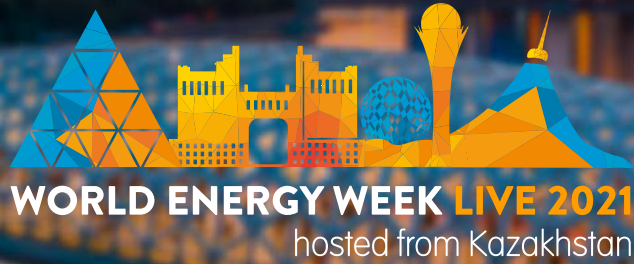




WORLD ENERGY COUNCIL



WORLD ENERGY WEEK LIVE 2021
hosted from Kazakhstan

5-7 OCTOBER 2021

WORLD ENERGY COUNCIL



Energy for Better Lives

3-DAY DIGITAL EVENT

We are honoured that Kazakhstan will host this year's digital World Energy Week from the heart of Eurasia and Central Asia regions. Hosted by the Ministry of Energy of Kazakhstan with the support of KAZENERGY Association, the Kazakhstan Member Committee of the World Energy Council, this discussion will be particularly timely as we start reflecting on and celebrate 100 years of energy one year ahead of the World Energy Congress in Russia.

This year **World Energy Week LIVE** will convene energy leaders in peer exchange and interactive conversation on climate neutral and carbon positive energy developments, which are evident in all world regions. It will provide a timely opportunity to clarify how responsible energy leaders are finding ways to build forward together in the new pandemic context of affordability and social justice.

Themes

Energy developments are once again centre stage. In an increasingly digital post-pandemic era, physical energy is still the ultimate connector and bridge to a better future in which globally connected energy societies flourish in a harmony of human progress and planetary health.

A pivotal and uncertain moment in energy for humanity, and a decisive decade for delivery

Multiple energy transition and transformation pathways are being progressed in response to the global imperatives of more accessible and affordable energy and climate neutrality. The general outlook is for global energy abundance and greater energy mix – clean, affordable, reliable, and equitable uses of heat, power and liquid fuels. Diversity in energy is increasing in the broadest sense – geographies, technologies, skills and capabilities – and is reflected in the uneven experiences of the COVID-19 pandemic.

“Energy for Better Lives” is the human-centric energy transitions and transformations agenda

Modern energy societies are struggling to keep pace with the accelerating cyber-energy technology innovation nexus, as they try to slow and stop climate change momentum and recover from the COVID-19 pandemic. Discussions will build on the World Energy Council's Humanizing Energy action agenda. This agenda recognizes that technology innovation is essential but insufficient to secure the benefits of sustainable energy for all.

Humanizing energy is imperative in avoiding conflict and the risk of stranded people

Given the increasing diversity of starting points and multiple pathways now involved in achieving globally agreed goals – UNSDG by 2030, UNFCCC net zero by 2050 - involving more people and communities in designing and driving demand-driven solutions is essential to success.

Humanizing energy is the best way to avoid the risk of extreme polarization between a narrowly principled green vs. clean and just leadership agenda and forge the new common ground needed for effective collaboration on complex coordination challenges.

▶ Headline speakers



H.E. Magzum Mirzagaliyev, Minister of Energy of the Republic of Kazakhstan



Hon. Dr. Megan Woods, Minister of Energy and Resources, Government of New Zealand



Angela Wilkinson, Secretary General & CEO, World Energy Council



H.E. Juan Carlos Jobet, Minister of Energy, Government of Chile



Hon. Kornelia Shilunga, Deputy Minister of Mines and Energy, Government of Namibia



Ashley Hovart, Vice President, Head of E-Mobility, Schneider Electric



Almassadam Satkaliyev, Chief Executive Officer, Samruk-Kazyna



Kim Yin Wong, Group President & Chief Executive Officer, Sembcorp



Gina Domanig, Managing Partner, Emerald Technology Ventures



Maria van der Hoeven, Senior Adviser to Secretary General for Literacy, World Energy Council



Bob Dudley, Former Group Chief Executive, Officer, BP



Rafael Cayuela, Chief Economist, The Dow Chemical company



Clay Koplín, Mayor of Cordova, Alaska



Sungat Yessimkhanov, Chairman of the Management Board, Samruk-Energy



Faith Chege, Portfolio Coordinator, EEP Africa



Maria Suner-Fleming, Chief Executive Officer of the Swedish Association of Mines, Mineral and Metal Producers



Gabriel Argüello, Vice Minister for Electricity and Renewable Energy, Ecuador



Mohit Bhargava, CEO, NTPC Renewable Energy Ltd (NREL)



Paddy Padmanathan, Chief Executive Officer, ACWA Power



Ahlem Friga-Noy, Country Chair in Kazakhstan, TotalEnergies & Managing Director, TotalEnergies EP Kazakhstan

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Programme *London time (UTC +1)*

TUESDAY 5 OCTOBER**DAY 1**

08.00 - 09.00

Leadership: The certainty of uncertainty

Global plenary

Leaders everywhere are grappling with the certainty of much greater economic uncertainty as their perceptions of risk, opportunity, and priorities for action continue to evolve against a backdrop of ambitions to decarbonise energy, secure climate neutrality and meet the changing social energy agenda. Which energy issues are front and centre for leaders across the world, and what are the gaps in implementation that need to be bridged and by whom?

09.15 - 10.15

The energy industry in Central Asia: New national initiatives and partnerships

Plenary session from Kazakhstan

Central Asia has significant hydrocarbon resources and great potential for renewable energy sources, allowing for opportunities to improve energy security in the region. Strengthening partnerships between the Central Asian countries - Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, especially in the field of electric power and water resources management, plays a key role in achieving national and regional priorities in the field of energy security, as well as in obtaining economic benefits from energy development.

10.30 - 11.30

Circular carbon economy in the Middle East

Regional Perspectives: Middle East & Gulf

Currently mature solutions to address climate change such as energy efficiency and renewable energy, while necessary, may not be enough to achieve the goals set in the Paris Agreement. In the Middle East and Gulf States, there is a need to develop and deploy technologies of varying maturity to address emissions reductions across multiple sectors. A Circular Carbon Economy framework, such as developed by the Kingdom of Saudi Arabia, provides a comprehensive approach in utilising all available levers for emissions reduction. The approach aims to address the challenge of climate change while generating socio-economic value by creating valuable products from CO₂.

11.30 - 12.00

Networking break

13.00 - 14.00

Energy transition and competition for resources in the region

Plenary session from Kazakhstan

The world is entering a stage of the so-called Fourth Energy Transition that involves the widespread use of renewable energy sources and the displacement of fossil fuels. However, the speed of the transition is linked with high uncertainty and diverse global pathways. As the world recovers from the Covid-19 crisis, how are Central Asian countries and societies managing the rise in demand for energy and raw materials while meeting the goals of climate neutrality and energy for better lives?

14.15 - 15.15

Energy 2.0: Rise of the machines and the digital customer

Global plenary

Accelerated digitalisation and datafication of energy societies and systems are leading to intense competition for energy-related services, bringing new players and business models into the market. Advances in computing power are also opening avenues to breakthrough innovations. How evenly distributed will the benefits of digitalisation be for consumers and customers?

15.30 - 16.30

Electrifying Transport: Demand and Challenges

Regional perspective: North America

The electrification of transportation is accelerating on many fronts globally, driven by national policies and enabled by rapidly evolving technologies and decreasing costs. It is increasingly important for both national and community stakeholders to clearly understand the pace of change within the transportation sector and to develop strategies and programs to remove obstacles to the adoption of electric vehicle technologies. These include: Blueprint for deploying and operating a reliable, accessible, and resilient national EV charging infrastructure; Local development of EV technology, manufacturing ecosystems, and businesses; Ensure that e-mobility options and services are relevant and equitable to communities.

16.45 - 17.45

Humanising Energy: Meeting the enablers of the transition

Global plenary

The energy transition is accelerating. As the sector and policymakers set out ambitious targets, global audiences seek the tools they need to both understand and play their part in the energy transition. This discussion will celebrate the launch of Humanising Energy, a new online series of films presented by the World Energy Council and produced by BBC StoryWorks Commercial productions. It will focus on showcasing innovations highlighted by the Council's global community, which are driving the energy transformation through the people enabling the transition at a grassroots level.

17.45 - 18.00

Wrap-up day 1

WEDNESDAY 6 OCTOBER

DAY 2

06.30 - 07.30

Future fuels

Regional perspective: Asia-Pacific

Alternative low-carbon options are emerging across the Asia Pacific region as we seek to reduce carbon emissions, from biofuels to synthetic fuels. What are the opportunities, challenges and future outlook of each option?

08.00 - 09.00

The role of gas in the energy transition in Russia and Kazakhstan

Plenary session from Kazakhstan

Current policies of states such as Kazakhstan and Russia focus on changing the energy mix in favour of natural gas that they see as a promising energy source with potential to compete with renewables in the future. Rethinking the use of gas is especially important in light of the decarbonisation of the global economy and the Paris Climate Agreement, to which Kazakhstan and Russia acceded in 2016. The resources available in Kazakhstan and Russia – raw materials, technological, engineering and human resources – can help to build into the new global market and satisfy, first and foremost, domestic and later external demand.

09.15 - 10.15

Carbon neutrality and energy for better lives: New opportunities for Kazakhstan

Plenary session from Kazakhstan

According to several scenarios, oil will soon cease to be the number one product in the global energy market. The main factors that will affect the reduction of power generation from fossil raw materials will be the course for decarbonisation and carbon neutrality. In view of this, what awaits the global energy market and how are countries such as Kazakhstan as a hydrocarbon-oriented economy adapting to ensure further development and energy security in the region? As one of the most energy-intensive countries in the world with almost 70% of electricity generation still dependent on coal, what are the opportunities for Kazakhstan's energy transition?

10.30 - 11.30

Hydrogen: Avoiding the trouble of the bubble

Global plenary

The current hydrogen conversation focuses heavily on supply, overlooking the critical role of hydrogen users. Demand-centric hydrogen perspectives are needed to facilitate the development of global value chains and to fulfil hydrogen's potential role as a clean energy vector.

11.30 - 12.30

Networking break

13.00 - 14.00

Customers of the future

Future Energy Leaders' session

The energy sector landscape is rapidly changing with increasing emphasis on low carbon development and associated technological and other advancements including dealing with challenges such as COVID-19 Pandemic. For successful delivery of these energy services, we the Future Energy Leaders at the World Energy Council will explore - what drives the future customer; their changing needs, expectations and experiences and what engages and excites them in a new world defined by shifting needs and priorities.

14.15 - 15.15

Energy for Humanity: Achieving abundance in a world of scarcity

Global plenary: Road to Congress 2022

We live in a world of increasing demand, and demands on the limits of our planet. The renewables revolution is materially intensive, and not yet accessible to all. Three billion people worldwide are living in energy poverty, whilst nearly one billion do not have any access to electricity. With growing disparity and scarcity, how can we achieve abundance of energy needed for meaningful livelihoods for all of humanity?

15.30-16.30

Decarbonisation: The Latin America reality

Regional perspective: Latin America

Latin America's main aggregated and interconnected sectors - such as transport, manufacturing and agriculture - are the main contributors to the region's greenhouse gas emissions. The decarbonisation of the electricity sector in these interconnected sectors is a starting point in finding a viable solution to generating clean energy and supporting further deployment of renewables. What can be the best way forward for Latin America's energy sector to meet carbon neutrality targets by 2050?

16.45-17.45

It's all about the money, money, money...or is it?

Global plenary

As the world begins its recovery from Covid-19 and against a backdrop of rebounding market investment, the urgency of net zero ambitions a new pandemic context of affordability, and demand for global social justice are compounding to affect investment choices in energy assets and infrastructures. ESG risk reporting has become an important filter for institutional investors. Intergenerational transfer of wealth is also triggering a new phenomenon of impact investing. Demand for a new scale of investment is emerging - as regional grouping of Africa countries, SMEs, cities, community cooperatives and social entrepreneurs become involved in humanising energy and sprinting towards more inclusive, sustainable and climate neutral energy futures.

17.45 - 18.00

Wrap-up day 2

 **THURSDAY 7 OCTOBER****DAY 3**

08.00 - 09.00

Capacity building for a net-zero Africa

Regional perspective: Africa

Many African countries who signed the Paris Agreement have set out on an ambitious plan to reduce their carbon emissions to zero by 2050. Despite many pledges and efforts by governments to tackle the causes of global warming, GHG emissions are still growing drastically. What can African countries do to accelerate the implementation of those ambitious targets? How can they prepare their populations and workforces to face some of the unavoidable changes and empower them to be enablers of a successful transition?

09.15 - 10.15

Petrochemical industry: Exploring technology trends and competences in Kazakhstan

Plenary session from Kazakhstan

Session with focus on energy transition in Kazakhstan and the subregion

10.30 - 10.40

Special Address from the President of the Republic of Kazakhstan

10.40 - 10.50

Special Address from the Secretary General and CEO of the World Energy Council

10.50 - 11.00

Special Address from the Minister of Energy of the Republic of Kazakhstan

11.30 - 12.30

World Energy Trilemma 2021 – Balancing dimensions: Navigating change across energy geographies

Global plenary

World Energy Trilemma 2021 – The results are in. Hear how countries and regions across the world balanced the competing dimensions Energy Security, Energy Equity and Environmental Sustainability, and how policy decisions taken a few years ago may have created impact and positioned them to face some of today's challenges. The session will launch the 2021 Trilemma report, review its highlights and take a closer look at specific geographies of energy including Arctic, ASEAN and OPEC+.

12.30 - 13.00

Networking break

13.30 - 14.30

Active energy citizens: At the heart of the energy transition

Regional perspective: Europe

Consumers and end-users are increasingly expected to play an active role in the energy system, propelled by increased use of digital technologies and new energy uses. As an 'energy citizen', how can we ensure that all citizens, communities and societies - including the most vulnerable - are involved in a clean and just energy transition?

14.45-15.45

Tipping points and transitions to 2040

Global plenary

Diversity in energy systems is increasing, in terms of people, technologies, geographies, needs and uses, opening up multiple transition pathways. How could these pathways evolve by 2040, when nine billion people with different lifestyles and behaviours to those of today inhabit our earth? Gamechangers such as synthetic molecules, new materials, and flexible storage, are colliding with new 'customer-centric' business models emerging at global and ultra-local levels.

16.00-16.15

Closing reflections with Jean-Marie Dauger, Chair, World Energy Council

16.15-16.30

Wrap-up day 3

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