



Mongolia: Policy on energy development and investment opportunities

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Mongolian Government policy on Energy

Legal framework for energy:

- Petroleum Law Of Mongolia ratified in January 18, 1991.
- The Government enacted the Energy Law in 2001, which provides the establishment of an efficient and commercially viable energy services.
- The Renewable Energy Law was enacted in January 2007.
- In 2008, the Government approved the State Policy on Fuel and Energy which identifies sector strategies, priorities, and actions for the energy sector from 2008 to 2015.

Mongolian Government policy on Energy

Government policy intentions:

- To meet growing energy demand of mining industry domestically through building new energy complexes.
- To use of environmentally friendly technology and support processing domestically produced oil in order to provide certain percentage of petroleum products to the domestic market supply, also build natural gas pipeline, storage depot.
- To build bigger renewable energy and other sources of energy PPs in Central Energy System to use primary energy resources efficiently.
- To build big capacity PPs with modern technology and export electricity.

Mongolian Government policy on Energy

Government policy trends in the near future:

- Revision and amendments to the “Energy Law”
- Development and adoption of new “Energy sector Master Plan”, “Energy conservation Law” and “Concepts of Government Energy Policy”
- Creation of clear and complete legal environment for public-private partnership in Energy Sector
- Development of Introduction of new competition model for electricity market
- Construction of oil and gas condensate refinery based on imported and local crude oil in the future to meet internal consumption of petroleum products.

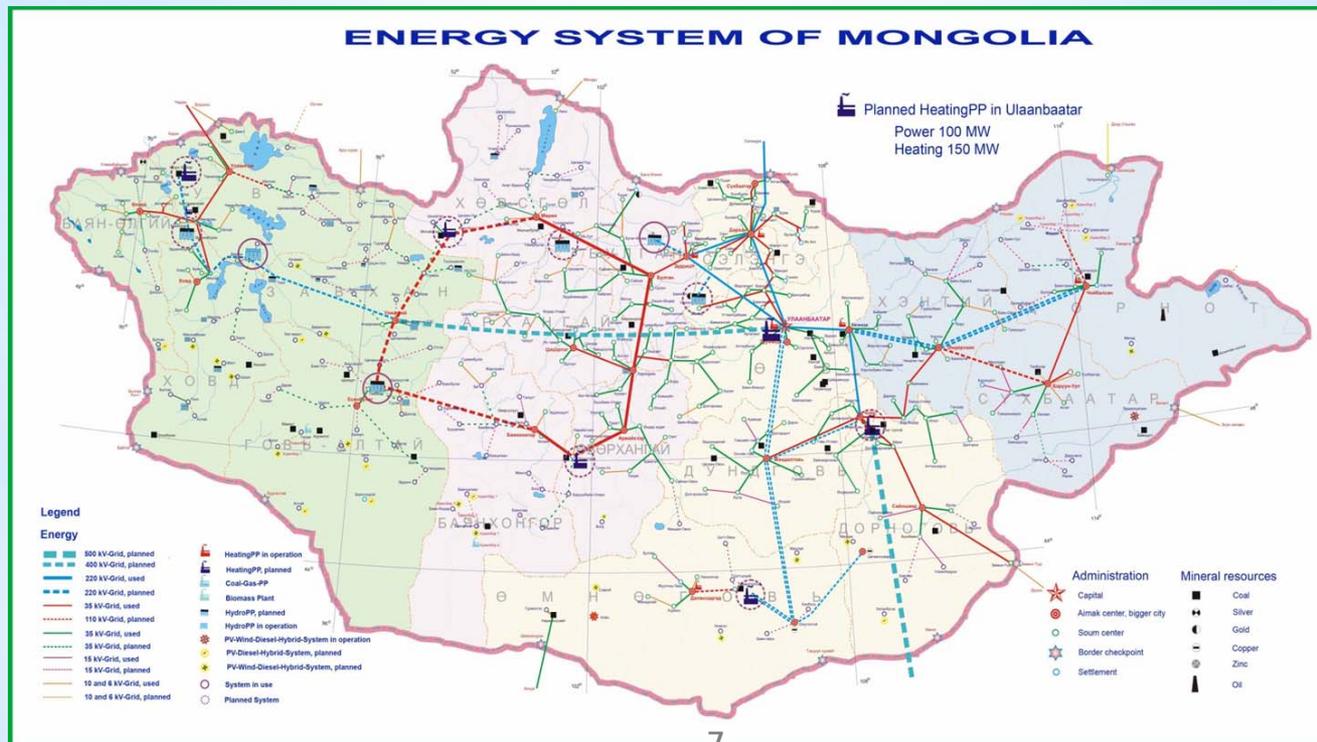
Energy development programs and their implementation

The Government of Mongolia developed and adopted following energy development programs:

- “Integrated Power System” program
 - to develop reliable and affordable energy supply
 - to contribute to regional development and improve energy security
- National renewable energy program
 - to promote and extend renewable energy development
- “100 000 solar panel” national program
 - to supply herders with renewable energy sources

Energy development programmes and their implementation

305 out of all 331 soum centers (municipal unit) connected to the centralized energy systems under scope of “Integrated Power System” program.



Regional initiatives on energy cooperation

There are some existing bilateral energy cooperation involving Mongolia and its neighboring countries, and a number of initiatives or projects are promoting bilateral or multilateral cooperation.

In recent years, many discussions and negotiations has occurred between Mongolia and its 2 neighbors mostly at the bilateral level as well as at the governmental and industrial levels.

These cooperation projects are categorized into the following:

- Expanding energy trade
- Exploration/development of upstream sector for oil, and coal
- Construction of cross-border energy trade infrastructure, including pipelines and power interconnection networks
- Power plant development and cross-border electricity interconnections, and
- Bilateral energy talks for policy cooperation

Regional initiatives on energy cooperation

- Mongolia is involved in several regional and sub-regional initiatives such as Intergovernmental Collaborative Mechanism on Energy Planning and Policy in the NEA region, UNDP (Greater Tumen Initiative), ADB (CAREC Programme) and Energy Charter Treaty.
- Intergovernmental Collaborative Mechanism on Energy in the North East Asian (NEA) region. Russian Federation, Mongolia, Republic of Korea and DPRK established the Intergovernmental Collaborative Mechanism on Energy Cooperation in NEA in 2005. Japan is an observer, while China participates in its activities.

Regional initiatives on energy cooperation

- The IGM has undertaken a number of activities and meetings in order to achieve its vision "*By 2020, improved energy security in North-East Asia through energy cooperation in a sustainable manner*"

The major outcomes of the IGM activities in 2006 - 2009 are:

- ✓ Country Report for Energy Policy Survey for 4 Countries
- ✓ Establishment of Common Energy Database for Four Countries
- ✓ Countries Report for Energy Demand/Supply Outlook by 2020
- ✓ Joint Study and Development a Common Database on Energy Production Potential and Development Plans of Countries in NEA by 2030
- ✓ Organization of the Government-Business Dialogue (GBD) on Energy Cooperation.

Investment and cooperation opportunities In Energy sector of Mongolia

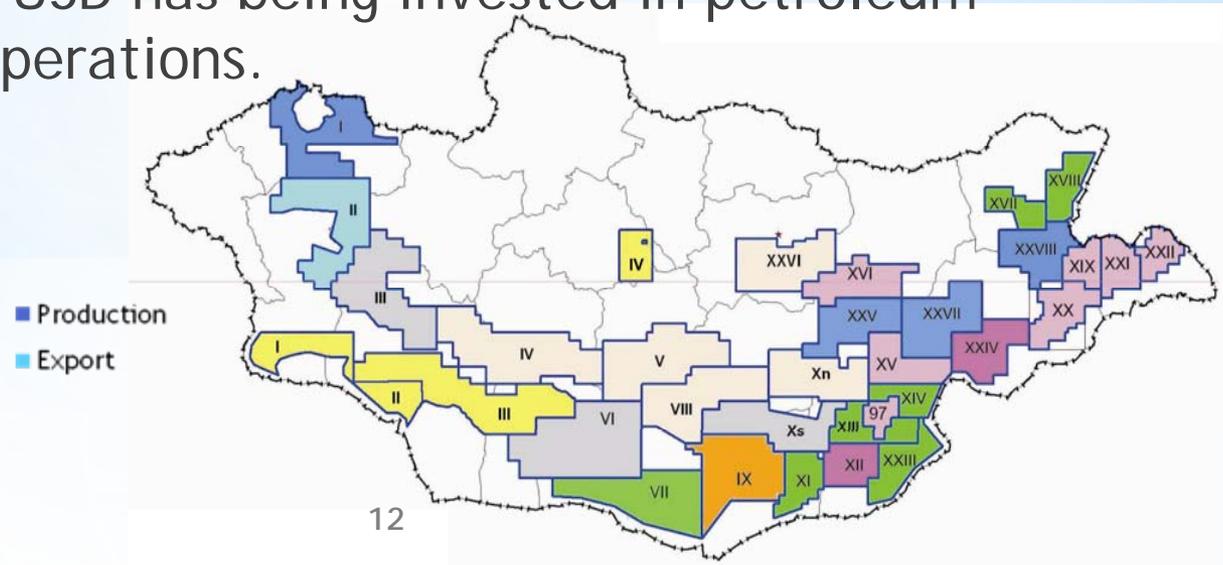
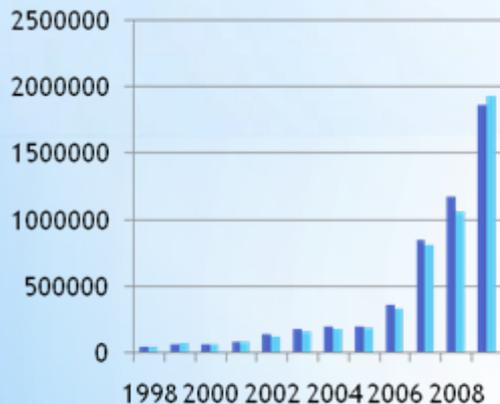
- Energy Law adopted in 2001 is legal foundation of Energy Sector Restructuring process:

Unbundling  Corporatization  Privatization

- Mongolian Parliamentary adopted at beginning of the 2010 “ Restructuring and privatization guiding principle of state property in period of 2010-2012” .
- The Government also adopted list of entities to privatize and restructure in 2010 in compliance with the guiding principle. For instance, Electricity distribution companies shall be privatized completely to investors by open bidding and some Power Plants such as “TPP-3” and ‘Erdenet TPP’ will be operated by investors under 100% public service concession awarded by competitive bidding.

Investment and cooperation opportunities in Energy sector of Mongolia

- There are 28 divided exploration blocks of Mongolia's sedimentary basins, prospects for petroleum, with a total area of over 614,000 square kilometers.
- Since 1993, 13.8 thousand straight kilometers of 2D seismic and 1791 square kilometers of 3D seismic were acquired, 100 petroleum exploration wells were drilled.
- 210.3 million USD has being invested in petroleum exploration operations.



Investment and cooperation opportunities In Energy sector of Mongolia

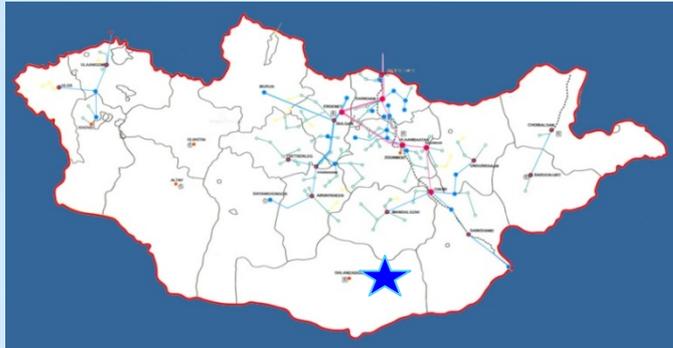
- 7 companies have to start their regular production activities within 5- 9 years in case their oil exploration is succeeded.
- Concluded PSC with Mongolian Government in 2005, Petro china Daqing Tamtsag Mongolia, LLC is planning to report its exploration officially in compliance with PSC and moving from experiment production to regular operations in this year.
- Petro china Daqing Tamtsag Mongolia, LLC is planning to produce 2.4 million barrels of crude oil in 2010, and to increase it up to 9.2 million barrels by 2013 as its peak production from Toson Uul - XIX and Tamsag - XXI blocks.

Investment and cooperation opportunities in Energy sector of Mongolia

Government actions for energy development of Mongolia

- To build new Thermal PP in Ulaanbaatar and increase capacity of district heating systems of the city.
- To construct big capacity coal burnt PP at Shivee-ovoo coal deposit to export electricity
- To build new generator or expand existing CHP in the eastern Energy Systems, to install 220 kV line between Baganuur and Undurkhaan and to study possibility to build nuclear PP.
- To intensify petroleum exploration, development and production operations in Mongolia and developing natural gas and coal-bed methane gas exploration, development and production.

Investment and cooperation opportunities in Energy sector of Mongolia: Tavan tolgoi TPP



Project name : Tavan tolgoi TPP

Project venue : Tavan tolgoi coal mine, Tsogt-ovoo soum,
Umnugobi province

Production scale : minimum 600 MW

Total investment :

Market orientation and market analyses : The electricity source for
Gobi Region mining activities and export

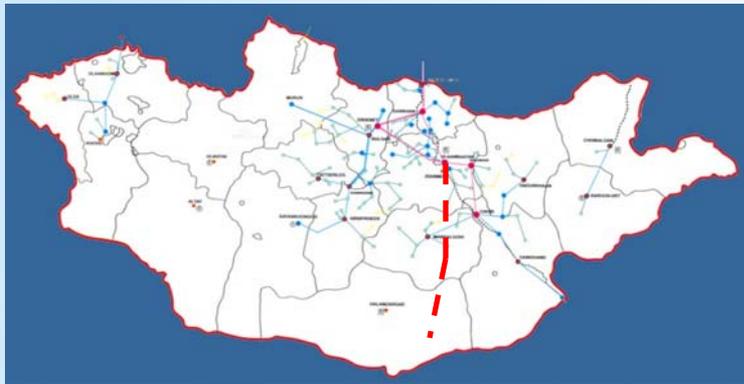
Cooperation mode: any type of foreign investment

Project progress : Preparation of tender documents

Employer: MMRE

Implementing agency: Energy Authority

Investment and cooperation opportunities In Energy sector of Mongolia: Power line to Oyu tolgoi



Project name : **UB-Oyu tolgoi power line**

Project venue : Power line Ulaanbaatar - Oyu tolgoi
gold and copper mine, 560km

Production scale : 220 kV, 100MW

Total investment : 150 million US\$

Market orientation and market analyses : Power
supply for Oyu tolgoi gold copper mine from the
CES

Estimated economic benefit : Annual transmission
412 GWh,

Cooperation mode: **Public-private partnership,
public service concession**

Project progress : Feasibility study

Employer: MMRE of Mongolia

Implementing agency: Energy Authority



**Thank you for your kind
attention!**