

# African-European Climate Change and Sustainable Energy

Online Seminar Series



THE AFRICA-EU PARTNERSHIP  
LE PARTENARIAT AFRIQUE-UE



## Report

### African-European Climate Change & Sustainable Energy Online Seminar Series, 7-28 October 2021

#### About the online seminar series

The overall goal of the online seminar series was to strengthen the implementation and visibility of the activities and aims of the AU-EU R&I Partnership on Climate Change and Sustainable Energy. The seminars assisted to accelerate the uptake of innovative climate change solutions developed by European researchers in partnership with African counterparts and to deepen knowledge and facilitate exchange between the project coordinators and experts on climate change research between Africa and Europe. The online seminar series brought together more than 100 previous and future/interested African and European members of projects related to climate change (incl. EU funded, bilateral and national projects), as well as experts and stakeholders in the field of CCSE and delivered concrete actionable outcomes, from short to long term for both researchers as policy makers.

#### Background of the CCSE-partnership

Africa has become one of the most important strategic partners of the EU within the past years. One of the most pressing and urgent questions in this regard is how to make Research and Innovation (R&I) a driver for sustainable development in the cooperation between the two continents.

The **AU-EU Partnership on Climate Change and Sustainable Energy (CCSE)**<sup>1</sup>, adopted at the AU-EU Summit in 2017, is the second R&I partnership of the **AU-EU High Level Policy Dialogue (HLPD) on Science, Technology and Innovation**<sup>2</sup>. In a joint effort the African Union (AU) and

<sup>1</sup> [https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/europe-world/international-cooperation/eu-africa-cooperation/partnership-climate-change-and-sustainable-energy-ccse\\_en](https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/europe-world/international-cooperation/eu-africa-cooperation/partnership-climate-change-and-sustainable-energy-ccse_en)

<sup>2</sup> [https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/europe-world/international-cooperation/eu-africa-cooperation\\_en#au-eu-high-level-policy-dialogue-hlpd-on-science-technology-and-innovation](https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/europe-world/international-cooperation/eu-africa-cooperation_en#au-eu-high-level-policy-dialogue-hlpd-on-science-technology-and-innovation)

European Union (EU) Commission services, AU and EU Member States, supported by the Horizon 2020-funded Research and Innovation Network for Europe and Africa (RINEA) and thematic experts, designed a roadmap in support of renewable energy and energy efficiency initiatives as well as cross-cutting issues related to climate change and sustainable energy such as human capital development, capacity-building, open data and open access. Since then, over €100 million have been invested in projects in support of climate services, renewable energy and energy efficiency to support climate adaptation and mitigation efforts in various sectors for Africa and for the implementation of the Paris Agreement. This includes for e.g., the renewable energy flagship action [LEAP-RE](#), climate change activities such as [CONFER](#) | [Down2Earth](#) | [FOCUS-Africa](#) and seven new dedicated calls under the new [Horizon Europe Africa-Initiative](#).

## **Topic 1: The CCSE Partnership and how to organise mutually beneficial cooperation and multi-stakeholder approaches for impact**

7.10.2021, 11:00-12:00 CEST

The first session attracted a total of 25 participants and focused on the CCSE partnership, and in more detail the LEAP programme, as well as exploring the different types of multi-stakeholder partnerships from African and European perspective. What came across is that it remains a challenge to involve African funding agencies and actors. It was also stressed that although increasingly knowledge is becoming available on what is needed to organise mutually beneficial multi-stakeholder approaches it often still is learning by doing.

- The first speaker, **François Moisan (Agence Nationale de la Recherche)** introduced the CCSE partnership and focused on how the LEAP-RE programme was developed. The key objective of the programme is to build a long-term partnership between Europe and Africa on Research & Innovation in the field of renewable energy. In this programme 32 African partners are working together with 39 European partners. These partners work together in calls and projects across different thematic areas, mobilizing 150-200 research and innovation partners from Africa & Europe, where deemed relevant additional partnerships with Green Deal Call laureates are promoted. Key aspect for ensuring the partnerships are fruitful specific attention is given to common monitoring, evaluation and lessons learned.
- The second speaker, **Patrick Monfray (IPSL Institute Pierre-Simon & Université de Picardie Jules Verne (Amiens))** elaborated on the development of the R&I partnership between Europe and Africa focused on climate change and sustainable energy. The partnership addresses 1) climate action for adaptation and mitigation as Africa despite the weak contribution to CO<sub>2</sub> (3%) is most vulnerable to impacts of climate change and 2) increase renewable energy sources and energy efficiency. To further develop the content of this partnership and collaborations within this partnership two workshops were organised involving 50/50 African and European partners. The first workshop centered around six climate action themes and for each theme recommendations were formulated in actionable areas in terms of a.o. knowledge, economy, technology, awareness, finance and governance frameworks. The second workshop focused on recommendation to funders for calls and events structured along the themes of regionalisation, research needs

& practices, skills and capacity building, funding and programming, public-private partnership to market and policies. The insights that emerged from this way of working to strengthen the partnership and implement targeted projects included the development of community knowledge, the use of digital tools to ease knowledge uptake, link to local socio-economic practices and connect with on-going initiatives, also to de-fragment funding support.

- The third and fourth speaker, **Elham Ali (Suez University)** and **Susanne Salz (GIZ, Partnerships2030)** highlighted the opportunities and challenges multi-stakeholder partnerships bring. Opportunities were discussed in terms of funding, increase technology transfer and knowledge sharing capacity and challenges mentioned were in terms of scale, cultural finetuning, distribution of funds and different priorities in terms of needs and availability. The speakers formulated also practical takeaways on how to best organise mutually beneficial cooperation and multi-stakeholder approaches to increase the impact of the joint efforts: 1) the importance of setting shared goals, 2) clarify and be explicit on who does what, 3) acknowledge differences also in languages and culture and 4) take time to build trust. All speakers stressed that much comes down to 'learning by doing'.

The presentation is available [here](#).

## Topic 2: Seizing opportunities of AU-EU cooperation under Horizon Europe

14.10.2021, 11:00-12:00 CEST

The second session attracted a total of 35 participants and provided a presentation of opportunities for the CCSE community within Horizon Europe<sup>3</sup> by a member of the German NCP for Horizon Europe. Thereafter, the African researcher in the field of CCSE, Anne Wacera Wambugu, provided an overview her experiences with H2020-funding, the predecessor programme of Horizon Europe. The presentations were followed by an open discussion on how to improve the cooperation under Horizon Europe and benefitting from the available opportunities.

- The first panellist, **Matthias Wurch, NCP Horizon Europe**, Germany presented the Opportunities for the CCSE community under Horizon Europe. He explained the vision and the objectives of the EU's key funding programme for R&I. The € 95,5 billion programme provides general openness to international participation and targets international cooperation actions. The programme comprises 3 pillars:
  1. Excellent Science: European Research Council, Mare Skłodowska-Curie, Research Infrastructures

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<sup>3</sup> [First calls targeting Africa published on the Funding and Tender portal | EURAXES](#)

2. Global Challenges & European Industrial Competitiveness: health, culture, creativity, inclusive societies, civil security for society, digital, industry and space, climate, energy and mobility, food, bio-economy, natural resources, agriculture & environment.

3. Innovative Europe: European Innovation Council, European Innovation Ecosystems, European Institute of Innovation & Technology

Matthias Wurch explained every pillar and the corresponding sub-programmes, objectives and option for participation and application. He also explained the Calls targeting Africa: 9 calls in the Working Programme 2021/2022 for proposals for collaboration with African researchers published on the Funding & Tenders Portal. The budget planned for these activities is estimated at 90 million EUR for 3 coordination and support actions (CSA), 5 research and innovation actions (RIA), and one innovation action (IA).

Finally, the Africa Initiative (work programme 2021-22) was explained, an immediate outcome of the first ever EU-AU R&I Ministerial in July 2020. It aims to strengthen long-term cooperation in finding solutions to enhance global public health, socio-economic development and recovery from the COVID-19 pandemic. Through calls for proposals targeted at EU-Africa R&I cooperation, it globes topics which responds to the four joint policy priorities:

- Public Health
- Green Transition
- Innovation & Technology
- Capacities for Science

- The second panellist, **Anne Wacera Wambugu, Strathmore University & LEAP-RE, Kenya** talked about the background, the objectives and her experience with the Horizon 2020 funded LEAP-RE (Long-term Joint EU-AU R&I partnership on renewable energy). She highlighted the importance of the teamwork of the consortium and to accept the diversity of thoughts, ideas and solutions to problems. The African youth is great platform to offer the solutions to the problems that Africa faces.

As challenges she identified capacity limitations and recommended that time has to be invested to train individuals new to the funding mechanism, which requires lots of communal effort. Managing the diversity arising from different backgrounds, which might create misunderstandings, is another challenge which has to be anticipated.

As a reward she considered the capacity development and that everyone is learning. There are a series of networking opportunities through the programme. Career mobility and visibility for early career researchers and practitioners, as well as working in international teams are further added values she emphasized of the Horizon 2020 programme.

The presentation is available [here](#).

### Topic 3: Transnational innovation for sustainable development

21.10.2021, 11:00-12:00 CEST

The third session attracted a total of 30 participants and highlighted that Africa is already seriously affected by climate change impacts that are being felt. This urgency leads to innovative solutions in this regard, e.g.: sustainable mobility. The experts from DLR-PT introduced the concept of transnational innovation, taking stock of the Africa-Europe-Innovation-Partnership (AEIP)<sup>4</sup>-outcomes. Two experts from Nigeria and Kenya provided their experience and an overview of the innovation founder's scene in Africa. The presentations were followed by an open discussion on how to best involve innovation in CCSE.

- The panel was opened with an introduction on Transnational/ "Reverse" innovation as a theoretical concept by **Frida Salge & Sophie Knebel, DLR-PT, Germany**. They explained that the term is coming from the area of product development and challenges the "traditional" innovation paths from countries of the Global North to countries of the Global South to expand the products' life-cycle. The objective is to create awareness that slight modifications of products from markets of the Global North are not enough to satisfy the needs of local emerging markets due to different market dynamics. Instead of simply exporting products to these markets, they have to be precisely tailored to them. Five gaps were identified that stimulate transnational innovation: price performance, infrastructure, regulatory, preference and sustainability gaps.

The next talk of **Adenike Aderonke Moradeyo, Department of Business Administration, Pan-Atlantic University, Nigeria** was on the role of Africa in transnational innovation. She pointed out that Africa is a 1.2 billion-person market and a diverse continent offering human and natural resources that have the potential to yield inclusive growth and eradicate poverty. Africa as a continent can achieve a significant role in transnational innovation through "reverse innovation" for sustainable development. Reverse innovations are described as innovations that emanate from developing countries, which are later, diffused to the developed countries. Africa can achieve transnational innovation through reverse innovation for sustainable development by investment in highly skilled human capital, R&D internationalisation, partnerships, integration and conforming with regulation and standards. For the transnational innovation, Adenike explained idea of simple, maintenance-friendly, affordable, reliable, and timely to market (SMART) products by firms in Africa. African governments need to embrace the innovation and need to establish a constitution of Africa Country-specific innovation ecosystem.

- The presentation was followed by the talk of **Ernest Chitechi, Kenya Climate Innovation Center (KCIC), Kenya** on "Transnational innovation as a solution for climate change?" He first explained the meaning of transnational innovations, applications and mode of application. Thereafter, he explained the circle of invention – innovation – adoption – diffusion. As regards to the transnational climate change innovations, he presented the challenges and one example ("Aviva Kenya" project<sup>5</sup>) which was developed at the West

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<sup>4</sup> [About the Innovation Partnership | Africa - Europe Innovation Partnership \(africaeurope-innovationpartnership.net\)](https://www.africaeurope-innovationpartnership.net/)

<sup>5</sup> <https://www.kenyacic.org/aviva/>

Africa Rice Development Agency – WARDA and supported by KCIC: A rice variety which is drought tolerant and requires less water. The company encouraged successfully farmers to adopt for diversification and to enhance food security in Kenya.

The presentation is available [here](#).

#### **Topic 4: Zooming in on international agreements that support the African and European Climate Agenda**

28.10.2021, 11:00-12:00 CEST

The fourth session attracted a total of 34 participants and focused on how **international agreements can support the African and European Climate Agenda** and highlighted some best practices as well as remaining challenges. Four experts elaborated on the role of international agreements in providing a framework for (R&I) collaboration and funding of climate mitigation and adaptation measures.

- The first panellist, **Dr Isayvani Naicker (Technopolis Group)** focused on “How to leverage R&I for Africa’s positioning in climate negotiations”. She highlighted the need of African governments to strengthen R&D in order to have a pool of expertise and talent that can both tackle prevailing problems, such as climate change, and strengthen the advisory role of research. Against this background, partnerships (north-south, public-private) are needed to support R&D in Africa, to develop knowledge exchange and advisory expertise.
- The second panellist, **Dr Erick Tambo (UNU-EHS/PACET, Cameroon)** elaborated on “International Partnership and Digitalisation for Energy Transition”. Dr Tambo stressed that important areas of collaboration are financial support, knowledge sharing, capacity, and technology development. He especially highlighted the role of cooperation for digitalisation for energy transition and climate action as well as the importance of the youth for fostering innovation and entrepreneurship.
- The third panellist, **Dr Sebastian Treyer (IDDRI, France)** focused on “Why do we still need COPs? The case of steel” He highlighted the importance of supporting national R&I on long-term development and decarbonisation pathways in order for them to be in line with the Paris Agreement. International cooperation is therefore needed to support access to funding and to foster local innovation capacities towards sustainability. In this context, international agreements and conferences, such as the COP help fostering exchange between countries, identifying progress as well as prevailing challenges countries face regarding their decarbonisation pathways (e.g., factors preventing innovation) and finding solutions (e.g., facilitating tech transfer, strengthening innovation capacities). Dr Treyer used the example of the steel industry in South Africa and the difficulties of a transformation towards the usage of green energy. He highlighted the need of setting incentives, for instance opening lead markets demanding “green steel” to ensure a successful transformation.
- The fourth panellist, **Dr Romeo Bertolini (Deputy Director and Head of the Bonn Office)** shed light on “R&I collaboration and NDC Partnership”. The NDC partnership is a coalition

of over 200 countries and institutions to drive transformational climate action and enhance sustainable development. The goal is to increase the NDCs every 5 years in order to achieve the 1.5-degree target. He showed several related mechanisms and programs, including the Partnership-Plan enabling coordinated and results-based actions and the climate action enhancement program (CAEP), providing fast-track support to update and enhance NDCs, amongst others. Dr Bertolini stressed the commitment of many countries to achieve a just transition.

The **discussion** evolved around the topic of the role of R&I for climate change adaptation, climate risk reductions and the integration of climate change resilience into African development investments and practices.

In a **final statement** the panellists expressed their hopes regarding the **results of the upcoming COP summit in Glasgow**: Dr Naicker wishes for **more commitment for R&I investment** and a just transition to a decarbonised economy. Dr Erick Tambo emphasized the need for an increased **involvement of the private sector and the youth** in climate action. Dr Sebastian Treyer stressed the importance of **plans of actions regarding funding** (north to south: supporting R&I systems in countries) and Dr Romeo Bertolini hopes that the **G20-countries increase their efforts on NDC enhancement** to match the ambition of developing countries.

The presentation is available [here](#).