

American Steel Experts' Dialogue in the framework of the IEA Global Sustainable Technology Roadmap for Iron & Steel

SESSION 3: Low carbon policies & Low-carbon alternative technologies in iron & steel

Global overview

22 August 2018 – São Paulo, Brazil

MINISTÉRIO DO
MEIO AMBIENTE

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Ministry of Environment

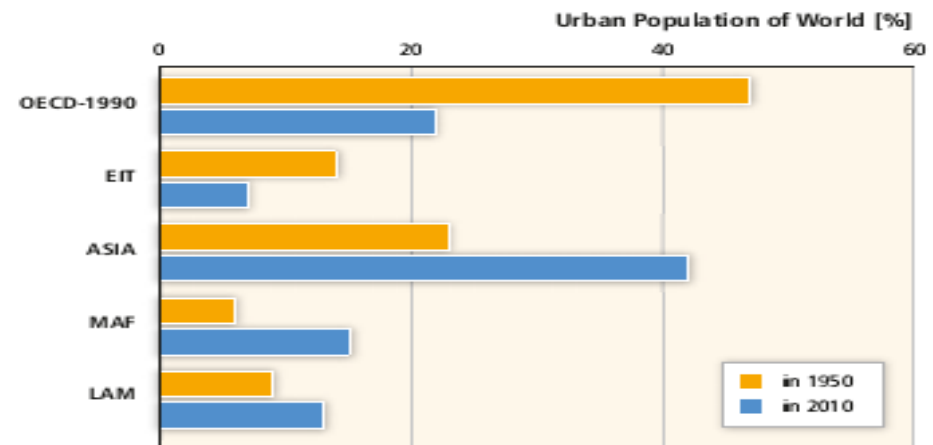
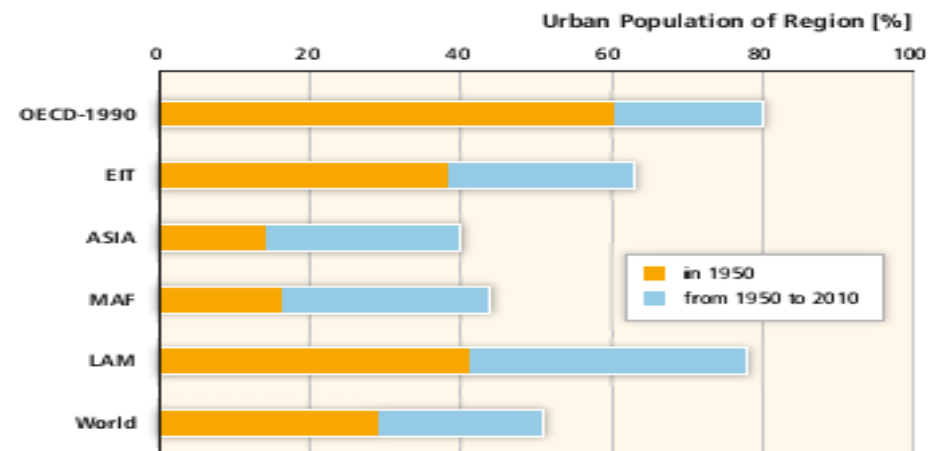
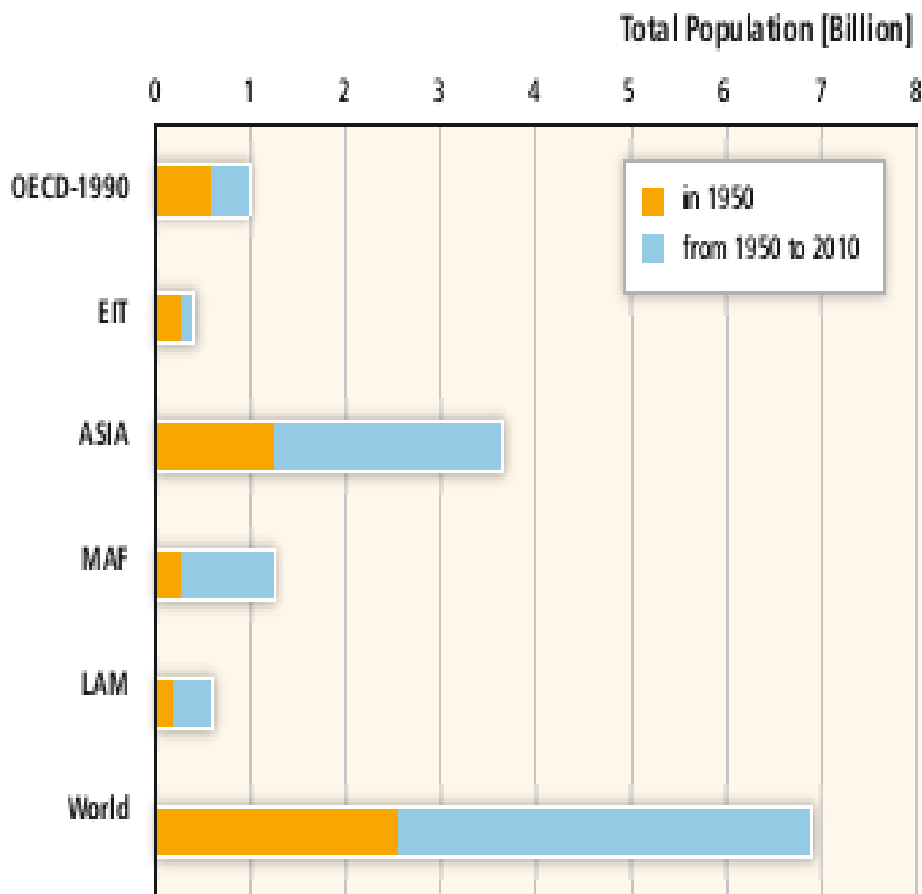
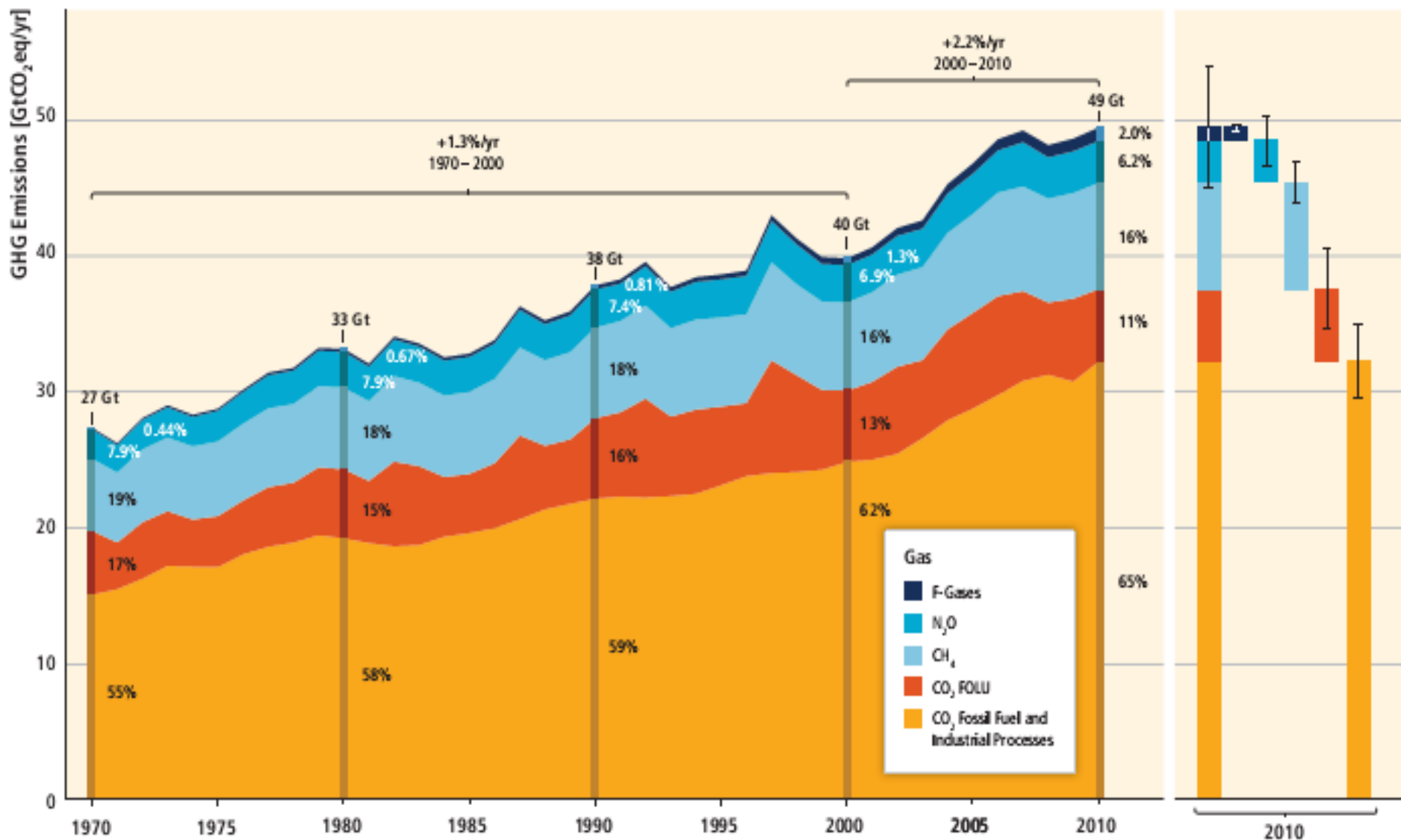


Figure 12.1 | Urban population as percentage of regional and world populations and in absolute numbers for RC5 regions (see Annex II.2), 1950–2010 Source: UN DESA (2012).

IPCC, 2014: *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.



Total Annual Anthropogenic GHG Emissions by Groups of Gases 1970–2010



IPCC, 2014: *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

COP 21 (Paris Agreement)

Article 2.1

- (a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C;
- (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; and
- (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

COP 21 (Paris Agreement)

All countries participate in mitigation by Nationally Determined Contributions (NDCs) (Art. 4.2)

- Shall pursue domestic mitigation measures

- NDCs are ratcheted upwards every 5 years (Art. 4.3, 4.9)

- Developed country Parties SHOULD continue taking the lead by undertaking economy- wide absolute emission reduction targets (Art. 4.4). Developing countries should “move over time” towards “economywide” reduction or limitation targets (Art. 4.4)

NDC



MITIGATION

Reference Point: 2005.

Greenhouse Gas Emissions Reduction by 2025 (Contribution)	Greenhouse Gas Emissions Reduction by 2030 (Subsequent indicative contribution)
37%	43%

Type: absolute target in relation to a base year.

Coverage: 100% of the territory, economy-wide, including CO₂, CH₄, N₂O, PFCs, HFCs, SF₆.

Metric: GWP-100 (IPCC AR5).

Brazil will reduce greenhouse gas emissions in the context of continued population and GDP growth, as well as income per capita increase, making therefore this contribution unequivocally very ambitious.

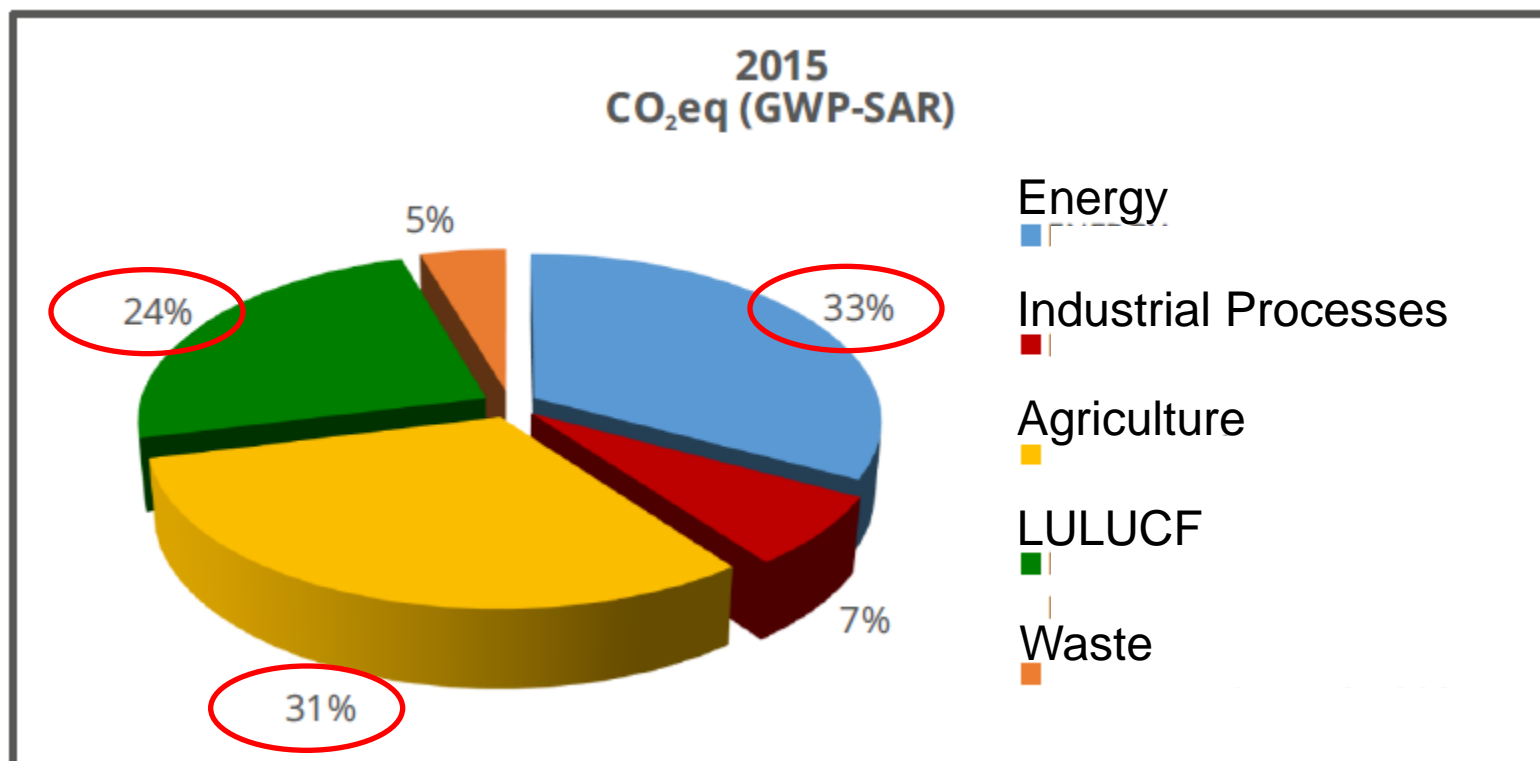
Brazil's population is projected to continue to grow until the 2040's, to approximately 230 million inhabitants.

Source: IBGE. *Projeção da População do Brasil por sexo e idade: 2000-2060*. August 2013. Available at http://www.ibge.gov.br/home/estatistica/populacao/projecao_da_populacao/2013/default.shtm, accessed on 2 September 2015.

NDC



Steel Industry is crucial to the Brazilian NDC implementation



Source: MCTIC (2018)