

Arcelon Mill Belling

Corporate Responsibility Report





## Steel, the fabric of life

ArcelorMittal Belgium produces innovative and sustainable steel products for the widest range of applications.

Without steel, no lightweight vehicles. Cars are required to become increasingly economical whilst also offering an excellent driving comfort and being perfectly safe. This is all made possible with the newest types of steel.

Without steel, no green energy. The newest types of steel are required for the building of wind turbines. Steel can also be recycled infinitely, a double bonus.

Without steel, no large infrastructural works. Steel is strong and resistant to all weather conditions. In addition, it is also perfectly suitable for all types of constructions, such as bridges.

Without steel, no futuristic buildings. Steel is strong and perfectly resistant to all outdoor conditions. It is also suitable for creating the most amazing architectural gems.

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\* This report provides an overview of the corporate responsibility initiatives taken by the production sites in Ghent, Liège, Geel and Genk during the year 2017.

As the report looks back at 2017, it does not take into account the corrective measures imposed by the European Commission in the spring of 2018 as a condition for Arcelor/Mittal's acquisition of the Italian steel company Ilva. In Belgium, this remedy package consists of the sale of the production lines in Tilleur (pickling, cold rolling and packaging) and the hot dip galvanizing lines 4 and 5 in Flémalle. This topic will be explained in more detail in the 2018 corporate responsibility report. **14** Outcome 01

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## Editorial

### Dear reader,

Creating innovative and sustainable steel products for a wide range of everyday applications is what we - the ArcelorMittal Belgium team - stand for. Our strengths are clear: We work with highly skilled professionals, we are an integrated site, we are close to our customers and our infrastructure enables cooperation with complementary sectors. In addition, our steel is also seen as the cornerstone of a circular economy and as a basic material for renewable energy.

Within our business operations, our emphasis is always put on safety, quality and operational reliability. Our shop floor colleagues are key within this and everyone is involved. As after all, progress is achieved through teamwork. Two years after the merger of our sites in Ghent, Liège, Geel and Genk, this strong teamwork has already provided us with many strong examples of the synergies that have been achieved, both in terms of system integration and in terms of automation and innovation.

Before taking a closer look at the economic context in which we operate and at some of our major achievements, I would like to begin with our highest priority: safety.

## "Safety is never to be taken for granted"

### Safety is and remains our top priority.

2017 made clear that safety is never to be taken for granted. In October last year, we reached a one year milestone of zero lost time accidents of our own employees. A few weeks later, however, two fatalities occurred on our site. At the end of November an explosion took place in our coking plant. One colleague died and two colleagues were seriously injured. One month later, at the end of December, a second fatal accident occured when a colleague died while unloading aluminum. Both tragedies have affected a great many people and will forever remain a black page in the history of our company.

Our employees are our main asset and safety is our top priority. Tragedies such as the ones we experienced at the end of 2017 must be avoided at all costs. We are determined, we must and we will succeed in our objective of zero serious accidents. In order to improve the quality of our safety rules & procedures and to implement them in a disciplined manner, we drew up a safety action plan at the end of 2017. With it we aim to achieve a breakthrough in preventing serious work accidents and to generate a shift in terms of safety. (For further information, see "Outcome 1 – Safe, healthy, quality working lives for our people" (p.14).

## "ArcelorMittal Belgium's annual steel production corresponds to a production of 3 days in China."

### China is setting the pace for the steel sector.

If we look at the market in which our company operates, we note that 1.6 billion tons of steel were produced worldwide last year, half of which in China. Nevertheless, China suffers from a large overcapacity of steel, this even amounted to more than 468 million tons in 2015. The Chinese government has therefore decided to reduce its overcapacity by 140 million tons between 2015 and 2020.

To -in the meantime- protect ourselves against this import of cheap Chinese steel, we have successfully completed antidumping files against Chinese steel in recent years. Although this has reduced the imports from China into Europe, we notice that the total imports of steel into Europe continue to rise as there is a shift in imports from China to other countries. We must therefore remain vigilant. As long as the worldwide overcapacity remains, steel will continue to be dumped. We will therefore continue to work towards a level playing field worldwide.

## "We can and will successfully achieve our ambition of becoming the steel company of the future!"

### Continuing to explore the boundaries of steel making.

We believe in the vigour of our Arcelor Mittal Belgium team to face up to these challenging market conditions. One of the strengths of our company is our ability to innovate, to constantly push the boundaries of our steel production. Innovation is inextricably linked to a continuous improvement. We are constantly looking for breakthroughs in processes, working methods and products. Today we are already shaping a vision of where we want to be in 15–20 years' time.

Just as our daily lives have dramatically changed over the course of the last 10 years with the rise of smartphones, social networks and the use of big data, our production activities are now undergoing the same fundamental changes, constantly pushing the boundaries in terms of efficiency and productivity. Thanks to our strong IT commitment and our extensive process automation, we were already a forerunner during the third industrial revolution, which was mainly characterized by automation. Our acquired knowledge and skills will now be deployed to take the next step towards the digital revolution in manufacturing, also known as industry 4.0.

A good illustration of our drive for innovation is the commissioning of our groundbreaking Jet Vapor Deposition production line in Liège. The JVD technology, inaugurated by His Majesty the King of the Belgians in February 2017, coats steel sheets in a vacuum chamber by spraying zinc onto it at high speed. The JVD line is a world first for the steel industry, both in terms of production process as well as product development. Innovation, of course, means much more than just process and/or product innovation. In the ecological field, too, we are constantly looking for breakthroughs in our processes in order to further reduce our footprint and to set new standards for moving towards a low-carbon company. Over the past year, a great deal of research has been carried out into the possibility of converting blast furnace gas into biofuel, thereby increasing our CO<sub>2</sub> efficiency. In the coming year we hope to take that next step forward, in which we will move from research to development and start building the pilot plant on our site in Ghent.

## "Setting down new markers to to evolve into a low-carbon company."

Every day I notice how industry 4.0 is becoming more and more reality in our site. As you can see, there are already many tangible examples. Many valuable ideas are in the pipeline. We have all the skills required to become the 'smart factory of the future': highly qualified employees, high-tech installations and highly automated processes. We also work closely together with the academic world and various research centres within ArcelorMittal to further strengthen our innovative capacity. I am convinced that we can and will successfully achieve our ambition!

May I, together with the ArcelorMittal Belgium team, wish you a great read with this new issue of our corporate responsibility report.



Manfred Van Vlierberghe CEO ArcelorMittal Belgium

## Company profile

ArcelorMittal Belgium is part of the ArcelorMittal group, a leading steel and mining company. Our Belgian cluster, with production facilities in Ghent, Liège, Geel and Genk, has all required facilities to convert raw materials in a sustainable way into steel products with high added value. Cars, wind turbines, design houses... wherever you look, you'll find steel from ArcelorMittal Belgium. Every year we produce around 6 million tons of flat steel, constantly improving our existing steel products and developing new ones.

## Our strengths

Complementary installations and products;

Unique and broad product range (uncoated, galvanized, organically coated and tinplate);

We are at the forefront of innovation;

We are unmatched in the development of the latest generation of ultra-high-strength steels;

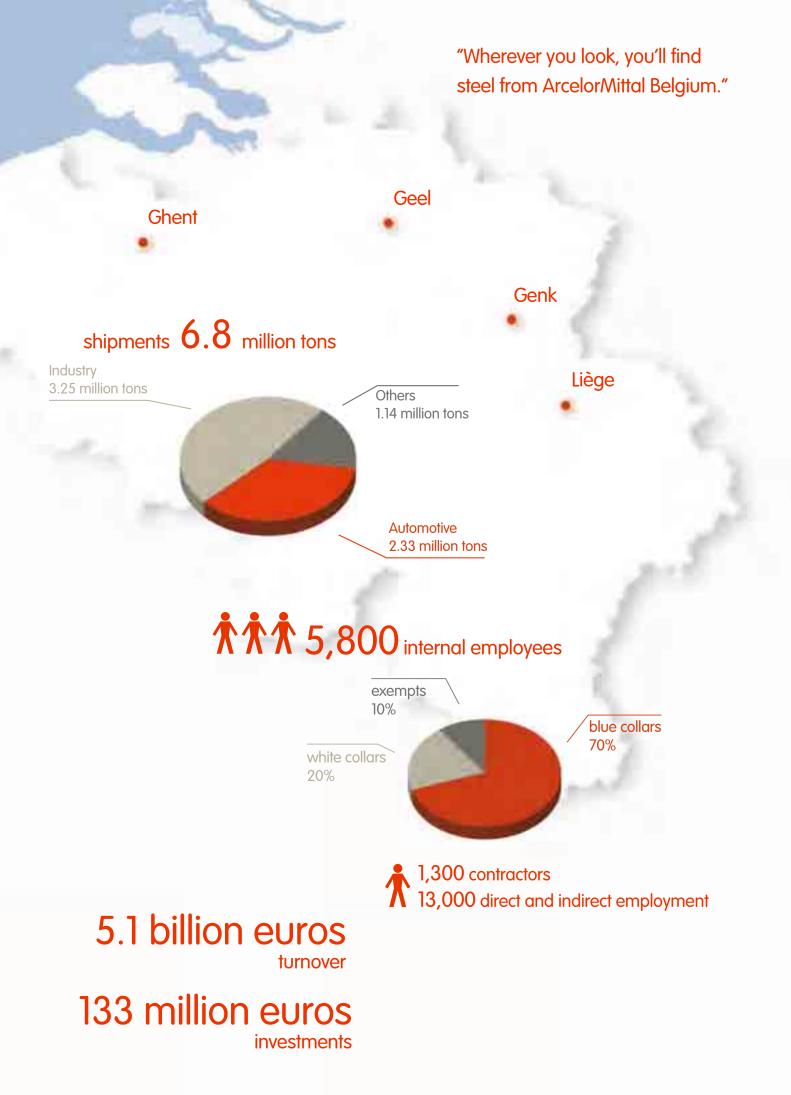
We maintain close contact with the universities of Ghent and Liège and we have two research centres in Ghent (OCAS) and Liège (CRM);

We serve partly the same customers in the automotive and industrial sectors. ArcelorMittal Belgium accounts for 15% of all car steels in Europe;

We are a reference for our customers: product range, product development, quality and service;

We are a pioneer in CO<sub>2</sub> efficiency;

We rely on motivated and committed employees who are proud to work at our company.



Until November 30 2017, Arcelor/Mittal Belgium's management committee consisted of the following members:



Frédéric Tancrez

COO Finishing Liège

As of December 1<sup>st</sup> 2017, the management committee of Arcelor-Mittal Belgium is composed as follows:

Kris Notebaert

COO Finishing Ghent

# <image>

## Management committee 2017



## The many sustainable aspects of steel

## Steel - 100% recyclable

Steel is 100% recyclable, this without any loss of quality. 10 to 15% of our end products consist out of recycled scrap. Utilizing scrap generates an enormous environmental gain as this does not require additional energy input as we use the energy that is released during the conversion of hot metal to liquid steel when melting steel. By utilizing scrap less  $CO_2$  is also emitted per ton of produced steel.

Products made of steel have an average lifespan of 20 years. Every ton of steel produced today, will find its way back into this production cycle sooner or later. This entails that steel can be recycled 5 times per century. Requiring carbon only once to produce new steel on a base of iron ore. However as the demand for steel currently still exceeds the amount of scrap available worldwide, we are still obliged to produce steel starting from iron ore.

## Steel - indicator of prosperity

In order to guarantee a good living standard worldwide, sustainable materials like steel are needed. Compared to other materials, steel is relatively cheap, available worldwide, easy to use and environmentally friendly.

Around 10 to 12 tons of steel per person is required to reach a fully developed economy. The current average on a world scale only amounts to 4 tons however. If we want to go towards 10 to 12 tons of steel per person, new steel, starting from iron ore, will still have to be produced throughout the next 50 years. This increasing consumption of steel, will create a (positive) snowball effect as it will be enable us to deploy more and more scrap. By the end of this century, around 80% of the production of steel will be based on the recycling of scrap and a mere 20% on the classical blast furnace route.

## Steel - unbeatable CO<sub>2</sub> footprint

On a world scale the average  $CO_2$  emission per ton steel, starting from iron ore, amounts to 2.6 ton. Aluminium easily emits around 20 tons, carbon fiber 40 tons. In addition, the steel industry continuously performs research on new solutions to improve its ecological footprint. At ArcelorMittal we invest strongly in the development of ultra-high-strength steels which will reduce the weight of the car bodywork with 20%. This in turn enables the automotive industry to reach its aim of manufacturing cars that will emit 95 grams per kilometer by 2020. Compared to the current emission level of cars, this entails a decrease of around 30 grams per kilometer. Taking into account that a car has a life expectancy of around 200,000 kilometers, its overall emission will decrease with 6 tons of  $CO_2$ .

Although steel takes up around 60% of the total weight of a car, it is only responsible for 20% of the total  $CO_2$  footprint required to manufacture the car. Due to the much higher  $CO_2$  values per ton, aluminium represents around 50% of the total  $CO_2$  footprint to build the car, despite the minimal use of aluminum in the car bodywork.



"Steel is the cornerstone of a circular economy and is the base material for sustainable energy. Think of wind turbines, solar panels and all kinds of storage tanks. In addition, the steel industry supplies raw materials for complementary sectors such as cement, energy, etc. From a product lifespan perspective, steel is a particularly interesting material, that offers a lot of sustainable possibilities!"

Manfred Van Vlierberghe, CEO ArcelorMittal Belgium

### Steel - cornerstone of a circular economy

ArcelorMittal Belgium generates much more added value than just the production of steel and the recycling of scrap. Almost all of our by-products are re-used into our steel production process or become the raw materials for other industries. We convert our process gasses into electricity, the cement industry utilizes our blast furnace slag and we are conducting groundbreaking research to convert part of our blast furnace gas into raw materials for other industries. In short: Nothing is wasted!

The steel industry is a cornerstone of a sustainable circular economy, in which all materials used in production are recuperated, treated and, as far as possible, re-used into the production chain as secondary raw material and/or energy source. This is how we combat the depletion of our natural resources.



## Key Performance Indicators

Safety frequency rates* employees and contractors	0.9
Percentage of sites that have their own safety management system, complying to the international OHSAS 18001 norm	100%
Number of training hours	395,095
Percentage of sites that have their own environmental ma- nagement system, complying to the international ISO 14001 norm	100%
Number of employees at ArcelorMittal Gent, Liège, Geel and Genk	5,800
Number of active registered contractors	> 800
Number of company visits	249
Number of sponsored projects	87
Percentage of employees that have subscribed to the Code of Business Conduct	100%
Number of employees reached by our communication sessions	2,500

\*Safety frequency rate = the number of accidents resulting in at least one day of absence from work per million hours worked.



## Our 10 sustainable development outcomes

The 10 outcomes are a strategic way to represent the material social and environmental aspects of our business. They form the basis of an approach that will help us avoid damaging disruptions to our operations and create substantial value, both for our stakeholders and our shareholders, from the products we make to the way we make them, from the quality of our employees' lives to how our communities perceive us.

- 1. Safe, healthy, quality working lives for our people.
- 2. Products that accelerate more sustainable lifestyles.
- 3. Products that create sustainable infrastructure.
- 4. Efficient use of natural resources and high recycling rates.
- 5. Trusted user of air, land and water.
- 6. Responsible energy user that helps create a lower carbon future.
- 7. 'Supply chains' that our customers trust.
- 8. Active and welcome member of the community.
- 9. Pipeline of talented scientists and engineers for tomorrow.
- 10. Our contribution to society measured, shared and valued.



## Safe, healthy, quality working lives for our people.

Our colleagues at the electrolytic galvanizing line in Marchin designed a new way of handling chemical drums.



## Safety should never be taken for granted

The year 2017 ended dramatically in terms of safety. On November 20 2017, an explosion occurred in our coking plant in Ghent. We lost one colleague, Robin Calemyn. Two colleagues were seriously injured. One month later, on December 28, a second fatal accident occurred in the steel shop in Ghent when lorry driver Aad Willemse died during the unloading of aggregates. Both tragedies show that we need to raise the bar on safety. Our goal of zero accidents is only possible:

- When we leave nothing to chance, interpretation or luck;
- When we comply 100% with the golden safety rules;
- When we follow the safety regulations and procedures step-bystep.

In order to improve the quality of our safety rules & procedures and to implement them in a disciplined manner, we drew up a safety action plan ('Raise the Bar') at the end of 2017. The action plan will enable us to achieve a breakthrough in the prevention of serious work accidents and to create a breakthrough in safety. The safety awareness can effectively increase, as we have seen in a number of sections or departments that were able to achieve exceptional results in 2017.



The global safety frequency rate, including both our own employees and contractors of our sites in Ghent, Liège, Geel and Genk, amounted to 0.9 in 2017. This is higher than the average for the Arcelor/Mittal Group (0.78) and for Flat Products Europe (0.78).

Our safety stewards play a crucial role in further improving our safety. Safety stewards are employees who, during the execution of their daily tasks, pay special attention to the safety of their colleagues. They ensure that the principle of shared vigilance is executed into actions. In 2017, 294 new stewards attended the weeklong formation session.

In 2017, 1,360 ArcelorMittal Belgium leaders attended a 'Smart Leadership' safety training. The focus of the training was on good leadership in the field of safety.

The Take Care safety training is designed to assist us in achieving the goal of zero fatalities and zero major accidents. The training is being rolled out throughout all European Arcelor Mittal sites and is aimed at all employees who are regularly active on the shop floor. The training takes up 20 days and runs over a period of 10 years. The first phase covers five consecutive days and focuses on how to comply with the Golden Rules. The Golden Rules are safety rules that relate to life-threatening risks that are specific to our business activities. At the end of 2017, 1,902 Arcelor Mittal Belgium employees had already followed the training.



"Take Care was a very useful training course that made you realize that anyone can change their risk behavior."

At the end of 2017, the Committee for the Prevention and Protection of ArcelorMittal Liège decided to elect a 'safety officer of the month'. This is an employee who fulfils an exemplary role in the field of safety. In December 2017 this honour fell to Joseph Haeseldonck, foreman of the LP2 painting line in Ramet. Joseph followed the 'Take Care' course and has since then been a pioneer in the launch and implementation of new safety proposals together with his team.

"It's very motivating to notice that your safety proposals are being put into practice." (Joseph Haeseldonck)





In 2017, our sites in Ghent, Genk and Geel were awarded the pillar 8 award for the fourth time. With the pillar 8 award, we want to recognize teams for their efforts in the field of safety and ergonomics. In the course of 2017, a total of 29 pillar 8 cases were submitted in Ghent, Geel and Genk to compete for the award. The pillar 8 award committee – composed of the management committee and the employee representatives of the Committee for Prevention and Protection – visited the four finalists on the shop floor. The two (ex aequo) winners were ArcelorMittal Genk and the Ghent steel shop. The pillar 8 team in the steel shop examined crane manipulations in the degassing installation's hall. The colleagues at the electrolytic galvanizing line in Genk devised an innovative method to measure the wear of the current power rolls. In 2018, the Liège sites will also be given the opportunity to submit pillar 8 cases in order to compete for the pillar 8 award.



## Health and Safety day



Every year, the Arcelor Mittal Group organizes a Health and Safety Day for all its employees. On the occasion of the event, we reflect on and look back at the actions and results reached in light of safety during the past year. It reminds us that there is only one ultimate safety objective: zero accidents. The 11<sup>th</sup> edition of the Health and Safety Day took place on April 28 2017. The safety themes covered were: analysis of recurring accidents, prevention of major and fatal accidents, comprehension of the Golden Rules, risk assessment at the start of work, shared vigilance and cooperation with contractors. The health themes covered related to ergonomically demanding tasks, first aid, prevention of stress and well-being at work.

From the end of April to the end of May 2017, in collaboration with DuPont, a health and safety survey was organized for the first time for all ArcelorMittal Belgium employees. The participation level was high: no less than 74% ArcelorMittal Belgium colleagues completed the survey. This shows that health and safety are being taken very seriously by our employees. A total of 944 comments were also formulated, illustrating the commitment and transparency of our employees on the subject. The survey illustrated that safety is our highest priority, that we are aware of the fact that we have to stop work if it cannot be carried out safely, that incidents and accidents are investigated extensively and that appropriate measures are taken in the event of violations.

At the beginning of December 2017, the OHSAS 18001 audit, an external audit of our safety and health management system, was carried out by external auditors of SGS. The audit was executed at ArcelorMittal Gent, Liège, Geel and Genk.

Safety is not merely limited to the workplace. This is why, on October 30 2017, a safety camp for 60 children of employees, aged between 12 and 18, was organized at Arcelor-Mittal Liège. During the training, the participants were made aware of safety. In cooperation with the Red Cross, the Cegis training center and CEPS (Centre européen pour la sécurité), workshops were held on (fire) wound care, life-saving measures and fire extinguishing techniques.



During the Health and Safety Day 2017, the 2016 safety award for contractors was awarded to Romarco. Romarco specializes in industrial cleaning. As part of the Health and Safety Day, 4 films were made and distributed via our intranet, in safety sessions and via our information screens. The themes of these safety films included the treatment of loads and hand injuries.

The colleagues of Romarco are visibly pleased with the safety award they received from ArcelorMittal Gent.



## "I will come to work in a fit and able condition."

Safety is our top priority, and health is inextricably linked to it. That's why one of our Golden Rules covers is based on working fit and healthy. What's more, we expect that our managers do everything required to ensure that people can work and stay healthy. The good health of our employees forms part of the basis for the success of our company. Healthy employees feel fitter, work better, are more productive and are less likely to be absent. In

our health policy, we strive for healthy working conditions and the promotion of a healthy lifestyle. Our health policy focuses mainly on smoking cessation, healthy nutrition and healthy physical activity.

The importance of good ergonomics in the execution of any job is crucial. We have drawn up an inventory of all physically demanding tasks. The next step is to establish a concrete timing to reduce the number of these ergonomically demanding tasks. Ergonomics is also important in the context of longer working lives. If we want to be able to work longer, we must continue to work on optimizing the working conditions. In addition to taking preventive measures, such as increasing the awareness, organizing training sessions and communicating on well-being, we also attach great importance to the reintegration of employees who were absent due to illness.

Arcelor Mittal organizes an annual Health Week at all sites worldwide under the motto – nothing is more important than your health. During the Health Week we want to encourage our employees to live healthy on a permanent basis. Various health initiatives were organized at our Ghent and Liège site, these were closely related to the interests and needs of our employees: a healthy breakfast, workshops on healthy eating and exercise, information on office ergonomics and the treatment of heavy loads, healthy slimming, health coaching, information about smoking cessation, information sessions on stress and burn-out, first aid for home, garden and kitchen accidents, forest runs, massage techniques, stimulation and acupuncture techniques, information sessions on nutrition and the link with obesity.

Apart from the Health Week, there are many other initiatives that keep the promotion of a healthy lifestyle in the spotlight. This entails that, throughout the year, employees who wanted to stop smoking were given the opportunity to follow the Allen Carr "Stop Smoking" training course. The training is a very positive approach that has already had a great deal of success with our employees in the past. In addition, our employees in Ghent and Liège can call on tobaccoologists for support in quitting smoking.

From October 2017 onwards, a free flu vaccination campaign was again organized in Ghent and Liège. In the course of 2017,

we organized 14 blood collection campaigns in collaboration with the Red Cross. Trainings were also offered to detect and combat drug use. The employees involved were given the opportunity to be personally supervised, in cooperation with the Nadja, a center which specializes in the matter.

Both within the framework of the Golden Rule 'Fit and Healthy' as well as the framework of sustainable mobility, we want to continue encouraging cycling. Wearing a bicycle helmet for sports bikes, whether electric or not, is compulsory on our ArcelorMittal Gent' premises. A 'helmet voucher' is offered to every commuter cyclist who desires so. In this way, we want to promote the use of bicycle helmets among our employees.



In our health policy, we strive for healthy working conditions and the promotion of a healthy lifestyle.









We live in a rapidly changing society. The world is not standing still and competition is fierce. We are convinced that we can make a difference through innovation. Innovation is achieved not only by investing in high-tech installations or working methods, but also and above all by engaged employees. By being able to lean on committed employees, you will stand out as an organization. Arcelor/Mittal Belgium has many highly qualified employees at its disposal, which is an asset that we must make full use of. By motivating and stimulating our colleagues, they assist us in safeguarding our future. Because that's what engaged employees do: they take initiative and responsibility and deliver strong results.

In order to be able to take targeted actions to increase the engagement levels, an employee survey is organized on a regular basis. By doing so we get an accurate picture of how our employees perceive their personal work situation. The most recent employee survey was organized in 2017. The overall satisfaction rose by 2% to 71%, the engagement levels rose by 4% to 74%. In terms of job satisfaction and commitment, we reached a higher score than the average reached within the Belgian private sector. Other positive aspects were the management of change, the improvement of the communication flows and the trainings offered. The most important action areas are: work-life balance, communication/ consultation, leadership and career guidance. A large number of actions have already been defined and implemented in various departments. All initiatives in the context of involvement and motivation belong in the following areas:



## Leadership

Managers play an important role in motivating employees. That is why we started the leadership programme in June 2015. All managers were involved in formulating core thoughts on good leadership, resulting in the 9 Golden Rules of Leadership. These Golden Rules act as a compass, they make clear what behavior we expect from our managers. Training and individual coaching is offered to further support our managers in the matter. In 2017, 208 of the more than 500 managers attended the 'Round Leadership' course. For the new managers, a more extensive training programme is available, they are in additional also mentored. In 2018, the leadership project will also be rolled out in Liège.

## Career management

'Career cafés' are a creative and participatory brainstorming process aiming to promote dialogue and the exchange of knowledge and ideas on the theme of career development. In 2017, seven career cafés took place in which more than 160 employees participated. A second series of career cafés for our blue collar colleagues is planned for 2019.

## Introduction programme new employees

In 2017, the introduction programme for exempts, white and blue collars was redesigned with a stronger focus on participation, interaction, cooperation and networking. In 2018, an 'on boarding app' for new managers will be launched, an application to speed up the socialization process.

## Feedback discussions blue collars

In January 2017, feedback discussions for all blue collars were started. We strongly believe in the importance of an open feedback culture where we can learn from each other by exchanging tips and suggestions. During the annual feedback discussion, the employee and his manager discuss development, cooperation and the future.

## **Resilience and stress**

Various actions are underway to improve the well-being at work. This includes awareness-raising campaigns about stress and burn-out. Mainly preventive actions such as trainings and coaching are offered. The actions on resilience and stress already launched at Arcelor Mittal Liège will be rolled out at Arcelor Mittal Gent in the course of 2018. All managers will be trained in recognizing and capturing stress signals from employees. Training courses will be available to all employees interested.



## Working from home

In addition to an extremely competitive salary, we offer an attractive package of fringe benefits. The 'New Way of Working' is on the rise, also at Arcelor Mittal Belgium. The need for more flexible working arrangements was clearly expressed in our personnel survey, which is conducted every two years. As a result, as of September 2016, it is now possible for part of our employees to work from home on an occasional basis.

## Company cars and bikes

As of May 2016, all employees are given the opportunity to lease a company car. Colleagues who wish to join the 'CarProgram' can make use of a company car for a period of 4 years in exchange for a contribution. We encourage our colleagues who wish to sign up for a lease car to opt for a greener type of car (e.g. electric car). As from July 2017, we also offer our employees the possibility to lease a bicycle.

## World Class Manufacturing (WCM)

WCM is a culture of continuous improvement in which the input and involvement of all employees is key. Our colleagues are encouraged to come up with creative solutions to improve the installations they work with and/or come up with ideas to change the way of working. Each year, teams are expected to benefit from hundreds of proposals for improvements in safety and efficiency. Teams are also recognized for their efforts through awards (see also page 19) and medals.

In 2017, in light of obtaining bronze medals, pre-audits were successfully carried out in four departments: the hot strip mill in Ghent, the electrolytic galvanizing line Sikel in Genk, the hot dip galvanizing lines Eurogal and Galva5 in Flémalle. Our colleagues from FER (Flémalle, Eurogal, Ramet) were able to carry out a successful pre-audit in a mere 10 months of preparation. In the meantime, the hot strip mill and the electrolytic galvanizing line in Genk have already achieved their bronze medal. The final audits in the context of the WCM Bronze of Galva5, Eurogal and HP5 are on the agenda for 2018.

## Consultation

The openness and accessibility of managers have the greatest impact on the daily operations and on the motivation and involvement of all employees. For this reason, structured work meetings between managers and their employees were started in all production departments. In addition, the members of the management committee directly engage in an open dialogue every two weeks with a group of approximately 25 employees. During these communication sessions, but also during the work consultations, dialogue is key. Everyone has a say and there is open communication.



## 5.06% of the total wage bill was spent on education and training

## Training

We believe that everyone should be given every opportunity to grow, to develop themselves according to his or her abilities, interests and ambitions. This contributes to the overall job satisfaction. That is why we invest heavily in education and training. Employees are trained to become specialists in their field of expertise or are given the opportunity to acquire further training. In 2017, ArcelorMittal Belgium spent 5.06% of its total wage package on education and training. Whereas the federal government's Generation Pact requires 1.9%.

Our training offer is very diverse and closely matches the training needs of the various production departments. For example, we organize courses on:

- safety;
- · electrical and mechanical maintenance;
- the production process, including metallurgical aspects and customer relations;
- quality: quality assurance, statistics, World Class Manufacturing...;
- general training and management skills: behavior, leadership, learning methods, didactics, communication, etc.;
  languages;
- IT: Office, SAP, as well as our own IT packages/solutions.

In 2017, the first colleagues that followed the renewed course in metallurgy graduated. The training was given a completely new look, tailored to the students. The programme runs for two years (instead of three) and consists of three main components: personal training, WCM and production steps.

In order to emphasize the importance of education and training, the ArcelorMittal Group organizes an annual Learning Week. The theme of the 2017 Learning Week was:

Learning together, Motivating and Inspiring. Arcelor Mittal Belgium organized various activities: an interactive exhibition and workshops on the digital revolution (including virtual reality, augmented reality), seminars on 'smarter and less conferencing' and 'withdrawal from email', time management training, production steps, IT training courses in Word and Excel 2016, workshops on working safely with grinders, etc.

On June 9 2017, the laureates of the course in metallurgy, the graduates of the evening course in Electricity/Mechanics and the WCM pillar 8 laureates of ArcelorMittal Gent were, together with their partner, invited for dinner in Maldegem.

Arcelor Mittal Gent's lecturers also gave external training in mechanics, hydraulics and welding to the 7<sup>th</sup> year industrial maintenance techniques TSO Sint-Laurens, VTS Sint-Niklaas and PTI Eeklo. A course in mechanics was also given to the 7<sup>th</sup> year students of Edugo in Oostakker.





We express our appreciation and respect for the dedication and loyalty of all employees by, among other things, organizing internal events. An annual Decoration Happening is held for all employees who have worked/ have been working for 25, 30, 35 or 40 years.



### Internal events

We express our appreciation and respect for the dedication and loyalty of all employees by, among other things, organizing internal events.

- An annual Decoration Happening is held for all employees who have worked/have been working for 25, 30, 35 or 40 years.
- All ArcelorMittal Belgium employees can apply for free tickets to the famous Gent Jazz Festival.
- A number of departments organized a festive (family) day or dinner in 2017. This was the case for the hot strip mill and the steel shop, both celebrated their 50<sup>th</sup> anniversary, for the hot dip galvanizing line Eurogal, which celebrated its 20<sup>th</sup> anniversary, and for the organic coating line Decosteel 2, which marked its 15<sup>th</sup> anniversary. In ArcelorMittal Liège a family day took place on February 5 2017. Employees and their

families were given a glimpse behind the scenes of the newly inaugurated Jet Vapor Deposition line, which is a world first for the steel industry. After the visit to the line, those present were able to have a chat whilst enjoying a snack and a drink.
On October 10 2017, our ArcelorMittal Liège's colleagues were given the opportunity to attend a private screening of: 'John Cockerill, toute une histoire' by Bernard Balteau. 2017 was in fact the year of remembrance of John Cockerill, who came to Seraing 200 years ago to make an important mark on the development of the (steel) industry. Our ArcelorMittal Liège colleagues were also able to obtain free tickets for the exhibition 'John Cockerill, 200 ans d'avenir' at the Boverie Museum in Liège.

The employees of ArcelorMittal Liège and their families were given a glimpse behind the screens of the groundbreaking Jet Vapor Deposition line.



## Products that accelerate more sustainable lifestyles

The proud employees of the new Jet Vapor Deposition line in Liège: a world first for the steel industry.





We focus strongly on product innovation. It is only by continuously renewing our product range that we can make the difference with our competitors. Our ambition is to produce innovative products with high added value that guarantee a sustainable lifestyle. In 2017, we invested 133 million euros in our sites to ensure continuous innovation.

A strong example of this innovation is the development of Fortiform<sup>®</sup> ultra-high-strength steels. Car parts made with this sustainable steel are 10 to 20% lighter, more economical and therefore better for the environment. As a result, our automotive customers will be able to limit the emission of passenger cars to 95 grams of CO<sub>2</sub> per kilometer by 2020. In addition, the Fortiform<sup>®</sup> steel is also safer in the event of a crash. Research and development for the Fortiform<sup>®</sup> range took place at the ArcelorMittal Group's research centers in Maizières-lès-Metz (France) and East-Chicago (USA).

Over the past five years, ArcelorMittal Belgium has carried out an ambitious investment programme of 250 million euros in order to produce these unique steel qualities. No fewer than five production departments were prepared for the production of the Fortiform<sup>®</sup> steels: the steel shop, the hot strip mill, the continuous annealing plant in Liège, the Jet Vapor Deposition line in Liège and the hot dip galvanizing line in Ghent.

The first group of 3<sup>rd</sup> generation ultra-high-strength steels (with a 10% reduction in weight) was launched in 2017. Numerous automotive manufacturers have since started using these new Fortiform® steels in their car models as they offer the best possible compromise between cost, performance (formability) and durability. In 2018, we will start with the industrialization of ultra-high-strength steels with a 20% weight reduction.

JVD is a breakthrough process, both in terms of production process as in terms of product development. It adds two new product families to ArcelorMittal's unique range of metallic coatings: Jetgal® and Jetskin™:

- Jetgal® is the brand name for the JVD zinc coating applied to steel grades intended for the automotive industry. It has been developed for ultrahigh-strength steels such as Fortiform®, which is produced in ArcelorMittal Gent and Liège.
- Jetskin™ is the brand name for the JVD zinc coating applied to steel grades for industrial applications, such as domestic appliances, doors, drums and interior applications.

In 2017, the JVD line produced several tens of thousands of tonnes of vacuum coated steel. This great success is the result of an excellent cooperation between the Liège industrial teams, the Arcelor Mittal R&D teams and the CRM Group. This cooperation has enabled us to overcome technical difficulties, to train our production teams quickly and to launch actions to improve performance and product quality.



In the continuous casting line in Ghent, where liquid steel is converted into slabs, a complete renovation of the heart of the casting installation took place. The casting segments have been equipped with dynamic soft reduction. Thanks to this, we are able to produce steel structures with a superior internal homogeneity. Ultrahigh-strength steels are used, among other things, in the cage construction of cars. It must therefore meet the highest standards of quality. Irregularities in the material will not be accepted by car manufacturers.

We equipped the continuous annealing line in Liège with a quenching and partitioning cycle. Allowing us to -alternately- heat up and cool down the newest generation of ultra-highstrength steels.

In 2017, work continued on the construction of a brand new furnace in our hot dip galvanizing line in Ghent in order to be able to galvanize the Fortiform<sup>®</sup> steel grades. The new furnace will be commissioned in the course of 2018.



Two new finishing stands were installed in the hot strip mill in Ghent. The entire finishing mill of the hot strip mill consists of 7 stands. Each of the seven stands reduces the thickness of the steel strip to the specified final thickness. The first two stands account for the largest reduction in thickness. In order to take on the rolling of the harder Fortiform® ultra-highstrength steels, two new stands were required.

In February 2017, the new Jet Vapor Deposition production line was inaugurated by His Majesty the King. The JVD line coats steel in a vacuum chamber, where we spray zinc onto the steel strip. The new line creates a unique process and is a real world first that could only be achieved through a breakthrough in scientific development. The production process reduces the ecological footprint. It ensures an exceptionally homogenous coating that improves the surface quality of the steel. It guarantees excellent adhesion of the coating, regardless of the steel grade, and it avoids the risk of oxidation.

## Performance Excellence Award

Every year, Arcelor/Mittal Europe - Flat Products organizes the Performance Excellence Awards, a competition between the various Arcelor/Mittal sites. The aim is to highlight outstanding achievements. The Jet Vapor Deposition line in Liège won the Performance Excellence 2017 Award in the category 'Technical Innovation and R&D'. The jury was impressed by the ambitious and innovative character of the project, as well as by the exemplary collaboration between R&D, engineering and production.



We want to become the reference in the production of (ultra-) high-strength steels. It is a strategic choice to prepare our production apparatus for those products for which the market demand is high.

High-strength steels are also used in other industrial market segments. The Amstrong<sup>™</sup> quality label is a good illustration of this. The Amstrong<sup>™</sup> high-strength steels and advanced highstrength steels are produced in Ghent, among other places, and are ideal for reducing the thickness and weight of a structure while at the same time increasing its load capacity. The Amstrong<sup>™</sup> range offers significant benefits for a wide range of applications such as trailers and dumpers, excavators and agricultural vehicles. Arcelor Mittal developed a digital tool that helps the commercial engineering teams to calculate weight and cost savings for customers who are considering switching from the more standard steels to Amstrong<sup>™</sup>.

The Magnelis<sup>®</sup> coating consists of a combination of zinc, aluminium and magnesium. The corrosion resistance of Magnelis<sup>®</sup> is significantly higher compared to traditional zinc-based coatings. It was developed in Eurogal, our hot dip galvanizing line in Liège. It was industrially applied in hot dip galvanizing lines in Germany and Spain. The Magnelis<sup>®</sup> coating is used in the support structure of solar panels, in garage gates or gutters.

ArcelorMittal Europe – Flat Products also works on its green technologies. Among other things, we launched a Nature range: a product line of durable and organic prepainted steel with coatings and surface treatments that comply with REACH <sup>[1]</sup>.

These organically coated steels are completely free of phthalates, chromates and heavy metals<sup>[2]</sup>.

Solano<sup>®</sup>, the premium coated steel for roofing and façade cladding, is the latest addition to the Nature range, which also includes the coated steel grades Granite<sup>®</sup> and Estetic<sup>®</sup>. The environmentally friendly Solano<sup>®</sup> coating is applied to hot dip galvanized substrate: pure zinc or zinc and aluminium (galfan). The unrivalled flexibility of Solano<sup>®</sup> Nature also makes it suitable for folding, cold forming and deep drawing without damaging the surface.

The ArcelorMittal Group regularly organizes product innovation days to provide an overview of the latest developments in steel production and coating. In this way, we are bridging the gap between our production and the commercial world.

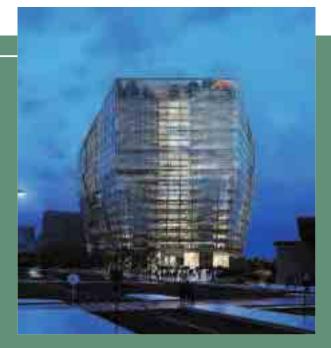
[1] REACH: Registration, Evaluation, Autorization and Restriction of Chemicals[2] Lead or hexavalent chromium



We want to become the reference in the production of (ultra-)high-strength steels.

## New headquarters in Luxembourg

We are also working on steel innovation in the construction sector. For example, our future HQ in Luxembourg will be built entirely out of steel. The building is expected to be completed in the fourth quarter of 2021. The use of steel in the construction sector has enormous advantages over concrete. You can span up to 13 meters with steel. There are many environmental and energy benefits, and the construction time is shorter.

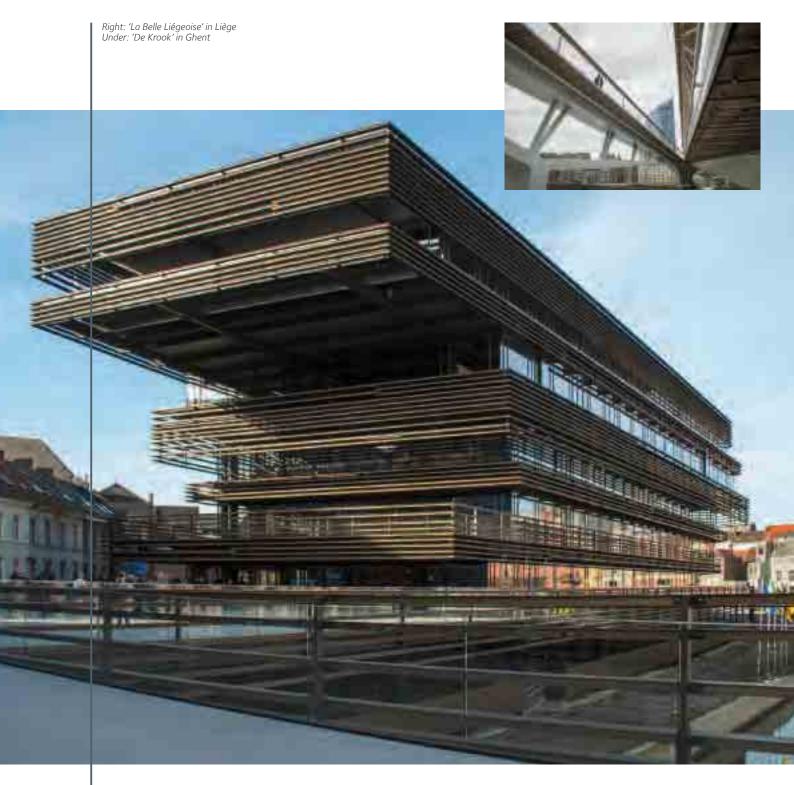


## $\mathbf{S}$

## Products that create sustainable infrastructure

The project team that helped realize the new wind farm at ArcelorMittal Gent – the largest wind farm at the Ghent port. Without steel, there is no renewable energy.





Arcelor/Mittal is committed to developing sustainable steel solutions for applications in construction, transport and other infrastructure works. The construction sector is an important market, which is why Arcelor/Mittal's research and development efforts are focused on developing zero energy buildings into energy-positive ones. We do more than just produce steel components, but have consciously opted for a comprehensive approach that encompasses a wide range of techniques. The fields of research will include models integrating renewable energy sources into buildings through steel products.

# New wind park inaugurated at the ArcelorMittal site in Ghent

On April 20 2017, a new wind park on the Arcelor Mittal site in Ghent was officially inaugurated by the Flemish Minister for Energy, Bart Tommelein, and the Flemish Minister for Environment, Joke Schauvliege.

The wind park has 8 wind turbines, each with a tip height of 200 metres. These turbines are consequently among the highest in the country. The total capacity of the park is 26.25 MW (5 x 3.45 MW and 3 x 3 MW). The wind turbines produce 70.8 million kWh of green electricity annually. This corresponds to the annual electricity consumption of about 20,000 house-holds. The wind turbines are a good example of the importance of steel in our daily lives. Without steel, there is no renewable energy.

5 of the 8 new wind turbines on the Arcelor Mittal Gent site were realized by Wind4Flanders and a public-private partnership between ENGIE Electrabel and a number of financing associations. The Flemish wind farm developer Storm built the remaining 3 new turbines.



#### De Krook: clever 'steel' piece of architecture

In 2017, the BBC included the new Ghent city library 'De Krook' in its list of the 10 most beautiful libraries worldwide.

"With the advent of smartphones and Wikipedia, concerns have grown that buildings full of books will become superfluous. Yet many of the most beautiful and largest libraries have only been built since the turn of the century," the BBC notes. "The brand new public library De Krook is one of them."

According to the BBC, De Krook contrasts beautifully with the many 'old' monuments present in the city. It describes De Krook as an "open house for knowledge and innovation", where you can even venture into 3D printing.

The building was designed by the Ghent-based architectural firm Coussée & Goris and its partner TV RCR Aranda Pigem Vilalta Arquitectes. The Spanish architectural firm received the

Pritzker Prize, the highest international award for architecture, in 2017. The architects used the kink or 'crook' in the terrain along the twisting Scheldt as their source of inspiration. They envisioned a 'stack of books', whilst shaping the building, stacking eight different balconies on top of each other overlooking the city centre.

#### Walkway made of steel: « La Belle Liégeoise »

This walkway for cyclists and pedestrians connects the Guillemins train station of Liège and the Boverie Museum park. It is a strong example of a project designed to revitalize the city of Liège and aiming to increase the attractiveness of the area surrounding the train station in Liège.

#### 'Arty' steel

The end of September 2017 marked a significant transformation of the scenery of the Korenmarkt in Ghent as two works of art, each 20 metres high, were placed on the square. One of them, the 'HD 400', is 100% made of (our) steel.

With the arrival of the new artworks, the city centre of Ghent gained two iconic landmarks. The artworks are not only the culmination of the redesigned Korenmarkt, but also illustrate the strong commitment the city has in bringing art into the streetscape.

The Korenmarkt is the economic and cultural-historical heart of Ghent. When the square was rebuilt in 2010, architect Paul Robbrecht envisioned two impressive vertical works of art oppositioning the three historic towers and the city hall.

'HD 400' is a strong example of the intangible combined with light, space and sensory experiences. The work consists of a giant steel beam 19 metres high, of which one side is polished to create a mirror. On the mirror side, the sculpture becomes, as it were, a ray of light reflecting the surroundings and creating a play of shadow and light on the Korenmarkt. From certain angles the beam appears to be almost disappearing: the urban image is broken in two by the reflection of the surroundings.

The name HD 400 refers to the H profile, the type of support beam that forms the basis of many modern constructions.

The work was sponsored by ArcelorMittal, and the high-quality steel was supplied by the Group.



The 'HD400' in Ghent

Efficient use of natural resources and high recycling rates

The new scrap and slag quay at ArcelorMittal Gent is above all ar investment in sustainability.

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ESPERANZA



ArcelorMittal Gent's skyline with its new wind turbines



#### Our environmental management system

Since 2001, we have an environmental management system in place that meets the requirements of the international standard ISO 14001. The environmental management system assists us in going about our environmental management in a structured manner, starting with the identification of the important environmental aspects we need to address. The environmental care system is audited annually by an external independent organization, which determines whether we continue to comply with all standards and whether we continue to improve on our environmental management. The ISO 14001 certificate offers a guarantee to all external stakeholders, such as local residents, surrounding businesses, governments, suppliers and customers, that 'sustainable development' is not a hollow phrase for us.

In November 2017, the SGS S&SC certification agency carried out an ISO 14001 follow-up audit to verify whether our environmental care system continues to operate optimally. The audit team did not identify any shortcomings, two opportunities for improvement were formulated. The agency concluded that our environmental management system is being properly monitored throughout the organization.

<sup>1</sup>LD refers to the Linz Donawitz steelmaking process. In this process, a water-cooled lance blows pure oxygen on top of the hot metal batch so as to burn all impurities. The LD steel-making process was commercialized by two steel companies in Austria – Voest in Linz and ÖAMG in Donawitz.

We strive towards converting all materials produced or utilized during the production of steel, into useful products or into products that can be utilized as raw material by other industries.

By-products are materials that may be reused in the most diverse applications as a raw material or as a substitute for live rock.

#### SLAGS

An important source of by-products is liquid slag that is formed at high temperatures during the production of steel. The slag produced in the blast furnace is granulated using powerful water jets to form granulated slag blast furnace sand. The cement industry uses this blast furnace sand to mix with cement clinker for the production of metallurgical cement (CEM III). This is used in concrete for hydraulic piers, and as cement for applications where fast hardening is a requirement. A small proportion of air-cooled blast furnace slag is used in road construction as a foundation material and as the basic raw material for rock wool.

LD slags<sup>1</sup> is produced in the steel shop. After de-ironing, these steel slags are sieved into different grain sizes in order to convert them into commercial end products. Certain slags are transformed into LD gravel by injecting sand and nitrogen into the slag to bind the free lime. LD gravel is used in road construction as an alternative raw material for porphyry. Steel slag that is not suitable for conversion to LD gravel, is crushed, de-ironed and sieved in different grain sizes. LD steel slag can be used for the durable hardening of, for example, parking lots, roads, paths and driveways. Coarser fractions of more than 40 mm are, in turn, a fully-fledged alternative for crushed gravel and for hydraulic engineering works, such as the reinforcement of the Western Scheldt bank. Finer fractions, smaller than 10 mm, are internally recycled via our sinters plants into the blast furnace as a replacement for limestone.

#### GASES

In the coking plant, tar, benzol and sulphur are separated from the coke oven gas in the by-products installations. These products are used as raw materials in the chemical industry. Coke oven gas, blast furnace gas and converter gas are also listed as by-products. Due to their energy properties, we can use them as fuel in our own processes to replace natural gas. The part that we cannot use ourselves is sent to the ENGIE power station, situated on our Ghent site, for conversion into electricity.



Residues are mainly ferrous oxide and carbonaceous residues (dust and sludge) which are inevitably formed during our production processes and which are separated from a gas or water stream in our dust collection or water treatment plants.





along the Ghent-Terneuzen canal

Waste materials are substances which are not easily reused. All waste materials are selectively collected before being disposed via accredited processors.



#### New scrap and slag quay

In 2016, the Ghent Port Company initiated the construction of a new scrap and slag quay at Arcelor/Mittal Gent. This investment by the Ghent Port Company in collaboration with Arcelor/Mittal Gent is evidence of a mutual trust in a long future. This investment is also an investment in sustainability. Arcelor/Mittal Gent optimizes its existing scrap transport by supplying as much as possible by inland shipping and seagoing navigation instead of by truck. This saves up to 5,000 truck transports for scrap every year. The slag quay optimizes internal transport and makes it possible to load the slag directly into seagoing vessels. As a result, there is a reduction in CO<sub>2</sub> emissions. The quay was commissioned in November 2017. The loading of inland vessels is scheduled for spring 2018.



#### **Production figures**

<b>Coking plant</b> Coke	1.2 million tons
Sinter plants Sinter	5.2 million tons
<b>Blast furnaces</b> Hot metal	4.9 million tons
<b>Steel shop</b> Liquid steel	5.6 million tons
Hot strip mill Hot rolled slabs	5.4 million tons
<b>Cold rolling mill</b> Cold rolled coils	4.6 million tons
Electrolytic galvanizing line Electrolytically galvanized coils	0.59 million tons
Hot dip galvanizing line Hot dip galvanized coils	2.6 million tons
Organic coating line Organically coated coils	0.61 million tons
<b>Tinning line</b> Tinplate	0.15 million tons

#### Raw materials

Coal	1.5 million tons
Iron ore	4.3 million tons
Anthracite	0.2 million tons
Limestone	0.6 million tons
Dolomite	0.2 million tons
Olivine	0.1 million tons
Pulverized coal	1.2 million tons
Pellets	2.6 million tons
External scrap	0.7 million tons
Lime	0.2 million tons

#### **Recuperated gases**

Coke oven gas	9.1 million GJ
Blast furnace gas	24.1 million GJ
Converter gas	3.8 million GJ

#### By-products

Benzol	11,000 tons
Tar	42,000 tons
Sulphur	2,000 tons
Blast furnace slag	1.3 million tons
Steel slag	0.4 million tons



## Trusted user of air, land and water

The new sleeve filter in sinter plant 2 in Ghent is the culmination of an ambitious nvestment programme in dust reduction worth more than 30 million euros.



Dust control has always been a top priority in our environmental policy. Many investments have ensured that our dust emissions today are only 15% of the dust emissions at the end of the 1980s.

In 2005-2006 we asked VITO to carry out a dust study. The research showed that the greatest impact on the air quality in the vicinity of our company originates from diffuse emissions. That is why, in recent years, we have paid particular attention to combating this specific type of emission. We have combined all the improvement actions into a dust reduction plan that runs over several years and is also updated and supplemented by new measures regularly. Some achievements of 2017:

- construction of a 10m high and 870m long dust berm along the Ghent-Terneuzen Canal to prevent wind erosion from the coalfields located behind it. Construction of the dust berm is expected to be finished by the end of 2018;
- new port unloading cranes with more effective watering and windshields;
- spraying of unpaved roads in dry weather;
- the application of a coating (crust) to the stacks of raw materials in dry and windy weather and the installation of dust strips to combat wind erosion;
- a thorough sweeping programme to keep the roads within our site free of dust;
- an alarm triggered by certain weather conditions.

A major investment in 2017 was the installation of a sleeve filter installation at the casting floor of blast furnace B. This project was commissioned in the first quarter of 2017 and represented an environmental investment of 11 million euros. In addition, we converted and expanded the dust filter installations in our sinter plants. In March 2017, a new hybrid filter was commissioned at sinter plant 1. A sleeve filter was commissioned at sinter plant 2 in December 2017. Both dedusting projects account for an investment amount of 21.5 million euros. As a result, our guided dust emissions, which originate for 75% from the sinter plants, will be greatly reduced.

This project is the culmination of an ambitious dust control investment programme of more than 30 million euros in 2017. We will continue to make efforts to improve air quality in the future, for example through the recirculation of flue gas in the sinter plants (2020).

All other emissions, such as NO<sub>x</sub>, SO<sub>x</sub> and dioxins, are closely monitored through an intensive internal measurement programme. In this way, we can monitor the proper operation of the production and purification installations and make immediate adjustments when necessary. As far as NO<sub>x</sub> and SO<sub>x</sub> emissions are concerned, we also act proactively by carefully selecting raw materials with a relatively low nitrogen (N) and sulphur (S) content.





# 21.5 million euros in additional dust protection investments in the sinter

#### plants.

This year, our sinter plants invested no less than 21.5 million euros in dust control. Two new filter installations were commissioned, a new phase in the further reduction of our guided dust emissions (= emissions that end up in the environment via the chimneys).

Sinter plant 1 introduced a new hybrid filter at the end of March 2017. The decision was taken to convert the existing electrofilter into a hybrid filter. A hybrid filter combines the technology of an electrofilter and a sleeve filter in one housing. The new installation consists of three compartments: the first compartment contains the electrofilter, which removes the coarsest dust from the flue gases. The following two compartments contain a total of 3,300 sleeve filters to collect the finer dust. The sleeves have a length of 10 meters which is exceptionally long. This was necessary in order to be able to integrate the predefined sleeve surface into the existing housing. We recycle the dust that is collected by the filters in our sinter plant. This technology was extensively tested in a pilot plant by an Arcelor/Mittal R&D department in Asturias before its industrial application. If our experiences with the hybrid filter are positive, the technology will also be rolled out in the other sites within the Arcelor/Mittal Group. By combining an electrofilter and a sleeve filter, we have reduced our dust emissions by a factor of 10 and our dust emissions are now below 5 mg per Nm<sup>3</sup>.

Sinter plant 2 installed a new sleeve filter installation in the fall of 2017. The flue gases are first treated in the existing electrofilter installation and then 70% of the flue gas volume is diverted to the newly installed sleeve filter installation. In the coming years, work will be carried out on a flue gas recirculation system at sinter plant 2. Once this system is operational, the entire flue gas flow will be treated via the sleeve filter. The installation was commissioned at the end of 2017 and the results in terms of dust emissions are promising.

These investments will significantly reduce our guided dust emissions, 75% of which come from the sinter plants, and the dust emissions from these chimneys will certainly be lower than the current emission standards.

The project team that commissioned a new hybrid filter at sinter plant 1 in the spring of 2017.

## Water

#### The steel production process requires large amounts of water, which is used as cooling water, process water and for environmental applications. Water is a natural resource, we thus use it as carefully as possible.

The water used by ArcelorMittal Liège in its production process and for cooling its installations comes mainly from the Meuse. After utilization, the water is purified and checked before being discharged back into the river.

In 2017, work continued on the water purification plants in Tilleur, Kessales and Flémalle so that the quality of the waste water meets all standards for discharge into the surface water of the Meuse.

Preventive measures were also taken with regards to the authorisation of the external landfill site 'La Chatqueue' in Seraing to prevent the pollution of the nearby stream, the 'Cornillon'.

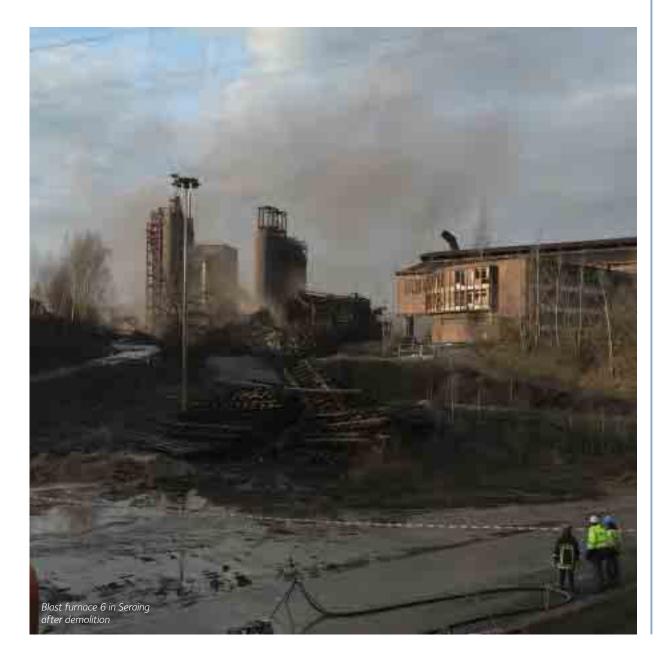
The main source of water for our Ghent site is the Ghent-Terneuzen Canal. The canal water is pumped up in the north of the company premises and goes in counterflow through the production process before eventually being discharged into the canal near the southern boundary of our site, after purification in wastewater treatment plants, so that the applicable discharge standards are respected.

In the past, groundwater was used for certain applications. Today, most groundwater is only used for safety reasons. For example, at a number of locations on our site, the groundwater level needs to be lowered as contact with hot metal or liquid steel could cause an explosion. In order not to lose this groundwater afterwards, we still use it in a number of quality-critical applications.



# Land

In November 2008, blast furnace 6 in Seraing was shut down. The blast furnace was demolished on December 16 2016. The site will be cleared before commencing with the decontamination of the soil. The area will be part of an urban development project of the city of Liège. The demolition is in line with the global agreement signed by the Walloon Region and Arcelor/Mittal in February 2014.





## Responsible energy user that helps create a lower carbon future

The departmental energy coordinators are the frontrunners for energy-saving projects in their respective departments.





In order to produce flat steel products with a high added value, a blast furnace route is required. We use iron ore and coal in our blast furnaces. The coal reduces the iron ore to hot metal, which is then converted into liquid steel in the steel shop. During the reduction of iron ore, CO<sub>2</sub> is also formed.

Today there is no real alternative to using carbon as a reducing agent in blast furnaces. Making steel therefore, by definition, remains  $CO_2$  intensive. However, the  $CO_2$  footprint of our Ghent site is one of the lowest in the world. This is achieved through a highly optimized production process on the one hand and the efficient use of scrap on the other. Indeed, the global carbon footprint of steel is on average 50% higher than the steel produced by Arcelor/Mittal Gent. We are also continuing our efforts to continue to improve.

In order to further reduce our  $CO_2$  footprint, we focus on the reuse of steel. Approximately 15% of each of our end products consists of recycled scrap. On a yearly basis, approximately 1 million tonnes of scrap is melted into the steel shop using the heat released in the production process. In this way, we also contribute to the circular economy.

The European steel sector is subject to the European Emission Trading System (ETS). This means that for every ton of  $CO_2$ emitted, an emission allowance must be submitted. The total quantity of allowances is limited to a fixed ceiling. One part is granted free of charge, the other part is traded on the market where the price is determined by supply and demand. The free allocation of  $CO_2$  emission allowances is subject to European established rules and is based on the specific  $CO_2$  emissions of the best performing companies ('benchmark level') and a historical

## $Fe_2O_3 + 2C = 2 Fe + CO + CO_2$ iron ore + coal = iron + gas



activity level. Allowances are granted free of charge in order to avoid carbon leakage<sup>1</sup>. After all, the ETS system only applies in Europe, which can create an uneven playing field between European steel companies and their global competition.

The ETS system calls on the steel industry to reduce its  $CO_2$  emissions faster than what is technologically possible today, despite the fact that the steel sector is particularly vulnerable to the risk of carbon leakage. As a result, European steel companies are faced with considerable shortages of  $CO_2$  allowances allocated for free. The same applies to our site in Ghent, which is nevertheless a benchmark in terms of  $CO_2$  efficiency. Our ArcelorMittal Gent site has been facing a shortage of rights since 2015. This shortage increases annually, on the one hand because the allocation of rights is based on a too low level of activity. On the other, the annual correction factor applied in

<sup>1</sup>'Carbon leakage' is a term often used to describe the situation that may occur if carbon-intensive businesses were to transfer production to other non-European countries which have laxer constraints on greenhouse gas emissions.



On average, the worldwide CO<sub>2</sub> footprint of steel is 50% higher than our steel.

accordance with European rules reduces the quantity of rights granted much more than what is technologically feasible. By 2020, this shortage will increase to an annual deficit of around 30%. The rights need to be bought, which causes a significant distortion of our competitiveness with steel companies outside Europe. Thus jeopardizing the further development of European steel companies. The unpredictability of CO<sub>2</sub> costs and the associated regulations lead to a particularly unstable investment climate.

To tackle this challenge, we are working with partners on breakthrough ideas. The most concrete project being the conversion of CO from blast furnaces into bioethanol by means of bacteria. The feasibility of the process has already been demonstrated via pilot installations. A first demonstration project on an industrial scale is currently being prepared at our Ghent site. Commissioning is expected to take place in 2019/2020, with approximately 80 million liters of bioethanol being produced per year. This corresponds to the green energy production of 120 wind turbines.

In addition, there are numerous R&D projects and partnerships with other sectors and research institutions that can all lead to industrial processes to further reduce our  $CO_2$  emissions. However, the ever-increasing shortages of  $CO_2$  rights that we will be faced with in the future will not be solved.

The development of new technologies takes time. This is something that the timeframe of continuous improvement, set by ETS, does not take into account. In its present form, ETS will jeopardize the survival of the European steel industry.

# We are working with partners on breakthrough ideas to further reduce our CO<sub>2</sub> emissions

#### Energy covenant

ArcelorMittal Gent is one of the world's best in terms of energy efficiency. We are committed to maintaining this position in the future. Among other things, we signed the energy covenant with the Flemish government. Entering into the covenant in-volves, amongst other things, a four-yearly audit of the differ- ent processes and the identification of further energy efficiency improvement measures.

Our site has already been audited for the first time and a number of actions have been defined. All this was included in an energy plan. The realization of this energy plan is monitored annually by 'the Verification Bureau Benchmark Flanders'.

One of the requirements of the energy covenant is to operate an energy management system. For the sake of international demonstrateability we have decided to set up an energy management system in accordance with the guidelines of the international standard ISO 50001.

All departments mapped out their largest energy consumptions as well as the factors influencing them. In this way, 'blind spots' in the field of energy consumption came to light. As a result, all departments became more aware of their energy consumption. In addition, we made internal comparisons between our various departments to improve the energy efficiency of our processes and facilities and translate the best practices into standard working practices.

The ISO 50001 certification audit took place at the end of November 2017. The auditors praised the effectiveness of our energy management system. They were particularly impressed by our detailed monitoring systems. They also stressed the importance of the departemental energy coordinators to promote energy awareness throughout the organization.

On January 14 2018, we received the ISO 50001 certificate for the first time





#### 'Accord de Branche'

At our ArcelorMittal site in Liège, we signed the 'Accord de Branche'. Our Liège site consists of different finishing lines located at different geographical locations. By joining the 'Accord de Branche', we are committed to improving our energy efficiency by 15.7% by 2020 compared to the benchmark year of 2005. The target was already met in 2014 and will be surpassed in 2020. The Walloon government monitors the achievement of this commitment on an annual basis.

Over the past year, important actions have been carried out in the context of the 'Accord de Branche'. In view of the renovation of the continuous annealing plant in Tilleur, the burners were completely renewed, resulting in lower emissions and higher heat efficiency. In addition, five (household) boilers were installed for the offices and changing rooms in Tilleur. These two investments will improve the site's energy efficiency, in line with our commitment to the 'Accord de Branche'.

#### Thermal revamping of the packaging line

At the end of 2016, the thermal revamping of the continuous annealing line was carried out in the packaging line in Tilleur. The objectives were to improve the productivity of the furnace and to reduce the environmental risks associated with atmospheric emissions from the furnace.

On June 1 2017, the official annual flue gas measurement was carried out with very satisfactory results. It was the best performance since 2010, even exceeding the targets sets. A monitoring system was put in place to ensure that performance is maintained over the long term.

This success reflects the continuous efforts of our teams and continuous improvements in our sites to reduce our environmental footprint.





#### We are investing in green power

Wind4Flanders and Storm have built 8 wind turbines on the premises of ArcelorMittal Gent. The wind turbines have a tip height of 200 metres and are therefore among the highest in the country. The total capacity of the park is  $26.25 \text{ MW} (5 \times 3.45 \text{ MW} and 3 \times 3 \text{ MW})$ . The wind turbines will produce 70.8 million kWh of green electricity annually. This corresponds to the annual electricity consumption of about 20,000 households. With this new wind farm, we are making a sustainable contribution to renewable energy.

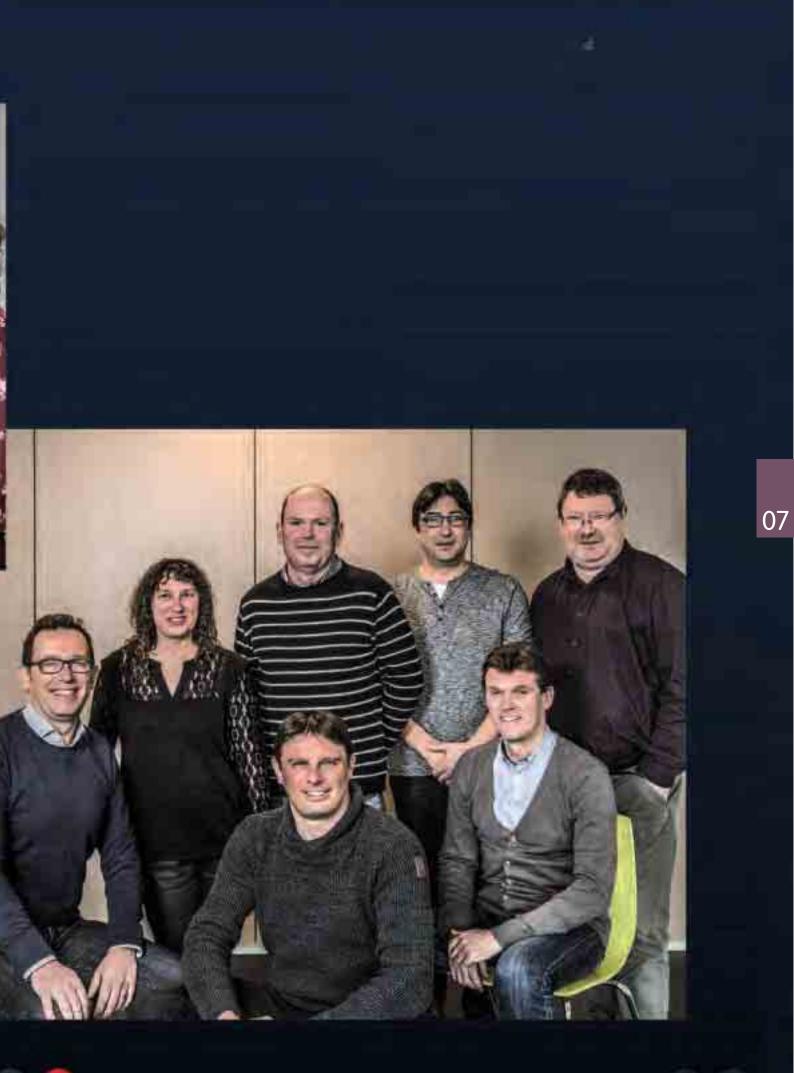
On April 20 2017, the official inauguration took place in the presence of Bart Tommelein, Flemish Minister for Energy, and Joke Schauvliege, Flemish Minister for Environment.





# Supply Chains that our customers trust

Our Ghent and Liège colleagues from the joint customer relations department will act as one face to the customers.



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A single face to the customer in terms of quality

In 2017, the new quality and product organization was launched with the creation of the 'external quality' section and the appointment of a 'quality line manager' in each department. The new centralized 'external quality' section strengthens the 'one face to the customer' approach thanks to a faster and more consistent response to customers for all deliveries from ArcelorMittal Belgium. The quality line managers will strengthen the quality improvements in each department.









#### Tools to improve quality

In 2017, we continued the implementation of new quality inspection systems (ASIS-GCSIS-GPQS). An ASIS inspection system was installed in the pickling line, in Galva5 and Euro-gal (hot dip galvanizing lines). In 2018, the LP2 painting line will also be equipped with a new inspection system.

The coupling of the new ASIS systems with the GCSIS-GPQS coil qualification is currently being carried out in the tinning line, the continuous annealing line in Kessales and the electrolytic galvanizing line in Marchin.

An online roughness measurement system was commissioned in the hot dip galvanizing line Eurogal, the continuous annealing line in Kessales and the electrolytic galvanizing line in Marchin.

An online oil measurement is currently being installed on the electrolytic galvanizing line in Marchin and in the hot dip galvanizing line Eurogal.

#### One face to the customers in the 'supply chain'

In the common customer relations department, the 'order managers' have direct contact with the customer regarding, among other things, the expiry date of the quotation, the follow-up of the order, and the shipping instructions. The objective of the 'order manager' is to serve both our Ghent and Liège customers, regardless of whether (s)he is based in Ghent or Liège. While supply chain processes and systems are largely aligned, local exceptions and differences do remain. In order to get to know these differences, we conducted a number of tests with a few automotive and industrial customers in the summer of 2017. These showed that we need to improve training and provide more support.

#### Priorities in the quality of our services

In 2017, we succeeded in giving absolute priority to the protection of customers or orders. We have achieved the service targets set by the automotive industry. Another action plan is being implemented to further improve service performance. The teams also took advantage of the flexibility and scale of the ArcelorMittal Group by carrying out contract work for other ArcelorMittal sites (and vice versa) in order to improve the service to our customers.

In 2017 the Tilleur packaging line, saw the start of 'Planning Arrangements' to improve the performance of recurring product specifications for our key customers. This IT system is recognized as an asset and guarantees the quality of the service provided.

The Integration project to harmonize the supply chain systems within ArcelorMittal Belgium entered its final phase. In 2017, the Galva 5 hot dip galvanizing line in Liège switched to the central NIPOS mainframe application.

ArcelorMittal Belgium breaks production records

Cost leadership is a prerequisite for attracting orders and investments. A good cost position is guaranteed when our production volume is high.

Our colleagues of the steel shop in Ghent established a production record.

#### Various (annual) records were broken in 2017:

- Raw materials, port and transport: **11.6 million tons** of iron ore
- Blast furnaces: 4.9 million tons of hot metal
- Steel shop: 5.6 million tons of liquid steel & 5.5 million tons of slabs
- Hot strip mill: **5.4 million tons**
- Pickling line 1 Ghent: 1.5 million tons
  Tandem BT2 Ghent: 1.3 million tons
- TTS Ghent: 2.3 million tons
- Continuous annealing Ghent: 551,000 tons
- Continuous annealing Kessales: 462,000 tons
- Continuous annealing Tilleur: 195,000 tons
- Hot dip galvanizing line Galva 5 (Flémalle): 605,000 tons
- Organic coating line Decosteel 2: 201,000 tons

Our hot galvanizing line, Galva5 in Flémalle even managed to achieve a production record for a galvanizing line within ArcelorMittal Europe. The production records reached within ArcelorMittal Belgium led to a record of invoiced shipments: 5.5 million tons of invoiced shipments in Ghent and 2 million tons in Liège.

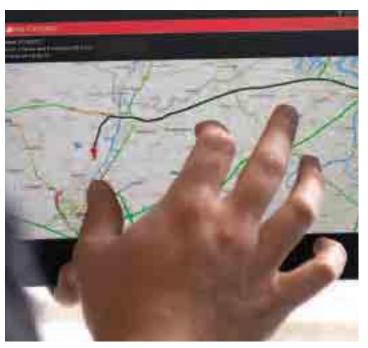
Our supply chain must be able to keep up with our shipping ambitions. For this reason, all departments must simultaneously achieve a higher level of operational safety. The programs 'Maintenance 5.5' in Ghent and 'Maintenance 2.2' in Liège have the ambition to make optimal use of existing resources. Specifically, we want to improve in terms of effectiveness (doing the right things), efficiency (doing the right things correctly) and the strength of the organization (who does what). We achieved several good results in 2017, such as reducing the 'inter campaigns' in the steel shop or increasing the reliability of the Combiline in Ramet.

#### ArcelorMittal Belgium develops a new Track & Trace app

Together with a number of logistics partners, our company has developed a system for real-time tracking & tracing. Enabling all parties involved to follow the transport step by step from planning to delivery to the customer.

Every year, we supply our steel to hundreds of destinations within and outside of Belgium & Europe. Every day, up to five hundred trucks, one hundred railway wagons and several inland and seagoing vessels leave our plants. From now on, these goods can be monitored - using the track & trace app - from the moment they leave our company to their final destination.

The application is already used by our customers as well as by our commercial organizations. Thanks to the Scale-Up project, data from many other sites is also available, so that the application can be used by many more customers than just those of our Ghent and Liège sites. There is also an extension made where each urgent transport can be followed up.



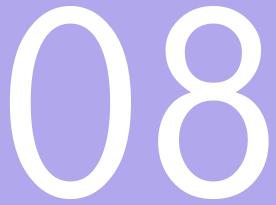


#### Customer Day 2017 with inauguration of the Jet Vapor Deposition Line in Liège

On February 2 2017, a Customer Day was organized to present the new Jet Vapor Deposition (JVD) line to more than 200 European industrial and automotive customers. The JVD makes it possible to vaporizes zinc to steel strips industry. The programme included an academic session, product conferences and a quided tour of the brand new production line.

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# Active and welcome member of the community

The Eurogal hot dip galvanizing line in Liège celebrated its 20<sup>th</sup> anniversary together with ts 80 employees, who are the main assets of the coating line.



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The Eurogal hot dip galvanizing line in Liège celebrated its 20<sup>th</sup> anniversary. In order to strengthen our company's brand and anchor our company in the region, we use amongst other things our social media channels and our neighbourhood magazine 'Steel in the neighbourhood'. Our corporate website (belgium.arcelormittal.com) and publications such as this corporate responsibility report are also a valuable source of information for our external stakeholders.

As is the case with our own employees, we also want to enter into a dialogue with external stakeholders. Company visits offer an excellent opportunity to do so. In 2017, we organized 249 company visits. Most of them were aimed at our customers and educational institutions, but specialized environmental visits were also organized on a regular basis.

On Arcelor Mittal Liège's family day on February 5 2017, employees and their families were given a glimpse behind the scenes of the new Jet Vapor Deposition production line, which is a world first for the steel industry. After the visit to the line, those present were able to talk to each other whilst enjoying a snack and a drink.

On November 17, the Eurogal hot dip galvanizing line in Liège celebrated its 20<sup>th</sup> anniversary. Since its launch, the coating line has produced more than 8 million tons of galvanized steel, corresponding in weight to the steel in 10 million vehicles and in length to 20 times the circumference of the earth or more than 150,000 soccer fields. The anniversary was celebrated together with the 80 employees who are the main asset of the line.

Every year in Liège, we organize a Christmas competition. All children of employees, aging between 0 and 12 years old can enter. We ask them to let their creativity run free and send in a photo, drawing or handicraft around the Christmas theme. All the works of art are exhibited in the entrance hall of the Centre Acier (Liège main office) for a month. An internal jury selects a winner per age category. In total we received about 60 entries.

On April 18, 20 engineering students from Ghent University took part in the very first thesis fair of Arcelor Mittal in Ghent.

On Saturday May 6 2017, the technology fair "Boetiek Techniek" took place for the fourth time in the city of Ghent. Hundreds of children between the ages of 10 and 15 were immersed in the wonderful world of technology. About 20 East Flemish companies were present. At the ArcelorMittal Gent stand, the children were able to build applications of steel in their own Minecraft world.

> During 'Boetiek Techniek' in Ghent, participants were given the opportunity to build their own Minecraft world, made out of steel applications.





**COMPANY!**" !" A visitor of the Open Company Day.

During the Flemish Harbour Day, visitors were able to see a fully automated crane in action.

On September 15, 16 and 17, Arcelor Mittal Belgium organized ts very first hackathon in the center of Ghent. During **'The Challenge'**, participants were given 48 hours to find a creative solution to an industry-based conundrum.

On Sunday, September 17 2017, the Flemish government - together with the ports of Antwerp, Ghent, Ostend and Zeebrugge – organized **the Flemish Harbour Day** for the 5<sup>th</sup> time. The port of Ghent, focused on 'transport' – How are goods transported to and from the Ghent port? ArcelorMittal Gent was able to perfectly align itself with this theme. Seagoing and inland waterway vessels, torpedo trucks, railway wagons,... these are just a few of the many means of transport we need to produce and ship steel to our customers.

On Thursday, September 28, 150 PhD students visited the ArcelorMittal Gent site to spend a whole day studying the career opportunities after a PhD.

Every two years we organize an **Environmental Meeting Day**. In 2017, the event took place on Saturday September 30. During the event local residents, local residents' groups, environmental councils, nature associations and the general public are informed on how we take the environment and the immediate environment into account. Special attention was paid to dust control, which is a top priority in our environmental policy. On Sunday's **Open Company Day**, on October 1 2017, we stressed the importance of steel in our daily lives and the innovative power of our company. The program of both event days included a visit to the continuous casting line, the hot strip mill and the production line for laser-welded blanks. During the open weekend we also supported a local charity, an annual practice. In 2017 we support to people with a mental disability. In doing so, we were in line with the campaign slogan of Open Company Day: "Entrepreneurs doing business for everyone!"

We participate in information meetings for the surrounding municipalities and for the entire province of East Flanders on themes in which ArcelorMittal Gent is involved.

In 2017, individual information moments with journalists and local, Flemish, Walloon, Belgian and European politicians were organized to proactively inform them about our company and the business context in which we operate.

Residents who have environmental complaints can contact us directly or call the green number of the Ghent canal area (0800/92.999) or Liège (0479/79.35.64). We investigate all complaints about nuisance individually. On the basis of the information provided, we check whether the nuisance is the result of failures in our processes. If this is the case, we try to limit the nuisance to a minimum. If the cause of the environmental nuisance does not appear to lie with us, we will provide an appropriate response to those who have reported it.

If you need further information about our company, please contact us via our website: belgium.arcelormittal.com

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## Pipeline of talented scientists and engineers for tomorrow

'Steel, your career, our future': our new recruitment campaign on the public transport in Ghent.

# 4.0

#### Industry 4.0 as our mindset 'Steel plant of the future'

Innovation is in our genes and is a prerequisite for continued growth. In this context, we are working towards 'Industry 4.0' or the fourth industrial revolution. Industry 4.0 will fundamentally change the way we produce steel over the next ten years. We possess all assets to be at the forefront of innovation: highly qualified employees, high-tech installations and highly automated processes. In addition, we are working with various research centers within ArcelorMittal and the educational world to develop new steel grades and new coatings.

We use drones to chart, among other things, the volumes of the raw material beddings.

Our strength lies in our ability to innovate and to continue to explore the boundaries of steel making.

# ArcelorMittal Belgium organizes the first edition of 'The Challenge', a hackathon in the context of industry 4.0.

From Friday 15 to Sunday September 17 2017, ArcelorMittal Belgium's very first hackathon took place in the center of Ghent. The word hackathon is a combination of "hack", which stands for optimizing a programming, and "marathon".

'The Challenge' was open to students and young entrepreneurs with a strong interest in IT and design. The 65 participants of the ArcelorMittal Belgium hackathon were given 48 hours to come up with a creative solution for an industry-based conundrum, focused on welding fractures. The overarching theme for the hackathon weekend was 'Smart factory' and 'Industry 4.0'.

After almost 48 hours of the Challenge hackathon, on September 17 the award ceremony took place. Each team had to give a five-minute presentation to pitch their project to the panel of judges, consisting of experts from ArcelorMittal Belgium, Ghent University and the University of Liège. 8,500 euros of prize money was awarded, divided into four categories: Visualization, Artificial Intelligence, User Experience and Best Overall Solution. The award ceremony took place in the presence of State secretary Philippe De Backer.

#### The winners were:

- Visualisation No Name
- Artificial Intelligence One Bonsai
- User Experience Staalent
- Best overall One Bonsai

Matthieu Jehl, CEO ArcelorMittal Belgium (until november 30 2017), said: "Innovation is part of our DNA. We are a highly technological and innovating company that focuses strongly on Industry 4.0. On a daily basis, we utilize the newest techniques in terms of capturing, processing, visualizing and analyzing a wide range of data, and continuously push the boundaries of steel making. This very first ArcelorMittal Belgium hackathon, which required participants to find a creative solution to a complex software issue, fits perfectly in our mindset of continuous innovation."

Throughout the hackathon weekend, a wide variety of workshops and training sessions were organized during which experts from ArcelorMittal Belgium and the universities of Liège and Ghent shared their knowledge about the world of Industry 4.0. Participants also got the chance to try out activities including drone racing. Our very first hackathon 'The Challenge' was a success.





e Bonsai, the winning tear The Challenae'

#### Collaboration with the academic world

Arcelor/Mittal Belgium employs more than 500 engineers who work in production, maintenance, IT, automation, engineering or research and development, whether or not in an international environment. They, for example, develop mathematical models to improve business processes, industrialize new products, improve the metallurgical quality of steel products, refine the production process and coordinate maintenance and automation projects.

In the autumn of 2016, we signed a contract with Ghent University for a long-term collaboration. With this contract we commit ourselves to financially support a number of research projects (including PhDs, bilateral research) from various research groups. The research themes are in the field of energy and CO<sub>2</sub> efficiency, material efficiency, productivity increase and automation. The collaboration will give a strong impulse to value creation through innovation and will guarantee the inflow of new insights and motivated knowledge employees.



#### Collaboration with Research & Development: proximity of OCAS and CRM

#### CRM

The Liège site works closely with the CRM Group (Centre de Recherche Métallurgique). Together they were able to launch a new production line: the Jet Vapor Deposition. The unique JVD process was made possible thanks to a breakthrough in scientific development. The line which was inaugurated at the beginning of 2017, is the result of eight years of hard work by ArcelorMittal and the CRM Group.

#### OCAS

The ArcelorMittal site in Ghent has maintained a close collaboration with the OCAS research center for many years. OCAS is a market-oriented research center that provides metal-based solutions and results-oriented services to metal manufacturing and processing companies around the world. It is a joint venture between ArcelorMittal and the Flemish Region.



#### Thesis fair

On Tuesday afternoon April 18, around 20 engineering students from Ghent University took part in the very first thesis fair of ArcelorMittal in Ghent.

The afternoon started with a presentation on the different thesis topics that were to be offered on our site the following academic year. Afterwards, a customized company visit took place, during which the students visited the construction site at our hot dip galvanizing line to see how a new furnace was built. The day ended with a competitive round of e-karting in Ghent.

#### From PhD to job market

On Thursday, September 28, 150 PhD students visited Arcelor Mittal Gent to explore future career opportunities after their PhD. The event is an annual initiative of all Flemish universities, coordinated by Ghent University. In 2017, the event focused on PhD students in (bio) engineering and/or natural sciences.

Participants from the five Flemish universities: Ghent University, Free University Brussels, University of Antwerp, Catholic University of Leuven and University of Hasselt attended the event. With this initiative, the universities wanted to introduce the PhD students to the evolution of the labor market and to the countless opportunities that await after obtaining this prestigious degree.

The conference was held for the second time at ArcelorMittal in Ghent last year. PhD colleagues working on our site shared their experiences on the value of their degree on the labor market.

#### 23 years of Environmental awards

As of 1995, ArcelorMittal Gent has been awarding environmental prizes to the best graduation projects dealing with an environment-relevant subject in the field of 'Bioengineering' and to the 'Masters in Environmental Sanitation' of Ghent University. A selection of the final works eligible for the environmental prize is made in advance by the professors of the Faculty of bioengineering. The nominated works are then read and assessed on the basis of a number of criteria. This is done on the one hand by our colleagues of the environmental department and on the other by the professors themselves. By mutual agreement, a winner is then appointed in each category. In 2017, the ArcelorMittal Gent environmental prizes were awarded for the 23<sup>rd</sup> time.

## Master's thesis prizes for students in engineering and industrial sciences.

Every year, we award a master's degree prize to students in the various fields of engineering and industrial sciences. In both fields of study we award up to three prizes, each for an amount of 1,500 euros. All master's theses with an engineering theme, submitted at the Ghent University and the Catholic University of Leuven, are eligible, but in particular those master's theses that make an excellent contribution to innovating or improving one or more of the following subjects:

- automation of processes,
- efficient use of energy,
- technological and economic usability of materials

In 2017, the master's thesis prizes were awarded for the  $15^{\rm th}$  time.



Interactive workshops fo PhD students

Awarding the Environmental Prize for the best graduation project in the field of 'Maste of Environmental Sanitation' at Ghent University.



09



# Our contribution to society measured, shared and valued

Participation in the 'Music for Life' solidarity campaign and the organization of a 'safety camp' for children of employees show that we take our social responsibility seriously.





#### We are not blind to social challenges and support all kinds of social projects to combat poverty and create training opportunities for people who have ended up on the fringes of society.

We are a founding member of 'Entrepreneurs for Entrepreneurs'. This is a Belgian partnership between companies and a number of non-governmental organizations. 'Entrepreneurs for Entrepreneurs' wants to support profitable business projects in the South, in order to boost employment and economic activity in those countries.

The 'Kromme Boom' is a care project open to people who can no longer function in society. Often they already have a history of aid institutions behind them. In the 'Kromme Boom', residents are offered a total package of living, working and relaxing, supporting them so they can return to a normal rhythm of life and eventually regain their place in society.

The 'Centrum Algemeen Welzijnswerk' (CAW) is a nonprofit organization active in providing assistance to underprivileged people in Ghent. The services provided vary widely, from relationship and divorce mediation to assistance in applying for social allowances or completing asylum procedures. Every year, an average of 12,000 requests for help are received by the emergency services providers of the CAW, the majority of which are about relationship and housing problems.

During the Volunteer Day, 24 enthusiastic colleagues from ArcelorMittal Gent set out to work in a welfare organization in Ghent.

'Kras' is a partnership of 13 poverty services in Ghent. 'Kras' annually supports 4,000 to 5,000 families in poverty. The services provided by Kras, range from food and clothing distribution to people living in poverty, to material aid and financial support to take part in trainings and cultural activities.

In addition, we support numerous social organizations in the Ghent and Liège region in which ArcelorMittal Belgium employees play an active role.

Arcelor Mittal Belgium organizes an annual solidarity campaign in which we call on employees to collect clothing and toys for the benefit of 'Spullenhulp' or the 'PCSW' in Flémalle. By doing so, 160 children from 75 families in the region of Liège were given a toy as a gift during the Saint Nicholas festival.

On December 8 2017, 24 volunteers from our site in Ghent joined forces with five local welfare organizations: the 'Centrum Algemeen Welzijnswerk', the 'Kromme Boom', the 'Triangel', 'Kras' and the 'Zilverbos' residential care center.

"We have the feeling that as a volunteer for one day we received more than what we gave."



In addition to supporting anti-poverty projects, we also encourage health and safety initiatives:

ArcelorMittal Gent took part in Music for Life and handed over a cheque of 11,468 euros to Bednet.

> Our colleagues cycled enthusiastically during the Warmest Week of Studio Brussel (national radio station) thus raising money for charity.

On April 2 2017, 89 employees took part in the running contest, the 'Port of Ghent Run'. In doing so, they supported Protos, a development cooperation working for better water management in developing countries (Africa and Latin America).

Midsummer Night Run

In addition to structural sponsoring, we also support specific projects of 'Entrepreneurs for Entrepreneurs', such as participation in the '20 km through Brussels'. On May 28 2017, a team of 28 employees joined and raised funds for eight development cooperations that are part of 'Entrepreneurs for Entrepreneurs'.

During the seventh 'Midsummer Night Run' on June 24 2017, our colleagues achieved great results. 61 employees ran in favour of 'Kras', a partnership of 15 poverty services in Ghent.

On October 30, ArcelorMittal Liège organized a safety camp for 60 children of employees. In cooperation with the Red Cross, the Cegis training center and CEPS ('Centre européen pour la sécurité'), workshops were held on (fire) wound care, life-saving measures and fire extinguishing techniques.

On December 16 2017, it was once again time for an atmospheric evening jog right through Ghent, better known as the Winter Midnight Run. An enthusiastic team of 80 Arcelor Mittal runners entered the race thus supporting Unicef.

The Warmest Week of Music for Life took place from December 18 to 24 2017 in the Provincial Domain

Puyenbroeck in Wachtebeke. Music for Life is the solidarity action of Studio Brussel (national radio station) in collaboration with the King Baudouin Foundation. From December 11 to 19 2017, our colleagues from Ghent, Genk and Geel cycled a total of 5,734 km in favour of 'Bednet'. 'Bednet' ensures that children and young people who are temporarily unable to attend school can follow their classes from home (synchronous internet education). Our company donated 2 euros for each kilometer cycled. On Wednesday, December 20, 10 sporty colleagues from ArcelorMittal Gent walked to the Puyenbroeck Domain in Wachtebeke to hand over a cheque worth 11,468 euros.

Every year, the non-profit organization Special Olympics Belgium organizes a national championship for athletes with a mental handicap, with the financial support of our company. The event takes place alternately in Flanders, Wallonia and Brussels. More than 3,400 athletes and 2,800 volunteers from all over Belgium came together at this major four-day sporting event. The 2017 event took place in Lommel.

In addition, we support numerous sports clubs in the Ghent and Liège region in which our ArcelorMittal Belgium employees play an active role.

In the fall of 2017, ArcelorMittal, in collaboration with the independent research agency APCO Insight, launched a survey to map out ArcelorMittal Belgium's image. The target groups consulted were staff members, customers, the government and influencers (including the media). The score among our employees was high: 88% of our colleagues are favorably disposed towards ArcelorMittal Belgium. The result of the actions we have taken in recent years to increase the engagement of our employees. Customers remain a central focus point and specific actions have been set up to further strengthen our brand image,

The Challenge

Pubbelinterview: Nieuwe CEO aan het ho

van ArcelorMittal Belgium

Arcelor Millel Gent

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to become the preferred supplier. The collaboration with the other target groups surveyed (governments and influencers) will be further strengthened so that our company is recognized for its positive contribution in the regions in which we operate.

With the neighbourhood magazine we aim to anchor our company more firmly in the region.

We are also publicly recognized for our performance in the field of sustainable business. On June 21 2017, for the 14<sup>th</sup> time in a row, we received the Environmental Charter for our site in Ghent.

The 'East Flanders Environmental Charter' is an initiative of Voka - East Flanders Chamber of Commerce. It aims to encourage companies in East Flanders to pursue an active environmental policy that leads to an improvement of the living environment in the region. Companies take part in it voluntarily. The 17 Sustainable Development Goals (SDGs) of the United Nations form the universal framework for this.

Participating in the Environmental Charter means that for at least four of these SDG's, environment-related objectives and associated actions must be defined and achieved in the course of 1 year. After the end of the action year, an evaluation team visits the site to check whether the actions have been carried out and whether the company continues to comply with its legal obligations.

We have been participating in the initiative with our Ghent site since 2003. It offers an extra incentive to continuously realizing environmental improvements. This is also the general aim of the ISO 14001 standard (see environmental management system p.56).



The Environmental Charter illustrates that our environmental management is effective and places our efforts in the field of environmental care in an objective manner in the spotlight.



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