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Empowering regulators to tackle decarbonisation

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Around the world, energy regulators play a key role in the energy sector governance that oversees billions of dollars of investments, ensuring affordability and security of supply. The development of these investments in the next years will be crucial for the success of the energy transition and for achieving our shared climate objectives.

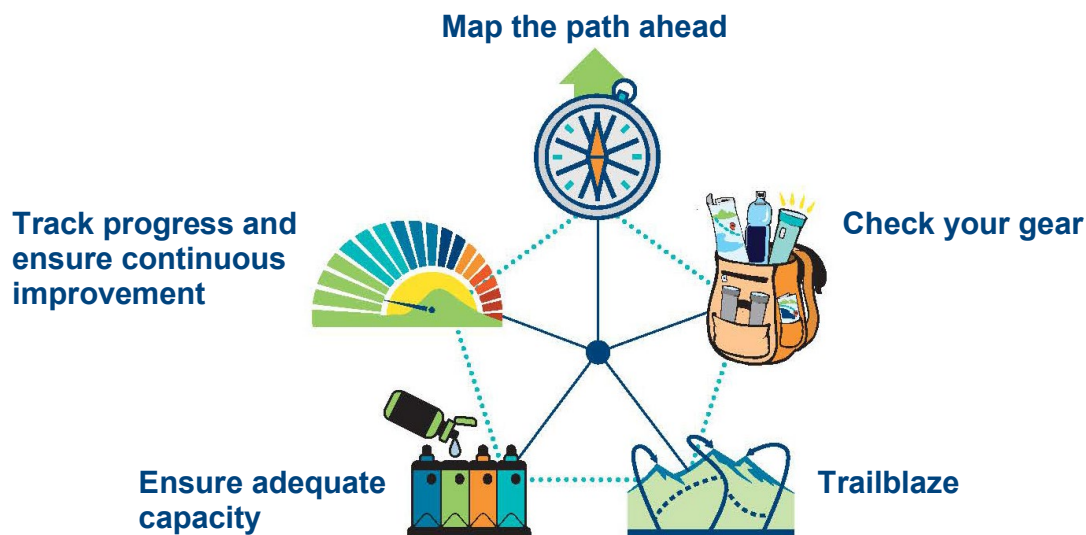
Though most countries have climate targets, very few have ensured that their regulators have the appropriate tools to align their work with decarbonisation goals. In 2023, the Regulatory Assistance Project (RAP) carried out a survey as part of the flagship project for the Regulatory Energy Transition Accelerator (RETA), a global platform bringing together more than 60 energy regulators from across the world. The survey found that of the 25 regulatory entities only two had explicit decarbonisation mandates.

This does not mean that regulators are not responding to emerging challenges. Decarbonisation goals are already moving regulators to innovate and deploy creative solutions, but the lack of tools, resources or mandates often hampers their ability to act. Responding to this finding, RETA set a priority to elevate this message to policymakers and to identify strategies to empower regulators and accelerate decarbonisation.

This policymakers' guide represents the first effort of a Clean Energy Ministerial (CEM) campaign titled "Empowering Regulators to Tackle Decarbonisation," which aims to prompt dialogues between governments and regulators across the world, working proactively towards international decarbonisation objectives. This campaign recognises that regulators must act within their ascribed mandate to maintain impartiality and independence in their decision-making processes. To kick-start the campaign, RAP proposes the following five priorities to empower regulators (Figure 1):

1. Map the path ahead: What are the challenge points?
2. Check your gear: What are the tools at hand?
3. Trailblaze: What are alternative pathways to reach the same outcome?
4. Ensure adequate capacity: Do you have enough resources for an increased set of tasks?
5. Track progress and ensure continuous improvement: Are your efforts effective for decarbonisation?

Figure 1. Proposed priorities for policymakers



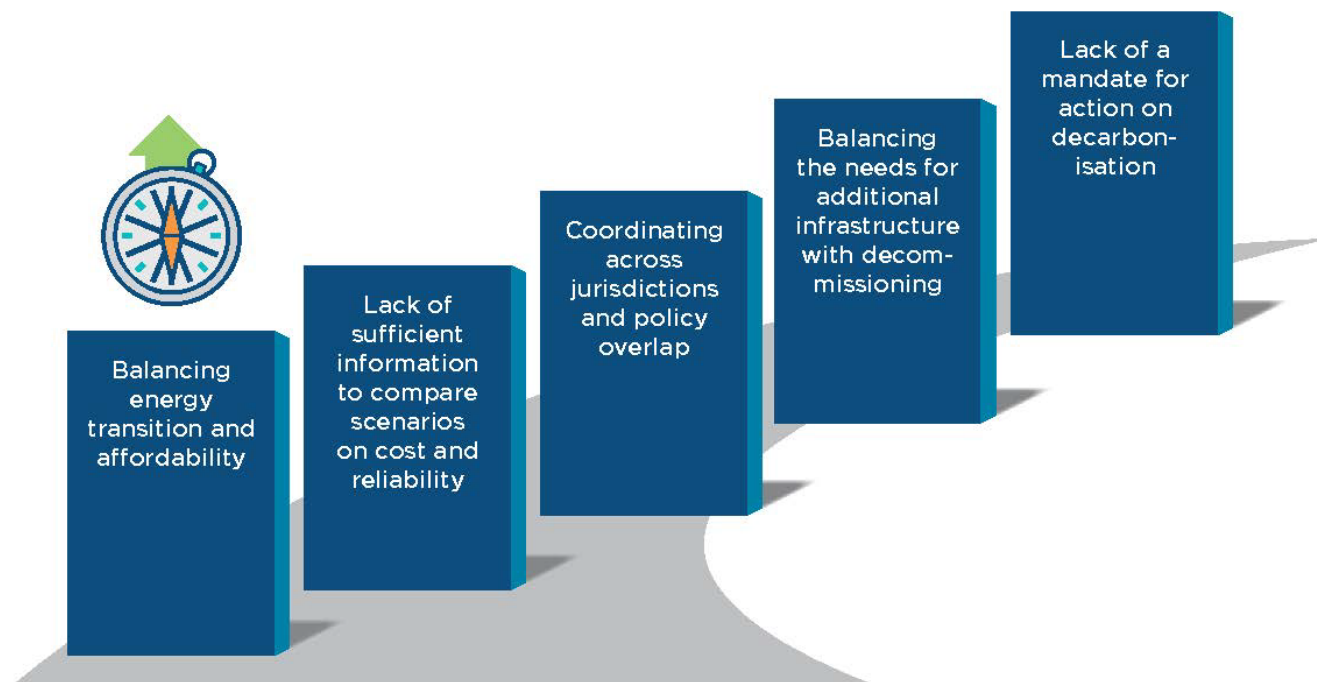
1. Map the path ahead

What are the challenge points?

Many governments have a vision of how their economies would look in the long term and the amount of emissions they would abate with respect to a baseline scenario. Most governments, however, have not analysed how their institutions must adapt to achieve that outcome.

Looking at the regulatory environment is an important part of this diagnosis. Depending on the country and its specific regulatory configuration, regulators may face different types of challenges during the decision-making process. Figure 2 on the next page shows five typical roadblocks faced by regulators on the path to decarbonisation.

Figure 2. Five typical roadblocks for regulators on the path to decarbonisation



The first step is, therefore, to enable governments and regulators to exchange openly and develop a common language with which to effectively identify the pitfalls hindering decarbonisation. Organisational or policy arrangements needed to improve decarbonisation, while maintaining and strengthening existing regulatory independence, may then be more easily diagnosed.

2. Check your gear

What are the tools at hand?

Once the gaps are identified, it is important to look at both the actions that have been taken so far and the policy changes that are acceptable within each country. Regulatory independence and legitimacy are defined by a set of policy and political decisions made by governments. Building on an open dialogue, governments and regulators can identify what are the best policy changes to enable regulators to consider decarbonisation in their decision-making (Figure 3).

This can range from changing the definition of the regulatory mandate in the power sector's underlying laws, to changing the acceptable criteria or opening the space to test regulatory innovations.

Figure 3. Toolkit for regulatory empowerment on decarbonisation



In a number of jurisdictions across the world, these tools are helping to clarify the best course of action for regulators. For example, in British Columbia, the regulator has requested government guidance on how best to balance affordability and decarbonisation in an effort to provide more stability to decisions that include decarbonisation. Another example of tools currently deployed by regulators can be seen in Michigan, where the public service commission has started requiring utilities to include low-emissions options consistent with the government's decarbonisation goals. This allows the regulator to assess both the economic and environmental benefits of actions such as early closure of coal plants. The insights derived from the required environmental and policy scenarios have been crucial in upholding early closure plans following legal challenges in court.

Going further, countries such as the United Kingdom and Australia have made use of explicit mandates enabling their regulators to consider decarbonisation in a consistent manner with national objectives. In the case of Australia, this required a modification of the country's underlying law for the whole power sector. In both cases, this explicit mandate provides a legal basis for decisions that consider environmental benefits, and in the case of Australia, the

mandate even includes a reference to carbon value to back up regulatory decisions. Different tools may be available depending on the country and require varying degrees of political momentum. Whatever the jurisdiction's choice, it is important that these tools build on systematic dialogue between governments and regulators.



3. Trailblaze

What are alternative pathways to reach the same outcome?

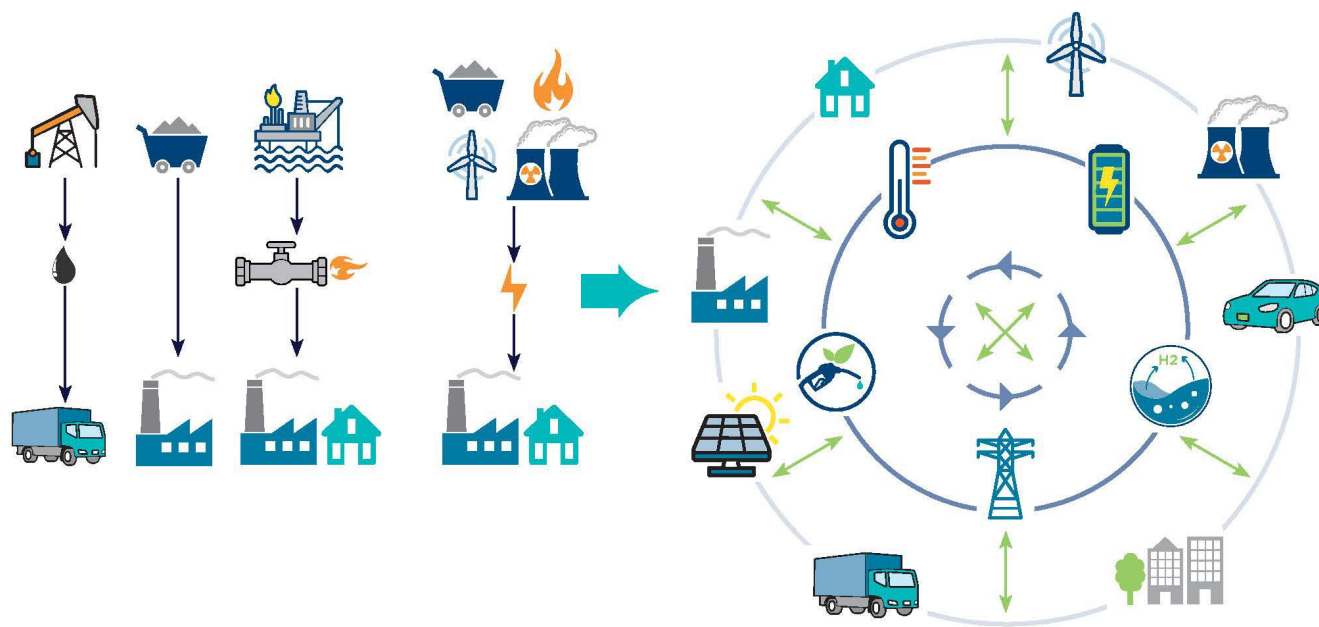
Decarbonisation of the power system and the wider energy system requires the increasing integration of various sectors such as transport, gas, heating, demand-side resources and efficiency. Decision-making in these areas has typically been siloed by topic, either in different organisations or at different government levels or even ring-fenced within various units of the same regulator.

Empowering regulators to act faster will require establishing cross-sectoral policy guidance that provides a common path on topics such as the pace of decarbonisation and the possibility of substitution among different sectors. It will also be vital to define dialogue and decision-making processes among institutions that typically do not interact with one another.

While energy system decarbonisation goes beyond the power sector, it is important to consider that, depending on the country's institutional layout, some responsibility areas will fall outside the typical scope of the energy regulator. To this end, a number of jurisdictions have enabled their regulators to consider other areas. In France, for example, the *Commission de Régulation de l'Énergie* collaborates closely with the government to develop strategies for hydrogen infrastructure regulation, ensuring that they evolve in conjunction with the government's energy policies. Other examples can be seen in Quebec, where the regulator requires utilities to consider nonenergy benefits such as environmental or social impacts when planning. Similarly, the British Columbia Utilities Commission requires gas and electric utilities to jointly plan to ensure a consistent approach to decarbonisation across fuels. Efforts exist even at the cross-

border level, such as the European Commission's recent strategy for energy system integration¹ that provides guidance on policymaking across various areas (Figure 4).²

Figure 4. The current linear energy system compared with future integrated sectors



Source: Adapted from European Commission. (n.d.). *EU strategy on energy system integration*

4. Ensure adequate capacity

Do you have enough resources for an increased set of tasks?

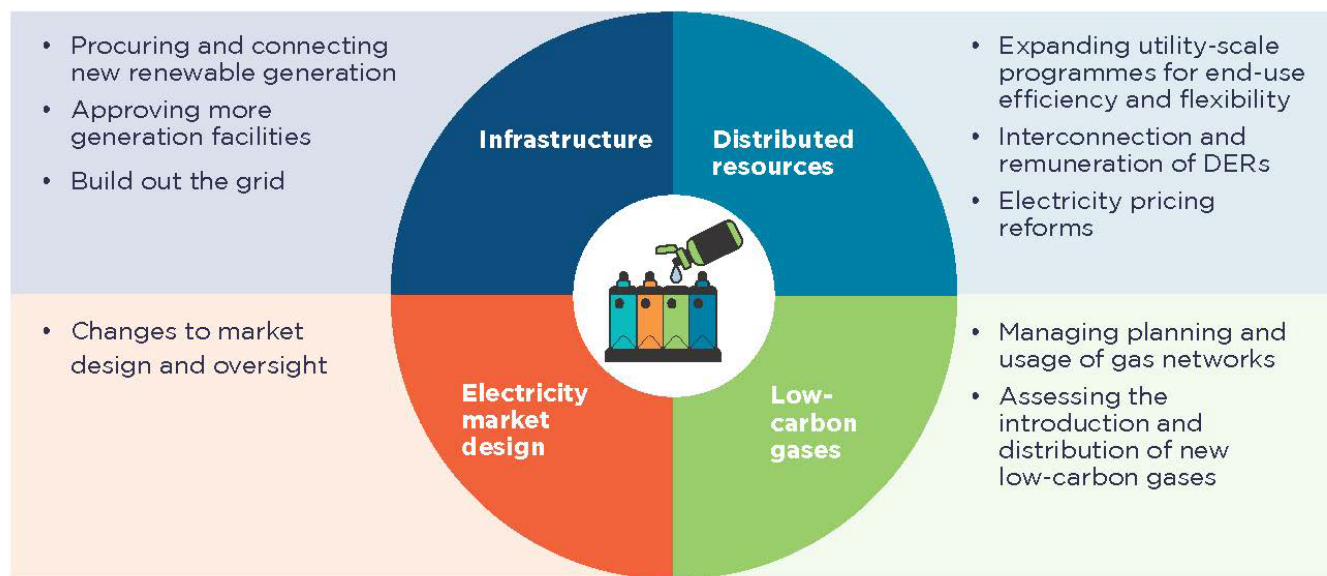
Empowering regulators to accelerate the energy transition does not only mean an expanded scope of work but also means ensuring that the right skill sets are available at the different institutions of the energy sector. Regulators in the survey conducted by RAP pointed out that

¹ European Commission. (n.d.). *EU strategy on energy system integration*. Energy. https://energy.ec.europa.eu/topics/energy-systems-integration/eu-strategy-energy-system-integration_en

² European Commission, n.d.

they are already dealing with an increasing number of questions and processes that need to be clarified to ensure the energy transition (Figure 5).

Figure 5. Energy system transformation comes with a new set of challenges beyond regulator's typical scope but that also depend on regulatory decision-making



The open dialogue recommended in section 1 also needs to address whether regulators have enough resources and have the right number of skilled people to deal with new and technically complex questions. As such, governments can consider the implications of enacting national strategies for all involved — including both the institutions implementing changes and the regulators — and allocate resources accordingly.



5. Track progress and ensure continuous improvement

Are your efforts effective for decarbonisation?

The energy transition will not be a single effort and will not look the same across every country. Systemic change and technological challenges will mean that governments, planners and

regulators will have to constantly adapt to new conditions. As such, it is important to establish monitoring mechanisms to ensure the effectiveness of regulation and progress made towards decarbonisation in various parts of the energy system. These can range from developing systems that monitor progress on decarbonisation to enabling new models for innovation in the power system.

Here too, collaboration between the government and the regulator is essential. In Mexico, for example, the government collaborated with the *Comisión Reguladora de Energía* to implement carbon-pricing mechanisms and to monitor the integration of externalities into energy planning to ensure that regulatory actions supported the government's decarbonisation goals. In Poland, monitoring of progress takes place in a different manner that also requires governmental coordination. In this case, it is through jointly implementing forward-looking investment plans and ensuring that regulatory approvals support the country's renewable energy targets.

In addition to monitoring, it is important for governments to enable innovation in the energy system. Power sector innovation can be fostered through regulatory mechanisms such as output-based remuneration schemes to encourage the deployment and integration of renewable energy, which has been done in Italy and India. For newer technologies or business models, however, so-called regulatory sandboxes can be deployed to test specific applications, as has been the case in the United Kingdom, Canada and elsewhere. Government coordination may be necessary to assess whether regulatory sandboxes are even allowed within the regulator's existing toolkit and to consider graduation mechanisms to ensure the sustainable deployment of such approaches within the main business model of regulated utilities, if their usefulness is proven within these pilots or sandboxes.





How to engage

The present priorities guide prepared specially for CEM15 builds on the insights from RAP's report [*Elevating the Priority of Decarbonization in Energy Regulators' Decision Making*](#), available online along with an [interactive database of more than 28 examples from across the world](#). In the coming months, RAP and RETA will collaborate with the 21st Century Power Partnership (21CPP) to define the work plan, along with co-leading CEM member countries. In the coming months, RAP, RETA, 21CPP and co-lead countries will work on defining the workplan for the campaign. The priorities outlined here will be used as the basis for dedicated regional workshops, high-level panel discussions and regular consultations with participating CEM and RETA countries.

If you wish to find out more about our planned activities or would like your country to engage in bilateral consultations, please feel free to contact RAP and the RETA secretariat for more information.

At the end of the year, RAP and RETA expect to produce a blueprint for empowering regulators across many countries at various stages of decarbonisation, which will be launched at CEM16.



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