EBC

Energy in Buildings and Communities Programme

Impact Masterclass

Communication for increasing research impact

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AUSTRALIA

Commissioned by the International Energy Agency (IEA) Energy in Buildings and Communities (EBC) Technology Collaboration Programme (TCP) Steering Group

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Module 2 – Using the guides and templates

Masterclass Structure

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Core learning modules

M0 - Introduction

M1 - Audience and strategy

M2 - template and guide Step by step Examples

Specialised short modules

M3 - Government and Industry

M4 - Public and Media

M5 - Strategic Social Media

Resources

Policy Brief

Writing Guide **Template**

Executive Summary

Writing Guide **Template**

Communication Insights and Useful Resources

Workbook

Structure of Module 2

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- ☐ Aims and Outcomes
- ☐ IEA EBC writing guides and templates
- ☐ Things to consider before you write
  - ☐ What is a policy?
  - ☐ Which research outcomes do you articulate?
  - ☐ What is a policy brief? What is an executive summary?
  - ☐ Why write a policy brief or executive summary?
  - ☐ Strategy and audiences
- ☐ Content of Policy Brief or Executive Summary
  - ☐ Policy brief or Executive Summary sections walk through
    - ☐ What to include in each section
    - ☐ Examples for each section from Annex 80 Resilient Cooling of Buildings sample
- ☐ Communication tools and tips

Aim and outcomes

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Aim:

- To run through the templates, guides and samples provided as tools to support improved connection to your key audience.

Outcomes:

- To clearly understand the resources and tools developed to help the researcher to increase the impact of their policy briefs and executive summaries.
- To see how the templates have been used to develop three sample documents.

IEA EBC guides and templates

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The following aids have been developed to assist Operating Agents and their colleagues maximise the impact of the work of the IEA Energy in Building and Communities Annexes on climate change policy.

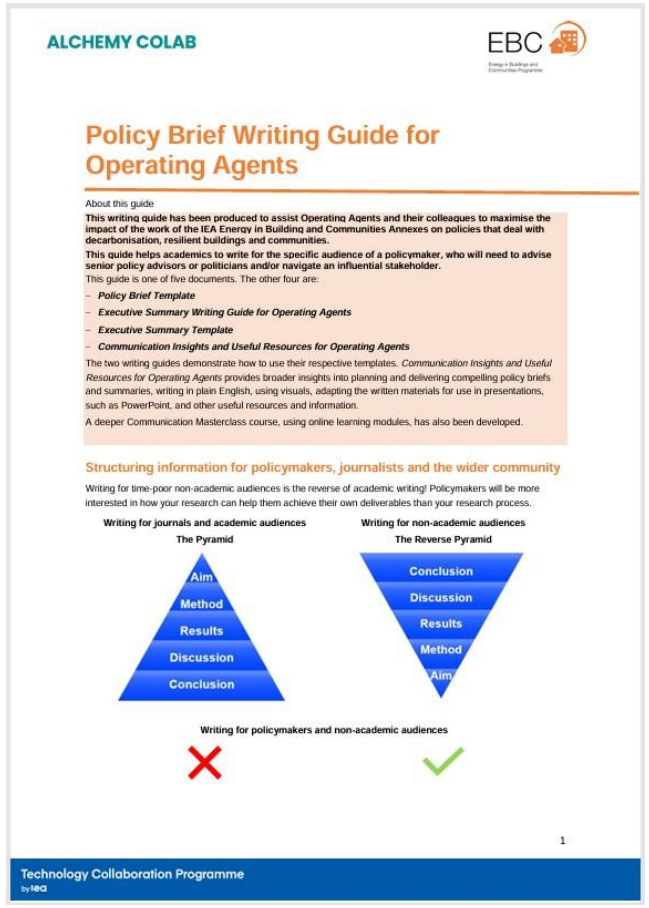
The five resource documents are:

- *Policy Brief Writing Guide for Operating Agents*
- *Policy Brief Template*
- *Executive Summary Writing Guide for Operating Agents*
- *Executive Summary Template*
- *Communication Insights and Useful Resources for Operating Agents*

These are complementary documents to the technical report, news article, and fact sheet writing guidance in the Management Guidelines for Operating Agents (August 2020).

IEA EBC guides and templates

Energy in Buildings and Communities Programme


ALCHEMY COLAB

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Policy Brief Writing Guide for Operating Agents

About this guide

This writing guide has been produced to assist Operating Agents and their colleagues to maximise the impact of the work of the IEA Energy in Building and Communities Annexes on policies that deal with decarbonisation, resilient buildings and communities.

This guide helps academics to write for the specific audience of a policymaker, who will need to advise senior policy advisors or politicians and/or navigate an influential stakeholder.

This guide is one of five documents. The other four are:

- ***Policy Brief Template***
- ***Executive Summary Writing Guide for Operating Agents***
- ***Executive Summary Template***
- ***Communication Insights and Useful Resources for Operating Agents***

The two writing guides demonstrate how to use their respective templates. *Communication Insights and Useful Resources for Operating Agents* provides broader insights into planning and delivering compelling policy briefs and summaries, writing in plain English, using visuals, adapting the written materials for use in presentations, such as PowerPoint, and other useful resources and information.

A deeper Communication Masterclass course, using online learning modules, has also been developed.

Structuring information for policymakers, journalists and the wider community

Writing for time-poor non-academic audiences is the reverse of academic writing! Policymakers will be more interested in how your research can help them achieve their own deliverables than your research process.

Writing for journals and academic audiences
The Pyramid
Aim
Method
Results
Discussion
Conclusion

Writing for non-academic audiences
The Reverse Pyramid
Conclusion
Discussion
Results
Method
Aim

Writing for policymakers and non-academic audiences

1

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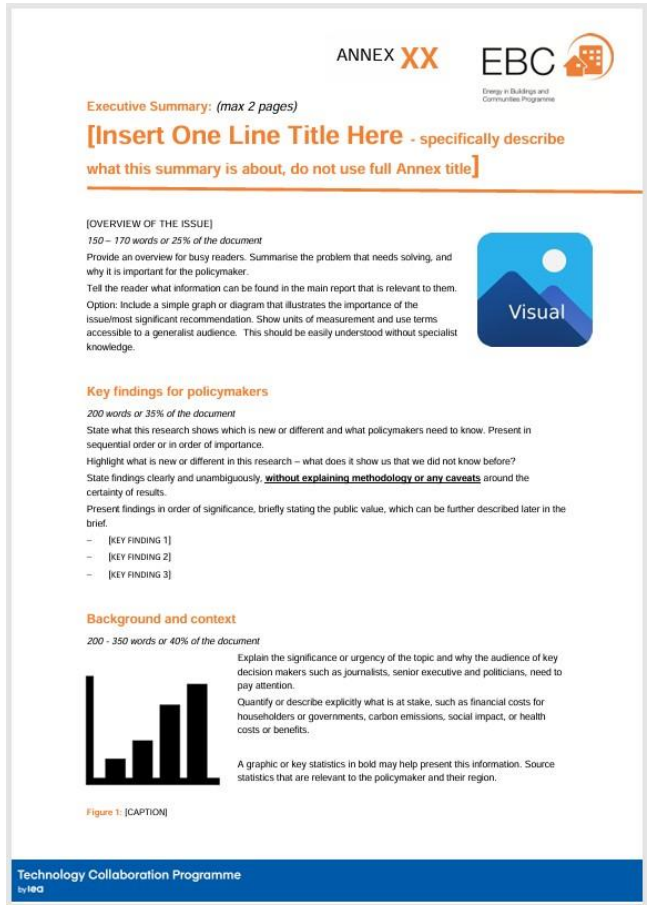
ANNEX XX

EBC

Executive Summary: *(max 2 pages)*

[Insert One Line Title Here - specifically describe what this summary is about, do not use full Annex title]

[OVERVIEW OF THE ISSUE]

150 – 170 words or 25% of the document

Provide an overview for busy readers. Summarise the problem that needs solving, and why it is important for the policymaker.

Tell the reader what information can be found in the main report that is relevant to them.

Option: Include a simple graph or diagram that illustrates the importance of the issue/most significant recommendation. Show units of measurement and use terms accessible to a generalist audience. This should be easily understood without specialist knowledge.

Visual

Key findings for policymakers

200 words or 35% of the document

State what this research shows which is new or different and what policymakers need to know. Present in sequential order or in order of importance.

Highlight what is new or different in this research – what does it show us that we did not know before?

State findings clearly and unambiguously, **without explaining methodology or any caveats** around the certainty of results.

Present findings in order of significance, briefly stating the public value, which can be further described later in the brief.

- [KEY FINDING 1]
- [KEY FINDING 2]
- [KEY FINDING 3]

Background and context

200 - 350 words or 40% of the document

Explain the significance or urgency of the topic and why the audience of key decision makers such as journalists, senior executive and politicians, need to pay attention.

Quantify or describe explicitly what is at stake, such as financial costs for householders or governments, carbon emissions, social impact, or health costs or benefits.

A graphic or key statistics in bold may help present this information. Source statistics that are relevant to the policymaker and their region.

Figure 1: [CAPTION]

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ANNEX 86

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Executive Summary:

Balancing the Financial Costs and Health Benefits of Optimising Energy Efficient Ventilation

ANNEX 80

EBC

Policy Brief:

Codifying Cool Surfaces to Protect People and the Grid During Heatwaves

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Technology Collaboration Programme by IEA

Writing guides

Templates

Samples

Things to consider before you write

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1. What is a policy?
2. Which research outcomes do you articulate?
3. What is a policy brief? What is an executive summary?
4. Why write a policy brief or executive summary?
5. Strategy and audiences

Things to consider before you write

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1. What is a policy?

A policy is a set of rules or guidelines that an organisation or government creates to guide a consistent approach to a problem through its decisions and actions.

It helps people know what to do in certain situations to reach specific goals or keep things running smoothly.

They should be founded on evidence-based research such as the work of the IEA EBC research Annexes.

Be aware that Operating Agents may need to convince or win over the policy and decision maker, it is important to explain the impact and value of the research outcomes.

Things to consider before you write

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2. Which research outcomes do you articulate?

To identify which research outcomes to use you need to identify your target audience (Module 1)

You also need to identify the relevant issues for your target audience at that point in time (Module 1)

You also need to understand the pressures and influences of the broader stakeholder ecosystem on the key audience (Module 1)

Things to consider before you write

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3. What is a policy brief? What is an executive summary?

Policy Brief	Executive summary
A stand-alone document Covers a single topic About 2 pages – up to 1000 words.	
Purpose: to tell the reader what they should do	Purpose: to provide an information overview or keep the reader informed
• focused on specific recommendations. • actionable – must be written for the context in which the research will be applied.	• general 'big picture' research overview OR focused on a narrow topic. • not intended to be actionable, so locally relevant/contextual information is less important.

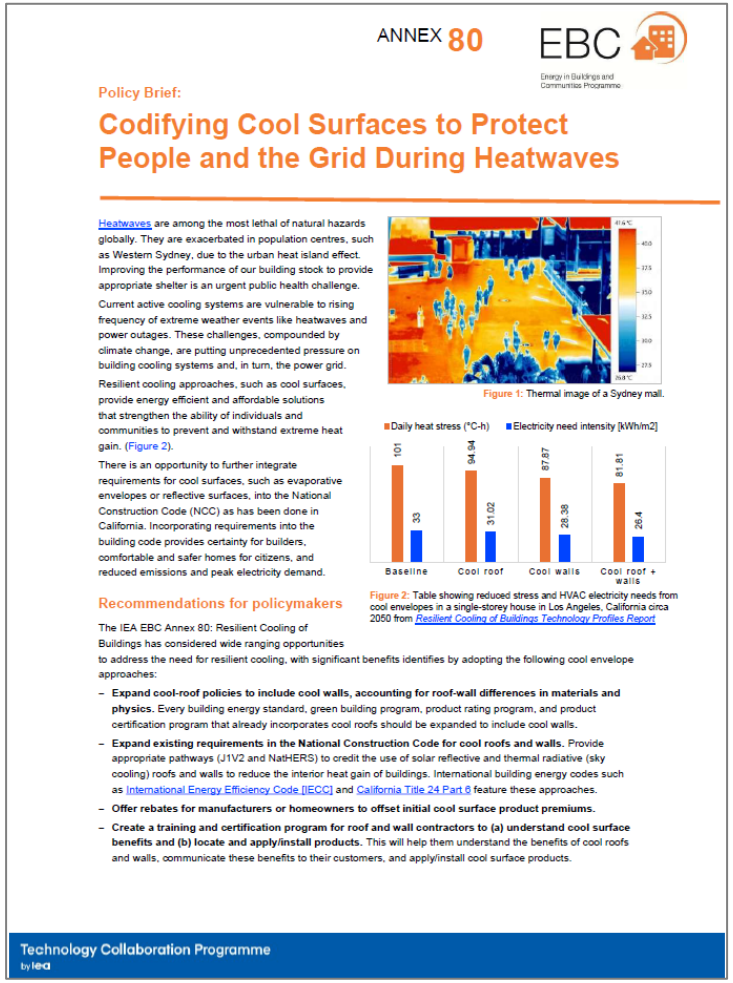
Things to consider before you write

3. What is a policy brief?

A policy brief presents research and recommendations to a non-academic audience of an issue that requires action.

It includes actionable policy options to deal with the issue the government is interested in, based on the evidence.

- A policy brief is *not* a summary of research.
- It is an interpretation of the research for policy making in the region where you are recommending it be applied.



ANNEX 80

Policy Brief:

Codifying Cool Surfaces to Protect People and the Grid During Heatwaves

Heatwaves are among the most lethal of natural hazards globally. They are exacerbated in population centres, such as Western Sydney, due to the urban heat island effect. Improving the performance of our building stock to provide appropriate shelter is an urgent public health challenge.

Current active cooling systems are vulnerable to rising frequency of extreme weather events like heatwaves and power outages. These challenges, compounded by climate change, are putting unprecedented pressure on building cooling systems and, in turn, the power grid.

Resilient cooling approaches, such as cool surfaces, provide energy efficient and affordable solutions that strengthen the ability of individuals and communities to prevent and withstand extreme heat gain. (Figure 2).

There is an opportunity to further integrate requirements for cool surfaces, such as evaporative envelopes or reflective surfaces, into the National Construction Code (NCC) as has been done in California. Incorporating requirements into the building code provides certainty for builders, comfortable and safer homes for citizens, and reduced emissions and peak electricity demand.

Figure 1: Thermal image of a Sydney mall.

Daily heat stress (°C-h) Electricity need intensity [kWh/m2]

	Baseline	Cool roof	Cool walls	Cool roof + walls
Daily heat stress (°C-h)	101	94.94	87.87	81.81
Electricity need intensity [kWh/m2]	33	31.02	28.38	26.4

Figure 2: Table showing reduced stress and HVAC electricity needs from cool envelopes in a single-storey house in Los Angeles, California circa 2050 from Resilient Cooling of Buildings Technology Profiles Report

Recommendations for policymakers

The IEA EBC Annex 80: Resilient Cooling of Buildings has considered wide ranging opportunities to address the need for resilient cooling, with significant benefits identifies by adopting the following cool envelope approaches:

- **Expand cool-roof policies to include cool walls, accounting for roof-wall differences in materials and physics.** Every building energy standard, green building program, product rating program, and product certification program that already incorporates cool roofs should be expanded to include cool walls.
- **Expand existing requirements in the National Construction Code for cool roofs and walls.** Provide appropriate pathways (J1V2 and NatHERS) to credit the use of solar reflective and thermal radiative (sky cooling) roofs and walls to reduce the interior heat gain of buildings. International building energy codes such as International Energy Efficiency Code [IECC] and California Title 24 Part 6 feature these approaches.
- **Offer rebates for manufacturers or homeowners to offset initial cool surface product premiums.**
- **Create a training and certification program for roof and wall contractors to (a) understand cool surface benefits and (b) locate and apply/install products.** This will help them understand the benefits of cool roofs and walls, communicate these benefits to their customers, and apply/install cool surface products.

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Which policy recommendations to articulate?

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Policy instruments	 Regulation (the stick)	 Economic means (the carrot)	 Information (the sermon)
Affirmative	**Prescriptions**	**Subsidies, grants, in kind services**	**Encouragement**
Example	A minimum standard of performance in equipment or systems.	Funding for research and development into a particular technology.	A policy that requires disclosure to the market or to the government of particular information.
Negative	**Proscriptions**	**Taxes, fees, physical obstacles**	**Warning**
Example	A phase-out of particular materials or equipment.	A tax to discourage a particular behaviour.	Communications materials to help people make better choices.

Things to consider before you write

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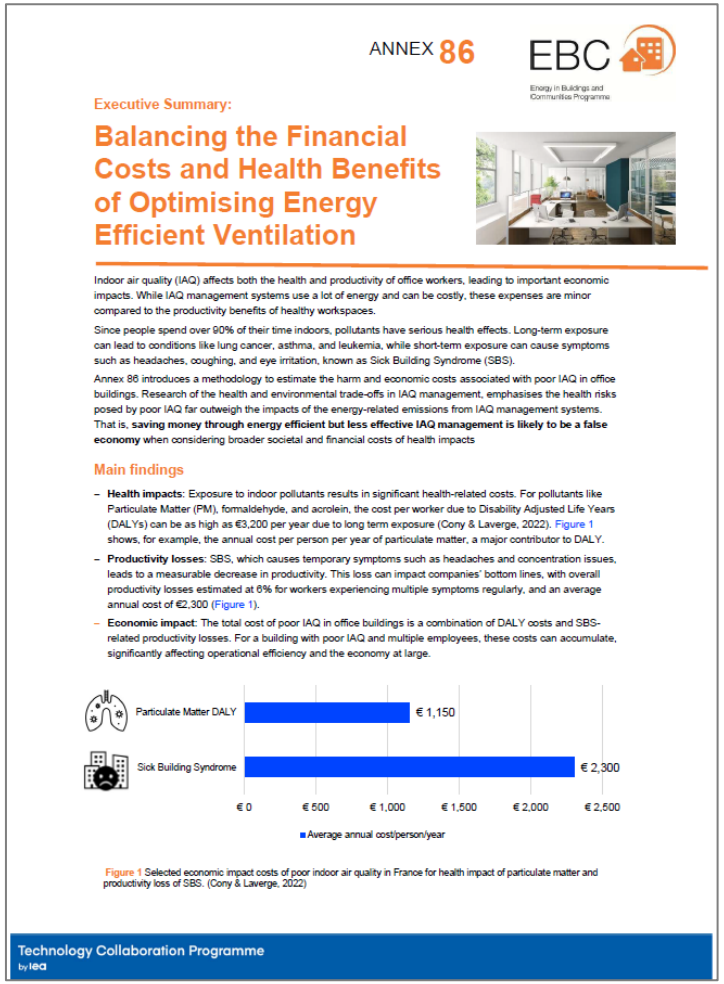
3. What is an executive summary?

An executive summary presents the state of knowledge to a non-academic audience.

It provides a summary of the relevant, evidence-based research to ensure the reader is well informed on the broad or narrow topic of interest.

It should be written to read well as a stand-alone document but can be the executive summary of a longer report or document.

It can bring to light information or findings that were previously not understood (example).



ANNEX 86

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Executive Summary:

Balancing the Financial Costs and Health Benefits of Optimising Energy Efficient Ventilation

Indoor air quality (IAQ) affects both the health and productivity of office workers, leading to important economic impacts. While IAQ management systems use a lot of energy and can be costly, these expenses are minor compared to the productivity benefits of healthy workspaces.

Since people spend over 90% of their time indoors, pollutants have serious health effects. Long-term exposure can lead to conditions like lung cancer, asthma, and leukemia, while short-term exposure can cause symptoms such as headaches, coughing, and eye irritation, known as Sick Building Syndrome (SBS).

Annex 86 introduces a methodology to estimate the harm and economic costs associated with poor IAQ in office buildings. Research of the health and environmental trade-offs in IAQ management, emphasises the health risks posed by poor IAQ far outweigh the impacts of the energy-related emissions from IAQ management systems. That is, **saving money through energy efficient but less effective IAQ management is likely to be a false economy** when considering broader societal and financial costs of health impacts

Main findings

- **Health impacts**: Exposure to indoor pollutants results in significant health-related costs. For pollutants like Particulate Matter (PM), formaldehyde, and acrolein, the cost per worker due to Disability Adjusted Life Years (DALYs) can be as high as €3,200 per year due to long term exposure (Cony & Laverge, 2022). Figure 1 shows, for example, the annual cost per person per year of particulate matter, a major contributor to DALY.
- **Productivity losses**: SBS, which causes temporary symptoms such as headaches and concentration issues, leads to a measurable decrease in productivity. This loss can impact companies' bottom lines, with overall productivity losses estimated at 6% for workers experiencing multiple symptoms regularly, and an average annual cost of €2,300 (Figure 1).
- **Economic impact**: The total cost of poor IAQ in office buildings is a combination of DALY costs and SBS-related productivity losses. For a building with poor IAQ and multiple employees, these costs can accumulate, significantly affecting operational efficiency and the economy at large.

Figure 1 Selected economic impact costs of poor indoor air quality in France for health impact of particulate matter and productivity loss of SBS. (Cony & Laverge, 2022)

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Things to consider before you write

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4. Why write a policy brief or executive summary?

Policy and decision makers should use best available information

BUT they are:

- Time poor
- Not experts
- Have competing priorities
- Have out of date understanding

If not you,
who do you trust
to give policymakers
advice about
your area of expertise?

There is an opportunity and an obligation to better convey complex academic material to policy-making audiences in a way that is informative, immediately accessible, useful and/or actionable.

Things to consider before you write

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4. Why write a policy brief or executive summary?

A policy brief or executive summary should have a clear and specific purpose, supported by the evidence.

It should address just one topic, issue or argument which can be supported by a number of findings.

Write down your purpose and refer to it often.

Only include information in your document that serves this purpose.

Your purpose could be to:

- Make recommendations that will lead to policy change and impact
- Provide evidence on a specific problem or issue you know they are tackling
- Inform the audience of a new issue
- Present evidence to counter misleading information that may have been provided directly or indirectly to your audience.

Things to consider before you write

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4. Why write a policy brief or executive summary?

Is there something new and important you would like them to know?

Is there a specific action you would like this audience to take?

What do you want them to do with your findings?

For policy briefs

Now consider your policy recommendations.

Use your research and other data to formulate your advice for policy.

While you may feel strongly about your recommendations, make sure your advice is based on evidence.

Your role is to persuade rather than inform.

Things to consider before you write

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5. Strategy and Audiences – From Module 1:

Key difference with academic writing

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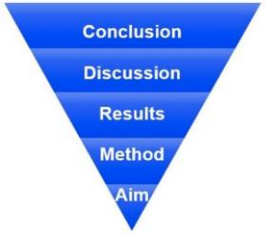
Writing for journals and academic audiences
The Pyramid

Writing for non-academic audiences
The Reverse Pyramid



Writing policy briefs and summary reports

Writing for your target audience

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Different audiences:

- have different levels of understanding
- have different drivers, interests and passions
- have different communication and learning styles.

For example:

- accountants might not understand technical/engineering information
- accountants are interested in financial information
- all people are interested in things that affect them personally (eg locally)
- urban designers may be highly visual people who respond to attractive imagery.

Things to consider before you write

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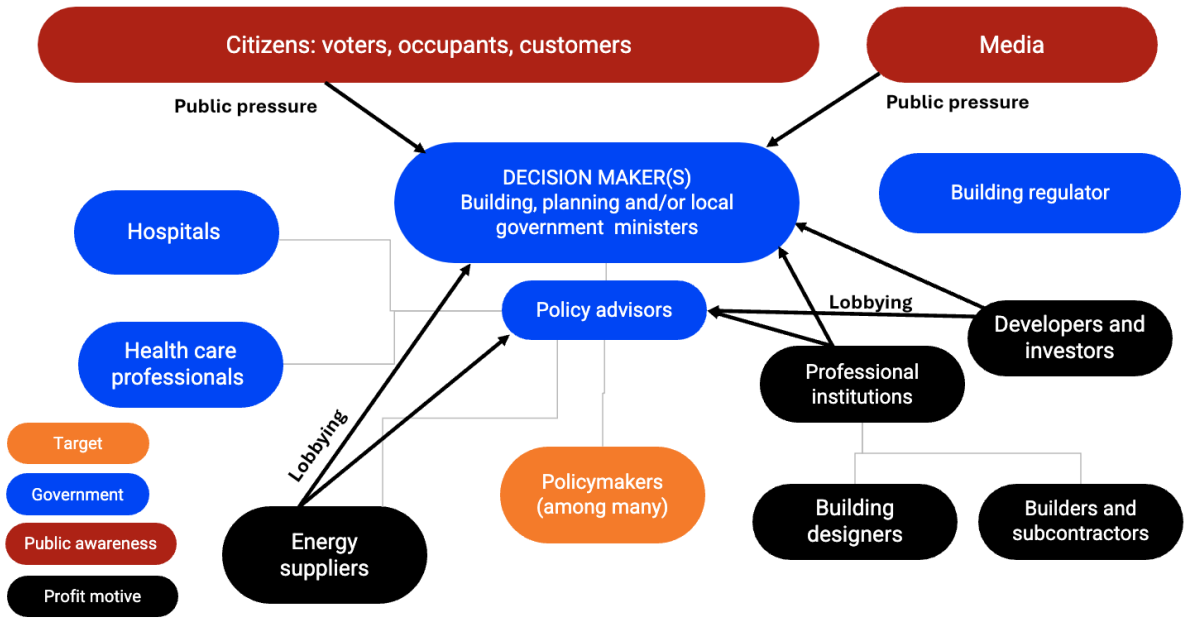
5. Strategy and Audiences – From Module 1:

Example: Mapping Annex 80 stakeholders



Things to consider before you write

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5. Strategy and Audiences

It is important to help the reader and their colleagues understand the **public value** of your work.

“Tonnes of carbon dioxide abated” is not a well-understood or meaningful term outside of expert circles. Include instead:

- **Climate change action benefits,** such as emissions reduction or cars off the road
- **Public health benefits**, such as improved air quality
- **Affordability and financial benefits**, such as reduced infrastructure costs, reduced cost of living from lower energy bills, or growth opportunities for businesses
- **Social benefits**, such as programs that address inequality
- Wellbeing, lifestyle, and liveability benefits.

Content of Policy Brief or Executive Summary

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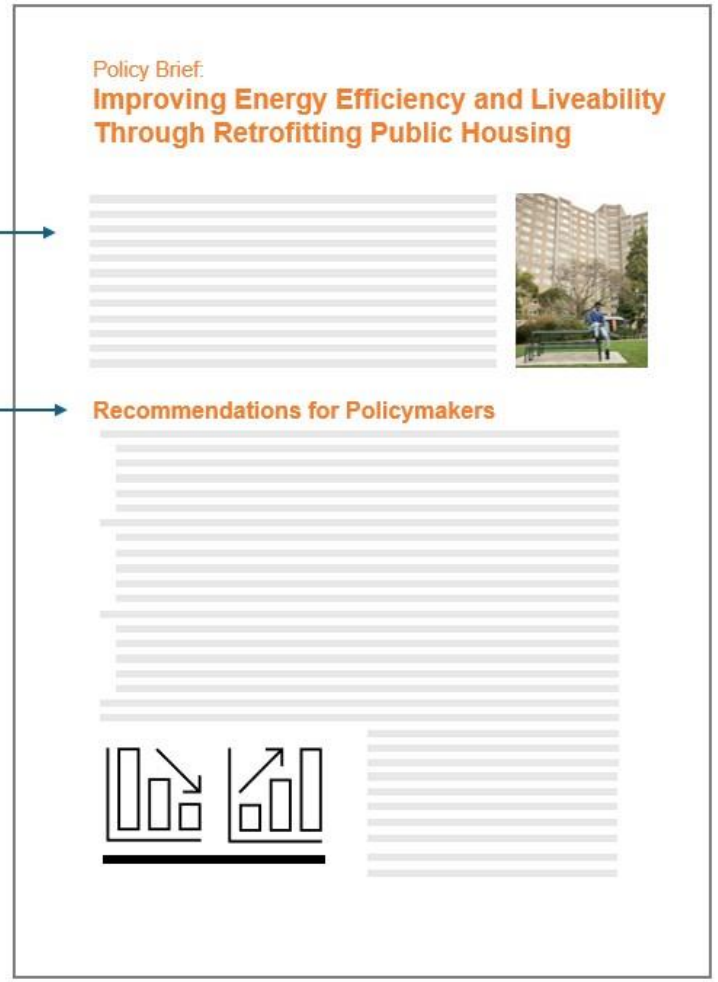
Overview (>180 words)

Key points or actions (~200 words)



Key findings and why this matters (200-300 words)

Content of Policy Brief or Executive Summary

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Example: Annex 80 *content*

Table of Contents

		POLICY MECHANISMS					TECHNOLOGY TARGET		DISRUPTIONS MITIGATED		
	Resilient Cooling of Buildings Policy Recommendations – Summary Annex 80	REGULATION	INFORMATION	INCENTIVES	R&D	STANDARDS	SPECIFIC	AGNOSTIC	HEAT WAVE	POWER OUTAGE	COST
A1	**ADVANCED SOLAR SHADING / ADVANCED GLAZING**										
1	Encourage the adoption of advanced windows through technical guidelines or policies		√			√	√		√	√	$ - $$
2	Provide in-depth guidance to support the uptake of solar shading technologies		√				√		√	√	$
3	Offer incentives and rebates to install advanced solar shading / glazing			√			√		√	√	$ - $$
4	Add code requirements for external movable solar shading to reduce solar heat gains through glazed areas		√			√	√		√	√	1-3%
A2	**COOL ENVELOPE MATERIALS**										
5	Add cool-surface prescriptions for indoor thermal quality to green building standards.					√	√		√	√	$
6	Add cool-roof and cool-wall provisions to building standards and programs worldwide					√	√		√	√	$
7	Introduce or improve cool-surface rebate programs			√			√		√	√	$ - $$
8	Provide cool-surface training to building contractors		√				√		√	√	$
9	Expand cool-roof policies to include cool walls	√		√		√	√		√	√	$ - $$
A3a	**EVAPORATIVE ENVELOPE SURFACES**										
10	Expand definitions in existing standards to be more widely applicable to all evaporative surface techniques	√				√	√	√	√	√	$
A3b	**VENTILATED ENVELOPE SURFACES**										
11	Create performance requirements for double-skin	√	√	√	√	√	√		√	√	$

Content of Policy Brief or Executive Summary

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1 – 2 line title *(depending on layout and graphics used)*

This should describe what this brief or report is about. Be specific.

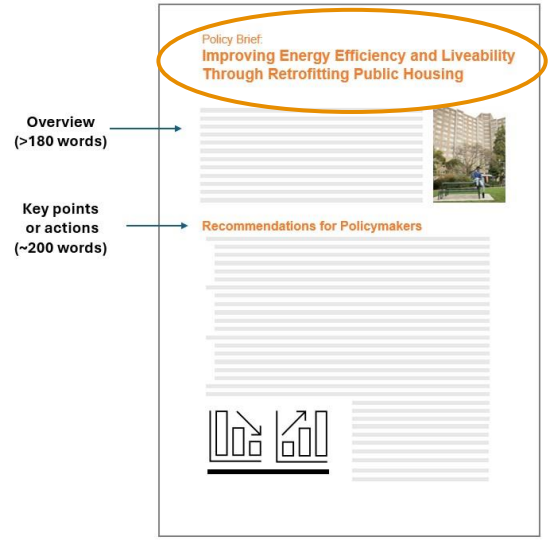
Ideally:

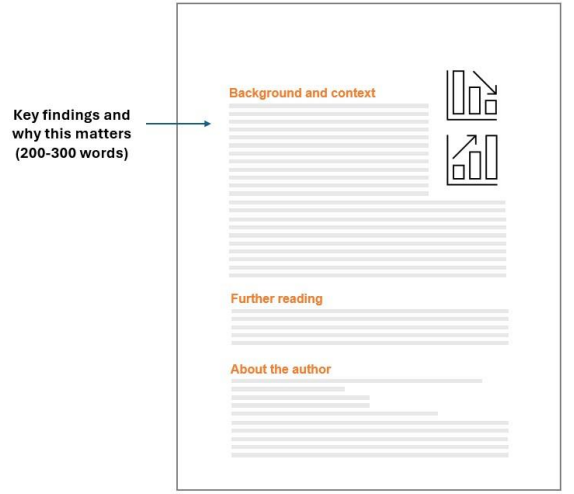
for a policy brief, it should convey the benefits of taking the action recommended

- ‘Improving Energy Efficiency and Liveability Through Retrofitting Public Housing’
- ‘Removing Barriers to Centralised Radiative Cooling in Apartment Buildings’

for an executive summary, it should convey the report’s topic and how that could influence something of public value.

- ‘Grid Integration Software for Fair and Affordable Electricity Use’





Content of Policy Brief or Executive Summary

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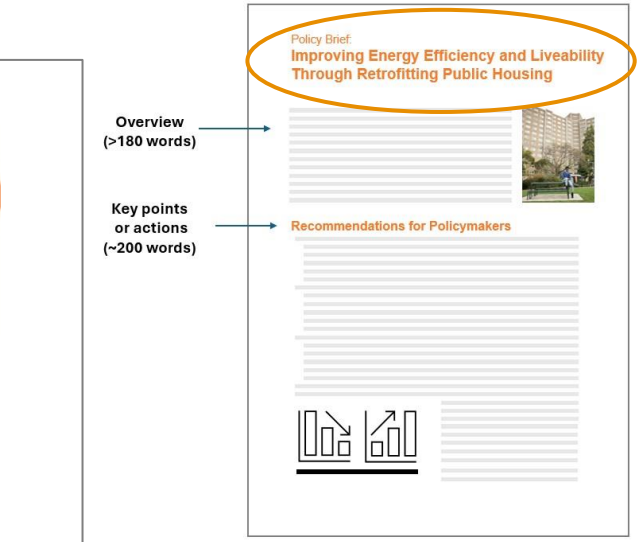
Example: Annex 80 *title*

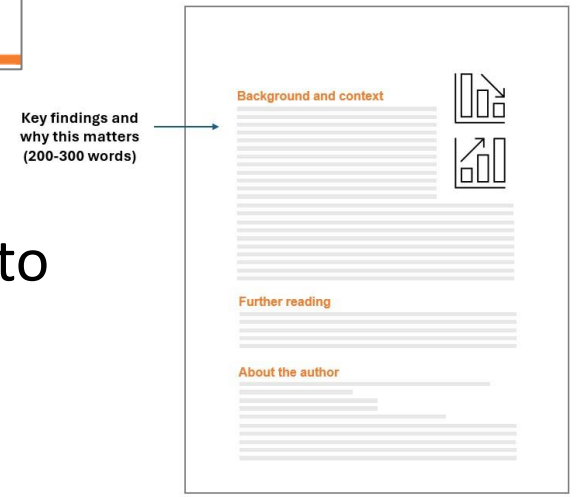
ANNEX 80

Energy in Buildings and Communities Programme

Policy Brief:

Codifying Cool Surfaces to Protect People and the Grid During Heatwaves





The Title focuses on ***protecting*** both **people** and the **grid** during heatwaves, by bringing the work of Annex 80 on cool surfaces into building codes.

Content of Policy Brief or Executive Summary

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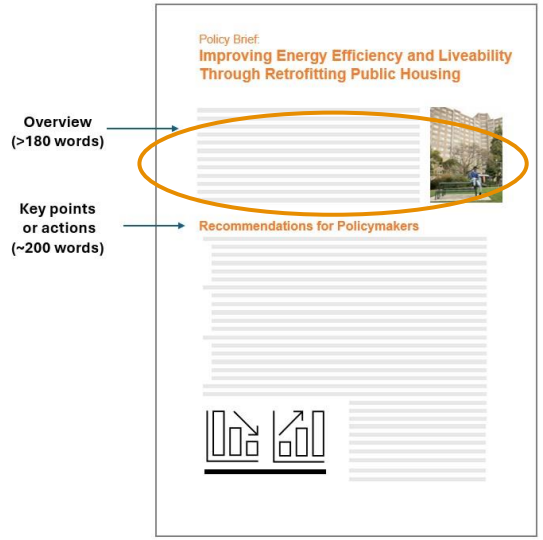
Overview: 150-180 words, ~25 % of the document

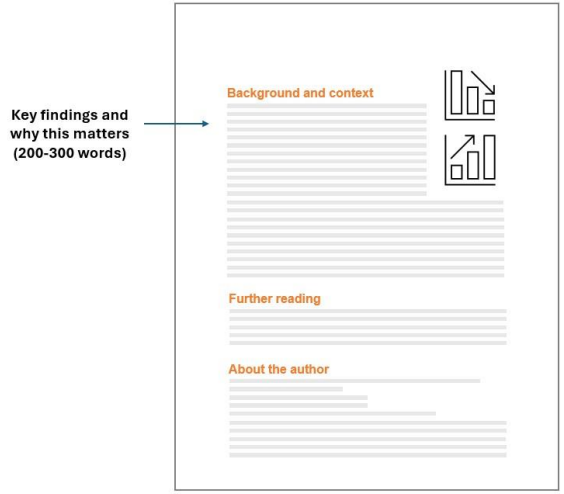
It needs to contain everything the reader needs if this is all they read. In needs to entice readers to go further. It does not need its own subheading;

It needs to:

- summarise what the topic is and distil the essence of the brief or report
- why it's important for the policy maker
- tell the reader what they will gain from reading the whole document - why it is important to their work
- It should appear on cover or top of first page and be written last

This section can be presented in a box to emphasise its importance.





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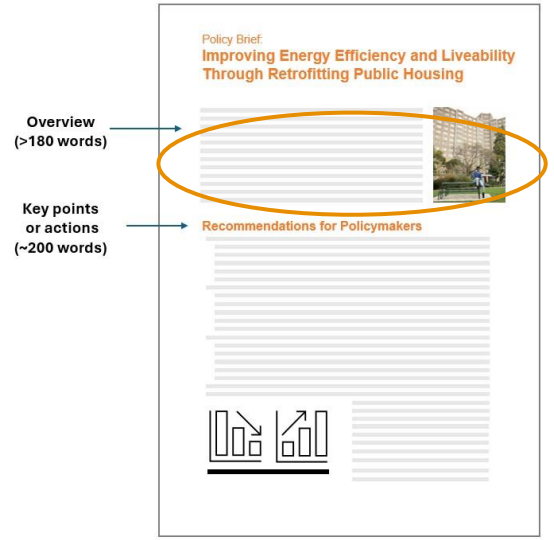
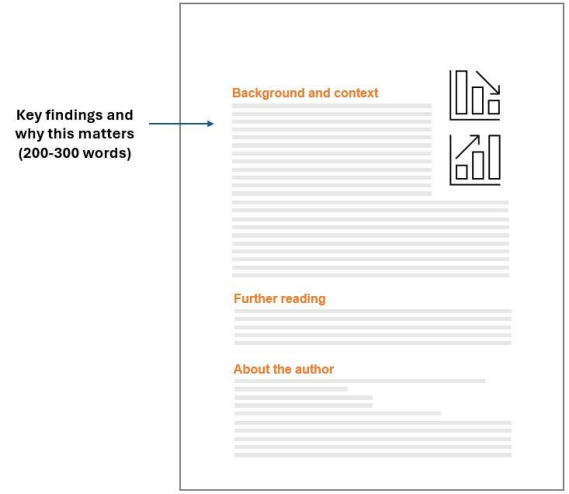


Remember that YOU are the expert. Provide your unvarnished opinions with confidence. Write strong, active statements that convey your authority.

Option: Include a simple graph or diagram which illustrates the most significant key finding/s and is accessible to a generalist audience.



Content of Policy Brief or Executive Summary

Energy in Buildings and Communities Programme

Example: Annex 80 *overview*

The overview starts with a reference to heatwaves which are increasing problems for people everywhere, and very emotive for many politicians.

The image amplifies this message.

The overview talks about how resilient approaches such as cool surfaces can help address the heat AND decrease the strain on the grid.

The bar chart demonstrates this.

ANNEX 80

Energy in Buildings and Communities Programme

Policy Brief:

Codifying Cool Surfaces to Protect People and the Grid During Heatwaves

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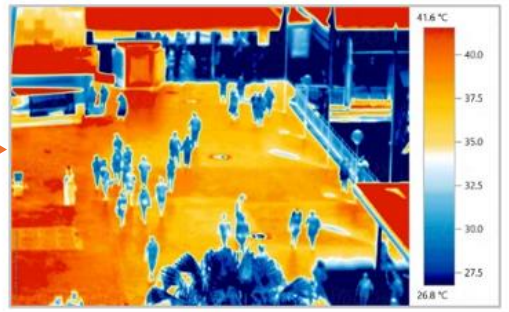
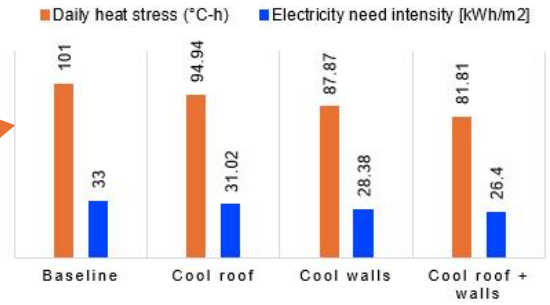


Figure 1: Thermal image of a Sydney mall.



Content of Policy Brief or Executive Summary

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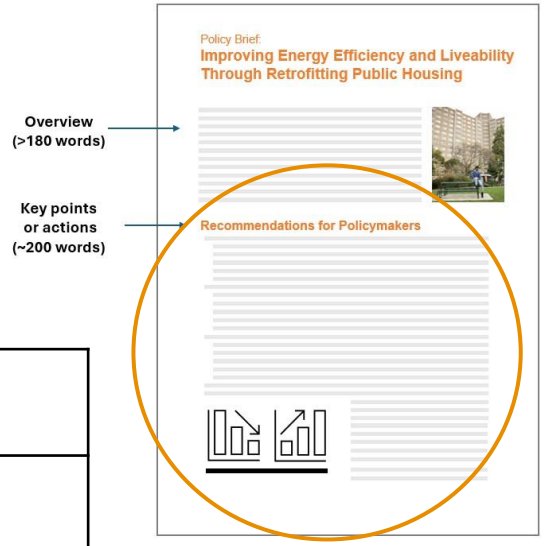
Recommendations or Key information for policymakers: ~200 words, 35% of the document

This section details the most important points, actions or research findings that need the attention of the policy maker.



Policy Brief	Executive summary
State what policy makers should do and what outcome you expect this to lead to in three dot points. Present these in sequential order or in order of importance. Ensure you suggest what is credible, feasible, and is able to benefit the specified market. Make the case for change, briefly stating the public value	Summarise the key findings in 3 – 4 bullet points. Highlight what is new or different in this research – what does it show us that we didn't know before? Present the findings in order of significance and state why each is significant. State findings clearly and unambiguously, without explaining methodology or any caveats around the certainty of results - remember you are the expert! Specify the implications of the research.

Content of Policy Brief or Executive Summary

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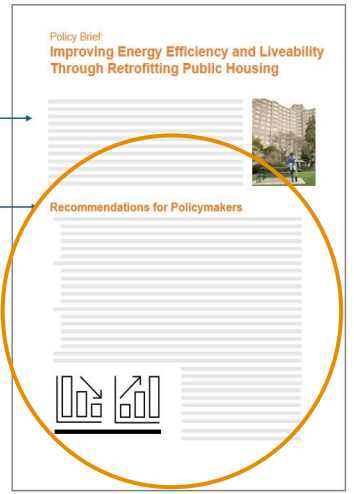
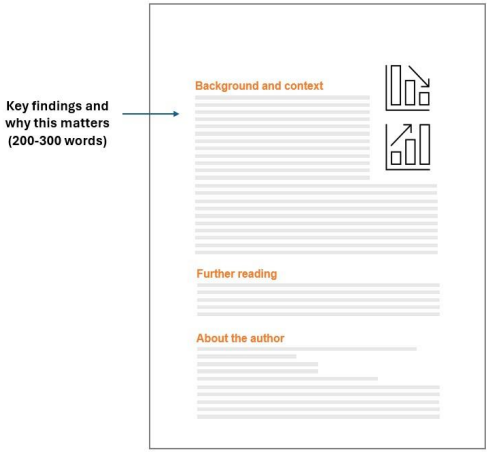
Example: Annex 80 *Recommendations*

Recommendations for policymakers

The IEA EBC Annex 80: Resilient Cooling of Buildings has considered wide ranging opportunities to address the need for resilient cooling, with significant benefits identifies by adopting the following cool envelope approaches:

- **Expand cool-roof policies to include cool walls, accounting for roof-wall differences in materials and physics.** Every building energy standard, green building program, product rating program, and product certification program that already incorporates cool roofs should be expanded to include cool walls.
- **Expand existing requirements in the National Construction Code for cool roofs and walls.** Provide appropriate pathways (J1V2 and NatHERS) to credit the use of solar reflective and thermal radiative (sky cooling) roofs and walls to reduce the interior heat gain of buildings. International building energy codes such as International Energy Efficiency Code [IECC] and California Title 24 Part 6 feature these approaches.
- **Offer rebates for manufacturers or homeowners to offset initial cool surface product premiums.**
- **Create a training and certification program for roof and wall contractors to (a) understand cool surface benefits and (b) locate and apply/install products.** This will help them understand the benefits of cool roofs and walls, communicate these benefits to their customers, and apply/install cool surface products.





Content of Policy Brief or Executive Summary

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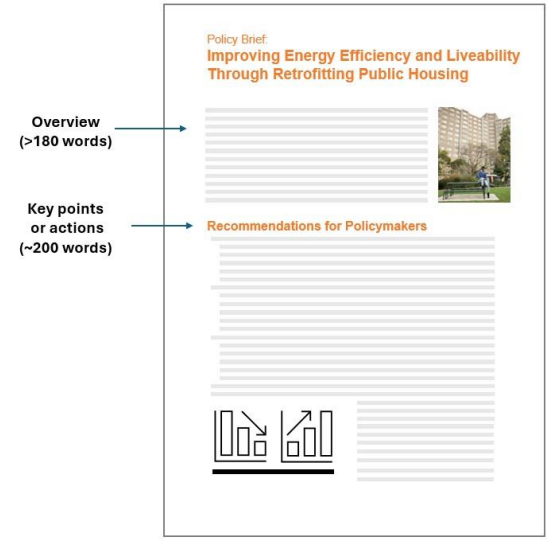
Background and context: 200-300 words, ~40% of the document

This section should provide important background information and put the brief in the context of the policy maker's work and responsibilities. It should set out:

- Why they need to read this now.
- What is the main challenge / opportunity.
- Any risks and mitigation opportunities and risk of not doing anything.
- Research process.
- Next steps.



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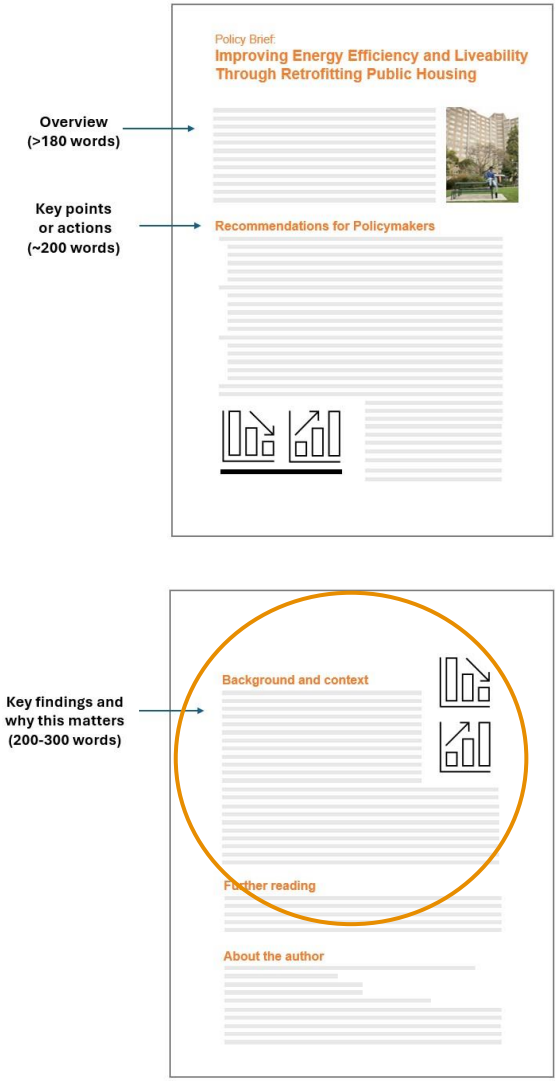
Background and context: 200-300 words

Policy Brief	Executive summary
Highlight key information that supports your recommendation What specifically is the value to the public? Cost-benefit or other key output that supports the recommended change. Implications for policy.	List the main findings using one sentence per finding. Include key figures (or ranges of figures) when trying to quantify key findings and summarise results.



Content of Policy Brief or Executive Summary

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Example: Annex 80 *Background and context*

This brings to life more of the research from the Annex, illustrating further why such action should be taken and the benefits that result.

The image amplifies this message as it shows what a building that takes this on board looks like, against one that hasn't.

Background and context

The challenges of cooling in a warming world

The global stock of air conditioners in buildings will grow to 5.6 billion by 2050, up from 1.6 billion in 2018, according to the International Energy Agency (IEA) *Future of Cooling* report, becoming a top driver of global electricity demand.

The increasing demand is driven by climate change, urbanisation, rising comfort expectations, and economic growth, particularly in hot and densely populated regions.

In Australia, 1.2 to 1.3 million small and medium stationary air conditioning units are sold annually, which would not be required in a warming climate if resilient cooling approaches are used. (Figure 3).

Figure 3: Cool wall use at One Central Park, Sydney (left) compared with maladaptive retrofitted air conditioning (right).

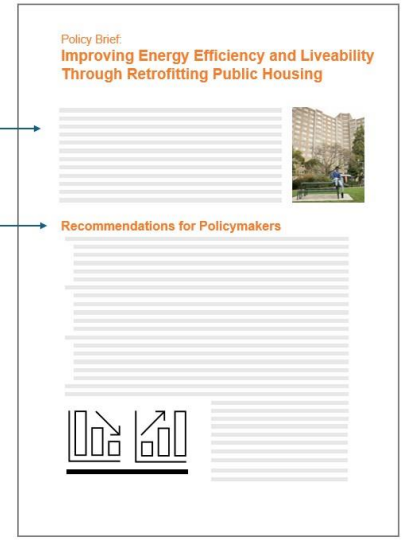
A *cool roof* or *cool wall* is a building surface designed to reflect more sunlight and absorb less heat than standard materials, helping to reduce the building's overall temperature. They can vary in detail from reflective painting through to green or water roofs/walls. The selection will depend on the design and whether it is a new building or retrofit. This reduces the need for air conditioning and, consequently, the costs for householders and businesses and the strain on the electricity grid.

Broader policy support for resilient cooling

IEA EBC Annex 80's main objective is to support a rapid transition to an environment where resilient low energy and low carbon cooling systems are the mainstream and preferred solutions for cooling and overheating issues in buildings.

It encompasses research into both active and passive cooling technologies categorised into four aims:

- Reduce externally induced heat gains to indoor environments
- Enhance personal comfort apart from cooling whole spaces
- Remove sensible heat (measurable heat) from indoor environments
- Control latent heat (humidity) of indoor environments.



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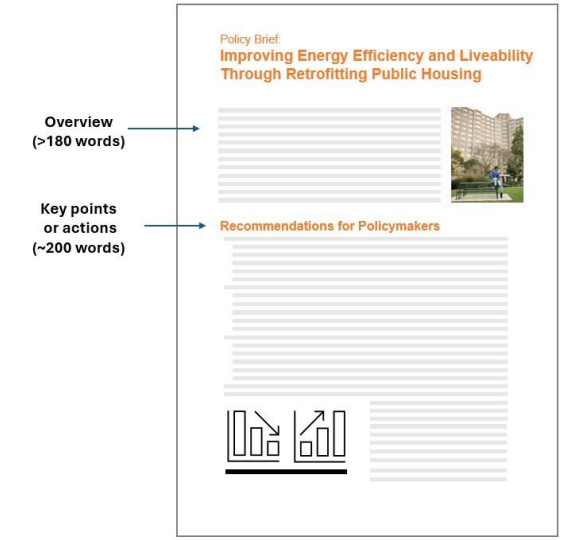
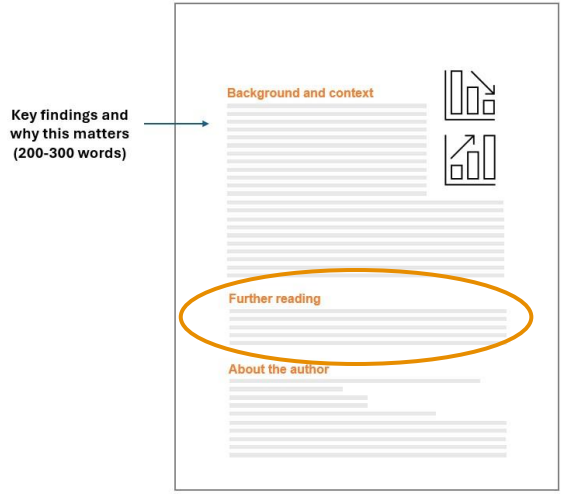
Further Reading

Provide information about the relevant outputs, such as technical reports or fact sheets, from the project or Annex that are specifically relevant to the policy brief.

Be brief and relevant.

Don’t provide an exhaustive list of further reading, as this might create an impression that you’re giving the reader more work to do and that the topic is more complex than it might be.





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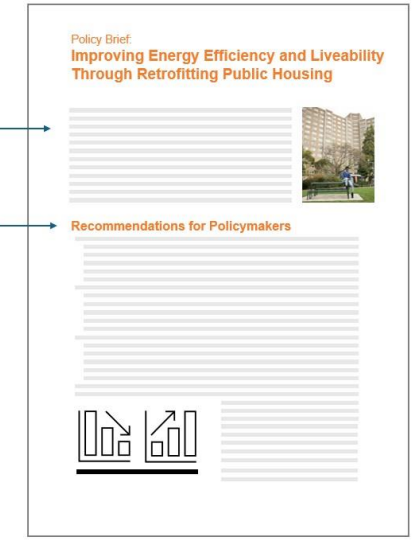
Example: Annex 80
Further reading

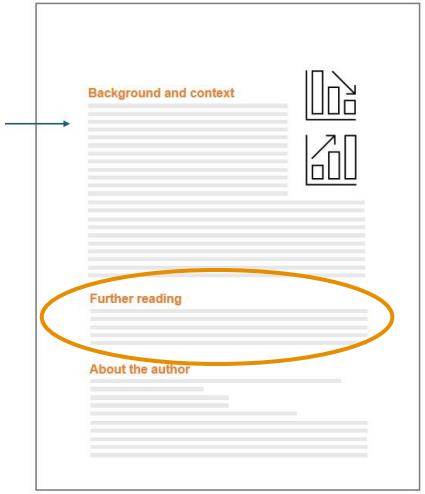
Simple references to the additional publications, and the Policy Recommendations in particular, that will support this policy brief.

Further reading

Annex 80 Publications https://annex80.iea-ebc.org/publications

The publication *International Energy Agency Resilient Cooling of Buildings – Policy Recommendations (Annex 80)* has a suite of other recommendations for policymakers working on the built environment, climate change adaptation, and public health. This includes practical information about envelope materials, ventilation and cooling systems, micro-cooling and personal comfort control, and whole building approaches.





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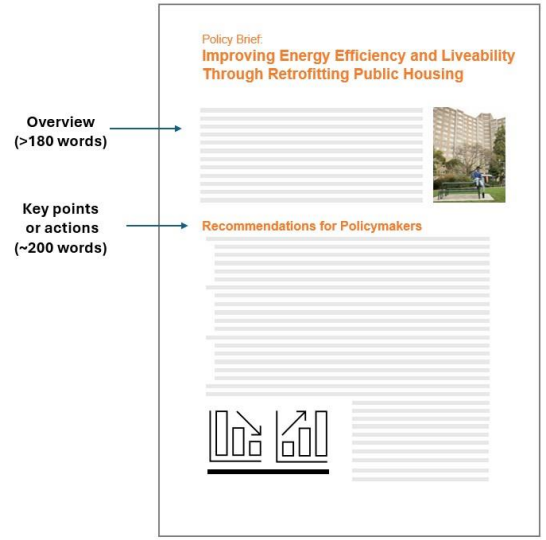
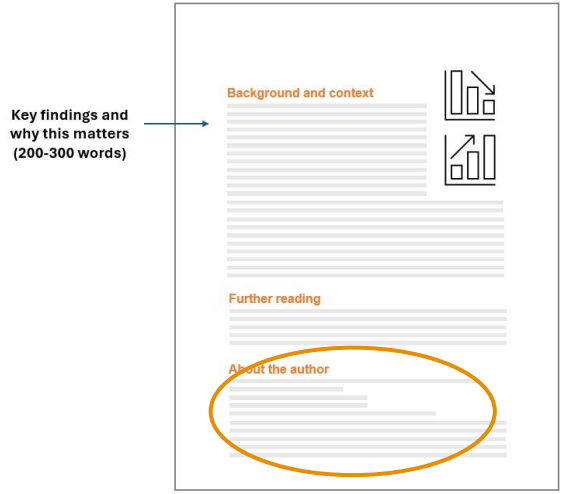
About the Authors

- State your name, position, institution, contact details and the name of the Annex you're involved with.
- This gives the brief credibility.
- You can also include other acknowledgements or disclaimers if needed.
- Include the standard paragraph about the IEA EBC programme.





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Energy in Buildings and Communities Programme

Example: Annex 80 *About the author*

Annex number and name

Operating agent, position, institution and contact details

Details about the IEA EBC

About the author

This work was made possible by Annex 80: Resilient Cooling of Buildings of the International Energy Agency (IEA) Energy in Buildings and Communities (EBC) Technology Collaboration Programme.

Contact:

Dr Peter Holzer, Institute of Building Research and Innovation

Operating Agent for IEA EBC Annex 80.

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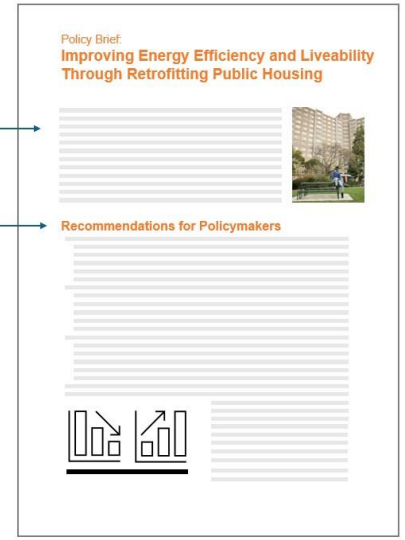
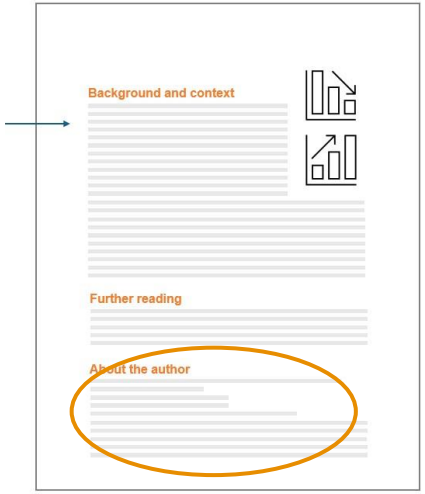
Email: peter.holzer@building-research.at

The IEA Energy in Buildings and Communities Programme is an international energy research and innovation programme in the buildings and communities field. It enables collaborative research and development projects among its 26 member countries. The programme provides high quality scientific reports and summary information for policy makers.

Visit: www.iea-ebc.org.





Communication tools and tips

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General tips:

- Use language tools in Microsoft Word
- Read your brief aloud
- Test your writing with non-Annex and non-academic people
- Use culturally sensitive language
- Use AI tools to test out different ‘voices’

Communication tools and tips

Visuals are an effective way to replace words.

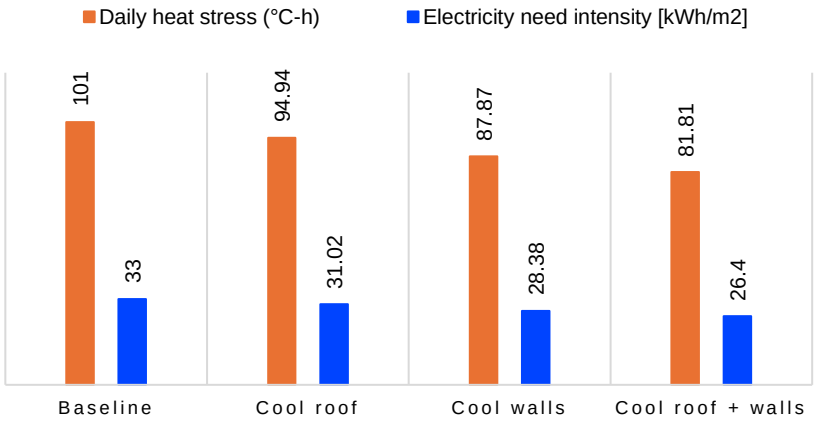
They speak to visual people and can cross boundaries.

TIPS

- Bar graphs are preferable to data tables (see examples)
- Photographs can make documents more powerful
- Include captions for photos and other visuals that explain the content to the reader.
- Use high quality images, especially if you expect your document to be printed.

Table 3: Reductions in daily thermal stress in a heat wave without air conditioning, annual HVAC energy use, and annual HVAC carbon emission after application of cool envelope materials to a single-family home in Los Angeles, California circa 2050 [21]:

KPI	Baseline	Reduction from cool roof[f]	Reduction from cool wall[g]	Reduction from cool roof + cool wall[f,g]
Daily heat stress[a] [°C·h]	101	6%	13%	19%
Annual HVAC electricity need intensity[b] [kWh/m²]	33	6%	14%	20%
Annual HVAC heating need intensity[c] [kWh/m²]	27	-1%	-4%	-6%
Annual HVAC primary energy intensity[d] [kWh/m²]	98	4%	8%	12%
Annual HVAC carbon emissionintensi-ty[e] [kg CO_2e/m²]	15.1	3%	6%	9%



Communication tools and tips

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Asked to present your work?

Do	Don't
✓ Keep text to a minimum. ✓ Use large text: 24 point or larger. ✓ Have high contrast between the text and background. ✓ Use graphics and visuals that illustrate the concepts. ✓ Speak with enthusiasm and passion.	✗ Present a written Word or PDF document projected onto a screen to read – way too much text. ✗ Use too much text per slide. If your audience is reading, they won't be listening to you talk. ✗ Read your slides word for word. ✗ Speak in monotone.

Communication tools and tips

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Too many colours

X

√

Colours in presentations	Colours in presentations
• Not too colourful • Many colours > not serious • Emphasise important information • Contrast background and font	• Not too colourful • Many colours > not serious • Emphasise important information • Contrast background and font

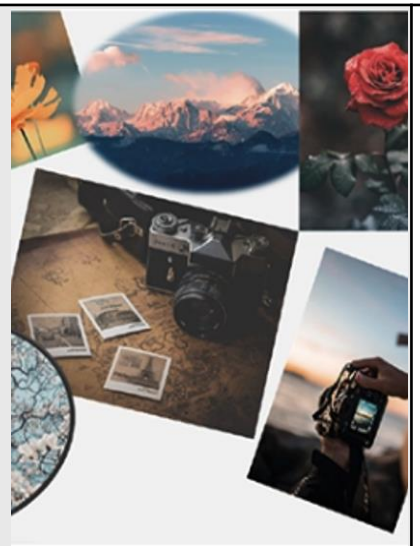
Inspired and adapted from: https://slidelizard.com/en/blog/bad-presentations

Communication tools and tips

Too many images

X

- Illustrate something
- Add variety
- Too many can distract
- fit content



√

- Illustrate something
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Inspired and adapted from: https://slidelizard.com/en/blog/bad-presentations

Communication tools and tips

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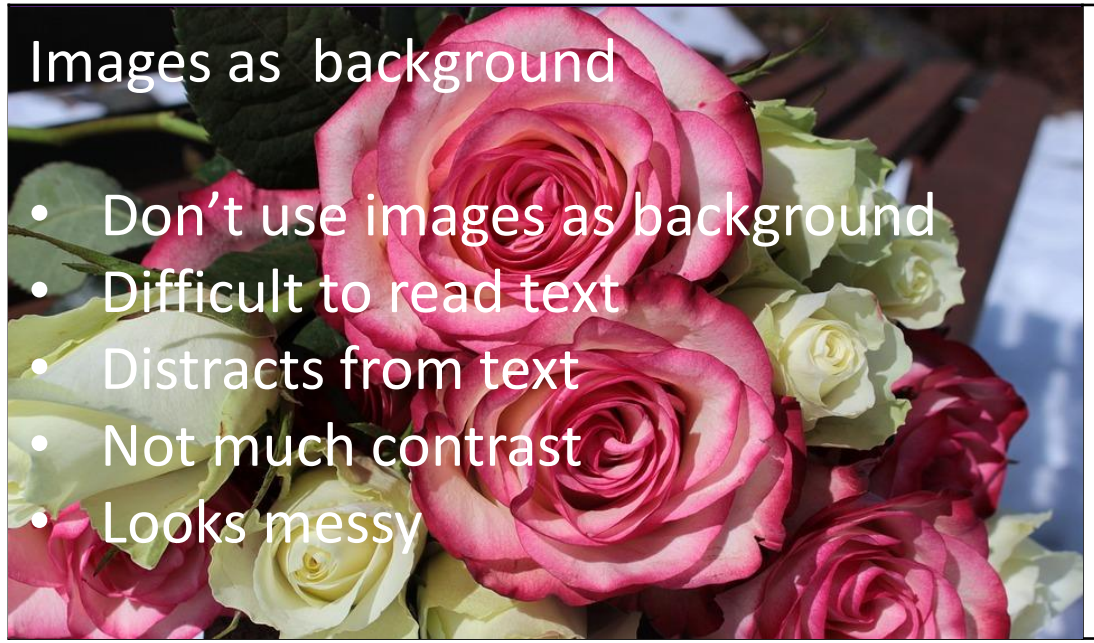
Use of images

X

Images as background

- Don’t use images as background
- Difficult to read text
- Distracts from text
- Not much contrast
- Looks messy



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Communication tools and tips

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Font choice

X

√

Fonts	Fonts
• Many different fonts look messy • **Max 2 different fonts** • LEGIBLE AT LONG DISTANCES • *Script*, *italic* and *decorative* fonts > slow to read • Should be avoided	• Many different fonts look messy • Max 2 different fonts • Legible at long distances • Script, italic and decorative fonts > slow to read • Should be avoided

Inspired and adapted from: https://slidelizard.com/en/blog/bad-presentations

Communication tools and tips

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Presenting

X

√

Common mistakes in presentations

- In presentations you should not avoid eye contact with your audience
- You should never speak incoherently, and you should not speak too fast. Avoid this by taking short pauses to collect yourself.
- You should not use too many colours in our presentation because it doesn't look serious.
- Avoid too many text on your presentation and never write entire sentences.
- You should not use images as background because the text will be difficult to read then
- You should speak free instead of speaking aloud
- You should not read the text from the slides because your audience can read for themselves

Common mistakes in presentations

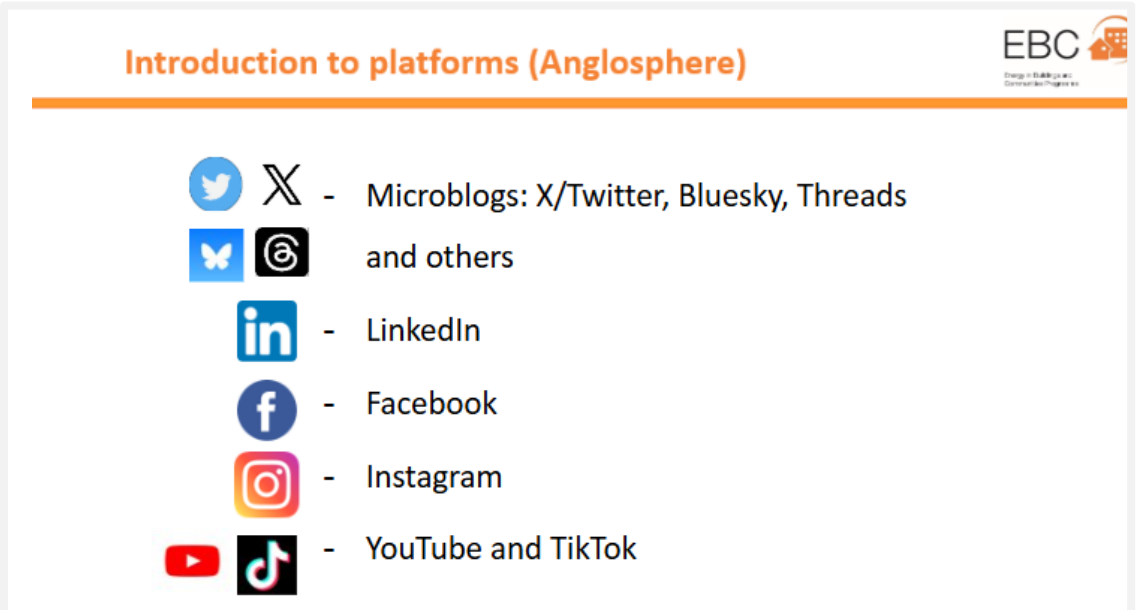
- Avoid eye contact
- Speak incoherently
- Too many colours
- Too much text and too small
- Images as background

Inspired and adapted from: https://slidelizard.com/en/blog/bad-presentations

Next steps: specialised modules

Deep dive modules that will support you with specific further communication of the Annex outcomes:

- Module 3: focus on Government and Industry
- Module 4: focus on the Public and the Media
- Module 5: use Social Media strategically to build your profile and increase the influence of your research



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Thank you