

### ArcelorMittal

# Steel and Construction Market Challenges and Opportunities

Growing Population and Urbanisation

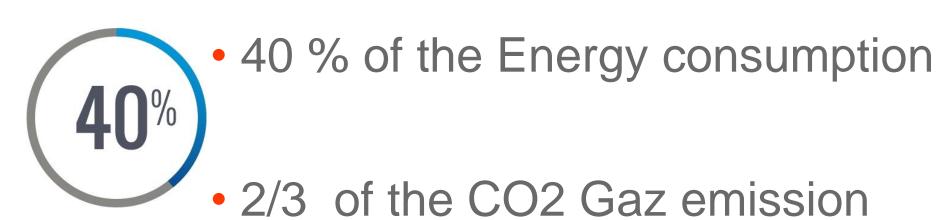
Numeric World Digitalization Climate change



# Construction market Energy and CO2



The Construction market is responsible for:





### The European Construction market: The Energy trend and Europe

 "Reduction of energy consumption and the use of energy from renewable sources in the buildings sector constitute important measures needed to reduce the Union's energy dependency and greenhouse gas emissions"

www.epbd-ca.eu
Directive 2010/31/EU



### The European Construction market: The EPBD

A powerful driver: the european EPBD

Performance of Buildings
Directive



www.epbd-ca.eu
Directive 2010/31/EU



### The European Construction market: The factor 4

## Objective factor $\frac{4}{4}$ to 2050 :

reduction of energy consumption and



carbon footprint by

4

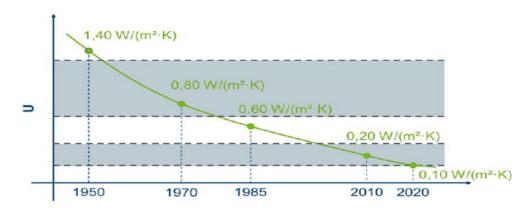
www.epbd-ca.eu



### The European Construction market: Solutions for Energy Efficient Buildings

200

 Passive Systems: Efficient Insulation and Thermal Performances



Active systems: Energy Harvesting





### ArcelorMittal Construction Market & Development

#### 32% of ArcelorMittal turnover



A strategy to deliver:

differentiated products

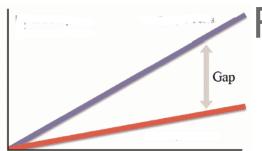
unique design solutions

ArcelorMittal is the leading global provider of steel for construction



#### ArcelorMittal Construction Development and Energy Efficiency



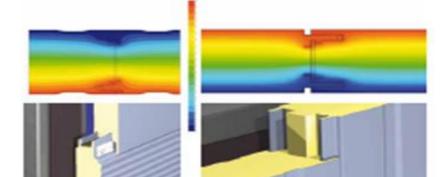


Forecast performance versus

Actual performance



Building science program on air tightness, thermal bridges, and efficient





# ArcelorMittal Construction Steel Solutions for Building Insulation in New and Retrofit buildings

# Each year ArcelorMittal Construction contributes to saving over



18 millions of MWH of energy or 5 millions Tons of CO2 eq

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#### ArcelorMittal and Construction Market Energy Efficiency in Buildings advocacy



#### **Fondation Batiment Energie in France**

Created in 2005 by ArcelorMittal, Engie, EDF and Lafarge. 10 years activity to support and fund research projects to improve the Energy Efficiency of Buildings especially through retrofitting.

www.batiment-energie.org



#### WBCSD EEB 2.0 project

Initiative on behalf of the WBCSD (Word Business Council for Sustainable Development) that works on worldwide regional construction markets to identify and find solutions to overtake non-technical barriers that hamper the uptake of energy-efficient solutions in both new and existing buildings (Participants: UTC, Lafarge ,Skanska, SGS, Arcadis, Engie,Arcelormittal , AkzoNobel ,Siemens ,Infosys,Schneider Electric ,AGC Glass ,Rexel,..)

http://www.wbcsd.org/buildings.aspx

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### Arcelormittal and Construction Market A path to industrialised construction

#### **Preindustrialised Steel Solutions for**



Affordable

Reliable

Speed-up construction

