

Agenda item 4 (c) i. Water-energy-food systems

Progress of work on the Water-Energy-Food Systems

27th meeting of the Technology Executive Committee
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Report of the Thematic Dialogue

Accelerating climate innovation and technology in the water-energy-food systems for inclusive NDC and NAP implementation



8 June 2023, during SB58



Outcomes



Contribution to the TEC rolling **workplan for 2023–2027**

More than 100 participants joined the session in person and online.

Insights on technological, social and institutional climate innovations in Water-Energy-Food systems as a comprehensive and integrated approach to tackling climate change while sustainably managing natural resources and our agrifood systems.



The event highlighted the importance of **inclusion of farmers, youth, indigenous peoples, women and other vulnerable communities** when deploying innovative climate technologies.



Objectives of the related Knowledge Product

- To discuss the role of innovation and technologies in Water-Energy-Food (WEF) systems in moving towards the long-term goals of the Paris Agreement
- To provide information on innovation options that could optimize the implementation process of NDCs and NAPs
- To highlight examples of successful agrifood systems transformation to address climate change in the WEF nexus
- To analyze knowledge gaps in the WEF nexus and identify how relevant technologies, including indigenous knowledge, innovative and digital technologies (e.g., early warning systems), could strengthen NAP and NDC ambitions in the agriculture sector.

Outline of the related Knowledge Product

‘Climate action and agrifood systems

Climate technologies for NDCs and NAPs implementation’

1. Executive summary

2. Introduction

3. Sustainable agrifood systems and value chains and technologies

- a) Definitions of climate technologies and innovative solutions, including traditional knowledge and low tech
- b) Definition of the concept of technology in agrifood systems and value chains
- c) Mapping of agrifood value chains and technologies, assessment of needs at farmer level
- d) Synergies and trade-offs between resource systems/value chains in food, water and energy systems

contd.



Outline of the related Knowledge Product

4. Technologies and the Water-Energy-Food nexus

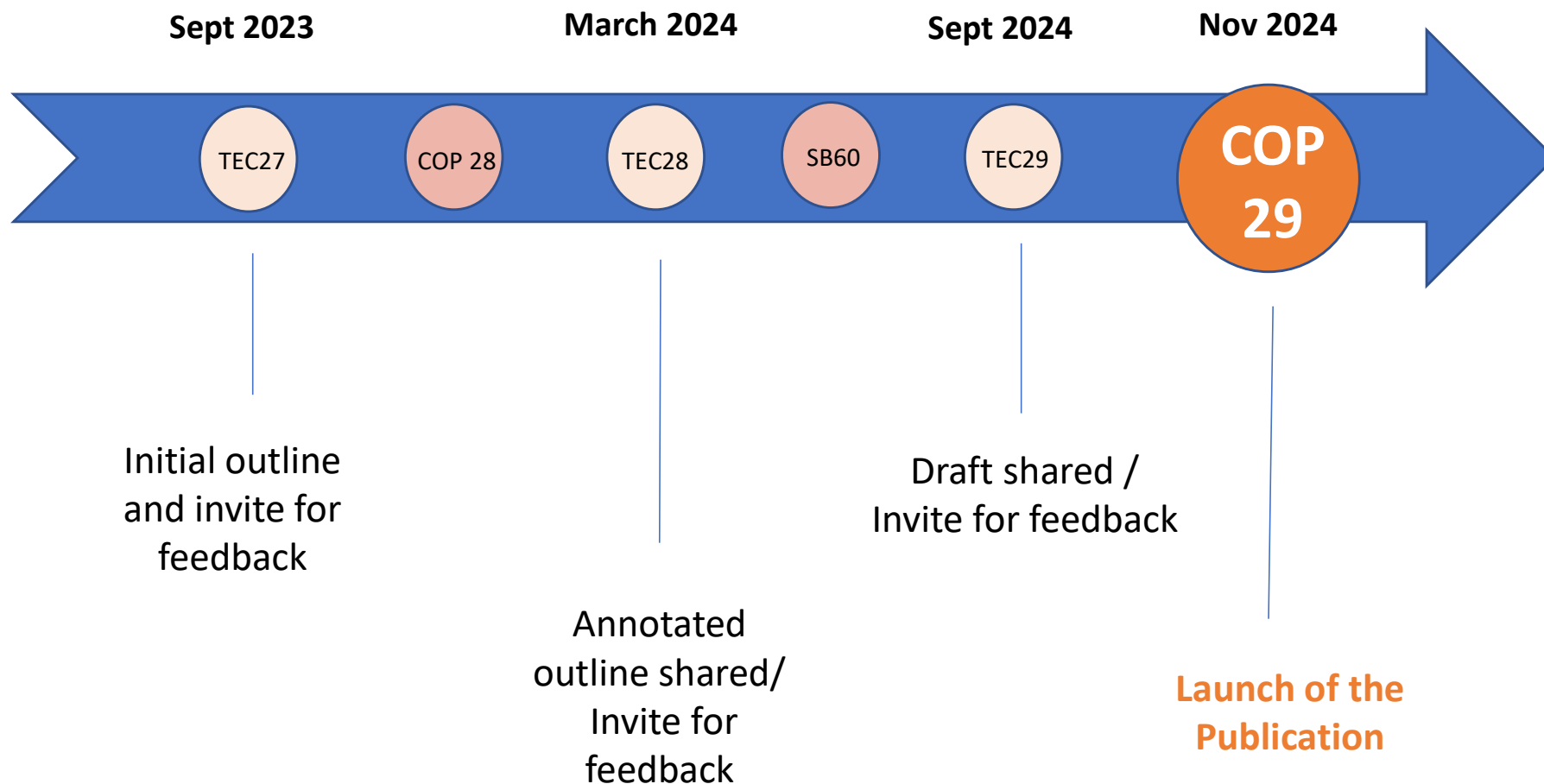
- a) Technologies to achieve Water-Energy-Food nexus within the agrifood systems in terms of adaptation and mitigation potential
- b) Technology sets at agrifood value chain level (production, processing, distribution, and consumption)
- c) Capacity needs for technology implementation, including a focus on decent livelihoods for smallholders
- d) Institutional needs for technology implementation

5. Select case studies

6. Policy gaps and opportunities

7. Conclusions and key messages

Next Steps



Thank you!

