

# NAVIGATING TO NET ZERO



NAVIGATOR





**Executive report** 

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## Foreword

As the world continues its race to net zero, and as COP28 takes hold in the UAE, the global community is once again looking for urgent answers to the climate emergency.

Masdar, the UAE's clean energy pioneer, has been searching for these solutions for nearly two decades, as it has helped accelerate the deployment of renewables at home and across the world. Today, Masdar is active in over 40 countries, deploying a wide range of clean energy technologies to build the energy system of tomorrow, today.

Masdar is also host of Abu Dhabi Sustainability Week (ADSW), one of the largest sustainability events in the world, with a proven track record of facilitating highlevel dialogue and climate action. Achieving net zero emissions and meeting the challenges of climate change requires a global effort and a commitment to collaboration among critical stakeholders. ADSW believes in the power of bringing people together – experts, executives, activists, innovators, investors and more – to discover new ways to support the UAE's and the world's goals of net zero emissions by 2050.

For COP28, the COP of action, ADSW turned to its community of experts, innovators and leaders. It became clear that having shared goals and knowledge sources are critical components for concerted and aligned action, and that there is no shortage of data out there for those looking, nor a lack of innovation. Instead, the real missing ingredient has been the spaces to connect and facilitate collaboration.

This year, ADSW engaged its international community, as well as external stakeholders, in a series of roundtables dedicated to understanding this need for connection and facilitation. After a year of dialogue at climate talks and events in Abu Dhabi, London and New York, ADSW is committing its strengths in convening and facilitating crucial action-oriented climate conversations at COP28.

As a facilitator for climate action, ADSW is a space for all voices and a variety of stakeholders from all global regions, with an understanding that funding, financing and policy alignment are foundational to moving forward. Because innovative instruments in these areas are not always easy to find or easy to apply in a world with so many different local landscapes, ADSW built the Net Zero Navigator to bring people, ideas and solutions together. A digital platform and Al-driven interactive tool, the Navigator allows a multistakeholder audience to engage with each other, learn and understand how to contribute to key climate initiatives.

As the world continues to unite for climate action, I would like to thank all ADSW participants who helped shape the Net Zero Navigator for their invaluable contributions toward the development of this game-changing tool. Climate action is a goal we can all agree on, and now we have a better way to reach it.



Mohamed Jameel Al Ramahi <sup>Chief Executive Officer</sup> Masdar

#### Introduction

The pathway to net zero is a collective enterprise. It demands an orchestrated effort across stakeholders, organizations and nations, if the world is to meet its targets by 2050. This year, ADSW engaged experts at multiple touchpoints to best learn what stakeholders need to catalyze collective progress. One of the key results? Net zero ambitions hinge on forging productive partnerships endowed with credible skills, competencies and capabilities to generate solutions to seemingly insurmountable challenges.

ADSW has immense respect for the experts it engages and has taken the initiative to help facilitate these productive partnerships, with the full understanding that such collaborations require a broad range of innovations in technologies, financial instruments, governance policies and capacity building. The insights gleaned from this year-long set of discussions highlight that while rapid strides are being made in technology incubation, renewable energy investments and consumption models, the true catalyst lies in ensuring stakeholders have a broad-spectrum understanding of how partnerships can help, which operational mechanisms are essential and how foresight can be used to anticipate potential futures.

Starting from these collaborative learnings, ADSW has set out three strategic priorities to support the global drive to net zero. The first, in line with Masdar's mandate, is helping the world transition to sustainable energy sources. The second is enabling technologies to support sustainability across a variety of sectors and industries. The third is supporting the development of sustainable economies in systemic areas where Masdar has invested its expertise to drive positive outcomes. If fostered with sustainability at the forefront, these broad systems – our built environment, water management, agriculture, manufacturing and transportation – have the potential to reshape our world for the better.

To drive this crucial work, stakeholders have important needs. They need to know who shares their priorities. They need to be aware of existing initiatives relevant to their pursuits. They need to connect via channels through which they can contribute, and they need to know the value that other initiatives hold for themselves, society and the planet. This information is instrumental in planning and indispensable for policy development, financial planning and regional and local initiative execution.

Information and innovation, however, are not enough. The world has plenty of sustainability-related databases, research programs and business accelerators. Experts are requesting quality facilitators – entities adept at expediting partnership formations, securing financial resources and disseminating policies. In essence, catalysts that increase the rate of "good fit" between stakeholders while supporting their needs.

With the support of the UAE and Masdar, ADSW is stepping into this space to galvanize communities committed to net zero climate action. The primary catalysts for action – innovative financing, governance frameworks and partnership models – are already known and comprise useful mechanisms such as incentive structures, funding models and risk mitigation strategies. The next step is integrating these elements by creating a space where individuals, knowledge and solutions can come together to propel action. This is exactly what ADSW has attempted to create.

Since 2008, ADSW has been a key facilitator in the sustainability sphere and sees an extraordinary opportunity to support stakeholder needs. At COP28, ADSW is providing a first look at "The Net Zero Navigator," its interactive Aldriven digital platform aimed at catalyzing collective progress by bringing stakeholders together to support its strategic priorities. The platform is designed to bring people, ideas and solutions together to drive action on climate goals.

To achieve net zero by 2050, alobal stakeholders need facilitators to help foster a culture of productive collaboration, knowledgesharing and strategic partnerships. Getting to net zero requires a unified global front. Through initiatives like ADSW's Net Zero Navigator, the world will move closer - faster - to a sustainable future, and the key to accelerating positive change will be our coming together. We must address challenges in ways that support sustainable economic development, connect those who can help each other and enable the technologies that usher in a global energy transition.

# UAE: committed to the SDGs

The United Arab Emirates is committed to achieving the United Nations Sustainable Development Goals (SDGs). In the last five years, the UAE has formed a dedicated national committee, created the Green Agenda 2030 and partnered with the United Nations to align its national development strategies with global sustainability objectives. This has provided a robust framework for sustainable growth and international cooperation. At the forefront of these commitments, the UAE has also taken a proactive stance on SDG 13, Climate Action, demonstrating its desire to lead and promote action for sustainability, especially for net zero ambitions.

#### National commitments to climate action

- <u>National Committee on SDGs</u>: The UAE's National Committee on SDGs integrates them into national strategies, engages diverse stakeholders, monitors their progress and fosters collaboration through initiatives like the <u>Global Councils</u> launched at the World Government Summit.
- <u>Green Agenda 2023</u>: The UAE's Green Agenda 2030 seeks to enhance GDP growth, boost exports and cut emissions as part of its commitment to green development and the SDGs.
- <u>United Nations Partnerships</u>: The UAE is partnering with the United Nations to foster a cooperative framework and advance the achievement of the SDGs, strengthening global sustainability efforts.





#### Supporting crucial SDGs



**Affordable and Clean Energy (SDG 7)**: The UAE's initiatives under SDG 7 aim to transition to sustainable energy, as outlined in the Green Agenda 2030, with targets to reduce carbon emissions and increase clean energy use.



**Industry, Innovation, and Infrastructure (SDG 9)**: Under SDG 9, the UAE focuses on innovation and infrastructure with strategies like Dubai's 3D Printing Strategy, driving the nation towards becoming a hub for sustainable industrial innovation.



Quality Education (SDG 4) and Decent Work and Economic Growth (SDG 8):

The UAE's investment in over 1,200 accredited academic programs supports SDG 4 and SDG 8, providing education that underpins sustainable development and economic growth through skill and knowledge enhancement.

#### Combating climate change with action

- National Climate Change Plan (2017-2050): The UAE's National Climate Change Plan (2017 –2050) aims to manage GHG emissions, enhance climate resilience and drive economic diversification with innovative solutions for sustainable development.
- <u>UAE Net Zero 2050 Strategic Initiative</u>: The UAE Net Zero 2050 Strategic Initiative aligns with the Paris Agreement to reduce GHG emissions and limit global temperature rise, reflecting the UAE's commitment to global climate action.
- Dubai's Zero Carbon Police Force: Dubai's Zero Carbon Police Force initiative supports the city's goal to become the lowest carbon footprint city by 2050, with a targeted 30% emission reduction by 2030.
- <u>Climate Adaptation Measures</u>: Through climate adaptation measures, the UAE seeks to strengthen its resilience against climate change impacts, ensuring sustainable development and environmental protection.

This dedication extends beyond government to the private sector as well. For example, <u>Global Mission</u> is one of the pioneering initiatives coming from the UAE. It stands as a testament to ambitious international financing, announcing The Global Fund for Sustainable Development. The fund looks to invest USD\$17 billion, an incredible USD\$1 billion for each of the 17 SDGs. It prioritizes health and environmental challenges, such as reducing carbon emissions, combating plastic pollution and enhancing clean water access. This pioneering initiative leverages a public-private partnership model and supports Abu Dhabi's long-term plans, such as the <u>Economic Vision</u> 2030 and <u>Environment Vision 2030</u>. Furthermore, it is expected to fund around 100 global projects in its initial year, reflecting Abu Dhabi's dedication to the global sustainability agenda and creating a collaborative ecosystem for leaders and organizations eager to invest in sustainability.

Bridging the investment drive with practical action, the Global Mission's commitment underscores a broader trend: the need for substantial financial resources to address environmental and health challenges. This need is echoed by the international community, as current efforts fall short of the targets set for 2050. By focusing on significant, measurable impacts across various sustainability goals, the fund exemplifies the large-scale, collaborative efforts required. As the world converges for COP28, such initiatives highlight the importance of combining financial muscle with strategic vision to catalyze meaningful progress toward the SDGs.

# Education and partnerships: insights for a sustainable world



By Prof. Mette Morsing Director, Smith School of Enterprise and the Environment

At Oxford's Smith School of Enterprise and the Environment, it is a privilege to be part of the global dialogue on sustainability, a journey shaped by what we call the three I's: impact, interdisciplinarity and international perspective. Our mission at the Smith School transcends the realm of academic research. We strive for research that not only achieves academic excellence but also creates real-world impact. This vision is not confined within the walls of Oxford University; it extends globally, addressing transnational issues like climate change.

Our approach is inherently interdisciplinary and is foundationally open to inclusive and multistakeholder input. We bring together experts from a variety of disciplines within the humanities and the social, natural and engineering sciences to foster collaborative projects with decision-makers and experts from the public and the private sector, all of whom bring their perspectives to collectively contribute to offer real solutions for a better world.

In critical research on partnerships, particularly in the context of the UN Sustainable Development Goals (SDGs), the growing emphasis on collaboration is a beacon of hope. SDG NO 17 is emblematic of the importance of partnerships in addressing global challenges. There is much optimism and emerging evidence supporting partnerships as an effective approach, but we also need to delve deeper into their actual outcomes. It's crucial to assess not just the process of bringing diverse groups together (input legitimacy) but also the tangible benefits and improvements they yield (output legitimacy).

One key aspect of successful partnerships is co-design. This involves integrating beneficiaries into the partnership from the outset, ensuring that their real needs and perspectives shape the processes and solutions. This approach is helpful, whether dealing with human rights or addressing broader issues like climate change. For a partnership to be successful, it is imperative that we ensure those who are meant to benefit from these partnerships are involved from the very beginning. Indications point to that we often too late or never take the beneficiary voices into the core of the partnership.

Education is another powerful tool in transitioning to a more sustainable world. Leading economists and researchers emphasize the need for a reimagined curriculum that encourages students to engage actively with global problems. In higher education, it's required but not enough to be well-versed in a single discipline. Students must be also equipped to understand and respect diverse perspectives, a skill set akin to diplomacy. This approach is vital for nurturing the next generation of leaders who will need to collaborate innovatively and effectively across various sectors.

A striking example of the power of education comes from a study comparing two groups of master's students exposed to sustainability and climate change curriculum. The group engaged deeply with the complexities of climate change emerged better informed and more receptive to the challenges, despite the difficulty of the subject. In contrast, students who were exposed to climate change as a peripheral "additional" topic developed a cynical view, influenced by the perception that it wasn't a priority.

Such comparisons beg the question as to whether we need to commit to re-skilling professors and educators so that the next generation of educated professionals understands what is at stake at a global level. With millions of students graduating from universities annually, the content and manner in which we teach these critical issues can have a profound impact on the future.

The way we communicate about climate change and sustainability is equally important. The media, both local and global, carries a significant responsibility in shaping public perception and sentiment. It's not just about presenting facts; it's about understanding the agendas behind these narratives and their impact on public opinion.

In conclusion, as we navigate the complexities of sustainability, the importance of impactful research, inclusive partnerships and transformative education cannot be overstated. These are the pillars upon which we can build a more sustainable and equitable world.

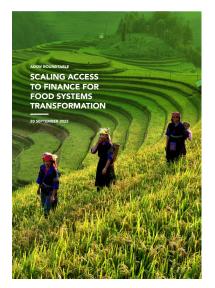
# A year of partnership discussions

To foster thought leadership and global outreach, ADSW works closely with experts to gather best practices and amplify impactful innovations. Throughout 2023, at physical and virtual meetings in Abu Dhabi, London, the Netherlands and New York, ADSW's community of contributors participated in individual technical committee workshops as well as Climate Week roundtable sessions. Their input is a key part of ADSW's inspiration to facilitate greater connections among action-oriented stakeholders. Each of this year's meetings focused on the catalysts needed to move forward and the different aspects of partnership and collaboration required to support them. One result from these meetings has been key input into shaping the Net Zero Navigator, ADSW's digital hub for bringing people, ideas and solutions together. Facilitating this interactive space is a fundamental step toward creating fertile ground for partnerships. You can find links to the report summaries of these discussions in the sidebar.

# <image>

ADSW roundtable: From Innovation to Investment: Establishing the UAE as a Global

**Climate Tech Hub** 



ADSW roundtable with PepsiCo: Scaling Access to Finance for Food Systems Transformation



ADSW roundtable: Creating Meaningful Partnerships for Achieving the COP28 Goals



ADSW roundtable: Facilitating Progress Towards a Clean Hydrogen Economy



ADSW rountable: Driving Climate Action Through Partnerships and Innovation

#### **Essential elements of good partnerships:**

- **Shared objectives**: Partners should have aligned goals and a mutual understanding of the partnership's purpose, ensuring all parties work towards common outcomes.
- **Clarity on benefits and risks**: Clearly define the potential gains and challenges of the partnership, ensuring transparency and preparedness for any eventualities.
- **Understanding the complementary value of parties**: Recognize and leverage the unique strengths and resources each party brings, enhancing the partnership's overall effectiveness.
- **Agreed measures for success**: Establish clear, quantifiable metrics or criteria to evaluate the partnership's progress and success, ensuring accountability and alignment with objectives.
- Knowing how to conclude: Have a clear strategy for responsibly and effectively concluding the partnership, whether it achieves its goals or needs to be terminated early.



# Imperatives for sustainability-focused partnerships

#### Blended climate-smart finance

Utilize smart finance to signal market readiness, overcome barriers and develop innovative instruments in partnership with stakeholders for achieving net zero goals. This includes leveraging private sector funding to complement public resources in various geographies.

#### Early-stage funding for innovationn

Seed and early-stage funding is crucial for startups and transformative technologies, including university research, to unlock potential and accelerate progress towards sustainable solutions.

#### Long-term, inclusive financial strategies

Emphasize long-term over short-term gains, ensuring finance flows into emerging economies. This involves fiduciary duty aligning with climate duty and creating new financial models that address climate change.

4

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#### Regulatory frameworks and public-private partnerships

Develop supportive regulatory environments and policies to facilitate innovation, systemic change and private sector participation, particularly in sustainable farming and energy sectors.

5

#### Community engagement and inclusion

Share best practices and success stories to engage communities, especially in the global south, emphasizing outcomes like job creation and skill development. Ensure diverse and inclusive participation at various levels to build capacit





## 6 Multi-stakeholder collaborations and platforms

Foster collaboration among businesses, governments and other stakeholders for ambitious climate targets. Create platforms for knowledge and expertise sharing to enable faster progress.

## 7

8

#### **Outcome-based collaborative approaches**

Focus on well-defined outcomes with accountability structures to accelerate initiatives. A cross-sector approach allows tapping into diverse solutions.

Addressing interconnectedness and value chains Recognize the interconnected impact of climate change and invest across value chains, from production to consumption, adapting financial systems to sustainability.

# 9

#### Empowering innovation and technology transfer

Overcome barriers in finance, regulation and skills to foster innovation. Support technology transfer through capacity building and leveraging technology for financial innovation.

## Risk management and collaborative funding models

Develop innovative funding constructs and collaborative models to reduce investment risks, particularly in high-risk sectors like food and agriculture. This includes creating instruments for de-risking investment.

ADSW's commitment to collaboration will be on display at the ADSW Partnership Hub at COP28 December 4–8, 2023. The hub will support ADSW's strategic priorities and emphasize the need for equitable and inclusive processes for climate action, both at COP28 and beyond.

# Digital tools: adding momentum to the energy transition



By Dr. Nikolas Meitanis Executive Director, Strategy & Corporate Development, Masdar

In the rapidly evolving landscape of renewable energy, strategic partnerships are essential to collaborative progress. As a leader in the energy industry, Masdar aims to deliver 100 gigawatts of renewable energy capacity by 2030 and will be working in dozens of countries on impactful projects. We are privileged to have an early look at ADSW's Net Zero Navigator – there is great value potential in such a comprehensive digital platform.

As an aggregator of relevant news, benchmarking metrics, and stakeholder mapping, digital tools provide a wealth of information on market participants, from industrial companies to contractors and equity investors. For the Navigator, its potential value as a one-stop source for updates on the latest innovations, project launches and investment opportunities would be an important addition to the collaborative community-building space that stakeholders need. More than just gathering news, it could be a benchmark for understanding the landscape of renewable energy technologies and sustainable development initiatives.

At Masdar, partnerships are vital in our field, both horizontally and vertically. We operate within a value chain that necessitates collaboration with suppliers, contractors, off-takers, regulators and lenders. Complementary partnerships, where each party brings unique skills to the table, are fundamental to our growth and learning. For example, combining our project financing expertise with a partner's technical know-how in offshore wind foundations or geothermal drilling could lead to more effective and innovative solutions.

Partnership comes with challenges, however, primarily in balancing risk and reward. In renewable energy, like in any business, this balance is crucial. For instance, implementing projects in developing regions requires clarity on commercializing electricity, including aspects like transmission lines, permitting and securing off-takers. Investments often stall due to uncertainties and potential risks, and it is important to think through the future of how the contextual environment – from politics to infrastructure – will evolve. Building good relationships and using network resources to aid in this process are critical to success.

A digital platform that could facilitate relationships among key stakeholders – developers, banks and experts – by speeding up processes and supporting interactions would be a welcome catalyst in the overall area of partnership development. Partnerships, after all, require a blend of knowledge, instinct for fit and conviction toward outcomes. The platform's combination of tangible information, space to announce new projects, overviews of market conditions, access to like-minded practitioners and experts, and menu of new offerings and initiatives could spur action toward collective goals.

The Net Zero Navigator has the potential to be a catalyst for education, awareness and connection driving us toward a more sustainable and collaborative future in the energy sector. The platform's role as a go-to resource offering initial insights, with a focus on technologies, energy and sustainable development, is an aspiration built upon ADSW's key facilitator role on the global stage. As a global initiative hosted by Masdar, ADSW supports our work to expand the renewable energy footprint globally. Doing so through the integration of digital tools that support strategic partnerships is a welcome occasion.

## Introducing the Net Zero Navigator



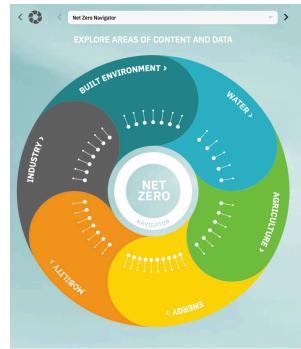
Action is the imperative for all stakeholders in the service of the greater goal of net zero emissions and the global sustainability transformation. After a year of discussions with technical committees and global experts on how to drive partnerships and create an action-oriented atmosphere for stakeholders, ADSW is proud to take an active step toward collaboration by establishing the Net Zero Navigator, an accessible Al-driven digital platform for stakeholder interaction.

The global community may be dispersed, but it has much to share among its valuable members. ADSW, as a trusted convener and facilitator, is building the Net Zero Navigator to create space for collaboration in the service of the global sustainability imperative. The Navigator will grow and evolve to provide regional information for researchers, benchmarking metrics for policymakers, market information for investors, an expert community for innovators to engage and stakeholder-centric pathways to reducing emissions. It will support ADSW's strategic priorities of transitioning to sustainable energy sources, enabling technologies for sustainability and developing sustainable economies.

By crafting a globally oriented interactive digital platform buttressed by subject experts, machine learning capabilities and a government committed to a greener future, ADSW is laying the foundation for a holistic approach to sustainability. The Navigator will be at the center of this approach, acting as the engine driving ADSW's contributions, especially to the reduction of emissions in line with the <u>UAE's Net Zero</u> by 2050 Strategic Initiative.

Achieving sustainability objectives, and with them a key goal such as net zero emissions is a multifaceted challenge. It is about more than the adoption of green technologies. It is about understanding the intertwining of economic systems, regulatory policies, financial structures and global partnerships. The Navigator is being built to provide a compass, helping stakeholders find their way through this complex web. It will be indispensable in maintaining the collaborative ties and shared spaces where stakeholders can build initiatives, find innovations, discover new stakeholders and share knowledge with a global audience.

#### ADSW's unique online platform and Al-driven interactive tool



# MAVIGATOR

The Net Zero Navigator is ADSW's knowledge and collaboration platform. It is a unique online tool designed to unite diverse stakeholders across policy, funding and partnerships in a shared mission towards net zero by 2050. It can help them discover shared priorities, understand the technology landscape, engage with relevant initiatives, and contribute to meaningful change.

#### STRATEGIC PRIORITIES



The Net Zero Navigator is a tool to help you navigate the net zero transition. It is designed to help you understand the key trends and topics that will shape the transition to net zero, and to help you explore the implications for your organisation.

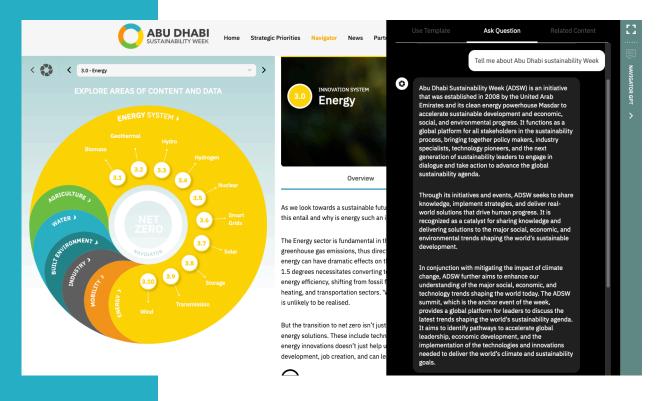
Hosted By: MASDAR

Navigating to net zero means charting a course to effectively balance carbon emissions with carbon reductions and removals. This path, however, is not linear. It is dotted with technological challenges, economic considerations, regulatory hurdles and the need for partnerships, governmental support and funding. In such a landscape, stakeholders can easily lose direction, especially when faced with myriad options and strategies. The Navigator intends to help clarify this journey and help stakeholders build a roadmap that remains aligned with their objectives, regardless of the complexities they encounter.

The Navigator will provide key information on the supporting pillars of sustainability transformation: finance, partnership and policy. Finance underpins the adoption and scaling of sustainable technologies. Without appropriate financial mechanisms, even the most promising solutions will remain underutilized. Partnerships, both local and global, facilitate knowledge exchange, technological transfer and collaborative actions. Meanwhile, policies provide the regulatory support that can either facilitate or impede sustainable actions. The Navigator, by integrating insights into these key areas, will offer stakeholders a broad and useful perspective through which to undergird their own decision-making. It will be a resource that supports users in following their own path to net zero.

Beginning with ADSW's strategic priorities, the Navigator will provide exploration pathways through the primary sustainability systems that Masdar and ADSW support. These include energy, water, transportation, agriculture, manufacturing and the built environment. In addition, it will spotlight the current trends and the future horizons of development that impact these systems.

Understanding the sustainability transformation through: POLICY TRENDS FINANCE TRENDS PARTNERSHIP TRENDS Stakeholders will be able to navigate from broad innovation systems, such as energy, and drill down to the key focus areas that comprise them, such as solar, hydrogen, biomass or geothermal sources. From here, overviews of important technologies, as well as information on relevant policy and financial instruments, are accessible. Executives, policymakers, innovators, investors, researchers and other experts will form the community section of the platform where they will be able to see the variety of players both large and small that make up a growing global network. Their projects and initiatives will benefit from visibility to one another and by direct connection to like-minded and supportive experts. Reputable publications, news and current media relevant to each focus area will be accessible as well.



The knowledge capabilities of the platform, however, are just the basis for its primary purpose – to connect stakeholders and help them navigate toward net zero from wherever they stand, no matter the sector or geographical location. Artificial intelligence integration means that platform users will be able to engage the platform and its knowledge archives in order to produce industry and policy briefings, generate recommendations, explore potential future scenarios and create focused reports relevant to their specific circumstances.

Over the next year, the Navigator will expand its knowledge and community base, helping anyone interested in gaining deeper insight into the sustainability systems at the heart of the global directive toward net zero. As more data is integrated into the platform, from both streaming and static sources, the Navigator will also be able to provide key metrics for self-benchmarking and policy objective setting. This is just the beginning of ADSW's powerful platform to catalyze action.

At COP28, a prototype of the Navigator will be on display for testing and feedback. In the spirit of supporting this COP as "the COP of action," ADSW is inviting guests at COP to help shape the digital platform so that it delivers on their needs.

# Digitalization: the key to transforming the energy sector



By Rachel Fletcher Director of Regulation and Economics, Octopus Energy

Reducing emissions and reaching net zero is a global priority. At Octopus, part of our mission is to accelerate the decarbonization of global energy systems through digitalization. We're leveraging our IT expertise to catalyze the energy transformation, optimize energy system assets and empower customers to contribute to a sustainable future. The opportunity is immense, especially because the energy sector has yet to be fully revolutionized by the digital age.

Our approach is rooted in what we call our "secret sauce" – a combination of customer-focused IT and advanced algorithmic optimization. We apply this powerful blend to both large and small assets on the electricity system, making the most of renewable energy and maintaining grid balance. Our integrated tech platform, for example, manages over 75,000 electric vehicle (EV) batteries in Britain, forming what may well be the world's largest virtual power plant made of aggregated electric vehicle load.

The journey to net zero is complex and challenging. It is more than just generating renewable energy; it's about connecting electricity to the grid and ensuring the grid itself can handle the power where and when it's needed. This is where digitalization, in combination with evolving assets, comes into play. Using advanced digital capabilities, such as algorithmic learning, gives us much needed flexibility, and as we transition away from fossil fuels, we will need to be able to draw on energy when and where it is required. In the shift to new customer assets like EVs and air source heat pumps, maintaining efficient grids will make all the difference.

Our commitment to this transformation is evident in our heavy investment in heat pump technology and training, anticipating the government's recognition of their role in decarbonizing domestic heat. However, we are acutely aware that some challenges are beyond our control and lie in the hands of government and regulatory policymakers. A prime example is the current grid connection bottleneck in Britain, which is stalling progress towards net zero by creating a lengthy and uncertain wait for investors.

The issues with grid connections are symptomatic of a larger problem – an electricity system that has not kept pace with the rapid changes in the energy sector overall. Network companies, once only dealt with a trickle of connection requests. Now, they are overwhelmed, and the process has become mired in inefficiency. Moreover, the lack of coordination between transmission and distribution grids, insufficient grid capacity, speculative requests for connections clogging the system and a lack of transparency all contribute to a gridlock that requires urgent attention. The digital revolution in energy is not just a possibility – it's a necessity. By embracing IT and algorithmic optimization, we can unlock the flexibility required for a renewable future.

To truly succeed, however, we must also address the systemic issues that hinder progress. For example, the wholesale market structure that fails to reflect the localized nature of energy supply and demand. Learning from international examples like the United States and the Nordics, which have adopted locational pricing, could provide us with the insights needed to reform our own market, making the transition to net zero faster, cheaper and more effective.

What Britain needs more than ever is political leadership that can cut through the complexity and drive action. We need senior figures to convene the necessary parties and forge a path forward. The green economy is not just about survival; it's an opportunity for leadership to drive innovation and growth. Britain has the chance to solidify its position as a pioneer in the transition to green energy – if we can overcome the hurdles that currently hold us back.



Sustainable Development



Energy Transition



Enabling Technologies

# Building global momentum

Innovation in policy, finance and partnership are central to reaching our collective goals, and progressive steps are being taken in countries and regions around the world. It is important to share successes from all regions so that others can take inspiration and spread best practices.

The graphic below highlights just a few recent and important policies, groundbreaking collaborations and savvy financial strategies. These selections relate specifically to ADSW's strategic priorities of enabling technologies, the renewable energy transition and sustainable economic development. For the benefit of platform users, the Navigator will aggregate information on initiatives and collaborations like these so that the stakeholders can witness and learn from regional progress. It will also offer a variety of recommendations, best practices and solutions available from different stakeholders, as described in the previous sections. One of the most valuable aspects of the Navigator will be to supply these knowledge resources with a stakeholder-centric approach, applying to the users specific context. The following pages are a small sample of the current activities taking place in different regions of the world.







#### Middle East North Africa (MENA)



#### Sustainable Development

#### Egypt and water conservation

initiatives - Egypt's National Water Resources Strategy 2017-2037 plans to address its water challenges through a multifaceted approach with an anticipated cost of EGP 900 billion (about \$55 billion), emphasizing desalination and water recycling as key components.



#### Energy Transition

#### Oatar and renewable energy -

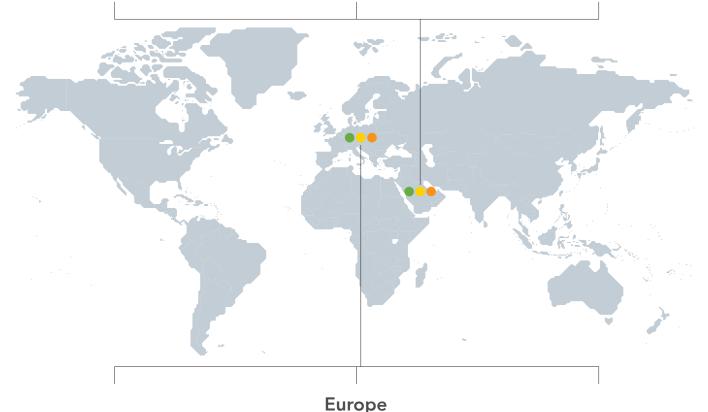
Qatar aims for 20% renewable electricity by 2030 and carbon neutrality by 2050, marked by the Al Kharsaah solar plant's opening in 2022, with a 2 TWh annual output and a \$630 million investment in further solar capacity, alongside developing waste-to-energy initiatives.



#### Enabling Technologies

Growth of fintech startups in the

<u>UAE</u> - McKinsey estimates "that MENAP fintech revenue could increase almost threefold, from \$1.5 billion in 2022 to an amount between \$3.5 billion and \$4.5 billion in 2025."





#### Sustainable Development

Green Deal's Just Transition

Program - To incentivize a move toward a climate-neutral economy, the budget for 2021-2027 is €20.288 billion, with €9.248 billion coming from financial programming, €10.872 billion from NextGenerationEU, and €167.7 million from contributions from other countries and entities.



Energy

Transition

Germany's Energiewende (energy transition) - "The German government initially planned to further increase the share of renewables in electricity to 50% by 2030, 65% by 2040 and 80% by 2050. But according to the new coalition agreement of March 2018, as affirmed by the climate cabinet, the government is now planning to speed up the growth, to reach a share of 65% renewable electricity by 2030 (contingent on a corresponding expansion in grid capacity)".





#### Enabling Technologies

#### Growth of digital banking for startups and sustainable fintech in key European cities - Aligning

In Key European cities - Aligning Europe's fintech with leading sectors could triple jobs to 364,000, boost investment by €84 billion, and increase valuations to €981 billion, surpassing the market cap of Europe's top ten banks.

#### Central & South Asia (Includes India)



Sustainable Development

Indian government's Smart Cities Mission - "3,131 Smart City projects worth ₹ 53,175 crore have been completed."



Energy Transition

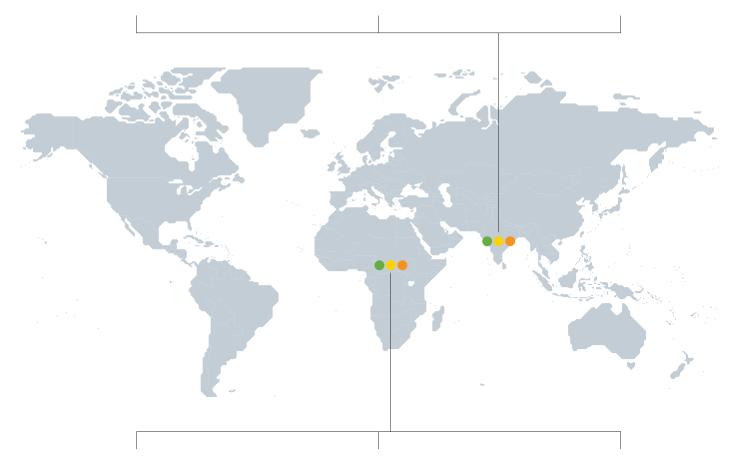
India and clean energy policies by 2030 - "Clean energy financing is necessary for India to meet its clean energy commitments. India has set a target of installing 500 GW of RE by 2030 as part of its climate goals."



Enabling Technologies

#### Phool and River Ganges clean up

- "11,060 metric tonnes of templewaste has been flowercycled® to date; ; 110 metric tonnes of chemical pesticides that enter the river through temple waste have been offset."



#### Sub-Saharan Africa



Sustainable Development

Incentives for Financing SDGs -"Efforts to boost tax revenue collection and stem illicit capital flows can mobilize an additional \$246 billion and narrow the region's SDG financing gap substantially, to just over \$10 billion per year."



Energy Transition (and Fintech)

<u>M-KOPA Solar's pay-as-you-go</u> <u>solar solutions</u> - "Since 2011, it has connected more than a million households in Sub-Saharan Africa to solar energy [...] It has provided more than \$600 million in financing for underbanked customers to purchase assets on a PAYG basis."



Mobile Money Expansion - 490 billion USD transactional value. "As of 2020, the mobile money industry accounts topped 300 million, having grown at a rate of 17 per cent year on year."

#### China (separate from Asia-Pacific)



Sustainable Development

Achieving key SDGs - "China [claims it] has lifted more than 700 million people out of poverty, contributing over 70% of global poverty reduction."



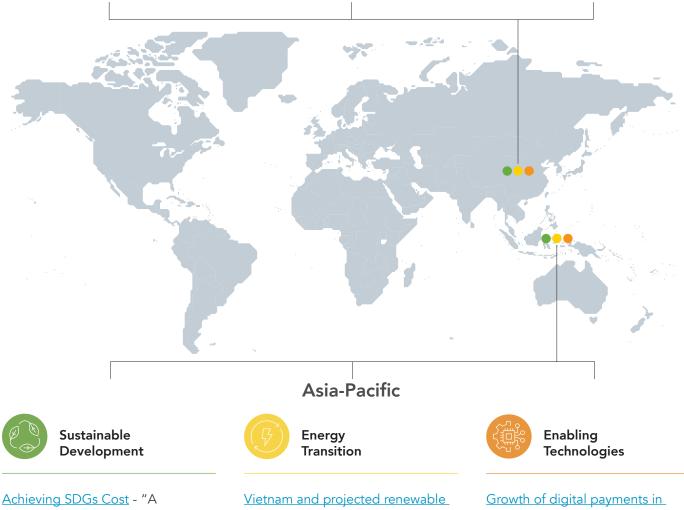
China's renewable energy expansion sets huge goals to be reached by 2060 - In September 2020, President Xi Jinping declared that China is targeting the peaking of CO2 emissions before 2030 and striving for carbon neutrality by 2060.



#### Enabling Technologies

#### China's Green finance polices

- In early 2021, the PBOC introduced five pillars for green finance development, including improving standards, strengthening regulation, enhancing incentives, enriching products, and expanding international cooperation.



comprehensive assessment of the investment needed to reach the Sustainable Development Goals in the region by 2030 estimates an additional \$1.5 trillion per year to end poverty and hunger, provide basic health care, a quality education, enabling infrastructure and clean energy for all, and for climate action and living in harmony with nature."

energy - Vietnam is projected to add approximately 28 GW of renewable energy capacity between 2020 and 2023, significantly more than Malaysia, the Philippines, Indonesia, and Thailand combined. India - "India's digital payments market is at an inflection point and is expected to more than triple from US\$3 trillion today to US\$10 trillion by 2026. As a result of this unprecedented growth, digital payments (non-cash) will constitute nearly 65% of all payments by 2026 i.e., 2 out of 3 transactions (by value) will be digital."

#### **North America**



Sustainable Development

<u>U.S. Green New Deal and</u> <u>renewable commitments</u> - "The United States has committed to an ambitious and achievable goal to reduce net GHG emissions 50-52% below 2005 levels in 2030."



Energy Transition

The US's Inflation Reduction Act, provides tax incentives to address climate -"The Inflation Reduction Act contains \$500 billion in new spending and tax breaks that aim to boost clean energy, reduce healthcare costs, and increase tax revenues."



Enabling Technologies

<u>US fintech transparency measures</u> -The report ranks the US eighth in natural capital disclosure transparency among DJIA firms, with a 40% completeness score by the Natural Capital Coalition.



#### Latin America and Caribbean (LAC)



Sustainable Development

#### Amazon Rainforest Conservation

- "More than 9.5 million hectares (23.4 million acres), an area larger than Portugal, have been regenerating in the Amazon alone since 2008."



Energy Transition

#### Brazilian fintech sector growth

potential - "As of March 31, 2023, home and building owners have installed more than 1.8 million renewable distributed generation systems in Brazil, totaling about 19 gigawatts (GW) of capacity, the vast majority of which is solar, according to the Brazilian Electricity Regulatory Agency (ANEEL)."



#### TerraBrasilis Data Aggregator

<u>Platform</u> - TerraBrasilis, by Brazil's INPE, provides data from programs like PRODES and DETER. It shows Amazon deforestation rising from 4.1k km<sup>2</sup> in 2012 to 12.5k km<sup>2</sup> in 2022, a concerning environmental trend.

# Uncertainty: the ultimate policy obstacle to technology innovation



By Dr. Andrey Zarur CEO Greenlight Biosciences

The goal is net zero emissions. To get there, however, the world needs to increase the efficiencies of large systems of value at a staggering rate.

At Greenlight Biosciences, we are focused on innovative technologies in the agricultural system. Agriculture is an immense area with colossal investment opportunities for achieving sustainability ambitions. For example, agriculture uses 70% of the world's yearly freshwater consumption and an unconscionable 40% of food gets destroyed before harvesting due to outdated practices. If we can address these losses and increase systemic efficiency, we're looking at recouping trillions of dollars in value. So, why isn't this the fastest growing area of investment? Why would there be any trepidation at all?

From where we sit, this trepidation is a clear result of policy uncertainty rather than product, market, or environmental risk. In business, as in life, risk and uncertainty are common companions. However, there is a marked difference between risk and uncertainty, and this difference is hampering the role of financial institutions in advancing our food systems.

Risk, to be clear, is a measurable entity. For example, in developing a new car, risks are quantifiable and can be managed, often attracting investments. Investors are willing to finance ventures like electric vehicles because the market and regulatory frameworks are well-established, leaving only market performance as the primary risk. But when we shift our gaze to the agricultural arena, a sector operating in tens of trillions of dollars, as opposed to the vehicle market's billions, the landscape changes. The uncertainties overshadow the risks. And regulatory uncertainty deters investment.

Uncertainty, after all, isn't measurable. It's binary. For instance, introducing new pest control methods in Europe is enveloped in binary uncertainty around the possibility of getting approval; either there will be a path to approval, or there won't. This binary nature of uncertainty has led to a significant withdrawal of agrochemical companies from pursuing new chemical solutions for crop protection in Europe. Without knowing if it is possible to get approval, it isn't worth the expenditure to solve problems, no matter how environmentally beneficial or financially lucrative the solutions could be.

An unfortunate impact of uncertainty is the delay in realizing the benefits of groundbreaking early-stage agricultural technologies. These innovations promise cleaner, more sustainable, and efficient food production. Yet, the lack of clarity on regulatory approvals and market acceptance leaves these promising technologies languishing in labs. This catch-22 situation is a significant roadblock; without funding, these technologies can't progress to market-ready solutions, and without market-ready solutions, funding – predicated on a clear roadmap to return on investment – is elusive.

So how can we transform this massive roadblock to innovation? Clarity is the first step towards a solution. Unlike subsidies or incentives, clarity and transparency in regulatory frameworks can significantly reduce uncertainties. Drawing an example from the pharmaceutical industry, when the US FDA adapted its regulatory approach to accommodate biology-based solutions, it cleared the path for innovation by reducing regulatory uncertainty. Likewise, reflecting on the electric vehicle industry's leap, a mere \$7,500 federal stimulus is what eased the regulatory path.

For Greenlight Biosciences, real progress is about exchanging uncertainty for the risk that the economic system knows how to manage. It is about unshackling the boundless potential of biotechnology from the chains of uncertainty and facilitating a future where sustainability is not just a goal – it is a tangible reality. The dialogue here isn't about cutting corners but expediting the review of solid scientific data to propel actionable solutions. To foster a conducive investment environment and bring transformative agricultural technologies to market, reducing uncertainty is crucial.

We are looking toward COP28 with hope. The focus on food systems and sustainability is a welcome shift. Simple policy tweaks could trigger significant emission reductions, given agriculture's hefty contribution to global greenhouse gas emissions. Only with a clear, transparent regulatory framework can we hope to attract the investments needed to revolutionize our food systems and ensure a sustainable future.

# Collaboration for a brighter future

Achieving net zero by mid-century should not merely be aspirational. It is, in fact, a dire necessity. It is no accident that executives and government officials equipped with investment power, policy mechanisms and partnership opportunities are finding themselves at the epicenter of this global crisis. Collaboration among these stakeholders in driving active sustainability measures is the only way forward. Isolated action, however well-intentioned, will fall short. The scale and urgency of this challenge demand an unwavering commitment to collective action and global collaboration, and through cooperative approaches these central stakeholders will pioneer innovative ways to generate new value and mitigate risks for businesses and societies.

From an economic perspective, the World Economic Forum (WEF) projects that the transition to a net zero emissions economy could unlock \$26 trillion in economic benefits by 2030, creating 65 million new jobs and avoiding over 700,000 premature deaths due to air pollution. Such a monumental economic opportunity means working together and doing so efficiently. This is especially true for sectors like renewable energy, sustainable transportation and green infrastructure. For executives, this means recognizing the value of collective investments in green initiatives, and for government officials it signifies the immense economic and societal gains that can be reaped from policy frameworks fostering international collaboration.



According to the Intergovernmental Panel on Climate Change (IPCC), limiting global warming to 1.5°C requires a decline of CO2 emissions of about 45 percent by 2030 (relative to 2010 levels) and continued progress in order to achieve net zero by 2050. The path to net zero, however, is fraught with challenges. McKinsey & Company highlights that almost half of the emissions reductions required to meet the 1.5°C target involve technologies that are not yet commercially available. For businesses, this is a mandate to foster collaborative research and development, knowledge sharing and joint investments in breakthrough technologies. Government officials, on the other hand, must understand the pivotal role of international partnerships in technology transfer and capacity building, especially for developing nations.

Furthermore, the transition to net zero is more than a technological and economic challenge. It is also a societal one. The <u>United Nations</u> has emphasized the importance of a "just transition," ensuring that the shift to a green economy is inclusive and that it offers alternative employment opportunities without exacerbating existing inequalities. Collective action must take up the hard work of making sure that the benefits of a net zero world are equitably shared, and that the costs of the transition are not unduly borne by the most vulnerable nations and communities.

The journey towards net zero is a shared pathway. While the challenges are manifold, so are the opportunities. For executives, it offers a chance to be at the forefront of a green economic boom, harnessing the collaborative spirit for technological and economic advancement. For government officials, it provides a canvas to draft policies and frameworks that not only address climate change but also propel societal progress. As the world stands on the cusp of a climate revolution, the message is clear: collective action and global collaboration are not just imperatives, they are the cornerstones of a sustainable, prosperous future.



# Key global collaborations focused on sustainable development

**United Nations Sustainable Development Goals (SDGs)** - A global initiative featuring 17 goals that address the global challenges we face, including poverty, inequality, climate change, and more.

The Paris Agreement - An agreement within the United Nations Framework Convention on Climate Change (UNFCCC) addressing the issues of greenhouse gas emissions, mitigation, adaptation, and finance.

**The Global Green Growth Institute (GGGI)** - An international organization that promotes sustainable economic growth in developing and emerging countries.

**The World Business Council for Sustainable Development (WBCSD)** - A global, CEO-led organization of over 200 leading businesses working to accelerate the transition to a sustainable world.

**Global Partnership for Sustainable Development Data (GPSDD)** - A global network committed to harnessing and using data for the SDGs, promoting data collaborations, and addressing data challenges.

**The Bonn Challenge** - A global effort to restore 150 million hectares of the world's deforested and degraded land by 2020 and 350 million hectares by 2030.





**The New Urban Agenda (NUA)** - An initiative adopted at the UN Conference on Housing and Sustainable Urban Development (Habitat III) addressing urbanization challenges.

**The Powering Past Coal Alliance** - A coalition of national and subnational governments, businesses, and organizations working to phase out unabated coal power.

**The Ocean Conference and its commitments** - A conference under the UN to support the implementation of Sustainable Development Goal 14: Life Below Water.

**RE100** - A collaborative global initiative uniting influential businesses committed to 100% renewable electricity.

These collaborations and initiatives involve multiple stakeholders, including governments, businesses, NGOs, and civil society, all working together to address the most pressing sustainable development challenges our planet faces.

# Drawing from global data sources

The Navigator will employ a diverse array of data sources to aid stakeholders in navigating to net zero. These will be built out through several development phases. Ultimately, they will provide crucial information and insights as well as recommendations to make the most of the evolving landscape of finance, policy and partnerships.

The Navigator will feature useful information for a variety of stakeholders. For example, economic and trade data will provide users of the Navigator with an overview of diverse features of the global economy. Consumer trends in the food and agriculture sector will shed light on issues in food security and economic sustainability. Health data will emphasize the links between human well-being and environmental care, offering insights into sustainable healthcare practices and policies. Demographic and population data will allow users of the Navigator to see how the infrastructures of tomorrow can anticipate the needs of a growing population.

Cross-sections of regional and industry data will delineate the economic backdrop against which sustainability efforts are being enacted. Data on international disasters will inform users' understanding of climate-related risks, guiding disaster risk reduction and climate action planning. The legal dimensions of sustainability, particularly those concerning climate change, are also increasingly relevant in enforcing and encouraging sustainable practices, shaping the legal landscape in which businesses and governments operate. Such diverse data streams will allow users of the Navigator to have easy access within a single platform.

The Navigator will be a unique multistakeholder and government supported platform addressing sustainable economic development, net zero climate action and energy transition with AI-integrated querying. Other platforms provide various resources for sustainability and net zero emissions research, partnership and other related needs. Many focus primarily on the United States' efforts. Examples of these efforts are listed <u>here</u>. The Navigator envisions addressing these imperatives in a holistic way and will encapsulate regional information and broader international collaborations as well.



Direct information about net zero policies and emissions data provides important metrics, but benchmarking measures are not the end of the story. Data from relevant sources develops contextual intelligence that can then become part of a more holistic overview of net zero progress. Understanding the relevance of the intersections of these data will generate better recommendations and insights for platform visitors.

#### Diverse data sources for contextual intelligence

- <u>Atlas of Economic Complexity Dataverse</u> (Harvard University): Economic and trade data, offering insights into the complexity and diversity of economies worldwide.
- <u>Global Supply Chain Pressure Index</u> (GSCPI) Federal Reserve Bank of New York: Information on global supply chain pressures, which helps in assessing the resilience and vulnerabilities of supply chains.
- <u>FAOSTAT</u> (Consumer Price Indices) Food and Agriculture Organization (FAO): Consumer Price Indices (CPI) data related to food and agriculture, crucial for understanding price trends and their impact on sustainability.
- <u>Global Burden of Disease Study 2019</u> (GBD 2019) Data Resources Institute for Health Metrics and Evaluation (IHME): Health-related data, offering insights into the global burden of diseases and their impact on sustainability and public health.
- <u>Data Portal United Nations Population Division</u>: Population and demographic data from the United Nations, essential for understanding the demographic aspect of sustainability.
- <u>IMF Data International Monetary Fund</u> (IMF): Economic and financial data, including fiscal and monetary statistics, which inform the economic context of sustainability efforts.
- <u>EM-DAT</u> (International Disasters) Centre for Research on the Epidemiology of Disasters (CRED): Data on international disasters, including natural and human-made disasters, supporting the assessment of climate-related risks.
- <u>Climate Change Litigation</u> (Columbia University): Information on legal cases related to climate change, assisting in understanding the legal framework and challenges in sustainability.
- <u>SDG Indicators United Nations Statistics Division</u>: Sustainable Development Goal (SDG) indicators data, providing a framework for measuring progress towards sustainability goals.
- <u>Google Sustainability Tools & Resources</u> (Google): Various sustainability tools and resources that offer insights into technology-driven solutions for sustainability challenges.





# Appendix of data sources

#### US sustainability and net zero resources

- <u>SDG Actions Platform | Department of Economic and Social Affairs (un.org)</u> This platform is
  a global registry of voluntary policies, commitments, multi-stakeholder partnerships and other
  initiatives made by governments, the UN system and a broad range of stakeholders to support the
  acceleration of the UN Sustainable Development Goals (SDGs).
- <u>Scaling Up Renewable Energy (SURE) | U.S. Aid</u> A program aimed at supporting countries in accelerating their transition to clean energy and reducing emissions.
- <u>Global Net zero Government Initiative | The White House</u> Launched at COP27, this initiative encourages governments to lead by example in achieving net zero emissions.
- <u>Energy Transition | United Nations Development Programme</u> Addresses the financial needs and job creation potential of the global energy transition towards net zero emissions by 2050.
- <u>U.S. Economic Development Administration</u> Focused exclusively on economic development with an emphasis on sustainable economic development.
- <u>The U.S. Commitment to the Sustainable Development Goals | U.S. Aid</u> Detailing the U.S. federal government's commitment to the Sustainable Development Goals, encompassing economic opportunity and environmental care.
- <u>Tools and Resources for Sustainable Communities | US EPA</u> Provides a framework for creating a smart growth economic development strategy particularly aimed at small and mid-sized cities.
- <u>Sustainability | US EPA</u> A platform focusing on sustainability as a priority interest, providing resources and information on sustainable practices.
- Moving to Net zero by 2050 | Department of Energy A directive on the United States' movement towards net zero carbon emissions by 2050.

Diverse data sources will collectively form the foundation of the platform. Through the analysis of this data, we aim to empower decision-makers and advocates in the field of sustainability with actionable information and strategies. The Navigator will add a vital tool to those communities that support international efforts, providing intuitive ways of viewing the data and resources related to sustainable economic development.

#### Sustainable development data platforms

- <u>Climate Knowledge Portal</u> Comprehensive global, regional, and country data related to climate change and development, offering resources to explore, evaluate, synthesize, and learn about future climate scenarios, projected risks, and climate-related vulnerabilities.
- <u>Our World in Data</u> Provides research and data to make progress against the world's largest problems, focusing on issues like poverty, disease, hunger, climate change, war, existential risks, and inequality
- <u>Sustainable Economic Development Assessment (SEDA</u>) This tool by BCG is designed to
  objectively measure a country's sustainable economic growth and citizen well-being. It combines
  data on outcomes (such as health and education) with quasi-objective data (such as governance
  assessments).

- <u>SDG Tracker</u> This tool presents data across all available indicators from the Our World in Data database, using official statistics from the UN and other international organizations.
- <u>Sustainable Development Report 2023 (sdgindex.org)</u> comprehensive review of the progress made each year on the Sustainable Development Goals since their adoption by the 193 UN Member States in 2015.
- <u>About Sustainable Development & Goals / IISD's Own Work on the Sustainable Development Goals</u>
   Provides visualizations of the indicators that countries are choosing to report on for the SDGs, offering a bottom-up view of national indicator reporting based on the top-down indicators selected by the United Nations.
- <u>Sustainable Development Goals Resource Centre (relx.com)</u> Offers interactive tools supporting the UN's Sustainable Development Goals (SDGs) with data and resources on various aspects.
- <u>United Nations (sdgmapping.ch)</u> An interactive visualization tool that maps the expertise on the Sustainable Development Goals (SDGs) across international organizations, NGOs and other institutions based in Geneva.
- <u>Net zero portal | STIP Compass (oecd.org)</u> A collaborative platform among the EC, IEA, and OECD that consolidates information on numerous Science, Technology and Innovation (STI) policies aimed at facilitating the transition to net zero emissions, with data amassed through the EC-OECD STIP Survey and the IEA's Policies.
- <u>ETP Clean Energy Technology Guide Data Tools IEA</u> An interactive database encompassing over 550 individual technology designs and components across the entire energy system, contributing towards the goal of achieving net zero emissions.
- <u>European Commission</u> The EU's approach towards implementing the UN's 2030 Agenda for Sustainable Development.
- <u>World Bank on Colombia</u> Colombia's efforts to balance economic growth with environmental conservation.
- <u>CEPAL</u> An assessment of Latin America and the Caribbean's progress towards achieving the Sustainable Development Goals by 2030.
- <u>United Nations Economic Commission for Africa</u> Insights into Africa's sustainable development efforts at the midway point of the implementation of the 2030 Agenda for Sustainable Development.
- <u>Asian Development Bank on SDGs</u> How the Asian Development Bank is working to help realize the 17 UN Sustainable Development Goals in Asia and the Pacific.
- <u>World Bank on Asia Pacific SDG Partnership</u> How energy, food, and finance systems can boost resilience and kickstart development progress in Asia and the Pacific.
- World Bank on Middle East and North Africa How countries in the Middle East and North Africa are working to eliminate poverty and promote shared prosperity through various sustainable initiatives.

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## Partners



Establish resilience at the technological frontier. Swiss Foresight & Technology Partners, Sàrl builds agency for clients in an uncertain and volatile global environment. Work with us to generate responsive strategies and sustainable value as you face organizational challenges from the impact of emerging technologies and market events.



Collective Intelligence Collaborative Action. Shapeable is a unique digital platform for collaborative impact networks. We combine an innovation consultancy, systems thinking workshops, content studio and online tools. Together we enable you to map complex global challenges, make change for good and measure impact at scale.



Abu Dhabi Sustainability Week (ADSW) is a global initiative championed by the UAE and its clean energy powerhouse Masdar to accelerate sustainable development and advance economic, social and environmental progress.

Established in 2008, ADSW provides a global platform for all who have a stake in the future of our planet. ADSW brings together leaders from across governments, the private sector and civil society, to discuss and engage on bold climate action and the innovations that will ensure a sustainable world for future generations.

ADSW is not only a premier convenor for global dialogue, but a catalyst for concrete results, providing multi-stakeholder platforms where thought leadership can evolve into thoughtful action.



Abu Dhabi Future Energy Company (Masdar) is the UAE's clean energy champion and one of the largest companies of its kind in the world, advancing the development and deployment of renewable energy and green hydrogen technologies to address global sustainability challenges.

Established in 2006, Masdar is today active in over 40 countries, helping them to achieve their clean energy objectives and advance sustainable development. Masdar is jointly owned by Abu Dhabi National Oil Company (ADNOC), Mubadala Investment Company (Mubadala), and Abu Dhabi National Energy Company (TAQA), and under this ownership the company is targeting a renewable energy portfolio capacity of at least 100 gigawatts (GW) by 2030 and an annual green hydrogen production capacity of up to 1 million tons by the same year.