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Independent expert advisory bodies facilitate ambitious climate policy responses

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Approach. This ScienceBrief Review examines emerging evidence of the impact that independent expert advisory bodies have had on the design and delivery of ambitious climate policy responses. It synthesises findings from more than 20 peer-reviewed scientific articles gathered using ScienceBrief. The evidence and can be sciencebrief.org/topics/climate-changescience/independent-advisory-bodies.

Summary. Many countries have established independent expert advisory bodies as part of their national policy strategies to tackle climate change. Such bodies provide evidence to inform government policy in pursuit of long-term climate objectives. They monitor progress and help focus climate change debates on key issues. These bodies are emerging as strong assets that can help governments raise ambition and deliver climate objectives in practice. They can increase public support for climate action and, by enabling longstrategic vision, encourage investments. More evidence is needed to assess the extent to which they are effective in supporting the delivery of climate objectives.

Key points.

- More than 40 countries have established climate advisory bodies to assist in the delivery of climate objectives, varying in expertise and independence.
- Emerging studies suggest such bodies are most impactful when they are independent from government, composed of members appointed for their expertise, small, and well-resourced.
- Recent studies find that these bodies can enhance climate responses by lending credibility to climate policies, strengthening public trust, and advising on feasible and ambitious policy action.
- Limited evidence exists to assess the true effectiveness of advisory bodies in terms of the uptake of their advice by governments and their support of the design and delivery of ambitious climate targets.

Background. Over 100 countries have stated their intention to implement net-zero greenhouse gas emissions commitments to tackle climate change; the big question is how they will achieve them .



Snap shot of the Brief at the time of publication. More evidence is required on this topic. Click here to visit the Brief.

Governments are reliant on expert advice to inform existing and new climate policies (Christensen and Velarde, 2019). Over the last decade climate change advisory bodies have proliferated. They are now in place in more than 40 countries, varying in expertise and independence (Averchenkova et al., 2021), and are a central feature of national climate responses (Abraham-Dukuma et al., 2020). The first independent expert climate advisory body was the UK Climate Change Committee (CCC), established under the 2008 UK Climate Change Act, with similar bodies now in place in at least Austria (2011), Iceland (2012), Denmark (2014), Finland (2015), Ireland (2015), Norway (2017), Sweden (2017), France (2018) and New Zealand (2019).

The composition and remit of advisory bodies varies by country. For example, bodies in Austria, Denmark and Finland are only tasked with providing advice rather than reviewing government progress (Nash and Steurer, 2019). Similar to the UK, the Irish Climate Change Advisory Council undertakes annual and periodic reviews of government progress, whilst the Swedish Climate Policy Council submits an annual progress report, and interim reports, on mitigation planning to the government. Climate governance differs in Denmark, which pursues credible commitment through political party agreements and not the 'legislate and delegate' approach of the UK, and therefore the Danish Climate Advisory Council was thought to have had little influence on policy (Lockwood, 2021). The majority of advisory bodies created by national climate legislation focus primarily on mitigation (Muinzer, 2019); the UK CCC is notable in that it also has adaptation as a central focus.

Advisory bodies that are independent from short term electoral politics are more likely to be effective and influence policy (Averchenkova 2020a; Averchenkova et al., 2021). For example, there were concerns about national advisory bodies in Japan because they were close to government and lobbyists and lacked policy analysis expertise, hence they were not independent and failed to gain the public's trust (Crowley and Head, 2017). By contrast the UK CCC is widely considered to be "a good institutional model for independent climate advisory bodies" (Nash and Steurer, 2019). Because of its independent analysis and scrutiny the UK CCC is widely trusted by policymakers of all parties (Averchenkova et al., 2018). One study suggests that for climate change governance to be effective an independent and multidisciplinary expert advisory body "will play a key role" (Abraham-Dukuma et al., 2020).

Advisory bodies need to be small enough to operate effectively (Göpfert et al., 2019). For example Averchenkova (2020a) recommends that an EU climate advisory body should have five to 15 members as this aligns with the size of climate advisory bodies in Member States.

Independent expert advisory bodies have impacted climate policies in different ways:

They support a long-term perspective in climate policies. Advisory bodies can help to achieve policy durability (Jordan and Moore, 2020) which provides regulatory certainty for investments and increases the credibility of government action (Averchenkova, 2020a). For example the creation of the UK CCC signals the UK Government's credible commitment to a low-carbon transition; this creates a stable, predictable policy environment that can encourage investment (Lockwood 2013, 2021). The UK CCC advises the government on the level that it should set its carbon budgets 12 years in advance. This helps avoid short-term political cycles driving decision-making. Establishing an expert climate change advisory body won't instantly improve a country's performance but it can improve mitigation and adaptation progress in the longerterm (Abraham-Dukuma et al., 2020). One study suggests that countries with climate legislation and expert institutions, such as advisory bodies, might be more able to effectively deliver climate adaptation actions than countries without them (Massey and Huitema, 2013).

They provide regular, mostly annual, assessments of progress with a duty to respond from governments, which maintains momentum in climate action (Nash and Steurer, 2019). For example, the UK CCC is mandated to annually review the UK's performance against its long-term climate targets which makes it difficult for the government to backslide and creates greater policy ambition (Farmer et al., 2019).

They can engage the public and strengthen public trust. Stakeholder engagement and facilitation of public debate is a formal part of the

remit of independent advisory bodies in some countries. For example, the Danish Council on Climate Change is mandated to create a Climate Dialogue forum (Weaver et al., 2019). Interviewed climate change policy experts agreed that climate change advisory bodies are "essential" for strengthening public trust, fostering political support for climate action and increasing the legitimacy and accountability of policymaking (Averchenkova 2020a: 1); these factors are all considered "necessary" for a successful net-zero transition in Europe (ibid). During early stages of the policymaking process advisory bodies can define the policy problem through public engagement and debate (Hoppe et al., 2013), for example expert advisory commissions in Norway play a vital role in policy formulation (Christensen and Holst, 2017).

They can provide actionable recommendations.

To have impact, climate advisory bodies must present findings and reports that can translate into actionable policies (Abraham-Dukuma et al., 2020). This is achieved by providing clear, objective, independent advice that has been assessed for its political feasibility and meets the government's needs (Salacuse, 2018; Sager et al., 2020). The success of advisory bodies depends on whether their recommendations align with the needs of policymakers at the time (Salacuse, 2018). For expert advice to influence environmental policymaking it can utilize 'windows of opportunity' such as increased public support for government action (Rose et al., 2020). For example, an empirical of analysis the Commission Royal Environmental Pollution found its advice was more likely to be implemented by the UK government if it was provided during a peak of public support for government action (Owens, 2015).

Advice that has been produced in consultation with policymakers ensures its relevance to the policymaking process (Crowley and Head, 2017; Jones et al., 2016; Groux et al., 2018). For example, in New Zealand the co-production of advice by an advisory body, scientists, policy planners and the community enabled collective decision-making and ensured that the advice provided to policymakers was policy-usable and legitimate within the current political context (Duncan et al., 2020). However, a challenge to be navigated is that the ability and willingness of political actors to support climate policy monitoring activities can be limited, for example in the EU (Schoenefeld et al., 2018).

Reinecke et al., (2013) found that climate advisory bodies in Germany, the UK, the Netherlands and Denmark enhance the saliency, credibility and legitimacy of their advice by:

- being comprised of expert members;
- consulting non-scientific actors in their deliberations;
- adhering to scientific standards of analysis; and,
- disclosing uncertainties.

Rather than through formal powers, the UK CCC's influence is based on reputation and authority (Lockwood, 2013). It has had several concrete impacts on national climate policy (see Box 1).

Box 1: Four examples of the UK CCC's impact on national climate policy

First, the CCC was "deliberately designed to allow Parliament to hold future Governments accountable for the effectiveness of their climate programs" (Carter, 2014). It does this by providing an annual decarbonisation progress report to UK Parliament and devolved administrations. These reports publicly expose shortfalls in Government policies (Farmer et al., 2019). These reports also contain the CCC's statutory recommendations on actions needed to meet targets.

Second, Government is mandated to take into account the CCC's advice when setting carbon budgets (Scotford and Minas, 2018). The 2008 Climate Change Act's (CCA) long-term goals, its creation of the CCC and its reporting procedures make it challenging for Government to backslide and creates inherent pressure for greater, increased ambition (Farmer et al., 2019). For example, the CCC's recommended 6th Carbon Budget, under consideration by the government, would bring forward the UK's previous 80% emissions reduction target to 78% by 15 years from 2050 to 2035 (CCC, 2020).

Third, the CCC has made the UK climate debate more evidence-based because its mandated monitoring, reporting and advising procedures are transparent (Averchenkova et al., 2020b). As such, information from the CCC is more trusted and respected than from government or NGOs (ibid). The CCC's evidence has been used by all sides of the debate in Parliament, particularly by Opposition to argue for greater climate policy ambition (Averchenkova et al., 2018).

Finally, the CCC has played a "crucial role" (Averchenkova et al., 2020b) in defining the UK's climate ambition. It has made a "material difference" to UK climate policy by impacting parliamentary debate and influencing new laws on energy, infrastructure and housing (Averchenkova et al. 2018). For example, the CCC was instrumental in the legislation of the 2013 Electricity Market Reform (ibid). Moreover, all five of the statutory carbon budgets advised by the CCC have been legislated by government (Lorenzoni and Benson, 2014; Nash and Steurer, 2019). Lockwood (2013) argues that without the influence of the CCC the UK's fourth carbon budget would never have been agreed by the Government. Between the CCA's creation in 2008 and 2019 the UK's emissions decreased by 30% (CCC, 2020).

Conclusion

An emerging literature is beginning to evidence the influence that advisory bodies can have on national climate policy. This influence is achieved through transparent mandated reporting procedures, contributions to evidence-based policymaking, publicly reporting shortfalls in government progress, and advising on feasible climate action. Climate Change Acts that establish dedicated institutions, such as expert advisory bodies, serve to institutionalise climate change into policymaking; this makes it difficult to take climate change off the political agenda (Nash and Steurer, 2020). The composition and remit of climate

advisory bodies is important, with the most impactful bodies so far being independent, expert, small and well-resourced. Apart from the case studies mentioned there is little evidence yet of the depth of impact that advisory bodies can have on enhancing climate actions; time, further analysis and more research are needed.

The full Brief and peer reviewed references can be explored at sciencebrief.org/topics/climate-change-science/independent-advisory-bodies

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