

The Role of the Circular Carbon Economy in Achieving the Sustainable Developments Goals (SDGs)

Date:

12 July 2021

07:30 – 09:00am EDT (2:30 – 4:00pm KSA)

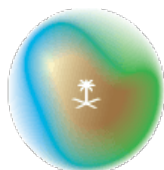
Side Event as part of the UN High-Level Political Forum on Sustainable Development

Organized by the Kingdom of Saudi Arabia:



**HIGH-LEVEL POLITICAL FORUM
ON SUSTAINABLE DEVELOPMENT**

وزارة الطاقة
MINISTRY OF ENERGY



وزارة الاقتصاد والتخطيط
MINISTRY OF ECONOMY & PLANNING



Overview

For more than a century, carbon has been a primary component of energy systems that has enabled economies to prosper. As the world seeks solutions to address the emissions challenge in the context of sustainable development, the concept of a Circular Carbon Economy (CCE) has gained prominence. It encompasses the 4 Rs – Reduce, Reuse, Recycle, and Remove; restoring the human-earth balance and harmonizing the carbon cycle.

The Earth has been achieving this balance for billions of years; a natural and stable flow of carbon between the atmosphere, ocean, and terrestrial ecosystems. Until recently, humans have played a simple role within this cycle, employing a linear model whereby we extract carbon from the ground and release it into the air. But by mimicking the natural process of the Earth, we can achieve our own balance, closing the loop to not only reduce emissions through energy efficiency and the use of renewables, but also to reuse, recycle and remove carbon emissions entirely.

As climate change requires a global response that brings together all solutions and efforts, G20 Leaders endorsed, during their Riyadh Summit on 21 -22 November 2020, the Circular Carbon Economy framework (CCE), with the aim of providing a sustainable, pragmatic and cost-effective approach that recognizes the urgency to act on climate change while ensuring access to clean and affordable energy for all, and advancing efforts for sustainable development and poverty eradication. Achieving all the sustainable development goals requires approaches that are comprehensive, striking the balance between environmental, social and economic dimensions.

The 4 Rs

Reduce	Reuse	Recycle	Remove
Energy efficient technologies can mitigate the amount of carbon entering the atmosphere, while noncarbon emitting renewables and nuclear can also play a part.	By capturing carbon through innovative technologies, it can then be used to create useful products, or be injected back into oil and gas reservoirs to increase productivity.	CO ₂ is chemically transformed into new products such as fertilizer or cement, or other forms of energy such as synthetic fuels.	The removal of carbon from the atmosphere can be both engineered – such as through direct air capture and sequestration – or natural, through carbon sinks such as mangrove forests.

To this end, the Kingdom of Saudi Arabia, as a global energy leader, developed and promoted the CCE framework, as a holistic approach that addresses emissions while generating value. It is a framework that leverages national strengths, promotes cost-effective agnostic technologies, and enables the Kingdom to meet and exceed its international ambitions through an inclusive approach to tackling climate change. The beauty of the CCE framework, and its associated technologies, is that it is one that is flexible and may be applied across a wide range of national circumstances.

This side event will bring together experts and scientists to discuss the national and global implementation of the CCE framework, its enabling policies and technologies, and its ability to support the achievement of the sustainable development goals, in an event organized by the Kingdom of Saudi Arabia.

Agenda:

TIME	SESSION
07:30 – 07:35 EDT (02:30 – 02:35) GMT+3	Moderator to Open Session and Introduce Speakers: <ul style="list-style-type: none">• Noura Alissa, Senior International Policy Analyst, Climate Change & Sustainability, Ministry of Energy, Saudi Arabia.
07:35 – 07:40 EDT (02:35 – 02:40) GMT+3	Opening Remarks: <ul style="list-style-type: none">• Khalid Abulief, Sr. Sustainability Advisor to HRH the Minister, Chief Negotiator for the Climate Agreements, Ministry of Energy, Saudi Arabia
07:40 – 07:50 EDT (02:40 – 02:50) GMT+3	Overview on the Circular Carbon Economy <ul style="list-style-type: none">• Adam Sieminski, President, King Abdullah Petroleum Studies and Research Center (KAPSARC).
07:50 – 08:05 EDT (02:50 – 03:05) GMT+3	CCE framework implementation <ul style="list-style-type: none">• Fahad Alajlan, Director of Hydrocarbon Sustainability Program, Ministry of Energy of Saudi Arabia.
08:05 – 08:20 EDT (03:05 – 03:20) GMT+3	Overview on priority CCE technologies – CCUS/ Hydrogen <ul style="list-style-type: none">• Tidjani Niass, CCUS Lead, Technology Strategy and Planning, Saudi Aramco.
08:20 – 08:50 EDT (03:20 – 03:50) GMT+3	Questions and Answers <ul style="list-style-type: none">• Noura Alissa, Senior International Policy Analyst, Climate Change & Sustainability, Ministry of Energy, Saudi Arabia.
08:50 – 09:00 EDT (03:50 – 04:00) GMT+3	Closing Remarks: <ul style="list-style-type: none">• Fareed Alasaly, Senior Advisor to HRH Minister of Energy, Ministry of Energy, Saudi Arabia.

Speakers



Khalid Abulief

- Khalid Abuleif has over 25 years' experience on sustainability, climate change policy and carbon management. Currently, he is a senior advisor to the Minister of Energy on Sustainability and Climate Policy.
- He is the lead negotiator for the climate change agreements and the Kingdom's focal point to the Secretariat for the United Nations Framework Convention on Climate Change (UNFCCC) and the Intergovernmental Panel for Climate Change (IPCC).
- He was the Co-Chair of the Kyoto Protocol Compliance Committee and the Chairman of the Facilitative Branch on 2012/2013. He served in this branch since its inception in December 2005.
- Khalid led the Kingdom's delegation to World Trade Organization (WTO) Committee on Trade and Environment (CTE) and the Special Session (CTE-SS) on the Doha agenda negotiations from 2005 to 2010.
- He was leading the Kingdom's team in the Technical Group Committee for the Carbon Sequestration Leadership Forum (CSLF) since 2005 and the coordinator of policy and CDM for Saudi Aramco carbon management program to year 2012.
- Khalid Abuleif is a University of Houston graduate with a B.S. degree in Civil Engineering; and M.S. degree in Environmental Engineering.



Fareed Alasaly

- Fareed ALASALY is a Senior Advisor to His Royal Highness the Saudi Minister of Energy.
- Fareed is the lead on Energy issues on the G20 forum since 2010 and Chaired G20 Energy Sustainably Working Group under the Saudi G20 Presidency 2020.
- Fareed served as an International Policies Senior advisor at the Ministry of Energy and Saudi Aramco. Fareed has more than 40 years of experience including partnering with governments, private sector and international organizations. Experienced in diverse aspects including: finance, investment portfolio management, partnerships alliances, portfolio management, industrial development, planning operations and logistics, materials supply management, technology and environmental policy.
- Fareed is been engaged with number of major International, Regional and National Forums, among them:
 - 1) The World Trade Organization (WTO) since 2003 during the Kingdoms accession to WTO in 2005;
 - 2) Climate change since 1997 including the institution of Carbon Capture and Storage Technology (CCS) in 2005;
 - 3) Carbon Sequestration and Storage Forum (CSLF);
 - 4) Board member of the Saudi General Authority for Foreign Trade;
 - 5) GCC Energy and Trade Committee Chairman;
 - 6) Member of the Saudi Designated National Authority for clean development mechanism; and
 - 7) Former Executive Board Member of Clean Development Mechanism for Kyoto Protocol.
- Fareed is a graduate from Saudi Arabian King AbdulAziz University with a Bachelor's degree in Economics and Business Administration. Fareed is a Master's Degree graduate from Saudi Arabian King Fahd University of Petroleum & Minerals.



Adam Sieminski

- Adam Sieminski is President of the King Abdullah Petroleum Studies and Research Center. KAPSARC is an independent, non-profit, research think tank located in Riyadh. Its mission is to advance the understanding of energy, economics, and the environment, acting as a catalyst for dialogue.
- Prior to joining KAPSARC, Mr. Sieminski held the James Schlesinger Chair for Energy and Geopolitics at the Center for Strategic and International Studies (CSIS) in Washington. Sieminski served as Administrator of the U.S. Energy Information Administration (EIA), the statistical and analytical division of the U.S. Department of Energy in 2012-2016. While awaiting U.S. Senate confirmation for the EIA appointment, he was the Senior Director for Energy and Environment of the U.S. National Security Council at the White House. He was previously Deutsche Bank's chief energy economist and integrated oil company analyst.
- Mr. Sieminski is an active member of the International Association for Energy Economics (IAEE), a Senior Fellow and former President of the U.S. Association for Energy Economics (USAEE), and was President of the National Association of Petroleum Investment Analysts. He holds the Chartered Financial Analyst (CFA) designation and earned both an undergraduate degree in civil engineering and a master's degree in public administration from Cornell University.



Fahad Alajlan

- Fahad Alajlan is the director of Hydrocarbon Sustainability Program and responsible for looking at long-term energy trends and their impact on energy markets including global demand for oil and gas. The program works to improve the environment and economics sustainability of hydrocarbon resources so they can part of energy supply mix in the upcoming energy transition. The program focuses on how to position Saudi Arabia to take advantage of the current energy transition and evaluate opportunities and risk to the Kingdom. In addition, he is in charge of the Circular Carbon Economy National Program, which aims to utilize a comprehensive framework to manage emissions while furthering the socioeconomic development of the Kingdom
- Prior to joining the Ministry of Energy Alajlan worked at the Ministry of Economy and Planning in Saudi Arabia, advising on energy markets, policy, and trends, as well as the industry and petrochemical sector. Before that, he served for more than 15 years at Saudi Aramco, where he held senior positions working across operation, corporate strategy, investment planning as well as mergers and acquisitions.
- Alajlan holds a BSc in Mechanical Engineering from North Carolina State University and an MBA from Stanford University in California.



Tidjani Niass

- Tidjani Niass is a CCUS lead at Saudi Aramco Technology Strategy and Planning Department, with over 25 years' experience of working at the interface of technology and policy. He is co-leading the Mission Innovation Carbon Capture Challenge, overseeing the global efforts on carbon capture, utilization and storage (CCUS) innovation. In this capacity, he improved broad international collaboration in CCUS innovation, including raising funding opportunity announcements to \$130 million, recommending priority research directions to inform national R&D policies and programs. Dr. Niass is also active in international collaborations such as the clean energy Clean Energy Ministerial (CEM) and the Carbon Sequestration Leadership Forum (CSLF).
- In 2008, Dr. Niass joined Saudi Aramco and held many senior leadership positions including Carbon Management Chief Technologist, overseeing and directing Saudi Aramco research in energy efficiency, CCUS, and renewable energies. In this capacity, he contributed in expanding Saudi Aramco research network with the establishment of global satellite centers and delivered key carbon management technologies. He is also leading Saudi Aramco's engagement in the Oil and Gas Climate Initiative (OGCI) CCUS initiatives.
- Prior to joining Saudi Aramco, Dr. Niass was the head of the Chemical Engineering Department at the French Petroleum Institute (IFP) in France. In this capacity, he was responsible of a research portfolio including reactors engineering for refining and gas treatment processes, New Energy Technologies such as CO₂ management, hydrogen generation and biofuels.
- Dr. Niass holds a Ph.D. in chemical engineering from Institut National Polytechnique de Lorraine and a M.Sc. in mechanical engineering from Ecole Nationale Supérieure d'Electricité et de Mécanique de Nancy in France.



Noura Alissa

- Noura currently serves as a Senior International Policy Analyst at the Ministry of Energy in Saudi Arabia. She engages with international energy policy, climate change & sustainability in policymaking, negotiations and advocacy, at the bilateral and multilateral level in forums including, but not limited to, the United Nations, the UNFCCC, and the WTO.
- During the Saudi G20 presidency, Noura conducted policy support for the Chair of the Employment Working Group, acting as the live drafter of the Labor and Employment Ministers Declaration and the co-lead of the Social Protection policy area.
- Noura has experience in strategy and policy consulting, as part of Takamol's Advisory Unit, a Saudi firm specializing in labor market solutions in support of Vision 2030.
- Prior, Noura conducted political analysis and engaged in diplomatic activities at the Royal Embassy of Saudi Arabia in the United Kingdom.
- Noura is also a semi-professional Taekwondo Athlete on the Saudi National team with an interest in expanding female participation in public policy and sports in the Kingdom.
- Noura holds an MSc in Comparative Politics from the London School of Economics and Political Science (LSE) and a BSc in Arts and Sciences: Societies with a focus on Politics & International Relations, and Psychology from University College London (UCL).



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