

Asia Pacific Energy Research Centre
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Thailand's Experience on Energy Security

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AGENDA

1

Thailand's Economic Situation

2

COVID-19 Recovery Measures

- Energy Transition (EE&RE) will continue

3

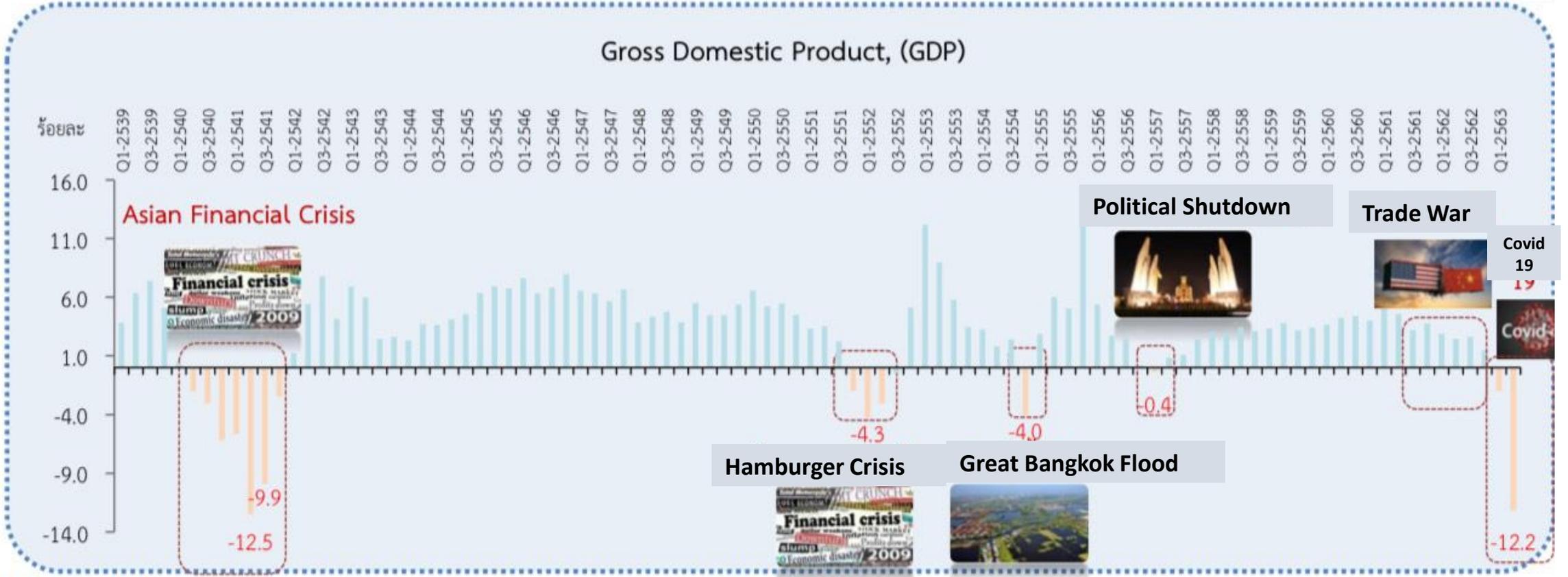
Lessons Learned for the future



Thailand's Economic Situation

GDP at Q2,2020 is lowest since 1998 (-12.5%)

หน่วย: ร้อยละ	2559	2560	2561			2562				2563					
			ทั้งปี	H1	H2	ทั้งปี	H1	H2	Q1	Q2	Q3	Q4	H1	Q1	Q2
GDP	3.4	4.1	4.2	4.8	3.5	2.4	2.7	2.0	2.9	2.4	2.6	1.5	-6.9	-2.0	-12.5
GDP_SA (QoQ)									1.0	0.7	0.0	-0.3		-2.5	-9.1



17 สิงหาคม 2563

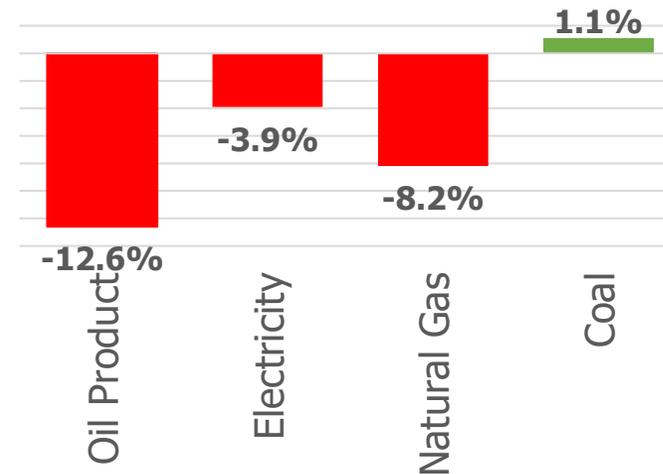
www.nesdc.go.th

Primary Commercial Energy



Final Energy

Overall Final Energy Consumption has decreased. Especially Jet fuel use could fall by 48.9% from the impact of COVID-19.



* Remark: Year on Year basis

*Jan-Jun 2020

Natural Gas

Natural Gas Supply

4,677 MMSCFD

↓ 7.2%

Domestic Supply

69%

3,224 MMSCFD

↓ 9.9%

Import

31%

1,453 MMSCFD

↓ 0.5%



Myanmar • Yadana 9%
• Yetagun 1%
• Zawtika 5%



LNG
16%

Natural Gas Demand

The use of Natural gas has decreased in all sector. Especially the transportation sector decreased by 28.8 percent and The use of Natural gas in Electricity production decreased by 7.4 percent.

↓ 8.2%
4,424 MMSCFD

* Remark: Year on Year basis

Use of Natural Gas

1 pic = 400 MMSCFD

NGV



3%

Industry



17%

GSP



20%

Electricity Production



*Jan-Jun 2020

60%



Electricity

Electricity Supply

Contracted Capacity

50,344 MW*

As of June 2020

Electricity Production

↓ 2.6%

105,231 GWh*

Export : 2,161 GWh

Electricity Consumption

Consumption

↓ 3.9%

94,198 GWh*

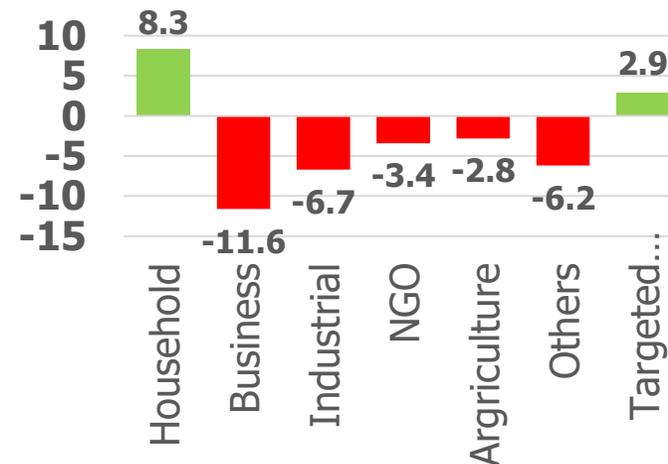
System Peak

30,342 MW

As of 13 March 2020 at 14.14 hrs.

ไต่รวม Peak ของ IPS

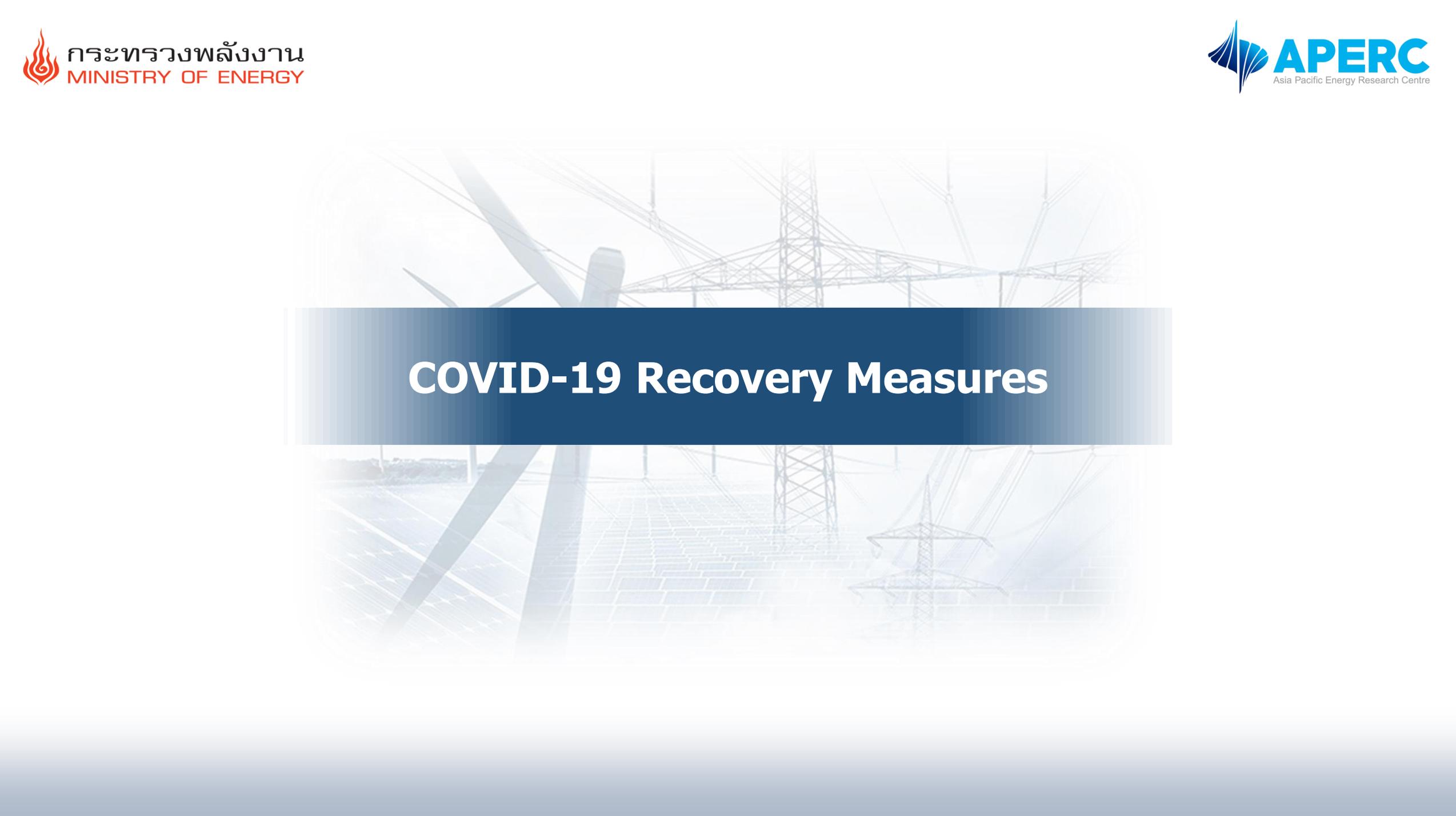
Use of Electricity



- **Remark : Year on Year basis**
- **Exclude IPS**



*Jan-Jun 2020



COVID-19 Recovery Measures

COVID-19 Recovery

1. Recovery Efforts

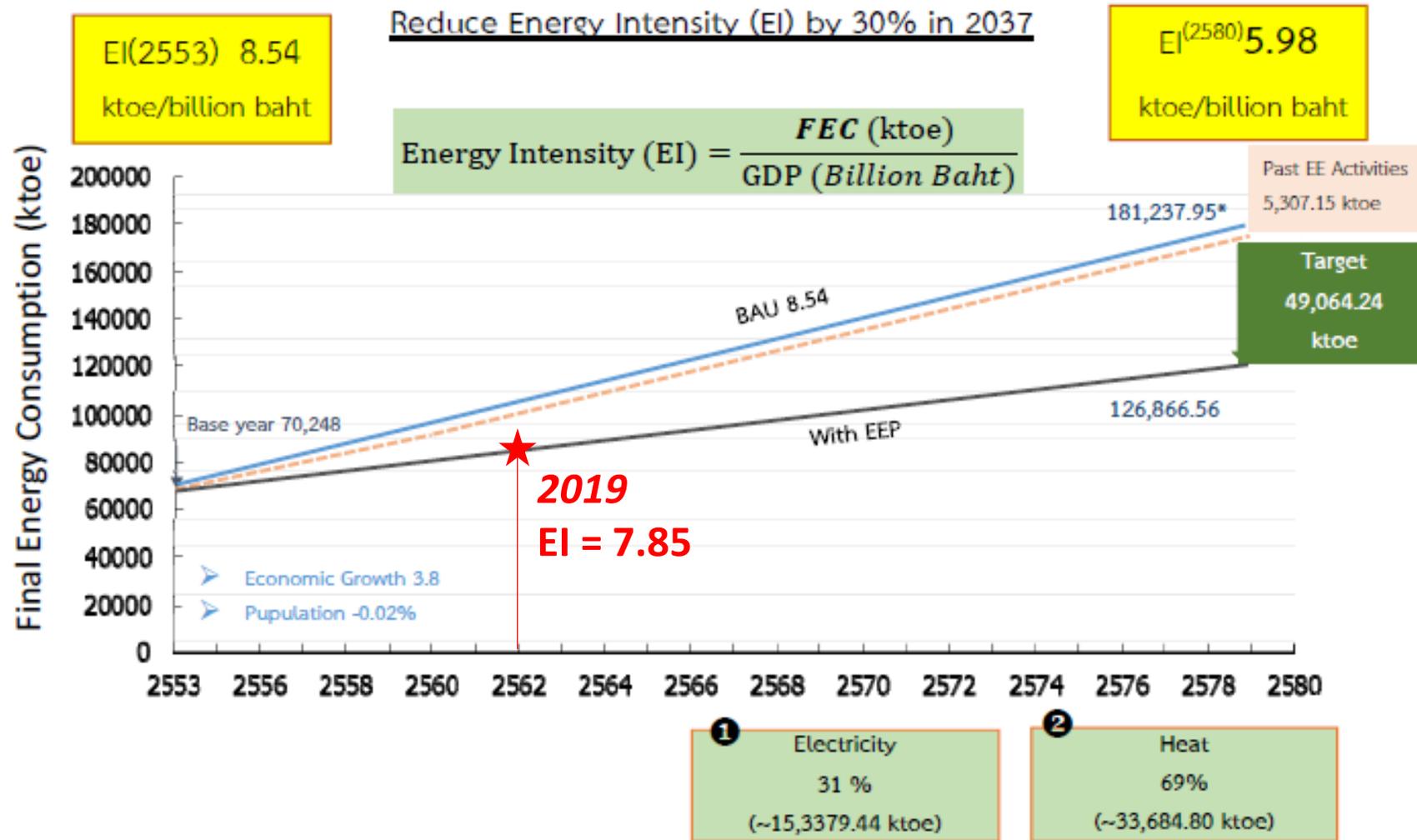
- 4 focus sector (Tourism/Health Care/Food/Global Supply Chain)
- 2 Segment Enablers (Workforces Reskill + Productivity)

2. New Business Investment

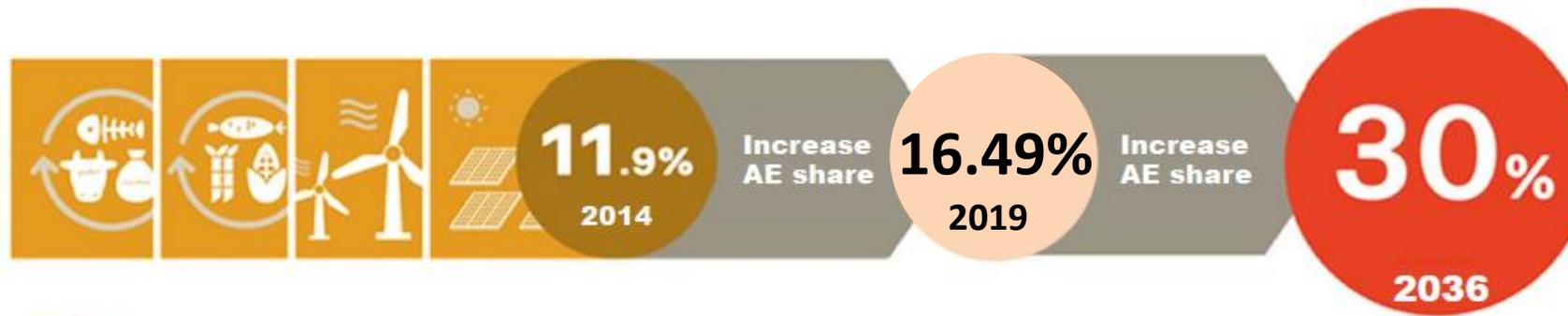
"Energy Transition "EE/RE" -> "Green Recovery Plan"



Thailand enforce EE measures throughout the country

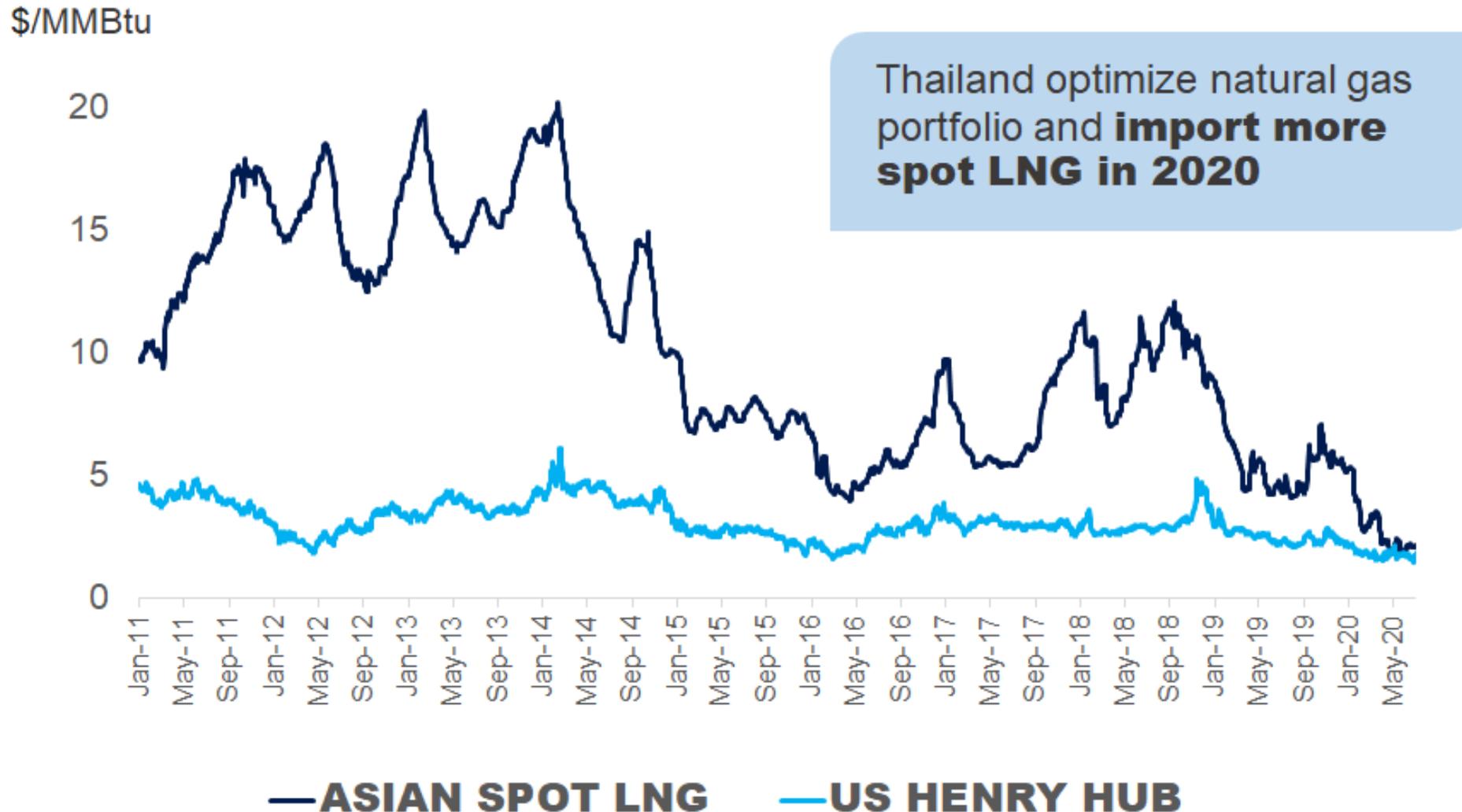


Thailand still affirms national RE targets within 2036



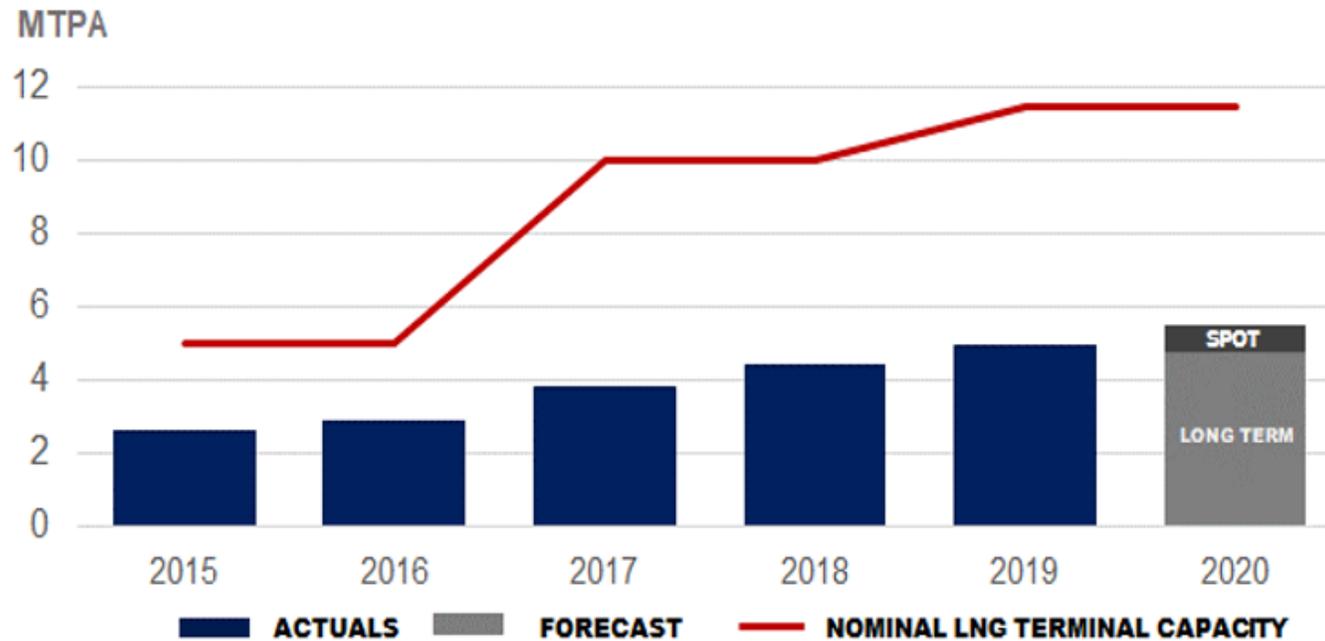
Power	Heat	Biofuel
AEDP's 2036 targets		
19,684.4 MW	25,088 ktoe	8,712.43 ktoe
20% of power production	36.67% of heat production	25.04% of fuel usage
Status at the end of 2019		
11,852.04 MW	8,525 ktoe	2,372 ktoe
22.68% of power production	24.52% of heat production	7.06% of fuel usage

Taking the opportunity of **very low** LNG spot price



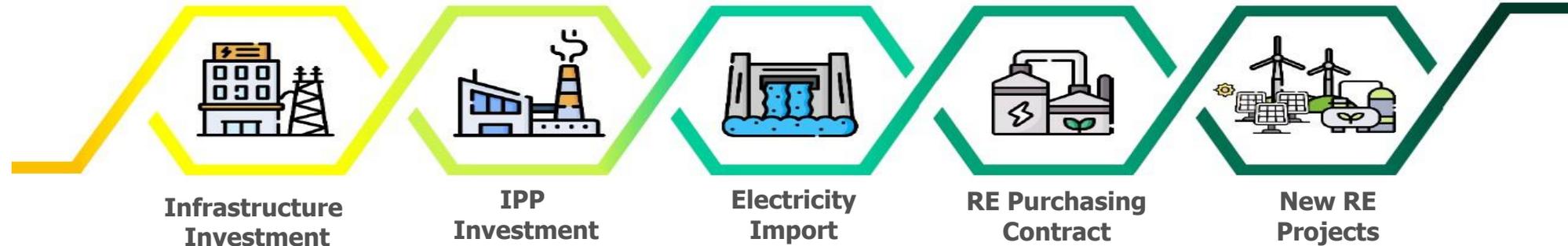
LNG Supply Department
PTT Public Co.,Ltd.

Thailand LNG Demand



Impact from COVID-19			
Before		After	
Gas Liberalization	+	More spot cargoes	+
Decline in Pipe-gas Supply	+	Vision on LNG-Hub	+
Firm Plan for More Terminal + FSRU	+	Decline in Power Demand	-

Maintaining Electricity Security for the Country



- **Jan – Jun 2020**

- Thailand imported electricity from Lao PDR and Malaysia 25,525 GWh

- Thailand exported electricity 2,161 GWh  **54%**

- **2020 forecast**

- Amount of electricity import increase by  **22%**

** Remark: Year on Year basis*

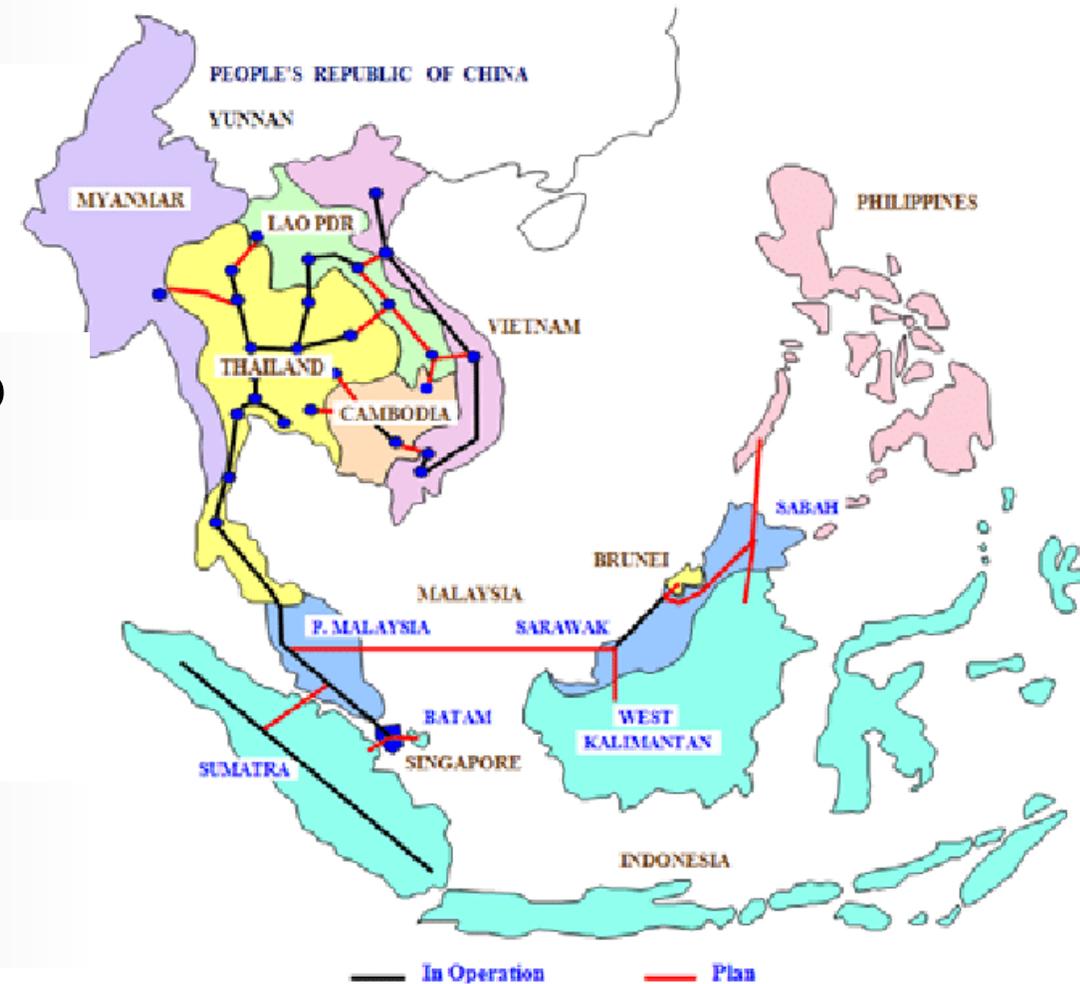


Lessons Learned for the future



Lessons Learned

- **"Security of Demand"**
 - Private Power Producers have not been affected by the COVID-19 pandemic.
- **Connectivity and Flexibility are keys to "Energy Security"**
 - Good mix of LNG can provide "Flexibility"
- **ASEAN Power Grid will help to lesson future crisis.**





THANK YOU