



# ESA-ESPI Study on Space for Climate

## Results and Conclusions

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# Joint ESA-ESPI Study

## 1. Climate Policy Mapping

*Analyzing ESA Member States Climate Policies*

## 2. Policy Impact Assessment

*Tracking references to ESA Climate Change Initiative (CCI) in adaptation Policies*

## 3. Policy Impact Considerations

*How to increase the use of space-based data in the climate policymaking process?*

# Climate Policy Landscaping

Country	Reference to Space	Reference to ESA
Austria	✓	x
Belgium	✓	✓
Czech Republic	✓	✓
Denmark	✓	x
Estonia	✓	✓
Finland	✓	x
France	✓	✓
Greece	✓	✓
Germany	✓	✓
Hungary	✓	✓
Ireland	✓	✓
Italy	✓	✓
Luxembourg	✓	x
Netherlands	✓	✓
Norway	✓	✓
Poland	✓	✓
Portugal	✓	✓
Romania	✓	x
Spain	✓	✓
Sweden	✓	✓
Switzerland	✓	✓
UK	✓	✓

- **All ESA Member States have references to space in their climate policies**
- Out of the 538 policies identified by ESPI, **186 have references to space**, which accounts for 34.57% of all policy documents.
  - Data sources
  - Mentions of Geographic Information Systems (GIS)
  - Recognition of the important role of space for monitoring climate change
  - Participation in national and international organisations, as well as cooperation with national space agencies
  - Policy measures to fill a knowledge gap

# Blocking points in integrating space-based data in climate policies

Policymaking and scientific communities rarely interact

Policymakers require actionable information and do not use raw data

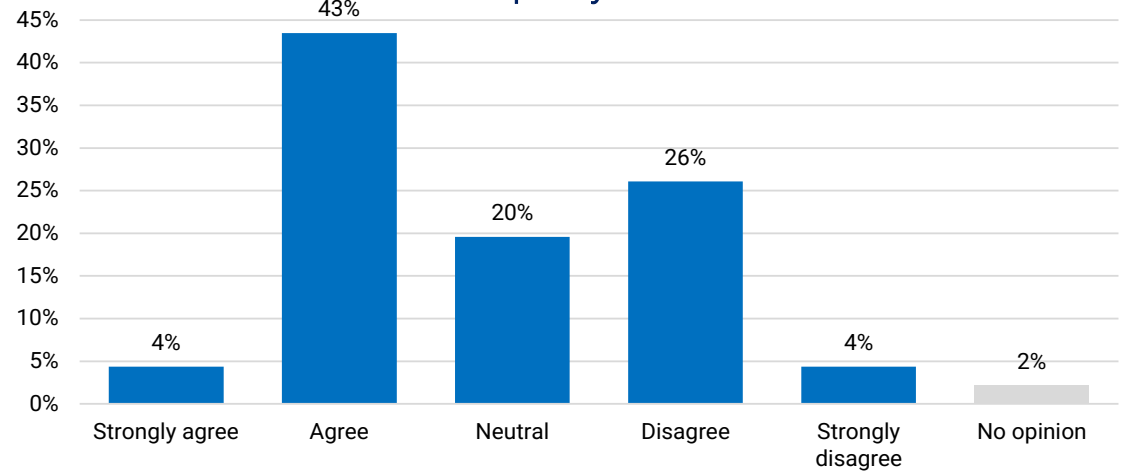
References to space depend on the people involved in the policymaking process and at what point

References to space are more present in older policy documents

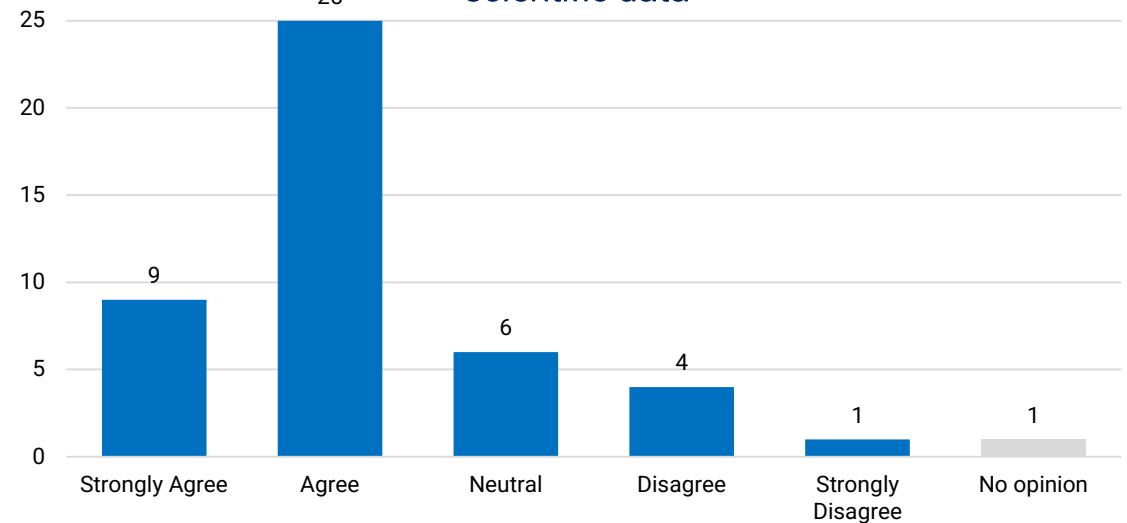
The scientific community playing a role in the elaboration of climate policies and calling for the inclusion of space-based data may be relatively small

# Perceptions of the Science to Policy Divide

Respondents' perception of a disconnect between science and policy

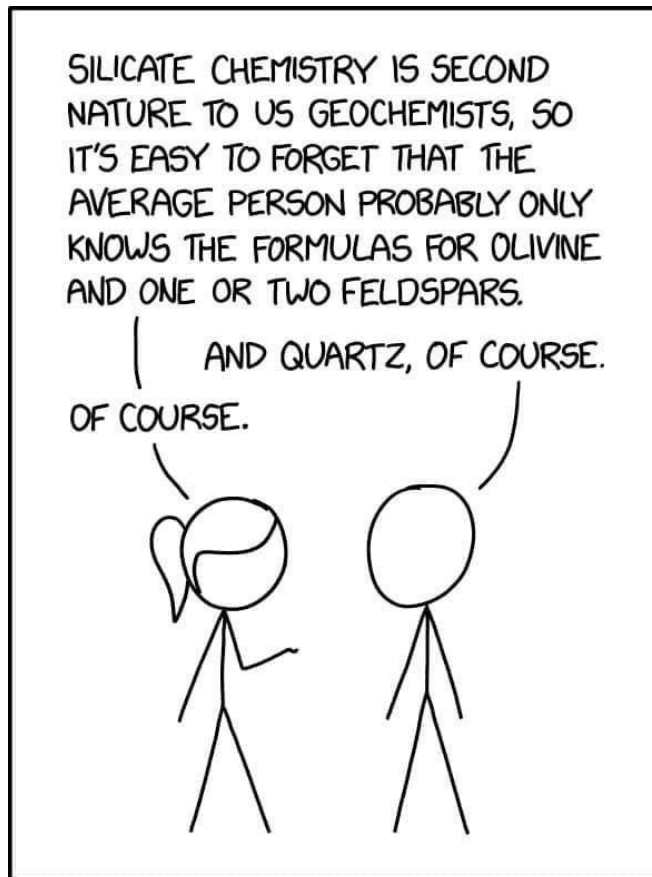


Respondents' perceptions on policymakers' difficulty understanding scientific data



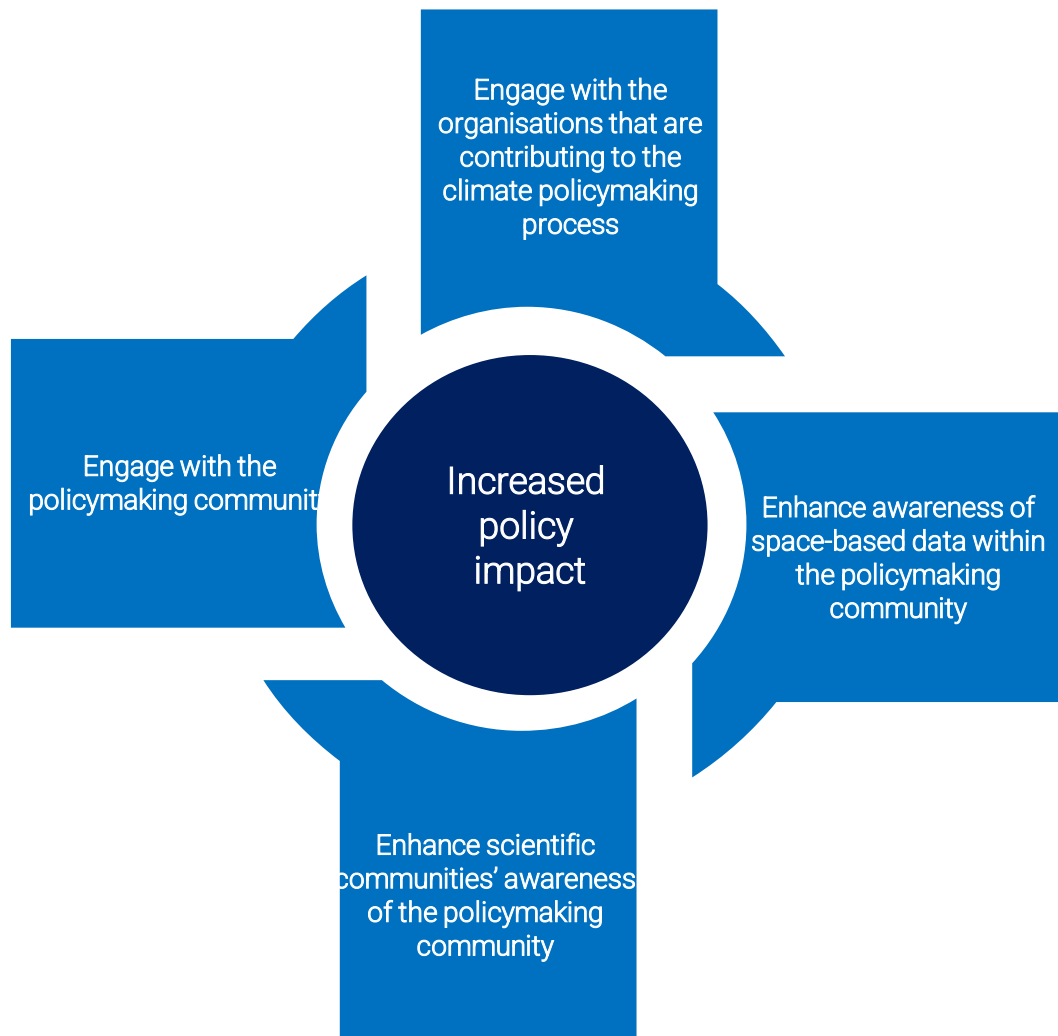
## Bridging the science to policy divide

- The importance of **science communication**:
  - Complex nature of scientific information
  - Policymakers' academic backgrounds
  - Affective and emotional aspects in communication
  - Role of social media in science communication
- **70% of survey respondents** would be interested in receiving explanations of climate data in non-technical language
- **52% of survey respondents** indicated being interested in a science-to-policy workshop
- **74% of survey respondents** are interested in receiving briefs about policy relevant peer-reviewed articles



EVEN WHEN THEY'RE TRYING TO COMPENSATE FOR IT, EXPERTS IN ANYTHING WILDLY OVERESTIMATE THE AVERAGE PERSON'S FAMILIARITY WITH THEIR FIELD.

# How to bridge the gap between science and policy?



The importance of engaging with different communities

## e.g., National Inventory Agencies

- Essential actors to increase the use of space-based data in climate policies
- Submission of national emission reports to UNFCCC
- Widely cited in national climate policies and report

# Thank you!

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