

The UN Climate Change Technology Executive Committee (TEC), together with Enterprise Neurosystem, a non-profit open-source artificial intelligence (AI) community, on Saturday launched the AI Innovation Grand Challenge to identify and support the development of AI-powered solutions for climate action in developing countries.

The launch was part of a COP28 high-level event organized by the UN Climate Change Technology Mechanism in collaboration with the COP28 Presidency.

“We are seeing increasing evidence that artificial intelligence can prove an invaluable instrument in tackling climate change. While we remain mindful of the associated challenges and risks of AI, the Innovation Grand Challenge is a promising step forward in harnessing the power of artificial intelligence and empowering innovators in developing countries,” said UN Climate Change Executive Secretary Simon Stiell.

H.E. Omar Sultan Al Olama, Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications, United Arab Emirates, said: “Harnessing artificial intelligence as a strategic asset to mitigate climate change involves integrating it into national policies and plans. This integration facilitates the use of data analytics to align policy with real-time climate data, thereby enhancing its efficacy and advancing technological development and scientific discovery in the field of energy. These measures and policies should not be viewed in isolation, but rather as a unified global initiative, acknowledging that climate change transcends geographical boundaries and requires concerted global efforts.”

Artificial intelligence is already being used to predict climate patterns and extreme weather events, improve crop yields, reduce water usage or optimize renewable energy systems.

The COP28 event brought together leaders from governments, the United Nations, development cooperation agencies and business to discuss how AI can be used for transformational climate action in developing nations, while ensuring that it does not contribute to widening the digital divide caused by unequal access to technology.

H.E. Shantal Munro-Knight, Minister in the Prime Minister’s Office, Barbados, said: “We are partnering with international tech companies to test their ideas in Barbados whilst contributing to the island’s development. Some ideas include using machine

learning and AI to check for the presence of tropical diseases, design hurricane resistant buildings and plan infrastructure investment. Collaboration, training and technology transfer are key to ensuring that AI contributes effectively to climate mitigation and adaptation for small island developing states.”

H.E. Moussa Bocar Thiam, Minister of Communications, Telecommunications and the Digital Economy, Senegal, said: “It is important to adapt the technology to take account of the digital divide, especially among those most vulnerable to climate change. Integration of chatbot voice with local languages in these emerging technology tools is one solution that would ensure the existing digital divide is taken into account.”

Mr. Ali Zaidi, Assistant to the President and National Climate Advisor, United States of America, said: “We must manage the risks and seize the promise of artificial intelligence. The United States is committed to doing so, as President Biden’s recent Executive Order on AI demonstrates. By working together, we can responsibly harness the power of this emerging technology to develop AI tools that help mitigate climate change risks, make our communities more sustainable and resilient, and build an equitable clean energy future for all.”

The event was organized under the Technology Mechanism Initiative on Artificial Intelligence for Climate Action (#AI4ClimateAction) which examines the potential of AI to scale up climate solutions in developing countries, with a focus on least developed countries and small island developing states.

In line with the call by UN Secretary-General António Guterres to develop AI that is “reliable and safe” and that can “supercharge climate action” to achieve the Sustainable Development Goals, the #AI4ClimateAction Initiative aims to advance climate-resilient and low-emissions development.

The Chairs of the Technology Mechanism, Stig Svenningsen and Erwin Rose, called for new collaborations and partnerships that help deliver concrete results, both on policy and implementation, under the #AI4ClimateAction Initiative.

Latest official estimates show that AI technologies will be the next wave of technologies to receive wide acceptance. However, with the exception of a few nations (such as South Africa, Nigeria, Ethiopia, Kenya, and Ghana), widespread adoption of AI applications in Africa is not yet a reality