

# Update on China's Wind Development

Liming Qiao

China Director, Global Wind Energy  
Council

[Liming.qiao@gwec.net](mailto:Liming.qiao@gwec.net)

# Wind Project Status in China

- In 2011, wind installed capacity reached 62.36GW; annual installed capacity 17.63GW; 43% of global annual wind market
- For the 12<sup>th</sup>. Five year plan(2011-2015), approved projects are announced by the government before the projects are taking place:
  - First batch announced: 14GW for non-wind base provinces (and smaller wind bases)and Wind Base (3GW for Hebei, 2GW for Heilongjiang, 2GW for Jilin, 2.8GW for Inner Mongolia)
  - Second batch:16.76 GW for non-wind base provinces (and smaller wind bases)
  - More to come in the next years.

# Update on Wind base program:

- Gan Su Jiuquan:
  - First batch 3800MW approved in 2009: 3600MW connected and 200MW under construction.
  - Second batch of 5000MW approved in 2009, started pre-construction work in 2011;
- Innermongolia (East) Tonliao project:
  - Part of the Inner Mongolia east 10 GW size wind base; Tongliao project is 1500MW, approved in 2008; will finish construction in 2012;
- Inner Mongolia (West) project:
  - BaYanzhuoer Wulate project:2100MW; 300MW finished;
  - Damao Bayin project : 1600MW; 200MW finished;
- Hebei Wind base project:
  - Zhangbei Phase I and Phase II: 24 projects totaling 2850MW , Phase I connected; phases II has not been approved;
  - Chengde project: 6 projects totaling 1000MW;
- Xin Jiang Wind base:
  - South east project to be the first one to be finished: 2000MW, to be finished by 2012.

Wind Bases	Wind Base plan by 2020	Projects in the Wind bases	Planned (MW)	Approved capacity (MW)	Installed Capacity (MW)	Under construction (MW)
Gan Su Jiu quan	12710					
		Phase I	3800	3800	3600	200
		Phase II	5000	5000	0	0
Inner Mongolia (East)	30811					
		Tong Liao Kailu	1500	1500	700	799
Inner Mongolia (West)	38320					
		Wulate	2100	300	300	0
		Damao Bayin project	1600	200	200	0
HeBei	14130					
		Zhang Bei Phase I	1350	1350	1350	0
		Zhang Bei Phase II	1500	500	400	100
		Cheng De	1000	450	336	114
Xin Jiang	10800					
		Ha Mi South East	2000	0	0	0
<b>Total</b>	<b>106771</b>			8100	6886	1213

## What can be done to accelerate wind development?

- Grid constraints:
  - Lack of transmission;
  - Grid curtailment: 25;% in Gansu; ten windy provinces average is 17%;
- Offshore:
  - Coordination of different government agencies need to be strengthened;
  - Need a national planning for offshore development.

## New developments in terms of policy, tariff and other enablers

- New policies to strengthen on the importance of the approval process;
- Policies and regulations to stress on the safety and quality of the projects and products; and a series of technical standards introduced
- Policy to encourage wind to go to lesser windy areas: four new provinces have first wind installations in 2011

- Feed in tariff: four levels of wind tariff associated with different wind resources. \$8 cents /kwh, \$8.6 cents/kwh, \$9.2 cents/kwh and \$9.7cents/kwh;
- Offshore:
  - 1<sup>st</sup> round of concession tender: \$12.3cents/kwh; \$11.2cents/kwh; \$10.9cents/kwh;
  - Demonstration projects: \$15.5cents/kwh