

Powering development and sustainability: Productive Use of Renewable Energy (PURE) in the agri-food systems

Monday 24 July 2023, 12.30 - 13.25 (CET) – Iran Room



Global
Solar
Council



Background and objectives

Globally, fossil fuels provide about 70-80% of the energy used in agri-food systems (FAO). In terms of the consumption of energy, food systems are a major source of demand as they account for 30% of all energy consumed in the world ([IRENA and FAO](#)). Most consumption (70%) takes place in post-harvest stages such as transportation, processing, packaging, shipping, storage, marketing, etc., and is driven by high-income countries ([FAO](#)). The over-reliance on fossil fuels to power the food systems has severe environmental implications. In 2019 global agri-food system emissions were 16.5 billion metric tonnes, corresponding to 31% (range: 19%–43%) of global GHG emissions for that year. The use of energy contributed to about one-third of the total greenhouse gas (GHG) emissions from food systems.

Agriculture is currently a large contributor to climate change as well as one of the economic sectors most at risk from it. But it doesn't have to be this way. Renewable energy sources like solar power can greatly benefit the agribusiness sector. Solar water pumps can provide a sustainable solution for irrigation in remote areas, reducing the reliance on fossil fuel-based generators. Solar-powered cold storage facilities, for

instance, can help reduce post-harvest losses by maintaining optimal temperatures for agricultural production. These facilities can be easily deployed in remote areas with limited access to electricity, providing a sustainable and cost-effective solution for preserving production. Additionally, solar-powered cold storage can help maintain the quality and nutritional value of food, leading to improved marketability and higher income for farmers.

Expected outcomes

By linking the event to the objectives of the UN Food Summit and the missions of the Coalition for Action and Power for All, participants can leverage the momentum, insights, and networks generated by these initiatives to drive forward innovative and sustainable solutions. The event will help address the pressing challenges faced by the agricultural sector in Africa and India, ultimately contributing to food security, improved livelihoods, and sustainable development in these regions. Following this side event, Power for All and its partners will hold national-level events to further disseminate the key messages and recommendations.

Moderator

Ms Kristina Skierka,

Power for All

Panelists

Ms Maria Michela Morese

FAO

Ms Ute Collier

IRENA

Ms Doreen Robinson

UNEP

Programme

12.30 Introduction

12.35 Keynote address

12.45 Panel discussion

13.15 Audience Q&A

13.25 Closing remarks