

LOOKING TO THE FUTURE

Innovation is crucial in creating sustainable energy solutions, and rewarding that innovation can motivate a spiral of positive change. The Zayed Future Energy Prize does just this

PICTURE A WORLD OF INCREASING DAILY COMMODITY prices, food and water shortages, and mushrooming energy costs. It doesn't take much imagination. Many say we're already there and based on current projections, it's going to get a whole lot worse. The combination of population expansion and limited resources means planet earth is reaching her limits. And time is of the essence. The global population currently stands at over seven billion people. Take the time to watch the flickering numbers on a world population metre, and you'll notice that the birth counter travels faster than death. The population is multiplying by the second and it is predicted to exceed nine billion by 2050 – that's roughly the population of France being added to the planet every year and many want to turn the lights on, drive cars, and power computers, kitchen appliances and hair dryers.

While energy demands soar, it is becoming increasingly difficult to find new sources of supply. Access to safe, clean and sustainable energy is fast becoming one of the greatest challenges facing humanity this century. Throughout human existence, energy has been central to the functioning and development of society, but there is a growing realisation that the world's energy systems need to change. Sustainable energy – green energy that can be replenished – is vital.

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The world is in need of innovative solutions to create a sustainable energy future. While no-one knows yet where the next great energy answer will come from, solutions and technologies that could change the world are in development by forward-thinking organisations across the globe. The US\$4 million Zayed Future Energy Prize, managed by Masdar in Abu Dhabi, recognises, rewards, and encourages these innovators of our time.

The Zayed Future Energy Prize is a result of the vision of the late Ruler of Abu Dhabi and Founding Father of the United Arab Emirates, Sheikh Zayed bin Sultan Al Nahyan. In 2008 at the World Future Energy Summit, His Highness General Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, and Deputy Supreme Commander of the Armed

Forces of the UAE, announced the Zayed Future Energy Prize, to honour his father's legacy of environmental stewardship and sustainability. This annual award, managed by Masdar, celebrates achievements that reflect impact, innovation, leadership and long-term vision in renewable energy and sustainability, recognising some of the most visionary leaders in global environmental solutions.

"As an oil-producing nation, the UAE sees an opportunity to leverage its hydrocarbon resources and capitalise on its deep energy expertise to develop a renewable energy industry," says Dr Nawal Al-Hosany, director of sustainability at Masdar and director of the Zayed Future Energy Prize. "It is a natural step forward to support our economic growth and diversification, while also extending the UAE's energy leadership."

Leaders come in a variety of shapes and sizes. Masdar knows this, and is determined to ensure the Prize reaches out to different key players in the industry. To this end the categories include; a large corporation, a small to medium enterprise (SME), a non-governmental organisation, a lifetime achievement recipient and up to five high schools spanning five world regions. From individuals to major corporations, the new generation and those with extended experience in the field, anyone making a difference can be recognised. ▾



LEFT TO RIGHT:
It is vital that innovative solutions are put in place globally to create a sustainable energy future; Dr Nawal Al-Hosany, director of sustainability at Masdar and director of the Zayed Future Energy Prize.



ENTRANTS HAVE ONE THING IN COMMON: THEY HAVE ALREADY MADE A SIGNIFICANT IMPACT ON THE ENVIRONMENT WITH THEIR SOLUTIONS; THEY ARE ALL CONTRIBUTING TO A GREENER, CLEANER, SUSTAINABLE FUTURE

Recognition takes different forms, with cash prizes ranging from US\$100,000 to US\$1.5 million. But it's not all about the money. In the large corporation category, recipients receive a simple recognition award. For many, this acknowledgement of their efforts is enough.

"The number of submissions has grown substantially in the last five years and we expect that number to grow even more in the future," says Dr Al-Hosany. "In 2013 alone, the Prize received 579 submissions from 88 countries – a 36 percent increase over 2012 and a three hundred percent increase since the Prize was established in 2008."

Entrants have one thing in common – they have already made a significant positive impact on the environment with their solutions. Whether those solutions are to do with energy conservation, cutting greenhouse-gas emissions, or increasing the production of clean, renewable energy, they are all contributing to a greener, cleaner, sustainable future.



FROM TOP: The Global High Schools Prize sees high schools submitting proposals for projects that incorporate the pillars of the initiative, including renewable energy, energy access and energy efficiency; the Zayed Future Energy Prize 2013 Award ceremony.

It's not easy to compare entrants who work in different fields. "One of the things that our jury and evaluation committee members say time and again is that selecting the best candidates is an extremely difficult task," confirms Dr Al-Hosany. "But they say this because the quality of submissions is so high. To help guide the review process we have built a structure to compare organisations across different fields."

"All categories – large corporation, SME, non-governmental organisation, lifetime achievement and high schools – are assessed based on the Prize criteria of impact, innovation, leadership and long-term vision," explains Dr Al-Hosany. But each criterion carries a different weight for each category. "Large corporations have a larger emphasis on impact and

long-term vision, SMEs on innovation and long-term vision, NGOs on impact and innovation. Lifetime Achievement assessments place emphasis on leadership and impact equally, while the Global High Schools Prize focuses on impact and innovation," Dr Al-Hosany outlines.

The Prize has a four-tier evaluation process. Every entry is first reviewed by an external research and analysis firm that consults with the Prize administration team to select the top candidates. The review committee then evaluates those candidates and culls the list using a scoring matrix based on the criteria. In the third stage, the selection committee, comprising leading experts in the field of renewable energy and sustainability, evaluate the entries and shortlists the top entries to be presented to the jury as finalists. Finally, the jury panel selects the winners.

"The Prize jury comprises influential leaders, voices and activists committed to the global effort of accelerating the adoption of renewable energy and sustainability," says Dr Al-Hosany. "The 2014 jury is chaired by His Excellency Dr. Ólafur Ragnar Grímsson, president of the Republic of Iceland. Other members currently include His Excellency Mohamed Nasheed, former president of the Republic of the Maldives; Her Excellency Elizabeth Dipuo Peters, minister of energy for South Africa; Adnan Z Amin, director-general of the International Renewable Energy Agency; and His Excellency Ahmed Ali Al Sayegh, chairman of Masdar."

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TOP TO BOTTOM: California-based d.light design won the 2013 SME category. By using portable solar lanterns to introduce modular, upgradable solar systems for homes and small businesses, the company has impacted over 15 million lives; Kirya Secondary School, Tanzania wins the Global High Schools category, Africa region (2013).

The Global High Schools Prize has been an interesting addition to the award portfolio. Launched last year, this category sees high schools submitting proposals for projects that incorporate one or more of the pillars of the initiative, including renewable energy, energy access and energy efficiency. The prize money then funds the project, which is slated for completion within a year. The 2013 European winner, Okehampton College in the United Kingdom, already had a focus on energy efficiency, with extensive monitoring, a building management system, 3,000 low-energy lights, insulation upgrades, improved heating controls, thermostatic radiator valves and an educational programme to develop better habits. The school is now installing wind power and biomass heating with the additional funding. But projects can be as simple or as complex as the school environment affords – from solar panels to wind power – as long as they address future energy.

"The interest from schools around the world has been tremendous," says Dr Al-Hosany about the budding programme. "We have undertaken a range of outreach programmes in the UAE and internationally to raise awareness about the school category amongst schools and educational associations. As part of its comprehensive outreach programme, the Prize has directly engaged in workshops with public and private schools and educational organisations in China, Japan, South Korea, Sweden, Germany, the United Kingdom, the United States, South Africa and India. We also recently signed a partnership agreement with New York-based Green School Alliance to engage the organisation's vast network."

One thing is certain: diversifying the global energy mix is critical if we're to meet rising electricity demands, address energy security, and build a sustainable future. Creating that sustainable energy future relies on technology innovation, and by rewarding excellence the Zayed Future Energy Prize fosters innovation. "The Prize underscores the commitment by the leadership of the UAE to create an innovation culture – to encourage and motivate organisations, individuals and schools across the world to participate in finding the solutions needed to solve the energy challenge," concludes Dr Al-Hosany. *The Zayed Future Energy Prize is now open for submissions. Closing date 5 August.*

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