



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY

MONGOLIA'S ENERGY SECTOR: CURRENT SITUATION AND FUTURE DIRECTIONS

ARIUNBOLD.S, SENIOR ANALYST
POLICY AND PLANNING DEPARTMENT
MINISTRY OF ENERGY OF MONGOLIA

27 February 2026



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY

1. CURRENT SITUATION OF THE SECTOR

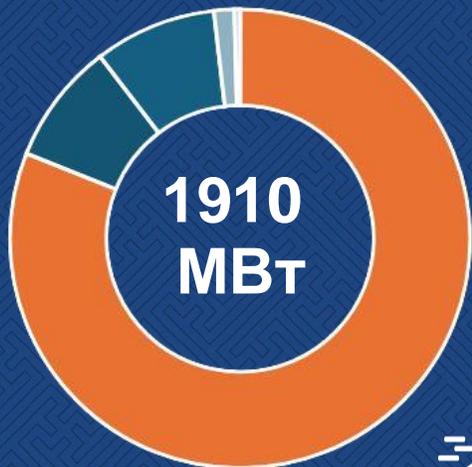
CURRENT SITUATION OF THE ENERGY SECTOR
OF MONGOLIA



7 MW
0.3%



1566 MW
82%



26 MW
1.4%



155 MW
8.1%



156 MW
8.2%

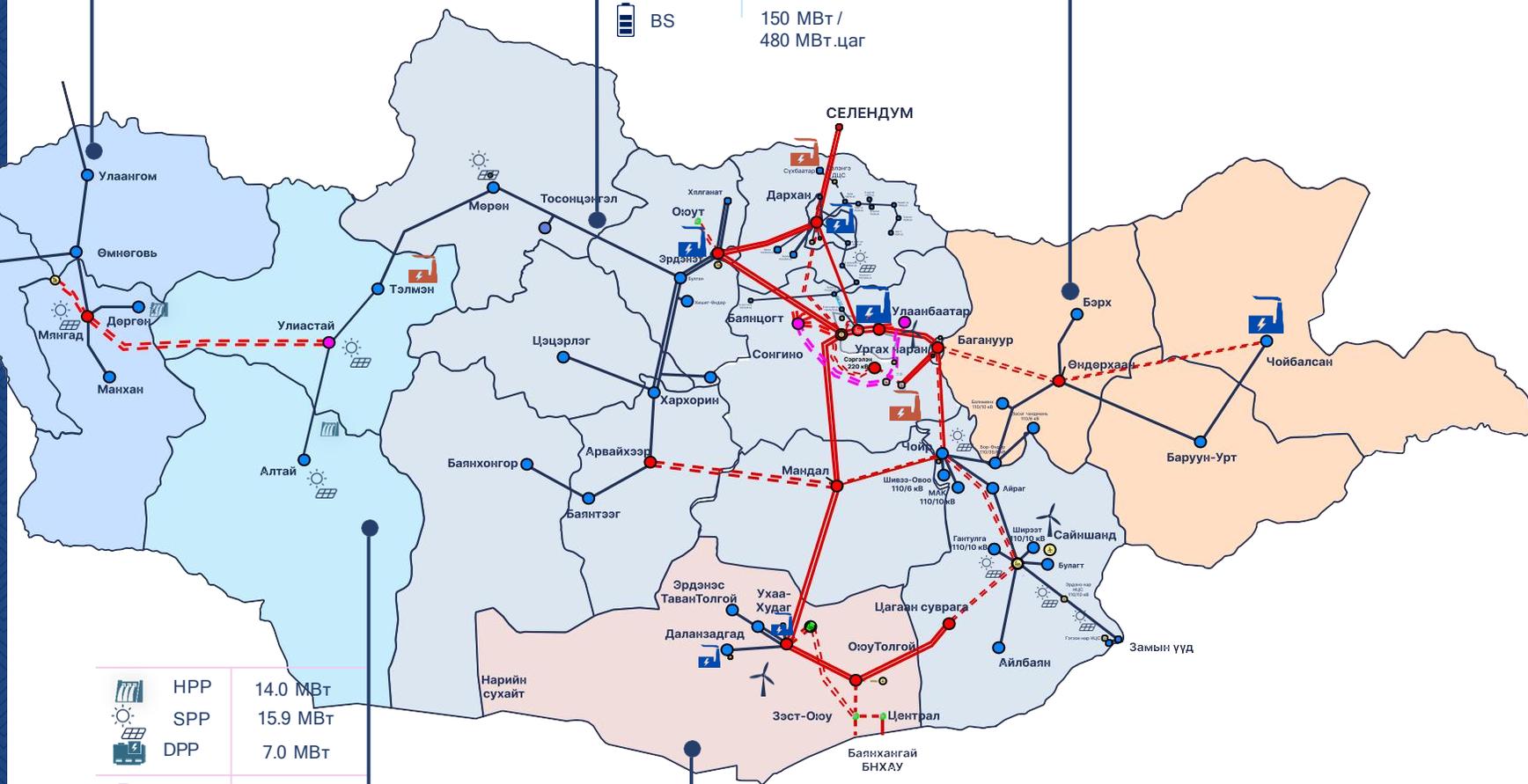


BATTERY STORAGE
151.1 MW/486.6 MW.h

West PP		
P _{max} =54.4 MW,		
HPP	12 MBт	
SPP	10 MBт	
P_{base}	22 MBт	

Central PP		
P _{max} =1765 MW,		
TPP	1475 MBт	
WPP	155 MBт	
SPP	135 MBт	
P_{base}	1765 MBт	
BS	150 MBт / 480 MBт.цаг	

Dornod PP		
P _{max} =81.5 MW,		
TPP	86 MBт	
P_{base}	86 MBт	



HPP	14.0 MBт
SPP	15.9 MBт
DPP	7.0 MBт
P_{base}	36.9 MBт
BS	1.1 MBт

P_{max}=28.5 MW

Altai-Uliastai PP

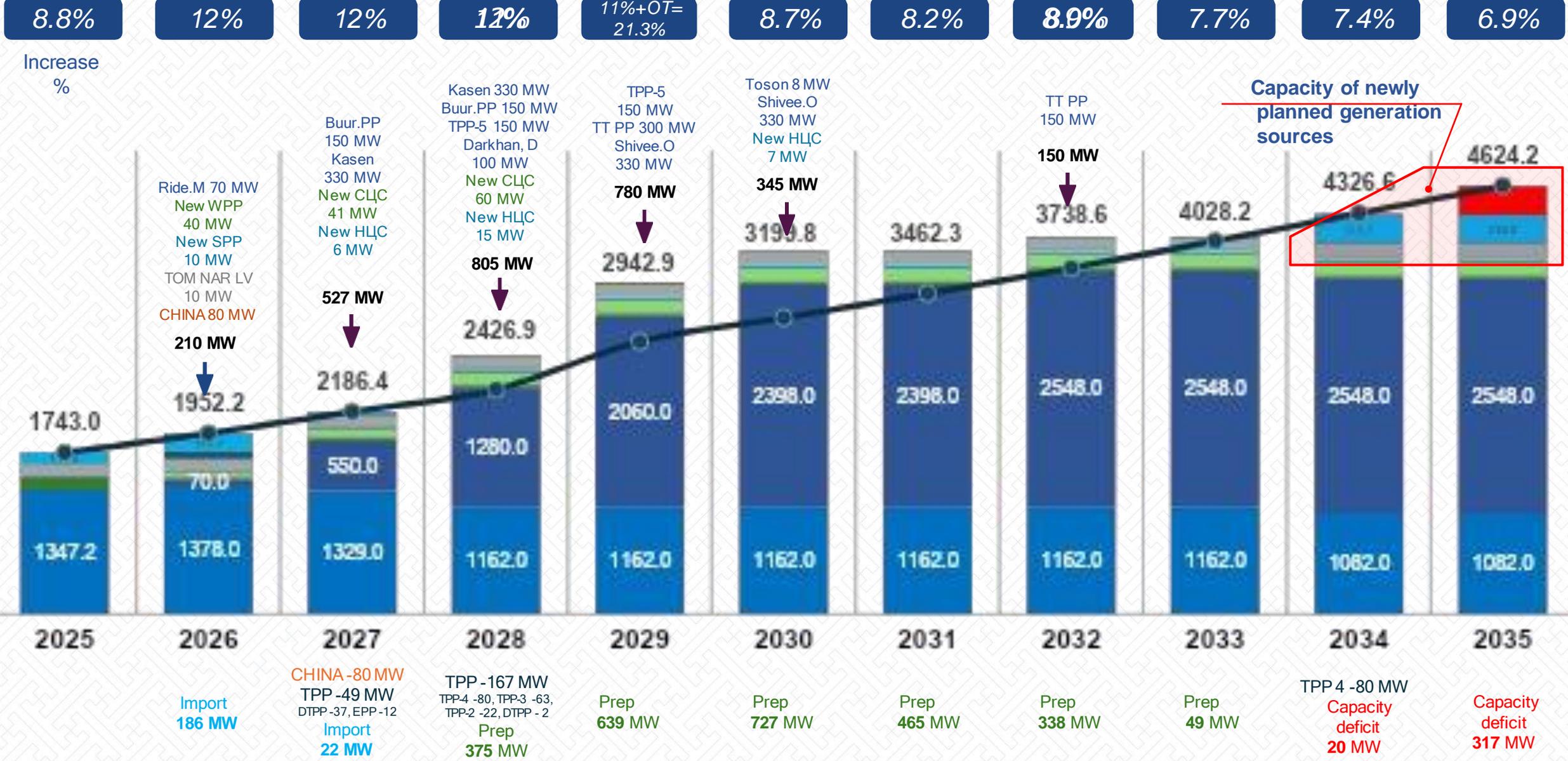
P_{max} - 184 MW

South PP

CENTRAL REGION CAPACITY BALANCE FORECAST, MW (2025-2035)



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY



Ride.M 70 MW
New WPP 40 MW
New SPP 10 MW
TOM NAR LV 10 MW
CHINA 80 MW
210 MW

Buur.PP 150 MW
Kasen 330 MW
New CLЦ 41 MW
New HЦC 6 MW

Kasen 330 MW
Buur.PP 150 MW
TPP-5 150 MW
Darkhan, D 100 MW
New CLЦ 60 MW
New HЦC 15 MW

TPP-5 150 MW
TT PP 300 MW
Shivee.O 330 MW

Toson 8 MW
Shivee.O 330 MW
New HЦC 7 MW

TT PP 150 MW

Import 186 MW

CHINA -80 MW
TPP -49 MW
DTPP -37, EPP -12
Import 22 MW

TPP -167 MW
TPP4 -80, TPP3 -63,
TPP2 -22, DTPP - 2
Prep 375 MW

Prep 639 MW

Prep 727 MW

Prep 465 MW

Prep 338 MW

Prep 49 MW

TPP 4 -80 MW
Capacity deficit 20 MW

Capacity deficit 317 MW

PENDING LOAD FOR ELECTRICAL TECHNICAL CONDITIONS



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY

WestPP

USAGE: 61 MW
UTILIZED CAPACITY UNDER ISSUED TECHNICAL CONDITIONS : 39 MBT
PENDING REQUEST: 42 MW

Central grid

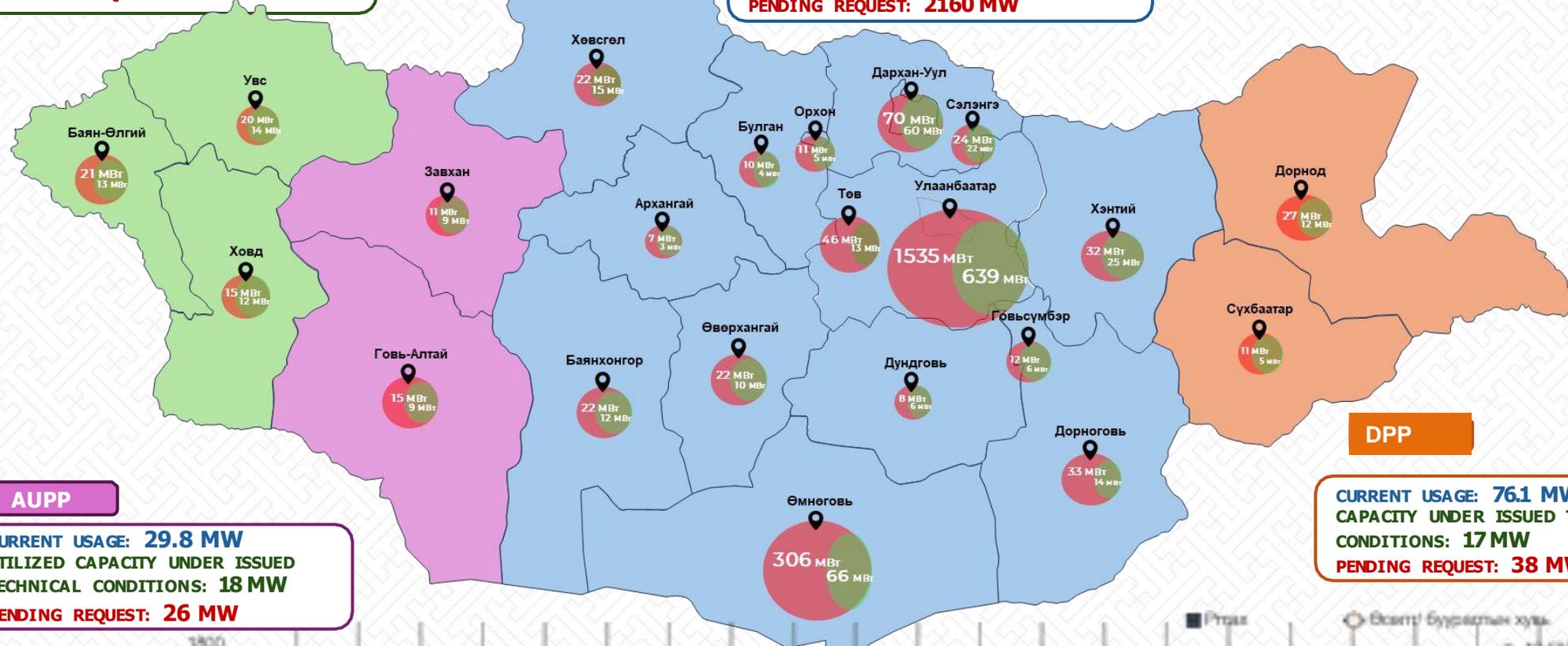
CURRENT USAGE: 1655 MW
UTILIZED CAPACITY UNDER ISSUED TECHNICAL CONDITIONS: 900 MBT
PENDING REQUEST: 2160 MW

CURRENT USAGE: 1800 MW

UTILIZED CAPACITY UNDER ISSUED TECHNICAL CONDITIONS: 974 MW

PENDING REQUEST: 2266 MW

TOTAL: 3240 MW

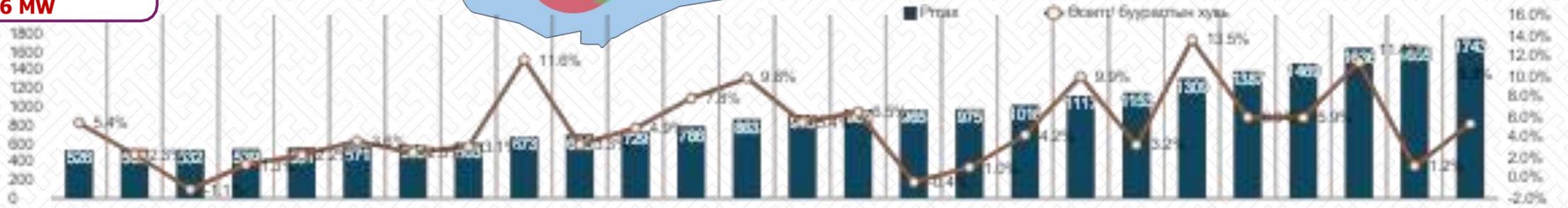


AUPP

CURRENT USAGE: 29.8 MW
UTILIZED CAPACITY UNDER ISSUED TECHNICAL CONDITIONS: 18 MW
PENDING REQUEST: 26 MW

DPP

CURRENT USAGE: 76.1 MW
UTILIZED CAPACITY UNDER ISSUED TECHNICAL CONDITIONS: 17 MW
PENDING REQUEST: 38 MW

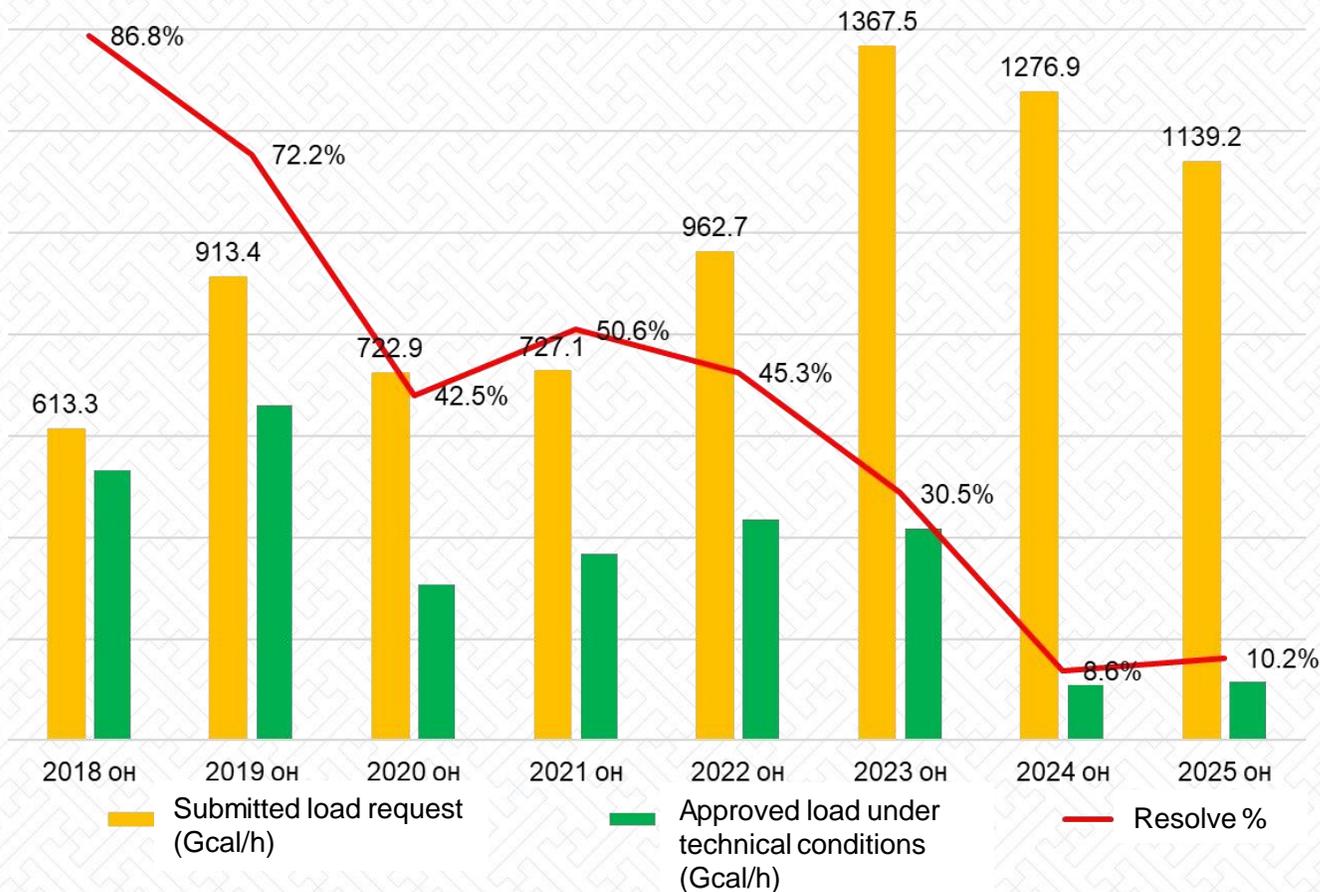


PENDING THERMAL ENERGY DEMAND IN ULAANBAATAR CITY



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY

Pending Heat Load under Thermal Technical Conditions (Gcal/h)



116 Gcal/h

Usage under Issued Technical Conditions

1023 Gcal/h

Unresolved usage

1638 Gcal/h

Increasing demand until 2040

2777 Gcal/h

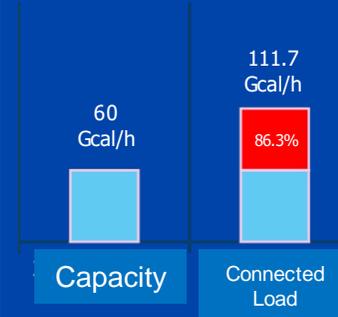
Total pending heat demand

HEAT SOURCE

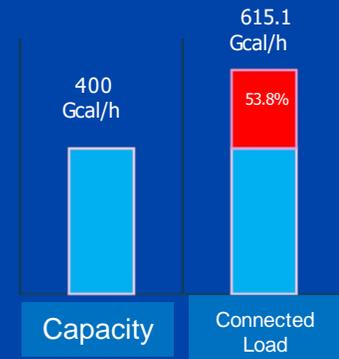
Installed Load **2'418 Gcal/h** 2'810 MW

Heat Consumption **3'558 Gcal/h** 4'138 MW

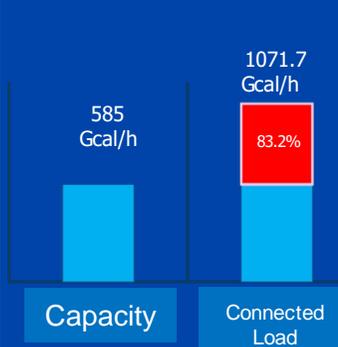
TPP 2
(Distribution rate -3%)



AMGALAN TPP
(Distribution rate -17%)



TPP 3
(Distribution rate -24%)



TPP 4
(Distribution rate -56%)



2026 MAJOR ENERGY PROJECTS TO BE COMMISSIONED IN 2026 AND IMPLEMENTED THEREAFTER



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY

TOSON TPP
PHASE II 8 MW /2027.06/



RIDE MONGOLIA TPP
35 MW /2026.03/
35 MW /2026.05/



TPP-5 300 MW
150 MW /2028.05/
150 MW /2029.10/



BUURULJUUT PP
PHASE II 300 MW /2027.10/



KASEN GREEN PP
PHASE I 330 MW /2027.07/
PHASE II 330 MW /2027.12/



SHIVEGOBI PP
PHASE I 330 MW /2029.05/
PHASE II 330 MW /2030.10/



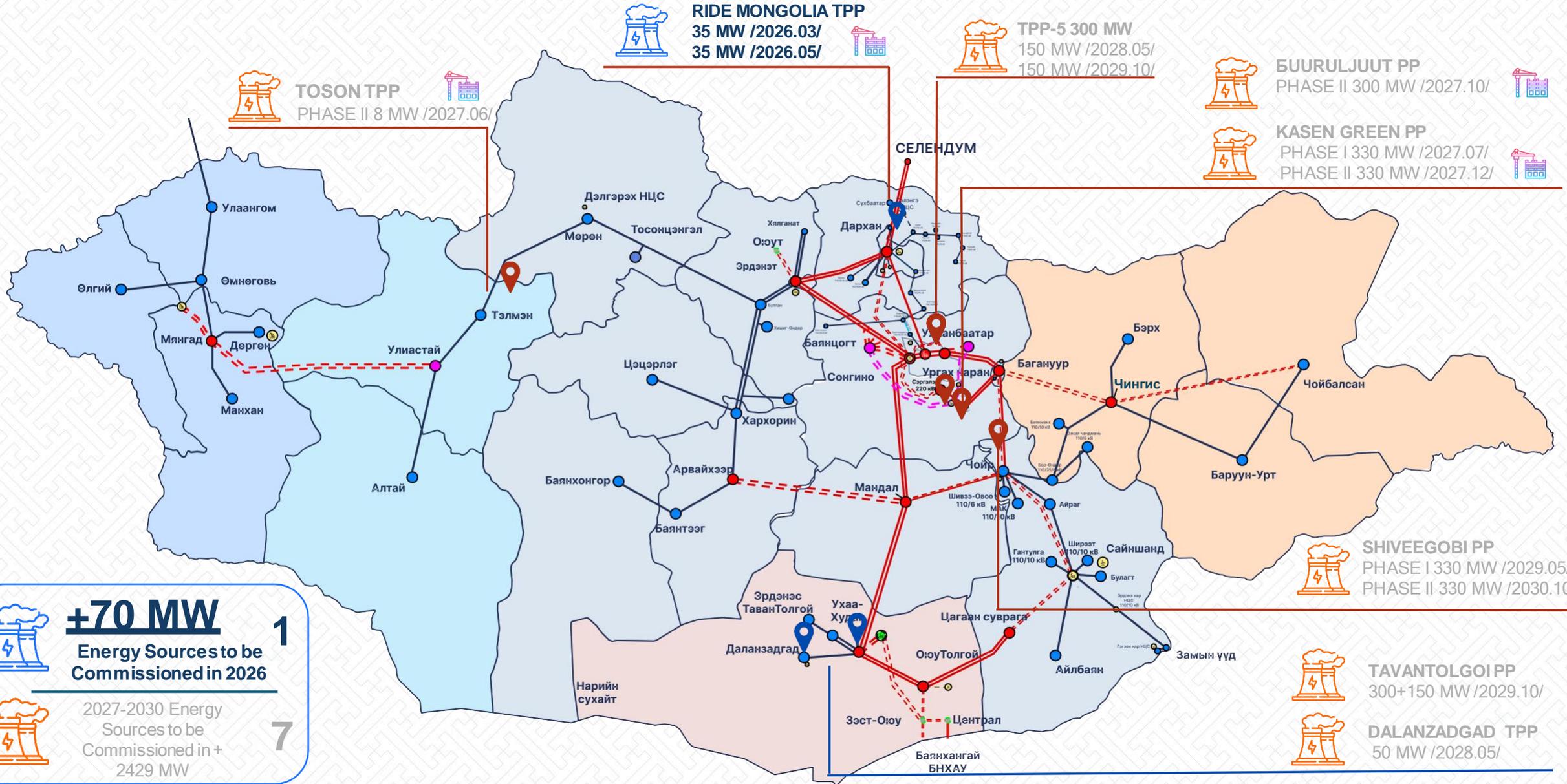
TAVANTOLGOI PP
300+150 MW /2029.10/



DALANZADGAD TPP
50 MW /2028.05/

+70 MW **1**
Energy Sources to be Commissioned in 2026

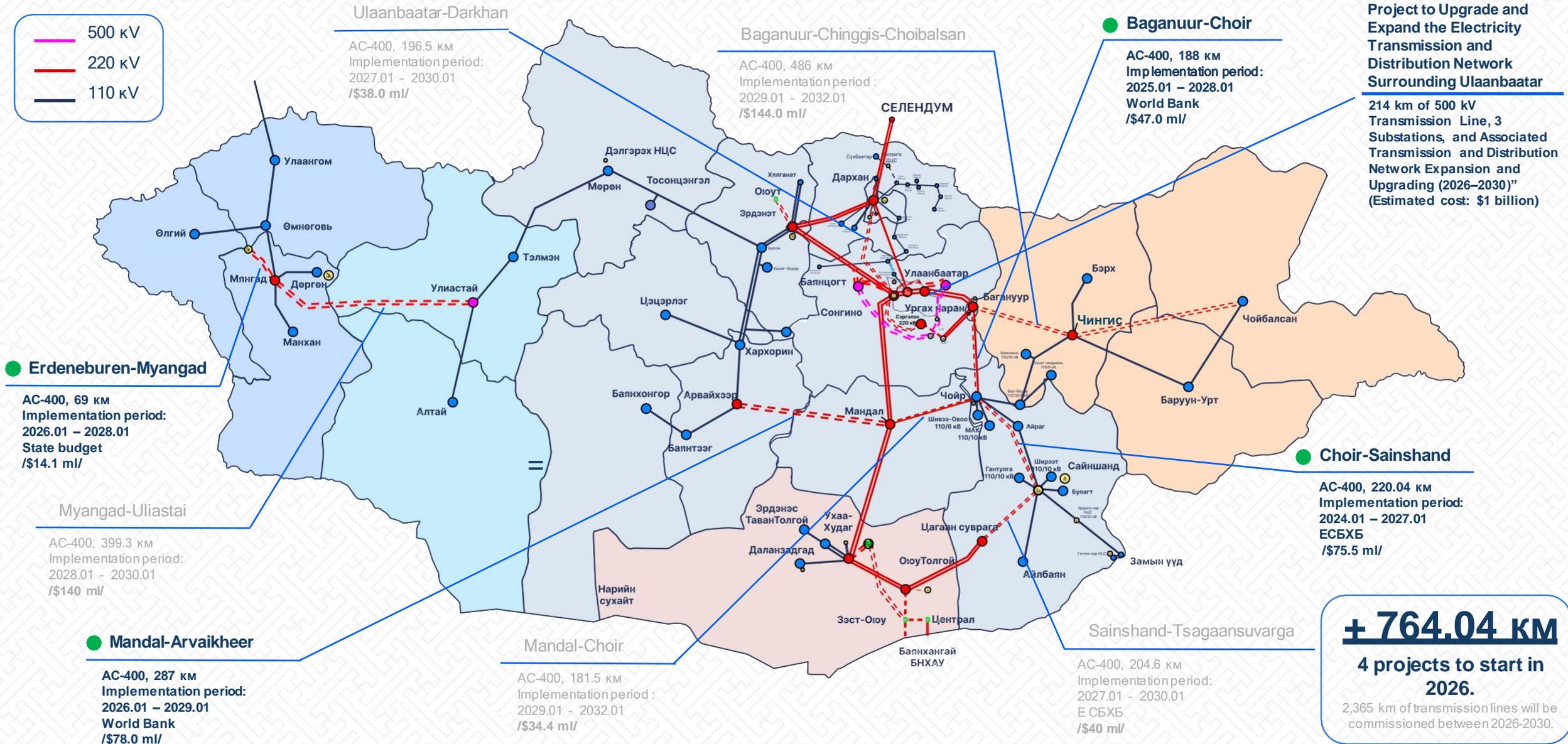
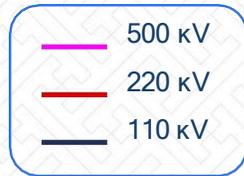
7
2027-2030 Energy Sources to be Commissioned in + 2429 MW



MAJOR ELECTRICITY TRANSMISSION LINE PROJECTS TO COMMENCE CONSTRUCTION IN 2026 AND FOR FUTURE IMPLEMENTATION



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY



Ulaanbaatar-Darkhan
AC-400, 196.5 км
Implementation period:
2027.01 - 2030.01
/\$38.0 ml/

Baganuur-Chinggis-Choibalsan
AC-400, 486 км
Implementation period :
2029.01 - 2032.01
/\$144.0 ml/

Baganuur-Choir
AC-400, 188 км
Implementation period:
2025.01 - 2028.01
World Bank
/\$47.0 ml/

Project to Upgrade and Expand the Electricity Transmission and Distribution Network Surrounding Ulaanbaatar
214 km of 500 kV Transmission Line, 3 Substations, and Associated Transmission and Distribution Network Expansion and Upgrading (2026–2030)”
(Estimated cost: \$1 billion)

Erdeneburen-Myangad
AC-400, 69 км
Implementation period:
2026.01 - 2028.01
State budget
/\$14.1 ml/

Myangad-Uliastai
AC-400, 399.3 км
Implementation period:
2028.01 - 2030.01
/\$140 ml/

Mandal-Arvaikheer
AC-400, 287 км
Implementation period:
2026.01 - 2029.01
World Bank
/\$78.0 ml/

Mandal-Choir
AC-400, 181.5 км
Implementation period :
2029.01 - 2032.01
/\$34.4 ml/

Choir-Sainshand
AC-400, 220.04 км
Implementation period:
2024.01 - 2027.01
ЕСБХБ
/\$75.5 ml/

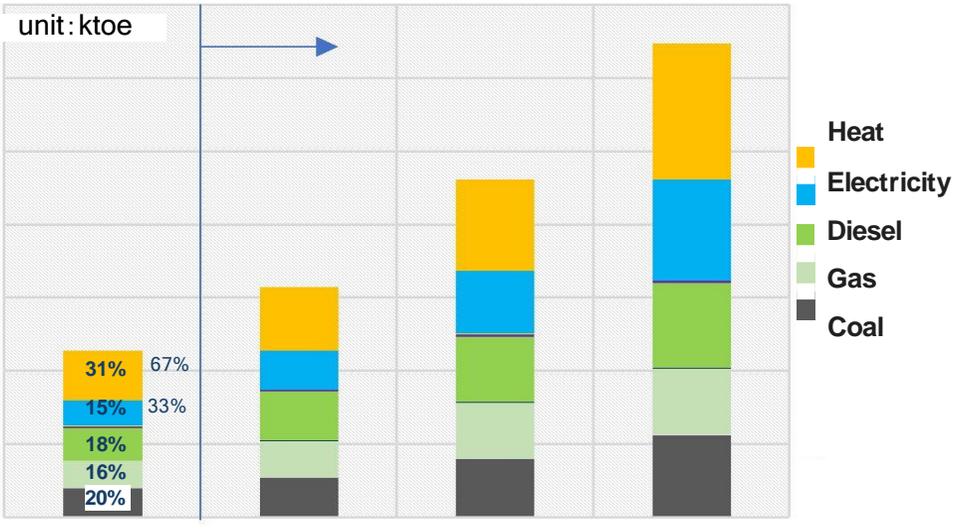
Sainshand-Tsagaansuvarga
AC-400, 204.6 км
Implementation period:
2027.01 - 2030.01
Е СБХБ
/\$40 ml/

+ 764.04 км
4 projects to start in 2026.
2,365 km of transmission lines will be commissioned between 2026-2030.

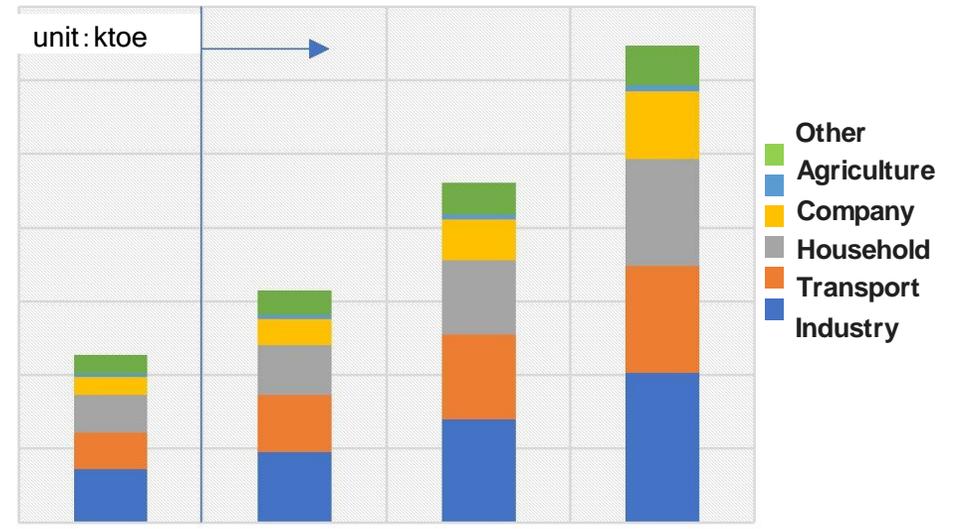
ENERGY DEMAND FORECAST 2026-2050



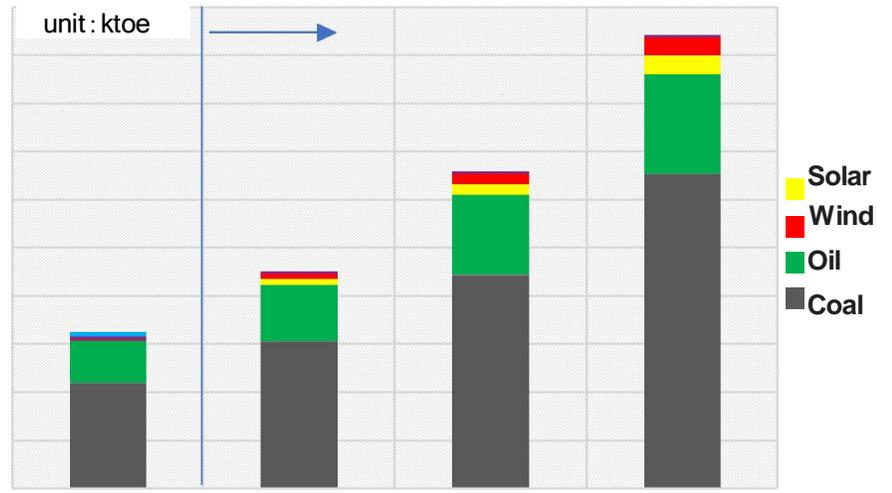
Category



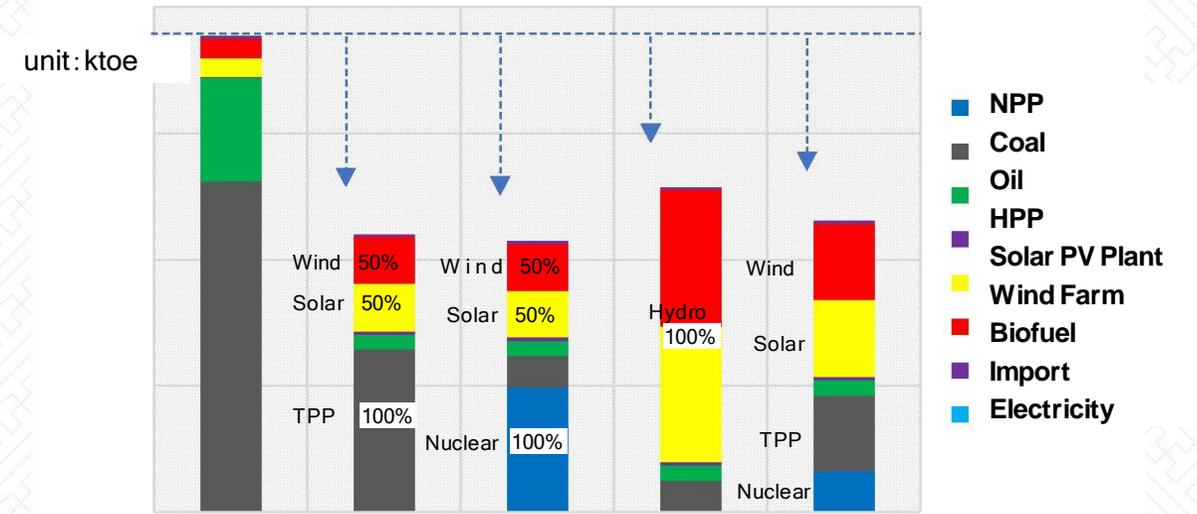
Sector



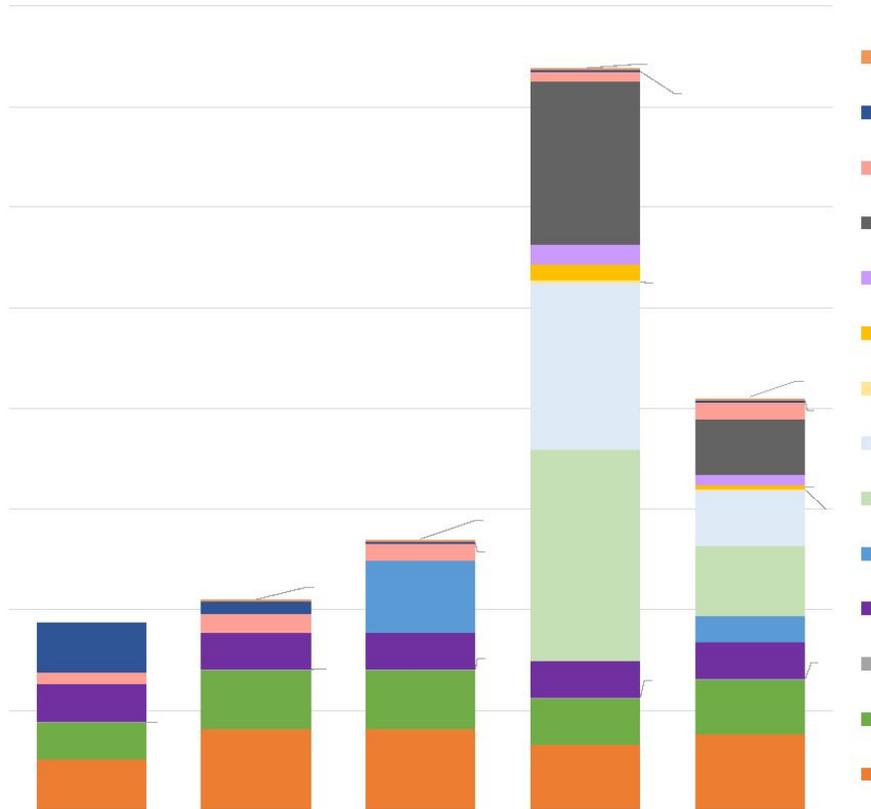
Primary Energy



Source scenario

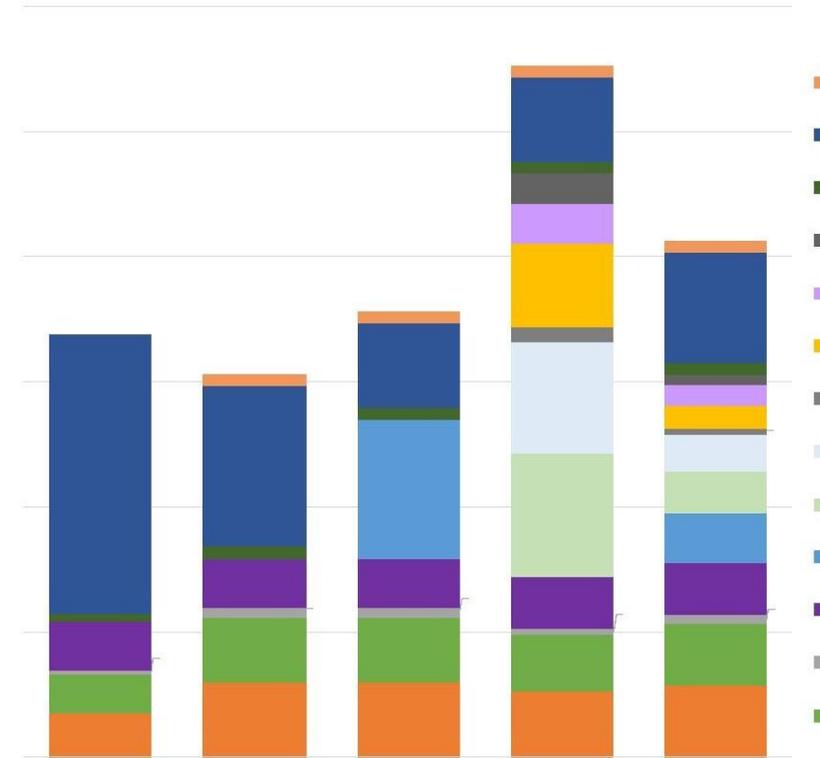


INVESTMENT AMOUNT BY SCENARIO



By 2050, total energy-sector investment under the BAU scenario amounts to USD 18.7 billion, while investment under the S-B scenario reaches USD 21 billion – a difference of USD 2.3 billion.

ELECTRICITY GENERATION COST
(including generation and transmission expenses)

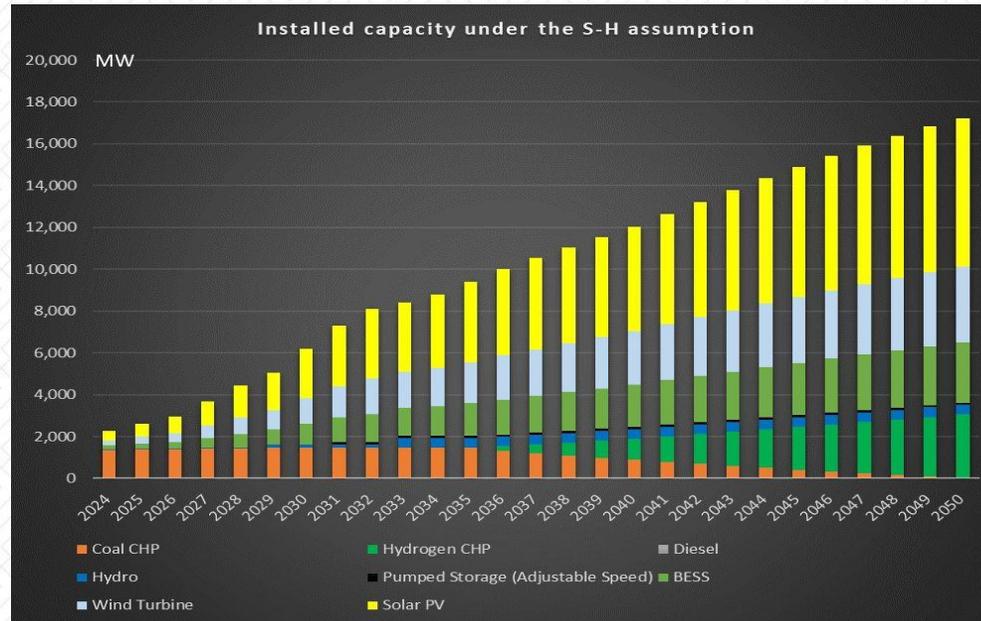
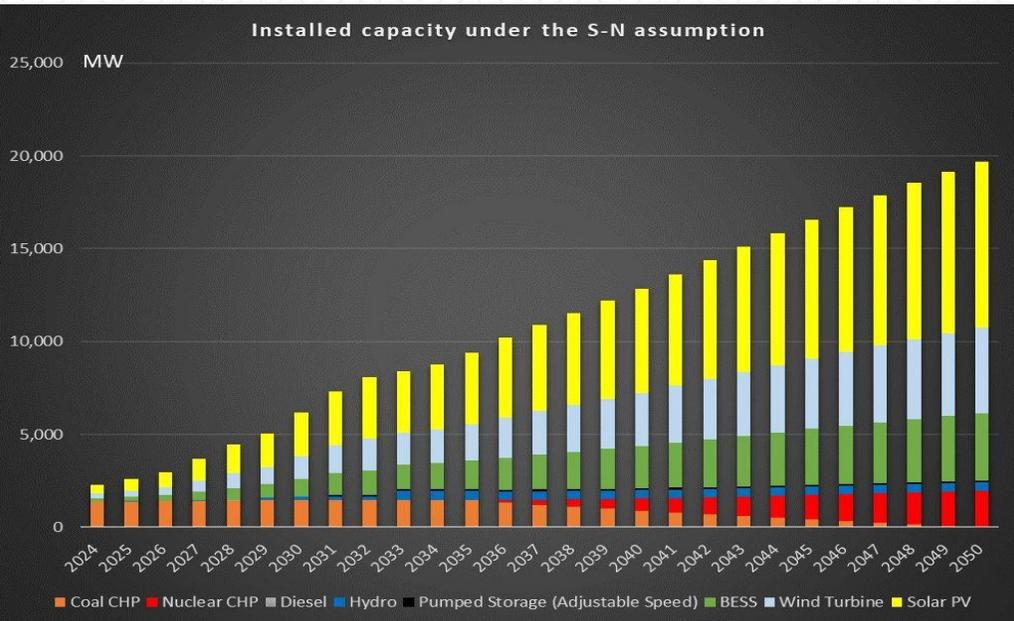
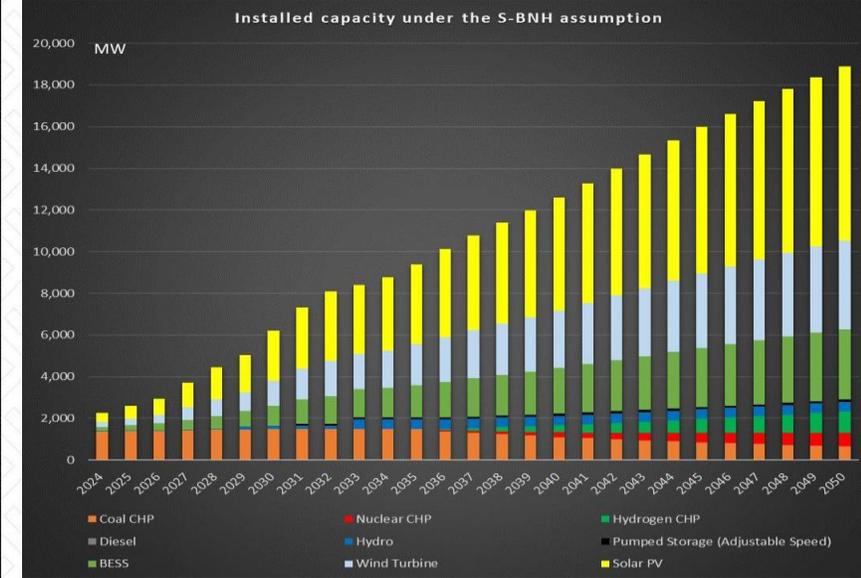
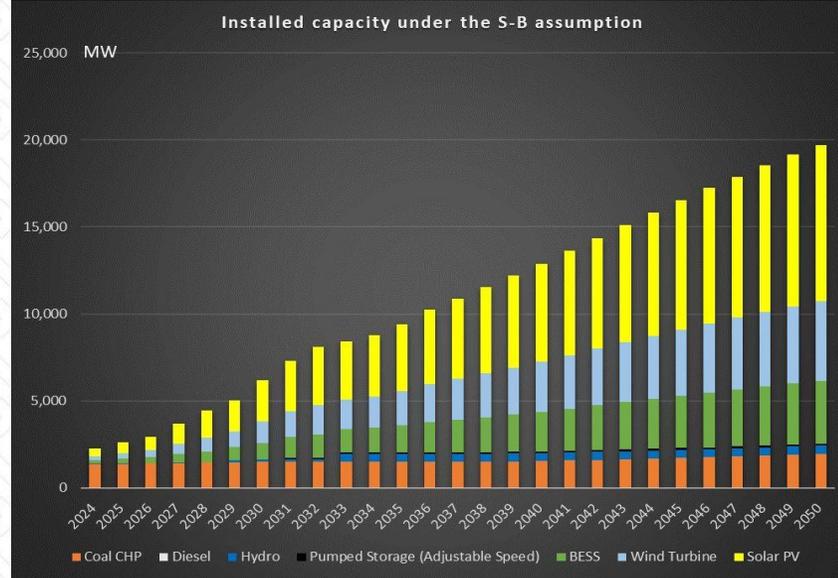
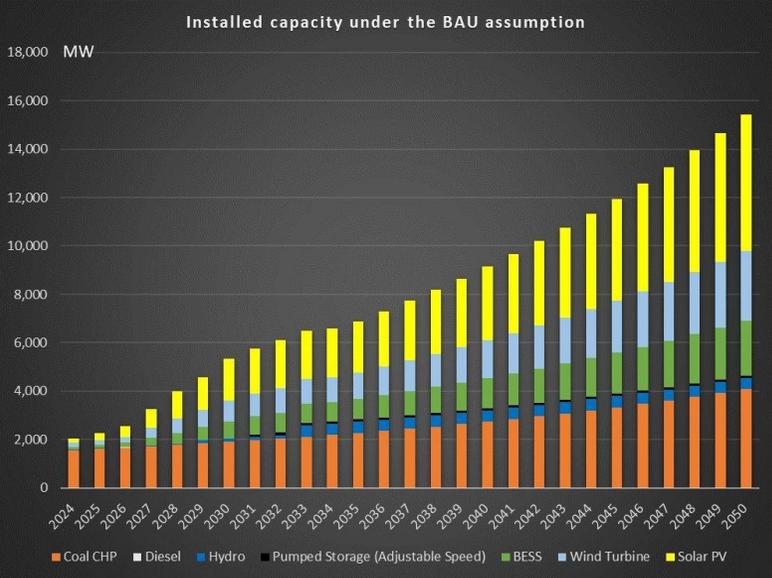


By 2050, the tariff under the S-B scenario is highly likely to be lower than the tariff under the BAU scenario.

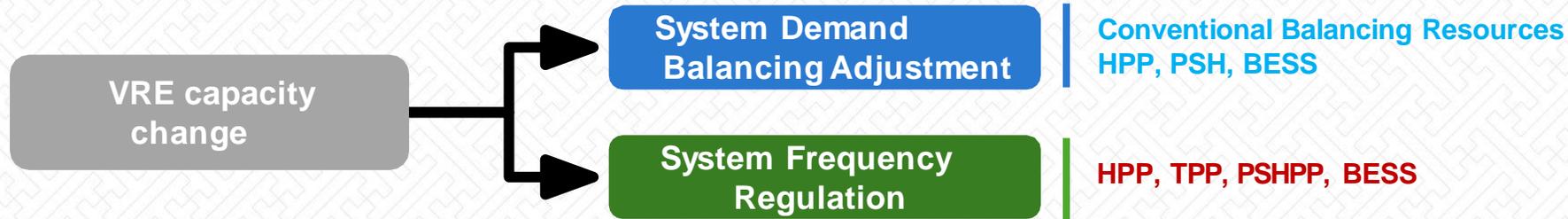
FORECAST OF INSTALLED ELECTRICITY GENERATION CAPACITY



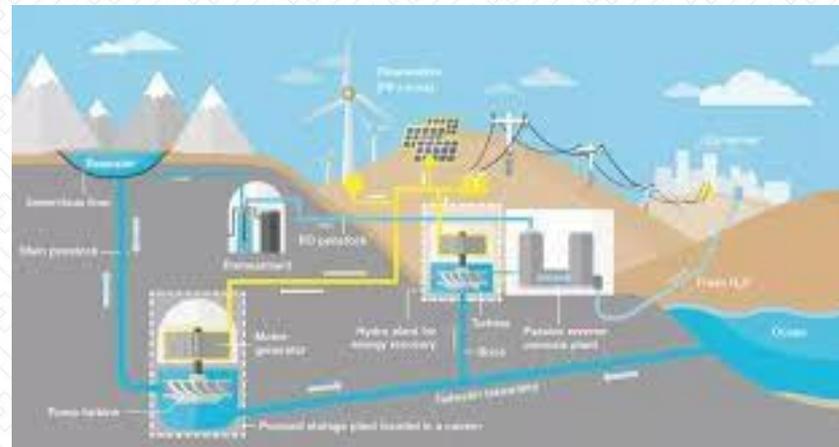
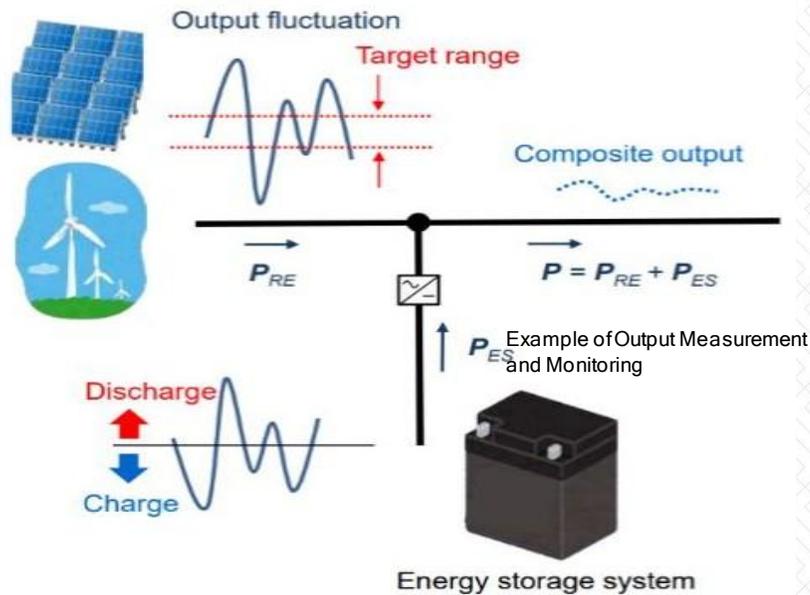
GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY



RESULT
CO2 emissions:
-S-B: 57.1%,
-S-N: 89.5%,
-S-H: 89.5%,
-S-BNH: 78.7%.



BESS has no limitations regarding installation location and can be constructed quickly and easily. Therefore, it is recommended to deploy BESS as a first priority. There are two types of control methods: one measures and manages VRE output fluctuations, while the other measures and manages system frequency.



- **BESS with Frequency Regulation Function:** A battery energy storage system capable of rapidly charging and discharging to regulate short-term frequency fluctuations.
- **Variable-speed Pumped Storage Hydropower Plant (PSH):** A pumped storage power system capable of adjusting voltage during pumping operations by controlling the rotational speed of the turbine-generator motor, thereby varying the volume of water lifted to match grid demand and supply conditions.

Source by JICA (Data Collection Survey on Promotion of Energy Transition in Mongolia Draft Final Report)

NDC 3.0 target:

GHG emissions reduced to 24.7 million tCO₂-eq by 2035

Energy sector – 33.4%
/8.265 ml.t/

Under conditioned measure 1: the plan is to achieve this target by commissioning two pumped storage hydropower plants in the Central Region. Investment is required.

SOLAR AND WIND POWER PLANTS AND BATTERY ENERGY STORAGE SYSTEMS TO BE DEVELOPED THROUGH COMPETITIVE SELECTION



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY

Lot 1

60 MW **50 MW**
 180 MW.h

10 MW **10 MW**
 20 MW.h

Connection point : Bayankhongor substation

20 MW **15 MW**
 60 MW.h

Connection point : Bayan-Ulgii urt substation

30 MW **25 MW**
 100 MW.h

Connection point : Umnugobi substation

19.8 MW **4 MW**
 8 MW.h

Connection point : Myangad substation



ASIAN DEVELOPMENT BANK



Renewable Energy Project to Be Implemented Through Competitive Selection



Renewable Energy Project to Be Implemented in Cooperation with the Asian Development Bank

Lot 2

55 MW **15 MW**
 57 MW.h

15 MW **3 MW**
 9 MW.h

Connection point: Undurkhaan substation

10 MW **2 MW**
 8 MW.h

Connection point: Baruun urt substation

30 MW **10 MW**
 40 MW.h

Холболтын цэг: Чойбалсан д/ст



Lot 3

100 MW

Connection point : Mandal substation

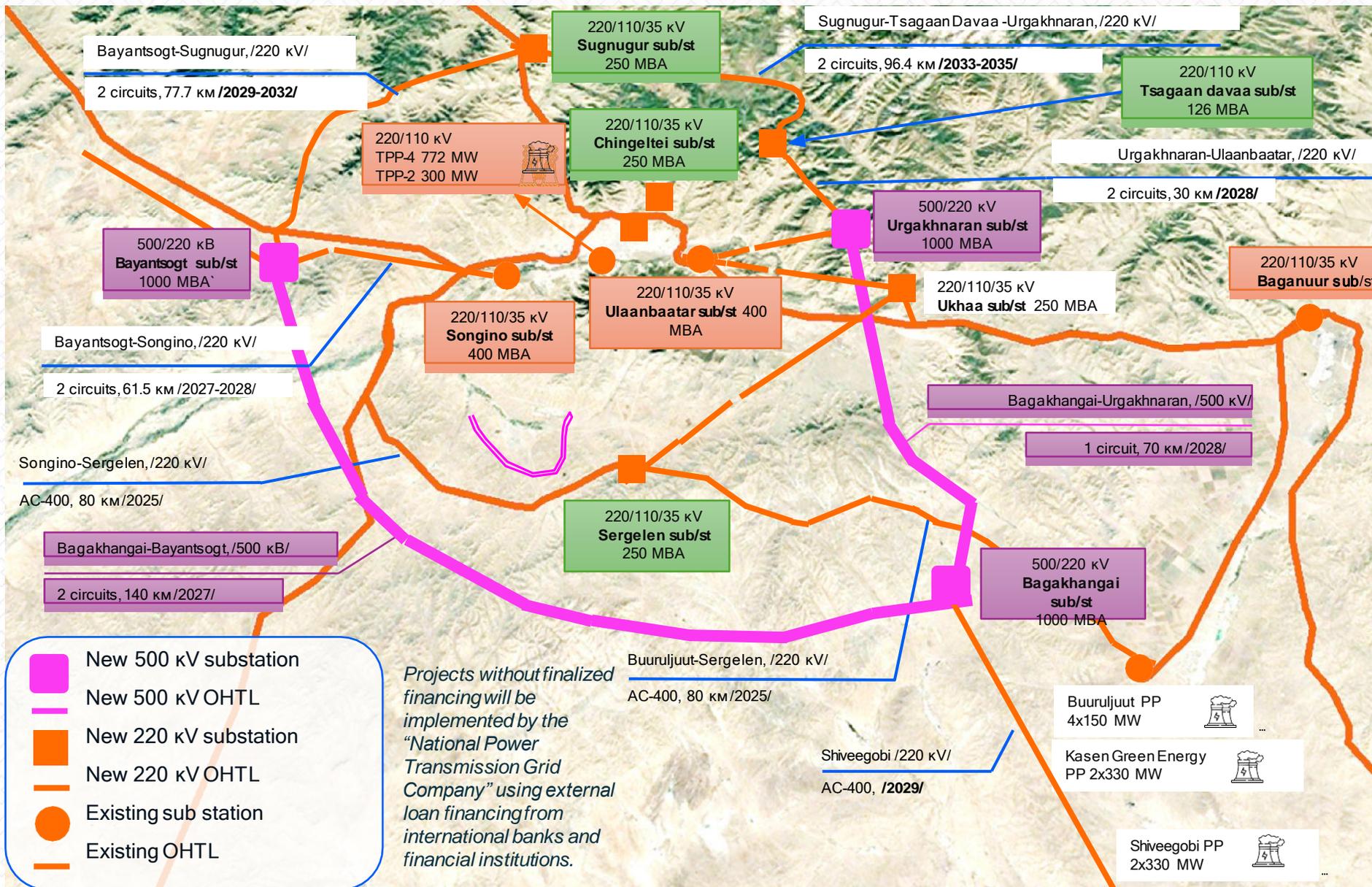


International Finance Corporation
WORLD BANK GROUP
Creating Markets, Creating Opportunities

PLANNED ENERGY SYSTEM AROUND ULAANBAATAR CITY



GOVERNMENT OF MONGOLIA
MINISTRY OF ENERGY



NEWLY PLANNED TRANSMISSION LINE SOURCE IN UB CITY

Source

+2070 MW

Buuruljuut PP	+450 MW
Bayan PP	660 MW
Shivee Ovoo	660 MW
TPP 5	300 MW

Transmission system

500 kV	220 kV
210 KM OHL	425.6 KM OHL
3 sub.st	5 sub.st



110 kV	35 kV
40.3 KM OHL	473.0 KM OHL
10 sub.st	16 sub.st



2026-2028 онд
1,000.1 ml \$



**THANK YOU FOR YOUR
ATTENTION!**

ariunbold@energy.gov.mn

