



## Supporting Technology Transfer in Durban

In Durban, governments can support the deployment of clean energy technologies by continuing to advance the establishment of the Climate Technology Center & Network (CTC&N). The CTC&N will help developing countries access valuable expertise and business networks needed to attract investment and disseminate clean energy technologies. Further, the CTC&N can build capacity at the local level by helping governments identify barriers to investment and deployment and offering policy frameworks that overcome such obstacles.

The CTC&N can provide a repository of clean energy companies' expertise, best practices and experiences, which decision-makers can use to

design the policy and market frameworks that best suit their country's distinct needs.

The following examples can become part of this repository, as they offer insight into how existing networks of clean energy companies and organizations are facilitating technology transfer by:

- Understanding the policy landscape and financing opportunities;
- Integrating local energy & climate goals with business objectives; and
- Helping to match supply to demand.

### Understanding the Policy & Finance Landscape

**Jupiter Oxygen Corporation (JOC)** has developed and pioneered a unique oxy-fuel combustion process that is maximizing heat transfer effectiveness and fuel efficiency in industrial furnaces and boilers.<sup>1</sup>

In bringing this technology to market in emerging economies, JOC's approach is multi-pronged. It first must understand the local market's price of fuel resources and electricity, the availability of government incentives or policies encouraging energy efficiency, and the existence of air pollution controls. Also considered is the framework for the protection of intellectual property rights, and the ability to source the needed finance from multi-lateral banking institutions to mitigate risk. Utilization of the CO<sub>2</sub> captured by JOC's patented technologies is another important factor in assessing the viability of a new market.



*JOC's Vision of Sustainable Development and Promotion of Clean, Energy Efficient Technologies.*

<sup>1</sup> For more information, please see: <http://jupiteroxygen.com>.

### Investing in Building Efficiency

Investments in energy efficiency can be integrated to meet both public climate and energy goals and a company's desire for long-term profitability. Across the varied interests in the building sector – from a real estate developer to a manufacturing facility to a retail chain – companies are realizing that energy efficiency offers numerous co-benefits.

RMZ Corporation, India's leading corporate real estate developer, worked with **Trane/Ingersoll Rand** in Chennai to create India's largest LEED® Gold-certified building. RMZ is now able to showcase a new environment that consumes 10% less energy than a conventional office building in India and offers a more livable workspace through improved indoor air quality and eco-friendly product choices. A Trane Tracer Summit™ building automation system and variable air volume (VAV) terminals provides building tenants with precise, individualized BTU metering, zone temperature control and utility integration.<sup>2</sup> A more energy efficient building lessens demand on the electricity grid, helping better manage power generation and its related GHG emissions.



*RMZ Millenia, the largest LEED® Gold-certified building in Chennai, India.*

<sup>2</sup> For more information, please see: <http://ingersollrand.com>.

## Integrating Energy and Climate Goals

A part of LEGO®'s "Planet Promise" is to reduce energy usage throughout its manufacturing process. A new LEGO® molding facility located in Cienega de Flores, Nuevo Leon, Mexico, utilizes roofing technology to reduce peak energy demand and improve the local climate condition. The facility's 414,000 square foot roof features 387 sky lights to illuminate the factory floor during daytime operations, while reducing electricity demand of lighting systems. A climate appropriate cool roof also lessens demand on the building's cooling load and its impact on the heat island effect. The LEGO® facility has been recognized by **RoofPoint™**, a new environmental roof rating system, for its environmental leadership.<sup>3</sup>



*A holistic approach to roofing at a LEGO® molding facility in Mexico.*

Retailers are also seeing the value in creating modern, energy efficient and high-quality stores. Falabella, the largest department store chain in Latin America is working with **Johnson Controls** to achieve a LEED® Volume Build Prototype Certification for its locations across Latin America. Between 2011 and 2015, the company aims to invest \$3.51 billion to open 215 new stores and 16 new shopping malls. Johnson Controls is working with Falabella to ensure its stores operate efficiently while minimizing environmental impact through use of renewable energy, natural ventilation, photovoltaic panels to provide electricity for security lighting, solar water heaters, daylighting, water efficiency measures, highly efficient HVAC systems, fully integrated building systems control and extensive training to operations staff.<sup>4</sup>



*Falabella currently owns 79 department stores, 108 home improvement stores and 55 supermarkets in Chile, Peru, Argentina and Colombia.*

## A Natural Export - Wind

A partnership can emerge between developing and developed countries, to match supply and demand, especially in renewable energy. **Sempra Generation's** Energía Sierra Juárez project in Baja California, Mexico<sup>5</sup>, proposes to tap into one of the region's strongest wind resources to generate a new supply of clean energy for California in the United States. Construction on the installation is expected to begin in 2012 and when completed in 2013 will generate up to 156 megawatts or enough power for approximately 65,000 average homes. This transmission line, dedicated to renewable power, requires international cooperation and special cross-border permitting, but exemplifies how demand

created by California's renewable energy portfolio standard drives private investment into new markets.



*Wind energy demand drives investment into new markets.*

<sup>3</sup> For more information, please see: <http://www.roofpoint.org>.

<sup>4</sup> For more information, please see: <http://www.johnsoncontrols.com>.

<sup>5</sup> For more information, please see: <http://www.sempra.com>.

## About the BCSE

The Business Council for Sustainable Energy (BCSE) represents a broad portfolio of existing clean energy business sectors, including renewable energy, supply-side and demand-side energy efficiency, natural gas and electric utilities in North America.

The Council has represented the views of clean energy industries in the United Nations Framework Convention on Climate Change (UNFCCC) process since 1992. For more information, please visit <http://www.bcse.org>.



[www.bcse.org](http://www.bcse.org)