



CLEAN ENERGY POWERHOUSE

PIONEERING ENERGY

Based in Abu Dhabi, Masdar is one of the world's leading renewable energy companies at the forefront of the global energy transition.



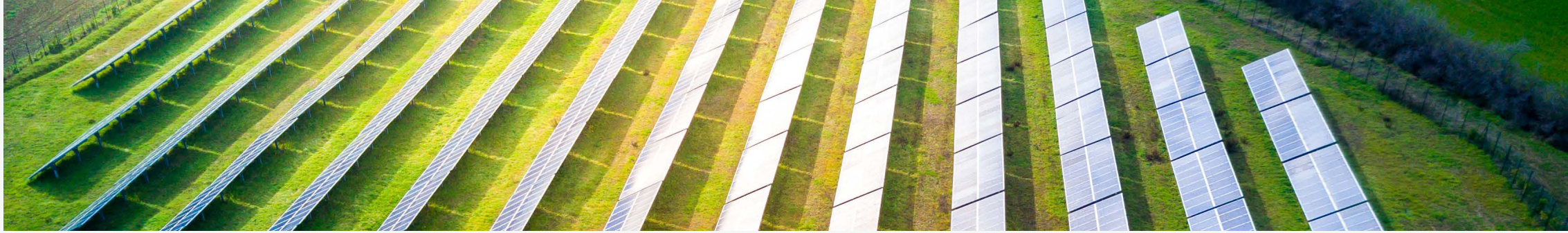
WHO WE ARE

Headquartered in the UAE, we have been advancing the development, commercialization and deployment of cutting-edge solutions since 2006. Masdar's expertise lies in the development of clean energy projects, the commercialization of high-impact innovations and hosting world-class industry and knowledge platforms that facilitate an inclusive and sustainable future for all. Today, Masdar is active in more than 40 countries across six continents and has invested in or committed to invest in projects with a combined value of over US\$30 billion, with a total capacity of over 20 gigawatts (GW), able to offset 30 million tonnes of CO2 emissions annually.

With our growing legacy in renewable energy delivery and our new green hydrogen business unit, Masdar plays a key role in the UAE's transition to a sustainable knowledge-based economy, expanding the UAE's energy leadership and supporting the global drive to net zero.



OUR SHAREHOLDERS



In December 2022, Abu Dhabi National Energy Company PJSC (TAQA) and Abu Dhabi National Oil Company (ADNOC), joined Mubadala Investment Company (Mubadala) as shareholders in Masdar, to create a truly global clean energy powerhouse.

This new shareholding structure brings together the extensive experience in renewable energy shared by TAQA, Mubadala and Masdar, with ADNOC's experience in hydrogen, global trading capabilities, infrastructure and logistics network.

Under the new partnership, Masdar will become a national clean energy champion for the UAE, with goals to produce 1 million tonnes of green hydrogen and reach 100 gigawatts (GW) total renewable energy capacity by 2030.





WHAT WE DO

Masdar brings technical expertise, innovation and experience to help solve some of the most difficult challenges in renewable energy and sustainability. We identify and develop commercially viable solutions that push forward the world's ability to address key issues such as energy access, water scarcity, climate change and decarbonization.

Promoting the UAE's economic development vision, we build local talent and R&D capabilities, innovate new industry solutions and contribute to the country's economic diversification. We support the UAE's commitment to becoming one of the world's largest investors in renewable energy and green hydrogen.

Our work includes renewable energy power projects of all sizes – collaborative sustainability innovation, pioneering green hydrogen ventures, research and development projects, and knowledge and engagement platforms that bring together key groups to advance equitable sustainability.

Cooperation and partnership are pillars of our execution model, whether through strategic co-investments or joint research and development projects with peer organizations based in the UAE, the wider Middle East or across the globe.





OUR PURPOSE

Masdar was founded by Abu Dhabi's leadership as a powerful mechanism to foster home-grown innovation and the development of cutting-edge technologies, as part of the UAE's ongoing economic diversification agenda, while also serving the vital cause of climate change mitigation.

Working in these future-focused industries helps drive the ambitions of Abu Dhabi and the wider UAE to diversify the scope of economic activity, drive growth in high-value, knowledge-intensive sectors, and achieve the country's net zero by 2050 goal.

Given the UAE's familiarity with extreme climate environments and the energy intensity required to live in such conditions, the significant benefits that can be gained from clean energy and sustainable development are very clear. The nation is, therefore, well positioned to build on its international leadership in conventional energy in order to champion future energy solutions and systems.

Masdar's growing international portfolio of clean energy projects supports the sustainability journeys of over 40 countries while our track record of clean energy innovation and project delivery drive the UAE's sustainable economic development.



ACHIEVEMENTS SO FAR



Masdar's dramatic growth since its launch in 2006 has come during a time of enormous transformation in the renewable energy and sustainability sectors. In its first decade, Masdar both contributed to this growth and evolved in response to the sector's ongoing development.

Masdar developed what was then the region's largest solar photovoltaic (PV) farm, as well as the region's first and at the time largest concentrated solar power (CSP) plant.

Internationally, Masdar is part of different consortia and joint ventures that, among other accomplishments, have delivered the world's largest offshore wind farm and the world's first CSP plant to deliver grid power 24 hours a day. We have helped deliver pioneering projects that have redefined what is achievable, like Hywind Scotland, the world's first floating offshore windfarm, and the Sharjah Waste to Energy Plant, the Middle East's first commercial-scale plant of its kind.





More landmark projects are already in development within the UAE and around the world. These include the Cirata Floating Solar Plant, which will be Southeast Asia's largest floating PV plant when completed, and the 2-GW Al Dhafra Solar PV Project, which will be the largest solar power plant in the world when completed.

In addition, Masdar has played a significant role in the enormous potential of renewable energy and clean technologies. The Masdar-backed Solar Impulse 2, the first aircraft to fly around the world without using a drop of fuel, attracted international attention and excitement.

Our knowledge and engagement platforms like Abu Dhabi Sustainability Week, Youth 4 Sustainability (Y4S), and Women in Sustainability, Environment and Renewable Energy (WiSER) help advance inclusive sustainability by bringing together individuals and organizations to create partnerships, share expertise, and agree on actions.

At the same time, Masdar's Zayed Sustainability Prize recognizes companies, schools, non-profits and inspiring leaders around the world in honor of the sustainability legacy of the UAE's founding father, the late Sheikh Zayed bin Sultan Al Nahyan. The direct and indirect impact of the previous winners' solutions have, to date, benefitted over 378 million people in over 150 countries around the world.



A COMPREHENSIVE APPROACH TO CLEAN-TECH

From the world's largest and first-of-a-kind renewable energy projects, to small-scale solar home systems, and from North America, Europe and Africa to the Middle East, Asia and South Pacific, Masdar Clean Energy has been transforming the status quo in communities and markets for more than 16 years. Masdar has invested in or committed to invest in renewable energy projects, that have a combined value of US\$30 billion. Leveraging technologies in wind, solar PV and concentrated solar power (CSP), the total generating capacity of these projects is over 20 GW, able to offset more than 30 million tonnes of CO2 annually.

Some of the most significant projects include the 600 MW London Array offshore wind farm – one of the world's largest wind farms in operation – and the 402 MW Dudgeon Offshore Wind Farm. The UK is also home to one of Masdar's "firsts" – the world's first commercial-scale floating offshore wind farm Hywind Scotland, which was connected to Batwind – the first integrated energy storage system in the world to be connected to a floating offshore wind farm.

Masdar was also the first investor in a UK government fund to help develop public charging infrastructure points for electric vehicles.

In Asia, Masdar is developing the southeast region's largest offshore floating solar plant in Indonesia through the 145-MW Cirata project, and Asia's largest potential capacity wind farm in Uzbekistan. In Africa, Masdar has signed agreements to develop 4-GW capacity green hydrogen plants in Egypt.



A world map in light gray with the Middle East and North Africa (MENA) region highlighted in a darker shade. Overlaid on the MENA region are several concentric circles and icons representing solar panels and wind turbines, indicating the company's regional focus.

REGIONAL EXPERTISE

In the MENA region, pioneering projects include the 100 MW Shams concentrated solar power (CSP) plant in Abu Dhabi, one of the largest CSP plants in the world and the first of its kind in the Middle East and North Africa. The 117 MW onshore Tafila Wind Farm in Jordan was the first commercial utility-scale wind power project in the Middle East. Also under development in Jordan is the 200 MW Baynouna Solar Energy Project, the country's largest solar power plant.

In the UAE, Masdar was part of a consortium to develop the 800 MW Phase 3 of the Mohammed bin Rashid Al Maktoum Solar Park in Dubai after setting a record-low bid price at the time for solar power generation of US cents 2.99 per kWh.

Masdar is also part of consortia developing Saudi Arabia's first wind farm and the largest in the Middle East, the 50 MW Dhofar Wind Farm in Oman, and the Middle East's first commercial-scale waste to energy plant in Sharjah. Masdar is also in the process of developing the world's largest solar plant in Al Dhafra, UAE.



GLOBAL IMPACT

Across all its projects, both large and small, Masdar Clean Energy works to push the frontiers of technology, systems integration, performance and commercial viability. Most projects achieve enhanced outcomes and breakthrough results via Masdar Clean Energy partnerships with organizations in government, industry, academia and the non-profit sector.

Worldwide energy security cannot, however, be delivered solely via utility-scale projects. Masdar Clean Energy's Energy Services team delivers small, distributed and localized projects and installations in challenging and remote locations, often far off the grid. The team brings the technology, project management and partnership expertise gained from Masdar Clean Energy's large-scale projects to bring clean energy to rural locations.

Benefitting hard-to-serve communities, these projects range from tiny Pacific Island micro-grids and rural solar home systems in Afghanistan and Morocco, to onshore wind in the Republic of Seychelles and off-grid community solar PV projects in Egypt. Project sizes range from 1.7 kilowatt (kW) rooftop solar home projects to community solar PV and wind generation facilities with capacities from 100 kW to 10 MW, although most are less than 1 megawatt.

In Egypt, 62,000 homes, schools, mosques, health clinics and government buildings across more than 140 communities have benefitted from the Energy Services team's activities. This includes adding more than 30 MW of solar power that offsets 42,700 tonnes of CO₂ emissions.





Projects across 11 islands in the Pacific region added more than 6 MW of clean power and help these communities save 3.2 million tonnes of fuel every year.

Similarly, a project was launched to deliver renewable energy projects to 16 Caribbean Island nations, of which five have been delivered, to help reduce reliance on fossil-fuel imports, increase energy access, and enhance climate change resilience.

Additionally, the Energy Services team offers energy management solutions to clients through energy performance contracting including: on-site renewable energy generation; building enhancements & retrofits; HVAC replacement & optimization; lighting upgrades; energy performance design reviews; and asset operations and maintenance services.

Every project creates an outsized impact by transforming lives through the delivery of new electricity access. In addition, projects have a multiplier effect by contributing to local and national social and economic development initiatives – such as providing technical training to local utility engineers, improving water security, and unlocking educational and business opportunities through the provision of new sources of electricity.



CLEAN-TECH INNOVATION

Masdar thrives on innovation, taking technologies, and the region, to new frontiers. Masdar was the first company in the Middle East and North Africa to build a utility-scale concentrated solar power plant, the first to develop a commercial-scale carbon capture usage and storage (CCUS) project with the Abu Dhabi National Oil Company (ADNOC), and the first to develop a commercial-scale wind farm in the GCC region.

Masdar also led the region's first sustainable seawater desalination project, which comprised five pilot projects using different technologies. Working with Abengoa, Suez, Veolia/Sidem, Trevi Systems and Mascara NT, the pilot project concluded that reverse osmosis and solar power are commercially attractive, sustainable long-term mainstream solutions to water and energy security in the Gulf region. This is particularly significant as conventional seawater desalination is energy intensive.



KNOWLEDGE PLATFORMS

Masdar believes that the advancement of our industry fundamentally depends on cooperation, partnership and knowledge transfer, with a holistic and inclusive approach across multiple stakeholder groups.

With this in mind, Masdar has created a number of powerful knowledge platforms for the global sustainability community. These include Abu Dhabi Sustainability Week (ADSW); the Zayed Sustainability Prize (ZSP); and strategic initiatives such as Women in Sustainability, Environment and Renewable Energy (WiSER), and Youth 4 Sustainability (Y4S).



Abu Dhabi Sustainability Week

Abu Dhabi Sustainability Week is the largest sustainability gathering in the Middle East, held annually each January.

The event is dedicated to furthering our understanding of the major social, economic and environmental trends shaping the world's sustainable development, and to empowering the global community to realize viable and effective strategies to mitigate climate change and address the energy and sustainability challenges of the future.



Zayed Sustainability Prize

The Zayed Sustainability Prize (ZSP), formerly known as the Zayed Future Energy Prize, is a tribute to the legacy of the late founding father of the UAE, Sheikh Zayed bin Sultan Al Nahyan – a visionary champion of sustainability.

This annual award, announced at the ADSW Opening Ceremony, celebrates achievements that are driving impact, innovation and inspiration across five distinct categories: Health, Food, Energy, Water and Global High Schools.

Since its establishment in 2008, the Zayed Sustainability Prize has directly and indirectly impacted over 387 million lives.





World Future Energy Summit (WFES) is a global industry platform connecting business and innovation in energy, clean technology and efficiency for a sustainable future, attracting world leaders, international policymakers, industry experts, investors from the public and private sector and media.

WFES is held during Abu Dhabi Sustainability Week, which is hosted by Masdar.



Women in Sustainability, Environment and Renewable Energy (WiSER) is a Masdar-led impact-focused platform dedicated to inspiring women and girls to play an active role in addressing global sustainability challenges. The year-long initiative holds an annual forum during ADSW.

The WiSER platform was officially launched on the sidelines of the 70th United Nations General Assembly in September 2015.



Youth 4 Sustainability (Y4S) is an outreach platform that invests and actively supports the development of our most valuable asset, our young people.

The Y4S Hub is a key component of Abu Dhabi Sustainability Week, which aims to prepare youth to carry forward the sustainability agenda by ensuring that relevant and actionable information is passed down to our future leaders.



LOOKING AHEAD

For more than a decade, Masdar has been pioneering clean technology.

As we help transform communities locally, regionally and across the far corners of the globe, we are spreading awareness about the UAE's commitment to embrace the future through innovation, economic diversification and a partnership approach that can overcome any hurdle.

The future is as bright as we want to make it. Through Masdar, Abu Dhabi and the UAE are embracing the huge potential that renewable energy and sustainability offer economies to energize growth, foster advanced R&D, and find solutions to global challenges our broad scope of operations. To find out more, visit our website: www.masdar.ae



