

Opportunity Day

Q1/2022 Results

May 25, 2022



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Recent Significant Events



- **Winnonie announced successfully raised 80 MB for a Series A**
2022 Target: 2,200 users, 100 battery swapping stations to cover 100% of BKK area



- **BBGI IPO**
- **BCPG COD Japan 25 MW Komagane project**



- **Redemption of BCP bonds of 3,000 MB**



- **Redemption of BCP bonds of 1,000 MB**
- **BCP 1.0 Baht/share dividend payment** on 2H2021 performance (2.0 Baht/share on 2021 performance)
- **BCPG 0.17 Baht/share dividend payment** on 2H2021 performance (0.33 Baht/share on 2021 performance)
- **BCPG COD Japan 20 MW Yabuki project**

สมัครวินโนนี่
สแกนเลย!

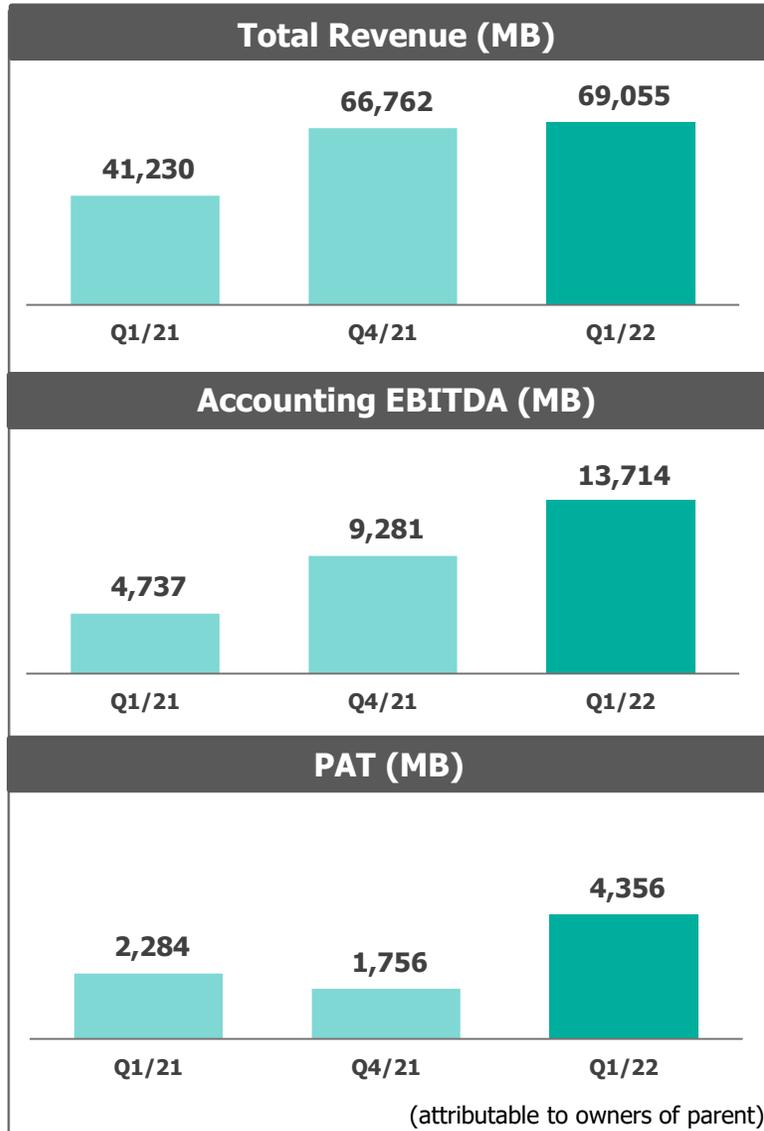


Facebook Page: Winnonie



LINE OA: @Winnonie

Q1/2022 Consolidated Performance



Bangchak's Group EBITDA surpassed *10 billion* Baht milestone for the first quarter

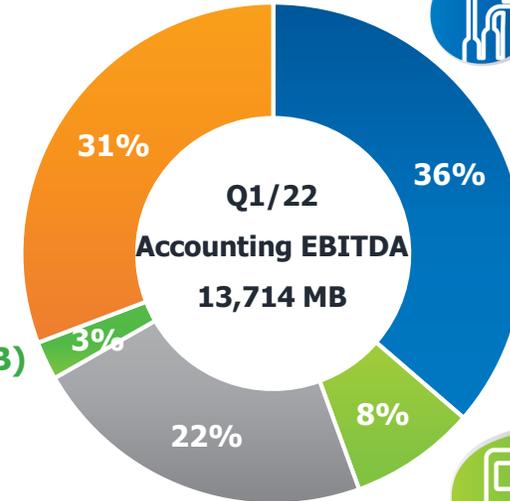
Natural Resources (4,251 MB)

- EBITDA declined QoQ due to lower sales volume from planned shutdown of Gjøa and no liftings from Ivar Aasen
- Higher realized price of liquids and gas



Bio-Based Product (343 MB)

- EBITDA improved QoQ mainly from higher B100 and ethanol price but lower cost of goods sold of ethanol business



Refinery & Trading (5,021 MB)

- EBITDA significantly improved 63% QoQ
- Historical high crude run 122 KBD (102% run rate)
- High level of operating GRM at 6.84 \$/BBL
- Strong inventory gain of 3,566 MB



Marketing (1,118 MB)

- EBITDA improved QoQ
- Better MKM of 0.59 Bath/Litre



Power Plant (3,075 MB)

- EBITDA improved QoQ mainly due to gain from divestment of Geothermal power plant of 2,031 MB
- Operating performance maintained QoQ despite a decrease in electricity output



Agenda



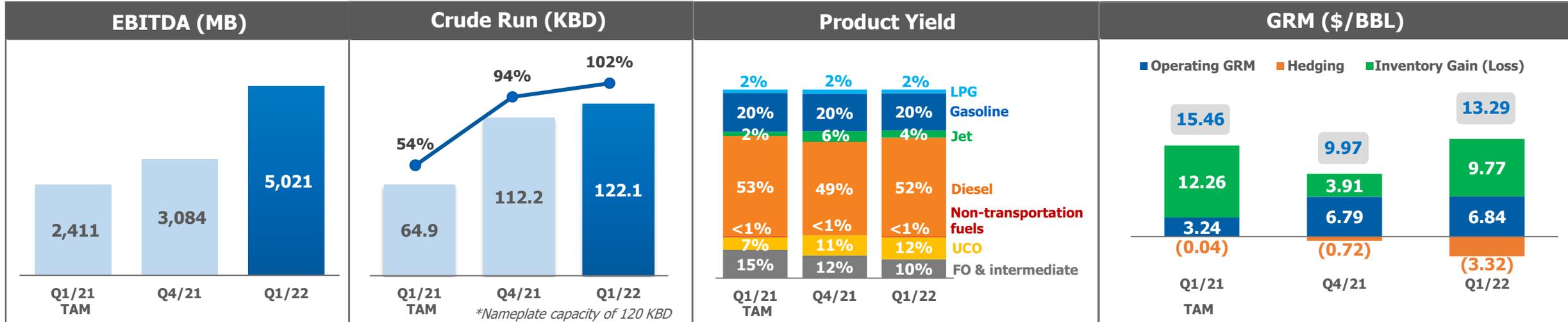
 **Business Performance
& Update**



 **Financial
Performance**

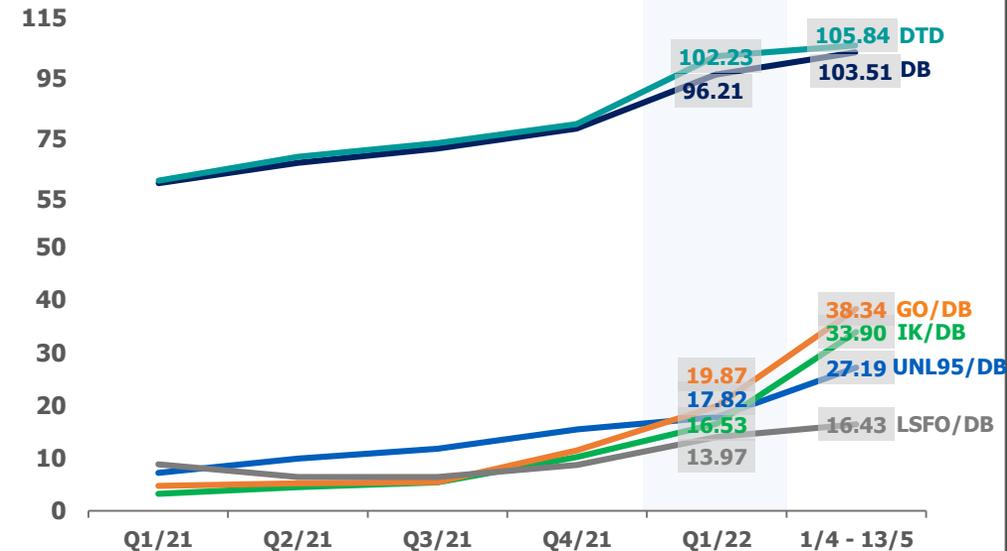


Refinery and Trading Business



- **A historical high crude run at 122 KBD** with the refinery utilization rate of 102%, benefited by oil demand recovery and high level of crack spread
- **High level of operating GRM of 6.84 \$/BBL** from better crack spread of all products but pressured by the spiking crude prices and premium
- **Strong inventory gains of 3,566 MB (Net NRV)** from rising crude oil prices due to strengthening oil demands amid global supply tightness resulted from banning Russian oil imports as part of sanctions against Russia for its invasion of Ukraine

Av. Crack Spread and Av. Oil Price (\$/BBL)



Business Update: Refinery



Q1/2022 Q2/2022E 2022E

Crude run: KBD

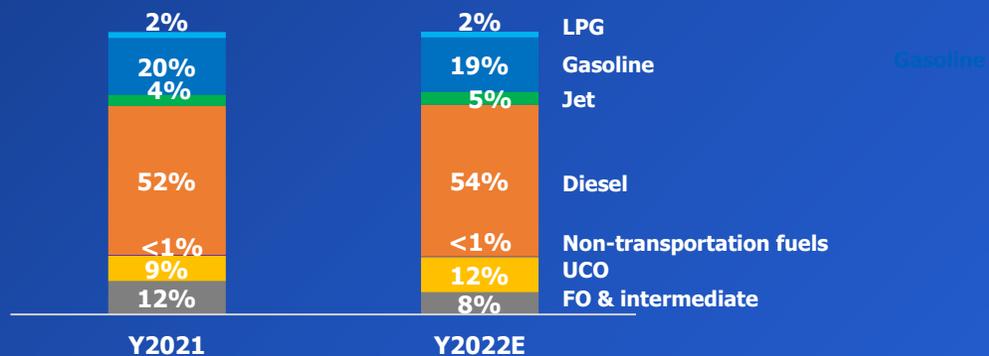
122.1	120+	120
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DB: \$/BBL

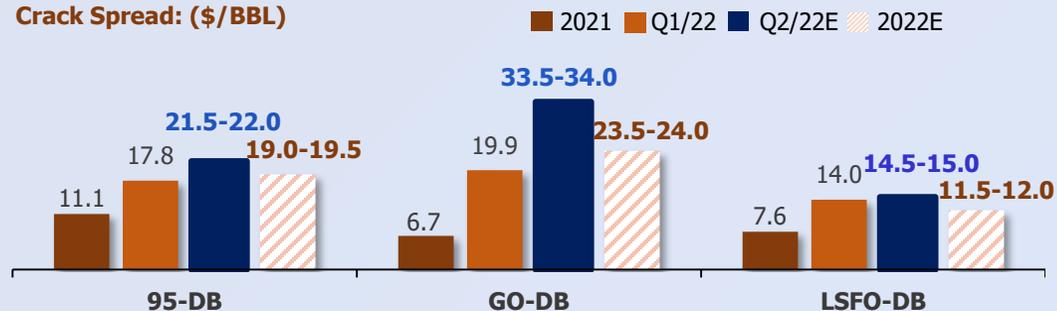
96.2	100-105	95-100
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Customized Products:

- Crude run at maximum capacity ~120 KBD
- Produce more high-value **UCO** – Lube & Wax and VLSWR for new market



Crack Spread: (\$/BBL)



Stepping Towards Net Zero Carbon Economy



- BCP, BBGI and Thanachok Oil Light Company Ltd., Thailand's leader in integrated vegetable oil business for over 40 years, **signed a MOU for the procurement of raw materials, products, plant construction, and retail of Sustainable Biofuels**

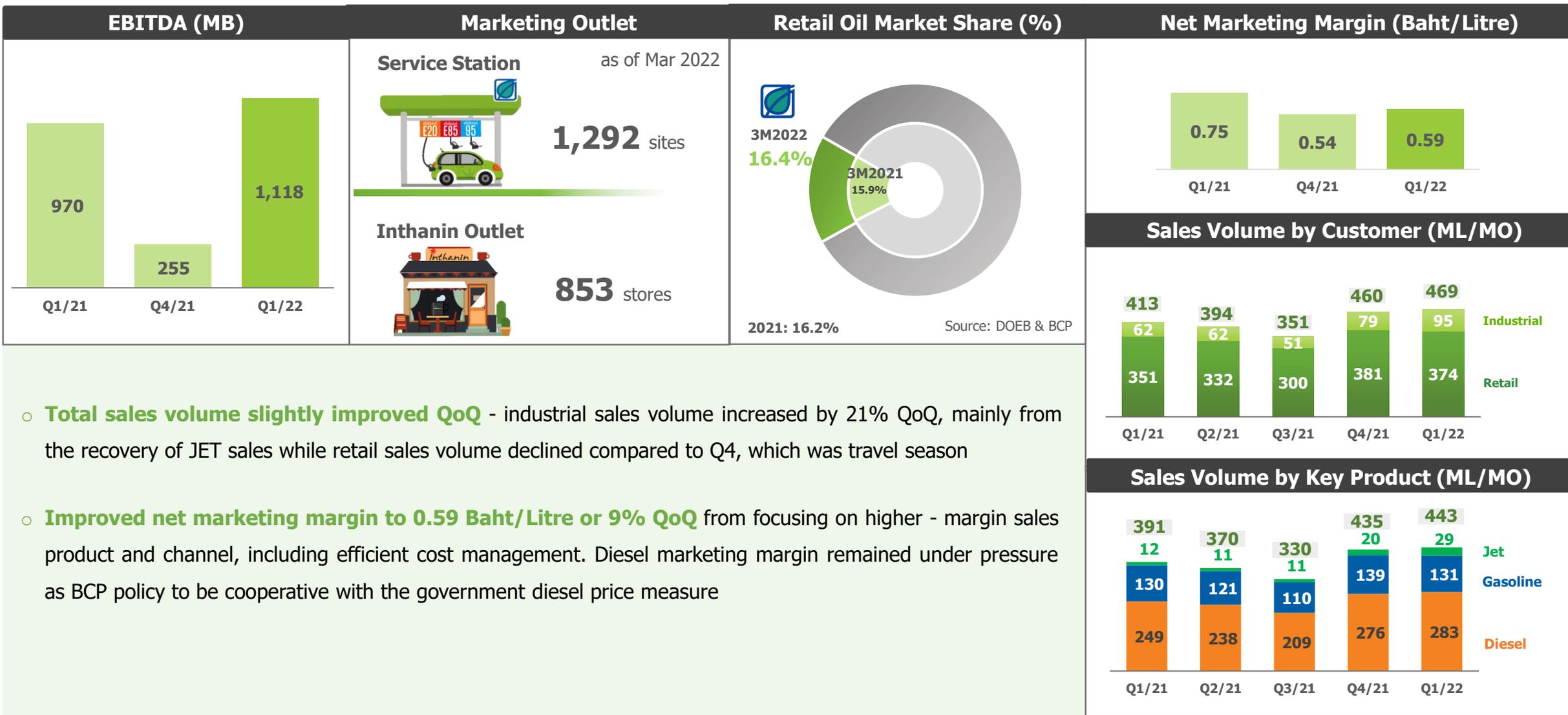
"Aim to be the first Sustainable Aviation Fuel (SAF¹) producer in Thailand"

- BCP through BCPT signed exclusive offtake agreement for 5 ML/mo. of Used Cooking Oil Methyl Ester (UCOME) with Thanachok Oil Light to market domestically and internationally

¹SAF is a biofuel used for aircraft which has similar properties to conventional jet fuel, but up to 80% in carbon reductions through the entire product life cycle



Marketing Business



Business Update: Marketing



Service Station

1,292 Stations

as of Mar 2022

Standard Type **677 sites**

COOP Type **615 sites**

Network Expansion

2021	→	2022
1,277 Stations		+80 to 100 Stations (gross)

Focus on: Standard type and JV type

Unique Design Service Stations as of Mar 2022



49 Stations

2021	→	2022
44 stations		+20 stations

A place to Refuel your car, and Refresh Yourself

853 Inthanin

Stores as of Mar 2022

523 sites in S/S
330 sites out S/S



"Historical high record of Sales in March"

Total Cups/Day



+6% QoQ

No. of stores



2021
817 Stores



2022
1,000 Stores

Online Cups/Day



+13% QoQ

EV Charging Station

Total installed in **97** Service Stations



Domestic Lubricant Market Share



3M2022
11.3%



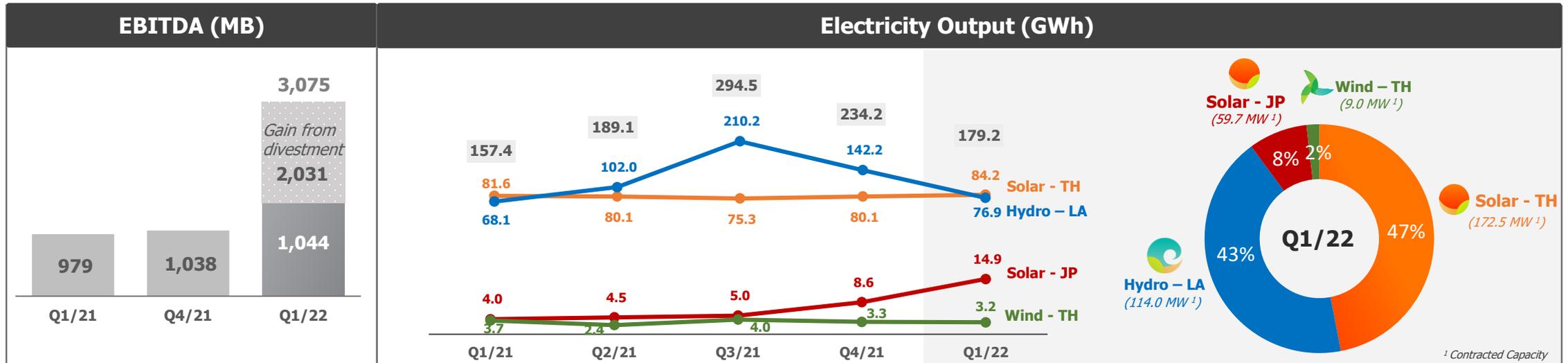
3M2021: 11.0%



Source: DOEB & BCP



Power Plant Business

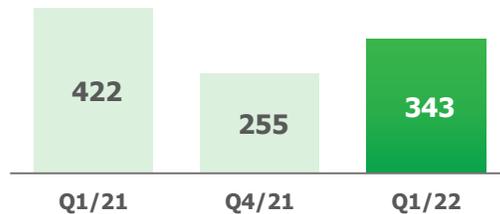


- **EBITDA increased QoQ** mainly due to gain from divestment of geothermal power plant of 2,031 MB
- **Operating performance was stable QoQ** despite a 23% QoQ decrease in electricity output mainly attributed to seasonal factor
 - Laos hydropower -46% due to seasonal factor of normal hydro power plants
 - Japan solar power +73% attributed to the full quarter recognition of Chiba 1 project, COD in November 2021
 - Thai solar power +5% mainly resulted from the better irradiation and the additional COD of CMU solar rooftop project
- **Share of profit of 142 MB:**
 - Geothermal plant dropped QoQ to 108 MB as the project was divested in late quarter
 - Philippines wind power plant rose QoQ to 34 MB from 5 MB due to higher tariff rate realization and higher electricity output supported by high season factor



Bio-Based Product Business

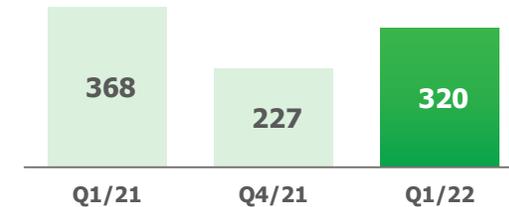
EBITDA (MB)



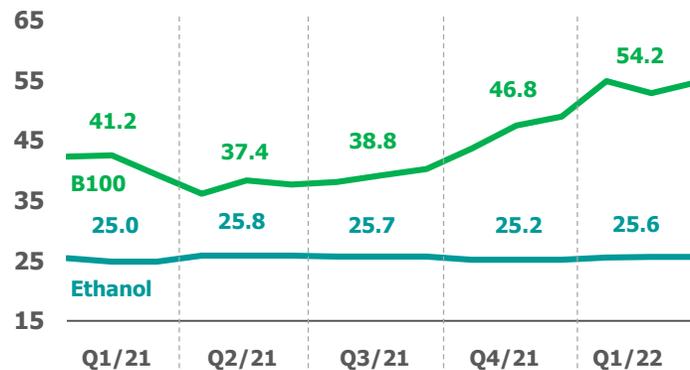
Revenue (MB)



Gross Profit (MB)



Average Market Price (Baht/Litre)



Source: EPPO

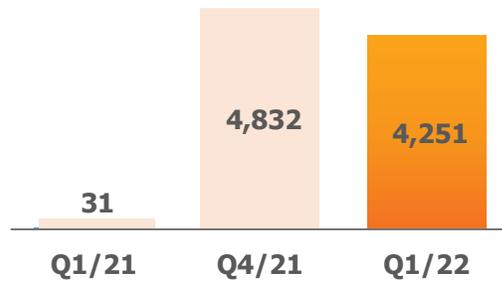
- **EBITDA improved QoQ from better gross profit** mainly from higher B100 and ethanol price but lower cost of goods sold of ethanol business
- **Average B100 market price increased QoQ** from 46.8 B/Litre to 54.2 B/Litre due to low level of domestic crude palm oil stock resulted from the delay in palm harvest and high exports
- **Demand of B100 was pressured by government policy** to cut B100 proportion in biodiesel from B7 to B5 effective from 5 Feb to 30 Jun 2022



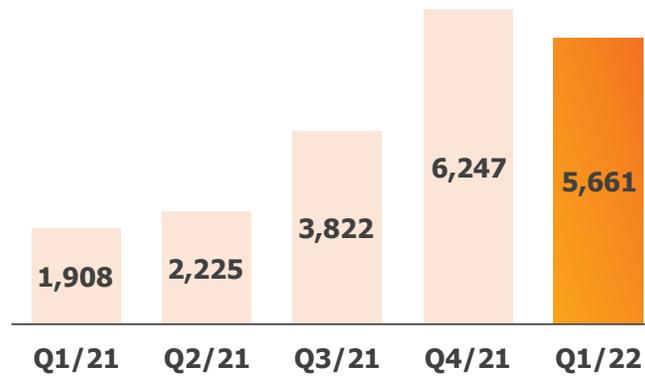
Natural Resources Business



EBITDA¹ (MB)

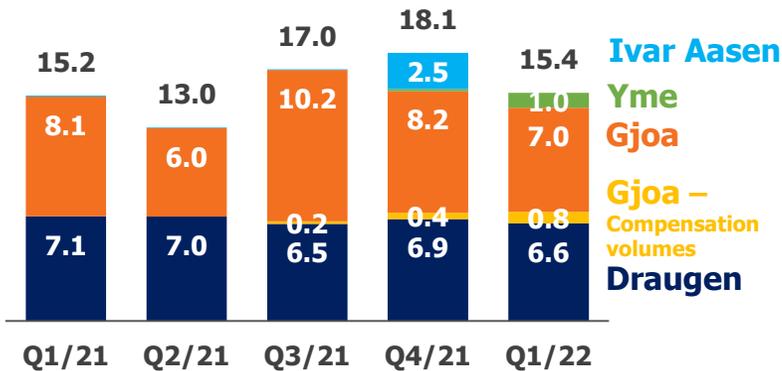


Revenues from Crude Oil and Gas Sales (MB)

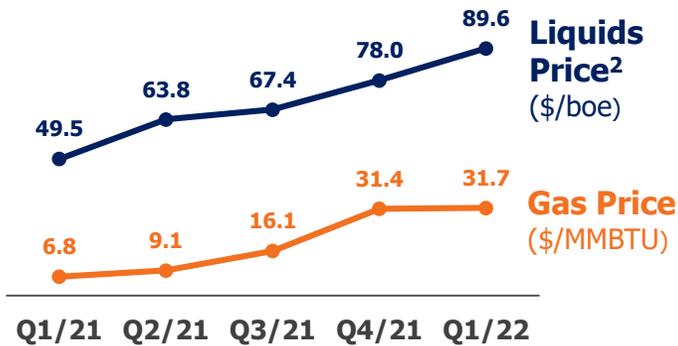


¹ As consolidated on BCP group level
(OKEA has been consolidated as a subsidiary since 1st July 2021)

Sales Volume - Net to OKEA (Kboepd)



Realized Price



² Comprising of crude and NGL price

Source: OKEA

- **Realized liquids price continued to increase** and up 15% QoQ and gas price also slightly increased
- **OKEA sales volumes declined by 15% QoQ** due to
 - **Planned shutdown of Gjøa field** (18 Mar - 8 Apr), mainly relating to tie-in work which Gjøa will receive compensation volumes for the deferred production
 - **No liftings from Ivar Aasen field** during the first quarter



Business Update: Others



✓ **More contribution from Japan solar projects** (65 MW)

- Chiba 1 COD Nov 2021 (20 MW)
- Komagane COD 29 Mar 2022 (25 MW)
- Yabuki COD 15 Apr 2022 (20 MW)



✓ **2022 New investments** (30,000 – 40,000 MB)

- Taiwan solar 469 MW expected COD 25.4 MW in Q4/2022
- M&A of operating projects



High Value Products (HVP):

- ✓ **B nature+** *ASTA-IMMU* and *ASTA-ViS* is **expanding B2C sale channels**, and currently available in Inthanin stores and other leading grocery stores such as Gourmet Market and COSCEN
- ✓ **Commercialize new products in Q3/2022**
 - **M-Green** detoxify chemicals for vegetables and fruit products
 - **X-10:** prolong the shelf life of vegetables and fruit products
 - **Reb-M:** natural sweetener to customers in ID,PH,TH

Our online channels:



BNaturePlus



@BNaturePlus



✓ **~ 117.5 MSUD* recent acquisitions with fully internal cash:**

- 35.2% working interest (WI) in Brage field
- Incremental of 6.5% WI in Ivar Aasen (9.2% total WI)
- 6% WI in Nova field

* With additional contingent payment based on an upside sharing arrangement subject to oil price level and oil production performance during 2022-24, and the transaction is conditional upon Norwegian government approval.

✓ **2022 volume guiding net to OKEA**

- Original assets production 18.5-20 Kboepd (2021: 15.5 Kboepd)
- Gjoa compensation 0.9-1.2 Kboepd (2021: 0.1 Kboepd)
- New assets production 5-6 Kboepd

✓ **2022 dividend: NOK/Share**

Quarter	Dividend (NOK/Share)	Status
Q2/22	0.9	Approved
Q3/22	1.0	Intention
Q4/22	1.0	Intention

(BCP indirectly holds 47,477,563 shares)

THANK YOU

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Appendix

Businesses



Bangchak's Business Portfolio



4.76%
Ministry of Finance



19.84%
Vayupak Fund 1



14.40%
Social Security Office



61.00%
Public

As of 3 March 2022



Bangchak Corporation Public Company Limited. Register Capital and Paid – up Capital 1,376,923,157 Baht

Refinery and Oil Trading Business

- A modern complex refinery with a maximum capacity of 120,000 barrel per day

Marketing Business

- Bangchak's network for retail customers across the country, as well as industrial users and transport sectors
- Expanding to non-oil businesses (Inthanin Coffee)

Green Energy Business



- Green power business to engage in the generation and distribution of power from renewable and clean energy

Bio-based Product Business



- Thailand's first and largest fully integrated biofuel (ethanol and biodiesel) producer and distributor

Natural Resources and Business Development Business

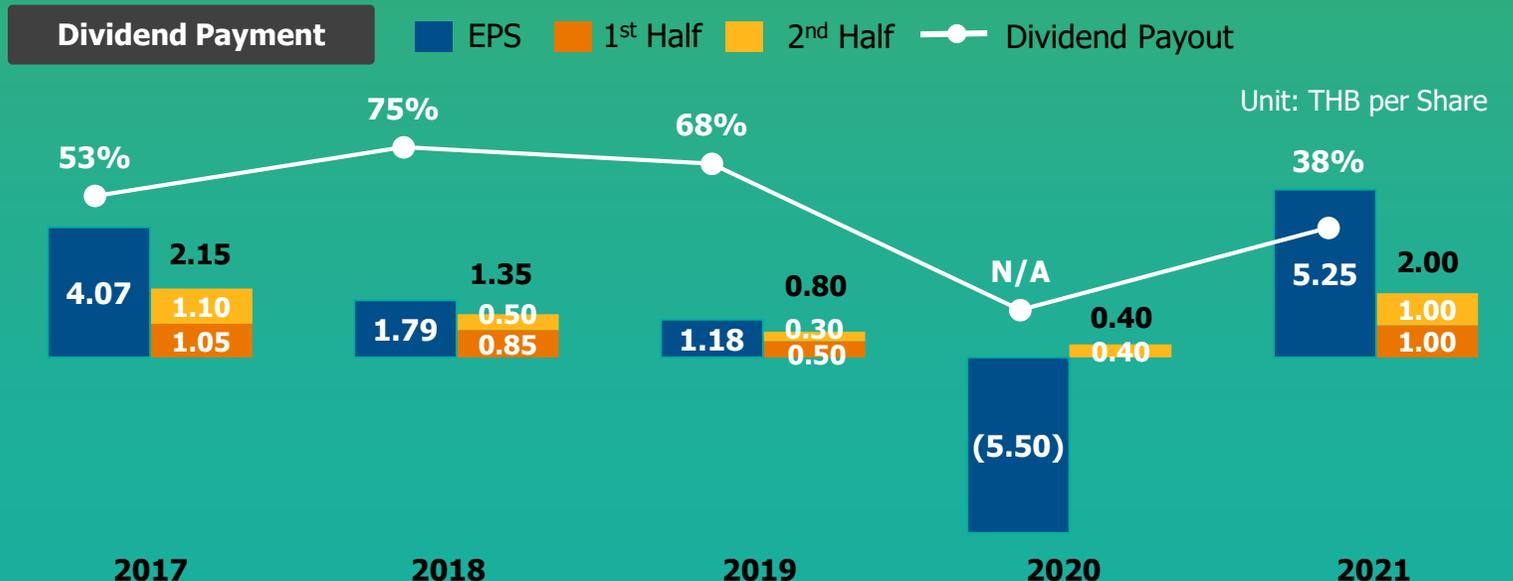


- Upstream petroleum exploration and production (E&P) business

Listed in SET since August 1994

Dividend Policy: ≥ 30 percent

The Company has the policy to pay out dividend to the shareholders at the rate of not less than 30 percent of net profit after deduction of allocation of legal reserve. However, this is subject to the economic situation, the Company's cash flow and investment plans of the Company and its subsidiaries according to the necessary, appropriation and other concerning as the Board of Directors' consideration.



BCP and Sustainability



To achieve "Race to Zero"

Carbon Neutral Company by 2030
Net-Zero Greenhouse Gas Emissions by 2050



To Create Social Values



ESG Rating & SDGs Performance



Refinery and Trading Business: BCP Refinery



Q1/22 Crude run **122** KBD

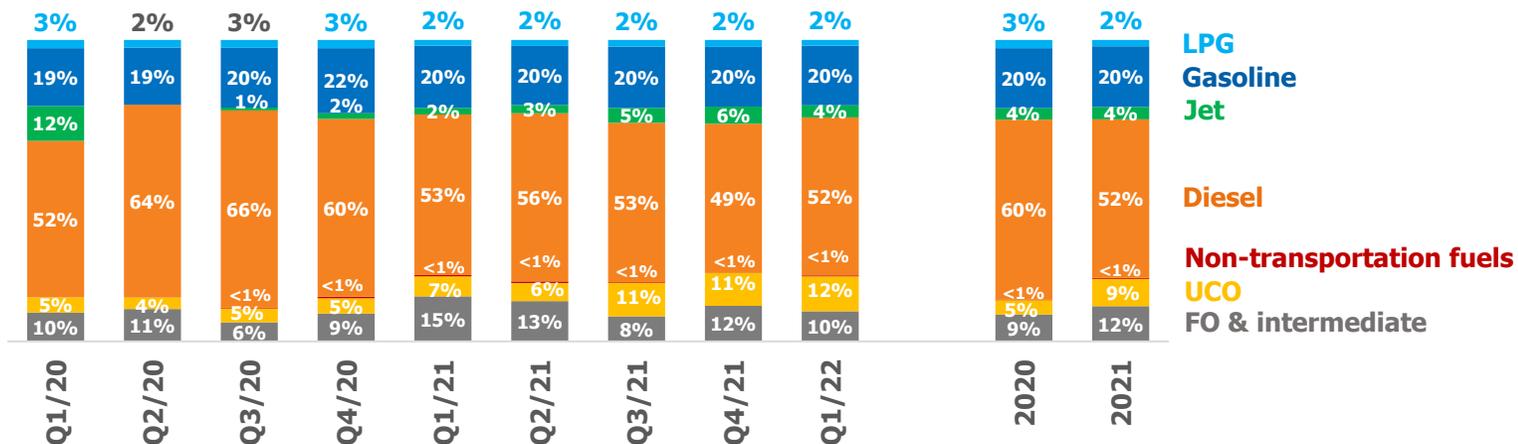
Nameplate capacity of 120 KBD



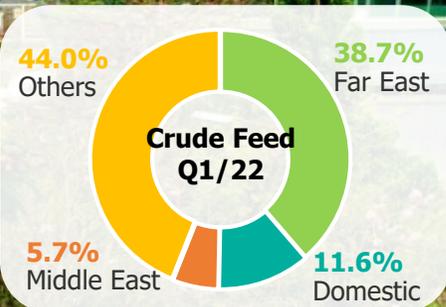
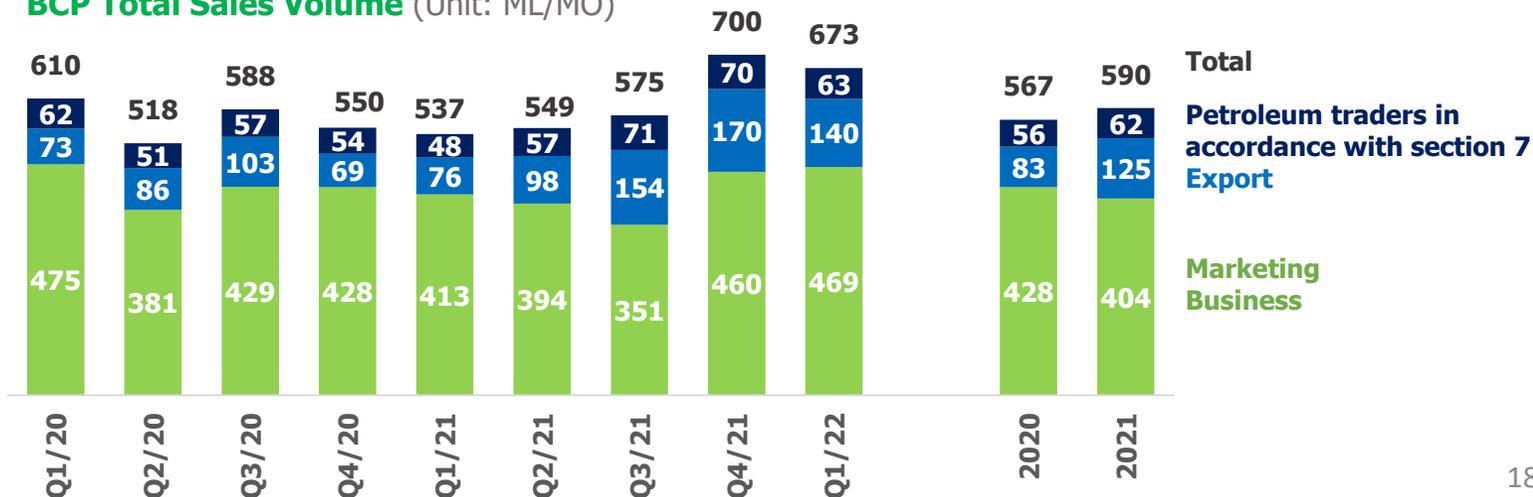
Q1/22 Operating GRM **6.7** \$/BBL



Production Yield



BCP Total Sales Volume (Unit: ML/MO)



Marketing Business: Service station and Inthanin



Service Stations (as of 31 Mar 2022)



1,292 Sites

Standard Type

677 Sites

CO-OP Type

615 Sites

Network Expansion

Focus on high potential areas, with service stations of distinguished character, harmoniously customized to customer needs

Unique Design Service Stations

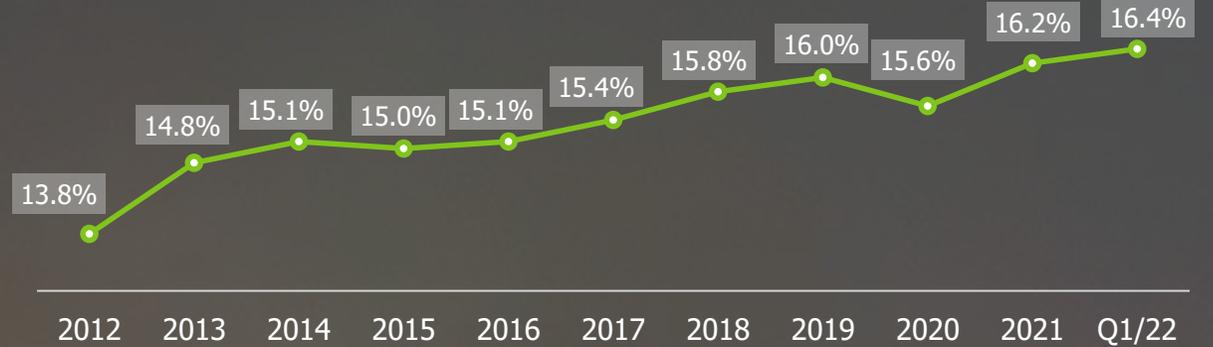
49 Sites

"The first impression"

Deliver the best customer experience. Developing unique design service station is one of the main strategy to make BCP service stations more appealing to customers



Market Share



Source: DOEB & BCP

Non-Oil Business

Coffee Business



Inthanin

"THE FRESH QUALITY ECO-COFFEE IN THAILAND", serve 100% Arabica coffee beans roasted with specific process while giving back to the community and environment nationwide

853 Stores

523 sites in S/S
330 sites out S/S
(as of 31 Mar 2022)

EV Charging Business



PEA
Provincial Electricity Authority



SHARGE

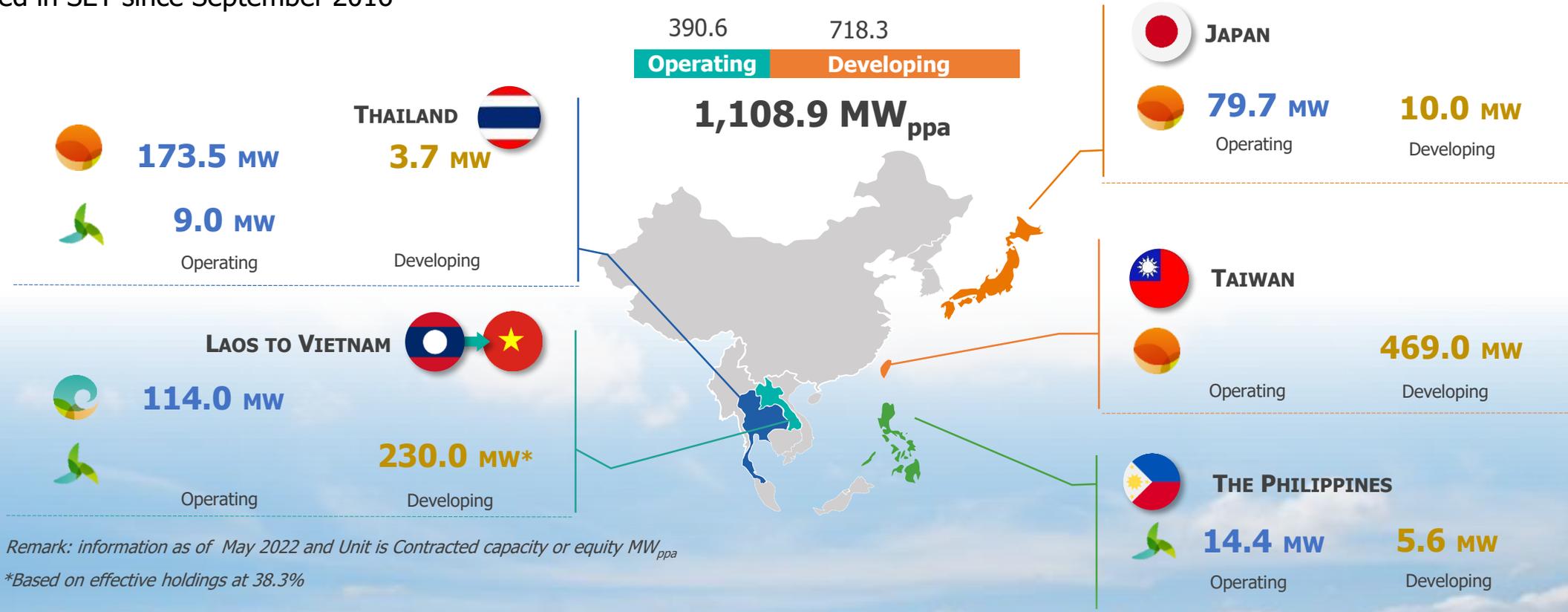
Total installed Service Stations

97

Power Plant Business: BCPG



- An integrated power generation company and service provider of smart energy system focusing on renewable and clean power
- Listed in SET since September 2016



Bio-based Product Business: BBGI



Ethanol Business

Kanchanaburi

Molasses

300,000 L/D

Operates under KGI-BP
BBGI holds 100%

Khonkaen

Molasses

150,000 L/D

+200,000 L/D

(Currently under construction)

Operates under KGI-NP

BBGI holds 100%

Chachoengsao

Cassava

150,000 L/D

Operates under BBE

BBGI holds 85%

Biodiesel Business

Ayutthaya

Crude palm oil

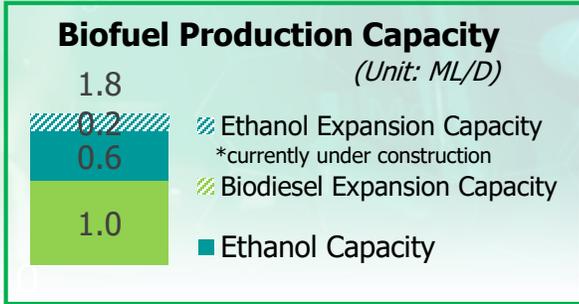
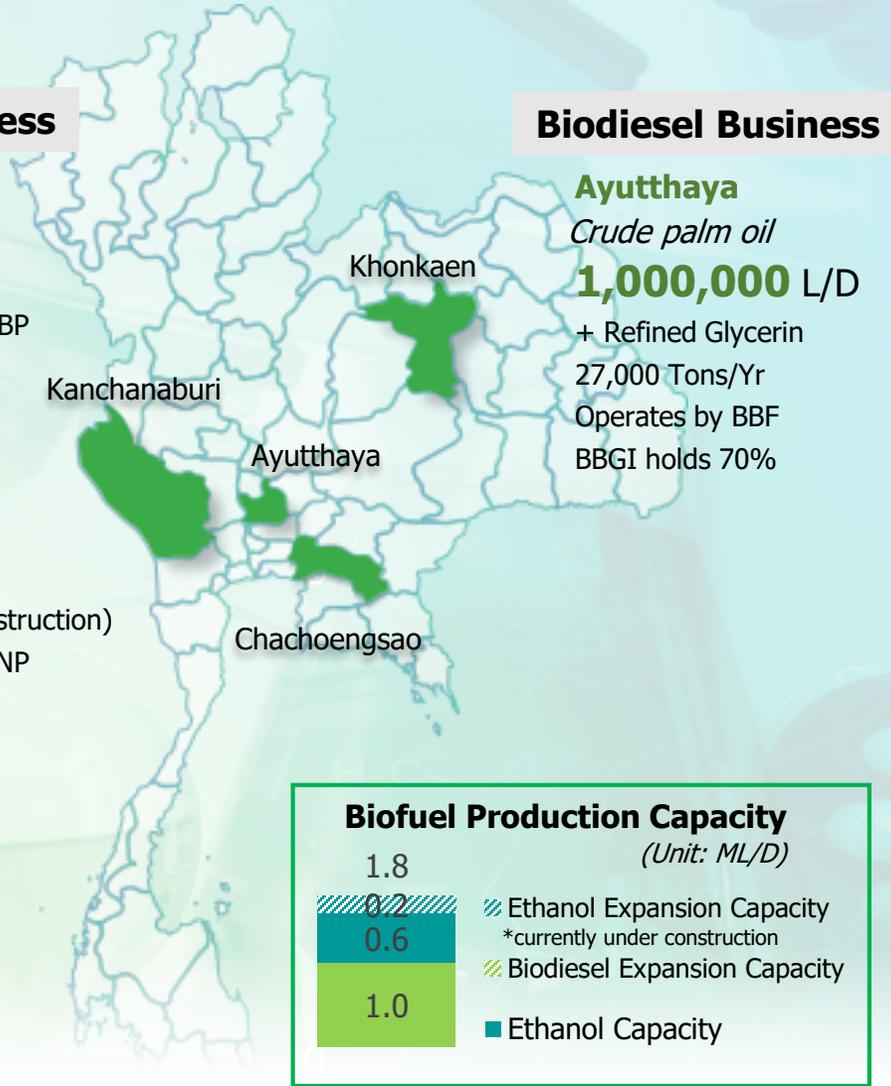
1,000,000 L/D

+ Refined Glycerin

27,000 Tons/Yr

Operates by BBF

BBGI holds 70%



Fully Integrated Biofuel Producer in Thailand

- Listed in SET since March 2022
- Collaborate with World Class Player through Investing and Partnering to Bring Bio Business to "New Frontier"

Synthetic Biology

Investing in Manus



Advanced bacteria fermentation tech to convert sugar into natural ingredients



Neotame



Reb M



Tabletop

Partnering with Manus



Exclusive Manufacturing License and Distributor in 12 Countries



Distribution Platform

Distributing HVP

Business-to-Customer (B2C)



Online Channel



Food & Health Supplement



Offline Channel



Business-to-Business (B2B)

Trading Bio-ingredients from Top-Tier Producer to gain insightful info



Astaxanthin

Natural Resources Business: OKEA ASA



Ownership:

44.56%

Operator: OKEA

Draugen



Ownership

12%

Gjøa



As of March 2022



Ownership

2.777%

Ivar Aasen

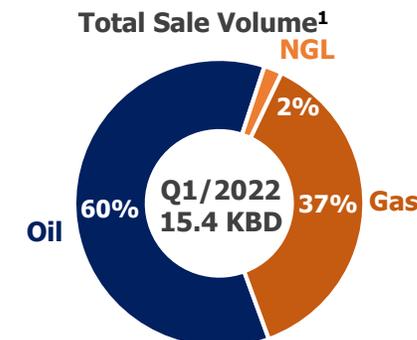
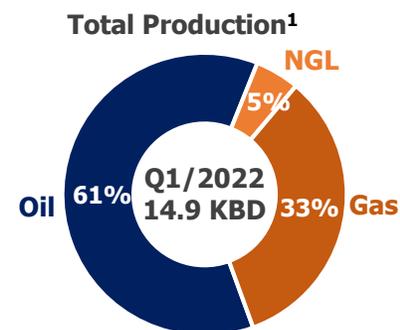


Ownership

15%

Yme

- A Norway-based oil company engaged in the oil and gas exploration and production industry
- Listed in Oslo stock exchange since June 2019



Total Sale Volume¹ (Unit:Kboepd)

Assets	Reserves ² (mmboe)	2019	2020	2021	Q1/21	Q2/21	Q3/21	Q4/21	Q1/22
Draugen	27.9	7.9	7.9	6.9	7.1	7.0	6.5	6.9	6.6
Gjoa	7.5	7.6	7.6	8.1	8.1	6.0	10.2	8.2	7.0
Ivar Aasen	2.1	0.3	0.3	0.7	0.07	0.03	0.05	2.5	1.0
Yme ³	10.7	0.0	0.0	0.04	0.0	0.0	0.0	0.1	0.04
3 rd party volume available for sale ⁴	-	0.0	0.0	0.1	0.0	0.0	0.2	0.4	0.8
Total	48.2	15.9	15.9	15.8	15.2	13.0	17.0	18.1	15.4

Note:

¹ Net to OKEA

² OKEA reserves as of 31 December 2021, except reserve from Ivar Aasen which is as of 1 January (2.777% working interest)

³ Yme First oil on 25 October 2021. Net production ~5.6 KBD for the first 12-months, and 8.4 KBD at plateau

<https://www.okea.no/>

⁴ Compensation volume from Duva received (tie-in to Gjøa)



Appendix

Financials



EBITDA Structure (Consolidated)



Unit: THB Million	Q1/2022	Q4/2021	QoQ	Q1/2021	YoY
Total Revenue	69,055	66,762	3%	41,230	67%
Accounting EBITDA	13,714	9,281	48%	4,737	189%
<i>Refinery and Trading Business^{1/}</i>	5,021	3,084	63%	2,411	108%
<i>Marketing Business^{2/}</i>	1,118	255	338%	970	15%
<i>Power Plant Business^{3/}</i>	3,075	1,038	196%	979	214%
<i>Bio-Based Product Business^{4/}</i>	343	255	35%	422	-19%
<i>Natural Resources Business^{5/}</i>	4,251	4,832	-12%	31	>1000%
<i>Others</i>	(94)	(184)	49%	(76)	-24%
Profit attributable to owners of the Company	4,356	1,756	148%	2,284	91%
Basic earnings (loss) per share (Baht)	3.12	1.20		1.59	

Note: 1/ EBITDA from Refinery and Trading Business of the company (BCP), BCP Trading Pte. Ltd. (BCPT), Bangchak Fuel Pipeline and Logistic Co.,Ltd. (BFPL) and others

2/ EBITDA from Marketing Business of the company (BCP), Bangchak Green Net Co.,Ltd. (BGN), Bangchak Retail Co., Ltd., (BCR) and others

3/ EBITDA from Power Plant Business of BCPG Plc. (BCPG Group)

4/ EBITDA from Bio-Based Product Business of BBGI Plc. (BBGI Group)

5/ EBITDA from Natural Resources Business of OKEA ASA (OKEA), BCP Innovation Pte. Ltd. (BCPI) And BTSG Co., Ltd. (BTSG) and others

Profit and Loss (Consolidated)



Consolidated Statement of Income (THB Million)	Q1/2022	Q4/2021	QoQ	Q1/2021	YoY
Revenue from sale of goods and rendering of services	69,055	66,762	3%	41,230	67%
Cost of sale of goods and rendering of services	(56,801)	(57,473)	-1%	(36,626)	55%
Gross Profit	12,254	9,289	32%	4,604	166%
Other income	350	225	56%	142	147%
Selling and administrative expenses	(1,669)	(2,465)	-32%	(1,445)	16%
Exploration and evaluation expenses	(346)	(344)	1%	(1)	N/A
Gain (loss) from derivatives	(1,320)	133	N/A	(429)	N/A
Gain (loss) on foreign exchange	60	(75)	N/A	43	N/A
Gain from sale of investment	2,031	(2)	N/A	0	N/A
Loss from impairment of assets	563	(1,757)	N/A	400	N/A
Profit (loss) from operating activities	11,923	5,003	138%	3,313	260%
Finance costs	(836)	(809)	3%	(464)	80%
Impairment gain and reversal of impairment loss (impairment loss) determined in accordance with TFRS 9	(384)	(29)	N/A	6	N/A
Share of profit (loss) of associates and joint ventures accounted for using equity method	148	159	-7%	194	-24%
Profit (loss) before income tax expense	10,851	4,323	151%	3,049	256%
Tax income (expense)	(5,347)	(1,756)	204%	(408)	N/A
Profit (loss) for the period	5,504	2,567	114%	2,642	108%
Owners of parent	4,356	1,756	148%	2,284	91%
Non-controlling interests	1,205	811		358	
Basic earnings (loss) per share (Baht)	3.12	1.20		1.59	

Financial Ratio (Consolidated)



Profitability Ratios (%)	Q1/2022	Q4/2021	Q1/2021
Gross Profit Margin	17.75%	13.91%	11.17%
EBITDA Margin	19.86%	13.90%	11.49%
Net Profit Margin	7.97%	3.84%	6.41%
Return on Equity ^{1/} (ROE)	17.96%	15.27%	-0.05%
Efficiency Ratio (%)			
Return on Assets (ROA)	13.45%	9.51%	2.44%

1/ Profit and total equity attributable to owners of the parent

	31-Mar-22	31-Dec-21	31-Mar-21
Liquidity Ratios (Times)			
Current Ratio	2.19	2.03	2.12
Quick Ratio	1.46	1.40	1.35
AR Turnover	23.67	26.29	18.92
Collection Period (Days)	15	14	19
AP Turnover	16.71	18.61	20.38
Payment Period (Days)	22	20	18
Financial Policy Ratios (Times)			
Debt to Equity	1.78	1.90	1.39
Interest bearing Debt to Equity	1.11	1.28	1.13
Net Interest bearing Debt to Equity	0.49	0.81	0.79
Release of Debenture Ratio (Times)			
Net Interest bearing Debt to Net Equity	0.45	0.70	0.64



Appendix

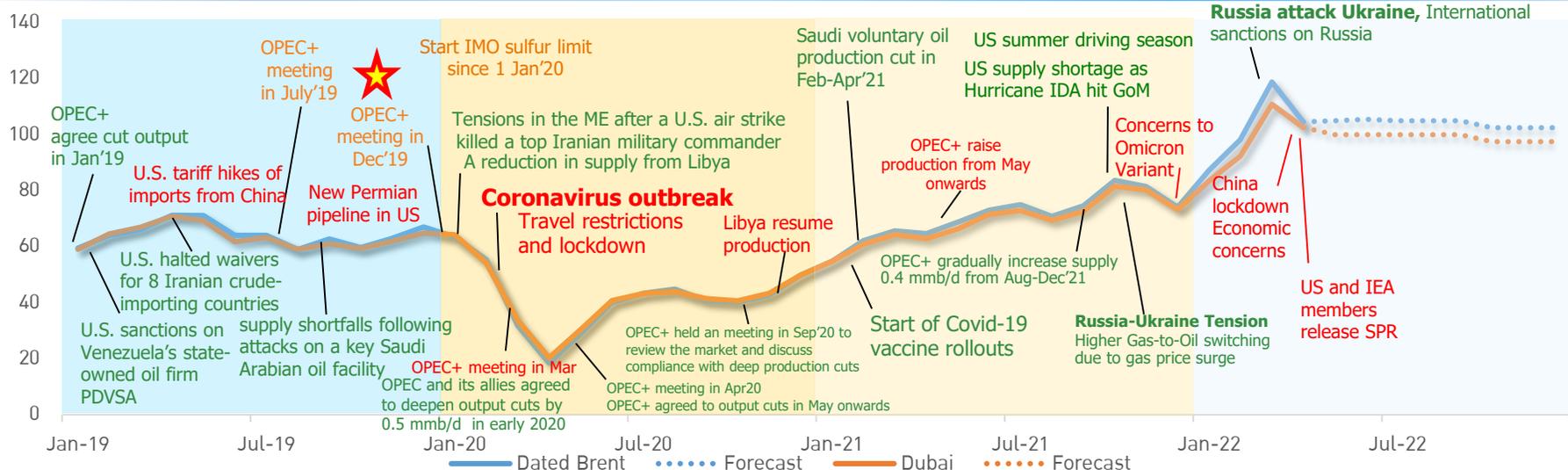
Oil Outlook



Crude Price Outlook



Dated Brent and Dubai Crude Price Movement and Factors

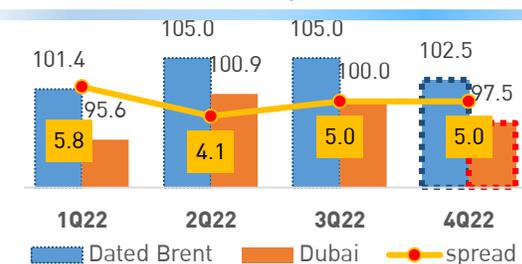


Dubai AVG: Q1/21=60.0 Q2/21=67.02 Q3/21 = 71.67 \$/BBL Q4/21 = 78.35 \$/BBL

Price Outlook (\$/BBL)



2020 Price Outlook by Quarter (\$/BBL)



Crude Oil Price Outlook : Crude price move around 95-120 \$/BBL in Q2/22 on worries that sliding output in sanctions-hit Russia, the world's second-biggest oil exporter, will tighten supply. The release of Strategic Petroleum Reserve volumes equals 1.3 MBD over the next six month, enough to offset a shortfall of 1 MBD of Russian oil supply. But geopolitical supply risks led by Libya and Iran and growing loss of Russian supply could bring back supply shortfall again

Focus on Q2/22:

- **Supply could be squeezed further if the EU imposes an embargo on Russian oil.**
- OPEC+ stick to existing agreement with 432,000 BPD rise in May
- Libya supply loss due to disruptions from protests
- IMF cuts global GDP growth forecast for 2022 from 4.4% to 3.6% from Russia's war in Ukraine and warns of further cuts if western countries expand their sanctions against Russia.
- Concerns on China lockdown hit oil demand
- **IEA members to release 1.3 MMBD oil over 6 months**
- Two-month truce in Yemen would reduce oil supply threat

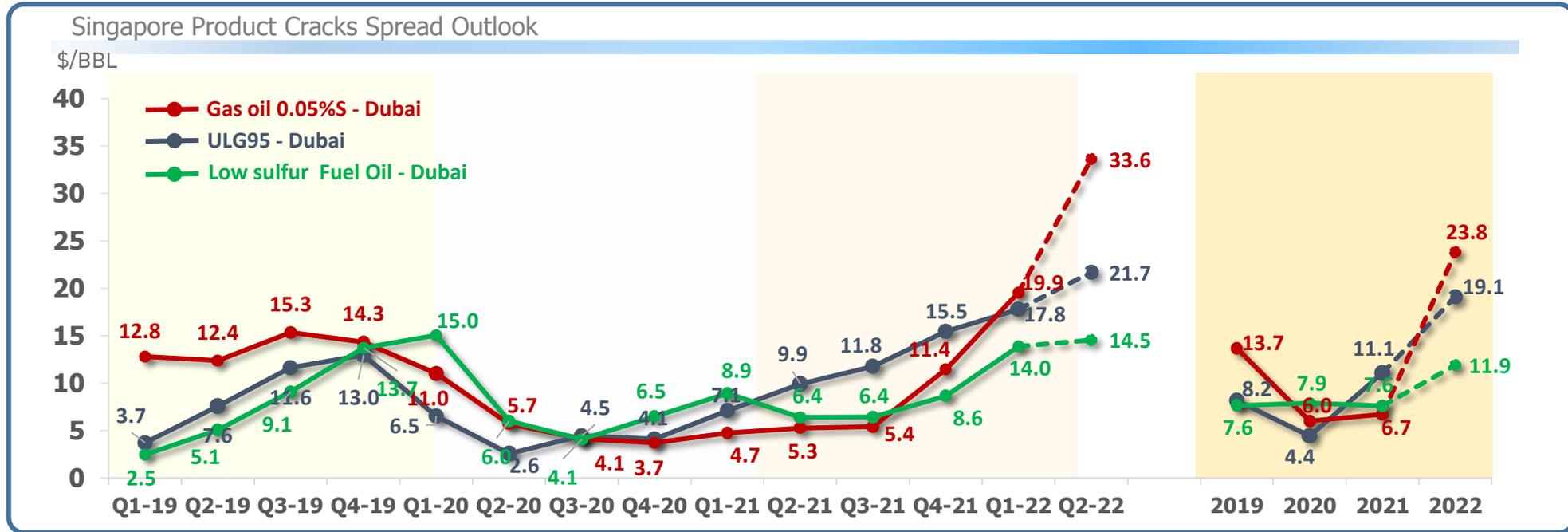
Market Highlights in 2022:

- Oil demand recovering more slowly: higher recession risk
- Lower supply due to sanctions on Russian oil
- Supply uncertainty from Libya outages and prolong Iranian sanctions lifting.
- Geopolitical supply risks in MENA
- OPEC+ production quota policy
- China stimulus hopes after economic hit by COVID-19
- Supply increase as U.S. and Iran nuclear talks.
- Low global oil products inventory, refineries will need to run harder
- Strong dollar index on potential US interest rate rise

Dated Brent – Dubai Spread

- Fears of supply shortfall in Europe, buyer avoid to buy Russian crude and gas-to-oil switching demand had drive the widen Dated Brent – Dubai spread in 1Q'22
- We see the spread is softening in 2Q22 due to higher supply from SPR release, refinery maintenance and more US crude exports to Europe from growing production and arbitrage economic.
- Overall spread in 2022 could be seen in widen range due to global supply tight especially in Europe which want to replace Russian barrel.

Crack Spread Price Outlook



Stronger gasoil crack as supply tightness from Russia-Ukraine tensions amid improving demand as recovering economic activities. Stronger gasoline crack as recovering demand across the region after eased restrictions with the tightness in the West in the lead-up to the summer driving season. Higher low sulfur fuel oil crack as lower supply shift away from marine fuel production towards the more profitable gasoil pool and reduced arbitrage cargo from Middle-East

Focus on Q2/22:

- Gasoil crack will be continued strong amid supply uncertainties with concerns over supply as Russia-Ukraine tensions and against the backdrop of extremely low global inventory levels as well as continued demand recovery from the reopening of economies
- Gasoline crack will be supported as the strength demand recovery after more countries eased restrictions and further border reopening amid the refinery maintenance in Asia
- Low Sulfur Fuel oil crack will be supported as higher gasoil cracks are incentivizing refiners to move sulfur cutter supply away from marine fuel production. US refiners pay up for cargoes from the Middle East at levels Asian refiners weren't willing to pay

Market Highlights in 2022:

- The continued demand recovery to pre-COVID levels as relax restrictions and further border reopening due to the lower severity of COVID-19 variant amid widespread and booster vaccination
- Expected growth in manufacturing and industrial demand will recover after Covid-19
- The resumption of air travel after more countries gradual lifting of travel restrictions
- The Low Sulfur Fuel Oil's supply in the worldwide will be continued to fall on the back of continued refinery modernization and will be supported by lower supply due to refiners move sulfur cutter supply away from marine fuel