## Climate-ADAPT use case 17 — Research organisation: UK Meteorological Office

The research perspective: assessing the status of EU climate projections from Climate-ADAPT for Copernicus Climate Services and EU-funded Horizon 2020 projects

**Climate-ADAPT features used**: database; EU policy (sector page); countries, regions, cities (country pages and interactive Map Viewer); news; events

Sector: adaptation in general/research

Governance level: national

Biogeographical region: Atlantic

Macro-region: North West Europe

Policy stage: policy development

## The challenge

The UK Meterological Office (Met Office) needed to get a quick and comprehensive overview of the state of the art of national climate projections in Europe's countries and regions for its Copernicus Climate Change Service (C3S) project 34a\_Lot3 (Copernicus Roadmap for European Climate Projections (77)) and its Horizon 2020 proposal on a European Climate Prediction system (EUCP), which it led (and won) in 2017.

The UK Met Office was fully aware of the wealth of information on climate scenarios that was available in the UK (from UKCIP work until 2012, the Climate Ready Support Service from the Environment Agency

2012-2015 and the UK government including the UK-wide climate projections (UKCP09) (<sup>78</sup>)). However, the Met Office needed information on the status of national climate projections in other European countries to determine what type of climate services are needed.

## The approach

To find information for its EU-funded research projects, the UK Met Office used the Climate-ADAPT country feature extensively, accessing individual country pages using the quick links on the home page. It also used the interactive Map Viewer (79) and several of the thematic maps with links to relevant reports to find the information for each country. These features allowed it to quickly gain an overview of activities such as climate projections, climate change risk assessments and national adaptation programmes in countries around Europe. Because of the fact sheet character of the pages, the information presented is moderately comparable across all countries. The 'Download page as PDF' functionality at the bottom of each country page allowed the information to be exported for further or future use.

The Met Office searched the database using filters, for example 'data type', to find the information it needed. It also used the filters 'network/organisations' and 'network/international organisations' to find stakeholders and make useful links to relevant organisations. Finally, the Met Office looked at information available on Climate-ADAPT in the form of a considerable number of sector pages on another Copernicus project, SECTEUR (80), which deals with understanding the needs of sectoral users in relation to climate data (agriculture/forestry, coastal areas, health, infrastructure, insurance and tourism).

 $<sup>\</sup>ensuremath{(^{77})} \quad https://climate.copernicus.eu/copernicus-roadmap-european-climate-projections$ 

<sup>(&</sup>lt;sup>78</sup>) http://ukclimateprojections.metoffice.gov.uk

<sup>(79)</sup> http://climate-adapt.eea.europa.eu/countries-regions/countries

<sup>(80)</sup> https://climate.copernicus.eu/secteur; http://www.the-iea.org/projects/secteur

The information extracted from Climate-ADAPT informed the UK Met Office's ongoing Copernicus project and has also been useful in a number of Horizon 2020 projects, for example Climateurope (81). The Met Office is now more confident that it has found the most up-to-date national projections.

The UK Met Office used the information harvested from Climate-ADAPT primarily for research purposes to synthesise the information into a description of the state of play of climate projections in Europe. The information gathered from Climate-ADAPT was also used in participatory processes and for knowledge-sharing, for example in stakeholder consultations for the upcoming UKCP18 projections and in discussions with organisations involved in Copernicus and Horizon 2020 climate projects.

Where appropriate, the Met Office recommends Climate-ADAPT to colleagues, customers and stakeholders, because the information has been checked by experts and is considered to be trustworthy and accurate. This enabled the Met Office to gain an overview quickly, without having to regularly refer back to the primary literature.

## **Future plans**

The UK Met Office is continuing to work on further Horizon 2020 and C3S projects relevant to European adaptation needs. The UK Met Office will continue to consult Climate-ADAPT as needed, to get a quick overview of the status of EU adaptation policy and knowledge development.

UK Met Office colleagues are planning to submit the key results of the SECTEUR project to the Climate-ADAPT database, so that they can be shared with other experts in Europe. This is because they are experienced Climate-ADAPT users and are aware of the added value of making research information available at EU level.

As both a research organisation and an information provider (i.e. an organisation that submits items) the UK Met Office would like to find the following additional features on Climate-ADAPT:

- a) Auto-generated comparisons between selection of countries/projects. It would be very useful from a research perspective if users could auto-generate comparisons between a selection of countries on their status of adaptation to climate change (e.g. by using traffic-light grading to produce a searchable mini-database and by using artificial intelligence).
- b) Closer links with other European Commission services and initiatives, for example C3S and Horizon 2020. It would be very helpful to allow users to benefit from enhanced links between Climate-ADAPT and C3S (82) and the Copernicus Atmosphere Monitoring Service (83). These services have dedicated science and media outlets as well as staff supporting them. Some of the other Copernicus components, such as the Copernicus Emergency Management Service (84) and mapping, etc., could also be relevant.

<sup>(81)</sup> https://www.climateurope.eu

<sup>(82)</sup> http://climate.copernicus.eu

<sup>(83)</sup> http://atmosphere.copernicus.eu

<sup>(84)</sup> http://emergency.copernicus.eu