Super-girds and their influence in facilitating the deployment of renewable energy globally

Global Energy Interconnection

Global Energy Interconnection
Development and Cooperation Organization (GEIDCO)

September 2018 in Bonn
What is GEI?

- Clean Energy
- Ultra High Voltage Grids
- Smart Grids

“Global interconnectivity for energy to reach everybody in need is the center of the two concepts, i.e. sustainability and inclusivity, of our commitment to Agenda 2030 and combating climate change. GEI, with a strong call for enhancing international energy cooperation, is critical to the 2030 Agenda and to the implementation of the Paris Agreement”

“The Global Energy Interconnection Initiative provides a key to solutions that can efficiently use rich and renewable resources, such as wind, solar and hydral, to deliver modern energy services to all even at long distances”
Why GEI?

- Climate Changes
- Environmental Pollutions
- Sustainable Development
- Unbalanced Development

Solution: Global Energy Interconnection
China’s successful experiences: UHV Technology

By 2020:
- More than 22 UHV lines
- Wind power: 250GW
- Solar power: 150GW
China’s successful experiences: Smart Grid

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Strong and Smart Grid

- Smart Substations: 2700
- Smart Meters: 430 million
- EV Charging Stations/Poles: 1 million
- Pumping Storage (57 Plants): 65 GW

Challenges: 'DII'

- Digitalization
- Integration of Renewable Energies
- Integration of e-Mobilities

- 7 days only clean energy integrated in Qing Qinghai Province (1.178 TWh)
Vision of Global Energy Interconnection
Thank you