

FACT SHEET – Energy & Environment / Cleantech in Chile

The need for more energy is urgent in Chile



So far, Energy & Environment is a somewhat neglected sector within Danish exports to Chile, in spite of the enormous potential in the sector. With some of the highest energy prices in Latin America, an energy grid already on the maximum of its capacity, no traditional natural resources (fossil fuels) of its own and an expected economic growth of 5-6% per year, the need for more energy – not least renewable energy – is urgent in Chile. At the same time, the awareness of energy efficiency solutions is very low in Chile, making cutting edge solutions within this area potentially very interesting. This spring, the Chilean Ministry of Energy launched a new national energy strategy for 2012-2030 in which energy efficiency, reduced import dependency, and a more efficient use of Chile's renewable energy resources are major priorities. The strategy received a warm welcome from the Chilean business community.

Characteristics of Energy & Environment / Cleantech in Chile

One of the founding characteristics of Chile's energy sector is that it has limited resources of fossil fuels, and yet they constitute around 75% of the country's total primary energy supply. As a result, Chile imports almost 79% of its primary energy supply in the form of oil, gas and carbon.

There is a massive need for more energy in Chile – including clean energy. The demand for energy in the country is estimated to increase by 6% to 7% annually until 2020, reaching a projected need of 100.000 GWh. In order to meet the demand, at least 8.000 MW in new generation projects is required.

The National Energy Strategy 2012-2030 aims to promote the use of environmentally sustainable forms of energy along with energy at competitive prices and to development environmentally sustainable forms of energy.

The regulatory framework in Chile has been readjusted to meet these demands, and the government has established that 5% of all energy must come from non-conventional renewable energy (NCRE) by 2014 and 10% by 2024.

Energy & Environment / Cleantech at a glance:

- Energy sources (2011): Conventional Hydroelectric (34%), Gas (33%), Carbon (16%), Oil (14%), Small hydro power (1%), Biomass (1%), Wind (1%).

The Electricity Market in Chile:

- The Chilean electricity market is in private hands divided into three independent markets: generation, transmission and distribution.
- The state only has a regulatory role.
- Two major grids in the north and center of Chile, concentrating 99% of Chile's electricity consumption.

The Electricity System in Chile:

- *Northern Interconnected System (SING):* Electricity consumption (23.8%). Favourable zone for the development of solar, wind and geothermal projects.
- *Central Interconnected System (SIC):* Electricity consumption (75.2%). Potential for the development of biomass, small hydropower geothermal, wind and marine energy projects.
- *Aysén and Magallanes Systems:* Several medium-sized systems. Suitable for the development of biomass, wind, small hydropower and marine projects

Business opportunities for Danish companies

Following the need in Chile for a secure, affordable energy supply, and the massive investments in the Chilean energy sector, big opportunities await for Danish companies in Chile's energy sector. According to the Chilean Ministry of Energy, more than USD 30 billion will be invested in clean energy and to expand the existing energy grid within a few years.

DID YOU KNOW THAT...

... Demand for electricity in Chile has doubled every ten years over the past four decades...

Renewable Energy

- Not many years ago, the participation of renewable energy in Chile's energy matrix was close to zero, but it now constitutes around 5%, and is targeted to reach 10% in 2024.
- The Chilean government has set aside a USD 400 million fund to support solar, wind, and geothermal projects, and a USD 85 million fund for geothermal exploration.
- The massive investments projected for the Chilean energy sector will not only result in greater energy independence but also improve Chile's environmental situation.

NCRE Resources & Potential

NCRE Resources	Gross MW Potential
Small hydro power plants	22.3000
Biomass	9.445
Wind	40.000
Geothermal	16.000
Solar	228.000
Wave	164.000
Total	480.245

(Renewable Energy Centre - CER, 2012)

The Environmental situation

- Green solutions are needed for a better balance between securing Chile's energy supply and the environment.
- According to WWF's Living Planet Report 2012, the ecological footprint in Chile, which measures human demand on the Earth's ecosystems, is the 50th highest in the world and the 3rd highest in Latin America.
- CO₂-emissions are the contributor to Chile's ecological footprint after deforestation.

STATE VISIT TO CHILE

Santiago de Chile, 11-15 March 2013

Join the Official Danish Business Delegation to Chile on the occasion of the State Visit by Her Majesty The Queen and His Royal Highness The Prince Consort
Sector specific program on Energy & Environment / Cleantech

Read more: www.royalvisitichile2013.dk

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www.chile.um.dk

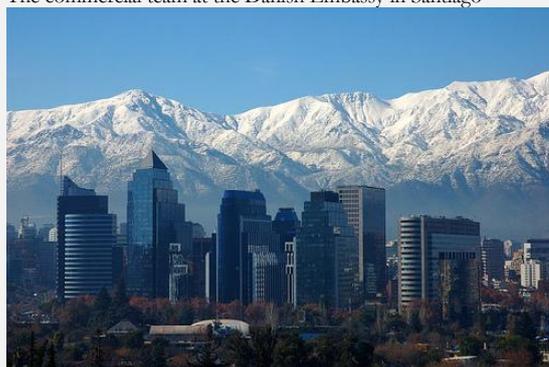
How can we add value to your company?

The Embassy of Denmark in Chile can add value to your company by:

- Using our local network of public and private stakeholders, related business associations, chambers and exhibitions to acquire relevant market information.
- Using our local knowledge to 'knock' on the correct doors to obtain pertinent market information and key stakeholder contacts.
- Endorsing your company to key decision makers and potential distributors.
- Participating and arranging meetings with relevant stakeholders.

CONTACT US:

The commercial team at the Danish Embassy in Santiago



Lars Steen Nielsen | larnie@um.dk | Ambassador
Laurids Refslund | lauref@um.dk | Head of Commercial Dept.
Aksel Jensen | aksjen@um.dk | Commercial Advisor
Carsten Bidsted | carbid@um.dk | Commercial Advisor
Kamil Kuninski | kamkun@um.dk | Commercial Advisor

Energy & Environment / Cleantech
– Laurids Refslund & Carsten Bidsted