

Concept Note

Advancing renewables-based clean cooking solutions: What is the role of solid biomass in reaching universal access?

19 July 2023 | 1 to 3 pm CEST

Background

The Sustainable Development Goal 7 (SDG 7) targets on achieving universal access to clean cooking fuels and technologies remains elusive. The latest 2023 SDG 7 Tracking Report finds that over the past decade, access to clean fuels and technologies for cooking rose by only 12 percentage points globally, and under business-as-usual, a quarter of the world's people will still lack access in 2030. The present levels of investments in deploying clean cooking solutions are extremely inadequate resulting in a net growth in the number of people living without access in regions such as Sub-Saharan Africa. Delayed action poses a significant social, economic and environmental cost borne disproportionately by women and children.

Over the next decades, as outlined in IRENA's World Energy Transitions Outlook, the world will need to accelerate its shift to renewable cooking solutions aligned with the 2030 Agenda for Sustainable Development Goals and Climate Agenda. This will involve both cleaner bioenergy solutions (including more sustainable biomass, biogas and bioethanol) and renewables-based electric cooking. The appropriate mix of solutions over the period to 2030 and 2050 will vary depending on country contexts and must be addressed as part of integrated clean cooking access plans.

To facilitate dialogue on the role of different renewables-based clean cooking solutions in achieving universal access, IRENA launched a [virtual knowledge exchange series](#) in April 2023. It aimed to organize solution deep-dive sessions inviting practitioners, policy makers, the private sector, and development organizations to discuss the current status of solutions, and the barriers faced especially from a policy, financing and local market development and supply chain perspective.

The fourth solution deep-dive, which will focus on solid biomass, will be co-organized by IRENA and Practical Action. The session will discuss the role of solid biomass fuels, as part of a broader clean cooking strategy, to expand access based on country examples and regional contexts. While inefficient biomass cooking using unsustainable fuels has massive health, social and environmental impacts, there are biomass cooking solutions that can reduce some of these impacts significantly. Advanced biomass solutions (e.g. gasifier stoves with pellets), for instance, can drastically reduce firewood consumption and black carbon emissions, although health benefits may be limited when benchmarked to Tier 4 of the Multi-Tier Framework. Processed solid biomass fuels as briquettes, chips or pellets derived from by-products of agricultural production and forest residues could have a role, even if transitory, in expanding clean cooking access alongside the adoption of improved cookstoves which are much more efficient and can reduce indoor air pollution. Effectively using these solutions requires establishing supply chains from procurement to production and end-users with environmental sustainability as a priority.

The session will convene diverse stakeholders to discuss what role biomass solutions will play in achieving universal access to clean cooking technologies, what enabling conditions are needed to facilitate adoption and build sustainable supply chains.

To register: https://irena-org.zoom.us/webinar/register/WN_0-VhbBsaSOo2jnLWMHuoQ

Agenda

13.00 – 13.05 **Opening remarks**

Ute Collier, Deputy Director, Knowledge, Policy and Finance Centre, IRENA

13.05 – 13.10 **Scene-setting remarks**

Mattia Vianello, Head of Energy, Practical Action

13.10 – 14.00 **Designing universal clean cooking strategies: Where does solid biomass fit in?**

Guiding questions

1. What role can more efficient/sustainable solid biomass solutions play in reaching universal clean cooking access in the countries you work in?
2. What does the current technology landscape look like for biomass stoves that meet the standards of modern cooking (Tier 4+)?
3. Why has it been so difficult to get improved cookstoves/fuels to make significant headway after decades of projects and programmes?
4. Do existing clean cooking strategies adequately represent the opportunity offered by efficient solid biomass solutions?
5. In what ways can market development support for advanced biomass solutions be utilized for other clean technologies once they will become available and affordable?

Moderator: Mattia Vianello, Head of Energy, Practical Action

Panellists:

- Bihinda Steven, Renewable Energy Senior Engineer, Ministry of Infrastructure, Rwanda (tbc)
- Michela Morese, Energy Team Leader and Senior Natural Resources Officer, FAO
- Heather Adair-Rohani, Acting Unit Head, Air Quality, Energy & Health, WHO
- Caroline Ochieng, Finance Specialist (Clean Cooking), Sustainable Energy for All

Audience Q&A

14.00 – 14.50 **Building sustainable and inclusive markets and supply chains: What lessons are emerging?**

Guiding questions

1. What lessons are emerging from your experience with setting up markets and supply chains for sustainable biomass cooking fuels and efficient appliances? What are the challenges you face/faced?
2. What are the key policy and regulatory enablers that can help develop sustainable markets and supply chains for such solutions?
3. What are the key enterprise and end-user financing gaps that need to be addressed across the supply chain?
4. Is current funding in the clean cooking sector across different technologies reflective of their potential to reach universal access?
5. How can public financing help support the development of sustainable and inclusive solid biomass markets? What role can carbon financing play?

Moderator: Ute Collier, Deputy Director, Knowledge, Policy and Finance Centre, IRENA

Panelists:

- Min Bikram Malla, Thematic Lead – Energy, Practical Action Nepal
- Molly Brown, Head of Carbon Strategy, BURN Manufacturing
- Umutoniwase Anitha, Founder and CEO, EcoGreen Rwanda
- Anton Espira, CEO, Eco2librium
- Sreyamsa Bairiganjan, Senior Energy and Climate Finance Expert, World Bank

Audience Q&A

14.50 – 14.55 Closing remarks