



Threatened
Species
Recovery
Hub

National Environmental Science Programme



Connecting research with policy: Guide to writing for policy-makers

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Introduction to this guide

In the course of their research, most environmental researchers are likely to identify issues that have implications for government policy-makers and decision-makers. This guide has been designed by the NESP TSR Hub to support researchers working in the environmental field to develop communications tailored for these end-users. It outlines four types of products designed to communicate research with policy end-users:

1. **In-brief:** A succinct communiqué (2 pages, 800-1000 words) aimed at concisely communicating relevant research findings and proposed actions on one key policy issue.
2. **Discussion paper:** A longer piece (e.g. 4-20 pages) aimed at canvassing a breadth of information on a complex policy question. Examples include deeper exploration of the background and context of the issue; review of current research pertaining to the issue; and/or examination of a range of options and their benefits, risks and costs.
3. **Inquiry submission:** A targeted piece (e.g. 4-12 pages) aimed at providing synthesised research information in direct response to a parliamentary inquiry or commission on a relevant topic.
These should address one or more of the inquiry terms of reference and be submitted through the inquiry's call for public submissions.
4. **Policy report:** A structured report (e.g. 20+ pages) providing detailed information and analysis on a policy-relevant topic.
The report should include an executive summary outlining key findings, provide detailed chapter-by-chapter discussion of the issue, offer conclusions and potentially offer recommendations or options for action stemming from the research.
Longer reports (50+ pages) should be accompanied by a summary report of approximately 20 pages. Published reports could also include front material, such as key charts and/or infographics, and be accompanied by a fact sheet.

What is policy?

In this guide, '**policy**' refers to a broad range of mechanisms and systems implemented by government agencies (local, state/territory or federal) to address specific issues.

It encompasses regulation, planning, legislation, strategy development, program design, evaluation, agreements and decisions related to funding and investment.

NESP TSR Hub policy-related research will be of most interest to:

- Department of Agriculture, Water and the Environment
- Australian Government Threatened Species Commissioner
- Minister for the Environment
- Local, state or territory governments or other Australian Government stakeholders
- Non-government conservation organisations.

Suggested outlines for each of these product types are given at the end of this guide.

Designing communications products for policy-makers



Quick tips for policy-related research

1. **Work closely with policy stakeholders before, during and after development of your project.** Ask who is most key to speak with early; when and how you might consult more broadly.
2. **Consider co-authoring your work with government partners.** If this is not appropriate, invite them (if they wish) to provide comment throughout the process.
3. **Policy briefs are documents produced by government policy advisers for their Ministers and senior executives.** It is best to avoid the language of 'policy brief' in describing products produced by researchers outside of government agencies.
4. **Your policy research product should be easily understood by any professional person, including those who may not be familiar with scientific terms or the technical aspects of the issue.** It should be readable and simply laid out i.e. summary graphs and infographics, fairly short paragraphs, dot points, sub-headings to guide the reader, and reasonable white space.

Recommended workflow

The checklist below can be used to plan the workflow for a project and ensure that the project is on track to meeting the communication expectations of policy makers.

<input type="checkbox"/> Discuss concept with project leaders and knowledge broker
<input type="checkbox"/> Identify key policy stakeholders in relevant department(s)/agency(ies) in collaboration with research leaders and knowledge broker
<input type="checkbox"/> Discuss the policy problem identified and any preliminary research with stakeholders early in the process
<input type="checkbox"/> Identify preferred option for progressing policy discussion (i.e. jointly authored policy brief, internal report, independent published in-brief, paper or report)
<input type="checkbox"/> Develop full consultation plan. Who do you need to engage, how and when?
<input type="checkbox"/> Consider involvement of Minister/advisers and when this should occur
<input type="checkbox"/> Draft your product following feedback from consultations, briefings and presentations
Review and feedback from: <input type="checkbox"/> project/theme leader; <input type="checkbox"/> knowledge broker; <input type="checkbox"/> policy partner(s); <input type="checkbox"/> other partner(s)
<input type="checkbox"/> Final product to science communication manager
<input type="checkbox"/> Notify the Program Funding Manager in accordance with advance publication notification requirements
<input type="checkbox"/> Program Manager to notify and seek review by end-users and senior executives and Ministerial staff as required
<input type="checkbox"/> Publish outputs in accordance with Program Funding requirements (e.g., for public accessibility)



Why should we consider tailoring our research communication products to policy-makers?

It can be disheartening when policy decisions are made that contradict scientific evidence or do not go far enough to address a problem.

Scientific evidence is just one of many factors that decision makers will consider when developing policy. Competing values, interests and trade-offs create complexity for conservation problems.

It is also important to remember scientific evidence does not stand alone. By considering the political landscape, researchers can frame their research in a way that is more relevant to decision makers.

Understanding the politics of science policy

Researchers seeking to influence policy will benefit from bearing in mind the different constraints, timelines and expectations between research and policy domains. Once again *collaboration is crucial* for success in influencing the development of science-based policy.

Mechanisms:

In seeking to inform policy in a specific area, knowledge of the mechanisms currently in place as well as what might be used to address a challenge is important. e.g.

What is the current legislative framework?

What is the constitutional situation? Is this a Commonwealth or State/Territory responsibility?

What bodies are responsible? e.g. government agencies, Minister, scientific advisory committees

What programs, interventions or regulations are already in place?

What strategies, documents, agreements or plans impinge on the policy area? Are these in place or under review?

What approaches have been used or considered in the past? How have these played out?

What international commitments or mechanisms are important?

What has worked in other jurisdictions?

What level of government is responsible? Is it Commonwealth, state/territory or local government or a shared responsibility?

Context:

Effective policy-making is shaped by a wide range of considerations beyond 'what the science shows'.

The best knowledge-informed policy will consider a broad range of issues such as political environment, economics, public opinion, values, social priorities, the priorities of other agencies and the relationship of this policy to broader goals.

Timeliness:

Policy cycles are complex, often circuitous, and bound to different timelines than research cycles.

Even in cases of quite direct influence, it typically takes many years for research to translate into changes in established policy or regulatory instruments. It can be even longer in complex cases, such as for legislative change.

Much shorter timelines may be involved through exploring possibilities for iterative changes to the implementation or realisation of policy, by working closely with policy-makers and implementers.

Do your best to understand where your work might fit with broader developments (e.g. is there a major strategy review that you can inform? Are there planned changes to legislation? What incremental changes may be useful?)

Timing is often critical, so be prepared to accept that research may not be taken up in the short term, particularly if policy or legislation relating to the issue has recently been reviewed and is being implemented.

This does not prevent comment on the issue but should be factored into how you present research findings with policy implications, which might focus on issues for future policy review.

Collaboration:

Government policy advisers and senior leaders will be the people who take your ideas forward; consultation and collaboration are key to paving the way for implementation at some stage.

Policy partners can also comment on what has been proposed or tried in the past, foreshadow future developments, and provide vital information on context, timing, legal and structural considerations, risks and limitations of your approach.

You do not have to agree with your stakeholders, but your work will be stronger and more influential by going through a process of forging these partnerships, fostering trust, and carefully developing your case for why this is an issue and what might be done to solve it.

Resources on developing science for policy



Australian Government report on integration of science in policy

Department of Industry, Innovation, Science, Research and Tertiary Education (2012).

APS200 Project: The Place of Science in Policy Development in the Public Service.

<https://webarchive.nla.gov.au/awa/20140212210750/http://www.industry.gov.au/science/Pages/Library%20Card/APS200ScienceinPolicyReport.aspx>



Guide to writing Policy Briefs (EU-focus)

Laura ffrench-Constant (2014). Report for *Research to Action*.

How to plan, write and communicate an effective Policy Brief: Three Steps to Success.

<https://www.researchtoaction.org/wp-content/uploads/2014/10/PBWeekLauraFCfinal.pdf>



Guidelines for environmental sciences

Clare Wilkinson, Emma Weitkamp (2012). The Institution of Environmental Sciences.

Engaging policy-makers with environmental science.

<https://www.the-ies.org/analysis/engaging-policy-makers>



10 tips for ecologists

Rachel Morgain and Megan Evans (2018).

Ecologists engaging with policy: what have we learnt?

ESA Bulletin 48(4), December 2018, p.1-3.

https://www.ecolsoc.org.au/files/bulletins/esabulletin_dec2018.pdf



5 steps to make evidence count

Paul Cairney: Politics & Public Policy (2017).

A 5-step strategy to make evidence count (blog post).

<https://paulcairney.wordpress.com/2017/09/14/a-5-step-strategy-to-make-evidence-count/amp/>



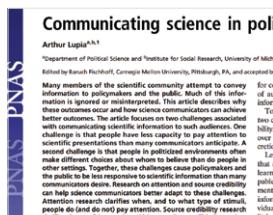
Tips and techniques

Megan C. Evans, Federico Davila, Anne Toomey & Carina Wyborn (2017).

Embrace complexity to improve conservation decision making.

Nature: Ecology and Evolution 1, November 2017, p.1588.

<https://www.nature.com/articles/s41559-017-0345-x>



Background research: challenges of communicating science for policy

Arthur Lupia (2013).

Communicating science in politicized environments.

Proceedings of the National Academy of Science 110(3), p.14048-14054.

http://www.pnas.org/content/110/Supplement_3/14048.full



Environment and sustainability: A policy handbook

Stephen Dovers, Karen Hussey (2013).

Environment and sustainability: A policy handbook. Second edition.

<https://www.federationpress.com.au/bookstore/book.asp?isbn=9781862879348>

Templates

In-brief (1-2 pages, 800-1000 words)

Typically, an in-brief responds to a single issue that falls within the jurisdiction of the end-user. It provides an accessible description of the problem and some ideas for action to support policy analysts to:

- i. answer questions from Ministers, senior leaders, or media, and/or
- ii. take appropriate steps to address the issue.

It may anticipate forthcoming points of potential influence, respond to an emerging issue or problem – e.g. something prominent in the media, a natural event, questions tabled in parliament, or a current review of a policy – or address an ongoing issue in a way that sheds new light.

A brief typically proposes a range of options to be considered, such as policy processes to take the matter further, research to be done, policy instruments to be considered/analysed, legislative reform, evaluation, or a combination of these.

In-brief: guidelines and structure

Can be adapted as needed.

Short title

Should clearly outline what the in-brief will cover

Key messages

3-4 key messages summarising detail below

Implications/actions supported by the research

1-5 dot points

Write as implications or framing options depending on content and audience

Avoid 'recommendations' unless specifically requested by policy end-users

Context (100-200 words)

Give some indication of the policy context as well as framing the research issue

Background (200-300 words)

Outline how the question or issue has arisen, any prior research and/or current responses

If longer, use subtitles to summarise

Detail (400-500 words)

Summarise this section with a heading that indicates the key area of research discussed

Provide slightly fuller level of detail of the research, its findings and relevance

Give subtitles that summarise findings and their relevance

Consultation

Which areas of government have been consulted (department(s), section(s), can be Commonwealth, state or territory)? Has this been developed in conjunction with any?

References

1-3 references if needed

Contact(s)

For further information, contact: [Name, email address]

Discussion paper (4-12 pages)

A policy discussion paper allows for canvassing a range of research and background information on a complex policy case. It may involve original research or reviews of existing research on a topic.

It is usually more open-ended than a brief or policy report, and takes a more discussion-based approach to the issue. Typical topics of a policy-related discussion paper include:

- A review of key scientific literature pertaining to an issue of policy concern
- A review of policy options that could be used to address a problem and their strengths, limitations, costs and risks
- A discussion of new research findings that impact on an issue of policy concern, placing these in a policy context and potentially identifying further research to be undertaken; e.g. that an in-depth review be commissioned on the topic.

Discussion paper: guidelines and structure

The format for a discussion paper is flexible, depending on the issues and research under consideration. However, it is useful to begin with summary information and key context.

An example of a structure for a discussion paper could be:

Key information

Consider summarising key information with a breakout box of 2-5 brief dot points

- This may be key findings from research, points of policy context and/or considerations of next steps/possible options for action

Introduction

Identify the policy issue and the research that will be used to inform the issue

Issue

Discuss the policy challenge, issue or problem that the research addresses

Context

Canvass the context for policy in this area, which may include:

- Discussion of the key policy and legislative frameworks that currently apply
- Discussion of prior approaches to the problem in this or other jurisdictions
- References to policy documents, public discussions, Ministerial statements or media that contextualise the current state of play
- Discussion of legal, constitutional or in-principle obligations that jurisdictions hold in the area
- Contextualisation of jurisdictional responsibilities (e.g. which level(s) of government is/are constitutionally or morally responsible for the problem?)

Where relevant:

- Indicate any areas of government that have collaborated in the development of the discussion paper and/or consulted with (check they agree to be named)

Research background

Briefly (1-2 short paragraphs): what method or approaches have been used in this research?

Findings and discussion

Outline the key findings of research under discussion. This may include:

- Review of existing literature pertaining to the topic
- Discussion of research findings related to the topic in context of broader literature
- Review of a range of policy options, their strengths and weaknesses, costs and risks.

Consider breaking this into separate sections based on topics/options under discussion

Conclusion/proposals/next steps

Here you may wish to:

- Summarise key findings from research
- Suggest a course of action. Typically this will be broader than for other policy products: e.g. that a workshop be convened to progress discussions; that further research be undertaken; that an in-depth review be commissioned on the topic

Consider breaking this into separate sections based on topics/options under discussion

References

Submission to inquiry (4-10 pages)

A parliamentary inquiry or commission of inquiry may be called by elected representatives in Commonwealth or state/territory governments to ascertain information to help representatives make decisions, shape legislation, form policy and/or ensure accountability for key issues.

Inquiries generally allow researchers to present relevant information and provide comment through a call for public submissions. In some cases they may be invited to appear before an inquiry. Research expertise is often considered to provide valuable insights to inquiries.

Submissions to inquiries must clearly address one or more of the inquiry's terms of reference in order for the information provided to be considered. These will be noted on the inquiry web page, along with key dates, inquiry committee members, and other critical information.

Inquiry submissions differ from other products for policy audiences in that they are intended primarily for elected representatives across the political spectrum who are delegated oversight of the inquiry, usually through membership of a relevant parliamentary committee. This will include opposition MPs and cross-benchers alongside government representatives.

The two key audiences for inquiry submissions are:

1. Elected MPs and/or delegated commissioners who have been assigned carriage of the inquiry who are very time-pressed and require fast access to high-level findings and options. In many cases they can not be expected to read beyond the first page/summary information.
2. Inquiry support staff, who will be tasked with assessing submissions in detail, and who assist inquiry committees in summarising information.

It is useful to present quick, striking, accessible information up-front, followed by more detail.

Inquiry submissions: guidelines and structure

Can be adapted as needed.

Title

Inquiry name

Inquiry terms of reference addressed

State which of the inquiry's terms of reference the submission addresses (can be >1)

Key messages

Key messages summarising information provided, written as dot points

Implications/options/actions supported by the research

Write as implications or framing options depending on levels of certainty, policy context and research findings

Discussion

Discuss and synthesise research findings relevant to the terms of reference and their potential implications

Reference these as appropriate

Provide meaningful headings and sub-headings to guide the reader

References

Contact(s)

Report for policy-makers (20+ pages)

A report for policy makers presents in-depth, usually longer-term research. This could involve original research, reviews of existing research, or a combination of both.

It may be developed through many stages of consultation and discussion with policy end-users.

It is distinguished from other kinds of reports in speaking directly to identified policy issues and by specifically proposing options or a course of action.

It is aimed at two key groups of end-users:

1. **Ministers and senior executives**, who are very time-pressed, and require fast access to high-level findings and proposals.
2. **Policy analysts**, who may also benefit from more detailed canvassing and discussion of issues and research findings.

For this reason, it is useful to structure policy reports with quick, striking, accessible information and proposals for action upfront in 1-2 pages, followed by more detailed exposition in the report body.

Report: guidelines and structure

Can be adapted as needed. Consider providing a summary report for long reports (>50 pages).

A. Executive summary

Targeted at senior leaders and other users who need a fast, strategic-level overview

Consider 1 page of infographics, charts or key visual information as opening page

1-2 pages short dot points key findings and implications

B. Actions supported by the research OR Recommendations (summarise all upfront)

Include this as a separate section if there are more than 3 actions/recommendations or if these are complex; if 3 or fewer simple proposals, these can be embedded in Executive Summary and repeated in main report

In cases where the report is developed more independently from decision-makers, it will likely be more effective to express these as "Actions supported by the research"

C. Main body of report

Can be structured in different ways (see following page), depending upon the content and how key findings are best highlighted, but should follow a few key principles, including:

- Highly structured by chapter and section, with explicit headings clearly indicating content
- Short text sections and ample white space
- Highlight key findings with strong figures, tables, quotes and/or break-out boxes.
- Consider embedding recommendations in **bold type** in/at end of related text sections

D. References and Appendices

Information necessary to a scientific report but not of direct interest to policy end-users, e.g.:

- detailed research methods
- list of participants/contributors
- summary of research instruments (e.g. survey)
- other supplementary information

Report: guidelines and structure

A. Tips for the Executive Summary

Keep it short

Use subheadings to guide the reader quickly to the most relevant information

Include most pertinent concrete details over generalised statements

- e.g. "45% of land managers reported difficulties controlling feral cats" rather than "Land managers often view feral cats as a significant problem".

Where the report is a direct request from and/or collaboration with specific areas of government, indicate this in front material if those partners agree it is appropriate

B. Tips for Actions/Recommendations

Number actions/recommendations if there are more than two

- a. Where options are inherently dependent on one another and should be implemented as a package, these can be grouped within a single numbered item
- b. (e.g. 1a. b. etc.)

Large numbers of recommendations can be grouped under thematic sub-headings

For complex reports, consider cross-referencing these to relevant sections of main report

C. Example of how to structure the main body of a report

Introduction:

Purpose of the report (1 paragraph)

Brief background focused on policy context/driver/question addressed (½-1 short page)

Indicate any areas of government that have collaborated in and/or been consulted in the development of the report where they agree to be named

Brief method/approach (e.g ½ page, two short paragraphs)

Chapter 1: Key finding 1

Research finding

Implications

Actions/Recommendation(s)

Chapter 2: Key finding 2

Research finding

Implications

Actions/Recommendation(s)

Etc.

Conclusion

Summarise main findings

Discuss implications and/or elaborate actions supported by the research.

This guide was produced by Rachel Morgain and Rachel Robbins, Fenner School of Environment and Society, Australian National University as part of the National Environmental Science Program's Threatened Species Recovery Hub

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Further information:

<http://www.nespthreatenedspecies.edu.au>

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