



ABU DHABI
SUSTAINABILITY WEEK

18 - 21 JANUARY 2021

DELIVERING A GREEN RECOVERY
LIVE AND MOVE

Principal Partner

دائرة الطاقة
DEPARTMENT OF ENERGY



Hosted by

Masdar
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About

Abu Dhabi Sustainability Week

Abu Dhabi Sustainability Week (ADSW) is a global platform for accelerating the world's sustainable development. The week brings together a unique fusion of policy makers, industry specialists, technology pioneers and the next generation of sustainability leaders to engage in dialogue and take action to advance the global sustainability agenda.

Through initiatives and events, ADSW is committed to the sharing of knowledge, implementation of strategies and the delivery of real-world solutions that drive human progress.

As a manifestation of the United Arab Emirates' (UAE) proactive, forward thinking approach to sustainability and mitigating the impact of climate change, ADSW aims to further our understanding of the major social, economic and technology trends shaping the world today.

The ADSW Summit

The critical importance of sustainability has been further reinforced during the pandemic. While the impact of COVID-19 has taught us how truly fragile our world can be, it has also demonstrated the power we possess, when working together, to overcome global challenges.

The virtual ADSW Summit brought together leaders from policy, business and technology to define new pathways for delivering a green recovery in a post COVID-19 world.

Taking place across three sessions, the Summit centralized around three pillars - Live & Move, Care & Engage, Work & Invest. Each pillar allowed participants and audiences to explore topics that are reimagining sustainable development and opening up social, economic and technological opportunities for delivering a green recovery.

Hosted by Masdar, the virtual ADSW Summit was held in partnership with the International Renewable Energy Agency (IRENA), the Atlantic Council and Abu Dhabi Global Market.

Life in a New World

From ravaged economies and disruptions in domestic and international food supply chains, to countless job losses and border closures, 2020 is a year that will go down in history as the COVID-19 pandemic has drastically impacted the world as we knew it.

A saturated global healthcare system, which put millions at risk of losing their lives, along with devastating effects on extreme poverty, global trade and the aviation industry, the world population has undergone an unprecedented shift in the way it has been living life.

And the ripple effect can be felt to this day. According to the **World Health Organisation (WHO)**, nearly half of the world's 3.3 billion global workforce are at risk of losing their livelihoods, while access to healthcare – including prevention and treatment services for noncommunicable diseases – has been severely disrupted since the start of the crisis.



“2020 showed us that we were all able to change in just a few months, a few weeks, sometimes a few days. We were able to drastically change our habits and our comforts for an essential cause. Last year, this was health. In the future, this may be the environment”

H.S.H. Prince Albert II of Monaco, Head of State, Principality of Monaco

A massive impact on global food supply chains has also reduced people's access to healthy, safe and diverse diets, calling for an urgent need to redefine our future.

As a result, many governments around the world have shifted gears and placed greener policies at the heart of their work, in an aim to impact the way we power our homes and embrace green living. Sustainability has been deemed the only way forward for this coming year. Global dialogue, the power of shared action and the strength humanity possesses are now considered vital elements to reinforce the new world we live in today.

Based on discussions held during the Live and Move session, part of the 2021 ADSW Summit, this report has gathered groundbreaking ideas, recommendations and insights from global experts into the lessons learnt from the past year and the ways in which we can forge a resilient and sustainable world.

A Wake-up Call For Humanity

According to **H.E. Dr. Sultan Ahmed Al Jaber**, Minister of Industry and Advanced Technology, UAE Special Envoy for Climate Change, and Chairman of Masdar in the United Arab Emirates, the pandemic was a wake-up call for humanity, reinforcing the importance of sustainability in its broadest sense and demonstrating the close ties between the world's health, food and resource security. As global supply chains were tested like never before – revealing weaknesses never imagined – humans proved just how resilient they could be.

The major lesson learnt from COVID-19 is that, when humanity comes together, there is no challenge that cannot be overcome. But climate change is looming, sharing three common factors with the pandemic: they are global, they respect no borders, and they require a united response.

The UAE has been a leader in its global approach to climate change, as the first Gulf country to join the international community in signing the Paris Accords, the first to set clean energy targets and to begin operating peaceful zero carbon nuclear power.

As such, a diverse energy mix will prove crucial in continued global progress, with the need for oil and gas to remain as low carbon as possible. New energy sources, such as hydrogen, hold great potential in helping deliver sustainable development. “Investments like these can embed sustainability into long-term post-COVID economic recovery, a recovery that will be accelerated by digitisation and machine learning,” Dr. Al Jaber highlights. “These evolving technologies will introduce new, cleaner industries, new jobs and definitely new hope.”



National Resilience in The Time of COVID-19

Despite the tragic economic and social consequences caused by COVID-19, optimism can be felt in 2021. With a drop in greenhouses gases due to a number of economic activities, travel coming to a halt and a resulting decrease in oil consumption, global CO₂ emissions from fossil fuels have dropped by an estimated seven percent in 2020 – the largest decline since the Second World War, according to the Centre for International Climate Research.

Recovery plans implemented by most governments worldwide have also emerged as one of the pandemic's silver lining, with a total amount recently estimated by the United

Nations Environment Programme at \$12 trillion – close to 12 percent of the world's GDP. "This is an unprecedented amount in history as far as investments in the future are concerned," says **H.S.H. Prince Albert II** of Monaco, Head of State, Principality of Monaco. "An amount which, if properly allocated, would be a major boost to our combat for the climate and the environment."

At a time when economies need to reinvent themselves, such sums offer the world a unique opportunity to do so in accordance with sustainable principles. But reinvention will require a collective effort, in which civil society plays a key role.



"If you have gone through 2020, you have learnt how to adapt very, very quickly. And I think that's really what the cities will look back and say, OK, how have I responded to covid and what kind of lessons I can learn to make ourselves a lot more resilient going forward"

H.E. Grace Fu, Minister for Sustainability and the Environment, the Republic of Singapore

Making Water More Sustainable

Alarming figures have emerged with regards to the status of water around the world. According to the 2020 United Nations World Water Development Report, global water use has increased sixfold over the past century, and water demand is rising by one percent annually worldwide. And with the trend expected to continue until 2050 – and climate change aggravating the situation – countries, particularly within the GCC, are at severe risk.

However, the report states that water can be a part of the solution: by improving water management and water production efficiency, resilience to climate change can also progress, maximising the provision of sufficient potable water supply on a global scale.

With the region's limited natural water resources, **H.E. Eng. Awaidha Murshed Ali Al Marar**, Chairman of the Abu Dhabi Department of Energy in the United Arab Emirates, believes desalination remains one of the long-term sources of potable water to meet the demand of a growing population and economic activity. However, with the potential detrimental environmental impact, continued innovation in desalination technology and the country's new water demand management strategy will be paramount.

Renewable energy-based solutions are also expected to be 75 percent more energy efficient and capable of reducing the environmental footprint. As such, the essential connection between water, food and energy, in terms of production and consumption, is seen as an opportunity to drive sustainability by integrating the management of those three sectors. Standing as an international concern, water requires global attention and collective action.



Achieving a Robust Food Security Strategy

With the UAE importing 90 percent of its food, certain shortages were felt during the country's lockdown in 2020. As a result, a transition towards more sustainable food systems is now gaining momentum. New technologies are being looked at to grow more food sustainably in the Emirates, according to **H.E. Mariam bint Mohammed Saeed Hareb Almheiri**, Minister of State for Food and Water Security for the UAE, while forging key partnerships to manoeuvre through the challenges.

Prior to the pandemic, hunger was rising for its fifth year in a row. COVID-19 emphasised the need to handle matters differently and use innovation as a catalyst in the field. Reversing the impact on climate and making advances on nature will also prove critical, as investments will have to be

cognizant of the fact that more needs to be done for the planet and its people.

Political will and agriculture technologies have a vital role to play in addressing sustainability in food. As such, the United Arab Emirates is now growing salmon, blueberry and quinoa, which are considered commercially viable today thanks to such technologies. Hopefulness prevails in the field, as an increasing number of people continue to buy groceries online, global food supply chains evolve, technology is being adopted more rapidly, and block chains, Artificial Intelligence (AI) and digitisation become more flexible and resilient.



"We see development of regulatory frameworks that will catalyse new technologies, new business models, new low carbon industries. All of this is good and really encouraging. These are strong and healthy signals for a green recovery. And if this week is any indication, the momentum will only continue as we move closer to COP26."

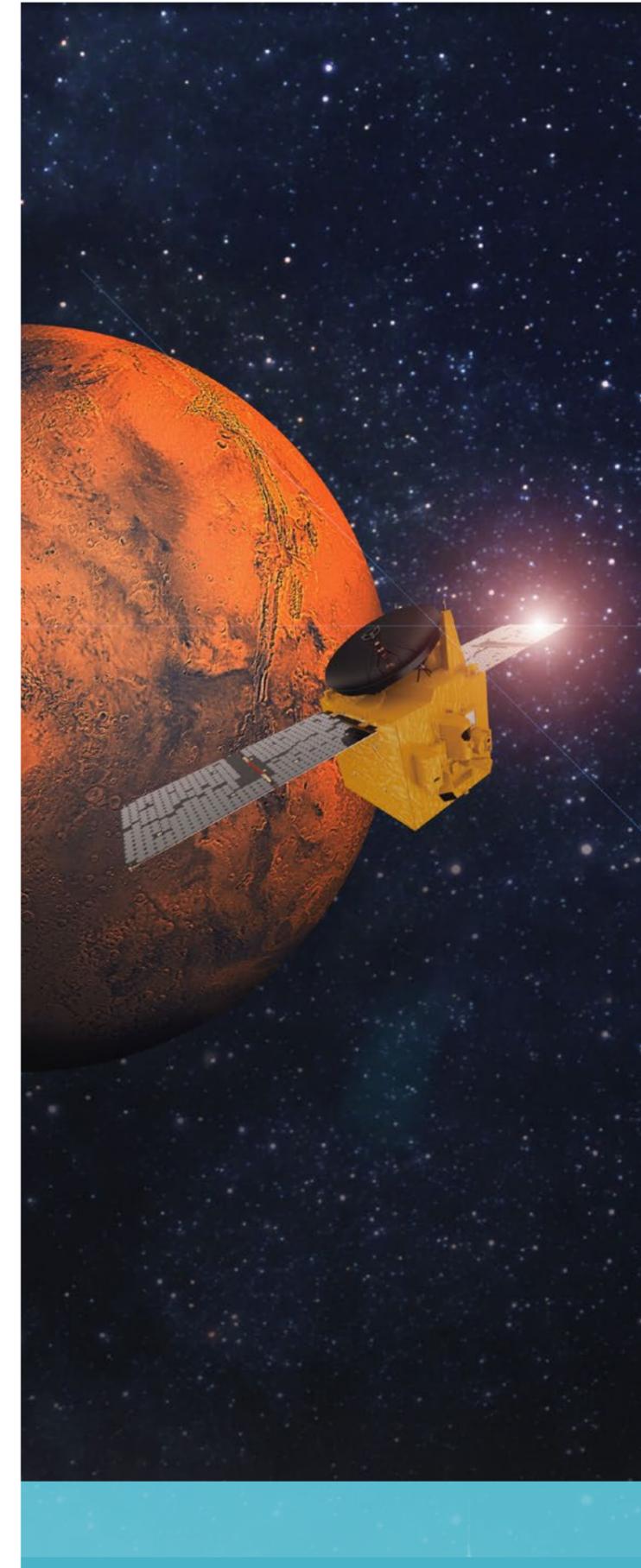
Jasim Husain Thabet, Group Chief Executive Officer & Managing Director, Taqa

The Next Generation Of Space Technologies

Space, technology and data can help us gain a better understanding of environmental, economic and societal impacts on earth. Machine learning and AI capabilities are said to spur on opportunities for the government, as well as commercial entities, to look at new space opportunities and use that data to provide different services. Such data can also provide fundamental insight into climate change and virus transmission, which can, in turn, help raise awareness among the community.

Saving humanity and biology can only be done by working together globally and exchanging data, according to **Johann-Dietrich Wörner**, Director General of the European Space Agency. Being as transparent and open as possible will lead to a future with no fences nor walls.

Ultimately, using space to ensure sustainability on earth must be worked on for future generations. Much change is currently taking place in that regard, with the United Nations focusing on the long-term sustainability of outer space activities.



The Sustainable Future Home

With the idea of homes drastically changing over the past year, people's needs from their home have also significantly shifted. Consequently, the choice of one's home base will be highly impacted by the requirement for travel, as stated by **Chris Hulatt**, Founder of the Octopus Group. He describes it as one of the lasting changes of the geopolitical impact of how we use our cities.

As COVID-19 has forced a serious refocusing back onto people's basic needs for safety and security, it has also made their yearning for psychological, social and community all that much greater. "I'm hoping that this is the pause that refreshes and that, as we emerge from this moment, we will look more closely for the homes to meet those needs outside of physical and security," says **Glen Finkel**, Co-Founder of PURETi/Toledo, Solar/Aquom.

But the key trend remains sustainability, with residents increasingly realising the need to

make their homes more energy efficient. In that realm, technology has a key role to play, with the necessity for homes to be integrated into the energy system. As renewables become a crucial source of power generation, that power consumption will have to be digital and smart.

Some of the breakthrough technologies include nanomaterials, tech and bio regenerative materials that are catching up to make a meaningful difference in the sustainable future home. Energy-saving lights that can activate materials inside the home to purify air are also gaining ground, with the potential to deliver hospital, clean room quality, pristine and pure air to any room anywhere in the world. With digital solutions emerging as champions from the pandemic, much optimism can be perceived on the horizon for the future of our homes.



"If we are to keep global warming to under one point five degrees centigrade this century and meet the UN Sustainable Development Goals, we must harness this innovation to make our cities more sustainable, more liveable. And definitely more efficient."

Mohamed Jameel Al Ramahi, Chief Executive Officer, Masdar

ADSW Summit: Live and Move Agenda



Official Welcome

- *H.E. Dr. Sultan Ahmed Al Jaber, Minister of Industry and Advanced Technology, UAE Special Envoy for Climate Change, and Chairman, Masdar, United Arab Emirates*



Keynote: National Resilience in the Time of COVID 19

- *H.S.H. Prince Albert II of Monaco, Head of State, Principality of Monaco*



In Perspective

- *David Beasley, Executive Director, World Food Programme*



In Conversation: Eliminating Hunger – Scaling Solutions for Global Impact

- *H.E. Mariam bint Mohammed Saeed Hareb Almheiri, Minister of State for Food and Water Security, United Arab Emirates*
- *Dr. Agnes Kalibata, Special Envoy of the UN Secretary-General for the 2021 Food Systems Summit*
- *Moderator: Manus Cranny, Bloomberg*



Address: Making Water More Sustainable

- H.E. Eng. Awaidha Murshed Ali Al Marar, Chairman, Abu Dhabi Department of Energy, United Arab Emirates



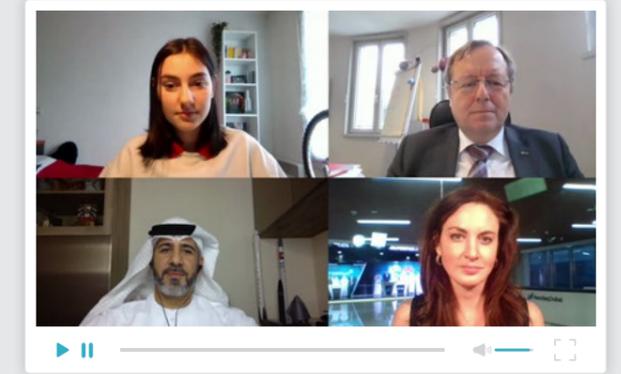
In Perspective

- Paul Polman, Co-Founder & Chair, Imagine



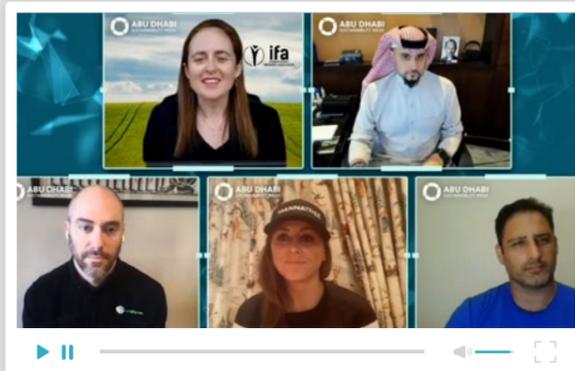
In Conversation: Using Human Connectedness to Solve Global Challenges

- H.E. Sheikha Bodour Al Qasimi, President, International Publishers Association, United Arab Emirates
- Mamadou Kwidjim Toure, Founder and Chairman, Africa 2.0 Foundation, Cameroon
- Moderator: Samia Badih, Arts & Culture Editor, The National



In Conversation: The Backbone of Digitization: The Next Generation of Space Technologies

- Fahad Al Mheiri, Acting Executive Director - Space Sector, United Arab Emirates Space Agency
- Camille Fournier, Aspiring ESA Astronaut and Mars Walker, France
- Johann-Dietrich Wörner, Director General, European Space Agency
- Moderator: Hadley Gamble, Anchor, CNBC



Panel: The Future of Food - New Tastes, New Priorities, New Technologies

- H.R.H Prince Khaled bin Alwaleed bin Talal Al Saud, Founder & Chief Executive Officer, KBW Ventures, Kingdom of Saudi Arabia
- Max Rye, Chief Strategist, TurtleTree Labs, Singapore
- Gabrielle "Ellie" Rubenstein, Co-Founder & Chief Executive Officer, Manna Tree, United States of America
- David Rosenberg, Chief Executive Officer & Co-Founder, Aerofarms, United States of America
- Moderator: Alzbeta Klein, Director General, International Fertilizer Association



Panel: The Future City

- H.E. Grace Fu, Minister for Sustainability and the Environment of the Republic of Singapore
- Allison Dring, Chief Executive Officer, Made Of Air GmBH, Germany
- Karim Tarraf, Chief Executive Officer & Co-Founder, Hawa Dawa, Germany
- Moderator: Michelle Moore, Chief Executive Officer, Groundswell, United States of America



In Conversation: The Future of Transport

- Josh Giegel, Co-Founder & Chief Technology Officer, Virgin Hyperloop, United States of America
- Moderator: Omar Butti, Presenter, United Arab Emirates



Address: The Future of Transport: Putting Aviation on a Sustainable Flightpath

- Tony Douglas, Group Chief Executive Officer, Etihad Aviation Group, United Arab Emirates



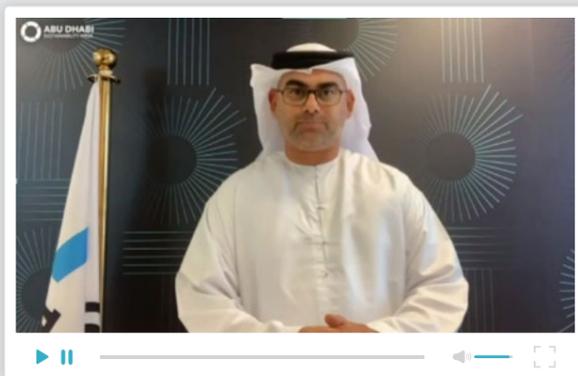
In Perspective

- H.E. Saeed Mohammed Ahmad Al Tayer, MD and CEO, Dubai Electricity & Water Authority



Panel: The Sustainable Future Home

- Pierre-André de Chalendar, Chairman & Chief Executive Officer, Saint-Gobain, France
- Glen Finkel, Co-Founder, PURETi/Toledo Solar/Aquom, United States of America
- Chris Hulatt, Founder, Octopus Group, United Kingdom
- Moderator: Dr. Rachel Armstrong, Professor of Experimental Architecture, Newcastle University, United Kingdom, Visiting Professor, KU Leuven, Belgium



Address: Sustainably Powering a Thriving Future

- Jasim Husain Thabet, Group Chief Executive Officer & Managing Director, Taqa, United Arab Emirates



Address: Space and Sustainability

- H.R.H. Prince Sultan bin Salman bin Abdulaziz Al Saud, Chairman of the Board of Directors, Saudi Space Commission, Kingdom of Saudi Arabia

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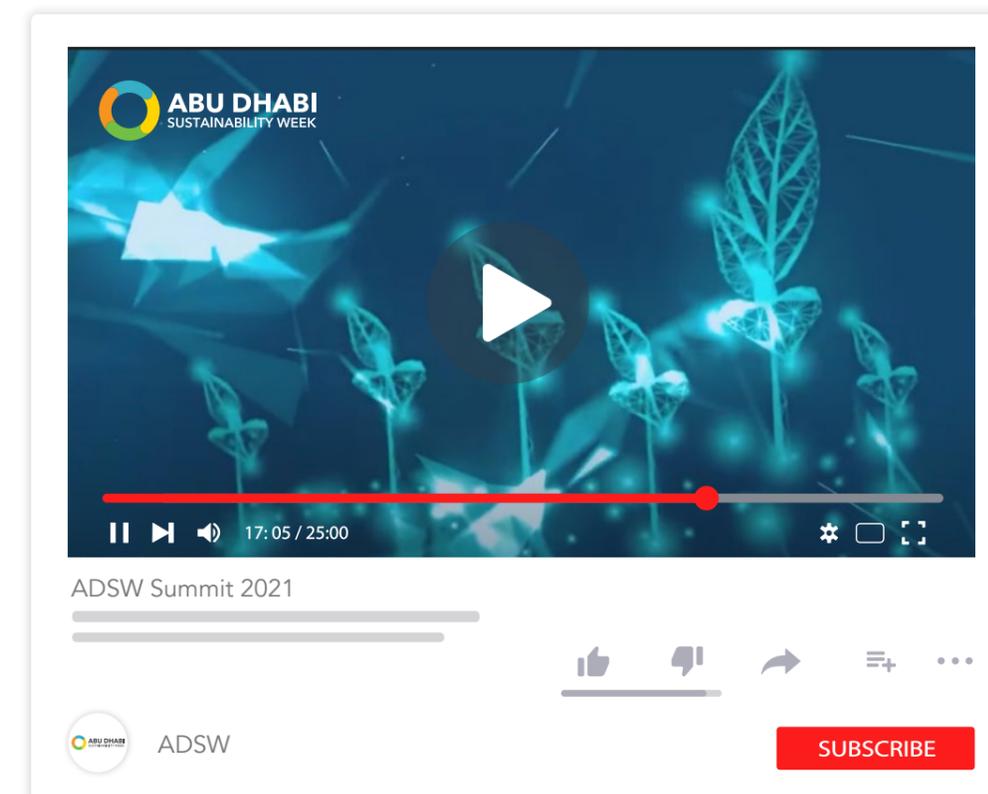


Host City



Watch Again

Join us on our youtube channel to watch our event playlist again: ADSWagenda





For more information

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