



Net Metering scheme in Brazil

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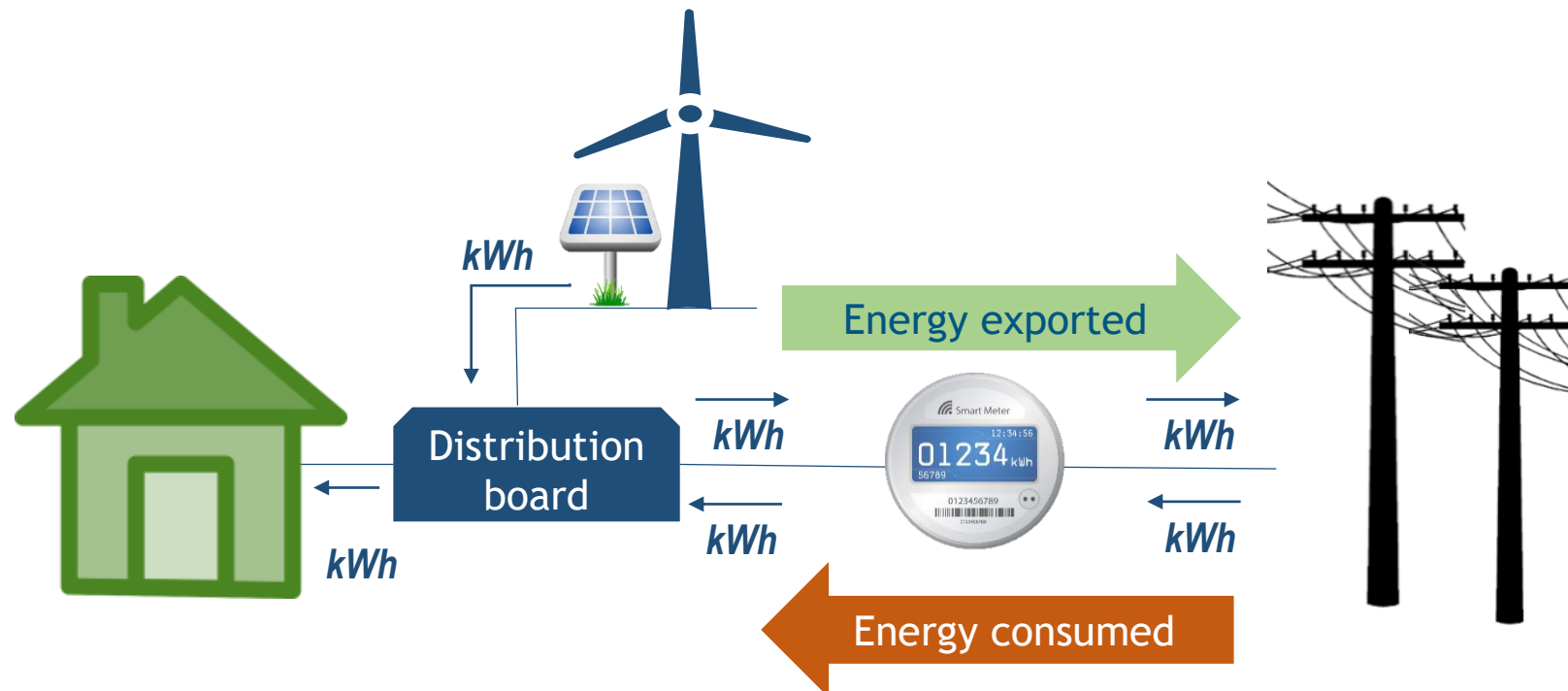
Senior Regulatory Specialist

Superintendency of Distribution Services Regulation - SRD

October 12th 2020

ANEEL Resolution 482/2012

- Renewables and cogeneration (Energy efficiency $>75\%$)
- Micro (up to 75 kW) and Mini (75 to 5.000 kW)
- Connected to the grid through a consumer's facility
- Net Metering – energy trade is not allowed

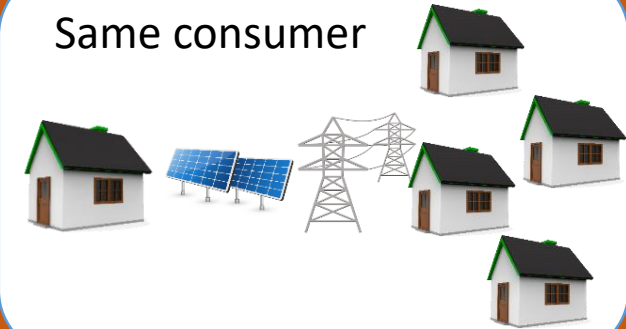


Business Models



Local net metering

Same consumer



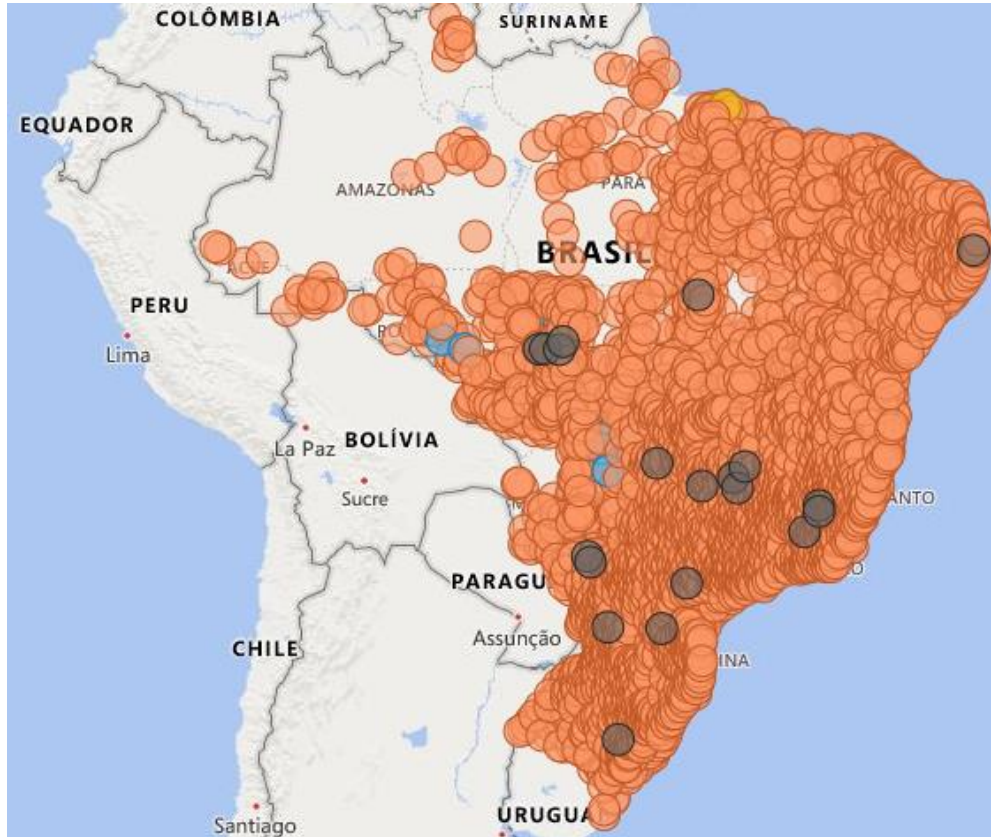
Same utility



Community

Virtual net metering

Main Outcomes

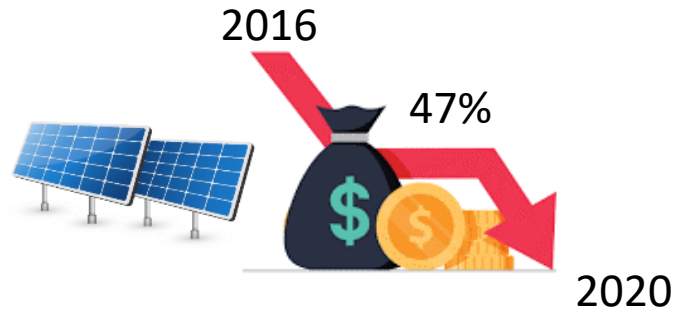


- 5035 cities – 90%

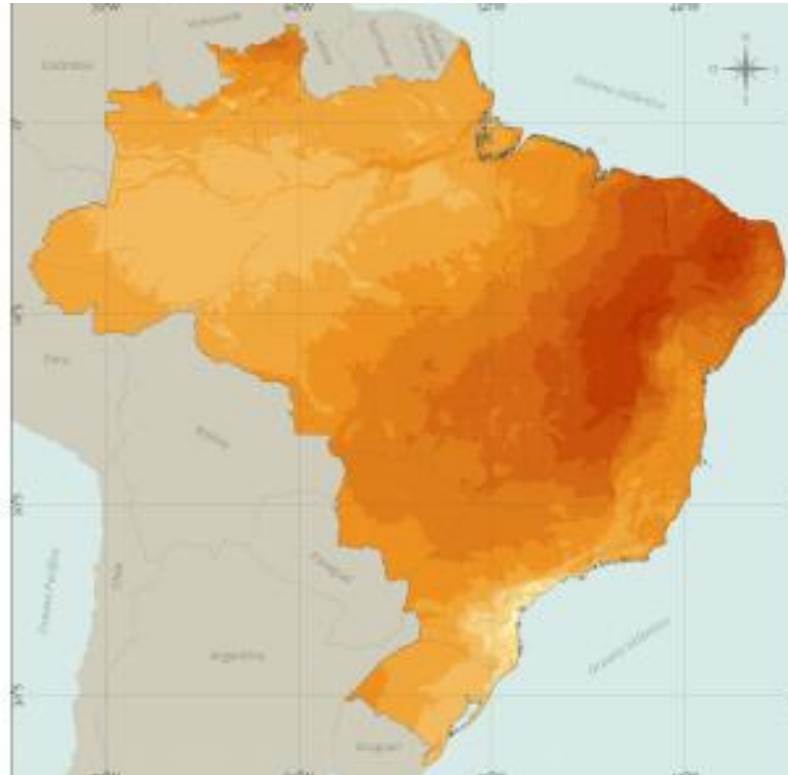


- 307 k connections/395 k consumers
- 39% comercial and 36% residential (MW)
- 79% < 75 kW (low voltage)

What are the main drives in Brazil?



4.3 to 5.8 kWh/m²/day



Energy
exported



9 years
(2016)



4.4 years
(2020)

How about the challenges?

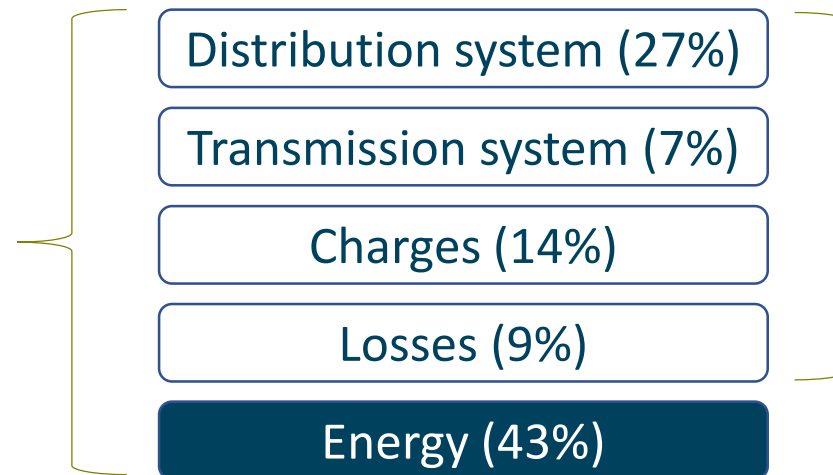
Net metering with volumetric tariff (\$/kWh)



No fixed charges for residential/commercial



Compensation of all tariff components



Utilities revenue reduction



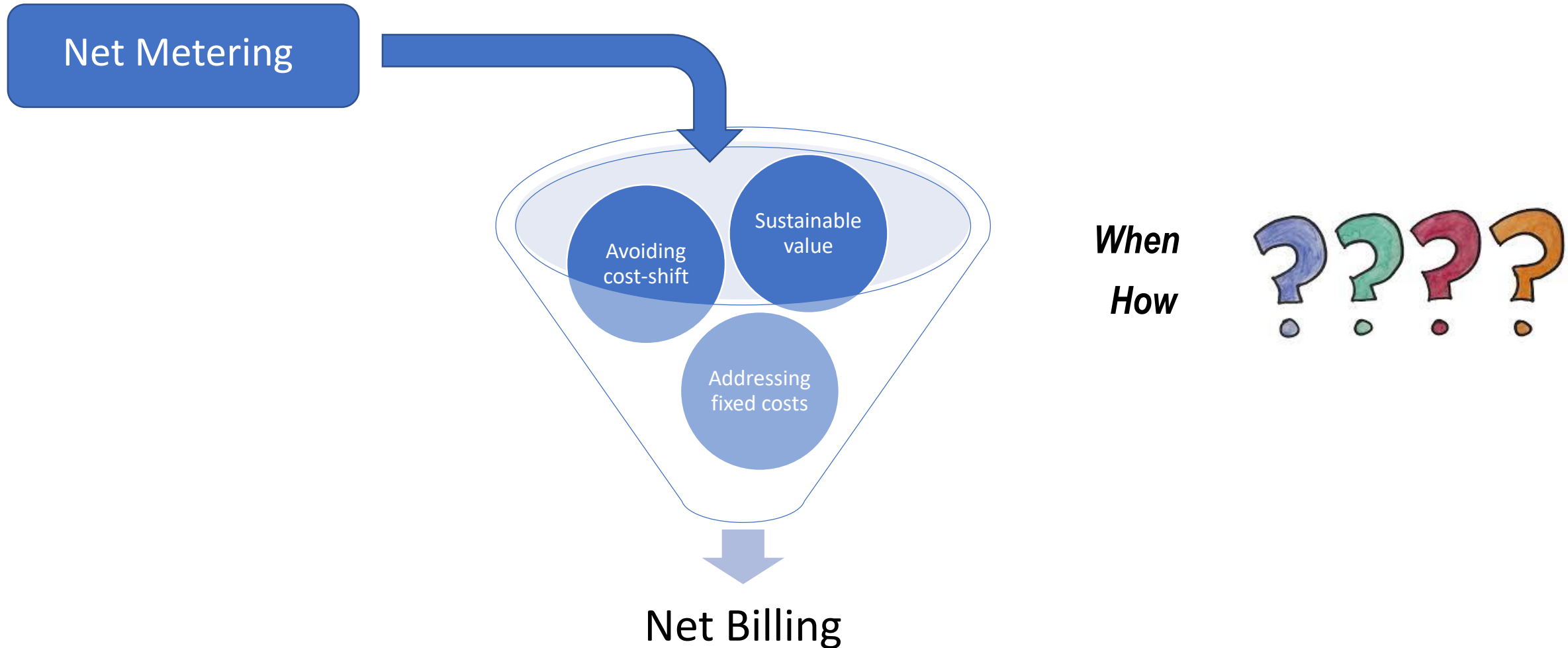
Cost-shift to other customers



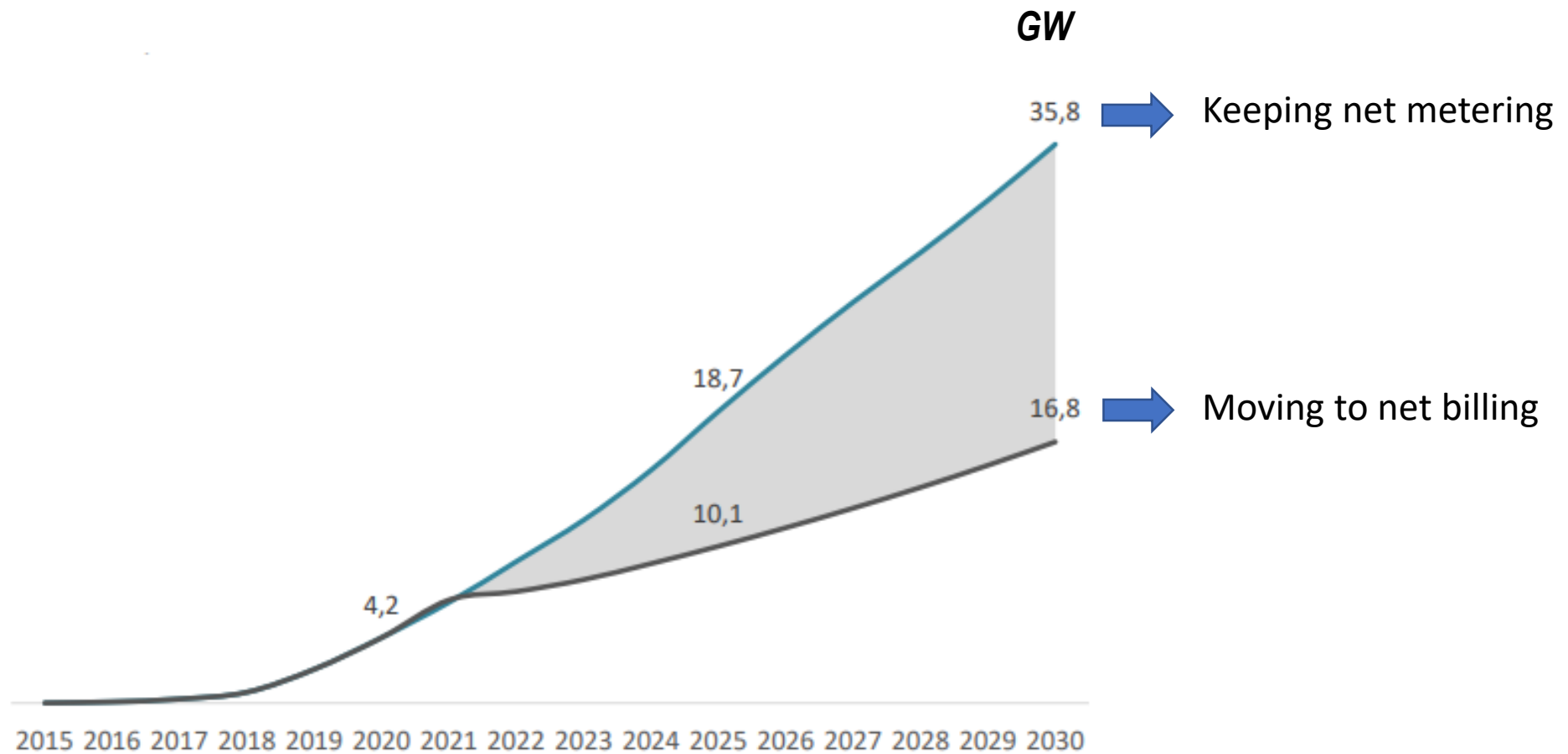
U\$ 10 billion by 2035 ← U\$ 2 billion by 2025

Addressing the problem

Proposal submitted to Public Hearing 25/2019

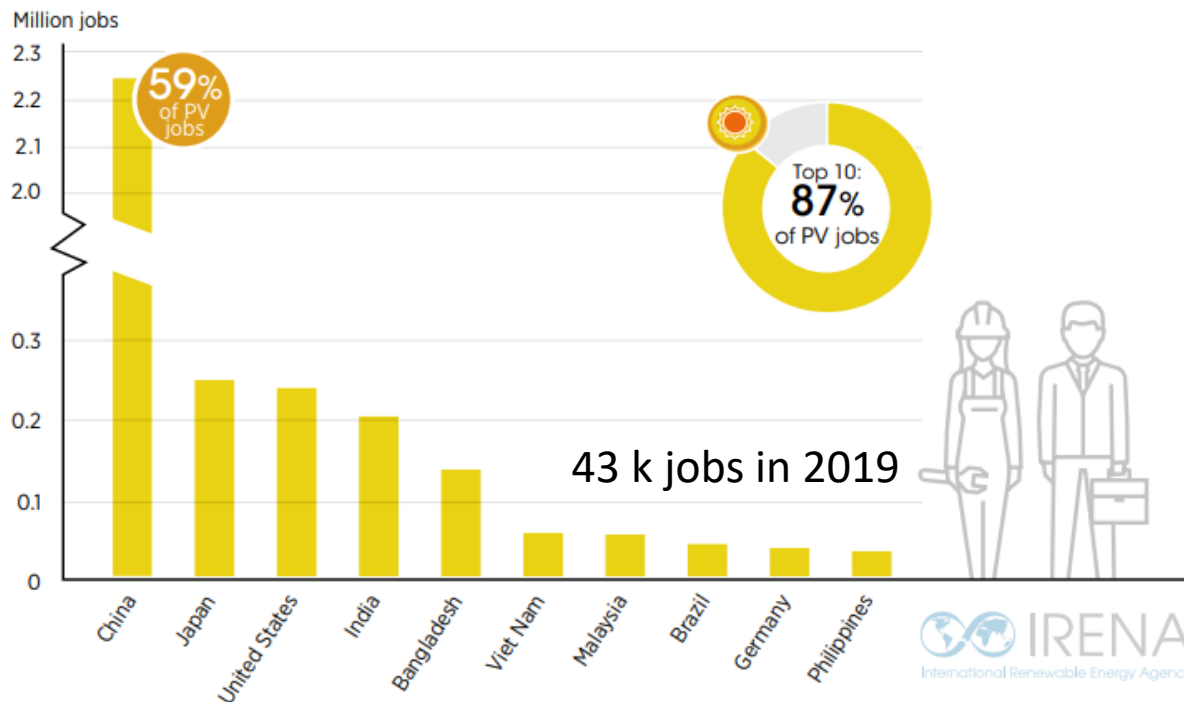


How future is going to be?



Source: PDE 2030 (EPE, 2020)

FIGURE 4: SOLAR PV EMPLOYMENT: TOP 10 COUNTRIES

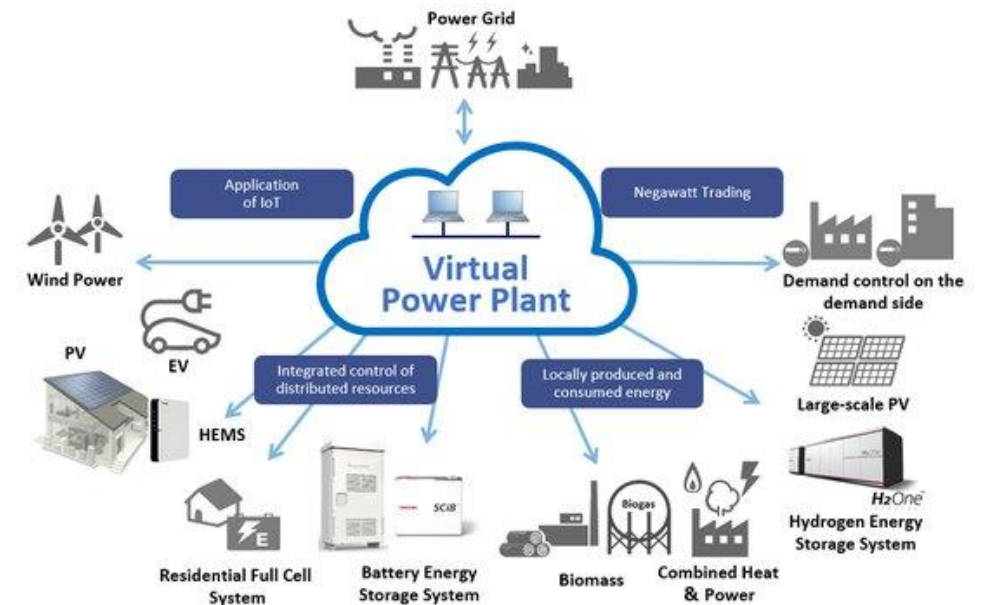
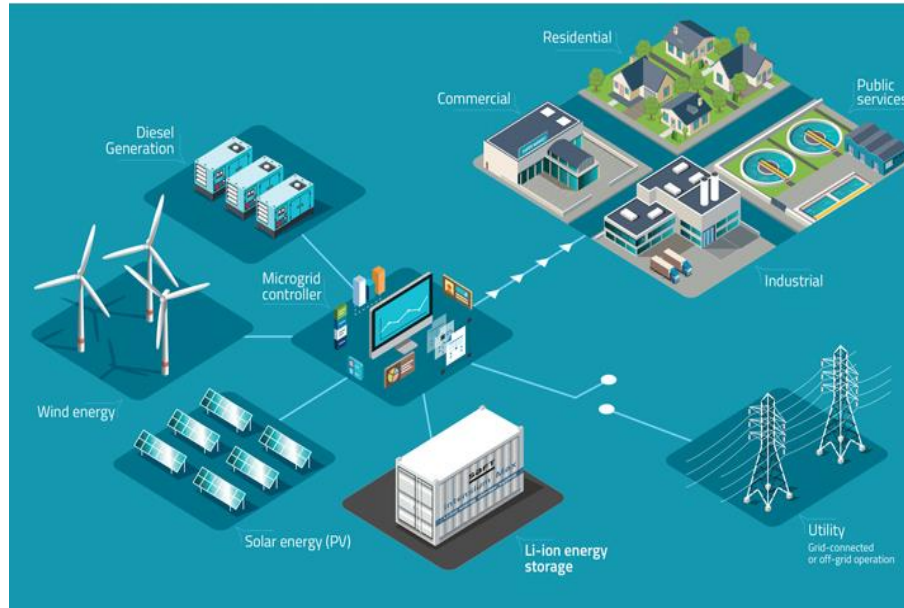
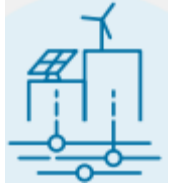


Map of Brazil showing the number of COVID-19 cases by state. The states and their respective case counts are:

State	Number of Cases
Acre	7
Amazonas	19
Amapá	4
Bahia	144
Ceará	196
Distrito Federal	11
Espírito Santo	40
Goiás	228
Maranhão	77
Mato Grosso	51
Mato Grosso do Sul	234
Minas Gerais	396
Pará	40
Paraíba	63
Paraná	13
Pernambuco	40
Piauí	196
Rio de Janeiro	879
Rio Grande do Sul	385
Rondônia	13
Roraima	4
Santa Catarina	58
São Paulo	234
Sergipe	144
Tocantins	40
Trópico	11

Source: <https://www.americadosol.org/fornecedores/>

What's coming next?



- Preparing the regulatory framework for full deployment of DER



Thank you!

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