

THE MASDAR INITIATIVE

FUTURE ENERGY



REALIZE

BELIEVE

SUCCEED

SUSTAIN

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"A new era is now upon us, challenging us to venture beyond the achievements of the past and to lay the groundwork for the next 50 years of progress."



REINVENTING ENERGY: A MESSAGE FROM THE CHAIRMAN

The Emirate of Abu Dhabi, capital of the United Arab Emirates, has taken the historic decision to invest in a long-term strategic development program for alternative energy and sustainable technologies.

During April 2006, His Highness Sheikh Mohammed Bin Zayed Al Nahyan, the Crown Prince of Abu Dhabi, announced the "Masdar Initiative." The word Masdar means "the Source" in Arabic. This Initiative will be the source for an impressive range of innovative Abu Dhabi-based industries and research to position Abu Dhabi as a global leader in clean energy and sustainable development. Masdar complements the vision of the late Sheikh Zayed Bin Sultan Al Nahyan, the founder and the former President of the UAE, who pioneered environmental conservation in the country.

The commitment of the Government of Abu Dhabi to Masdar is clear and strong. Masdar will assist Abu Dhabi in maintaining its position in the global energy market over the long term. Masdar will also be a key resource in nation-building, by developing the human capital that will help create and lead a new UAE scientific and research culture.

Abu Dhabi has had the good fortune to be blessed with substantial natural resources. Sensible development of these assets during

the past 45 years, together with valued international partners, has brought many benefits to our own people as well as to our customers worldwide.

But a new era is now upon us, challenging us to venture beyond the achievements of the past and to lay the groundwork for the next 50 years of progress. We shall accomplish this by channeling our accumulated energy expertise and financial resources into new activities and industries such as Masdar. Under the visionary leadership of the President of the UAE, His Highness Sheikh Khalifa Bin Zayed Al Nahyan, Abu Dhabi will achieve its strategic developmental aims and contribute significantly to a cleaner and sustainable future for all.

Ahmed Ali Al Sayegh
Chairman

“We intend to move fast and with maximum efficiency, achieving dynamic results by creating successful associations and partnerships.”



AN INVITATION FROM THE CEO

In April this year, the government of Abu Dhabi launched the Masdar Initiative, a landmark program to establish an entirely new economic sector dedicated to alternative and sustainable energy.

The Masdar Initiative offers a proactive response to today's energy and environmental challenges and is being driven by the Abu Dhabi Future Energy Company (ADFEC), a company wholly-owned by the government of Abu Dhabi through Mubadala Development Company.

Masdar is a highly-strategic initiative with four primary objectives. The first is to help drive the economic diversification of Abu Dhabi. The second is to maintain, and later expand, Abu Dhabi's position in evolving global energy markets. The third is to position our country as a developer of technology, and not simply an importer. And the fourth is to make a meaningful contribution towards sustainable human development.

We recognize that to achieve these goals we need to openly engage partners who share the vision, resources and commitment necessary for progress in this new era of cleaner energy and more sustainable use of natural resources. Therefore, we are attracting the best international partners – corporate, academic and financial – in every aspect of Masdar. In return, we offer them a uniquely supportive environment for successful collaboration.

We intend to move fast and with maximum efficiency, achieving dynamic results by creating successful associations and partnerships with global investors, energy and industrial corporations, academic institutions and researchers of international repute. We're making significant investments in new technologies, research and specialist education to assist Abu Dhabi's expansion into more knowledge-based industries.

There is clearly much to accomplish, and we are committed to delivering tangible and substantial results through Masdar's broad scope for partnership and cooperation. Join us in the journey.

Sultan Ahmed Al Jaber
Chief Executive Officer

THE MASDAR INITIATIVE: AN INTRODUCTION

In April 2006, Abu Dhabi took a bold and historic decision to embrace renewable and sustainable energy technologies.

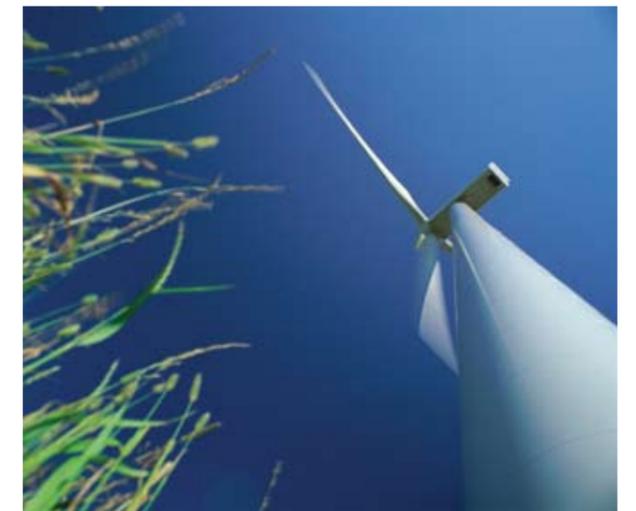


HH the Crown Prince of Abu Dhabi with executives from leading energy organizations and academic institutions during Masdar launch.

As the first major hydrocarbon-producing nation to take such a step, it has established its leadership position by launching the Masdar Initiative, a global cooperative platform for open engagement in the search for solutions to some of mankind's most pressing issues: energy security, climate change and truly sustainable human development.

Abu Dhabi is leveraging its substantial resources and expertise in global energy markets into the technologies of the future. One key objective of Masdar is to position Abu Dhabi as a world-class research and development hub for new energy technologies, while ensuring that Abu Dhabi maintains a strong position in world energy markets.

A related objective is to drive the commercialization and adoption of these and other technologies in sustainable energy, carbon management and water utilization. In doing so, Masdar will play a decisive role in Abu Dhabi's transition from technology consumer to technology producer. The goal is the establishment of an entirely-new economic sector in Abu Dhabi around these new industries, which will assist economic diversification and the development of knowledge-based industries.



The Abu Dhabi Future Energy Company (ADFEC) is the government-owned organization mandated to develop and execute the Masdar Initiative. ADFEC will also ensure that Masdar further enhances Abu Dhabi's existing record of environmental stewardship and its contribution to the global community.

The following pages highlight the key components of this exciting new initiative and describe how they integrate into a powerful and comprehensive platform for global collaboration.



The Masdar Institute is a graduate-level scientific and engineering institution focused on education and research in the core energy and sustainability-technology themes of the Masdar Initiative.

The Masdar Institute is a non-profit, independent entity established with the assistance of the world-renowned Massachusetts Institute of Technology (MIT), under a cooperative agreement signed in December 2006. MIT is assisting the Masdar Institute to emulate its own standards of excellence in Abu Dhabi, and to become a regional engine for technology-driven growth by combining local cutting-edge research with high-caliber graduate education.

The Masdar Institute offers Masters and PhD programs in Science and Engineering disciplines designed to attract top-level talent from local and international universities. Masdar Institute students and researchers will experience uniquely-rewarding opportunities in the region's emerging sustainable energy and technology industries, through continual interaction with top academics and campus-based industry experts. Combined with solid scientific training, such experience will ensure that Masdar Institute graduates are in high demand, both regionally and internationally.

Extensive collaboration with other leading international scientific centers via the Masdar Research Network will further broaden the experiences of students, faculty and staff, as well as firmly securing the Institute's position within the global scientific community.



EXPLORE
DEVELOP
EDUCATE
INSPIRE

THE MASDAR INITIATIVE
Masdar Research Network



Masdar Research Network was launched in Abu Dhabi in July 2006 with six leading research and academic institutions

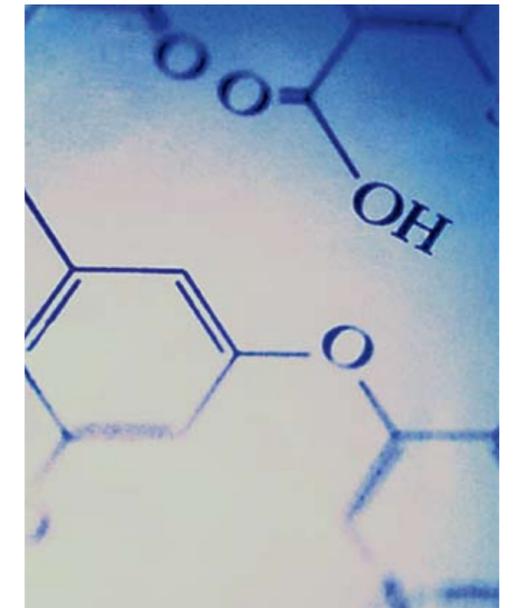
MASDAR RESEARCH NETWORK

Launched in July 2006, the Masdar Research Network is a unique collaborative research framework between the Masdar Institute and leading global scientific research institutions.

The Network will create a nucleus of world-class scientific research in advanced energy and sustainability technologies. It leverages the core research strengths of each partner to accelerate innovation and commercial development of the most promising technologies.

The Network's partners include Imperial College London, UK; RWTH of Aachen, Germany; University of Waterloo, Canada; Tokyo Institute of Technology, Japan; Columbia University, USA and the German Aerospace Center (DLR). All bring advanced technologies and strong ties to industry, allowing the Network to develop, validate and finance a broad spectrum of research projects.

Research tracks currently underway include photovoltaic (crystalline, thin-film and low-cost polysilicon); water management (desalination, membrane technologies); solar thermal and carbon management (carbon capture and storage). Projects are jointly financed by Masdar and industrial partners selected by the host institution, with resulting IP rights shared among the parties.

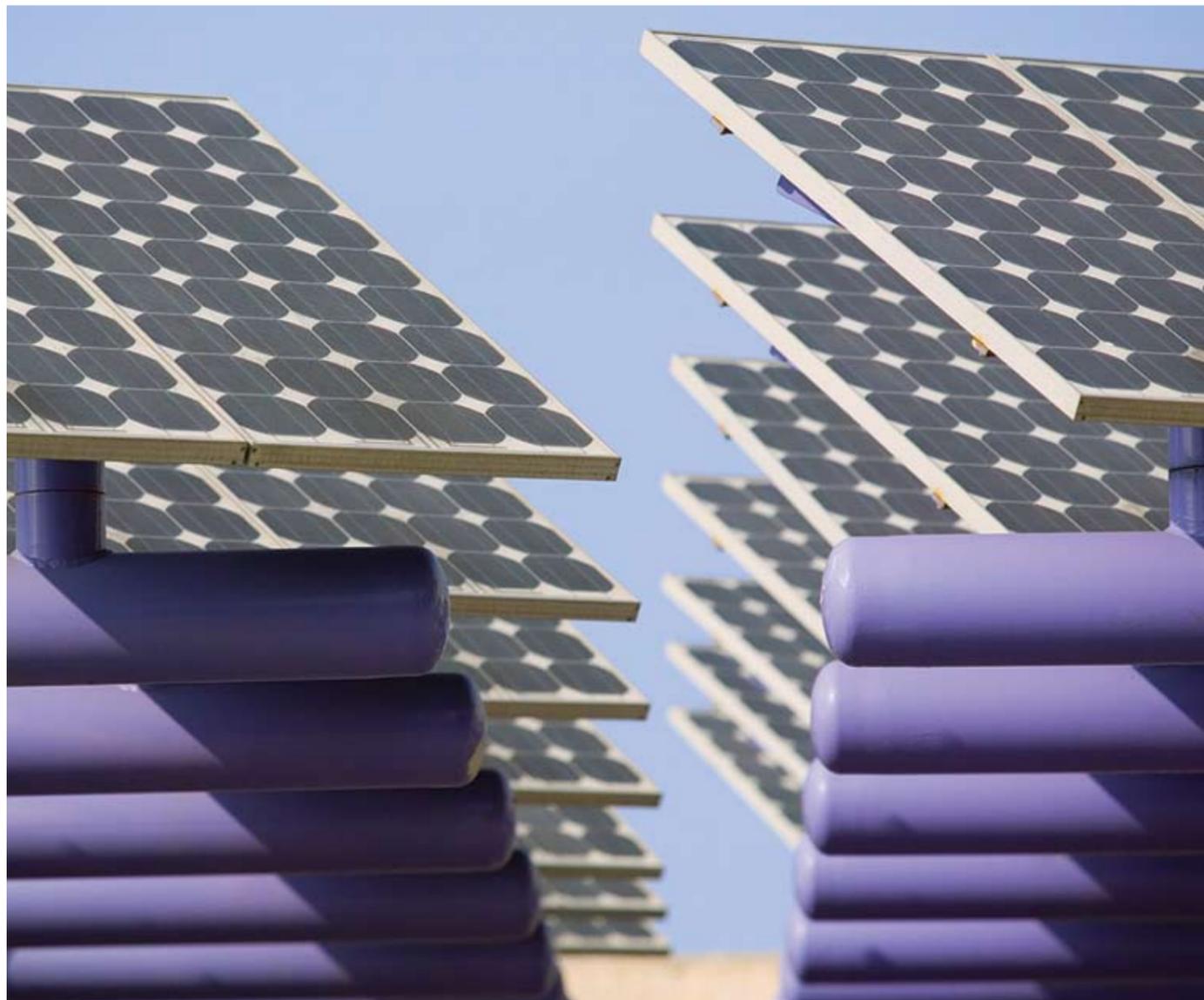


Scientists and post-doctoral researchers are actively being recruited from the UAE and the region to work alongside established international researchers on current and future projects.



INNOVATION & INVESTMENT

The Innovation & Investment (I&I) Unit invests in advanced energy and sustainability technologies that contribute to the future sustainability of Abu Dhabi and the region.



The main aim of I&I is to attract relevant technologies and assist companies to commercialize their applications. I&I offers an array of financial instruments that invest in a wide spectrum of early-stage to near-commercial stage technologies.

The Unit has identified three strategic thrusts. The first is the Masdar Clean Tech Fund, a \$250 million private equity fund launched in partnership with Credit Suisse and Consensus Business Group in November 2006. The Fund acquires equity stakes in global companies, from start-ups through late-stage, with promising technologies in clean energy, water and environmental solutions. Particular emphasis is placed on technologies applicable to the climate and environmental conditions of Abu Dhabi.

The second is the Sustainable Technologies and Advanced Research (STAR) program, which invests in near-commercial technologies suitable for demonstration-level projects. Once proven successful, these technologies are scaled into commercially-viable businesses. STAR typically develops joint ventures with partners willing to share the risks and rewards in advancing each project. Representative projects currently in development are focused on solar power (CSP), photovoltaic, sea water desalination and biofuels.



The third is the Masdar Business Incubator which assists start-ups and entrepreneurs, nurturing them into commercially viable businesses. I&I provides seed capital, infrastructure support, market research, business mentoring and product development guidance to young startups. These services are expected to be launched once the Special Free Zone and campus are operational in 2009. The goal of the Incubator is to encourage greater entrepreneurship and small business development in Abu Dhabi, in order to drive economic diversity and growth.

SPECIAL PROJECTS

The Special Projects Unit is developing large-scale, capital-intensive energy and technology projects of strategic importance to Masdar and the broader economic diversification of Abu Dhabi's economy.



Masdar's intention is to 'kick-start' sizeable new businesses in advanced energy and sustainability technologies through a combination of Abu Dhabi-based production ventures and international acquisitions. By applying scale and leveraging Abu Dhabi's low-cost manufacturing base, these businesses - including polysilicon, photovoltaic, energy storage, biofuels and hydrogen - will enjoy competitive advantages allowing them to compete globally and to provide significant diversification to the Abu Dhabi economy.

An example of the Unit's world-scale solutions is an integrated hydrogen power generation project, currently under study. The project offers Abu Dhabi the opportunity to become a world leader in clean power generation, carbon sequestration and the new hydrogen economy. By utilizing advanced technology that makes hydrogen production commercially viable today - due to its tie-in to the region's oil and gas industries - this project can also stimulate other hydrogen-related fields such as clean transport, fuel cells and industrial applications.

The Unit is a key platform for attracting international companies seeking a significant production base for their technologies and products in the strategic regional markets of the GCC, Middle East, Africa and South Asia.





CARBON MANAGEMENT

The Carbon Management Unit is spearheading the development of CO₂ emission reduction projects that promote sustainable growth in Abu Dhabi and the region.



Growing scientific evidence has identified climate change caused by greenhouse gas emissions - mainly those derived from fossil fuel combustion - as a serious threat to sustainable human development, with adverse impacts on human health, food security, the environment and the economy.

New mechanisms, such as the Kyoto Protocol's Clean Development Mechanism (CDM), aim to curb such emissions by providing market-driven incentives. The CDM offers tradable "carbon credits" against project-based emission reduction in developing countries.

Masdar views the CDM as an exceptional opportunity for Abu Dhabi to lead the creation of the necessary conditions for sustainable growth in the region and to simultaneously address key environmental concerns in a significant manner.

The Carbon Management Unit is harnessing government commitment and private initiative to spearhead the development of CDM projects in the Middle East and North Africa. It is actively developing a broad portfolio of carbon-related projects in oil & gas, heavy industry, renewable energy and waste management, together with various government and industry partners.



The Unit is particularly focused on advancing CO₂ capture and storage (CCS) for enhanced oil recovery - a strategic technology with positive impact on the regional economy. CCS is the most promising technology for the reduction of anthropogenic CO₂ emissions and a viable substitution for the vast amount of natural gas currently re-injected into ageing oil reservoirs.



SPECIAL FREE ZONE

Masdar's Special Free Zone (SFZ) is a unique, integrated 'Green Community' in the heart of Abu Dhabi.

This new energy and technology Community will open in 2009, covering six square kilometers and offering the finest practical facilities for the Masdar Institute, the Research Network, light industry, development units and laboratories, plus a carefully selected pool of international tenants.

The Zone is an inspirational expression of Masdar's vision, hosting an iconic campus leveraging the fullest use of innovation in energy-efficiency, sustainable practices, resource recycling, biodiversity, transportation and green building standards. Every building in the Zone will be designed and constructed to provide a model for sustainable living and working.

The Masdar SFZ will offer opportunities unique in the Middle East for synergy between academic resources, research facilities, industry, the financial community, entrepreneurs and family businesses. The Zone will provide up to 1,500 companies with an attractive package of incentives, including a one-stop-shop program of government services, transparent laws, 100% foreign ownership, tax-free environment and intellectual property protection. Proximity to nearby manufacturers, suppliers and markets rounds out the Zone's unique value proposition.



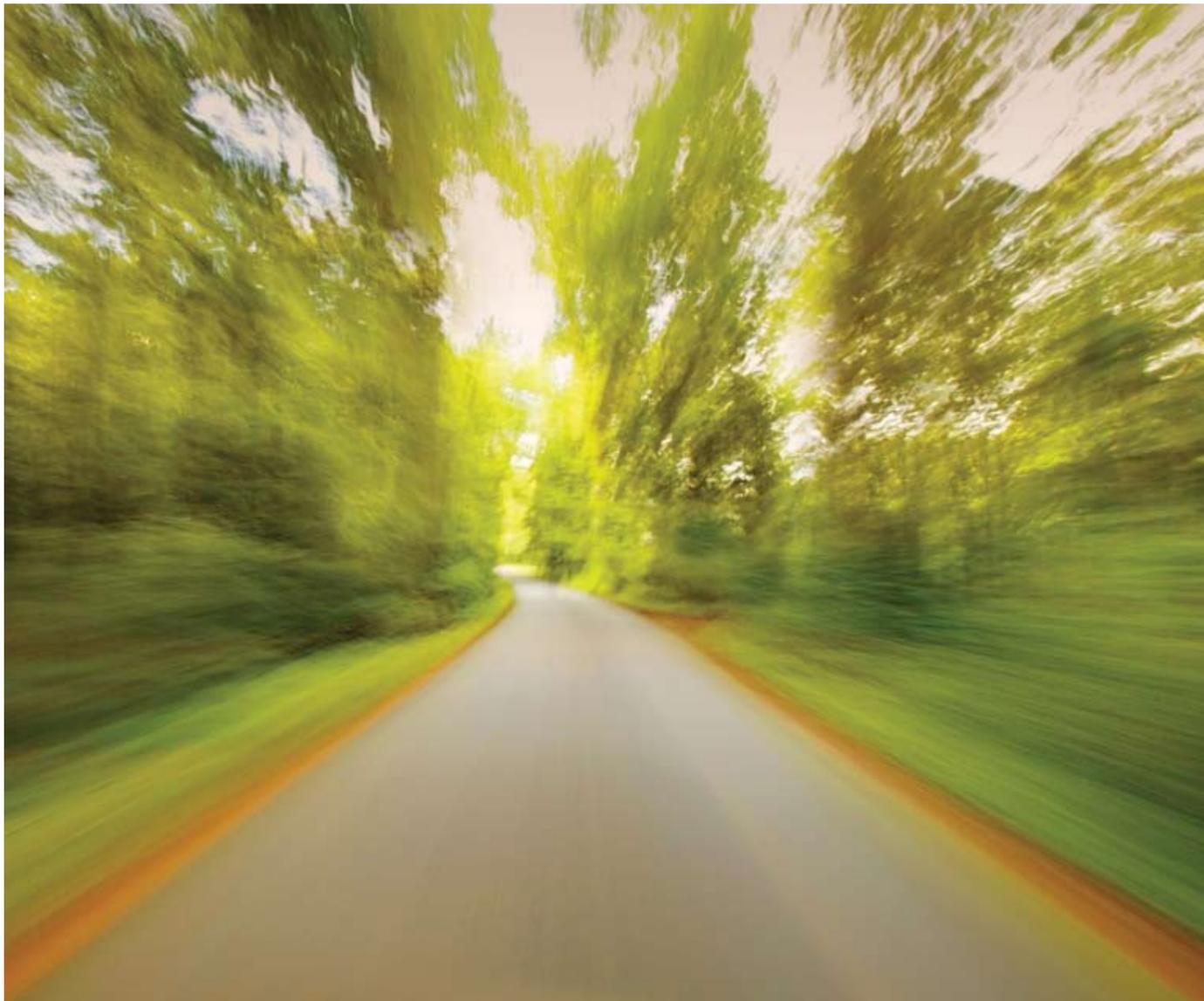
As the Zone is developed, Masdar intends to leverage elsewhere the knowledge gained in developing the SFZ with a minimum carbon footprint, by building other sustainable communities that can also serve as showcases of environmental urban achievement.





THE WAY FORWARD: AN INVITATION

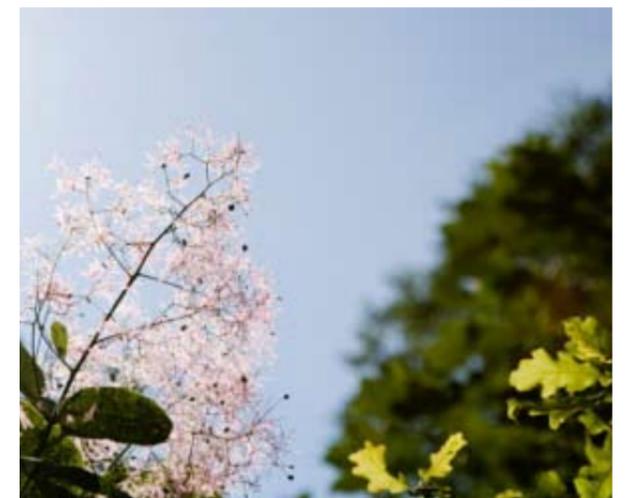
A historic and global technological shift to new energy sources and sustainable resource utilization is now under way.



The Masdar Initiative aims to play a unique role in that evolution – representing a leading Middle Eastern oil-producing nation that is proactively engaging the world's best minds and organizations to envision a cleaner, more sustainable future.

The initiative embraces a spirit of purpose and focus. Through an extensive series of meaningful achievements, Masdar aims to make an enduring impact on Abu Dhabi, the region and the global community. By providing the leadership, platform and resources to create new ideas, breakthrough technologies and the commercial basis for their widespread adoption, Masdar will also demonstrate Abu Dhabi's continued contribution to the global community.

Through Masdar, we invite the global community to participate in the collective search for creative solutions to some of mankind's most pressing concerns: energy, the environment, and the sustainable use of vital natural resources.



WILL YOU JOIN US





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