
Sourcing of science advice

Response from the American Chamber of Commerce Ireland (AmCham) to the Department of Further & Higher Education, Research, Innovation and Science's public consultation.

September 2022

The American Chamber of Commerce Ireland

The Voice of US-Ireland Business

The American Chamber of Commerce Ireland (AmCham) is the collective voice of US companies in Ireland and the leading international business organisation supporting the Transatlantic business relationship. Our members are the Irish operations of all the major US companies in every sector present here, Irish companies with operations in the United States and organisations with close linkages to US-Ireland trade and Investment.

AmCham welcomes the opportunity to participate in the Department of Further and Higher Education, Research, Innovation and Science's public consultation on the sourcing of science advice.

The COVID-19 pandemic renewed public awareness of the important role Research, Development and Innovation (RDI) plays in solving significant, unprecedented challenges. It was a visible display of the importance of science advice in the formulation of public policy and highlighted the value and efficiency of public-private sector collaborations. These collaborations are crucial to tackling environmental, social, and economic challenges going forward.

The impact of the work undertaken during the pandemic is highlighted by the fact that Ireland was the fifth biggest responder to the demand for key products related to COVID, even though Ireland only has 0.06% of the world's population.

Question 1: How should science advice fit into the overall policy process, including the broad reform agenda (such as the generation of evidence for policy, and strengthening policy development and foresight in the public service)?

Ireland's RDI ecosystem should be treated as a place for discovering new solutions to public policy challenges. In this respect, Ireland's RDI ecosystem requires the sustained commitment of many Government departments, agencies, and stakeholders. Collaboration with and between Governmental agencies, alongside industry, is essential to finding solutions to today's systemic and complex challenges.

Public administration could build platforms that can be used to share research and increase collaboration across Governmental departments. For example, Governmental departments should use innovative and collaborative approaches, such as co-creations, as a mechanism for addressing public policy problems. Co-creations bring together multiple stakeholders – MNCs, SMEs, HEI, NGOs, community advocates and more – to develop innovative solutions to complex challenges. The research and experience of public policy experts should inform the selection of the challenges addressed by such mechanisms.

In order to best enable cross sectoral communication, the establishment of a National RDI Advisory Council to supply evidence-based advice for challenges and policy decisions would be beneficial. Such a body should include representatives from the business, HEIs, and Government departments. Ensuring regional, sectoral and gender balance on such a body would best place it to identify and address all relevant issues.

One scheme in which collaboration is championed is the Disruption Technologies Innovation Fund (DTIF) which aims to 'foster deeper and wider RD&I collaborations between the public and private sectors in key technology areas and, in particular, to

support collaborations between large firms and SMEs in Ireland.’¹ AmCham supports DTIF’s mission to address national policy challenges and its “Challenge-centric” method for aligning innovation investment with public priorities.

AmCham further welcomed the announcement of a €71.6 million investment in a research and innovation National Grand Challenges Programme which will focus on the need for a transition to a climate neutral and clean economy as well as the challenges of digital transition. The RDI resulting from the National Grand Challenges Programme should help inform future policy creation, and Government should encourage public policy experts to participate in the RDI ecosystem that results from the Programme.

Question 2: What examples and experience do you have where advice has been effectively sourced and applied?

The most publicly showcased example of science advice being effectively sourced and applied is the Government’s response to the COVID-19 pandemic. The COVID-19 pandemic saw policymakers working alongside, and depending on, scientists and researchers to a heightened degree, whilst under intense public scrutiny.

The pandemic highlighted how science interacts with policy-making and with society, demonstrating that science does not operate in a social or political vacuum. Ireland’s response to the crisis was thorough and timely. Alongside this, a comprehensive communications strategy, including the use of traditional and social media, and the frequency of updates led to a high level of public adherence to public health advice. This approach showcased the importance of collaboration, and clear communication, in relation to the formulation of policy alongside science advice.

Furthermore, as previously mentioned, the work undertaken by scientists, experts and industry supported Ireland in coming the world’s fifth biggest responder to the demand for key COVID related products despite only having 0.06% of the world’s population.

As referenced in the consultation paper, the Environment and Climate Research and Advisory Unit plays a crucial role in aiding policy makers in the Department of Environment, Climate and Communications. If Ireland is to achieve the legally mandated targets for 2030 and beyond, successful collaboration with experts in the field is key. The EU’s target of 55% emission reductions by 2030, and the Government’s commitment to transition to a carbon neutral economy by 2050 have the full support of AmCham and its members. AmCham members are leading the adoption of

¹ Department of Enterprise Trade and Employment: <https://enterprise.gov.ie/en/what-we-do/innovation-research-development/disruptive-technologies-innovation-fund/>.

sustainability and net-zero measures, and many are pursuing even more ambitious targets. The transition to a carbon neutral economy will affect how we live and work and will require an all-of-society approach.

The Climate Action Plan 2023, due later this year, should set out the precise actions and steps that need to be followed in order to align with the ambition of the carbon budgets which were adopted by the Oireachtas in April. AmCham advocates for the provision of a comprehensive and inclusive roadmap which outlines how all economic sectors will adapt to sustainability measures which contribute to lowering Ireland's emissions and meeting the ambitious targets set by Government, while also outlining how future economic growth will be achieved.

Question 5: What kind of individual skills and competencies do science advisors, scientists, and government officials need to develop to effectively populate or engage with science advisory structures?

An effective science advisor needs not only an expertise in their subject area, but also an acute understanding of how policymaking works. Further, scientists must play the “honest broker” who is able to help decision makers to choose between several options on a given topic.² There is a need for a concerted effort on both sides to connect with scholarship on the advisory processes and practices, and further a need for continuous evaluation of how successfully the structures interact work and compare to international models.

Question 6: How can we make sure that citizen involvement, public trust and experience-based knowledge is included in any science advisory structure?

A 2019 report by the Science Advice for Policy by European Academies (SAPEA) details a number of key recommendations in relation to best practice when it comes to science advice and policy. It notes the most highly recommended science advice process ‘*combines analytic rigour with deliberative argumentation. Analysis refers to the inclusion of systematic and peer-reviewed knowledge. Deliberation refers to the mutual exchange of arguments and reflections, to arrive at evidence-informed and value balanced conclusions in a discussion.*’³ Here the importance of thorough

² Pielke, R. Jr. (2007) *The Honest Broker: Making Sense of Science in Policy & Politics*, Cambridge University Press.

³ SAPEA, ‘Making sense of science for policy under conditions of complexity and uncertainty’, <https://www.sapea.info/wp-content/uploads/masos-executive-summary-screen-version.pdf>

deliberation and science-based conclusions indicates the level of authority that can be instilled via watertight research, and importantly peer-review.

In the science advice process, citizen engagement is important. Transparency and communication are vital in building public support. A communications strategy is key here: effective science communication includes clarity about the quality of evidence, the treatment of uncertainties and ambiguities, the possible courses of action and information about the background of the science advisors.

Question 7: How can the Irish system be better-connected to EU and EU-27 science advice processes?

The European model provides a useful example of how science advice can be successfully implemented into the policy making process. For example, the Scientific Advice Mechanism (SAM) provides independent, high quality scientific advice directly to European Commissioners to inform their decision-making on policy issues. The SAM is composed of a secretariat in the Commission's research and innovation department, the Group of Chief Scientific Advisors (GCSA) to the European Commission, and the Science Advice for Policy by European Academies (SAPEA) project. Members of the European Commission initiate the evidence review process through a request to the Commissioner. After a research question has been formulated and a scoping paper agreed between the Commission and the GCSA, the SAPEA is typically given responsibility for the evidence review (the collection and review of evidence) report; these reports may, in addition to reviewing the evidence, identify policy options.

Ireland could look to examples of best practice, such as the processes in place at EU level, to inform a model at national level, allowing for the development of the necessary structures to best support the science advice process.