FIAT CHRYSLER AUTOMOBILES

2016 SUSTAINABILITY REPORT

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LETTER FROM THE CHAIRMAN AND THE CHIEF EXECUTIVE OFFICER

FCA closed 2016 with another record financial performance while continuing to be recognized for its sustainable operating model.

We exceeded our full-year guidance in all key metrics, made all the more significant by the fact that our targets were revised upward twice during the year. In addition, all of our segments were profitable and showed improvement over the prior year.

Adjusted EBIT for the year climbed 26 percent to €6.1 billion. We posted a net profit of €1.8 billion, significantly improving from €93 million the prior year, and our adjusted net profit was up 47 percent to €2.5 billion. We also reduced net industrial debt further to €4.6 billion, which represents almost a half billion euro improvement from year-end 2015.

With these results, we have achieved or exceeded all the key targets in the first three years of our 5-year business plan.

Worldwide combined shipments in 2016 were in line with the prior year at 4.7 million units, with Jeep brand combined shipments up 9 percent to more than 1.4 million units, representing the fifth straight annual record.

Net revenues came in at €111 billion, in line with 2015.

Looking at our mass-market operations by region, NAFTA posted a strong performance with a 15 percent increase in adjusted EBIT and margins improving from 6.4 percent to 7.4 percent. The 5 percent decrease in shipments was primarily due to the planned phase-out of the Chrysler 200 and Dodge Dart models as part of our NAFTA capacity realignment. Our manufacturing footprint in NAFTA is being retooled to increase production of Jeep and Ram vehicles and capitalize on the strength of those brands as demand continues to shift towards their core product segments.

In LATAM, we posted an adjusted EBIT of €5 million, reversing the prior year's loss of €87 million. This improvement was despite the continued poor market conditions in Brazil, where we have held the position of market leader for 15 years. The launch of the all-new Jeep Compass in September marked the final piece of our industrialization plan at our new plant in Pernambuco which is also producing the Jeep Renegade and Fiat Toro pickup truck.

In APAC, adjusted EBIT doubled to €105 million and margin rose to 2.9 percent from 1.1 percent on the strength of favorable product mix and improved results from our Chinese joint venture. That joint venture is now fully operational with the production of three Jeep brand SUVs.

During the year, there was a significant improvement in the contribution from EMEA, which grew sales, market share, revenues and margin. Adjusted EBIT rose 154 percent to €540 million with the margin more than double the previous year at 2.5 percent.

Maserati posted a record adjusted EBIT of €339 million, more than three times the prior year's level, reflecting significantly higher revenues following the successful launch of the all-new Levante SUV. Full year adjusted EBIT margin more than doubled to 9.7 percent, while reaching 12 percent in the second half of the year.

Our Components segment came in with a 13 percent increase in adjusted EBIT for the year, to €445 million, with margin rising to 4.6 percent from 4.0 percent largely as a result of a strong performance by Magneti Marelli, which continues to improve both volumes and margins.

On the product side, we launched nine all-new products worldwide, six of which were white-space additions to our portfolio. They include the Maserati Levante, Alfa Romeo Giulia and the Fiat Tipo, Toro, Fullback and 124 Spider. At the Los Angeles Auto Show in November, we unveiled the Stelvio, Alfa Romeo's first-ever SUV, and the all-new Jeep Compass made its North American debut, following up on its successful launch in Latin America.

FCA also made several key moves to stay at the forefront of the rapid technological changes that are transforming the industry.

The Windsor Assembly Plant in Canada began producing the all-new Chrysler Pacifica Hybrid, the industry's first electrified minivan and the most fuel-efficient ever with a U.S. EPA rating of 84 miles-per-gallon equivalent.

In 2016, we also announced a collaboration with Waymo (formerly the Google Self-Driving Car Project) and the completion of 100 Pacifica Hybrid vehicles purpose built for fully self-driving operations. This marked the first time that Google has worked directly with an automaker to integrate its self-driving system, including sensors and software, into a passenger vehicle.

To begin 2017, at the CES in Las Vegas, we revealed the Chrysler Portal concept, a semi-autonomous electric vehicle that is engineered to be upgradeable as advances in technology enable higher levels of autonomy and designed to grow with millennials through their life stages.

We have made significant progress since unveiling our five-year strategic plan in 2014, and for 2017 we have issued guidance that confirms our conviction in achieving the key targets we have set for 2018. For full-year 2017, we expect net revenues of between €115 billion and €120 billion, adjusted EBIT in excess of €7 billion, adjusted net profit of more than €3 billion and net industrial debt to be further reduced to below €2.5 billion by year-end.

Our approach to achieving profitable growth includes expanding our business globally while always remaining mindful of how our actions affect the world in which we operate. This commitment to playing a positive role is fundamental to the character of our Group. It reflects our core belief that achieving sustainable economic results requires a balanced approach that also contributes to the environment and society as a whole.

We are convinced that the objectives we have set for the future, together with the significant steps we have already taken, are clear evidence that our approach to sustainability is not only pragmatic, but it is deeply rooted in our culture and central to our mission.

In fact, our efforts have been recognized by the world's leading sustainability rating agencies.

In addition, our targets are aligned with the inspirational principles that drive the United Nations Sustainable Development Goals (SDGs) initiative, which addresses the global challenge of sustainable development. And, our global sustainable best practices are aligned with the European Union Commission's efforts to stimulate the transition towards a circular economy that maximizes the value and use of materials, products and waste.

To cite just a few examples, during 2016 we implemented more than 4,400 new environmental projects at our plants worldwide, leading to a reduction of the carbon footprint and about €70 million in savings. Projects targeted at reducing water consumption at our facilities resulted in 2.2 billion m^3 of water being saved and €4.5 million in cost savings, with the recycling index reaching 98.9 percent.

Our plants also achieved a 5.5 percent reduction in waste generated and a 2.4 percent reduction in CO_2 emissions in 2016. As a result of continuous improvements over the years, the percentage of electric energy used in our manufacturing activities that is derived from renewable sources reached 26.1 percent in 2016, and FCA automotive plants in Italy and Brazil now operate entirely on renewable energy.

Work-related injuries decreased by 17 percent at plants worldwide, marking the 10th consecutive year of improvement.

FCA encourages its employees to volunteer their time and skills to help build strong, self-reliant communities. In 2016, approximately 200,000 hours were volunteered worldwide by FCA employees. The Group also committed about €24 million to local communities around the world.

FCA continues in its commitment to reducing the environmental impact of its products over their entire life cycle, while responding to consumer demands in each market.

FCA has been a leader in natural gas vehicles for more than 15 years, and in 2016 we presented the Fiat 500 M15, the first retail-ready Euro 6 compliant vehicle that can also run on a blend of gasoline and methanol (up to 15 percent).

We are also focused on improving our gasoline engines, and we have developed all-new global small and medium gasoline engine families, including the new three-cylinder Firefly engine launched in 2016.

As part of that mission and as an integral part of FCA's long-term business plans, FCA is committed to complying with all applicable laws and regulations relating to vehicle emissions.

Finally, we aim to offer our employees a diverse and inclusive work environment. We are pleased that several third-party organizations have recognized our efforts in this area.

Our approach to business and to sustainable development are not two different things. They are guided by the same spirit and values, those values upon which we have built FCA: commitment, respect, integrity, and responsibility.

We have come a long way the past few years because we have nourished this spirit and we have held on to our values, recognizing that we have a vital stake in each other's success.

Our unique strength as a company resides in our work ethic as well as our diversity, our openness, the accountability to deliver on our promises, and the way we respect each other. These values are what define us.

We continue in our commitment to building an organization that will stand the test of time by constantly innovating, remaining resilient in the face of changing circumstances, and focusing intensely on how to create a better future for our group, our communities and all of our stakeholders, inside and outside the company.

We wish to thank everyone in the FCA organization for their hard work, their commitment to excel and their openness with each other across borders to achieve our goal of creating such an organization. We know there is immense talent within our company, and we will be able to leverage it to the extent that we continue to foster a collaborative environment that brings out the best in each other.

We also wish to thank our shareholders and all of our stakeholders for your continued support as we seek to build a stronger future for all of us.

23 February 2017

John Elkann
/S/ Chairman

Sergio Marchionne
/S/ Chief Executive Officer

BUSINESS MODEL

Fiat Chrysler Automobiles is an international automotive group engaged in designing, engineering, manufacturing, distributing and selling vehicles, components and production systems, with operations in approximately 40 countries and commercial relationships with customers in more than 140 countries. In 2016, FCA activities were organized through six reportable segments[1] operating to achieve profitability and responsible growth in a highly competitive and dynamic economy.

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[1] Four regional mass-market vehicle segments (NAFTA, LATAM, APAC and EMEA), Maserati, our global luxury brand segment and a global Components segment (Magneti Marelli, Comau and Teksid).

GRI: G4-3, G4-4, G4-6, G4-8

THE BUSINESS MODEL EXPLAINED

FCA touches countless lives on a daily basis, from our 231,000 employees, to the thousands of individuals who work for our dealers and suppliers, to the more than 4.7 million customers who, in 2016, bought our new vehicles.
We create value through the improved livelihoods of our customers and employees, vitality among our communities, and financial return to our investors. In doing this, we recognize that our environmental and social activities affect not only our aspiration to grow the business but also our commitment to positively affect our world.

FCA incorporates the concept of a circular economy into its business approach, focusing on reducing waste in every link in the value chain from vehicle design through production, distribution, use and eventual reuse of materials. The circular economy model stands in contrast to the disposable economy, which wastes materials and the energy needed to produce them. Keeping resources in use for as long as possible is a sound business practice that reduces material costs and promotes efficiency, while also helping reduce the impact on the environment through the entire life cycle of a product. It also encourages collaboration, as companies try to find others who match up in either providing or repurposing material waste. This cooperation is consistent with FCA's overarching view that a low-carbon future depends on the combined efforts of government, energy producers, manufacturers, academia and the financial community. In the automotive industry, remanufacturing and reconditioning of parts also makes manufacturers less susceptible to price increases and shortages of raw materials.

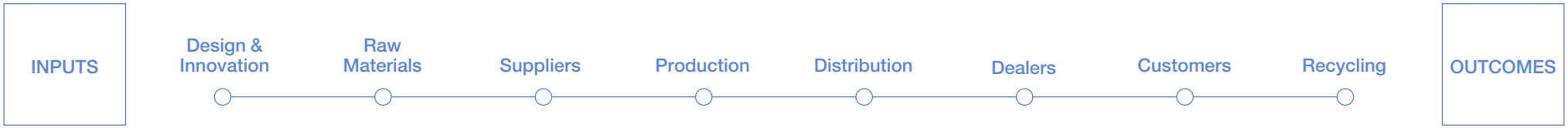
The ability to create value for stakeholders through each of the value chain phases can promote responsible development, the transition to a circular economy model and help tackle climate change. The need to move to a more sustainable future is one of the major challenges facing everyone on the planet today as suggested by the United Nations "Transforming our World" 2030 Agenda.

Central to FCA's approach is the belief that effective, lasting solutions to climate change and other pressing environmental and social issues can only be achieved through an integrated approach that combines individual and collective commitment; an effective multi-stakeholder strategy; investment in enabling premium processes and technologies; and the incorporation of circular economy principles in operations. All of these elements are an integral part of FCA's model of operating responsibly.

The following graphics present a simplified view of the highly complex industry that FCA competes in to illustrate how various tangible and intangible capitals as inputs are converted through the Group's business activities into outcomes, bringing value to our customers, to society and to the environment.

The relationship between inputs and outcomes is intended to show the interconnectivity of the Group's activities and is not cause-and-effect; several inputs can affect one single outcome or a single input may impact many outcomes. Each stage of the value chain includes a description of the main activities related to that stage; a link to the section on related FCA activities, projects and results; and a list of direct or indirect impacts on various capitals and stakeholders related to that stage. Across its Value Chain, FCA operates responsibly to contribute to many of the United Nations Sustainable Development Goals supporting the 2030 Agenda for Sustainable Development.

The information is reported following recommendations of the Integrated Reporting framework and the G4 guidelines issued by the Global Reporting Initiative.

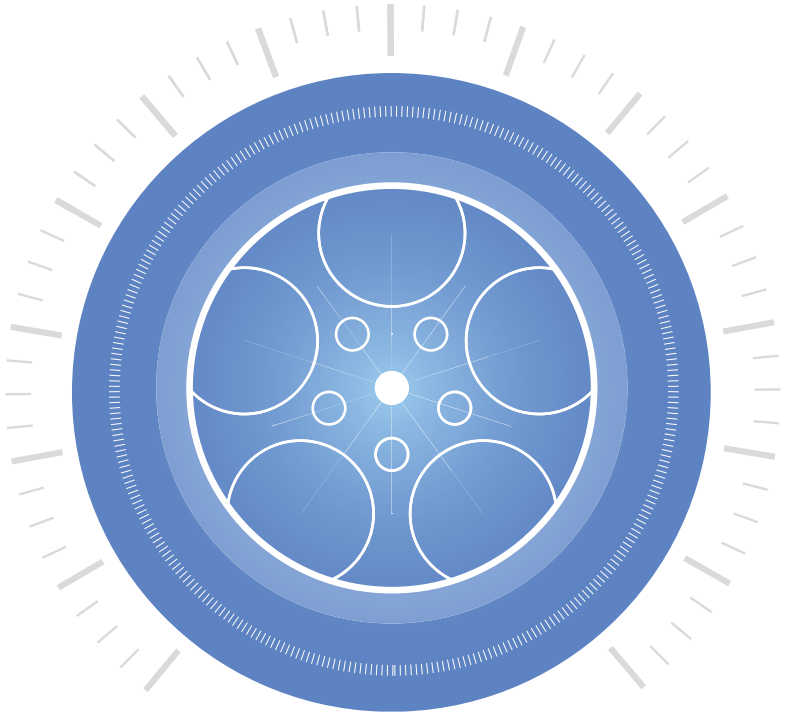


THE BUSINESS MODEL EXPLAINED

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

Design & Innovation

This stage includes the research, development and design activities conducted with respect to both the Group's products and processes. Innovative approaches to vehicle efficiency, safety and quality combine with processes that reduce waste of all kinds throughout the value chain.



Impacts

- Innovation in products and processes
- Customer safety during driving experience
- Vehicle fuel economy and emissions
- Vehicle quality
- Customer satisfaction and loyalty
- Product competitiveness and reputation
- Brand perception and value
- Vehicle material composition and end-of-life
- Environmental impact and natural resource consumption in production processes
- Employee health and safety in production processes

Read more >

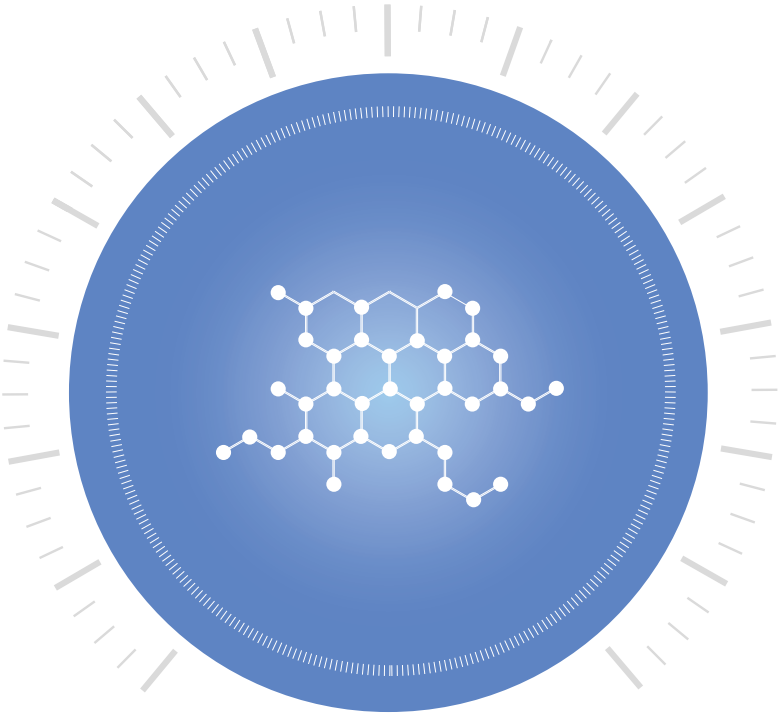
GRI: G4-2, G4-EC8, G4-SO2

THE BUSINESS MODEL EXPLAINED

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

Raw Materials

This stage covers the extraction of raw materials that are subsequently processed and transformed to manufacture our vehicles.



Impacts

- Indirect environmental impacts from extraction and material sourcing operations
- Indirect social impacts on communities near the extraction site
- Indirect employment in third parties' operations
- Local revenue for business partners
- External stakeholder perception due to raw material provision
- International standards and regulatory compliance

Read more >

GRI: G4-2, G4-EC8, G4-EN33, G4-LA15, G4-HR11, G4-SO2, G4-SO10

THE BUSINESS MODEL EXPLAINED

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

Suppliers

This stage includes the operations suppliers perform to provide FCA with the parts, components and services necessary for the production of Group vehicles.

Impacts

- Indirect employment in third parties' operations
- Working conditions for third party employees
- Local revenue for business partners and communities
- Indirect environmental impact and natural resource consumption
- Innovation of components and processes
- Technological sharing among regions and industries

Read more >

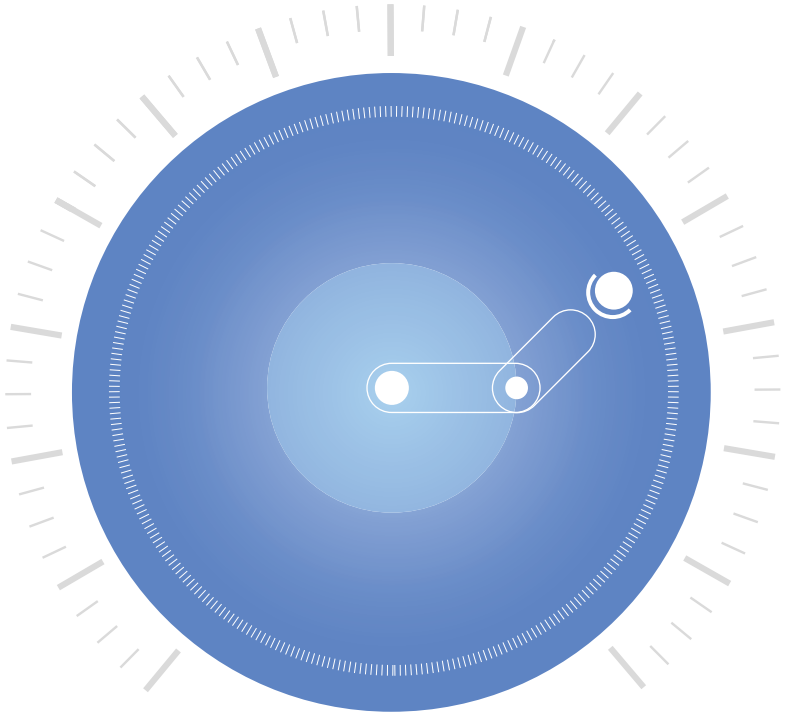
GRI: G4-2, G4-EC8, G4-EN33, G4-LA15, G4-HR11, G4-SO2, G4-SO10

THE BUSINESS MODEL EXPLAINED

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

Production

This stage includes all activities at Group plants which transform parts and components into finished vehicles.



Impacts

- Direct employment
- Local revenue for communities where FCA operates
- Employee development through training
- Employee safety and working conditions
- Environmental impact and natural resource consumption from direct operations
- Process innovation
- Technological and know-how sharing across regions, Group companies and working teams
- Respect of product safety and quality standards

Read more >

GRI: G4-2, G4-EC8, G4-SO2

THE BUSINESS MODEL EXPLAINED

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

Distribution

This stage includes transport, storage and distribution operations of raw materials and components to plants, and finished vehicles from the production site to dealerships before reaching the final customer.

Impacts

- Indirect employment in third parties' operations
- Local revenue for business partners and communities
- Greenhouse gas emissions
- Social impacts on traffic and road safety
- Production continuity
- Vehicle delivery to customers

Read more >

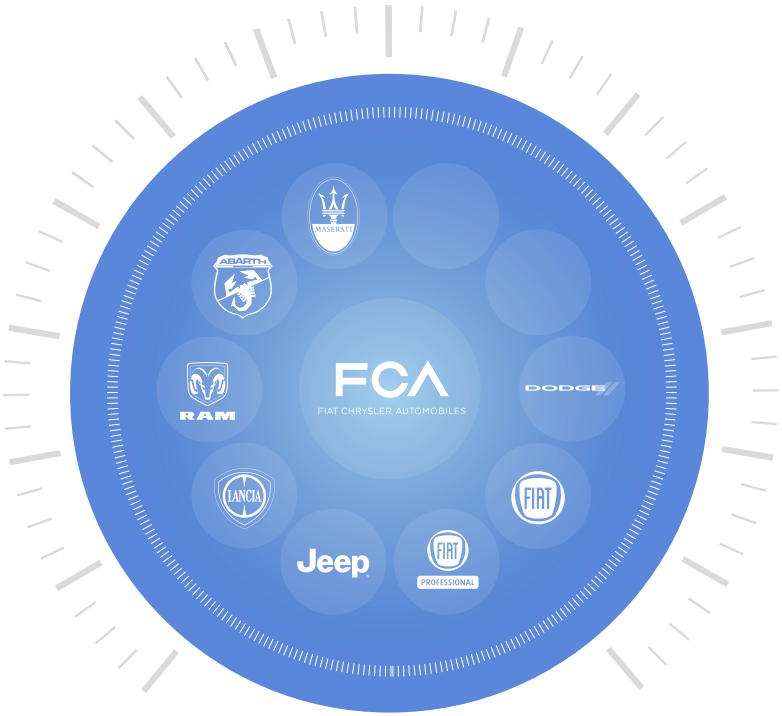
GRI: G4-2, G4-EC8, G4-EN33, G4-SO2

THE BUSINESS MODEL EXPLAINED

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — **Dealers** — Customers — Recycling — OUTCOMES

Dealers

This stage includes the activities that take place in the dealerships, from customer welcome to sale and delivery of vehicles and after-sales technical assistance.



Impacts

- Indirect employment
- Local revenue for business partners and communities
- Product competitiveness
- Customer satisfaction and loyalty
- Brand perception and value

Read more >

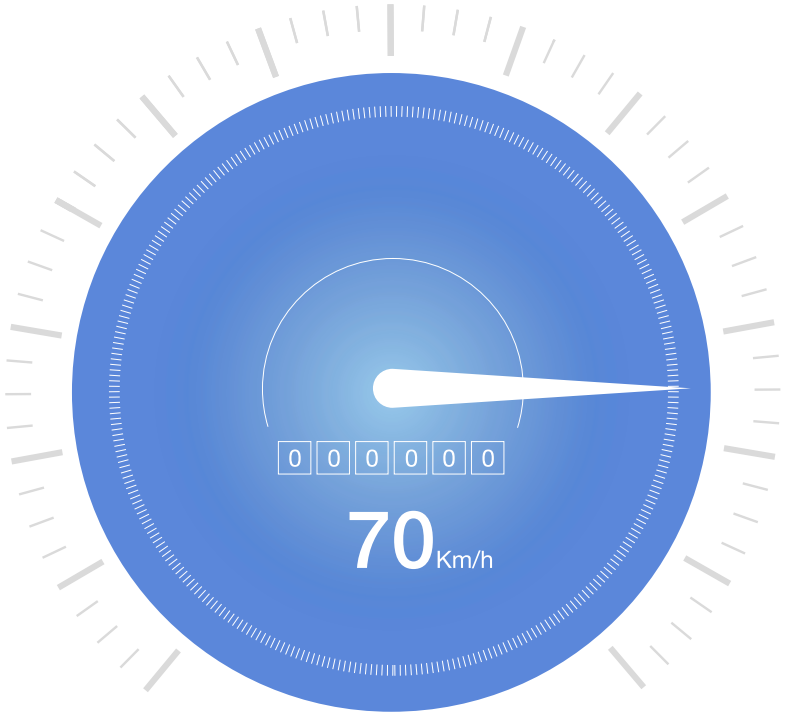
GRI: G4-2, G4-EC8, G4-SO2

THE BUSINESS MODEL EXPLAINED

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

Customers

This stage relates to the use phase of FCA vehicles by customers around the world.



Impacts

- Social impacts on traffic, road safety and freedom of mobility
- Vehicle fuel consumption and emissions
- Customer satisfaction and loyalty
- Brand reputation and value

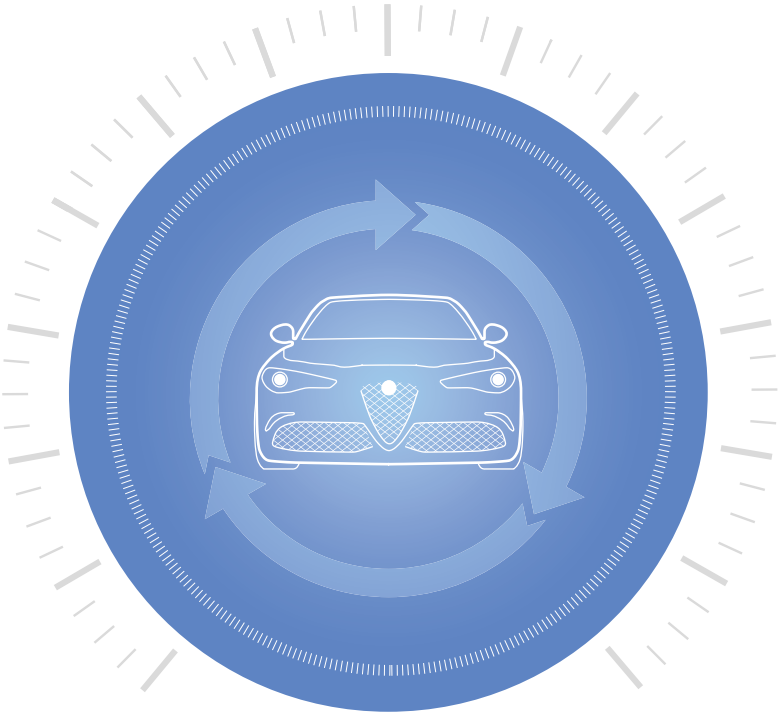
Read more >

THE BUSINESS MODEL EXPLAINED

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

Recycling

This stage includes disposal operations at the end of a vehicle's useful life.



Impacts

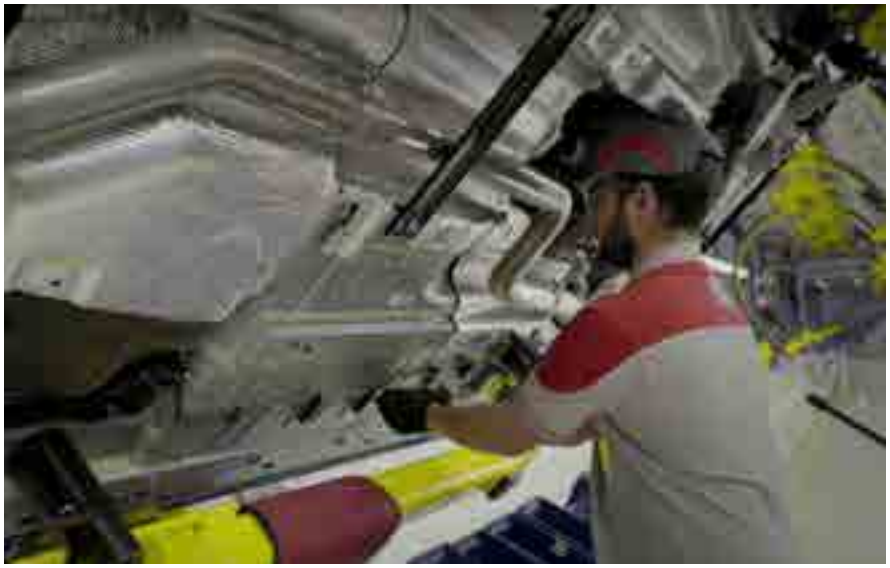
- Sourcing of raw materials
- Access to critical raw materials
- Natural resource scarcity
- Environmental impacts of vehicle end-of-life: waste generation, dismantling, recycling, disposal management and remanufacturing

Read more >

GRI: G4-2, G4-EC8, G4-SO2

BUSINESS MODEL INPUTS

INPUTS → Design & Innovation → Raw Materials → Suppliers → Production → Distribution → Dealers → Customers → Recycling → OUTCOMES



RELEVANT SDGs

INPUTS

These are key figures that serve as input in generating value for our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

- Financial
- Manufactured
- Intellectual
- Human
- Social and Relationship
- Natural

Financial

Financial capital consists of the financial resources available to FCA for use in the development, production and sale of quality vehicles that can successfully compete in an increasingly global market.

€110.6 billion
Net Revenues (2015)

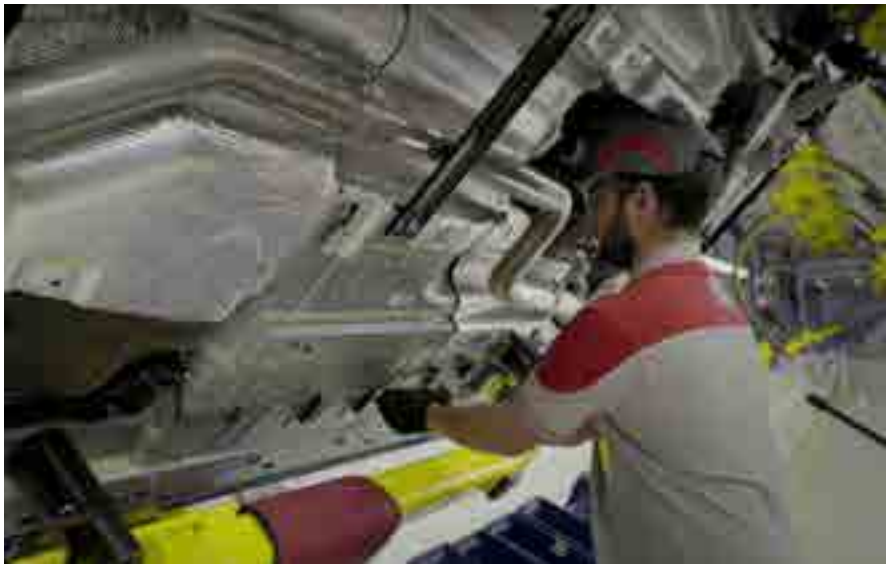
€0.1 billion
Net Profit (2015)

€5.0 billion
Net Industrial Debt (2015)

€24.6 billion
Available Liquidity (2015)

BUSINESS MODEL INPUTS

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES



RELEVANT SDGs

INPUTS

These are key figures that serve as input in generating value for our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial
Manufactured
Intellectual
Human
Social and Relationship
Natural

Manufactured

Manufactured capital consists of FCA buildings, technology and other physical assets and the value of investments to maintain and upgrade those assets to the highest technical and quality standards.

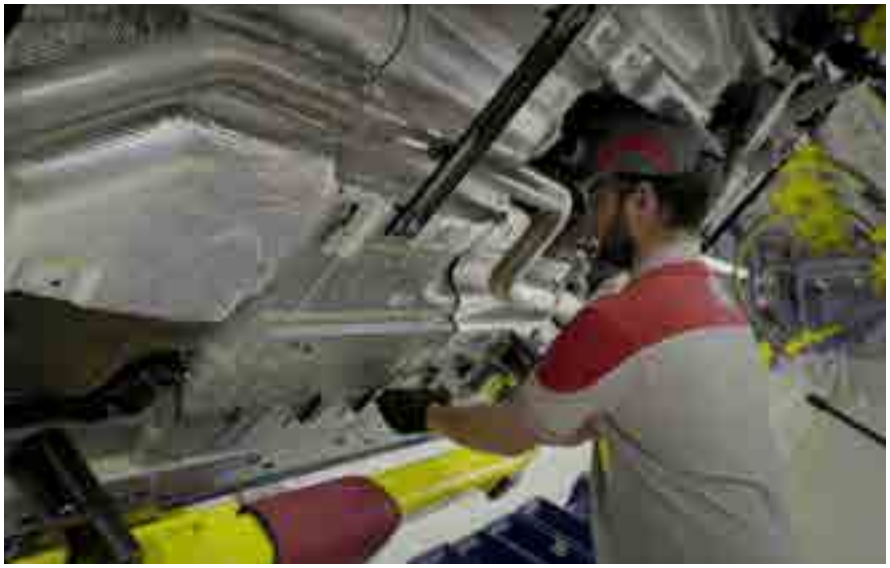
162 manufacturing facilities
worldwide, as well as other properties (parts distribution centers, research laboratories, proving grounds, warehouses and office buildings)

€30.4 billion
of total carrying value of FCA property, plant and equipment assets

GRI: G4-9, G4-EC7

BUSINESS MODEL INPUTS

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES



RELEVANT SDGs

INPUTS

These are key figures that serve as input in generating value for our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial

Manufactured

Intellectual

Human

Social and Relationship

Natural

Intellectual

Intellectual capital consists of knowledge-based assets such as systems and processes, patents and licenses, and other know-how that FCA can trace back to its more than century-long heritage in the automotive sector.

8,462 patents registered at December 31, 2015

~€4.2 billion invested in **Research** and **Development** (R&D) activities

87 R&D centers with approximately **20,600 employees**

Continuous research on **vehicle innovation, quality, safety, performance** and **eco-mobility**

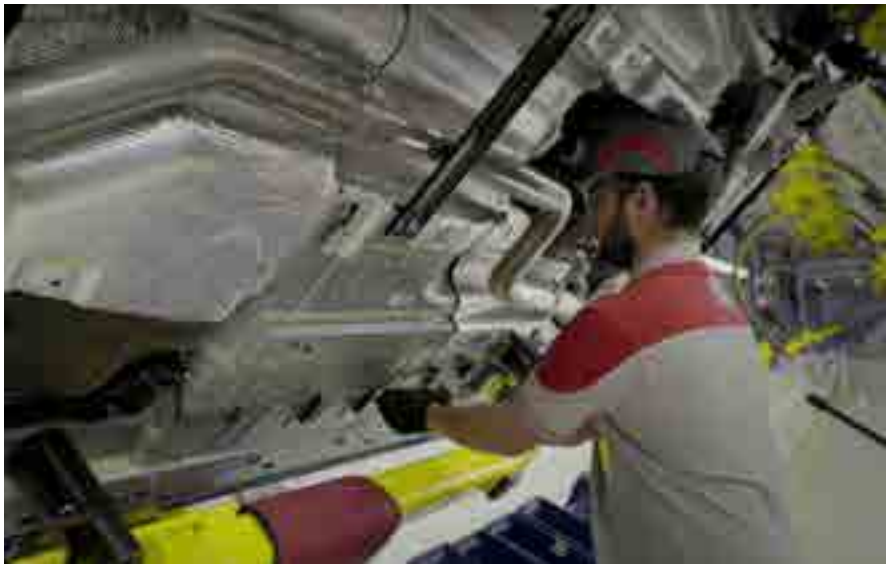
World Class Manufacturing program adopted in 2006

Employee suggestions for **improvement** collected worldwide

GRI: G4-9

BUSINESS MODEL INPUTS

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES



RELEVANT SDGs

INPUTS

These are key figures that serve as input in generating value for our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial

Manufactured

Intellectual

Human

Social and Relationship

Natural

Human

FCA human capital consists of all individuals worldwide who dedicate themselves on a daily basis to achieving the organization's objectives and creating sustainable long-term value for stakeholders.

231,623 employees at December 31, 2015

~€65 million invested in **training** and **development**

~63,200 employees evaluated globally **through** the **Performance Leadership Management** evaluation process (managers, professional and salaried)

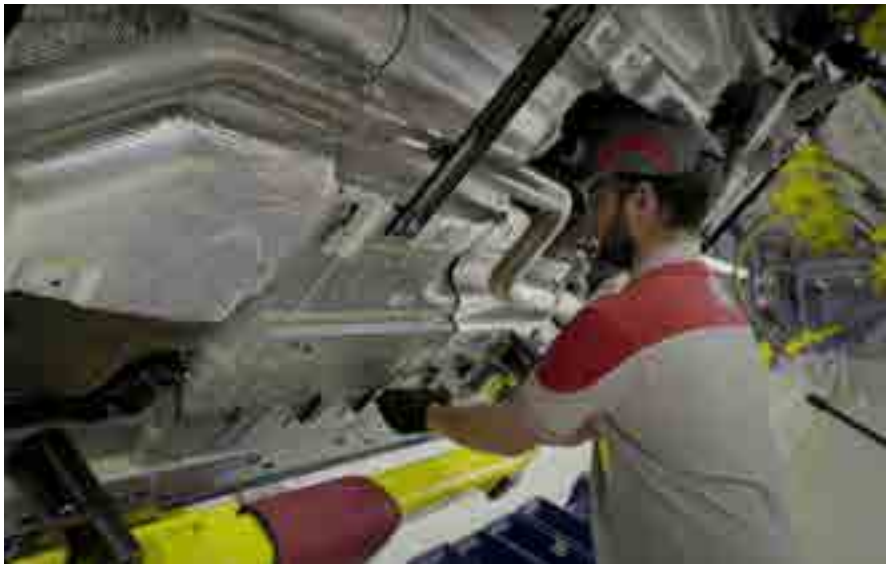
€194 million invested for improvement to **safety** and **working conditions** and to employee health, equivalent to 1.5% of annual personnel costs

Health and Safety certification (OHSAS) in place at **141 plants**

GRI: G4-9, G4-LA9, G4-LA10, G4-LA11

BUSINESS MODEL INPUTS

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES



RELEVANT SDGs

INPUTS

These are key figures that serve as input in generating value for our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial

Manufactured

Intellectual

Human

Social and Relationship

Natural

Social and Relationship

Social and relationship capital consists of the network of relationships based on dialogue that FCA has with internal and external stakeholders, including suppliers, business partners, distributors, dealers, customers, media, investors, public institutions and authorities, regulatory agencies, schools, universities and local communities.

~4,300 stakeholders worldwide **responded to online sustainability survey**

57 sustainability targets updated and communicated to stakeholders

Open dialogue with **international institutions, associations** and **partners** on a global scale

~6,450 distribution relationships (dealers and distributors) in more than 140 countries

26 Customer Contact Centers worldwide, **30 languages spoken**, more than **1,400 agents and supervisors**

€58.3 billion in purchases from **2,567 direct material suppliers**

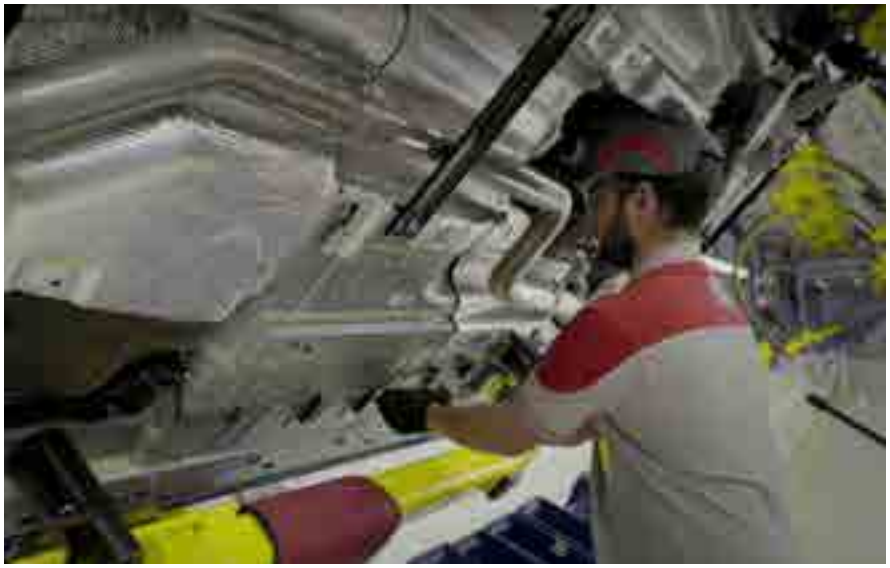
Sustainability Self-Assessment Survey completed by **803 suppliers**

~€24 million donated to **local communities**, of which **52%** to support **community development** and more than **36%** to support **education**

GRI: G4-9, G4-EC8, G4-EN32, G4-EN33, G4-LA14, G4-HR10, G4-HR11, G4-SO9, G4-SO10, G4-PR5

BUSINESS MODEL INPUTS

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES



RELEVANT SDGs

INPUTS

These are key figures that serve as input in generating value for our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

- Financial
- Manufactured
- Intellectual
- Human
- Social and Relationship
- Natural

Natural

Natural capital consists of resources, either physical or not, required by FCA to conduct its activities and manufacture its products.

~47 million GJ of energy consumed at Group plants worldwide

26.1% of **electricity** from **renewable sources**

5.95 GJ of **energy consumed** per **vehicle produced**

24.4 million m³ of **water consumed** (withdrawal) at Group plants worldwide

3.19 m³ of **water consumed** per **vehicle produced**

GRI: G4-9, G4-EN3, G4-EN5, G4-EN8

BUSINESS MODEL OUTCOMES

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

RELEVANT SDGs

OUTCOMES

These are key figures that serve as outcomes in generating value to our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial
Manufactured
Intellectual
Human
Social and Relationship
Natural

Financial

Financial capital generated through the sale of Group products enables FCA to strengthen its global market position and invest to increase the value of the other capitals.

€111.0 billion
Net Revenues (2016)

€1.8 billion
Net Profit (2016)

€4.6 billion
Net Industrial Debt (2016)

€23.8 billion
Available Liquidity (2016)

2 million
outstanding FCA shares held by Socially Responsible Investors[1]

[1] *Data refers to IPREO Shareholders Identification registered in February 2017.*

BUSINESS MODEL OUTCOMES

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

RELEVANT SDGs

OUTCOMES

These are key figures that serve as outcomes in generating value to our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial
Manufactured
Intellectual
Human
Social and Relationship
Natural

Manufactured

FCA increases its manufactured capital by developing its global presence and increasing production capacity through modernization of existing plants and construction of new plants.

Continued the transition to **local SUV production in China** with the production of the Jeep Renegade and the all-new Jeep Compass at the Guangzhou joint venture plant

Cassino plant (Italy) **renewed** for production of the new generation of Alfa Romeo vehicles

$744 million USD invested by FCA to upgrade the Windsor plant (Canada) for the production of Chrysler Pacifica and Pacifica Hybrid

GRI: G4-9, G4-EC7, G4-EC8

BUSINESS MODEL OUTCOMES

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

RELEVANT SDGs

OUTCOMES

These are key figures that serve as outcomes in generating value to our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial

Manufactured

Intellectual

Human

Social and Relationship

Natural

Intellectual

To succeed in the highly-competitive, technology-driven auto sector, FCA continuously develops its intellectual capital as one of the means to improve the sustainability profile of its products and processes.

738 new patents and **59 new design rights** registered in 2016

Numerous **product recognitions in 2016**, including:

- All-new 2017 Chrysler Pacifica named North American Utility Vehicle of the Year and its Hybrid Propulsion System named to Wards 10 Best Engines list
- Alfa Romeo Giulia won the prestigious 2017 Driver's Choice Award for Best New Luxury Car and the EuroCarBody 2016 award for innovative concepts, materials, development and design solutions, among other criteria
- Ram ProMaster City named 2017 Commercial Green Car of the Year™ by Green Car Journal
- For a third consecutive year, Dodge Challenger ranked at the top of J.D. Power 2016 U.S. Initial Quality Study Midsize Sporty Car segment

147 facilities applying **World Class Manufacturing** program, with **87** reaching an award level (**5 Gold level, 25 Silver and 57 Bronze**)

Employee engagement demonstrated through more than **2.5 million WCM suggestions** and more than **108,000** suggestions collected **from Ipropose, BIS, Ideaction, STEP-UP!, MAIS** and **Haz Más** programs

BUSINESS MODEL OUTCOMES

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

RELEVANT SDGs

OUTCOMES

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Financial

Manufactured

Intellectual

Human

Social and Relationship

Natural

Human

FCA regards proper recognition and development of human capital as fundamental to the long-term success of the organization. Excellence is heavily dependent on factors such as diversity, professional experience and know-how, and a healthy and safe work environment.

231,019 employees

3.2 million hours of training worldwide

Empowered individuals offered professional opportunities that allow them to gain experience in other geographic or business areas

Well-being initiatives of the Health Promotion Program implemented at selected locations

Accident indicator improved, with a decrease of 16.7% in the frequency rate vs 2015

Safety record responsible for savings of about €85 million in state accident premiums in Italy since 2012

GRI: G4-9, G4-LA1, G4-LA9

BUSINESS MODEL OUTCOMES

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

RELEVANT SDGs

OUTCOMES

These are key figures that serve as outcomes in generating value to our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial

Manufactured

Intellectual

Human

Social and Relationship

Natural

Social and Relationship

FCA's dialogue with the various categories of stakeholders enriches its social and relationship capital and is essential to identifying current and future trends that can influence the choices of the Group itself, as well as consumers, business partners, lawmakers and regulators, etc.

Results of **sustainability-focused stakeholder engagement process** used to update the **Materiality Diagram**

FCA recognized as a leader for its sustainability commitment and performance. **FCA included in** the prestigious **Dow Jones Sustainability Index World**, as well as the **CDP Climate Performance Leadership Index** (A list)

Customer **recognition of brand value** demonstrated by increasing sales volumes: **Jeep's strong global performance** continued with **record worldwide shipments** of **1.4 million**, up **9%** vs 2015

>24 million customer contacts managed by our **Customer Contact Centers**

Key suppliers accounted for roughly **61.3%** of total purchase value

Supported several **initiatives worldwide for development of local communities and to advance education**

GRI: G4-9, G4-EC8

BUSINESS MODEL OUTCOMES

INPUTS — Design & Innovation — Raw Materials — Suppliers — Production — Distribution — Dealers — Customers — Recycling — OUTCOMES

RELEVANT SDGs

OUTCOMES

These are key figures that serve as outcomes in generating value to our stakeholders. Data reflects the status at December 31, 2016, unless stated otherwise.

Financial

Manufactured

Intellectual

Human

Social and Relationship

Natural

Natural

FCA acts to minimize the impact of its activities on natural capital by adopting leading technologies and processes, reducing consumption of natural resources, mitigating supplier-related risks and, in general, seeking to apply high international standards and best practices.

3.9 million tons of CO_2 emissions at Group plants, a **decrease of 9.4%** vs 2010 despite a **21.1% increase in production volumes**

1.6 million tons of CO_2 emissions avoided since 2010 through a **24.8% decrease in emissions** per vehicle produced

17.6 million m^3 of water discharged at Group plants worldwide

2.2 billion m^3 of water saved at Group plants worldwide with **recycling index of 98.9%**

1.4 million tons in total waste generated at Group plants worldwide, of which **14.9% sent to landfill** and **82.3% recovered**

62.2% reduction vs 2010 **in hazardous waste** per vehicle produced at Group plants

~4,400 environmental projects implemented **under the WCM program**, leading to **€70 million** in cost savings

GRI: G4-9, G4-EN10, G4-EN15, G4-EN16, G4-EN19, G4-EN22, G4-EN23

RESPONSIBILITIES AND TARGETS

FCA pursues a model of sustainable integration between industry, the community and the environment across operations worldwide.
We believe that competitiveness in the market can be built by targeting product and process innovation in a pragmatic and sustainable way. As a global company that addresses the mobility needs of millions of people every year, we felt the urgency to embrace our responsibility to tackle climate change and support social development, driven by the values of integrity, transparency and trust.

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RESPONSIBLE CORPORATE CITIZENSHIP

Responsible corporate citizens are committed to address topics of global concern which require the combined actions of government, corporations, nonprofit organizations, consumers, academia and the financial community. Among the topics of particular concern are human rights and climate change.

FCA's responsible journey includes commitments and efforts directed to the mitigation of climate change and the prevention of adverse human rights conditions. Sustainability targets set by FCA align with the United Nations global 2030 Agenda for Sustainable Development.

In late 2015, the UN set a framework to drive global action for a better future through the Sustainable Development Goals (SDGs). The 17 goals are intended to guide firstly governments, but also businesses and civil society in ending poverty, fighting inequality and injustice, and tackling climate change by 2030.

FCA welcomes and supports the Sustainable Development Goals in their ambition to achieve a more sustainable world. The Company recognizes its role in contributing to the objectives of the 2030 Agenda.

In 2016, FCA analyzed its approach to sustainability, which is represented by Commitments and Targets, the Materiality Diagram and impacts on the entire Value Chain. The Company identified the areas where FCA can make the greatest contribution and highlighted the connections with the related SDGs.

These areas are:

FCA acknowledges the challenges posed by climate change and endeavors to address this issue in its products, processes and facilities and in collaborating with its suppliers: these are the value chain areas where we can have the greatest direct impact. A broad scientific consensus has concluded that the burning of fossil fuels is a primary driver of global warming, with the potential for significant environmental, economic and social consequences. FCA is working with governments, energy companies, industry peers and suppliers, and consumers to achieve the goal of transitioning to a low-carbon future.

The 2017 Chrysler Pacifica Hybrid, the industry's first electrified minivan, underscores the Group's commitment to meeting the mobility needs of its customers while minimizing vehicle emissions. The Pacifica Hybrid is the first minivan to receive a 10 – the U.S. Environmental Protection Agency's highest rating – in the Green Vehicle Guide.

The Chrysler Pacifica Hybrid exemplifies FCA's efforts to minimize environmental impacts related to the use of its products. The Group's goals include:

- an expected 40% reduction in CO_2 emissions by 2020 vs 2006 from Mass-Market Brand cars sold in Europe
- improved fuel economy of new FCA US vehicles of at least 5% to 15% compared with the vehicles they replace
- continued development of electric/hybrid technologies.

FCA is also adopting energy-efficient solutions in its plants, such as zero-waste-to-landfill processes, efficient water management and the implementation of primerless technology in new paint shops to significantly reduce energy consumption, CO_2 emissions and waste. The Company has established long-term environmental targets for areas where FCA and its suppliers can have the greatest direct impact. Global goals for our manufacturing plants include:

- reducing energy consumed per vehicle produced by 30% from 2010 to 2020
- reducing CO_2 emissions per vehicle produced by 32% from 2010 to 2020
- reducing water consumption per vehicle produced by 40% from 2010 to 2020.

FCA is also helping mobilize suppliers to become actively involved in cutting greenhouse gas emissions and managing risks associated with climate change, such as extreme weather events that can result in global supply chain volatility and rising costs. The Group's target is to monitor CO_2 emissions of at least 90% of top suppliers (accounting for about 57% of purchases by value) by 2020 and support them in addressing sustainability issues.

Human Rights

In accordance with the Code of Conduct, "The FCA Group is firmly committed to conduct all of its business activities in a socially responsible manner and in line with sustainable practices and local or regional requirements and expectations. The FCA Group's principles and practices in support of sustainability include [...], Child Labor and Forced Labor Prohibitions, [...]."

FCA does not employ any form of forced, mandatory or child labor. More specifically, the Company does not employ individuals younger than the permissible age for working established in the legislation of the place in which the work is carried out and, in any case, younger than 15, unless an exception is expressly supported by international conventions, including regulations related to training or apprenticeship programs for students younger than 15. The annual analysis of the presence of child labor covering 100% of employees worldwide as well as the survey carried out on forced and compulsory labor showed that no incidents of child labor or forced and compulsory labor took place in any of the companies mapped, including those located in countries that have not ratified International Labour Organization (ILO) Conventions on these issues.

To address the potential risk of child labor, particularly in disadvantaged areas, FCA has implemented several initiatives where we have operations. In several countries, these projects consist of job training courses, and are aimed at advocating inclusion and promoting completion of schooling.

The Group's pledge to create a working environment that is inclusive and free from any form of discrimination is captured by the FCA Code of Conduct through which the Company endorses the United Nations Declaration on Human Rights.

Security personnel employed by FCA are among the stakeholders to whom the Code applies. These principles are reinforced through training initiatives that cover human rights-related aspects relevant to the professional behavior of security personnel. These initiatives address local needs and – where appropriate – specific requirements related to local regulations. Security guards directly employed by the Group may be provided with training or modules covering human rights aspects.

Human Rights risk self-assessments form part of the standard Internal Audit and Compliance process in the NAFTA, EMEA, LATAM and APAC regions. This assessment aims to evaluate effective application of the UN Ruggie Framework Guiding Principles on Business and Human Rights. Areas covered by these self-assessments include:

- child labor and young workers
- forced labor
- freedom from discrimination
- terms of employment
- security
- supply chain management.

Individual legal entities carried out assessments based on their human rights compliance checklist and, as part of the standard audit procedures, around 48% of the items on the audit checklist were audited by Internal Audit & Compliance in 2016.

GRI: G4-DMA, G4-HR1, G4-HR2, G4-HR3, G4-HR4, G4-HR5, G4-HR6, G4-HR7, G4-HR9

ENGAGEMENT WITH STAKEHOLDERS

As a global enterprise with a complex, intricately connected value chain, FCA engages with a wide range of stakeholders, including employees, customers, suppliers, dealers, institutions, investors, trade unions, associations and local communities. The Company's success depends on the effectiveness with which we listen to and respond to the needs and expectations of stakeholders who, directly or indirectly, affect the activities of the Group or are impacted by them.

Our stakeholder engagement and development of materiality are conducted in accordance with internationally recognized frameworks and principles, such as the Global Reporting Initiative (GRI-G4), the AA1000 Principles Standard, the AA1000 Materiality Report guidelines, the AA1000 Stakeholder Engagement Standard and the <IR> Materiality Background Paper.

Every year, the Group conducts surveys and stakeholder engagement activities focused on sustainability topics, fostering dialogue through these events and broadening the spectrum of stakeholders engaged each year. These activities are an essential part of a robust sustainability program and help us to better identify risks and opportunities, as well as to align our objectives to social, technological and regulatory changes around the globe. In each of the regions where FCA operates, these stakeholder initiatives are adapted to locally relevant topics and needs.

GRI: G4-DMA, G4-24, G4-25, G4-26, G4-27

2016

4,298 Total stakeholders involved

Major common topics raised during regional discussions

- Promotion of a culture of sustainability
- Exploration of innovative sustainable mobility solutions and alternative fuels and propulsion

EMEA
Open discussion — Internal and external stakeholders

New format for ongoing dialogue with sustainability representatives from other businesses and organizations

Main topics raised

- Focus on reputation risk management

NAFTA
Open discussion — Internal and external stakeholders

Employees, Suppliers, University students, Academic representatives

Main topics raised

- Exploration of new mobility solutions
- Promotion of a culture of sustainability
- Engagement on responsible purchasing practices in the supply chain

WORLDWIDE
Survey — Internal and external stakeholders

Stakeholder engaged for an online survey

LATAM
Open discussion — External stakeholders

Suppliers

Main topics raised

- Promotion of social and environmental responsibility among suppliers

APAC
Open discussion — Internal stakeholders

Employees

Main topics raised

- Discussion of business integrity and ethical standards
- Focus on improving customer satisfaction

2015 2014 >
2013 2012 >

GRI: G4-DMA, G4-24, G4-25, G4-26, G4-27

2015

4,623 Total stakeholders involved

Major common topics raised during regional discussions

- Focus on safety
- Improvement of vehicle fuel economy

EMEA
Open discussion — External stakeholders

FCA Global Sustainable Mobility Partner for Expo Milano 2015

Six sustainability-focused events

Main topics raised

- Environmental performance
- Promotion of natural resource protection and biodiversity
- Innovation and 3D printing
- Promotion of training and educational initiatives
- Improvement of innovative and ecological materials

EMEA and NAFTA
Open discussion — External stakeholders

University and High School presentations

Main topics raised

- Promotion of a culture of sustainability
- Engagement of local communities
- Reduction of resource consumption during production processes
- Sustainability engagement in the supply chain

WORLDWIDE
Survey — Internal and external stakeholders

Stakeholders engaged for an online survey

LATAM
Open discussion — Internal stakeholders

Sustainability-focused event

Main topics raised

- Promotion of responsible use of water
- Involvement of suppliers in sustainability aspects

APAC
Open discussion — External stakeholders

Sustainability-focused event

Main topics raised

- Engagement with business partners, guiding them to reach higher quality standards
- Cooperation with the Government to set higher standards on quality improvements and emissions reduction

2014

381 Total stakeholders involved

Major common topics raised during regional discussions

- Development of new sustainable mobility solutions
- Introduction of mobile connectivity and new technologies in vehicles
- Involvement of suppliers in sustainability aspects

EMEA
Survey and open discussion — Internal stakeholders

Seven sustainability-focused events

Main topics raised

- Engagement with institution to promote a culture of sustainability
- Promotion of responsible use of energy
- Responsible use of recycling and recycled materials

NAFTA
Survey and open discussion — Internal stakeholders

Six sustainability-focused events

Main topics raised

- Promotion of new mobility solutions
- Focus on vehicle connectivity and vehicle sharing
- Management of traffic reduction in congested urban areas

APAC
Survey and open discussion — Internal stakeholders

Sustainability-focused event

Main topics raised

- Promotion of a culture of sustainability
- Promotion of flexible working hours and improvement of work-life balance
- Reduction of resource consumption during vehicle production

< 2016
2013 2012 >

GRI: G4-DMA, G4-24, G4-25, G4-26, G4-27

2013

72 Total stakeholders involved

Major common topics raised during regional discussions

- Development of innovative sustainable mobility solutions and alternative fuels
- Road safety and related social impact
- Sharing sustainable practices along the supply chain
- Optimizing fuel consumption and reducing vehicle CO_2 emissions
- Spreading a culture of sustainability in society

EMEA

Survey and open discussion — External stakeholders

First FCA sustainability-focused event

Main topics raised

- Promotion of a culture of sustainability through partnerships with academia and other players
- Encouraging new models of mobility

LATAM

Survey and open discussion — External stakeholders

Sustainability-focused event

Main topics raised

- Responsible management of end-of-life products
- Improvement of quality and accessibility of services through participation in the development of public policies

NAFTA

Survey and open discussion — External stakeholders

Sustainability-focused event

Main topics raised

- Promotion of new mobility models

2012

70 Total stakeholders involved

EMEA and NAFTA

Survey — Internal stakeholders

First survey launched: employees from various functions and geographic areas involved

2015
2014
2016

In 2016, FCA engaged about 4,300 internal and external stakeholders worldwide through an online survey regarding sustainability topics.

Many of FCA's stakeholder events over the years are designed to help educate youth about sustainability. In 2016, FCA collaborated with universities and high schools on several occasions to bring sustainability into the classroom.

In the NAFTA region, FCA conducted a stakeholder event with newly-hired employees at FCA. This activity had a two-fold purpose: teach new hires about sustainability in general, and in particular about FCA's sustainability efforts; and participate in a role-playing exercise to explore the evolving definition of mobility. Each participant was assigned the role of a stakeholder who either has an impact on mobility, or is impacted by it, such as utility provider, manufacturer, consumer, community leader, or technology provider. The goal of the exercise was to explore the topic of mobility from a variety of viewpoints and discuss challenges and opportunities for the future.

In Italy in 2016, FCA established a new format for ongoing dialogue with sustainability representatives from other businesses and organizations, with the objective to work together with stakeholders in creating a comprehensive learning process for the continuous development of specific subjects or trends that different industries might experience. Aspects addressed through these round tables also included the analysis of best practices regarding reputation risk management.

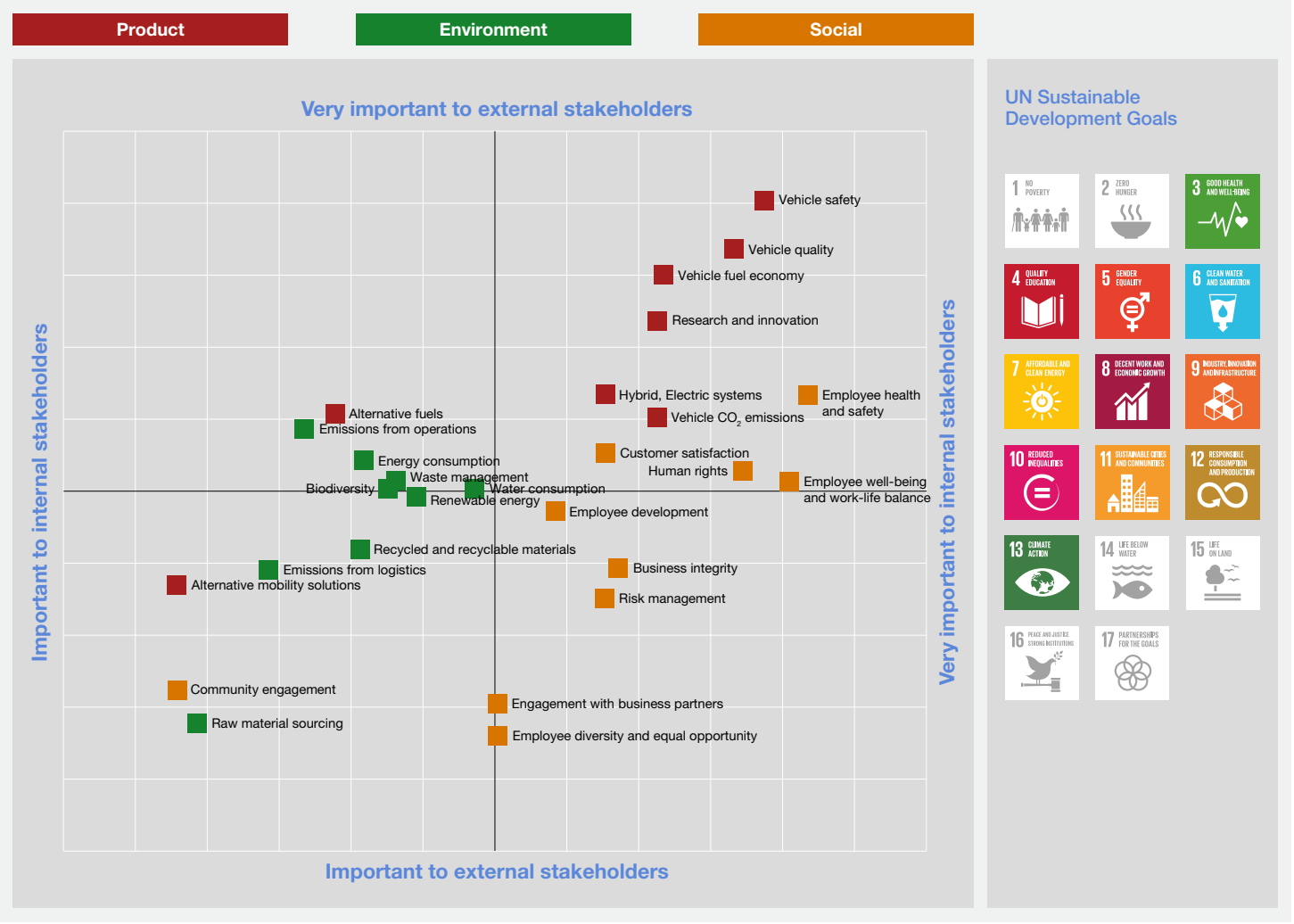
GRI: G4-DMA, G4-24, G4-25, G4-26, G4-27

MATERIALITY

FCA actively engages with external stakeholders and those within the Company to help determine the issues they consider most important to address in sustainability reporting. These engagements enable us to gather insight on the relative importance of specific sustainability-focused aspects. In determining subjects to be included, we also consider factors such as strategic priorities, corporate values, industry trends, information of interest for investors and societal standards and expectations. Material aspects include the most important intangible factors that relate to, and have an impact on, FCA's ability to create long-term value.

To keep our focus up to date, in 2016 the Company performed a thorough review of material topics that had been identified and prioritized in previous years. The FCA Materiality Diagram, which charts the relative importance of issues for both internal and external stakeholders, was updated in line with our findings. This assessment was used to help prioritize issues in our reporting. The analysis conducted in 2016 also identified correlations between the FCA material topics and the United Nations Sustainable Development Goals (SDGs).

Each material aspect has impacts throughout the entire organization and across all operating segments and regions. In addition, each aspect has effects outside the organization in geographical areas where the Group operates and for all stakeholder categories identified.



Related content

Responsible Corporate Citizenship >

GRI: G4-18, G4-19, G4-20, G4-21, G4-27

SUSTAINABILITY TARGETS

FCA's sustainable projects and initiatives endeavor to generate value responsibly through the incorporation of economic, environmental and social aspects into its business decisions.

This approach has led to the creation of a focused and disciplined method for tracking the Company's progress toward sustainable development. Sustainability-focused targets communicate annually to stakeholders by reporting on progress toward achievement of each goal during the current reporting year.

In 2016, an analysis of FCA's sustainability commitments and targets was completed to ensure their continued relevance and alignment with both the Group's direction and the United Nations Sustainable Development Goals (SDGs). The identified correlations highlight the importance for FCA of the high relevance topics and objectives identified in the internationally-agreed 2030 Agenda for Sustainable Development.

FCA's approach for proposing and updating sustainability-focused targets is both local and global, incorporating feedback from all regions and business functions. In addition, the highest governance bodies within FCA engage in the development and approval of targets to ensure that the commitment to economic, environmental and social sustainability is consistent with the Group's business strategy.

Three main phases comprise the process:
In the Planning Phase, the Sustainability Team focuses on drafting specific and measurable goals in collaboration with FCA's operating segments, regions and corporate functions. Additional perspective is gathered by benchmarking best-in-class industries and by taking into consideration evaluations by the principal sustainability rating agencies, international organizations and Socially Responsible Investors with which the Group has a relationship. The Team uses these inputs to draft sustainability-focused targets, which are then submitted to the Group Executive Council (GEC) which evaluates their consistency with the Business Plan and strategy and either approves or modifies the targets.

During the Management Phase, FCA's various operating segments, regions or corporate functions are accountable for managing projects and achieving the targets. These organizations take responsibility for implementing the initiatives by bringing their specific resources, tools and knowledge to bear in meeting the specific targets.

The Control Phase involves a series of project updates that business units provide to the Sustainability Team, which in turn informs the GEC of ongoing progress.

Discover all our commitments and results.

CORPORATE GOVERNANCE AND VALUES >
INFORMATION AND COMMUNICATION TECHNOLOGY >
EMPLOYEES >
OCCUPATIONAL HEALTH AND SAFETY >
COMMUNITY >
CUSTOMERS AND DEALERS >
PRODUCT >
PRODUCTION >
SUPPLIERS >
LOGISTICS >

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

CORPORATE GOVERNANCE AND VALUES

Commitment: foster a path of resilience and growth in response to Environmental, Social and Governance aspects

Targets	2016 Results
2020: demonstrate continued relevance of Group's sustainability performance to financial and non-financial stakeholders through global and regional recognition	FCA recognized among sustainability leaders and confirmed as member of numerous leading indices, including the Dow Jones Sustainability Index World and CDP A List
2020: further incorporate respect for human rights, as already established in Code of Conduct, into Group audit processes, in accordance with local constraints and requirements	Human rights risk self-assessment regarding child labor, young workers, labor practices, forced labor, non-discrimination, conditions of employment, security and supply chain management implemented as part of the FCA standard audit process in the EMEA, NAFTA, LATAM and APAC regions, including all companies, in order to cover due diligence requirements of the UN Ruggie Framework Guiding Principles
2020: prevent and manage emerging risks to ensure business continuity and minimize economic, environmental and social impacts, both internal and external	Completed development phase of project for detection and mitigation of supplier risks (read more) Conducted a comprehensive analysis of: - threats exposing Group cyber assets and information - policies and procedures to reduce the risk of cyberattack - plans to neutralize threats and remedy security issues Global project tested and launched in EMEA region to comprehensively assess and proactively manage worldwide risks to finished FCA vehicles stored in parking lots (read more)
2020: incorporate sustainability targets in individual performance goals to drive behaviors in support of sustainability culture and values	Sustainability targets incorporated in performance management system for individuals with responsibility for related projects, Top Management members and second-level reports to Heads of operating sectors and certain corporate functions
2020: expand and innovate dialogue on sustainability topics to reach an increasing number of internal and external stakeholders worldwide	About 4,300 internal and external stakeholders engaged in an online sustainability survey Sustainability-focused stakeholder engagement events held in EMEA, NAFTA, LATAM and APAC regions with more than 800 internal and external stakeholders involved High school and university students involved in sustainability-focused open discussions with FCA representatives Outcomes from sustainability-focused stakeholder engagement events reported on ad hoc basis to regional Heads of Human Resources, executives with responsibility for sustainability matters, Chief Operating Officers of the regions and operating segments and the Governance and Sustainability Committee at Board level About 250 internal sustainability network experts contributed throughout 2016 to the FCA sustainability program, representing all Group companies and business functions worldwide

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

INFORMATION AND COMMUNICATION TECHNOLOGY

Commitment: implement innovative solutions to support competitive business activities

Targets	2016 Results
2020: support FCA digital transformation for smart manufacturing, digital workplace and virtual sales experience	Adopted advanced ICT solutions, including the New Plant Landscape infrastructure, to achieve higher quality standards in manufacturing processes (read more) SMART Digital Operations 2016 award presented to the Melfi (Italy) plant Launched multiple projects to enhance the customer sales experience, including the Abarth Virtual Reality Configurator, the Facebook Messenger ChatBOT and the Amazon partnership in Italy (read more) Improved cybersecurity of connected systems at both corporate and vehicle level through threat monitoring, design enhancements and third-party penetration testing (read more)

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

EMPLOYEES

Commitment: attract, develop and retain the best employees through inclusion, engagement, challenge and reward

Targets	2016 Results
2020: leverage diversity as a key asset and monitor equal opportunity implementation worldwide through Human Resources processes, to build a complete skill set and value everyone's contribution	Internal mobility opportunities available to FCA salaried and hourly employees worldwide through a variety of channels, including job posting programs: on average 44% of posted positions filled with internal candidates Best practices and professional expertise shared across regions through international development path for more than 540 expatriates More than 26% of new hires were women, contributing to the continuous increase of female representation among the workforce More than 15% of leading positions held by women, compared with 14% in 2015
2020: increase work-life balance opportunities to maximize employee satisfaction and effectiveness	Several company welfare initiatives in place across all regions and companies to support employees in delivering outstanding professional contribution and results
2020: strengthen local community involvement through regional implementation of corporate volunteer programs, based on local needs, policies, and constraints	More than 20,400 employees volunteered worldwide, devoting approximately 200,000 hours during work time (an economic cost of approx. €6 million[1]) to support local communities
2020: conduct people satisfaction surveys on a regular basis to monitor and improve effectiveness in talent acquisition, development, and retention	People satisfaction surveys performed in 30 countries worldwide: - more than 54,500 hourly and salaried employees involved - survey results and key findings under evaluation for development of appropriate actions
2020: provide long-term, performance-related incentive plans and development programs at the regional level, in accordance with local requirements and constraints	More than 75,000 employees eligible for additional variable pay component defined by trade union agreements upon achievement of the financial targets established in the 2015-2018 period of the Business Plan Retention programs and incentives helped maintain a stable manager attrition rate compared with previous year Approx. 6,700 employees participated in exchange programs between FCA regions and companies, high-level training, or MBA Executive programs More than 2,600 recently-graduated new hires involved in induction and orientation programs
2020: develop new initiatives and channels to increase employee contribution to the Group's sustainability profile	Ongoing employee contributions to improve business products and processes continued through several initiatives[2] with more than 2.6 million suggestions collected, resulting in significant financial return Regular communication from the Chief Executive Officer informing employees about significant FCA activities

[1] This figure represents a conservative estimate that considers total personnel costs, total employees and assumptions on total working days and hours.
[2] WCM, Ipropose, BIS, Ideaction, STEP-UP!, MAIS and Haz Más programs.

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

OCCUPATIONAL HEALTH AND SAFETY

Commitment: strive for a zero accident and injury rate and to maximize employee health and well-being

Targets	2016 Results
2020: achieve continued reduction in accident frequency and severity rates, with ultimate goal of zero lost time accidents for all Group plants	Reduced frequency rate for the tenth consecutive year with 0.10 accidents per 100,000 hours worked (-16.7% vs 2015 and -77.3% vs 2010) Consistent severity rate after nine consecutive years of reduction with 0.04 days of absence due to accidents per 1,000 hours worked (-69.2% vs 2010) (read more)
2020: expand Health Promotion Program (HPP) to all plants worldwide, in line with local needs and constraints, to promote healthy lifestyles and safe working environment	HPP expanded to 136 plants in 19 countries, with focus on smoking cessation, nutrition education and promotion of a preventive culture through medical checks (read more)
2020: achieve OHSAS 18001 certification for all Group plants operating worldwide	141 plants certified OHSAS 18001, covering approx. 180,000 employees (read more)

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

COMMUNITY

Commitment: support social inclusion and cultural and economic development in local communities

Targets	2016 Results
2020: serve as a catalyst to help enhance the self-sustaining social-economic development of local communities	Local development opportunities and positive impacts generated by the Árvore da Vida program in Brazil: - about 21,800 individuals reached in the period 2004-2016 - more than €1.2 million invested in 2016 - social and cultural initiatives continued in partnership with local network representatives Contributions to the United Way from FCA, FCA employees, and special FCA-United Way events totaled approx. €7.5 million
2020: advance youth education and training, with particular emphasis on science, technology, engineering and math programs, including initiatives that address innovation, mobility and environmental issues	Agreement between FCA and Politecnico of Turin (Italy) for the period 2014-2018: - approx. €1.8 million contribution granted to support Automotive Engineering master degree course in 2016 Industrial Automation Master, summer schools and Voluntary Educational Programs delivered by Comau to high-potential university students worldwide with roughly 800 hours of lessons delivered Opportunities provided by the TechPro^2 project measured and assessed: - about 3,100 students trained - about 3 million hours of training provided - 826 internships, of which approx. 36% at Italian FCA after-sales centers Approx. €301,000 in grants from FCA Foundation to support *FIRST* programs in the U.S. and Canada: - 75 teams at the high school and middle school levels supported by more than 80 FCA employee mentors FCA supported Winning Futures, a school-based mentorship program for youth, with a donation of approximately €47,000 from the FCA Foundation, and more than 100 hours of work and personal time volunteered by employees Voluntary Educational Program workshop and summer school offered with trainers and tutorship provided by Group managers for a total of 96 hours, of which 40 focused on environmental sustainability aspects More than 3,100 children of FCA employees in EMEA region involved in summer camp programs focused on environmental awareness

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

CUSTOMERS AND DEALERS

RELEVANT SDGs

Commitment: strengthen relationship with customers worldwide and achieve higher satisfaction levels

Targets	2016 Results
2020: support and engage existing and potential customers through a global Customer Care platform and dedicated initiatives or channels	Provided worldwide customer assistance in 30 different languages Handled more than 24 million contacts globally Offered additional innovative communication channels for existing and potential customers across regions
2020: achieve customer service levels[1] in all regions in line with Group's best performing region	Achieved customer service performance across regions varying from 81.2% to 88.2% call response within 20 seconds (read more)
2020: support customer experience within the dealer network by focusing on personnel development and quality management programs	Provided more than 5.7 million training hours to sales, after-sales and technical personnel within FCA's dealer network worldwide Expanded Mopar Career Automotive Program by 65% to train high-potential, entry-level automotive technicians (read more)
2016: reach 20% more customers in 18 EU markets vs 2013 through new multichannel customer feedback system	Reached +75% customers vs 2013
2016: increase loyalty products up to 40% of all new contracts acquired annually by FCA Bank	Reached up to 40% of new contracts for loyalty products acquired by FCA Bank (vs 30% in 2013)
2016: increase annual renewal/refinancing rate on loyalty products held by existing FCA Bank customers to 45%	Reached 48% for renewal/refinancing rate for existing FCA Bank customers in line with 2013 result

RELEVANT SDGs

Commitment: reduce environmental impact of sales activities and promote excellence in the dealer network

2017: achieve 20% reduction (vs 2012) in average cumulative kWh of electricity consumed at Company-owned dealerships in Italy	Reduced by 11% (vs 2012) electricity consumption at Company-owned Italian dealerships and 100% of electricity supplied from the grid coming from renewable sources
2017: progressively introduce eco-efficiency guidelines and best practices at both independent and Company-owned dealerships	Piloted an initiative to reduce electricity consumption in the dealer network in the U.S. through the adoption of LED lighting (read more)

[1] Group level refers to the level of service across the four regions: EMEA, NAFTA, LATAM and APAC.

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

PRODUCT

Commitment: minimize environmental impacts from our products by reducing CO_2 emissions and improving fuel economy

Targets	2016 Results
2020: achieve 40% reduction in CO_2 emissions vs 2006 [1] for Mass-Market Brand cars sold in Europe, according to EU regulation requirements	✓ Reduced CO_2 emissions in Europe by 21% vs 2006 and by 26% vs 2000 while increasing product portfolio across Mass-Market Brands ✓ 73% of cars sold in Europe recorded emissions less than 120g CO_2/km and 78% less than 130g CO_2/km
2020: achieve at least 5% to 15% improvement in fuel economy[2] for major renewals of FCA US vehicles compared with replaced vehicles/models	✓ Fuel economy of 2017 Chrysler Pacifica / Chrysler Pacifica Hybrid compared with 2016 Chrysler Town & Country 3.6-liter[3]: - 2017 Chrysler Pacifica 3.6-liter: +7.8% - 2017 Chrysler Pacifica Hybrid (charge sustaining): +61.8% - 2017 Chrysler Pacifica Hybrid (charge depleting): +320.8% ✓ Powertrain and technology upgrades contributed to fuel economy improvements on selected current vehicles of up to 7%
2025: actively pursue actions in support of the U.S. EPA/NHTSA industry goal of 54.5 mpg by 2025	✓ 2016 product actions that contributed to fuel efficiency: - Pentastar engine upgrade integrated into additional models: 2016 Jeep Grand Cherokee, Dodge Durango, and 2017 Chrysler Pacifica - Engine Stop-Start (ESS) technology integrated into additional models: 2016 Jeep Grand Cherokee 3.6-liter, Dodge Durango 3.6-liter - Electric power steering (EPS) integrated into additional models: 2016 Jeep Grand Cherokee 3.6 and 5.7-liter, and Dodge Durango - Continued integration of technologies to improve fuel efficiency or decrease emissions, including active aerodynamic systems; LED lighting; vehicle weight reductions; thermal control technologies - More than 570,000 2016 model year vehicles produced in North America capable of running on gasoline blends containing up to 85% ethanol (E85 flexible fuel) or biodiesel blends of up to 20% (B20)
2017: at least 6.8% reduction in CO_2 emissions on average fleet vs 2012 in Brazil	✓ Over 329,000[4] Flexfuel and TetraFuel vehicles licensed in Brazil (90% of total registered licenses) contributing to the progressive reduction of CO_2 emissions of average fleet ✓ Launched initial version of new global family of small engine, Firefly, delivering best-in-class fuel economy
2020: develop electric/hybrid technologies, focusing on solutions that are economically viable, competitive in the marketplace, and beneficial to society	✓ Production launch of the 2017 model year Chrysler Pacifica Hybrid in December 2016: - industry's first electrified minivan - achieves 84 miles per gallon equivalent (MPGe) fuel economy rating in electric-only mode; 33 miles of all-electric range and total driving range of 566 miles ✓ Electric-powered Chrysler Portal Concept revealed at the 2017 U.S. Consumer Electronics Show, designed to upgrade to higher levels of autonomous driving when technology advances, if desired ✓ Fiat 500e electric vehicle car-sharing service in collaboration with the city of Turin (Italy) resulted in approx. 31,000 km driven

[1] 2006 baseline established using impact assessment guidelines of EC Regulation 443/2009. Rules for CO_2 calculation are defined in EC Regulation 443/2009 and EU Regulation 333/2014.
[2] Data is reported to the U.S. National Highway Traffic Safety Administration (NHTSA) and provided by model year, meaning the year used to designate a discrete vehicle model, irrespective of the calendar year in which the vehicle was actually produced, provided that the production period does not exceed 24 months. CAFE standards from NHTSA are set independently for passenger cars and light duty trucks. Fuel economy is based on the most recent NHTSA required submission, which for 2016 reflects mid-model year data. Previous year data is adjusted to reflect final EPA/NHTSA reports.
[3] All improvements represent combined fuel economy compared with the replaced model.
[4] Official data communicated to Brazil's INOVAR-Auto program that establishes a minimum average vehicle energy efficiency for 2017 expressed in megajoules per kilometer (MJ/km).

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

Commitment: minimize environmental impacts from our products by reducing CO_2 emissions and improving fuel economy

2020: maintain a wide offering of CNG models in Europe, promoting technological innovation and retaining significant position among leaders in Europe	● FCA confirmed among leaders for natural gas vehicles in Europe: - about 45% market share with a total of more than 31,000 natural gas vehicles sold in 2016 - more than 720,000 natural gas vehicles produced since 1997 ● Partnership agreement reached with Europe's leading natural gas providers: agreements signed with Snam, GRDF and ENGIE to foster sustainable mobility solutions ● Biomethane promoted through participation in "[bio]metanoday" and "Biomobility Day" events ● First experimental assessment of the innovative CNG direct injection technology developed within the framework of the EU H2020 GasON project to combine environmental profile with higher performances
2020: reduce CO_2 emissions by 30% vs 2008 on entire Maserati product range	● Concept study for premium BEV architecture in progress

RELEVANT SDGs

Commitment: offer new services that improve the mobility experience and provide greater access to affordable solutions

2020: pursue research, advance development and delivery of new sustainable connectivity and mobility solutions that are economically viable for the Group and its customers	● FCA began collaboration with Waymo (formerly the Google Self-Driving Car Project) to accelerate efforts to develop fully self-driving cars - 100 Chrysler Pacifica Hybrid minivans delivered to Waymo for use in Waymo's test fleet ● Enhanced Uconnect features launched in EMEA and NAFTA regions to provide hands-free capability, minimize driver interruptions and integrate smartphone technology ● eco:Drive integrated into Fiat Panda Uconnect mobile application ● Enjoy,[5] the sustainable car-sharing service launched by ENI in partnership with FCA and Trenitalia, extended to Catania (Italy), reaching a total of about 500,000 individuals and nine million rentals since 2013

[5] *Already available in Milan, Rome, Florence, and Turin (Italy).*

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

Commitment: assess and manage environmental impacts throughout the entire product life cycle

2020: offer new products (vehicles and components) with environmental performance certification through integration of ISO 14040/44-compliant Life Cycle Assessment (LCA) methodologies	✓ Critical review by a third-party certification firm for compliance verification of the LCA applied to the following vehicles: - Fiat Panda 1.2 gasoline new model vs previous model - Fiat 500X 1.4 gasoline vs Jeep Renegade 1.4 gasoline - Alfa Romeo Giulia 2.2 diesel 180 hp vs Alfa Romeo Giulietta 2.0 diesel 175 hp ✓ LCA completed on the following vehicles: - Fiat 500X 1.4 gasoline vs Jeep Renegade 1.4 gasoline - Alfa Romeo Giulia 2.2 diesel 180 hp vs Alfa Romeo Giulietta 2.0 diesel 175 hp - Chrysler Pacifica Hybrid vs Chrysler Town & Country ✓ LCA and Social LCA (S-LCA) completed on Magneti Marelli products: knuckle wheel carrier and pedalbox support ✓ Magneti Marelli completed first pilot project to engage a critical supplier on the application of LCA methodology ✓ LCA completed on Fiat Uno 1.4 FIRE vs 1.3 Firefly engine ✓ LCA completed on Fiat Mobi 1.0 FIRE vs 1.0 Firefly engine ✓ LCA completed on Fiat Grand Siena 1.4 TetraFuel vs 1.4 Flexfuel version ✓ LCA completed on the application of aluminum on hoods, the use of plastic material on fenders and glass as a replacement for steel on rear doors ✓ LCA completed on Betim Plant's stamping, welding, painting and final assembly lines
2020: minimize environmental impact of materials used in vehicles	✓ Global FCA standard on managing Substances of Concern being rolled out to suppliers worldwide
2020: increase the use of renewable and recyclable materials in next generation vehicles with a focus on recycling and substitution opportunities for critical raw materials	✓ CRF engaged with selected suppliers to evaluate testing activities on thermoplastic polymers filled with reused and recycled carbon fibers ✓ Began work on the EU Horizon 2020 LIBRE Project to develop automotive and heavy duty applications for bio-based carbon fiber materials ✓ CRF collaborated with the FCA design center to evaluate the potential use of aesthetical natural fibers in interior trimming, maintaining expected performance ✓ Began work on the EU Horizon 2020 PLATIRUS Project to develop an innovative recovery process of critical raw materials from electronic waste and automotive catalysts ✓ Recycled thermoplastic polyolefins (TPOs)/polypropylene used in the following applications: Dodge Challenger headlamp housings; and Jeep Cherokee and Dodge Grand Caravan bumper energy absorbers ✓ Recycled nylon used in the following applications: selected engine covers and intake manifolds, Jeep Cherokee fan shrouds, and multiple base engine components for select engines: 3.6-liter Pentastar engine valve covers, oil fill neck/caps, crossover, oil filter adapters and PCV valve; 1.4-liter FIRE engine oil caps, belt covers and oil mist separators ✓ Over 90 approvals of sustainable materials included in the FCA US approved sources list for plastics and textiles

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

Commitment: assess and manage environmental impacts throughout the entire product life cycle

2020: outperform European Union reuse/recycling quota target (85%) and reuse/recovery quota target (95%) in Italy and achieve similar results in other main EU markets	✓ 83% of vehicle materials reused and/or recycled in Italy ✓ 85% of vehicle materials reused and/or recovered in Italy
2020: improve efficiency in management of End-of-Life Vehicles (ELVs) and exceed minimum regulatory requirements with expansion of qualified and certified ELV network in relevant markets	✓ ELV network capacity and quality expanded in Poland, Serbia and Ireland ✓ 100% of tires collected from dismantlers in Italy, equal to approx. 22,000 tons used in recycling activities ✓ 289 dismantlers chosen among the Italian ELV network in all Italian regions, on the basis of environmental and quality criteria ✓ ELV monitoring activities established in 70 markets across the EMEA, NAFTA, LATAM and APAC regions

RELEVANT SDGs

Commitments: improve vehicle preventive, active and passive systems and overall road safety performance

2020: continue to focus on vehicle occupant safety through advanced solutions encompassing all safety aspects while: - adapting to the rapidly changing regulatory requirements and third-party ratings in all regions - maintaining high levels of structural crashworthiness while introducing Advanced Driver Assistance Systems (ADAS) such as Automatic Emergency Brakes (AEB) and Forward Collision Warning (FCW) - offering modular architectures, innovative and efficient restraint systems and providing technically advanced active safety systems for Mass Market Brand vehicles including global applications - continue to be an industry leader in user-centered HMI design approaches for all safety system customer interfaces	✓ Vehicle Safety and Regulatory Compliance organizations established in EMEA, LATAM and APAC regions, supplementing the existing NAFTA organization ✓ 360-degree Surround View Camera launched on the 2017 Chrysler Pacifica ✓ 2017 Chrysler Pacifica named an IIHS Top Safety Pick+ ✓ 2017 Chrysler Pacifica, Dodge Charger, Dodge Challenger and Jeep Grand Cherokee 4x4 achieved NHTSA Overall 5-Star rating ✓ Alfa Romeo Giulia achieved 5-Star Euro NCAP rating ✓ Jeep Renegade and the Fiat 500X achieved 5-Star Australian NCAP rating ✓ Internal accident database enhanced with 600 additional cases through the participation in the European IGLAD consortium ✓ Announced commitment to make Automatic Emergency Braking a standard feature on virtually all new vehicles sold in the U.S. by 2022
2016: introduce new driver-assist and safety systems such as Active Cruise Control (ACC), Forward Collision Warning (FCW) and Roll Over Mitigation (ROM) on Maserati models	✓ Adaptive Cruise Control, Forward Collision Warning, Blind Spot Alert with Rear Cross Path Detection, Lane Departure Warning and Surround View Camera available for Maserati Levante

RELEVANT SDGs

Commitment: offer competitive products that meet the needs of customers worldwide

2020: achieve top quartile[6] competitive position for vehicle portfolio, leading to increased customer loyalty and advocacy for our products based on applicable regional benchmarks	✓ Improved on average more than 20% globally for the rate of repair in the first 90 days of ownership ✓ Improved on average nearly 4% globally for Things Gone Wrong from surveys that evaluate functionality and design issues

[6] Vehicle portfolio will place within the top 25% of benchmark data.

KEY

⊕ Target exceeded ◉ Target achieved or in line with glide path ◔ Target partially achieved ○ Target postponed

RELEVANT SDGs

PRODUCTION[1]

Commitment: optimize environmental performance of production processes

Targets	2016 Results
2020: achieve 30% reduction in energy consumed per vehicle produced vs 2010 at Mass-Market Brand assembly and stamping plants worldwide	◉ Reduced by 19.2% energy consumption per vehicle produced at Mass-Market Brand assembly and stamping plants worldwide vs 2010 (from 7.36 to 5.95 GJ/vehicle) (read more)
2020: achieve 32% reduction in CO_2 emitted per vehicle produced vs 2010 at Mass-Market Brand assembly and stamping plants worldwide	◉ Reduced by 24.8% CO_2 emissions per vehicle produced at Mass-Market Brand assembly and stamping plants worldwide vs 2010 (from 0.616 to 0.463 tons CO_2/vehicle) (read more)
2020: use electricity generated from renewable sources for 100% of purchased electricity supplied from the grid and consumed by Mass-Market Brand plants in EMEA region	◉ 100% of electricity supplied from the grid and consumed by Mass-Market Brand plants in Italy and Brazil originating from renewable sources (read more)
2020: achieve 40% reduction in water consumed per vehicle produced vs 2010 at Mass-Market Brand assembly and stamping plants worldwide	◉ Reduced by 36.1% water consumption per vehicle produced at Mass-Market Brand assembly and stamping plants worldwide vs 2010 (from 4.99 to 3.19 m^3/vehicle) (read more)
2020: maintain water recycling index over 95% at all FCA plants worldwide	◉ Achieved 98.9% water recycling index at FCA plants worldwide (read more)
2020: achieve 14% reduction in waste generated per vehicle produced vs 2010 at Mass-Market Brand assembly and stamping plants worldwide	⊕ Reduced by 22.0% waste generated per vehicle produced at Mass-Market Brand assembly and stamping plants worldwide vs 2010 (from 217.2 to 169.4 kg/vehicle) (read more)
2020: achieve 54% reduction in hazardous waste generated per vehicle produced vs 2010 at Mass-Market Brand assembly and stamping plants worldwide	⊕ Reduced by 62.2% hazardous waste generated per vehicle produced at Mass-Market Brand assembly and stamping plants worldwide vs 2010 (from 8.2 to 3.1 kg/vehicle) (read more)
2020: achieve up to 98% waste recovery at Group plants worldwide, with specific targets for each company	◉ Achieved 96.6% waste recovery at Mass-Market Brand assembly and stamping plants worldwide (read more)
2020: achieve 25% reduction in Volatile Organic Compounds (VOC) emitted per square meter vs 2010 at Mass-Market Brand assembly and stamping plants worldwide	◉ Reduced by 20.4% VOC emissions per square meter at Mass-Market Brand assembly and stamping plants worldwide vs 2010 (from 32.4 to 25.8 g/m^2) (read more)

[1] 2020 targets for this section are based on current estimates of future production volumes according to the 2014-2018 Business Plan period.

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

Commitment: optimize environmental performance of production processes

2020: achieve Environmental (ISO 14001) and Energy (ISO 50001) certification for all Group plants[2] operating worldwide	142 Group plants certified with ISO 14001, accounting for nearly 100% of total Group industrial revenues[3] and covering over 99% of manufacturing employees[4] ISO 50001 certification for plants, accounting for 93% of total FCA energy consumption (read more)
2020: extend WCM program to 99%[5] of Group plants operating worldwide and achieve bronze, silver, gold or world class award performance level for 100% of plants in WCM program	WCM program implemented in 147 plants, accounting for more than 98% of total Group manufacturing cost base Award performance level achieved in 87 plants (57 bronze, 25 silver and 5 gold level), accounting for 84%[5] of Group plants adopting WCM (read more)

[2] For ISO 50001only where material: corresponding to at least 95% of energy consumption of all Group plants.
[3] Industrial revenues are those attributable to the activities of plants directly controlled by the Group.
[4] Manufacturing employees are those directly and indirectly involved in manufacturing processes.
[5] Percentage based on the total manufacturing cost base.

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

SUPPLIERS

Commitment: promote social and environmental responsibility among suppliers

Targets	2016 Results
2020: address critical current and emerging issues to strive toward a conflict-free supply chain while enhancing mineral traceability in high-risk areas and promote ethical sourcing through industry-driven programs and mechanisms	Working group created from FCA companies, with support of the FCA Purchasing, Legal, Sustainability, and Materials organizations, to prepare for first FCA NV filing of the Conflict Minerals Report to the U.S. Securities and Exchange Commission (SEC) in May 2017 for 2016 reporting period Delivered training on conflict minerals and ethical sourcing to 160 suppliers in the U.S. and Europe Provided training and materials to FCA companies for distribution to suppliers Assessed opportunities for concrete support of the respect for human rights in our supply chain through engagement in multi-stakeholder initiatives addressing responsible sourcing Continued engagement with ACEA working group on Conflict Minerals
2020: evaluate all Tier 1 suppliers with potential exposure to high environmental or social risks through sustainability audits or assessments; conduct targeted third-party audits of all strategic suppliers	53 audits of major FCA suppliers performed, of which 18 were conducted by FCA Supplier Quality Engineers and 35 conducted by third-party auditors More than 800 self-assessment questionnaires submitted by FCA suppliers, representing approximately 69% of FCA 2016 annual purchased value (from direct and indirect material suppliers)
2020: monitor CO_2 emissions of 90-100% of top Group suppliers (representing approx. 57% of purchases by value) through the CDP supply chain program	225 suppliers invited to respond to the CDP Supply Chain program, with response rate of 73% representing approximately 37% of FCA 2016 annual purchased value (from direct and indirect material suppliers)

KEY

Target exceeded | Target achieved or in line with glide path | Target partially achieved | Target postponed

RELEVANT SDGs

LOGISTICS

Commitment: deliver goods and vehicles on time while reducing the environmental impact of logistics

Targets	2016 Results
2020: enhance logistics operations through optimization of fleet characteristics and application of methodologies designed to reduce the impact of freight and vehicle movement	✓ FCA owned fleet upgraded with eco-efficient solutions: - 179 new compressed natural gas-powered tractors for upstream transport in the U.S. and Canada - purchased 10 low emissions natural gas-powered trucks for finished vehicle distribution in Europe (read more) ✓ FCA contractual clauses, already adopted in Europe, extended to Brazilian external fleet providers: no trucks permitted with emissions levels that do not meet Euro III standard and at least 50% of supplier fleets compliant with Euro V or stricter standards ✓ New projects implemented and/or expanded to improve worldwide transport operations, such as: - optimization of routes - use of intermodal solutions - increase of transport capacity (read more)
2020: leverage existing and emerging processes and technologies to move materials while protecting part quality and the environment	✓ Performance and environmental impact of packaging and protective materials improved through: - investments in standard containers - optimized design of special racks for premium parts - adoption of returnable crates in selected flows (read more) ✓ Best practices from I-Fast Container Logistics related to reducing cardboard, currently applied in EMEA, extended across the LATAM region

CORPORATE GOVERNANCE PILLARS

The central pillars of FCA's governance model include a clear and comprehensive Code of Conduct comprised of principles reflecting the Group's commitment to the highest standards of integrity and ethics; the whistleblowing process for reporting conduct which may be contrary to the Company's values; an advanced risk management system; and an ongoing alignment with international best practice and the Dutch Corporate Governance Code.

FCA's corporate governance structure has been expanded over time to incorporate a set of values, rules and procedures that reflect regulatory changes, improvements in corporate governance practices and the commitment to sustainable business conduct. As a result, responsible governance and sustainability factors have become embedded in the FCA culture.

The Group aims to contribute positively to the future development of regulations and standards in the automotive industry and in all other sectors related to the mobility of people and goods. This contribution is reflected in FCA's efforts to achieve our long-term targets and commitments. As reported in the FCA Code of Conduct, the Group is committed to conducting its government and public institution relations, including lobbying, in strict and full compliance with applicable laws and ethics rules as well as in full compliance with the Code and any applicable local procedures.

Political contributions by the Group are only allowed where permitted by law and must be authorized at the appropriate level within each Group company. In 2016, no contributions were made by FCA to political parties. Employees are free to make personal contributions to political candidates or parties, to the extent that these contributions do not violate corporate policy. Any political association or financial contribution made by Group employees is considered personal and completely voluntary.

INDUSTRY ASSOCIATIONS AND MEMBERSHIPS

In Europe, the Group belongs to trade associations such as the European Automobile Manufacturers' Association (ACEA) for passenger cars and commercial vehicles. ACEA represents manufacturers with production sites in the European Union (EU). The Association's mission is to define common interests, policies and positions in the framework of a dialogue with European institutions and other stakeholders.

In addition, ACEA is engaged in communication activities about the role and importance of the automotive sector for the entire EU economy, and undertakes a strategic reflection on global sustainable mobility challenges. FCA is a founding member of the Association and contributes both financially through a membership fee and operationally through its experts' participation in working groups and task forces related to these priority areas: competitiveness, market and economy; environment and sustainability; international trade; research and innovation; safety; and transport policy.

The Alliance of Automobile Manufacturers is the leading advocacy group for the U.S. auto industry. The Alliance focuses on developing and implementing constructive solutions to public policy challenges that promote sustainable mobility and benefit society in the areas of environment, energy and motor vehicle safety. The organization provides FCA US and the auto industry with a united voice on U.S. federal and state regulatory and legislative matters.

In Brazil, the Group has long been an active member of the Associação Nacional dos Fabricantes de Veículos Automotores (ANFAVEA), among others. This nationwide association unites the country's automakers with the purpose of addressing industry and market issues affecting the automotive sector as well as coordinating and protecting the collective interests of the association's members.

In most countries, dialogue occurs through industrial and employers' associations to which the Group companies belong. These associations operate to protect the interests of their members and to represent them within the social dialogue - at both a national and local level - with the main political and administrative institutions, the trade unions and other social parties.

For example, through its 40 federations in 34 countries, Business Europe represents European businesses of all sizes and is a recognized partner taking part in social dialogue within the European Union.

FCA is also a member of China Association of Automobile Manufacturers (CAAM). CAAM is a leading group aiming at facilitating the communication between the government and the automotive industry. This group promotes the development of the automotive industry in China leveraging on its main functions such as policy research, information service, international communication and exhibition service.

GRI: G4-DMA, G4-16, G4-34, G4-56, G4-SO6

CORPORATE GOVERNANCE STRUCTURE

FCA's governance supports how we do business on a daily basis, enabling us to lead the way to sustainable growth and to create value while respecting the legitimate interests of stakeholders. FCA's governance structure consists of a management and control system and general meetings of shareholders. In addition, as required by law, the accounts are reviewed or audited by independent auditors.

The main elements of FCA's governance model are described below, while full disclosure on this aspect is available in the Annual Report, pages 87-102, as well as in the Governance section of the Company's website where relevant updates are reported during the year.

The Board of Directors as a whole is responsible for the strategy of the Company. The Board of Directors is composed of two executive directors (i.e., the Chairman and the Chief Executive Officer) and nine non-executive directors.

In accordance with the Dutch Corporate Governance Code, the majority of members of the FCA Board are non-executive and independent. Independence is a crucial requirement for the proper functioning of the Board. An important means of promoting independent action of the Board is to ensure the diversity of its composition in terms of such factors as age, gender, expertise, background or nationality. The presence of independent directors is essential to the protection of the interests of shareholders, particularly minority shareholders, assuring that potential conflicts between the interests of the Company and those of the controlling shareholders are assessed impartially.

The composition of the FCA Board of Directors reflects international standards:

- there are 11 directors, ensuring the effective functioning of the Board and its Committees
- the Board is composed of three women and eight men, with women making up 27% of the total
- Board member average age is 61.

A combination of skills and experience is fundamental to the proper functioning of the Board. The size, complexity and product offerings of the sectors in which FCA operates, and the geographic spread of its businesses, require that Board members have a broad and diverse mix of skills and background. International experience and an understanding of industrial and financial sectors are also reflected in the Board membership. For more details on the Board of Directors, including curriculum vitae for individual members, see the Board of Directors section of the corporate website, where a skill matrix of the Board members is also available.

Structure and content of Board meetings and participation at committee meetings informs the directors about Company operations and market conditions. Meetings are also held periodically on-site at industrial locations. The directors also receive periodic updates on significant changes in laws and regulations.

During 2016, there were six meetings of the Board of Directors. The average attendance at those meetings was 97%.

The appointment of members of the Board of Directors is voted on, among other proposals, by shareholders at general meetings. The general meeting of shareholders has at all times power to suspend or to dismiss any director. General meetings are the mechanism through which all shareholders are represented.

GRI: G4-DMA, G4-34, G4-36, G4-37, G4-38, G4-39, G4-40, G4-43, G4-44, G4-45, G4-LA12

BOARD COMMITTEES

The Board of Directors is supported by three committees, whose roles and responsibilities are reviewed regularly and updated to reflect current best practices in corporate governance:

- Governance and Sustainability Committee
- Audit Committee
- Compensation Committee.

Governance and Sustainability Committee

The Governance and Sustainability Committee is responsible for, among other things, assisting and advising the Board of Directors with: (i) the identification of the criteria, professional and personal qualifications for candidates to serve as directors; (ii) periodic assessment of the size and composition of the Board of Directors; (iii) periodic assessment of the performance of individual directors and reporting this to the Board of Directors; (iv) proposals for appointment of executive and non-executive directors; (v) supervision of the selection criteria and appointment procedure for senior management; (vi) monitoring and evaluating reports on the Group's sustainable development policies and practices, management standards, strategy, performance and governance globally; and (vii) reviewing, assessing and making recommendations as to strategic guidelines for sustainability-related issues, and reviewing the annual Sustainability Report.

The Governance and Sustainability Committee is elected by the Board of Directors and is comprised of three directors, two of whom are independent. During 2016 the Governance and Sustainability Committee met once, with 100% attendance of its members at such meeting.

For details about the Audit and Compensation Committees, refer to the Governance section of the corporate website.

GRI: G4-34, G4-36, G4-37, G4-38, G4-40, G4-42, G4-43, G4-44, G4-45, G4-48

SUSTAINABILITY MODEL

FCA's approach to sustainability recognizes that we are accountable for how we impact the world. Financial, environmental and social concerns are all an integral part of our business strategy as we seek to create the right balance that produces lasting value for our Company as well as society as a whole. In fact, the business case for corporate social responsibility has gotten stronger as consumers increasingly choose to support brands they perceive to be pursuing higher motives than just profit. Ethical factors are particularly important in an industry such as automotive, where many products offer high quality at competitive prices.

FCA's sustainability model incorporates the need to implement robust processes as well as achieve cultural buy-in to simultaneously achieve its economic and social responsibility objectives. The Group has established processes to align its long-term business strategy with the needs of internal and external shareholders, to assess its ability to meet these targets, and to identify opportunities for improvement. The commitment to sustainability arises from a corporate culture that includes integrity, respect for others and a commitment to community service.

In order to implement meaningful sustainability practices, FCA involves every area, every function and every employee, from the top of the management chain to workers in plants and offices around the world. The Group also actively promotes environmental and social responsibility among its many suppliers.

In 2009, the Nominating and Corporate Governance Committee assumed overall oversight for integrating social and environmental concerns into FCA's actions and interactions with stakeholders. The members were reappointed in 2014 as the Governance and Sustainability Committee.

Several other entities help direct a disciplined approach to sustainability management. The Sustainability Team -- made up of members from Italy, Brazil, China and the U.S. - plays a crucial role in fostering a culture of sustainability. The team brings expertise in issues such as risk assessment, cost optimization, stakeholder engagement and reputation management to help identify relevant targets for action and analyze the impact of sustainability efforts. The Sustainability Team provides direct support to managers of key operations (such as environment, innovation, human resources and supply chain) in FCA's regions and operating segments, as well as those in centralized functions. With the support of the Investor Relations Team, it also handles relationships with sustainability rating agencies, international organizations, analysts and those investors who are motivated by social and environment ideals.

The heads of principal corporate functions serve on the Cross-Functional Sustainability Committee (CSC), which evaluates and facilitates operational decisions and advises the Group Executive Council (GEC) on proposals submitted by the Sustainability Team. The CSC meets on an ad hoc basis, with sessions attended by members if the agenda is relevant to their specific functions, including Business Development, Corporate Communications, Engineering, Design, Finance, GEC Coordinator, Human Resources, Industrial Relations, Institutional Relations, Internal Audit & Compliance, Manufacturing, Purchasing, Senior Counsel and Treasurer. The Sustainability Group Coordinator is also a member of the GEC.

The GEC is a decision-making body at FCA. It is led by the Chief Executive Officer (CEO) and composed of senior leadership from regional operations, brands, industrial processes, and support/corporate functions. The GEC is responsible for defining the Group's sustainability strategy and approving operating guidelines, and also plays a vital role in ensuring that sustainability efforts are aligned with economic objectives. The CSC provides updates to the GEC on specific sustainability initiatives and on the Group's overall performance in meeting sustainability targets.

The Board of Directors, composed of both executive and non-executive members, is responsible for the management and strategic direction of the Group. The Board's Governance and Sustainability Committee evaluates proposals related to strategic sustainability initiatives, advises the full Board as necessary, and reviews the annual Sustainability Report.

Discussions between stakeholders and the Board regarding sustainability issues are delegated to the Sustainability Team as part of its assignment to maintain an interchange with internal and external stakeholders. Reports on these dialogues are then included in the annual disclosure of the Sustainability Report and conveyed to the Governance and Sustainability Committee. Executives who are responsible for sustainability issues help draft annual plans for stakeholder engagement activities. Relevant outcomes from these events are reported to the appropriate level within the Group, such as regional heads of Human Resources and COOs of the regions and operating segments.

GRI: G4-34, G4-35, G4-36, G4-37, G4-42, G4-43, G4-48, G4-49, G4-53

CODE OF CONDUCT

The FCA Code of Conduct is an integral part of the Company's governance model, serving as the foundation upon which our Group builds a culture dedicated to growth, innovation and responsibility.

FCA endorses the United Nations (UN) Declaration of Human Rights, the International Labour Organization (ILO) Conventions and the Organization for Economic Co-Operation and Development (OECD) Guidelines for Multinational Companies. The FCA Code of Conduct is intended to be consistent with such guidelines and aims to ensure that all members of the Company's workforce act with the highest level of integrity, comply with applicable laws, and build a better future for our Company and the communities in which we do business.

The FCA integrity system is comprised of these primary elements:

- Principles that capture the Company commitment to important values in business and personal conduct
- Practices that are the basic rules that must guide our daily behaviors required to achieve our overarching Principles
- Procedures that further articulate the Company's specific operational approach to achieving compliance and that may have specific application limited to certain geographical regions and/or businesses as appropriate.

In addition, guidelines covering specific issues in greater depth emphasize the Company's accountability and commitment to a culture of responsibility and integrity.

The Code applies to all Board members and officers of Fiat Chrysler Automobiles N.V. and its subsidiaries, as well as full-time and part-time employees of FCA and any of its subsidiaries. The Code also applies to all temporary, contract and all other individuals and companies that act on behalf of FCA, wherever they are located in the world.

FCA uses its best efforts to ensure that the Code is regarded as a best practice of business conduct and observed by those third parties with whom it maintains business relationships of a lasting nature such as suppliers, dealers, advisors and agents.

The Code may be consulted and downloaded from FCA's corporate website, the employee portal and other employee communication channels aimed at reaching the entire workforce. Copies can also be obtained from Human Resources, the Legal Department or the Head of Internal Audit & Compliance.

FCA disseminates the Principles established in the Code of Conduct and the values of good governance to all employees. During 2016, training about ethics and compliance, with particular focus on the Code of Conduct, anti-corruption, corporate governance and human rights (including non-discrimination) was offered to FCA employees resulting in more than 146,000 participations.

GRI: G4-DMA, G4-15, G4-56, G4-57, G4-HR1, G4-HR2, G4-SO4

ACTING WITH INTEGRITY

The level of knowledge and compliance with the Code of Conduct is systematically measured.

Violations of the Code of Conduct are essentially identified through:

- periodic activities carried out by Internal Audit & Compliance
- reports received in accordance with the Ethics Helpline Management Procedures
- checks forming part of the standard operating procedures.

For the reporting of alleged violations, FCA has dedicated channels to provide a worldwide, common and independent intake via telephone and web.

The FCA Ethics Helpline is an essential element of the management process, in accordance with the Code of Conduct, in relation to concerns raised. It is managed by an independent provider, available 24 hours a day, seven days a week. FCA has chosen this reporting tool to meet compliance needs and maintain an accurate reporting environment.The FCA Ethics Helpline also allows employees, suppliers, dealers, consumers and other stakeholders to request advice about the application of the Code of Conduct (for example, to verify definitions of terms or restrictions under the Code), and to report any concerns about alleged situations, events, or actions that they believe may be inconsistent with the Code. The FCA Ethics Helpline can be accessed either by phone (35 dedicated numbers in 21 languages) or by web intake (19 languages available). In addition to the FCA Ethics Helpline, it is also possible to report potential forms of misconduct of the Principles, outlined in the Code of Conduct, by utilizing the contact details contained in the FCA's Worldwide Ethics and Compliance Contact List. Further, FCA employees may also seek advice concerning the application and interpretation of the FCA Code of Conduct by contacting their immediate supervisor, Human Resources representatives, or the Legal Department.

FCA analyzes and investigates the allegations received; the results and potential disciplinary actions arising are assessed by the Ethics and Compliance Committee at the regional level and where deemed necessary escalated to the global FCA Ethics and Compliance Committee.The relevant internal functions are notified of the violations. The FCA Audit Committee is periodically updated on the status of the allegations with a specific focus on significant cases.

The violations of the Code of Conduct have been categorized according to the Principles of the Code. Accordingly, Managing Our Assets and Information includes Communicating Effectively, Protecting FCA Assets and Maintaining Appropriate Records.

The category Interacting with External Parties comprises Avoiding Conflicts of Interest and Supporting Our Communities. Conducting Business covers Sustainably Purchasing Goods or Services, Transacting Business Legally and Engaging in Sustainable Practices. Finally, Protecting Our Workforce includes behaviors related to Maintaining a Fair and Secure Workplace, and Ensuring Health and Safety. See the complete Code of Conduct for further details about each category.

For all Code violations, the disciplinary measures taken are commensurate with the seriousness of the case and comply with local legislation.

Compliance with business ethics standards, including those that relate to corruption, is verified through regular audits conducted by the FCA Internal Audit & Compliance department based on the annual risk assessment. Compliance with competition laws is also crucial to the Group's reputation. To fulfill FCA's commitment to compliance in this area in all countries where we do business, FCA has adopted a comprehensive compliance program, which includes Competition Guidelines, periodic training, awareness and counseling. When dealing with our business partners, our workforce is expected to always maintain the highest degree of integrity and to act solely in the best interest of the Company. Any situation that constitutes a conflict or gives the appearance of a potential conflict must be disclosed immediately to any of the individuals or groups listed in FCA's Worldwide Ethics and Compliance Contact List.

Whistleblowing Procedures as of December 31, 2016
by Code of Conduct categories

	Total closed cases	Total confirmed cases
Managing Our Assets and Information	518	175
Interacting with External Parties	86	37
Conducting Business	29	15
Protecting Our Workforce	256	70
Total	**889**	**297**

Related content

FCA Ethics Helpline >>

GRI: G4-DMA, G4-57, G4-58, G4-EN34, G4-HR3, G4-HR9, G4-HR12, G4-SO3, G4-SO4, G4-SO5, G4-SO11

COMBATING CORRUPTION AND BRIBERY

Included in the FCA Code of Conduct's Principles within "Transacting Business Legally" and "Interacting with External Parties" are, among others, rules related to anti-bribery, anti-corruption, anti-competitive behavior and conflicts of interest.

Anti-bribery and anti-corruption laws implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, the OECD Guidelines, and laws such as the United States Foreign Corrupt Practices Act, United Kingdom Bribery Act and similar laws (e.g., Brazil's Anti-Corruption Law-Lei da Empresa Limpa) prohibit providing, directly or indirectly (such as through an intermediary), anything of value not only to domestic, but also to foreign government, political or military employees or officials, foreign political party officials or candidates; employees of foreign government owned or controlled entities; or representatives of international organizations (such as the United Nations or the World Bank); or to private entities/individuals for the purpose of obtaining or retaining business or securing any improper advantage.
FCA's record keeping and internal accounting and control Practices and Procedures are designed to ensure integrity and accuracy in the recording and reporting of all business transactions.

COMPLIANCE

A summary is provided below of the final court judgments, final arbitration awards and other final orders deemed significant because of their value and for which a final decision was issued in 2016 against companies of FCA Group (Final Judgments).

There were no significant Final Judgments relating to a breach of i) environmental legislation, ii) rights of local communities, iii) privacy, iv) product liability, v) unfair competition, intellectual property and antitrust, vi) contractual liability, vii) product and service information and labeling, viii) litigation with suppliers and ix) human rights.

With regard to advertising, in October 2015 the Italian Authority for Competition and Market (AGCM) alleged that payment and pricing methods offered in a certain commercial for the Company's products were not sufficiently clear and in May 2016 issued a decision imposing a fine of €300,000 on FCA Italy.

In addition, there were also certain non-final judgments or orders relating to matters that are still pending and whose final outcome remains uncertain (Non-Final Judgments).

With regard to contractual liability, in September 2016 Fiat Chrysler Automoveis Brasil Ltda was ordered to indemnify a former dealer for approximately €1 Million regarding certain taxes withheld by the company in 1996 and not reimbursed to the dealer. The company appealed and the decision was suspended. In addition, in two cases (one in the Brazilian State of Parana and one in the State of Sao Paulo) Fiat Chrysler Automoveis Brasil Ltda was held jointly and severally liable with a former dealer for the dealer's failure to deliver cars to its customers. The company appealed in both cases and in both cases the decision was suspended.

Final rulings related to labor and social security matters delivered in 2016 were lower [in number and amount] compared to those from previous years and concentrated mostly in Brazil and Mexico, mainly concerning the interpretation of local regulations. None of these final judgments can be considered exceptional either in nature or in number. In addition, in 2016 one of the Italian subsidiaries of the Group appealed before the supreme administrative court ("Consiglio di Stato") the rejection by Italian Administrative Court ("TAR") of a claim filed against an administrative determination of the national social security institute ("INPS") calling for the return of certain contributions ("Cassa Integrazione Guadagni") formerly paid by the security institute to the company's employees on the ground of economic crisis.

GRI: G4-DMA, G4-15, G4-57, G4-58, G4-EN29, G4-HR8, G4-SO5, G4-SO7, G4-SO8, G4-PR2, G4-PR4, G4-PR7, G4-PR8, G4-PR9

RISK MANAGEMENT

Risk management is fundamental to effective management and an essential element of sound corporate governance.

FCA employs a multi-dimensional approach for managing and mitigating risks to its business operations and assets. The risks encompass a broad array of topics, including socio-economic uncertainty; regulatory initiatives; competitive actions; industrial accidents; natural disasters; risks posed by climate change; liability claims and lawsuits; portfolio management and investor decisions; employee health, safety, and retention issues; and similar exposures among the FCA supply chain. The impact of these risks can be tangible – usually quantified in financial terms – or more qualitative, such as the reputational risk among consumers, business partners and investors. The overall process involves identifying the risks, preemptively reducing their likelihood of occurrence, developing plans for responding to risks should they occur, and where possible, securing insurance to cover potential losses. The three primary elements of the globally-integrated FCA approach are:

- the Enterprise Risk Management process, which increases visibility to key risks which may hinder FCA's ability to achieve its strategic goals. All regions collaborate to identify and prioritize risks based on impact and vulnerability, determine the acceptable risk tolerance, and monitor mitigation actions and risk metrics for key global risks throughout the year
- the Business Continuity Management process, which establishes and validates a structured approach to restoring normal business operations after major disruptions - typically those events that impair production across multiple days and/or manufacturing plants
- the Pure Risk Management process, which identifies conditions that could result in property and business interruption losses; assigns probability and estimates the impact; implements optimized prevention, protection, and risk transfer countermeasures; and monitors the process for effectiveness. These activities are not only focused on the traditional fire and natural hazard risks, but have been extended to several other pure risks through the development of innovative risk engineering solutions.

The FCA risk management process provides an important contribution to FCA's sustainable development and a competitive advantage in a fast-changing and challenging global business environment.

ENTERPRISE RISK MANAGEMENT

FCA's Enterprise Risk Management (ERM) model defines a risk as any event that could impact the Company's ability to achieve its objectives.

The ERM model is based on the framework established by The Committee of Sponsoring Organizations of the Treadway Commission (COSO) and was adapted to the unique needs of the Group. It is updated to incorporate best practices identified during evaluations of other industrial groups, to better respond to new requirements or to significant emerging issues (climate change, macroeconomic developments, joint ventures, etc.). Over 50 risk drivers have been identified, which are further broken down into approximately 85 potential events.

The analysis of potential risks is:

- dynamic (due to periodic evaluation of the main risks with follow-up and monitoring of mitigating actions identified and/or implemented);
- predictive (through prospective risk assessment); and
- cross-functional (through risk assessment with direct involvement of business areas).

ERM coordinators are appointed for each operating segment of the Group. They are responsible for preparing, coordinating and holding cross-functional meetings with the heads of key operating segments. The objectives of these meetings are to facilitate discussion, identify and evaluate potential risks, and formulate risk mitigation plans.

On an annual basis, an enterprise risk assessment is performed based on a bottom-up approach beginning with the individual business units and concludes with the review of the Risk Management Committee. Regional/company Chief Executive Officers and/or Chief Operating Officers of these operating segments review and approve their respective risk assessments and submit these results to the central ERM team. The central team consolidates results into a Group report for review and validation with the Group Chief Financial Officer (CFO). As part of the consolidation, global focus risks are identified and risk dashboards created to monitor key risk indicators as well as current and go-forward mitigation efforts.

Key global risks identified in 2016 include risks related to regulatory compliance; product quality and customer satisfaction; talent management; commercial and industrial practices; and product portfolio and product life cycle. Each key global focus risk has been classified according to the COSO risk categories and corresponding risk factors have been assigned. Control measures and mitigating actions have been defined for each identified risk.

For further details please refer to "Sinificant risks identified and control measures taken" at page 104 of the 2016 FCA Annual Report.

GRI: G4-DMA, G4-2, G4-14, G4-45, G4-46, G4-47, G4-49, G4-50, G4-58, G4-EC2, G4-EC7, G4-EC8

BUSINESS CONTINUITY MANAGEMENT

FCA's Business Continuity Management is a structured approach to restoring normal business operations following a potential disruption or catastrophic event, such as a natural disaster, pandemic, or cyberattack, including similar events within its supply chain.

The Business Continuity Management process has four major elements:

- conducting an enterprise risk assessment, during which facilities and functions are analyzed in terms of their relative vulnerability and potential impact of disruptions. Reputational, operational and financial risks are taken into account, and a heat map is developed to enable prioritization for the Business Continuity Plan.
- undertaking a Business Impact Analysis (BIA) for each facility or function, beginning with the higher-risk entities. A BIA identifies and rates all major buildings, equipment, processes, human resources, suppliers and ICT systems based on their criticality in achieving operational objectives, and an estimated time to recover is determined.
- developing a Business Continuity Plan (BCP), which specifies the procedures for business recovery
- testing the BCP, generally through a simulation exercise.

The results and priorities of the Business Continuity Management process are reviewed regularly by management.

By the end of 2016, Business Continuity Plans had been developed for 18 high-risk plants in the United States, Canada and Mexico, accounting for nearly 90% of total FCA NAFTA revenue attributed to vehicle sales. Plans have also been developed for six supporting corporate functions that most directly impact operations. FCA relies on a customized relational database to improve the efficiency and accuracy whereby business continuity data, plans, and risk mitigation actions are created, tracked, and shared across the enterprise.

Because disruptions to business operations may also impact non-manufacturing activities, FCA Services has also put Business Continuity Plans in place. FCA Services is the shared service center dedicated to supporting FCA's worldwide processes and activities within Finance, Taxation, HR Services and Customs. The FCA Services Business Continuity Plan follows the best practices and requirements of international standards (FCA Services is ISO 27001:2013 certified) and focuses on the safety of employees and on continuity of services.

The continuity of the business is ensured through a continuous improvement cycle that includes:

- Policies and Procedures followed by all FCA Services countries
- Enterprise Risk Assessment and Business Impact Analysis to identify the risks and evaluate financial, reputational and operational impact. To mitigate the risks, action plans and new countermeasures are implemented.
- Business Continuity Plan with all steps and actions to be taken in case of a disruption event
- disruption scenarios to be prepared against several different adverse situations
- continuous control and monitoring of events that can impact the business
- testing, from simulation exercises to full testing, to ensure the validity of the plan and involve and train employees.

All FCA Services Business Continuity activities are reviewed every year by a Steering Committee as well as by internal and independent external auditors to assure the correctness and continuous improvement of the Business Continuity Plan.

GRI: G4-DMA, G4-2, G4-14, G4-EC2

MANAGEMENT OF PURE RISK

FCA endeavors to prevent losses that can result in property damage that could lead to an interruption in business. Short- or long-term disruption in operations, as well as damage to goods or facilities, can occur from natural causes or accidental or malicious acts (fire, explosion, floods, etc.) and are classified as pure risks.

Loss prevention, as well as other risk prevention processes, is embedded in day-to-day activities as well as in every new project.

The FCA Risk Management policy aims to ensure that the Group has a consistent basis for measuring, controlling, monitoring and reporting risk at all levels, as reflected in the following four pillars:

- preventing accidents or mitigating their effects
- adopting higher international standards for risk prevention
- minimizing the cost of risk by optimizing loss prevention, investment, self-insurance and risk transfer programs
- centralizing and consolidating the relationships with global insurance markets.

The FCA Risk Management center of competence leads the development of loss expectancy scenarios as well as recovery/mitigation options. Specific activities include monitoring and insuring against pure risks – such as fire, explosions, and natural disasters – and playing a central role in managing events that have the potential to impact the continuity of operations or integrity of physical assets at the Group's 1,296 sites worldwide covered by the insurance programs.

The Pure Risk Management process is conducted with the support of external consulting firms that specialize in industrial risk and that use field audits to provide an impartial, in-depth and continuous assessment of risk across the Group.

During 2016, FCA's risk management entities were responsible for managing 225 sites worldwide, representing 88% of total insured value.

To ensure that industrial risk is adequately and efficiently monitored, more than 95% of FCA sites managed by FCA's risk management entities are surveyed at least once every three years and more than 50% are surveyed annually. In 2016, a total of 101 sites (representing approximately 69% of FCA's industrial activities) and 441 new projects were inspected or monitored to ensure conformity with international standards in loss prevention.

In 2016, FCA invested €30.3 million in targeted loss prevention and physical risk mitigation measures that lead to a reduction in overall loss expectancies of approximately €3.1 billion during the year, due largely to the completion of automatic sprinkler system upgrades. Figures relate to the insurance year from July 1, 2015 to June 30, 2016.

By concentrating and strictly controlling the fire protection investments at selected vital sites, an overall Global Efficiency Index (GEI) of 0.96 was achieved. This level is consistent with risk management best practices at large industrial corporations. The Global Efficiency Index for loss mitigation (GEI = cost of protection/reduction of expected damage) is recognized as a measure of effectiveness for industrial risk management. These actions made it possible for FCA to have 75% of the total insured values certified by the insurance market as Highly Protected Risk.

This globally-recognized industrial insurance certification reflects the highest level of loss prevention practice and protection standards in combating property damage risks. Such risks must be assessed and certified by external, internationally-recognized experts.

Industrial losses from natural hazards can be caused by earthquakes, flooding, tornadoes and severe storms. Climate change has the potential to further influence the magnitude and frequency of hydrogeological and meteorological disasters and may introduce new hazards in areas unfamiliar with them.

To bolster the sustainability and resilience of the Group, the risk management function launched several forward-looking and innovative risk engineering approaches and solutions to better understand the impacts of natural hazards and to appropriately respond. The ability to assess losses and costs associated with natural hazards is essential for better hazard mitigation. This proactive approach will continue to reduce the detection time of new risks, particularly those related to natural hazards, and to promptly adapt the FCA loss prevention and mitigation practices and procedures.

The following projects are core operational activities:

- insurable environmental risk management
- earthquake risk re-engineering project
- flood risk re-engineering project
- parking lot risk management
- supplier risk management.

GRI: G4-DMA, G4-2, G4-14, G4-45, G4-46, G4-47, G4-EC2, G4-EC7, G4-EC8

Insurable Environmental Risks

FCA uses an innovative environmental risk management methodology developed in collaboration with Environment, Health and Safety (EHS) departments across the Group, a major international consultancy and certification firm, and an insurance partner. This program, which has become a consolidated pillar within the loss prevention activities of FCA, enables the Group to:

- obtain objective and quantified assessments of its insurable environmental exposures
- improve risk profiles of each business unit to minimize environmental risk costs
- understand and clearly communicate priorities and benefits
- inform the insurance market of activities to prevent and mitigate potential environmental losses
- obtain environmental insurance coverage appropriate to the level of risk exposure and potential loss
- execute prevention activities in line with Group strategies.

Seventy-eight percent of FCA's worldwide total insured value was analyzed and quantified using this methodology.

To validate information collected through self-assessments, 24 on-site ad hoc visits were conducted at Group sites considered representative in terms of size, activity and geographical distribution. The surveys, organized by the EHS department for each operating company, were conducted by environmental risk engineers from a leading global environmental risk insurer to validate the consistency of the self-assessment checklists and identify possible improvement opportunities.

These activities supplied the basis for development of the Group's first environmental maps which provide a quantification of the overall level of risk, using a scientifically-based certified self-assessment tool. Results presented to the insurance market confirm that FCA's environmental risks have been adequately identified and quantified and are properly managed, enabling the Group to secure comprehensive global insurance coverage.

Earthquake Risk Project

Recent seismic events affecting industrialized countries (e.g., Japan - 2011, Italy - 2012 and 2016) demonstrate that the implementation of a structured risk engineering program based on a sound risk estimation is vital in controlling exposure to potential property damage and business interruption. A modern risk management decision-making process requires quantitative estimates of expected losses due to seismic events.

FCA Risk Management, in collaboration with AXA MATRIX Risk Consultants and the University of Naples Federico II, developed the "Integrated Approach" to seismic risk assessment and management, an innovative multi-level framework that allows simultaneous state-of-the-art seismic risk assessment and rational allocation of available resources. Unlike traditional approaches to seismic risk, this methodology encompasses individual quantification of all basic components of that risk: the seismic hazard of the site, the expected building structural response, and the unique economic activities and asset values.

In 2016, the collaboration's working group consolidated and extended the application of the "Integrated Approach" to several key sites worldwide. This included:

- the "Level 1" analysis, which is aimed at quantitative and transparent seismic risk prioritization, and which was extended to 48 sites
- the "Level 2" analysis, providing quantitative seismic loss assessment, which was applied to three locations identified as top risks during the 2015 Level 1 analysis
- the "Level 3" analysis, consisting of on-site earthquake-specialized loss prevention engineers developing dedicated risk mitigating recommendations which will be applied to selected plants.

GRI: G4-DMA, G4-2, G4-14, G4-45, G4-46, G4-47, G4-EC2, G4-EC7, G4-EC8

Flood Risk Project

To verify whether the FCA methodologies used to identify and quantify flood exposures are still the most advanced available, FCA Risk Management has formed a working team consisting of specialists from the loss prevention engineering departments of four recognized insurance and reinsurance global leaders.

Enabled by their natural hazard research centers, the reinsurance companies provide mapping tools based on geomorphological satellite imagery and mathematical modeling for the first macro analysis of the risk portfolio.

The engineering departments of the insurance companies provide their risk analysis based on visual and instrumental interpretation techniques along with field checks.

This methodology for industrial flood risk assessment was tested with the FCA EMEA portfolio covering 97 sites, and identified 42 sites where a second flood risk study was recommended.

Seven sites have already been reevaluated using the new flood risk assessment tool and confirmed the previous flood risk rating.

The flood team also completed three ad hoc flood surveys to test the correctness and efficiency of the new process.

In 2016, the project was launched in the NAFTA region and is expected to be in place in that region by 2017.

Parking Lot Project

In 2016, a global project was piloted to assess and proactively manage natural hazard risks that expose finished FCA vehicles stored in parking lots to damage such as fire, hail, natural hazard and external exposures.

An international team comprised of logistics and risk management specialists and supported by the Group risk engineering provider was asked to develop a risk mapping tool to:

- collect key data to quantify and compare risks on accumulation and potential exposures
- produce both global exposures and specific hazard risk maps highlighting top risks and priorities
- define both prevention and protection risk treatment priorities and outline the most appropriate action plans.

A test phase was launched involving approximately 30 logistics areas in the EMEA region. When the validity of the methodology, data collection and analysis software was proven, a decision was reached to expand coverage in EMEA to roughly 100 parking lots. This project will be further extended to other regions.

GRI: G4-DMA, G4-2, G4-14, G4-45, G4-46, G4-47, G4-EC2, G4-EC7, G4-EC8

Supply Chain Risk

Managing the complexity of multi-tier supply chains presents particular challenges for all major industries, including the automotive sector. FCA strives to implement strategies that manage both everyday and exceptional risks along the supply chain.

Suppliers who meet certain risk criteria are encouraged to work with FCA to ensure that risk management processes in place are able to secure the supply flow of key components.

The process, led by FCA Risk Management and FCA Purchasing, begins with a simplified, semi-quantitative approach: already available information (financial, business, industrial and geopolitical) is used to prioritize suppliers. This helps focus engineering resources on those crucial suppliers with the greatest potential impact or loss likelihood on FCA supply chains. A second step entails a methodology and supporting tool that allows FCA to assign a risk management maturity index to the supplier risk management processes.

It is based on suppliers that have mature risk management practices being able to manage their risks and minimize the probability of an extended production stoppage in one of their key manufacturing plants. The final step is to conduct focused loss prevention audits with targeted suppliers to identify and quantify risks that could impact the supply of components to FCA and develop adequate action plans to mitigate those risks.

The methodology and reporting tools enable focused loss prevention supplier audits to be conducted and required information to be collected in order to:

- quantify the potential exposure to FCA
- define the fire and Nat Haz loss scenarios and quantify the production downtime
- estimate the time to restart and time to resource
- identify potential equipment bottlenecks, critical equipment and vital tier 2 or 3 suppliers.

An example where this methodology was adopted is the recently-built Jeep plant in the northeastern Brazilian state of Pernambuco. This industrial complex covers approximately 2.8 million square feet, represents a total investment of $2.4 billion, and took two and a half years to build.

Designing an effective and resilient supply chain for FCA operations in the Pernambuco area was strategically important for the Group and included a focus on local sourcing. The on-site Supplier Park covers an area of 270,000 square meters and houses 16 suppliers that produce 17 component product lines at a dozen factories. These suppliers account for approximately 40% of the Jeep Renegade's content, including stamping and welding, painting, moldings, internal and external finishing, assembly, and complex systems such as instrument panels.

From the start, the central FCA Risk Management center of competence and a dedicated local team of loss prevention specialists ensured alignment to both Brazilian and FCA internationally recognized loss prevention standards, not only for the main FCA plant but also for the Supplier Park.

During construction, $20 million was invested in fire protection equipment and more than 2,000 loss prevention engineering hours were dedicated to completion of the projects, which included testing and verification of the protection systems. This allowed the plant to attain a high level of loss prevention practices and protection standards aimed at achieving the Highly Protected Risk insurance market certification in 2017.

GRI: G4-DMA, G4-2, G4-14, G4-45, G4-46, G4-47, G4-EC2, G4-EC7, G4-EC8

EMPLOYEES AND COMMUNITY

The Group embraces its responsibilities to those impacted by its actions, beginning with its own employees and extending to other stakeholders, including those living in cities and areas where FCA operates as well as society at large. Relationships with key stakeholders are built on values that include honesty and integrity. These values represent a way for FCA to nurture participation not only in the achievement of business goals but also in community improvement efforts.

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EMPLOYEES

Dedicated employees are essential to the Group to create value for our many stakeholders inside and outside of offices and plants. By attracting and developing an engaged and accountable workforce, FCA strives to create an environment that is attractive to those who contribute their talents and aspirations to shaping our future.

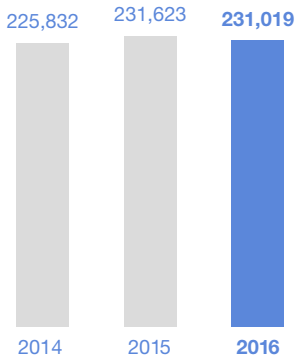
Employees at all levels are expected to bring their knowledge, creativity and experience to their areas of work in order to identify opportunities and act as catalysts for change so that the Group can adapt, reacting quickly to the market and outpacing the competition. Employees are also expected to practice the business ethics and behavioral expectations of the FCA Code of Conduct. Consistent with these goals, the Human Resources function supports robust processes designed to both secure the talent required by the business and also to provide employees with opportunities during their entire career life cycle from recruiting to retirement.

As of December 31, 2016, the Group employed 231,019[1] people.

View data >

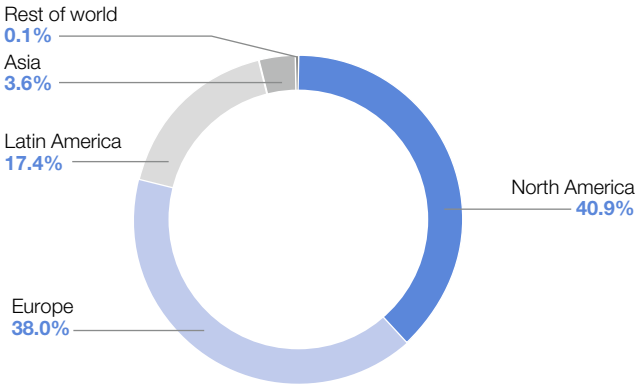
Employee Trend by Year

FCA worldwide (no.)



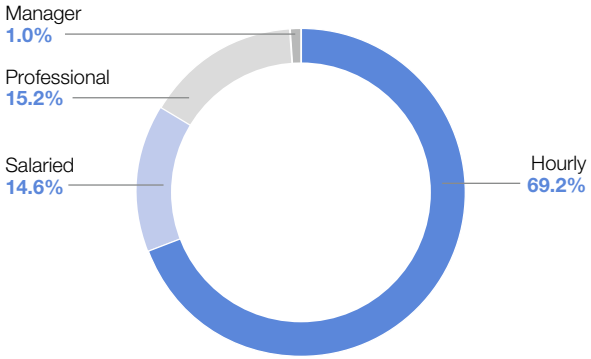
Employees by Geographic Area

FCA worldwide



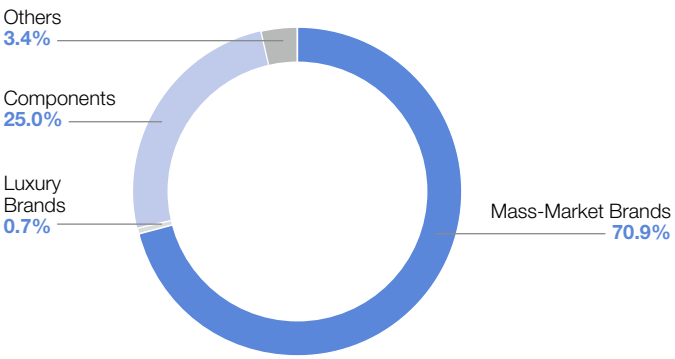
Employees by Category

FCA worldwide



Employees by Operating Segment

FCA worldwide



[1] *Unless otherwise specified, workforce data is calculated at year-end.*

GRI: G4-DMA, G4-9, G4-10, G4-13, G4-LA1, G4-LA10, G4-LA12

CULTURE OF DIVERSITY AND INCLUSION

FCA promotes a company culture where every individual is encouraged to contribute his or her unique perspective and strength to the whole, while respecting and learning from the experience of others. FCA does not tolerate discrimination, including discrimination based on race, gender, sexual orientation, physical and health conditions, disability, age, nationality, religion or personal beliefs. As stated in the FCA Code of Conduct, "The Group is committed to maintaining a fair, secure, productive and inclusive workplace for all members of our workforce, one in which everyone is valued for their unique contributions to the Company."

Promoting gender equal rights and opportunities in the workplace is a fundamental commitment for FCA and is vital to its human resources management. This commitment aligns with the United Nations Gender Equality Seal (GES) definition of gender equality. The Company believes that the establishment of a comprehensive ecosystem is essential for long-term success as it creates a wider, more diverse pool of talent and improves the Company's understanding of its customer base.

Female Employees by Category
FCA worldwide (%)

	2016	2015	2014
Hourly	20.1	19.5	19.1
Salaried	28.3	28.6	28.8
Professional	19.5	19.2	18.6
Manager	14.1	13.5	13.6
Total workforce	**21.2**	**20.7**	**20.4**

At FCA, more than 15% of leading positions are held by women.

Several initiatives are in place across the Group to foster a diverse and inclusive work environment among employees. The FCA US Diversity Council works to improve the representation of women and ethnic minorities. Meetings with Senior Leadership and Human Resources (HR) align to integrate diversity and inclusion within the talent review process and support HR drivers of recruitment, development, retention and succession planning. Diversity within North America is also represented by the longstanding Business Resource Groups (BRGs).
The BRGs (African American Network, Latins in Connection Network, Asian Network, First Nations Network, Gay and Lesbian Alliance, Women's Forum and the FCA Veterans' Group) provide multicultural learning opportunities, mentoring and networking for employees, and support for community outreach initiatives and charitable events. Participation in BRG-sponsored activities is encouraged and open to all salaried employees from all facilities.

The Company offers employment opportunities for individuals with disabilities. The latest survey of the number of disabled workers was completed in 2015 across 38 countries. Details are available in the 2015 Sustainability Report.

The commitment to equal opportunities also drives the Company's compensation philosophy that emphasizes the value of a high performing culture and the importance of a market-driven approach. Additionally, the Group employs formal processes to monitor the application of its core equity and fairness principles to compensation levels, annual salary reviews and promotions.

This topic is often a subject of dialogue with trade unions and/or collective bargaining at the country level, consistent with the procedures established by local regulations and practice.

View data >

Related content

Compensation and Reward >

GRI: G4-DMA, G4-LA12

MANAGEMENT AND DEVELOPMENT

FCA recognizes that its success depends on people at every level embracing shared core values.

The Group's approach to leadership and development is embodied in the commitment to five key principles:

- merit must always be recognized and employed
- leadership is a worthy calling which enhances people's lives
- taking on the competition is the stimulus for aiming ever higher
- best-in-class performance is the goal we want to achieve
- keeping our promises is what makes us credible and reliable.

These principles are the basis for every decision including the appointment of leaders.

Performance and Leadership Management (PLM) is the appraisal system adopted worldwide to assess FCA employees (manager, professional and salaried).

Through PLM, specific targets are established to guide and assess employees in relation to their results, attitudes and behaviors. Complete performance and leadership mapping processes were conducted during 2016 for approximately 63,200 FCA employees, including all managers, professionals and salaried employees. A pre-employment screening and an initial probationary evaluation through the WCM performance management system is completed for 100% of hourly workers.

The PLM process is the basis for personnel-related management decisions, and is also a fundamental element in talent management, succession planning and the orientation of our culture around sustainability principles and goals. Sustainability targets are embedded into the business and thus part of organizational objectives included for annual performance evaluations, including those of top management members and second-level reports to heads of operating sectors and select corporate functions.

The importance of the evaluation process to the Company's success is also evidenced by the dedication of top management. Each year, the FCA Chief Executive Officer, Chief Human Resources Officer, Regional Chief Operating Officers and supporting business heads analyze and validate the results of the PLM process, with particular emphasis on senior managers. Decisions regarding career development for individuals are also discussed and confirmed, resulting in organizational changes, cross-region and cross-company transfers, and several key positions being filled largely by internal candidates.

Talent Management and Succession Planning

The Group addresses the challenges of the industry with increasing flexibility and firmly believes that success can be achieved by engaging empowered individuals and appointing the people with the right skills to key positions. Talent management paves the way toward these objectives by identifying the most talented employees and closely managing their development.

Highly talented individuals are identified and offered professional opportunities that allow them to gain experience in other geographic or business areas and greater exposure to senior management. The succession planning process focuses on ensuring that all key leaders develop both a short- and long-term succession plan. Through this process, attention is directed toward less experienced individuals who are not yet widely known within the organization, but who warrant investment as potential leaders for the future. On average, 44% of posted positions are filled with internal candidates. Key individuals, selected on the basis of their professional profile (in terms of performance and leadership) and potential for growth in positions of increased responsibility, are evaluated through a process that directly involves management, ranging from their immediate supervisor to senior management representatives.

GRI: G4-DMA, G4-LA10, G4-LA11

Learning Management

In a competitive environment of constant change, the Group's workforce at all levels needs to be open to constant learning. For this reason, learning agility, leadership capacity and awareness of the workforce at all levels are provided through job rotations, coaching, mentoring and training.

The Group invested about €65 million in training during 2016, delivering a total of 3.2 million hours of training to more than 160,000 Group employees.

Investments in classroom, online and on-the-job training focused primarily on the Group's four core training concepts: development of job-specific know-how (79.0%), managerial skills (7.0%), cross-cultural awareness and language skills (6.6%) and corporate campaigns, rules and commitments (7.4%).

FCA is committed to measuring the direct business impact of its training activities, in addition to the monitoring of process efficiencies and effectiveness.

One example is the Cost Deployment of Training model used within the World Class Manufacturing (WCM) program. WCM applies this model to a portion of the total training costs. By monitoring on-the-job training and the associated generation of process improvements, FCA identified estimated savings of about €2.9 million enabled by a training cost of about €1.4 million in 2016.

3.2 Million
hours of training provided in 2016 to FCA employees worldwide

View data >

Dialogue with Employees

FCA seeks to foster a company culture where new ideas are encouraged and valued at every level. This atmosphere of openness provides the basis for a constant flow of suggestions and feedback to continuously improve processes and products. Formal opportunities for exchange and dialogue include organization town halls, employee meetings, team-building events, department gatherings and an innovative learning community. This innovative learning community enables employees to grow and share their individual professional skills with colleagues and work in teams to solve business challenges. Through an innovative learning platform, the Group will launch a widespread training campaign focused on sustainability to strengthen the awareness and engagement of the workforce on FCA commitments and achievements on this topic. More than 50,000 employees are expected to be involved in the first edition of this training campaign.

This openness also reflects FCA's commitment to employee satisfaction, the quality of the working experience within the Company and expectations for the future. To assess these attitudes, surveys are conducted worldwide. Outcomes of surveys are used to plan and address specific actions aimed at maximizing overall employee satisfaction.

Various initiatives were completed to explore employee satisfaction and well-being at selected locations. In total, people satisfaction surveys were conducted with more than 54,500 hourly and salaried employees between 2015 and 2016.

Information derived from these initiatives is under evaluation for development of appropriate actions.

The Company expects all of its employees to embrace the need for continual improvement. To foster a bottom-up innovation process, several tools and programs are in place worldwide to collect suggestions from employees.

Relevant examples are:

- the World Class Manufacturing program offers our largest worldwide example of employee engagement: in 2016, more than 2.5 million WCM suggestions were collected to foster shared learning and best-in-class performance
- through the BIS, Ideaction, STEP-UP!, Haz Más, MAIS and Ipropose programs, more than 108,000 ideas and improvement proposals were generated through direct and spontaneous engagement of employees worldwide.

2.6 Million
suggestions collected from employees worldwide

GRI: G4-DMA, G4-LA9, G4-LA10

COMPENSATION AND REWARD

In its endeavor to provide an inclusive work environment and equal opportunities for employees, the Group adopts a progressive total compensation system based on equitable and fair criteria.

At the heart of the Company's compensation philosophy lies the concept of meritocracy, which embraces the value of a high performance culture and the importance of a market-driven approach.

To support these elements of meritocracy, the Company has defined a compensation system that comprises a number of different components. This comprehensive package rewards employees for their contribution to the Company's results, provides development opportunities and allows them to share in the business success they help create.
Base salary, benefits and variable incentives are determined by market-driven benchmarks, thereby ensuring fair and objective treatment for employees in the different markets around the world.
The specific criteria for adjustments focus on closing competitive gaps with respect to market position, giving priority to top performers. Variable compensation and career development are impacted by individual contribution, which is vigorously evaluated through a performance and leadership management program that is consistently deployed throughout the entire organization. The same metrics and methodology are applied in this assessment of annual performance to all eligible employees worldwide. Additionally, the Group employs a formal process to monitor application of its core equity and fairness principle to compensation levels, annual salary reviews and promotions.
These reviews are based on standard criteria, which managers and human resource professionals utilize in making compensation determinations.

Combined, all of these actions are designed to ensure the Company's total compensation system, in line with all other internal processes related to people management, promotes equal opportunity.

View data >

Benefits

The Group's compensation and benefits packages are aligned with international best practices and are pursuant to fair and attractive economic rewards for employees. FCA offers a broad range of benefits depending on an individual's grade level, country of employment and local policies. In October 2016, FCA conducted its annual analysis of various company compensation and benefits over the entire workforce.

Findings show that more than 65% of employees are eligible for a pension plan and during 2016 over 70% of these employees participated in this type of plan, representing 48% of the total employee base.

Supplementary retirement plans provided by the Group fall into two categories:

- defined contribution plans, for which contributions (by employees, the company or both) are defined at the outset, and benefits depend on the total sums allocated to the fund supporting the plan and the financial returns of the individual account holders. Most existing retirement plans at Group companies are defined contribution plans.
- defined benefit plans, in which the future benefits paid out to employees are defined at the outset, and contributions may vary over time to fund the payment of the pre-defined benefits.

Company-provided health plans are also available for FCA employees, and roughly 65% of the surveyed population participated in a company-provided health plan. Childcare services are also offered at some locations to help employees achieve work-life effectiveness by responding to the needs of the family.

The Group also promotes a healthy lifestyle through comprehensive wellness programs and access to dedicated fitness facilities which are available in certain areas.

Principal Employee Benefits

FCA worldwide (% of employees entitled to benefit)

Pension plans	65
Company-provided health plans	80
Life insurance	64
Financial support for disability/invalidity	70
Employee cafeteria or lunch vouchers	61
Child care services[2]	34
Wellness and nutrition programs[3]	64
Gym/fitness services[4]	40
Other[5]	43

[2] Includes kindergarten, free gymnasium access for children, assistance with homework, summer camps/holidays, other services dedicated to child care.
[3] Includes nutrition coaching, smoking cessation training, medical check-ups, medical screening, other wellness programs.
[4] Includes free gymnasium access, gym/fitness courses and other sports initiatives.
[5] Includes benefits such as company cars, housing, interest free loans.

WORK-LIFE BALANCE

FCA recognizes the importance of supporting employees in balancing their personal and professional lives. The Group helps its employees manage this balance in line with local requirements and constraints.

Arrangements and initiatives to improve work-life balance include flextime, job-sharing, part-time or reduced hours, telecommuting, compressed workweek/ summer hours, parental leave and other leaves.

Depending on the company, flexible arrangements may be formal agreements approved by the Human Resources department or the result of an informal agreement with the local manager. These flexible work arrangements are subject to considerations such as staffing needs, job responsibilities, business climate, mutual agreement or other factors. The flexibility and frequency of these arrangements vary by organization, but as expectations are clearly defined and supported by technologies that make balancing work and home life increasingly possible, these options are becoming more prevalent.

An assessment of Group companies revealed that in 2016, roughly 16% of employees were covered by one or more of the available flexible working arrangements. Specifically: 2.5% of the workforce is employed part-time of which about 54.3% are women; 2.7% took parental leave related to childbirth and care; approximately 8.4% participated in other types of leaves[6]; and 2.8% were covered by other types of work schedule flexibility (e.g., flexible working hours, working from home, job-sharing). The actual figure may be considerably higher, as this percentage does not include participation resulting from an informal agreement with local managers, and consequently is not formalized or tracked.

The Group supports equitable choices for maternity, paternity and adoption benefits which encourage employees to balance parental responsibilities with their careers. FCA provides parental leaves to employees in compliance with local regulations (labor law requirements may vary from country to country). In some countries, the Group exceeds local requirements with dedicated policies.

Return-to-work and retention rates following parental leave are two key indicators of the mid- and long-term capability of the Company to provide employees with career growth opportunities and achieve balance between their home and work lives.

Events such as the open house held this year at the Chrysler World Headquarters and Technology Center in Auburn Hills (U.S.) help connect the workplace and family life. Over 40,000 employees, contractors and family members were able to tour the campus, including the Design Dome and studios, the Pilot Operations Plant and displays in the full-scale wind tunnel.

View data >

[6] *Other types of leaves are those not related to childbirth or childcare.*

LABOR AND COLLECTIVE BARGAINING

FCA recognizes and respects the right of its employees who are free to join and be represented by trade unions or by other representatives elected in accordance with current local legislation and practices, and in line with the practices of the various trade unions.

On December 31, 2016, approximately 83% of employees worldwide[7] were covered by collective bargaining agreements. During 2016, 242 agreements were stipulated at the company or plant level.

In the nonunionized companies, around 80% of employees not covered by collective bargaining benefit from conditions that are supplemental to, or better than, the minimum required by law.

In 2016, an analysis was carried out in those countries that have not ratified International Labour Organization (ILO) Conventions on freedom of association or the right to organize and collective bargain. It covered approximately 97% of employees of Group companies in Brazil, the U.S., Canada, Mexico, China and India, and showed that the application of these rights and principles is ensured through local legislation.

In 2016, the level of labor unrest and local labor action in other countries was negligible and mostly related to local issues at individual plants.

At the European level, regulations require that all community-scale undertakings establish a European Works Council (EWC), which ensures workers the right to information and consultation. FCA first established an EWC in 1997 on the basis of the agreement signed in 1996 which was subsequently renewed with amendments and modifications. In July 2016, a renewal trade union agreement was signed for the EWC for FCA employees. The main amendment of the new agreement, which is effective until the end of 2018, increases the number of total seats from 20 to 24 so that employees from additional countries within the scope of the EWC are represented. The meeting of the FCA EWC scheduled in November 2016 had to be postponed to January 2017.

In Italy, all FCA employees are covered by collective bargaining agreements and all FCA companies apply the company-specific collective labor agreement (CCSL) which was renewed in 2015 for the period 2015-2018. Italian managers are covered by the Collective Agreement for FCA and CNH Industrial managers (CCL dirigenti) renewed in March 2016 with Federmanager and valid until the end of 2017.

In the U.S., the company applies the UAW-FCA US four-year national collective bargaining agreement that covers around 44,000 employees.

In Canada, FCA entered into a new four-year labor agreement with Unifor ratified in October 2016. The terms of this agreement provide a 2% wage increase in the first and fourth years of the agreement for employees hired prior to September 2012, and will continue to close the pay gap for employees hired on or after September 2012 by revising a ten-year progressive pay-scale plan. The agreement included a lump sum payment to each Unifor member in November 2016.

Considering the economic context of European Union countries, 2016 wage negotiations were aimed at keeping labor cost stable, by mainly providing conditions based on specific company performance metrics. For example, in Poland trade union agreements for the introduction of a performance-based compensation scheme for the period 2016-2018 (which was introduced at FCA Poland in 2015 based on the model defined in Italy) were also reached at FCA Powertrain Poland and Magneti Marelli manufacturing units.

In early 2016, Group companies applying the performance-based compensation scheme paid the annual bonus calculated on the basis of production efficiencies achieved in 2015 at the employee's plant.

As provided for by the above scheme, quarterly installments were also paid in advance on the Business Plan Bonus.

View data >

[7] *Including Sevel (Italy)*

GRI: G4-DMA, G4-11, G4-HR4, G4-LA8

Freedom of Association

FCA employees are free to join any trade union provided they do so in accordance with local law and the rules of the trade union concerned.

When engaging in negotiations with trade unions or other representatives, FCA pursues a constructive approach based on mutual respect and dialogue.

In 2016, a survey covering around 96% of the total workforce worldwide[8] showed that approximately 82% of employees were covered by representative bodies. Representative bodies, generally elected by local plant workers, are entitled to be informed, consulted and negotiate on specific issues as provided by law or applicable collective agreements. In the European Union countries, employee representative bodies are established for companies or sites where employee numbers exceed the minimum limits specified by national laws or procedures. In the NAFTA region, representatives are only present at sites where a trade union has been established. In China, employees are free to form a representative council in accordance with national labor laws, local rules and regulations.

Management of Production Levels

During 2016, the management of production levels varied within the regions based on market demand:

- In the EMEA region, the response strategy to the change of market demand for specific geographical areas and some product segments continued in 2016, leading to the use of forms of flexibility in order to increase or reduce production depending on the required volumes. However, the Company continued its policy for employment protection taking advantage of temporary layoff schemes or schemes defined by collective bargaining or company policies. This enabled management of temporary drops in production and continuation of restructuring and reorganization activities linked to Group investments. In Italy, the use of temporary layoff benefit schemes by Group companies continued to decrease in 2016 by 28.3% compared to 2015. At the same time, the implementation of the investment plan had significant positive impacts in some major production plants: Mirafiori for the new Maserati Levante; Cassino for the Alfa Romeo Giulia and Stelvio; Termoli and Pratola Serra for the innovative engine production of new models.
- FCA Serbia adapted production capability to market volumes by structurally changing the plant organization in Kragujevac from three shifts to two shifts to allow for the stability of the plant and improve its competitiveness. Headcount reduction was managed in cooperation with trade unions through a Voluntary Leave Program
- In the NAFTA region, the Company used flexible operating patterns and assessed the number of manufacturing employees needed to support current and anticipated production volumes, as well as additional engineering, research and development and other highly skilled employees to support product development, sales, marketing and other corporate activities.

[8] *including Sevel (Italy)*

GRI: G4-DMA, G4-11, G4-HR4, G4-LA8

Minimum Notice Period

Although regulations and practices from a local, regional and national level can vary, FCA strives to keep employee representatives involved when operational changes impact our employees.

Within the European Union (EU), Directive 2001/23/EC stipulates that when a transfer of an undertaking, business, or part of an undertaking or business occurs as a result of a legal transfer or merger, a disclosure and consultation process is required with employee representatives. The procedure must be initiated reasonably in advance of the transfer. FCA companies comply with this Directive as implemented by the relevant laws and regulations of each EU member state.

The agreement for the FCA European Works Council also specifies conditions when employees are to be informed and consulted. These include fundamental changes in the organization; the introduction of new working methods and new manufacturing processes significantly affecting the Group as a whole; and reductions in size or the closure, relocation of production, or merger of companies or business units having a substantial impact on employment at the global level.

Outside the European Union, local laws and practices apply:

- U.S.: A federal law known as the Worker Adjustment and Retraining Notification Act (WARN) applies to unionized and nonunionized sites and requires, in general, that an employer give a minimum of 60 days' notice of any plant closing that will cause at least 50 employees to lose their jobs, or, in the case of a mass layoff, where 33% of the workforce at a particular job site will be permanently laid off.
- Canada: Notice-of-termination regulations vary by province. In Ontario, where the majority of the Canadian workforce is employed, notification must be given at least eight weeks prior to termination for employees with eight years or more of service. The remaining FCA Canada LLC employees are located in Alberta and Quebec, where the maximum notice requirement is eight weeks for employees with more than 10 years of service.

At unionized locations in the U.S. and Canada, the level of union involvement is normally defined by the collective bargaining agreement signed between the Company and the trade union and applicable at the plant level. The agreement usually defines the information and consultation procedures to be followed in such circumstances. At nonunionized plants, it is common practice to make a company-wide announcement to all employees of organizational changes that relate to outsourcing, giving reasonable prior notice of the operation.

- Mexico: Companies must notify the Federal Arbitration and the Conciliation Board, as well as the trade unions, prior to any large-scale employee layoffs or plant closures. In agreement with Federal Labor Law, companies are also required to inform the Federal Labor Agency prior to any large-scale employee layoffs or plant closures. According to FCA's Union Bargaining Agreement, in case of any large-scale employee layoff, the Company and the union will agree to the terms and conditions applicable to the layoff. No notification period is expressly defined in Mexican labor law
- Venezuela: The notice period varies based on length of service.

OCCUPATIONAL HEALTH AND SAFETY

FCA gives paramount importance to achieving the highest standards of workplace health and safety, in every country and area of activity. The Group's commitment to health and well-being extends not only to employees but also suppliers, service providers and local communities.

Principal pillars of FCA's commitment to health and safety are:

- the promotion of a culture of health and well-being for all employees
- continuous reduction of accidents in terms of both severity and frequency
- alignment of all FCA plants and facilities to the international standard (OHSAS 18001).

Operating according to these international standards requires an integrated approach to the management of health and safety in our plants and offices.

FCA is active in a number of areas, including the definition of standardized procedures for identifying and assessing risk; the adoption of preventive measures for continuous improvement of working conditions; the application of robust safety and ergonomic standards in plants and equipment design; the promotion of safe behavior through training initiatives and awareness campaigns; the active involvement of all employees in the improvement process; and the promotion of a healthy lifestyle.

At the Group level, Environment, Health and Safety (EHS) managers are responsible for establishing health and safety guidelines, procedures and standards and for supporting local EHS professionals in implementing them. In addition, they are responsible for monitoring national and local legislation, as well as applicable health and safety rules and regulations.

FCA has committed that all of its plants operating worldwide in 2020 will be OHSAS 18001 certified. At the end of 2016, 141 Group plants, representing more than 180,000 manufacturing employees,[9] were OHSAS 18001 certified.

Spending on Occupational Health and Safety
FCA worldwide

	2016	2015	2014
Spending on Occupational Health and Safety (€ million)	194	291	230
Percentage of personnel costs	1.5%	2.5%	2.3%

141
OHSAS 18001 Certified Plants

>180K
Employees at Certified Plants

€194 Million
Spending on Health and Safety

View data >

[9] *Manufacturing employees are those directly or indirectly involved in manufacturing processes.*

Engagement in Prevention

Effective implementation of health and safety standards at FCA facilities is made possible through a combination of preventive measures and the collaboration of employees. Employees are involved in the process through training and initiatives designed to increase safety awareness, and by participating in a comprehensive system for gathering feedback and suggestions.

During 2016, employees submitted more than 2.5 million suggestions, of which 259,000 were related to improvement of health and safety conditions. The most actionable and valuable ideas were put into practice, shared across multiple facilities and incorporated into FCA's Occupational Health and Safety Management System (OHSMS). Recognition was given to the employees who proposed them.

259,000
suggestions to improve health and safety conditions

One of the objectives of the Safety Pillar of the World Class Manufacturing program is to contribute to continuous improvement in the workplace and the progressive reduction of all objective and behavioral risks that could result in accidents, injuries and occupational diseases. The basic principle of this pillar is that bold objectives can only be achieved by establishing a strong safety culture throughout the entire organization.

Delivering on this core value requires a broader approach in which employee health and safety are not simply defined as a lack of illness or risk factors, but are considered more broadly in terms of the workers' well-being.

1.3 Million
training hours on safety aspects

Improvement in employee health and safety is also one of the issues of ongoing dialogue with the employee-representative bodies in accordance with current laws and the collective agreements applied in the various countries in which the Group operates.

The analysis carried out in 2016 covering 95.9% of FCA employees worldwide (including the joint operation Sevel S.p.A. in Atessa, Italy) revealed that 93.4% are represented on issues such as health and safety through organized bodies that monitor health and safety programs and provide advice where needed.

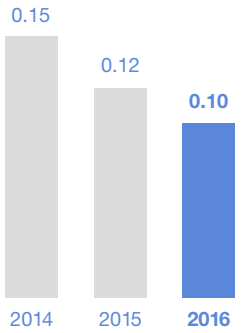
GRI: G4-DMA, G4-LA5, G4-LA8

Safety Insights

FCA has significantly reduced the frequency and severity of work-related injuries over several years through application of the tools and methodologies provided by the Occupational Health and Safety Management System (OHSMS) and the WCM Safety pillar, together with the active involvement of employees, development of specialized know-how and targeted investment.

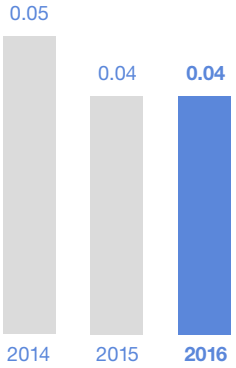
Frequency Rate[10]

FCA worldwide
(accidents per 100,000 hours worked)



Severity Rate[11]

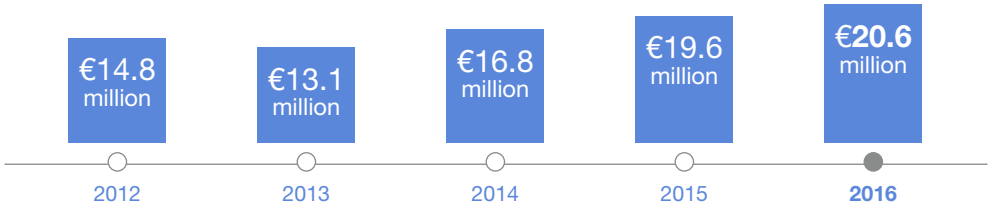
FCA worldwide
(days of absence due to accidents per 1,000 hours worked)



Work-related injuries are analyzed to determine the contributing causes and to take appropriate measures to avoid recurrence. Injuries are categorized according to frequency, severity and gender of the employee involved. Additional statistics are also kept by site and production line/process.

Insurance Premium Discounts in Italy

€85 Million
saved in 2012-2016



In 2016, the primary indicators improved for the tenth consecutive year. The frequency rate was reduced by 16.7% over the prior year to 0.10 accidents per 100,000 hours worked and the severity rate was consistent with the previous year, at 0.04 days of absence per 1,000 hours worked.

In Italy, investment in health and safety, combined with other measures, has resulted in a progressive reduction in the level of risk attributed to FCA plants by INAIL, the national accident and disability insurance agency.

As a result, the Group was eligible for "good performer" premium discounts, which enabled savings of about €85 million between 2012 and 2016.

Near misses[12] are also analyzed so that the appropriate preventive measures can be taken, including implementing best practices and correcting potentially high-risk behaviors. In 2016, approximately 11,900 near misses were identified and analyzed. In 2016, there were no fatal accidents involving Group employees.

Fatalities
FCA worldwide

	2016	2015	2014	2013
Fatal accidents involving Group employees (no.)	0	3	1	2

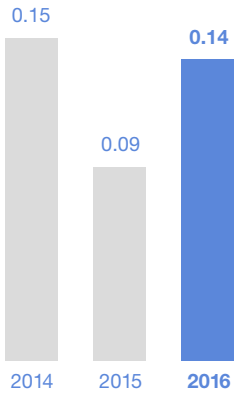
[10] *The Frequency Rate is the ratio of the number of injuries reported (resulting in more than three days of absence) to the number of hours worked, multiplied by 100,000.*
[11] *The Severity Rate is the ratio of the number of days of absence due to accidents to the number of hours worked, multiplied by 1,000.*
[12] *A near miss is an event that did not result in injury or illness but had the potential to do so.*

GRI: G4-DMA, G4-LA6, G4-LA7

Occupational illnesses refer to diseases that develop gradually over time as a direct consequence of insured work activities carried out by an employee. FCA monitors trends of occupational illness on a continuous basis. From a statistical point of view, occupational illnesses occurring in the manufacturing environment fall into two distinct categories. First are the cases under investigation, which are being reviewed by insurers to verify, in accordance with applicable regulations, the existence of a disease and a causal link with work activities carried out. The second category includes cases for which the insurer, upon completion of an investigation, has confirmed that the conditions exist.

In 2016, there were 632 confirmed cases worldwide. The occupational illness frequency rate was 0.14 cases per 100,000 hours worked (0.09 in 2015). This indicator (and changes from year to year) typically bears a low correlation to recent or current preventive measures because unlike the accident indicators, occupational illness can relate to issues that originated years or even decades prior to being confirmed. In fact, occupational illnesses are quite complex and are usually related to historical working methods or environmental conditions that have long since been eliminated. There is currently no evidence of a high incidence or high risk of occupational illness related to FCA employees.

Occupational Illness Frequency Rate
FCA worldwide
(cases per 100,000 hours worked)



View data >

Health Promotion Program

FCA considers the health of its workers a top priority for all of its companies and all the countries in which it operates. In 2016, the Health Promotion Program (HPP) continued, including several projects promoted at the central and local levels to support and monitor employees as they strive to adopt a healthy lifestyle. In 2016, the program was expanded to 136 plants in 19 countries, continuing to address regional issues where appropriate.

The HPP is based on experiences reported both inside and outside FCA, and follows the health and safety principles of the main international organizations, including the World Health Organization (WHO), the U.S. Occupational Safety and Health Administration (OSHA), the European Agency for Safety and Health at Work (EU-OSHA), and the International Labour Organization (ILO).

The four top-priority areas where the HPP seeks to intervene are:

- screening and vaccination, including services such as blood pressure, blood sugar level and cholesterol monitoring
- nutrition education initiatives, including counseling on healthy eating in the workplace and providing healthier food options on the cafeteria menu
- promotion of physical exercise through sports teams or clubs, and advice on how to increase daily exercise. For example, dedicating special areas of the Company to sports activities and/or entering agreements with local sports centers for use by employees and their families
- smoking cessation programs through awareness campaigns on smoking-related issues, including long-term health risks and the creation of support groups.

COMMUNITY

FCA's approach to community engagement is founded on the conviction that the Group can and should be an agent of positive change. This belief is embedded in our culture and is an intrinsic part of corporate decision-making.

The Company's corporate citizenship efforts primarily target areas where we have operations. Our role as a member of the community helps us assess and, where possible, address the social and economic development needs of the area.

In addition to monetary contributions from the Company, FCA encourages its employees to volunteer their time and skills to help build strong, resilient communities, as well as to give back to the local areas that have supported the Company through its more than one hundred-year history. These programs provide a vital connection between FCA employees and the communities where they live and work. During 2016, employees donated approximately 200,000 hours during work time.

Engagement in charitable initiatives extends from senior management throughout the entire Company. In the U.S., Sergio Marchionne, FCA's Chief Executive Officer, is serving a two-year term as United Way of Southeastern Michigan Volunteer Campaign Chair. United Way Worldwide is a non-governmental organization operating in 45 countries that is committed to improving living conditions in local communities. Contributions to the United Way from FCA, employees, and special FCA-United Way events totaled approximately €7.5 million in 2016.

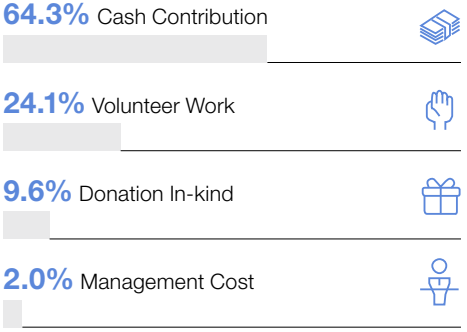
A portion of the Group's charitable activities is operated through the FCA Foundation, which is supported by FCA US and governed by a Board of Trustees consisting of corporate executives. The Fundación FCA performs a similar role in Mexico.

Through ongoing stakeholder dialogue, community engagement has been identified as one of the Company's material topics. In alignment with the United Nations Sustainable Development Goals, our social contribution efforts focus most particularly on "Quality Education," "Gender Equality," "Decent Work and Economic Growth," "Reduced Inequalities," "Industry, Innovation and Infrastructure" and "Sustainable Cities and Communities."

In 2016, the Group committed resources for a value of about €24 million[13] to benefit local communities.

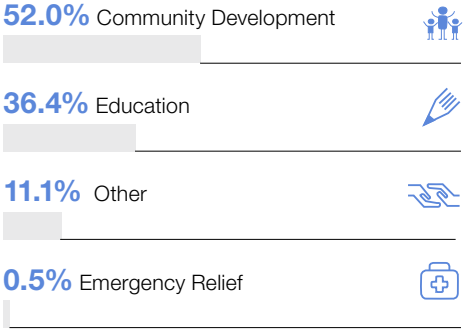
Form of contribution

FCA worldwide



Area of intervention

FCA worldwide



In order to make a sustainable improvement in local communities, the Group prefers investments designed to enhance community development over a simple donation of money.

The Group's 2016 activities destined to benefit local communities focused on a variety of causes: 52% for community development projects, including health-related issues; 36.4% for promotion of education; and 11.6% for emergency relief efforts and other initiatives.

[13] Based on non-accounting data and calculation methods which may include estimates. Amounts in currency other than Euro were converted based on exchange rate at December 31, 2016. The reported figure does not include initiatives whose sole purpose is to promote a brand. Amounts refer to all FCA companies worldwide consolidated on a line-by-line basis at December 31, 2016.

WORKING ALONGSIDE THE COMMUNITY

To maximize the impact of our social contributions, FCA works to build strong relationships and partnerships with nonprofit organizations, community, academic and local leaders. Engagement with these stakeholders is essential to understanding where FCA can best apply its resources.

At each location, FCA is committed to operating in a way that generates local growth while respecting the interests of the various stakeholders. Employees are included in this vision of social responsibility, and are encouraged to work alongside community members. Regional experiences describe several ways through which FCA devotes resources to the specific needs of each area of intervention.

~200,000
Hours Volunteered

One significant example that is impacting local development is the Árvore da Vida program in Brazil where FCA was the highest-selling automaker in 2016. Developed in 2004, the Árvore da Vida program promotes social, cultural and economic growth by encouraging independence and empowerment of the people living in the community of Jardim Teresopolis, an area near the FCA plant in Betim. About 21,800 people have benefited from the program since it started. The program initially began with a study that revealed a low rate of education, low family income, high violence rates and a flat social structure. Consequently, the program focused on socio-educational initiatives, professional qualification programs and support for entrepreneurship and community development. The success of the program has led to the creation of a Vision of the Future, including four priorities for the coming years: Education, Culture, Community Integration and Safety.

Another Brazilian program that focuses on local entrepreneurial activities to generate income is the Cooperárvore, a social cooperative formed in 2006 by women from the community living in the area surrounding the FCA Betim plant. The Cooperárvore contributed to recycling about 28 tons of material, such as seat belts and automotive fabric. Over three tons of fabric and seat belt remnants were donated by FCA to Cooperárvore that used these remnants to make fashion accessories and other items. Over the past 10 years, Cooperárvore has contributed to improving the quality of life of more than 70 households in the area surrounding FCA's Betim Assembly Plant. The average income of cooperative members increased by 297% from 2007 to 2016. This is an example of how FCA is contributing daily to the transition to a circular economy.

In the NAFTA region, the Motor Citizens corporate volunteer program allows FCA employees the opportunity to positively impact communities through a variety of engagement activities. Salaried employees in the U.S., Canada and Mexico have 18 hours of paid time off each year to volunteer for eligible charitable organizations. In 2016, more than 1,600 Motor Citizens projects were undertaken. Among these was FCA's support in Southeast Michigan of World Habitat Day, which was designated by the United Nations General Assembly to recognize the importance of promoting the idea that everyone deserves a decent, affordable place to live.

More than 150 FCA employees constructed picnic tables, storage sheds, wheelchair ramps and platforms for use in Habitat homes across Southeast Michigan. FCA employees also donated household items to help restock Habitat for Humanity ReStores, which are nonprofit home improvement stores and donation centers that are open to the public and help fund Habitat operations. Through the years, FCA employees have been long-standing Habitat for Humanity volunteers.

GRI: G4-EC1, G4-EC7, G4-EC8, G4-HR8, G4-SO1, G4-SO2

In 2017, the NAFTA region's experience with the employee volunteer program is expected to be assessed for expansion and customization to other regions.

In the EMEA region, a growing best practice through which Company employees devote their time and dedication for the benefit of the local community is represented by the social team building program that was launched in the second half of 2015.

Partnering with local municipalities and districts, FCA assesses local community needs and directs its effort to positively impact them. This program also represents an effective way to promote a sense of belonging and to reinforce connections within the Company and communities. At the end of 2016, about 700 employees from the Mirafiori area (Turin, Italy) had participated in social team building events to improve conditions of public areas such as local schools and district gardens that needed concrete interventions. Doing social activities together also helps strengthen employees' sense of belonging and awareness of the power that these collective efforts can generate.

In the APAC region, Fiat India Automobiles Private Limited (FIAPL) has actively supported various community initiatives. These include, for example, pursuing opportunities to partner with suppliers and local communities to establish sustainable water stewardship in support of access to clean water in water-stressed areas of India.

In 2016, FIAPL worked with Indian government officials to provide more than 230 students aged 6 to 14 years with artificial limbs, walking assistance equipment and wheelchairs.

Throughout its history, FCA has assisted victims of natural disasters by responding to the needs of the community and supplying technical, humanitarian and financial aid as well as support vehicles. One important example is the ongoing fund-raising campaign launched following the earthquake that struck central Italy in August 2016. As of December 31, 2016, FCA and its employees have donated approximately €170,000 to help the victims.

GRI: G4-EC1, G4-EC7, G4-EC8, G4-HR8, G4-SO1, G4-SO2

ADVANCING EDUCATION

FCA believes that education is an essential element in creating strong and sustainable communities. In 2016, educational initiatives represented 36.4% of approximately €24 million in contributions to local communities. Over the years, the Company has partnered with a number of academic and nonprofit organizations across the globe to promote educational opportunities, and subsequently, employability. These partnerships help the workforce of the future to develop the technical skills that will be necessary to succeed in the labor market. Many of these collaborations focus particularly on programs designed to expand science, technology, engineering and math (STEM) skills and opportunities among youth.

In Italy, the "Alternanza scuola-lavoro" initiative is administered by the Italian government to offer an alternative to traditional classroom learning in the form of work-school programs at a variety of companies. To support this innovative educational approach, in 2016 FCA launched the FCA for Education project. FCA for Education aims to acquaint students with real working situations and consists of two initiatives: FCA Adoption and FCA e_discovery. FCA Adoption is the "adoption" by the Company of Italian high schools located near FCA plants. Adopted schools participate in a comprehensive 200- to 400-hour work-school program. Students have the opportunity to learn from FCA managers about the various professional paths available in a global company. They can participate in typical work situations such as meetings, brainstorming, on-site audits and systems analysis. In 2016, about 1,000 students from 16 high schools for 48 classrooms were enrolled in this program.

FCA e_discovery is the online product for students, with tutors available to assist when needed. Because this project is provided online, there is the potential for any school in Italy to participate. The program is divided into four parts: 1) a content module that describes the basic processes of a company and its organizations, including sustainability aspects; 2) a simulation module through which students organize and design a company; 3) an industry-focused module with slides, videos and other materials that describe the automotive industry and the process of designing, building, selling and servicing a vehicle; and 4) a competitive game for the students which integrates what they have learned in the program. These two projects represented an FCA investment of €125,500 and the donation of nearly 3,000 hours by FCA employees.

In the EMEA region, FCA's partnership agreement with Politecnico of Turin extends to 2018, including a commitment from FCA to provide €7.4 million in funding and other resources. The demand for skilled professionals continues to grow across the industry. To train graduates for a role within the Italian manufacturing industry, Comau collaborated with Politecnico of Turin to organize a Masters in Industrial Automation which was funded by the Region of Piedmont. The objective of the two-year postgraduate program is to attract the best graduates in engineering from Italian and foreign universities. These students are provided specialized training in industrial automation to prepare them for a two-year advanced apprenticeship with the Group. The curriculum also includes a focus on environmental sustainability and approaches used to reduce vehicle emissions. The program is taught in part by Comau managers and is conducted entirely in English with 540 hours of theory in the first year and 660 hours of project work at Comau in the second year. Ninety engineers were hired from the first five graduating classes and an additional 22 students enrolled in the 2017 program - a clear indication of the success of the program.

TechPro2 is an international FCA project in association with Salesian Vocational Training Centers (CNOS-FAP) that has been in operation since 2008. The project offers young people, who are often from disadvantaged backgrounds, with continuing education to become specialized operators for automotive repair centers and the dealer network. The three-year program provides selected students with theoretical and practical knowledge from CNOS-FAP instructors who have received professional training by FCA employees. The training centers are designed and equipped by FCA and reflect the same service standards as the FCA dealer network. Second and third-year students gain important hands-on experience through internships and apprenticeships. In 2016, 826 students in Italy were enrolled in TechPro2 apprenticeships, with 36% of them within the FCA dealer network. In addition, approximately 3,100 students took part in the program around the world, receiving around three million hours of training in seven different languages and 53 locations. CNOS-FAP conducts an annual survey to assess the effectiveness of the initiative. In 2016, the survey involved 437 students who had completed the program the previous year and, despite the employment challenges

GRI: G4-EC1, G4-EC7, G4-EC8, G4-SO1, G4-SO2

in the automotive industry, 36 % of the students in Italy had found employment, with 41% continuing their studies. The successful results of the program have encouraged FCA to further investigate the benefits in terms of improvements to the social condition and employability of the program's participants.

In 2015, near the FCA plant in Pernambuco (Brazil), the Group launched the Qualiescola project. The project aims to train elementary school teachers and school administrators to improve public education. In Igarassu, where the project has been underway for two years, the Basic Education Development Index in Elementary School grew 25%, from 2.8 to 3.5, reaching the target defined by the Brazilian Government. The total number of beneficiaries thus far are 447 teachers and 13,000 students from 98 public schools.

FCA has supported Winning Futures, an innovative school-based mentorship program in Southeast Michigan (U.S.) that aims to inspire high school students and prepare them to be self-reliant, successful and economically self-sufficient. In addition to a donation of approximately €47,400 from the FCA Foundation, FCA employees donated more than a hundred hours of both work and personal time as mentors.

In central Indiana (U.S.) where FCA has a significant manufacturing presence, FCA has partnered with an initiative called the Integrated Technology Education Program (ITEP) to expand educational opportunities for high school students in advanced technology. FCA supports ITEP through curriculum development, training equipment, student selection, work-study programs and mentoring. Nine high schools and three career technical education centers have joined the program. In the first two years, students take advanced manufacturing courses, and in their final year of high school they are eligible for half day work-study experiences at one of the five FCA plants in Indiana, where they gain hands-on experience from industry leaders and program mentors. ITEP offers career pathways that feature technical certificates in eight industrial technology fields. Students are encouraged to pursue college studies following graduation from high school. This partnership is part of a broader FCA engagement in the community to change the public perception of manufacturing by offering and supporting tours for local organizations, including elementary and middle schools.

Engaging youth in STEM-related activities begins at a young age with programs such as *FIRST* Robotics, which helps motivate middle and high school students to explore and pursue studies, and ultimately careers, in science, technology, engineering and mathematics. In 2016, the FCA Foundation awarded approximately €301,000 in grants to *FIRST* programs in the U.S. and Canada. More than 80 FCA employees in the U.S. and Canada served as team mentors to guide 75 student teams at the high school and middle school levels to design, build and program robots to perform prescribed tasks against a field of competitors. Through this process, students learn basic physics, electrical and mechanical engineering and machining skills.

FCA is engaged in a number of initiatives to promote studies and careers in technical fields among segments of the population that may be under-represented in STEM vocations. FCA has partnered with the Michigan Council of Women in Technology (MCWT) to promote technical studies among girls and young women. In 2016, FCA employees volunteered more than 275 hours of their personal and work time to a variety of programs offered with MCWT.

Fiat India Automobiles Private Limited (FIAPL) has a venture in Pune (India) between FCA Italy and Tata Motors in collaboration with Don Bosco Vyawasaik Prashikshan Kendra. One of the programs, called Diksha, is focused on providing education and technical training to youth, particularly for those who are disadvantaged and have limited opportunities. The goal of this initiative is to help the students become self-sufficient and able to earn a self-supporting income. FIAPL supports Diksha through:

- improving the knowledge, capability, and competencies of trainers and teachers
- offering company training internships for trainers and students
- supporting practical experience through donations of vehicles, components, workshop equipment, teaching materials and training aids
- on-the-job factory training, the dealership network and train-the-trainer programs.

Since 2013, approximately 700 students have participated in the program with about 99% of qualified students employed in the automobile sector.

GRI: G4-EC1, G4-EC7, G4-EC8, G4-SO1, G4-SO2

CUSTOMERS AND DEALERS

Emerging consumer attitudes, behaviors and expectations are creating a demand for personalized, no-hassle products and services. At the same time, we recognize that expectations vary from market to market due to differences in cultures, preferences and driving experiences. With this in mind, FCA and its dealers are focusing on customer experience as a key differentiator in each region. FCA works closely with its dealers to develop a sustained, multi-faceted approach to create a positive customer environment throughout the purchasing and ownership process.

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CUSTOMERS

The products we design and deliver at FCA are as diverse as our customers. A number of universal trends, however, are being observed around the world, and FCA is working to keep up with the changes these trends are reflecting in customer expectations, behaviors and attitudes. Customers increasingly demand connectivity and convenience, and the fast-growing collaborative economy is an important conduit to deliver on these requirements. These trends are impacting both the products and services we offer and also how we communicate and provide information to customers. We are focusing our efforts on the end-to-end customer experience, making interactions through both traditional and new channels more customized and convenient.

At FCA, market research experts deliver insights across all regions to help shape new concepts and product design; identify consistent actions to improve vehicle brand perceptions; and track automotive after-sales and services. As an example, in 2016 FCA developed a new Feature Innovation Process for the U.S. market, designed to better align features offered with changing customer desires, and to help define content for upcoming vehicles. In EMEA, a data-driven, trend-watching activity has been coordinated to help define the future of mini-compact vehicles, incorporating key insights through interviews with both opinion leaders and customers. Together with this activity, a systematic research initiative is underway to understand customer expectations about new safety and comfort features.

CUSTOMER EXPERIENCE

Customer experience is based on interactions with FCA products, services, tools and representatives.

Realizing that the dealer network is the primary face-to-face connection with customers, FCA uses a variety of approaches to enhance this experience, while accommodating market-specific needs and wants. Emerging technologies also have an impact on customer expectations, so FCA provides opportunities for customers to interact with the dealer network; research products and services; and learn about its brands through a wide variety of channels, often before an in-person sales or service experience.

To keep pace with customers' demand for a higher and faster level of interaction, FCA is focusing on digital communication and providing customers easier access to information. As an example, in 2016, FCA was among the first in the European automotive industry to launch its chatBOT, short for chat robot, on Facebook Messenger for the Italian market. The system was developed by the Mobile Competence Center within FCA's Information and Communication Technology department and uses artificial intelligence that simulates a human conversation to provide customers with vehicle descriptions, photos, pricing and dealer location. Using instant messaging, customers can find the vehicle that best meets their needs.

In 2016, FCA signed a partnership with Amazon to provide customers in Italy the ease and convenience of online vehicle shopping. Through this collaboration, FCA and Amazon launched an innovative purchasing process, combining online purchasing with human interaction - customers can initiate the purchase online and complete the vehicle delivery process at their local dealer. Italian customers can choose from among Fiat brand models that have been selected for the program based on levels of technology and innovation on board.

To evaluate the effectiveness of our customer-related programs, FCA measures how satisfied customers are with both sales and service experiences, as well as how likely they are to recommend our dealers and brands to family and friends. Results are integrated into dealer processes, customer contact center management and training programs.

Sales and Service satisfaction with Dealers

+ 5 Percentage Points
vs 2013 in U.S. sales experience

+ 2 Percentage Points
vs 2013 in U.S. service experience

+ 6 Percentage Points
vs 2013 in EMEA sales experience

+ 14 Percentage Points
vs 2013 in EMEA service experience

Customer experiences are monitored on a regional basis through surveys that provide insight into customer advocacy and satisfaction with the dealer network. FCA uses an advocacy measurement in the U.S. market to track customer satisfaction. This figure represents the percentage of customers who are likely to recommend the dealer to a friend or family member based on their sales or service experience. Since 2013, both sales and service advocacy results in the U.S. have improved each year. The sales advocacy results have improved more than five percentage points and the service advocacy results have improved more than two percentage points, based on 2016 results. In 2016, over 1.4 million completed surveys were received from U.S. sales and service customers, furthering the ability to monitor and improve dealer processes.

In the EMEA region, the international measure used to evaluate customer satisfaction throughout the sales and service experience is the Net Promoter Score (NPS). In 2016, with improvements to the dealer network processes, NPS increased by more than six percentage points for sales and 14 percentage points for service[1], along with a 75% increase in the number of customers providing feedback compared with 2013. The overall feedback process covers a total of 20 markets within the EMEA region, providing extensive insights from customers.

[1] Data refers to NPS after-sales across all EMEA markets covered by Customer Feedback Sales and Service (general distributor, Finland, Ireland, Middle East, South Africa and Turkey not included).

CUSTOMER SUPPORT

Supporting our customers goes beyond the basic processes of selling and servicing vehicles. At FCA, we offer several communication opportunities for current and potential owners, including information on our products, safe and eco-efficient driving habits, and mobility solutions for challenged drivers. We also realize customer satisfaction depends not only on the vehicle, but can also be impacted by interactions such as call center inquiries and financial service processes.

In addition to the Company's corporate and brand websites, FCA uses innovative channels and new customer touchpoints to provide consistent, detailed and up-to-date information on products and services worldwide. To strengthen connections with our customers and address customer complaints, FCA's social media listening teams monitor digital media channels, such as Facebook, Twitter and automotive blogs. A dedicated owner site is available in most countries in the EMEA region and the U.S. This website provides FCA customers with details on accessories and services as well as features that may be available in their regions, including Remote Vehicle Services; Vehicle Health and Maintenance Recommendations; Warranty and Roadside Assistance; and Vehicle-Specific Recall Information. FCA US has also launched a recall self-service website where customers can sign-up for proactive email and text notifications when there is a status update available on an open recall.

FCA regularly engages with stakeholders to provide information regarding the proper use of our products and services, including potential risks or hazards. With our global focus, the Group sells its products and services to consumers in more than 140 countries worldwide, excluding markets where they are prohibited. Given the nature of its activities, FCA is subject to numerous laws and regulations governing product information. One example is the Directive 1999/94/EC in Europe which establishes specific requirements relating to the availability of consumer information on fuel economy and CO_2 emissions for new passenger cars. Similar requirements are adopted in other markets where local requirements are less stringent.

In keeping with those requirements, the Group communicates that information to consumers through a variety of channels, including product materials in dealer showrooms, product advertisements, brand websites, etc.

In the U.S., the Environmental Protection Agency (EPA) supervises compliance with fuel economy labeling requirements on new vehicles. In addition to information on fuel economy, the label format also provides consumers information about annual fuel costs and environmental performance, including smog and greenhouse gas ratings. Consumers can also scan the QR Code on the label with a smartphone to access additional fuel economy information about the vehicle online.

In China, the Ministry of Industry and Information Technology (MIIT) enforced the fuel consumption label for new light vehicles, and standard GB 22757-2008 established specific requirements relating to the availability of information on the label. Also, MIIT set up a website to publish fuel consumption information on vehicle types sold to consumers in China.

The Group communicates other information including safety and usage instructions and warnings that are either required by law or provided on a voluntary basis. This information is provided through owner and maintenance manuals, information labels and product advertising, as well as through the dealer and service network, Customer Contact Centers and other channels. Consumers are provided detailed information on areas such as the proper use of active and passive safety features (e.g., seat belts, airbags, child seats); driving behavior that can affect fuel consumption and emissions; and responsible disposal of materials following maintenance (e.g., used oil, filters, etc.).

Customer Contact Centers

To ensure strong and global management of customer activities worldwide, dedicated customer contact organizations have been established in all four FCA regions: EMEA, NAFTA, LATAM and APAC. Customer Contact Centers (CCC), together with dealers, are among the primary channels of communication between customers and the Company. There are 26 CCCs worldwide, with more than 1,400 agents and supervisors who handled more than 24 million customer contacts in 2016, offering a variety of services including information, complaint management and, in some locations, roadside assistance.

FCA Customer Contact Centers manage the entire process, from the first contact with the customer until a response has been given, ensuring resolution in the shortest possible time. They provide multilingual support with a strong focus on employing native speakers of 30 different languages. FCA believes that skilled, knowledgeable and motivated agents are essential for a high level of customer satisfaction. For this reason, in 2016 the Group offered more than 60,000 hours of agent training on new products, behaviors and processes, as well as systems and new procedures.

NAFTA

3 Languages spoken **871** Personnel

Chatham, Ontario
Windsor, Ontario
Indianapolis, Indiana
Center Line, Michigan
Southfield, Michigan
Salt Lake City, Utah
Irving, Texas
Mexico City, Mexico
San Juan, Puerto Rico

EMEA

25 Languages spoken **393** Personnel

Moscow, Russia
Budapest, Hungary
Kragujevac, Serbia
Arese, Italy
Istanbul, Turkey
Cairo, Egypt
Dubai, U. A. Emirates
Johannesburg, South Africa

LATAM

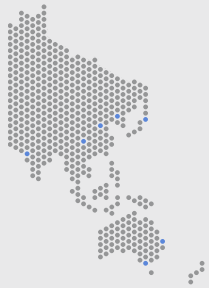
2 Languages spoken **120** Personnel

Valencia, Venezuela
Belo Horizonte, Brazil
Cordoba, Argentina

APAC

6 Languages spoken **66** Personnel

Shanghai, China
Seoul, South Korea
Tokyo, Japan
Pune, India
Sydney, Australia
Brisbane, Australia



View data >

Customer Education

Supporting our customers involves more than just communicating with them. FCA uses a variety of channels worldwide to educate customers about vehicle safety, including a wide array of courses aimed at improving driver behavior and control over the vehicle. The courses vary by brand, focusing on the individual vehicle attributes. One example of an advanced driving course is the Mopar Road Ready program in the U.S. The course is designed to teach safe and defensive driving techniques and has helped train nearly 2,700 teenage drivers and their parents. Each session provides a brief classroom review of basic driving topics, including proper seat positioning, hand positioning and basic vehicle dynamics. Advanced behind-the-wheel training is then provided to teens during five on-track courses, including accident avoidance, distraction, panic stop, wheel drop and wet skid pad.

In addition to offering safe driving courses, FCA encourages eco-friendly driving through awareness campaigns and software tools like eco:Drive.The eco:Drive feature offers personalized tips to drivers based on driving styles, with the objective of helping them reduce fuel consumption and emissions. Similarly, one of the customizable cluster displays in the 2017 Chrysler Pacifica Hybrid is an “efficiency coach,” which guides the owners to drive more efficiently and maximize the time spent in battery mode. It helps the driver optimize energy consumption while accelerating, and provides guidance on braking to take full advantage of the regenerative braking that contributes to charging the battery.

Related content

Connecting Customers >

Challenged Mobility

FCA offers mobility solutions for a wide range of customers, including those with special needs. For an individual with a disability, accessible mobility can be an important step toward independence.

At FCA, the Autonomy and Automobility programs are designed to help customers with permanent disabilities by providing resources such as financial assistance and customizable adaptive equipment. Since 1995, the Autonomy program has offered solutions that make it possible for people with disabilities to drive Fiat, Lancia, Alfa Romeo, Abarth, Jeep and Fiat Professional brand vehicles. In 2016, there were 25,217 customized vehicles sold through the Autonomy program to customers in Europe and Brazil. Revenues from the sale of these vehicles in Italy totaled more than €167 million in 2016. In addition, 1,800 people benefited during the year from the services offered through the Autonomy program’s 19 Mobility Centers in Italy. These Centers are managed in collaboration with local associations, rehabilitation centers, health authorities and the department of motor vehicles. The services offered include assistance with a range of administrative, legal and technical issues, fitness-to-drive screening assessments, and information on test drives.

The U.S.-based program, Automobility, is a financial assistance program that was launched in 1987 to help customers with permanent disabilities enter, exit and/or operate a new vehicle. The program helps cover more than €900 of the expense for installing adaptive driver or passenger equipment on most Chrysler, Jeep, Dodge, Ram or Fiat vehicles. It also helps customers locate assessment centers and vehicle modifiers or adaptive equipment installers to ensure new products meet their needs. Since 2010, the program has provided nearly 30,000 Automobility Program customer assistance grants.

Related content

Fiat Autonomy: Freedom of movement >

Fiat Autonomy >

Customer Data

The Group takes care in processing and protecting personal data of customers and other stakeholders, as set out in the FCA Data Privacy Guidelines and in compliance with applicable laws and regulations.
In 2014, the Alliance of Automobile Manufacturers and the Association of Global Automakers submitted to the U.S. Federal Trade Commission the Consumer Privacy Protection Principles for Vehicle Technologies and Services. As a member of the Alliance, FCA US committed to the implementation of these seven Principles, which include transparency; choice; respect for context; data minimization; de-identification & retention; data security, integrity & access; and accountability. The Principles represent a unified responsibility to continue enhancing benefits to customers while respecting their privacy and are increasingly important as customers and vehicles become more connected. This connectivity may include information such as location of vehicles or how drivers operate their vehicles.
The Privacy Principles acknowledge that technologies and services are increasingly designed to enhance vehicle safety, performance and the driving experience, and rely upon information from vehicle systems.

Financial Services

FCA facilitates access to vehicle purchases in Europe through FCA Bank S.p.A. which offers customers a wide range of financial products and insurance services at competitive terms. Web-based tools are developed and used to suggest the financial plan that best suits customers' needs and budgets, including Financial Calculator and Find Your Car. In 2016, FCA Bank issued more than 638,000 new financial contracts. By offering attractive tailored options to refinance existing or purchase new vehicles, FCA Bank strengthens customer loyalty and contributes to their overall satisfaction. FCA Bank conducts a comprehensive Customer Satisfaction Survey semi-annually to monitor the level of customer satisfaction with its products and services, conduct of sales personnel, and clarity and completeness of the information provided by sales personnel. During 2016, about 16,000 FCA Bank customers were surveyed by phone and polls.

Products and services are offered to customers in alignment with the principles of transparency, fairness and responsibility, as well as in full compliance with applicable laws and regulations.

View data >

GRI: G4-DMA, G4-PR8, G4-PR5

DEALER AND SERVICE NETWORK

Dealers play a pivotal role in developing relationships and building trust with FCA's customers. The Company works closely with its dealers to enhance their ability to make the purchase, service and ownership experiences easier and more convenient. FCA regards dealers as key business partners and proactively engages with them to create personal, differentiated experiences for customers in all markets.

FCA has worked with its dealer network to help them update sales and service processes to provide a positive ownership experience while accommodating brand values, local requirements, and different customer needs. We develop and deploy extensive training opportunities to expand the skills of our current dealer network, from sales, after-sales and technical personnel, to those who may be employed in the network in the near future. Specific training initiatives and educational programs emphasize enhancing the quality of service offered, the ability to establish a positive dialogue with customers and the level of product-related knowledge.

In addition to focusing on processes and personnel development, FCA offers a variety of interactive tools to enhance the customer experience and communication between the dealer network and customers. FCA's support also involves developing and supporting initiatives to reduce inefficiencies, waste and environmental impact, leading to a more sustainable approach for the dealer network.

Related content

Customer Experience >>

QUALITY IN THE DEALER NETWORK

One of the keys to customer satisfaction is the quality of sales and service processes within the dealer network. Monitoring their effectiveness through customer feedback is critical to the overall success of our network. As cultures vary across markets, FCA's dealer network programs and processes take these differences into consideration. Several measures have been implemented over time to improve processes, customer service standards and service quality for the Group's dealer network. An example of a market-specific program that relies on customer feedback is the Customer First program in the U.S. This program supports improving the customer experience as the primary means to retain customers, and focuses on the dealer network's important role in the process. Customer First concentrates on five key pillars including facility maintenance, employee engagement, sales and service process consistency, customer advocacy measures and employee training. The goal is to take a long-term relational approach to both customer and employee engagement by placing emphasis on processes, training, and facility comfort and convenience. In 2016, more than 300 dealers achieved the Customer First Award for Excellence.

Another market-specific program is the Branded Sales Process (BSP) used in the European markets. BSP addresses customer satisfaction and individual brand values and positioning by focusing on eight customer-facing processes: acquisition, welcome, interview, experience, negotiation, purchase, delivery and loyalty. The program also covers internal dealer processes such as marketing and communication, showroom management, order management and sales staff management. BSP is designed to increase customer satisfaction, improve sales capabilities and gain a competitive advantage.

In order to improve the customer experience in Brazil, FCA developed a program called World Class Dealer (WCD) built on the knowledge and best practices of the World Class Manufacturing (WCM) program. WCD is tailored to local network characteristics and Brazilian customer expectations. As a part of WCD, dealers must implement specific sales and after-sales standards and processes centered on improving operational efficiency, performance, profitability, market share and customer satisfaction, as well as reducing waste generated. Dealer operations are assessed to identify gaps, recommend improvements, generate action plans and achieve certification from FCA.

Virtual Reality in Dealerships

Today's customers value personalization, along with easy access to information. To support an enhanced customer experience, FCA develops tools to optimize interactions between customers and the dealer network. The Abarth Virtual Reality Configurator allows a customer to become immersed in a real-time customization of the vehicle and, at the same time, allows the dealer to show possible customizations before the customer purchases the vehicle. The system allows the user to discover the new Abarth 124 Spider by using dedicated equipment such as a helmet with 3D virtual reality – experiencing a realistic and immersive encounter that reproduces the vehicle's details. The customer can also move around the vehicle, open the doors, sit inside and even hear the sound of the engine and exhaust.

The vehicle configuration details created by the customer can be saved and shared via email. This Virtual Reality Configurator offers a cyber experience and helps the customer make a purchase decision. The tool, developed by FCA's Information and Communication Technology department leveraging the technical resources and knowledge of its Virtual Reality Competence Center, is available in the main European markets and is also used during international events and auto shows.

DEALER PERSONNEL DEVELOPMENT

FCA develops training programs to enhance the knowledge and skills of its dealer network, as well as its day-to-day business operations. The two main training organizations within the Group, Unetversity and the FCA Performance Institute, standardize skill levels across the network and offer targeted training to dealership sales, after-sales and technical personnel worldwide.

A variety of topics are addressed within the training courses, such as customer relationship management processes; product and vehicle systems knowledge; and environmental and safety features of the Group's vehicles. FCA also provides web-based courses tailored for those network professionals who are not located near live course offerings. Various online tools and performance support, including virtual classrooms, online training, web portals, tablet applications, in-dealership touch-screen kiosks and smartphone-optimized tools and resources are offered.

Training provided in 2016
> 5.7 Million
hours worldwide

Building the network goes beyond providing training and communication tools for existing network employees – it also means looking forward and supporting the development of the next generation of dealership personnel.

Customer Relationship and Technical Support

One of the main topics covered in dealer training programs is improving relationships with customers. The training programs are based on market specifications and requirements, along with customer expectations, which can vary by brand. An example is the 2016 training program for Jeep and Alfa Romeo brand sales personnel in Italy and other European countries. The program assessed sales personnel attitudes needed to support the two global brands and live training courses were created to:

- develop effective communication skills
- engage and understand customers
- present products effectively.

Special training events dedicated to the new Alfa Romeo Giulia were developed for both sales and after-sales personnel to support the launch of the vehicle. Two-day training events were attended by over 700 service advisors and 1,600 sales personnel across Europe, focusing on their interactions with customers.

FCA also dedicates considerable resources to the technical support of customers' vehicles, including environmental and safety training within our dealer network. Worldwide, dealer personnel receive training on topics related to the reduction of fuel consumption and CO_2 emissions; eco-friendly technologies; alternative fuels and the latest generation engines; and active and passive safety features. This training is essential to present product features, as well as ensure proper maintenance and repair knowledge to support vehicle efficiency.

Specialty training is developed for sales, after-sales and technical personnel to support new vehicle launches. As an example, the 2017 Chrysler Pacifica Hybrid technician training included a High Voltage Safety and Awareness web course, along with an instructor-led course on Advanced System and Diagnosis. In addition to this training, FCA announced mandatory hazardous material (hazmat) training for U.S. and Canadian dealers, to help ensure government hazmat training requirements are completed and to improve the safety of those involved in the transportation process.

Knowledgeable, skilled technicians are critical to maintaining and repairing vehicles so that they perform efficiently. In 2016, the EMEA region continued to focus on the development of Dealer Expert Technicians, who are the lead technicians in each dealership for diagnosis and complex technical problems. This role is fundamental to maintain properly performing vehicles, along with fixing the vehicle right the first time and delivering a high level of customer satisfaction. Qualifying as a Dealer Expert Technician involves an initial assessment of individual competencies and training needs, which lead to creating dedicated and specific training paths for each person. Dealer Expert Technicians are qualified after they attend and pass all the courses in their training path. They can be disqualified if required courses, such as a new product training course, are not completed. During 2016, more than 2,600 dealer personnel qualified as Dealer Expert Technicians in EMEA.

Enhancing Network Skills

Through FCA's partnership in the U.S. with Strayer University and the Degrees@Work and Degrees@Work Family programs, dealers and FCA provide a no-cost, no-debt college degree to dealership employees and their families. Participants are offered the opportunity to receive relevant Associate's, Undergraduate and Master's degrees. The programs enable dealerships to attract top talent, improve the skill set of existing employees, lessen the burden of paying for college for families and increase employee retention. By the end of 2016, there were more than 200 dealers enrolled in the program with more than 1,300 dealership employees and family members who have taken advantage of this opportunity.

FCA is also assisting its dealer network to recruit and train entry-level technicians to sustain and grow the dealer service operations in the U.S. The Mopar Career Automotive Program (CAP) is a national study and internship program offered by a network of schools that utilize FCA-specific curriculum to train high-potential, entry-level automotive technicians for employment at FCA dealerships. Mopar CAP has created strategic partnerships with automotive technical colleges and technical schools in selected locations throughout the U.S. The program provides a competitive and structured career training path for students so that dealers can attract the best future technician applicants. Graduating students can be hired as productive employees immediately following graduation. At the end of 2016, there were 78 Mopar CAP schools in the U.S., a 65% increase over the prior year, supporting more than 4,000 active students.

IMPROVING NETWORK SUSTAINABILITY

FCA works with the dealer network to create responsible and sustainable development practices. This includes helping to reduce the environmental impact of the network even though the vast majority of the dealerships are privately-owned. In 2016, FCA continued to develop and expand initiatives in the various regions based on local network opportunities. These programs were related to increasing awareness on sustainability topics; reducing energy consumption, atmospheric emissions and natural resource consumption; and improving waste management.

During 2016, FCA piloted a new program in the U.S. designed to assist dealers in converting to LED lighting. FCA and its partners in the program piloted an LED retrofit solution which not only provided customers and dealership employees with a brighter and safer environment at night, but also decreased the dealers' total electricity cost over 40% by reducing consumption by more than 50%. This program supports FCA's commitment to reducing overall environmental impact, in addition to offering a positive financial impact for dealerships and a better experience for customers. The roll-out of the initiative is planned to launch in the U.S. in 2017.

Related content

Production >
Logistics >

INNOVATION AND MOBILITY

FCA evaluates the impact of its vehicles on the environment throughout their entire life cycle. The Company's approach to responsible vehicle development includes dedication to efficient powertrains, improved aerodynamics, weight reduction, safety, quality, increased use of renewable materials, and alternative mobility solutions. Immediate and tangible results can best be achieved by combining conventional and alternative technologies, while recognizing and accommodating the different economic, geographic and fuel requirements of each market. Because the environmental impact of vehicles is affected by driving behavior, the Group also engages customers to promote eco-friendly driving.

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RESEARCH AND DEVELOPMENT

FCA engages in research and development activities aimed at improving the design, performance, safety, fuel efficiency, reliability, consumer perception and sustainability of our products and services.

During our 2016 sustainability-focused stakeholder engagements, FCA stakeholders confirmed research and innovation as one of the key material topics for the Group.

In 2016, the Group invested approximately €4.2 billion in research and development, representing around 3.8% of net revenues from industrial operations. Approximately 20,600 employees at 87 locations worldwide were involved in the Group's innovation activities, continuing to generate a significant intellectual property portfolio. At year-end 2016, FCA had a total of 11,487 patents and patent applications and 1,637 protected product designs.

The global innovation and product development activities are centrally coordinated by the Chief Technology Officer (CTO), Powertrain Coordinator, Product Portfolio Management Responsible and Design Responsible who are members of the Group Executive Council, an FCA operational decision-making body. In particular, the CTO leads FCA Research & Development (R&D) and is responsible for stimulating opportunities for synergies and technology transfer across the entire enterprise.

In the EMEA region, Product Development departments located in Turin and Modena (Italy) are the primary R&D facilities. In the NAFTA region, research and development activities are primarily carried out at the Chrysler World Headquarters and Technology Center in Auburn Hills (U.S.), and the Automotive Research and Development Centre in Windsor (Canada). Our personnel support product development efforts and have expertise in a number of disciplines, including mechanical, electrical, materials, computer science and chemical engineering.

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CRF >

INNOVATION AND COLLABORATION

FCA fosters innovation by encouraging creativity among its workforce, as well as through collaboration with our suppliers and external organizations such as universities, research centers and other institutions.

Product and process improvements may also result from suggestions and ideas from other internal areas in addition to Engineering. In 2016, the global World Class Manufacturing program that promotes employee suggestions to improve processes produced more than 2.5 million suggestions. The most actionable suggestions were implemented and the project owners were recognized for their contributions.

During 2016, the NAFTA region's Innovation Space served as the venue for roughly 90 training and workshop activities. Creative and alternative thinking processes are promoted through the tools and techniques used in the Innovation Space. These methods are used to develop advanced strategies, process improvements, new product features and technical problem solutions. New innovation methods added in 2016 include the teaching of early prototyping techniques and the use of bio-inspired design thinking as a source of fresh, innovative ideas.

Universities and Research Centers

The Group engages in long-standing collaborations with universities and research centers through research groups and joint projects. These close ties with the academic world are instrumental to encouraging creative thinking and rewarding talent in young people. Collaboration is promoted in many different ways by the individual companies and across the Group.

The collaboration in the EMEA and NAFTA regions with Politecnico of Turin (Italy) and the University of Windsor (Canada) through the International Dual Master's Degree (IDMD) Program continues to demonstrate FCA's commitment to strengthen common research and internationalization. Special activities were organized in 2016 to involve a larger number of students at U.S. and Canadian universities in the IDMD Program. Also, the memorandum of understanding was extended to 2018 between FCA and Politecnico of Turin.

In the NAFTA region, FCA is cooperating on a number of initiatives with many universities, including Massachusetts Institute of Technology, Michigan State University, University of Wisconsin, The Ohio State University and Oakland University. FCA's collaboration continued in 2016 with McMaster University, a public research university in Hamilton (Canada). This project is working on the development of next-generation, energy-efficient, high-performance electrified powertrains and powertrain components.

GRI: G4-DMA, G4-14, G4-EN7, G4-EN27

USCAR

FCA US is a member of the United States Council for Automotive Research (USCAR), a collaborative technology organization aimed at strengthening the technology base of the U.S. auto industry through cooperative research and development. Participation in USCAR provides access to more than 300 projects with national laboratories, research centers, industry partners and universities in conjunction with USDRIVE, a consortium of the U.S. Department of Energy and Transportation, energy and utility companies. USCAR is also involved, through collaboration with the United States Advanced Battery Consortium (USABC), with 19 advanced battery technology programs with a total cost shared value of over $55 million. The USCAR/USABC/DOE collaboration allows for a total of $125 million of cost shared funding over a five-year period for the advancement of battery technology. The emphasis of this collaboration is to develop the battery technology of industry partners within the U.S.

Collaborative Research Projects

CRF, an FCA research center in Europe, plays an active role in the main European Technology Platforms and is the focal point for collaborative research programs.

Involvement in European Research Organizations

European Technology Platforms	Public-private partnerships	Research and development organizations
ERTRAC: Road transport	Green Cars Initiative	EUCAR: European Council for Automotive R&D
EPoSS: Smart system integration	Factories of the Future	ERTICO-ITS Europe: network of Intelligent Transport Systems and Services
EuMaT: Advanced engineering materials and technologies	ECSEL (Components and electronic systems)	EIT ICT Labs: Knowledge & Information Community on ICT
MANUFUTURE: Manufacturing and production processes		Human Factors and Ergonomics Society - Europe Chapter
NANOfutures: initiative for sustainable development of nanotechnologies		

Related content

Production >
Electric and Hybrid Technologies >

GRI: G4-DMA, G4-EN27

EMISSIONS AND FUEL ECONOMY

FCA's efforts to improve fuel economy and reduce CO_2 emissions have focused on:

- powertrain technologies (e.g., engines, transmissions, hybrid and electric propulsion)
- vehicle energy demand (aerodynamic efficiency, weight, tire performance, etc.)
- customer driving style and usage.

To optimize vehicle fuel economy and reduce CO_2 emissions, FCA addresses each of these areas at the start of the product development process.

FCA vehicles must comply with comprehensive local, regional and national laws and regulations with respect to vehicle emissions and fuel economy. The Group develops technologies that respond to the regulatory requirements of each market, while at the same time addressing vastly different consumer preferences and demands across the world.

Government and regulatory scrutiny of the automotive industry has continued to intensify during the course of 2016, and is expected to remain high, particularly in light of recent regulatory actions related to diesel emissions involving a number of automakers. We have received inquiries from several regulatory authorities as they examine the on-road tailpipe emissions of several automakers' vehicles.

In particular, the Group has been working with the Italian Ministry of Transport ("MIT") and the Dutch Vehicle Regulator ("RDW"), the authorities that certified FCA diesel vehicles for sale in the European Union. The Group also initially responded to inquiries from the German authority, the Kraftfahrt-Bundesamt ("KBA"), regarding emissions test results for its vehicles reported by KBA, and the Group discussed the KBA reported test results, its emission control calibrations and the features of the vehicles in question. After these initial discussions, the MIT, which has sole authority for regulatory compliance of the vehicles it has certified, asserted its jurisdiction over the matters raised by the KBA, tested the vehicles, determined that the vehicles complied with applicable European regulations and informed the KBA of its determination.

Under European Commission rules, mediations have been held with MIT and the German Ministry of Transport and Digital Infrastructure ("BMVI"), which oversees the KBA, in an effort to resolve the differences. In addition, on March 21, 2017 the press reported that at the request of the French Consumer Protection Agency, the French public prosecutor has begun a further investigation regarding whether the sale of the Group's diesel vehicles violated French consumer protection laws, as it has done for other automakers' diesel vehicles. The results of these inquiries cannot be predicted at this time; however, the intervention by a number of governmental agencies and authorities has required significant management time, which may divert attention from other key aspects of the Group's business plan, or may lead to further enforcement actions as well as obligations to modify or recall vehicles, any of which may have a material adverse effect on the Group's business, results of operations and reputation.

On January 12, 2017, the U.S. Environmental Protection Agency ("EPA") and the California Air Resources Board ("CARB") each issued a notice of violation ("NOV") alleging that FCA US failed to disclose certain emissions control strategies in its application for certificates to permit the sale of model year 2014-2016 Jeep Grand Cherokee and Ram 1500 diesel vehicles. Approximately 104,000 of these vehicles were sold in the United States, of which approximately 14,000 were sold in California. The NOVs also state that the EPA and CARB are continuing to investigate whether any of these emissions control strategies are properly justified under the applicable regulations or constitute a "defeat device" as defined in the Clean Air Act. Following the issuance of the NOVs, a number of civil lawsuits have been filed. The Group has also received various inquiries, subpoenas and requests for information from a number of governmental authorities, including the U.S. Department of Justice, the SEC and several states' attorneys general. The Group is investigating these matters and it intends to cooperate with all valid governmental requests.

For more information on emissions and fuel economy regulations in the various markets, see the FCA 2016 Annual Report on Form 20-F

GRI: G4-DMA, G4-EN7, G4-EN27

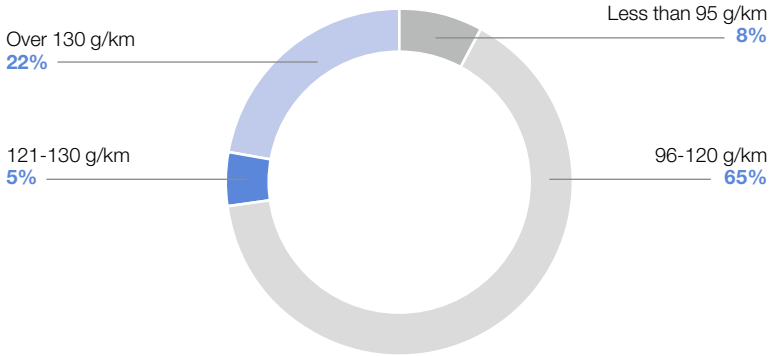
EUROPEAN UNION

In the European Union (EU), the average CO_2 emissions of the Group's Mass-Market Brand cars is 119.4 g/km in 2016. This represents a 21% decrease compared with 2006 (the benchmark year used in EU regulations to set the 2012-2015 and 2020 targets), and a 26% reduction compared with 2000, which was the first year the EU Commission monitored average emissions.

Approximately 73% of the Group's newly registered Mass-Market Brand cars emitted 120 g/km of CO_2 or less in the European Union, while 78% emitted 130 g/km of CO_2 or less. In 2014, the European Union implemented new regulations that established CO_2 emission targets for light commercial vehicles (LCV) and, accordingly, FCA continues to monitor LCV data and established appropriate systems based on regulation requirements. A new regulatory test procedure for measuring CO_2 emissions and fuel consumption from light duty vehicles, the World harmonized Light vehicles Test Procedure (WLTP), will be effective in the European Union on September 1, 2017 for new passenger car types, on September 1, 2018 for all passenger cars, and one year later for light commercial vehicles. WLTP will replace the current New European Driving Cycle (or "NEDC"). The WLTP is expected to provide CO_2 emissions and fuel consumption values that are more representative of real driving conditions. The CO_2 targets will be replaced in 2021 with values that represent a stringency comparable to that specified for the NEDC-based targets. The new WLTP test procedure is also expected to be used for measuring levels of regulated emissions.

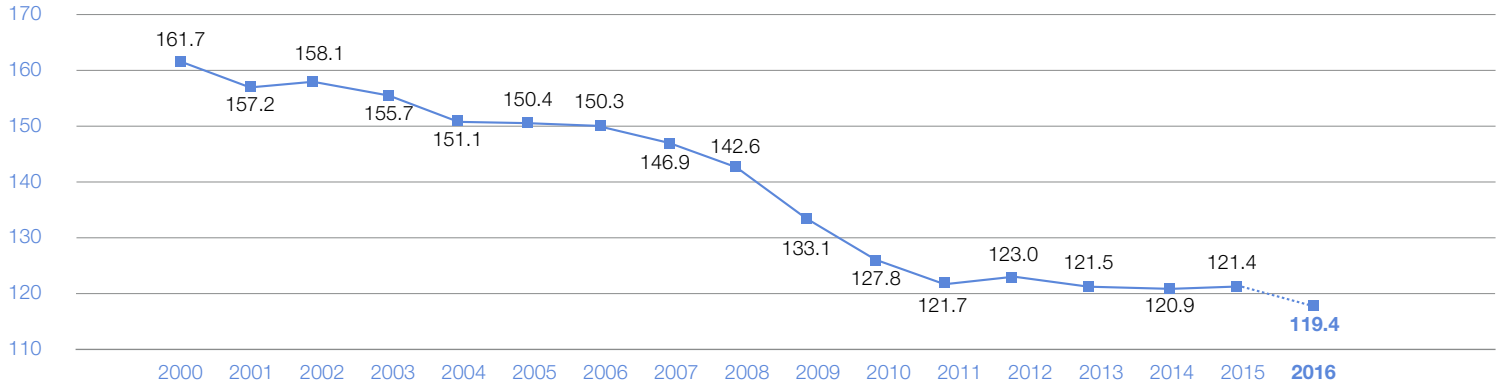
New Car Registrations by CO_2 Emission Levels

Mass-Market Brands in the European Union



Average CO_2 Emissions for Newly Registered Passenger Cars

FCA (Mass-Market Brands) in the European Union (g/km)[1]



[1] *Source: 2000-2015 EU Commission data; 2016 FCA estimate.*

Other Emissions

As part of its environmental efforts, FCA's work to reduce fuel consumption and CO_2 emissions is paired with an even greater effort to develop technologies that reduce regulated emissions, including particulates and oxides of nitrogen (NOx).
The Group has developed solutions to reduce emission levels to comply with the Euro 6 standard. This standard introduces mandatory, more stringent limits, particularly on diesel NOx emissions, for all new type-approved passenger cars in Europe as of September 2014, and for all new registrations as of September 2015 (one year later for LCV). For diesel engines, FCA's MultiJet II technology represents an important step toward compliance with Euro 6 emission standards, as it ensures better combustion while lowering the need for exhaust gas aftertreatment. In addition to passenger cars, in 2016, Euro 6 standard compliance was completed across the entire FCA LCV lineup. Further requirements of Euro 6 have been developed by the EU institutions and are expected to be implemented on September 1, 2017. A new test procedure has been defined to directly assess the regulated emissions of light duty vehicles under real driving conditions. Compliance with emissions conformity factors of this new test procedure will be mandatory for new passenger cars on September 1, 2017, and for all passenger cars on September 1, 2018 for the measurement of particle number emissions (PN) and on September 1, 2019 for NOx emissions (one year later for LCV): more stringent conformity factor for NOx emissions will be introduced for new passenger cars on January 1, 2020 and for all passenger cars on January 1, 2021 (one year later for LCV).

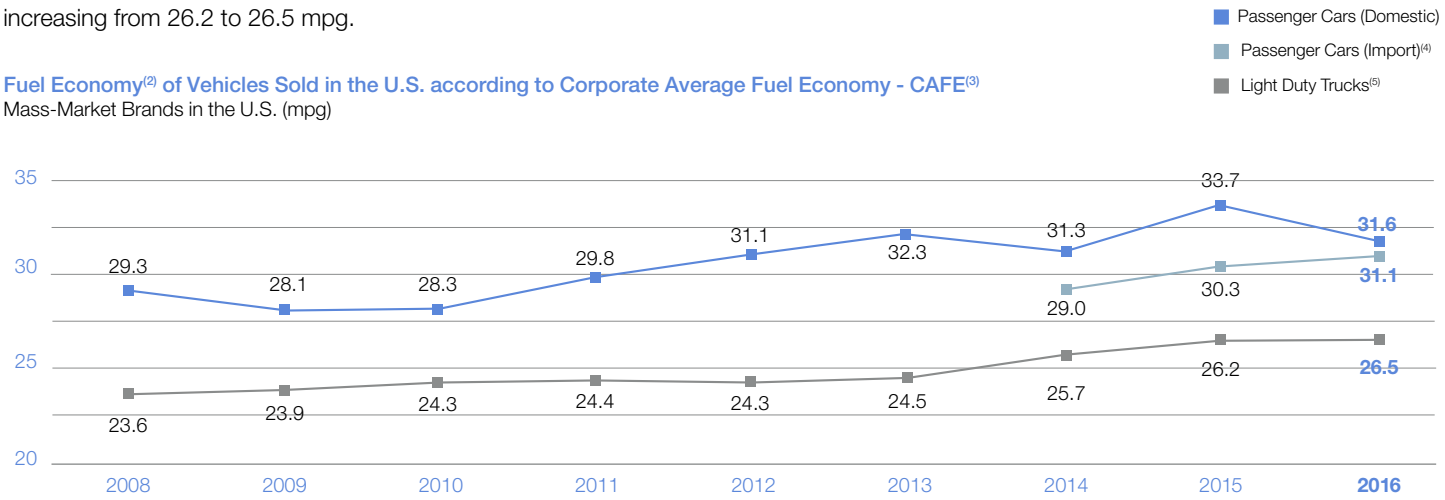
UNITED STATES

In the U.S., vehicle fuel efficiency is measured by fuel economy expressed in miles per gallon (mpg). Actual fleet performance is dependent on many factors, including the vehicles and technologies FCA offers, as well as the mix of vehicles consumers choose to buy.

FCA updated its Business Plan in 2016 to reflect the sustained market shift to sport-utility vehicles (SUVs) and pickup trucks in the U.S. The Chrysler 200 and Dodge Dart have been discontinued and production capacity is being adjusted to respond to consumer preference for the Company's Jeep brand vehicles and trucks.

The Plan also reflected further applications of battery/electric technologies.
FCA's domestic passenger car fuel economy declined in 2016 from 33.7 to 31.6 mpg. Truck fuel economy (including SUVs, pickup trucks and minivans) improved 1.1% from 2015 to 2016, increasing from 26.2 to 26.5 mpg.

Fuel Economy[2] of Vehicles Sold in the U.S. according to Corporate Average Fuel Economy - CAFE[3]
Mass-Market Brands in the U.S. (mpg)



[2] *Refers to fuel consumption in miles per gallon, which, by applying an appropriate conversion factor, corresponds to the kilometers traveled with consumption of a liter of fuel. Therefore, an increase in fuel economy corresponds to an increase in vehicle efficiency, and a reduction of fuel consumption and CO_2 emissions.*
[3] *Data is reported to the U.S. National Highway Traffic Safety Administration (NHTSA) and provided by model year, meaning the year used to designate a discrete vehicle model, irrespective of the calendar year in which the vehicle was actually produced, provided that the production period does not exceed 24 months. CAFE standards from NHTSA are set independently for passenger cars and light duty trucks. Fuel economy is based on the most recent NHTSA required submission, which for 2016 reflects mid-model year data. Previous year data is adjusted to reflect final EPA/NHTSA reports.*
[4] *FCA's import passenger car fuel economy was reported for the first time in 2014, and includes both Mass-Market and Luxury Brands sold in the U.S., including Fiat, Maserati, Alfa Romeo and Ferrari brand vehicles. The spin-off of Ferrari from the Group was completed on January 3, 2016. Ferrari is included here based on submissions to the EPA.*
[5] *Vehicles for the transportation of passengers and/or goods with specific characteristics defined by the U.S. National Highway Traffic Safety Administration – NHTSA (e.g., SUVs, MPVs and pickups).*

OTHER MARKETS

In countries in the APAC and LATAM regions, including those without specific regulations governing CO_2 emissions or fuel consumption, FCA offers vehicles with leading-edge technology designed to reduce both.

Brazil

In Brazil, the major market in the LATAM region, more than 329,000 Flexfuel and TetraFuel vehicles were registered[6] in 2016, accounting for approximately 90% of vehicles licensed by the Group in this market. FCA participates in the government's INMETRO vehicle fuel consumption monitoring program (PBEV - Brazilian Labeling Program Vehicle). For PBEV 2016, 113 Fiat vehicles were involved.

The new global family of small gasoline engines, first launched in Latin America in 2016 under the Firefly family name, was designed to improve vehicle fuel economy and emission levels. It covers a large range of vehicle applications with different power outputs and introduces new features and technologies to improve efficiencies, focusing on a reduction in friction and thermal management to maximize the efficiency of the engine's internal combustion. This engine family's output is aligned with the expected evolution of regulations and the foreseeable trends in market and customer needs. The new 2017 Fiat Uno is the first global-scale vehicle of FCA to receive the new Firefly engine. With modular construction and aluminum blocks, this new family includes 3- and 4-cylinder versions with the same single piston and cylinder dimensions for both cases. The Firefly 1.0-liter is also available on the new Fiat Mobi Drive Dualogic version. Firefly engines deliver best-in-class fuel economy.

China

In China, Phase IV of the Corporate Average Fuel Consumption (CAFC) is currently in place. Each automaker must meet a specific fleet average fuel consumption target related to vehicle weight. The phase-in of this fleet-average requirement began in 2016, with full compliance required by 2020. The Group is committed to launching fuel efficient products; technical solutions such as Engine Stop-Start (ESS) were already widely applied on 2016 model year vehicles. The Jeep Grand Cherokee with ESS represented approximately 53% of total FCA imports into China in 2016. The locally-produced Jeep Renegade was launched with ESS as the standard configuration.

In April 2016, FCA launched local production of the Jeep Renegade in a joint venture with Chinese partner Guangzhou Automobile Group Co., Ltd (GAC Group) in the new Guangzhou plant.

FCA combined sustainable vehicle technologies with sustainable manufacturing processes, including the adoption of technologies such as a new compact paint process with water-based colors.

[6] *Official data communicated to Brazil's INOVAR-Auto program.*

EFFICIENT POWERTRAINS AND TECHNOLOGIES

FCA's powertrain and engineering approach leverages regional strengths and develops plans from a global perspective. The Group's Business Plan was updated in January 2016 to further align products with consumer demands in each market where it does business. It also addresses the unique regulatory requirements of each region, and includes new actions to improve vehicle fuel efficiency and reduce vehicle CO_2 emissions.

The evolution of FCA proprietary technologies like MultiAir and MultiJet has progressed in combination with other technologies, such as direct injection, variable displacement oil pumps, two-step valve lift systems, cooled exhaust gas recirculation systems, and electronic thermostats, leading to the development of more efficient powertrain architectures. The latest generation MultiAir technology brings further improvements in fuel efficiency and CO_2 emissions via improved intake valve event control, building on the progress of the previous generation.

The wider use of smart technologies, which provide dynamic management of the vehicle's powertrain systems, has contributed to an improved balance between performance and fuel economy. These technologies include smart charging, optimized engine cooling systems and cylinder deactivation. Conventional gasoline and diesel engines are expected to continue to play a predominant role in mobility in upcoming years. The Group believes that there is still significant potential to reduce the fuel consumption and emission levels of these engines through technological advancements.

POWERTRAINS

Maximizing powertrain efficiency is part of FCA's commitment to reduce vehicle CO_2 emissions and improve fuel economy. This means not only developing more efficient engines and transmissions, but also optimizing the vehicle/powertrain system. Selection of the most suitable powertrain (engine and transmission) is based on vehicle type and use.

Gasoline Engines

In multiple regions, completely new global small and medium gasoline engine families are being developed to improve fuel economy and emission levels. These new engine families feature a modular approach from a shared cylinder design (allowing for different engine configurations, displacements, efficiency and power outputs) and are expected to cover a large range of vehicle applications and introduce features and technologies such as direct injection, downsizing, turbocharging, and cooled exhaust gas recirculation to improve efficiency, while also addressing internal friction and thermal management. In particular, both a 1.0-liter three cylinder and a 1.3-liter four cylinder Firefly global small engine application launched in the LATAM region in third quarter of 2016. The first global medium engine application (a 2.0-liter turbo four cylinder engine) launched in the Alfa Romeo Giulia in the fourth quarter of 2016 and Alfa Romeo Stelvio in the first quarter of 2017. This new engine is manufactured in Termoli (Italy).

All regions are implementing Engine Stop-Start (ESS) applications. In the EMEA region, the adoption of ESS has been extended to the entire vehicle range in order to improve average CO_2 emissions; in the NAFTA region, ESS was extended to Jeep Grand Cherokee and Dodge Durango models. Research activities on gasoline engines have primarily been focused on further increasing overall engine efficiency through a combination of synergistic technologies, (i.e. high compression ratio matched with GDI and boosting) especially under real driving conditions.

GRI: G4-DMA, G4-EN7, G4-EN27

Diesel Engines

In recent years, diesel research has focused on the combustion process and after-treatment technologies. On the combustion side, enhanced control of injection parameters together with optimization of combustion bowl shape represented a key step in reducing “engine-out” pollutants and enhancing fuel economy.

The new 2.2-liter aluminum block diesel engine was introduced in the recently-launched Alfa Romeo Giulia and Stelvio models with a power output ranging from 150 to 210 horsepower. The engine is available with both manual and automatic transmissions, and in both rear-wheel-drive and all-wheel-drive configurations. On the Alfa Romeo Giulia, an eight-speed automatic transmission “Advanced Efficiency” variant was launched, which combines high performance and CO_2 emissions as low as 99 g/km in the combined cycle. To achieve these competitive CO_2 emission levels, this variant incorporates technologies such as a smart alternator; optimization of the engine cooling circuit to reduce warm-up time; variable displacement oil pump; and Engine Stop-Start technology.

In terms of aftertreatment systems, research and development activities have mainly focused on continuous improvements to passive and active NOx reduction technologies optimized for the next generation diesel powertrains. Advanced aftertreatment systems for the reduction of NOx emissions are under development both for passenger car and light commercial vehicle applications. In particular, we have incorporated the selective catalytic reduction (SCR) aftertreatment system to reduce NOx emissions in Fiat Ducato vehicles coupled with 2.3-liter diesel engines.

Transmissions

FCA offers a well-balanced transmission portfolio that includes manual transmissions, automated manual transmissions, dual dry clutch transmissions (DDCT) and automatic transmissions. This broad offering is designed to meet market demands and regulatory requirements in the different regions where we operate, and to achieve the right vehicle performance characteristics for our individual brands. The use of DDCT, a core technology for the Group, has recently been launched in new applications in markets where customers value this technology.

The transmission plays an important role in achieving improvements in the overall CO_2 reduction and improved fuel economy. The technologies used in the transmission allow for optimizing the power output of the engine and transferring the power derived from the engine to the road in an efficient manner. One method is to use enhanced torsional vibration damping at the output of the engine. This is achieved through use of long travel dampers and also includes the use of pendulum dampers to allow the engine to operate at a lower speed and high output torque. In this area the engine is more efficient converting the fuel energy to mechanical energy.

Another area fuel economy improvements were made is with the use of hybrid powertrains. The single-input electrically variable transmission used in the Chrysler Pacifica Hybrid is a dual electric motor system along with a unique gear arrangement to optimize the use of the power output of the internal combustion engine. This system has the ability to utilize the power regeneration to slow the vehicle. Besides the improvements used to operate the internal combustion engine, other improvements in the transmission are used to reduce the operational power consumption of the transmission.

The Group offers 8- and 9-speed automatic transmissions developed to provide our customers with improved efficiency, performance and drive comfort. Particular focus is placed on optimizing the engine-transmission matching to achieve more efficient powertrain solutions for each vehicle segment. The second generation TorqueFlite 8-speed improves transmission efficiency via improved line pressure control and reduced clutch drag by adding clutch separator rings.

The addition of transmission oil heaters allows for the transmission to quickly warm up to operating temperatures to achieve optimal transmission efficiency. There are many other technologies being investigated to reduce the power consumption of the transmission such as switchable one way clutches, oil viscosity reduction, and the use of simulation to right size components in the system.

GRI: G4-DMA, G4-EN7, G4-EN27

ELECTRIC AND HYBRID TECHNOLOGIES

In 2016, FCA started production of the new Chrysler Pacifica Hybrid, the industry's first electrified minivan. It earned a fuel economy rating of 84 miles per gallon equivalent (MPGe), from the U.S. Environmental Protection Agency (EPA), and is expected to provide an estimated range of 33 miles solely on zero-emissions electric power. The 16-kWh lithium-ion (Li-ion) battery is capable of being recharged in approximately two hours using a Level 2 240 volt charger. When the battery's energy is depleted to a certain threshold, the Pacifica Hybrid operates like a conventional hybrid.

The Chrysler Pacifica Hybrid follows FCA's first battery electric vehicle for mass production, the Fiat 500e, which began production in late 2012. The Fiat 500e launched in the U.S. with an EPA label of 108 highway MPGe rating and class leading 87 miles of combined city/highway driving range.

Additional electrification technologies applicable to rear- and all-wheel drive based vehicles are also being developed, including a mild hybrid using belt starter generator (BSG) technology. BSG offers improvement in fuel economy and a reduction in CO_2 emissions at a relatively low cost.

An all-electric concept vehicle, the Chrysler Portal, was unveiled in early 2017 at the Consumer Electronics Show (CES) in Las Vegas (U.S.). The Chrysler Portal Concept is a forward-thinking interpretation of a next generation of family transportation, focused toward the millennial generation. This concept vehicle has an estimated driving range of more than 250 miles on a full charge, and its next-generation DC Fast Charge (350 kW) technology recharges the battery pack with 150 miles of range, in less than 20 minutes. This concept vehicle is designed with an array of sensor technologies that have the potential to be upgraded if desired to higher levels of autonomous driving as technology progresses.

FCA is also working on electrified solutions in the EMEA region. The Group supports public and private sector pilot projects, aimed at overcoming existing barriers, and testing the market potential for widespread application of electric vehicles, particularly for urban use. In Europe, a car-sharing service was established with the City of Turin (Italy). FCA provided a fleet of eight all-electric Fiat 500e vehicles, which have traveled approximately 31,000 km around the city center in 2016.

In addition, FCA successfully concluded its collaboration as Official Global Partner for sustainable mobility within the framework of Expo Milano 2015, where Fiat 500e vehicles were used as part of the event fleet. FCA was provided with real world data on vehicle usage and consumer preferences on electric vehicles. In 2016, FCA launched an internal car-sharing initiative using part of the Fiat 500e EXPO 2015 fleet. This sustainable program is designed to improve employee transportation between the Orbassano and Mirafiori (Italy) FCA sites.

FCA complements its own research and development efforts on hybrid and electric technologies with collaborations with external partners:

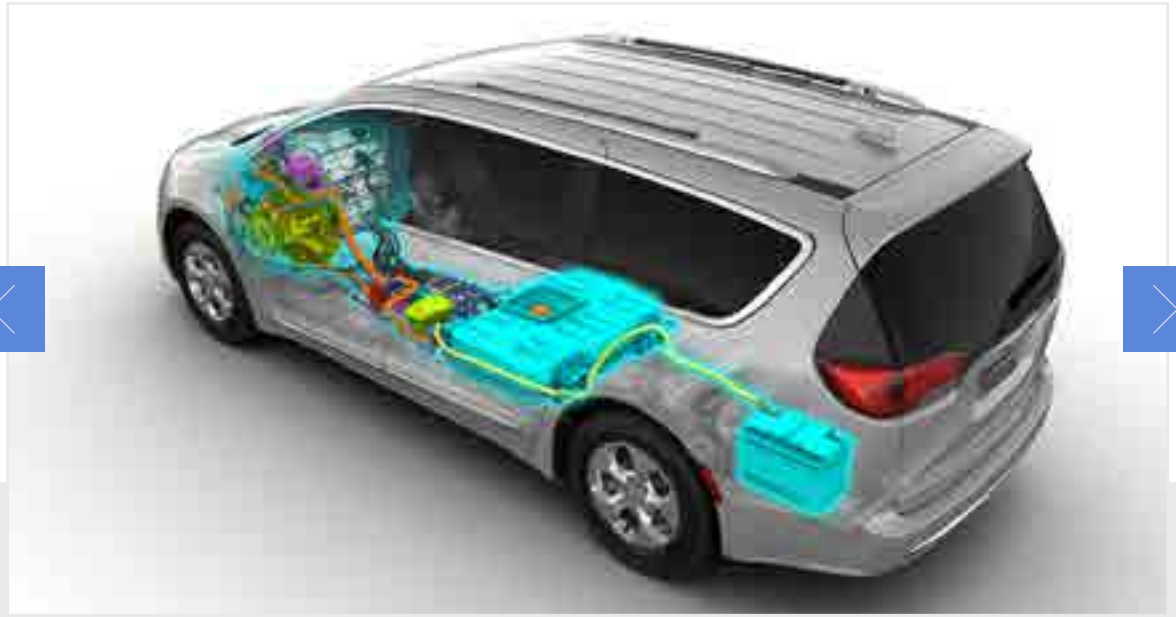
- ongoing work with McMaster University in Canada focuses on developing next-generation, energy efficient, high performance electrified powertrain components, suitable for a range of vehicle applications. The collaboration has already contributed to the expansion of FCA employees' competencies and skill sets in the field of electric/hybrid vehicles, with FCA hiring graduating Master's students from the university.
- OPTEMUS, a collaborative project, is aimed at extending the driving range of electric and plug-in hybrid cars, focusing on low/high ambient temperatures and real driving style, and leveraging low energy consumption and energy harvesting.

Related content

Chrysler Pacifica Hybrid >

CHRYSLER PACIFICA HYBRID

CHRYSLER PACIFICA HYBRID



Hybrid Powertrain

- Blended plug-in hybrid design
- Zero-emissions electric power
- Specially adapted 3.6-liter Pentastar V-6 engine with Atkinson cycle combustion system
- Dual-motor eFlite electrically variable transmission (EVT)

CHRYSLER PACIFICA HYBRID

Battery and Charging

- 16-kWh lithium-ion battery pack
- Regenerative braking system helps provide additional range by charging the battery

CHRYSLER PACIFICA HYBRID

Fuel Economy

- 84 miles-per-gallon equivalent (MPGe)
- Highest rating of “10” in U.S. Environmental Protection Agency’s (EPA) Green Vehicle Guide
- Total driving range of 566 miles
- Most fuel efficient minivan ever

Greenhouse Gas Emissions

- 31% reduction in Global Warming Potential (GWP) compared with previous generation gasoline-powered minivan
- Potential emissions-savings for one Pacifica Hybrid over its first 120,000 miles of operations is equivalent to:
  - Average annual CO_2 output of 22 American households
  - 14 commercial flights from Detroit to Los Angeles
  - Driving average U.S. passenger vehicle more than 50,000 miles

CHRYSLER PACIFICA HYBRID

Safety and Security

- More than 100 standard and available safety and security features
- 360-degree Surround View camera
- ParkSense Parallel/Perpendicular Park Assist
- Adaptive Cruise Control with Stop and Hold
- Automatic Emergency Braking, enabled by Forward Collision Warning-Plus system

CHRYSLER PACIFICA HYBRID

Materials and Lightweighting

- Pacifica body structure is 72% high-strength steel
- Intense focus on mass optimization resulted in a 250 pound savings
- Liftgate constructed of magnesium and aluminum
- Extensive use of aluminum components

CHRYSLER PACIFICA HYBRID

Aerodynamics

- Segment leading aerodynamics
- 0.300 coefficient of drag (Cd)
- Active grille shutter system reduces drag an average 10%

CHRYSLER PACIFICA HYBRID

Technology and Connectivity

- Hybrid Electric Pages on touchscreen include:
  - Power Flow showing how/where power is flowing within the vehicle
  - Driving History showing distance driven in electric and hybrid mode
  - Charge Scheduling to make the most of off-peak charging rates
- "Efficiency coach" guides owners to drive more efficiently and maximize time spent in battery mode
- Smartphone app provides state of charge, range, time to full recharge, ability to schedule charging, locations of charging stations

CHRYSLER PACIFICA HYBRID

Manufacturing

- 33 years of minivan production knowledge and expertise
- Plant has built more than 10 million minivans to date
- $744 million USD invested by FCA to upgrade plant for the Chrysler Pacifica and Pacifica Hybrid

CHRYSLER PACIFICA HYBRID

Voice of the Customer

- Customer needs integrated through interviews with more than 3,000 drivers
- More than 1,400 people surveyed on design, features and vehicle segment preferences

CHRYSLER PACIFICA HYBRID

Collaborating for the Future

- Collaboration with Waymo (formerly Google self-driving car project)
- 100 Chrysler Pacifica Hybrid minivans in Waymo's self-driving test fleet

ALTERNATIVE FUELS

FCA invests heavily in solutions that optimize the use of available natural resources. From natural gas to biofuels, the Company offers technologies that are aligned with the fuels available in the various markets, and that reduce vehicle emissions.

Natural Gas

FCA believes that natural gas is one of the best existing solutions for reducing urban pollution levels and CO_2 emissions. Specifically, natural gas:

- is one of the most economical fuels available and a viable alternative to traditional fuels
- produces a low level of regulated emissions, from particulate matter (reduced to essentially zero) to the most reactive hydrocarbons that result in the creation of other pollutants
- generates 23% less CO_2 emissions compared with gasoline
- has the potential to become a renewable fuel source in the form of biomethane.

Natural gas is also a key element in the European Union's strategy for low-emission mobility. At FCA, alternative fuels form a key pillar of our strategy. In line with the principles set in the EU Directive on the deployment of alternative fuels infrastructure (DAFI), FCA is cooperating with leading energy players in Europe. FCA, Iveco and Snam, a leader in Europe in the construction and integrated management of natural gas infrastructure, signed a Memorandum of Understanding (MoU) in October 2016 aimed at fostering the development of natural gas as a fuel for road vehicles. Under the terms of the Memorandum, FCA and Iveco intend to further develop their ranges of natural gas vehicles while Snam will help expand the number of methane service stations throughout Italy. Similarly, FCA and Gaz Réseau Distribution France, the main gas distribution company in France, signed an agreement to foster the sustainable mobility solutions offered by methane and biomethane in France. Finally, FCA, together with Iveco, is cooperating with ENGIE, Europe's leading gas provider, to promote natural gas mobility and improve infrastructures across Belgium, Romania and France as a first stage. In this context, the three parties signed a Memorandum of Understanding in 2016.

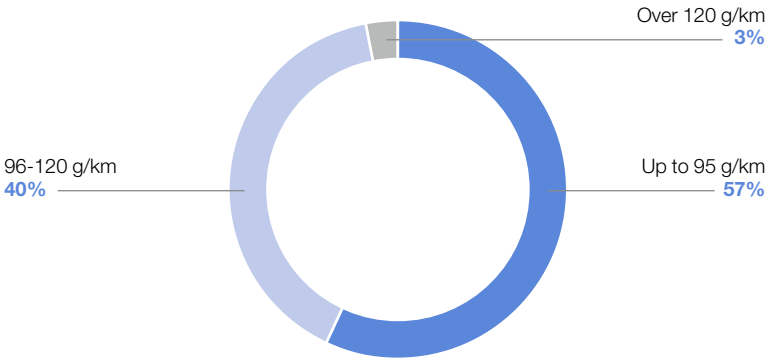
Market Leadership

FCA has been Europe's leading producer of Original Equipment Manufacturer (OEM) natural gas vehicles for more than 15 years. The Group continues to invest in this technology and offers a wide range of eco-friendly, bi-fuel (natural gas/gasoline) vehicles that meet the needs of private and commercial consumers.

The range includes the new Fiat Qubo and new Fiat Fiorino, both available since early 2016, with a 70 hp, 1.4-liter, bi-fuel (natural gas and gasoline) engine. In addition, the new Fiat Panda 2017 is offered with an 80 hp 0.9-liter, bi-fuel (natural gas and gasoline) engine.

Consumer safety and comfort have been taken into account, as the natural gas tanks are designed to be fully integrated into the vehicle's structure. In 2016, FCA was confirmed among European leaders, with more than 31,000 natural gas vehicles registered, representing a share of about 45%. Since 1997, the Group has sold more than 720,000 natural gas-powered cars and commercial vehicles.

Newly Registered Natural Gas Cars by CO_2 Emission Levels
Fiat and Lancia in Europe



In the U.S., FCA offers a factory-built compressed natural gas (CNG) pickup, the Ram 2500 Heavy Duty CNG.

Together with another automaker, the Company is partnering with Argonne National Laboratory on a dual-fuel engine project funded by the U.S. Department of Energy. The key objectives of this investigation into in-cylinder gasoline/compressed natural gas blending include improved engine efficiencies over both gasoline and natural gas-only operation; a more than 50% petroleum reduction through efficient CNG combustion and displacement of gasoline; and the ability to operate on gasoline only, CNG only, or a combination of both. Current production natural gas spark ignition engines employ a port fuel injection (PFI) system which results in a loss of volumetric efficiency under un-throttled operating conditions due to the displacement of air by the gaseous fuel in the intake port, and therefore a lower specific power output. The test engine at ANL employs direct injection (DI) of natural gas which alleviates the limitations of PFI systems by enabling better volumetric efficiency and consequently higher specific power. In addition, relative to the baseline gasoline PFI system with compression ratio CR = 10.5, the higher knock resistance of natural gas enables stoichiometric operation (no fuel enrichment) with optimal spark timing resulting in improved thermodynamic efficiency. By effectively utilizing the aforementioned benefits, this investigation has thus far demonstrated a 12% increase in specific power output and an 18% improvement in full load efficiency relative to the baseline, for operation on 100% natural gas. The basic premise of the dual fuel in-cylinder gasoline/CNG blending concept is to make optimal use of both fuels to maximize the benefit of their respective properties with the ultimate goal of reducing petroleum consumption. To this end, the ongoing efforts are currently focused on evaluating various aspects of engine operation including side and central direct injection of natural gas, higher compression ratio, enhanced charge motion, and appropriate level of gasoline/natural gas blending to optimize vehicle fuel economy under different driving conditions.

Biomethane: a Renewable Fuel Source

Biomethane, which is produced by upgrading biogas, has the same properties and uses as fossil natural gas. Biogas is derived from organic materials such as manure, crop residues and organic municipal waste. A natural gas vehicle can also run on biomethane and, on a well-to-wheel basis, a vehicle running on biomethane produces roughly the same level of CO_2 emissions as an electric-powered vehicle running on electricity generated from renewable fuel.

During 2016, FCA was engaged in several projects to promote biomethane as a sustainable solution for transportation. Among these initiatives, FCA and CNH Industrial organized “[bio]metanoday” which took place in March 2016 in Turin, Italy. This event was a collaboration with Egea and Acea Pinerolese Industriale, two leading Italian companies involved in the production of biomethane from organic waste. “[bio] metanoday” was conceived to demonstrate that producing biomethane from organic waste is not only possible, but also useful to enhance renewable resources and strengthen the competitiveness of the related sectors. In addition, together with CNH Industrial, FCA took part in the initiative “Biomobility Day, biomethane in circular economy,” which was held in September 2016 in Rome, Italy. The initiative’s main objective was to show biomethane’s potential benefits, including greenhouse gas emissions reduction.

Biofuels

In Brazil, FCA has a full range of Flexfuel vehicles that run on varying blends of gasoline and bioethanol. FCA’s innovation in this field is also exemplified by the TetraFuel engine (patented by Magneti Marelli), the first in the world capable of running on four different fuels: bioethanol, Brazilian gasoline (refined crude oil and 22% anhydrous ethanol), gasoline and natural gas. Brazil has an extensive bioethanol distribution network, supported by long-standing government policies and readily available raw materials. In 2016, more than 329,000 Flexfuel and TetraFuel vehicles were registered in Brazil, accounting for approximately 90% of vehicles licensed by the Group.
In Europe, all engines sold are compatible with blends of up to 10% bioethanol with gasoline (E10), and up to 7% biodiesel with diesel (B7). In the NAFTA region, FCA produced more than 570,000 2016 model year vehicles capable of running on gasoline blends containing up to 85% ethanol (E85 flexible fuel) or biodiesel blends of up to 20% (B20).

Methanol

In November 2016, FCA presented the results of the "M15 Project" within the framework of the Memorandum of Understanding signed in February 2015 between FCA, Iveco, Magneti Marelli and the Israel Fuel Choices Initiative (IFCI). Conducted in collaboration with DOR Chemicals, one of Israel's foremost fuel components producers, the "M15 Project" marks an important milestone in the field of alternative fuels. The Fiat 500 M15 is the first ever, retail-ready vehicle to comply with EU Euro 6 regulations that is able to run on a blend of gasoline and methanol (up to 15%). Methanol can be produced from methane or other feedstock. It can be distributed using existing infrastructures already in place for oil, even if some materials have to be adapted to make them compatible with this fuel. This pioneering product will be marketed in Israel by MCA - the official Israeli importer of FCA vehicles. A Fiat 500 M15 running on a blend of 85% gasoline and 15% methanol delivers a 2% CO_2 reduction compared with the same Euro 6 version of the vehicle running on gasoline, while maintaining the equivalent vehicle performance.

EFFICIENCY SOLUTIONS

FCA augments its powertrain and alternative fuel engine innovations by integrating technologies that optimize energy demand into its vehicles. These efficiency technologies include improving aerodynamics, reducing weight, minimizing tire and brake drag, offering Engine Stop-Start systems and using thermal control technologies.

Improved Aerodynamics

Fuel economy can be improved by optimizing vehicle aerodynamic performance. FCA strives to reduce the aerodynamic drag of its vehicles, and also uses active aerodynamic technologies that are automatically activated under certain conditions. Depending on the vehicle, these active technologies may include active grille shutters such as those found on the Maserati Levante, Fiat Tipo and Chrysler Pacifica. From the earliest development stage, the aerodynamic performance of every vehicle profile is measured, optimized, tested and certified in the world-class, full-scale, aerodynamic wind tunnels of the Group. Due to a combination of honed surfacing and aero-enhancing application, the Alfa Romeo Giulia delivers a drag coefficient of 0.25, Alfa Romeo Stelvio a value of 0.30 and Maserati Levante a value of 0.31. The new Fiat Tipo hatchback and station wagon versions deliver a drag coefficient of 0.29. Achieving this aerodynamic performance was heavily dependent on the virtual simulation capabilities of the Product Engineering organization.
The new Chrysler Pacifica, unveiled in January 2016, underwent more than 400 hours of wind tunnel testing and achieves a 0.30 drag coefficient. The vehicle's aerodynamic performance contributes to its fuel efficiency and is the result of a wide range of enhancements, including an active grille shutter system and aero optimization of the windshield angle, mirrors, front end, sill claddings, placement of belly pans and windshield wipers.

Weight Reduction

FCA adopts a number of weight reduction solutions that help manage vehicle energy demand and improve fuel economy. The new Chrysler Pacifica is lighter by approximately 250 pounds on a model-to-model basis than the outgoing model. This result has been achieved through strategic use of aluminum, magnesium and advanced, hot-stamped/high-strength steels, the application of lightweight structural adhesives where necessary and an intense focus on mass optimization.
In October 2016, the Alfa Romeo Giulia won the "EuroCarBody 2016" award for body design by "Automotive Circle International." This result was achieved due to an efficient bodyshell, which is light and rigid, and the extensive use of ultra-lightweight materials such as carbon fiber and aluminum. Carbon fiber was chosen for the propeller shaft, and aluminum for the engine, suspension system, brakes, doors, wheel arches and hood.

(7) EU 7th Framework project "ALIVE: Advanced High Volume Affordable Lightweighting for Future Electric Vehicles."

Vehicle Lightweighting Technologies Research

FCA is a partner in ALIVE,[7] a European collaborative research project aimed at developing key vehicle lightweighting technologies based on advanced metal and hybrid materials, such as the latest generation aluminum, alloys and composites. Another lightweight research project focused on the application of composite materials in automotive systems is ENLIGHT, a collaborative research project focused on the application of composite materials in automotive systems.

Minimizing Tire Rolling Resistance

FCA uses a variety of solutions to reduce rolling resistance, which contributes directly to improvements in fuel efficiency and CO_2 emissions. Low rolling resistance tires, for example, are offered on select versions of the Ram 1500 pickup, Jeep Grand Cherokee, Dodge Durango, Chrysler Pacifica, Alfa Romeo Giulia and Alfa Romeo Stelvio.

Magneti Marelli's efficient components

Magneti Marelli provides wide-ranging expertise in electronics through a process of ongoing innovation and environmental sustainability in order to develop intelligent systems for active and passive vehicle safety, on-board comfort and powertrain technologies. Magneti Marelli products that are intended to improve energy efficiency (including hybrid systems, Xenon and LED lights, gasoline direct injection systems and automated manual transmissions) contributed €2.3 billion in revenues for 2016.

ENGAGING CUSTOMERS

Consumers are increasingly looking to innovative, new technologies to meet their needs for social connection, better time management and access to essential information. In making purchase decisions, consumers are factoring in how well vehicles seamlessly enable their connected lifestyles. Alternative mobility solutions, such as car-sharing, are becoming increasingly attractive as the growth of connected systems makes transactions more convenient. FCA is devoting resources to innovative technologies that address changing driver expectations and evolving mobility scenarios, while taking measures to keep vehicle and customer data secure.

FCA engages in research on future social and technological trends that will affect nearly every aspect of our business – from design to manufacturing, marketing and human resources, as well as having an impact on lifestyles and consumer preferences. In 2016, FCA developed an internal, detailed reference guide to enhance corporate awareness of emerging trends. FCA is exploring application of these trends in strategic planning, and a cross-functional corporate team is in place to translate the research findings into specific FCA initiatives.

As trends related to connectivity and mobility evolve, so does the attention on autonomous vehicle technology. FCA continues to advance the development of autonomous vehicle technology by offering Advanced Driver Assistance Systems. We are progressing from single function automation, such as Adaptive Cruise Control and the more recent Lane Keep Assist, to multi-function automation where two functions work together. As an example, our Forward Collision Warning-Plus system utilizes radar and video sensors to identify potential impact scenarios. The system detects potential frontal collision conditions, then warns or assists the driver in avoiding or mitigating the incident. Increased safety of occupants and pedestrians is among the benefits related to autonomous driving.

MOBILITY SOLUTIONS

Changing consumer behaviors, attitudes and expectations are having a considerable impact on mobility preferences. Along with being more connected through social media and applications, consumers are accessing goods and services from each other or sharing the use of assets, such as vehicles, instead of owning them.

FCA has supported a variety of mobility initiatives to respond to changing customer expectations and trends such as urbanization and the shared economy. Enjoy is a car-sharing service that offers a fleet of high efficiency vehicles to urban drivers. It was launched in Milan (Italy) by ENI, an oil and gas company, at the end of 2013, in partnership with FCA which has provided more than 2,100 vehicles. Since the service was launched, roughly a half million individuals in Milan, Rome, Florence, Turin and Catania have signed up to use the service and nine million rentals have been logged. As of 2015, Enjoy had the highest number of vehicles and registered users of any Italian car-sharing program.[8]

Focusing on the future of transportation, in May 2016 FCA announced a collaboration with Waymo (formerly the Google self-driving car project) to integrate Google's self-driving technology into Chrysler Pacifica Hybrid minivans. This marks the first time that Google has worked directly with an automaker to integrate its self-driving system, including its sensors and software, into a passenger vehicle. Production of 100 Chrysler Pacifica Hybrid minivans, uniquely built to enable fully self-driving operations, was completed in late 2016 and joined Waymo's self-driving test fleet in early 2017. This collaboration will help FCA and Google better understand what it will take to bring self-driving cars into the world.

Autonomous vehicle technology was also featured in the Chrysler Portal Concept unveiled in the U.S. at the Consumer Electronics Show (CES) 2017. This all-electric concept vehicle was designed by millennials for millennials, and represents an interpretation of the fifth generation of family transportation. It is designed with a suite of sensing technologies that enable SAE Level Three autonomous driving, with the potential of being upgraded to higher autonomous driving modes as technology progresses, if desired. The Portal offers drivers and passengers a "third space" - an alternative space that bridges between work and home and features flexible configurability. An in-vehicle wireless network integrates with mobile devices to enable community social sharing among passengers and internet cloud-based applications.

[8] 2015 Data extracted from "1° Rapporto Nazionale - La Sharing Mobility in Italia: Numeri, Fatti e Potenzialità".

CHRYSLER PORTAL CONCEPT

CHRYSLER PORTAL CONCEPT

Powertrain

- All-electric; zero-emissions electric power
- Estimated driving range of more than 250 miles on a full charge

CHRYSLER PORTAL CONCEPT

Semi-Autonomous Vehicle

- Suite of sensing technologies enables SAE Level Three autonomous driving mode
- Designed to upgrade to higher levels of autonomous driving, when technology advances, if desired

CHRYSLER PORTAL CONCEPT

Battery and Charging

- Approximate 100-kWh lithium-ion battery pack mounted underneath the vehicle floor
- Next-generation DC Fast Charger technology adds 150 miles of range in less than 20 minutes

CHRYSLER PORTAL CONCEPT

Connectivity

- Facial recognition automatically recognizes and configures the driver's and passenger's preferred vehicle settings and enables the Portal to track the driver's directional gaze
- Vehicle-to-X (V2X) communication allows the vehicle and infrastructure to "talk" to each other, such as intersection crash warning, traffic sign recognition and emergency vehicle approaching
- Voice biometrics enables the driver and passengers to use voice commands to unlock and open doors upon approaching vehicle
- Bring your own device (BYOD) - seamless vehicle integration of personal devices such as phones, tablets, cameras and wearables

CHRYSLER PORTAL CONCEPT

“Third Space”/ Design

- Concept creates a “third space” for the transition between home and work environment
- Mono-volume form with unique portal-shaped, articulating doors create wide 5-foot entryways

To continue refining mobility solutions, FCA regularly gathers feedback from young consumers who are on the leading edge of adopting new concepts involving the shared economy and connected technology. In 2015, FCA promoted an open innovation contest, "Millennials and Cars: the future of the car and the car of the future" in collaboration with the Second University of Naples (Italy) and the University of Cassino and Southern Lazio (Italy). The goal was to engage millennials, who are comfortable with social networking and technology, to propose projects that reflect their vision of the future for the automobile. At the beginning of 2016, more than 500 proposals were reviewed and assessed by an Innovation Board consisting of FCA senior managers and representatives from the universities. Winning students were selected for a six-month internship at the FCA Plants of Cassino and Giovanbattista Vico in Pomigliano d'Arco (Italy).

Another connected mobility initiative is being supported by CRF, a research center of FCA in the EMEA region. CRF has been participating as a partner in the European TEAM (Tomorrow's Elastic Adaptive Mobility) initiative since it began in 2012. Co-funded by the European Union, this project involves a wide variety of participants, including automakers, telecommunication providers, research institutes, road infrastructure operators and traffic managers. The goal is to improve mobility by integrating drivers, travelers and the transportation infrastructure into a single collaborative network. The Company completed its activities within the TEAM project in 2016 by integrating and testing connected mobility services at selected test sites in Italy, and testing V2X (vehicle-to-everything) connectivity platforms.

Related content

Chrysler Portal Concepts >

CONNECTING CUSTOMERS

The rapid rise of technology and its increasing integration into vehicles has led FCA to coach drivers about the impact their driving habits may have on the environment. One way FCA supports this effort is through the Uconnect System which provides drivers with a range of available communication, navigation, entertainment features and connected services. One of the features that is available in some markets and vehicles is eco:Drive. Eco:Drive is an FCA software system that offers personalized tips on driving styles with the objective of contributing to a reduction in fuel consumption and emissions. In 2016, eco:Drive's functionality was expanded with the new Fiat Panda Uconnect mobile app that integrates the driver's smartphone and radio in the Fiat Panda. By the end of 2016, more than 111,800 customers in Europe, including more than 9,600 new users, had used the eco:Drive software.

Similarly, the new Chrysler Pacifica Hybrid offers an "efficiency coach" – a display that guides owners to drive more efficiently and maximize the time spent in battery mode. It also directs the driver on how to optimize energy consumption while accelerating, and provides guidance on braking to take full advantage of the regenerative braking that contributes to charging the battery.

Consumers are accustomed to connectivity in their everyday lives – sending text messages, talking on the phone, participating in social media or accessing the content available on the internet. The task for auto manufacturers is to account for these consumer expectations in a way that enables drivers to maintain their focus on the task of driving. FCA is addressing the issue of distracted drivers in a number of ways. FCA's Uconnect System allows customers to stay connected to the information they want and need while remaining focused on the road. New enhancements launched in 2016 support functions on customers' mobile devices by putting the information on the vehicle's built-in display. Drivers are able to place calls, listen to music, send and receive messages, obtain directions optimized for traffic conditions, and access third-party audio applications on their phone. This functionality is available through voice-activated commands, as well as on the touch screen.

Related content

Customer Education >

CYBERSECURITY

Although "being connected" has seemingly become a requirement for many people and products, there is a fast- growing concern in the automotive industry related to cybersecurity. In response, FCA has put in place a cross-functional team of professionals focused on the cybersecurity of our corporate systems and vehicles through activities such as threat monitoring, design enhancements, and third-party penetration testing. Cybersecurity is considered throughout a vehicle's life cycle including development, manufacturing and service.
In addition, FCA was the first full-line automaker to offer a financial reward for discovery and reporting of potential vehicle cybersecurity vulnerabilities through a crowdsourced bounty program. FCA is a founding member with active leadership in the recently formed Automotive - Information Sharing and Analysis Center (Auto-ISAC). The Auto-ISAC enhances the industry's ability to quickly learn of new threats and vulnerabilities and to work in a collaborative manner on threat triage.

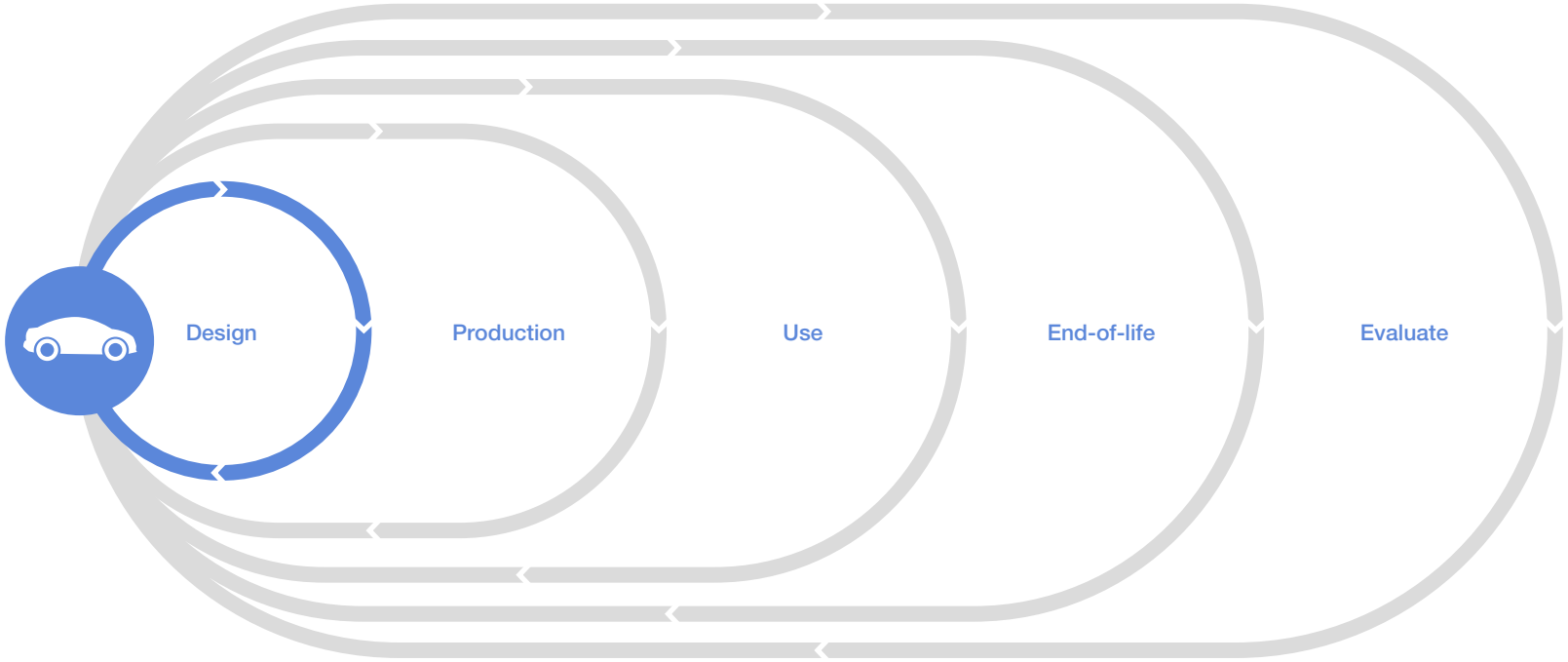
DESIGN FOR THE CIRCULAR ECONOMY

FCA's sustainability practices help support global efforts to stimulate the transition toward a circular economy that is focused on maximizing the value and use from materials, products and waste. Keeping resources in use for as long as possible is a business practice that reduces material costs and promotes efficiency, while also helping minimize the impact on the environment through the entire life cycle of a product. FCA favors a well thought-out and balanced approach that addresses the full spectrum of opportunities.

DESIGN

Design ● Production ○ Use ○ End-of-life ○ Evaluate ○

Selection of recyclable, bio-based, bio-filled and/or recycled materials to minimize overall environmental impact of vehicle. FCA example: materials enhanced with natural fibers, such as kenaf and jute, used on selected FCA vehicles. Recycled nylon used for Jeep Cherokee fan shrouds and engine covers for the World Engine.



GRI: G4-DMA, G4-EN1, G4-EN2, G4-PR1, G4-PR3

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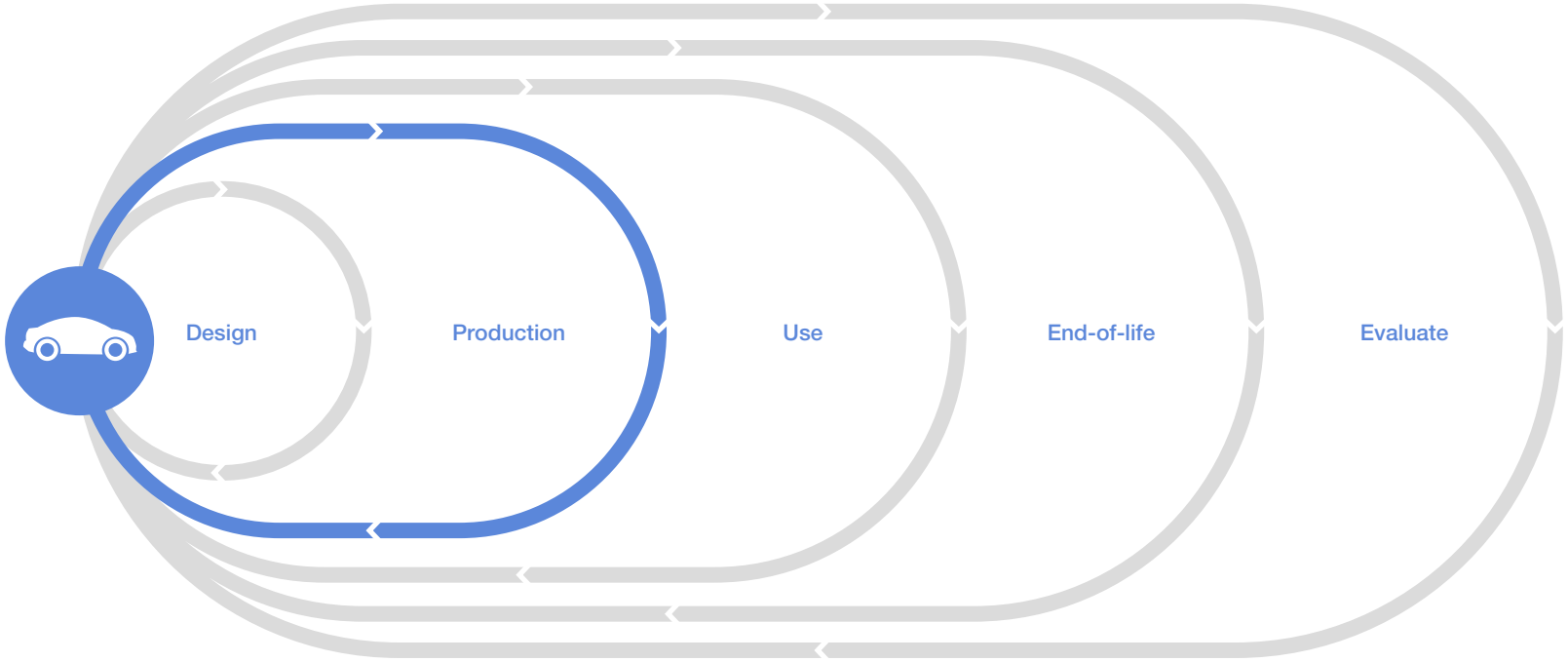
PRODUCTION

Design ○ Production ● Use ○ End-of-life ○ Evaluate ○

Reduce environmental impact of manufacturing operations and, where possible, use waste as a resource. FCA example: as a result of improvements in operations since 2010, water consumption was reduced by 27.6%; energy consumption by 2.9%; waste generated by 18.7% and CO_2 emissions by 9.4%.



GRI: G4-DMA, G4-EN1, G4-EN2, G4-PR1, G4-PR3

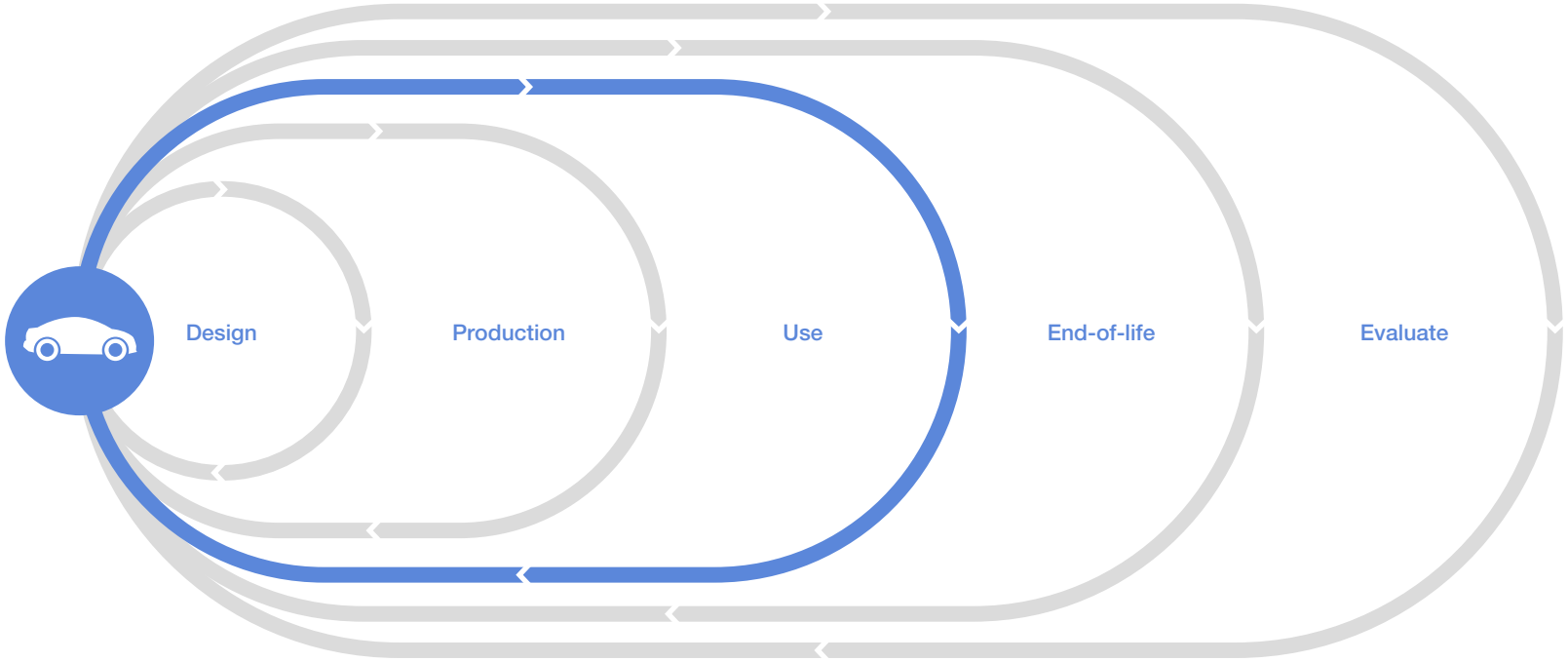
DESIGN FOR THE CIRCULAR ECONOMY

FCA's sustainability practices help support global efforts to stimulate the transition toward a circular economy that is focused on maximizing the value and use from materials, products and waste. Keeping resources in use for as long as possible is a business practice that reduces material costs and promotes efficiency, while also helping minimize the impact on the environment through the entire life cycle of a product. FCA favors a well thought-out and balanced approach that addresses the full spectrum of opportunities.

USE

Design ○ Production ○ Use ● End-of-life ○ Evaluate ○

Promote responsible driving among customers. FCA example: the new Chrysler Pacifica Hybrid offers an "efficiency coach" - a display that guides owners to drive more efficiently and maximize the time spent in battery mode. It also directs the driver on how to optimize energy consumption while accelerating, and provides guidance on braking to take full advantage of the regenerative braking that contributes to charging the battery. Another example is eco:Drive, an FCA software system available in some markets and vehicles, that offers personalized tips on driving styles with the objective of contributing to a reduction in fuel consumption and emissions.



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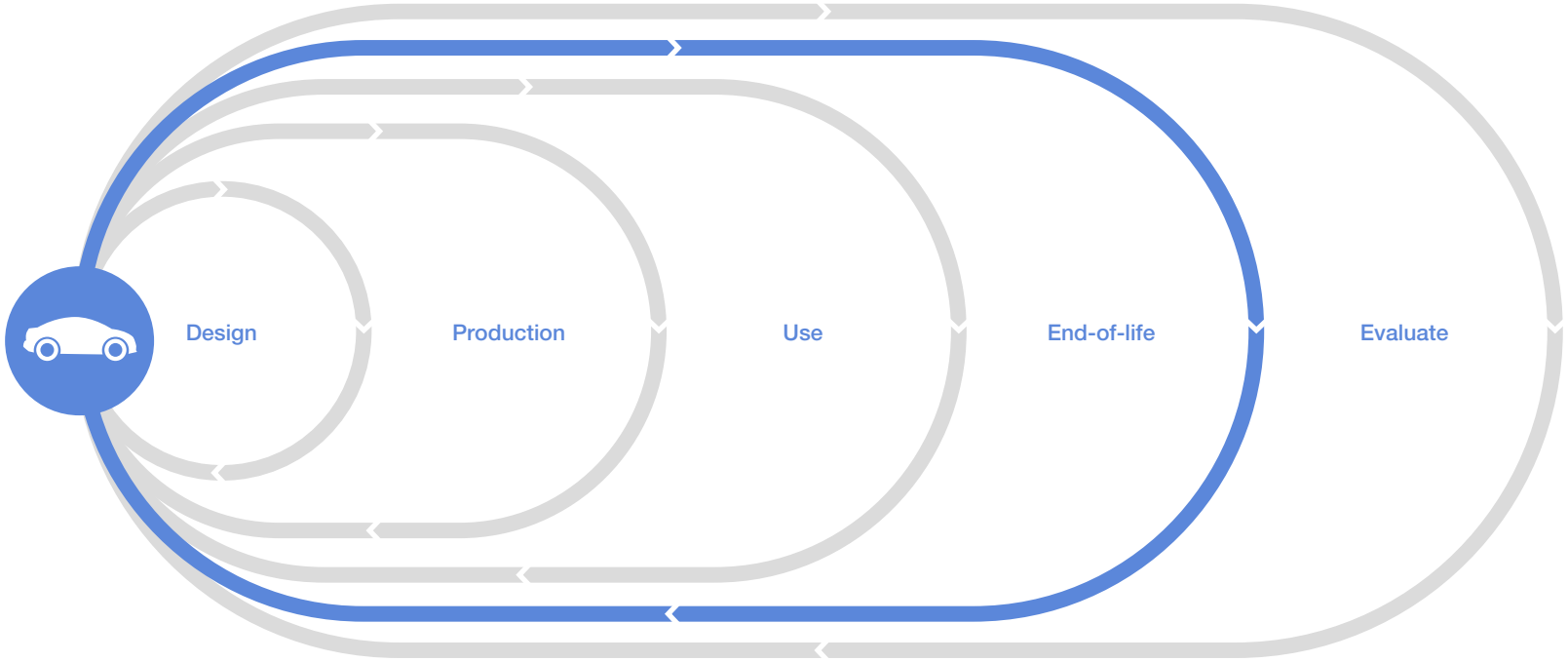
END-OF-LIFE

Design ○ Production ○ Use ○ End-of-life ● Evaluate ○

Promote reuse, recycling and recovery of vehicle materials. FCA example: To provide a second life for selected parts from FCA vehicles, the Company develops specific product lines of remanufactured parts to support the aftermarket needs of customers. These parts simultaneously reduce the cost of vehicle ownership for customers and decrease the volume of salvageable materials heading to landfills.



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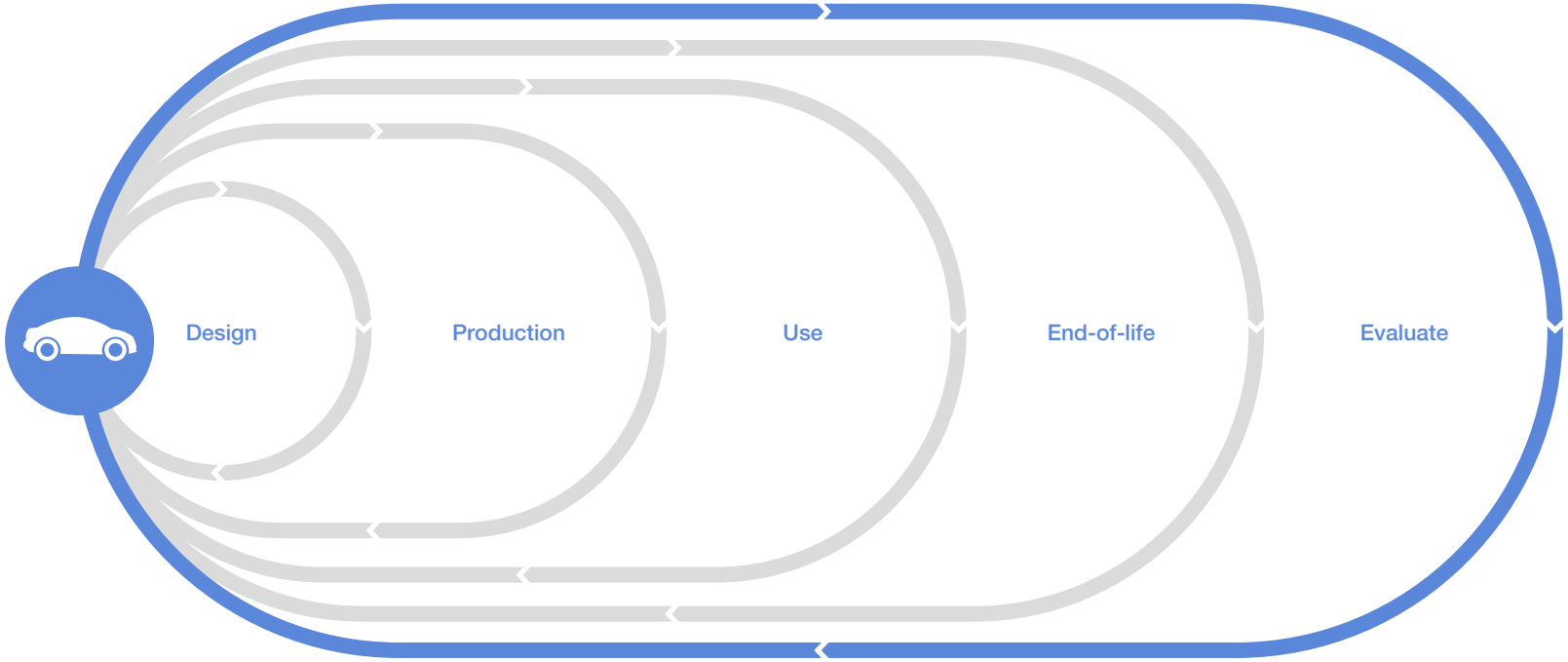
EVALUATE

Design ○ Production ○ Use ○ End-of-life ○ Evaluate ●

Adopt methods such as Life Cycle Assessment (LCA) to measure overall environmental impact of vehicles. FCA example: In 2016, FCA completed Life Cycle Assessments for several vehicles, including the new Chrysler Pacifica Hybrid and Alfa Romeo Giulia 2.2 diesel version.



● GRI: G4-DMA, G4-EN1, G4-EN2, G4-PR1, G4-PR3

In 2016, CRF received a significant commitment in several new Horizon 2020 publicly-funded collaborative research projects, such as:

- Circ-Pack focused on a circular economy approach for recycling of production scraps
- Plasti-Circle, focused on a circular economy approach for recycling plastic packaging waste
- Ecobulk for the development of a recycling process of natural fiber reinforced plastics.

Recyclability and recoverability of products is a key factor in FCA's approach to product development. The Group monitors the recyclability and recoverability of its products by leveraging the competencies of the Group Materials Labs (GML) in Italy and the Automotive Research and Development Centre (ARDC) in Canada.

In Europe, all type-approved vehicles sold are monitored in terms of recyclability and recoverability according to the standard set by the European Union.[9] In 2016, all Group vehicles sold in Europe were 95% recoverable and 85% recyclable by weight, in compliance with the EU's Reusability, Recyclability, Recoverability directive.

Recycled materials accounted for an average of 43%[10] of the weight of Group vehicles type-approved in Europe in 2016 and the average weight of renewable materials was 7.4 kg. This was achieved in part through participation in several international collaborative research projects on the use of recycled materials and biomaterials.

View data >

MATERIALS AND SUBSTANCES

Most material innovation and development is conducted by FCA's Group Materials Labs (GML), using a circular economy approach. GML also monitor changes in legislation and assess potential implications on the Group's products and processes. In 2016, the Labs' main activities were related to the development of environmental sustainable carbon fibers for automotive applications. These fibers, biologically-derived or recycled, enhance environmental benefits of both the production and vehicle use phases.

In the NAFTA region, the FCA US Organic Materials Engineering organization is responsible for approving sustainable materials to be used in FCA vehicles. In 2016, they approved 10% more sustainable materials compared with the previous year. These approved materials contain recycled or bio/renewable content, lower density or low emission polymers as sustainable material options for various components. For example, recycled nylon for Jeep Cherokee fan shrouds and engine covers for World Engine programs were new applications in 2016.

Carbon footprint reduction requires an important focus on all families of materials. For example, high strength aluminum alloys, which contribute significant weight reductions, have been characterized, and are ready to be incorporated into FCA premium segment vehicles.

FCA participates in a variety of research and collaborative projects supporting innovative solutions such as:

- the LIBRE project, a Horizon 2020 publicly-funded collaborative research project aiming to produce recycled carbon fibers from waste lignin, applicable as filler for thermoplastic materials.
- a recently completed European sustainable materials project called BRIGIT, with the objective to develop a cost-competitive and environmentally-sustainable process to produce bio-based composites (biopolymers in combination with natural fibers). Results include the validation of the bio-based composite on a pilot scale.
- the Horizon 2020 PLATIRUS project, to produce new catalytic converters through the recovery and reuse of disposed converters.
- eCAIMAN project, focused on developing an automotive Li-ion battery cell that can be produced in Europe by scaling-up existing production technologies and materials mined in Europe, thereby reducing the final battery price.
- FCA also partnered with a supplier to develop a new program to reclaim lithium-ion batteries from FCA vehicles, and reuse them for non-automotive applications (e.g., motorized wheelchairs). This circular economy initiative is a zero waste to landfill solution and is expected to represent cost avoidance for FCA.

[9] *Directive 2005/64/EC of the European Parliament and of the Council of October 26, 2005.*
[10] *Estimated figures according to the Company's best knowledge referred to the average weight of type-approved vehicles in 2016 in Europe, according to Directive 2005/64/EC.*

Substances of Concern

FCA works to eliminate or reduce to the maximum extent the use of Substances of Concern (SoC) that can impact human health or the environment.

We use the International Material Data System (IMDS) to track the composition of individual materials and components in our vehicles. Data from IMDS is then fed into FCA internal management systems, which are used internally to monitor the content of all vehicles and identify the presence of SoCs. These systems are crucial for tracking vehicle recyclability and recoverability, as well as monitoring Substances of Concern included on the Global Automotive Declarable Substance List.

FCA's internal standard of restricted and prohibited SoCs is made available to suppliers worldwide, which are required to adhere to IMDS and SoC disclosure obligations. It provides uniform global requirements, regardless of where the products are ultimately sold or marketed, that minimize market-specific uncertainty or interpretation while increasing transparency and clarity. In 2016, FCA began development of a global standard to address the use of process chemicals. This standard is expected to be completed and rolled out to suppliers in 2020.

Great attention is given by FCA to substances identified in globally regulated substance restrictions like the REACH[11] regulation and heavy metal ban.[12]
This level of awareness and commitment to compliance is also critical to FCA suppliers with whom we collaborate closely in identifying technically and environmentally sustainable substitutes for substances that will be restricted in the near future.

LIFE CYCLE ASSESSMENT

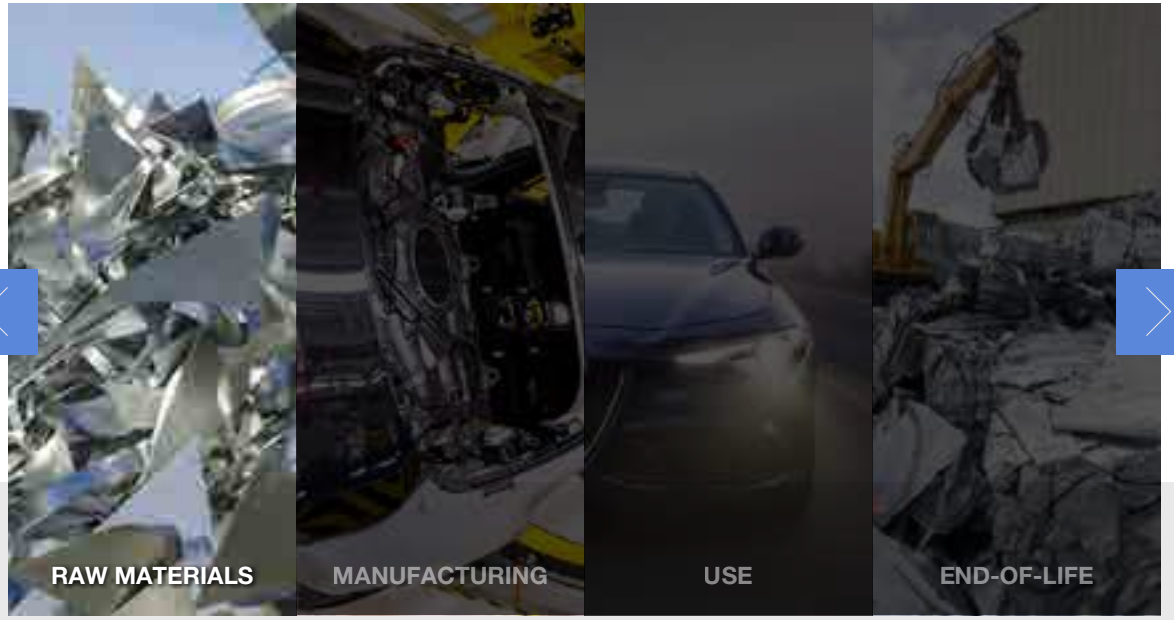
Companies are being challenged to assess the impacts of their products more rapidly and effectively; Life Cycle Assessment (LCA) is an effective methodology to evaluate the environmental impact of materials, components and production processes. Factors taken into account by this methodology relate to energy and other resources consumed in production; use and recycling; and waste generation, according to the principles of the ISO 14040/44 standards. Paying specific attention to both the overall performance of each vehicle and the environmental performance in any life cycle stage, vehicle LCAs continue to influence the development of new, more environmentally-friendly products. The LCA methodology is an important tool to evaluate products using a circular economy framework. In 2016, FCA completed Life Cycle Assessments for:

- 2017 Chrysler Pacifica Hybrid vs 2015 Chrysler Town & Country
- Alfa Romeo Giulia 2.2 diesel 180 hp vs Alfa Romeo Giulietta 2.0 diesel 175 hp
- Fiat 500X 1.4 gasoline 140 hp vs Jeep Renegade 1.4 gasoline 140 hp.

Critical reviews by a third-party certification firm for compliance verification with ISO 14040/44 were done for the Alfa Romeo Giulia and Giulietta; Fiat 500X and Jeep Renegade; and Fiat Panda.[13]
During 2016, Politecnico of Turin collaborated with FCA to improve FCA's LCA methodology, and reduce the time required for some of the most time-consuming steps of a typical LCA activity. Collaborative LCA applications are also in place within several internationally-funded projects related to materials, processes and automotive components. Significant environmental results have been achieved in the ALIVE, ENLIGHT and Evolution EU-funded projects, and the NANOPREPAINT regional project where the focus is to evaluate the technical and environmental performance of the pre-painting processes.

[11] European Regulation 1907/2006 of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
[12] Commission Directive 2016/774/EU of May 18, 2016 amending Annex II to directive 2000/53/EC of the European Parliament and of the Council on End-of-Life Vehicles.
[13] New Fiat Panda 1.2 gasoline 69 hp vs prior Fiat Panda.

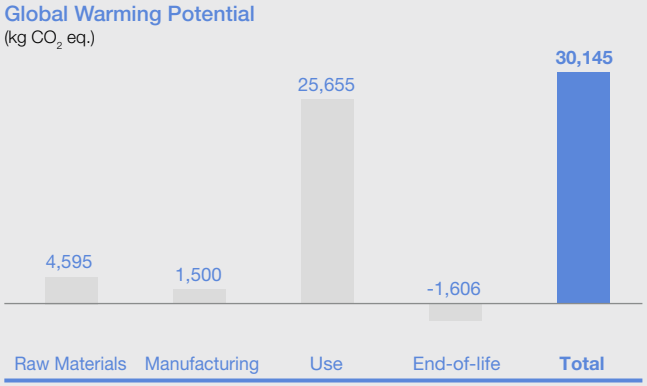
ALFA ROMEO GIULIA 2.2 DIESEL 180 HP



74.5%
Metal

11.7%
Plastic

13.8%
Other



ALFA ROMEO GIULIA 2.2 DIESEL 180 HP

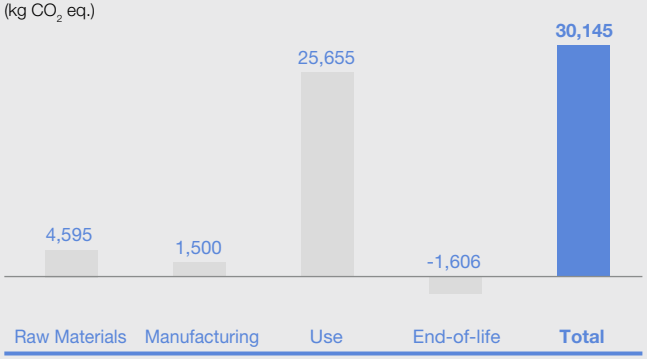
9.72
Energy [GJ/car]

5.49
Water [m³/car]

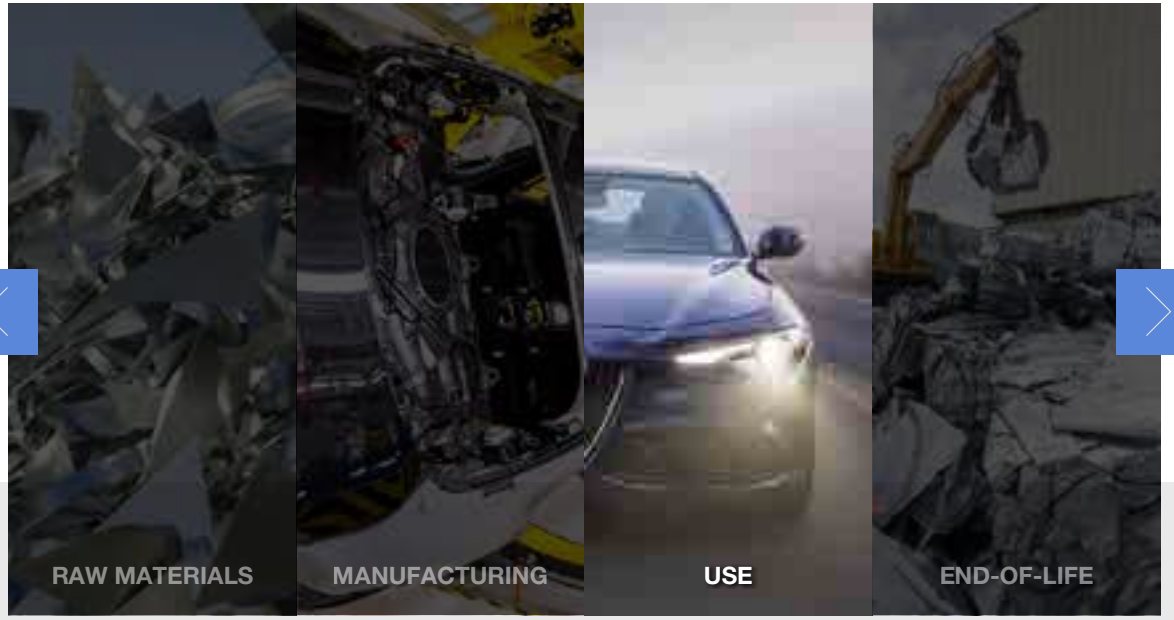
71.02
Waste [kg/car]

Data includes assembly operations and transmission and engine manufacturing.

Global Warming Potential
(kg CO_2 eq.)



ALFA ROMEO GIULIA 2.2 DIESEL 180 HP



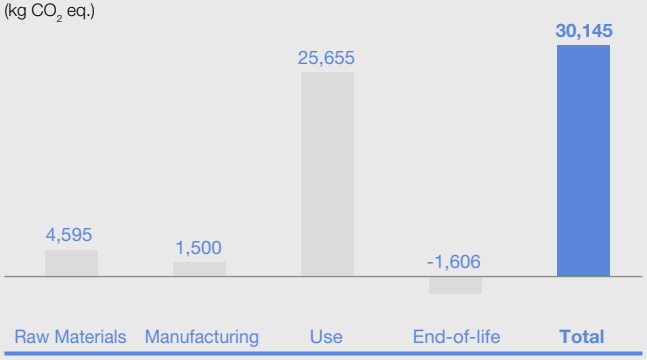
109.0
CO_2 [g/km]

4.2
Fuel [l/100km]

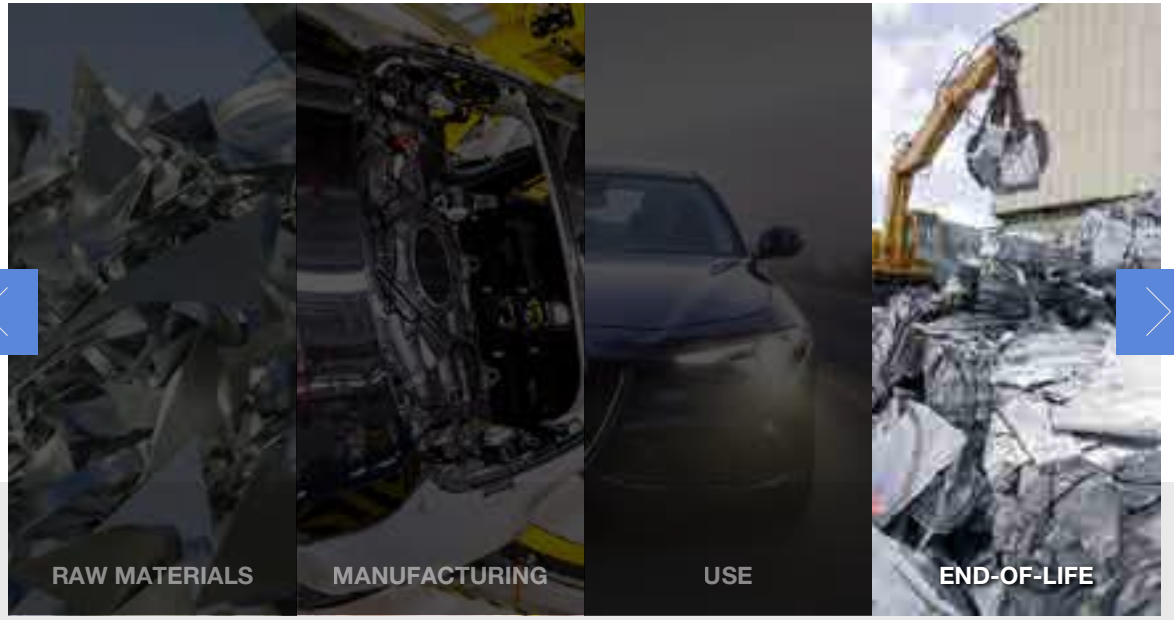
EURO 6
Compliant

Data refers to 200,000 km use.

Global Warming Potential
(kg CO_2 eq.)



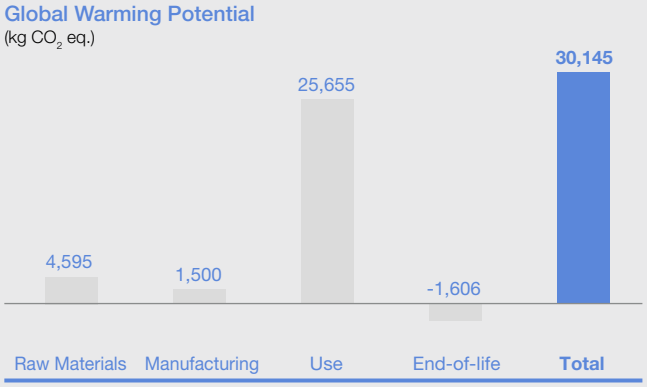
ALFA ROMEO GIULIA 2.2 DIESEL 180 HP



264.5
Energy of ELV Management (2000/53/EC) [MJ/car]

85.2%
Recyclability Index

95%
Recoverability Index



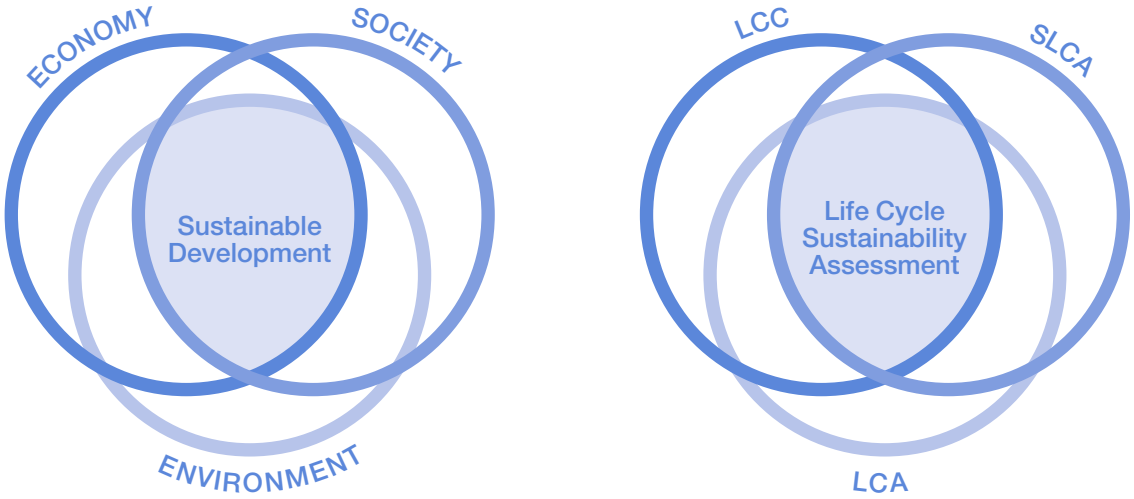
Magneti Marelli LCA Analysis

Magneti Marelli's utilization of LCA has grown over the last years. The result of these efforts has led to 10 projects involving five business lines to test innovative materials and valuation of different technologies. During 2016, Magneti Marelli extended the scope of its LCA analysis by including Environmental Life Cycle Cost (eLCC) and Social Life Cycle Assessment (SLCA) into the traditional product Sustainability Life Cycle Assessment (S-LCA). Overall, the sustainable assessment activities covered the following projects:

- LCA of a pedalbox support with filler variation for thermoplastic compound
- S-LCA of a knuckle wheel carrier
- Integration of SLCA in the previously completed, instrument panel LCA.

The results concluded that over the product life cycle, the most relevant impacts are due to the raw material consumption and the vehicle use phase. In particular, natural fibers are found to have lower environmental impact compared to the traditional synthetic plastic fillers, without compromising functionality.

Product Social Life Cycle Assessment



Product Social Impact Assessment helps companies identify social impacts throughout the product life cycle. The method is based on the identification of social impacts in order to help identify risks and potential areas of concern among company stakeholders such as employees, the local community and consumers. For Magneti Marelli, social responsibility may become an important driver in the evaluation of supplier behavior, while providing more transparency and collaboration.

VEHICLE END-OF-LIFE MANAGEMENT

In order to minimize environmental impact and improve energy efficiency, the European Union defines how vehicles should be designed and how to manage the waste generated. The focus on component reuse, material recycling and recovery as part of end-of-life vehicle (ELV) management is referenced in the Circular Economy package introduced by the European Commission in 2015. The emphasis FCA places on its approach to ELV management plays a significant part in achieving the targets set by the European Union and other countries for minimizing the environmental impacts of end-of-life vehicles.

Regarding the monitoring activities on ELV management, FCA is active in the review and proposal of ELV policy changes worldwide to comply with new standards or regulations. FCA's participation in international and dedicated working groups (e.g., ACEA) on vehicles and battery recycling helps ensure that ELV compliance procedures are followed in the EU and other markets.

During 2016, EUROSTAT published the target results on reuse and recycling and reuse and recovery[14] in the European market for 2014.

Important improvements were reported in Italy, where the European targets were achieved due to continuing efforts on end-of-life tire recycling which involved all of the Italian ELV supply chain. In 2016, the Group continued to work in EMEA to monitor independent dealerships' ELV compliance and to analyze the environmental performance of the dismantler network.

In the U.S., end-of-life vehicles (ELVs) generate more than 18 million tons of steel. Approximately 86% of a vehicle's material content is recycled, reused or used for energy recovery.[15]
FCA plays a role in the NAFTA region by providing recyclability and recoverability information on vehicles they export to countries with end-of-life vehicle regulations. The Vehicle Recycling Laboratory at the Automotive Research and Development Centre (ARDC) in Canada plays an important role to support vehicle end-of-life research and development. The laboratory is equipped with material identification equipment, vehicle fluid removal equipment, unique vehicle dismantling equipment, and advanced data analysis equipment. The ARDC performs vehicle teardowns to satisfy dismantling manual requirements, and provides or confirms existing part information that is used to generate more accurate recyclability calculations. Additionally, the Group participates in the End-of-Life Vehicle Solutions Corporation (ELVS). Collectively, this industry collaboration continues to promote the industry's environmental efforts in recyclability, education and outreach, with an emphasis on the disposal of elemental mercury from automotive switches and end-of-life high voltage batteries from electric and hybrid vehicles. FCA also participates in the United States Advanced Battery Consortium (USABC) which has the mission of developing electrochemical energy storage technologies to support the commercialization of fuel cell, hybrid and electric vehicles. The projects include research on lithium-ion battery recycling.

[14] *Related to EU Directive 2000/53/EC.*
[15] *Sources: www.recycle-steel.org and www.autoalliance.org.*

Projects

Extensive research on material recovery from end-of-life vehicles and automotive shredder residue (ASR), or "fluff," has led to the development and testing of new compounds derived from ELVs. FCA was also involved in several European research and development projects (e.g., ALIVE, ENLIGHT) analyzing various end-of-life scenarios for innovative lightweight materials to optimize the entire cradle-to-grave environmental footprint. Some examples include:

- The main results from the ALIVE project show that the metal-based lightweight solutions developed for the project do not affect end-of-life management.
- The composite-based ENLIGHT solutions show environmental improvement along the entire life cycle, however, more attention to the end-of-life step is needed.
- CRF is a partner of the EU Project RECYC-AL where the recycled aluminum obtained from the industrial recycling chain is upgraded to develop automotive components with performance equal to current aluminum parts.

Finally, FCA measures CO_2 emissions and the associated energy consumption resulting from end-of-life vehicle treatment. In 2016, CO_2 emissions amounted to approximately 202 kg of CO_2eq per vehicle, while energy consumption was1,460 MJ of primary energy demand per vehicle.[16]

Related content

ALIVE >

ENLIGHT >

REMANUFACTURED PARTS

To provide a second life for selected parts from FCA vehicles, the Company develops specific product lines of remanufactured parts to support the aftermarket needs of customers. These parts simultaneously reduce the cost of vehicle ownership for customers and decrease the volume of salvageable materials heading to landfills. This circular economy approach recovers materials, and saves energy, water and chemicals by reusing parts or components. Through external specialized providers, FCA certifies the production of remanufactured parts in order to provide a repair solution equivalent to original equipment parts, and that carry the same warranty conditions as new parts.
In the EMEA region, the remanufactured product lines account for more than 1,000 unique product codes – a list that is continuously expanding. To date, the program includes engines, turbochargers, injectors, injection pumps, air flow meters, gearboxes, flywheels, air compressors, starters and alternators.

In the NAFTA region, the Group is also expanding its offerings of remanufactured parts. The selection includes more than 2,850 active parts, 300 of which were added in 2016, and includes remanufactured brake calipers, starters and alternators, electronic control modules, steering and suspensions, and air compressors, as well as engine and transmission product categories. The number of active or unique parts changes as they go out of stock, or stop being produced when the vehicles they were made for are no longer manufactured.

FCA has also recently started remanufacturing transmission components in the APAC region. The program includes 18 products and continues to expand.

[16] *Life Cycle Assessment according to ISO 14040-14044; performed with Gabi 7 software, using CML 2001 method (updated April 2015) in order to calculate the GWP of the end-of-life of an average FCA vehicle. The results take into account the environmental debits due to the following ELV management activities: depollution (oil, fluids), dismantling for component reuse and material recycling, shredding activities, landfilling of the Automotive Shredder Residue. The environmental credits due to the reuse, recycling and recovery of the materials sorted are out of the scope of the LCA.*

VEHICLE SAFETY

FCA's approach to safety on the road incorporates a wide range of elements, including promoting a proactive vehicle safety culture within the industry and the Company. Throughout 2016, FCA brought together major global automakers in the U.S. at industry workshops and summits focused on enhancing vehicle safety.

As a public safety advocate, FCA also coordinated and co-hosted industry events in the U.S. focused on topics such as strategies and approaches for vehicle safety training and earlier identification of trends in potential safety defects, including sharing approaches on proactively and systematically analyzing data. Along with supporting a vehicle safety culture within the industry, FCA also engaged Company subject matter experts and external industry experts to develop a U.S. Safety Act Web-based Training Module. The training provided employees specific training including topics such as understanding of the U.S. National Highway Transportation Safety Administration, the U.S. Safety Act and the importance of the role they play in delivering safe vehicles to customers. The training module has been openly shared and offered to other automakers.

The Company hosted the inaugural best practices recall summit where colleagues from both FCA and competitive auto companies shared approaches for improving recall execution. Participants had the opportunity to review research on customer attitudes toward automotive safety recalls, along with a third-party assessment of how automakers can improve processes for safety-related defect determinations and recall campaign processes.

In 2016, FCA US further reaffirmed its commitment to vehicle safety by signing an agreement, the Proactive Safety Principles, along with 18 other automakers, to leverage their knowledge and collaborate to enhance safety of the traveling public. The Principles include Enhance and Facilitate Proactive Safety; Enhance Analysis and Examination of Early Warning Reporting Data; Maximize Safety Recall Participation Rates; and Enhance Automotive Cybersecurity.

From a global perspective, the four FCA regions became even more closely aligned in 2016, with new Vehicle Safety and Regulatory Compliance organizations announced for EMEA, LATAM and APAC, supplementing the existing organization in NAFTA. The four regional organizations collectively report to the Chief Technical Compliance Officer for FCA. This alignment further supports sharing information and best practices in order to harmonize guidelines and processes where possible, given the regulatory environment.

SAFETY RESEARCH

A team of specialized engineers located in Orbassano and Pomigliano in Italy, and in Auburn Hills and at the Chelsea Proving Grounds in the U.S., develops and assesses effective safety systems. The engineers concentrate on various aspects including safety levels in front, rear and side collisions for vehicles from different segments; protection of vulnerable road users; and integration of active and passive safety systems. These efforts result in the continual implementation of upgrades to our testing equipment and methodology. In 2016, the Chelsea Proving Ground Safety Test Center improved crash video detail by installing a higher efficiency LED system which also significantly reduced energy consumption.

Our advanced engineering organization at the Pomigliano Technical Center applies upfront virtual reality methods and innovative technological solutions for virtual and physical tests. By analyzing the performance of vehicle safety systems in real-world collisions, we are able to develop future active and passive safety systems. In 2016, more than 600 real accidents were reviewed to understand the crash occurrence and the relevant injuries to vehicle occupants, as well as pedestrians and cyclists.

FCA actively participates in national and international groups and projects focused on areas of occupant and pedestrian safety such as developing new and improved safety standards and automated driving systems. Some examples include:

- The EMEA safety organization is a member of IGLAD (Initiative for the Global Harmonization of Accident Data), a consortium of auto manufacturers that collects and analyzes traffic accident data to improve road and vehicle safety.
- In the U.S., FCA collaborates with other automakers to identify technical issues and conduct research related to vehicle safety through the U.S. Council for Automotive Research (USCAR).
- FCA is a member of CATS (Cyclist Autonomous Emergency Braking Testing System) which actively supports and prepares for the introduction of Cyclist AEB systems designed to detect cyclists and reduce the number of fatalities and seriously injured.

- FCA is collaborating with other auto companies on the HoliDes project. HoliDes (Holistic Human Factors and System Design of Adaptive Cooperative Human-Machine Systems) was launched in 2013 to investigate new ways to proactively communicate system adaptations to humans, focusing on situations where many humans and many machines act together and adapt to each other.
- The AdaptIVe (Automated Driving Applications and Technologies for Intelligent Vehicles) project is Europe's first large-scale collaborative research project on automated driving. Launched in 2014, the project involves auto manufacturers, automotive and technology suppliers and research institutes collaborating to develop various automated driving functions for daily traffic by dynamically adapting the level of automation to the situation and the driver. AdaptIVe focuses on the performance and acceptance of automated systems that improve safety by minimizing the effects of human errors, while enhancing traffic efficiency and reducing congestion.
- The RobustSENSE project is a collaborative research project started in June 2015 to develop a robust and reliable platform for automated driving. The platform addresses the problem that today's driver assistance systems stop working in harsh environmental conditions. RobustSENSE enables better system operation by combining several independent subsystems into an integrated and comprehensive solution.

SAFETY DESCRIPTIONS AND RATINGS

FCA offers active and passive features for diverse drivers and vehicle segments, along with tertiary safety elements. The intent of active safety systems is to help drivers avoid crashes by assisting them to control their vehicles or alert them to potentially hazardous situations. These systems monitor surroundings, the status of the vehicle and driver behavior. They also include semi-automated technologies that provide assistance to drivers in certain instances, with the driver retaining control as needed. One such system is Full-Speed Forward Collision Warning-Plus, which includes Automatic Emergency Braking (AEB) technology. When the system first detects a potential impact, it pre-fills the vehicle's brakes and transmits audible and visual warnings for the driver to intervene. If there is no driver response, the system triggers a brief brake application as a tactile alert. If the driver remains unresponsive and the frontal collision risk is imminent, braking occurs automatically to slow the vehicle and reduce an impact's severity. However, the system may bring the vehicle to a full stop if a frontal collision appears imminent at speeds below 25 miles per hour (mph). Passive safety systems help mitigate the effects of a crash. These include occupant restraint technology and the use of more advanced materials that enable us to improve crash energy management. In the area of tertiary safety, the Group provides emergency rescue sheets with information to rescue teams or first responders on special design elements and the position of components to be considered when assisting the occupants of vehicles involved in an accident.

In the U.S., FCA also launched phone mirroring technologies known as "Android Auto" and "Apple CarPlay" in the 2017 Dodge Charger, Chrysler 300 and Dodge Challenger. These technologies offer the latest technology to enable a customer to use many of the features on their cell phone through steering wheel mounted or voice recognition technology to reduce the safety risks associated with driver distraction.

As we continue efforts to deliver the latest advancements in both passive and active safety technologies, ratings from independent agencies help validate our progress. Independent agencies rate the comparative safety of vehicles across the industry in different regions. While the specific criteria vary, these ratings are generally based on some form of evaluating the level of safety provided for occupants during a crash as well as a vehicle's ability to avoid a crash through the use of technology. A number of FCA vehicles have earned top ratings based on performance during assessments.

In the U.S., the 2017 Chrysler Pacifica, Dodge Charger, Dodge Challenger and Jeep Grand Cherokee 4x4 achieved 5-Star overall safety ratings in the U.S. NCAP conducted by the National Highway Traffic Safety Administration (NHTSA). The U.S. Insurance Institute for Highway Safety (IIHS) named the 2017 Chrysler Pacifica a Top Safety Pick+ rated vehicle. The Alfa Romeo Giulia earned a 5-Star Euro NCAP rating in 2016 while the Jeep Renegade and the Fiat 500X were awarded the Australian NCAP 5-Star rating.

REGULATORY COMPLIANCE

FCA stands behind the quality and safety of its products in every market. When potential vehicle safety issues arise, we promptly investigate and take corrective action, including initiating recall campaigns when appropriate. By quickly initiating appropriate safety recalls, we address safety issues more quickly and inconvenience fewer customers. In 2016, there were 126 recall campaigns involving 12,174,843 initial recall notices for vehicles worldwide.

The Company continues working to increase recall completion rates and improve the overall customer experience across the regions. As an example, the FCA US Customer Contact Center (CCC) added a recall-dedicated team to maintain the priority of our recall-affected customers and become a knowledge source for other teams throughout the organization.
In addition, agents proactively notify customers of incomplete recalls affecting each caller's vehicle, and have been empowered to assist with parts procurement and scheduling of appointments for recall repair completion. FCA US also has an internet portal, Recall Central, which consolidates safety recall campaign information so dealers may better assist customers - a key variable in the recall-completion equation. We also bolstered our mobile, social media and web self-service experiences for customers affected by safety recalls. FCA US launched an online process in 2016 where customers can sign up for proactive email and text message notifications when there is a status update available on an open recall. Every safety recall launched by FCA US is also communicated through a statement posted on the media site since these campaigns can have implications for vehicles outside the NAFTA region.

In the U.S., FCA also launched a new set of industry-leading advanced data analytics to improve our ability to more rapidly and effectively identify and assess potential safety issues so that potential remedies can be deployed quickly to mitigate risk to our customers.
In the EMEA region, recall campaigns are managed by informing customers through written communication. The entire process is designed to minimize inconvenience to the customer and vehicle downtime. Moreover, a customer can obtain additional information on the work to be carried out, the location of service centers and other services that may be available, by contacting the FCA Customer Contact Center (CCC) at any time. The CCC can be contacted through one of the available channels including brand-specific toll-free numbers, emails, links on websites and social networks, as well as more traditional means of contact such as letters and faxes.

Through the Global Technical Compliance organization, the recall investigation and execution process has been harmonized to enhance coordination across regions and the robustness of recall campaign remedies for our customers.

Related content

Customer Contact Centers >

VEHICLE QUALITY

Vehicle quality is central to FCA's goal of earning and maintaining the trust and loyalty of customers. We recognize that expectations vary from market to market due to differences in driving experiences and local preferences such as vehicle size, fuel type and acceptance of new technology. During vehicle development, our approach to quality keeps customer needs in mind and strives to embrace excellence both in our products and our processes. One measure of this customer focus is reflected in the results of the J.D. Power 2016 U.S. Initial Quality Study (IQS), which ranked FCA's Chrysler and Jeep brands as the most improved.

As part of our commitment to vehicle quality, FCA has also set a target of achieving top quartile placement for the vehicle portfolio by 2020, based on the relevant competitive benchmark for each geographic region. This includes vehicle reliability as measured by rate of repair and survey results related to vehicle functionality and design. In 2016, the rate of repair in the first 90 days of ownership improved on average by more than 20% globally. Things Gone Wrong (TGW) is an internal and external survey process which evaluates customer needs and behaviors related to vehicle functionality and design issues. In 2016, TGW improved on average by almost 4% globally.

QUALITY PROCESSES

For every vehicle we make, quality considerations ranging from customer expectations to functional requirements are addressed from the earliest stages of design. At times, differences in customer expectations or regulatory requirements within a specific market have an impact on quality standards. When this occurs, FCA normally applies the most stringent specifications for all markets. These market-based differences add complexity and make close cooperation across regions an essential part of the process. To support global quality collaboration, the Global Issue Management (GIM) system provides a single repository that is available in five languages to help expedite issue resolution across functional groups and regions. By replacing multiple systems with one global system, awareness of issues is improved and a more consistent resolution is achieved. Benefits of the GIM system extend beyond our internal resources by providing our supply chain access to view and address supplier-related issues.

From a quality testing perspective, some of the most punishing vehicle tests involve the Road Test Simulator (RTS). It re-creates the abuse vehicles endure at the hands of a 95th percentile customer – meaning a customer who drives the vehicle in more severe conditions than 95% of all drivers. The RTS mimics a wide range of on-road and off-road driving surfaces and puts a lifetime of wear and tear on a vehicle in only one month's time. The thousands of simulated and laboratory tests conducted set the foundation for the regimented reliability, capability and durability testing that continues at FCA's proving grounds around the world.

In addition to the extensive testing facilities at the proving grounds in Chelsea (U.S.) and Balocco (Italy), the Group also conducts extreme weather testing at FCA's Arizona Proving Grounds (U.S.) and the Arjeplog (Sweden) Proving Grounds within the Arctic Circle. At the Florida Evaluation Center (U.S.), vehicles undergo coast-down testing to assess overall frictional drag, aerodynamics and tire rolling resistance. Engineering and Quality teams also study how vehicles perform in less predictable environments. Reliability test fleet vehicles are driven day and night on public road surfaces, at high and low altitudes and through blizzard conditions, as well as dry, desert heat and hot, humid locations all over the globe.

Inside an assembly plant's Quality Assurance Center, randomly selected vehicles undergo audits and detailed technical measurements on more than 400 vehicle functions, such as heating, cooling, emissions, and fit-and-finish.

FCA assembly plants also employ state-of-the-art metrology centers, a high-tech laboratory with a clean-room environment. The metrology labs use laser scanners and a complex set of fixtures that mimic the body shop's process so that engineers and technicians can find the root cause of any build variations even when components appear perfect to the naked eye. All these tools are used to find and resolve issues before vehicles are shipped to dealers and, ultimately, to the end customers. As a part of our quality approach, all Group plants have adopted a Quality Management System that is ISO 9001:2008 certified and all powertrain plants in Europe are also ISO/TS 16949:2009 certified.

Along with monitoring at specific points throughout the product development process, two other quality assurance programs are conducted before and after product launch. The first is an internal process known as "fleet fast feedback" in which employees evaluate and comment on pre-launch vehicles, which helps assess customer reaction. The second involves monitoring performance of a sample of customer vehicles by a cross-functional team for the first several months after a new model launch. These programs help to rapidly identify and resolve potential issues with new models and ensure customer satisfaction from the first day of ownership.

PRODUCTION AND SUPPLY CHAIN

The sourcing, transportation, manufacturing and distribution of our products are critical to the way FCA takes responsibility for the social and environmental impacts of its activities. Adopting rigorous standards for efficiency, quality and environment-friendly production at our own facilities helps reduce FCA's footprint. These efforts extend to the partnership FCA has with its suppliers and logistics providers. Promoting sustainable practices in a global supply base is a complex but essential undertaking.

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PRODUCTION

Successfully navigating the complexities of the global market requires continuous improvements in operational efficiency and the design of sustainable processes.

FCA is responding to this challenge with a lean, smart and digital operating model that is the result of continuous improvement in processes, a strong commitment to sustainable innovation and the direct participation of employees in the pursuit of excellence. Identifying emerging technologies, trends and opportunities, while targeting those with the greatest potential, is embedded within the organization at various levels.

In its production facilities, FCA strives to minimize the environmental impact of processes. Efforts at the plant level include reducing CO_2 emissions, water consumption and waste generation. Continuous improvements in environmental performance at the plant level is achieved through significant employee engagement, an essential part of FCA's approach and its ability to generate sustainable, long-term value for stakeholders.

Environmental protection at FCA is managed through its Environment, Health and Safety (EHS) and Energy organizations. EHS and Energy managers at each company within the Group are responsible for overseeing facility environmental activities and directing capital investments dedicated to specific action plans. They monitor developments with national and local laws and regulations related to the environment. They ensure that senior management and plant environmental professionals understand the potential impact of new or revised policies on their operations, and they conduct periodic compliance audits.

FCA is committed to implementing and maintaining its Environmental Management System (EMS) compliant with the ISO 14001 standards at its production plants. At the end of 2016, 142 Group plants, representing nearly 100% of industrial revenues, were ISO 14001 certified.

The plants still awaiting certification have already adopted an EMS that is aligned with the ISO 14001 standard and are regularly audited by the central EHS organization.

With respect to the Energy Management System (EnMS), at the end of 2016 the majority of Group plants were ISO 50001 certified, representing approximately 93% of the Group's total energy consumption.

The Group EMS and EnMS are certified by accredited third parties. Together with World Class Manufacturing (WCM) methodologies and tools, they contribute to steady and continuous reduction in the impact of manufacturing processes, as well as to the achievement of environmental objectives.

In place for more than 10 years, WCM is a structured, rigorous and integrated methodology that covers every aspect of the production process: from workplace safety to environmental protection, from maintenance to logistics and quality, from people development to process innovation. The WCM system consists of 10 technical and 10 management pillars and serves as a common language for FCA plants worldwide. Aimed first and foremost at improving production processes, it helps improve product quality which ultimately plays a key role in meeting or exceeding customer expectations.

At year-end 2016, a total of 147 FCA plants have implemented WCM, which now covers more than 98%[1] of our plants: 57 have achieved a bronze level of implementation and performance, 25 silver and five gold.

nearly 100%
ISO 14001 Certified Plants

93%
ISO 50001 Certified Plants

98%
of FCA plants apply WCM

5 Gold Plants
25 Silver Plants
57 Bronze Plants

4,400
Environmental Projects in 2016

€70 Million
Saved in 2016

Created with broad employee engagement, the projects developed within WCM are designed to reduce losses and waste; increase productivity; and improve quality and safety in a systematic manner, aiming to ultimately reach zero accidents, zero waste, zero breakdowns and zero inventories.

[1] Percentage based on the total manufacturing cost base.

There were roughly 4,400 environmental projects started during 2016, for an estimated cost savings of €70 million. About 3,300 dedicated energy projects were implemented, resulting in approximately 70,00 fewer tons of CO_2 emissions.
To manage and minimize environmental and safety risks, a preventive and proactive approach is employed. In the event of an incident, WCM calls for a rigorous analysis of the causes and application of the most appropriate procedures to reduce the risk of recurrence.

The success of WCM is highly dependent on the participation of employees, who are involved in targeted training programs in order to properly apply WCM methods. Employees worldwide are encouraged to make suggestions for improving processes, each of which is assessed for potential application. In 2016, FCA plant employees submitted a total of more than 2.5 million suggestions, representing an average of more than 15 proposals per employee.

Best practice projects are shared among all plants, with more than 17,000 approved and disseminated across the Group's plants through 2016.

WCM tools and methods are also applied to non-production business processes. FCA is transferring WCM principles and best practices to its Logistics, Manufacturing Engineering, design activities, Dealers and Suppliers, to integrate this approach into other areas of the Company. By involving suppliers in the application of WCM principles, FCA minimizes the environmental footprint along its value chain while spreading a sustainability culture.

FCA's plants have action plans and related short-, mid-, and long-term projects aimed at reducing costs and environmental footprint. In 2016, expenditures and investments for the environment amounted to around €100 million.[2]
No significant spills were reported.

Smart Manufacturing

Innovation plays a crucial role in creating value for the business through the execution of new ideas in both products and processes.

FCA innovates its manufacturing processes in several ways. One example is represented by the redesign of plants as "digital factories" based on the integrated modular factory model, which assumes that advanced processes and tools function as partners, supporting rather than substituting the operator. FCA recently completed the development of a new Information and Communication Technology (ICT) infrastructure deployed in major plant renovations and in greenfield projects. This infrastructure, called New Plant Landscape (NPL), offers several benefits, including: use of electronic data to support quality control processes, as well as vehicle tracking and traceability to components suppliers; real time data for equipment performance and process variables, enabling improved troubleshooting and root cause analysis which supports rapid decision-making at all levels; a common user portal with enhanced usability and access to relevant data for operators; improved logistics flows with automatic material sequencing and call-off; and optimized layout of the production line, saving space and reducing the plant's overall carbon footprint.

FCA makes extensive use of industrial 3D printing technologies, also referred to as Additive Manufacturing, in both product development and manufacturing processes. For example, at the Melfi plant in Italy, prototype components can be printed directly from 3D computer models avoiding the need to build special stamping presses, molds, or other equipment. Not only is this technology essential to improve time-to-market, but it also significantly reduces the material use, waste generation and energy consumption associated with these activities.

The implementation of World Class Manufacturing at FCA plants worldwide represents the foundation of a progressive transition to a smart factory model. WCM provides the FCA-specific language for deployment of the concepts of lean, smart and digital production across the Group's manufacturing operations.

In 2016, the Melfi plant received the Special Award OEM for SMART Digital Operations, which is awarded annually as part of a prestigious competition that assesses best-in-class performance and innovation among European Original Equipment Manufacturers (OEMs).

[2] *€99.9 million, of which 75.0% for waste disposal, emissions treatment, and remediation costs, and 25.0% for prevention and environmental management costs.*

Data reported as a measure of FCA's impact on the environment consists of both absolute values, directly correlated to production volumes and reporting boundaries, and normalized values.

Normalized environmental performance indicators are presented in order to ensure data comparability from year to year and enable operational trends to be evaluated. Due to the significant variation in types of production lines (vehicles, engines, components, etc.), it is not possible to present normalized data at the Group level.

Normalized data presented in this chapter is for energy, air emissions, water and waste for the Mass-Market Brand assembly and stamping facilities, which account for more than half of the Group's environmental footprint.
The year 2010 is used as the baseline to measure progress to FCA's environmental targets because this was the first year FCA US (formerly known as Chrysler Group) was included in the scope of the Group.

View data >

Related content

Supplier WCM >

ENERGY CONSUMPTION

Consuming energy responsibly is the basis of FCA's commitment to reduce energy demand and to employ energy solutions with an ever-decreasing impact on the environment. This commitment is embodied in the World Class Manufacturing (WCM) Energy sub-pillar which focuses on identifying and implementing energy reduction and efficiency measures. In 2016, energy consumption was consistent with the amount of energy consumed the previous year, and well below the 2010 level in both absolute terms and on a per vehicle produced basis. Despite growth in economic results, and both stable energy consumption and vehicle production volumes globally, the related CO_2 emissions of FCA resulted in a year-over-year decrease in 2016.

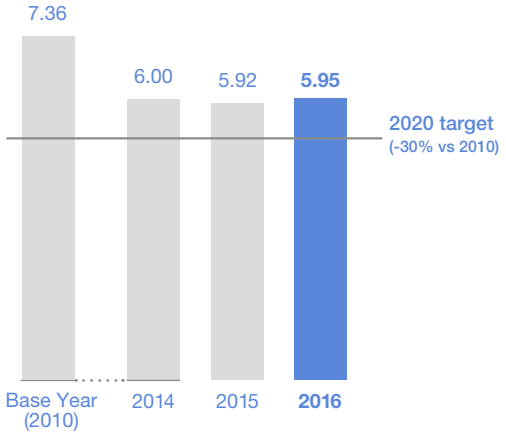
During the year, the Group rolled out several initiatives to improve the energy efficiency of systems and equipment, to implement organizational measures such as process redesign and optimization of plant capacity, and to increase energy awareness among employees. These initiatives had a considerable impact, generating energy savings of around 830 TJ and avoiding approximately 70,000 tons in CO_2 emissions.

Direct and Indirect Energy Consumption
FCA worldwide (TJ)

	2016	2015	2014
Plants	*143*	*141*	*138*
Electricity	22,056	21,267	21,163
Natural gas	18,959	19,674	20,838
Other fuels	610	924	1,133
Other energy sources	5,828	5,582	4,636
Total energy consumption	**47,453**	**47,447**	**47,771**

At Mass-Market Brand assembly and stamping plants, the energy consumption per vehicle produced was consistent with last year, at 5.95 GJ in 2016, and recording a decrease of 19.2% compared with 2010 (from 7.36 to 5.95 GJ).

Direct and Indirect Energy Consumption per Unit of Production
Mass-Market Brand assembly and stamping plants worldwide
(GJ per vehicle produced)



-19.2%
Energy Consumed

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GRI: G4-DMA, G4-EN3, G4-EN5, G4-EN6, G4-EN19

CO_2 EMISSIONS

FCA's engagement in the fight against climate change is demonstrated by the general downward trend in CO_2 emissions from our production processes compared with the 2010 baseline.

In 2016, total CO_2 emissions were well below the amount reported in previous years, aided by the 3,300 energy projects that were launched in 2016, which saved €58 million.[3]

€58 Million
Saved

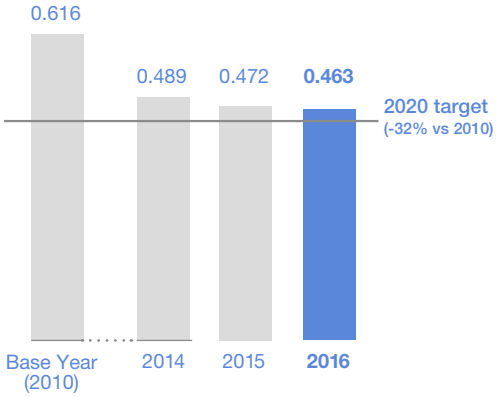
Emissions of CO_2 per vehicle produced at Mass-Market Brand assembly and stamping plants decreased 24.8% in the last six years, falling from 0.616 tons per vehicle produced in 2010 to 0.463 tons per vehicle produced in 2016.

-24.8%
CO_2 Emitted

Direct and Indirect CO_2 Emissions
FCA worldwide (thousands of tons of CO_2)

	2016	2015	2014
Plants	*143*	*141*	*138*
Direct emissions	1,039	1,104	1,180
Indirect emissions	2,860	2,906	3,026
Total CO_2 emissions	**3,899**	**4,009**	**4,206**

Direct and Indirect CO_2 Emissions per Unit of Production
Mass-Market Brand assembly and stamping plants worldwide (tons of CO_2 per vehicle produced)



In 2016, FCA continued to make extensive use of energy from renewable sources.
In Europe, the vast majority of renewable energy purchased for consumption by the Group is certified by the supplier, covering 100% of Italian plants' electricity. In Brazil, South America's major market, electricity purchased for consumption is certified as originating almost entirely from hydroelectric or wind sources. In addition, solar power is used for electricity and/or heating at some Group plants.
Energy from renewable sources used in Group production processes represented 26.1% of total electricity consumption in 2016.

26.1%
from Renewables

One example of FCA's commitment to renewable energy is its renovated plant in Cassino (Italy) where FCA produces the Alfa Romeo Giulia and other premium cars under the Alfa Romeo brand. FCA has designated the Cassino Plant a "World Class Sustainable Plant" based on its advanced technologies and processes, which offer high standards of efficiency, workforce ergonomics and eco-sustainability. Cassino has also established itself as an eco-performer. With zero waste-to-landfill since 2000, the plant also plans to be fully self-sufficient in terms of water usage and has a zero carbon footprint. One hundred percent of electricity used in industrial processes comes from renewable sources, including on-site solar power generation. In addition, the small amount of carbon emissions from thermal energy generation are fully offset.

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Low-emission Transport >
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[3] *Prorated to include carry-over from projects launched in 2015.*

GRI: G4-DMA, G4-EN15, G4-EN16, G4-EN18, G4-EN19

WATER MANAGEMENT

Water scarcity is one of the primary challenges facing governments, communities, businesses and individuals in many parts of the world. Water scarcity also exposes companies and society overall to business risk.

FCA sees water as one of the most important natural resources to be protected. Internal policies and procedures provide the principles for sustainable management of the entire water cycle and emphasize reducing consumption, especially in water-stressed regions where availability is critical to the surrounding environment and population.

FCA periodically maps the availability of water resources around the world, correlating the quantity of water available with the quantity consumed in each region. In 2016, FCA adopted a new risk assessment method to evaluate water stressed areas. This assessment identified three plants located in areas where water is considered a limited resource.[4] Accordingly, these plants took appropriate measures to improve water reuse and recycling.

As a result of improvements in water cycle management and measures taken to reuse water in industrial processes, FCA reduced overall water consumption by 27.6% compared with 2010 (from 33.7 to 24.4 million m^3). Projects to cut the quantity of water consumed led to an overall savings of about €4.5 million in 2016.

Water Withdrawal and Discharge
FCA worldwide (millions of m^3)

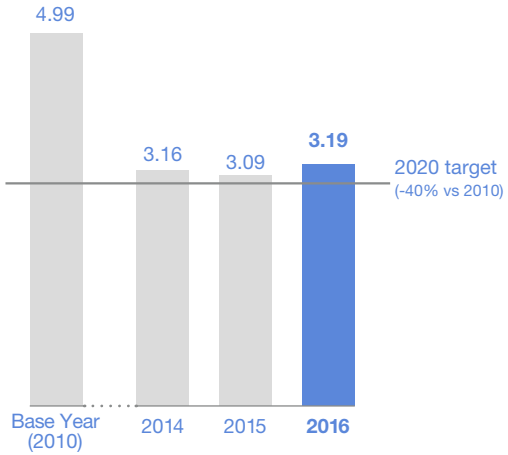
	2016	2015	2014
Plants	*143*	*141*	*138*
Total water withdrawal[5]	**24.4**	**24.3**	**24.7**
Total water discharge[6]	**17.6**	**19.3**	**16.4**

Water recycling resulted in 2.2 billion m^3 of water saved, equivalent to the amount of water that flows over Niagara Falls during a two-week period.

Water Recycling Index
FCA worldwide (millions of m^3)

	2016	2015	2014
Total water requirement	**2,251.2**	2,361.0	3,291.2
of which covered by recycling	2,226.8	2,336.7	3,266.5
of which water withdrawal	24.4	24.3	24.7
Recycling Index[7]	**98.9%**	**99.0%**	**99.2%**

Water Withdrawal per Unit of Production
Mass-Market Brand assembly and stamping plants worldwide (m^3 per vehicle produced)



In 2016, Mass-Market Brand assembly and stamping plants reduced water consumption per vehicle produced by 36.1% compared with 2010.

-36.1%
Water Consumed

[4] *Due to a change in methodology, the plants identified in water risk areas changed compared to last year. FCA previously used the Aquastat database, developed by the Food and Agriculture Organization (FAO). In 2016, FCA adopted the Aqueduct database, a web-based interactive platform developed by the World Resource Institute (WRI), which measures river flood impacts by urban damage, affected GDP, and affected population at the country, state, and river basin scale.*
[5] *Data restated for 2014 due to a miscalculation.*
[6] *Data restated for 2014 due to a miscalculation.*
[7] *The recycling index is calculated on the basis of total water requirement, which is the sum of water withdrawn and water recirculated in the plants.*

The Group pairs reducing consumption of water resources with optimizing wastewater treatment processes and constant monitoring of relevant parameters. In 2016, analysis conducted on water discharged from FCA plants worldwide revealed levels of Biochemical Oxygen Demand (BOD) up to 98% below regulatory requirements, while levels of Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) were up to 97% and 98% below required limits, respectively.

In addition to any legal requirements, FCA regularly measures and analyzes the presence in its wastewater of certain heavy metals such as nickel (Ni), zinc (Zn), lead (Pb), cadmium (Cd) and copper (Cu). These analyses provide a comprehensive view of FCA's overall impact on water quality to maintain levels well below legal limits.

Of 143 total plants active in 2016, all were serviced by either an internal or external wastewater treatment system.

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WASTE MANAGEMENT

FCA has long been committed to reducing waste generation in its production activities in alignment with the principles of the circular economy. Reusing and recovering materials is widely practiced throughout the Group. FCA strives to recycle what cannot be reused. If neither reuse nor recovery is possible, waste is disposed of using the method available that has the least environmental impact (waste-to-energy conversion or treatment) with landfills used only as a last resort.

Actions to improve this important environmental aspect resulted in a 5.5% reduction of waste generated in 2016 compared with 2015. In the past two years, the amount of waste generated has decreased by 20.0%. Projects to cut the quantity of waste generated led to savings of about €7 million in 2016. In addition, revenues of about €27 million were generated by selling recoverable waste to companies that use the waste to be recycled and reused to generate new products or energy.

The Group also carefully manages the level of waste defined as hazardous which is generated during manufacturing processes, in accordance with applicable regulations in each jurisdiction. Particular importance is given to reducing the generation of such waste, since by its very nature it is often less suitable for recovery. Through appropriate environmental practices, total hazardous waste decreased by 45.2% compared with 2010 levels.

In 2016, the waste recovery rate in Mass-Market Brand assembly and stamping plants was 96.6% and the percentage of waste sent to landfill was 1.5%.

Waste Generation and Management
FCA worldwide (tons)

	2016	2015	2014
Plants	*143*	*141*	*138*
Waste disposed			
Treatment	30,995	33,825	36,130
Sent to landfill	179,704	220,169	295,359
Total waste disposed	**210,699**	**253,994**	**331,489**
Waste recovered			
Waste-to-energy conversion	25,814	19,170	18,362
Waste recovered	1,148,511	1,192,357	1,381,979
Total waste recovered	**1,174,325**	**1,211,527**	**1,400,341**
Total waste generated	**1,385,024**	**1,465,520**	**1,731,828**

In Mass-Market Brand assembly and stamping plants, the quantity of waste generated per vehicle produced in 2016 decreased by 1.1% compared with the prior year (from 171.3 to 169.4 kg/vehicle produced), and by 22.0% compared with 2010 (from 217.2 to 169.4 kg/vehicle produced). Hazardous waste per vehicle produced decreased 62.2% compared with 2010 (from 8.2 to 3.1 kg/vehicle produced).

-62.2%
Hazardous Waste

96.6%
Waste Recovered

GRI: G4-DMA, G4-EN22, G4-EN23

The quantity of waste sent to landfills by the Group is significantly influenced by a single type of waste from an FCA company that operates in the iron and casting components sector; Teksid generates inert industrial process sand, which must be sent to landfill at the present time due to technological constraints. Teksid has several projects in progress aimed at optimizing the management of this type of waste.

In alignment with the terms of the Basel Convention, 120 tons of hazardous waste were exported from Canada to the United States for recycling (paint shop-related waste), representing less than 0.01% of all waste generated by FCA.

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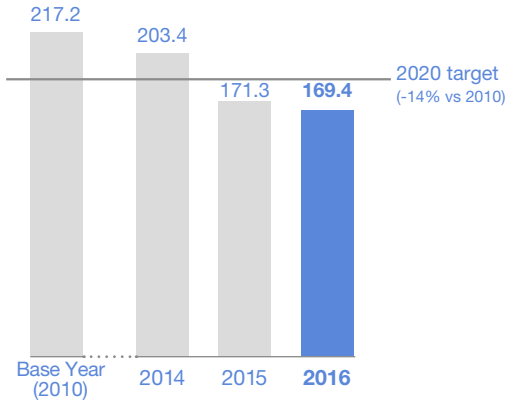
WASTE AND HAZARDOUS WASTE

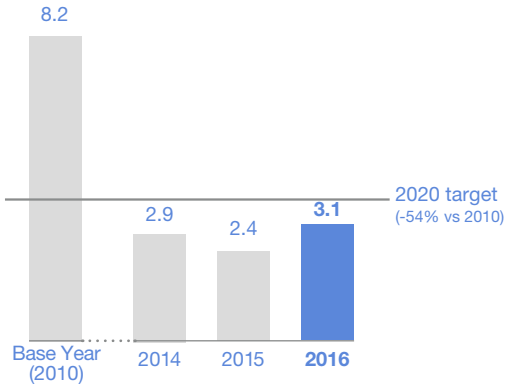
Waste Generated per Unit of Production

Mass-Market Brand assembly and stamping plants worldwide
(kg per vehicle produced)



Hazardous Waste Generated per Unit of Production

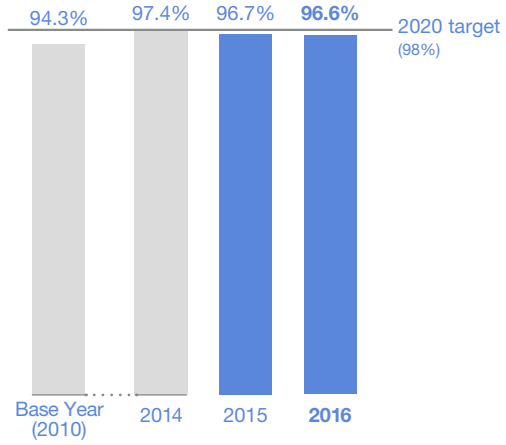
Mass-Market Brand assembly and stamping plants worldwide
(kg per vehicle produced)



WASTE RATES

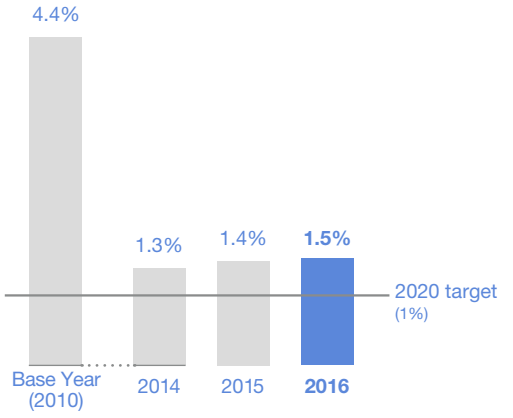
Waste Recovery Rate

Mass-Market Brand assembly and stamping plants worldwide



Waste Sent to Landfill

Mass-Market Brand assembly and stamping plants worldwide



GRI: G4-EN23, G4-EN25

SUPPLIER MANAGEMENT

A global enterprise carries global responsibility that extends far beyond our plants and offices. Suppliers around the world provide more than 75% of the components used in our vehicles, so it is essential that the principles of sustainable operations are embraced at each step of the way. Our suppliers join us in working toward responsible and sustainable sourcing and operations. We recognize and value their impact on our efforts to increase awareness and transparency through each tier while reducing risk and the effect on our resources.

Choosing suppliers who demonstrate proven capabilities in quality management, market understanding and readiness to innovate is critical to our ability to distinguish our products from the competition. We work together with our suppliers to develop responsible development practices that help limit exposure to unexpected events and supply disruption, while building long-term core competence that can drive sustainable growth over time.

FCA Purchasing, the organization responsible for supplier management, sets global purchasing strategies and oversees the integration of processes worldwide. This organization also works with peers and counterparts to integrate key environmental, social, and governance considerations into global purchasing decisions. Our buying teams within selected commodity groups work with suppliers and internal colleagues from various functional areas to develop and execute sourcing strategies as well as support the ongoing selection, management and development of our supply base. In addition, experts from Compliance, Purchasing and Engineering collaborate with suppliers on opportunities to further develop technical innovation aimed at improving the environmental profile of our products in compliance with each market's laws and regulations. By working together, these teams develop and integrate new technologies that optimize vehicle energy demand through load reductions, powertrain improvements and climate control efficiencies.

The Company evaluates the effectiveness of its management approach through external audits, periodic benchmarking activities and feedback from various stakeholders, including suppliers themselves.

Our supplier base is highly concentrated, with the top 142 strategic suppliers accounting for approximately 61% of total purchases by value. The Group classifies suppliers as being strategic through a formal process based on the following criteria: allocated spending amount; production and spare parts capacity; technical and commercially-viable alternatives; and the value of Group procurement orders as a percentage of the supplier's annual turnover.

In 2016, we extended our supplier base to 37 new suppliers. In general, there were no other significant changes in our supply chain's structure or in any notable outsourcing activities.

Highlights
FCA Purchasing Worldwide

	2016
Direct and indirect material purchases managed by FCA Purchasing (% of total FCA purchases)[8]	100
Direct material suppliers (no.)	2,567
Concentration of direct material purchases (% of purchases from top 142 suppliers)	61.3
Value of purchases from direct material suppliers (€ billion)[9]	58.3
Value of purchases from indirect material suppliers (€ billion)[10]	17.6

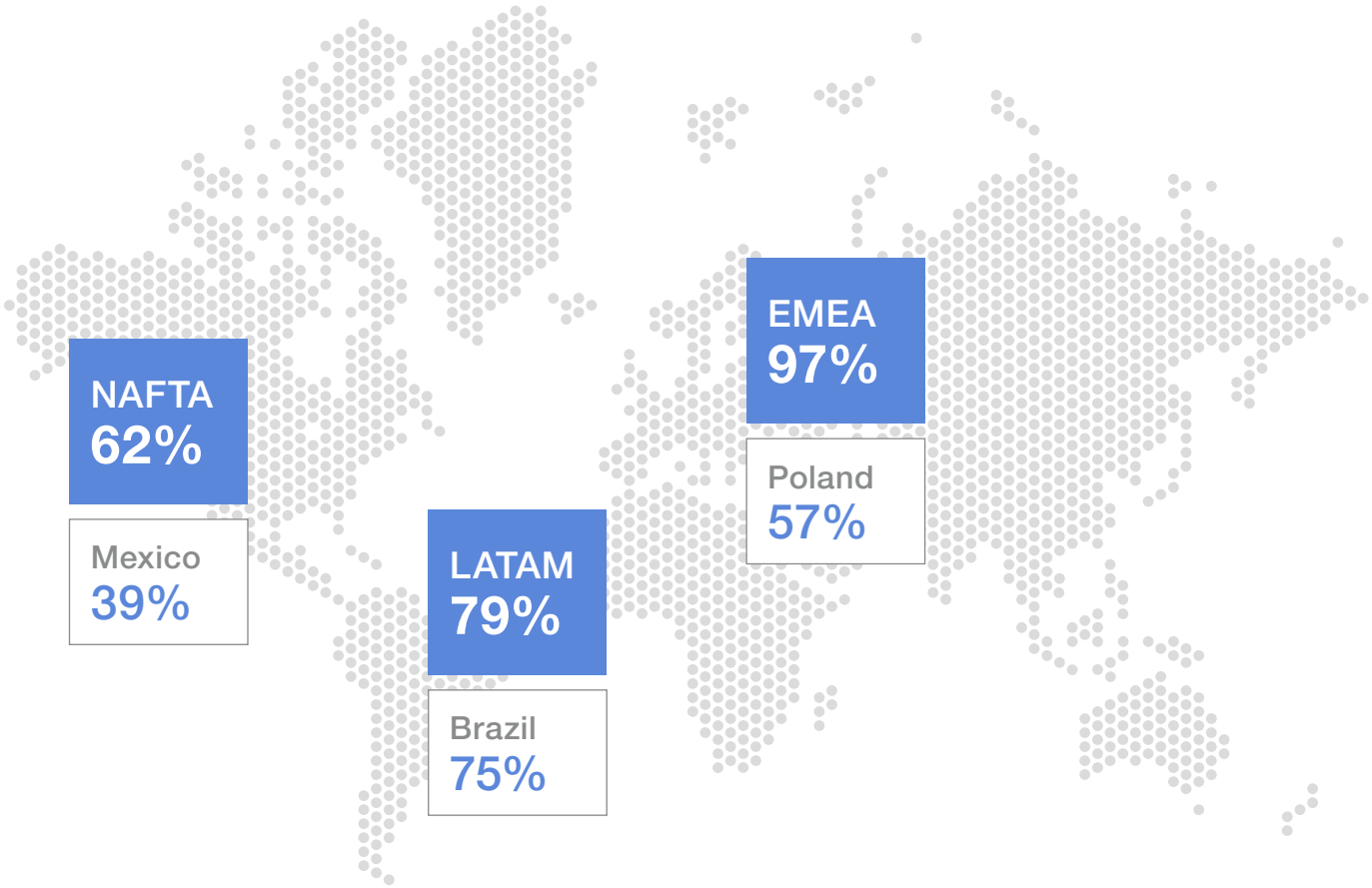
[8] *Refers to the monetary value of purchases managed by FCA Purchasing.*
[9] *Direct materials are pre-assembled components and systems used in assembly.*
[10] *Indirect materials are services, machinery, equipment, etc.*

GRI: G4-DMA, G4-12, G4-13, G4-EC8, G4-EC9

Our operations impact local economies and whenever possible, we utilize local suppliers near major locations of operation. This generates direct and indirect income and employment opportunities in the communities where the business is located while minimizing transport-related environmental impacts. Local suppliers are those that supply an FCA plant located in the same country where they operate.

View data >

Concentration of FCA annual purchased value from local suppliers by region and by emerging markets[11]



[11] Refers to markets where FCA plants are located (source for "Emerging Markets": Dow Jones Indices Country classification system, effective September 2011).

GRI: G4-DMA, G4-12, G4-13, G4-EC8, G4-EC9

SUPPLIER RISK MANAGEMENT

The financial strength of our supply base is one of the key priorities of the supply chain selection and management strategy. FCA has a Supplier Risk Management (SRM) function that ensures the assessment of suppliers' financial status.

FCA uses a number of management tools to proactively support risk identification and mitigation. The SRM global tools combine a worldwide database and common methodologies that enable financial risk analysis of our supply chain, including providers of both direct and indirect products and services. The evaluation is based on suppliers' public financial reports and other information provided by the suppliers themselves.

A financial risk rating is issued for each supplier. Those with low risk are considered eligible for new contracts. Suppliers with greater risk, however, require specific approval.

The condition of the supply base is constantly monitored through regular meetings with the relevant departments of our operating segments; the cases potentially at risk are examined to define strategies and corrective action plans where needed.

SUSTAINABILITY FOR SUPPLIERS

FCA suppliers are selected based on the quality and competitiveness of their products and services, and on their respect of social, ethical and environmental principles. Commitment to responsibility is a prerequisite to becoming an FCA supplier and developing a lasting business relationship with us. For this reason, and in order to address, prevent, and mitigate any potential impacts, contractual clauses addressing these principles have been progressively introduced since 2009. FCA's General Terms and Conditions require any new purchase orders with suppliers to comply with both the principles set forth by the FCA Code of Conduct and Sustainability Guidelines for Suppliers.

If a supplier fails to follow these principles, the Group can require the supplier to implement a corrective action plan, which is then verified through audit activities, and reserves the right to terminate the business relationship.

Supplier Sustainability Guidelines are available on the FCA corporate website and on the supplier portal. They focus on the following principles:

Human rights and working conditions

- rejection of the use of forced or child labor in any form
- recognition of the right to freedom of association in accordance with applicable laws
- freedom from harassment and discrimination
- safeguarding of employee health and safety
- guarantee of equal opportunities, fair working conditions, appropriate working time, equal compensation, and the right to training for employees.

Respect for the environment

- optimized use of resources
- responsible waste management
- management of substances of concern in the manufacturing process
- development of low environmental impact products
- use of an environmentally sustainable logistics system.

Business ethics

- high standards of integrity, honesty and fairness
- prohibition of corruption and money laundering.

Our suppliers are also monitored on their governance structure and level of ethics and integrity. In the EMEA region, for example, any noncompliance on the part of the supplier is brought to the attention of a sustainability committee, established within the FCA Purchasing organization.

The committee's role is to review performance and to identify the appropriate actions for noncompliant suppliers in order to prevent and mitigate actual and potential adverse impacts. The committee consists of the FCA Purchasing's Processes Compliance Manager, Supplier Quality Engineering Head, and General Counsel.

GRI: G4-DMA, G4-EC8, G4-HR1

Culture of Sustainability

Achieving our goals for sustainability across the supply base requires the support and engagement of FCA employees at all levels. A global project called Destination 2020 has helped to transform the organization and support long-term goals, including sustainability targets. One of the project areas addresses supplier relationships and is built around our Foundational Principles. These principles are used both internally and with our suppliers and provide the basis for how we work with these suppliers. Based on the progress made, the program has evolved into Driving to Excellence (D2X), adding new projects and executive sponsors to match our needs going forward.
Focused training events based on these Principles took place in each region in 2016. EMEA and APAC have completed employee training, with NAFTA and LATAM to be completed in 2017.

The long-term goal is that all supplier relationships will reflect these Foundational Principles:

Integrity
Trust and be trustworthy

Empathy & Advocacy
Respect and support each other

Mutual Transparency
Share expectations and information

Sense of Urgency
Act quickly and decisively

Proactive Collaboration
Work together effectively and efficiently

Continuous Improvement
Share best practices

Personal Accountability
Take ownership and accept responsibility

Long-Term Mindset
Make decisions that foster sustainable relationships

A supplier survey program is utilized to acquire supplier feedback, which is collected after interactive events, and then turned into actionable projects. Progress is communicated within and outside FCA Purchasing to further improve supplier working relationships.

GRI: G4-DMA, G4-HR1

SUPPLIER ASSESSMENT PROCESS

Suppliers play a key role in the continuity of our activities and can have a significant impact on external perceptions of our social and environmental responsibility. The Group plans to conduct sustainability audits or assessments of all Tier 1 suppliers with potential exposure to significant environmental or social risks by 2020.

The Supplier Quality and Supplier Relations departments are responsible for managing the supplier assessment process.

The assessment of supplier compliance with sustainability criteria is conducted through three phases.

The first phase consists of the Supplier Sustainability Self-Assessment (SSSA) questionnaire which covers environmental issues, labor practices, human rights, compliance, ethics, diversity, and health and safety topics. Used in all four regions, this standardized tool was developed by the Automotive Industry Action Group (AIAG) with the contribution of a work group that included FCA and other automakers and suppliers. It has a two-fold purpose: to communicate expectations to suppliers, and to determine the level of sustainability activity within the supply base. Moreover, it represents an effective and efficient tool that reduces the burden of multiple and similar information requests received by suppliers. Suppliers complete the SSSA online by accessing it via the FCA eSupplier Connect portal.

The second phase of assessing suppliers is the creation of the risk map. The primary factors taken into account in building the risk map are:

- supplier's turnover
- country risk associated with the supplier's home country, with particular emphasis on countries with a poor human rights record[12]
- supplier's financial risk
- supplier's SSSA score
- supplier's exposure to commodity risk
- location of supplier's main production activities (where available or known).

The risk map score indicates a supplier's overall risk level (high, medium or low) and is used to prioritize supplier audits. Active direct material suppliers are assessed yearly and their risk level analyzed.

On-site supplier audits (in the form of both announced or semi-announced/ unannounced) represent the third and most intensive phase for confirming supplier compliance, and are conducted by either internal Supplier Quality Engineers or external auditors. Globally, 53 supplier locations participated in these audits in 2016. If any critical issues are identified during an audit, a supplier may be placed on "watch status" or, in particularly severe cases, the relationship with the supplier may be suspended or terminated. Where areas for improvement are identified, a supplier corrective action plan is developed. Action plans establish specific responsibilities within the supplier's organization, activities and deadlines for implementation.

In all regions, the level of compliance and recommended action plans following self-assessments and on-site audits are reported in the Supply Quality Performance (SQP) system, which divides suppliers into three categories of compliance. On a monthly basis, the SQP system generates an updated scorecard that provides a qualitative assessment (including sustainability rating) of suppliers eligible to participate in competitive tenders.

Toward the goal of objectively evaluating suppliers' performance, FCA is developing its Global Scorecard which will provide standardized metrics across all regions. This comprehensive tool will be used for FCA programs such as Supplier Performance Management (One Voice), Commodity Strategies, Qualitas Awards Selection and to augment the Quality First Sourcing Process.

[12] *With reference to the EIRIS "Countries of Concern for Human Rights" List.*

GRI: G4-DMA, G4-EN32, G4-EN33, G4-HR4, G4-HR5, G4-HR6, G4-HR10, G4-HR11, G4-LA14, G4-LA15, G4-SO9, G4-SO10

Assessing Potential Suppliers

Before FCA conducts business with a company, an evaluation helps determine their suitability based on a broad scope of criteria. Through the SEA (Supplier Eligibility Assessment) the Company identifies potential suppliers' strengths, weaknesses and capabilities to produce a product of the required quality, performance and cost, and whether a supplier has the potential to be a high-performing supplier for FCA.

The SEA is conducted prior to the procurement phase for those suppliers who are not currently providing parts or services for us. It can also be used in situations in which a supplier's location has not delivered products for more than 24 months, even if the supplier has already been assessed for other facilities, products, or commodities.

Potential suppliers must demonstrate that they have adopted a program that promotes sustainability, both internally and along the supply chain, a code of conduct, a certified system for managing employee health and safety, and a certified environmental management system. These conditions help ensure that they monitor and manage environmental aspects, labor practices, human rights, and their impact on society.

The SEA consists of an audit carried out at the supplier's facility and is generally preceded by the completion of a Supplier Data Profile. Subsequently, if required, corrective actions, responsibilities, and target dates for resolution can be defined for all identified items. In 2016, more than 75 new supplier locations were evaluated worldwide through this process and the SSSA.

View data >

SUPPLIER DIVERSITY

In 2016, FCA US was named Corporation of the Year - Tier 2 Program by the National Minority Supplier Development Council for our success in requiring our Tier 1 suppliers to do direct business with diverse suppliers. FCA was also named the Corporation of the Year by the Michigan Minority Supplier Development Council and by the Great Lakes Women's Business Council, and received the Top Corporation Award from the Women's Business Enterprise National Council.

One of the ways FCA supports inclusion is through the Matchmaker event, which creates opportunities for diverse suppliers. Completing its 17th year, the annual Matchmaker provides minority-owned, women-owned and veteran-owned businesses access to FCA US Tier 1 suppliers and to decision-makers within the FCA US procurement organization. The 2016 Matchmaker event attracted more than 3,000 participants, and more than 184 minority-owned, women-owned and veteran-owned suppliers participated.

The High Focus program, established in 2011, focuses on suppliers with greater potential for diverse spend and equips them with the tools and support to achieve their diversity targets. The diversity spend status of each supplier is monitored monthly and reviewed quarterly with them. Since the program's inception, 143 suppliers have improved their minority purchasing more than ten-fold (€1.17 billion).

Evidence of the Company's commitment toward supplier diversity is in the inclusion of both minority and women sourcing performance at the Tier 2 level as a metric on the suppliers' scorecards.

With a world-class supplier diversity and development program that spans 33 years, FCA US spent €5.6 billion with minority suppliers in 2016, representing 18% of its total annual domestic purchased value. Women-owned businesses, which are tracked separately, accounted for €2.2 billion of FCA US spending, representing 7% of its total annual domestic purchased value.

The Company continues to support several organizations that assist Tier 1 suppliers in achieving their minority-owned and women-owned sourcing goals. These organizations include the National Minority Supplier Development Council, the Canadian Aboriginal and Minority Supplier Council, the Women's Business Enterprise National Council, WBE Canada and WECONNECT International. In addition, we support veteran-business ownership through membership with the National Veteran-Owned Business Association and the National Veteran Business Development Council.

GRI: G4-DMA, G4-EC8, G4-EN32, G4-EN33, G4-HR4, G4-HR5, G4-HR6, G4-HR10, G4-HR11, G4-LA14, G4-LA15, G4-SO9, G4-SO10

SUPPLIER ENVIRONMENTAL PERFORMANCE

Fighting climate change requires the combined commitment of FCA and our suppliers. Through a variety of means, suppliers are screened to verify their concerted involvement in a wide array of environmental concerns. Optimizing their use of resources is essential; important steps include minimizing regulated emissions and greenhouse gases; properly managing waste treatment and disposal; and adopting logistics processes with minimized environmental impact. FCA encourages suppliers to implement an environmental management system aligned with international standards.

FCA specifies in all supply contracts its support of responsible procurement by requiring every material's adherence to environmental, health and safety requirements, including ingredients, formulas and handling procedures where relevant. These requirements are extended to our procurement practices through the use of tools such as the International Material Data System and Life Cycle Assessment.

As directed by globally regulated substance restrictions such as REACH (regulation on Registration, Evaluation, Authorization and Restriction of Chemicals), our suppliers are required to use chemicals whose contents meet our current standards for the management of substances of concern.

If a risk to the environment is identified, the Group conducts thorough on-site audits to examine the supplier's environmental management methods. These audits include a rigorous inspection of proper environmental management system documents and their mode of distribution in the work environment; accountability for ensuring compliance with the environmental management system; methods by which information or training programs are provided to employees; goals to improve environmental performance; and any environmental certifications held by the company. In order to prevent, mitigate or redress a negative impact encountered during inspection, a joint action plan is developed with the supplier.

Due to our belief that water scarcity could impact business continuity and that water conservation is essential, the Group continues to pursue opportunities to partner with our suppliers and local communities to establish sustainable water stewardship that supports access to clean water in water-stressed regions, such as certain areas in India.

Collaboration projects with suppliers

FCA recognizes the importance of collaboration for improving the environmental sustainability of supplier products and processes, and provides comprehensive support through a variety of initiatives. Some examples are provided below.

As our electrified vehicle portfolio continues to grow, FCA explores solutions for the life cycle management of lithium-ion batteries. In 2016, FCA partnered with a supplier to develop a program to reclaim and reuse these lithium-ion batteries. The Electric Vehicle Battery Recycling program is important due to the significant carbon footprint of these batteries. When batteries become available, FCA or a business partner notifies the supplier who retrieves and transports them for repurposing in other non-automotive applications such as personal mobility devices, including motorized wheelchairs. This remanufacturing initiative offers consumers of these goods a lower cost option for the replacement of their batteries in addition to being a zero waste-to-landfill solution. While still a new program, it is designed to grow as more batteries become available for reuse. In addition to reducing waste, this circular economy initiative is expected to represent a significant cost avoidance for FCA.

To raise awareness of suppliers' impacts on climate change issues, particularly on the reduction of their greenhouse gas emissions, 225 suppliers were invited to participate in the CDP supply chain program in 2016. This year, 164 suppliers disclosed (73% response rate), attaining an average score of C (on a scale from A to D-).

Approximately 87% of responding suppliers reported scope 1 and scope 2 emissions. This high response rate was due in part to dedicated supplier training webinars that FCA provided in cooperation with the CDP supply chain program to support this engagement and to convey the importance and benefits from transparently reporting on impacts.

By 2020, the Group expects to monitor 90-100% of top Group suppliers' CO_2 emissions (accounting for about 57% of annual purchases by value) through the CDP supply chain program. In 2016, suppliers disclosing accounted for approximately 37% of FCA annual purchases by value from direct and indirect material suppliers.

GRI: G4-DMA, G4-EN32, G4-EN33, G4-PR3

Suppliers are required to submit detailed information on the material content and substances used in production and service parts through an online platform (IMDS System) so substances can be traced back to the specific component. In this way, FCA can monitor, control, reduce, or eliminate regulated chemical substances which are restricted or prohibited in one or more markets. A global standard on managing Substances of Concern (SoC) was published during 2016 and is now available to every worldwide supplier, minimizing market-specific uncertainties.

The data feed into the IMDS system is managed by Group internal systems to improve data relevant to global material content reporting requirements and chemical substance prohibitions. The IMDS/SoC Compliance portal, which is accessed through the eSupplier Connect portal, allows suppliers and release engineers to utilize a centralized platform to view IMDS status and chemical substance prohibition lists, resulting in increased compliance knowledge and improved collaboration in developing globally compliant parts. Benefits of the portal include the following capabilities:

- IMDS requests and missing records
- FCA US LLC chemical substance prohibition list
- Part scope containing an SoC and required phase-out date
- Automated notifications regarding IMDS and SoC status

More than 93,000 material data sheets were completed in 2016 for FCA vehicles.

Related content

Life Cycle Assessment >

Materials and substances >

SUPPLIER HUMAN RIGHTS AND LABOR PRACTICES

FCA suppliers must adhere to sustainability standards related to international human rights and labor laws.

Suppliers at every tier of the supply chain carry a large part of this management responsibility; nevertheless, FCA is aware of the role that it can play in preventing human rights violations and promoting sound working conditions. FCA's approach over the years has been built on systematic assessments and competency-building initiatives.

Self-assessment questionnaires are used to monitor the suppliers' management systems with respect to basic human rights, health and safety in the workplace and fair working conditions. Suppliers are also expected to establish an occupational management system to systematically assess occupational health and safety risks, to measure performance through key indicators; and to extend their health and safety policies to their contractors.

Finally, FCA expects suppliers to take appropriate steps in preventing child labor and forced or compulsory labor, as well as recognizing the right to freedom of association and collective bargaining.

In a supply chain as complex as that of the automotive industry, maintaining integrity and respect for resources involved is a segment of risk management beyond the direct control of FCA. For this reason, engaging in industry and cross-sector collaboration on supply chain concerns such as conflict minerals and other extractives helps lessen the risks that could be associated with those issues.

Conflict Minerals

Many geopolitical experts believe that conflicts may increasingly arise over access to raw materials. For this reason, FCA places a high priority on responsible sourcing and the integrity of its suppliers. The Group monitors events very closely in countries considered politically or economically unstable for potential disruptions in the supply chain that could compromise the ethical availability of essential raw materials that are difficult to replace.

FCA promotes socially responsible sourcing by making reasonable effort to trace the source of conflict minerals contained in our products.

GRI: G4-DMA, G4-LA14, G4-LA15, G4-HR4, G4-HR5, G4-HR6, G4-HR10, G4-HR11

The complex global challenge of managing multiple layers of suppliers is a driving force in working with peers to address ethical and social sourcing risks. In collaboration with the Automotive Industry Action Group (AIAG), FCA has developed strategies addressing Section 1502 of the Dodd-Frank Act, as well as subsequent rules promulgated by the U.S. Securities and Exchange Commission (SEC), regarding conflict minerals. The rule requires companies to determine whether tin, tantalum, tungsten, or gold (3TG) in their supply chain originated from the Democratic Republic of the Congo (DRC) or surrounding countries, and if the sale of those minerals supported the armed conflict in the DRC.

In addition, FCA has supported AIAG in creating a common automotive process to obtain conflict minerals reporting information through the iPoint Conflict Minerals Platform (iPCMP), a web-based data management tool based on the Conflict Minerals Reporting Template.

FCA reviews the information and works with suppliers to ensure the fulfillment of due diligence obligations under the SEC conflict minerals rule. While in the past FCA US has filed annual conflict minerals reports to the SEC, FCA NV is preparing to file a conflict minerals report for the first time with the SEC for the 2016 year in May of 2017.

To prepare suppliers for the possible implementation of European Union (EU) law on conflict minerals, FCA provided training in the U.S. and Europe regarding conflict minerals and ethical sourcing. In addition to developing training materials for deployment to suppliers, FCA US provided training sessions during Supplier Training Week in May and October of 2016.

FCA is also working closely with the Conflict-Free Sourcing Initiative (CFSI) and the Conflict Free Smelter Program (CFSP). The CFSP audits smelters around the world to designate whether they are conflict free. To date, more than 246 smelters have been audited as conflict-free, and the CFSP is increasing its auditing efforts. We provide significant resources to support the CFSP and will continue to do so in the future.

Since supply chain management is an essential part of responsible sourcing, FCA provides suppliers with the necessary support to understand and comply with regulations on conflict minerals, including guidance for using the appropriate tools to trace their origins. A working group was formed to ensure close collaboration between the FCA companies, with each designating a conflict minerals representative for their respective region or company. This working group includes support from the Purchasing, Legal and Global Materials Labs organizations.

Raw Material Sourcing

The responsible procurement of raw materials for our vehicles is extremely important. Although the source of any raw material may be several tiers removed in the supply chain, we recognize its place in our sourcing process. Through engagement with several multi-stakeholder organizations, both within and outside the automotive industry, FCA addresses not only the needs, but the opportunities that exist through ethical and conscientious procurement practices.

Raw materials are crucial to worldwide economies and some of them, such as rare earth elements (REE) and noble metals, are essential for innovative energy saving technologies. To address this challenge in 2010, the European Commission created a list of Critical Raw Materials (CRMs), defined as those representing both a high economic importance and a risk of supply chain disruption. The CRM List was revised in 2014, and a new revision is expected in 2017. FCA is aware of CRM relevance, and constantly monitors their use on current products and innovative applications.

The objective is to develop alternative solutions, either through substitution or recycling, and identify opportunities for recycling or reuse through collaboration with other industries. FCA's Global Materials Labs personnel are actively involved in the EU's Horizon 2020 research and innovation program as experts in support of the search for viable solutions in this area.

Related content

Human Rights >

Design for the Circular Economy >

GRI: G4-DMA, G4-LA14, G4-LA15, G4-HR4, G4-HR5, G4-HR6, G4-HR10, G4-HR11

ONGOING DIALOGUE WITH SUPPLIERS

Continuous dialogue is encouraged with suppliers at all levels of management, both for FCA and the suppliers. This includes forums such as the Global and Regional Supplier Advisory Councils (SAC). The SAC meets quarterly, and involves 40-50 supplier executives that provide feedback on strategic topics. FCA also uses a dedicated supplier internet portal, eSupplier Connect, to share information on technical requirements, supply planning, supplier quality and the results of compliance tests conducted on new components. Suppliers use this portal to communicate with the Company, enter contract bid details and specify the origin of components. eSupplier Connect also includes a section dedicated to supply chain sustainability, including best practice articles highlighting supplier initiatives that provide inspiration to companies with less experience in implementing sustainability programs.

As in previous years, initiatives for the exchange of ideas and information continued, including local conferences (29 in 2016) and Technology Days (33 events in 2016), attracting an average of approximately 1,000 participants worldwide. At these events, leading suppliers in terms of innovation, technology, and quality addressed specific topics and shared some of their latest technological developments. In the NAFTA region, regular Supplier Town Hall meetings, attended by an average of 500 suppliers either in person or worldwide via webcast, continue to be a major enabler of two-way communication.

FCA also encourages dialogue with and within the supply base by working closely with many industry and supplier organizations. One such group is the Automotive Industry Action Group (AIAG), which the Company helped found in 1982. AIAG is a cooperative forum for the auto industry focused on improving business processes and practices involving trading partners and peers throughout the supply chain. In addition to a leadership role on the Board of Directors with co-leadership within the Corporate Responsibility Steering Committee, FCA employees are engaged in a number of other AIAG teams that partner OEMs and suppliers. Many of the initiatives promoted by AIAG focus on sustainability issues connected to the supply chain and on streamlining tools and metrics across the industry.

Every year, FCA seeks to improve and expand training opportunities for suppliers. Our supply base is a critical element of FCA's activities and it is imperative that timely training is developed and deployed to our suppliers worldwide. Training initiatives for suppliers increased during 2016 across the EMEA region, in China and in Mexico. Specific training for indirect suppliers was also developed to address the needs of this specialized segment of the FCA supply chain.

Within eSupplier Connect, the supplier Learning Center provides improved learning opportunities and other resources. As the supply base continues to expand globally, it is necessary to effectively manage training information to enable development, delivery and use of this material.

Additional in-depth training on responsible working conditions is offered to suppliers in partnership with AIAG. This training is developed and updated collaboratively with other automakers and is designed to help protect the rights and dignity of the workers who make vehicle components. In 2016, full-day, interactive training sessions were conducted in Mexico. The classes, which were funded by the OEMs, covered human rights, environmental concerns, health and safety and ethics. The classes reached approximately 156 supplier companies, with the additional requirement that all attending suppliers cascade the material to their next-tier suppliers, expanding the reach even further. Over 2,200 participants took the web-based training, which is available in eight languages to provide a high-level version of the same concepts covered in the live training. FCA is also committed to promoting entrepreneurial growth by providing entrepreneurs the practical capacity-building training they need, which enables subject matter experts to achieve a higher level of sustainability knowledge. With this aim, an on-site basic sustainability training course was delivered in 2016 at FCA's EMEA headquarters to 38 select suppliers during the Supplier Training Week. FCA US hosts Supplier Training Week twice a year, covering numerous subjects from Purchasing, Quality, Supply Chain Management, Manufacturing, Finance, and Engineering. The agenda also includes specific classes on sustainability-related topics such as responsible working conditions, environmental impact and ethics. In 2016, nearly 500 suppliers attended training classes focused around supply chain sustainability. Similarly, we benefit from the experience and expertise of our suppliers through benchmarking and best practice-sharing.

The FCA Supplier Sustainability Panel addresses existing and emerging sustainability issues, and is comprised of a cross section of the supplier base with

GRI: G4-DMA, G4-EC8, G4-EN34, G4-LA16, G4-HR12, G4-SO11

participants from companies of different sizes, footprints and commodities. Topics addressed include ways in which FCA and its suppliers can work together on sustainability initiatives, gap assessment and resolution, benchmarking site visits, and training and communication throughout the supply chain.

In 2016, FCA teamed up with supplier BASF to extend and strengthen the message of responsible sourcing throughout our supply chain. An immersive workshop brought sourcing decision-makers from throughout the supply chain together to recognize and address issues that hinder sustainable purchasing. The event included not only procurement professionals from FCA and Tier 1 suppliers, but the suppliers selected and invited their suppliers (Tier 2+ to FCA) to foster continuity in messaging and a ground-level perspective not often available to auto manufacturers. Participants identified four distinct workstreams that are now being addressed by participants, with the goal of not only resolving these issues for themselves, but deploying solutions across the extended supply chain, either through broad communication, training sessions or peer-to-peer mentoring. This event was a pilot, which will be expanded in each of FCA's other regions.

Another aspect of supplier engagement focuses on fostering innovation to improve products, processes and content, often leading to sustainable solutions such as the use of recycled raw materials or weight reduction. The Technical Cost Reduction (TCR) SUPER (SUpplier Product Enhancement Reward) Program encourages a proactive approach with suppliers whereby economic benefits are shared when innovative manufacturing technologies and leaner component designs are implemented. All supplier-initiated ideas are incorporated into the SUPER program. For example, roughly 280 ideas were implemented by suppliers across the four regions, resulting in shared economic benefits of approximately €12 million.

Dedicated email addresses enable suppliers to request information (sustainability_supplychain@fcagroup.com) or report situations of noncompliance in the supply chain (bpo@fcagroup.com). Additional FCA channels are also in place to report a violation or suspected violation.

Related content

Acting with Integrity >

Supplier WCM

For 2016, FCA Purchasing, with the support of the World Class Manufacturing Academy, has continued providing WCM methodology and applied tools to its suppliers. Support has included plant floor assessments for new launch suppliers and focused improvement activities for current production suppliers. To maximize the effectiveness of the program, suppliers and commodities are prioritized based on importance from the customer's point of view, the purchasing strategy, and the supplier's current performance. Furthermore, the program is tailored to offer suppliers a wider range of scenarios: Light (Basic Training), Intermediate (Advanced Training), Award, and Focused Problem Programs.

FCA Purchasing is taking a more global approach to expand the World Class Supplier Program by offering a range of engagements from basic to advanced WCM support levels.

Related content

Production >

Supplier Awards

In 2016, FCA again honored outstanding suppliers during the Supplier Qualitas Award ceremonies held in each of the four regions. Several suppliers were recognized for their extraordinary commitment to innovation, quality, continuous improvement and the FCA Purchasing organization's Foundational Principles.

A distinct category recognizes companies for their commitment to sustainability. The top winners in 2016 were Metalsa, S.A. de C.V. for the NAFTA region and 3M for the EMEA region. These companies were honored for the breadth and depth of their related initiatives and programs.

GRI: G4-DMA, G4-EC8, G4-EN34, G4-LA16, G4-HR12, G4-SO11

LOGISTICS

As a global company, FCA endeavors to move millions of automotive parts, materials and finished vehicles responsibly. This effort calls for rethinking traditional methods and introducing new, effective and efficient ways.

Together with our suppliers and logistics partners, processes are continuously being improved by re-engineering material flows and packaging, and applying just-in-time methodology. Immediate benefits are the reduction of stock and material handling and the delivery of only what is needed, where it is needed, at the right time.

FCA Global Supply Chain Management acts as a bridge between Group plants, the supplier network and dealers, managing transports among all parties involved. The logistics operations are handled by a variety of internal and external operators, depending on the origin and destination of the goods. The Company has adopted Green Logistics Principles that provide direction on how to optimize fleet characteristics and apply methodologies to reduce the impact of freight and vehicle movement.

FCA monitors logistics performance to detect areas of improvement and actions needed, and communicates transparently its environmental and social impacts to stakeholders. In 2016, the scope of this monitoring was further expanded to include additional flows to and from South and North American countries. The increase in reporting scope enabled a more thorough analysis, both from the regional and global perspectives. Due to changes in the boundary and refinement in the methodology, 2016 data is not directly comparable to previous years.

The Company's logistics approach focuses on:

- the optimization of logistics flows and the adoption of low-emission transport vehicles to improve performance and minimize impacts on the environment
- the implementation of emerging solutions and technologies to protect parts and decrease the use of packaging and protective materials to save resources.

Among the best practices adopted, World Class Logistics (WCL) is the program used to define logistics processes at plants and Parts Distribution Centers (PDCs). Through its extensive approach, WCL helps to meet safety, ergonomics and eco-compatibility requirements as well as transport flow optimization.

FCA has implemented a number of solutions that contribute to reducing the environmental impact of its production and distribution process. These include the utilization of low-emission natural gas trucks in the FCA-owned fleets. This project allowed an annual reduction of more than 4,150 tons of CO_2 emissions for operations in the US and Canada.

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TRANSPORT ROUTES AND MODES

Redesigning flows, both in terms of frequency and length, is one of the main enablers to improving efficiencies in the supply chain and limiting distances traveled to move vehicles and parts. As a result, emissions, time and in-transit inventory are all reduced.

In the NAFTA region, initiatives such as optimizing ship frequency and sourcing from locations closer to FCA's plants resulted in avoiding 9.8 million km and nearly 9,500 tons of CO_2 annualized for 2016. In addition, over 3,000 tons of CO_2 were avoided by cutting 3.1 million km traveled by road in North America through daily monitoring activities of routes to FCA Integrated Logistics Centers.

In 2016, the start of production of a new vehicle in the Betim plant (Brazil) provided the opportunity to redesign upstream flows for the delivery of vehicle components. During the year, the share of transports managed by FCA increased from 43% to more than 60%, with the remainder controlled by parts suppliers. This change in responsibilities allowed FCA Supply Chain Management to improve the processes in terms of flows, transport capacity and frequency, thus reducing the number of trucks needed. As part of the project, the cross-docking facility was moved closer to the supplier network, allowing a reduction in the overall distances covered in the goods collection routes. These improvements helped avoid around 4 million km and 3,400 tons of CO_2 emissions.

In 2016, Magneti Marelli introduced a daily shuttle to optimize intercompany flows between several plants in Spain and Italy. In addition, dedicated milk run projects allowed the optimization of parts consolidation from a number of suppliers located in Eastern Europe. These projects allowed Magneti Marelli to avoid 127 tons of CO_2 emissions.

Relocating or establishing new distribution and consolidation centers is one of the most efficient ways to optimize flows, reducing distances between points of origin and destination. The implementation of a new distribution center near São Paulo (Brazil) for imported cars to be delivered to the southern Brazilian states requires less travel than those previously shipped to the consolidation center in the north. This project saves time, accelerating the delivery to dealers and customers, and reduced emissions in 2016 by more than 175 tons of CO_2. The same approach led to the launch of a new export consolidation center in North America to collect parts from local suppliers before delivery to other countries by ship. This project allowed an annualized reduction of over 1.1 million km, avoiding approximately 1,200 tons of CO_2 emissions.

Direct shipment can also be used to redefine deliveries, again reducing emissions, time and inventory. By avoiding routes that include logistics service provider warehouses, direct deliveries from some European suppliers to a number of FCA plants worldwide led to CO_2 avoidance of approximately 930 tons in 2016. International routes were also optimized to reduce miles by shipping parts directly from FCA plants in Italy to plants in the U.S. and Mexico, avoiding approximately 250 tons of CO_2 emissions annualized.

The Group also explores alternative solutions to road transport for both material and vehicle distribution by using a variety of options such as rail and ocean, especially for long distance shipments. FCA continues to evaluate its network for potential new rail and sea routes on an ongoing basis. However, depending on plant and dealer locations, as well as existing infrastructure, movements may require a significant percentage of road transport.

Efforts continued in 2016 to implement new, or extend existing, intermodal solutions, those made using a combination of different modes of transportation.

Innovation is essential in optimizing the routes and modes used to deliver finished vehicles. In one example, the efficiency of shipping via new multi-modal routes combining truck and short-sea routing to four different U.S. ports rather than relying entirely on road transport reduced CO_2 emissions by 57% and eliminated 21,600 tons of CO_2.

Intermodal solutions where rail transportation for vehicle distribution replaced road transport in Europe led to savings from both the economic and environmental perspective. Approximately 2,150 tons of CO_2 emissions were avoided in 2016. An additional 2,500 tons of CO_2 emissions were avoided during the year by adopting sea transportation for upstream delivery to Group plants in Italy instead of moving goods via road.

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LOW-EMISSION TRANSPORT

FCA's focus on reducing its environmental impact also involves the adoption of low emission vehicles for transports.

FCA Transport is the NAFTA region's Group-owned trucking fleet composed of 276 tractors and nearly 1,300 trailers servicing plants in Michigan and Ohio (U.S.), and Ontario (Canada). Launched in 2015, its CNG fleet of 179 tractors operates on Compressed Natural Gas rather than traditional diesel fuel. This transition reflects the balance of profitability, social responsibility and environmental stewardship. The fleet conversion provided a solid business case, clear environmental benefits and an opportunity to invest in the FCA Transport facility and workforce.

In 2016, the first full year for utilizing the new fleet, carbon emissions were reduced by approximately 15.4% compared with diesel at the Detroit terminal CNG fleet, the first tractors in the fleet to adopt this solution.

For its adoption of low-emission policies and technology, FCA Transport was recognized as one of the "Heavy Duty Trucking's Top 50 Green Fleets 2016." In addition, the Natural Gas Vehicles of America honored FCA Transport with the "2016 Achievement Award" for creating the largest private fleet of CNG-powered heavy duty vehicles in the state of Michigan (U.S.).

This is not the only application where FCA employs methane-powered trucks for transport. A recent contract signed by i-FAST Automotive Logistics, an FCA company, involves the supply of 10 finished vehicle trucks powered by Liquefied Natural Gas (LNG). i-FAST Automotive Logistics is a leader in Italy and Europe in the sector of multiple-vehicle road transport and has a large modern car transporter fleet, 96% of which complies with Euro V or Euro VI standards.

The company will continue with a further transition over time of the existing fleet to LNG, where applicable, and Euro VI trucks.

i-FAST Automotive Logistics tested the LNG technology in 2016, covering over 8,000 km on various routes and conditions. Based on the positive results, i-FAST Automotive Logistics is expected to become the first company to offer this kind of sustainable, low environmental impact transport for the movement of finished vehicles in Europe.

FCA also promotes lower impact solutions among external fleet providers through contractual clauses and partnerships. FCA contractual clauses require that at least 50% of supplier fleets operating in the EMEA region consist of vehicles compliant with Euro V or stricter standards. They further specify that access to European plants is prohibited for trucks with emissions levels that do not meet the Euro III standard. The same specifications were added during 2016 to 62% of contracts for upstream road transports to Brazilian plants and will be expanded in 2017.

In the NAFTA region, FCA participates in partnerships to foster eco-friendly logistics. The Company partners with SmartWay, a collaboration between the U.S. Environmental Protection Agency and the freight industry designed to help companies reduce the carbon footprint of their transport operations.

In 2016, FCA was recognized by SEMARNAT, the Mexican Environment ministry, for its excellent results on Transporte Limpio, a similar program in Mexico.

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TRANSPORT CAPACITY

Optimization of transport capacity is another way the Group reduces the environmental impact of logistics operations while simultaneously containing shipping costs.

For finished vehicles, a smart-loading method is used to increase the number of units on rail cars by combining vehicles of various dimensions to fully utilize rail capacity. This process of optimizing the loads reduces the number of rail cars necessary, increasing efficiency and reducing costs as well as carbon emissions. In 2016, optimizing the rail loading process at several plants in North America reduced the total amount of rail car CO_2 emissions by 2,400 tons.

In the EMEA region, projects to increase material transportation capacity through revised frequencies and loading mixes led

to savings of approximately 500 tons of CO_2, while through increased density within standard packaging an additional 300 tons of emissions were avoided.

An additional tool used by FCA to improve transport capacity is the design process to increase the density of special racks for specific parts. For example, the average part density per rack for a new model launched in 2016 and produced in the EMEA region was improved by over 15% compared with a similar model in the previous year. The same experience, applied to another model in the startup phase during 2016, resulted in 1,000 tons of CO_2 emissions avoided.

In 2016, FCA started to use higher capacity tandem trailers for it operations in Brazil, replacing smaller trucks and reducing distances traveled. The increased-capacity trucks achieved a reduction of 1.8 million km traveled, avoiding more than 1,500 tons of CO_2 emissions while contributing to a reduction in costs.

PACKAGING AND PROTECTIVE MATERIALS

FCA strives to reduce packaging and protective material consumption and increase reusable containers, while meeting quality requirements. Where reusable containers are not the optimal solution, the Group ensures that recovery processes are applied.

In 2016, expendable cardboard boxes continued to be replaced with returnable plastic totes in a variety of routes. Adopting this solution for parts shipped from South Korean Mopar distribution centers helped reduce both costs and the consumption of cardboard by 17 tons during the year. In addition, 73 tons of cardboard and 44 tons of wood were saved on Magneti Marelli routes to deliver components to the Cassino Plant in Italy.

In the NAFTA region, the amount of cardboard arriving at assembly plants in 2016 was reduced to 6.8 kg per vehicle produced as a result of improvements in container fleet management. Recent investments in the returnable container fleet allows greater flexibility in scheduling and decreased demand for expendable packaging.

Increasing container density continues to be an area of focus that reduces cost, handling, cardboard waste and carbon. Density improvements on several international shipments have resulted in a combined CO_2 reduction of 96 tons, eliminating 500 m^3 of cardboard, annualized.

These improvements also provide better protection for the parts, improving quality and reducing the risk of damage.

FCA Material Logistics Management staff continued container audits, resulting in the recovery and proper allocation of more than 82,000 returnable containers from 435 supplier locations. These reclaimed assets further reduced the need for expendable cardboard packaging.

In the NAFTA region, FCA optimizes the management of returnable containers through a Regional Container Pool Center for upstream freight. This process efficiently directs containers where needed, resulting in a reduction in transportation costs, travel time for containers, handling costs, and possible double handling. In 2016, the Regional Container Pooling Initiative avoided approximately 2,250 tons of CO_2 emissions.

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MOPAR DISTRIBUTION CENTERS

World Class Logistics (WCL) helps to significantly reduce the environmental footprint of logistics activities at Mopar Parts Distribution Centers (PDCs), eliminating waste while exhibiting a productive and efficient high-volume flow of goods and materials.

The EMEA Central Parts Distribution Centers in None and Volvera (Italy) achieved the World Class Logistics Bronze Level in 2015, and are working toward Silver Level certification. In 2016, they achieved ISO 14001 certification and installed an advanced biological wastewater treatment system at the None plant. This solution applies the circular economy concept by using plastic bottle caps as carriers for bacterial bio-film to purify wastewater.

All Mopar Parts Distribution Centers located in the U.S., Canada and Mexico are ISO14001 certified, with five of these sending zero process waste to landfill.

Environmental performance of the Group Parts Distribution Centers is monitored on a monthly basis. Results are communicated and shared among employees to increase their level of awareness and encourage direct involvement in initiatives aimed at improving sustainability performance.

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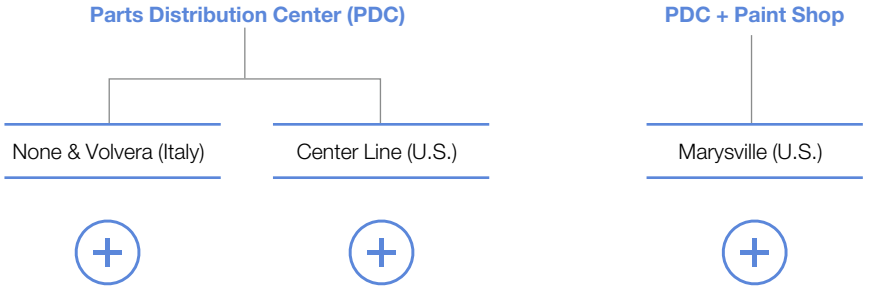
Enviromental Results for Global Source Warehouses that have implemented WCL (2016 vs 2011)



(13) CO_2 emissions normalized by labor hours as it directly relates to natural gas consumption in the Paint Shop operation. All other numbers represent actual usage.

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FACTS & FIGURES

EMPLOYEES

Employees in Numbers

Gender Distribution by Geographic Area
FCA worldwide

	2016			2015			2014		
	Workforce by Geographic Area (no.)	% Men	% Women	Workforce by Geographic Area (no.)	% Men	% Women	Workforce by Geographic Area (no.)	% Men	% Women
Europe	87,743	77.8	22.2	88,903	77.9	22.1	85,274	77.9	22.1
North America	94,450	76.1	23.9	90,164	76.2	23.8	85,483	76.2	23.8
Latin America	40,331	88.9	11.1	44,199	89.7	10.3	47,232	90.2	9.8
Asia	8,331	72.7	27.3	8,185	72.5	27.5	7,668	71.6	28.4
Rest of world	164	70.1	29.9	172	69.8	30.2	175	70.3	29.7
Total	**231,019**	**78.8**	**21.2**	**231,623**	**79.3**	**20.7**	**225,832**	**79.6**	**20.4**

Gender Distribution by Category
FCA worldwide

	2016			2015			2014		
	Workforce by Category (no.)	% Men	% Women	Workforce by Geographic Area (no.)	% Men	% Women	Workforce by Geographic Area (no.)	% Men	% Women
Manager	2,356	85.9	14.1	2,401	86.5	13.5	2,348	86.4	13.6
Professional	35,188	80.5	19.5	34,020	80.8	19.2	32,874	81.4	18.6
Salaried	33,630	71.7	28.3	33,755	71.4	28.6	33,082	71.2	28.8
Hourly	159,845	79.9	20.1	161,447	80.5	19.5	157,528	80.9	19.1
Total	**231,019**	**78.8**	**21.2**	**231,623**	**79.3**	**20.7**	**225,832**	**79.6**	**20.4**

Employees by Geographic Area and Category
FCA worldwide (no.)

	2016					2015					2014				
	Total	Hourly	Salaried	Professional	Manager	Total	Hourly	Salaried	Professional	Manager	Total	Hourly	Salaried	Professional	Manager
Europe	87,743	55,106	14,259	17,310	1,068	88,903	56,588	14,465	16,753	1,097	85,274	54,088	13,957	16,162	1,067
North America	94,450	70,856	10,275	12,221	1,098	90,164	67,719	9,595	11,732	1,118	85,483	63,540	9,335	11,502	1,106
Latin America	40,331	31,081	5,541	3,556	153	44,199	34,574	5,966	3,513	146	47,232	37,258	6,352	3,480	142
Asia	8,331	2,798	3,524	1,972	37	8,185	2,562	3,704	1,880	39	7,668	2,636	3,412	1,588	32
Rest of world	164	4	31	129	-	172	4	25	142	1	175	6	26	142	1
Total	**231,019**	**159,845**	**33,630**	**35,188**	**2,356**	**231,623**	**161,447**	**33,755**	**34,020**	**2,401**	**225,832**	**157,528**	**33,082**	**32,874**	**2,348**

Gender Distribution by Operating Segment
FCA worldwide

	2016			2015			2014		
	Workforce by Operating Segment (no.)	% Men	% Women	Workforce by Operating Segment (no.)	% Men	% Women	Workforce by Operating Segment (no.)	% Men	% Women
Mass-Market Brands	163,873	80.8	19.2	162,492	80.9	19.1	158,522	81.1	18.9
Luxury and performance vehicles	1,585	80.0	20.0	1,506	79.9	20.1	1,267	80.2	19.8
Components and production systems	57,645	76.6	23.4	59,376	78.4	21.6	57,813	79.2	20.8
Others[1]	7,916	54.5	45.5	8,249	54.0	46.0	8,230	53.5	46.5
Total	**231,019**	**78.8**	**21.2**	**231,623**	**79.3**	**20.7**	**225,832**	**79.6**	**20.4**

[1] Others includes companies operating in publishing, communications and services, and other companies.

GRI: G4-9, G4-10, G4-LA12

EMPLOYEES

Employees in Numbers

Employees by Country
FCA worldwide (%)

	2016	2015	2014
USA	26.8	26.3	26.3
Italy	26.5	26.6	25.9
Brazil	15.7	16.9	18.3
Mexico	8.6	7.5	6.6
Canada	5.5	5.2	5.0
Poland	4.0	4.0	4.0
China	2.4	2.3	2.3
Argentina	1.4	1.8	2.2
Germany	1.2	1.2	1.2
Serbia	1.1	1.6	1.7
France	0.9	0.9	1.0
Spain	0.7	0.8	0.7
Venezuela	0.4	0.4	0.4
Other countries	4.7	4.6	4.4
Total (no.)	**231,019**	**231,623**	**225,832**

Nationality of Managers
FCA worldwide

	2016	
	Managers (no.)	% of Total Managers
American	936	39.7
Italian	922	39.1
Brazilian	126	5.3
Canadian	73	3.1
Mexican	63	2.7
French	56	2.4
German	40	1.7
Chinese	19	0.8
Polish	19	0.8
Others	102	4.3
Total	**2,356**	**100.0**

Managers of Local Nationality by Geographic Area
FCA worldwide (%)[2]

	2016
Europe	91.1
North America	92.5
Latin America	90.8
Asia	64.9
Rest of world	-

Workforce by Principal Ethnic Origin
FCA in North America (%)

	2016
Caucasian	47.1
Hispanic	23.0
African American	19.3
American Indian	0.2
Other	10.4

Workforce by Minority Group
FCA in North America (%)

	2016
Employees belonging to a nationality minority group (no.)[3]	4,090
of which men (%)	75.8
of which women (%)	24.2
over total workforce (%)	1.8

[2] La Stampa managers not included in the calculation.
[3] Minority group reported in the table consists of employees with nationality different from country of work.

EMPLOYEES

Workforce Gender Distribution by Contract and Employment Type

FCA worldwide

2016	Unlimited-term		Fixed-term	
	% Men	% Women	% Men	% Women
Total	**79.3**	**20.7**	**69.9**	**30.1**

	Unlimited-term				Fixed-term			
	Part-time		Full-time		Part-time		Full-time	
	% Men	% Women	% Men	% Women	% Men	% Women	% Men	% Women
Europe	12.0	88.8	79.2	20.8	33.3	66.7	63.7	36.3
North America	9.9	90.1	76.5	23.5	55.1	44.9	96.7	3.3
Latin America	100.0	-	89.0	11.0	-	-	74.7	25.3
Asia	-	-	73.0	27.0	-	100.0	54.4	45.6
Rest of world	-	-	70.1	29.9	-	-	-	-

EMPLOYEES

Gender Distribution by Length of Service
FCA worldwide

	2016			2015			2014		
	Workforce by Length of Service (no.)	% Men	% Women	Workforce by Length of Service (no.)	% Men	% Women	Workforce by Length of Service (no.)	% Men	% Women
Up to 5 years	98,525	75.5	24.5	103,321	75.7	24.3	93,928	76.3	23.7
6 to 10 years	33,858	78.6	21.4	28,849	81.6	18.4	29,548	82.0	18.0
11 to 20 years	43,025	81.3	18.7	47,712	81.4	18.6	54,254	81.1	18.9
21 to 30 years	44,787	83.9	16.1	40,956	84.3	15.7	35,950	85.6	14.4
Over 30 years	10,824	79.7	20.3	10,785	78.3	21.7	12,152	75.6	24.4
Total	**231,019**	**78.8**	**21.2**	**231,623**	**79.3**	**20.7**	**225,832**	**79.6**	**20.4**

Gender Distribution by Age
FCA worldwide

	2016			2015			2014		
	Workforce by Age (no.)	% Men	% Women	Workforce by Age (no.)	% Men	% Women	Workforce by Age (no.)	% Men	% Women
Up to 30 years	50,387	77.2	22.8	51,413	77.9	22.1	50,136	78.1	21.9
31 to 40 years	59,421	77.8	22.2	60,707	78.5	21.5	58,499	79.1	20.9
41 to 50 years	65,295	79.2	20.8	66,770	79.9	20.1	64,300	80.5	19.5
Over 50 years	55,916	80.9	19.1	52,733	80.8	19.2	52,897	80.6	19.4
Total	**231,019**	**78.8**	**21.2**	**231,623**	**79.3**	**20.7**	**225,832**	**79.6**	**20.4**

Gender Distribution by Level of Education
FCA worldwide

	2016			2015			2014		
	Workforce by Education (no.)	% Men	% Women	Workforce by Education (no.)	% Men	% Women	Workforce by Education (no.)	% Men	% Women
University degree or equivalent[4]	60,960	75.0	25.0	57,364	75.3	24.7	48,965	75.5	24.5
High school	110,154	79.9	20.1	112,224	80.7	19.3	92,961	80.8	19.2
Elementary/middle school	52,668	82.1	17.9	47,426	79.7	20.3	35,220	87.5	12.5
Not tracked	7,237	71.4	28.6	14,609	82.0	18.0	48,686	75.8	24.2
Total	**231,019**	**78.8**	**21.2**	**231,623**	**79.3**	**20.7**	**225,832**	**79.6**	**20.4**

[4] Calculation subject to approximation resulting from the comparison of academic qualifications among different countries.

EMPLOYEES

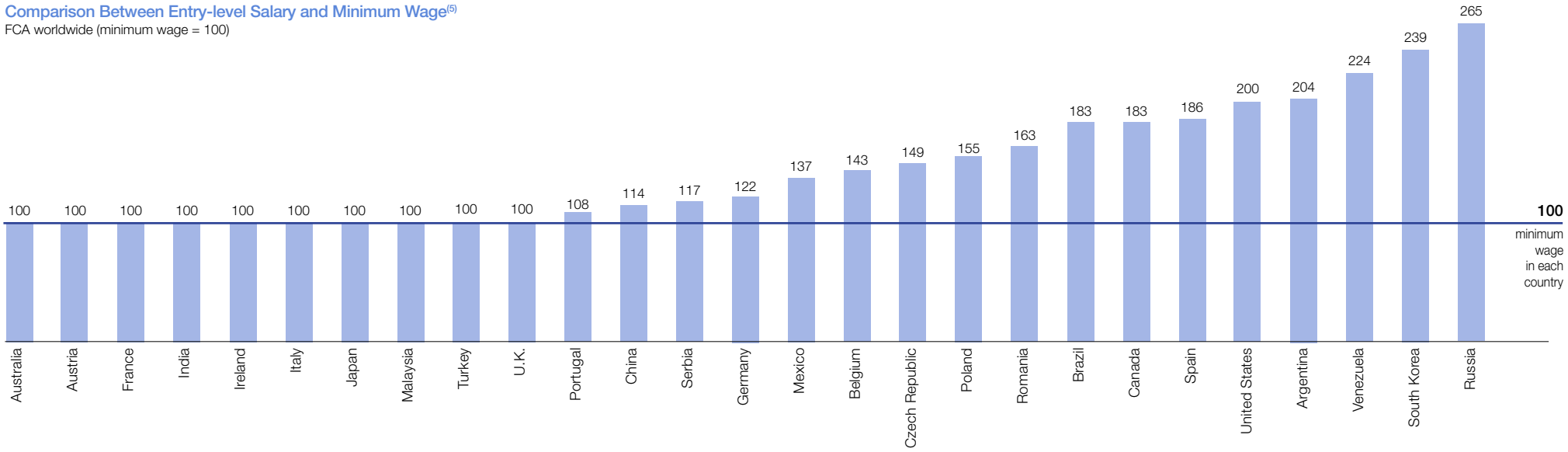
Women by Geographic Area
FCA worldwide (%)

	2016	2015	2014
Europe	22.2	22.1	22.1
North America	23.9	23.8	23.8
Latin America	11.1	10.3	9.8
Asia	27.3	27.5	28.4
Rest of world	29.9	30.2	29.7
Total	**21.2**	**20.7**	**20.4**

Employees by Contract and Employment Type
FCA worldwide (no.)

	2016				
		Unlimited-term		Fixed-term	
	Total	Full-time	Part-time	Full-time	Part-time
Europe	87,743	83,718	1,171	2,845	9
North America	94,450	86,727	71	3,173	4,479
Latin America	40,331	39,990	1	340	-
Asia	8,331	8,170	-	160	1
Rest of world	164	164	-	-	-
Total	**231,019**	**218,769**	**1,243**	**6,518**	**4,489**

Comparison Between Entry-level Salary and Minimum Wage[5]
FCA worldwide (minimum wage = 100)



[5] *In accordance with the GRI-G4 Guidelines, entry-level salary is defined as the minimum compensation paid to a full-time employee hired at the lowest pay scale/employee grade on the basis of company policy or agreements between the company and trade unions. For each country, results are based on the company with the lowest ratio of entry-level salary to minimum wage, unless the number of employees of the company with the lowest ratio represented less than 10% of that country's total headcount. Figures reported are as of October 31, 2016. The survey of 27 countries covered about 99% of the Group's total workforce. Workplace equality within the Group is also seen in the comparison between minimum entry-level wages by gender. Considering the countries included in the survey sample, minimum wage levels were found to be identical between men and women.*

GRI: G4-DMA, G4-9, G4-10, G4-EC5, G4-LA12

EMPLOYEES

Return to Work After Parental Leave
FCA worldwide (%)

	Male	Female
Employees that took parental leave among the workforce in 2016	2.1	4.9
Employees that took parental leave in 2015 and are still employed	65.0	82.0
Employees that took parental leave in 2014 and are still employed	72.0	72.0

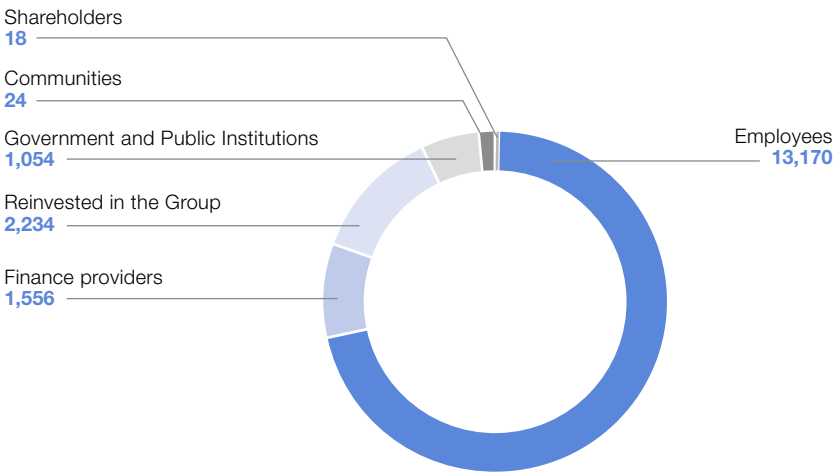
Direct Economic Value and Value Added Generated

The value added through the activities of FCA and distributed to its various stakeholders in 2016 totaled €18,056 million (about 16% of revenues).

Direct Economic Value and Value Added Generated
FCA worldwide (€ million)

	2016
Consolidated 2016 revenues	111,018
Income of financial services companies	(142)
Government grants (current and deferred/capitalized), release of provisions, other income	937
Other income	420
Direct economic value generated	**112,233**
Cost of materials	(84,139)
Depreciation and amortization	(5,956)
Other expense	(4,082)
Value added	**18,056**

Breakdown of Value Added
FCA worldwide (€ million)



GRI: G4-EC1, G4-LA3

EMPLOYEES

Employee Training

Training Expenditures
FCA worldwide

	2016	2015	2014
Spending on training (€ million)	64.9	59.0	64.0
% of personnel costs	0.5	0.5	0.7

Employees Involved in Training by Gender
FCA worldwide

	Number	Hours	Average Number of Training Hours[6]
Men	125,837	2,604,872	14.3
Women	34,287	606,991	12.4
Total	**160,124**	**3,211,863**	**13.9**

Employees Involved in Training by Category
FCA worldwide

	% of Employees	Average Number of Training Hours[6]
Hourly	53.6	10.6
Professional & Salaried	44.8	21.5
Manager	1.6	16.1

Training on Corporate Campaigns[7]
FCA worldwide

	2016	2015	2014
Participants involved (no.)	146,052	111,100	104,704
of which managers (%)	4.2	2.7	3.7

Environmental Training
FCA worldwide (thousands)

	2016	2015	2014
Hours of training	279,428	437,812	451,318
Employees involved	88,124	78,438	107,560
of which hourly employees	71,166	67,673	96,220

Health and Safety Training
FCA worldwide (thousands)

	2016	2015	2014
Hours of training	1,311	1,025	1,215
Employees involved	161	134	171
of which hourly employees	135	109	134

[6] Averages calculated based on total workforce and not exclusively on employees enrolled in training courses.
[7] Training on corporate governance, anti-corruption, human rights, non-discrimination and sustainability.

GRI: G4-EN31, G4-HR2, G4-LA9, G4-LA10, G4-SO4

EMPLOYEES

Employee Turnover[8]

Turnover by Geographic Area	Europe	North America	Latin America	Asia	Rest of World	Total Worldwide
Employees at December 31, 2015	91,798	90,210	44,199	8,242	172	234,621
New Hires	4,474	19,696	6,061	2,135	14	32,380
Departures	(5,456)	(15,417)	(10,240)	(1,838)	(22)	(32,973)
Δ scope of operations and transfers	(3,073)	(39)	311	(208)	0	(3,009)
Employees at December 31, 2016	**87,743**	**94,450**	**40,331**	**8,331**	**164**	**231,019**

Turnover by Category	Hourly	Salaried	Professional	Manager	Total Worldwide
Employees at December 31, 2015	163,054	34,689	34,390	2,488	234,621
New Hires	23,159	6,618	2,531	72	32,380
Departures	(24,313)	(5,569)	(2,865)	(226)	(32,973)
Δ scope of operations, transfers and category change	(2,058)	(2,132)	1,154	27	(3,009)
Employees at December 31, 2016	**159,845**	**33,630**	**35,188**	**2,356**	**231,019**

Turnover by Category and Geographic Area	Hourly Europe	Hourly North America	Hourly Latin America	Hourly Asia	Hourly Rest of World
Employees at December 31, 2015	58,194	67,720	34,574	2,562	4
New Hires	2,160	14,933	5,158	908	-
Departures	(3,236)	(11,603)	(8,809)	(665)	-
Δ scope of operations, transfers and category change	(2,016)	(195)	161	(8)	-
Employees at December 31, 2016	**55,106**	**70,856**	**31,081**	**2,798**	**4**

Turnover by Age Group[9]	Up to 30 Years	31 to 40 Years	41 to 50 Years	Over 50 Years	Total Worldwide
Employees at December 31, 2015	51,673	61,883	67,785	53,280	234,621
New Hires	19,922	7,725	3,360	1,373	32,380
Departures	(14,952)	(8,689)	(4,435)	(4,897)	(32,973)
Δ scope of operations and transfers	(235)	(1,230)	(1,001)	(543)	(3,009)
Employees at December 31, 2016	**50,387**	**59,421**	**65,295**	**55,916**	**231,019**

Turnover by Gender	Men	Women	Total Worldwide
Employees at December 31, 2015	186,244	48,377	234,621
New Hires	23,909	8,471	32,380
Departures	(25,374)	(7,599)	(32,973)
Δ scope of operations and transfers	(2,653)	(356)	(3,009)
Employees at December 31, 2016	**182,126**	**48,893**	**231,019**

[8] For the purpose of turnover reporting, employees as of December 31, 2015 reported in this table include Ferrari. The spin-off of Ferrari is considered a "Δ scope of operation" consistent with turnover reporting calculation.
[9] Turnover by age does not cover employees that changed age group between 2015 and 2016.

EMPLOYEES

Labor and collective bargaining

Collective agreements signed during the year at company/plant level

FCA worldwide (no.)

	2016	2015
Collective agreements	242	252

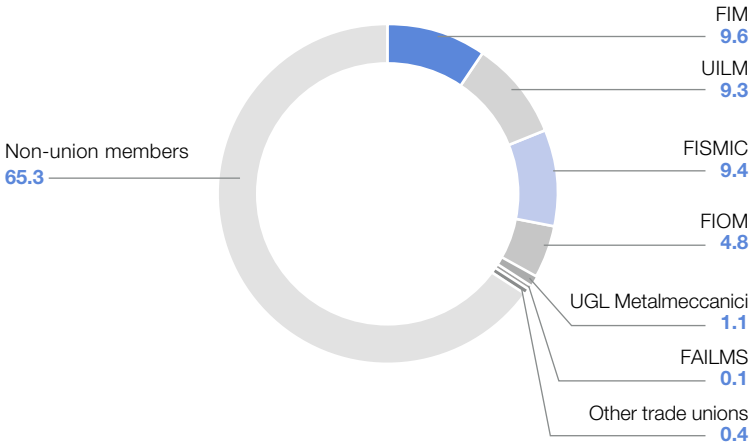
Main issues covered under the agreements

FCA worldwide (%)

	2016	2015
Operating issue	52.1	61.5
Wage issue	45.5	40.5
Occupational Health and Safety[10]	12.4	11.1
Restructuring	5.8	3.6
Training	2.5	4.4
Equal opportunities	0.8	2.0
Other	26.9	13.5

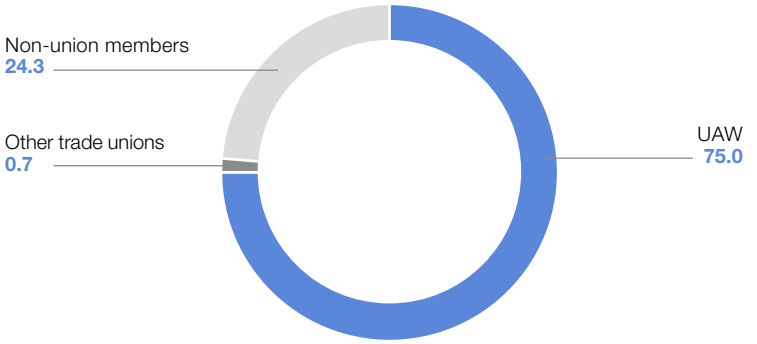
Union Membership Italy

FCA in Italy *(% of total workforce, excluding managers)*



Union Membership United States

FCA in the United States *(% of total workforce, excluding managers)*



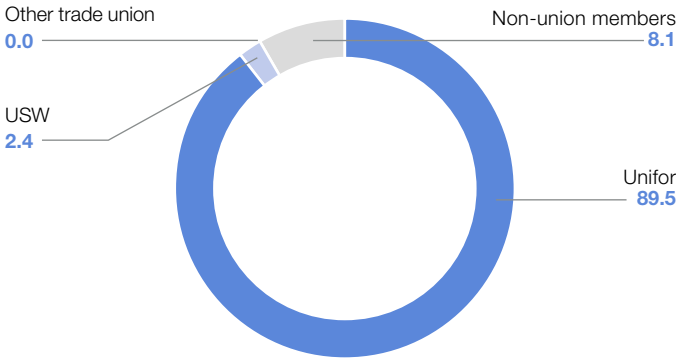
[10] *Including work-related stress.*

EMPLOYEES

Labor and collective bargaining

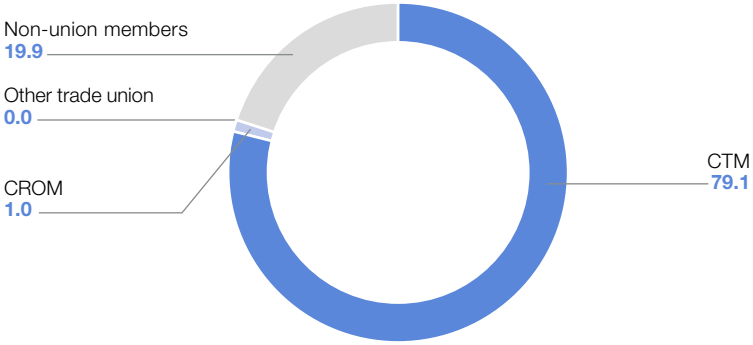
Union Membership Canada

FCA in Canada *(% of total workforce, excluding managers)*



Union Membership Mexico

FCA in Mexico *(% of total workforce, excluding managers)*



EMPLOYEES

Occupational Health and Safety

Injuries by Geographic Area and Gender
FCA worldwide (no.)

	2016			2015			2014		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Europe	229	183	46	235	193	42	258	198	60
North America	132	95	37	161	133	28	153	123	30
Latin America	77	74	3	100	90	10	212	199	13
Asia	8	8	-	12	12	-	11	10	1
Rest of world	-	-	-	-	-	-	-	-	-
Total	**446**	**360**	**86**	**508**	**428**	**80**	**634**	**530**	**104**

Days of Absence[11] by Geographic Area and Gender
FCA worldwide (no.)

	2016			2015			2014		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Europe	8,423	6,832	1,591	7,757	6,157	1,600	9,148	6,828	2,320
North America	7,161	5,262	1,899	7,843	6,374	1,469	7,695	6,371	1,324
Latin America	1,341	1,165	176	2,859	2,637	222	3,484	3,279	205
Asia	115	115	-	193	193	-	463	458	5
Rest of world	-	-	-	-	-	-	-	-	-
Total	**17,040**	**13,374**	**3,666**	**18,652**	**15,361**	**3,291**	**20,790**	**16,936**	**3,854**

Frequency Rate by Geographic Area and Gender
FCA worldwide *(accidents per 100,000 hours worked)*

	2016			2015			2014		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Europe	0.14	0.14	0.16	0.15	0.16	0.13	0.19	0.18	0.23
North America	0.07	0.07	0.08	0.09	0.09	0.06	0.08	0.09	0.07
Latin America	0.11	0.12	0.05	0.13	0.13	0.12	0.24	0.25	0.15
Asia	0.03	0.04	-	0.06	0.08	-	0.05	0.06	0.03
Rest of world	-	-	-	-	-	-	-	-	-
Total	**0.10**	**0.10**	**0.10**	**0.12**	**0.12**	**0.09**	**0.15**	**0.15**	**0.13**

Severity Rate by Geographic Area and Gender
FCA worldwide *(days of absence due to accidents per 1,000 hours worked)*

	2016			2015			2014		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Europe	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.06	0.09
North America	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.05	0.03
Latin America	0.02	0.02	0.03	0.04	0.04	0.03	0.04	0.04	0.02
Asia	-	0.01	-	0.01	0.01	-	0.02	0.03	-
Rest of world	-	-	-	-	-	-	-	-	-
Total	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.05**	**0.05**	**0.05**

Occupational Illness Frequency Rate by Geographic Area and Gender
FCA worldwide *(days of absence due to accidents per 1,000 hours worked)*

	2016			2015			2014		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Europe	0.10	0.09	0.16	0.08	0.07	0.10	0.13	0.12	0.17
North America	0.20	0.17	0.30	0.12	0.09	0.19	0.26	0.24	0.34
Latin America	0.13	0.14	-	0.06	0.07	-	-	-	0.01
Asia	-	-	-	-	-	-	-	-	-
Rest of world	-	-	-	-	-	-	-	-	-
Total	**0.14**	**0.13**	**0.21**	**0.09**	**0.08**	**0.13**	**0.15**	**0.13**	**0.24**

Occupational Illness Cases by Geographic Area and Gender
FCA worldwide (no.)

	2016			2015			2014		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Europe	165	119	46	117	87	30	177	131	46
North America	377	237	140	218	136	82	482	333	149
Latin America	90	90	-	47	47	-	4	3	1
Asia	-	-	-	-	-	-	-	-	-
Rest of world	-	-	-	-	-	-	-	-	-
Total	**632**	**446**	**186**	**382**	**270**	**112**	**663**	**467**	**196**

[11] Refers to the number of calendar days of absence (including Saturdays, Sundays and holidays) due to accidents that occurred to employees (hourly, salaried and professional) resulting in absence from work for more than three days, excluding the day the accident occurred. Excluded from the calculation are days of absence due to accidents that occurred while traveling to and from work, including by private transportation.

CUSTOMERS

Customer Contact Center Performance

	EMEA	NAFTA	LATAM	APAC
Contacts managed (millions)	4.5	18.5	1.4	0.3 [1]
Customers participating in satisfaction surveys	12.9%	6.0%	8.1%	1.6%
Satisfaction index (scale 1-10) Information	7.8[2]	8.5[3]	8.1[4]	8.7[5]
Satisfaction index (scale 1-10) Complaints	6.6[2]	6.7[3]	6.9[4]	7.6[5]
% of calls answered within 20 seconds	81.2%	85.0%	88.2%	84.8%
Information: cases settled in a single call	89.0%	90.0%	94.3%	89.7%
Complaints: % cases settled within 5 business days	69.5%	81.0%	46.1%	86.8%
Hours of personnel training	19,500	20,329	9,151	11,720
Personnel (agents and supervisors)	393	871	120	66

FCA Bank Satisfaction Index in selected EMEA Major Markets

Score: Min 1 to Max 5

	2016
Italy	3.98
Germany	4.30
U.K.	4.45
France	4.23

[1] Only inbound contacts.
[2] EMEA markets monitored through Customer Satisfaction Index are Austria, Belgium, France, Germany, Italy, the Netherlands, Poland, Portugal, Russia, Spain, Switzerland and United Kingdom.
[3] NAFTA markets monitored through Customer Satisfaction Index are U.S. and Canada.
[4] LATAM markets monitored through Customer Satisfaction Index are Argentina and Brazil.
[5] APAC markets monitored through Customer Satisfaction Index are India, Japan and South Korea.

PRODUCT

Investments and Patents

Public Funding for Research and Development
FCA worldwide (€ million)

	2016	2015
Grants	86	36
Loans	233	496
of which subsidized loans	1	8
of which EIB[1] loans	232	488

Patents
FCA worldwide

Total patents granted until December 31, 2016	8,269
of which: granted during 2016	738
Patents pending at December 31, 2016	3,218
of which: new patent applications filed in 2016	464

Designs
FCA worldwide

Design rights registered at December 31, 2016	1,637
of which: registered in 2016	59

Materials Used

Materials Used in Type-approved Vehicles in Europe[2]

	Average Weight of Materials Used (kg)	Average Composition of Vehicles by Material (%)
Steel	804.6	56.4
Cast iron	90.1	6.4
Light alloys	135.9	9.5
Other metals	38.0	2.7
Polymers	176.9	12.4
Elastomers	57.0	4.0
Glass	37.8	2.7
Fluids	59.9	4.2
Other	24.9	1.7
Total	1,425.1	100%

[1] European Investment Bank.
[2] Average for 2016 existing range of type-approved vehicles in Europe, based on Directive 2005/64/EC.

PRODUCTION[1]

Certifications

FCA worldwide (no.)

	2016	2015	2014	2013
ISO 14001 - Environment	142	137	130	124
ISO 50001 - Energy	88	87	85	43
OHSAS 18001	141	136	130	110

Environmental Violations

FCA worldwide (no.)

	2016	2015	2014	2013
Number of violations[2]	-	-	4	-
Amount of fines/penalties (€ thousands)	-	-	90	-

[1] In this section, the data relative to 2010 has been restated to include FCA US (formerly known as Chrysler Group) and to exclude companies demerged into CNH Industrial S.p.A. The per unit data has been recalculated on the basis of reporting scope applicable for 2016.
[2] Data refers to material violations, with fine/penalty greater than $10,000 U.S.

PRODUCTION

Energy

Direct and Indirect Energy Consumption
FCA worldwide (GJ)

		Mass-Market Brands				Luxury Brand	Components		
2016	**FCA**	Assembly and Stamping	Engines and Transmissions	Casting	Others	Maserati	Magneti Marelli	Teksid	Comau
Plants	*143*	*36*	*22*	*2*	*9*	*2*	*54*	*5*	*13*
Electricity	22,056,496	10,353,703	5,238,830	567,598	624,227	216,126	3,014,040	1,934,405	107,567
Natural gas	18,958,867	13,914,755	1,335,569	841,265	387,459	402,572	850,692	1,127,303	99,252
Other fuels	609,538	38,524	892	-	-	115	33,340	533,778	2,889
Other energy sources	5,828,165	4,278,548	558,148	-	109,050	423,959	131,418	327,038	4
Total energy consumption	**47,453,066**	**28,585,530**	**7,133,438**	**1,408,863**	**1,120,736**	**1,042,771**	**4,029,490**	**3,922,525**	**209,712**
2015									
Plants	*141*	*35*	*22*	*2*	*9*	*2*	*53*	*5*	*13*
Electricity	21,267,263	9,878,202	5,220,067	587,058	579,054	95,653	2,935,219	1,851,140	120,869
Natural gas	19,674,175	14,670,476	1,479,625	782,570	418,695	297,620	806,821	1,104,191	114,176
Other fuels	923,674	58,445	442	-	-	110	52,697	808,709	3,270
Other energy sources	5,581,542	4,536,877	531,743	-	102,878	62,393	104,724	242,925	3
Total energy consumption	**47,446,655**	**29,144,000**	**7,231,878**	**1,369,629**	**1,100,627**	**455,776**	**3,899,461**	**4,006,965**	**238,318**
2014									
Plants	*138*	*34*	*21*	*2*	*8*	*2*	*53*	*5*	*13*
Electricity	21,163,478	9,972,518	5,125,881	580,048	508,445	101,998	2,855,409	1,896,420	122,759
Natural gas	20,838,131	15,739,635	1,696,703	746,509	379,968	348,918	747,228	1,038,679	140,491
Other fuels	1,133,152	74,097	457	-	-	139	39,800	1,014,377	4,283
Other energy sources	4,636,348	3,770,939	446,756	-	48,289	49,764	126,423	194,173	4
Total energy consumption	**47,771,109**	**29,557,189**	**7,269,797**	**1,326,557**	**936,702**	**500,819**	**3,768,860**	**4,143,648**	**267,537**

PRODUCTION

Direct Energy Consumption by Source
FCA worldwide (GJ)

		Mass-Market Brands				Luxury Brand	Components		
2016	**FCA**	Assembly and Stamping	Engines and Transmissions	Casting	Others	Maserati	Magneti Marelli	Teksid	Comau
Plants	*143*	*36*	*22*	*2*	*9*	*2*	*54*	*5*	*13*
Non-renewable sources									
Natural gas	18,958,867	13,914,755	1,335,569	841,265	387,459	402,572	850,692	1,127,303	99,252
Coal	482,467	-	-	-	-	-	-	482,467	-
Diesel	62,661	5,069	-	-	-	115	4,668	51,311	1,498
LPG	64,313	33,455	892	-	-	-	28,575	-	1,391
Other (HS and LS fuel oil)	97	-	-	-	-	-	97	-	-
Total non-renewable sources	**19,568,405**	**13,953,279**	**1,336,461**	**841,265**	**387,459**	**402,687**	**884,032**	**1,661,081**	**102,141**
Renewable sources									
Biomass	-	-	-	-	-	-	-	-	-
Photovoltaic	3,777	-	3,777	-	-	-	-	-	-
Solar-thermal	64	-	64	-	-	-	-	-	-
Total renewable sources	**3,841**	**-**	**3,841**	**-**	**-**	**-**	**-**	**-**	**-**
Total direct energy consumption	**19,572,245**	**13,953,279**	**1,340,301**	**841,265**	**387,459**	**402,687**	**884,032**	**1,661,081**	**102,141**
2015									
Plants	*141*	*35*	*22*	*2*	*9*	*2*	*53*	*5*	*13*
Non-renewable sources									
Natural gas	19,674,175	14,670,476	1,479,625	782,570	418,695	297,620	806,821	1,104,191	114,176
Coal	754,949	-	-	-	-	-	-	754,949	-
Diesel	62,671	2,716	-	-	-	110	4,526	53,761	1,558
LPG	105,958	55,729	442	-	-	-	48,074	-	1,712
Other (HS and LS fuel oil)	97	-	-	-	-	-	97	-	-
Total non-renewable sources	**20,597,849**	**14,728,921**	**1,480,067**	**782,570**	**418,695**	**297,730**	**859,518**	**1,912,901**	**117,446**
Renewable sources									
Biomass	-	-	-	-	-	-	-	-	-
Photovoltaic	3,890	-	3,890	-	-	-	-	-	-
Solar-thermal	638	-	638	-	-	-	-	-	-
Total renewable sources	**4,527**	**-**	**4,527**	**-**	**-**	**-**	**-**	**-**	**-**
Total direct energy consumption	**20,602,376**	**14,728,921**	**1,484,594**	**782,570**	**418,695**	**297,730**	**859,518**	**1,912,901**	**117,446**
2014									
Plants	*138*	*34*	*21*	*2*	*8*	*2*	*53*	*5*	*13*
Non-renewable sources									
Natural gas	20,838,131	15,739,635	1,696,702	746,509	379,968	348,918	747,228	1,038,679	140,491
Coal	952,258	-	-	-	-	-	-	952,258	-
Diesel	73,237	4,729	-	-	-	139	4,807	62,119	1,443
LPG	107,525	69,368	457	-	-	-	34,860	-	2,840
Other (HS and LS fuel oil)	132	-	-	-	-	-	132	-	
Total non-renewable sources	**21,971,283**	**15,813,732**	**1,697,159**	**746,509**	**379,968**	**349,057**	**787,028**	**2,053,056**	**144,774**
Renewable sources									
Biomass	-	-	-	-	-	-	-	-	-
Photovoltaic	1,221	-	1,221	-	-	-	-	-	-
Solar-thermal	-	-	-	-	-	-	-	-	-
Total renewable sources	**1,221**	**-**	**1,221**	**-**	**-**	**-**	**-**	**-**	**-**
Total direct energy consumption	**21,972,504**	**15,813,732**	**1,698,380**	**746,509**	**379,968**	**349,057**	**787,028**	**2,053,056**	**144,774**

PRODUCTION

Indirect Energy Consumption by Source

FCA worldwide (GJ)

2016	FCA	Mass-Market Brands: Assembly and Stamping	Mass-Market Brands: Engines and Transmissions	Mass-Market Brands: Casting	Mass-Market Brands: Others	Luxury Brand: Maserati	Components: Magneti Marelli	Components: Teksid	Components: Comau
Plants	*143*	*36*	*22*	*2*	*9*	*2*	*54*	*5*	*13*
Electricity									
Non-renewable sources	16,306,541	8,278,815	3,788,979	567,598	449,005	15,753	2,222,212	890,368	93,811
Renewable sources	5,746,178	2,074,888	1,446,074	-	175,222	200,372	791,828	1,044,037	13,756
Total electricity	**22,052,719**	**10,353,703**	**5,235,053**	**567,598**	**624,227**	**216,126**	**3,014,040**	**1,934,405**	**107,567**
Thermal energy									
Non-renewable sources	4,569,384	3,387,176	351,127	-	44,320	401,912	105,883	278,966	-
Renewable sources	4,825	-	-	-	-	-	4,821	-	4
Total thermal energy	**4,574,209**	**3,387,176**	**351,127**	**-**	**44,320**	**401,912**	**110,704**	**278,966**	**4**
Other energy sources									
Non-renewable sources	1,253,892	891,372	206,956	-	64,730	22,047	20,715	48,072	-
Renewable sources	-	-	-	-	-	-	-	-	-
Total other energy sources	**1,253,892**	**891,372**	**206,956**	**-**	**64,730**	**22,047**	**20,715**	**48,072**	**-**
Total indirect energy consumption	**27,880,820**	**14,632,251**	**5,793,137**	**567,598**	**733,277**	**640,084**	**3,145,458**	**2,261,444**	**107,571**
2015									
Plants	*141*	*35*	*22*	*2*	*9*	*2*	*53*	*5*	*13*
Electricity									
Non-renewable sources	16,581,497	8,273,649	4,008,955	587,058	431,789	6,282	2,151,834	1,014,751	107,179
Renewable sources	4,684,512	1,604,553	1,209,858	-	147,265	89,371	783,386	836,389	13,690
Total electricity	**21,266,009**	**9,878,202**	**5,218,813**	**587,058**	**579,054**	**95,653**	**2,935,219**	**1,851,140**	**120,869**
Thermal energy									
Non-renewable sources	4,393,247	3,637,849	325,056	-	34,639	62,393	90,385	242,925	-
Renewable sources	3,663	-	-	-	-		3,660		3
Total thermal energy	**4,396,910**	**3,637,849**	**325,056**	**-**	**34,639**	**62,393**	**94,045**	**242,925**	**3**
Other energy sources									
Non-renewable sources	1,181,360	899,028	203,414	-	68,239	-	10,679	-	-
Renewable sources	-	-	-	-	-	-	-	-	-
Total other energy sources	**1,181,360**	**899,028**	**203,414**	**-**	**68,239**	**-**	**10,679**	**-**	**-**
Total indirect energy consumption	**26,844,278**	**14,415,079**	**5,747,283**	**587,058**	**681,932**	**158,046**	**3,039,943**	**2,094,064**	**120,872**
2014									
Plants	*138*	*34*	*21*	*2*	*8*	*2*	*53*	*5*	*13*
Electricity									
Non-renewable sources	16,814,496	8,224,424	4,306,059	580,048	391,390	58,333	2,179,235	965,943	109,064
Renewable sources	4,347,761	1,748,094	818,601	-	117,055	43,665	676,174	930,477	13,695
Total electricity	**21,162,257**	**9,972,518**	**5,124,660**	**580,048**	**508,445**	**101,998**	**2,855,409**	**1,896,420**	**122,759**
Thermal energy									
Non-renewable sources	3,830,196	3,166,909	302,769	-	12,636	49,368	104,341	194,173	-
Renewable sources	4,690	-	873	-	-	-	3,813	-	4
Total thermal energy	**3,834,886**	**3,166,909**	**303,642**	**-**	**12,636**	**49,368**	**108,154**	**194,173**	**4**
Other energy sources									
Non-renewable sources	801,462	604,030	143,115	-	35,653	396	18,269	-	-
Renewable sources	-	-	-	-	-	-	-	-	-
Total other energy sources	**801,462**	**604,030**	**143,115**	**-**	**35,653**	**396**	**18,269**	**-**	**-**
Total indirect energy consumption	**25,798,606**	**13,743,457**	**5,571,417**	**580,048**	**556,734**	**151,762**	**2,981,832**	**2,090,593**	**122,763**

PRODUCTION

Direct and Indirect Energy Consumption per Unit of Production

FCA worldwide (GJ/unit of production)

	Targeted Reduction 2020 vs 2010	2016	2015	2014	Base Year (2010)	Unit of Measurement
Mass-Market Brand assembly and stamping	-30%	5.95	5.92	6.00	7.36	GJ/vehicle produced
Mass-Market Brand engines and transmissions	n.a.	0.83	0.81	0.81	0.90	GJ/unit produced
Mass-Market Brand casting	-40%	7.61	6.65	6.87	10.92	GJ/unit produced
Mass-Market Brand others[3]	-40%	0.19	0.19	0.19	0.34	GJ/hour of production
Maserati	-25%	23.15	20.34	18.02	28.53	GJ/vehicle produced
Magneti Marelli	-21%	0.12	0.13	0.13	0.16	GJ/hour of production
Teksid (cast iron)	-0%	9.90	9.85	9.92	9.68	GJ/ton produced
Teksid (aluminum)	-15%	38.23	35.69	37.29	51.52	GJ/ton produced
Comau[4]	-30%	16.99	16.88	19.19	27.76	MJ/hour of production
FCA	**up to -40%**					

[3] Refers to NAFTA region plants.
[4] Due to the very low impact of its activities, the normalized figures for Comau have been calculated based on MJ per unit.

PRODUCTION

CO_2 Emissions

Direct and Indirect CO_2 Emissions
FCA worldwide (tons)

		Mass-Market Brands				Luxury Brand	Components		
2016	**FCA**	Assembly and Stamping	Engines and Transmissions	Casting	Others	Maserati	Magneti Marelli	Teksid	Comau
Plants	*143*	*36*	*22*	*2*	*9*	*2*	*54*	*5*	*13*
Direct emissions	1,039,063	717,465	68,985	41,969	19,639	22,674	49,880	112,685	5,766
Indirect emissions	2,860,144	1,506,692	716,596	81,959	58,355	31,037	298,309	156,386	10,810
Total CO_2 emissions	**3,899,207**	**2,224,157**	**785,581**	**123,928**	**77,994**	**53,711**	**348,190**	**269,071**	**16,576**
2015									
Plants	*141*	*35*	*22*	*2*	*9*	*2*	*53*	*5*	*13*
Direct emissions	1,103,605	757,748	76,412	38,982	21,066	16,792	48,639	137,347	6,619
Indirect emissions	2,905,806	1,563,657	740,707	83,222	59,025	7,697	289,657	149,009	12,831
Total CO_2 emissions	**4,009,411**	**2,321,405**	**817,119**	**122,204**	**80,091**	**24,489**	**338,296**	**286,356**	**19,451**
2014									
Plants	*138*	*34*	*21*	*2*	*8*	*2*	*53*	*5*	*13*
Direct emissions	1,179,650	810,943	87,290	37,191	19,037	19,585	44,486	152,956	8,163
Indirect emissions	3,026,394	1,597,295	843,477	90,340	27,270	10,549	293,687	150,611	13,165
Total CO_2 emissions	**4,206,044**	**2,408,238**	**930,767**	**127,531**	**46,307**	**30,134**	**338,172**	**303,568**	**21,328**

GRI: G4-EN15, G4-EN16

PRODUCTION

Direct and Indirect CO_2 Emissions per Unit of Production

FCA worldwide (tons of CO_2/unit of production)

	Targeted Reduction 2020 vs 2010	2016	2015	2014	Base Year (2010)	Unit of Measurement
Mass-Market Brand assembly and stamping	-32%	0.463	0.472	0.489	0.616	tons of CO_2/vehicle produced
Mass-Market Brand engines and transmissions	n.a.	0.091	0.091	0.104	0.116	tons of CO_2/unit produced
Mass-Market Brand casting	-35%	0.670	0.593	0.660	0.992	tons of CO_2/ton produced
Mass-Market Brand others[5]	-35%	0.016	0.015	0.012	0.030	tons of CO_2/hour of production
Maserati	-30%	1.190	1.081	1.012	1.844	tons of CO_2/hour of production
Magneti Marelli	-24%	0.011	0.011	0.011	0.014	tons of CO_2/hour of production
Teksid (cast iron)	-0%	0.750	0.767	0.757	0.690	tons of CO_2/ton produced
Teksid (aluminum)	-15%	2.062	1.911	2.320	3.350	tons of CO_2/ton produced
Comau[6]	-40%	1.343	1.378	1.551	2.670	kg of CO_2/hour of production
FCA	**up to -40%**					

Electricity from Renewable Sources

FCA worldwide

	2016	2015	2014	2010
Mass-Market Brand assembly and stamping	20.0%	16.2%	17.5%	17.9%
Mass-Market Brand engines and transmissions	27.6%	23.2%	16.0%	9.3%
Mass-Market Brand casting	-	-	-	-
Mass-Market Brand others	28.1%	25.4%	23.0%	-
Maserati	92.7%	93.4%	42.8%	-
Magneti Marelli	26.3%	26.7%	23.7%	23.8%
Teksid	54.0%	45.2%	49.1%	53.9%
Comau	12.8%	11.3%	11.2%	0.9%
Average FCA	**26.1%**	**22.1%**	**20.6%**	**20.6%**

[5] Refers to NAFTA region plants.
[6] Due to the very low impact of its activities, the normalized figures for Comau have been calculated based on kg per unit

PRODUCTION

Other Emissions and Impacts

Presence of Ozone Depleting Substances (ODS) in Equipment

FCA worldwide (kg)

		Mass-Market Brands				Luxury Brand	Components		
2016	**FCA**	Assembly and Stamping[7]	Engines and Transmissions	Casting	Others	Maserati	Magneti Marelli	Teksid	Comau
Plants	*143*	*36*	*22*	*2*	*9*	*2*	*54*	*5*	*13*
CFCs	1,085	1,047	10	23	5	-	-	-	-
HCFCs	72,287	60,794	7,478	824	1,944	-	1,011	-	236
Halons	161	118	-	43	-	-	-	-	-
Methyl bromide	-	-	-	-	-	-	-	-	-
Other CFCs fully halogenated	1	1	-	-	-	-	-	-	-
Total	**73,534**	**61,960**	**7,488**	**890**	**1,949**	**-**	**1,011**	**-**	**236**
2015									
Plants	*141*	*35*	*22*	*2*	*9*	*2*	*53*	*5*	*13*
CFCs	1,991	1,054	918	-	19	-	-	-	-
HCFCs	71,695	61,085	6,496	454	2,289	-	1,111	-	260
Halons	118	118	-	-	-	-	-	-	-
Methyl bromide	-	-	-	-	-	-	-	-	-
Other CFCs fully halogentated	939	1	-	-	938	-	-	-	-
Total	**74,743**	**62,258**	**7,414**	**454**	**3,246**	**-**	**1,111**	**-**	**260**
2014									
Plants	*138*	*34*	*21*	*2*	*8*	*2*	*53*	*5*	*13*
CFCs	1,272	1,053	56	121	41	-	1	-	-
HCFCs	75,866	60,795	9,162	1,405	2,240	-	1,949	-	315
Halons	118	118	-	-	-	-	-	-	-
Methyl bromide	-	-	-	-	-	-	-	-	-
Other CFCs fully halogenated	1	1	-	-	-	-	-	-	-
Total	**77,257**	**61,967**	**9,218**	**1,526**	**2,282**	**-**	**1,950**	**-**	**315**

[7] *Data restated for 2014 and 2015 due to a miscalculation.*

PRODUCTION

Emissions of Nitrogen Oxides (NOx)[8][9]
FCA worldwide (tons)

	2016	2015	2014
Mass-market Brand assembly and stamping	838	855	900
Mass-market Brand engines and transmissions	80	90	98
Maserati	46	35	41
Magneti Marelli	107	100	92
Teksid	179	184	179
Others	69	68	68
Total	**1319**	**1332**	**1378**

Emissions of Sulfur Oxides (SOx)[8][9]
FCA worldwide (tons)

	2016	2015	2014
Mass-market Brand assembly and stamping	3.0	3.4	3.9
Magneti Marelli	0.7	0.7	0.7
Teksid	78.5	115.8	143.4
Others	0.9	0.8	0.8
Total	**83.1**	**120.7**	**148.8**

Emissions of Dust[8][9]
FCA worldwide (tons)

	2016	2015	2014
Mass-market Brand assembly and stamping	34.7	37.9	41.3
Mass-market Brand engines and transmissions	3.2	3.6	4.3
Teksid	11.5	17.4	21.7
Others	3.8	3.8	3.6
Total	**53.2**	**62.7**	**70.9**

Emissions of Volatile Organic Compounds (VOC)[9]
FCA worldwide (tons)

	2016	2015	2014
Mass-Market Brand assembly and stamping	14,219	13,731	14,429
Maserati	102	132	177
Magneti Marelli	257	480	495
Others	12	12	22
Total VOC emissions	**14,590**	**14,355**	**15,122**

Emissions of Volatile Organic Compounds (VOC) per unit of production[9]
FCA worldwide (g/m^2)

	Target 2020 vs 2010 (%)	2016	2015	2014	Base Year (2010)
Mass-Market Brand assembly and stamping	-25%	25.8	24.7	25.8	32.4
Maserati	-19%	28.2	32.4	33.9	55.3
Magneti Marelli	-10%	15.6	29.0	41.2	48.1
FCA average VOC emissions	**up to -68%**	**25.5**	**24.9**	**26.3**	**33.2**

[8] *Estimated emissions based on direct fuel consumption.*
[9] *Data reported for companies for which emissions are most material.*

PRODUCTION

Water

Water Withdrawal and Discharge

FCA worldwide (thousands of m³)

		Mass-Market Brands				Luxury Brand	Components		
2016	FCA	Assembly and Stamping	Engines and Transmissions	Casting	Others	Maserati	Magneti Marelli[10]	Teksid	Comau
Plants	*143*	*36*	*22*	*2*	*9*	*2*	*54*	*5*	*13*
Withdrawal									
Groundwater	6,028	2,822	405	227	-	166	540	1,832	36
Municipal water supply	17,700	12,360	3,069	142	365	28	1,536	159	40
Surface water	693	292	1	-	-	-	217	180	3
Other	10	9	-	-	-	-	1	-	-
Total water withdrawal	**24,431**	**15,483**	**3,476**	**370**	**365**	**194**	**2,294**	**2,170**	**79**
Discharge									
Surface water	4,778	1,883	695	-	-	-	116	2,083	1
Public sewer systems	12,341	9,253	1,260	49	244	118	1,166	210	40
Other destinations	517	48	397	-	-	-	62	-	10
Total water discharge	**17,636**	**11,184**	**2,352**	**49**	**244**	**118**	**1,344**	**2,293**	**51**
2015									
Plants	*141*	*35*	*22*	*2*	*9*	*2*	*53*	*5*	*13*
Withdrawal									
Groundwater	6,605	2,983	806	198	-	185	535	1,854	44
Municipal water supply	17,055	11,875	2,771	127	388	37	1,553	257	46
Surface water	684	339	-	-	8	-	216	117	4
Other	-	-	-	-	-	-	-	-	-
Total water withdrawal	**24,344**	**15,197**	**3,577**	**325**	**396**	**222**	**2,304**	**2,229**	**94**
Discharge									
Surface water	5,353	1,798	1,563	-	15	-	177	1,795	5
Public sewer systems	12,148	8,797	1,478	134	160	136	1,334	61	49
Other destinations	1,838	1,283	362	12	93	-	74	-	13
Total water discharge	**19,340**	**11,878**	**3,404**	**146**	**268**	**136**	**1,585**	**1,855**	**67**
2014									
Plants	*138*	*34*	*21*	*2*	*8*	*2*	*53*	*5*	*13*
Withdrawal									
Groundwater	5,533	2,138	733	194	18	247	647	1,515	41
Municipal water supply	18,403	13,003	2,932	125	315	61	1,546	361	60
Surface water	774	412	1	-	-	-	241	119	1
Other	12	9	-	-	-	-	3	-	-
Total water withdrawal	**24,722**	**15,562**	**3,666**	**319**	**333**	**308**	**2,437**	**1,995**	**102**
Discharge									
Surface water	4,400	1,106	1,587	-	1	-	138	1,561	7
Public sewer systems	10,360	7,598	1,327	132	115	142	901	83	62
Other destinations	1,672	1,162	373	15	30	-	83	-	9
Total water discharge	**16,432**	**9,866**	**3,287**	**147**	**146**	**142**	**1,122**	**1,644**	**78**

[10] *Data restated for 2014 due to a miscalculation.*

GRI: G4-EN8, G4-EN22

PRODUCTION

Water Withdrawal per Unit of Production

FCA worldwide (m^3/unit of production)

	Targeted Reduction 2020 vs 2010	2016	2015	2014	Base Year (2010)	Unit of Measurement
Mass-Market Brand assembly and stamping	-40%	3.19	3.09	3.16	4.99	m^3/vehicle produced
Mass-Market Brand engines and transmissions	-52%	0.40	0.40	0.40	0.67	m^3/unit produced
Mass-Market Brand casting	-15%	2.00	1.58	1.65	2.07	m^3/ton produced
Mass-Market Brand others[11]	-50%	0.05	0.05	0.05	0.10	m^3/hour of production
Maserati	-15%	7.18	6.76	7.34	14.68	m^3/vehicle produced
Magneti Marelli	-50%	0.07	0.07	0.08	0.12	m^3/hour of production
Teksid (cast iron)	-11%	2.32	2.29	2.68	3.15	m^3/ton produced
Teksid (aluminum)	-77%	48.91	53.67	45.92	154.27	m^3/ton produced
Comau[12]	-50%	6.59	6.68	7.50	14.00	l/hour of production
FCA	**up to - 77%**					

Water Recycling Index

FCA worldwide (thousands of m^3)

		Mass-Market Brands				Luxury Brand	Components		
2016	FCA	Assembly and Stamping	Engines and Transmissions	Casting	Others	Maserati	Magneti Marelli[13]	Teksid	Comau
Plants	*143*	*36*	*22*	*2*	*9*	*2*	*54*	*5*	*13*
Total water requirement	**2,251,196**	1,549,080	526,620	113,903	16,303	12,812	27,603	4,795	79
of which covered by recycling	2,226,765	1,533,597	523,144	113,534	15,938	12,618	25,310	2,625	-
of which water withdrawal	24,431	15,483	3,476	370	365	194	2,294	2,170	79
Recycling Index (%)	**98.9**	**99.0**	**99.3**	**99.7**	**97.8**	**98.5**	**91.7**	**54.7**	**0.0**
2015									
Plants	*141*	*35*	*22*	*2*	*9*	*2*	*53*	*5*	*13*
Total water requirement	**2,361,012**	1,602,384	597,044	94,604	21,186	12,822	30,276	2,602	94
of which covered by recycling	2,336,667	1,587,187	593,467	94,279	20,790	12,600	27,972	373	-
of which water withdrawal	24,344	15,197	3,577	325	396	222	2,304	2,229	94
Recycling Index (%)	**99.0**	**99.1**	**99.4**	**99.7**	**98.1**	**98.3**	**92.4**	**14.3**	**0.0**
2014									
Plants	*138*	*34*	*21*	*2*	*8*	*2*	*53*	*5*	*14*
Total water requirement	**3,291,239**	2,473,364	644,280	114,458	7,953	17,443	29,917	3,721	102
of which covered by recycling	3,266,518	2,457,803	640,615	114,139	7,620	17,135	27,480	1,726	-
of which water withdrawal	24,721	15,562	3,666	319	333	308	2,437	1,995	102
Recycling Index (%)	**99.2**	**99.4**	**99.4**	**99.7**	**95.8**	**98.2**	**91.9**	**46.4**	**0.0**

[11] Refers to NAFTA region plants.
[12] Data restated for 2010 due to a miscalculation. Due to the very low impact of its activities, the normalized figures for Comau have been calculated based on liters per unit.
[13] Data restated for 2014 due to a miscalculation.

PRODUCTION

Water Resources Significantly Affected[14] by Water Withdrawal and/or Discharge at Plants

FCA worldwide

Company and plant location	Water Source (Name and Size in m³/Year)	Use	Protected Water Body	High Biodiversity Value Water Body[15]	Water Withdrawal[16]	Water Discharges[16]
Teksid Carmagnola (Italy)	Gora del Naviglio river - 3.5 million	Process water effluent	no	no	no	57%

BOD

Biochemical Oxygen Demand (BOD)[17]

FCA worldwide (maximum level under applicable regulation = 100)
% of the limit

	2016	2015	2014
Mass-Market Brand assembly and stamping	15.3	19.7	16.1
Mass-Market Brand engines and transmissions	10.8	25.2	17.2
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	2.0	7.8	8.0
Magneti Marelli	14.6	18.4	50.0
Teksid	51.7	16.7	8.3
Comau	n.a.	n.a.	4.1

Biochemical Oxygen Demand (BOD)[17]

FCA worldwide (milligram/liter)

	2016	2015	2014
Mass-Market Brand assembly and stamping	45.2	52.7	46.9
Mass-Market Brand engines and transmissions	20.7	32.4	40.2
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	5.0	19.4	20.0
Magneti Marelli	33.3	47.6	51.7
Teksid	7.6	23.4	24.7
Comau	n.a.	n.a.	29.5

[14] Water sources are regarded as significantly affected by water withdrawals and/or discharges if they are designated protected areas or have high biodiversity value, or if the withdrawals and/or discharges of water represent more than 5% of the average annual volume of the water body concerned. Only surface water has been taken into account. In 2016 none of the water withdrawals at any of the plants significantly affected the resources according to the criteria listed in GRI-G4 EN9 and never exceeded the 5% threshold at any site.
[15] There is no known impact on the aquatic habitat, since the receiving water body does not have protected species and is not included on any list of extremely valuable natural habitats.
[16] Representing more than 5% of average annual volume of the water body concerned.
[17] Figures take into account worst level registered for all plants in each company.

PRODUCTION

COD

Chemical Oxygen Demand (COD)[18]
FCA worldwide (maximum level under applicable regulation = 100)
% of the limit

	2016	2015	2014
Mass-Market Brand assembly and stamping	25.5	23.3	17.7
Mass-Market Brand engines and transmissions	20.2	38.0	23.4
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	3.0	11.0	10.3
Magneti Marelli	18.2	23.7	50.8
Teksid	29.4	77.8	47.2
Comau	n.a.	n.a.	34.0

Chemical Oxygen Demand (COD)[18]
FCA worldwide (milligram/liter)

	2016	2015	2014
Mass-Market Brand assembly and stamping	138.0	129.9	98.3
Mass-Market Brand engines and transmissions	93.4	115.4	114.7
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	15.0	55.1	51.5
Magneti Marelli	100.5	142.4	170.4
Teksid	18.9	43.0	39.3
Comau	n.a.	n.a.	29.6

TSS

Total Suspended Solids (TSS)[18]
FCA worldwide (maximum level under applicable regulation = 100)
% of the limit

	2016	2015	2014
Mass-Market Brand assembly and stamping	6.8	13.4	13.3
Mass-Market Brand engines and transmissions	11.7	32.5	20.2
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	2.1	3.3	2.8
Magneti Marelli	5.8	4.2	33.6
Teksid	88.9	56.3	38.6
Comau	n.a.	n.a.	24.8

Total Suspended Solids (TSS)[18]
FCA worldwide (milligram/liter)

	2016	2015	2014
Mass-Market Brand assembly and stamping	22.0	38.1	42.6
Mass-Market Brand engines and transmissions	22.0	42.6	40.8
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	4.1	6.7	5.7
Magneti Marelli	25.5	19.3	25.9
Teksid	5.6	21.2	20.8
Comau	n.a.	n.a.	19.4

[18] Figures take into account worst level registered for all plants in each company.

PRODUCTION

Heavy Metals in Water Discharged

Cadmium (Cd)[19]

FCA worldwide (maximum level under applicable regulation = 100)
% of the limit

	2016	2015	2014
Mass-Market Brand assembly and stamping	10.9	5.5	18.7
Mass-Market Brand engines and transmissions	7.5	1.1	3.0
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	15.0	-	-
Magneti Marelli	2.8	2.1	22.5
Teksid	15.0	15.0	15.0
Comau	n.a.	n.a.	n.a.

Cadmium (Cd)[19]

FCA worldwide (milligram/liter)

	2016	2015	2014
Mass-Market Brand assembly and stamping	-	-	0.1
Mass-Market Brand engines and transmissions	-	-	-
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	-	-	-
Magneti Marelli	-	-	-
Teksid	-	-	-
Comau	n.a.	n.a.	n.a.

Copper (Cu)[19]

FCA worldwide (maximum level under applicable regulation = 100)
% of the limit

	2016	2015	2014
Mass-Market Brand assembly and stamping	7.7	4.2	4.2
Mass-Market Brand engines and transmissions	9.4	8.0	6.2
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	8.8	7.3	7.5
Magneti Marelli	2.7	1.4	8.1
Teksid	20.0	39.0	39.0
Comau	n.a.	n.a.	n.a.

Copper (Cu)[19]

FCA worldwide (milligram/liter)

	2016	2015	2014
Mass-Market Brand assembly and stamping	-	0.3	0.3
Mass-Market Brand engines and transmissions	-	-	-
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	-	-	-
Magneti Marelli	0.1	0.1	0.1
Teksid	-	-	-
Comau	n.a.	n.a.	n.a.

[19] Figures take into account worst level registered for all plants in each company.

PRODUCTION

Heavy Metals in Water Discharged

Lead (Pb)[20]
FCA worldwide (maximum level under applicable regulation = 100)
% of the limit

	2016	2015	2014
Mass-Market Brand assembly and stamping	13.1	20.0	20.0
Mass-Market Brand engines and transmissions	14.7	18.5	17.7
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	16.7	16.1	16.7
Magneti Marelli	2.1	-	8.3
Teksid	25.0	25.0	-
Comau	n.a.	n.a.	n.a.

Lead (Pb)[20]
FCA worldwide (milligram/liter)

	2016	2015	2014
Mass-Market Brand assembly and stamping	-	0.2	0.2
Mass-Market Brand engines and transmissions	-	0.1	0.1
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	0.1	0.1	0.1
Magneti Marelli	0.1	-	-
Teksid	-	-	-
Comau	n.a.	n.a.	n.a.

Nickel (Ni)[20]
FCA worldwide (maximum level under applicable regulation = 100)
% of the limit

	2016	2015	2014
Mass-Market Brand assembly and stamping	31.1	13.1	11.6
Mass-Market Brand engines and transmissions	2.5	3.4	4.5
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	4.3	2.4	2.5
Magneti Marelli	2.9	-	2.4
Teksid	5.0	5.0	5.0
Comau	n.a.	n.a.	n.a.

Nickel (Ni)[20]
FCA worldwide (milligram/liter)

	2016	2015	2014
Mass-Market Brand assembly and stamping	0.9	0.4	0.4
Mass-Market Brand engines and transmissions	0.1	0.1	0.1
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	0.2	0.1	0.1
Magneti Marelli	0.1	0.1	0.1
Teksid	0.1	0.1	0.1
Comau	n.a.	n.a.	n.a.

[20] Figures take into account worst level registered for all plants in each company.

PRODUCTION

Heavy Metals in Water Discharged

Zinc (Zn)[21]
FCA worldwide (maximum level under applicable regulation = 100)
% of the limit

	2016	2015	2014
Mass-Market Brand assembly and stamping	33.8	27.7	20.8
Mass-Market Brand engines and transmissions	11.4	20.9	12.4
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	14.0	27.1	26.0
Magneti Marelli	8.9	-	6.4
Teksid	15.4	32.8	44.0
Comau	n.a.	n.a.	n.a.

Zinc (Zn)[21]
FCA worldwide (milligram/liter)

	2016	2015	2014
Mass-Market Brand assembly and stamping	0.5	0.4	0.5
Mass-Market Brand engines and transmissions	0.1	0.2	0.1
Mass-Market Brand casting	n.a.	n.a.	n.a.
Mass-Market Brand others	n.a.	n.a.	n.a.
Maserati	0.1	0.3	0.3
Magneti Marelli	0.2	0.4	0.1
Teksid	0.1	0.3	0.3
Comau	n.a.	n.a.	n.a.

[21] Figures take into account worst level registered for all plants in each company.

PRODUCTION

Waste

Waste Generation and Management
FCA worldwide (tons)

2016	FCA	Mass-Market Brands				Luxury Brand	Components		
		Assembly and Stamping	Engines and Transmissions	Casting	Others	Maserati	Magneti Marelli	Teksid	Comau
Plants	*143*	*36*	*22*	*2*	*9*	*2*	*54*	*5*	*13*
Waste recovered									
Waste-to-energy conversion	25,814	16,710	4,245	337	462	-	2,867	1,020	172
Waste recovery	1,148,511	777,460	129,762	27,188	15,904	2,150	64,523	129,547	1,977
Total waste recovered	**1,174,325**	**794,170**	**134,007**	**27,526**	**16,366**	**2,150**	**67,391**	**130,567**	**2,149**
Waste disposed									
Waste to landfill	179,704	12,595	1,180	-	660	-	2,497	162,773	-
Waste to treatment	30,995	15,371	11,444	191	217	107	3,296	322	46
Total waste disposed	**210,699**	**27,966**	**12,624**	**191**	**877**	**107**	**5,792**	**163,095**	**46**
Waste generated									
Non-hazardous waste	1,353,025	807,133	139,072	27,717	16,849	2,109	65,596	292,590	1,960
Hazardous waste	31,999	15,003	7,559	-	394	148	7,587	1,072	235
Total waste generated	**1,385,024**	**822,135**	**146,631**	**27,717**	**17,243**	**2,257**	**73,183**	**293,662**	**2,195**
waste recovered	84.8%	96.6%	91.4%	99.3%	94.9%	95.2%	92.1%	44.5%	97.9%
waste sent to landfill	13.0%	1.5%	0.8%	0.0%	3.8%	0.0%	3.4%	55.4%	0.0%
2015									
Plants	*141*	*35*	*22*	*2*	*9*	*2*	*53*	*5*	*13*
Waste recovered									
Waste-to-energy conversion	19,170	11,230	3,393	438	362	-	2,535	1,062	150
Waste recovery	1,192,357	803,287	137,998	43,951	18,756	2,496	60,285	122,629	2,954
Total waste recovered	**1,211,526**	**814,517**	**141,391**	**44,389**	**19,118**	**2,496**	**62,820**	**123,692**	**3,104**
Waste disposed									
Waste to landfill	220,169	11,733	2,278	38	787	-	1,483	203,840	11
Waste to treatment	33,825	15,694	12,092	1,576	276	164	3,541	390	92
Total waste disposed	**253,994**	**27,427**	**14,369**	**1,614**	**1,063**	**164**	**5,024**	**204,229**	**103**
Waste generated									
Non-hazardous waste	1,435,040	829,942	147,188	45,993	19,687	2,428	60,075	326,791	2,936
Hazardous waste	30,481	12,002	8,572	10	494	232	7,770	1,130	271
Total waste generated	**1,465,520**	**841,944**	**155,760**	**46,003**	**20,181**	**2,660**	**67,844**	**327,921**	**3,207**
waste recovered	82.7%	96.7%	90.8%	96.5%	94.7%	93.8%	92.6%	37.7%	96.8%
waste sent to landfill	15.0%	1.4%	1.5%	0.1%	3.9%	0.0%	2.2%	62.2%	0.3%

PRODUCTION

Waste Generation and Management
FCA worldwide (tons)

		Mass-Market Brands				Luxury Brand	Components		
2014	**FCA**	Assembly and Stamping	Engines and Transmissions	Casting	Others	Maserati	Magneti Marelli	Teksid	Comau
Plants	*138*	*34*	*21*	*2*	*8*	*2*	*53*	*5*	*13*
Waste recovered									
Waste-to-energy conversion	18,361	11,360	3,247	370	185	-	1,377	1,517	305
Waste recovery	1,381,979	963,321	141,933	61,460	16,710	3,927	53,822	137,875	2,931
Total waste recovered	**1,400,340**	**974,681**	**145,180**	**61,830**	**16,895**	**3,927**	**55,199**	**139,392**	**3,236**
Waste disposed									
Waste to landfill	295,358	12,843	2,400	156	798	-	2,073	276,923	165
Waste to treatment	36,129	13,541	15,650	5	204	413	5,715	520	81
Total waste disposed	**331,487**	**26,384**	**18,050**	**161**	**1,002**	**413**	**7,788**	**277,443**	**246**
Waste generated									
Non-hazardous waste	1,698,505	986,993	155,055	61,990	17,603	3,941	54,636	415,026	3,261
Hazardous waste	33,323	14,072	8,176	-	295	399	8,351	1,809	221
Total waste generated	**1,731,828**	**1,001,065**	**163,231**	**61,990**	**17,898**	**4,340**	**62,987**	**416,835**	**3,482**
waste recovered	80.9%	97.4%	88.9%	99.7%	94.4%	90.5%	87.6%	33.4%	92.9%
waste sent to landfill	17.1%	1.3%	1.5%	0.3%	4.5%	0.0%	3.3%	66.4%	4.7%

PRODUCTION

Waste Generated per Unit of Production

FCA worldwide (kg/unit of production)

	Targeted Reduction 2020 vs 2010	2016	2015	2014	Base Year (2010)	Unit of Measurement
Mass-Market Brand assembly and stamping	-14%	169.4	171.3	203.4	217.2	kg/vehicle produced
Mass-Market Brand engines and transmissions	-21%	17.0	17.3	17.9	21.3	kg/unit produced
Mass-Market Brand casting	n.a.	149.8	223.4	320.9	179.0	kg/ton produced
Mass-Market Brand others[22]	n.a.	3.2	3.7	4.0	2.4	kg/hour of production
Maserati	-25%	83.5	80.9	103.5	147.2	kg/vehicle produced
Magneti Marelli	-30%	2.2	2.1	2.1	3.1	kg/hour of production
Teksid (cast iron)	-8%	1,008	1,062	1,244	1,250	kg/ton produced
Teksid (aluminum)	-12%	501	348	394	450	kg/ton produced
Comau[23]	-34%	182	228	256	400	g/hour of production
FCA	**up to 34%**					

Hazardous Waste Generated per Unit of Production

FCA worldwide (kg/unit of production)

	Targeted Reduction 2020 vs 2010	2016	2015	2014	Base Year (2010)	Unit of Measurement
Mass-Market Brand assembly and stamping	-54%	3.1	2.4	2.9	8.2	kg/vehicle produced
Mass-Market Brand engines and transmissions	-75%	0.9	1.0	0.9	2.3	kg/unit produced
Mass-Market Brand casting	-0%	-	-	-	-	kg/ton produced
Mass-Market Brand others[22]	-0%	-	-	-	-	kg/hour of production
Maserati	-25%	5.5	7.1	9.5	14.2	kg/vehicle produced
Magneti Marelli	-30%	0.2	0.2	0.3	0.4	kg/hour of production
Teksid (cast iron)	-17%	2.8	3.0	4.3	5.8	kg/ton produced
Teksid (aluminum)	-17%	9.6	8.4	16.0	32.7	kg/ton produced
Comau[23]	-57%	19.5	19.3	16.3	100.0	g/hour of production
FCA	**up to 75%**					

[22] Refers to NAFTA region plants.
[23] Due to the very low impact of its activities, the normalized figures for Comau have been calculated based on grams per unit.

PRODUCTION

Recovery of Waste

FCA worldwide *(% waste recovered out of waste generated)*

	2020 Target	2016	2015	2014	2010
Mass-Market Brand assembly and stamping	97%	96.6%	96.7%	97.4%	94.0%
Mass-Market Brand engines and transmissions	96%	91.4%	90.8%	87.0%	83.0%
Mass-Market Brand casting	95%	99.3%	96.5%	99.1%	98.9%
Mass-Market Brand others[24]	95%	93.1%	94.7%	94.4%	93.2%
Maserati	91%	95.2%	93.8%	90.5%	84.6%
Magneti Marelli	90%	92.1%	92.6%	87.6%	82.6%
Teksid	45%	44.5%	37.7%	33.4%	19.7%
Comau	95%	97.9%	96.8%	92.9%	66.0%
FCA	**up to 97%**				

Waste in Landfill

FCA worldwide *(% waste sent to landfill out of waste generated)*

	2020 Target	2016	2015	2014	2010
Mass-Market Brand assembly and stamping	1%	1.5%	1.4%	1.3%	4.4%
Mass-Market Brand engines and transmissions	1%	0.8%	1.5%	1.5%	3.5%
Mass-Market Brand casting	2%	0.0%	0.1%	0.3%	4.0%
Mass-Market Brand others[24]	2%	5.7%	3.9%	4.5%	6.9%
Maserati	0%	0.0%	0.0%	0.0%	0.0%
Magneti Marelli	3%	3.4%	2.2%	3.3%	10.4%
Teksid	70%	55.4%	62.2%	66.4%	80.1%
Comau	0%	0.0%	0.3%	4.7%	14.7%
FCA	**up to 0%**				

[24] *Refers to NAFTA region plants.*

PRODUCTION

Biodiversity Conservation

Plants Near, Bordering or Within Protected[24] or High Biodiversity Areas

Company and Plant Location	Activity	Surface (km²)	IUCN Red List Species/National Conservation List Species Present	Investment (€)	Action Taken	Independent Monitoring	Protected Area Relative to Plant
FCA Italy Verrone (Italy)	Production of transmissions and parts	1.8	44 species listed 2 Endangered 2 Vulnerable 2 Near Threatened 38 Least Concern	59,800	Maintenance and monitoring of nests: monitoring and sampling of nests conducted in collaboration with the Department of Life Sciences and Systems Biology, University of Turin. Technical assistance for biodiversity: analysis and assessment of carbon stocks and carbon sink of forest areas. Technical experiments of bioacoustics: characterization of the acoustic landscape within the park by the installation of recording units to detect the peaks and the nature of acoustic energy. State of conservation improving: management activities and support interventions to highlight the areas of greatest natural value, and identify those areas where biodiversity is threatened by external interference. Biophilia: continuation of environmental awareness campaigns to encourage appreciation among children of natural environments.	Yes	Within plant complex
Magneti Marelli Venaria (Italy)	Production of lighting and exhaust systems	0.2	1 species listed 1 Near Threatened	16,000	In 2016, the project moved to a new area in La Mandria Park, on the route that allows access to historical buildings. The route is lined on both sides mainly by native oaks, and red oaks which originated from North America. In 2016, there was a series of assessments on the red oaks, followed by the planting of new oak trees to fill in the route. Plantings were shielded to protect them from deer and hares.	No	Within plant complex (IT1110079 “La Mandria”)

[24] *A protected area (site of regional, national and EU importance, special protection zone, oasis, etc.) is a geographically defined area that is designated, regulated or managed to achieve specific conservation objectives. An area of high biodiversity value is an area that is not subject to legal protection, but is recognized by governmental and non-governmental organizations for its significant biodiversity.*

GRI: G4-EN11, G4-EN12, G4-EN13, G4-EN14

PRODUCTION

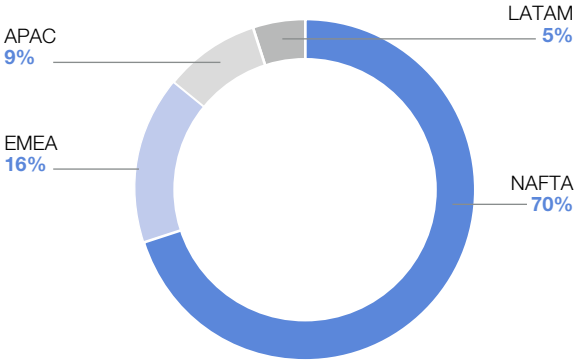
Company and Plant Location	Activity	Surface (km²)	IUCN Red List Species/National Conservation List Species Present	Investment (€)	Action Taken	Independent Monitoring	Protected Area Relative to Plant
Teksid Funfrap (Portugal)	Production of engine blocks, exhaust manifolds, differentials and carter turbines	0.1	n.a.	–	Monitored the environmental situation and met with local authorities to disclose the results of the analysis.	No	Adjacent to plant (within 5 km)
FCA Italy Kragujevac (Serbia)	Assembly and stamping	1.2	73 species listed: 2 Near Threatened 71 Least Concern	600	Bio Lake: Area = 1,230 m^2 Maximum depth = 1.95 m Volume = 1,500 m^3 Aquatic florae are used to oxy-genate the water and eliminate microorganisms. Chlorine and chemical disinfectants are not used to treat the water. Koi were introduced to help balance the ecosystem and reduce algae. Approximately 30 indigenous trees have been planted.	Yes	Adjacent to plant (within 5 km)
FCA Italy Campo Largo (Brazil)	Production of engines	1.2	Flora: 54 species listed: 3 Endangered 6 Vulnerable 45 Near Threatened Fauna: 88 species listed: 1 Critically Endangered 1 Endangered 2 Near Threatened 84 Least Concern	-	Area surveyed by a professional biologist to count the number of species of animals and flora in the area. Construction of a viewing platform	Yes	Adjacent to plant (within 5 km)
FCA Italy Goiana (Brazil)	Assembly and stamping	3.04	Fauna: 108 species listed: 10 Endangered 22 Vulnerable 2 Near Threatened 33 Least Concern 14 Not Threatened 1 Introduced 26 Unrated Flora: 25 species listed: 25 Threatened	170,000	Historical research on Atlantic forest fauna and flora (Zona da Mata Norte). Established a nursery of native seedlings, with production of 60,000 seedlings to date. Planting of 57,000 native seedlings, to create an ecological corridor. Conducted weekly visits to plant, nursery and biodiversity park by local schools.	Yes	No protected areas within plant area, but there are five remaining fragments of the Atlantic Forest near the plant area (within 5 km)
FCA Italy Jaboatão dos Guararapes (Brazil)	Production of electric harnesses	0.10	41 species listed 41 Unrated	-	Eco-tours provided within the site to employees and children.	No	Within plant

GRI: G4-EN11, G4-EN12, G4-EN13, G4-EN14

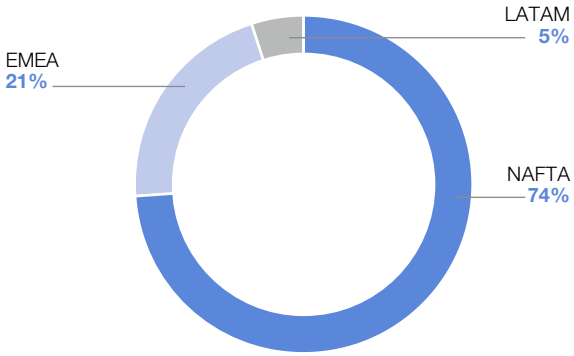
SUPPLIER MANAGEMENT

Purchases

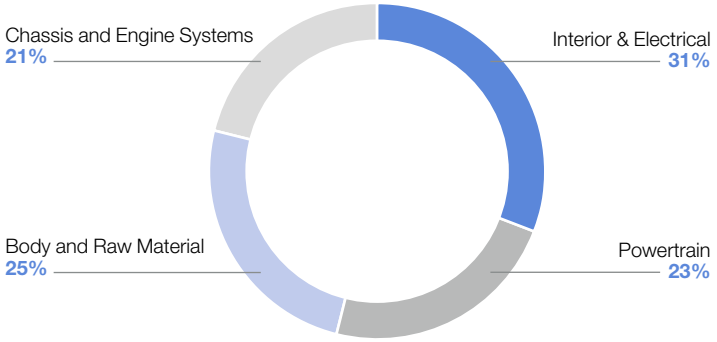
Purchases[1] by Origin
FCA Purchasing worldwide



Purchases[1] by Destination
FCA Purchasing worldwide



Purchases[1] by Type[2]
FCA Purchasing worldwide



[1] Refers to the monetary value of direct material purchases managed by FCA Purchasing.
[2] The FCA purchased commodities (metals, chemicals, electrical, mechanical) were aligned in 2016 to match Engineering and Supplier Quality and merged into four departments: Body & Raw Materials, Chassis & Engine Systems, Interior & Electrical, and Powertrain. Previous years' data cannot be restated in the new structure.

SUPPLIER MANAGEMENT

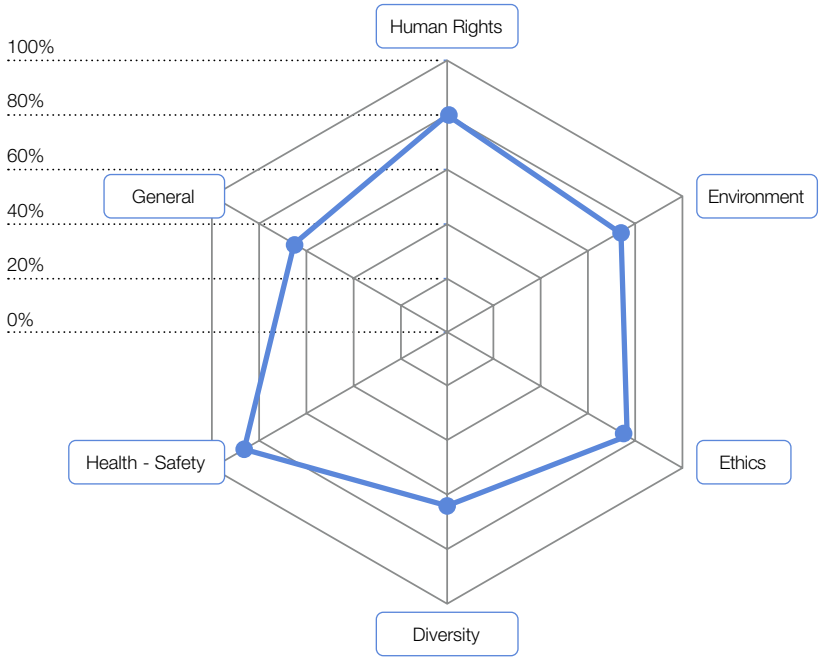
Supplier Sustainability Self-Assessments

Questionnaire Results
FCA Purchasing worldwide

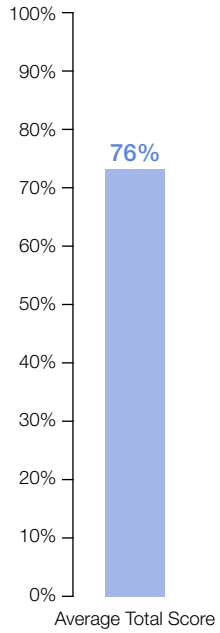
	2016	2015	2014
Suppliers sent self-assessment questionnaires (no.)[3]	1,629	1,497	1,176
Suppliers responding to questionnaire (%)	49	22	53
Average score	76/100	74/100	75/100
Purchases by value covered by questionnaires (%)[4]	69	34	63

Dashboard

Average Score by Value



Average Total



[3] *Data refers to suppliers' Top Parent or headquarters code.*
[4] *Value of purchases (from direct and indirect suppliers) managed by FCA Purchasing.*

GRI: G4-EN32, G4-HR10, G4-LA14, G4-S09

SUPPLIER MANAGEMENT

Audit Results
FCA Purchasing worldwide

	2016	2015	2014
Sustainability audits (no.)	53	60	65
Performed by FCA personnel (Supplier Quality Engineers)	18	27	30
Performed by a third party	35	33	35
Purchases by value covered by audits (%)[5]	10	5	6

Corrective Action Plans[6]
FCA Purchasing worldwide

Aspects	Numbers of Suppliers with Agreed-Upon Action Plans	Audited Suppliers with Significant Actual and Potential Negative Impacts, with Agreed-Upon Action Plans[7]	Number of Action Plans	Main Action Plan Topics
Environment	5	9%	22	Environmental performance Environmental performance: GHG emissions Environmental management Environmental reporting Environmental Emergency Planning System
Labor practices	21	40%	74	Anti-corruption practices Diversity Diversity: code or policy for suppliers Diversity: metrics for suppliers Diversity: suppliers training Diversity: targets Diversity: training Occupational Health & Safety Safety Emergency Planning System Sustainability monitoring in the supply chain Supplier Compliance & Ethics training Safety audits Employees involvement in Health & Safety
Human rights	8	15%	12	Code of conduct Code of conduct: Lack of references to human rights Supplier contractual requirement on human rights
Impact on society	7	13%	12	Anti-corruption practice, lack of: -a written code or policy -grievance mechanism Supplier code of conduct Community development

[5] Value of purchases (from direct and indirect suppliers) managed by FCA Purchasing.
[6] In 2016, 120 joint action plans have been initiated for 21 suppliers.
[7] The percentage is calculated based on the 53 suppliers audited.

GRI: G4-EN33, G4-LA15, G4-HR4, G4-HR5, G4-HR6, G4-HR11, G4-SO10

LOGISTICS

CO_2 Emissions in Logistics Processes

FCA (thousands of tons of CO_2)

	2016	2015	2014
Upstream[1]	737.8[2]	677.0	640.3
Downstream[3]	716.1[2]	766.3	623.1
Total	**1453,9[2]**	**1,443.3**	**1,263.4**
Mopar	59.8[2]	2.1	1.8
Magneti Marelli	23.1	28.0	24.3

[1] Upstream: material and parts distribution to plants.
[2] In 2016, the scope of the monitoring was expanded to include additional flows covering greater distances in South and North America. Due to changes in the boundary and to refinement in the methodology, 2016 data is not directly comparable with previous years. In addition, Mopar 2016 data includes operations in NAFTA, which in previous years was allocated to Upstream.
[3] Downstream: finished vehicle distribution to markets.

DEFINITIONS, METHODOLOGY AND SCOPE

The FCA NV Sustainability Report, now in its 13th edition, is a voluntary document issued by the Group according to GRI G4 guidelines[1] to provide stakeholders a comprehensive picture of FCA activities, results and commitments in the economic, environmental and social spheres.
This appendix provides a methodology guide. Unless otherwise specified or required by the context in which they are used:

- the terms "FCA," "Group" and "Company" refer to all companies consolidated within Fiat Chrysler Automobiles N.V. for accounting purposes (see subsidiaries consolidated in the FCA NV Annual Report)
- the term "company" is used with reference to a selection among the following entities: FCA Italy (formerly known as Fiat Group Automobiles or FGA), FCA US (formerly known as Chrysler Group or CG), Maserati, Comau, Magneti Marelli, Teksid, Fiat Services and other companies
- the term "FCA US" refers to all companies consolidated within FCA US LLC (formerly known as "Chrysler Group") for accounting purposes (see subsidiaries consolidated in the FCA NV Annual Report)
- the term "FCA Italy" (formerly known as "Fiat Group Automobiles") refers to all companies consolidated within FCA Italy S.p.A. for accounting purposes (see subsidiaries consolidated in the FCA NV Annual Report)
- the term "operating segment" refers to the segments of the Group that are regularly reviewed by the Chief Executive Officer for making strategic decisions and allocating resources and assessing performance.They include four regional mass-market vehicle operating segments: EMEA (Europe, Russia, Middle East and Africa), NAFTA (U.S., Canada and Mexico), LATAM (South and Central America) and APAC (Asia and Pacific countries); the luxury brand operating segment (Maserati); the global Components segment (Magneti Marelli, Teksid, Comau)
- the term "customer" as used in this Report refers to the user of our products or services.

Unless otherwise indicated or required by the context, the information and data contained in this Sustainability Report relates to financial year 2016 (January 1, 2016 to December 31, 2016) and to all FCA companies worldwide falling within the scope of consolidation at December 31, 2016.

In order to ensure that information is comparable and meaningful over time, some data for past years was restated to ensure comparability in terms of scope. With respect to years 2010 to 2015, data refers to all companies consolidated within FCA NV for accounting purposes at December 31, 2016.
Except as noted, 2016 data does not include Ferrari, as the spin-off of Ferrari from the Group was completed in January 2016; Data for prior periods also does not include Ferrari, consistent with Ferrari's classification as a discontinued operation for the year ended December 31, 2015.
We monitor our operations through the use of several non-generally accepted accounting principles ("non-GAAP") financial measures: Net debt, Net industrial debt, Adjusted Earnings Before Interest and Taxes ("Adjusted EBIT") and Adjusted net profit; for reconciliations of each of these non-GAAP financial measures to the most directly comparable measure included in our Consolidated Financial Statements, refer to the 2016 FCA Annual Report on the Company's website at www.fcagroup.com.

The exclusion of any geographical area, Group company, or specific site from the scope of reporting is attributable to the inability to obtain data of satisfactory quality, or to its immateriality in relation to the Group as a whole, as may be the case for newly-acquired entities or production activities that are not yet fully operational. In some cases, entities that are not consolidated in the financial statements were included in the scope of reporting because of their significant environmental and social impacts. In particular:

- data on occupational health and safety reported in the "Occupational Health and Safety" section relates to 139 of the 162 plants[2] included in the FCA NV Annual Report (covering approximately 94% of plant workers),[3] to office facilities (in total covering approximately 100% of Group employees), and to four plants of companies that are not fully consolidated, including one joint venture in Turkey and three in the APAC region (two in China and one in India)

[1] The Global Reporting Initiative (GRI) is a multi-stakeholder process for the development and disclosure of Sustainability Reporting Guidelines. The GRI G4 guidelines were issued in May 2013. These guidelines offer an international reference for the disclosure of governance approach and of the environmental, social and economic performance and impacts of organizations.
[2] Data was not considered material, and was thus not reported, for two plants dedicated to publishing and communication activities and 21 plants in start-up or closing phase.
[3] Plant workers are defined as all employees located at a particular site, including workers assigned to manufacturing and other associated units (quality control, logistics, etc.), and to research and development.

GRI: G4-6, G4-17, G4-22, G4-23, G4-29, G4-30

- the Group's environmental and energy performance reported in the "Plants" section refers to 139 of the 162 plants[4] included in the FCA NV Annual Report (covering approximately 100% of the Group's industrial revenues),[5] and to four plants of companies that are not fully consolidated, including one joint venture in Turkey and three in the APAC region (two in China and one in India)
- performance indicators per unit of production reported in the "Plants" section have been restated to make data comparable year-over-year.

Data was collected and reported with the aid of existing management control and information systems, where available, in order to ensure reliability of information flows and the correct monitoring of sustainability performance. A dedicated reporting process was established for certain indicators, using electronic databases or files populated directly by the individuals or entities responsible for each aspect worldwide.
Unless otherwise indicated, all data presented in the Report refers to the International System of Units and may be subject to rounding. In some cases, rounding of a very low number may result in a report of zero.

Quality of Information
The quality of the information contained in the Sustainability Report is supported by compliance with the following principles:

- materiality: inclusion of all information deemed to be of interest to internal and external stakeholders due to its economic, environmental or social impact
- completeness: inclusion of all material topics and indicators
- balance: coverage of both positive and negative aspects of the Group's performance
- comparability: ability to compare between time periods and with similar organizations
- accuracy: provision of adequate levels of detail
- reliability: reporting process subject to audit by an independent organization
- timeliness: Sustainability Report presented together with the FCA NV Annual Report at the Annual General Meeting of FCA NV
- clarity: the language used addresses all stakeholders.

Preparation of the Sustainability Report is part of an annual reporting process subject to audit, analysis and approval by a number of individuals and entities. FCA continues to use its best efforts to ensure the accuracy of the sustainability information contained in this Report. From time to time, however, figures may be updated.
The document is:

- prepared by the FCA Sustainability Team that coordinates and engages Group operating segments and regions and relevant functions
- approved by the Sustainability Disclosure Committee and presented to the Group Executive Council, a decision making body headed by the CEO of FCA NV, consisting of Chief Operating Officers of regions and companies of the Group and various function heads and by subject matter experts
- presented to the Governance and Sustainability Committee, a subcommittee of the Board of Directors of FCA NV, in the form of a management summary of principal achievements and future plans
- subject to assurance by an external independent audit firm, Deloitte & Touche S.p.A., in accordance with the criteria established in the International Standard on Assurance Engagement 3000 - Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000), issued by the International Auditing and Assurance Standards Board for limited assurance engagements. The statement of assurance describing the activities carried out and the expression of opinion is provided at page 215.
- presented together with the Annual Report at the Annual General Meeting of FCA NV to provide a complete, current overview of the Group's financial, environmental and social performance
- available for download at no cost from the Sustainability section of the Group's public website (www.fcagroup.com).

The 2015 Sustainability Report was made available at FCA NV's Annual General Meeting on April 15, 2016.

[4] Data was not considered material, and was thus not reported, for two plants dedicated to publishing and communication activities and 21 plants in start-up or closing phase.
[5] Revenues attributable to activity of plants directly controlled by the Group.

ABOUT THIS REPORT

Reporting period
Financial year 2016 (January 1, 2016 to December 31, 2016)

Reporting cycle
Annual

Date of publication
April, 2016

Document formats
PDF and interactive versions

Report scope and boundary
- The information and data relate to FCA companies worldwide falling within the scope of consolidation at December 31, 2016.
- Financial figures reflect those reported in the 2016 FCA NV Annual Report.

Report content
The selection of topics for this Report is based on the results of our Corporate priorities, the dialogue with stakeholders, the Global Reporting Initiative G4 requirements and other sustainability ratings and rankings. This Report includes material aspects as well as topics which are not material, but which may be of interest to selected stakeholders. Additional environmental, social and governance indicators are reported in the Facts & Figures section.

Global Reporting Initiative (GRI)
The Report is GRI G4 in accordance - Comprehensive option.
See page 216 for full set of indicators.

Assurance
- The Report has been submitted to assurance by an external independent audit firm, Deloitte & Touche S.p.A., in accordance with the criteria established in the International Standard on Assurance Engagement 3000 - Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000), issued by the International Auditing and Assurance Standards Board for limited assurance engagements.
- Deloitte & Touche S.p.A. is officially authorized to conduct ISAE 3000 assurance audits. The statement of assurance describing the activities carried out and the expression of opinion is provided at page 215.

Contact
Fiat Chrysler Automobiles N.V.
Registered Office: Amsterdam, The Netherlands
Amsterdam Chamber of Commerce: 60372958
Corporate Office: 25 St James's Street, London SW1A 1HA U.K

Your opinion is important to us. Please contact the Sustainability Team with any questions or suggestions.
sustainability@fcagroup.com
sustainability-emea@fcagroup.com
sustainability-nafta@fcagroup.com
sustainability-latam@fcagroup.com
sustainability-apac@fcagroup.com

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements. These statements may include terms such as “may,” “will,” “expect,” “could,” “should,” “intend,” “estimate,” “anticipate,” “believe,” “remain,” “on track,” “design,” “target,” “objective,” “goal,” “forecast,” “projection,” “outlook,” “prospects,” “plan,” “intend,” or similar terms. Forward-looking statements are not guarantees of future performance. Rather, they are based on the Group’s current expectations and projections about future events and, by their nature, are subject to inherent risks and uncertainties. They relate to events and depend on circumstances that may or may not occur or exist in the future and, as such, undue reliance should not be placed on them. Actual results may differ materially from those expressed in such statements as a result of a variety of factors, including: the Group’s ability to maintain vehicle shipment volumes; developments in global financial markets and general economic environment; changes in demand for automotive products, which is highly cyclical; changes in local economic and political conditions, including with regard to trade policy; the Group’s ability to enrich the product portfolio and offer innovative products; the high level of competition in the automotive industry; the Group’s ability to expand certain of the Group’s brands internationally; changes in the Group’s credit ratings; the Group’s ability to realize anticipated benefits from any joint venture arrangements and other strategic alliances; potential shortfalls in the Group’s defined benefit pension plans; the ability of the Group’s dealers and retail customers to obtain adequate access to financing; the Group’s ability to access funding to execute the Group’s business plan and improve the Group’s business, financial condition and results of operations; various types of claims, lawsuits and other contingent obligations against the Group; disruptions arising from political, social and economic instability; material operating expenditures and other effects from and in relation to compliance with environmental, health and safety regulation; developments in labor and industrial relations and developments in applicable labor laws; increases in costs, disruptions of supply or shortages of raw materials; exchange rate fluctuations, interest rate changes, credit risk and other market risks; political and civil unrest; earthquakes or other disasters and other risks and uncertainties.

INDEPENDENT AUDITOR'S REPORT

This Sustainability Report has been submitted to assurance by an external independent audit firm, Deloitte & Touche S.p.A.
The scope, methodology, limitations and conclusions of the assurance engagement are provided in the following Independent Auditors' Report.

Deloitte.

Deloitte & Touche S.p.A.
Via Tortona, 25
20144 Milano
Italia

Tel: +39 02 83322111
Fax: +39 02 83322112
www.deloitte.it

INDEPENDENT AUDITORS' REPORT ON THE SUSTAINABILITY REPORT

To the Governance and Sustainability Committee of Fiat Chrysler Automobiles N.V.

We have carried out a limited assurance engagement on the Sustainability Report of Fiat Chrysler Automobiles ("FCA" or the "Group") as of December 31, 2016.

Sustainability organization's responsibility on the preparation of the Sustainability Report

Group Sustainability organization is responsible for the preparation of the Sustainability Report in accordance with the "*G4 Sustainability Reporting Guidelines*" issued in 2013 by *GRI – Global Reporting Initiative*, as stated in the paragraphs "About this Report" and "Definitions, Methodology and Scope" of the Sustainability Report. The Sustainability organization is supported by several entities within the organization including the Sustainability Disclosure Committee, the Group Executive Council and the Board Governance and Sustainability Committee that is also responsible for, among other things, assisting and advising the Board of Directors with monitoring and evaluating reports on the Group's sustainable development policies and practices, management standards, strategy, performance and governance globally, and reviewing, assessing and making recommendations as to strategic guidelines for sustainability related issues, and reviewing the annual Sustainability Report. The Group Sustainability organization also support the definition of FCA's objectives regarding sustainability performance and reporting of the achieved results, the identification of the stakeholders and the significant aspects to report.

Auditors' responsibility

Our responsibility is to issue this report based on the procedures performed. We conducted our work in accordance with the criteria established in the "*International Standard on Assurance Engagements 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information*" ("*ISAE 3000 Revised*"), issued by the International Auditing and Assurance Standards Board for limited assurance engagements. The standard requires the compliance with ethical principles, including independence requirements, and that we plan and perform the engagement to obtain limited assurance whether the report is free from material misstatement.

The procedures performed on the Sustainability Report included inquiries, primary with company personnel responsible for the preparation of Sustainability Report, analysis of documents, recalculations and other evidence gathering procedures as appropriate.

These procedures consisted in verifying its compliance with the principles for defining report content and quality set out in the "*G4 Sustainability Reporting Guidelines*", and are summarized as follows:

- comparing the economic and financial information and data included in the Sustainability Report with those included in the Group Consolidated Financial Statements as of December 31, 2016, on which another auditor issued the auditors' report, dated February 28, 2017;
- analysing, through interviews, the governance system and the management process of the matters related to sustainability management and its relationship with the strategy and operations of the Group;
- analysing the process relating to the definition of material aspects disclosed in the Sustainability Report, with reference to the methods used for the identification and prioritization of material aspects for stakeholders and to the internal validation of the process results;
- analysing how the processes underlying the generation, collection and management of quantitative data of the Sustainability Report operate. In particular, we have performed:
  - interviews and discussions with the management of FCA Sepin S.c.p.A. and the personnel of the Group among the four operating regions and components segment to gather information about the accounting and reporting systems used in preparing the Sustainability Report, as well as on the internal control procedures supporting the gathering, aggregation, processing and transmittal of data and information to the department responsible for the preparation of the Sustainability Report;
  - analysis, on a sample basis, of the documentation supporting the preparation of the Sustainability Report, in order to gather the evidence of processes in place, their adequacy, and that the internal control system correctly manages data and information in connection with the objectives described in the Sustainability Report;
- analysing the compliance and the internal consistency of the qualitative information disclosed in the Sustainability Report in relation to the guidelines identified in the paragraph "Sustainability organization's responsibility on the preparation of the Sustainability Report" of this report;
- analysing the stakeholders engagement process, in terms of methods applied, through the analysis of the minutes of the meetings or any other available documentation about the main topics arisen in the discussion with them;
- obtaining the representation letter signed by the legal representative of FCA Sepin S.c.p.A., on the compliance of the Sustainability Report with the guidelines identified in the paragraph "Sustainability organization's responsibility on the preparation of the Sustainability Report" of this report, as well as the reliability and completeness of the data and information disclosed.

The procedures performed in a limited assurance engagement are less than those performed in a reasonable assurance engagement in accordance with *ISAE 3000 Revised*, and, therefore, do not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the Sustainability Report of FCA as of December 31st, 2016 is not prepared, in all material respects, in accordance with the "*G4 Sustainability Reporting Guidelines*" issued in 2013 by *GRI – Global Reporting Initiative*, as stated in the paragraphs "About this Report" and "Definitions, Methodology and Scope" of the Sustainability Report.

DELOITTE & TOUCHE S.p.A.

Franco Amelio
Partner

Milan, Italy
April 11, 2017

GRI G4 CONTENT INDEX

This Report is prepared according to GRI G4 - Comprehensive option.

The following table lists content within the document that relates to specific GRI G4 indicators. Each indicator references the appropriate pages in the 2016 Sustainability Report or the 2016 FCA NV Annual Report.

Page numbers also work as a direct link to the related content in this Report or in another source.

Key
AR = Annual Report at December 31, 2016
SR = Sustainability Report at December 31, 2016
Fully disclosed
Not disclosed

General standard disclosures

Strategy and analysis

G4-1	Statement from the Chairman and the CEO	SR	3-5	
G4-2	Key impacts, risks, and opportunities	AR	17-30	
		SR	7-15, 29, 36, 58-64, 80	

Organizational profile

G4-3	Name of the organization	SR	6	
G4-4	Primary brands, products, and/or services	AR SR	39-52 6	
G4-5	Location of the organization's headquarters	SR	213	
G4-6	Countries where the organization operates	AR SR	265-282 6, 211-212	
G4-7	Nature of ownership and legal form	AR	86-87	
G4-8	Markets served	SR	6	
G4-9	Scale of the reporting organization	SR	7, 16-27, 66, 172-173, 175-176, 179	
G4-10	Workforce characteristic	SR	66, 172, 173, 174, 175, 176, 179	
G4-11	Employees covered by collective bargaining agreements	SR	73-74	
G4-12	Organization's supply chain	AR SR	118 155, 156, 207	
G4-13	Changes in organization's size, structure, ownership or its supply chain	AR SR	118 66, 155, 156, 179, 211	
G4-14	Precautionary approach to risk management	SR	58-64, 97	

DMA and Indicators		Publications	Page	Omission and reason
G4-15	Externally developed charters, principles or initiatives to which the organization subscribes	AR SR	100 55, 57	
G4-16	Membership in associations or organizations	SR	51	
Identified material aspects and boundaries				
G4-17	Entities included in the organization reports	AR SR	145-166, 265-282 211-212	
G4-18	Reporting principles for defining report content	SR	35	
G4-19	Material aspects identified in defining report content	SR	35	
G4-20	Material aspects within the organization	SR	35	
G4-21	Material aspects outside the organization	SR	35	
G4-22	Restatements of information provided in earlier reports	SR	211-212	
G4-23	Significant changes from previous reporting periods in scope and aspect boundaries	SR	211-212	
Stakeholder engagement				
G4-24	Stakeholder groups engaged by the organization	SR	31-34	
G4-25	Identification and selection of stakeholders to engage	SR	31-34	
G4-26	Organization's approach to stakeholder engagement	SR	31-34	
G4-27	Key topics collected through stakeholder engagement	SR	31-35	
Report profile				
G4-28	Reporting period	SR	213	
G4-29	Date of the last report	SR	211-212	
G4-30	Reporting cycle	SR	211, 212, 213	
G4-31	Contact point for questions regarding the report	SR	213	
G4-32	GRI Content Index	SR	216-225	
G4-33	External assurance	SR	215	

DMA and Indicators		Publications	Page	Omission and reason
Governance				
G4-34	Governance structure	AR SR	87-109 51-54	
G4-35	Delegating authority for economic, environmental and social topics	SR	54	
G4-36	Positions with responsibility for economic, environmental and social topics	AR SR	93 52-54	
G4-37	Consultation between stakeholders and the highest governance bodies on economic, environmental and social topics	AR SR	93, 96-98 52, 53, 54	
G4-38	Composition of highest governance bodies and its committees	AR SR	87-109 52, 53	
G4-39	Executive powers of the Chairman	AR SR	87-92 52	
G4-40	Qualification and expertise of highest governance bodies	AR SR	87-91 52, 53	
G4-41	Processes to avoid conflicts of interest	AR	87	
G4-42	Highest governance bodies and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts	AR SR	93 53, 54	
G4-43	Measures taken to develop and enhance the highest governance bodies' collective knowledge of economic, environmental and social topics	AR SR	93 52, 53, 54	
G4-44	Evaluation of the Board of Directors' performance	AR SR	93 52, 53	
G4-45	Highest governance bodies' role in the identification and management of economic, environmental and social impacts, risks, and opportunities	AR SR	103-107 52-54, 59, 61-64	
G4-46	Highest governance bodies' role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	AR SR	103-107 59, 61-64	
G4-47	Frequency of the highest governance bodies' review of economic, environmental and social impacts, risks, and opportunities	AR SR	103-107 61-64	
G4-48	Highest committee or position that formally reviews and approves the organization's sustainability report	AR SR	93 53-54	
G4-49	Communicating critical concerns to the highest governance bodies	AR SR	103-107 54, 59	
G4-50	Critical concerns that were communicated to the highest governance bodies and the mechanism(s) used to address and resolve them	AR SR	103-107 59	
G4-51	Remuneration policies for highest governance bodies and senior executives	AR	120-133	
G4-52	Determining remuneration	AR	120-133	
G4-53	How stakeholders' views are sought and taken into account regarding remuneration	AR	96-99, 120-133	
G4-54	Ratio of the annual compensations within the organization			The full set of data is not reportable In some countries of presence this information is subject to confidential treatment
G4-55	Ratio of percentage increase in annual compensation within the organization			The full set of data is not reportable In some countries of presence this information is subject to confidential treatment

Ethics and integrity

G4-56	Organization's values, principles, standards and norms of behavior	SR	51, 55	
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity	SR	55-57	
G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity	SR	56-57, 59	

Specific standard disclosures

Economic

DMA and Indicators		Publications	Page	Omission and reason
Material aspect: economic performance				
G4-DMA	Generic Disclosures on Management Approach	SR	59-65	
G4-EC1	Direct economic value generated and distributed	SR	80-84, 177	
G4-EC2	Financial implications, risks and opportunities for the organization's activities due to climate change	AR SR	104-107 17, 59-64	
G4-EC3	Coverage of the organization's defined benefit plan obligations	SR	71	
G4-EC4	Financial assistance received from government	SR	184	
Material aspect: market presence				
G4-DMA	Generic Disclosures on Management Approach	SR	176	
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage	SR	176	
G4-EC6	Proportion of senior management hired from the local community	SR	173	
Material aspect: indirect economic impacts				
G4-DMA	Generic Disclosures on Management Approach	AR SR	104-107 80, 156	
G4-EC7	Development and impact of infrastructure investments and services supported	AR SR	104-107 17, 23, 59, 61-64, 80-84	
G4-EC8	Significant indirect economic impacts	SR	7-15, 20, 23, 26, 59, 61-64, 80-84, 93-95, 155-157, 160, 164-165	
Material aspect: procurement practices				
G4-DMA	Generic Disclosures on Management Approach	SR	155-156	
G4-EC9	Proportion of spending on local suppliers	SR	155-156, 207	

Environmental

DMA and Indicators		Publications	Page	Omission and reason
Material aspect: materials				
G4-DMA	Generic Disclosures on Management Approach	SR	129-133	
G4-EN1	Materials used	SR	129-133, 184	
G4-EN2	Recycled input materials	SR	129-133, 142, 184	
Material aspect: energy				
G4-DMA	Generic Disclosures on Management Approach	SR	150	
G4-EN3	Energy consumption within the organization	SR	150, 186-188	
G4-EN4	Energy consumption outside of the organization	SR	142, 184	
G4-EN5	Energy intensity	SR	21, 150, 189	
G4-EN6	Reduction of energy consumption	SR	150	
G4-EN7	Reductions in energy requirements of products and services	SR	97, 117-119	
Material aspect: water				
G4-DMA	Generic Disclosures on Management Approach	SR	152	
G4-EN8	Water withdrawal	SR	21, 152, 194	
G4-EN9	Water sources significantly affected by withdrawal	SR	196	
G4-EN10	Water recycled and reused	SR	27, 152, 195	
Material aspect: biodiversity				
G4-DMA	Generic Disclosures on Management Approach	SR	148-149	
G4-EN11	Operational sites in, or adjacent to, protected areas and areas of high biodiversity value	SR	205-206	
G4-EN12	Description of significant impacts on biodiversity	SR	205-206	
G4-EN13	Habitats protected or restored	SR	205-206	
G4-EN14	List of species with habitats in areas affected by operations, by level of extinction risk	SR	205-206	
Material aspect: emissions				
G4-DMA	Generic Disclosures on Management Approach	SR	151, 166	
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	SR	27, 151, 190	
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	SR	27, 151, 190	
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	SR	142, 210	
G4-EN18	Greenhouse gas (GHG) emissions intensity	SR	151, 191	
G4-EN19	Reduction of greenhouse gas (GHG) emissions	SR	27, 149-151, 166-168, 170, 191	
G4-EN20	Emissions of ozone-depleting substances (ODS)	SR	192	
G4-EN21	NO_x, SO_x, and other significant air emissions	SR	193	

DMA and Indicators		Publications	Page	Omission and reason
Material aspect: effluents and waste				
G4-DMA	Generic Disclosures on Management Approach	SR	152, 153	
G4-EN22	Water discharge	SR	27, 152-153, 194, 196-200	
G4-EN23	Waste disposal	SR	27, 153-154, 201-202	
G4-EN24	Significant spills	SR	149	
G4-EN25	Hazardous waste	SR	154	
G4-EN26	Biodiversity and habitats affected by the organization's discharges	SR	196	
Material aspect: products and services				
G4-DMA	Generic Disclosures on Management Approach	SR	97-119, 141	
G4-EN27	Mitigation of environmental impacts of products and services	SR	90, 97-119, 121-128, 134-140	
G4-EN28	Products sold and their packaging materials that are reclaimed	SR	141	
Material aspect: compliance				
G4-DMA	Generic Disclosures on Management Approach	SR	57	
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	SR	57, 185	
Material aspect: transport				
G4-DMA	Generic Disclosures on Management Approach	SR	166	
G4-EN30	Environmental impacts of transport	SR	169-170, 210	
Material aspect: overall				
G4-DMA	Generic Disclosures on Management Approach	SR	149	
G4-EN31	Environmental protection expenditures and investments	SR	149	
Material aspect: supplier environmental assessment				
G4-DMA	Generic Disclosures on Management Approach	SR	159-161	
G4-EN32	Suppliers screened using environmental criteria	SR	20, 159-161, 168, 208	
G4-EN33	Actual and potential negative environmental impacts in the supply chain and actions taken	SR	9-10, 12, 20, 159-161, 209	
Material aspect: environmental grievance mechanisms				
G4-DMA	Generic Disclosures on Management Approach	SR	56	
G4-EN34	Grievances about environmental impacts filed, addressed, and resolved	SR	56, 164-165	

DMA and Indicators		Publications	Page	Omission and reason
Social				
Labor practices and decent work				
DMA and Indicators		Publications	Page	Omission and reason
Material aspect: employment				
G4-DMA	Generic Disclosures on Management Approach	SR	66, 70-72	
G4-LA1	Number and rates of new employee hires and employee turnover	SR	25, 66, 72, 179	
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	SR	71	
G4-LA3	Return to work and retention rates after parental leave	SR	72, 177	
Material aspect: labor/management relations				
G4-DMA	Generic Disclosures on Management Approach	SR	75	
G4-LA4	Minimum notice periods regarding operational changes	SR	75	
Material aspect: occupational health and safety				
G4-DMA	Generic Disclosures on Management Approach	SR	73-74, 76-79	
G4-LA5	Workforce represented in health and safety committees	SR	77	
G4-LA6	Injuries, occupational diseases, lost days, absenteeism and total number of work-related fatalities	SR	78-79, 182	
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	SR	78-79, 182	
G4-LA8	Health and safety topics covered in formal agreements with trade unions	SR	73-74, 77, 180	
Material aspect: training and education				
G4-DMA	Generic Disclosures on Management Approach	SR	66, 68-69	
G4-LA9	Training per employee	SR	19, 25, 69, 178	
G4-LA10	Programs for skills management and lifelong learning of employees	SR	19, 66, 68-69, 178	
G4-LA11	Employees receiving regular performance and career development reviews	SR	19, 68	
Material aspect: diversity and equal opportunity				
G4-DMA	Generic Disclosures on Management Approach	SR	52, 66-67	
G4-LA12	Composition of governance bodies and breakdown of employees per indicators of diversity	SR	52, 66-67, 172-176	
Material aspect: equal remuneration for women and men				
G4-DMA	Generic Disclosures on Management Approach	SR	70	
G4-LA13	Ratio of basic salary and remuneration of women to men	SR		The full set of data is not reportable; in some countries of presence this information is subject to confidential treatment
Material aspect: supplier assessment for labor practices				
G4-DMA	Generic Disclosures on Management Approach	SR	159-160, 162-163	
G4-LA14	Suppliers screened using labor practices criteria	SR	20, 159-160, 162-163, 208	
G4-LA15	Actual and potential negative impacts for labor practices in the supply chain and actions taken	SR	9-10, 159-160, 162-163, 209	
Material aspect: labor practices grievance mechanisms				
G4-DMA	Generic Disclosures on Management Approach	SR	56, 164-165	
G4-LA16	Grievances about labor practices filed, addressed, and resolved	SR	164-165	

Human rights

DMA and Indicators		Publications	Page	Omission and reason
Material aspect: investment				
G4-DMA	Generic Disclosures on Management Approach	SR	55, 157-158	
G4-HR1	Investment agreements and contracts that include human rights clauses or that underwent human rights screening	SR	30, 55, 157, 158	
G4-HR2	Employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations	SR	30, 55, 178	
Material aspect: non-discrimination				
G4-DMA	Generic Disclosures on Management Approach	SR	30, 56	
G4-HR3	Incidents of discrimination and corrective actions taken	SR	30, 56	
Material aspect: freedom of association and collective bargaining				
G4-DMA	Generic Disclosures on Management Approach	SR	73-74, 159-160, 162-163	
G4-HR4	Risks to the right to exercise freedom of association and collective bargaining	SR	30, 73-74, 159-160, 162-163, 180-181, 209	
Material aspect: child labor				
G4-DMA	Generic Disclosures on Management Approach	SR	30, 159-160, 162-163	
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