





Energy Regulatory Commission Office of the Energy Regulatory Commission

Session I:

SAFEGUARDING ENERGY TRANSITION GOALS

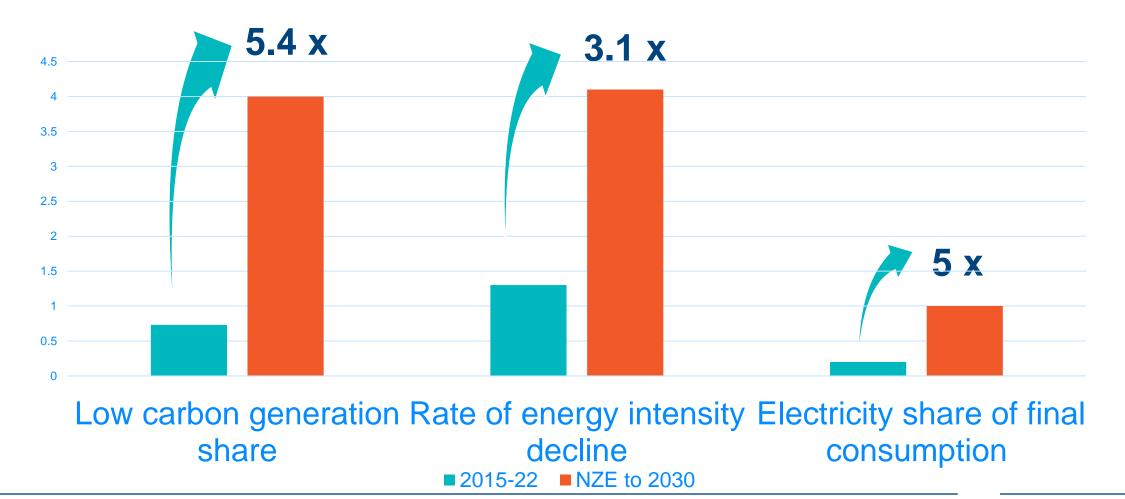
Elevating the Priority of Decarbonization in Energy Regulators Decision-making

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Regulatory Assistance project

The energy transition needs to accelerate

historical growth and IEA NZE scenario required growth to 2030 (annual average %)



Regulatory Assistance Project (RAP)®

Source: IEA and authors' calculations

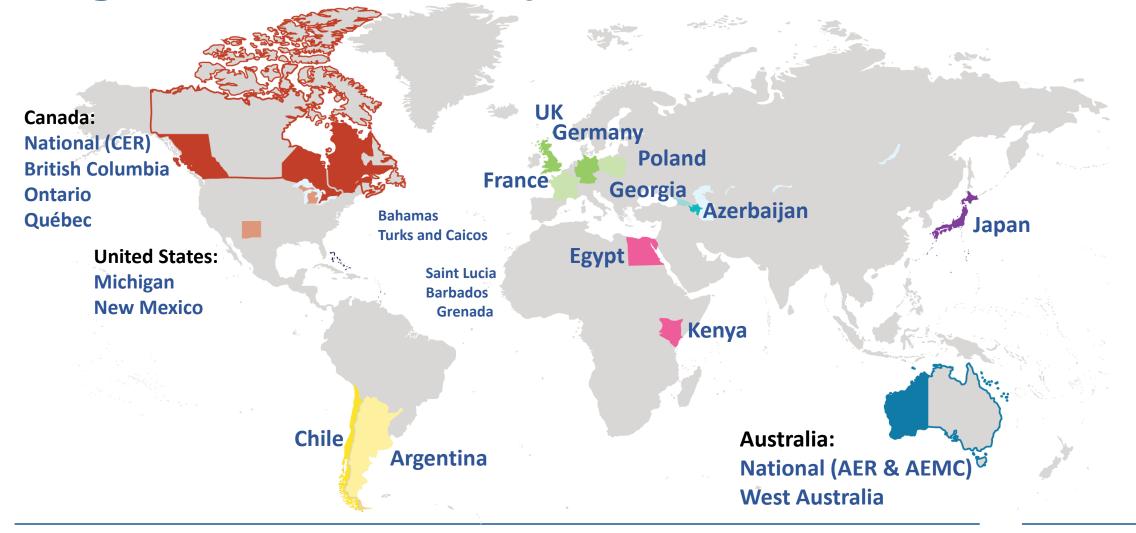
This acceleration will challenge regulators, who will be obliged to expand their role

- Overseeing much larger renewable procurements
- Approving major transmission buildout (siting/permitting as well as investment)
- Approving expansion of utility efficiency/electrification programs
- Setting rules for connecting, paying and managing more distributed PV and batteries
- Aligning regulatory incentives for electricity distributors to reflect their changing role
- Reforming electricity pricing to tap customer resources (such as demand response)
- Managing uncertain future for existing gas networks and the role of future (low carbon) gases
- Regulators are under pressure to deal with rising costs, particularly in electricity

This report aims to help regulators elevate the priority of decarbonization

- Documenting good examples of how regulators have been making decarbonization a priority – even if not explicitly an objective.
- Identifying gaps in the current regulatory framework that make it more difficult to do this.
- Identifying what governments, regulators and RETA can do to achieve the acceleration.

Regulators from 25 jurisdictions interviewed



We found many examples of how regulators have been creative

Requiring utilities to include low carbon scenarios (Michigan) Taking on expanded responsibilities (UK and Australia)

Reviewing a program

to shift gas heating

customers onto hybrid

heating (Quebec)

Expanded role in transmission approvals (Germany) Managing regulatory changes through sandbox approaches (Italy)

Factoring in embodied carbon in solar PV procurement (France) Addressing gas disconnections as a result of electrification (Australia) Working with government to reform electricity tariffs to encourage electrification (Ontario)

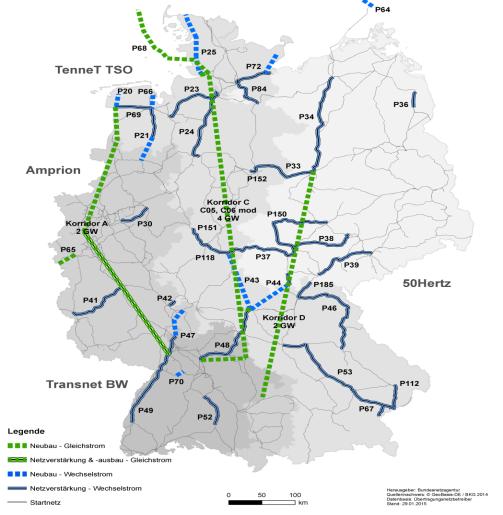
Michigan: Environmental Policy Scenario in integrated resource planning

- Michigan regulator MPSC sets our requirements for integrated resource planning
- In addition to a reference case, it also requires an Environmental Policy scenario which examines the costs and benefits of a hard cap on emissions (-30% by 2030) – which would require an earlier phaseout of coal generation facilities.
- Led to an agreement on a plan that will speed up coal plant retirements.

Germany transmission expansion

A cautionary tale?

- Authority passed to regulator in 2011 to approve 3 electric superhighways (green lines).
- Despite 6 legislative amendments, highways are still years behind schedule.



Victoria: gas disconnections

- As electrification becomes more prevalent customers will start leaving the gas system;
- Australian Energy Regulator (AER) found this had created a problem in the state of Victoria: customers avoid permanently disconnecting from the gas system to avoid high disconnection costs/fees when they close their account.
- Remaining connected while not taking gas is potentially a dangerous situation.
- AER (short-term) solution: cut the fee and collect the disconnection costs from the remaining customers.

Expanding the regulatory mandate to address decarbonization has started

- Legislation in Australia (2023) now incorporates the following objective:
 - the achievement of targets set by a participating jurisdiction— (i) for reducing Australia's greenhouse gas emissions; or (ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.
- Legislation in the UK (2023) goes even further:
 - Regulator now has a specific duty to assist achievement of net zero
 - Expansion of regulatory oversight to cover heat networks and CO2 transport and storage networks
- Internalizing carbon pricing in investment tests becomes of critical importance.

More examples at the project website:

Explore the map below, based on: **Reset Map** How regulators are Acceleration of regulatory Importance of Changes to the legal creatively addressing government-regulator processes to advance Or, explore based on: Choose a finding... Choose a recommendation... ~ or **Canada** (National) Ontario Polanc British Columbia Germany Michigan Azerbaijan Georgia The Bahamas New Mexico 2. Turks & Caicos Egypt St. Lucia Barbados Grenada Kenya Australia (National) West Australia Chile Argentina

Some top findings

- Today, most regulators lack an objective on "decarbonisation" in their mandate, hindering their efforts
- An effective government- regulator relationship is vital
- It is time to release the regulatory handbrake on power system investment

What regulators need

- A decarbonization objective in legislation
- A carbon price
- More resources
- Communication channels to provide regulatory input for policy-making

What regulators need to do

- Anticipate the low carbon future in their decisions
- Reform regulatory processes and regulations (quicker, more proactive decisions)
- Advise governments on practical and technical implications of energy transition policies

How RETA can help

- Develop an energy regulatory peer review process
- Build capacity
- Ensure regulatory representation at major international energy and climate fora





Adaptive Regulation in Energy Transition

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Thank You

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