

## Press Release

21st September 2011

### **Alstom & Datang agree to jointly develop carbon capture demonstration projects in China**

China Datang Corporation and Alstom have signed a Memorandum of Understanding (MoU) to form a long-term strategic partnership and jointly develop carbon capture and storage (CCS) demonstration projects in China. The announcement was made on the occasion of the *Carbon Sequestration Leadership Forum* organized this year in Beijing, and attended by key governmental and corporate energy decision makers.

Under the terms of the MoU, Alstom, together with Datang, will develop two CCS demonstration projects respectively located in China's two biggest oilfields Daqing, Heilongjiang province and Dongying, Shandong province. Alstom offers three technologies for carbon capture : oxy-firing, chilled ammonia and advanced amines. The 350 MW coal-fired power plant of Daqing will be equipped with Alstom's oxy-firing technology and the 1000 MWe Dongying coal-fired power plant will also adopt one of Alstom's leading carbon capture technologies. Both CCS projects are scheduled for operation in 2015. Once completed, the two CCS demonstration projects will each be able to capture above 1,000,000 metric tonnes of CO<sub>2</sub> annually.

The two projects represent significant improvement of CCS demonstration projects in China in terms of scale and technology and will further diversify China's CCS technology mix. Economically speaking, the adjacency to oilfields of these projects provides a convenient and cost-effective condition for CO<sub>2</sub> transport, utilisation and storage. In addition, after being compressed and piped deep into the oilfield, the CO<sub>2</sub> can serve as effective tool for oil pumping, i.e. Enhanced Oil Recovery (EOR) which will increase the financial feasibility of these two demo projects.

For a coal-dependent country like China, carbon capture and storage technology is an essential part of a successful strategy to address climate change while providing cost effective thermal power solution to meet China's energy needs. The Chinese government has vowed to reduce CO<sub>2</sub> emissions per unit of GDP by 40-45% by 2020 from 2005 levels, following its promise for a 20% cut by 2010. The two demo projects will pave the way for large-scale CCS deployment in China and help the government in honoring its commitment.

Philippe Joubert, Deputy CEO of Alstom said, *"As a proven leader in the development of CCS technology, we are pleased and proud to partner with Datang in CCS deployment in China and to be able to use our leading edge technology in supporting China to combat climate change."*

China Datang Corporation has been adhering to the principle of "Clean Power Lights the bright future" since its foundation. The company attaches great importance on the development of low

carbon technologies by drastically promoting new and renewable energy, committing to energy saving and emission reduction. Thanks to all these efforts, Datang has achieved substantial reduction in emission, fuel consumptions of thermal power units, and especially in carbon emission intensity, and thus was able to meet the emission reduction target one year ahead of the deadline specified in the Eleventh Five-Year Plan. Looking into the Twelfth Five-Year Plan period, Datang will advocate the research and development of CCS through cooperation and is well positioned to play a key role in the field of low carbon and emission reduction.

Currently Alstom has 16 pilot and demonstration projects all around the world. Earlier this year in June, Alstom has announced that carbon capture technology works and will be cost effective and competitive compared to all other CO<sub>2</sub>-free technologies.

### About Alstom

Alstom is a global leader in the world of power generation, power transmission and rail infrastructure and sets the benchmark for innovative and environmentally friendly technologies. Alstom builds the fastest train and the highest capacity automated metro in the world, provides turnkey integrated power plant solutions and associated services for a wide variety of energy sources, including hydro, nuclear, gas, coal and wind, and it offers a wide range of solutions for power transmission, with a focus on smart grids. The Group employs 92,000 people in around 100 countries, and had sales of €20.9 billion in 2010/11.

### About China Datang Corporation

China Datang Corporation (CDT) is an extra large scaled power generation enterprise group established on the basis of the partial power generation assets of former State Power Corporation of China on Dec. 29, 2002. By the end of 2010, the power generation assets in operation and under construction of CDT are widely distributed over 28 provinces (autonomous regions or municipalities) as well as overseas countries such as Myanmar, Cambodia and etc, with total installed capacity of 105,895.9MW. The group employs over 100,00 people. In July, 2010, Datang for the first time entered the Fortune Global 500 and ranked 412. In 2011, Datang's ranking rose to 374, 38 positions ahead of last years.

### Press Contacts

Philippe Kasse (Corporate) - Tel : + 33 1 41 49 29 82 [philippe.kasse@chq.alstom.com](mailto:philippe.kasse@chq.alstom.com)

Mary Varkados (Power) - Tel : + 33 1 41 49 27 13 [mary.varkados@power.alstom.com](mailto:mary.varkados@power.alstom.com)

### Investor Relations

Emmanuelle Châtelain, Juliette Langlais - Tel + 33 1 41 49 37 38 / 21 36 - [investor.relations@chq.alstom.com](mailto:investor.relations@chq.alstom.com)

website [www.alstom.com](http://www.alstom.com)