

Twenty-sixth meeting of the Council
Abu Dhabi, 19-20 October 2023

Background Note

Reinforcing Climate Action in the Agriculture and Health Sectors with Renewables

Background

1. An integrated approach based on the deployment of sustainable, efficient, and cost-effective renewable energy solutions into the agri-food and health value chains is crucial to meet several Sustainable Development Goals (SDGs)¹ as well as the objectives of the Paris Climate Agreement, particularly in the context of climate action and empowering lives and livelihoods.
2. In agri-food sector, energy is essential for primary production, processing, and storage, and for raising productivity and incomes, reducing food losses, enhancing resilience for farmers and agri-enterprises. However, access to energy is limited in the rural areas of many developing countries, where agriculture is the main source of livelihoods. Furthermore, where energy is accessible, high dependence on fossil fuel-based energy solutions, with high price volatility and logistical challenges, along with inefficient and unsustainable biomass use have made the current pattern of energy use in the agri-food systems untenable.
3. In the health sector, access to energy improves the quality, accessibility, and reliability of services. Energy is essential to power vital medical devices, including vaccine refrigerators and emergency-surgical, laboratory and diagnostic equipment. Energy is important for basic amenities like lighting, cooling, ventilation, communications, clean and hot water. Decentralised renewable energy solutions present a key opportunity to provide clean, reliable, affordable, and tailored electricity services to health care facilities currently lacking access or facing unreliable supply, in both rural and urban areas.
4. IRENA is building support and partnering with governments, philanthropists, foundations, technical and financial partners, and the private sector to commit USD 1 billion towards a COP28 Initiative on ‘Empowering Lives and Livelihoods – Renewables for Climate Action’ to connect people and livelihoods through renewable energy solutions in agri-food and health sectors. The Initiative aims to strengthen value chains in both the agri-food and health sectors, simultaneously

¹ Including SDG 7 on sustainable and clean energy, SDG 6 on access to clean water, SDG 3 on health, SDG 2 on food security, and SDG 1 on poverty alleviation.

driving equity benefits especially for women who are most impacted by climate change, lack of clean energy, access to resource and opportunities.

5. Since the curtain-raiser of the Initiative by IRENA and the Government of the United Arab Emirates (UAE) in January 2023, the Agency is in the process of developing a robust framework of collaboration with technical and financial partners in the development and implementation of country programmes under the Initiative, which will entail three main components:
 - a. Sustainable and Efficient Decentralized Renewable Energy (DRE) Solutions for deployment across the health and agriculture value chains with detailed specification of agricultural products and health services deployed, segments of the value chain, and geographic coverage.
 - b. Affordable Financing Solutions for small holder farmers and rural health facilities to support the implementation of identified DRE solutions for improved productivity, business/service expansion and value addition activities.
 - c. Ecosystem Development for Capacity Building to ensure mid-to-long term sustainability of country programme implementations with focus on local innovation, entrepreneurship development, women, and youth empowerment, technical and financial capacity development building of relevant local stakeholders, and in-country and cross-country knowledge exchange.

Objective of the session

The objective of the session is to discuss and collect views of IRENA Members on the challenges and opportunities on integrating renewable energy solutions into agri-food and health value chains in leading up to COP28 where the Initiative on “Empowering Lives and Livelihoods – Renewables for Climate Action” will be launched. Members are welcome to share country specific experiences and best practices and offer guidance on how such partnership platforms can lead to transformative impact on achieving food security and reliable access to health services.

Guiding questions

- How can countries and supporting stakeholders contribute towards defining commitments, goals, and actions to effectively deploy renewable energy in agri-food and health value chains?
- How can collaboration between technical and financial partners and community stakeholders be strengthened to scale up deployment of renewable energy in agri-food and health sectors?
- What are the experiences and best practices that IRENA Members can share to foster sustainable, efficient and affordable renewable energy solutions for agri-food and health?

Associated Publications

[Decentralised solar electricity for agri-food value chains in the Hindu Kush Himalaya region](#) (2022)

[Renewable energy for agriculture: Insights from Southeast Asia](#) (2022)

[Powering Agri-food Value Chains with Geothermal Heat: A Guidebook for Policy Makers](#) (2022)

[Assessment and Design of Renewable Energy Systems for Enhancing Healthcare Delivery in Burkina Faso](#) (2022)

[Renewable Energy for Agri-food Systems: Towards the Sustainable Development Goals and the Paris Agreement](#) (2021)