



Wind energy assessment case study, Mongolia

Bavuudorj Ovgor PhD



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Introduction



Ministry of Energy of Mongolia



ADB Quantum leap in wind energy



National renewable energy center



Objective

Build favorable environment for potential investors in wind energy sector.

In order to reach national targets for renewable (wind) energy development:

- 20% of RE by 2020

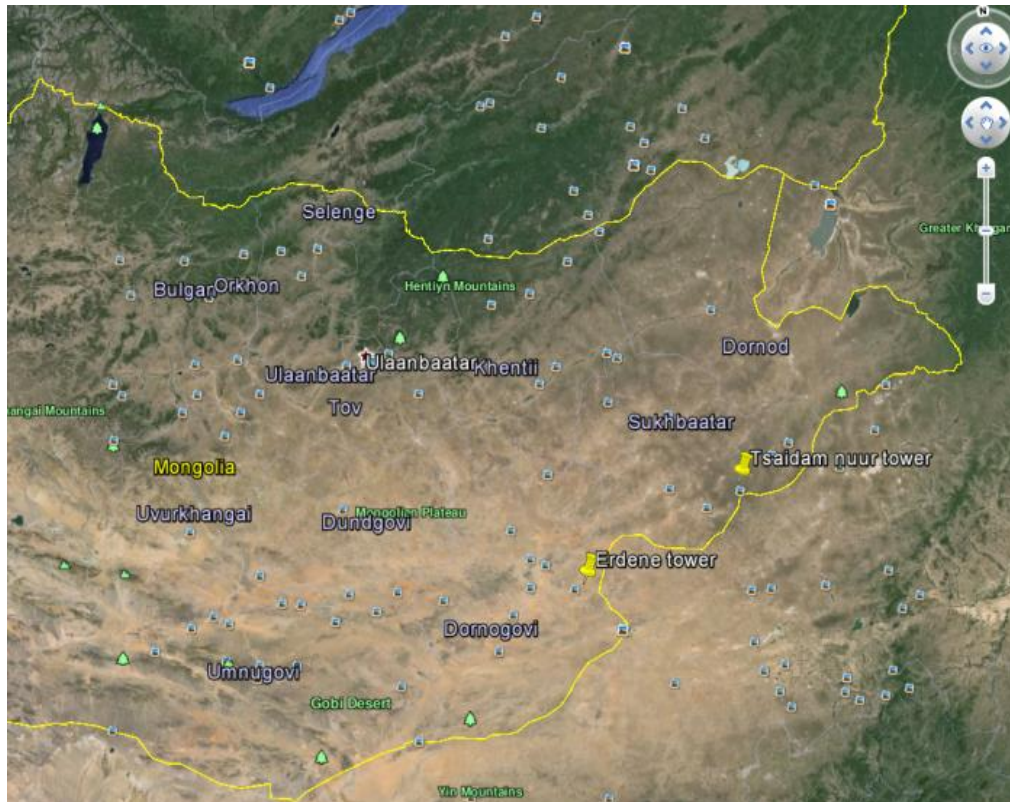
- 30% of RE by 2030

- 10% of wind by 2020

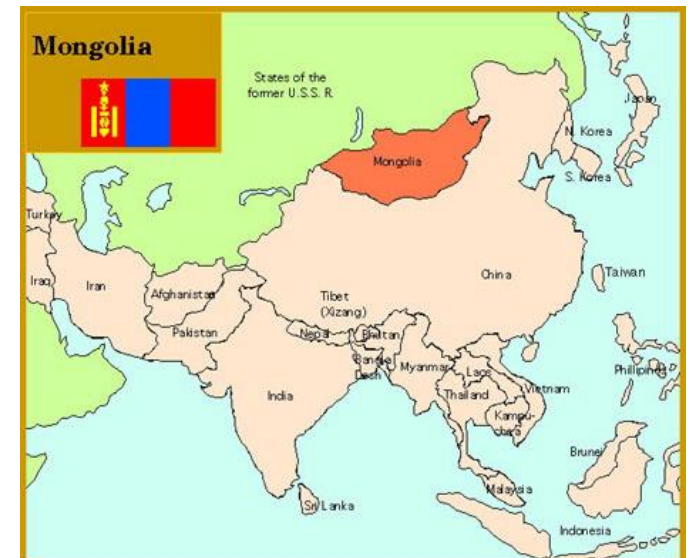
- 15% of wind by 2030.

Build base for possible ASG Gobitech initiative.

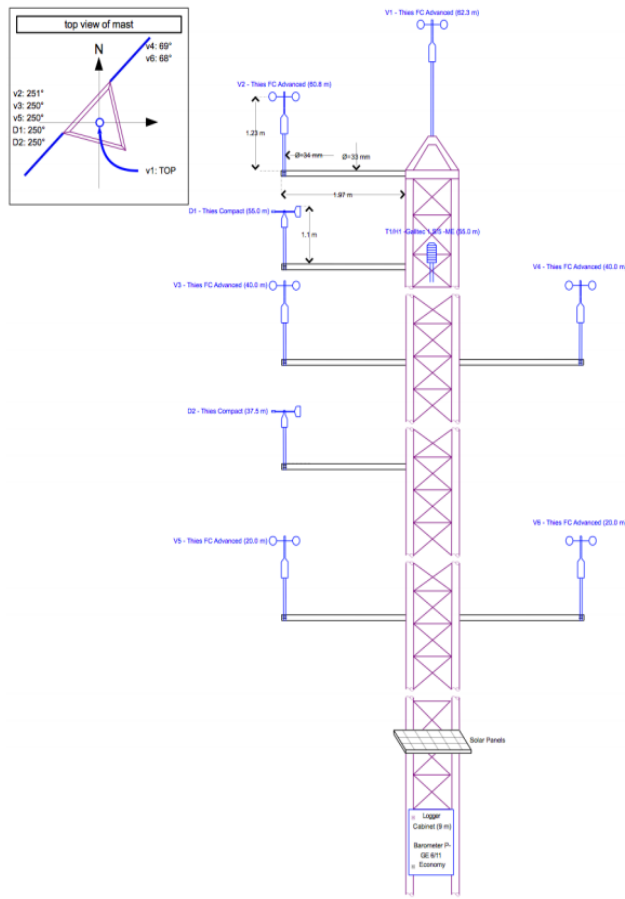
Detailed wind observation sites



Site	Latitude	Longitude	Elevation
Ulaan-uul Erdene soum, Dornogobi aimag	44°28'29.8"	111°07'54.5"	1032 m
Tsaidam undur nuur, Darganga soum, Sukhbaatar aimag	45°36'20.2"	114°34'15.3"	1320 m



Met-masts

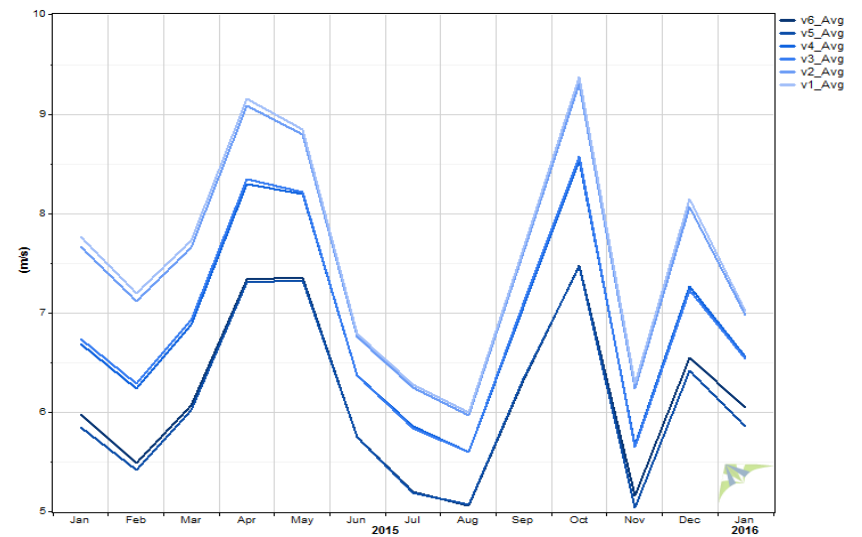
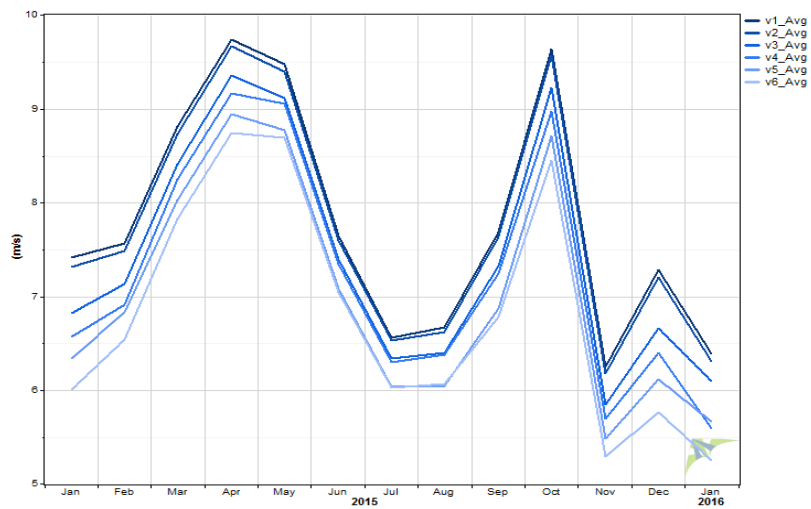


Sensors	Barings, °	Elevation, agl. m	Calibration
Anemometer 1	-	62.3	certified
Anemometer 2	251	60.8	certified
Anemometer 3	250	40.0	certified
Anemometer 4	69	40.0	certified
Anemometer 5	250	20.0	certified
Anemometer 6	68	20.0	certified
Wind wane 1	250	55.0	certified
Wind wane 2	250	37.5	certified
Thermometer	-	55.0	certified
Humidity meter	-	55.0	certified
Baromemter	-	9.0	certified
Pyranometer	180	11.0	certified

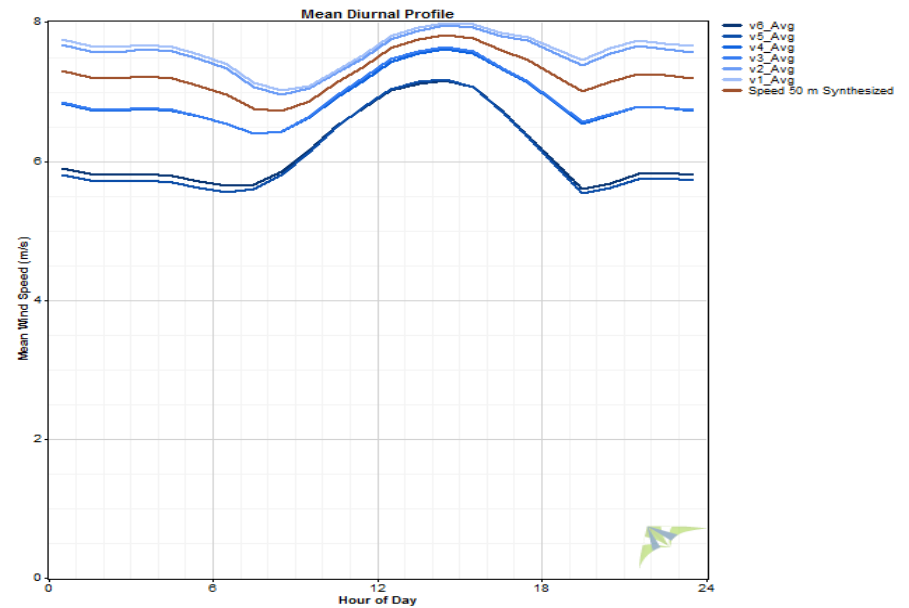
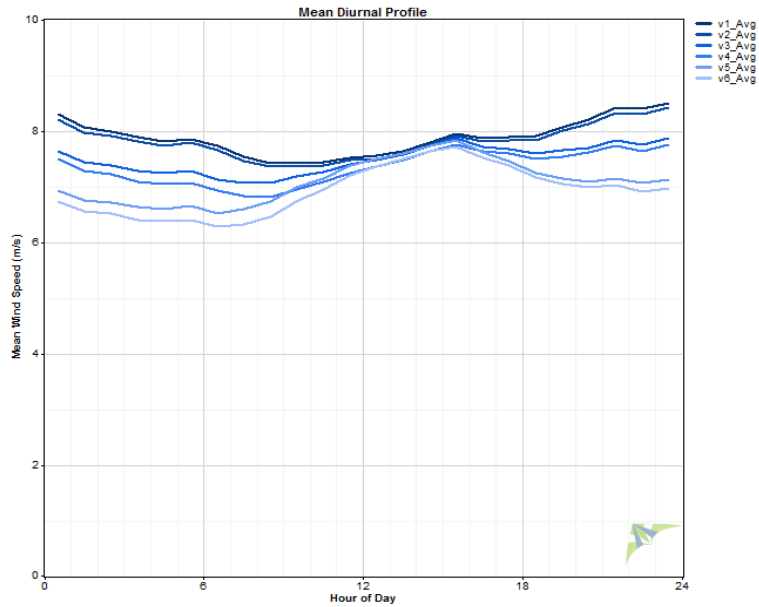
Met-masts



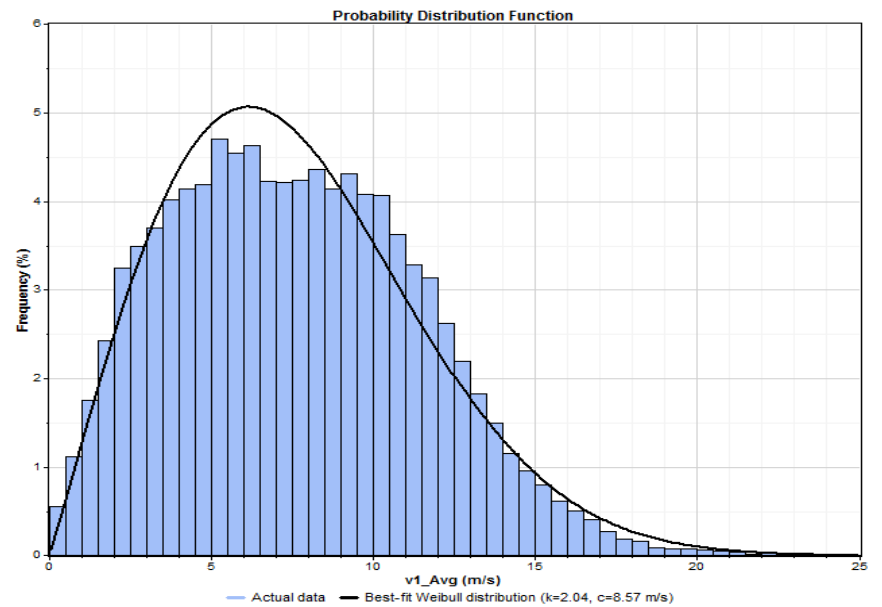
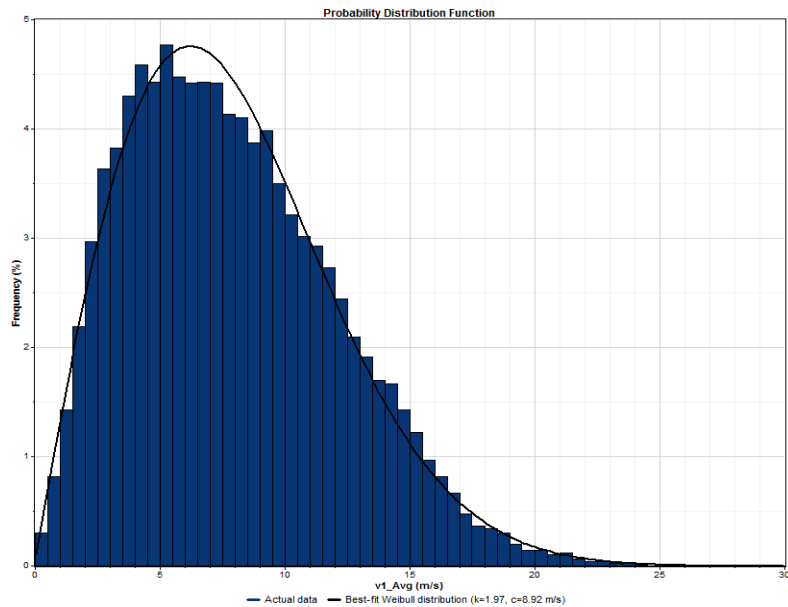
Observed data



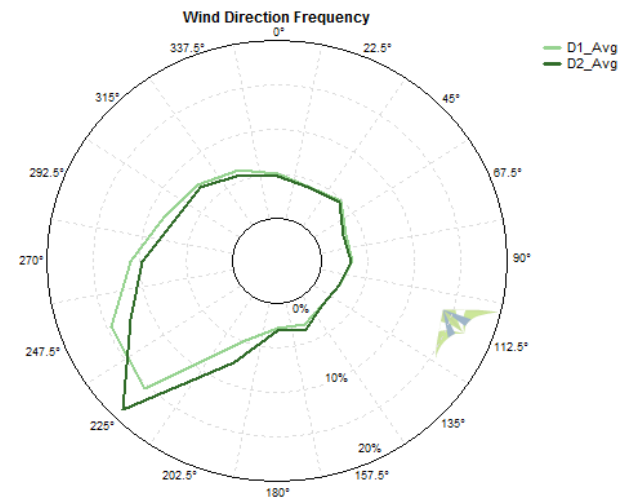
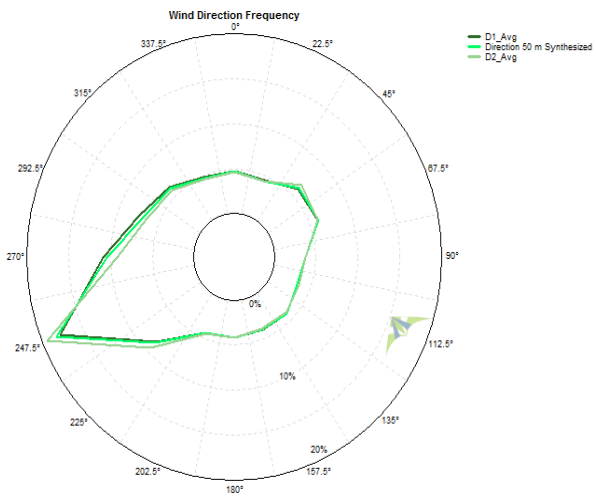
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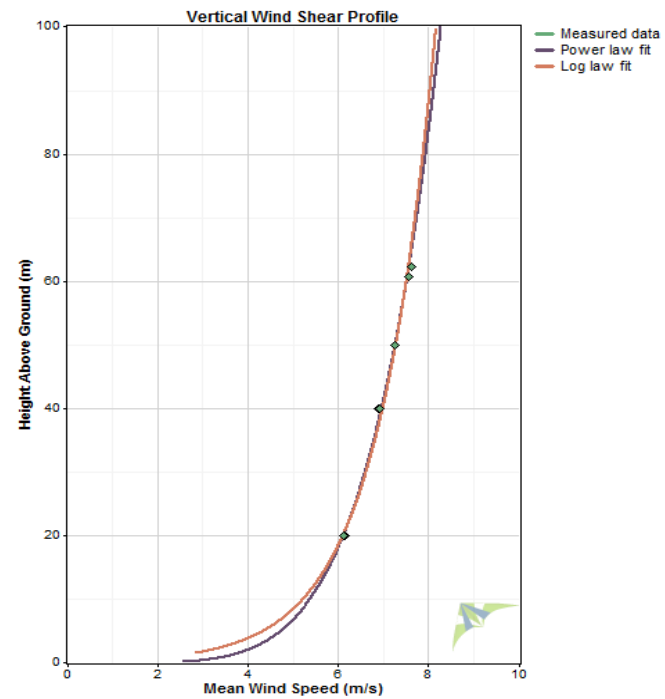
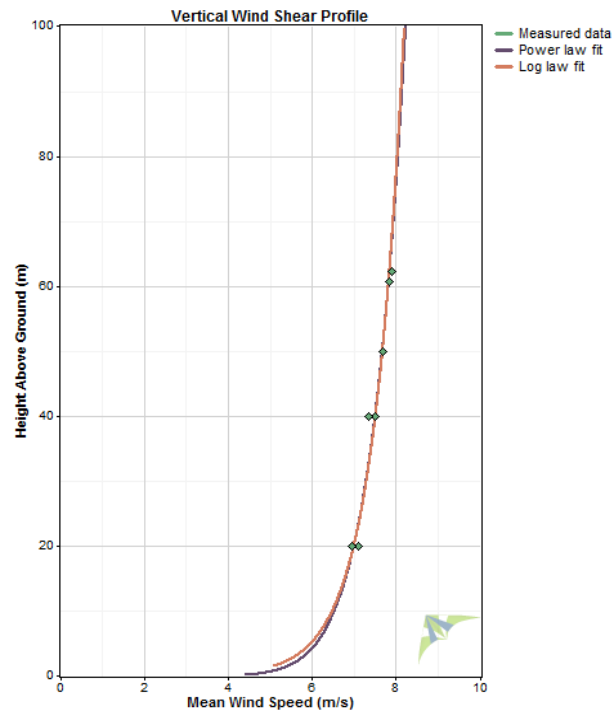
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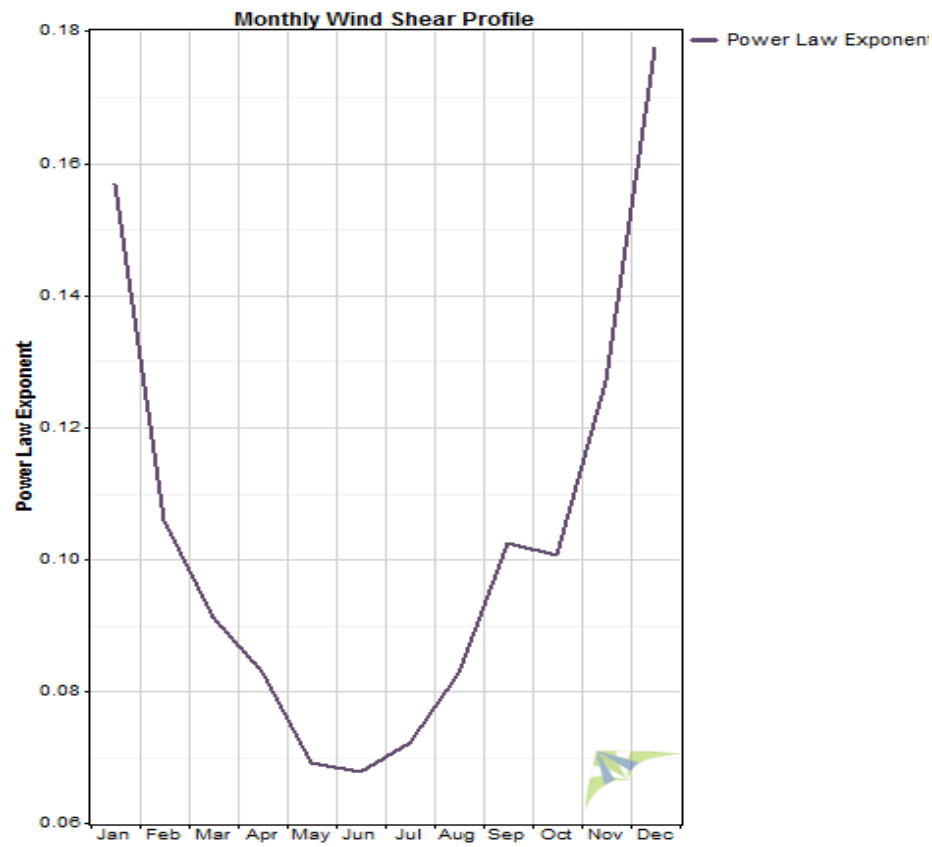
Observed data



Observed data



Observed data





Data access

All raw data collected, processed and owned by National renewable energy center of Mongolia under the guidance of Ministry of Energy of Mongolia

Contact of NREC:

Director Mr. Altangerel

Phone: +976-7028-6298

www.nrec.mn

email: info@nrec.mn



Next steppes

- Update wind resource map
 - Install portable stations on potential wind farm development site
 - Prepare pre-feasibility study on possible wind farm development in near by region
 - Start feasibility study of large scale wind power development in the region
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Thank you for your attention!
