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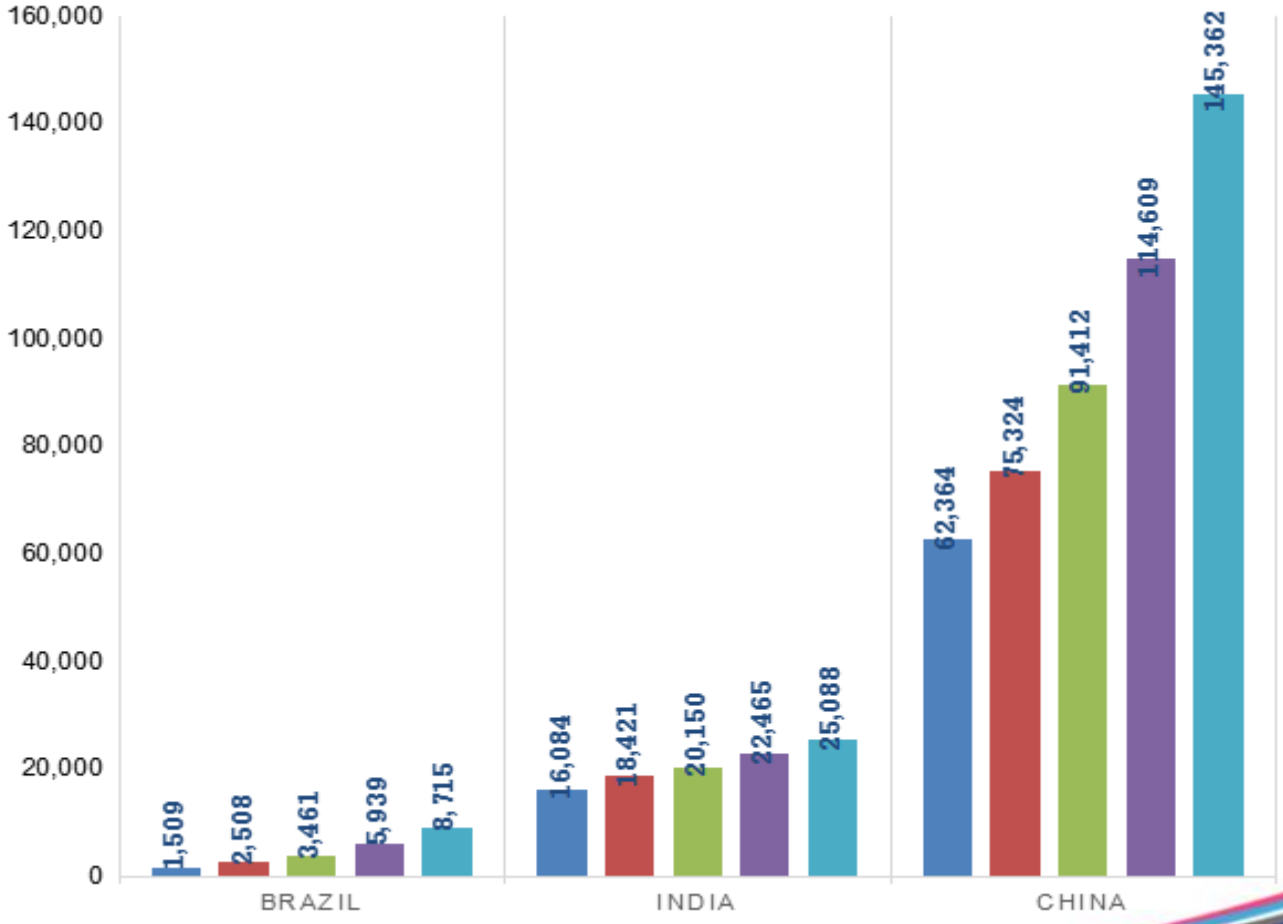
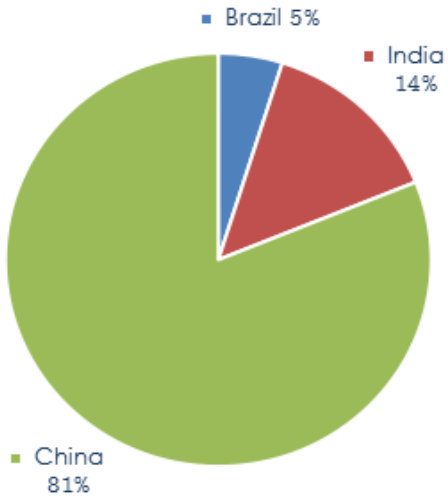
Wind Energy Development in BRICs

Wind Energy Installation from 2010 to 2015





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A Detailed Look at BRICs

	Renewable Energy Plan / Target	Renewable Enregy Act	Long term PPA / FIT	Localization Requirement
China	13th Five-Year-Plan of the Chinese government has clear outlined the 2020 goal of renewable energy plan, wind energy will reach 250GW.	Yes, the Renewable Energy Act was released in 2006.	Class I: ¥0.49/kWh Class II: ¥0.52/kWh Class III: ¥0.56/kWh Class IV: ¥0.61/kWh	Localization requirement was cancelled in 2010 (70%)
India	By 2022, wind energy installation reaches 60GW.	Renewable Purchage Obligation (RPO) is mandatory.	Varies among states, from 13 years to 25 years, range from 4.11Rp/kWh to 5.92Rp/kWh	No restriction currently. All the turbines models will require to pass the NIWE certification before connection. Import tax: 10% to 11%
Brazil	On August 11th 2015, Brazilian government annouced it will invest approximately 33.6B USD in the renewbale energy sector before 2018, for particular wind energy installations will add about 4 – 6GW.	Not available	By annual PPA auctions, the lastest price is R$203.46/MWh	Wind turbines will need to be manufactured locally in order to secure the local financing from BNDES.

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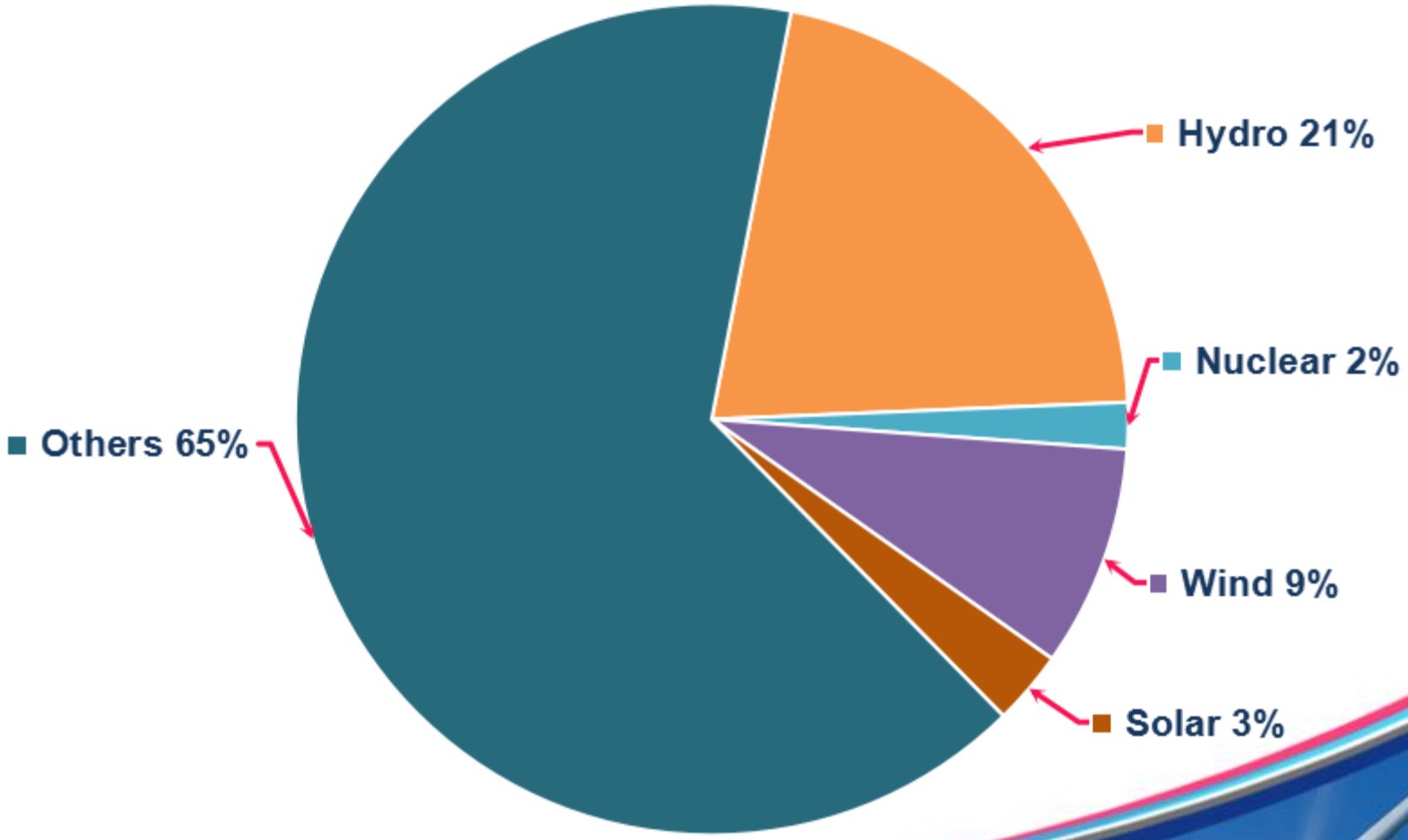
Energy in China

2015 Energy Structure in China



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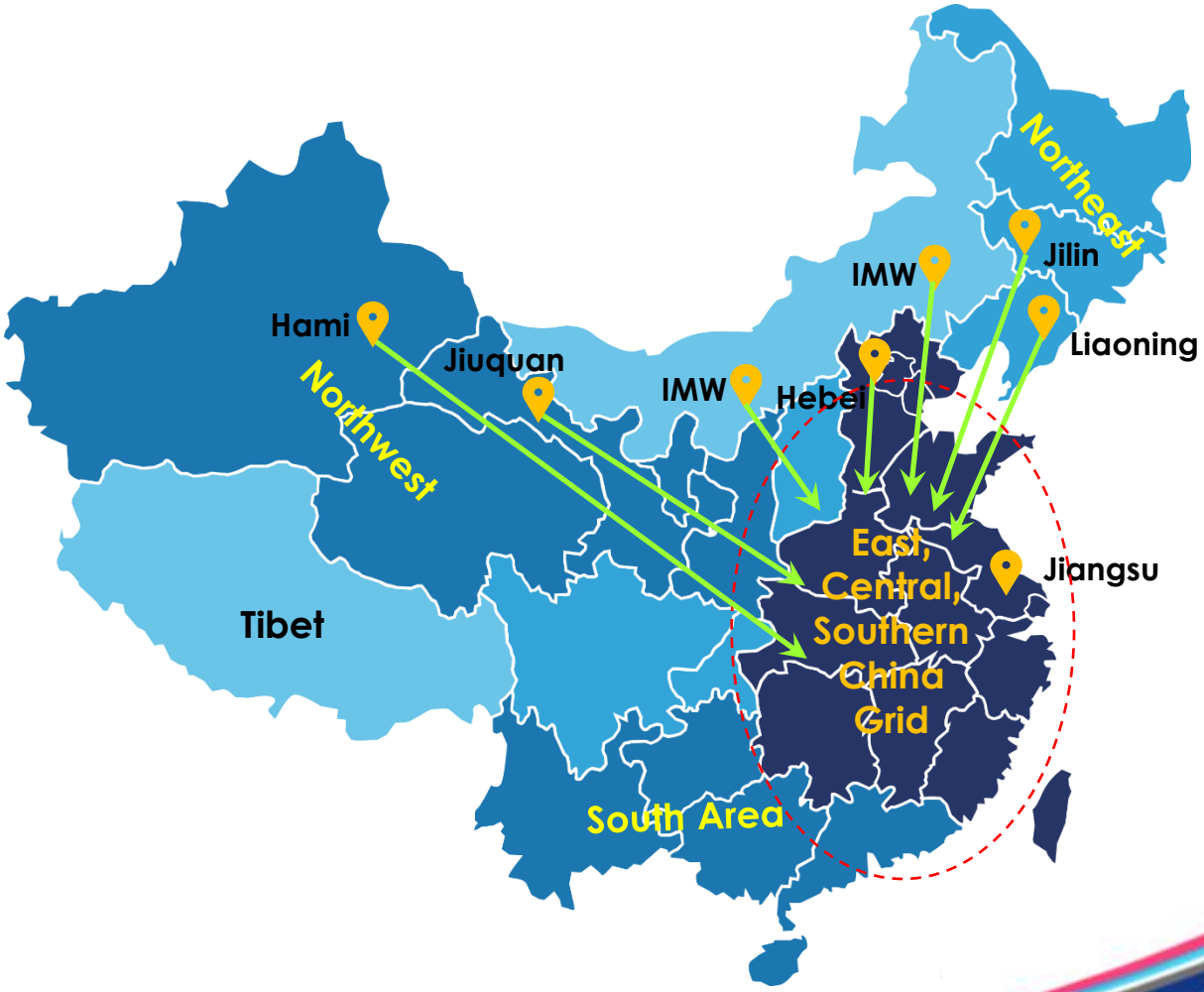
Challenge in Transmission



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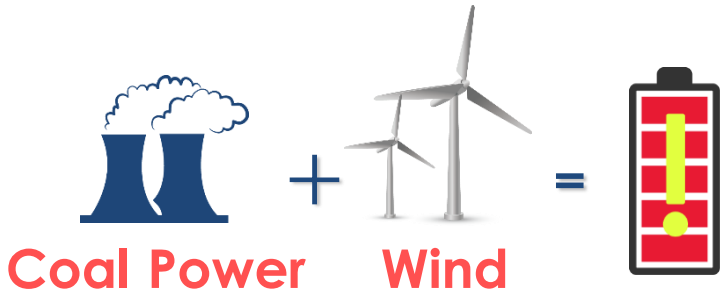
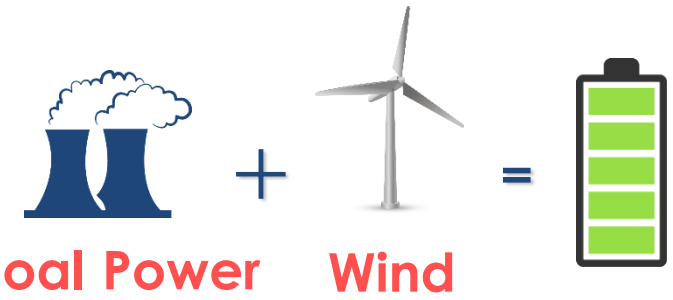
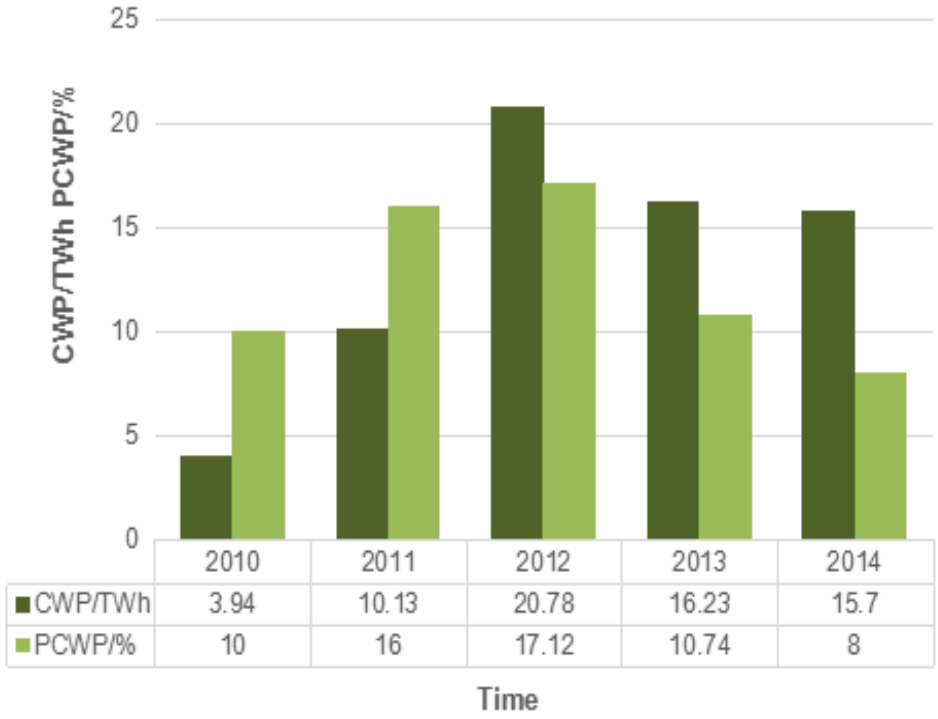
Curtailment Problem







	2010	2011	2012	2013	2014
CWP/TWh	3.94	10.13	20.78	16.23	15.7
PCWP/%	10	16	17.12	10.74	8

PCWP in 2015 = 15%
ALMOST DOUBLE THAN in 2014

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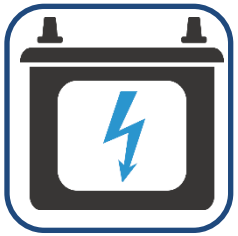
Proposed Solutions

Building more ultra-high voltage lines as the main channel of wind power transmission.



Storage system is one of the key technology can improve the curtailment situation.

The management rules issued in March set an annual minimum purchase guarantee for wind and utility-scale solar generation, securing the recovery of cost and reasonable profit for those projects.

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Ming Yang Wind Power

2006 — Founding of MY Wind Power

2007 — First 1.5MW wind turbine

2009 — Established R&D Center in Denmark

2010 — IPO on New York Stock Exchange

2013 — Launched offshore SCD 6.5MW

2014 — First DNV-GL 2010 certification for MY1.5MW-89 in the world

2015 — New installation 2.7GW

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Integration of Supply Chain

MINGYANG WIND POWER
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Blades

MINGYANG ELECTRIC
明阳电气
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Convertor

Switchgear

Transformer

SVG

REE REnergy Electric 瑞能电气

Pitch System

Convertor

Control System

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O&M

SCADA

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End to End Solution Provider

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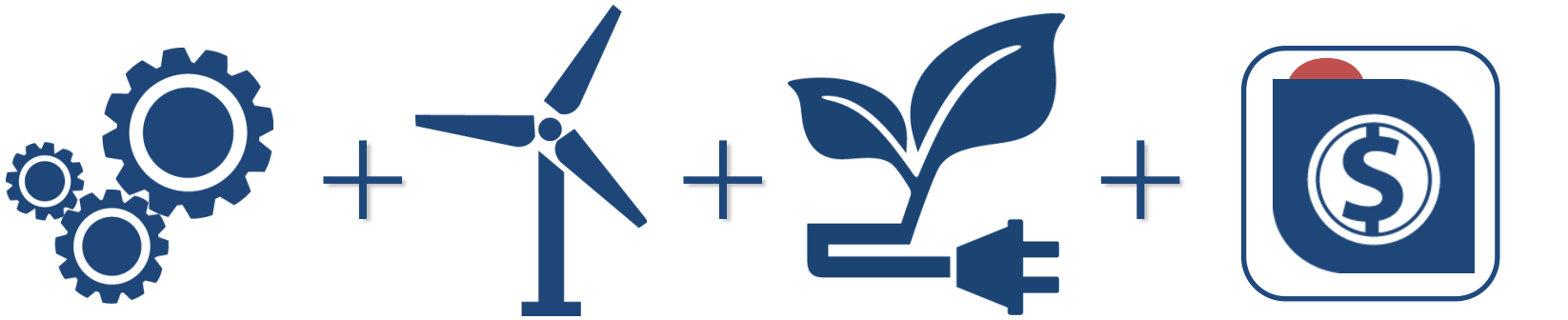
What is next?



Components + WTGs Manufacturer + Generation + Electricity Sale

Thank you!