

Workshop on gas market design

IEA-Brazil gas market peer-review and dialogue

Duarte Figueira Brasília, 23 August 2018



The International Energy Agency (IEA)



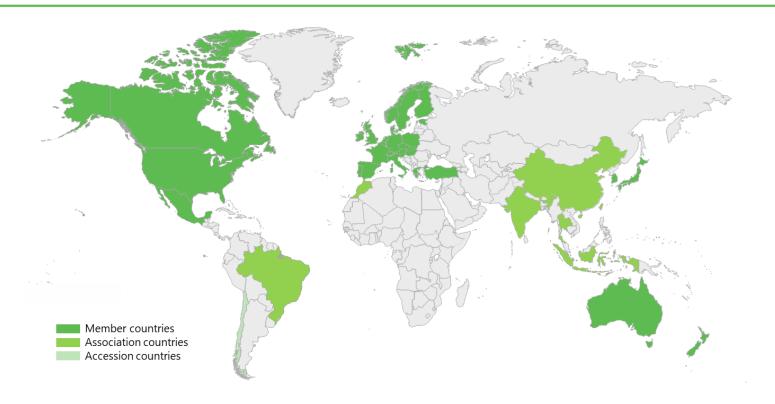




The IEA is at the heart of the global energy dialogue and the transition to a clean energy future, and provides unbiased <u>analysis</u>, <u>projections</u> and <u>data</u> to support energy policies of its member countries and beyond

The IEA "family"





The IEA family includes <u>30 member countries</u> (from the OECD), <u>7 association countries</u>, including Brazil, China, India and Indonesia, and partners around the world

IEA-Brazil Association

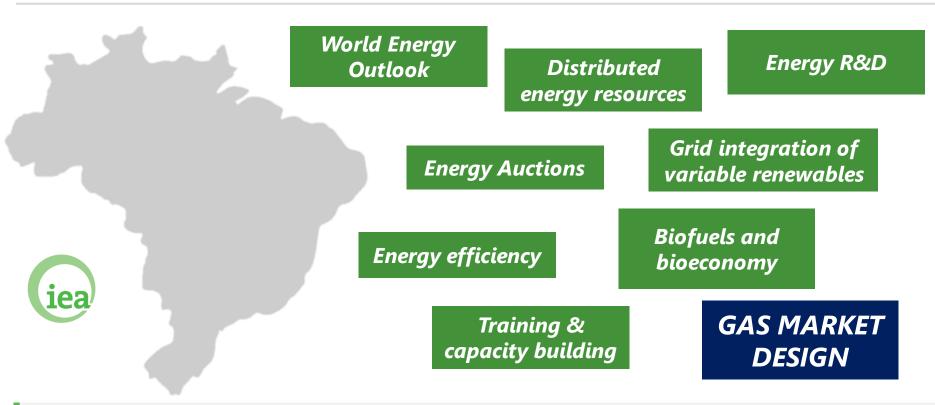




Brazil joined the IEA as an Association country in October 2017

IEA-Brazil joint Programme of Work



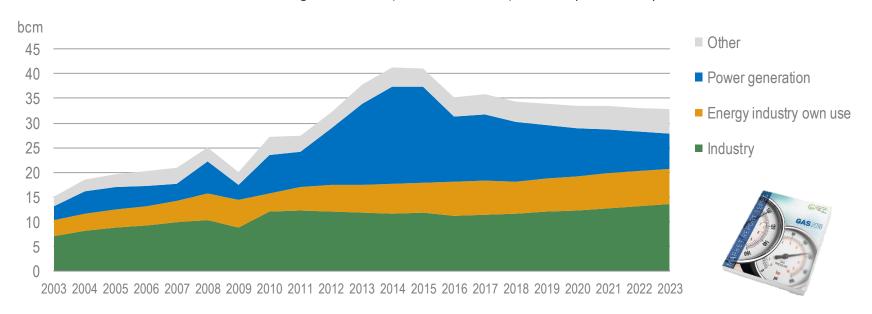


The IEA and Brazil have signed the most ambitious and wide-ranging programme of work to date.

The IEA's view on the Brazilian gas market



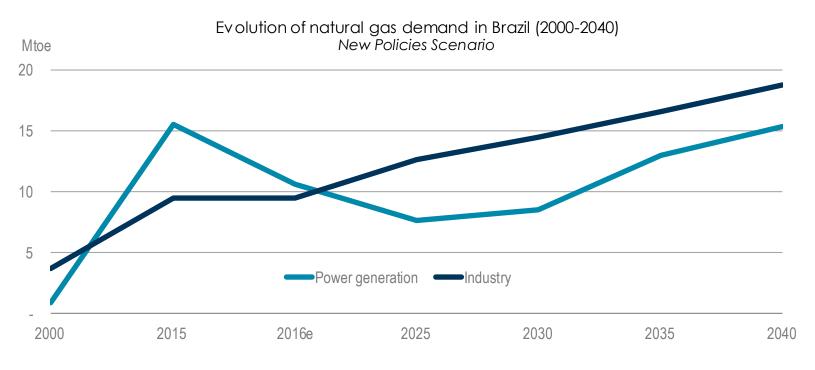
Evolution of natural gas consumption in Brazil by sector (2003-2023)



During the next five years, natural gas demand in Brazil is expected to grow in every sector besides power generation until 2023.

An expanding market







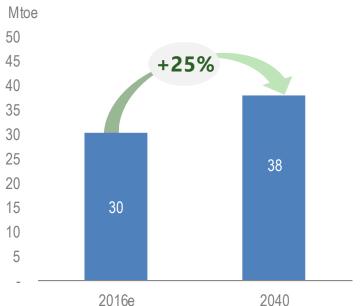
Demand in industry is expected to increase steadily over the next decades, while demand for power generation will start increasing in the medium-term.

Natural gas and renewables





Change in total primary gas demand in Brazil Sustainable Development Scenario





Additional thermal generation is needed to support the deployment of variable renewable energy, providing flexibility and assuring security of supply.

The environment for reform



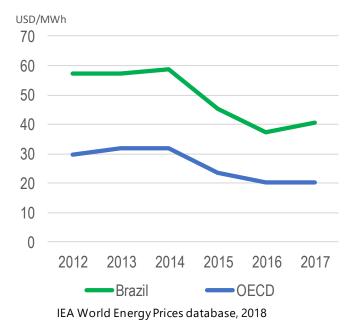
A timely initiative

Several key elements for a successful market reform are present in Brazil at the moment, including:

- Prospect for future growth in demand and supply
- Diversified sources of supply (local production, Bolivia, LNG)
- Petrobras Programa de Parcerias de Investimentos (PPI) creates new market opportunities

Natural gas prices for industry





The conjunction of market factors in Brazil and the prospect of more competitive prices provide a positive motivation for reform.

IEA-Brazil gas market peer-review and dialogue



- IEA Member countries are required to undergo an In-Depth Review of their Energy Policy every five years.
- This process is an opportunity to **identify and facilitate the exchange of best practices** between Member and non-member countries, as well as IEA Secretariat experts.
- Brazil asked the IEA to undertake a limited peer-review with a focus on **unbundling models and network codes** with recommendations to feed into the reform process thinking. Project supported by an IEA Member country (UK).
- **European experience is not for copy-paste** but can provide policy building blocks for decision-makers around the world to **design policy solutions adapted to local priorities and specificities**.

Concluding the peer-review process



- **Fact-finding mission** including meetings with Brazilian stakeholders, experts and academia in January 2018.
- Drafting of a **preliminary recommendations** by IEA Secretariat experts and peer-review group.
- Today's workshop is **an opportunity to discuss and challenge** the preliminary recommendations

An IEA Insights Series report based on this peer-review process to be published by late September 2018.

