

The background of the cover is a composite image of Earth from space. The left side shows a bright, curved horizon of the planet, with swirling white and grey cloud patterns over dark oceanic areas. The right side of the image transitions into a dark, starry space, where the Earth's surface is covered in a dense, glowing network of golden-yellow lights, representing city lights at night. The overall effect is a dramatic and somewhat ominous view of our planet from the cosmos.

# AN ANTHOLOGY OF GLOBAL RISK

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# 18. Pathways to Linking Science and Policy in Global Risk

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## Highlights:

- Existential Risk Studies is an action-oriented discipline that must embed policy impact to reduce global risk as an essential part of our work.
- Impact comes in many forms, and it is good to plan for impact and engage with relevant stakeholders from the earliest stages of the research process.
- CSER has engaged in a variety of impact-focused activities and has found our broad network, high-quality research, and willingness to shape our work to fit the needs of policy-makers essential to our success.
- It is important to set clear goals for impact and continuously monitor the policy landscape and how it is changing.

This chapter is based on a CSER report published in July 2021, which is a practical how-to guide to engaging with stakeholders and policy-makers. It involved one-to-one interviews and a workshop designed to elicit advice and experience from CSER researchers. After presenting a general overview of CSER's approach to impact, the chapter outlines six policy case studies to develop advice for others seeking to influence policy. The "how to" character of this chapter is usefully complemented by the macro-analyses of policy-shaping contained in Chapter 19, and is



further supplemented by the reflective account of seeking to influence nuclear disarmament diplomacy in Chapter 20.

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When studying existential and Global Catastrophic Risk, we also look for how to manage and reduce it. This goes beyond more traditional academic outputs and leads to possible engagement with policy-makers and other stakeholders that influence the systems that generate or mitigate risk. The Centre for the Study of Existential Risk (CSER) looks to strengthen the impact of our research on practical policy and has developed and improved our methods in doing so. In this chapter, we look at effective approaches and relevant skills to promote impact (such as project management, communication, networking, expertise and familiarity with the policy landscape), and suggest step-by-step guidance to assist in planning interventions.

## 1. Policy Impact

Academic impact refers to influence within the academic community. This can be demonstrated, for example, by shifting old dogmas or by contributing to new theories across and within disciplines. Policy impact, by contrast, refers to contributions with social, economic and political dimensions. This includes diverse reference groups and transitions, such as technological progress, government regulation, or corporate management.<sup>1</sup>

Working to achieve policy impact is a pathway to applying scientific evidence to achieve a better world. Doing so can expand your published materials by turning the experience into academic papers or your work features in official documents. It can improve your network amongst academics and others looking for impact, triggering a virtuous circle of new contacts, research, collaborations, and ideas for further impact. It allows academics to transition from abstract to applied practical work. It can also bring in extra funding — as funders and research councils are increasingly impact-focused — as well as opening opportunities for consultancy or follow-on careers, and increasing your institution's reputation.

Policy engagement is often time-consuming and may distract from other priorities (such as scientific publications), which may have a



clearer linkage with academic career progression. It also involves a significant risk of uncertain or minimal success that is difficult to track or credit.

Researchers interested in increasing their policy impact can work with stakeholders in three sectors: civil society,<sup>2</sup> government<sup>3</sup> and business.<sup>4</sup> The Cambridge Public Policy report “How to Evidence and Record Policy Impact”<sup>5</sup> explores impacts on UK public policy and provides indicators that researchers and institutions can use to evaluate the influence of their research in this sphere. These include, amongst others: citations in government reports or international bodies; changing public understanding of a policy issue or challenge; engagement with campaign and pressure groups, and other civil society organisations; and improving public services. These indicators are based on the Research Excellence Framework (REF) process, which is used to assess research performance at academic institutions in the UK. CSER provided an impact case study for REF2021, which starts by observing that:

CSER is dedicated to the study and mitigation of risks that could lead to human extinction or civilisational collapse. Thanks to the Centre’s research and lobbying activity, governments, policymakers, and AI businesses around the world have increased their attention to, and introduced measures to reduce, existential risk. CSER researchers have helped to grow and shape the field by advising a range of new non-academic research centres and philanthropic funders on these emerging areas of risk research. The team has had a significant effect on UK and international policy by creating a new All-Party Parliamentary Group on Future Generations; by inspiring a campaign for a new UK Future Generations Bill; and by changing international norms regarding the publication of AI-technology research and development and the conduct of risk-assessments.

## 2. Approaches to Policy Engagement

Academics and think tanks often make the mistake of seeing policy engagement as an afterthought once the research product (report or article) has been published. It is better to incorporate impact considerations right at the start when considering purpose and study design, which also creates opportunities for policy co-creation. Including



stakeholders in expert solicitation processes and other participatory research methods can also be effective. It is perfectly consistent with integrity to be asking what the priorities of target policy “customers” might be and how to develop the research questions that shape your research, even if that might be to challenge established practices head-on.

A CSER policy engagement might start by contacting science-policy brokers, such as the United Nation’s various offices (WHO, UNDRR, UNODA, etc), the International Science Council, the Centre for Science and Policy (CSAP) at the University of Cambridge, the Royal Society, the Simon Institute for Longterm Governance, or the Centre for Long Term Resilience (CLTR), among others. We also monitor official and parliamentary websites for relevant opportunities to contribute to policy enquiries and consultations. These could include calls for papers or open consultations from the UN-affiliated bodies or the European Commission. It can also be effective to join relevant expert advisory groups within governments, inter-governmental and non-governmental organisations. It may be possible to join scientific networks — such as the Global Young Academy or the International Network for Science Government Advice — national-level science academies, or engage with social movements.

A common approach would be to write a policy paper. This can be self-published or placed in a relevant journal, such as the Cambridge Journal of Science and Policy, or on industry or think-tank websites, newsletters, or blogs. There may be opportunities to work more directly with official organs. For example, the UK’s Parliamentary Office on Science and Technology publishes “notes”, four-page briefings that review emerging research areas.



### 3. Six CSER Pathways

We used six study cases of CSER's policy impact to develop advice for others seeking to influence policy:

#### 3.1 Creating an All Party Parliamentary Group (APPG) on future generations

This began as a student initiative with CSER advising research students at the University of Cambridge, who were looking at different ways in which future generations were represented in politics around the world. This led to a paper published in the journal *Futures* and recommended establishing a group to represent future generations in the UK parliament.<sup>6</sup> CSER further collaborated with students to identify and engage with key people, including parliamentarians and people with experience in setting up such groups, to understand how such a group could be established. Engaging a broad range of key people to widen political buy-in was key. Once enough support was obtained, it was possible to complete the UK Parliament's standard template to form APPGs and approve it with a sufficiently large and broad group of parliamentarians.

#### 3.2 AI white paper for House of Lords

This opportunity emerged following an open call for evidence published online by the UK House of Lords. CSER researchers facilitated collaboration and distribution of work in paper drafting using a live Google doc, and collated established and novel evidence, using diagrams to show interrelations among topics. A final White Paper was produced that was concisely presented and delivered intuitively for policy-makers.<sup>7</sup> When responding to follow-up queries, we assigned team members based on expertise and obtained co-authors' agreement before sending the final answers, as well as pursuing follow-up workshops with other institutions and co-creating media articles based on this work.



### 3.3 Drafting a parliamentary Welfare of Future Generations Bill

The All Party Parliamentary Group for Future Generations created a briefing paper as a basis for generating buy-in through tailored engagements and maintained a database of key people to be contacted (e.g. parliamentarians), including their interests/history. CSER was also able to leverage our own networks, roundtables, and events to gain key people as allies and keep in regular contact. We also worked with the campaigning and fundraising organisation Today for Tomorrow, part of The Big Issue, to support strategy for pushing the bill. Bill templates and drafting support were offered by the Parliamentarians Bill Office, and CSER researchers joined others in open drafting sessions to develop different aspects of the bill. The bill was introduced to Parliament by Lord Bird and passed through the House of Lords. However, there was not enough parliamentary time for it to pass the House of Commons as well. Nevertheless, the bill stimulated parliamentary discussions and raised the issue of the long term in UK politics.

### 3.4 Advising an intergovernmental organisation on foresight systems

CSER has sought out opportunities through our networks and researching the needs of organisations. We created an initial proposal by conducting a literature review on best foresight methods relevant to organisations' needs, and identified and researched relevant components of the organisation, along with the key people for conducting an expert elicitation. We also co-designed a tailored system for the World Health Organization through iterative workshops and interviews and coached the organisation through the first implementation, sharing co-authorship of two publications to get buy-in.<sup>8</sup>



### 3.5 Providing expert advice to the Cabinet Office

CSER was invited to submit proposals by leveraging our networks. We partnered with policy-bridging organisations, such as CLTR, to make connections and train us on the process, and developed recommendations backed up with substantial scientific evidence, while maintaining a database over time. We clearly defined the expectations and agenda, and established a strategy to present recommendations, even following scripts when offering recommendations to ensure that key points and messages were covered. We also paid close attention to the ensuing discussion and provided substantiated responses to follow-up questions.

### 3.6 Academics at the UN Biological Weapons Convention (BWC)

CSER identified shortfalls in global governance, in this case at the BWC negotiations, and defined relevant topics. We collaborated with a BWC expert on the specific process to understand what could realistically be achieved, and built trust with stakeholders through conversations to understand their expectations and perspectives. We also organised workshops with stakeholders, with each participant presenting for five minutes under Chatham House rules. We produced a report from the workshop, drafting different versions suited to particular audiences.<sup>9</sup> Finally, we submitted the report to UN BWC for dissemination and used it as a basis for academic/media articles.

## 4. Advice for Policy Engagement

Engaging in the policy process is rewarding and crucial to moving from knowledge into action and impact. It can be demanding for academics and requires a set of skills that are quite different from those developed when completing traditional academic training. When engaging with decision-shapers and decision-makers, time is of the essence. It is rare to get into academic details with most decision-makers. Communication



generally needs to be concise, and when consulting one must be mindful of their competing priorities.

Monitoring the policy system is important to intervening at the right moment, when proposals are more likely to be heard and received well. When drafting reports, it is important to leave enough time when seeking feedback for drafting and redrafting, allocating time for follow-on engagement. Consulting with stakeholders before any final version of a document is a good way to involve people and give them a sense of agency within the relationship.

Achieving impact involves observing and sensing the complexities of the situation. This involves listening and understanding the needs of the stakeholder you are engaging with and responding to their concerns and perspective. Establishing a constructive relationship demands sensitivity. When seeking influence and providing expert advice, it is vital to express your message in a manner that aligns with the overall objectives and framing, that is, unless the purpose is to shift that framing (which is a very tall order). Usually, policy-makers will appreciate well-presented, concrete, actionable policy recommendations.

Collaboration amongst stakeholders with diverse interests and approaches is more likely to have an impact, even whilst such collaboration can often come with significant coordination challenges. Partners bring their own networks and constituencies, culture and messaging, credibility and perspectives. Surprising collaborators that effectively straddle polarised viewpoints can be particularly effective.

Proposals are more likely to be successful if you can demonstrate that they align with a clear consensus within the scientific community. They are also more likely to be successful if they are adaptable to diverse conditions, concerns and perspectives within the complex policy system and are expressed in the policy language and culture you are trying to influence.

It is good to communicate quantitative data, but when doing so, it is essential to be clear and unambiguous and ensure that it was understood correctly by policy-makers within the context it was situated in. If your numbers are estimates or include error bars, state this clearly. Trust is built if the uncertainties involved are communicated with clarity and assumptions exposed.



When engaging with political actors, such as members of Parliament, quality is often better than quantity, as people need to build convincing narratives if they are to use your research effectively. Spend time with individual members in one-to-one meetings, ensuring that you understand their priorities and they understand the evidence, perspective and recommendations you are conveying. Strong advocates within a body such as Parliament, who devote energy to the issue, are worth far more than a number that would simply support the idea in the lobby but not prioritise the issue.

Priorities require shifts in resources. When advocating for more resources for a case, it will have more credibility if you are able to identify other areas that could receive less.

Avoid academic jargon. Your familiarity with the use of terms and acronyms may give you comfort and a sense of expertise and solidity, but can also confuse and close down those you seek to engage. It is often helpful to have someone less familiar with your discipline to read through any outputs and check that they can clearly understand them.

## 5. Conclusion

Our survival in the face of existential risk demands significant shifts in activity in the public and private sectors. Policy impact takes attention, strategy, collaboration, and engagement throughout a research project. This chapter has offered targeted advice to researchers, collated from experienced CSER staff.

## Notes and References

- 1 The definition of policy impact according to the 2014 Research Excellence Framework is “any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia”. REF2014 was the first national assessment exercise to evaluate the wider, socioeconomic impact of research. [https://www.research-strategy.admin.cam.ac.uk/files/collecting\\_research\\_impact\\_evidence\\_best\\_practice\\_guidance.pdf](https://www.research-strategy.admin.cam.ac.uk/files/collecting_research_impact_evidence_best_practice_guidance.pdf)
- 2 NGOs, charitable organizations, schools, labour unions, indigenous groups, political parties, professional associations, foundations, faith-based organizations.
- 3 Governmental departments, agencies, and organizations at local, national, regional and international levels.



- 4 From startups to multinationals across a range of sectors in IT, biotechnology, finance, energy, insurance, agriculture, etc
- 5 “How to Evidence and Record Policy Impact A ‘how to’ guide for Researchers” (2017) <https://www.iph.cam.ac.uk/wp-content/uploads/2017/07/Policy-Impact-booklet-print-April-2017-1.pdf>
- 6 Jones, Natalie, Mark O’Brien, and Thomas Ryan. “Representation of future generations in United Kingdom policy-making”, *Futures* 102 (2018): 153–63. Also reprinted as Chapter 22 of this volume.
- 7 Available at <https://www.cser.ac.uk/resources/written-evidence-lords-select-committee-artificial-intelligence/>
- 8 Available at <https://www.cser.ac.uk/resources/who-emerging-technologies-and-dual-use-concerns/> and <https://www.cser.ac.uk/resources/emerging-trends-and-technologies-horizon-scan-global-public-health/>.
- 9 Available at <https://www.cser.ac.uk/resources/eighth-review-conference-biological-weapons-convention-where-next/>.