Understanding the energy crisis and its impact on food security



SAVING LIVES CHANGING LIVES

The world is facing a reckoning when it comes to energy supply. Despite decades of calls to reduce dependency on fossil fuels, countries have persisted on the widespread use of coal, oil and gas to fuel their economies. Not only has the burning of fossil fuels been responsible for rising carbon emissions that drive global heating, but we have created a globalized world in which food and energy systems are highly concentrated – which makes them extremely vulnerable to disruption.

The war in Ukraine underscores how the lack of diversity in our global energy and food systems are working against the resilience of livelihoods. As the prices for energy, fertilizer and food commodities skyrocket, people across the planet are unable to absorb the rising costs. As a result, we see an unprecedented contribution of rising energy prices to food insecurity and humanitarian needs. Our collective failure to promote diversified energy systems has forced millions around the world to become dependent on humanitarian assistance to meet their basic needs for survival.

Even before the current energy crisis began, the world was falling short in ensuring equitable access to energy for all. 770 million people lack access to electricity worldwide, which precludes efforts to achieve poverty eradication and other development goals. At the same time, approximately 2.5 billion people lack access to clean cooking, meaning nearly one-third of the global population still depend on firewood and charcoal for cooking their meals (IEA, 2021). This leads to negative health consequences, disproportionately threatening the safety and well-being of women and girls. It also contributes to deforestation and resource scarcity, which can trigger social tensions.

As political negotiations ensue and initiatives such as the **UN Global Crisis Response Group** convene to unlock solutions to the current crisis, preventing further aggravation and transforming systems to withstand future shocks requires a forward outlook. Instead, we see countries reacting to the energy crisis by reneging on their climate commitments and reverting to fossil fuels.



WFP has introduced solar dryers to communities in southeast Kenya to preserve surplus harvests and bring more products to market, such as potato chips. In collaboration with the International Potato Centre (CIP), WFP is supporting local governments to scale up the production and consumption of orange-fleshed sweet potatoes to address malnutrition and strengthen livelihood options. © WFP/Martin Karimi

This threatens global cooperation to advance climate action at a time when adherence to such pledges is of vital importance. If we are to keep the 1.5°C target of the Paris Agreement within reach and build the resilience of the systems that power and feed us, the diversification of food and energy systems needs to be at the heart of our collective efforts.

Such diversification entails transitioning to the use of low-carbon and fuel-efficient technologies across food systems, in pursuit of global targets to achieve net-zero emissions by mid-century. In this context, it is imperative to promote the use of renewable energy sources – such as solar, hydro and wind – and to close the gap of energy access in developing countries.



WFP: A Partner for Sustainable Energy Solutions

As the world's largest humanitarian organization, WFP is uniquely positioned to support access to energy and the transition to renewables in emergency situations and fragile contexts, reaching the last mile to ensure that no one is left behind. Working with partners across governments, the UN system, civil society organizations and the private sector, WFP implements programmes that help communities diversify energy sources and adopt energy efficient solutions for food production, processing, storage and transport. These initiatives promote decarbonization and support communities and governments' efforts to adapt to the impacts of compounding economic and environmental crises.

In 2021, WFP and partners supported over 1.7 million people in 14 countries across Africa, Asia and the Pacific, the Middle East, and Latin America and the Caribbean in accessing clean energy products and services. These programmes include:

- Enabling the access of households and schools to **efficient cooking appliances**, which reduces the cost of cooking, protects the environment and improves public health.

- Promoting **solar-powered irrigation**, which helps to drip-irrigate crops and reduces resource use in agricultural production for smallholder farmers.

- Installing **biodigesters** in schools, which produce fertilizer for gardens and biogas for cooking school meals.

 Providing energy equipment that reduces postharvest losses and preserves food quality, such as cooling technologies, solar dryers, and milling and oil processing equipment.

- Decarbonizing energy systems by supporting the **adoption of renewables**, such as solar PV, through blended finance in communities and local enterprises to transition from reliance on methane gas and diesel.



Hawa Woli harvests vegetables at a school garden in Matafo, Chad. WFP, along with partners such as SOS Sahel International France and local government partners, have supported her women's association to improve agricultural production and feed school children. WFP's support includes the provision of a solar water pump, which helps irrigate crops without diesel or petrol. © WFP/Evelyn Fey



Through its Home-Grown School Feeding programme, WFP supported the construction of new water, sanitation and hygiene (WASH) facilities – including new fuel-efficient stoves – throughout schools in Rwanda during the COVID-19 pandemic, in partnership with World Vision International. © WFP/Daniel Kibsgaard

As WFP works to scale up these initiatives, efforts are underway to reach more communities and scale up support and partnerships to re-energize local value chains and economies. WFP's programmes aim to shift from a model of "procurement and distribution" to one based on economically sustainable and market-based practices. This entails supporting local entrepreneurs to deliver energy products and services, understanding and responding to end-users' demand, building market linkages and facilitating knowledge transfer within and between communities. These approaches put the empowerment of people and communities at the center of the energy transition – and represent a key element of how the current global food crisis can be tackled through sustainable energy solutions.