

MAXIMISING THE IMPACT OF SCIENCE ON CLIMATE ACTION IN BELGIUM



Wake-up call

The dramatic floods in October in the Valencia region in Spain, following many other climate extremes affecting people in Europe and worldwide, shed light on the reality of climate change and the lack of preparedness of our societies. Well-established attribution research demonstrates that such climate extremes are more likely because of man-made climate change (see ["World Weather Attribution" initiative](#)). The severe human and economic consequences of such events in a world at (almost) +1.5°C highlight the double challenge that we face: (1) the need to better prepare for the current and future impacts of climate change; (2) the need to rapidly and deeply decarbonize our economies.

At the same time, in preparation of the annual climate conference (COP), the United Nations Environment Programme (UNEP) recently published the annual update of its ['Emissions gap report'](#), to come to the same conclusion as in previous years: the world is still not on track to limit global warming to 1.5 to 2°C, as we committed to do by signing the Paris Agreement. In its 2024 edition, the UNEP report points out that greenhouse gas emissions were still rising in 2023. The emission gap (the difference between the projected emissions and the emission trajectory required to limit global warming to 1.5 – 2°C) projected for 2030 and 2035, based on the reduction pledges made by the parties to the Paris agreement in their national contributions, remains substantial. Even if some of these contributions have been strengthened, leading to a slight reduction of the emission gap, we are still a long way from achieving the targets. According to the emission scenarios, ranging from the most optimistic (full implementation of the reduction pledges) to the most pessimistic (continuation of current policies), peak warming over the twenty-first century will reach and exceed 2°C, or even 3°C if current policies remain.

Such warming levels are incompatible with a stable and prosperous future, with a great risk that impacts will multiply and intensify, and that tipping points will be reached. These tipping points are dreaded because they are synonymous with abrupt change and profound or irreversible disruption to physical, biological and human systems.

The house is on fire and we're looking the other way. Humanity is procrastinating in the face of the predicted disaster. Yet the solutions exist, and are within our grasp, provided we take decisive action to implement them.

More than ever, on the road to a zero-carbon, resilient society, science must be our compass. Science can provide us with the solutions we need, whether they are technological, economic, social or behavioural in nature. Furthermore, science enables us to set the right questions, provides objectivity and context, and brings nuance and rationality for scientific-sound decision-making and

societal will.

In this context, the Belgian Climate Centre continues to centralize and to improve the access to research data, results and expertise from the Belgian scientific community by acting as central access point for policy makers, the public and private sectors and the media. To this end, a Belgian climate-related data portal and dashboard are upcoming.

To bring the climate-related research and expertise in Belgium closer to decision-makers, medias and other end-users, our catalogue of climate scientific experts, currently features 443 experts, and will continue to grow to provide a unique gateway to the diversity of climate researchers in Belgium.

Finally, our full program of thematic events, to connect researchers, experts and decision makers from public and private sector will be available in our next newsletters and in the 'events' section on our [website](#).

Stay tuned!



Etienne Hanon
Science & Policy Lead

The Belgian Climate Centre at COP29

The Belgian Climate Centre participated in COP29 in Baku to stay informed about the latest developments in international climate negotiations and to engage in discussions, exchanging ideas and insights with similar organizations globally.

COP29 sparked high expectations, as the world anticipated significant advancements in tackling the climate crisis. Following intense negotiations, two major decisions were taken by negotiators in Baku:

1. Developed nations [agreed](#) to channel at least USD 300 billion per year by 2035 for developing countries to support their efforts to deal with climate change

This New collective quantified goal on climate finance (NCQG) will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources. While developed countries will take the lead, developing countries are also encouraged to make contributions on a voluntary basis. The Baku conclusions state that climate financing must be “balanced” between emission reduction and adaptation policies. In addition, priority must be given to the least developed countries and the poorest small island states.

The negotiators also included in the final document a call to raise USD 1.3 trillion each year from a wide range of sources, including private investment, by 2035 – but this call does not represent an obligation for countries that are parties to the Convention.

Although presented as a significant step forward in climate finance negotiations, the agreed NCQG is considered insufficient by many observers (even according [estimates](#) of the UNFCCC Standing Committee on Finance, USD 455–584 billion per year of total costed needs reported in nationally determined contributions of developing country Parties), and it has been criticised by developing countries and civil society.

2. Countries have agreed on the final building blocks that set out how carbon markets will operate under the Paris Agreement.

The agreed text on country-to-country trading under [Article 6.2](#) of the Paris Agreement clarifies how countries will authorize the trade of carbon credits and how registries tracking this will operate. It also sets up a transparent process of technical reviews to ensure environmental integrity of the credits.

Countries also agreed on standards and rules for the centralised carbon market under the UN under

[Article 6.4](#) of the Paris Agreement, also known as the Paris Agreement Crediting Mechanism. The Mechanism has a Supervisory Body that is now tasked to get the market up and running considering the best available science.

- You can find all decisions taken at COP29 here: <https://unfccc.int/cop29/auvs>

Much remains to be accomplished at COP30 in Brazil next year, and we hope that the upcoming conference will be guided by climate science to ensure real progress is made.



United Nations
Climate Change



COP29
Baku
Azerbaijan

The Belgian Climate Centre contributed to new State of Climate Services report from the World Meteorological Organization



As climate change impacts intensify, the need for the provision and use of climate data, information, and knowledge or so-called climate services, to support mitigation, adaptation and increase resilience has never been higher. In the past five years, there has been progress in provision of this climate information for decision-making, but big gaps remain and investment lags far behind needs, according to a new multi-agency flagship report produced by the [World Meteorological Organization](#).

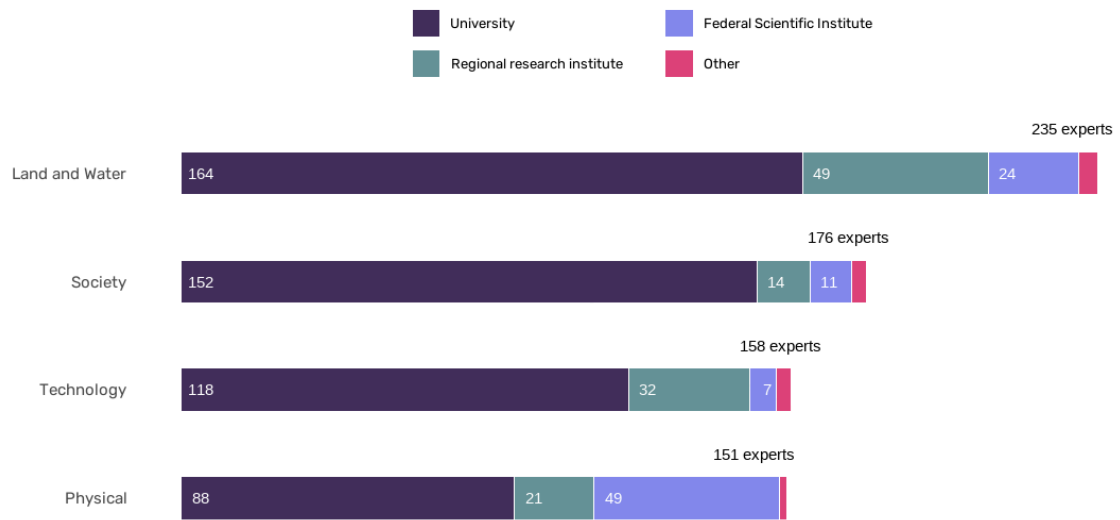
For this year's edition of the report, the Belgian Climate Centre provided the Belgian case study explaining how we centralise and improve the access to data and information by acting as central access point for our stakeholders.

Read the full report [here](#).

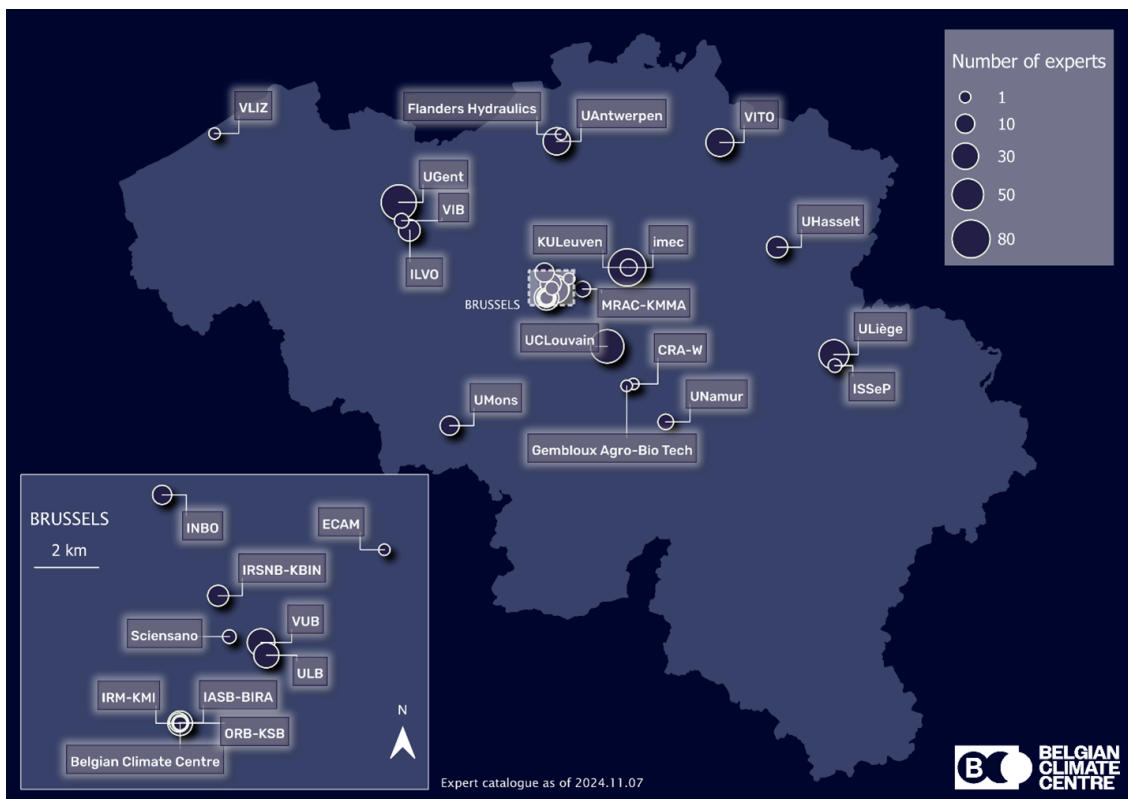
The BCC Expert Catalogue continues to expand!

Our [Expert Catalogue](#) is growing and now features 443 well-established scientific experts who are actively engaged in climate research in Belgium. What have we noticed so far?

1. Most of the experts in our catalogue are affiliated to Belgian universities and do research on subjects related to land and water (experts could select multiple options in the survey).



2. The experts in our catalogue are affiliated to research institutions that operate all over Belgium.



Our Expert Catalogue was developed based on different rounds of targeted surveys and requests via our website. We know that there are more Belgian climate experts out there, so please help us make our Expert Catalogue as complete as possible!

If you are or you know a well-established scientific expert, active in climate-related research who would like to be added to the catalogue, contact us via this [contact form](#).

Belgian scientists in the media

- 16/10/2024 - "[L'équivalent de 4 ans d'émissions de gaz à effet de serre": la Terre a vécu 22 "sauts de CO2"](#)"

- 21/10/2024 - [Le réchauffement du climat alimente de plus en plus les incendies](#)
- 31/10/2024 - [Klimatoloog Rozemien De Troch na dodelijk noodweer in Spanje: "Klimaatverandering vormt existentiële bedreiging, maar er is een uitweg"](#)
- 13/11/2024 - [Quand l'été est pourri en Belgique, il fait très chaud en Grèce : "On l'a vu cet été mais c'est un motif qui se répète sur les 700 dernières années"](#)
- 12/11/2024 - [Klimaatwetenschapper Thiery over Bakoe-top: 'Zonder mondiale samenwerking zijn we verloren'](#)
- 23/11/2024 - [Waarom we blijven mikken op maximaal 1,5 graden opwarming, al lijkt dat onhaalbaar: 'Die grens blijft nuttig, ook als we ze overschrijden'](#)

Upcoming events

3 December 2024

[Staying the course: driving sustainability forward in a shifting geopolitical context](#) (European Environment Agency)

11 December 2024

[Speak Up Conference "Lost in Transition?"](#) (Interreg North Sea)

12 December 2024

[WEkEO Hackathon: Data-driven solutions to climate change](#)

23 January 2025

[Weather-related renewable energy modelling](#) (KMI-IRM)

20 February 2025

[Forum "Sustainable Food System"](#) (FRDO-CFDD)



Who is Belgian Climate Centre?

The Climate Centre has been created to lead scientific research at the highest level on climate and related economic and ecological issues.

It also serves as a contact point for organisations, policymakers and citizens for a wide range of climate-related services. The mission of the Belgian Climate Centre is to maximise the impact of science on climate mitigation and adaptation in Belgium to support an efficient and socially just transition.

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