

Masdar City and Masdar Institute at a glance

Dr. Giovanni Palmisano

Department of Chemical and Environmental Engineering, Masdar Institute of Science and Technology, Abu Dhabi, UAE

In 2008, Masdar City broke ground and embarked on a daring journey to develop the world's most sustainable eco-city. From its inception, city planners knew that taking such a visionary concept to reality would be a challenging and an evolutionary process. Today, through smart investments, Masdar City is successfully pioneering a "greenprint" for how cities can accommodate rapid urbanization and dramatically reduce energy, water and waste.

The city, which integrates ancient Arabic architectural techniques with modern building technologies, is naturally cooler, captures prevailing winds and is more comfortable during the high summer temperatures. But the sun is also a blessing. Harnessing the sun's rays, Masdar uses clean energy generated onsite from rooftop solar arrays and from one of the largest photovoltaic installations in the Middle East.

Some of the world's most prominent companies like Siemens, GE and Lockheed Martin have made Masdar City their home in the Middle East, turning it into a leading business technology hub. It is welcoming too that the International Renewable Energy Agency, IRENA, chose Masdar City for its headquarters. However, this is only the beginning. Masdar City continues to add new businesses, schools, restaurants, apartments and much more – creating the diversity of any major, modern city. New projects include serviced apartments, a 500-unit residential complex, eco-villas and a new K-12 school and university. When complete, up to 40,000 people will live in Masdar City, with up to a 50,000 working and studying every day.

At the city's core is the Masdar Institute of Science and Technology, the world's first graduate-level university dedicated to providing real-world solutions to issues of sustainability. Established in collaboration with the Massachusetts Institute of Technology (MIT), the Institute integrates theory and practice to incubate a culture of innovation and entrepreneurship, working to develop the critical thinkers and leaders of tomorrow.

Within its campus in Masdar City in Abu Dhabi, the capital of the United Arab Emirates, Masdar Institute is establishing an educational environment, a culture of R&D excellence, and ties with government and industry that are essential to fostering indigenous innovation, human capital and knowledge development, and a spirit of entrepreneurship and global competitiveness. Currently, the Institute is ranked the top engineering university in the UAE and 14th among the top 20 universities in the 2016 Best Arab Region Universities Rankings published annually by the US News and World Report, featuring more than 120 universities in 18 countries.

Masdar Institute has been able to attract the brightest UAE national and international graduates, who demonstrate exceptional intellectual and entrepreneurial strengths and are committed to addressing the world's energy needs. All admitted full-time students are provided a full scholarship including 100% tuition coverage, textbooks, a laptop, housing, health insurance, monthly stipend, and annual return air tickets.

Masdar Institute currently offers 9 Master of Science degree programs and an interdisciplinary PhD program based on the US graduate education model. To date, the Institute has graduated 585 alumni, of whom 74% are international graduates. Over 40% of the Institute's graduates have been employed in local and international companies, and more than 30% are pursuing PhD studies at leading national and international universities.