GOVERNMENT OF MONGOLIA

ASIAN SUPER GRID

By Angarag Myagmar
Head of RE division
Ministry of Energy
Mongolia
2015 July 21-22nd Beijing

Legislation

No	Name of Documents	Approved	Update
Legal Framework			
1	Energy Law of Mongolia	2001	2011
2	Renewable Energy Law of Mongolia	2007	-
3	Concession Law	2010	-
Development programs			
4	"100000 Solar Ger" National Program	1999	Come to the end 2012
5	Program on Integrated Power Energy System	2002	2007 and Update will be made in 2012
6	National Renewable Energy Program	2005	-
7	Millennium Development Goals Based Comprehensive National Development Strategy of Mongolia	2007	-
8	New Construction and Mid-Term Goal Program	2010	-
9	Southern Gobi Development Program	2010	-
Government Policy Document			
10	Government Action Plan 2012-2016	2012	-

Legislation

	Hydro			Wind	Solar
	up to 0.5 MW	from 0.5 to 2 MW	from 2 to 5 MW		
Grid-connected	0.045 - 0.06	0.045 - 0.06	0.045 - 0.06	0.08 - 0.095	0.15 - 0.18
Stand alone	0.08 - 0.10	0.05 - 0.06	0.045 - 0.05	0.10 - 0.15	0.2 - 0.3
Prices are given in USD per kWh					

- •In January 11, 2007, the Parliament was approved a Renewable energy law
- •Feed-in tariffs (FIT) for renewable power sources
- •Promotes, incentives and supports the production of energy from renewable sources by regulating generation, transmission

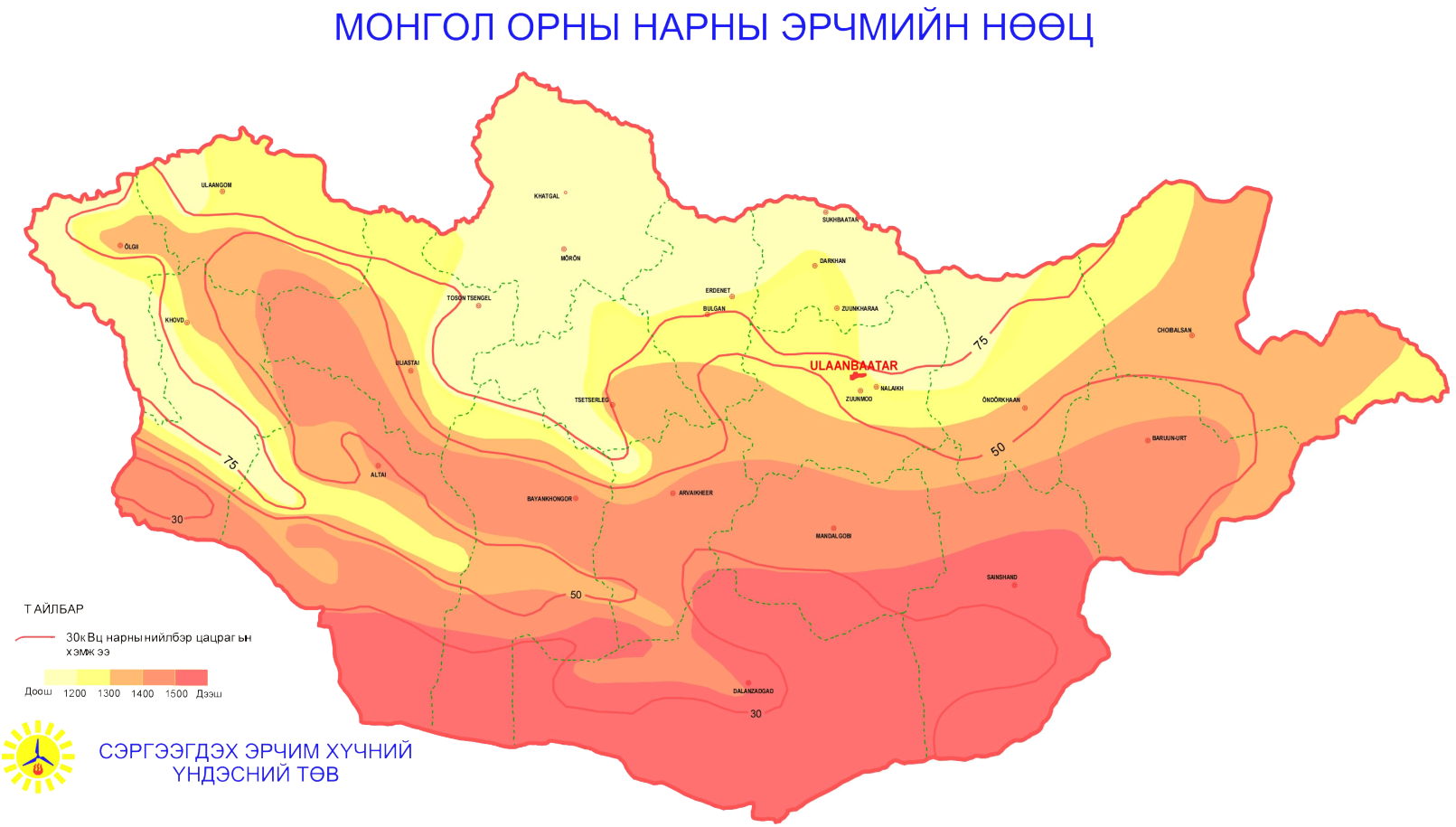
Legislation

- RE Law has been amended 2015 June by the Parliament of Mongolia
- New Encouraging(support tariff scheduled)
- FIT/ Cross subsidy
- Enables Small scale grid to connect to system

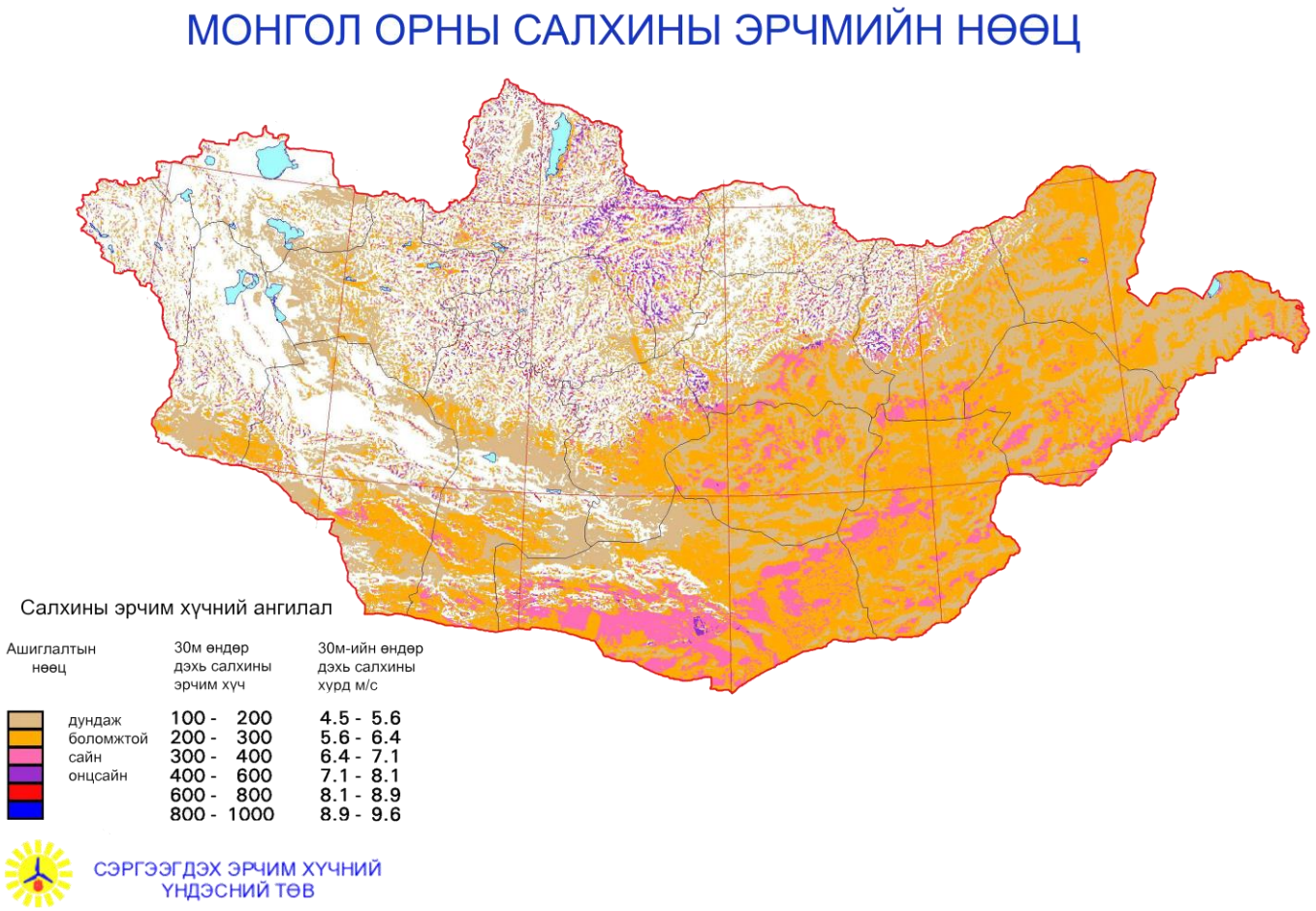
Tariffs will apply by the Energy regulatory commision

Mongolia`s Renewable energy potential

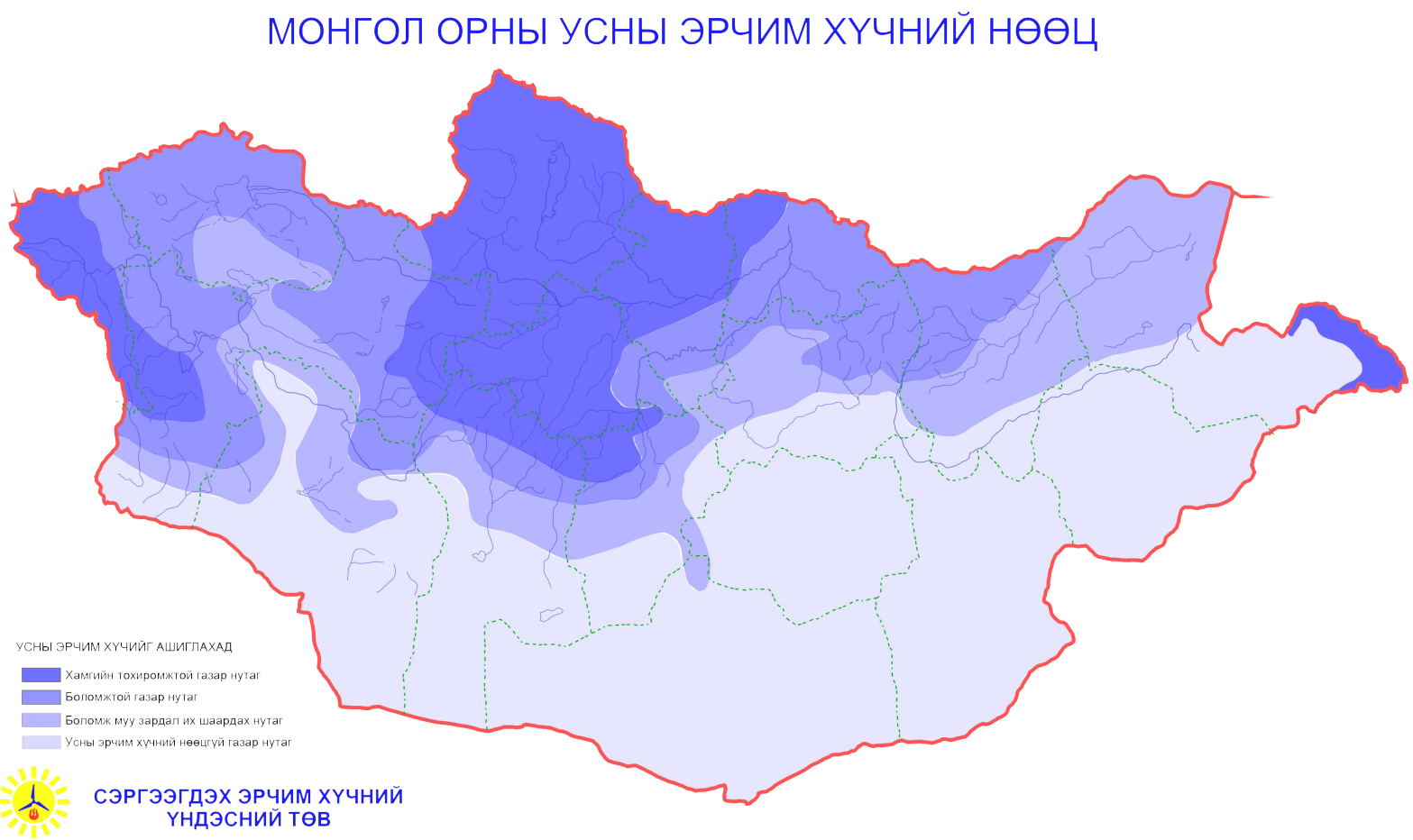
Potential
Solar energy/IRRADIATION



Potential
Wind Energy



Potential
Hydro



Potential

There is a wide opportunity to cooperate in the renewable energy sector.

- Rich resources of Solar, Wind and Hydro in Mongolia:
  - Solar: 270-300 sunny days in a year, 4.3-4.7 kWh/meter or higher per day
  - Wind: 10 % of the total land area can be classified as excellent for utility scale applications, Power density 400-600 W/m^2, the resource could potentially supply over 1100 GW of installed capacity.
  - Hydro: Theoretical potential 6.2 GW, more than 1 GW of these ahs been identified



Activities on ASG

Activities

- 2012 North east asian super grid conference under the President of Mongolia
- Accomplishment of Desertec/Gobitec research study by Energy Charter/2013
- Establishment of Ministerial task on Asian Super Grid
- Several meetings with Japan, South Korea
- 2015 Memorandum of understanding between Chinese RE association, Korea and Mongolia
- Meetings with Russian energy system

Proposed ASG




Gobi desert
Sakhalin
Beijing
Seoul
Bhutan
Chengdu
Tokyo
Shanghai
Delhi
Dhaka
Hong Kong
Taipei
Mumbai
Manila
Bangkok
Kuala Lampur
Singapore
ASIA SUPER GRID
(ASG)

Thank you

Angarag Myagmar
Ministry of Energy
Head of RE division
Mongolia
angarag@energy.gov.mn