# Regional Renewable Energy Policy in China

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### Sum of its Parts

#### UK:

245,000 Square Kilometers
60,975,000 Estimated Population in 2007
Basket of Six GHGs in 2006 at 652.3 million tons of CO<sub>2</sub> equivalent
0.5% lower than 2005 figures
2007, reduced to 639.4 million tons of CO<sub>2</sub> equivalent (excluding EU ETS)

#### China:

9,596,960 Square Kilometers
1.33 billion Estimated Population in 2008
2004-2010 CO<sub>2e</sub> Emissions Growth Rate Estimated at 11% (2-4 times higher than original IPCC estimates estimates)



### Maintaining the Momentum

#### 1.2% population growth

- 7.4% increase in per capita income
- increased energy demand across all sectors (for example, 2009 private auto demand)
- 3.7% p.a. increase in energy efficiency

# China Climate Program

- CDM Projects, 40% of total generated
- 2010 energy intensity target and <u>4x growth, while only</u> <u>doubling energy consumption from 2000-2020</u>
- Top 1000 Enterprises Program
- retiring inefficient plants (8% of generating capacity by 2010) and closing inefficient industrial plants
- end-use efficiency through standards and labeling and fuel economy standards (more stringent than US)
- renewable energy targets and incentives (15% of primary energy consumption and 20% of electricity by 2020)
- others: export taxes on energy intensive products; reforestation; advanced coal initiatives; & population

## **RE Policy Development**

- Renewable Energy Law
- National RE Targets
- Requires national resource surveys
- Requirement for mid- and long- term Provincial targets (similar situation to national RE targets under the EU Directive)

# Renewable Energy Development Plan to 2020

#### Wind

total installed grid-connected wind capacity 30 GW

Rich wind energy resources in provinces such as Guangdong, Fujian, Jiangsu, Shandong, Hebei, Inner Mongolia, Liaoning, and Jilin, will be exploited in adjacent swaths, thus establishing a backbone of major wind provinces, each with over 2 GW of capacity installed. Six wind farm bases (Dabancheng in Xinjiang, Yumen in Gansu, the eastern coastal area around Jiangsu and Shanghai, Huitengxile in Inner Mongolia, the Zhangbei Region of Hebei, and Baicheng in Jilin) will be developed each with 1 GW installed capacity

1 GW offshore wind capacity will be installed

200 million megawatt hours of electricity generated by non-hydropower renewable energy projects by 2020 would indicate a need for roughly 100,000 megawatts of wind power capacity by that time

### Thank You

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