

KYSELYLOMAKE: FSD3325 EUROOPPALAISTEN ILMASTOPALVELUIDEN KÄYTTÄJÄKYSELY (EU-MACS) 2017

QUESTIONNAIRE: FSD3325 EUROPEAN CLIMATE SERVICES USER SURVEY (EU-MACS) 2017

Tämä kyselylomake on osa yllä mainittua Yhteiskuntatieteelliseen tietoaarkistoon arkistoitua tutkimusaineistoa.

Kyselylomaketta hyödyntävien tulee viitata siihen asianmukaisesti lähdeviitteellä.

Lisätiedot: <http://www.fsd.uta.fi/>

This questionnaire forms a part of the above mentioned dataset, archived at the Finnish Social Science Data Archive.

If the questionnaire is used or referred to in any way, the source must be acknowledged by means of an appropriate bibliographic citation.

More information: <http://www.fsd.uta.fi/>

Detta frågeformulär utgör en del av den ovannämnda datamängden, arkiverad på Finlands samhällsvetenskapliga dataarkiv.

Om frågeformuläret är utnyttjat eller refererat till måste källan anges i form av bibliografisk referens.

Mer information: <http://www.fsd.uta.fi/>

ANNEX 1 – SURVEY

Questionnaire on Barriers and Enabling Conditions on the European Market for Climate Services

This survey aims at identifying barriers in the European market for climate services. According to the IPCC, barriers are obstacles to reaching a certain potential – they make a situation more difficult than it needs to be. In addition, we aim to identify enhancements that enable innovations in order to improve development and use of climate services.

The survey addresses both providers and users of climate services. It does not focus on specific sectors or types of climate services and it does not distinguish for which purposes climate services are provided or used.

The survey is divided into three sections. Questions in the first section address you and your organisation, the second part addresses the barriers and enabling innovations, and the last section focuses on identifying reasons for non-use of climate services.

We do not ask for any personal information. Participation will be completely anonymous. The replies will be stored in an anonymized way, in a password protected storage capacity.

For more information see: <http://eu-macs.eu> <http://eu-macs.eu/>

In case of questions about the survey, please email joerg.cortekar@hzg.de

We thank you for your participation and support of EU-MACS on behalf of the whole EU-MACS consortium.

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A. Who is providing / using climate services?

In this first section of the survey we would like to learn more about you as a provider or user of climate services.

1. I am / I work for an organisation that is

Providing climate services (please also tick this box if you are providing and using climate services)

Using climate services only.

→ if 'provider' then continue with Q2

→ if 'user only' then continue with Q18

2. Please specify the type of organisation you work for:

National Weather Service (or a direct subsidiary)

University or research institute

Private business

Public Climate Service Centre (not attached to National Weather Service)

Non-profit organisation

Industry or professional body

Public administration / politics

Other:

3. To better understand where specific barriers occur, please position your organisation in the value chain of climate services.

Data collection

High-performance computing

Model development

Modelling and re-analysis

Climate information and knowledge

Regional downscaling

Impact modelling (incl. socio-economic impacts)

Consultancy services (translation layer)

National government / administration

Regional / federal government / administration

Local government / administration

Civil society, e.g. foundations, associations

International corporations

SME

Other:

4. In which country (or countries) is your organisation located?

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Austria | <input type="checkbox"/> Belgium | <input type="checkbox"/> Bulgaria |
| <input type="checkbox"/> Croatia | <input type="checkbox"/> Cyprus | <input type="checkbox"/> Czech Republic |
| <input type="checkbox"/> Denmark | <input type="checkbox"/> Estonia | <input type="checkbox"/> Finland |
| <input type="checkbox"/> Germany | <input type="checkbox"/> Greece | <input type="checkbox"/> Hungary |
| <input type="checkbox"/> Ireland | <input type="checkbox"/> Italy | <input type="checkbox"/> Latvia |
| <input type="checkbox"/> Lithuania | <input type="checkbox"/> Luxembourg | <input type="checkbox"/> Malta |
| <input type="checkbox"/> The Netherlands | <input type="checkbox"/> Poland | <input type="checkbox"/> Portugal |
| <input type="checkbox"/> Romania | <input type="checkbox"/> Slovakia | <input type="checkbox"/> Slovenia |
| <input type="checkbox"/> Spain | <input type="checkbox"/> Sweden | <input type="checkbox"/> United Kingdom |
| <input type="checkbox"/> other, where: | | |

5. In which city are you located?

6. For what sector(s) do you mainly provide climate services? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Water (excl. water way management and water infrastructures) |
| <input type="checkbox"/> Forestry | <input type="checkbox"/> Energy (excl. grids) |
| <input type="checkbox"/> (Critical) Infrastructures (incl. energy and water supply, and telecommunication but excl. roads, rails and waterways) | <input type="checkbox"/> Transport and logistics (incl. land, water and air) |
| <input type="checkbox"/> Tourism | <input type="checkbox"/> Building and construction |
| <input type="checkbox"/> Finance and (re-) insurance | <input type="checkbox"/> Catastrophe management / Disaster Risk Reduction |
| <input type="checkbox"/> Health care incl. pharmaceuticals | <input type="checkbox"/> Waste management |
| <input type="checkbox"/> Biodiversity and nature conservation | <input type="checkbox"/> Education and training |
| <input type="checkbox"/> Spatial / urban planning | <input type="checkbox"/> Industry and Trade |
| <input type="checkbox"/> Ecosystems management, incl. soil | <input type="checkbox"/> Mining / Extraction (incl. oil, gas, coal) |
| <input type="checkbox"/> Other: | |

7. Are you engaged in or connected to one or more of the following networks? (Check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> ERA-NET for Climate Services | <input type="checkbox"/> Climate Services Partnership | <input type="checkbox"/> Global Framework for Climate Services (GFCS) |
| <input type="checkbox"/> Copernicus Climate Change Service (C3S) | <input type="checkbox"/> Climate Knowledge Brokers | <input type="checkbox"/> World Climate Research Programme |
| <input type="checkbox"/> EUMETNET | <input type="checkbox"/> Water JPI | <input type="checkbox"/> Future Earth |
| <input type="checkbox"/> ECRA | <input type="checkbox"/> JPI Oceans | <input type="checkbox"/> Belmont Forum |
| <input type="checkbox"/> CORDEX | <input type="checkbox"/> JPI Climate | <input type="checkbox"/> EIT Climate KIC |
| <input type="checkbox"/> CMIP | <input type="checkbox"/> JPI Urban Europe | <input type="checkbox"/> GCOS |
| <input type="checkbox"/> GEOSS | <input type="checkbox"/> JPI FACCE | <input type="checkbox"/> Others: |

8. Does your organisation operate a quality assurance process in relation to the supplied climate information?

- yes no

→ if 'yes' continue with Q8a

→ if 'no' continue with Q9

8a. Does this process include

- | | |
|---|---|
| <input type="checkbox"/> Statistical properties of datasets | <input type="checkbox"/> Declaration of the sources of the datasets (observation and/or model simulation) |
| <input type="checkbox"/> Declaration of post-processing steps (bias corrections, interpolation, etc.) | <input type="checkbox"/> A systematic production and maintenance of metadata per dataset |
| <input type="checkbox"/> Some kind of certification | |

8b. Do you provide meta-data on datasets and other information to (prospective) users?

- Upon request Standard practice Usually not

9. Do you offer advice and/or tools to users to evaluate the fitness-for-purpose of climate information?

- | | |
|--|---|
| <input type="checkbox"/> Yes | <input type="checkbox"/> Yes, but evaluation is a joint effort of provider and (prospective) user |
| <input type="checkbox"/> No, that is to say we do that in house, without involvement of the user | <input type="checkbox"/> No |

B. What kinds of barriers do you face in your activities related to climate services?

In this section we would like to learn about the barriers and enabling conditions you face when developing and providing climate services.

10. Over the past years, numerous different types of climate services have been developed. How would you classify the climate service product you will relate all subsequent questions to? (check what fits best)

- | | |
|--|--|
| <input type="checkbox"/> Advisory services, risk assessments and decision support tools | <input type="checkbox"/> Data management, incl. calibrated data sets, data archiving, data certification |
| <input type="checkbox"/> Measurements, incl. instruments and technologies for measurements and calibration | <input type="checkbox"/> Modelling, including climate, impacts and socio-economics |
| <input type="checkbox"/> Operations (collection and provision of raw data) | <input type="checkbox"/> Processed data, incl. re-analysis |
| <input type="checkbox"/> Publications, e.g. synthesis and assessments, guidance documents, manuals | <input type="checkbox"/> Capacity building / training |
| <input type="checkbox"/> Other: | |

11. What type(s) of climate data and information is needed for the selected service?

- | | |
|---|---|
| <input type="checkbox"/> Observational data | <input type="checkbox"/> Seasonal forecasts |
| <input type="checkbox"/> Climate projections and models | <input type="checkbox"/> Paleoclimatology |
| <input type="checkbox"/> Mapping and analysis tools | <input type="checkbox"/> Not applicable |

12. Please let us know, which economic barriers you have already faced in relation to the selected type of service. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Limited financial resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human capital (incl. number and proficiency of staff)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organisational setting, incl. established practices and routines, decision-making processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Added-value of climate services often unclear (differences between expected and actual costs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timeliness of development and provision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intellectual property rights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business model development (from prototyping to operationalization)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

13. Please let us know, which social barriers you have already faced. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Difficulties to involve different stakeholders (lack of social capital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulties to interact with other in-house expertise / other disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different cultural settings in science and application, incl. attitudes, priorities and expectations, 'language'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infrequent interaction between provider and user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

14. Please let us know, which technological and scientific barriers you have already faced. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Lack of appropriate technology / technological capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Missing standardization of information, incl. layout, terminology etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of scale (both, temporal and spatial) of relevant scientific or technical information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timeliness of development and provision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coupling of climate and impact models	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limited / incomplete understanding of target sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

15. Please let us know, which ethical barriers you have already faced. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Difficulties to describe data sources, methods used to develop services etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulties to provide meta information, strength and weaknesses / limitations of a service, uncertainties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cooperation between provider and user during service development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short-term relationship - missing trust between provider and user on reliability and quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

16. Please let us know, which legal / regulatory barriers you have already faced. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Reliance and / or dependence upon EU, national or regional policies and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unclear regulatory / legal requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

17. What innovations of the past years would you consider most relevant to overcome the indicated barriers?

Innovation	1	2	3	4	5	Not applicable
Improved high-performance computing capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved methodologies for science-stakeholder interactions, e.g. to foster two way dialogue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open data policies to increase accessibility of information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internal capacity building, e.g. setting up working groups, hiring / capacitating staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there any other important innovations that helped to overcome barriers in relation to your climate services activities?

18. Would you like to add another type of service?

yes

no

→ if 'yes' then continue with Q10 (and go through section B again; max. three times, then loops ends automatically)

→ if 'no' survey ends for providers.

→ Section A continues for users! (followed, if answer to Q1 is 'user')

19. Please specify the type of organisation you work for :

- | | | |
|--|--|--|
| <input type="checkbox"/> University or Research
Performing Organization | <input type="checkbox"/> Private business | <input type="checkbox"/> Non profit organisation |
| <input type="checkbox"/> Public administration / politics | <input type="checkbox"/> Industry or professional body | <input type="checkbox"/> Other: |

20. In which country (or countries) is your organisation located?

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Austria | <input type="checkbox"/> Belgium | <input type="checkbox"/> Bulgaria |
| <input type="checkbox"/> Croatia | <input type="checkbox"/> Cyprus | <input type="checkbox"/> Czech Republic |
| <input type="checkbox"/> Denmark | <input type="checkbox"/> Estonia | <input type="checkbox"/> Finland |
| <input type="checkbox"/> Germany | <input type="checkbox"/> Greece | <input type="checkbox"/> Hungary |
| <input type="checkbox"/> Ireland | <input type="checkbox"/> Italy | <input type="checkbox"/> Latvia |
| <input type="checkbox"/> Lithuania | <input type="checkbox"/> Luxembourg | <input type="checkbox"/> Malta |
| <input type="checkbox"/> The Netherlands | <input type="checkbox"/> Poland | <input type="checkbox"/> Portugal |
| <input type="checkbox"/> Romania | <input type="checkbox"/> Slovakia | <input type="checkbox"/> Slovenia |
| <input type="checkbox"/> Spain | <input type="checkbox"/> Sweden | <input type="checkbox"/> United Kingdom |
| <input type="checkbox"/> other, where: | | |

21. In which city is your organisation located?

22. In which sector(s) do you work? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Water (excl. water way management and water infrastructures) |
| <input type="checkbox"/> Forestry | <input type="checkbox"/> Energy (excl. grids) |
| <input type="checkbox"/> (Critical) Infrastructures (incl. energy and water supply, and telecommunication but excl. roads, rails and waterways) | <input type="checkbox"/> Transport and logistics (incl. land, water and air) |
| <input type="checkbox"/> Tourism | <input type="checkbox"/> Building and construction |
| <input type="checkbox"/> Finance and (re-) insurance | <input type="checkbox"/> Catastrophe management / Disaster Risk Reduction |
| <input type="checkbox"/> Health care incl. pharmaceuticals | <input type="checkbox"/> Waste management |
| <input type="checkbox"/> Biodiversity and nature conservation | <input type="checkbox"/> Education and training |
| <input type="checkbox"/> Spatial / urban planning | <input type="checkbox"/> Industry and Trade |
| <input type="checkbox"/> Ecosystems management, incl. soil | <input type="checkbox"/> Mining / Extraction (incl. oil, gas, coal) |
| <input type="checkbox"/> Other: | |

23. Are you engaged in or connected to one or more of the following networks? (Check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> ERA-NET for Climate Services | <input type="checkbox"/> Climate Services Partnership | <input type="checkbox"/> Global Framework for Climate Services (GFCS) |
| <input type="checkbox"/> Copernicus Climate Change Service (C3S) | <input type="checkbox"/> Climate Knowledge Brokers | <input type="checkbox"/> World Climate Research Programme |
| <input type="checkbox"/> EUMETNET | <input type="checkbox"/> Water JPI | <input type="checkbox"/> Future Earth |
| <input type="checkbox"/> ECRA | <input type="checkbox"/> JPI Oceans | <input type="checkbox"/> Belmont Forum |
| <input type="checkbox"/> CORDEX | <input type="checkbox"/> JPI Climate | <input type="checkbox"/> EIT Climate KIC |
| <input type="checkbox"/> CMIP | <input type="checkbox"/> JPI Urban Europe | <input type="checkbox"/> GCOS |
| <input type="checkbox"/> GEOSS | <input type="checkbox"/> JPI FACCE | <input type="checkbox"/> Others: |

Would you like to add another network or initiative?

25. Do you use climate services in your work?

yes

no

→ if 'yes' continue with Q26

→ if 'no' continue with Q40.

26. What, in your opinion, does 'quality' refer to in your choice of climate service providers, and how would you rate it in terms of importance from 1 (low) to 5 (high)?

Quality characteristics	1	2	3	4	5	Not considered
The usefulness of the information in our own processes (better results or output)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The serviceability of the provider regarding information transfer, applicability, and further advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The fitness-for-purpose of the provided data for joining with our own data and information (e.g. spatial and temporal resolution, statistical properties, proximity to variables of interest, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The cost of acquisition and use of the climate services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. Did the acquisition of climate services entail:

No purchase cost

Modest purchase cost

Significant purchase cost

28. Did the use of climate services entail:

- | | | |
|---|--|---|
| <input type="checkbox"/> No or no notable extra resource use | <input type="checkbox"/> Moderate, yet notable extra resource use for HR | <input type="checkbox"/> Moderate, yet notable extra resource use for equipment/ software |
| <input type="checkbox"/> Moderate, yet notable extra resource use for HR and equipment / software | <input type="checkbox"/> Significant extra resource use for HR | <input type="checkbox"/> Significant extra resource use for equipment/ software |
| <input type="checkbox"/> Significant extra resource use for HR and equipment / software | | |

29. Would your organisation see benefits in joint acquisition (and post-processing) of climate services (e.g. with other organisations in the same area, with others from the same sector, etc.)?

- | | |
|---|--|
| <input type="checkbox"/> No, because our climate services acquisition happens irregularly | <input type="checkbox"/> Yes, with organisations from same area |
| <input type="checkbox"/> No, because it mixes with confidential or commercially sensitive information | <input type="checkbox"/> Yes, with organisations from same sector |
| <input type="checkbox"/> No, because our climate service needs are quite specific | <input type="checkbox"/> Yes, in order to share costs / save resource use |
| | <input type="checkbox"/> Yes, in order to better exploit the potential of climate services |

B. What kinds of barriers do you face in your activities related to climate services?

In this section we would like to learn about the barriers and enabling conditions you face when using climate services.

Would you like to add anything?

34.

Please let us know, which social barriers you have already faced. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Difficulties to involve different stakeholders (lack of social capital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulties to interact with other in-house expertise / other disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different cultural settings in science and application, incl. attitudes, priorities and expectations, 'language'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infrequent interaction between provider and user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

35. Please let us know, which technological and scientific barriers you have already faced. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Lack of appropriate technology / technological capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulties to find suitable services (availability)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Difficulties to access suitable services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Missing standardization of information, incl. layout, terminology etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of scale (both, temporal and spatial) relevant scientific or technical information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timeliness of development and provision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inappropriate format of available services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

36. Please let us know, which ethical barriers you have already faced. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Missing transparency of data sources, methods used to develop services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completeness of information incl. metadata, strength and weaknesses / limitations of a service, uncertainties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cooperation between provider and user during service development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Short-term relationship - missing trust between provider and user on reliability and quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

37. Please let us know, which legal / regulatory barriers you have already faced. Please rate their importance from 1 (low) to 5 (high).

Barriers	1	2	3	4	5	Not applicable
Reliance and / or dependence upon EU, national or regional policies and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unclear regulatory / legal requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

38. What innovations of the past years would you consider most relevant to overcome the indicated barriers? Please rate their importance from 1 (low) to 5 (high)

Innovation	1	2	3	4	5	Not applicable
Improved high-performance computing capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved methodologies for science-stakeholder interactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Capacity-building opportunities and trainings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open data policies to increase accessibility of information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Policy reforms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internal capacity building, e.g. setting up working groups, hiring / capacitating staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guidance documents, manuals, laymans reports etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Would you like to add anything?

Are there other reasons for not using climate services?

41. What climate services that are not yet available would help you to fulfil your job?

42. In which way could services already available be improved to better fit your purposes?

You have completed the survey. Thank you very much for your participation.

You can now close the window.