



Mengrong CHENG State Grid Corporation of China US Representative Office GEIDCO North America Representative Office

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A brief introduction of GEIDCO



Global Energy Interconnection Development and Cooperation Organization 全球能源互联网发展合作组织



Established: March 29th, 2016

Mission: promote GEI to meet the global power demand with clean and green alternatives.

Chairman: LIU Zhenya, former Chairman of SGCC

Vice Chairmen: Steve Chu, former U.S. Secretary **Global Energy Interconnection** Development and Cooperation Organization of Energy and Nobel Prize winner in physics; Shu Yinbiao, 全球能源互联网发展合作组织 Chairman of SGCC; Masayoshi Son, Chairman & CEO of SoftBank Group Corp; Oleg Budargin, Former Director General of PJSC Rosseti







Steven Chu

Shu Masayoshi Yinbiao

Oleg Budargin

Son







A brief introduction of GEIDCO

On November 1st, 2017, GEIDCO held a high-level seminar with the UN-DESA at the UN Headquarter in New York, and released the *Global Energy Interconnection Action Plan to Promote the 2030 Agenda for Sustainable Development* to align with the 17 sustainable development goals.



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António Guterres (UN Secretary-General) :

Global interconnectivity allows for inclusivity for energy to reach everybody in need. GEI is in the center of the two central concepts (sustainability and inclusivity) of our commitment to Agenda 2030, and the key to combating climate change.



Global Energy Interconnection Development and Cooperation Organ





What is GEI?



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GEI is a clean energy-dominant, electric-centric modern energy system that is globally interconnected, jointly constructed and mutually beneficial to all.



Modern electricity system



Why to build GEI?



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The key of accelerating global energy transition is to massively develop and utilize clean energy.

- Power Generation: Intermittent and volatile wind and PV power can enjoy better development by being integrated into a large power grid.
- > **Resource Distribution**: unevenly distributed clean energy resources.

Major load centers are concentrate in East Asia, South Asia, Europe and Southern Africa.

85% of clean resources in Africa-Eurasia continent are concentrated in this energy belt.

Solar Power Bases Wind Power Bases Hydropower Bases Load Centers

CODO

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- To develop clean energy bases and distributed generations
 - Large scale clean energy bases: centralized generation and long distance transmission
 - **Distributed Generation**: feed-in and absorb, plug-in





Phased development of GEI



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By 2050, GEI will basically come into being.



China is building energy interconnection



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Since 2004, China has completed 8 UHVAC and 13 UHVDC power transmission projects. Another 3 UHVAC and 2 UHVDC projects are under construction.



UHV projects in operation and under construction in China

Xiangjiaba(Southwest China)-shanghai \pm 800 kV UHVDC grid, with a total length of 1907 km, was completed in 2010. It has a transmission capacity of 6.4 GW, which can satisfy 20% of peak power demand in Shanghai.



Xiangjiaba (Southwest China)-shanghai $\pm 800 \text{ kV}$ UHVDC grid







Global Energy Interconnection is Key to Ensuring a Sustainable Future



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