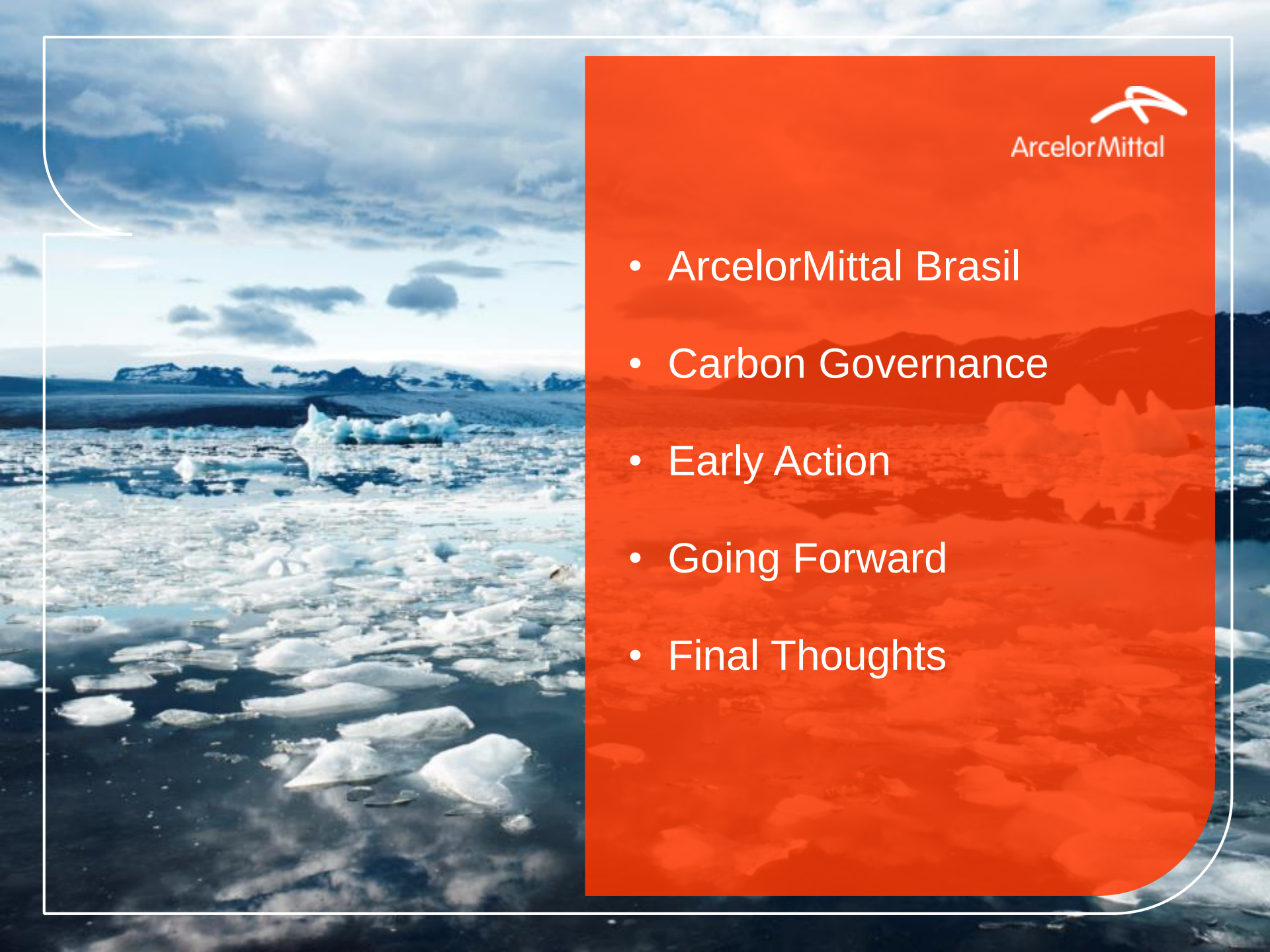
Carbon Management

ArcelorMittal Brasil

Environmental Management



- ArcelorMittal Brasil
- Carbon Governance
- Early Action
- Going Forward
- Final Thoughts

ArcelorMittal
Our business

ArcelorMittal is the world's leading steel and mining company, with a presence in 60 countries and an industrial footprint in 18 countries.

ArcelorMittal in Brasil

ArcelorMittal Brasil

In numbers

- More than 30 units for production and processing of steel.
- Annual steel production capacity: 12.5 million tons.
- Annual iron ore production: 7.1 million tons.
- Present in the segments of flat and long steel, carbon, mining, production and distribution of charcoal.
- Products used in such segments as automotive, appliances, civil and naval construction, among others
- Around 16,000 employees
- Sales of 9.7 million tons of products in 2017
- Consolidated net revenue in 2017: R$ 20.32 billion.
- EBITDA in 2017: R$ 2.55 billion.

Carbon Governance

Outcome, stakeholders' expectations, internal policies

Our 10 Outcomes

6. Responsible energy user that helps create a lower carbon future

The chemistry of steel-making means it is a carbon-intensive industry - and as the world's largest steel producer, we currently have one of the world's largest corporate carbon footprints. Yet **we see steel as having a vital role to play in a low-carbon, resource-efficient future**. We're embracing this opportunity through an approach that drives emissions reductions through technological innovation and collaboration with other industries, as well as energy efficiencies.

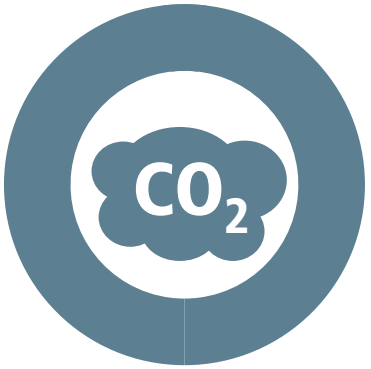
ArcelorMittal
Stakeholders' expectations

Since the 2015 Paris climate agreement identified an ambitious collective target of limiting global warming to 2 degrees or lower, expectations from stakeholders have advanced at an unprecedented level.

Priorities for our business and our stakeholders *(Annual Review 2017)*

- Safety
- Financial health
- **Climate change**

We're expected to increase transparency on our:
- Energy consumption
- Carbon emissions
- Product performance
- Supply chain impacts



Environmental Policy

Luxembourg, June 16th, 2015

1) Implementation of **environmental management systems** including ISO 14001 certification for all production facilities;
2) **Compliance** with all relevant environmental laws and regulations, and other company commitments;
3) **Continuous improvement** in environmental performance, taking advantage of systematic monitoring and aiming at pollution prevention;
4) Development, improvement and application of low impact, **environmental production methods** taking benefit of locally available raw materials;
5) Development and manufacture of **environmentally friendly products** focusing on their use and subsequent recycling;
6) Efficient use of **natural resources, energy and land**;
7) Management and reduction where technically and economically feasible of the **CO_2 footprint** of steel production;
8) **Employee commitment** and responsibility in environmental performance;
9) **Supplier and contractor awareness** and respect of ArcelorMittal's environmental policy;
10) **Open communication** and dialogue with all stakeholders affected by ArcelorMittal's operations.

As the biggest steel and mining company worldwide, we do recognize that steelmaking is resource-intensive.

Our environmental policy focus on ten main key principles.

7. Management and Reduction where technically and economically feasible of the **CO2 footprint** of steel production

Energy Policy

Energy Policy

ArcelorMittal

Short description:

Efficient use and conservation of energy to reinforce our leadership position and to assume our societal and environmental responsibilities.

Scope:

Relevant to all employees of ArcelorMittal.

Making steel more sustainable & competitive

1. Purpose

ArcelorMittal is committed to the efficient use and conservation of energy to reinforce its leadership position and to assume its societal and environmental responsibilities for the benefit of all its stakeholders. This policy provides to all employees the requirements for a successful and sustainable energy management programme.

2. Principles

At ArcelorMittal, we are committed to:

1. **Competitiveness** – by reducing our energy costs.
2. **Efficiency** – by establishing and implementing effective energy management programmes to reduce the specific consumption of energy in our processes. We will also support manufacturing capabilities by internal benchmarking of energy efficiency and transforming our best practices into standards.
3. **Technology** – by investing in innovative, energy efficient technologies that are both environmentally and economically effective.
4. **Social Responsibility** – through energy efficiency measures by harnessing any energy source, including in waste gases, to reduce our carbon footprint.
5. **Partnering** – with our suppliers and customers to maximise the inherent energy efficient properties of steel and steel products.
6. **Employees Engagement** – by supporting and encouraging continuous energy conservation by employees in their work and personal activities.
7. **Continuous Improvement** – by establishing and maintaining a framework for setting, reviewing and reporting our corporate energy target and objectives.
8. **Supporting** – national governmental energy efficiency policies.
9. **Leadership** – by being a reference in the industrial world through our energy approach.

These commitments have to be considered and integrated into all our further actions.

ArcelorMittal | CTO | AM_CTO_PO_02.01 | November 2011

At ArcelorMittal we are committed to:

Efficiency

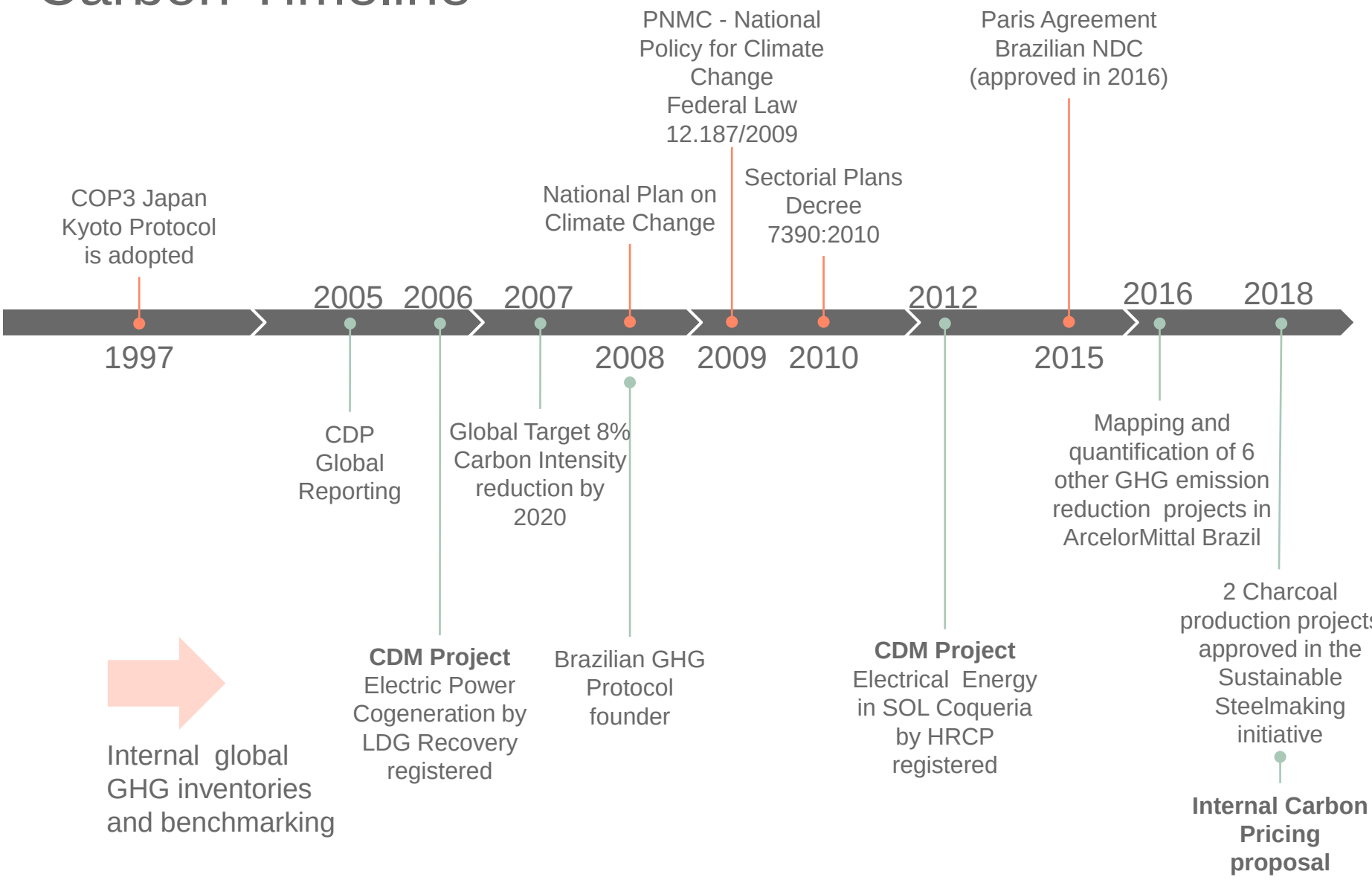
by establishing and implementing effective energy management programmes to reduce the specific consumption of energy in our processes.
[…] support manufacturing capabilities by internal benchmarking of energy efficiency and transforming our best practices into standards

Early Action

Monitoring and reporting, Internal Benchmarking, CDM and carbon emission reduction projects

ArcelorMittal Brasil

Carbon Timeline



Reporting and Transparency

Participant since 2005, reporting CO2 emissions, reduction targets and strategies to achieve them.

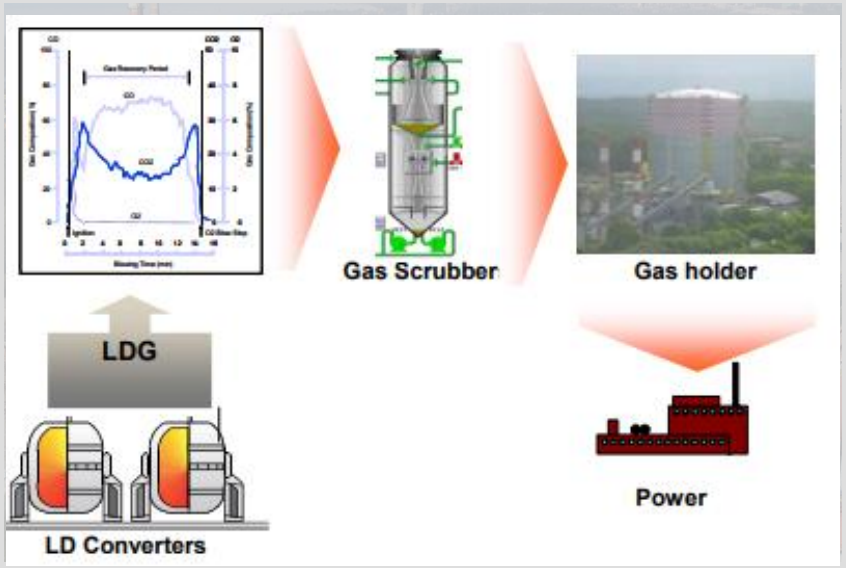
CO_2 information externally audited by Deloitte.

One of the founding companies in 2008.
Silver qualification GHG inventory published in 2018.

Corporate Sustainability Report
GRI compliant
Total CO_2 emissions (Scopes 1, 2 and 3) and emission reductions.

CDM Projects

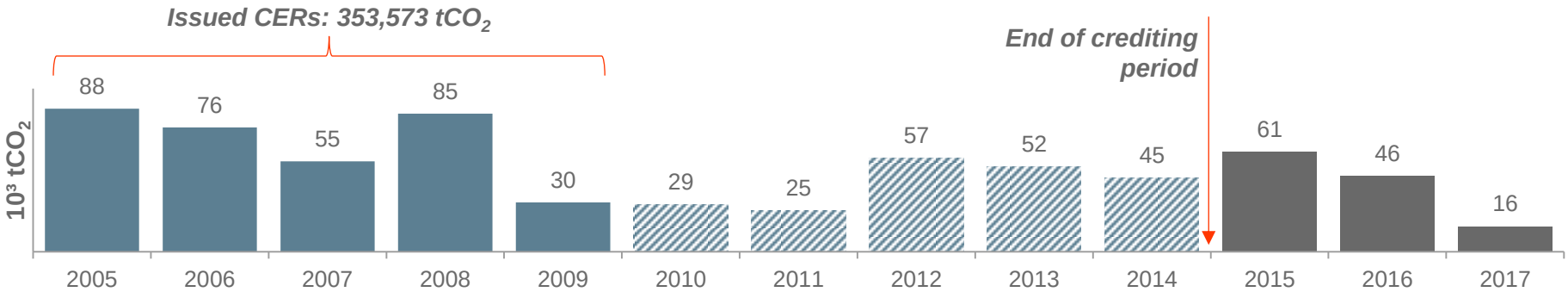
(Project 184) Electric Power Co-Generation by LDG Recovery



Site: ArcelorMittal Tubarão
Registration Date: 15 May 06
Crediting Period: 01 Sep 04 - 31 Aug 14 (Fixed)
Methodology: ACM0004

The project aimed to recover LDG from the steelmaking shop and produce electric power in thermal electrical plants on site.

- 1st CDM project registered in a large-scale integrated steel plant
- Additionality demonstrated by investment analysis.



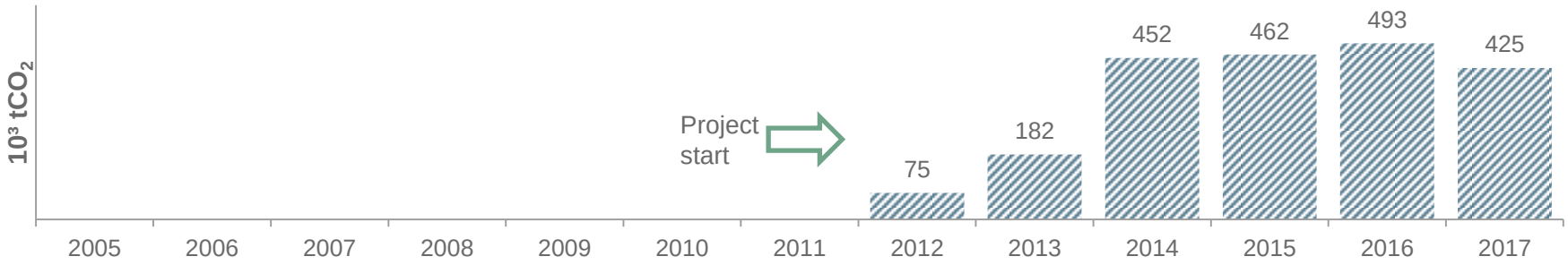
CDM Projects

(Project 6453) Generation of Electrical Energy in SOL by Heat Recovery

Site: ArcelorMittal Tubarão
Registration Date: 16 Aug 12
Crediting Period: 01 Sep 12 - 31 Aug 22 (Fixed)
Methodology: ACM0012 ver. 4

The project aims to generate electrical energy from recovered waste heat from the coke production process implemented at SOL Coke Plant. The Heat Recovery system implemented was the first of its kind in Brazil.

First Monitoring Report filed in 2018.

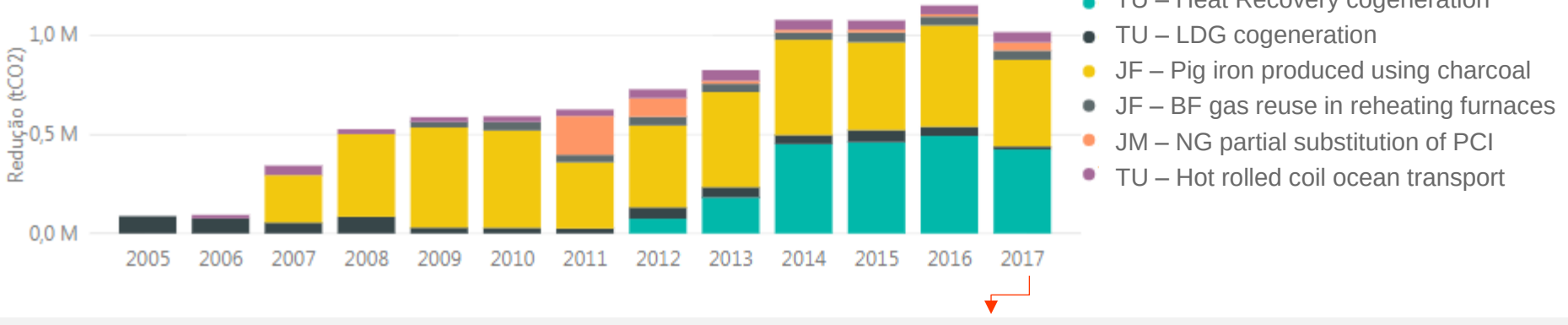


Other carbon emission reduction projects

Site	Project	Methodology
Tubarão	LDG Recovery for Electric Power Generation*	CDM ACM0012 v.04
Tubarão	Electric Power Cogeneration in Heat Recovery Coke Production*	CDM ACM0004 v.01
Juiz de Fora	Pig iron production via renewable reducing agent and methane abatement during carbonization	CDM AMS II.D v 13.0
Juiz de Fora	BF gas reuse on hot rolling reheating furnaces	CDM AM0082 v.01
Monlevade	Partial coal and coke substitution with natural gas in Blast Furnace	CDM ACM0009 v.05.0
Tubarão	Hot Rolled Coil transport via coastal shipping	CDM AM0090 v.01.1.0

**Approved Registered CDMs*

Calculated GHG Emission Reductions



Calculated reductions corresponded to ~6% of total CO_2 direct emissions (Scope 1) in 2017

Going Forward

Contributing to National NDC, Improving Inventory accuracy, MAC Curve and Carbon Pricing

Brazilian NDC and National Inventory

Steel industry's participation

ArcelorMittal

NDC Targets

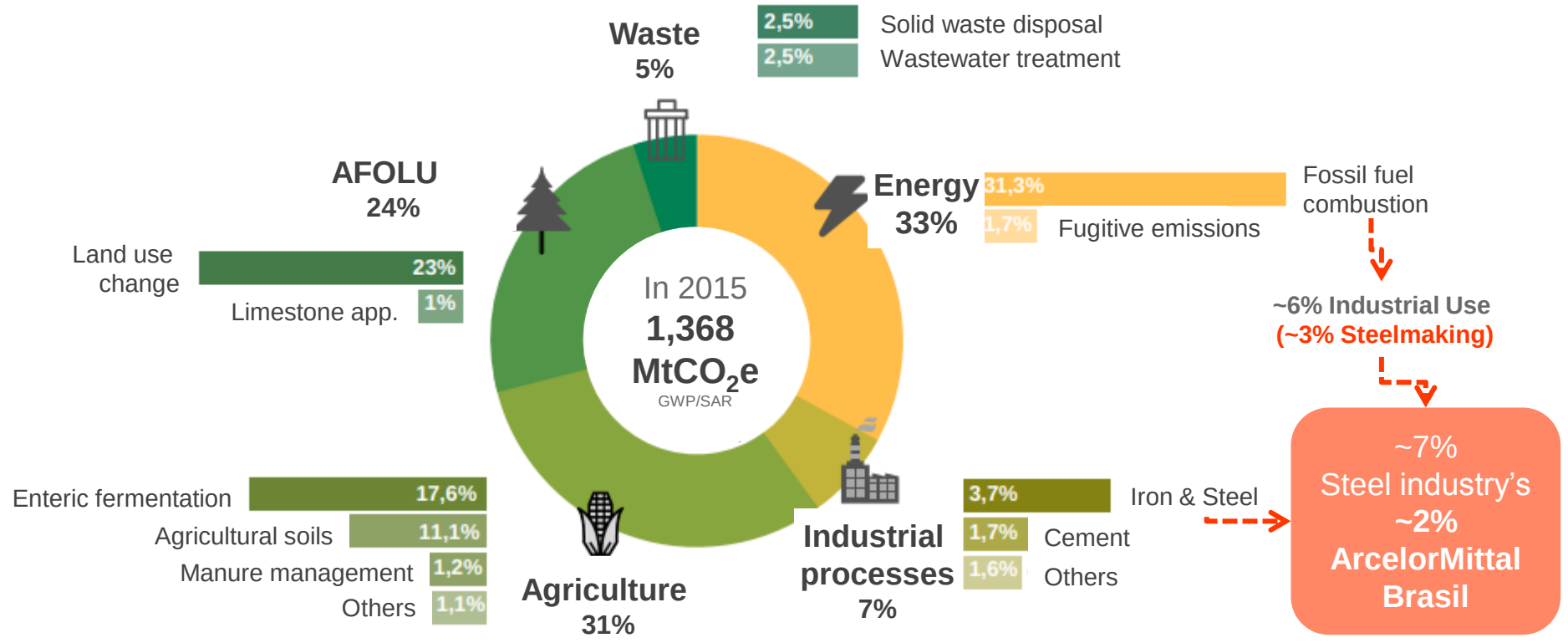
base year 2005
2,043 MtCO2e

-37% of CO_2e by 2025

-43% of CO_2e by 2030

Main actions

- Zero illegal deforestation and 12 million ha reforested by 2030
- 18% of biofuels in national fuel matrix and 45% of renewable energies in national mix, excluding hydro power
- **For industries:** clean technologies and energy efficiency



Ongoing Actions

- Improving site and corporate level GHG Inventories through automation using cloud software
- Construction of a CO_2 emissions reduction Marginal Abatement Cost (MAC) Curve
- Promoting Energy Efficiency projects and monitoring of associated GHG emission reductions
  - ISO 50.001 Gap analysis
  - Plan 2030

ENERGY EFFICIENCY MASTER PLAN 2030

Long-term plan aiming at increasing energy efficiency, maximizing fuel utilization and promote carbon reduction in ArcelorMittal Tubarão

Ongoing Actions
Internal Carbon Pricing

Assessment and design of an internal carbon pricing mechanism in order to influence the investment decision making process

Main challenges

- Awareness from internal stakeholders regarding climate change scenarios and implications for the business
- Uncertainties regarding national government position on a potential national carbon pricing mechanism
- Mixed signals from government policies going against national targets, such as roll back on policies against deforestation

Actions

- Internal and external Benchmarking
- Partnership with Fundação Getúlio Vargas (Simulated ETS, EPC)

Promoting carbon reduction downstream

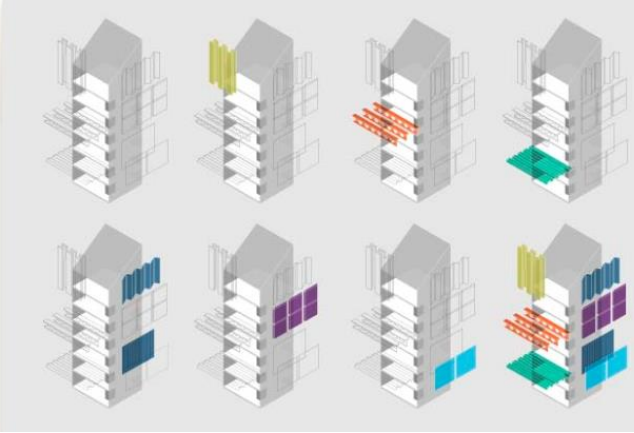
S-in motion®

Steel solutions for lighter cars

- Saving weight
- Safer cars
- Sustainable
- Strength
- Steel solution

Steligence®

proposes that buildings need to be considered as integrated, almost 'living' entities, embedded in the urban environment



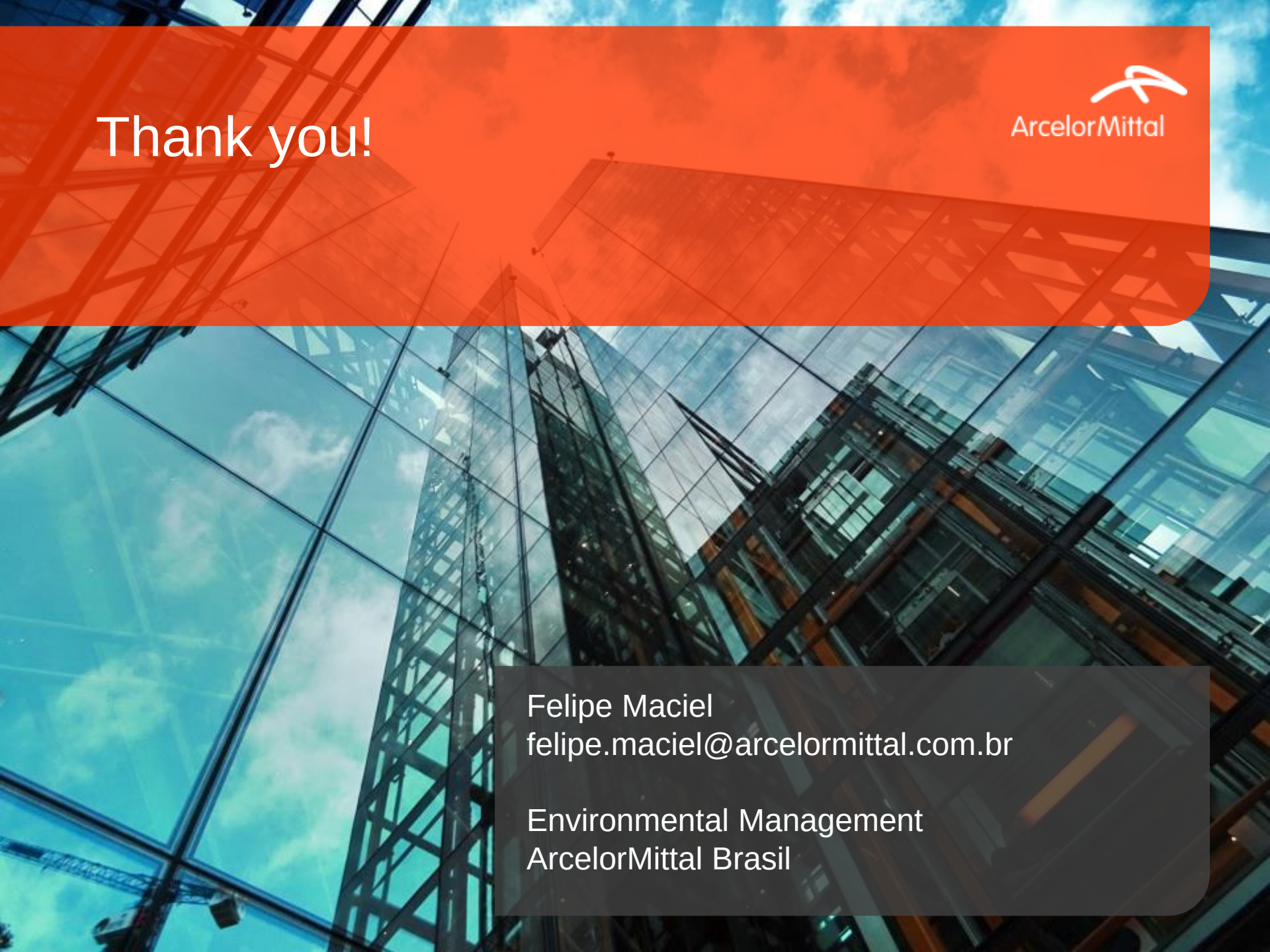
The intelligent construction choice

Steligence®

Final thoughts

- ArcelorMittal understands the significant threat posed by Climate Change to the planet and the necessity of a transition to a low carbon economy;
- Steel is a vital element for the circular, low carbon economy of the future;
- A balanced set of policies, that incentivizes long-term investment in carbon efficiency and low-carbon technology, while preventing carbon leakage is essential for industry engagement;
- There is no simple solution and collaboration from government, NGOs, society and businesses is necessary;
- Brazilian steel → advantages in charcoal route and low carbon electric grid need to be valued.

Thank you!



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