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Turning Sustainability into a catalyst for innovation

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LCM 2017

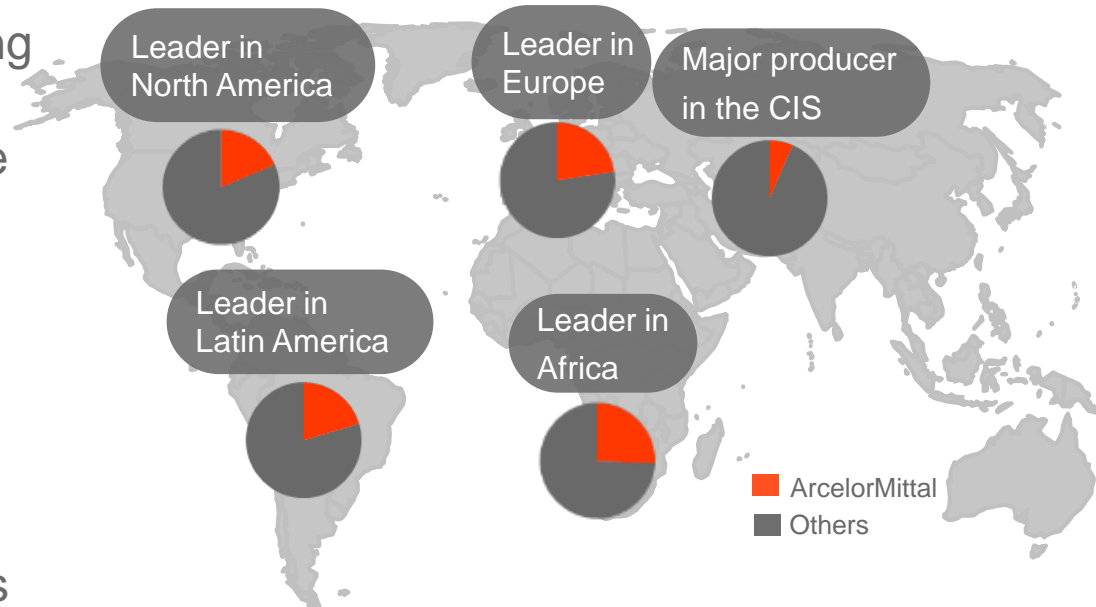
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steel and mining company

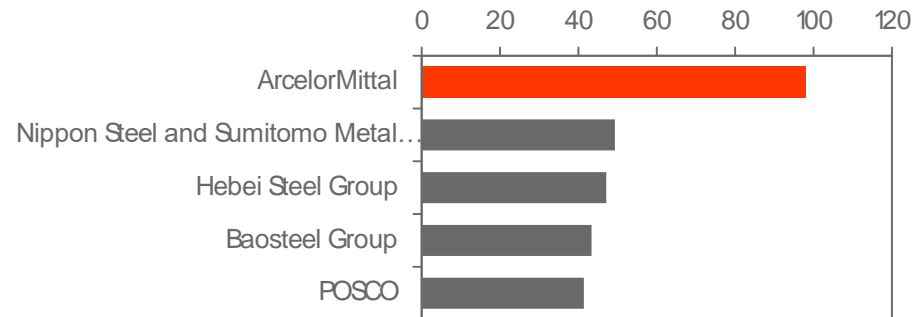


ArcelorMittal

- ArcelorMittal is the world's leading **steel** and **mining** company, with over **200,000** employees in more than **60** countries.
- Leader in all major global steel markets, including **automotive**, **construction**, household **appliances** and **packaging**, with leading R&D and technology, as well as sizeable captive supplies of raw materials and outstanding distribution networks.



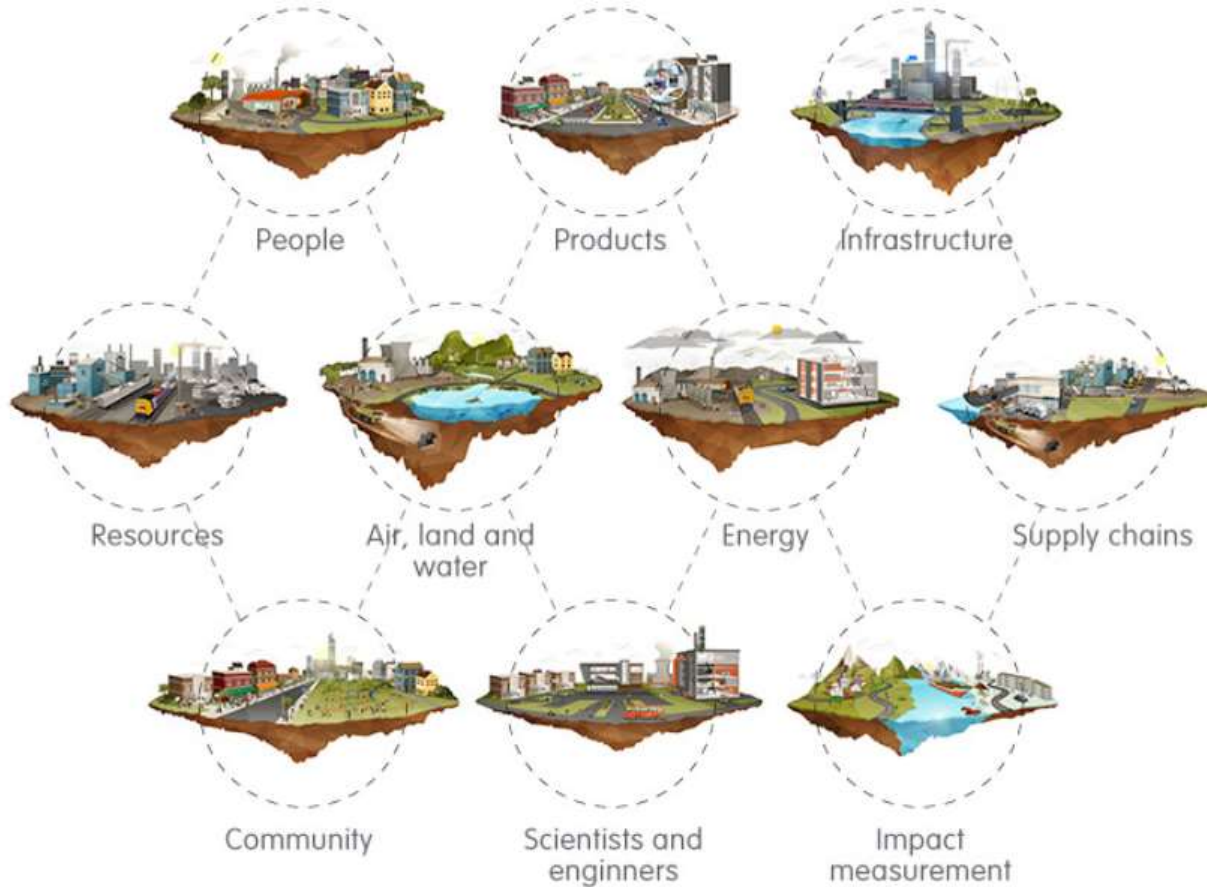
Top 5 steel producers 2015 (million tons)



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our 10 sustainability outcomes



All underpinned by
transparent good governance

ArcelorMittal R&D at a glance

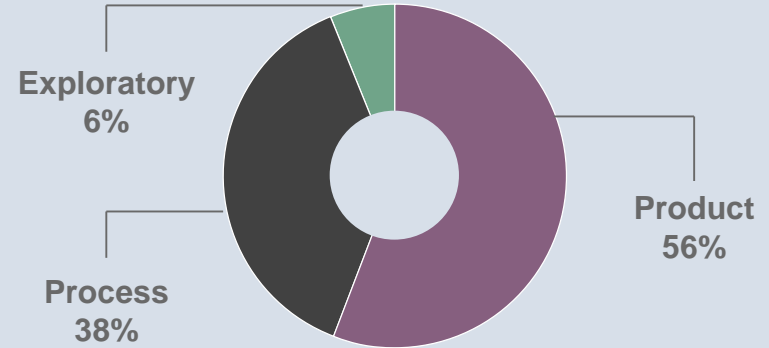


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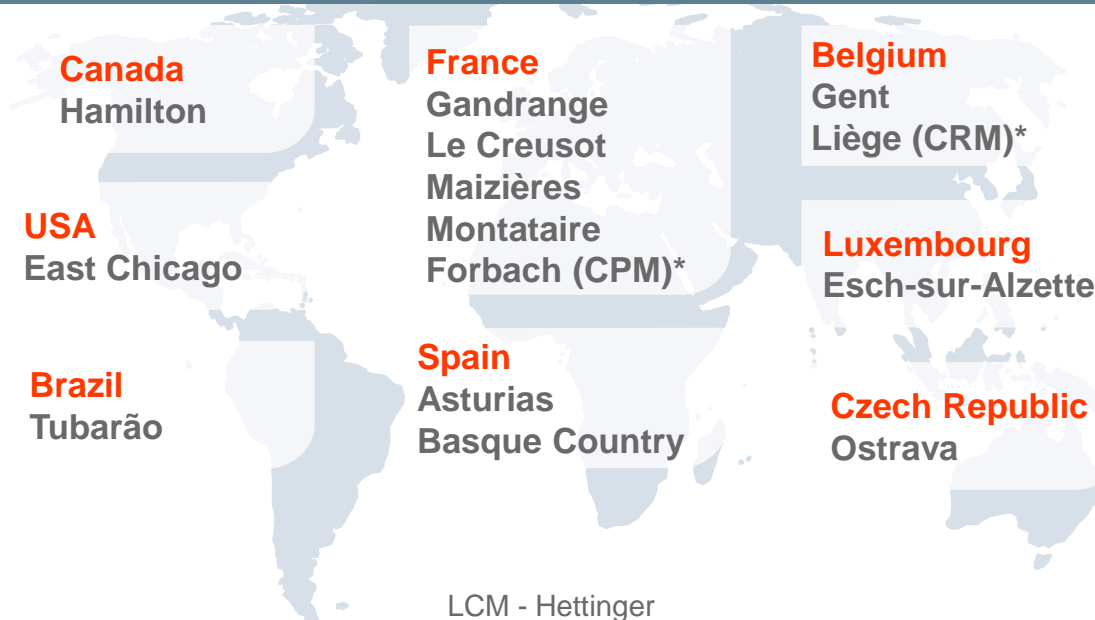
- 1,400 full time researchers
- 2016 spending of \$239m

R&D effort fully aligned with Group strategy: geography, value chain, product differentiation

Budget spending by focus area



12 research centres



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ArcelorMittal R&D

domains of product research



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ArcelorMittal R&D domains of process research



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Objectives

WE AIM AT
IMPROVING THE
SUSTAINABILITY
PERFORMANCE OF
FUTURE
ARCELORMITTAL
PRODUCTION &
SOLUTIONS

- To engage researchers in **developing products and processes achieving a higher sustainability performance**
- To help **promoting the sustainability added-value of our solutions** towards clients and stakeholders
- To **identify the projects with the highest potential** contribution to sustainability development





How does it work?

Inputs

Resources: Coal, water, natural gas
Worker safety: Personal protection, Toxicity
In-use properties: Car crash, energy efficiency

Analysis

Computer based calculation using ArcelorMittal databases

Results

Social & environmental indicators calculated for 7 sustainability concerns



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Practically:

- This assessment enables to identify the **strong points** of the project regarding ArcelorMittal Sustainability Outcomes....
- as well as the **parameters that should be improved**
- **From X2 to X5**, the researcher can modify the inputs and test their effects

ization of ArcelorMittal

SUSTAINABILITY PERFORMANCE OF THE R&D PROJECT COPY GRAPH

According to the indicators, the impacts of the R&D projects are assessed quantitatively or qualitatively. See "Parameters" Spreadsheet for more details on quantitative and qualitative indicators and the influence of parameters. Results should be analysed on a case by case basis. In particular, indicators are not weighted and are considered with an equal importance as they are all normalised on a scale from -3 to +3. In reality, the project may affect much more one impact than another, which should be taken into account when drawing conclusion from the results. However, some general comments may be made according to the graphs:

- The impact of the R&D project on most sustainability indicators is:
- The outcomes positively impacted are:
- The outcomes negatively impacted are:

POSITIVE
 People / Product / Air, Land and Water / Energy
 Supply Chain





Where are we now

- Beta version tested in 2016
 - Tool user-friendly and easy to use.
 - Estimated time for the evaluation : less than 30 minutes
 - Work done on increasing transparency
- Official launch December 2016 (internal and external)
- First deployment to test and improve the tool
 - 3 sectors (process, automotive and construction – potentially 70% of ArcelorMittal R&D budget)
 - 2 research programs per sector
- Progressively extended to all R&D sectors

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Our goal: development only possible if increased sustainable performance is proven

Thank you!

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