



ADSW SPECIAL EDITION AT COP28

UNITED ON
CLIMATE ACTION

Hosted by



FOREWORD

FOR 16 years, Masdar has hosted Abu Dhabi Sustainability Week (ADSW), bringing together the public sector, civil society, and business to solve global climate challenges. As the world gathered in Dubai to tackle the greatest challenge of our time, the ADSW Special Edition at COP28 provided a platform to strengthen existing collaboration, forge new partnerships and support the United Arab Emirates in the success of COP28.

Masdar was proud to host this special edition of ADSW and spearhead the UAE's international climate action as COP28's Principal Pathway Partner. Over nearly two decades, Masdar's mission has been to drive the energy transition forward and protect the future of our planet, pioneering clean energy in the UAE and around the world, including a growing portfolio of projects across the Global South that are providing clean energy access to those that need it most. Today, Masdar is one of the world's fastest-growing clean energy companies with some of its most ambitious renewable energy targets.

In the discussions throughout the ADSW Special Edition at COP28, it was clear that Masdar is not alone in its ambitions to drive the global energy transition forward. Through thought-provoking panel discussions, roundtables and seminars, global leaders from across industry, government, and civil society came together to find solutions to drive climate action.

This spirit of collaboration was reflected throughout COP28 itself, culminating in the historic UAE Consensus. With the world now focused on capturing this unprecedented momentum and tripling global renewable energy capacity by 2030, Masdar remains committed to supporting the world in delivering on this promise. And as the world continues to search for innovative new ways to build a more sustainable future where no one is left behind, ADSW will remain a key platform to spark ideas and find common ground.



**Mohamed Jameel
Al Ramahi**

Chief Executive Officer
Masdar

Masdar hosts ADSW Special Edition at COP28, the “COP of action”

THE 28th edition of the Conference of Parties, or COP28, held in the UAE, delivered the historic UAE Consensus that includes carbon abatement commitments and climate-change financing agreements. The 197 nations, as well as the European Union, agreed for the first time ever to “[transition] away from fossil fuels in energy systems, in a just, orderly and equitable manner ... so as to achieve net zero by 2050 in keeping with the science.” The milestone announcement is the first time the world has pledged to move away from fossil fuels, the largest contributor to global warming and climate change.

Another historic breakthrough of the UAE Consensus is the operationalizing and financing of the Loss and Damage Fund that was established at COP27, which will provide financing for vulnerable countries hit hard by climate disasters. USD 700 million has been raised so far, with the UAE and Germany leading the way with contributions of USD 100 million each. Other climate action financing initiatives include the launch of the Alterra fund by the UAE, a new private investment vehicle that aims to raise USD 250 billion globally in the next six years to create a fairer climate finance system. COP28 also performed the first Global Stocktake, a landmark assessment of the world’s progress in mitigating climate change, held at the midpoint between the Paris Agreement in 2015 to take action to limit the long-term global temperature increase to

1.5°C and its deadline of 2030. The assessment reveals that current actions are insufficient to maintain the 1.5°C pathway and urges nations to triple renewable energy capacity and double the global average annual rate of energy efficiency improvements by 2030.

COP28 in the UAE is of particular significance for the results it delivered and the issues that it debated, particularly during the ADSW Special Edition at COP28, held by Abu Dhabi Sustainability Week under the theme United on Climate Action at COP28. The global initiative championed by the UAE and its clean energy powerhouse Masdar brought together thought leaders and key stakeholders, including heads of state, policymakers, industry leaders, investors, civil society, youth, and entrepreneurs for an enlightening series of discussions. Masdar also signed

several meaningful agreements with government and corporate entities worldwide to advance the sustainability agenda.

Held under the patronage of H.H. Sheikh Mohammed bin Zayed Al Nahyan, President of the UAE, the ADSW Special Edition at COP28 was a culmination of year-long international conversations held to discuss how innovative cross-sector partnerships, financing solutions and technological applications can accelerate climate action that is both equitable and sustainable.

The Special Edition’s program included the ADSW Summit and a series of high-level roundtables, as well as meetings of Masdar’s strategic platforms: Women in Sustainability, Environment, and Renewable Energy (WiSER) and Youth 4 Sustainability (Y4S). It also included partner-led events with the Abu Dhabi Sustainable



Finance Forum, Atlantic Council Global Energy Forum, Parliamentary Assembly of the Council of Europe, the Africa and Middle East SAFE Initiative launched by the Global Green Growth Initiative (GGGI) in collaboration with the COP28 Presidency, and the AWS Clean Energy Accelerator 3.0 Innovation Showcase.

Throughout COP28, ADSW roundtables connected global participants and observer delegates with climate negotiators in the spirit of collaborative action to enable timely and relevant climate action conversations between accredited parties. Bridging the Blue and Green Zones of COP28, the roundtable discussions brought participants together for discussions on climate change and public health, circular economy innovation, investment strategies to

accelerate decarbonization of heavy industries, scaling climate tech innovations, future-proofing family enterprises from climate financial risks, decarbonizing cities, accelerating the development of the clean hydrogen economy, mobilizing finance for food systems transformation, and innovative water solutions for climate adaptation and humanitarian relief.

As part of the UAE's Year of Sustainability, 2023 saw the nation evaluate its progress in addressing climate issues, including greenhouse gas emission inventories and decarbonization plan assessments. In this spirit, the ADSW Special Edition welcomed stakeholders in sustainability and clean energy to catalyze positive change and turn pledges into practical solutions to collectively and inclusively tackle global challenges.

\$700M

has been raised so far for the Loss and Damage Fund with the UAE and Germany leading contributions



Accelerating the Energy Transition



The historic shift from fossil fuels

Countries at the United Nations Climate Change Conference (COP28), held in the United Arab Emirates, adopted what is hailed as an historic deal to transition away from fossil fuels in an attempt to reach global net zero emissions by 2050. The **UAE Consensus**, as it has come to be known, signals the “beginning of the end” of the fossil fuel era by laying the ground for a swift, just and equitable transition, underpinned by deep emissions cuts and scaled-up finance.

A culmination of the world’s first Global Stocktake, the UAE Consensus includes the shift away from fossil fuels for the first time at a UN climate summit. The UAE Consensus can now serve as the foundation on which countries can develop stronger climate action plans due by 2025. It recognizes the science that indicates global greenhouse gas emissions need to be cut 43 percent by 2030, compared to 2019 levels, to limit global warming to 1.5°C.

Climate policy informed by climate science and a strategic, goal-based approach reliant on collaboration from a diverse set of stakeholders also emerged as key topics at COP28, including a discussion on the next round of nationally determined contributions (NDCs).

43%

reduction is needed in
global greenhouse gas
emissions by 2030



“The real challenge lies beyond macro or sovereign risks; it’s about forging strong, reliable grids to handle new challenges like heat waves. Embracing digitalization and AI is crucial.”

Ignacio S. Galán

Executive Chairman
Iberdrola S.A.

In addition to fossil fuels, the UAE Consensus includes an agreement on efforts to phase down **coal power** and phase out **inefficient fossil-fuel subsidies** and other elements that could come in the way of a just and orderly transition to net zero.

Decarbonizing the oil and gas sector came in for intense discussion, with participants recognizing the need to address emissions by oil and gas producers using cost-effective measures. According to the International Energy Agency (IEA), [oil and gas operations](#) account for 15 percent of energy-related emissions globally, the equivalent of 5.1 billion tons of greenhouse gas emissions. These can be addressed by tackling methane emissions; eliminating all non-emergency flaring; electrifying upstream facilities with low-emissions electricity; equipping oil and gas processes with carbon capture, utilization, and storage technologies (CCUS); and expanding the use of hydrogen from low-emissions electrolysis in refineries.

Fast-tracking renewable energy systems

The UAE Consensus also calls on parties to take action toward achieving, on a global scale, a tripling of renewable energy capacity and doubling energy efficiency by 2030. COP28, IEA and the International Renewable Energy Agency (IRENA) have called for the tripling of renewable energy to 11,000GW as a key step on the path to limiting global warming to 1.5°C. Industry has also rallied around these targets, brought together in an initiative called **Doubling down and tripling up**, launched by the Global Renewables Alliance (GRA) at New York Climate Week in 2023. This initiative is backed by over 250 organizations and corporations, including Masdar, the UAE’s renewable energy champion.



At the ADSW Special Edition at COP28, participants addressed the most crucial sustainability issues humanity is facing. Mohamed Jameel Al Ramahi, CEO, Masdar, said: "At Masdar, responding to the COP28 Presidency's call for action, we've committed ourselves to significantly expanding our renewable energy capacity. We plan to triple our efforts in renewable energy over the next decade, investing a substantial USD 20 billion globally across different technologies. This investment isn't just limited to specific geographies; we're focusing on a global scale, particularly emphasizing on the Global South. Our strategy relies heavily on building strong partnerships and alliances, which we view as essential for achieving our ambitious renewable energy goals."

From an estimated 20GW in 2022, Masdar has committed to accelerating growth to reach 100GW of renewable energy production by 2030, while aiming to be a leading producer of green hydrogen by the same year.

H.E. Saeed Mohammed Al Tayer, Managing Director and CEO of Dubai Electricity and Water Authority (DEWA), said the Mohammed Bin Rashid Solar Park in Dubai exemplifies the shift toward renewable energy, particularly solar power. It currently has an output of 2,627MW with a planned expansion to 5,000MW by 2030.

Participants spoke of the importance of **partnerships in achieving renewable energy targets**. Examples such as Masdar show that collaboration and a shared vision can lead to success. Masdar's involvement in initiatives such as the largest solar project in Abu Dhabi and Dubai, as well as solar, wind, and other projects across the world, in partnership with government and corporate entities, has achieved global recognition.



"A successful energy transition will require collaboration, determination, and a healthy dose of optimism."

Mohamed Jameel Al Ramahi

Chief Executive Officer
Masdar



"The need for a transition to sustainable energy has never been more pressing. We need to take bold and decisive actions to address the challenges of climate change."

H.E. Saeed Mohammed Al Tayer

Managing Director and CEO
Dubai Electricity and Water
Authority (DEWA)



“While permitting grids are essential, sparking and maintaining consumer demand is equally crucial. We need to demonstrate to consumers that renewable energy can provide them with the right power and do so more affordably.”

Greg Jackson

Chief Executive Officer
Octopus Energy



Masdar signed many agreements at COP28 that amplify this vision, including:

- A strategic joint development and investment framework agreement with Hy24, the world’s largest clean hydrogen pure-play investor, to foster large-scale green hydrogen projects.
- An agreement with the Jordanian Ministry of Energy and Mineral Resources to develop a 1GW wind project with a battery energy storage system (BESS), and an agreement to explore the feasibility of establishing a green hydrogen plant.
- [Six agreements](#) in the African nations of Angola, Uganda, the Republic of Congo, Kenya, Mozambique and Zambia. Masdar has committed to deploying USD 2 billion of equity by 2030 in Africa as part of the UAE-led Africa Green Investment Finance Initiative.
- A [strategic partnership agreement](#) with Iberdrola to co-invest up to EUR 15 billion in the joint development of offshore wind and green hydrogen projects in key markets including Germany, UK, and the USA.

Greg Jackson, Chief Executive Officer, Octopus Energy, highlighted the **importance of community buy-in** to tripling renewable energy capacity. Octopus Energy focuses on driving green electrification, counting consumer demand as a critical component. While permitting grids is essential to effectively triple renewable energy capacity, sparking and maintaining consumer demand is integral to the growth.



According to Jackson, there is a need to demonstrate to consumers that renewable energy can not only provide them with the right power but also do so more affordably – that it is an upgrade to their lives, not a sacrifice.

The urgency to triple global renewable energy capacity was a focus of many discussions. Bruno Bensasson, President, Renewable Energies, Chairman and Chief Executive Officer of EDF Renewables, said the goals need to be broader. EDF's commitment to tripling renewable energy, he said, is part of a broader, more integrated strategy, with the focus being not only on renewables but also on energy efficiency and nuclear power.

Other examples highlight the need to include clean energy in the strategic plans of energy companies. Speaking at a panel discussion titled Enabling the Energy Transition: The Path Forward, Maarten Wetselaar, Chief Executive Officer, Cepsa, a Spanish energy company, spoke of how transformation has allowed a large part of the company's income to be sourced from solar and wind energy.

Ignacio S. Galán, Executive Chairman, Iberdrola S.A., spoke of the need to create strong, reliable grids capable of handling new demands, such as heatwaves. The role of technology, especially digitalization and AI, is vital. Storage solutions and ways to ensure electricity availability everywhere can make the tripling of renewable energy.

Paving the way for green hydrogen

According to IRENA, clean hydrogen is expected to represent 12 percent of the global total energy demand by [2050](#). This requires focus on scaling up production and deployment. As many as 30 countries have developed **national hydrogen strategies**; investment has started flowing into hydrogen projects; and countries have built dedicated hydrogen missions for developing partnerships and agreements. The UAE aspires to become one of the top 10 hydrogen producers worldwide by 2031, with a 25 percent share of the global hydrogen market. The key challenges that need to be addressed include the creation of a viable global market for hydrogen, reducing the cost of production, improving transportation and storage, ensuring safety, and developing regulations and standards.



"EDF's commitment to tripling renewable energy is part of a broader, more integrated strategy. Our involvement spans production, transmission, and storage. Our approach is tailored to each country's resources."

Bruno Bensasson

Group Senior Executive Vice-President, Renewable Energies, Chairman and Chief Executive Officer of EDF Renewables



"Abatement will not take place if there is no economic prize; globally it will not happen."

Maarten Wetselaar

Chief Executive Officer
Cepsa



"We're looking at five key drivers of the global economy: financial structures, internal conflicts over wealth, geopolitical tensions, environmental challenges, and technological advances. These shape our economic landscape."

Ray Dalio

Founder and CIO Mentor
Bridgewater Associates

60%

of the world's solar potential is in Africa, but it has only one percent share in photovoltaic opportunities

In one discussion at the ADSW Special Edition at COP28, **social trust** was defined as "the level of confidence individuals have in other stakeholders and the belief that others will act with integrity." This could be integral to the future success of green hydrogen.

Participants highlighted the large role that **emerging market and developing economies** (EMDEs) with good renewable energy resources are expected to play in generating green hydrogen as a way to fund cleaner economic growth. In this context, and at a nascent stage of the green hydrogen industry, responsible and transformative development is paramount, they said. It is important to learn the lessons from previous "resource rushes" to avoid a hydrogen-fueled "resource-curse", they said, and develop a considered approach that supports a just transition.

Such an approach would contribute to **transformative resource development** and sustainable economic growth in EMDEs by enabling community involvement in the development of the hydrogen industry as well as in reaping the rewards. Speakers stressed the need for tangible deliverables, coherent communication strategies, and engagement with regulatory authorities.

A firm but flexible policy environment with a commitment to sustainability would serve not only as a conduit for growth but also as a foundation for greater trust, they said. Participants highlighted the need for stakeholders across the green hydrogen industry to operate with transparency and a commitment to social good, as the evolution of green hydrogen moves from concept to action.

The development of a **viable global market for hydrogen** was also highlighted, citing examples of pathbreaking projects such as [H2 Green Steel](#) in northern Sweden. The plant will use hydrogen produced from renewable electricity instead of coal to deliver steel in a process emitting as much as 95 percent less CO₂ than steel produced with traditional blast furnace technology.





Enabling a just transition

Following the first annual high-level ministerial roundtable on the work program for a just transition established at COP27, the UAE's COP28 Presidency prioritized a just, orderly and equitable energy transition led by developed countries. A just transition is [defined](#) as a combination of social and economic policies that ensure that the process and outcomes of transitioning from fossil fuels to clean energy sources, or the greening of an economy, are fair and equitable for all communities, workers and social groups. This takes into [account](#) ensuring public support via benefits such as good green jobs, strategic participation of diverse stakeholders, and applying local solutions to accelerate the transition. It also addresses issues faced by workers and communities in carbon-intensive sectors who may be affected by disruptions caused by the transition. COP28 saw several announcements to improve the **resilience of food and public health systems**, and to reduce emissions related to agriculture and methane.

Elizabeth Wathuti, Founder of the Green Generation Initiative (GGI) in Kenya, spoke of the challenge of balancing immediate needs with long-term sustainability, especially in resource-constrained settings. There is an unprecedented urgency to convert climate pledges into actionable steps, she said.

The success of GGI in Kenya demonstrates the impact of **engaging young people in environmental stewardship**. Young people as a demographic are both vulnerable to the effects of climate change and a primary resource in combatting climate change. This necessitates empowering the youth to protect them while also accelerating climate action.



"A message to global partners: To get to the path below the 1.5°C goal, we need to triple the production of renewable energy and double energy efficiency."

Maroš Šefčovič

Vice President
European Commission



"Climate change is our collective responsibility. Let us commit to real, tangible actions to create a sustainable future for all."

Elizabeth Wathuti

Founder
Green Generation Initiative,
Kenya



“The UAE has taught many that going green does not necessarily come at a higher cost. Do not eliminate any source of energy, our emission is the enemy.”

H.E. Suhail Al Mazrouei

Minister of Energy and Infrastructure
United Arab Emirates



“It is not good enough for us to only save the world from climate change but also to think about communities in the country and across the world.”

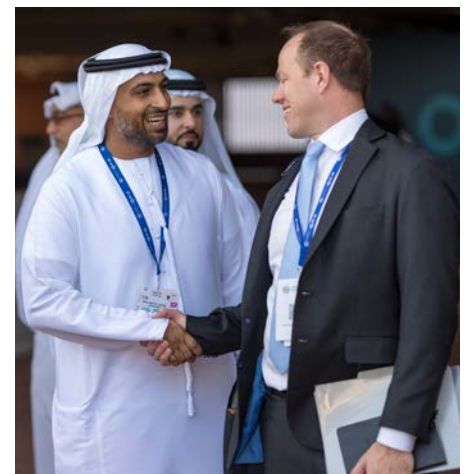
Hon. David Turk

Deputy Secretary of Energy
US Department of Energy

Experts agreed on the key ingredients needed for a smooth and just transition. It requires the **will of leaders, strategic planning and community partnerships**. H.E. Suhail Al Mazrouei, UAE Minister of Energy and Infrastructure highlighted effective leadership, a robust plan with regular reviews, and public support as key to achieving a smooth and just energy transition. Mohamed Jameel Al Ramahi highlighted the importance of balancing rapid economic and infrastructural development with the imperatives of sustainable and environmentally responsible practices. The potential conflict between global cooperation for climate action and the competitive economic interests of individual nations needs to be addressed effectively, he said.

Amid diverse global economic pressures, decision-makers have the task to rise to the challenges of allocating resources and investments in renewable energy. Stressing the importance of collaborative efforts among diverse stakeholders, Al Ramahi said the ADSW platform emphasizes the need for **collective resolve to address climate challenges** and drive the energy transition.

The Hon. David Turk, United States Deputy Secretary of Energy, Department of Energy, said that action to tackle climate change needs to focus on communities, both local and worldwide. In the US, for instance, grant money necessitates a community benefit plan. This combines a moral perspective with business success and garners community support for a just energy transition. Strengthening early warning systems, investing in robust data analytics and promoting evidence-based policymaking were also identified as crucial actions.



Ray Dalio, Founder and CIO Mentor, Bridgewater Associates, highlighted the vital **interlinkages between inclusive development and profitability**. He said it is crucial to understand how national debt, internal conflicts arising from gaps in wealth and value, geopolitical conflicts, natural disasters such as droughts and pandemics and technology affect the dynamics of climate finance and investment. These factors will significantly shape the coming years, making a **human-centric transition** even more important.

Financial strategies need to take into account the very **survival of vulnerable countries**, such as Small Island Developing States (SIDS). Cultural heritage aligned to the environment needs to become a factor over and above traditional cost-benefit analyses. The Hon. Seve Paeniu, Minister of Finance, Tuvalu, spoke of the existential threat faced by vulnerable countries and the urgent action needed. The tangible effects of climate change are evident in continuous land erosion and the destruction of livelihoods, with no higher ground for safe relocation.

Minister Paeniu outlined the disparities in the current global investments, particularly the unevenness in clean energy finances, which should be a key point of discussion in the energy transition. For instance, despite 60 percent of the world's solar potential being in Africa, the continent currently possesses only a one percent share in photovoltaic opportunities.



"As we sit here, the situation is catastrophic. Our plantations, the base of livelihoods, and fishing are being destroyed because of the impact of climate change. There's no high ground in Tuvalu. We move from one side of the lagoon to the ocean side. That's a very precarious situation."

Hon. Seve Paeniu

Minister of Finance
Tuvalu

250

organizations have backed the doubling down and tripling up initiative



Unlocking Financing for the Green Economy

\$2.4T

is needed every year to
address climate change
by 2030



Unprecedented financing momentum at COP28

Global organizations such as the International Monetary Fund ([IMF](#)) have spoken of the importance of fiscal and macroeconomic policies in shaping an appropriate response to the threats posed by climate change in a way that maximizes the opportunities inherent in low-carbon, resilient growth.

According to a consensus of economists [convened by COP28](#), emerging markets and developing economies will require up to USD 2.4 trillion every year to address climate change by 2030. Scaled-up climate finance, called the “great enabler of climate action”, took center stage at the conference. According to UN Climate Change Executive Secretary Simon Stiell, a swift, just and equitable transition, bolstered by significant emissions cuts, is possible with meaningful financial commitment.

In response, His Highness Sheikh Mohamed bin Zayed Al Nahyan, President of the UAE, said the country has pledged to invest USD 30 billion in **Alterra**, a new private investment vehicle that aims to raise USD 250 billion globally in the next six years to create a fairer climate finance system. Alterra will focus on climate investments in emerging markets and developing economies, where traditional funding has been lacking because of the higher perceived risks.

"Alterra provides a transformational solution for attracting private capital. Its scale and structure will create a multiplier effect in climate focused investment, making it a vehicle like no other," said COP28 President Dr. Sultan Al Jaber. "Its launch reflects the COP presidency's action agenda and the UAE's efforts to make climate finance available, accessible and affordable."

COP28 also announced the operationalization of the Loss and Damage Fund, which will assist developing countries that are particularly vulnerable to the adverse effects of climate change. The UAE has committed USD 100 million to the fund, Germany committed USD 100 million, the UK committed GBP 40 million for the fund and GBP 20 million for other arrangements, the US USD 17.5 million, and Japan committed USD 10 million.

"What was promised in Sharm El Sheikh has been delivered in Dubai," said Dr. Al Jaber. "The speed at which the world came together to get this fund operationalized within one year since parties agreed to it in Sharm El Sheikh is unprecedented. It proves the world can unite, can act and can deliver."

With six countries pledging new funding for the second replenishment of the **Green Climate Fund (GCF)**, the fund reached a total of USD 12.8 billion from 31 countries during COP28 UAE. Other [announcements](#) included **financing by the World Bank for climate projects**, connecting 100 million people in Africa to solar energy, efforts to reduce methane gas in highly specific projects, as well as voluntary carbon markets. In another climate finance [development](#), the **Least Developed Countries Fund** and **Special Climate Change Fund** saw eight donor governments announce new commitments, taking the total to more than USD 174 million. New pledges amounting to nearly USD 188 million at the close of COP28 UAE were made to the **Adaptation Fund**.



"Risk is often more about perception, and sometimes these perceptions are incorrect. Investors are increasingly recognizing the potential to overcome infrastructural challenges and are adopting a long-term perspective, looking at risk and return differently for sustainable investments."

Cate Ambrose

Chief Executive Officer
and Board Member
The Global Private
Capital Association



“We know how to deliver progress. By pioneering global finance we are set to become the green falcon economy and capital to benefit every corner of the planet and make our sustainability ambitions a reality.”

H.E. Ahmed Jasim Al Zaabi

Member of Abu Dhabi Executive Council
Chairman, Abu Dhabi Department of Economic Development
Chairman, ADGM

\$188M

in new pledges for the Adaptation Fund were announced at COP28



Dr. Al Jaber also stated that COP28 had an [action agenda](#) to focus the discussion on the “trillions, not billions” that are needed to support all countries with clean energy transition and implement national climate plans and adaptation efforts. Consequently, COP28 delegates discussed the importance of setting a new collective quantified goal on climate finance in 2024, with USD 100 billion per year as a baseline, to deliver national climate plans by 2025.

Enabling frameworks for climate change financing

The **Global Climate Finance Center (GCFC)** was launched at the ADSW Special Edition at COP28 to accelerate the development of climate finance frameworks and help make climate finance available, cheaper and accessible, in the UAE and globally.

H.E. Ahmed Jasim Al Zaabi, Chairman of the Abu Dhabi Department of Economic Development and Abu Dhabi Global Market (ADGM), said: “The launch of the GCFC marks a pivotal moment, unleashing new financial streams for climate finance. The GCFC is positioned as a leader in research, policy, innovation and stakeholder involvement and a center of excellence to drive advancements in climate finance globally.”

The GCFC brings together nine global institutions representing public, private and philanthropic sectors, including ADGM, the Abu Dhabi Developmental Holding Company (ADQ), BlackRock, the Children’s Investment Fund Foundation (CIFF), the Glasgow Financial Alliance for Net Zero (GFANZ), HSBC, Masdar, Ninety One and the World Bank Group. The **role of the private sector** in financing was highlighted in the build-up to COP28 UAE. Given that half of the essential transition financing must be sourced from the private sector, the GCFC fund will play a pivotal role in mobilizing funds.

Al Zaabi also highlighted the importance of regulatory frameworks for carbon offset, establishing funds, developing industrial policy, and focusing on the circular economy. And he appreciated Abu Dhabi’s introduction of a **regulatory framework for carbon offsets** and a sustainable finance declaration that 145 institutions have signed.



"We cannot finance education, healthcare, or climate adaptation with short repayment timelines. We need the proper repayment timeline of at least 30 to 40 years."

Hon. Mia Amor Mottley

Prime Minister of Barbados

The Honorable Mia Amor Mottley, Prime Minister of Barbados, spoke of a more **moral and just approach** to managing the financial and debt struggles faced by countries, particularly in the aftermath of natural disasters. Financial solutions include debt pauses and extended repayment timelines, which can help ensure that developing countries can recover from financial losses triggered by natural disasters and receive meaningful support during the transition to net-zero emissions.

Unique challenges, like the absence of high ground in Tuvalu and the slow pace of financial aid through mechanisms like the Green Climate Fund, necessitate reevaluating traditional financial criteria by multilateral development banks (MDBs) and international financial institutions (IFIs). These institutions need to focus on the immediate needs of small, vulnerable nations, prioritizing livelihoods, land and cultural heritage over conventional investment returns.

Multilateral financial flows can play a significant role in helping developing countries undertake low-carbon development and reduce their emissions, while advancing their ability to resist the current impacts of climate change by facilitating **adaptation and resilience**. The World Bank and its peer regional institutions, such as the Asian Development Bank (ADB) and the African Development Bank (AfDB), have an increasingly important role to play in channeling financial resources to climate-related projects in member countries.



“The financing of sustainable development, especially in light of fiscal deficits and debt, requires a blend of public policy, public debt, private sector equity, and philanthropy.”

Noel Quinn

Group CEO
HSBC

20%

of GDP can be unlocked by debt pauses during natural disasters



However, MDBs’ efforts to fulfill their potential in climate finance are [held back](#) by a lack of transparently tracked, detailed data and lagging financial commitments.

H. E. Mottley also suggested broadening the conversation beyond government action to consider **global taxation** involving non-state actors and individuals in a shared responsibility. This can be achieved without causing disruptions or skewing the global financial balance, she said.

Long repayment schedules of 30 to 40 years can help countries fund education, healthcare or climate adaptation. This calls for a granular approach to the analysis of debt. The highly indebted poor and middle-income countries host most of the poor in the world. If they are only afforded short-term capital, they will not have the necessary resources to build their countries and communities.

It is crucial to develop a general understanding and consensus on the implications of natural disasters on national economies. In the event of a disaster, **debt pauses** can unlock nearly 20 percent of the GDP. This trigger-based aid is unmatched globally, particularly amidst insufficient insurance coverage. Nations must take steps to cover the expenses resulting from such damages.

International banks must also agree on debt pauses in times of disasters. Limitations in national capacities combined with constraints in the international systems can prove costly. There is now a need for international banking systems to introduce regulations and practices to create a more just financial ecosystem.

Managing large debts and investing in new technologies are crucial for both economic and environmental sustainability. Mobilizing the trillions of dollars required to address climate change requires significant capital to be deployed over a generation. Such large-scale investment could change the global economy in positive ways, helping create new industries and technologies and accelerating development in the global south.

Expanding the sources of financing

Multiple participants in the ADSW Special Edition at COP28 stressed the need for both government and private sector involvement in financing sustainable initiatives. **Public policy, public debt, private sector equity and philanthropy** are all key drivers of the world's economy. Long-term planning and investments are essential, focusing on areas like artificial intelligence and blended finance structures. Climate finance and investment, therefore, must be integrated into these broader fiscal and economic strategies, where sustainable development becomes a core component of the economic outlook. The private sector's involvement is key to bridging the investment gap, especially in infrastructure, to meet the challenges of climate change and sustainable development. Keith Tuffley, Vice Chairman and Global Co-Head, Sustainability and Corporate Transitions, Citi, pointed out that discussions have reached a "tipping point", with money being unlocked for transition and blended funds set up to address climate finance.

Understanding the available financial resources in the private sector involves looking at who holds the wealth and what their motivations are, participants said. **Philanthropy** has about USD 1 trillion available, but the annual need for climate action is much higher, estimated at USD 5 to 7 trillion, or about 7 percent of global GDP.

Development banks hold about USD 3 trillion, but the majority of the capital lies with institutional investors, who control about USD 200 trillion, participants said. However, their investment in climate-related areas is constrained because they are duty-bound to deliver returns. This involves converting investment into productivity, focusing on responsible investment strategies and entrepreneurial ventures.

Risks and challenges

The complexities in mobilizing adequate finances for climate action require **risk management and investment returns**, not to mention stepping up the pace and scale of financing.



"When it comes to climate it is science-based and we cannot politicize something based on science."

Keith Tuffley

Vice Chairman and Global
Co-Head, Sustainability &
Corporate Transitions
Citi

7%

of global GDP is
required annually for
climate action



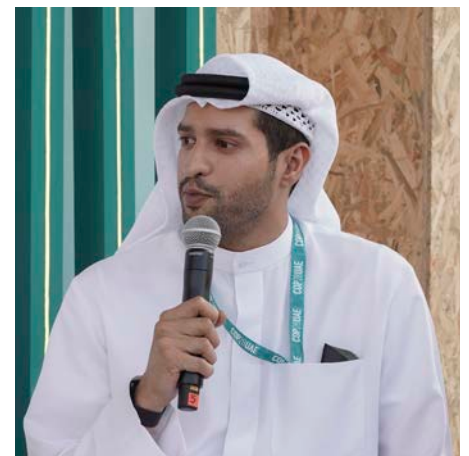
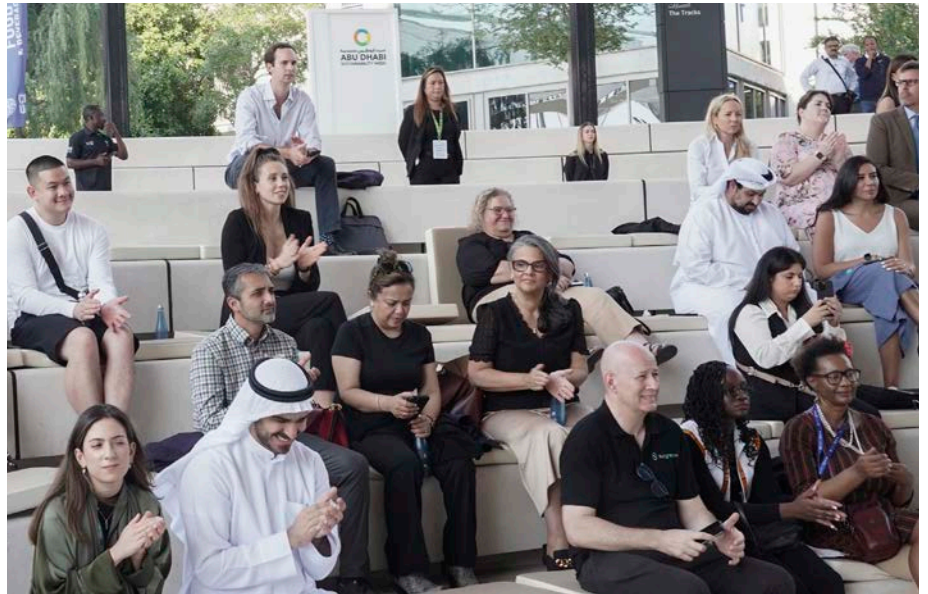
“Abu Dhabi has been championing sustainability for 15 years, and we truly believe in its importance not just during a specific week but every single day.”

**H.E. Eng. Awaidha
Murshed Ali
Al Marar**

Chairman
Abu Dhabi Department of
Energy

\$200T

of capital is controlled
by institutional investors,
and not fully tapped for
climate action



Risk is often more about perception, and sometimes these perceptions may be incorrect, participants said. Investors are increasingly recognizing the potential to overcome infrastructural challenges and are adopting a long-term perspective, **looking at risk and return differently** for sustainable investments.

Development institutions and MDBs play crucial roles, but collaboration is key. It is vital to identify areas where these institutions can work together rather than compete, participants said. There is a need for a common reporting framework for climate investors that offers a unified approach to measuring and reporting on climate investments.

Investors are also recognizing the inadequacy of current financial mechanisms to meet the scale of investment required for climate action. Effectively blending public policy, debt, and private sector investment for sustainable development presents significant challenges, and the future of sustainable financing is about **balancing realism with optimism**. It involves focusing on the potential of private sector involvement and recognizing the need for creative adaptation to the challenges that lie ahead.

There is a need for renewable energy's share in total energy generation to increase from the current 28 percent to 90 percent to achieve carbon neutrality, participants said, highlighting the scale of the transition needed in energy generation.



The **UAE's investments in renewable energy exceed those in oil and gas**, said H.E. Suhail Al Mazrouei, UAE Minister of Energy and Infrastructure, with plans to triple these investments by 2030. This substantial commitment to clean energy supersedes the country's investments in hydrocarbons. The UAE only invests in hydrocarbon energies with the aim of preventing spikes in pricing during the transition, ensuring the affordability of renewable energy.

It is important to recognize the political dimensions inherent in the transition process. However, in the context of climate, it is fundamentally science-based, and it cannot be politicized. It is crucial to engage society in this journey, fostering excitement among all participants. Amidst these challenges, there exist opportunities to innovate and develop new solutions, addressing existing inequalities in the process.

9

global institutions from public, private and philanthropic sectors will mobilize funds at the Global Climate Finance Center



**Making Business
Sustainable**

40%

of global CO₂
emissions are caused
by heavy industry



Decarbonization of industry

Businesses from across sectors brought their perspective to bear at the ADSW Special Edition at COP28 on areas as diverse as geopolitics, cost of capital and supply chains. Businesses are keen to demonstrate their commitment to action, even as they are finding pathways to **collaborate across industries, governments and civil society** to drive change. A special focus was on hard-to-abate sectors including cement and the built environment, chemicals, fertilizers, steel, aviation, shipping and road freight, which together account for about one-third of global CO₂ emissions.

Decarbonizing operations would require financing as well as innovative technologies and processes. The [final](#) text of the UAE Consensus includes an acceleration of zero- and low-emission technologies, including renewables, nuclear, low-carbon hydrogen production and abatement and removal technologies such as CCUS, particularly in hard-to-abate sectors.

The Consensus also “encourages inclusive international cooperation on research, development, and demonstration as well as innovation, including in hard-to-abate sectors, to strengthen endogenous capacities and technologies and fostering national systems of innovation in line with the findings of the Intergovernmental Panel on Climate Change.”

It also “encourages inclusive international cooperation on research, development, and demonstration as well as innovation, including in hard-to-abate sectors, with a view to strengthening endogenous capacities and technologies and fostering national systems of innovation in line with the findings of the Intergovernmental Panel on Climate Change.”

Dr. Thomas Becker, Vice President of Sustainability, Mobility, BMW Group, spoke of the imperative for industry decarbonization, as heavy industry [accounts](#) for nearly 40 percent of global CO₂ emissions. Dr. Becker discussed the importance of **reducing the production footprint** by using more recycled materials and by replacing grey energy with green energy. Green electricity improves car efficiency, while hydrogen cars offer a clean energy option for the future.

By accounting for renewable sources and ensuring proper environmental practices, companies can **incorporate green energy into supply chains**. New global partnerships can be established to offer greener products in the automotive industry, such as the partnership with Emirates Global Aluminum (EGA), from which BMW sources aluminum produced from solar power.

Abdulnasser Ibrahim Saif bin Kalban, CEO, EGA, spoke of the company’s commitment to sustainability, which he said extends beyond merely reducing CO₂ emissions. Bin Kalban stressed that aluminum is infinitely recyclable and discussed EGA’s plans for the first aluminum recycling plant in the Middle East. Utilizing solar park-derived green aluminum combined with scraps yields the greenest aluminum. While the product is scheduled to reach BMW by 2024, deals with other car manufacturers are under way, demonstrating an increased demand for greener aluminum. EGA aims to increase green aluminum production to remain in line with the demand while ensuring responsible practices using CO₂ abatement technologies.

Participants at the ADSW Special Edition at COP28 posited that the biggest challenge is the **limited supply of green materials** with which to manufacture the final product. If the upstream challenge is met, it would be possible to decarbonize 50 percent with only a 0.5-1.0 percent increase in the cost of materials. Part of this challenge lies in **vertical integration of the production process** to capture both operational cost efficiencies and energy efficiencies, enabling the manufacturer to access project finance with a high credit rating.



“Our methods are helping them (car manufacturers) decarbonize their processes.”

Abdulnasser Ibrahim Saif bin Kalban

Chief Executive Officer
Emirates Global Aluminum



“Meeting our footprint goals is about reducing the footprint of production.”

Dr. Thomas Becker

Vice President Sustainability,
Mobility
BMW Group



“Collaboration is the basis. If you think about the complexities and resources required to achieve our decarbonization aspirations, we must collaborate.”

Themba Mkhwanazi

Director, Africa & Australia
Region
Anglo American

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is Africa’s annual food import cost because it exports most of its indigenous production



This is especially true in the example of steel production in Europe using green hydrogen as the fuel rather than, for instance, coal. An electrolyzer that can produce the amount of green hydrogen necessary to decarbonize the auto industry would require significant investment. It would be difficult to achieve a return on that investment without financing that takes that difficulty into account.

There is clearly a message from the top to change the way we conduct, evaluate, and strategize business. Across sectors, the low/zero-carbon transformation is increasingly being seen as a significant opportunity. Ongoing decarbonization commitments include the 2021 pledge by oil and gas companies to reduce methane emissions by 30 percent by 2030, underpinned by USD 1 billion in finance, and the launch of the [Oil and Gas Decarbonization Charter](#) at COP28. The Glasgow Financial Alliance for Net Zero (GFANZ), which now comprises 675 financial institutions from 50 countries, brought focus to bear on the development of investment architecture for the global carbon markets.

There is a need for innovative financing for the decarbonization of heavy industry, mainly because the companies themselves do not have the margin comfort to do this themselves, participants said. Heavy industries have spent many years honing their systems to minimize financial risk; they are now being asked to embrace new constructs that may turn the entire risk profile on its head. Decarbonizing the entire supply chain – from copper or nickel mining to transportation of the final product, for instance – needs to be broken down into easy-to-achieve components driven by innovative project financing, speakers said.

Transforming food systems

A similar situation exists in the production, processing, storage, transportation, and disposal of food, globally. Each of these steps creates greenhouse gases that trap the sun’s heat and contribute to climate change. [According to the UN](#), about a third of all human-caused greenhouse gas emissions are linked to food, mostly agriculture and land use. This includes, for instance, methane from cattle’s digestive process, nitrous oxide from fertilizers used for crop production, carbon dioxide from cutting down forests for the expansion of farmland, manure management, burning of crop residues and the use of fuel on farms.

With food security at the top of most countries' agendas, greening this sector has acquired paramount importance. From the financial perspective, climate risk insurance as well as private-sector investment insurance have come into the limelight. To increase funding, investment needs guarantees, which is also a key feature of the greening of food systems.

Involved in this process are, among other entities, governments, NGOs, food companies, buyers of agricultural products, and even start-ups and investment funds, each of whom need **incentives to focus on financing the transformation** of food systems. Participants pointed out that one of the big challenges is that existing incentives in food production often incentivize bad behavior, such as wasting water. It is therefore important to understand what kind of behavior is to be incentivized – over what time horizons and metrics – for the transformation to be effective.

The next step would be to generate **investment models that deliver successful outcomes**. For instance, the Middle East imports most of its food and has relatively large investment pools. Africa, on the other hand, is a massive producer of food but has very few investible resources. In spite of that, Africa imports more than USD 40 billion of food each year, participants said, because it exports most of its indigenous production.

A **review of national food policies** is essential to develop strategies that could positively influence finance mobilization for food systems transformation. Participants also saw it necessary to develop a view of how capital is understood locally in different communities, including the capitalization of local resources, capacities, knowledge and experience. This would assist in developing effective responses or interventions, whether these are in normal conditions or in crisis situations.

Another aspect that needs attention, participants said, is to tap into the USD 1.4 trillion in **agricultural subsidies** available globally, to make the transformation possible. Part of the investment needs to be made into **technologies and start-ups** that play into making crops more abundant and/or nutritious, such as genetic modification, or positively disrupting soil management, marketing and transportation systems.



50%

production can be decarbonized with only 0.5-1 percent increase in the cost of materials



"To ensure a transition that is not chaotic, we need a vast energy mix and apply technologies to make them cleaner."

Lorenzo Simonelli

Chairman and CEO
Baker Hughes



One of the main challenges for investors in food systems, especially in Africa, is the absence of transparency, which erodes trust. Digitization of farming operations can help solve this. The other challenge is that farmers as well as investors look for 5x or 6x returns on investment, and this may not always be possible during a major transformation. A new paradigm of investment, mobilized by **enhanced information flows and transparency**, can help change this situation, participants said.

Policy-directed **priority sector lending by banks** was discussed as a means of financing the transformation of food security, citing the India experience. Banks in India are incentivized to provide agriculture-related loans at one-third the cost of industry financing, because agriculture is recognized as a priority sector, not just for food security but also for economic development.

At COP28, the [Declaration](#) on Sustainable Agriculture and Resilient Food Systems includes a commitment by about 146 nations to **scale-up adaptation and resilience activities**, especially in the context of farmers, fisherfolk and other food producers being vulnerable to the impacts of climate change.

Lou Cooperhouse, Founder and CEO of BlueNalu, explained the innovative approach to addressing global seafood supply-chain challenges. BlueNalu addresses pressing concerns, he said, including warming oceans, overfishing and unsustainable aquaculture practices. The company also highlights the environmental and health crises linked to current seafood practices. It focuses on cell-cultured seafood, particularly bluefin tuna, to provide a sustainable, safe and healthy alternative to traditional seafood. The company's efforts to create a demand-driven supply chain and emphasis on health benefits were also highlighted.

Collaboration between the Middle East and Africa is a major opportunity for **knowledge-sharing** and the development of scalable, sustainable food solutions, participants said. The [launch](#) by leaders from Africa and the Middle East of a USD 10 billion public-private partnership initiative to transform food systems for millions of people, called SAFE, was discussed. This landmark initiative endeavors to **Scale-up Agriculture and Food systems for Economic development** in Africa and the Middle East.

146

nations have committed to scaling-up adaptation and resilience activities

Participants stressed that for policy incentives to be effective, there must be **clear objectives and measurement of impact** in order to reduce risk for investors. The discussion also highlighted the importance of recognizing that because private investors must consider profit, streamlining regulation can be vital to ensure projects are low-risk, bankable and scalable to attract private capital.

Incorporating circularity across sectors

There is increased focus on businesses to be deeply cognizant of integrating climate, people and nature as part of a just transition. Participants discussed the example of Abu Dhabi's circular economy plans, targeting annual recycling and reuse of 40,000 tons across all sectors by 2030.

Participants also discussed specific products and processes, particularly to do with waste. In this context, if phosphate remains unused in a mine and is discarded as waste, it can instead be repurposed to produce paper using minimal water and fewer trees. This approach works to favor the environment as well as the business, allowing companies in the region to increase their valuation. **Financing structures also need to evolve** so that an unconventional venture such as a mine entering paper production may be made possible with the right capital, technology and tailored business model.

ADSW hosted a roundtable discussion focused on the importance of driving greater circularity and sustainability within the petrochemical sector. Panelists highlighted the potential for circularity to increase efficiencies through the reuse of resources and explored how, as the world moves away from fossil fuels, stranded assets like petrochemical infrastructure could be repurposed using technological solutions.



"The mission of COP is about bringing people together to come up with great innovations."

Lou Cooperhouse

Founder, President,
and CEO
BlueNalu

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public-private
partnership will
transform food
systems in Africa and
the Middle East



"We are trying to open the market and invest more to create opportunities within the blue economy."

Al-Amin Ibrahim Al-Amin

Technical Advisor to the Minister of the Blue Economy
Republic of Nigeria



"We can move the next generation to a world where you have access to cheap decentralized energy that is democratic and peaceful."

Jochen Wermuth

Investor, Managing Partner
Wermuth Asset Management GmbH

According to Gunter Pauli, Environmental Entrepreneur and Author of The Blue Economy, "The shift is essential not only in the energy sectors but also in our approach to plastics. While they contribute to the convenience of modern living, we must rethink their sourcing and aim to reduce dependency. This requires deliberate policy-making and decisions. An increasing number of governments are introducing entities of the blue economy, like the Nigerian government."

The panel called for the **removal of regulatory barriers** and urged support from governments and other stakeholders to both de-risk emerging technologies and reduce their cost. Participants also advocated for more **public-private partnerships** to coordinate financial frameworks that encourage greater investment in circularity and sustainability.

An example relates to an outdated cracker used in the oil industry. Once used for asbestos chemicals, it is now understood to be a pollutant, resulting in significant costs of clean-up. Instead, by reimagining the cracker, and deploying new technologies, the operation was transformed to make bioplastics. While producing bioplastics requires significant capital investment, the process of repurposing existing infrastructure to initiate sustainable practices is more cost-effective. Participants brought attention to humanity's approach to plastics to rethink sourcing and reduce dependency.

The idea of circularity emerged as crucial to the transition because of its comprehensive, holistic approach. Al-Amin Ibrahim Al-Amin, Technical Advisor to the Minister of the Blue Economy, Republic of Nigeria, highlighted the country's rich resource base and the establishment of a ministry dedicated to the blue economy demonstrating the seriousness of intent.

With a focus is on expanding market access and bolstering investments to create opportunities within the blue economy, the innovation here is to **treat waste as a resource**. Al-Amin said there are numerous advantages and prospects inherent in waste utilization.

Jochen Wermuth, Investor and Managing Partner at Wermuth Asset Management GmbH, spoke of the long-term outlook of circular economy practices. He said that the next generation of circularity relates to impactful, long-term investments aligned with sustainability.





Today, climate change is no longer merely about morals or exceptional leadership, but also about market forces that have become aligned with the shift towards sustainability. He noted that successful initiatives generating power utilizing circular economy principles are producing energy more efficiently.

Technology as a partner

Technologies, including digital solutions, can go a long way in the journey to net zero. At the ADSW Special Edition at COP28, Charles Yang, Senior Vice President, Global Marketing, Sales and Services, Huawei Digital Power, identified four main components of the energy transition:

- shifting energy generation towards renewables
- increasing electrification
- leveraging digitalization through AI and cloud computing
- improving energy efficiency

Yang discussed how AI, 5G and cloud computing are instrumental in **driving forward the energy transition**. The integration of information and communication technology (ICT) innovation, material recycling and carbon emission reduction strategies is crucial for minimizing carbon footprint and advancing the development of clean energy. However, crucial to the integration of new technologies like AI and 5G with traditional energy systems is **ensuring a stable and efficient power supply** while transitioning.

In many urban areas, a range of solutions underscores the immense power of technology to support climate adaptation. The incorporation of these technologies into city infrastructure can be vital in understanding and mitigating emissions across sectors such as energy, waste and transportation. **Climate tech innovations** are now a category of their own. Overall private sector investment is down in the past year, but climate tech investment is bucking that trend, participants said. Historically, climate tech investment has focused on energy production and mobility, rather than heavier emission areas such as industry and food production, but now more climate tech investment is going into the hard-to-abate sectors as well.

In the GCC region, there is a strong correlation between higher emission sectors and climate tech investment. Creating an ecosystem that caters to all stakeholders, including **start-up capital, regulation and human capital**, will facilitate more investment in climate tech. The role of SMEs and companies of all sizes is crucial.



“Today, as we leave carbon-based energy behind, we must acknowledge the long-term consequences of depleting these energy resources, which have been fundamental to the development of human civilization.”

Charles Yang

Senior Vice President,
Global Marketing,
Sales and Services
Huawei Digital Power



"I know we are here today to talk about breakthrough technologies, but when we look into the future, we need to look at all types of technologies including the tried and tested."

Mavi Zingoni

Chief Executive Officer
GE Power



Participants suggested that large corporations can be incentivized to partner with start-ups, giving start-ups credibility and real experience that they can take to market. Another suggestion was to price in the damage caused by carbon to add momentum to climate tech innovation.

Food technology continues to be a key discussion topic. Technological innovation is a proven tool in combating food insecurity – and thanks to cutting-edge **research in agritech**, the Middle East offers enormous potential for knowledge-sharing and transfer. Panelists cited groundbreaking methods and approaches that show promising results – from drought- and heat-resilient agriculture and more circular methods of farming to game-changing digital tools that can help modernize everything from irrigation to soil mapping and more sophisticated early-warning systems.

However, not only modern but also traditional technologies have a role to play. Mavi Zingoni, Chief Executive Officer, GE Power, cited the example of a small town in Argentina where a river hosts a hydropower plant. Forty years since inception, the plant is still generating renewable power. She stressed that **the world needs all types of technologies**, including the tried and tested.

Utilizing technologies to fulfil the ever-increasing demand for power is the only way to accelerate the journey toward a more sustainable planet. Participants spoke of the importance of **decarbonizing the power sector**. Technologies such as Direct Air Capture (DAC) are capable of "turning back the clock".

While removing carbon from air is not new, new solutions include optimal DAC technology that can capture and seal carbon from air at a truly impressive rate, resulting in a tremendous breakthrough.

Transformation needs to encompass the whole supply chain. Greening the supply chain involves considering cargo. Businesses can shift from coal to liquified natural gas while transporting cargo to customers. Large mining companies such as Anglo American can assist customers in decarbonizing their operations. Such efforts need to be supported by adequate progress in CCUS.



Participants at the ADSW Special Edition at COP28 emphasized the role of **digital infrastructure** in accurately measuring climate progress, allowing for better planning and execution of decarbonization projects. Participants agreed that actionable, incremental steps in city-level climate change solutions have a higher chance of ultimate success, by building a toolkit over time to mitigate and adapt to climate change.

Innovation can be multi-faceted and cover a gamut of sectors, including innovative policy decisions, products, supply chain and practices. With its focus on a just transition, the ADSW Special Edition at COP28 brought out many examples of **applicable innovation** taking place in localities around the world.

Luiz de Mendonça, Chief Executive Officer, Acelen, spoke of the renewable energy company's innovative energy transition initiative in Brazil, focusing on the macaúba fruit as a potential future oil source. The project, with an investment of USD 2.5 billion adheres to the zero-waste and the 4F principle: Food, Feed, Fiber and Fuel. The project involves regenerating over 200,000 hectares of degraded land in Bahia, Brazil. Acelen is also engaging in public-private partnerships with small farmers, with the project expected to inject USD 17 billion into the economy, create 90,000 jobs and reduce carbon emissions by 80 percent. Acelen's initiative aligns with 11 of the 17 Sustainable Development Goals (SDGs) of the 2030 agenda.

Dr. Sebastian Groh, Founder and CEO, ME SOLshare Ltd., said businesses have a clear choice on whether to invest in those who have the means but do not truly understand the issue, or in people who lack the means but have a good grasp of the problem. Groh's company SOLshare runs an innovative virtual power plant in Bangladesh by working with battery-powered tuk-tuk vehicles that are used as taxis in Bangladesh. SOLshare worked to upgrade the batteries on the tuk-tuks to lithium-ion batteries. At the end of the day, the tuk-tuks come back to the grid and surplus energy from the batteries is fed back to the grid. This is a virtual power plant in action. Groh underscored the importance of **supporting climate-focused entrepreneurs** in developing nations, as these visionaries tackle challenges firsthand and often have the most fitting solutions. He suggested that investors step outside their comfort zones and support start-ups with localized solutions that combat climate change in developing countries.



"We face a choice of whether to invest in those who have the means but do not understand the issue or in people who lack the means but have a good understanding of the problem."

Dr. Sebastian Groh

Founder and CEO
ME SOLshare Ltd.



"We are targeting one billion liters of sustainable aviation fuel from macaúba seeds by 2026 – a leap towards green aviation."

Luiz de Mendonça

Chief Executive Officer
Acelen

KEY TAKEAWAYS

- Decarbonizing operations in hard-to-abate sectors, which together account for a third of global CO₂ emissions, would require financing as well as innovative technologies and processes.
- Vertical integration of the production process to capture both operational cost efficiencies and energy efficiencies, can enable the manufacturer to access project finance with a high credit rating.
- With food security at the top of most countries' agendas, greening this sector includes addressing climate risk insurance as well as private-sector investment insurance to positively disrupt soil management, marketing, and transportation systems.
- Technology is an enabler in the journey to net zero. The incorporation of technologies such as AI, 5G, and cloud computing into city infrastructure can help mitigate emissions across sectors such as energy, waste, and transportation.
- Incorporating circularity to increase efficiencies through the reuse of resources requires financing structures to evolve so that ventures spanning multiple sectors can be made possible with the right capital, technology, and tailored business models.

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