



Advancing with energy efficiency policies in the AC
sector in Brazil

Kigali Cooling Efficiency Program Project

- ❖ About iCS
- ❖ AC sector impacts on the Brazilian power sector
- ❖ Barriers to advance
- ❖ Kigali Cooling Efficiency Program: our experience

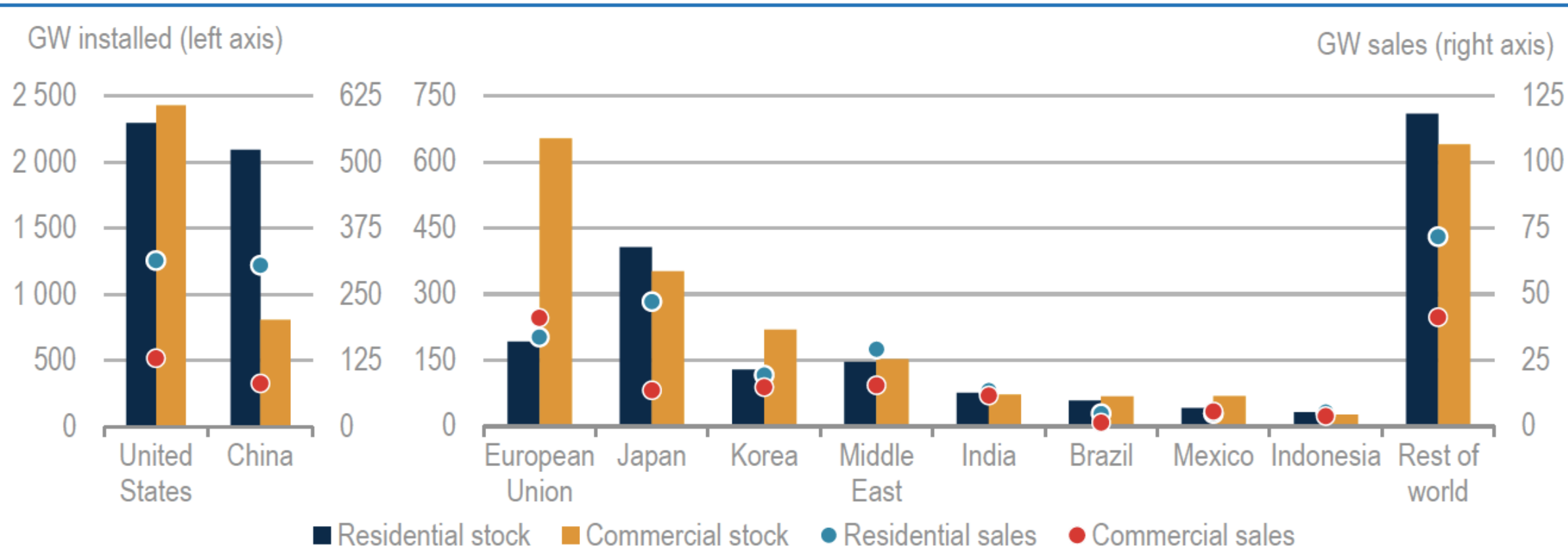
VISION A prosperous, just Brazil that leads the transition to 1.5°C

MISSION Enable the conditions and the architecture for society and decision makers to make informed choices about its future development path. Therefore, we strive to become a recognized center of excellence in philanthropy for climate change in Brazil by:

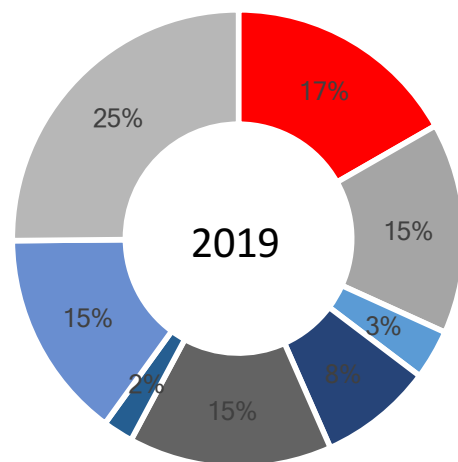
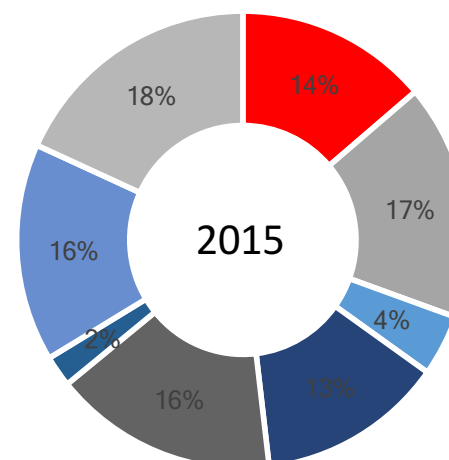
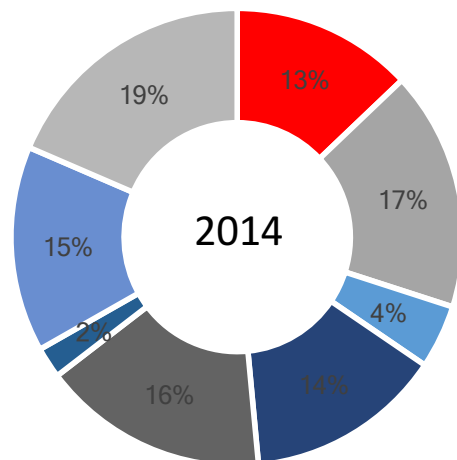
- Grant Making: supporting and enabling organizations and projects of civil society, academia, and governments
- Mobilizing Resources: engaging national and international philanthropic and other financial actors
- Convening: connecting partners and catalyzing actions across various parts of society.

Brazil is one of the biggest AC markets in the world

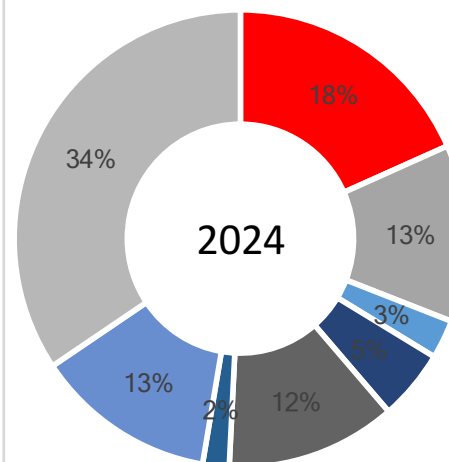
Figure 1.4 • Aggregate AC cooling output capacity and sales by country/region, 2016



ACs will be largest source of residential electricity demand by 2019



- Ar Condicionado
- Refrigerador
- Freezer
- Lâmpadas
- Chuveiro elétrico
- Máquina de lavar
- Televisão
- Outros



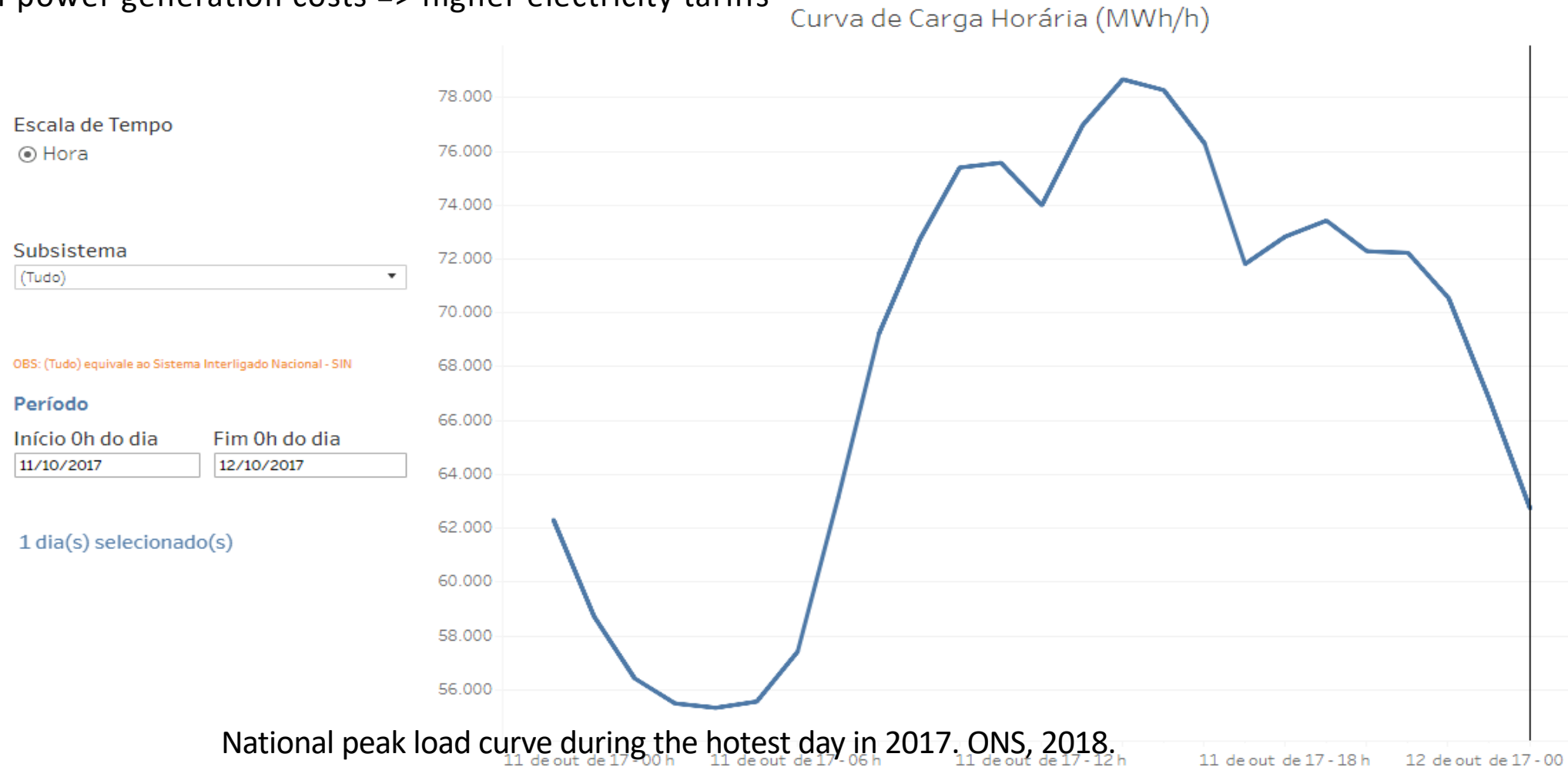
Electricity consumption share by equipment in the residential sector. EPE, 2014.

AC sector impacts on Brazil's power sector

The problem is that AC use is one of the drivers of current peak loads, contributing to:

⇒ Fossil fuels thermal power plants generation increase => GHG emissions

⇒ Increase of power generation costs => higher electricity tariffs



National peak load curve during the hottest day in 2017. ONS, 2018.

About the K-CEP Project in Brazil


- 1 Support governamental planning with a view to insert AC energy efficiency measures
- *Support technical studies required by EPE, using AC as cases*

- 2 Work for MEPs and labeling program review
- *Advisory Committee composed by decision-makers*
 - *Lawrence Berkeley National Lab => impact regulatory study*
 - *Communication and advocacy campaigns in partnership with other NGOs*


- 3 Support compressor Market transformation
- *Pre-feasibility study for a super efficient compressor manufacture unit*
 - *CLASP*

- 4 Support other Market transformation activities
- *Laboratory capacity*
 - *Market mechanisms, such as buyers' club*


Barriers and opportunities

- ❖ AC industry is showing a conservative position:
 - ❖ Economic crisis affected AC industry
 - ❖ Political instability is hampering the investment in the sector


Dialogue → government support → advocacy measures to engage AC companies

- ❖ Institutional structure complexity:
 - ❖ Different governmental bodies in charge of EE
 - ❖ Elections = no structural chance in the short run
 - ❖ Eletrobras privatization: uncertainty regarding who will run EE program (PROCEL) and laboratories

Engagement of major decision-makers (MME, INMETRO, PROCEL, EPE)
⇒ Advisory committee
⇒ Technical support as a strategy

- ❖ Energy efficiency is not a priority
 - ❖ Energy policies and planning focused on supply side
 - ❖ Lack of available data to subsidize the decision-making process
 - ❖ Lack of society/consumer pressure

⇒ Technical studies
⇒ Consumer campaigns

- ❖ Link between EE and refrigerant transition in a early stage
 - ❖ Kigali Amendment pending on Congress approval
 - ❖ Lack of understanding regarding the cobenefits of leverage a joint strategy

⇒ Advocacy strategy in the Congress to guarantee that Kigali Amendment will be approved
⇒ EE first => bringing EE bodies to the discussion



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