

Arctic Circle **Assembly III** – **Reykjavík**, Iceland



Brazil: Energy and the Arctic

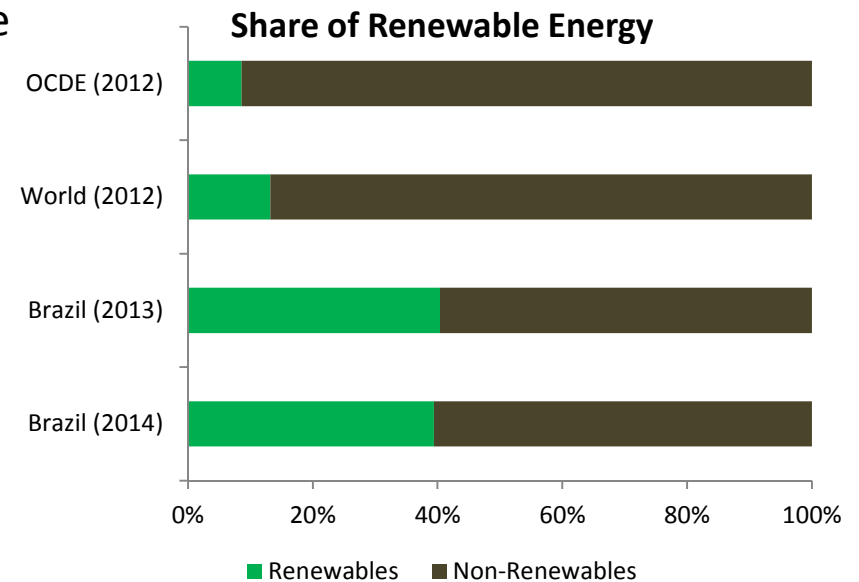
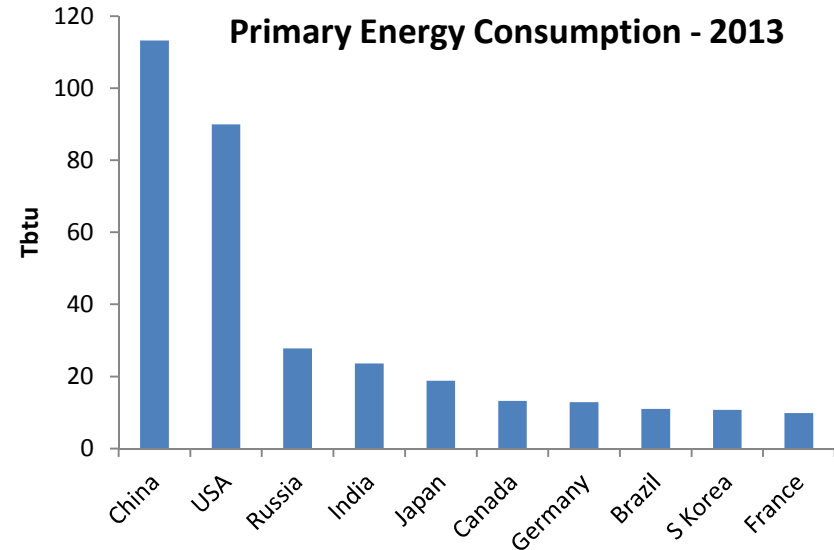
Ieda Gomes

Breakout Session: Brazil and the Sustainability of the Arctic

Friday 16th October 2015

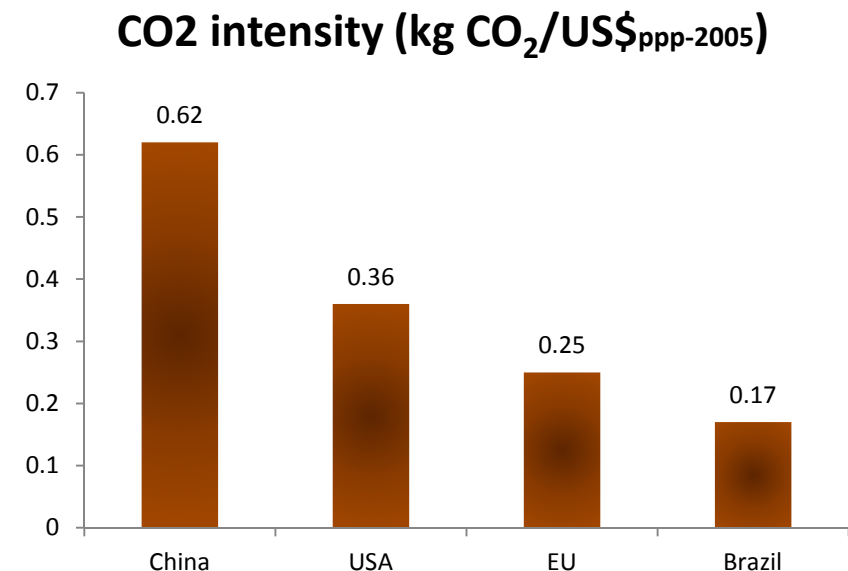
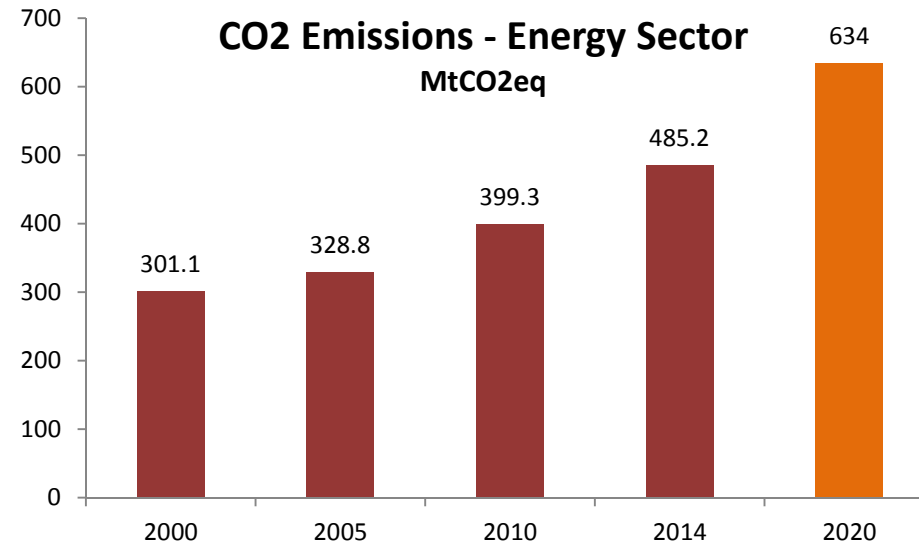
Brazil Energy in Context

- The 7th largest world economy and 8th largest energy consuming country
- Despite lower GDP growth (0.1%), energy consumption rose 3.1% in 2014
- Oil, oil products and natural gas accounted for 80% of the growth
- Brazil has one of “greenest” energy matrix in the world with large share of sugar cane, hydro, wood and growing wind power
- Ethanol - slight recovery following recent realignment in petrol prices



Brazil Energy and Carbon Emissions

- Economy much less carbon intensive than China and EU
- Power sector emitted 137 kg CO₂ /MWh, 5x lower than China and 3x lower than EU
- Electricity production geared towards cleaner sources: natural gas, wind, solar
 - But CO₂ emissions poised to increase 30% by 2020 (transportation and powergen)
 - Transportation sector accounts for 46% of 2014 emissions
- Flexcars allow for petrol/ethanol switch - more needs to be done to reduce diesel and petrol



Challenges

- Changes in environment policies prevents construction of hydro plants with reservoirs
- Fossil fuels will be necessary for baseload power and renewables' back up
 - Fortunately natural gas is the preferred fossil alternative (domestic and pipeline gas and LNG imports)
- Ethanol production dropped dramatically due to petrol subsidies (2011-2014)
- No current policy to replace diesel
- Return to economic growth will require more power and transportation fuel

Opportunities Brazil-Arctic

- World leader in bio-energy and sustainable offshore oil & gas production
- Will become a large oil producer with unrivalled skills in deepwater exploration and production
- Can share best practice in renewable energy capabilities
- Brazil iNDC intended commitment – opportunities for North-South cooperation
 - reduce greenhouse gas emissions by 37% in 2025 and 43% by 2030 (below 2005 levels)
 - Means: forest monitoring systems; biofuels capacity-building and technology transfer; low carbon and resilient agriculture; restoration and reforestation activities;
 - 17 million hectares of secondary forests in Amazonia absorbing CO₂
- New maritime routes for Brazil's trade partners in Eastern Asia

