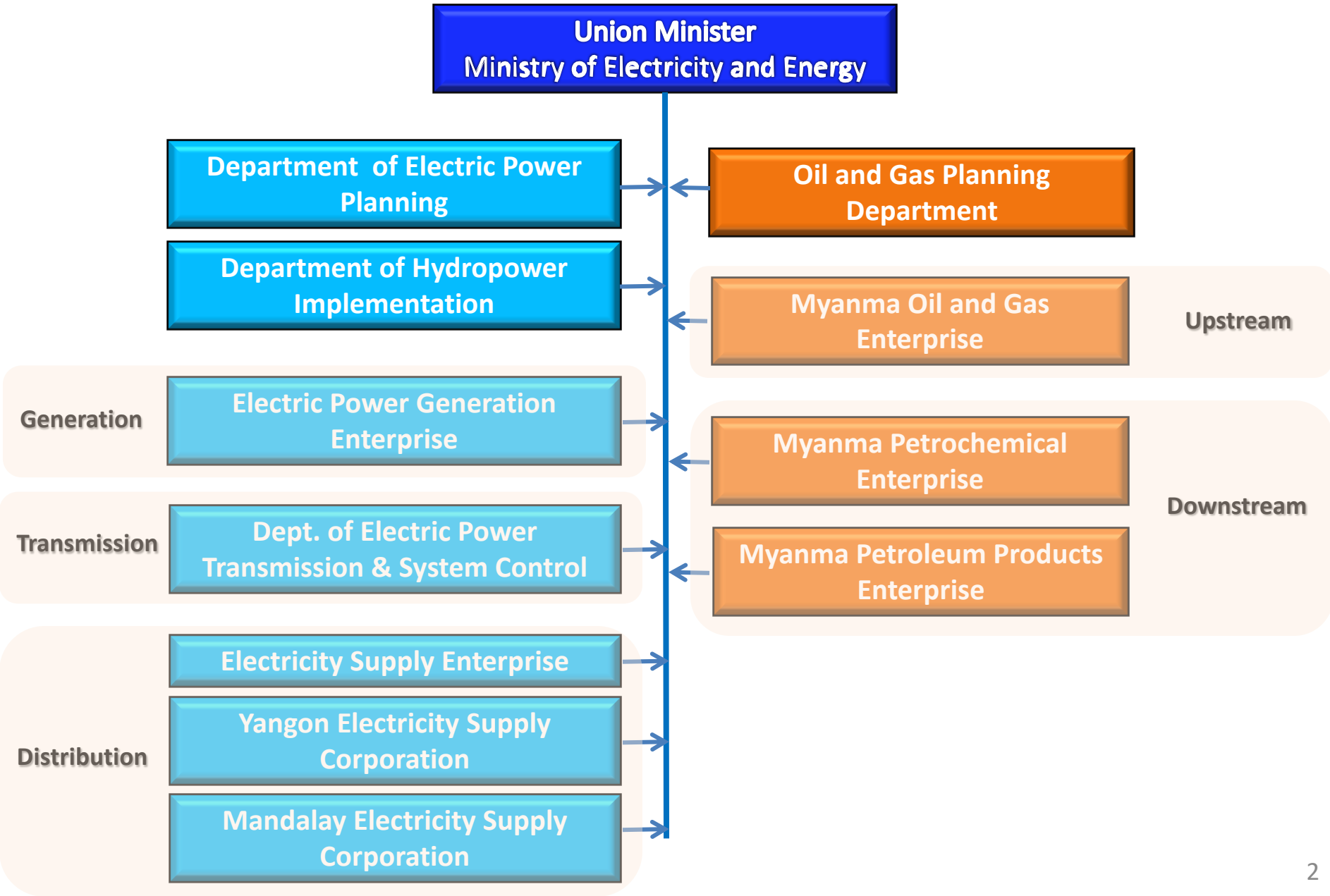
The Republic of the Union of Myanmar

Ministry of Electricity and Energy

Electricity Supply and Opportunities in Myanmar

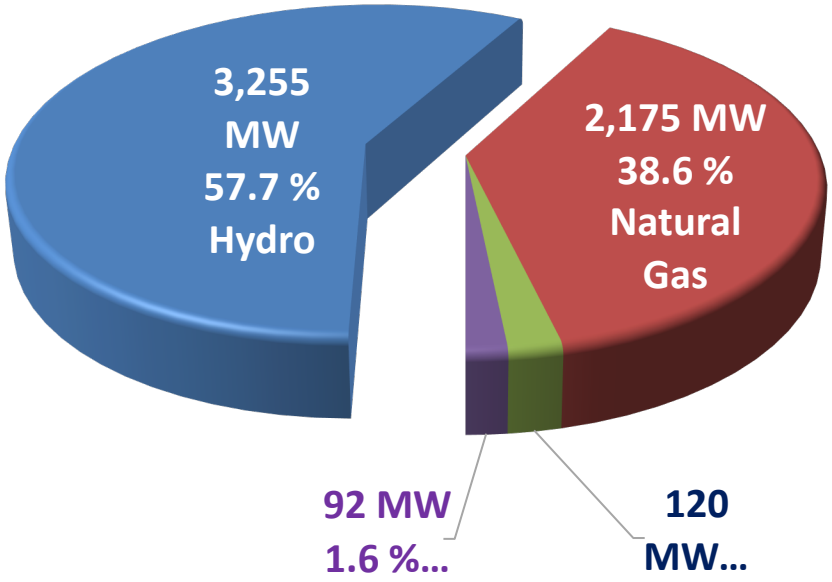
Ms Mi Mi Khaing
Director General
Department of Electric Power Planning

Organization Structure

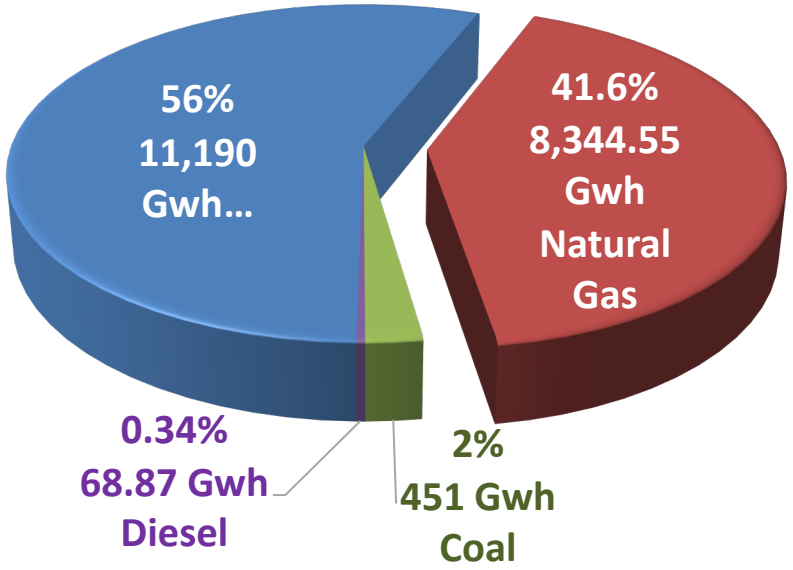


Electricity Generation as of 2017-2018

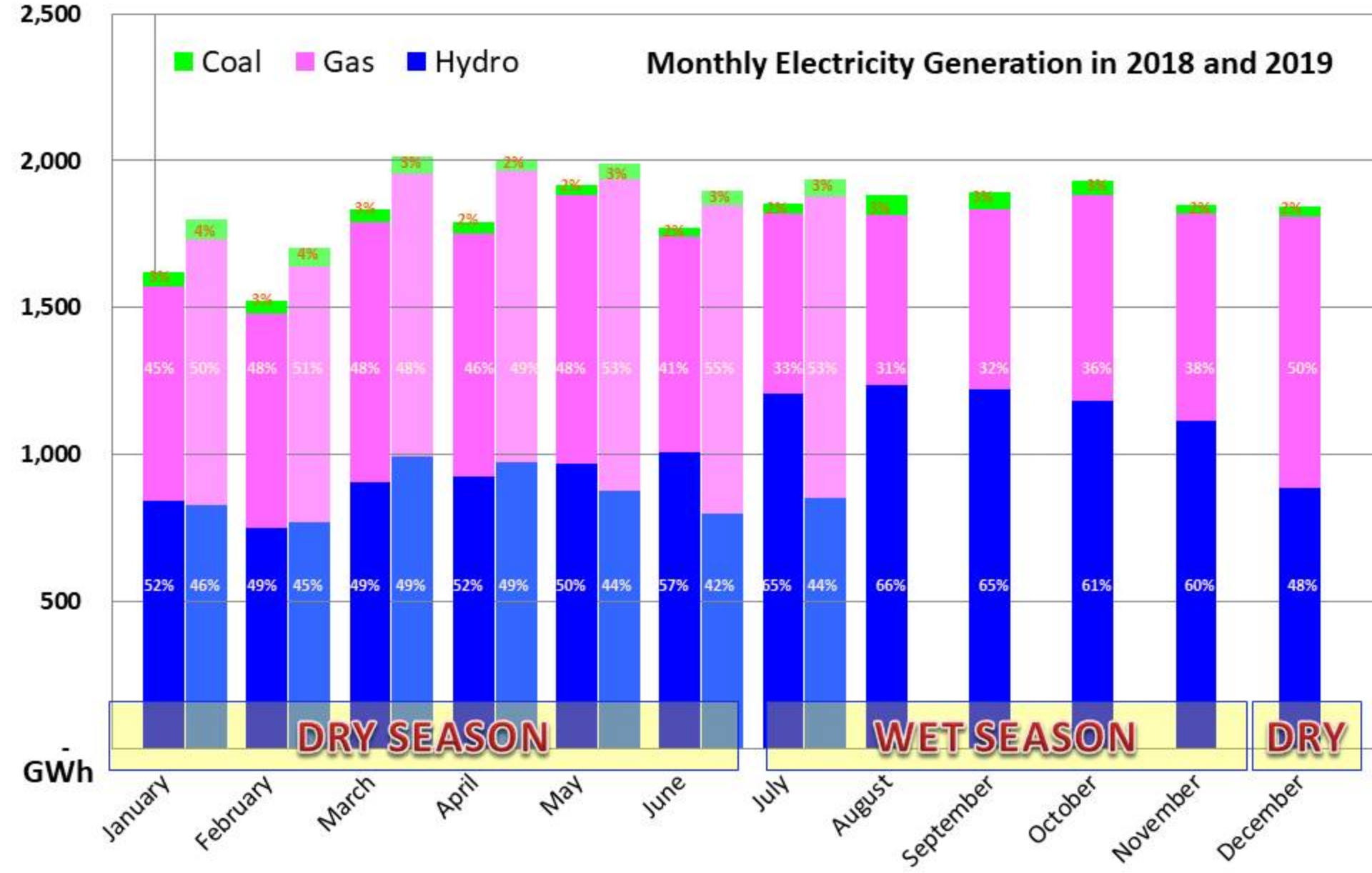
Installed Capacity (5,642MW)



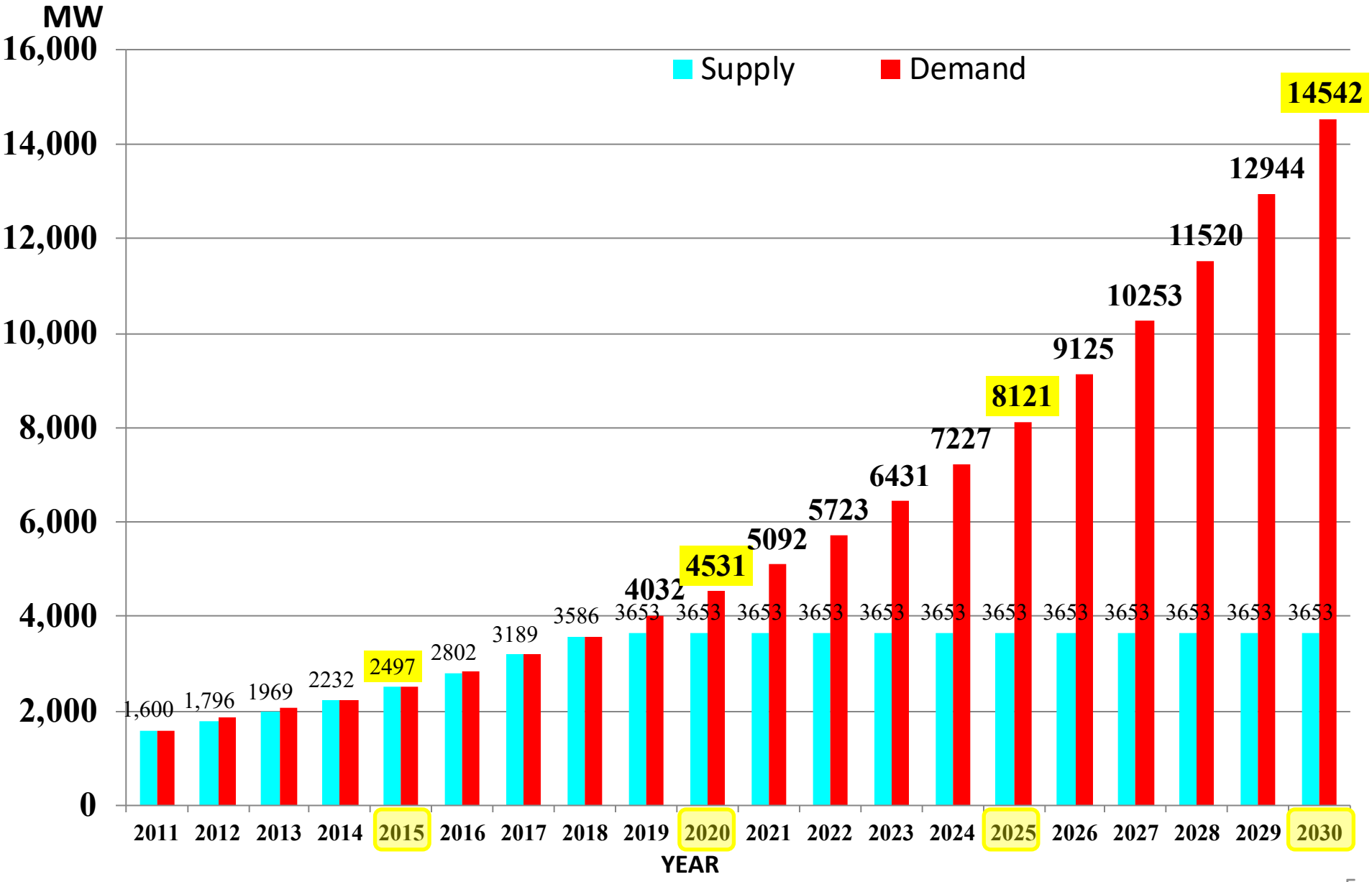
Generation (20,054 GWh)



Generation Mix Affected by Seasonality



Future Demand and Electricity Supply Gap



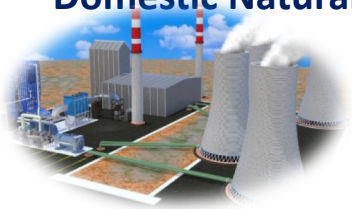
Energy Source Scenarios (by National Electricity Master Plan 2014)

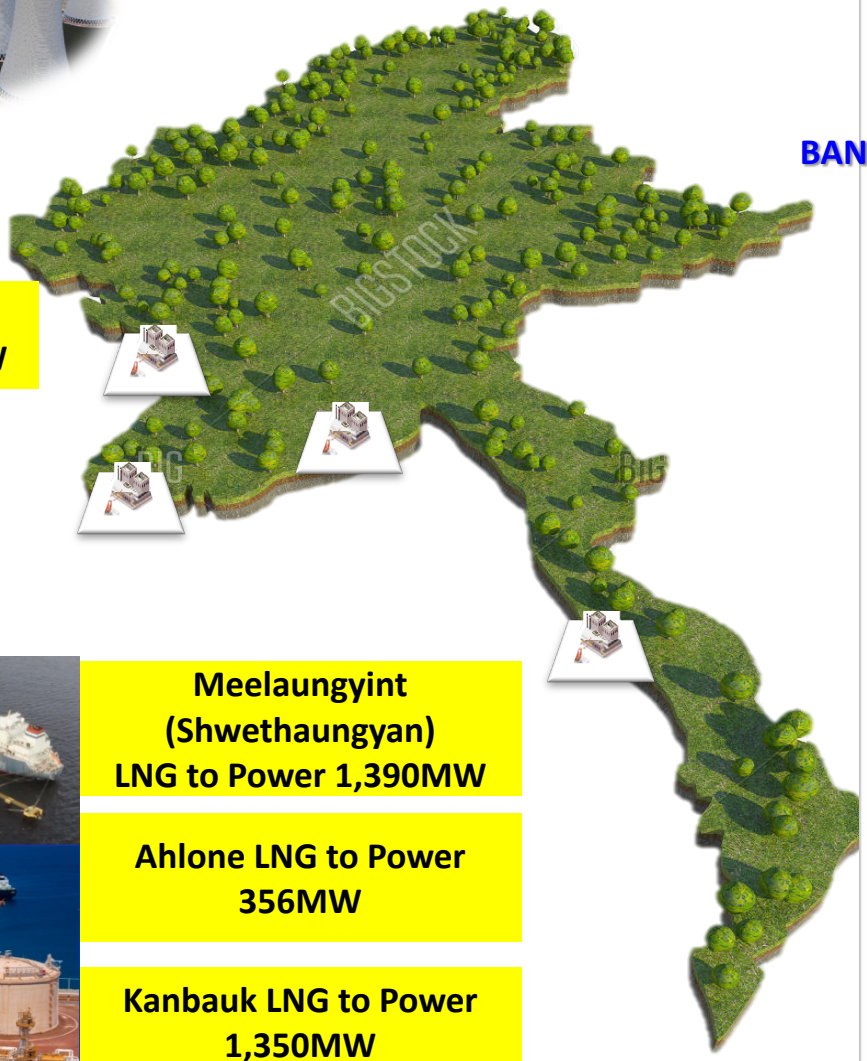
Energy Resources	Scenario		
	Option 1 Domestic Energy Consumption	Option 2 Least Cost	Option 3 Power Resource Balance
Hydro (Large)	42%	42%	6%
Hydro (Small &Medium)	24%	24%	32%
Gas	17%	9%	20%
Coal	10%	18%	33%
Renewable	7%	7%	9%
Total Installed Capacity	28,784 MW	28,552MW	23,594 MW

- Challenges on Environmental Protest for Large Dam and CO2 emission for Coal
- Alternated Option need to be consider ;
  - Importing Electricity from Neighbouring Countries,
  - Using Imported LNG

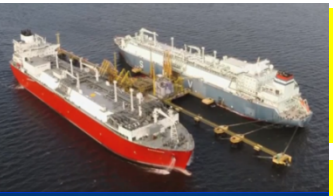
Domestic Natural Gas & Imported LNG

Domestic Natural Gas & Imported LNG





Kyaukphu CCGT 135MW

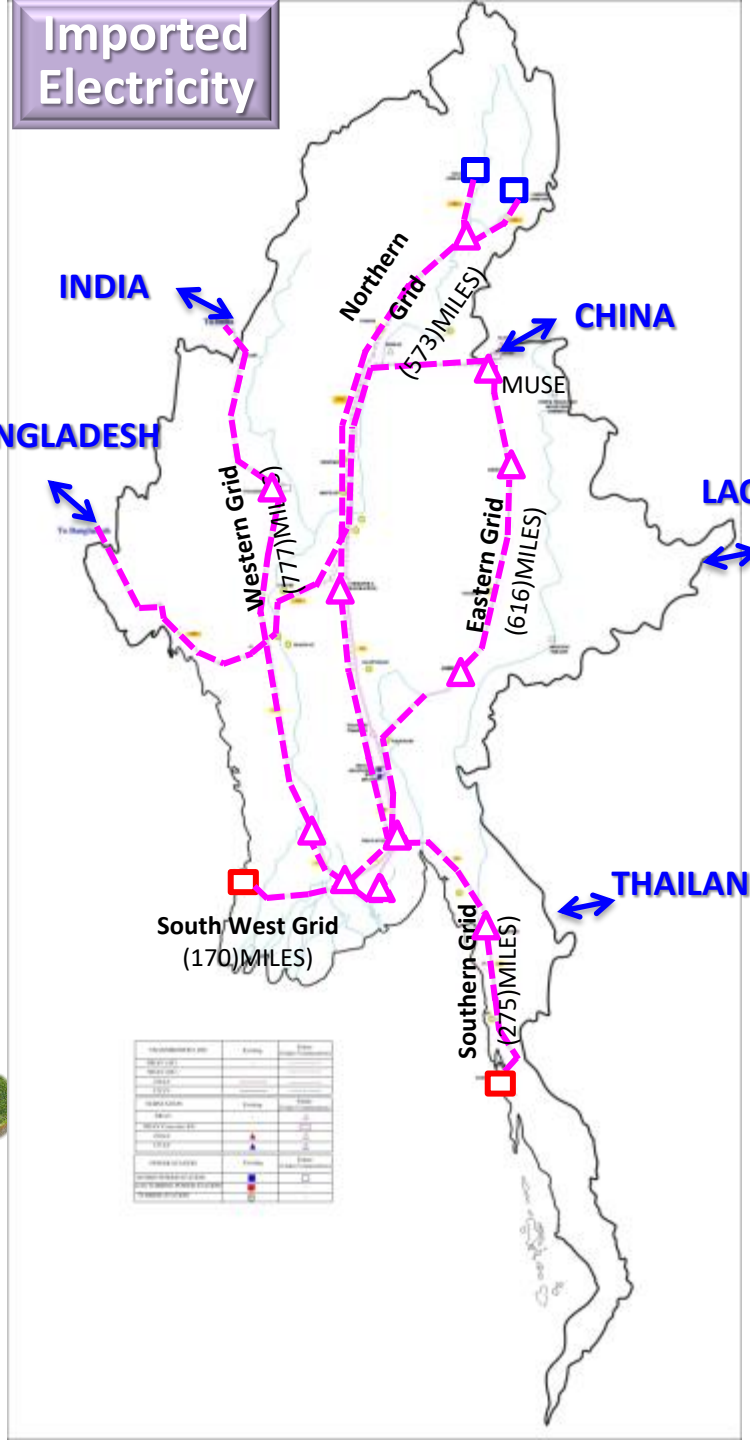


Meelaungyint (Shwethaungyan) LNG to Power 1,390MW

Ahlone LNG to Power 356MW

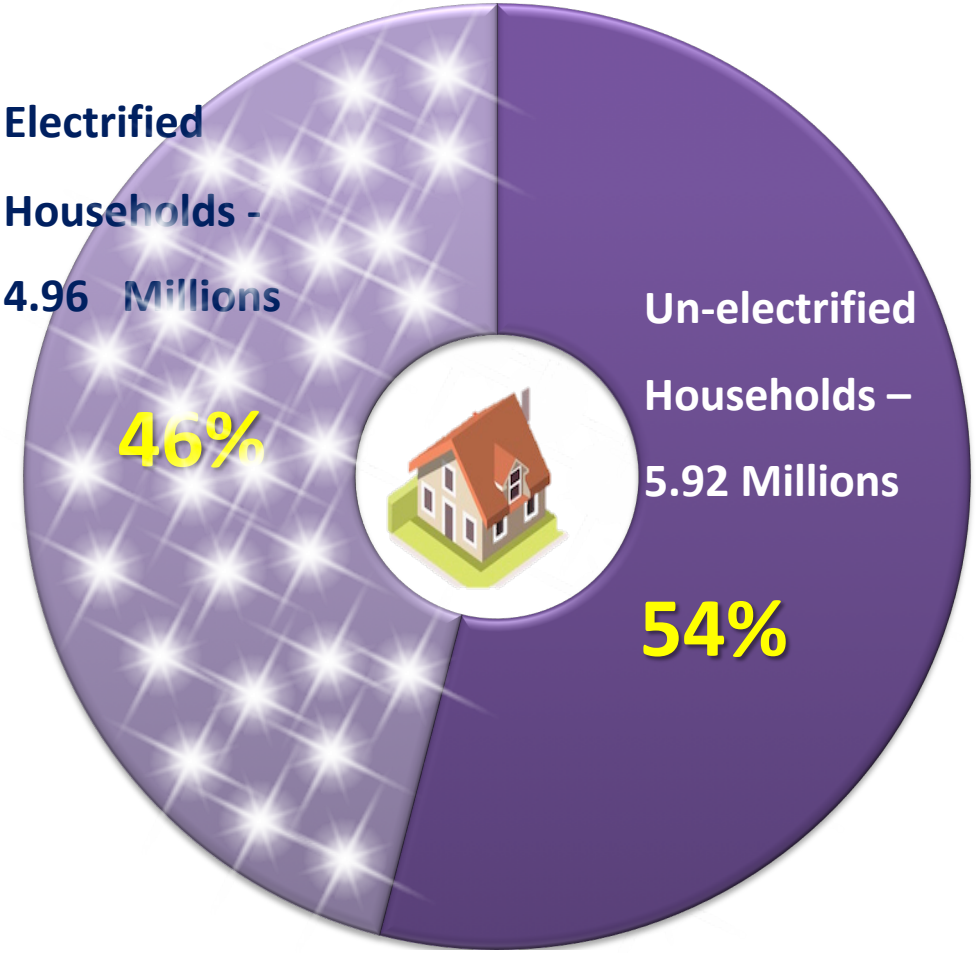
Kanbauk LNG to Power 1,350MW

Imported Electricity



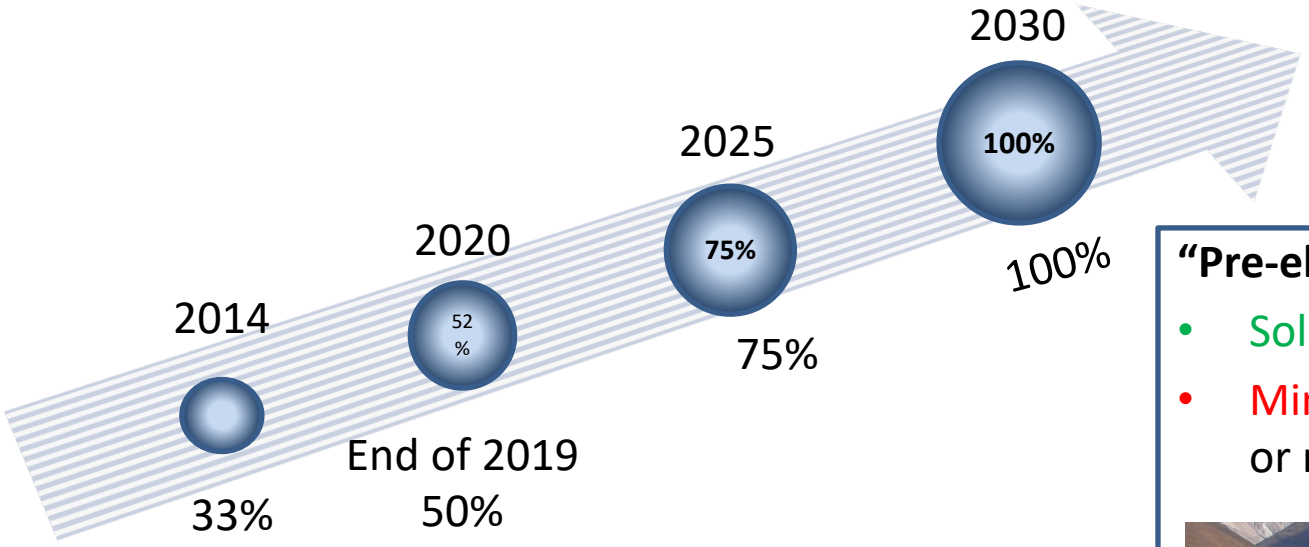
Access to Electricity

As of 2019 June



Target

Road Map and Rollout Plan for 100% Electrification

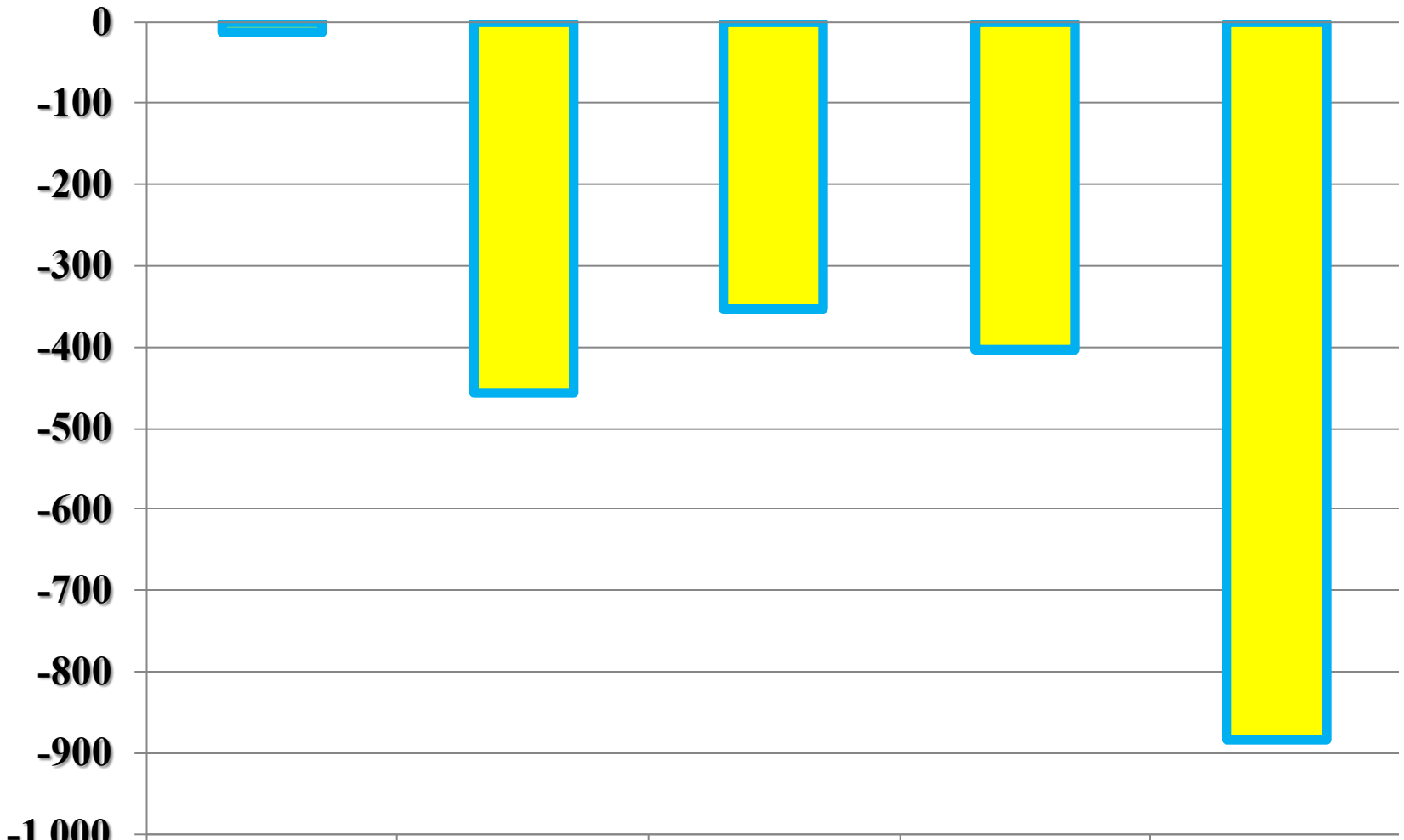


Systematic grid network rollout connection plan

“Pre-electrification” Options

- Solar home systems
- Mini-grids : solar, hybrid, diesel, or micro-hydro where available

Subsidization to Electricity Price



	2014-15	2015-16	2016-17	2017-18	2018-19
Billion Kyats	-13	-455	-352	-403	-883

Subsidization to Electricity Price

Before July 2019

Residential Use of Electricity	Tariff (kyats)
1kWh – 100kWh	35
101kWh – 200kWh	40
201kWh and above	50
Commercial and Industrial	
1kWh – 500kWh	75
501kWh – 10,000kWh	100
10,001kWh – 50,000kWh	125
50,001kWh – 200,000kWh	150
200,001kWh – 300,000kWh	125
300,001kWh and above	100

After 1st July 2019

Residential Use of Electricity	Tariff (kyats)
1kWh – 30kWh	35
31kWh – 50kWh	50
51kWh – 75kWh	70
76kWh – 100kWh	90
101kWh – 150kWh	110
151kWh – 200kWh	120
201kWh and above	125
Non-residential Use of Electricity [Commercial, Industrial and Others]	
1kWh – 500kWh	125
501kWh – 5,000kWh	135
5,001kWh – 10,000kWh	145
10,001kWh – 20,000kWh	155
20,001kWh – 50,000kWh	165
50,000kWh – 100,000kWh	175
100,001kWh and above	180

Challenging in Investment of Power Project

- to utilize least cost resource mix including both supply side and demand side option
- to be ensured reasonable price with fair competition and full accountability
- to be balancing of consumer interests and investor interests
- to minimize the Environmental and Social Impact

BOT or Concession Agreement as the guarantee

- ensure the availability, transferability and convertibility of foreign currency for its payment obligations
- repatriation of the profits of the Company
- pay, or cause buyer to pay,
  - ✓ any amount that is finally due and payable by buyer to the Company under the Power Purchase Agreement,
  - ✓ including any amounts payable directly to a Financing Party under Step-in Rights or under the Assignment of the Power Purchase Agreement.

THANK YOU