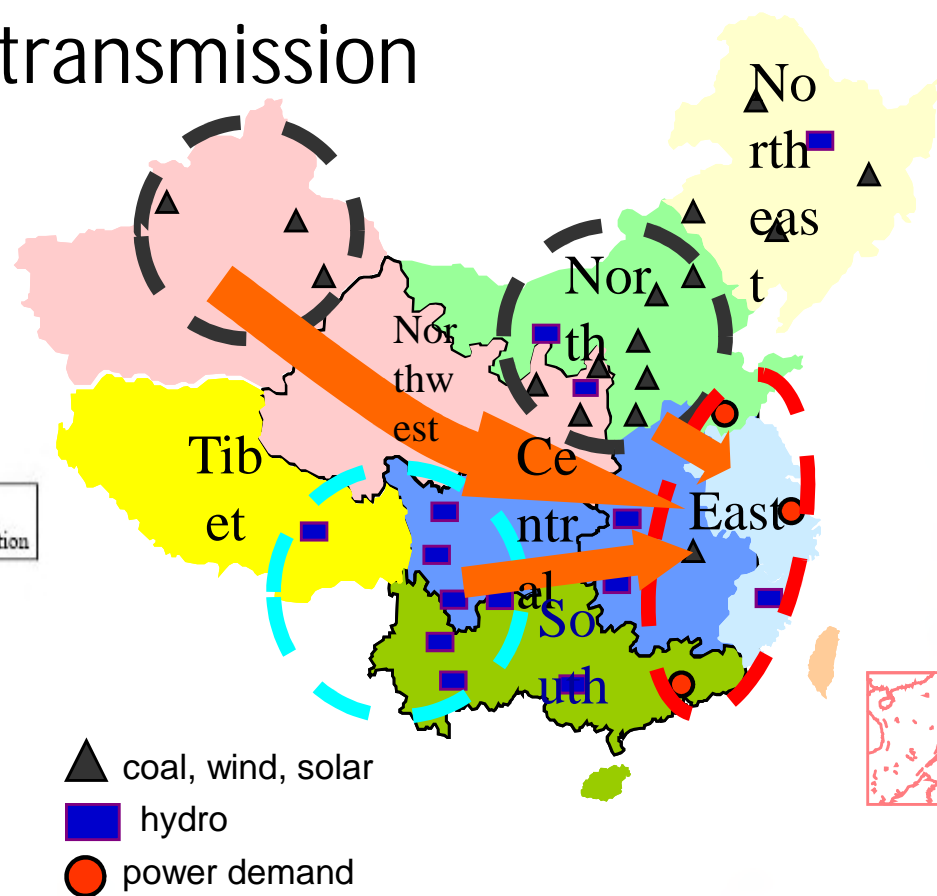
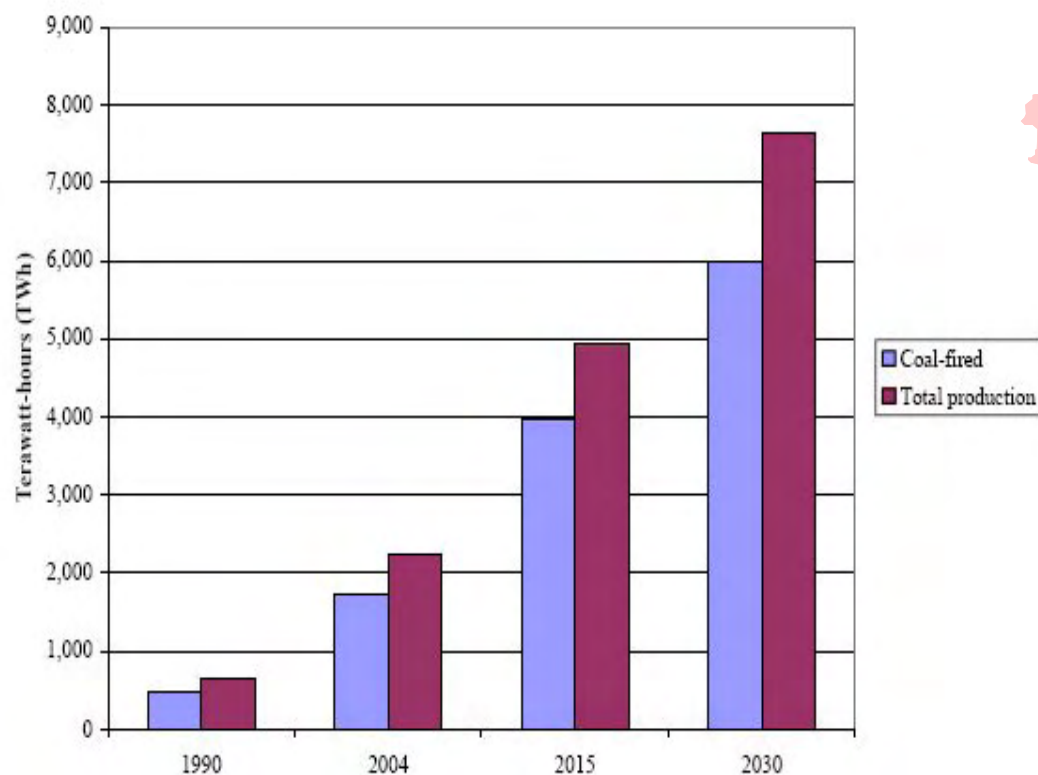


China's Development of a Strong and Smart Grid

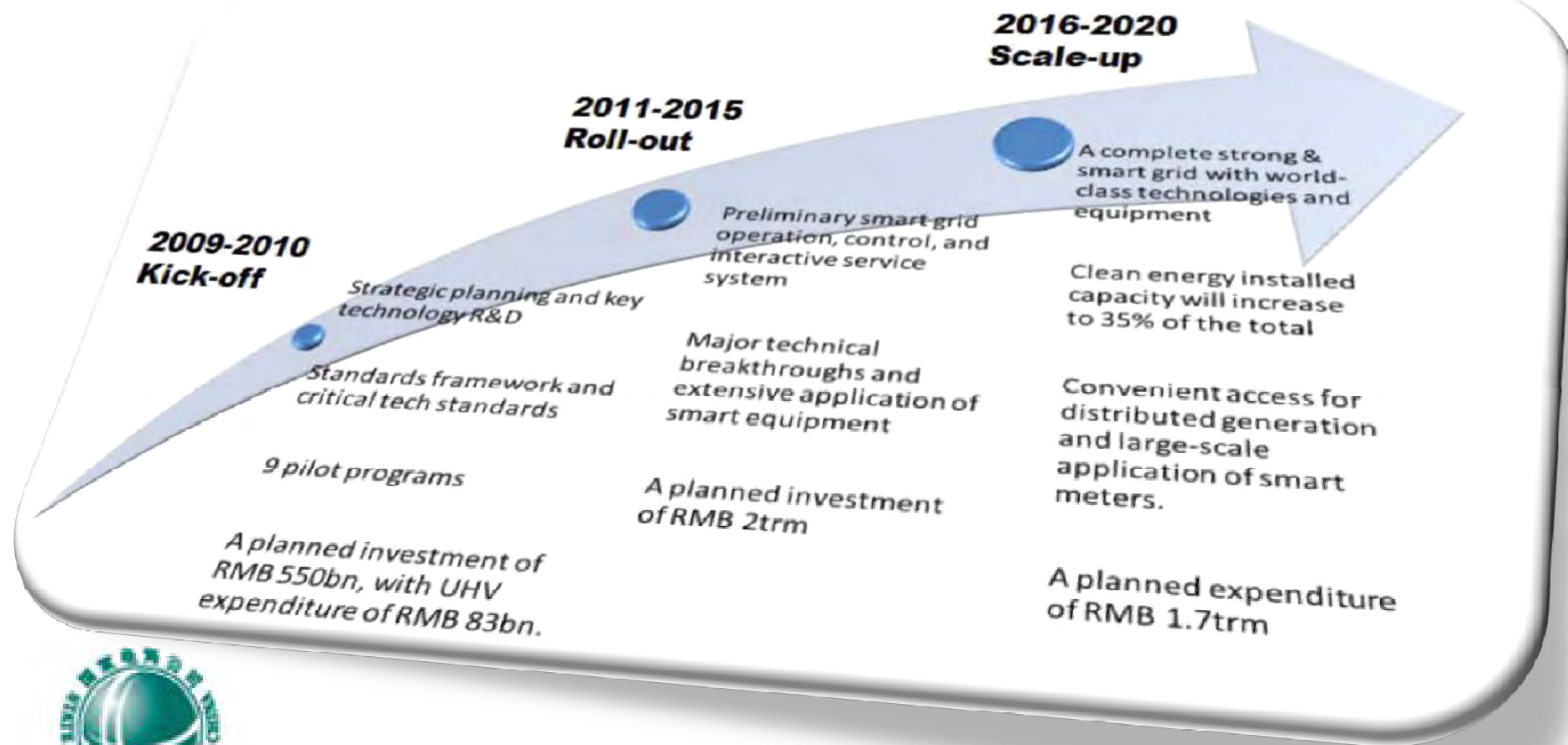
Bryan D. Larson
U.S. Embassy, Beijing

Market Context

- Connect power resources in western and northern China to industrial centers in east and south
- Integration of renewable resources to the grid
- Focus on ultra-high voltage transmission



China Grid Development & Investment



Pilot Projects of Strong & Smart Grid

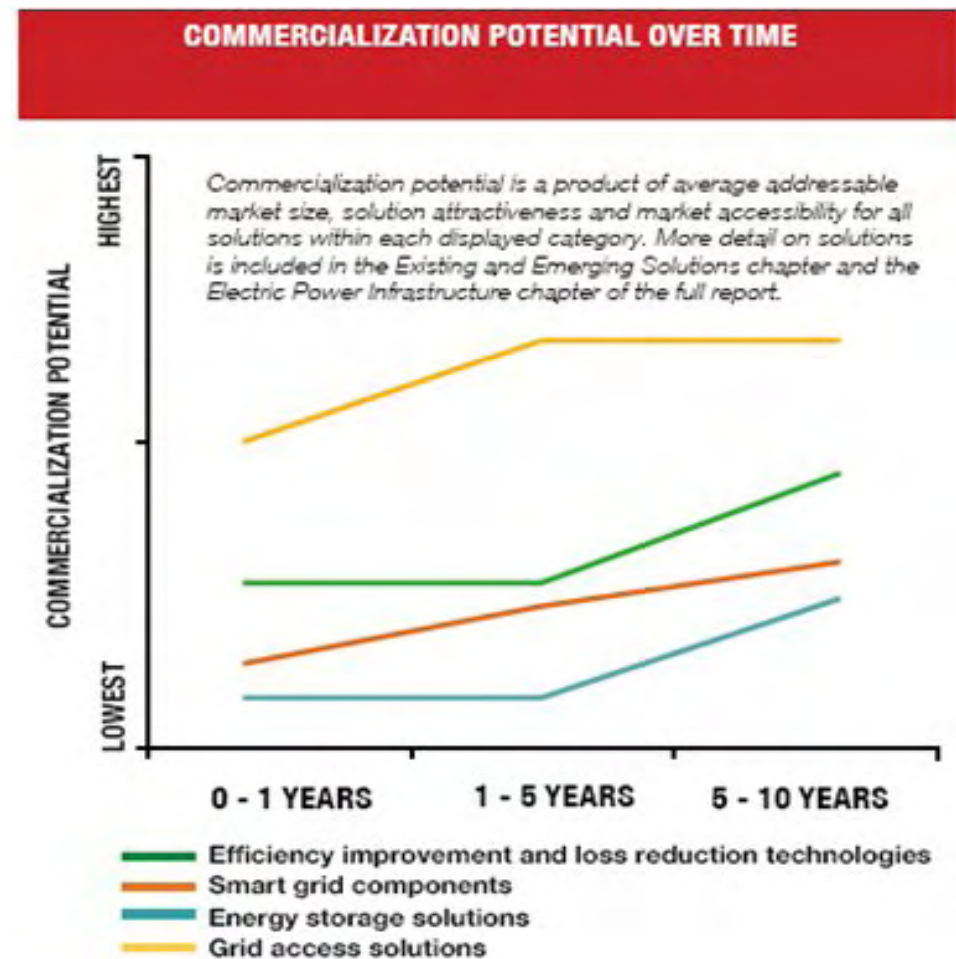
- August 2009 – first batch of 9 pilot projects (SGCC)
- February 2010 – second batch of projects

Pilot Category	Project Name	Estimated completion date
General	Sino-Singapore Eco-city Smart Power Grid Pilot Project	Phase I is due by the end of 2011
Power Generation	Wind-Solar and Energy-Storage Combined Pilot Project	Phase 1 is due by June 2011
Power Generation	Conventional Power Grid Coordinate Pilot Project	Jun-10
Power Transmission	Central Pilot Project for Transmission Line Real Time Monitoring	Dec-10
Power Transformation	Smart Power Converter Station Pilot Project	Jun-11
Power Distribution	Power Distribution Automation Pilot Project	Dec-11
Power Consumption	Power Consumption Information Gathering System Pilot Project	Phase 1: Jul-2010; Phase 2: Dec-2010
Power Consumption	Electrical Charging Station Pilot Project	Nov-10
Power Dispatch	Information Supporting System of Technology Dispatch on Smart Grid Pilot Project	Dec-10

Source: Deutsche Bank, SGCC, CSG, China Electric Council, Central Government of Republic of China

Commercialization Potential

- Grid Access Solutions
- Efficiency Improvement and Loss Reduction Technologies
- Smart Grid Components
- Energy Storage



Source: The China Greentech Report 2009
www.china-greentech.com

Resources and Programs

- U.S.-China Energy Cooperation Program (www.uschinaecp.org)
- China Greentech Initiative (www.china-greentech.com)
- U.S. Commercial Service (www.buyusa.gov/china/en/energy.html)
 - CS China Energy and Environment Update

