



Gulf Energy Development Public Company Limited

Q3 2021 Earnings Presentation

Investor Relations

November 2021

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Overview of GULF's Businesses



ENERGY



Gas-fired Power Generation



Thailand Oman

13,661 MW

- Independent Power Producer (IPPs) (10,861 MW)
- Small Power Producer (SPPs) (2,474 MW)
- Captive Power Plant (326 MW)



Gas



Thailand

- Natural Gas Distribution (32,000,000 mmbtu/year)
- LNG Terminal
- LNG Shipper Licenses



Renewable Energy



Thailand Vietnam Germany

837 MW

- Onshore / Offshore Wind (593 MW)
- Solar Farm (119 MW)
- Solar Rooftop (100 MW)
- Biomass (25 MW)

Potential:

- LNG-to-Power



Vietnam

- Hydropower



Laos

INFRASTRUCTURE



Thailand

- Industrial Port
- Deep Sea Container Port
- Intercity Motorways
- Electricity Distribution & District Cooling System

DIGITAL



Thailand



- 5G Technology
- Telecommunications
- Satellite
- Digital Platform

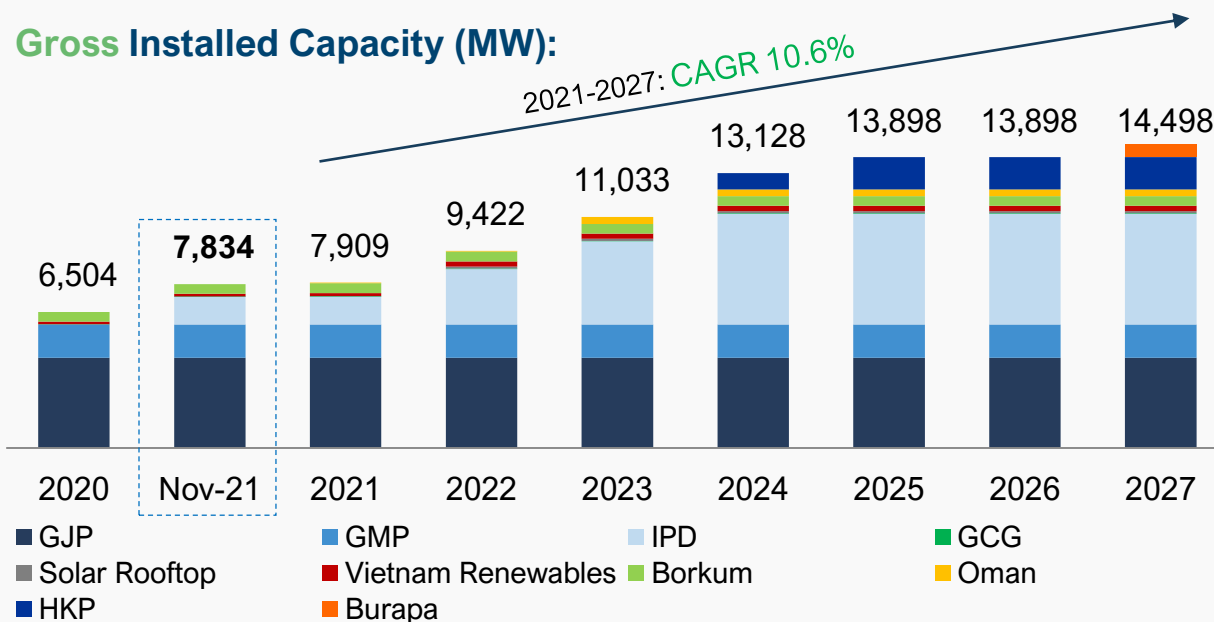
Potential:

- Data Center / Cloud Computing
- Smart Metering
- Smart Grid

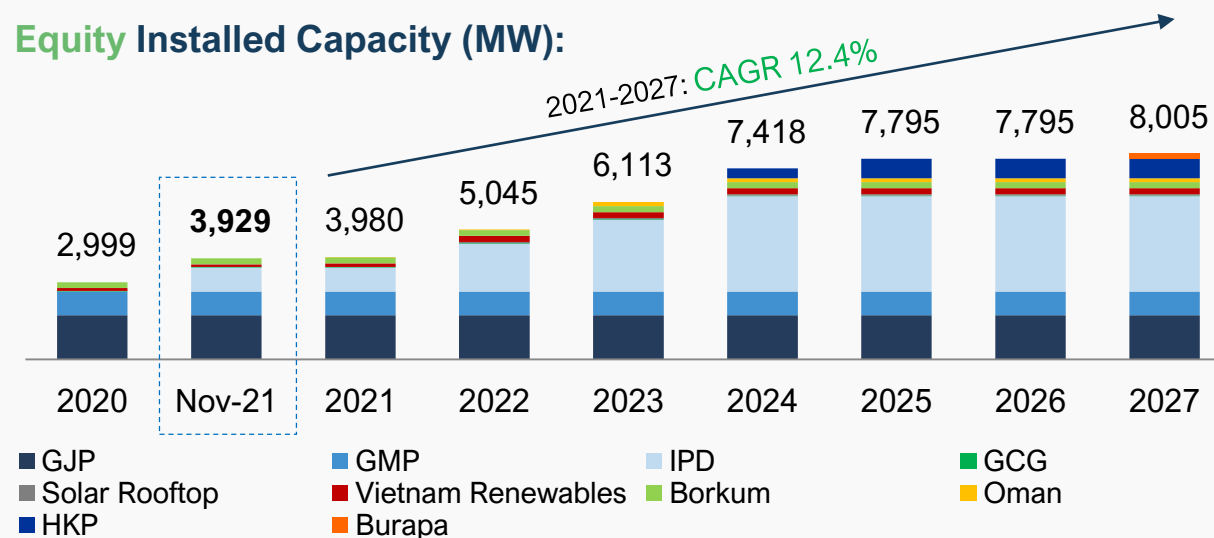
Capacity Growth & Target under Committed PPAs



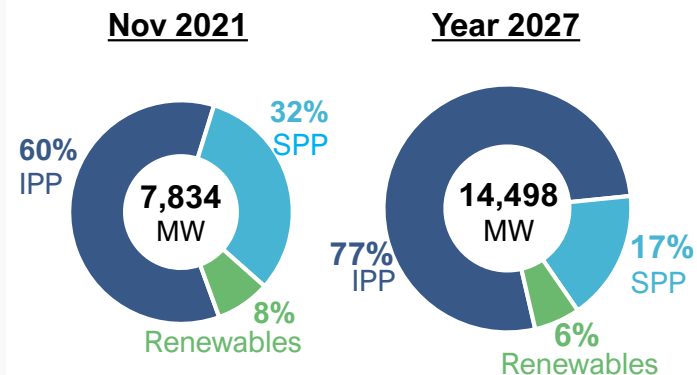
Gross Installed Capacity (MW):



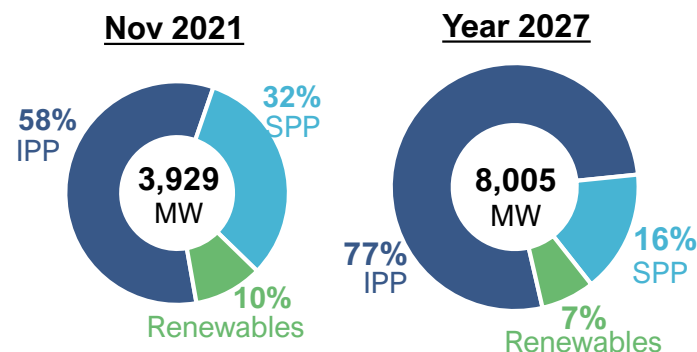
Equity Installed Capacity (MW):



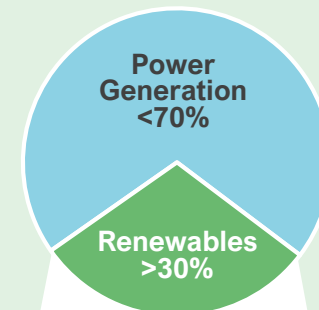
Gross Capacity by power plant type



Equity Capacity by power plant type



Year 2030 (Target)



Renewables capacity* growth from:



Hydropower projects



Renewables in Thailand, Vietnam, Europe, US & Asia, etc.

*gross installed capacity

Impact from COVID-19



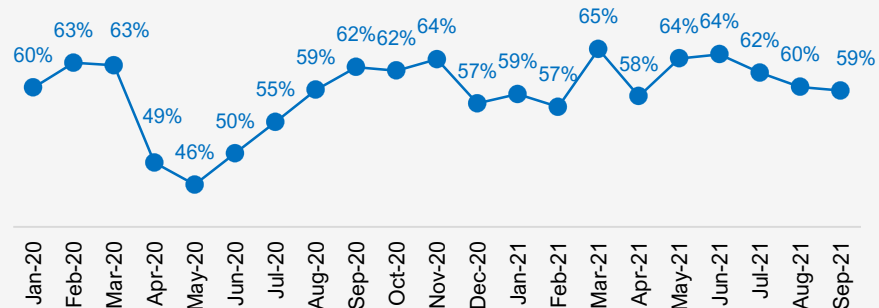
COVID-19 has limited impact to GULF as IU electricity demand is still growing



Limited impact to electricity sales in Thailand

- Electricity demand from IUs still growing from new customers and existing customers, especially from automotive, steel, electronic components and packaging industries
- Average **IU load factor** of **61% in 9M'21** vs **56% in 9M'20**
- Only 14% of electricity sold to IUs** across various sectors

Industrial Customers Load Factor



Duqm Refinery's construction delay caused postponement of DIPWP's SCOD

- Construction for DIPWP project progressed as planned; however, SCOD was postponed to early 2023 (from 2022) due to Duqm Refinery's construction delay from impact of COVID-19
- No impact to IRR from change in SCOD**



Delay in Mekong Offshore Wind project COD (128 MW)

- Delayed COD of Mekong Offshore Wind project due to nationwide lockdown
- Ph. 1 (30 MW): from Q2 2021 to Q4 2021, Ph. 2-3 (98 MW): from Q4 2021 to Q1 2022
- Tariff extension request has been submitted** to the Prime Minister for consideration



Temporary Curtailment of electricity sales from GTN1 & GTN2 solar projects

- Weaker electricity demand caused by the more severe COVID outbreak in Vietnam has led to temporary curtailment in 2021
- No major impact to GULF's electricity sales** (approx. 6% of total revenue from GTN1 & GTN2 solar projects was affected in Q3'21)

IPPs under development in Thailand: IPD (Total 5,300 MW)

Construction and development progress as planned for all projects



Gulf SRC



Installed Capacity:

2,650 MW

Contracted Capacity:

2,500 MW

Shareholding:

70% GULF (75% dividends)
30% Mitsui & Co.

Location:

WHA Eastern Seaboard Industrial Estate 1,
Chonburi province, Thailand

PPA:

Signed with EGAT for 25 years

GSA:

Signed with PTT

EPC:

Signed with Mitsubishi Power, MHI Power Project and STECON

LTSA:

Signed with MPW-PTC

Fuel Type:

Gas-fired

SCOD:

✓ Unit 1: 31 Mar 2021 ✓ Unit 2: 1 Oct 2021
Unit 3: 31 Mar 2022 Unit 4: 1 Oct 2022

Project Cost:

THB 50.0 billion

Status:

- Unit 3 under commissioning
- Unit 4: under construction

Gulf PD



2,650 MW

2,500 MW

70% GULF (75% dividends)
30% Mitsui & Co.

Rojana Rayong 2 Industrial Park,
Rayong province, Thailand

Signed with EGAT for 25 years

Signed with PTT

Signed with Mitsubishi Power, MHI Power Project and STECON

Signed with MPW-PTC

Gas-fired

Unit 1: 31 Mar 2023 Unit 2: 1 Oct 2023
Unit 3: 31 Mar 2024 Unit 4: 1 Oct 2024

Approx. THB 50.0 billion

Under construction: **44.1%** Completed

IPPs under development in Thailand: HKP & BPP



Construction and development progress as planned for all projects



Hin Kong Power



Installed Capacity:

1,540 MW

Contracted Capacity:

1,400 MW

Shareholding:

49% GULF
51% RATCH Group

Location:

Hin Kong subdistrict, Mueang district,
Ratchaburi province, Thailand

PPA:

Signed with EGAT for 25 years

Fuel Type:

Gas-fired

SCOD:

Unit 1: 1 Mar 2024 (770 MW)
Unit 2: 1 Jan 2025 (770 MW)

Project Cost:

[to be disclosed]

Status:

- **EIA approval obtained**
- Construction started in Nov 2021

Burapa Power



600 MW

540 MW

35% GULF
65% NPS

Khao Hin Son subdistrict, Phanom Sarakham district,
Chachoengsao province, Thailand

Signed with EGAT for 25 years

Gas-fired

1 Nov 2027

[to be disclosed]

- **EIA approval obtained**
- Start construction by 2025

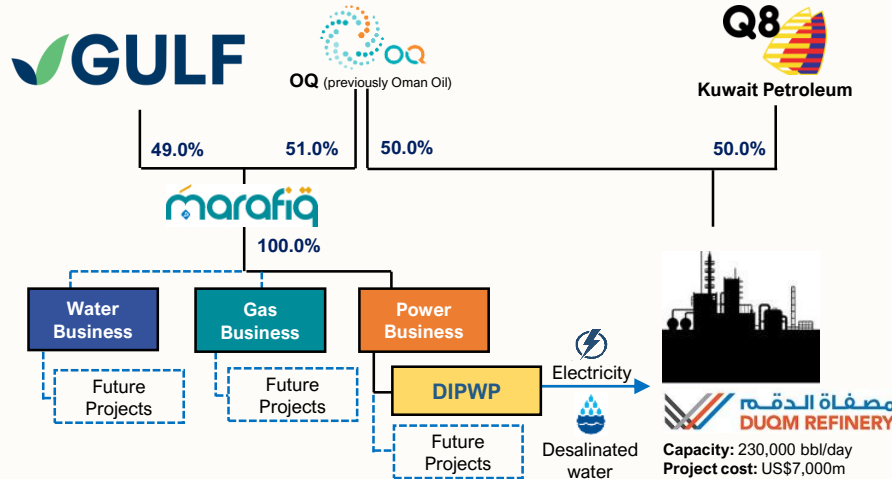
Note: Project progress as of October 2021

DIPWP Project in Oman

Potential to expand business in Duqm SEZ



Duqm Independent Power & Water Project (DIPWP)



Potential Projects

- GULF **directly holds 49% shares in Marafiq**
- Marafiq has **exclusive rights** to provide utility services in Duqm SEZ for **25 years** with a 25-year additional term
- Opportunities to jointly develop and operate **future utilities projects in Duqm SEZ** with Marafiq:
 - Generation and supply of electricity, water, steam, district cooling
 - Waste water and sewerage collection and treatment
 - Industrial waste management and waste incineration
 - Natural gas and industrial gases

Note: Project progress as of October 2021

Location:

Duqm Special Economic Zone, Oman

Installed Capacity:

Power: **≈ 326 MW**
Water: **≈ 1,667 m³/hour**

Contracted Capacity:

Power: **≈ 208 MW**
Water: **≈ 1,250 m³/hour**

Fuel type:

Gas/Diesel

Gas turbine:

SIEMENS SGT800

EPC:

Signed with consortium of 4 companies:
1) Alghanim International General Trading & Contracting Co. W.L.L.
2) Cobra Instalaciones y Servicios S.A.
3) Sojitz Corporation
4) Tecnicas De Desalinizacion De Aguas

PPA:

Signed with Duqm Refinery for 25 years
(+5 years renewal)

SCOD:

• Power Phase 1 (40 MW): Dec 2021
• Water: (50m³/h): Jan 2022
• Power Phase 2 (286 MW): Q1 2023

Project cost:

≈ USD 483 million

Status:

Under construction: **93.9%** Completed



Mekong Wind Project in Vietnam



Mekong offshore wind project in Vietnam slightly delayed due to national lockdown from COVID-19 pandemic



Mekong Wind

Installed
Capacity:

128 MW

Shareholding:

95% GULF
5% TTC Group

Location:

Ben Tre Province, Vietnam

Off-taker

Vietnam Electricity (EVN)

Tariff

US 9.8c./kWh

Fuel Type:

Offshore wind

Status & SCOD:

- **Phase 1 (30 MW):** SCOD Q4 2021
Under Commissioning
Overall progress **96.4%** completed
- **Phases 2-3 (98 MW):** SCOD Q1 2022
Overall progress **84.8%** completed

Project cost

USD 265 million



Map Ta Phut Ph.3 & Laem Chabang Ph.3 Projects



Public Private Partnership (PPP) in Thailand



Map Ta Phut Ph.3

**Consortium:**

70% GULF
30% PTT Tank Terminal

Investment Type:

PPP

Authority:

Industrial Estate Authority of Thailand (IEAT)

Scope:

- Ph.1: Land reclamation
- Ph.2: LNG terminal
(up to 10.8 MTPA)

Construction Period:

- Ph.1: 3 years (2021 – 2024)
- Ph.2: 2 years (2024 – 2026)

Operation Period:

30 years

Investment Cost:

Ph.1: THB 11.0 billion
Ph.2: THB [30.0] billion

Status:

- **PPP contract signed in Oct 2019**
- **EPC contract signed in Jul 2020**
- **Construction started in Q4'2021**

Laem Chabang Ph.3

**40% GULF**

30% PTT Tank Terminal
30% China Harbour Engineering

PPP Net Cost

Port Authority of Thailand (PAT)

- Design, build, O&M F1 and F2 Terminals
- 4 MTEU/year

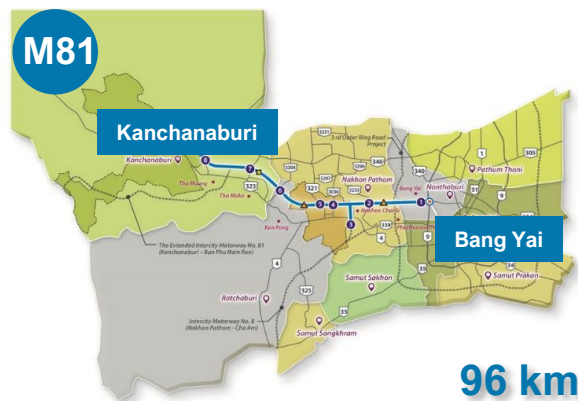
- F1: 3 years (2023 – 2025)
- F2: 3 years (2027 – 2029)

35 years

THB 30.0 billion

- **Cabinet approved PPP contract on 9 Nov 2021**
- PPP contract signing on 25 Nov 2021

M6 & M81 Motorway PPP Signing



Shareholding:

BGSR JV



40%



40%



10%



10%

M6 Bang Pa-In – Nakhon Ratchasima

M81 Bang Yai – Kanchanaburi

Investment Type:	PPP Gross Cost	PPP Gross Cost
Authority:	Department of Highways (DOH)	Department of Highways (DOH)
Distance:	196 km	96 km
Scope:	Phase 1: Design and Construction (3 years) - Toll Collection System - Traffic Management and Control System - Other Infrastructures Phase 2: Operation and Maintenance (30 years)	
Investment Cost:	≈ THB 7.0 billion	≈ THB 5.6 billion
D/E Ratio:	70:30	70:30
SCOD:	[2024]	[2024]
Status:	- PPP contract signed on 29 Sep 2021 - Expect to start construction in Dec 2021	

One Bangkok

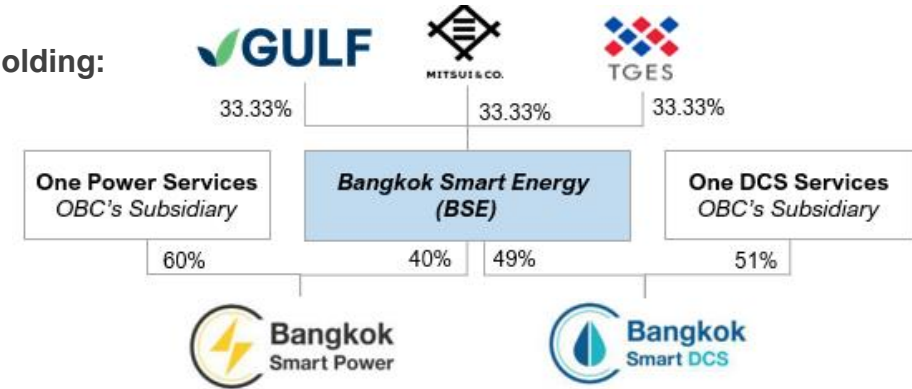
Private Partnership in Thailand



Nature of Business:	Electricity Distribution System (Power)	District Chilled Water Distribution System (DCS)
Installed Capacity:	240 MW	40,000 RT
Connected Capacity:	123 MW	36,000 RT
EPC Contract:	ABB	Thai Shinyo

Note: Project progress as of October 2021

Shareholding:



Investment Type: Private partnership

Off-taker: 100% by Customers in One Bangkok Project

Construction Period/ SCOD:

- 2021: EPC contract signing in Jan
- 2022: Power SCOD
- 2023: DCS Ph.1 SCOD (25,000 RT)
- 2024: DCS Ph. 2 SCOD (8,000 RT)
- 2025: DCS Ph.3 SCOD (2,000 RT)
- 2026: DCS Ph.4 SCOD – All facilities completion

Operation Period: 30 years from SCOD

Project Cost: THB 3,100 million

Status: Under construction:

- Power **32.96%** Completed
- DCS **14.94%** Completed

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Key Events in Q3'21



01

INTUCH Tender Offer



4 Aug 2021: GULF completed the tender offer of INTUCH shares with total shareholding of 42.25% (from 18.93% before the transaction)

02

Gulf Renewable Energy



13 Aug 2021: GULF established Gulf Renewable Energy to operate renewable energy businesses such as wind energy, solar farm, solar rooftop, biomass and hydropower

03

M6 & M81 Motorway PPP Signing



29 Sep 2021: BGSR 6 and BGSR 81 signed the Public Private Partnership (PPP Gross Cost) contracts with the Department of Highways to operate of M6 and M81 Intercity Motorway projects

04

Bond Issuance



29 Sep 2021: GULF issued debentures totaling THB 30,000 million with average interest rate of 2.5% per annum and average tenor of 6 years to institutional investors and high-net-worth individuals

05

Data Center Business



1 Oct 2021: GULF signed an MOU with Singtel to jointly develop a data center business in Thailand

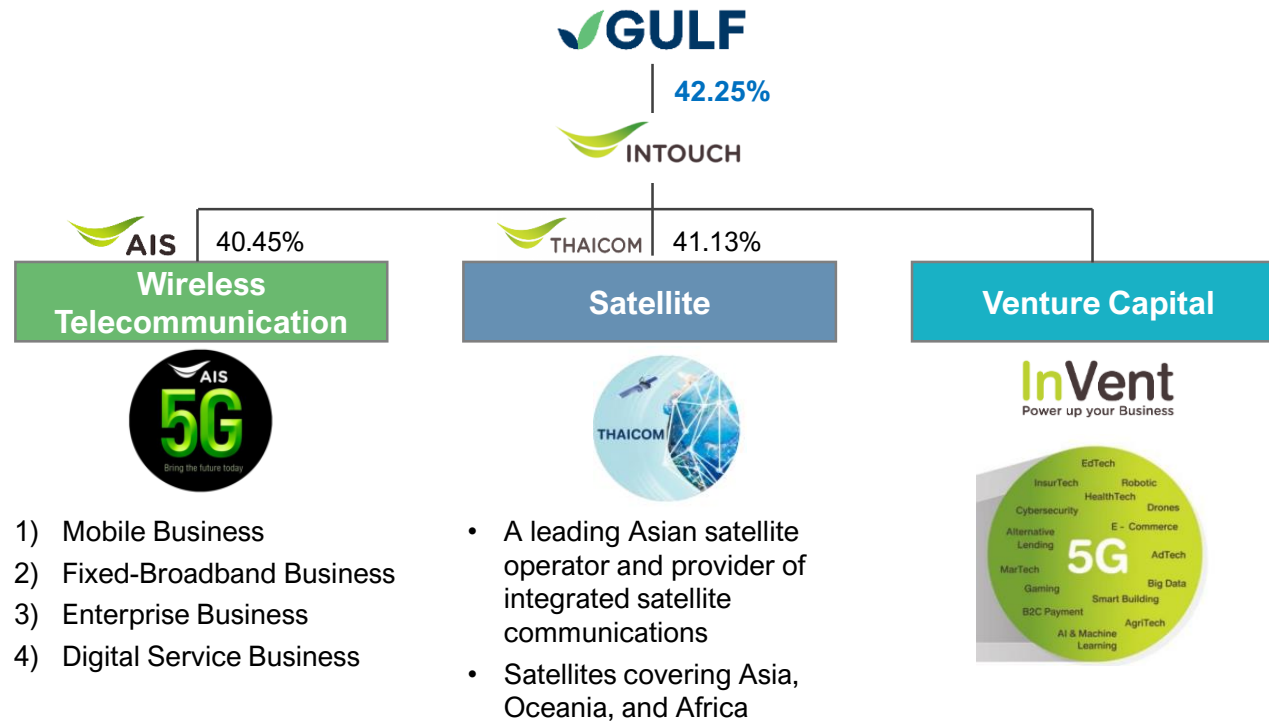
Investment in INTUCH



INTUCH Tender Offer

Total Shareholding:	42.25% (from 18.93% before the tender offer)
Tender Offer Period:	29 Jun 2021 – 4 Aug 2021
Offer price:	THB 65.00 / share
Investment Cost:	THB 48,612 million

Shareholding Structure



Investment Rationale

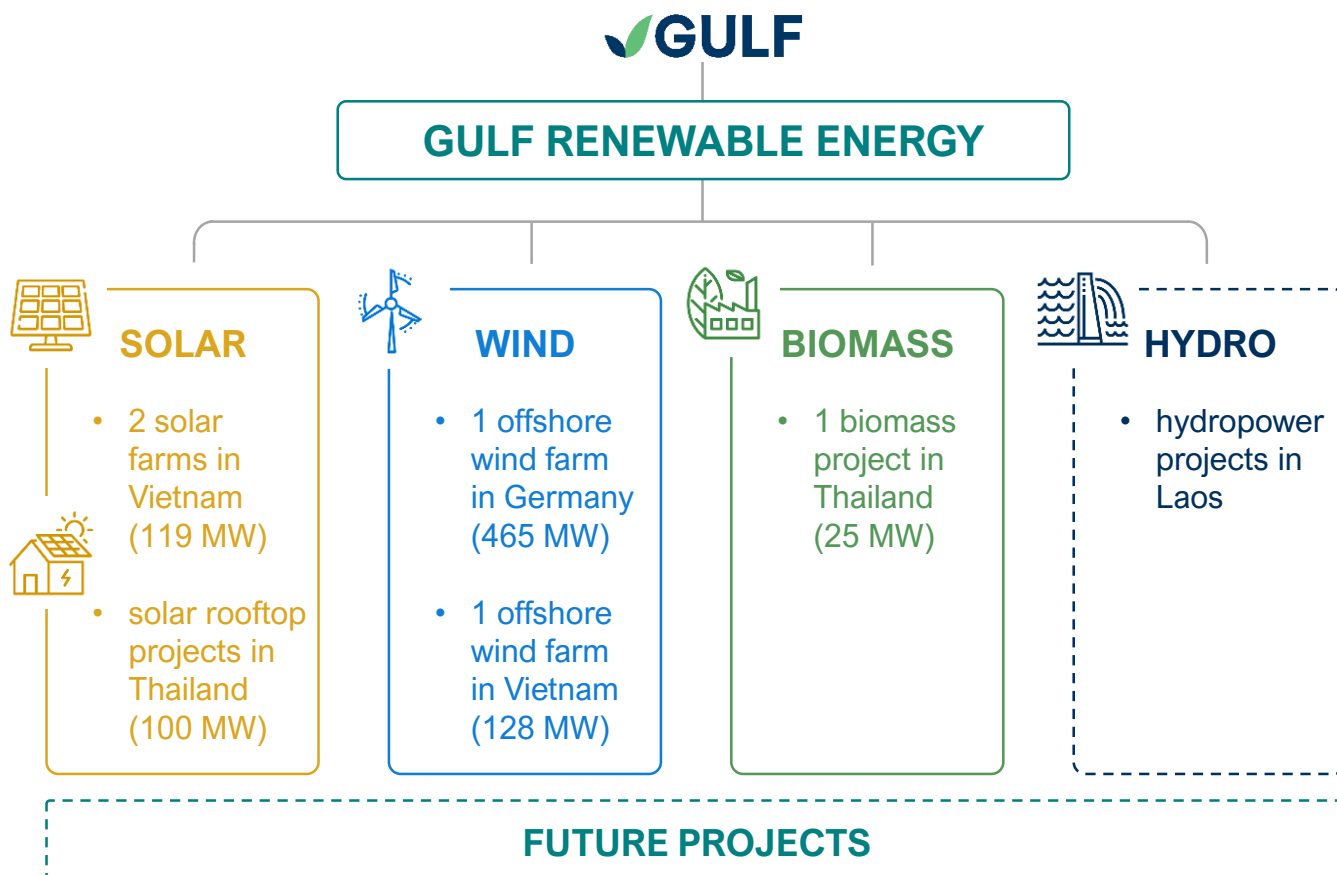
- Diversify our business from energy and logistics infrastructure into digital infrastructure
- Strengthen long-term earnings growth of GULF
- Provide GULF with stable dividend stream in the long run
- Potential synergy benefits especially when the liberalization of power industry takes place
 - Data center / Cloud computing
 - Smart grid
 - Smart metering
 - Peer to peer trading

Gulf Renewable Energy



Target to have >30% of renewable energy within 2030

GULF has always recognized the importance of clean energy and have structured our **renewable energy portfolio** to be managed under **Gulf Renewable Energy**, which is also the **investment arm for renewable energy business expansion** in the future.



Global Energy Trends

- Global energy trend has shifted from using fossil fuels to **clean energy**
- Common goals to **reduce greenhouse gas emissions** and **achieve net zero carbon** within 2050 under the Paris Agreement
- Commitment to solve global **climate change** issues
- Thailand has committed to **achieve carbon neutrality** by 2050 and **net zero emissions** within 2065



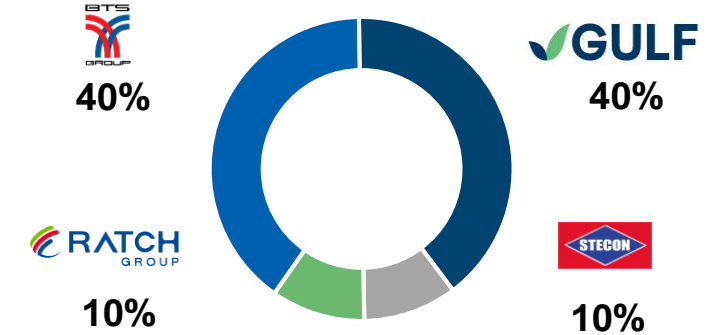
GULF's Strategies

- Adhere to **No Coal Policy**
- Target to increase the proportion of installed power generation capacity from renewable energy to **more than 30%** of the Company's total gross installed power capacity within 2030
- Focus on **solar, wind, hydro, waste to energy, biomass** and **energy storage systems management**

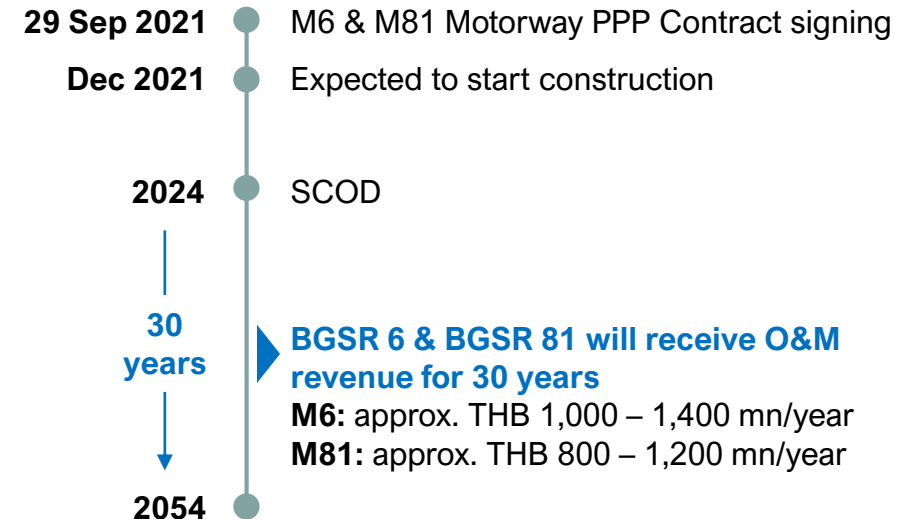
M6 & M81 Motorway PPP Contract Signing



BGSR 6 & BGSR 81 Shareholding



Key Timeline



THB 30,000 Million Bond Issuance



Issue Size

THB 30,000 million (THB 25,000 million + THB 5,000 million green shoe)
(oversubscribed by **2.06 times**)

Details of the Allotment

Debenture	Term	Interest Rate	Amount
Debenture tranche 1	3 years	1.7%	THB 12,000 million
Debenture tranche 2	5 years	2.5%	THB 6,000 million
Debenture tranche 3	7 years	3.0%	THB 3,000 million
Debenture tranche 4	10 years	3.4%	THB 9,000 million
Total	6 years	2.5%	THB 30,000 million

Issued Date

September 29, 2021

Placement Type

Private placement to institutional investors and high-net-worth investors

Use of Proceeds

Partial loan repayment for the acquisition of INTUCH shares and business expansion

Company Rating

A (Stable Outlook) by TRIS Rating

Issue Rating

A- (Stable Outlook) by TRIS Rating



Data Center Business



MOU to Build Leading Data Center Business in Thailand



Strong local know-how, business networks and access to lands



Strong relationships with hyperscalers and OTT (Over-the-top platform) providers



Expertise in power generation and renewable/green energy solutions

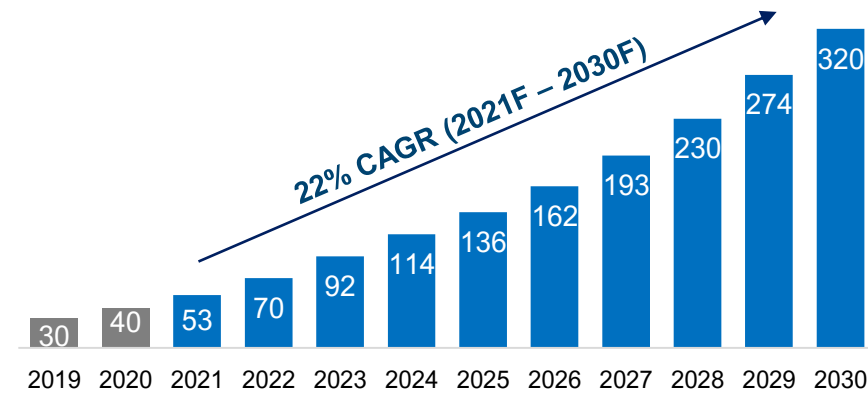


Expertise in Data Center operations worldwide

50/50 partnership as starting basis

More clarity within Q1 2022

Thailand Data Center Demand Forecast (MW)



Source: Estimates based on Deloitte, Citibank, Knight Frank

Data Center Demand Growth Drivers:



Consumers: High growth of Cloud Gaming, OTT providers, Social media and E-commerce



Enterprise: Higher usage of AI, Big Data Analysis, Automation system, Cloud Computing and cloud-based CRM and ERP software



Government: Government Data Center and Cloud Service: GDCC development project

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Q4'21 Outlook



Performance Outlook

- + Contribution from **GSRC Unit 2 (662.5 MW)**, which reached COD on Oct. 1, 2021
- + COD of **Mekong Wind project Phase 1 (30 MW)** in Q4 2021
- + COD of **DIPWP Phase 1 (40 MW)** in Dec 2021
- + Contribution from **GULF1 projects (10 MW)** which will gradually COD in Q4 2021
- + High season of **Borkum Riffgrund 2 Offshore Wind project (465 MW)** in Germany
- + **Expected rebound in electricity consumption** after the reopening of Thailand
- + **Share of profit from INTUCH** will be recorded for the first quarter in Q4 2021



Key Agreements Signing

LCB3 PPP Signing

- **PPP contract will be signed** with the Port Authority of Thailand on **Nov 25, 2021**
- **F1 terminal:** SCOD in 2025
F2 terminal: SCOD in 2029



Pak Beng & Pak Lay Tariff MOU Signing

- The National Energy Policy Council (NEPC) **approved the tariff** for Pak Beng and Pak Lay hydropower projects on **Nov 5, 2021** as follows:

Pak Beng (912 MW): THB 2.7935/unit
Pak Lay (770 MW): THB 2.9426/unit

- **Tariff MOU is expected to be signed** with EGAT in **Dec 2021**

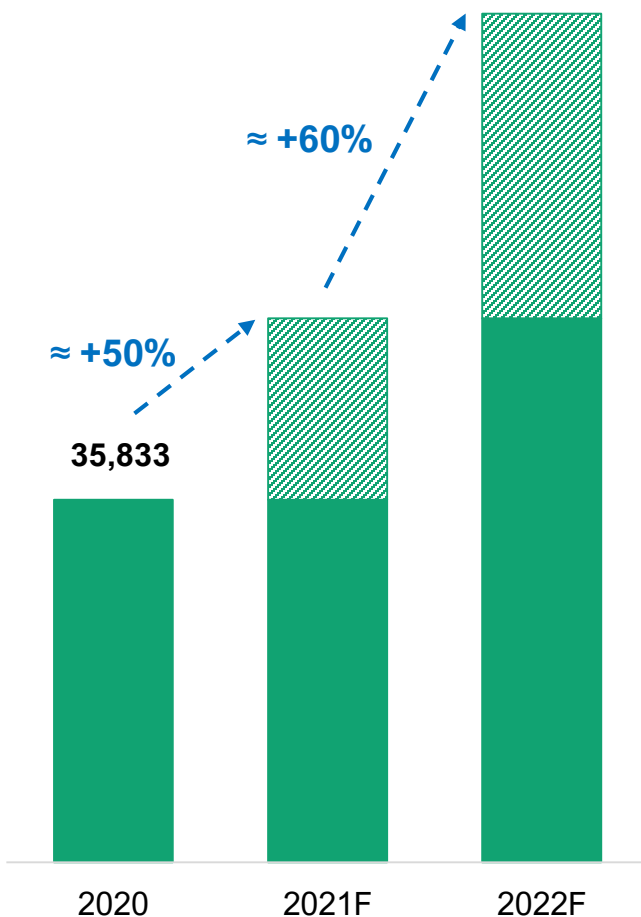


2022 Revenue Drivers



New capacity and full-year project contribution will boost revenue growth of approx. 60% in 2022

Projected Revenue Growth



01

New capacity from project COD



GSRC (IPP) (1,325 MW)

Unit 3 (662.5 MW): 31 Mar 22

Unit 4 (662.5 MW): 1 Oct 22



Gulf1 (Solar Rooftop) (90 MW)

SCOD: Gradual COD in 2022

02

Full-year project contribution

- **GSRC Units 1 & 2 (1,325 MW)**
Full-year revenue and profit contribution
- **DIPWP Power Phase 1 (40 MW)**
Full-year share of profit contribution
- **Investment in INTUCH (42.25% stake)**
Full-year share of profit recognition (equity method)

03

Overseas and domestic M&As

- **Renewable projects** in Thailand, Vietnam, Europe, US & Asia, etc.



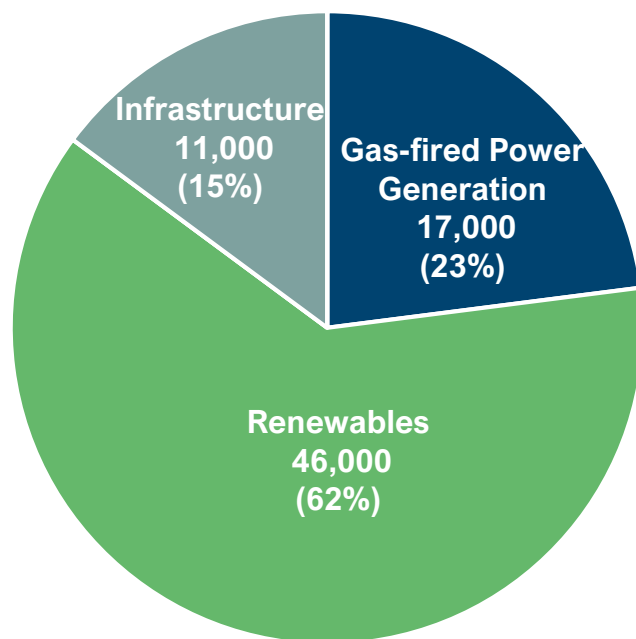
Investment Plan (2022F – 2031F)



Investment plan for projects in the pipeline only; excludes any M&As

GULF's Investment Plan

Unit: THB million



approx. THB 74,000 million
(Year 2022F – 2031F)

Use of Funds in 2022F – 2031F

≈ THB 74,000 million

for projects including:

GAS-FIRED

POWER GENERATION

- GSRC & GPD
- Hin Kong Power
- Burapa Power
- Oman DIPWP

RENEWABLE ENERGY

- Mekong Wind
- Gulf1 projects
- Hydropower projects

INFRASTRUCTURE

- Map Ta Phut 3
- Laem Chabang 3
- Motorway projects

Source of Funds

A combination of:

- Internal cash flow from operating projects
- Bond issuance
- Long-term loans from financial institutions

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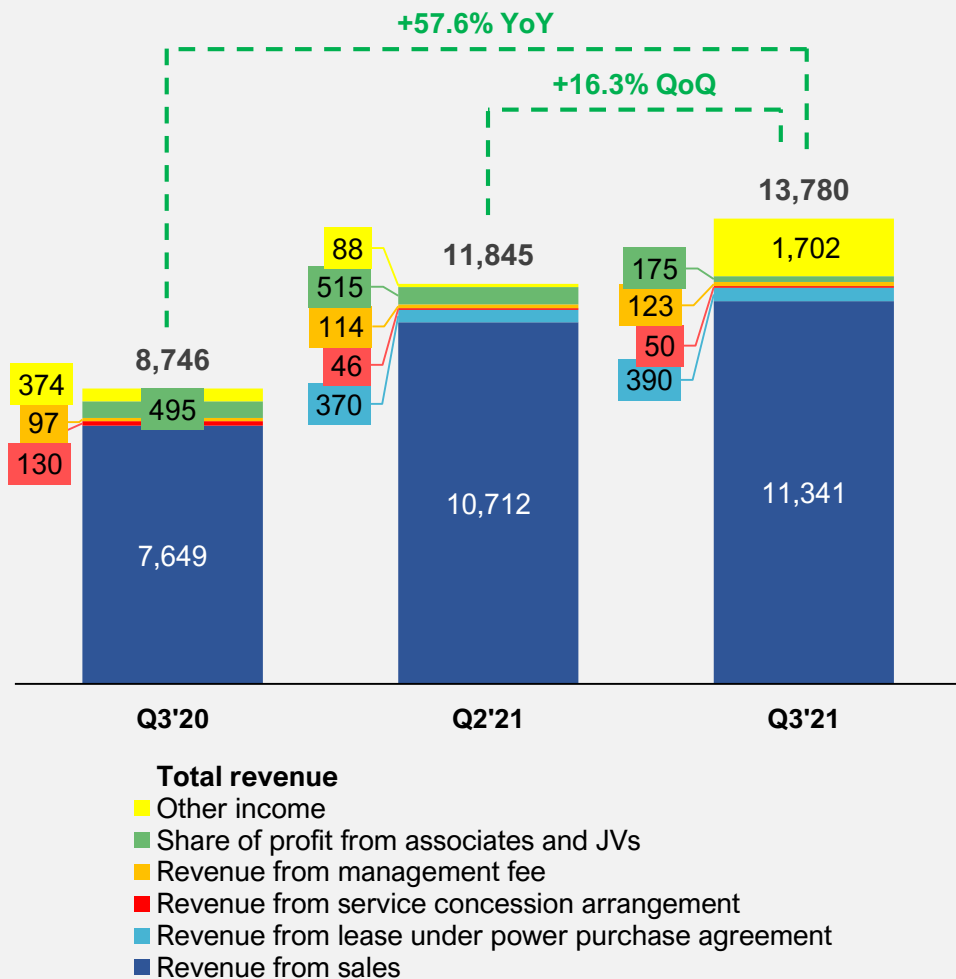
Q3'21 Financial Performance

Total Revenues



Revenue from GSRC & BKR2 projects and dividend income from INTUCH were main revenue drivers in Q3'21

Unit: THB million



Total revenues in Q3'21 was THB 13,780 million

- YoY: 8,746 MB → 13,780 MB (57.6%) primarily from:

- + Increase in sales revenue from THB 7,649 million to THB 11,341 million (+48.3%) due to
 - revenue recognition from GSRC unit 1 project which COD on 31 Mar'21
 - revenue from BKR2 which started to contribute from Q4'20 onwards
 - higher volume of electricity sold to EGAT and IUs by GMP group
- + Other Income of THB 1,702 million, mainly increased from THB 1,666 million dividend from INTUCH
- + Recorded full quarter revenue from lease under power purchase agreement from GSRC project
- Lower share of profit from associates & JVs from GJP's unrealized FX loss and PTT NGD's unrealized derivative gain totaled at a net loss of THB 515 million in Q3'21, compared to a net loss of THB 250 in Q3'20, coupled the softened profit from the 7 SPPs affected by the increased gas cost.

- QoQ: 11,845 MB → 13,780 MB (+16.3%) mainly from:

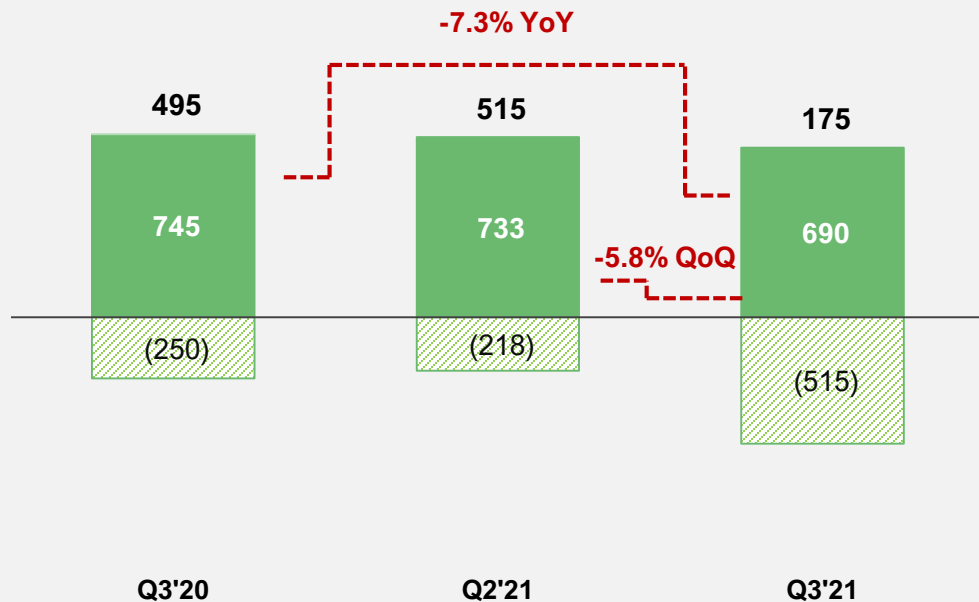
- + Dividend income in the amount of THB 1,666 million from INTUCH
- + Sales revenue increased from THB 10,712 million to THB 11,341 million (+5.9%) mainly from the higher volume of electricity sold to EGAT and IUs by GMP group
- Share of profit from associates & JVs declined mainly from GJP's unrealized FX loss and PTT NGD's unrealized derivative gain totaled at a net loss of THB 515 million in Q3'21 vs. THB 218 million net loss in Q2'21, coupled with weakened profit from the 7 SPPs caused by the higher gas price.

Share of Profit from associates and JVs



Share of core profit decreased from weaker EGAT sales volume from 2 IPPs and higher gas price

Unit: THB million



■ FX gain/loss and unrealized gain/loss from derivative contracts of PTT NGD

■ Share of core profit

Total share of profit

Share of Core profit from associates and JVs in Q3'21 was **THB 690 million -7.3% YoY and -5.8% QoQ** primarily from:

- 1) **Share of Core Profit from an associate GJP** was recorded at THB 611 million, **-18.8% YoY and -7.8% QoQ** mainly from:
 - Significant decrease in volume of electricity sold to EGAT by the 2 IPPs
 - Profit of the 7SPPs was affected by the higher natural gas cost (+14.2% YoY and +12.6% QoQ), while Ft reduced 29.0% YoY and remain unchanged QoQ
- 2) **Slightly offset by share of Core profit from an associate PTT NGD**, which has been recognized from Q4'20 onwards, and recorded at **THB 67 million (+6.5% QoQ)** from the higher gross margin per unit, while sales volume remained at the same level as Q2'21

Share of profit from associates and JVs (incl. FX) in Q3'21 was THB 175 million, mainly from GJP's exchange rate loss of THB 577 million, net with unrealized gain on derivative contracts of PTT NGD of THB 62 million

	FX Rate at End of Period		
	(THB/USD)	(THB/EUR)	(USD/EUR)*
Q2'20	31.0658	34.3318	-
Q3'20	31.8258	36.7782	-
Q4'20	30.2068	36.4949	1.2290
Q1'21	31.5052	36.3346	1.1706
Q2'21	32.2219	37.7588	1.1902
Q3'21	34.0908	38.9765	1.1604

*Based on the exchange rate in Singapore.

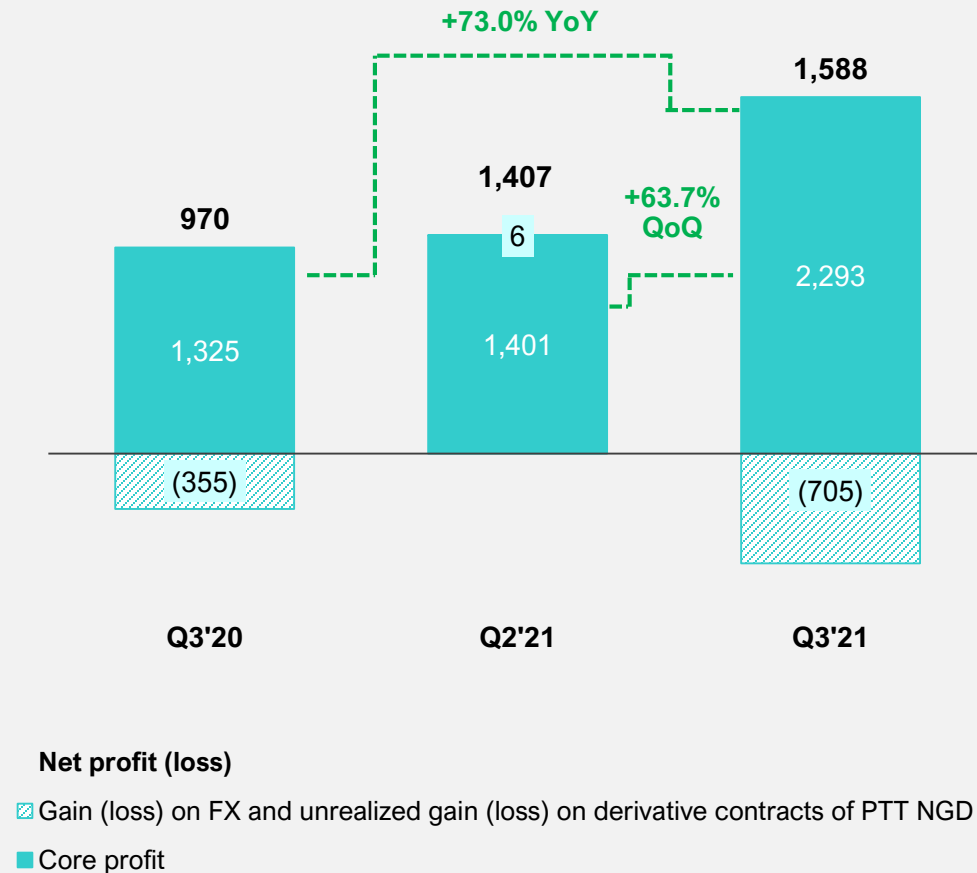
	Natural Gas Price (THB/mmbtu)	Ft (THB)
Q3'20	235.22	(0.1188)
Q2'21	238.56	(0.1532)
Q3'21	268.61	(0.1532)

Net profit / Core profit



Core profit grew mainly from INTUCH dividend, offsetting the effects from the rising gas price

Unit: THB million



Core profit in Q3'21 was **THB 2,293 million**

+73.0% YoY from THB 1,325 million in Q3'20, due mainly to:

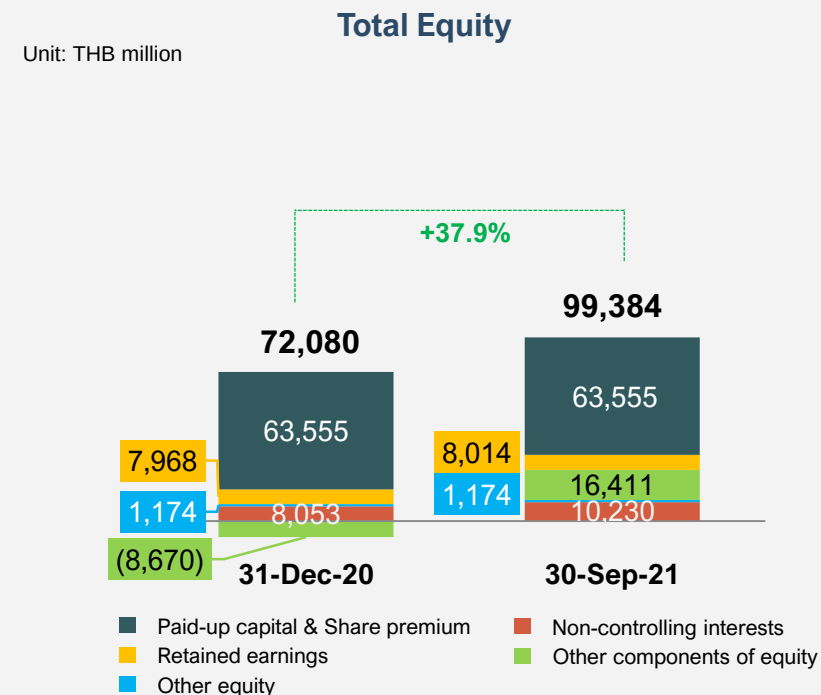
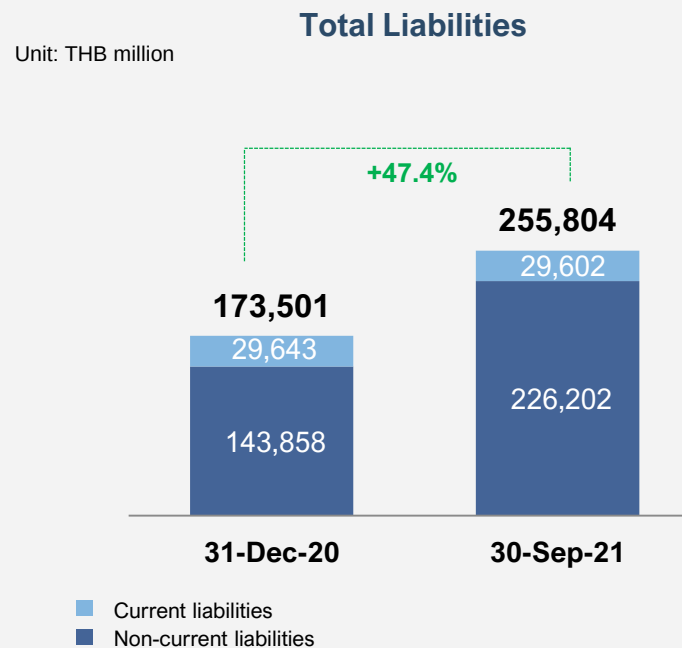
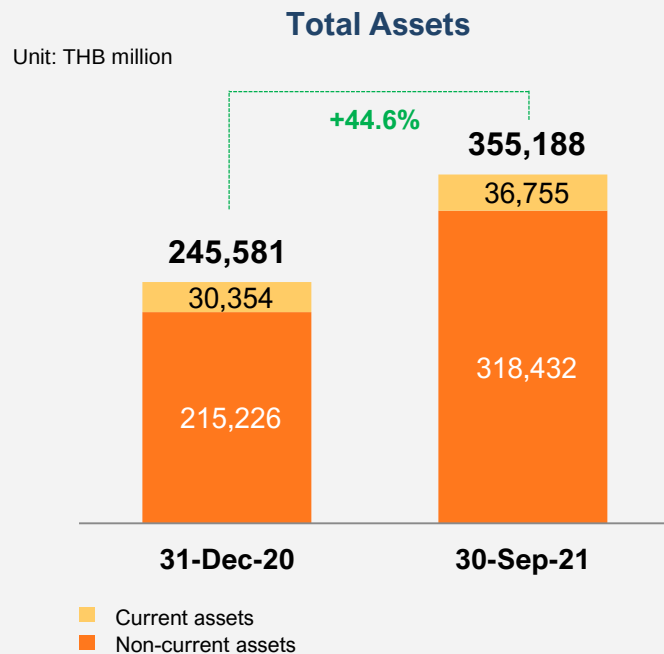
- + Dividend received in Q3'21 of THB 1,681 million, comprised of THB 1,666 million dividend from INTUCH, and THB 15 million dividend from SPCG
- + Profit contribution from GSRC unit 1 which started commercial operation on 31 Mar 21
- + Profit contribution from 12 SPPs under GMP group from higher electricity sales to EGAT & industrial customers
- + Share of Core Profit from PTT NGD of THB 67 million
- Share of Core Profit from GJP softened mainly from 7 SPPs' softened profit from higher gas cost.

+63.7% QoQ from THB 1,401 million in Q2'21, primarily from:

- + Dividend received of THB 1,681 million
- + Improved performance from GCG biomass project, due to the higher electricity sales volume, and the benefit from the lower wood cost
- Gas Fired Power Generation Business contributed a softened profit, from the lower electricity sales volume to EGAT from IPPs under GSRC and GJP group, and the SPPs under GMP group which was affected by the higher natural gas cost

Net profit in Q3'21 was THB 1,588 million, compared to net profit of THB 970 million in Q3'20 (+63.7% YoY) and net profit of THB 1,407 million in Q2'21 (+12.9% QoQ)

Balance Sheet



Total assets was **THB 355,188 million, +44.6%** mainly from:

- **Current:** Trade receivables increased THB 2,305 million from the company's higher sales
- **Current & Non-current:** Finance lease receivable under power purchase agreement increased by THB 11,911 million from the COD of GSRC
- **Non-current:**
 - 1) Other non-current financial assets increased by THB 83,179 million from additional shareholding in INTUCH
 - 2) PPE net increased by THB 3,588 million from construction progress of GSRC, GDP and Mekong project, deduct with decreasing part from the COD of GSRC booked in accordance with TFRS16

Total liabilities was **THB 255,804 million, +47.4%** mainly from:

- **Non-current:**
 - 1) Long-term loan increased THB 53,017 million from loan drawdowns for the GSRC and GPD construction, and for GULF's working capital
 - 2) Debentures increased by THB 28,542 million from the issuance of THB 30,000 million GULF's 1/2021 debentures
 - 3) Deferred liabilities increased THB 5,530 million from the higher fair value of investment in INTUCH
 - 4) Other non-current liabilities decreased THB 3,602 million from the higher fair value of the Company's IRS contracts

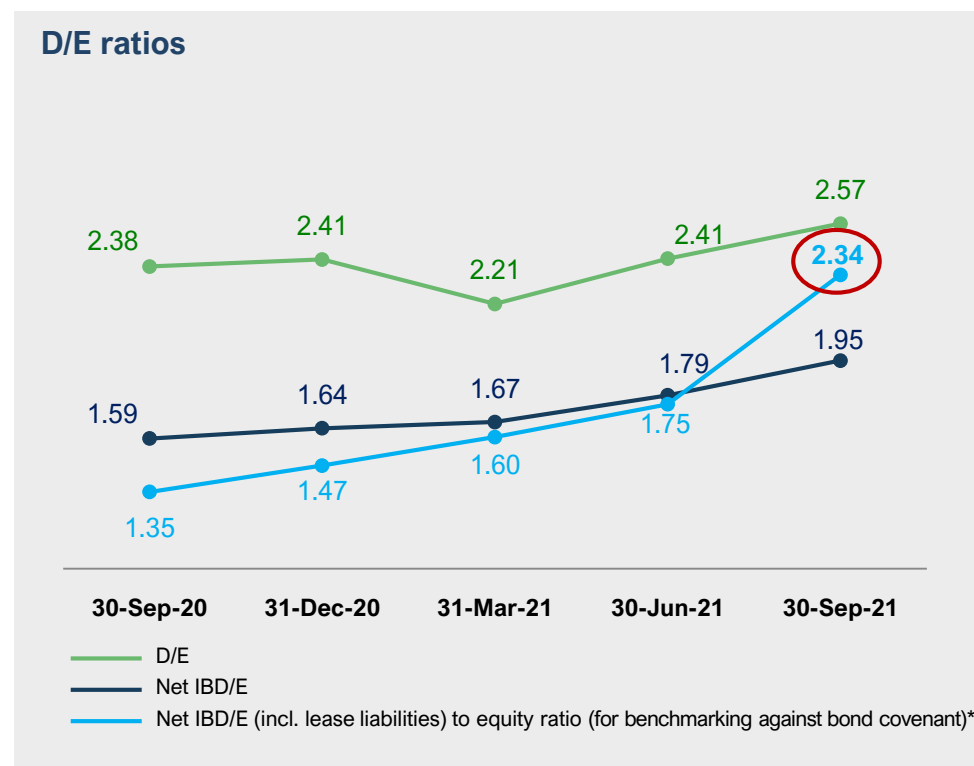
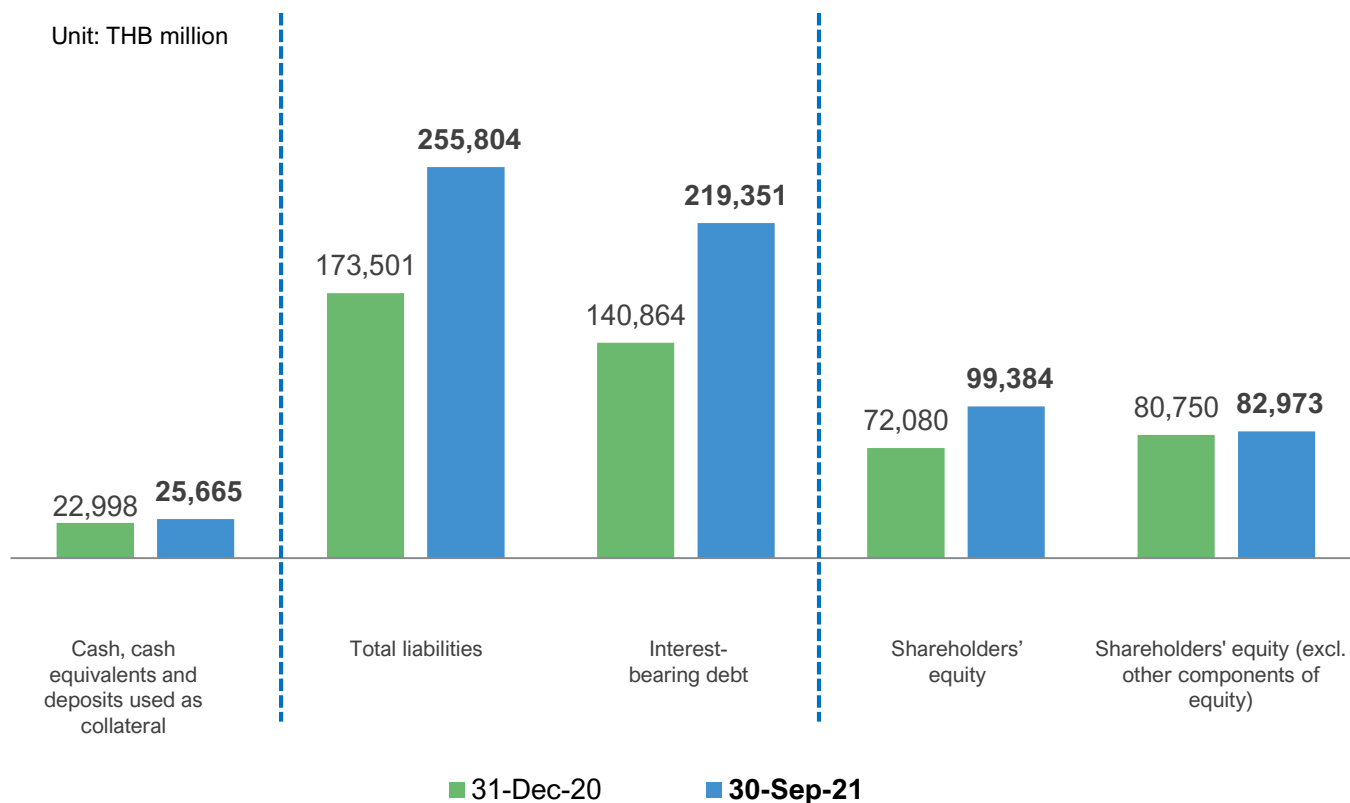
Total equity was **THB 99,384 million, +37.9%** mainly from:

- Other components of equity increased THB 25,080 million from the unrealized gain from the higher fair value of investment in INTUCH
- Non-controlling interests increased THB 2,177 million mostly due to gain from fair value measurement of IRS contracts required under TFRS9
- Retained earnings decreased by THB 214 million due to dividend payment

D/E ratios



Leverage ratios higher from debt used in INTUCH acquisition, but will be lower in Q4'21 from the gain on INTUCH's share price, following the change in accounting treatment



Note:

* Net interest-bearing debt to equity = (Total interest-bearing debt incl. lease liabilities - cash and cash equivalent - deposits at financial institutions used as collateral) / (equity - other components of equity)

Q&A





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Appendix

GULF's Project Details – GJP Group (2 IPPs & 7 SPPs)

Gas-Fired Power Generation Business in Thailand

Name	Type	Location (Province)	Equity Interest (%)	Installed Power Capacity (MW)	Steam (T/H)	Chilled Water (RT)	Equity Power Capacity (MW)	Equity Steam (T/H)	Equity Chilled Water (RT)	COD
GJP Group (Associate) : In Operation										
GNS	IPP	Saraburi	40.00%	1,668.2	-	-	667.3	-	-	Unit 1: Jun 1, 2014 Unit 2: Dec 1, 2014
GUT	IPP	Ayutthaya	40.00%	1,752.4	-	-	701.0	-	-	Unit 1: Jun 1, 2015 Unit 2: Dec 1, 2015
GKP1	SPP	Saraburi	40.00%	124.3	22.0	-	49.7	8.8	-	Jan 5, 2013
GKP2	SPP	Saraburi	40.00%	124.3	22.0	-	49.7	8.8	-	Feb 1, 2013
GTLC	SPP	Saraburi	40.00%	125.8	15.0	-	50.3	6.0	-	Mar 1, 2013
GNNK	SPP	Chachoengsao	40.00%	130.0	-	3,200.0	52.0	-	1,280.0	Apr 1, 2013
GNLL	SPP	Rayong	30.00%	125.3	8.0	4,600.0	37.6	2.4	1,380.0	May 1, 2013
GCRN	SPP	Pathumthani	40.00%	125.9	15.0	-	50.4	6.0	-	Jul 1, 2013
GNK2	SPP	Saraburi	40.00%	132.4	10.0	-	53.0	4.0	-	Oct 1, 2013
Total GJP				4,308.7	92.0	7,800.0	1,710.9	36.0	2,660.0	

GULF's Project Details – GMP Group (12 SPPs)

Gas-Fired Power Generation Business in Thailand

Name	Type	Location (Province)	Equity Interest (%)	Installed Power Capacity (MW)	Steam (T/H)	Equity Power Capacity (MW)	Equity Steam (T/H)	COD
GMP Group (Subsidiary) : In Operation								
GVTP	SPP	Rayong	52.49%	140.9	20.0	73.9	10.5	May 16, 2017
GTS1	SPP	Rayong	52.49%	138.3	30.0	72.6	15.7	Jul 8, 2017
GTS2	SPP	Rayong	52.49%	138.3	30.0	72.6	15.7	Sep 1, 2017
GTS3	SPP	Rayong	52.49%	130.2	25.0	68.3	13.1	Nov 1, 2017
GTS4	SPP	Rayong	52.49%	130.2	25.0	68.3	13.1	Jan 1, 2018
GNC	SPP	Prachinburi	70.00%	126.5	20.0	88.5	14.0	Mar 1, 2018
GBL	SPP	Ayutthaya	52.50%	129.5	10.0	68.0	5.3	Sep 1, 2018
GBP	SPP	Ayutthaya	52.50%	129.5	10.0	68.0	5.3	Nov 1, 2018
GNLL2	SPP	Rayong	52.49%	129.5	10.0	68.0	5.2	Jan 1, 2019
GNPM	SPP	Saraburi	70.00%	138.3	25.0	96.8	17.5	Mar 1, 2019
GNRV1	SPP	Nakorn Ratchasima	70.00%	127.5	10.0	89.2	7.0	May 1, 2019
GNRV2	SPP	Nakorn Ratchasima	70.00%	127.5	10.0	89.2	7.0	Jul 1, 2019
Total GMP				1,585.9	225.0	923.4	129.5	

GULF's Project Details – IPP Projects in Thailand

Gas-Fired Power Generation Business in Thailand

Name	Type	Location (Province)	Equity Interest (%)	Installed Power Capacity (MW)	Equity Power Capacity (MW)	SCOD
IPD Group (Subsidiary) : Under Construction						
GSRC	IPP	Chonburi	70.00%	2,650.0	1,855.0	Unit 1: Mar 31, 2021 Unit 2: Oct 1, 2021 Unit 3: Mar 31, 2022 Unit 4: Oct 1, 2022
GPD	IPP	Rayong	70.00%	2,650.0	1,855.0	Unit 1: Mar 31, 2023 Unit 2: Oct 1, 2023 Unit 3: Mar 31, 2024 Unit 4: Oct 1, 2024
Total IPD				5,300.0	3,710.0	
HKH (Joint Venture) : Under Development						
HKP	IPP	Ratchaburi	49.00%	1,540.0	754.6	Unit 1: Mar 1, 2024 Unit 2: Jan 1, 2025
Total HKH				1,540.0	754.6	
BPH (Joint Venture) : Under Development						
BPP	IPP	Chachoengsao	35.00%	600.0	210.0	Nov 1, 2027
Total BPH				600.0	210.0	

GULF's Project Details – DIPWP in Oman

Gas-Fired Power Generation Business Overseas

Name	Type	Location	Equity Interest (%)	Installed Power Capacity (MW)	Desalinated Water (m ³ /hr)	Equity Power Capacity (MW)	Equity Desalinated Water (m ³ /hr)	SCOD
Marafiq (Joint Venture) : Under Construction								
DIPWP	Captive	Duqm Special Economic Zone, Oman	49.00%	326.0	1,667.0	159.7	816.8	Ph. 1 (40 MW): Dec 2021 Ph. 2 (286 MW): Q1 2023
Total Marafiq				326.0	1,667.0	159.7	816.8	

GULF's Project Details – Gas Business



Gas Business in Thailand

Name	Location (Province)	Equity Interest (%)	Capacity	COD / SCOD
Natural Gas Distribution: In Operation				
Gulf WHA MT NGD 2	Chonburi	35.00%	2,000,000 mmbtu/year	Dec 1, 2018
Gulf WHA MT NGD 4	Rayong	35.00%	2,000,000 mmbtu/year	Jun 11, 2019
PTT NGD	Bangkok Metropolitan Region, Rayong and Chonburi	42.00%	28,000,000 mmbtu/year (sales volume)	1997 - 2019
LNG Terminal: Under Construction				
MTP3 (LNG Terminal)	Rayong	70.00%	Up to 10.8 MTPA	Construction period 2024- 2026* *subject to the country's LNG demand

GULF's Project Details – Renewable Projects in Thailand

Renewable Energy Projects in Thailand under GULF RENEWABLE ENERGY

Name	Type	Location (Province)	Equity Interest (%)	Installed Power Capacity (MW)	Equity Power Capacity (MW)	COD / SCOD
In Operation						
Gulf Solar BV	Solar Rooftop (VSPP)	Chonburi	74.99%	0.13	0.10	Jun 23, 2014
Gulf Solar TS1	Solar Rooftop (VSPP)	Rayong	74.99%	0.13	0.09	Aug 27, 2014
Gulf Solar KKS	Solar Rooftop (VSPP)	Chonburi	74.99%	0.25	0.19	Dec 26, 2014
Gulf Solar TS2	Solar Rooftop (VSPP)	Rayong	74.99%	0.09	0.07	Jan 8, 2015
GCG	Biomass (SPP)	Songkhla	100.00%	25.0	25.0	Mar 1, 2020
Total in Operation				25.60	25.45	
Under Construction						
Gulf1	Solar Rooftop & Energy Solution	-	50.00%	100.00	50.00	10 MW: 2021 90 MW: 2022
Total Under Construction				100.00	50.00	

GULF's Project Details – Renewable Projects Overseas

Renewable Energy Projects Overseas under GULF RENEWABLE ENERGY

Name	Type	Location	Equity Interest (%)	Installed Power Capacity (MW)	Equity Power Capacity (MW)	COD / SCOD
In Operation						
GTN1	Solar Farm	Tay Ninh, Vietnam	90.00%	68.8	61.9	Mar 6, 2019
GTN2	Solar Farm	Tay Ninh, Vietnam	90.00%	50.0	45.0	Apr 19, 2019
BKR2	Offshore Wind Farm	North Sea, Germany	50.00%	464.8	232.4	Apr 2019
Total in Operation				583.6	339.3	
Under Construction						
Mekong Wind Farm (Ph. 1-3)	Offshore Wind Farm	Ben Tre, Vietnam	95.00%	128.0	121.6	Ph. 1 (30 MW): Dec 2021 Ph. 2 (98 MW): Q1 2022
Total Under Construction				128.0	121.6	

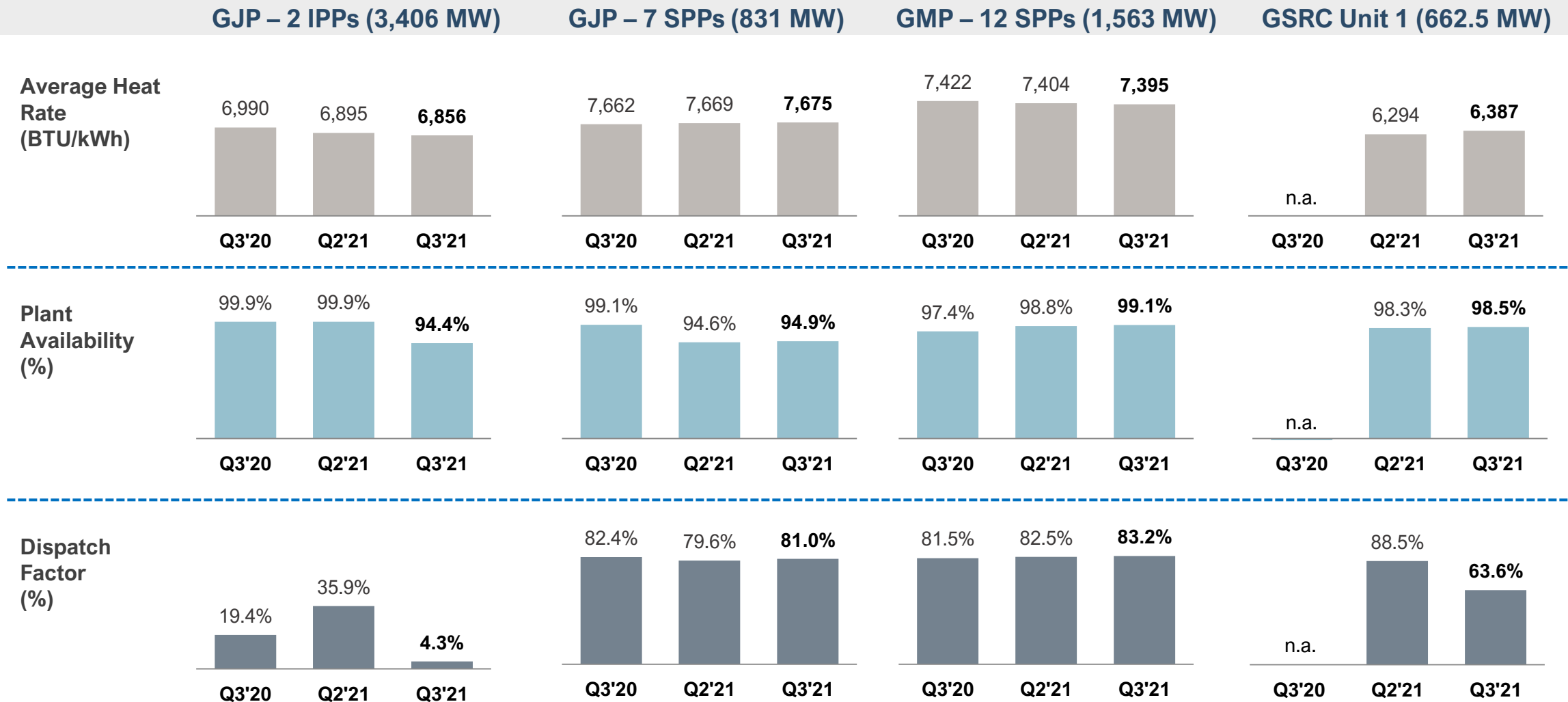
GULF's Project Details – Infrastructure & Utilities Business



Infrastructure & Utilities Business in Thailand

Name	Type of Project	Location (Province)	Equity Interest (%)	Capacity	SCOD
Under Development / Under Construction					
MTP3 (Land Reclamation)	Land Reclamation	Rayong	70.00%	1,000 rai	Construction period 2021-2024
LCB3 (F1 and F2 Terminals)	Deep Sea Container Port	Chonburi	40.00%	>4 million TEU/year	F1: 3 years (2023 – 2025) F2: 3 years (2027 – 2029)
M6 Motorway	Intercity Motorway	Bang Pa-In - Nakhon Ratchasima	40.00%	196 km	2024
M81 Motorway	Intercity Motorway	Bang Yai - Kanchanaburi	40.00%	96 km	2024
One Bangkok (BSP)	Power Distribution System	Bangkok	13.33%	Power: 240.0 MW	2022
One Bangkok (BSD)	District Cooling System		16.33%	Chilled Water: 36,000 RT	2023 - 2026

Power Plant Performance – Gas fired



Power Plant Performance - Renewables

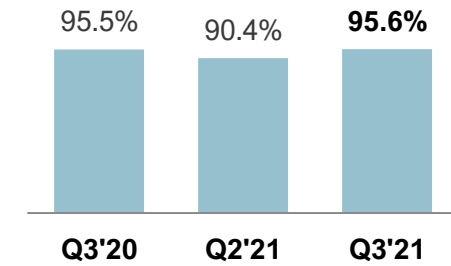
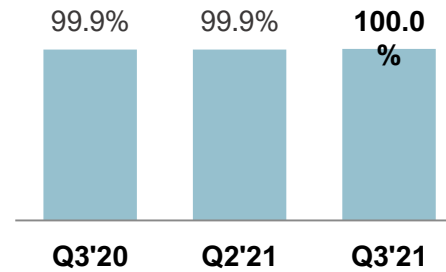
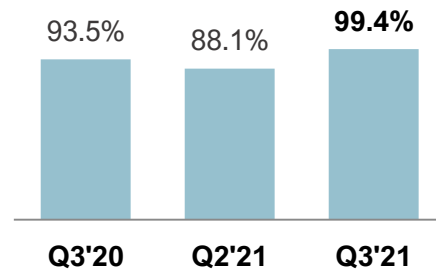


GCG – Biomass (25 MW)

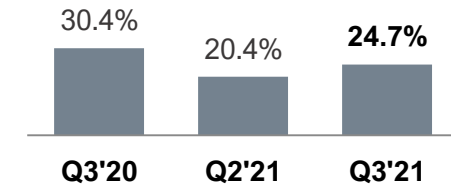
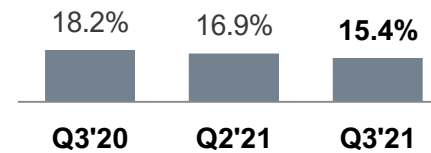
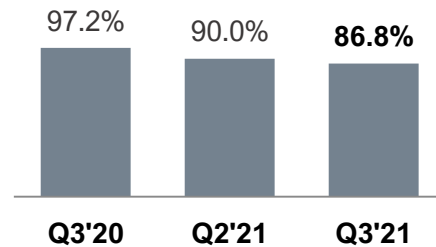
GTN 1 & GTN 2 - Solar (119 MW)

BKR2 – Offshore Wind (464.8 MW)

Plant
Availability
(%)



Capacity
Factor
(%)



Maintenance Schedule



SIEMENS

A (3 days)

B (18 days)

C (22 days)

MHPS

CI (10 days)

TI (18 days)

MI (35 days)

GE

CI (1 days)

HGPI (18 days)

MO (22 days)

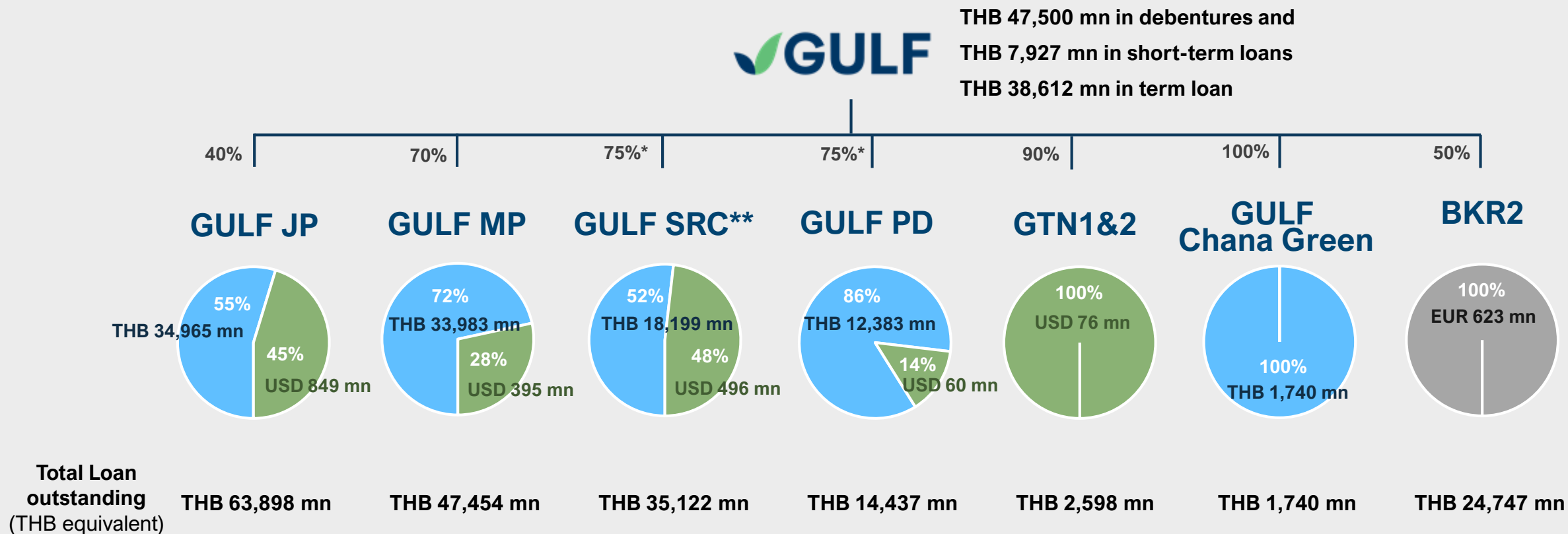
GULF

* 1 unit

Group	Project	Type	COD	2020				2021				2022			
				Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
GJP	GKP1	SPP	2013					A					A		
	GKP2	SPP						A				A			
	GTLC	SPP						A					A		
	GNNK	SPP						A				A			
	GNLL	SPP					A					A			
	GCRN	SPP		C					A				A		
	GNK2	SPP						A				A			
	GNS	IPP	2014					A*		A*					
	GUT	IPP	2015	B*								B*			
GMP	GVTP	SPP	2017	B					A				A		
	GTS1	SPP			B					A					A
	GTS2	SPP		A		B					A				A
	GTS3	SPP		A				B				A			
	GTS4	SPP	2018	A				B				A			
	GNC	SPP			A		A	A	B*			B*	A*	A*	A*
	GBL	SPP					A					B			
	GBP	SPP		A				A					B		
	GNLL2	SPP	2019	A					A						B
	GNPM	SPP		A						A				B	
	GNRV1	SPP			A		A	A*	A*		A	A*	B*		B
	GNRV2	SPP		A		A		A*	A*	A*	A		A	B*	

Debt Outstanding

(As of 30 September 2021)



- All of the power projects in Thailand have long term loans of **20 - 23 years** (vs. PPA term of 25 years).
- To mitigate interest rate fluctuation, the company entered into interest rate swaps to swap interest rate from floating rate into fixed rate for **18 - 20 years**.

Note:

* Based on % profit sharing received from GSRC & GPD

** Gulf SRC has a short-term loan outstanding at THB 500 million

Credit Ratings and Outlook



Rating Agency		Issue Rating	Outlook
 A Strategic Partner of 	 Gulf Company Rating	A	Stable
	THB 7,500 million Gulf Debenture Senior Unsecured Debenture Issuance Date: 25 Jan 2019	A-	Stable
	THB 10,000 million Gulf Debenture Senior Unsecured Debenture Issuance Date: 19 Aug 2020	A-	Stable
	THB 25,000 million Gulf Debenture Senior Unsecured Debenture Issuance Date: 29 Sep 2021	A-	Stable

Latest Review Date: 26 Aug 2021

Sustainability Policy



01

Strive to achieve sustainability in all dimensions of its operations – including the economic, environmental and social dimensions – and promote sustainable practices among all employees and community members.



02

Act within the confines of the law, uphold its commitments to mandatory and voluntary agreements, and respect international standards of human rights and labor rights.



03

Adopt good corporate governance practices to ensure transparency, avoid corruption, and encourage fair and ethical behavior.



04

Assess and manage risks in a systematic manner through regular and consistent performance monitoring and evaluation, internal and external audits, and strong internal controls.



05

Encourage dialogue and participation with internal and external stakeholders by establishing clear communication channels, providing accurate and reliable information, and managing complaints and requests for consults.



06

Provide a safe and healthy work environment that promotes non-discrimination, gender equality, personal development and well-being.



07

Adopt technologies and practices which reduce negative impacts on the environment, ensure a commitment to environmental protection during all stages of project development, and promote environmental awareness and conservation.

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