



25TH
WPC ENERGY
CONGRESS
Riyadh, 11-15 October 2026



WPC
ENERGY

وزارة الطاقة
MINISTRY OF ENERGY



25th WPC Energy Congress

special
Programme

World Café

Carbon dioxide Removal Technologies

Shaping the future of carbon management through
dialogue, innovation, evidence-based insights

Event Date: **14 October 2026** | **15:30 - 17:30**



كابسارك
KAPSARC

11 — 15
October 2026

Riyadh
Front Exhibition
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World Café Programme Overview

Carbon Dioxide Removal (CDR) technologies play a critical role in achieving global climate targets by actively removing carbon dioxide from the atmosphere and enabling long-term storage.

As decarbonization efforts accelerate, CDR is increasingly recognized as an essential complement to emissions-reduction strategies particularly for hard-to-abate sectors.

This interactive World Café session brings together experts, policymakers, and practitioners to explore the evolving landscape of engineered CDR solutions, including Direct Air Capture (DAC), Bioenergy with Carbon Capture and Storage (BECCS), and biochar.

Through structure, small-group discussions, participants will examine the technical, economic, regulatory, and societal dimensions of deploying CDR at scale.

Language

English

Dates &
Time

Wed 14 Oct 2026
15:30 – 17:30

The session is designed as a World Café, a highly interactive format that fosters collaborative dialogue and knowledge exchange.



World Café

Programme Structure

Table 1: Evaluating Engineered CDR Pathways

Assessing performance, cost structures, and environmental impacts of DACCS, BECCS, and biochar.

What does current evidence reveal about their effectiveness and trade-offs?

Table 2: Scaling CDR Deployment

Exploring infrastructure, systems, and institutional enablers required for large-scale implementation.

What are the critical barriers-and how can they be addressed across regions?

Table 3: Policy, Regulation, and Carbon Markets

Understanding the policy instruments and market mechanisms needed to support high-integrity CDR.

How can regulation and carbon markets accelerate responsible deployment?

Table 4: Regional & Societal Dimentions

Analyzing how geography, resources, and societal factors influence CDR adoption.

How can risks, trade-offs, and local constraints be effectively managed?



World Café Learning Outcomes

**By the end of this session,
participants will be able to:**

Develop a comprehensive understanding of key CDR technologies

Evaluate trade-offs across technical, economic, and environmental dimensions

Understand policy and market frameworks supporting carbon removal

Apply insights to inform strategic decision-making in climate and energy contexts



World Café

Experts in the Field



Dr. Naser Odeh

Principal Fellow

Leading expert in climate and sustainability, specializing in Carbon Dioxide Removal (CDR) and carbon capture, utilization, and storage (CCUS). At KAPSARC, he leads research on techno-economic analysis, life cycle assessment, and the strategic prioritization of decarbonization pathways aligned with the Circular Carbon Economy.



Dr. Mari Luomi

Principal Fellow

Policy-oriented social scientist specializing in climate change, energy transitions, and sustainable development. At KAPSARC, she leads research on carbon markets in emerging economies and the development of the Circular Carbon Economy Index.



Dr. Raphael Apeaning

Lead Researcher

Lead Research in the Climate and Sustainability Program at KAPSARC, with expertise in integrated assessment modeling and energy transition pathways. His work focuses on evaluating the role of carbon dioxide removal technologies within climate models.

World Café Experts in the Field



Dr. Michael Samsu Koroma

Lead Researcher

Lead Researcher in Life Cycle Assessment (LCA) and Environmental Systems Analysis for transport and energy transitions at KAPSARC. His work evaluates emissions, operational feasibility, and policy implications of decarbonization pathways, with a strong focus on lifecycle-based carbon accounting.



Hind Aldhuwaihi

Associate Researcher

Associate Researcher in the Climate and Sustainability Program at KAPSARC, focusing on energy transitions, climate policy, and the Circular Carbon Economy. Her work centers on carbon dioxide removal (CDR) and comparative analysis of global energy transitions pathways.



Sarah Wahbah

Senior Associate

Senior Associate within KAPSARC's advisory team, specializing in carbon markets and CCUS-related strategies. She has contributed to high-impact initiatives, including the establishment of the Regional Voluntary Carbon Market Company (VCM).



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