Regenerative Happiness

40th anniversary bangchak

Bangchak Corporation Plc

S&P Global

MSCI ESG RATINGS AA
CCC | B | BB | BBB | A | AA | AAA

SET AAA ESG Ratings 2023

May, 2024

Disclaimer

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Bangchak Business Portfolio

Register Capital and Paid – up Capital 1,376,923,157 Baht

4.76%	Ministry of Finance
19.85%	Vayupak Fund 1
14.18%	Social Security Office
61.21%	Public (As of 7 March 24)

Natural Resources

OKEA ASA
Holds 45.58%

Norway-based oil & gas company
with production capacity of
35-40 KBD in 2024

Refinery & Oil Trading Business

294 KBD
of nameplate capacity
with 500,000 Tons of Paraxylene
bsrc Holds 76.34%

Marketing Business

Distribution channels through industrial & retail channels
2,217 Service Stations

Clean Power Business

bcpg Holds 57.81%
4 power generation technologies
in 7 countries over the world with
2,049 MW in total

Bio-based Products

bbgi Holds 45.00%
No.1 fully Integrated Biofuel Producer in Thailand with **1.85 ML/D** in production capacity

Always Ahead of The Game!

Leading the Way in the Eco-Revolution

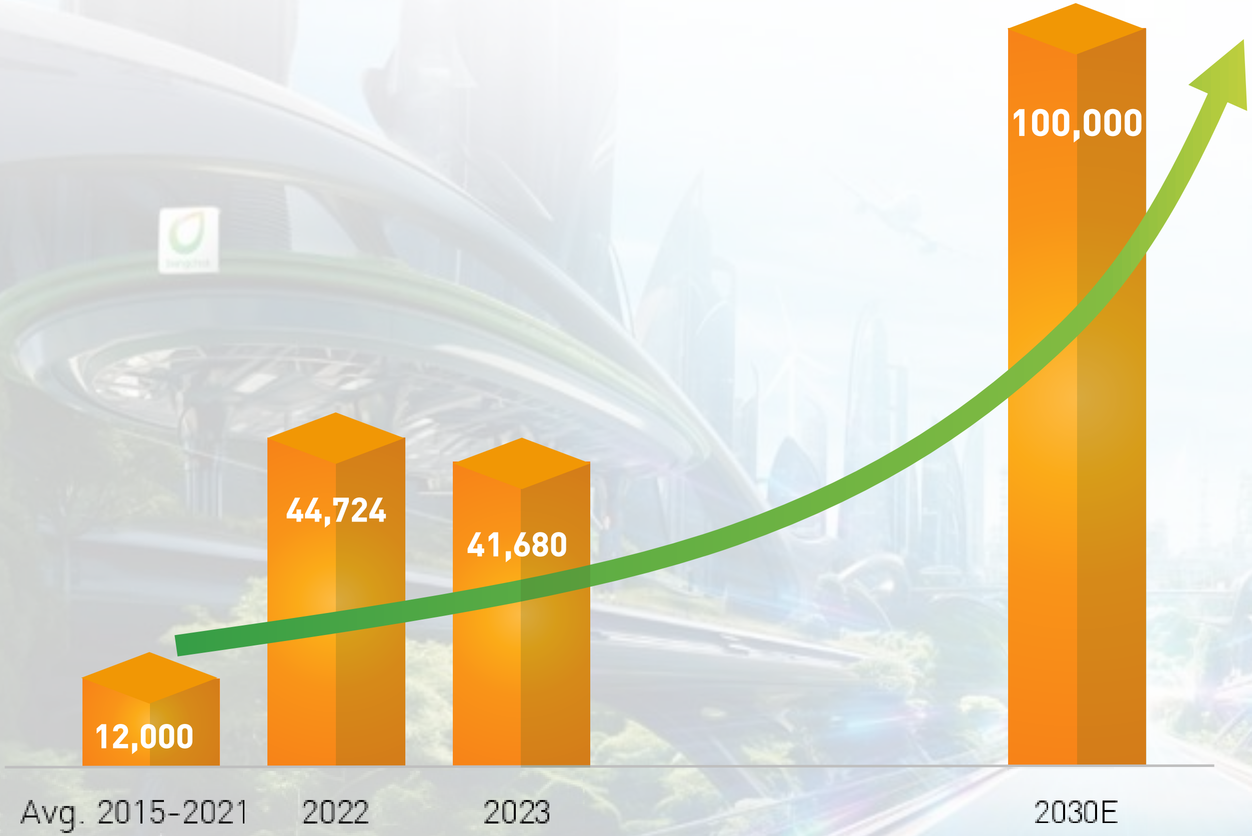
Exponential Growth Journey

Strong Market Fundamentals, Optimization, Diversification

10X New Growth Chapter

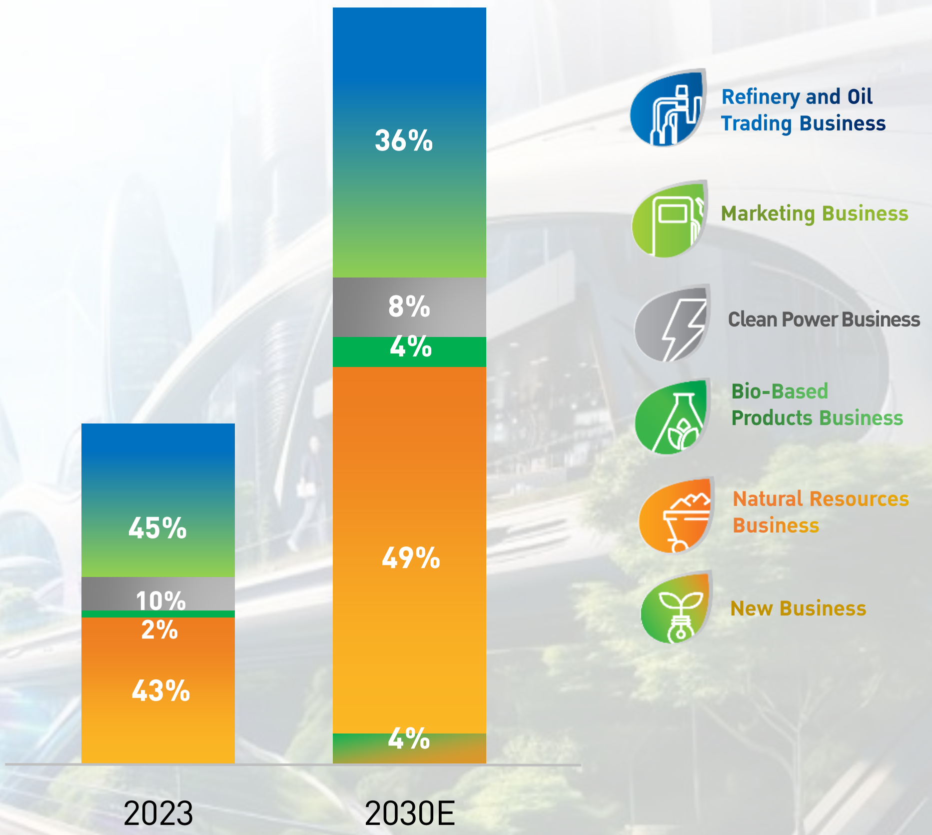
Accounting EBITDA

Unit : Million Baht



Accounting EBITDA

(% breakdown by business unit)



From a Simple Refinery to
Two World-Class Complex Refineries

Bangchak Group employs a combination of Hydrocracking and Fluidized Catalytic Cracking (FCC) techniques in operating two refineries with a combined nameplate capacity of 294 KBD. This strategy aims to maximize Gross Refinery Margin (GRM) within our Group by providing a diverse product mix.

Our ongoing efforts focus on enhancing efficiency to reduce OPEX, implementing debottlenecking measures for increased crude run, and expanding the production of niche products such as unconverted oil, wax, and Sustainable Aviation Fuel (SAF) to position ourselves as a niche refinery.

2013
99 KBD
Production Capacity

2017
111 KBD
Production Capacity

2022
123 KBD
Production Capacity

Thailand Quality Award Winner 2022
TQA Certificate

2023
155 KBD
Production Capacity

GPEA
Global Performance Excellence Award 2023

2024
294 KBD
Nameplate Capacity

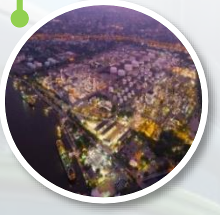
The **LARGEST** refineries in Thailand with a combined nameplate capacity of **294 KBD**

Thriving Sriracha Refinery through Bangchak Legacy

Crude Run

122 KBD

99 KBD in 2014



New Crude

47

Different crude sources

14

OPEX* ($/BBL)

>2 $/BBL in 2015

1.3

Niche Product Portion

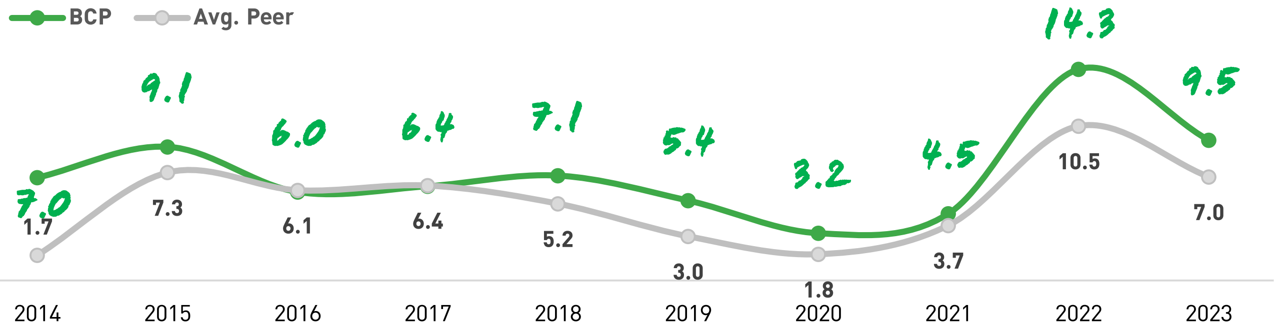
18%

right after TAM in May 2024

12%

2%

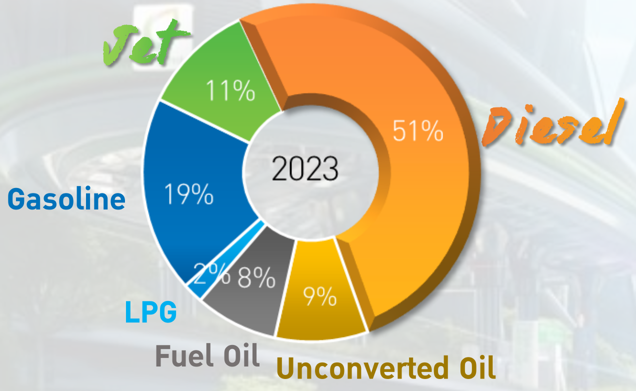
PROVEN HIGH LEVEL of GRM ($/BBL)

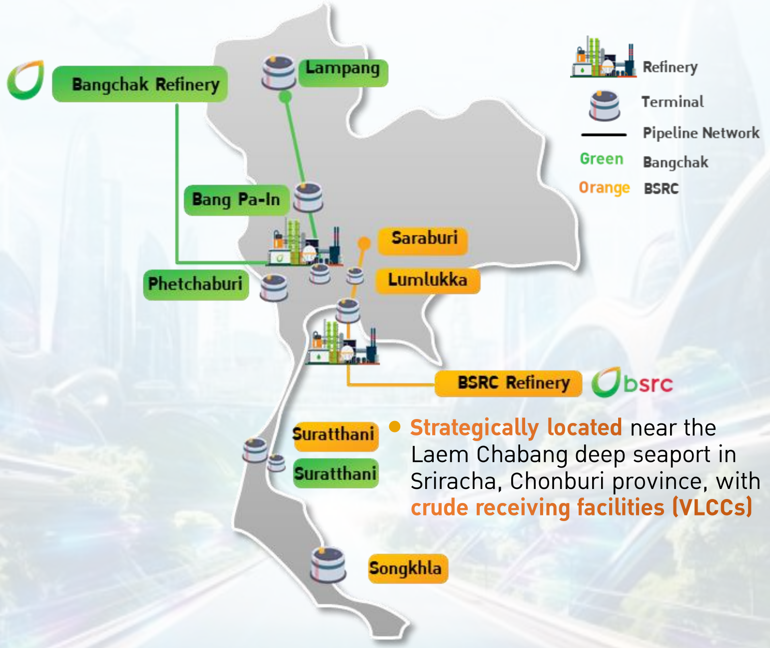


*Note: Exclude ROU

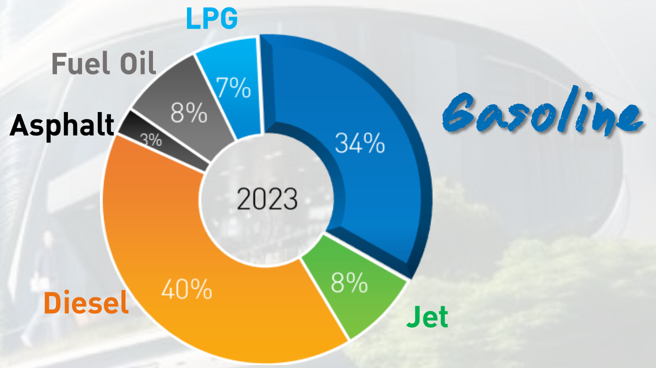
Complementary Refinery Portfolio: *Pre-Integration*

Phra Khanong Refinery		Sriracha Refinery
120 KBD	Nameplate Capacity	174 KBD
103%	FY23 Avg. Utilization Rate	68%
Hydrocracking (HCU)	Technology	Fluidized Catalytic Cracking (FCC)
Middle Distillate	Product Yield Maximization	Gasoline





- **Strategically located** near the Laem Chabang deep seaport in Sriracha, Chonburi province, with **crude receiving facilities (VLCCs)**



Status before acquisition:

Importation of Gasoline 50-75 ML/MO

Status before acquisition:

Exportation of Gasoline & Fuel Oil (FO)

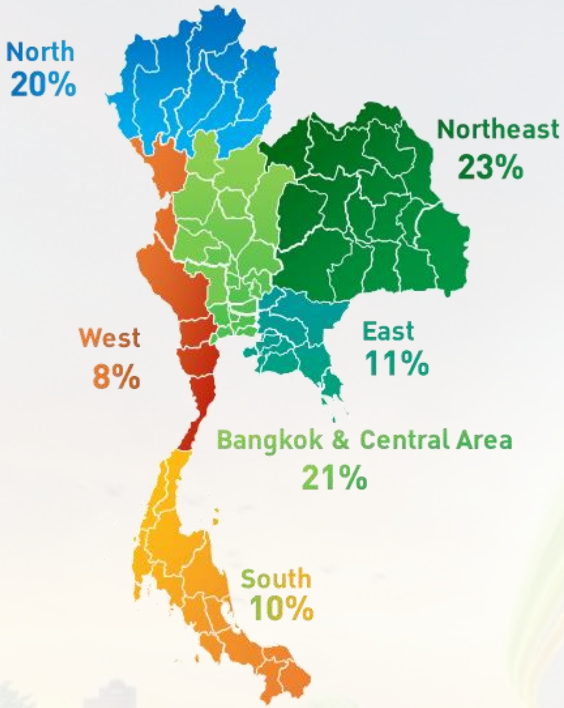
From Cooperative Service Stations to Greennovative Destination

1,072
Stations
2015

2x growth

2,217
Stations
Ended Q1/24

Strengthening Marketing Portfolio: *Pre-Integration*



2,217
service stations
1,388 + 829

No.1
in Bangkok & Central Area

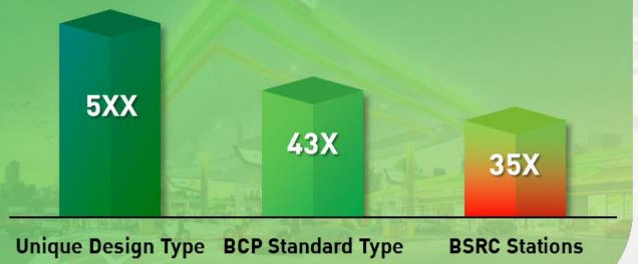
33%
Network Coverage of Branded SS. in Thailand

13%
Market Share in Premium Products
Growth 4X from pre-integration

Bangchak	FY2023	Bangchak Sriracha
397 ML/MO (Standard Type Thruput per SS: 42X KL/MO)	Avg. Sales Volume via SS	290 ML/MO
143 ML/MO	Avg. Sales Volume in Industrial Market	341 ML/MO
16.5%	Retail Oil Market Share	12.3%
FURIO	Lubricant Sales	
Inthanin 1,020	Coffee Outlets	

Upside of Thruput per Station

(KL/MO/SS)



Opportunities to Expand Retail Businesses

Network Planning
Non-Oil Expansion
Fleet Card
Co-Marketing Campaign
EV Charger

Keep Realizing EBITDA Synergies >3,000 mn. THB/Year

Refinery Operations

~฿1,000 mn. THB

- ✓ Improved utilization from 130 KBD to 174 KBD
- ✓ Product yield and GRM optimization
- ✓ Coordinated maintenance schedule
- ✓ Strategic oil blending
- ✓ Crude co-loading

Logistics

~฿200 mn. THB

- ✓ Logistic re-zoning
- ✓ Expanded logistics reach with lower cost
- ✓ Trading growth

Marketing Network

~฿300 mn. THB

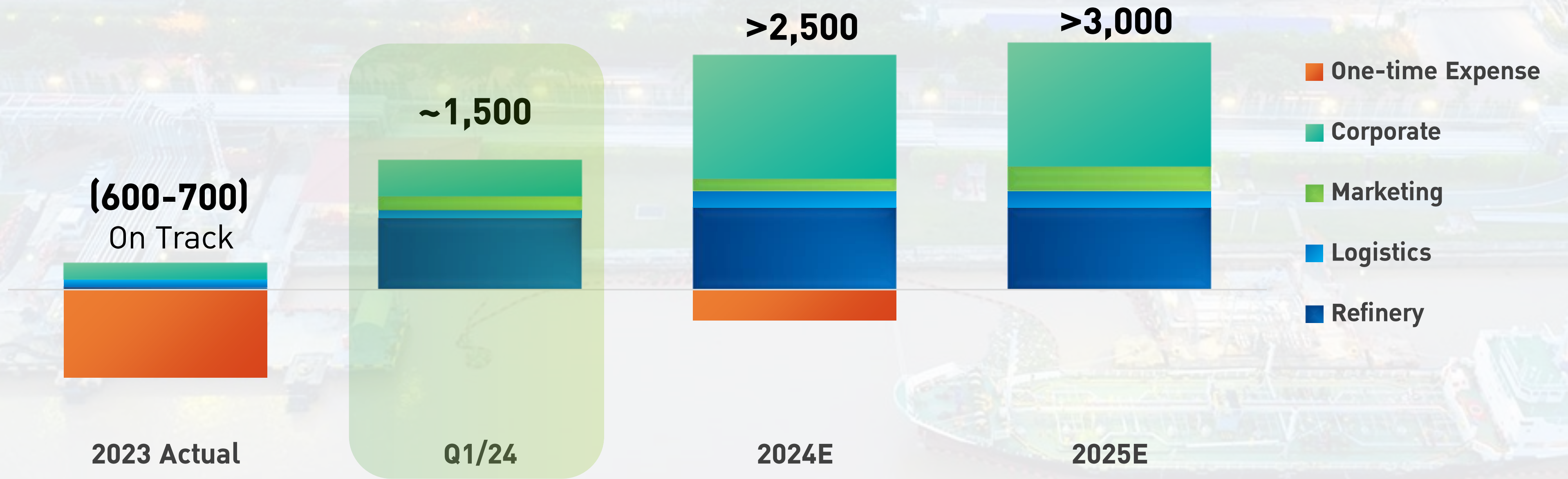
- ✓ BSRC's throughput enhancement
- ✓ Increase sales volume of premium products
- ✓ Expand industrial sales volume
- ✓ Opportunity for Non-oil network expansion in BSRC's stations

Corporate Cost Saving

~฿1,500 mn. THB

- ✓ Economies of scale on back-office operations
- ✓ Simplified management structure

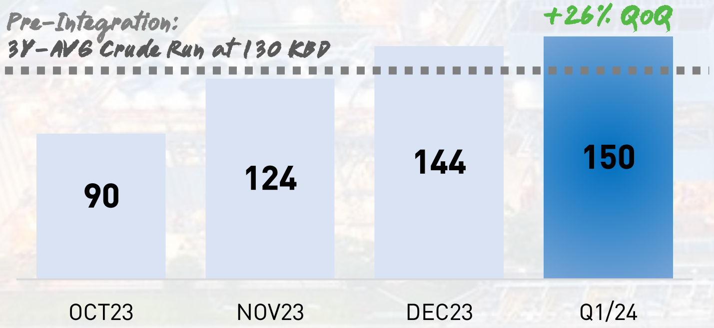
Unit : Million Baht



Synergy in Action: *Progress Snapshot*

Refinery Operations

Sriracha Crude Run Improvement (Unit: KBD)



Crude Co-Loading & Co-Purchasing

✓Jetty & Port improvement for receiving larger vessels

✓Receiving **Suezmax vessel** (~ 950,000 barrels)

✓Higher negotiation power for crude purchase

Product Optimization & Product Blending

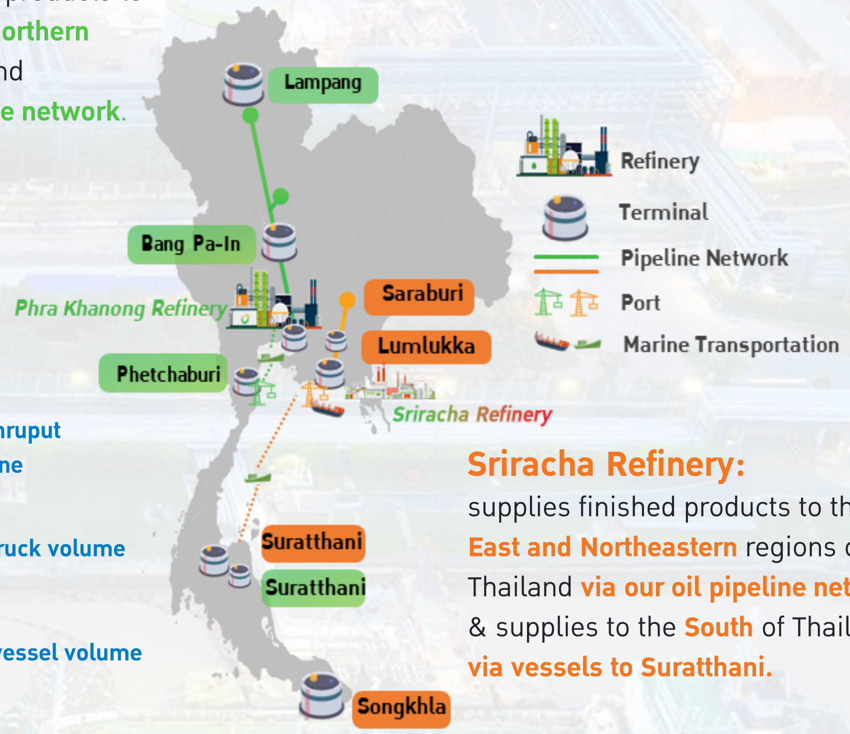
for profit maximization of Bangchak's Group

✓**No Gasoline Import for BCP**,
replacing by Gasoline production from BSRC
(Previously BSRC used to export Gasoline)

Logistics

Logistics Rezoning & Oil Pipeline Usage

Phra Khanong Refinery:
supplies finished products to the **Central and Northern** regions of Thailand **via our oil pipeline network.**



Increasing thruput via oil pipeline

Optimizing truck volume

Optimizing vessel volume

Sriracha Refinery:
supplies finished products to the **East and Northeastern** regions of Thailand **via our oil pipeline network** & supplies to the **South** of Thailand **via vessels to Suratthani.**

Synergy in Action: *Progress Snapshot*

Marketing Network

- Rebranding Service Stations — 829 — 45% SS rebranding — Target to be completed by 2024
  As of APR24
- Avg. Sales Volume via SS — +32 ML/MO from pre-integration
- Retail Market Share — 28.8% (FY2023) → 29.2% (Q1/24)
- Premium Product Penetration
- Non-Oil Offering Penetration

Lubricant Sales into 747 SS under BSRC

- Integrated Marketing Campaign

✓ Sales Promotion
✓ Loyalty Program

Corporate Cost Saving

- **Providing shared services**
  i.e. Accounting, IT, HR systems with comprehensive support
- **Business Management & Brand Royalty**
- **Manpower Management**
  i.e. manpower sharing for some units & strategic work etc.
- **Co-Procurement & Pool Bidding**
  i.e. external auditor fee, equipment, chemicals, and others for 2 refineries
- **Facility Management**
  i.e. co-office space, equipment, cleaning etc.

What is Sustainable Aviation Fuel (SAF)

SAF

Sustainable Aviation Fuel (SAF) are defined as renewable or waste-derived aviation fuels that meets sustainability criteria, that has similar properties to conventional jet fuel but with a smaller carbon footprint.

- **100% WASTES AND RESIDUES**

- **DROP-IN Jet fuel quality**

- SAF gives an impressive **reduction of up to 80% in carbon emissions** over the lifecycle of the fuel compared to traditional jet fuel

CO_2 80%

ICAO Certified Technology

ICAO

50%

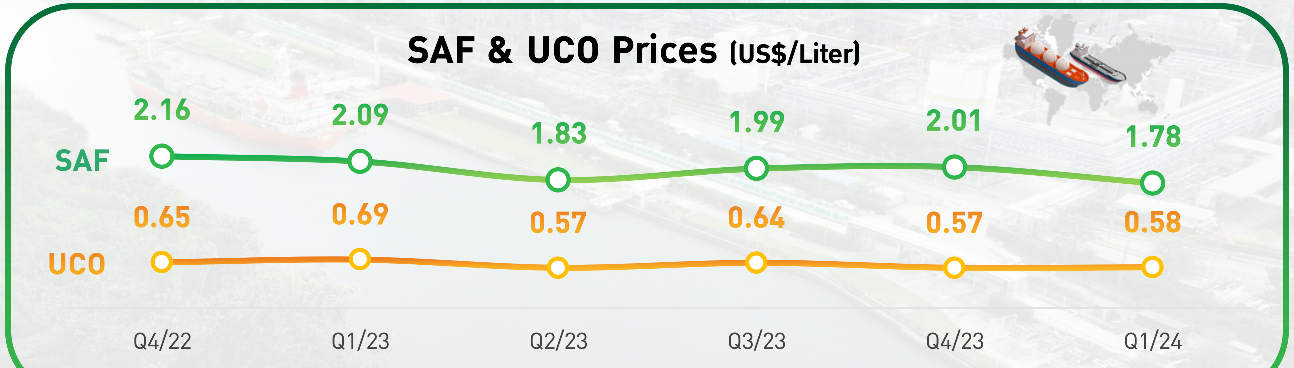
Maximum Blending Ratio into JET

HEFA: Synthesized paraffinic kerosene from **Hydrotreated Esters and Fatty Acids**

50%

Maximum Blending Ratio into JET

Alcohol to Jet (ATJ)



Source: Company's Data

Bangchak's Sustainable Aviation Fuel (SAF)

40th anniversary bangchak

1st SAF Producer in Thailand

1st Player to secure feedstock

Lower CAPEX

No CIT for 8 years
thanks to BOI benefit

Shareholding Structure

- **Investment Budget: 8.5 bn. THB**
- **Production Capacity 1 ML/D (7 KBD)**
- **Target COD: Q2/2025**

SAF Production Plant under Construction

SAF Feedstock

Used Cooking Oil (UCO)

1. To purchase UCO at **Bangchak 162** Service Stations nationwide

ทอด ไม่ทิ้ง "Fried to Fly"

2. **Strategic partnership & being a shareholder of no.1 used cooking oil collector in Thailand:**

KFC, CPF, S&P, HONG BAO, เพลิน, Spaghetti Factory, Bangkok Airways, Chula, ไม่ทอดซ้ำ, กรมอนามัย DEPARTMENT OF HEALTH, QSNCC, wake up waste

3. **Palm Fatty Acid Distillate (PFAD)**

Receiving from **Palm Oil Refinery Plant** in Bangchak Group

SAF Customers

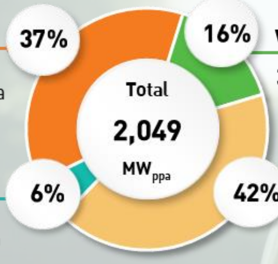
- Locked in Sales Volume **60%** of total production
- Strategic Partnership Agreement

COSMO | Sumitomo Corporation

Clean Power Business footprints in 7 countries globally

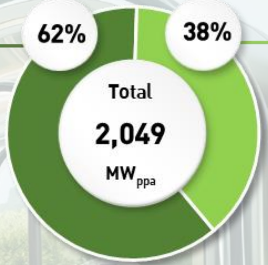
An integrated power generation company and service provider of smart energy system focusing on renewable and clean power

Generation by Technologies



- Solar: 759.3 MW_{ppa}
- Wind: 318.7 MW_{ppa}
- Hydro: 114.0 MW_{ppa}
- Gas: 857.0 MW_{ppa}

Production Capacity



- Operating: 1,262.8 MW_{ppa}
- Developing: 786.2 MW_{ppa}

THAILAND

188.7 MW

9.0 MW

Oil Terminal 710 ML

Operating

11.9 MW

District cooling

3,000 RT (Phase I)

(SCOD 2024)

Developing

LAOS TO VIETNAM

114.0 MW

Operating

(SCOD 2025)

290.0 MW

Developing

U.S.A

857 MW

Operating

CHINA

- VRB

JAPAN

79.7 MW

Operating

10.0 MW

Developing

TAIWAN

Operating

(SCOD 2023-2025)

469.0 MW

Developing

THE PHILIPPINES

14.4 MW

Operating

5.3 MW (SCOD 2025)

Developing

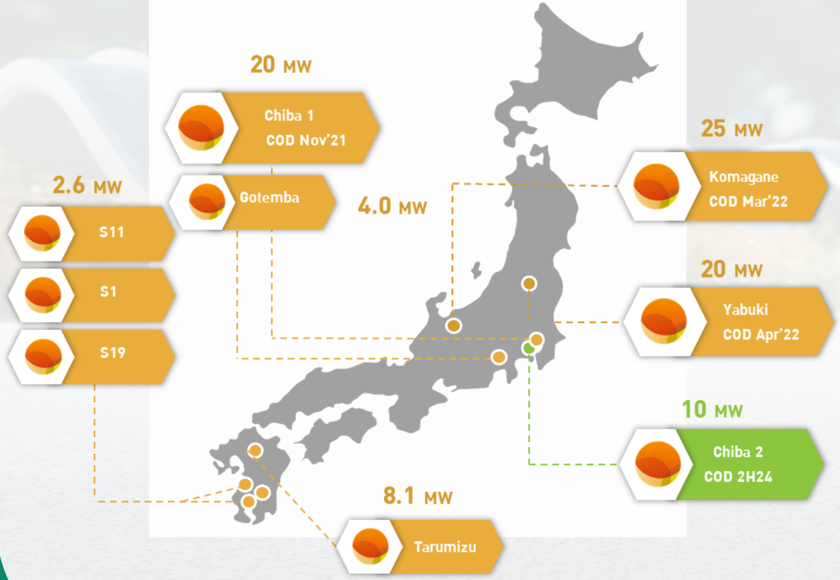
Solar Energy | Wind Energy | Hydropower | Natural Gas | Smart Energy

Remark: information as of Mar 2024 and Unit is Contracted capacity or equity MW_{ppa}

Clean Power Business: *2024 Project Highlights*

Capital Recycling from Japan Divestment

- 9 solar farms & Asset Management and Operation & Maintenance unit
- Transaction value of **JPY 42,970 mn.** (approx. of **THB 10,377 mn.**)
- Target completion by **2Q24**

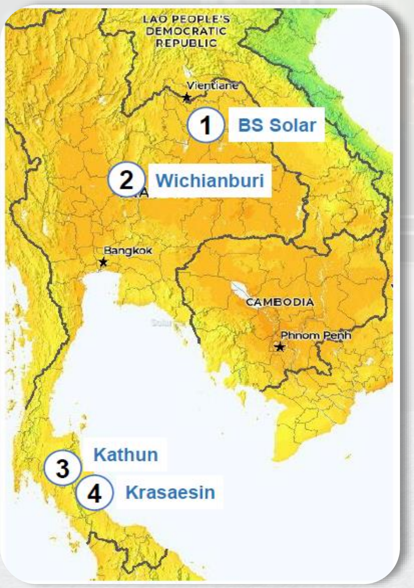


Thailand

13 MWe Solar Farm

additional acquisition in operating assets

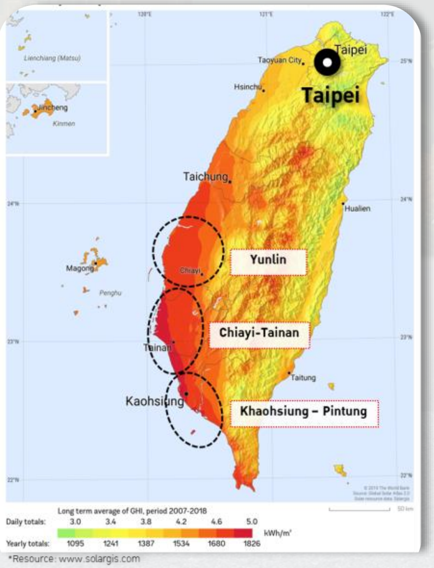
- 4 Operating Assets
- Investment < **THB 477 mn.**
- Completed 8 MWe in 1Q24-2Q24 & 5 Mwe by 2024



Taiwan

469 MWe Solar Farm

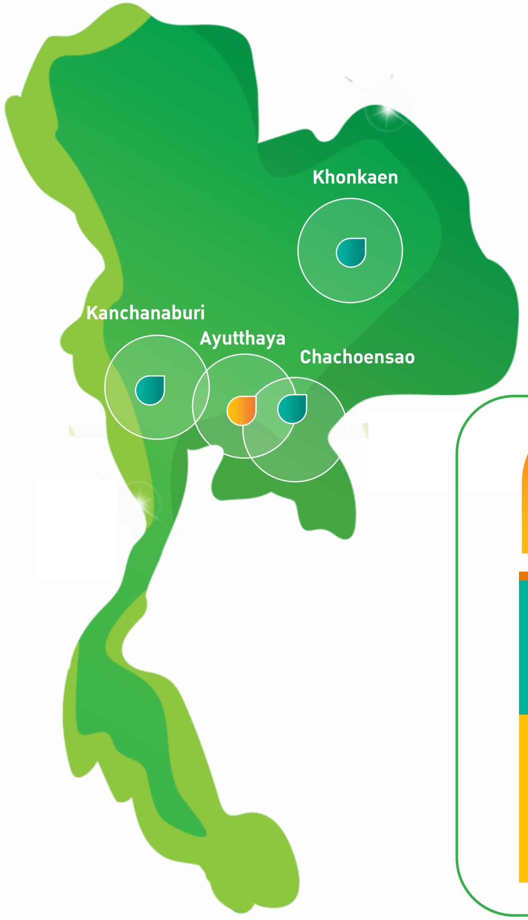
under construction as planned



*Resource: www.solargis.com

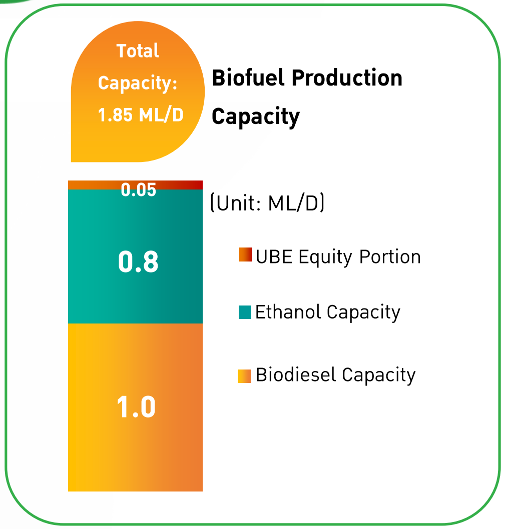
Biotechnology Beyond Biopower

No.1 Fully Integrated Biofuel Producer in Thailand, aiming to become a leader in premium bio-based products and biotechnology business.



bbgi

Holds 44.99%



ASEAN 1st CDMO Producer

Strategic JV with Fermbox Bio to establish

the first CDMO Plant

Fermbox — FERMENTING THE FUTURE: Expertise in synthetic biology and manufacturing processes

bbgi — Biotechnology Beyond Biopower: Experience in large-scale project execution

bbfb

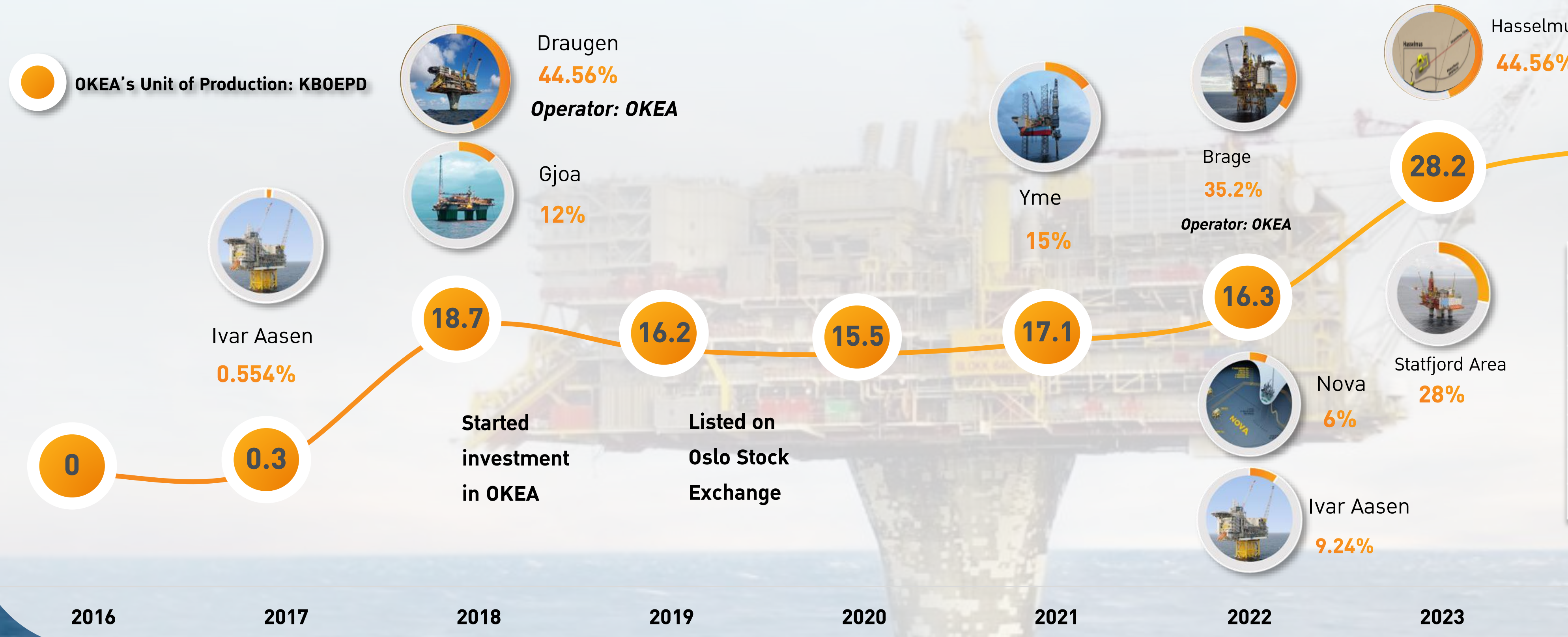
Capacity: 2,000 Tons/Year

- **PROJECT INVESTMENT** : **≤ 444 MB** (Proceeds from IPO)
- **% OF BBGI SHARE** : **> 75%**
- **PRODUCTION CAPACITY** : **2,000 Tons/Year** (Initial Phase)
- **SYNBIO PRODUCT** : **Industrial Enzymes** (Initial Phase)

Strong Foothold in E&P Business

With investment in upstream petroleum exploration and production (E&P) business through OKEA ASA in Norway since 2018, Bangchak Group has planned to extend our presence in E&P to other regions in the world.

OKEA ASA Holds 45.44%



Production Volume (KBOEPD)

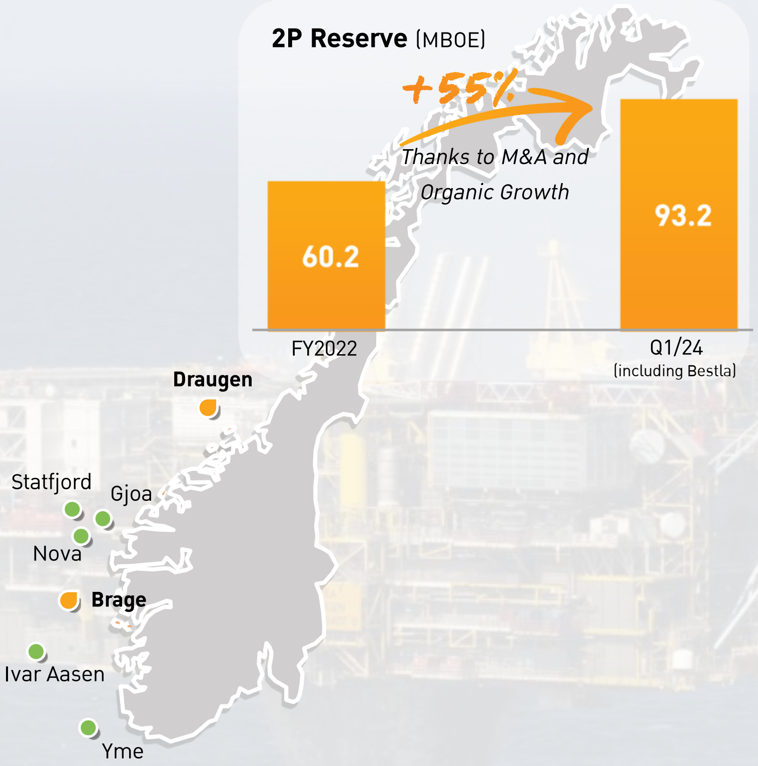
	2023	1Q24
Draugen	6.5	10.6
Brage	4.9	7.6
Gjoa & Nova	7.4	6.4
Ivar Aasen	3.0	2.8
Yme	2.8	3.4
Statfjord area	-	11.3
Total	**24.6**	**42.1**

Creating Value through active ownership

Draugen

44.56%

- Taking operatorship in December 2018
- **Increased production efficiency to 90% in Q1/2024 (from 88% in 2019)** driven by solid operational performance and key contributions from **Hasselmus**
- **Sanctioned electrification project** – will **reduce CO_2 intensity by 95%** and production expense by 2027



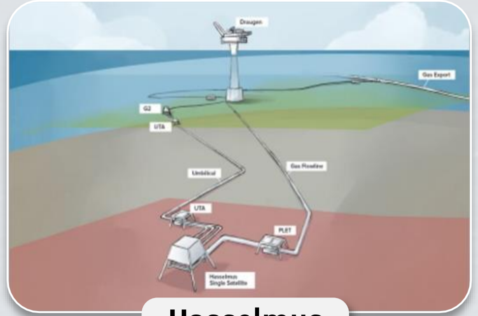
Brage

35.2%

- Becoming operator in November 2022
- **Improved production efficiency to 96% in Q1/2024 (from 91% in Q1/2023)** through successful infill drilling campaign and Cook development, delivering above expectations
- **Bestla** tie-back to Brage **will add significant volumes**, synergies and economics of scale

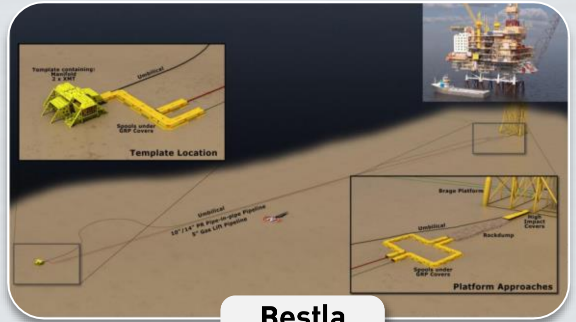
New Development Fields

*a subsea tie-back to **Draugen platform***



Hasselmus

*a subsea tie-back to **Brage Platform***

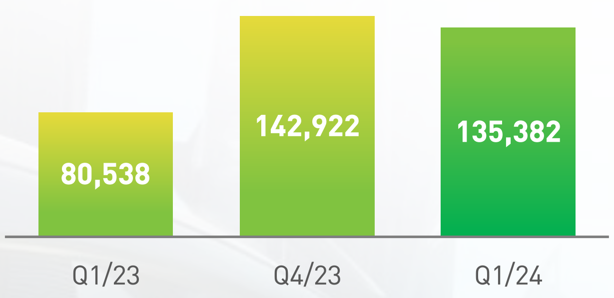


Bestla

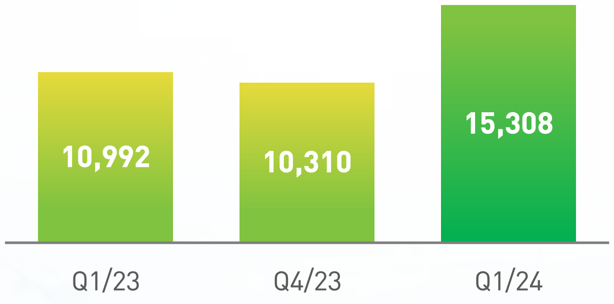
Hasselmus		Bestla
1.96 KBOEPD	Net Production	10 KBOEPD
4.7 MBOE	Net 2P Reserve	9.4 MBOE
Oct 2023	COD	Target 1H2027

Highest-Record Quarterly Accounting EBITDA

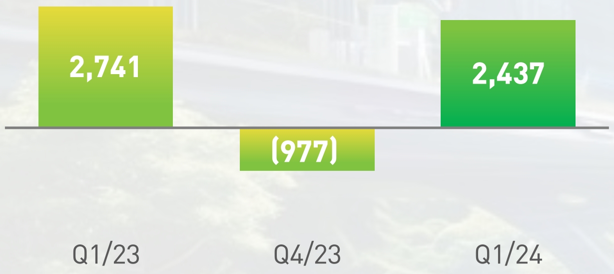
Total Revenue (MB)



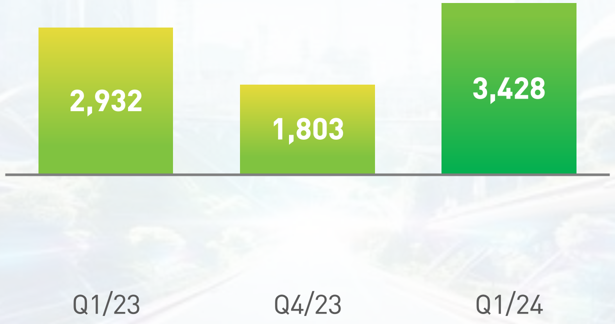
Accounting EBITDA (MB)



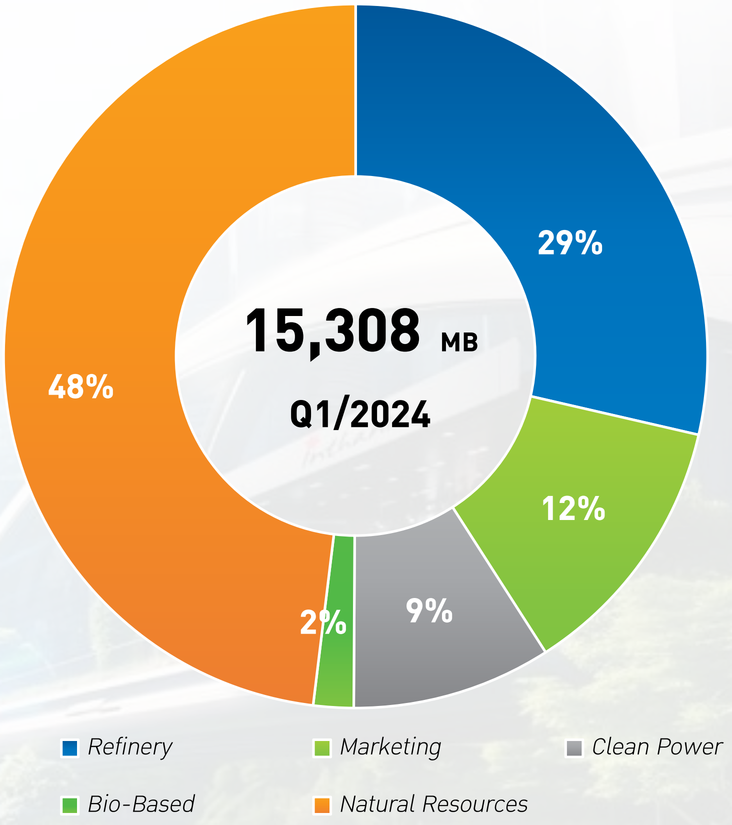
PAT (MB)



Core Profit (MB)



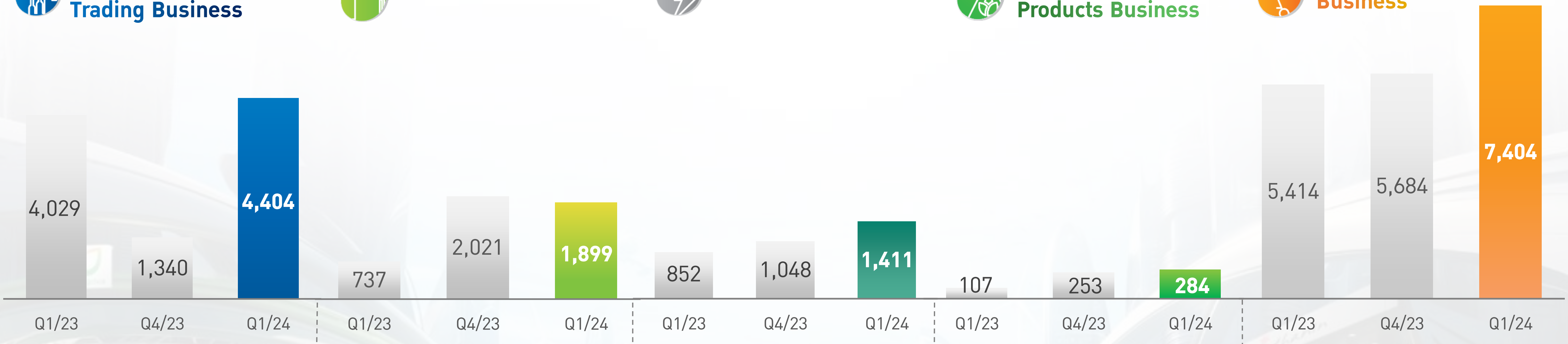
Accounting EBITDA Breakdown by Business Unit



Q1/2024 Performance Snapshot comparing to Q4/2023

Accounting EBITDA (Unit : Million Baht)

Refinery and Oil Trading Business | Marketing Business | Clean Power Business | Bio-Based Products Business | Natural Resources Business



Refinery and Oil Trading Business

- (+) Highest Record Run Rate of 272 KBD after the Acquisition of BSRC
- (+) Strong Operating GRM at $6.08/BBL
- (+) Lower Inventory Loss (Net NRV)

Marketing Business

- (+) Highest Total Sales Volume thanks to the Acquisition of BSRC
- (+) Increase in Retail Market Share to 29.2%
- (+) Lower Inventory loss (Net NRV)
- (−) Soften Marketing Margin

Clean Power Business

- (+) Higher Share of Profit from U.S. Projects & Full Quarter Profit Recognition
- (−) Slightly Lower Electricity Sales due to Seasonality Impacted Hydro Power Plant

Bio-Based Products Business

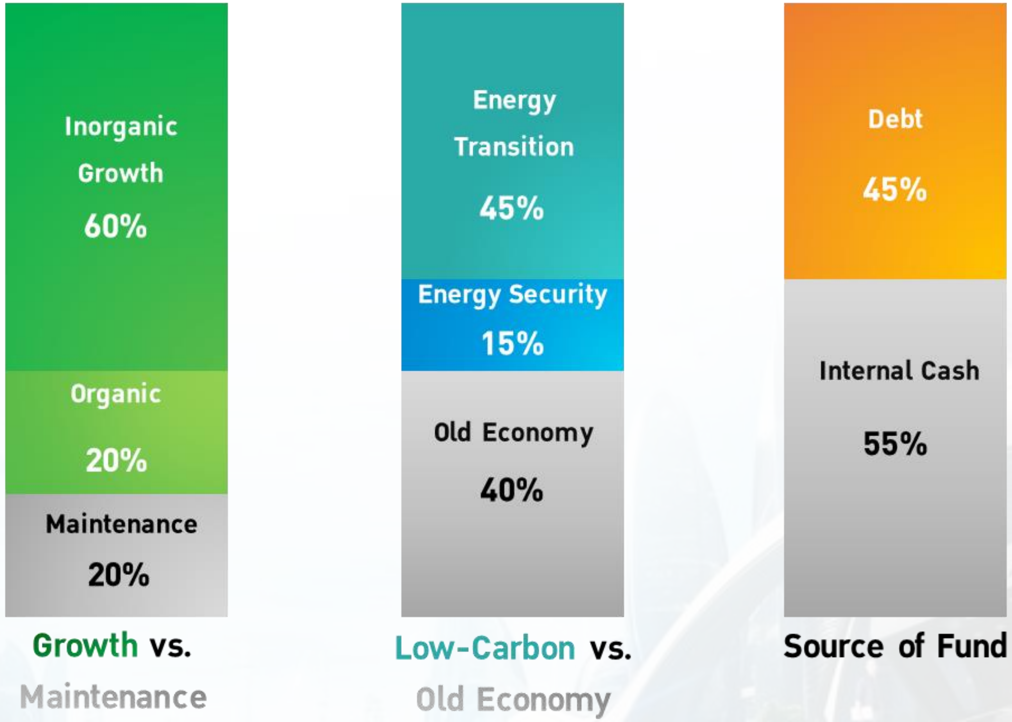
- (+) Highest B100 Sales Volume thanks to selling to BSRC
- (+) Improved Ethanol Spread
- (−) Lower Ethanol Sales Volume

Natural Resources Business

- (+) All Time High Production & Sales Volume
- (−) Lower Oil & Gas Prices
- (−) Net Impairment loss of 366 MB – impact to PAT

Investment Plan

CAPEX 2024-2030



(Unit: MB)	Refinery and Oil Trading	bsrc	Marketing	Green Power	Bio-Based Products	Natural Resources	New Business
2024E	9,000	1,700	1,700	14,000	800	17,800	5,000

Total CAPEX in 2024: 50,000 mn.THB

Strong Financial Status Going Forward

Resilience

Data as of 31 Mar 2024

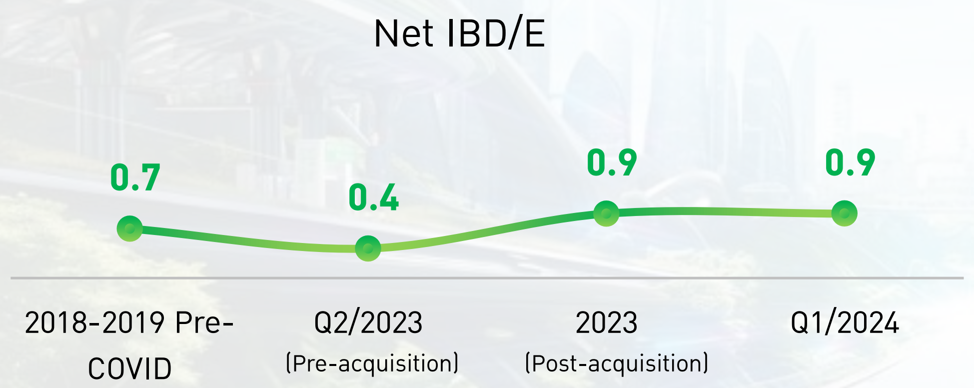
Cash[1]	Asset	Debt	EBITDA LTM[2]
34,091 MB	352,406 MB	128,769 MB	45,997 MB

Remark: [1]Including short-term investment [2]Last 12 Month

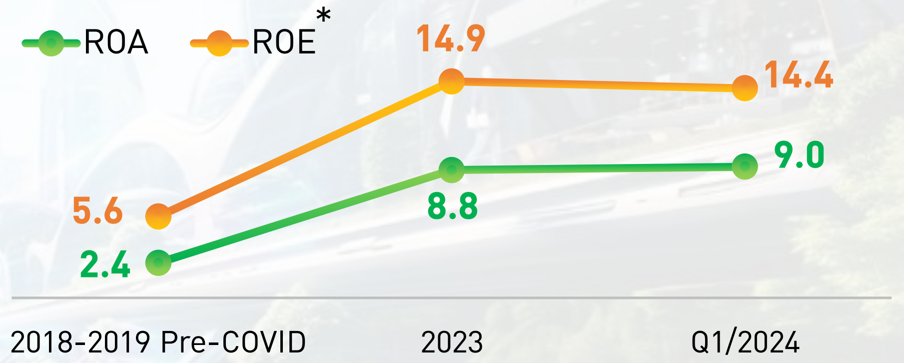
Confirm Credit Rating from TRIS RATING:

A 'Stable' Outlook as of 31 AUG 23

Ratios (Times)



Return (%)



*Note: Calculated from Recurring PAT (Excl. impairment and other one-time items)

Building a Legacy of Growth

- Driving growth from key business units
- Optimize synergy among Bangchak Group
- Continued searching for future investment opportunities

Maximizing Returns

- Deliver high level of Total Shareholding Returns (TSR)
- Disciplined new investment
- Capital recycling for portfolio optimization

Creating a Better World

- Continue launching bio-products
- Continue efficiency improvement for energy consumption reduction
- Target for Net Zero in 2050

Anticipating the Evolution of Success in 2024

Driving Forces for sustainable Growth

BCP+BSRC
Crude Run
155 KBD → 72% → 266 KBD

BCP+BSRC
Service Station
2,219 → +40 → 2,259 S/S

BCP+BSRC
Total Sales Volume (ML/MO)
717 → +60%

Electricity Output
3,770 kWh → ~100% → 7,400 kWh

Total Sales Volume
of B100 & Ethanol
422 → >30% → 550 ML

Oil & Gas Sales Volume
23 Kboepd → >50% → 35-40 Kboepd

Crafting a Sustainable World with Evolving Greenovation

http://www.bangchak.co.th　Bangchak　@Bangchak.WOW

40th anniversary bangchak

Regenerative Happiness

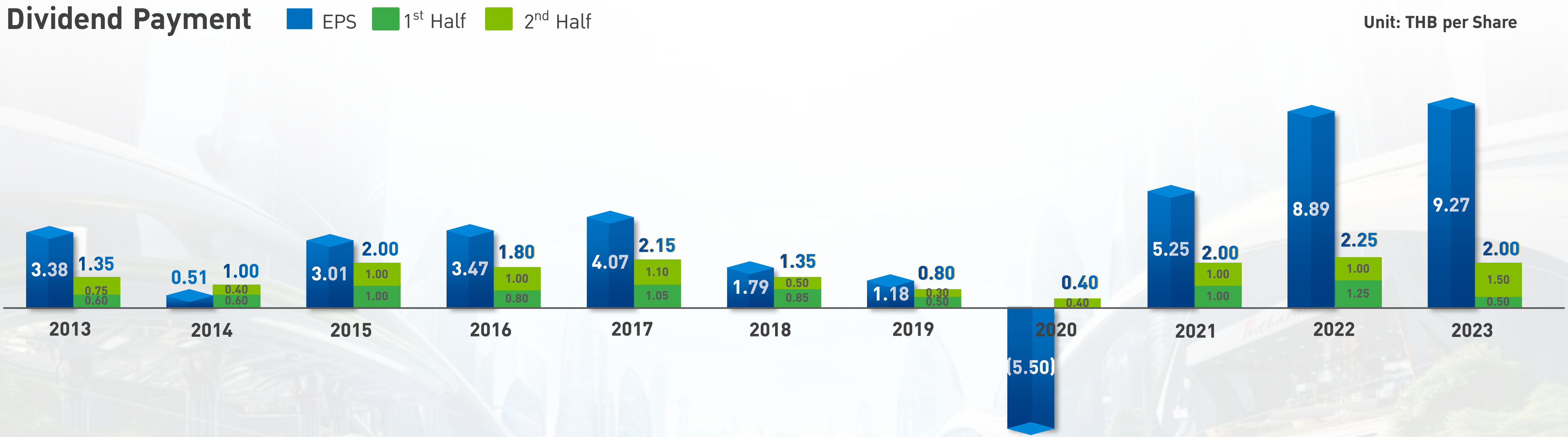
ส่งต่อ...ความสุขไม่สิ้นสุด

Bangchak's Historical Dividend

Dividend Policy: ≥ 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.

Dividend Payment



Dividend Yield

3.94%	3.21%	5.87%	5.74%	5.99%	3.76%	2.76%	2.01%	7.71%	7.25%	5.50%

Share Price* (Baht/Share)

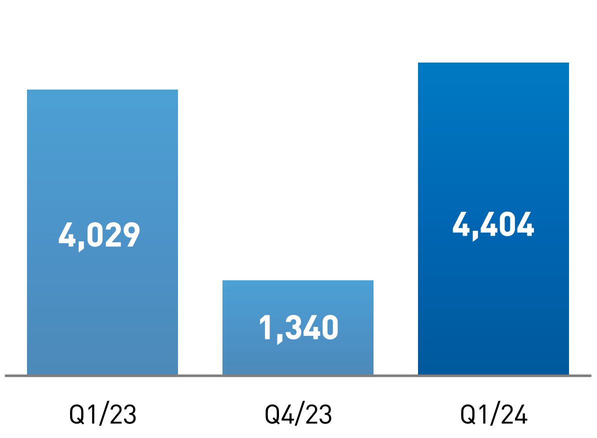
34.29	31.13	34.08	31.38	35.88	35.93	29.43	19.92	25.93	31.05	36.36

1 Jan 23 – 31 Dec 23

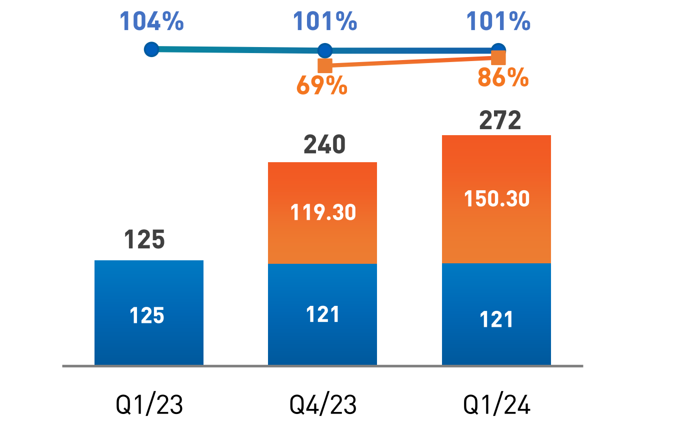
*Note: Average share price of the period

Refinery and Oil Trading Business

EBITDA (MB)

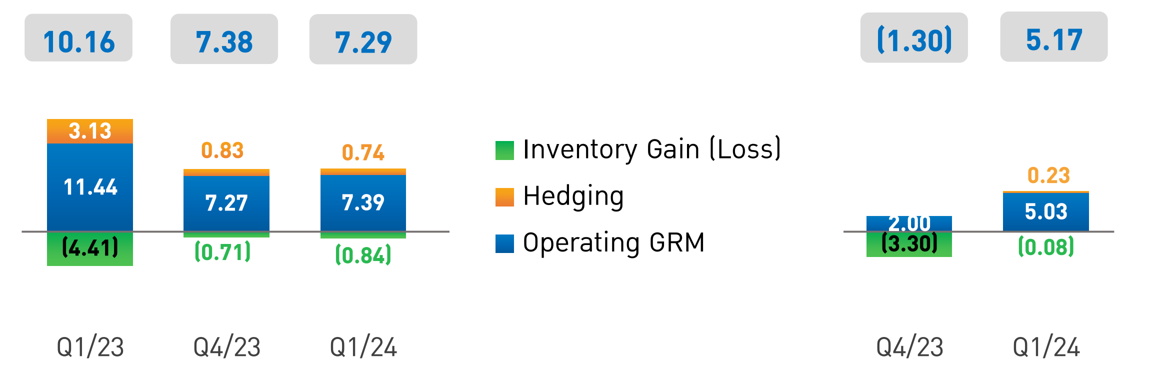


Crude Run (KBD)



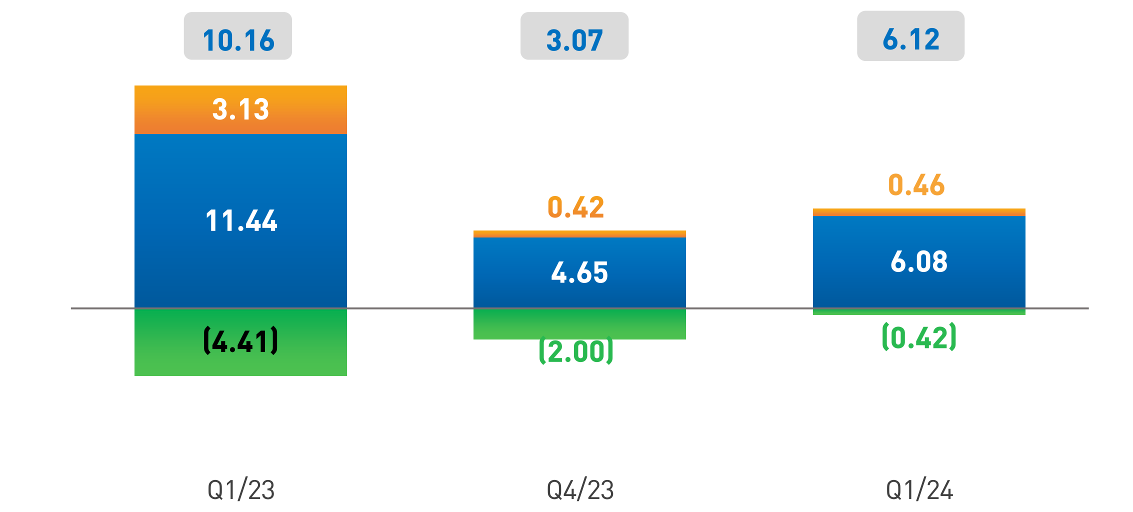
Phra Khanong's GRM ($/BBL)

Sriracha's GRM ($/BBL)



- Group's Refinery witnessed a significant increase in average production capacity, **reaching a record high of 271.7 KBD in Q1/2024.** This increase was primarily due to the enhanced production capacity of Sriracha Refinery, which rose from 119.3 KBD to 150.3 KBD.
- **Pra Khanong Refinery reported a marginal improvement in operating Gross Refining Margin (GRM),** attributed to the reduction in crude costs compared to the previous quarter. While **Sriracha Refinery: Reported improving operating GRM**, experienced a climb from US$2.00/BBL to US$5.03/BBL. This increase was supported by the highest production capacity (+26% QoQ) in Sriracha's history, along with the elevated crack spreads for the gasoline.
- **Group's Inventory loss (Net NRV) of US$ 0.42/BBL, (372) MB**, despite the positive momentum in the global crude market. This was primarily due to the high procurement of crude during the elevated crude prices in October 2023, resulting in the recognition of Inventory Loss. However, the negative impact was offset by the **Gain from fair value of oil hedging of US$ 0.46/BBL** due to the downward trend in the crack spreads.

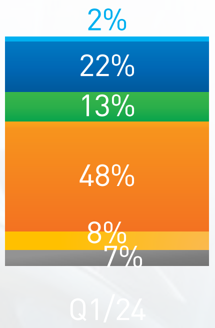
Bangchak Group's GRM ($/BBL)

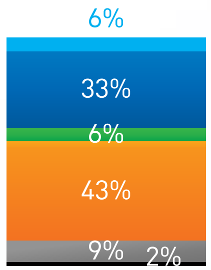


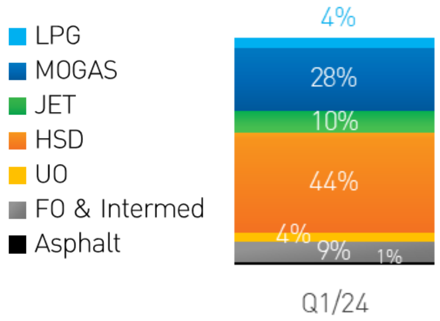
Complementary Refinery Portfolio: *Post-Integration*

	Q1/24 Phra Khanong Refinery	Q1/24 Sriracha Refinery	Q1/24 Bangchak Group
Crude Run (Utilization Rate)	121 KBD (101%)	150 KBD (86%) The highest crude run in DEC23 at 144 KBD	272 KBD (92%)

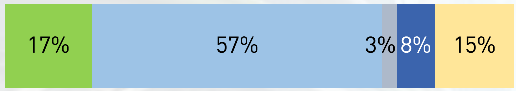
Product Yield

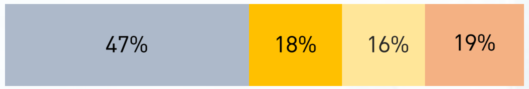


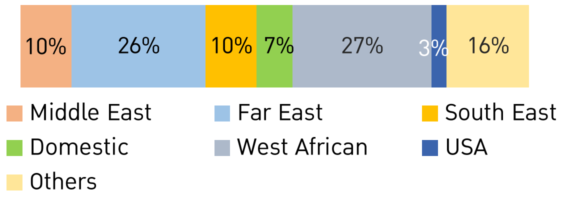




Crude Source







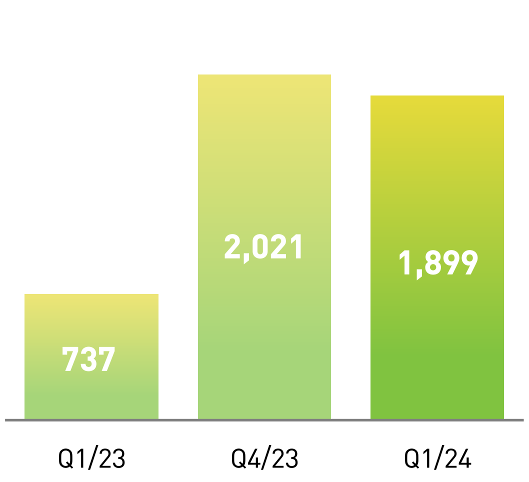
	Phra Khanong Refinery	Sriracha Refinery	Bangchak Group
BCPT Oil Trading Volume	~9 m.BBL	~16 m.BBL	27 m.BBL (+49%) Include Out-Out Trading

Logistics Integration

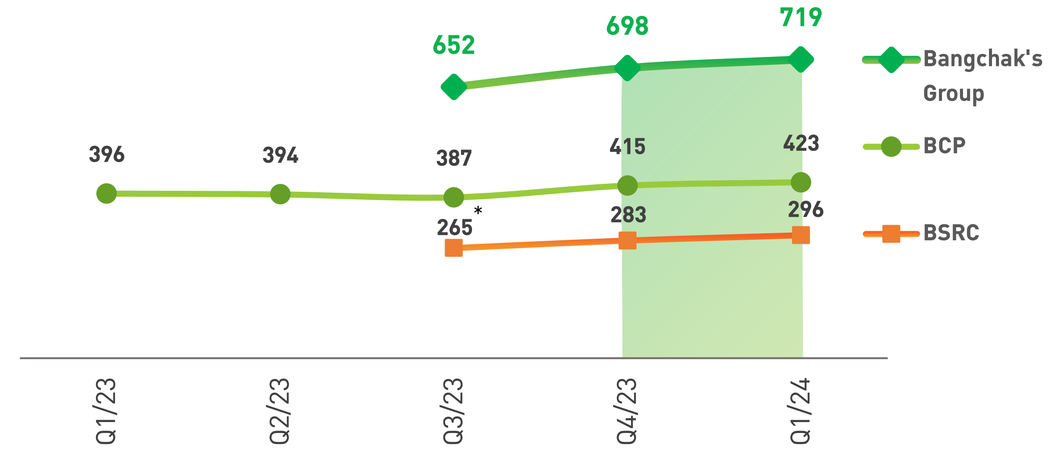
- *Pipeline* access from BKK-Northern
- Phetchaburi , Si Chang *Seaport & Terminal*
- *Pipeline* access from Eastern to Northeastern
- Sriracha *Deep Seaport & Terminal*
- *Terminals* across Thailand

Marketing Business

EBITDA (MB)

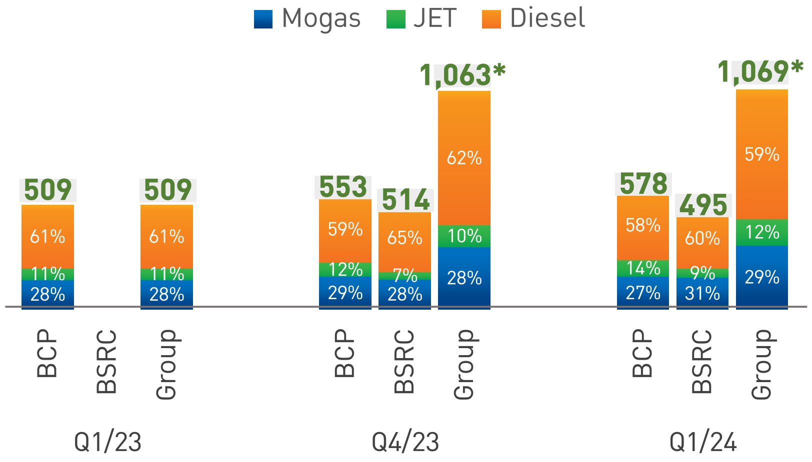


RM Sales Volume (ML/MO)



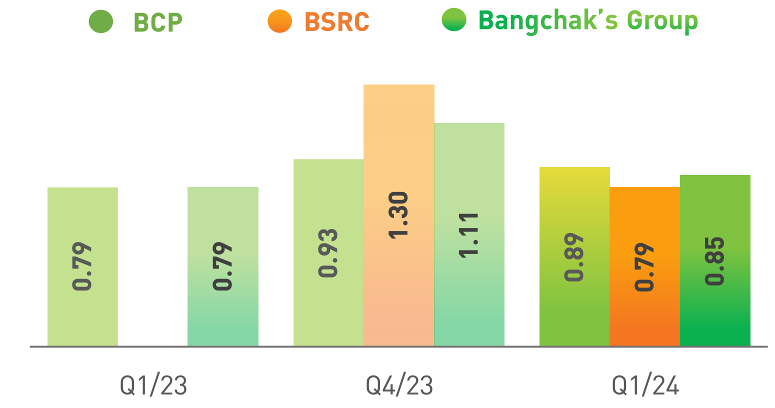
*Note: Bangchak Sriracha Plc. ("BSRC") consolidated since September 1, 2023.

Sales Volume by Key Product (ML/MO)



*Note: Total sales volume of Bangchak Group included intercompany eliminations

Net Marketing Margin (Baht/Liter)



Note: Net Marketing Margin of Bangchak and BGN (including inventory gain/(loss) and NRV)

- **Total sales volume reached a record high of 3,541 million liter (+5% QoQ),** driven by growth in both the retail and industrial markets.
  - **Retail sales volume experienced a surge,** attributed to extensive network coverage, an effective marketing strategy, and the enhanced sales volume at service stations following the rebranding to the 'Bangchak' brand.
  - **Sales volume in the industrial market saw an uptick,** fueled by increased demand for jet fuel as travel activity continued to rebound.
- **Softened Group's marketing margin** due to higher product costs, particularly Euro 5, and the impact of inventory loss.

Strengthening Marketing Portfolio

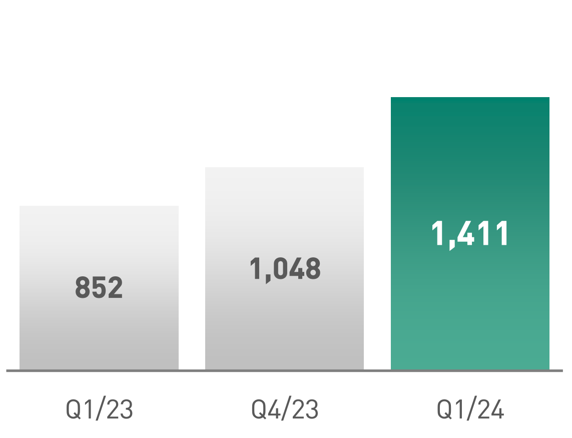
	Q1/24 Bangchak Service Stations	Q1/24 Bangchak Service Station under BSRC Operation	Q1/24 Bangchak Group
No. of SS	1,388	829 — 372 SS rebranding (As of APR24)	2,217
Total Sales Volume	1,899 ML (10% QoQ)	1,653 ML (-1% QoQ)	3,541 ML (5% QoQ) 2,156 ML (3% QoQ) · 1,384 ML (7% QoQ)
Retail Market: Industrial Market	67% : 33%	54% : 46%	61% : 39%
Retail Market Share	17.2%	12.0%	29.2% 28.8% in 2023
Lube Market Share FURiO	12.1%		12.1% 10.9% in 2023
No. of Coffee Outlet Inthanin	1,003		1,003

Note: Data as of 31 March 2024

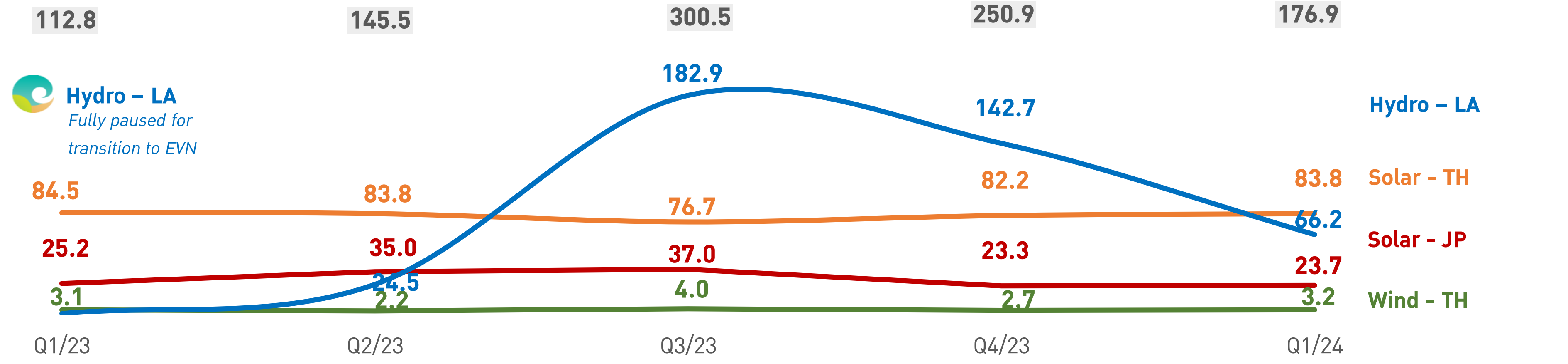
Source: DOEB & BCP

Clean Power Business

EBITDA (MB)



Electricity Output (GWh)



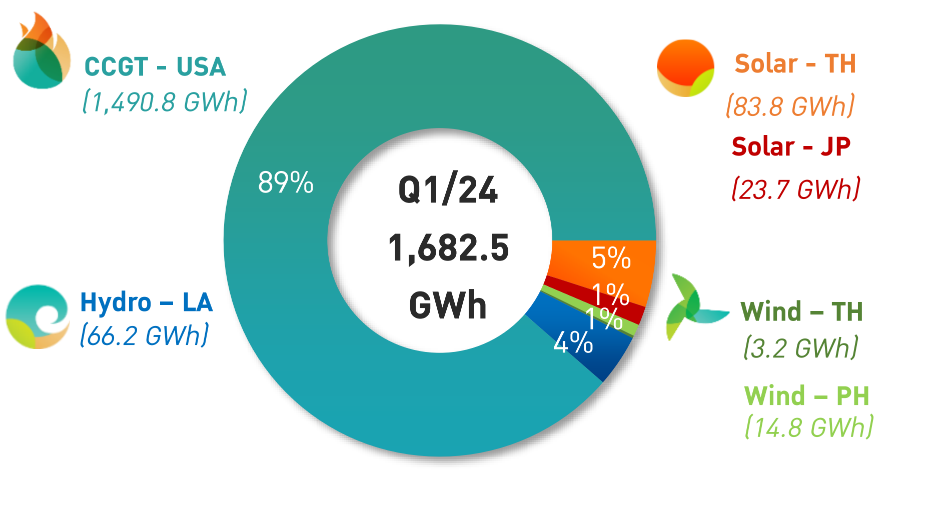
EBITDA rose +35% QoQ, mainly from

- Higher share of profit, primarily due to operations of natural gas power plants in the United States, driven by an increase in profit per unit from Spark Spread, as well as, a reduction in maintenance shutdown days compared to the previous quarter.

Marginal decrease of Electricity generation -1% QoQ, mainly from

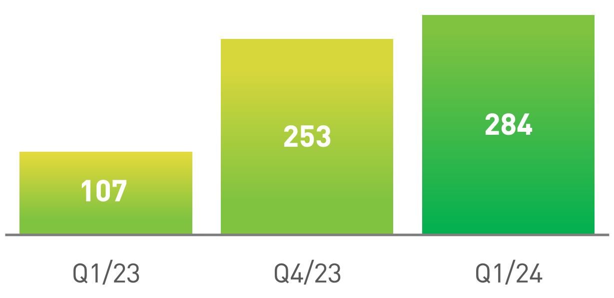
- **Laos hydropower plant** a slight reduction in electricity sales volume, influenced by seasonal factors combined with the impact of the El Niño phenomenon
- **Meanwhile,** electricity generation from solar power plants in Thailand and Japan increased due to seasonal factors, resulting in higher irradiation. Efficiency improvements implemented in the Thai solar power plant also contributed to this growth. However, in Q1/2024, the gradual phasing out of the adder program for Solar power plant projects in Thailand had a notable impact, totaling a reduction of 13 MW.

Sellable Output Breakdown by Power Types

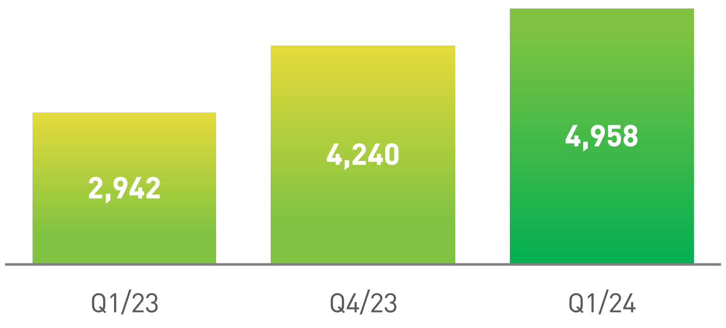


Bio-Based Products Business

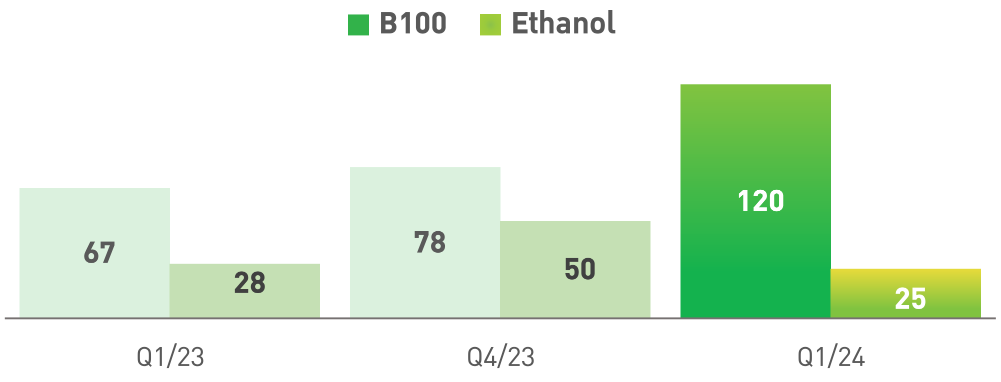
EBITDA (MB)



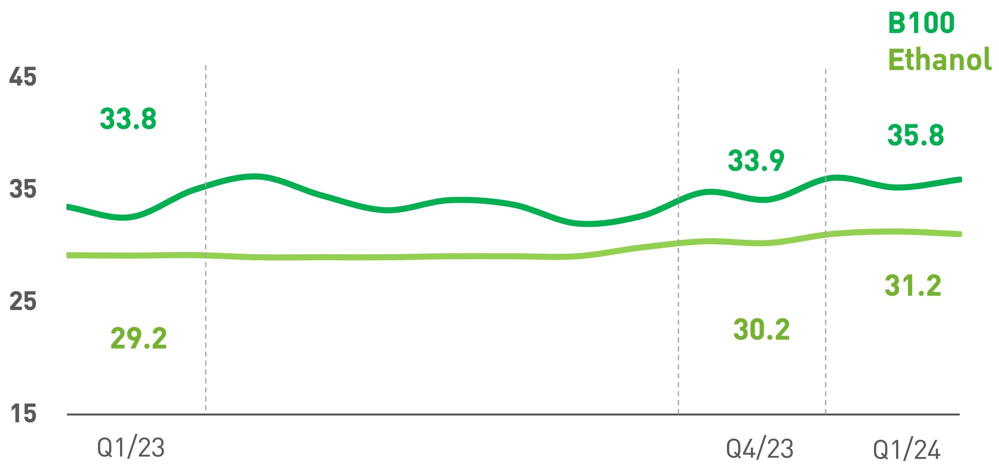
Revenue (MB)



Sales Volume (ML)



Avg. Market Price (Baht/Liter)

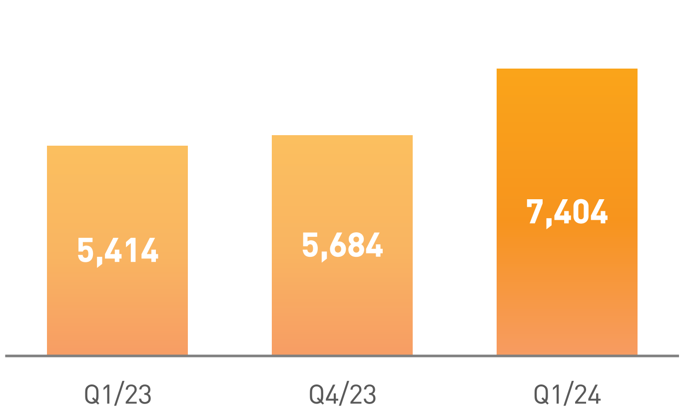


Source: EPPO

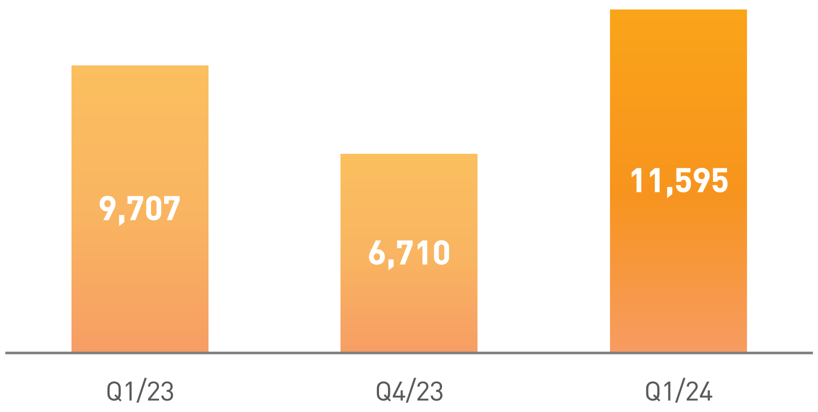
- **Biodiesel business witnessed an increase in gross profit,** due to rising biodiesel sales volume due to an increased demand from BSRC.
- **Average B100 market price increased QoQ from 33.9 THB/Litre to 35.8 THB/Litre** due to the global market's price dynamics, influenced by the low level of domestic oil palm production.
- While **Ethanol business revenue declined QoQ**, attributable to 25% decreased sales volume. This adjustment reflects our strategic sales management plan, in response to heightened raw material costs, including cassava and molasses, as well as low domestic sugarcane production, which was impacted by the effects of El Niño.

Natural Resources Business

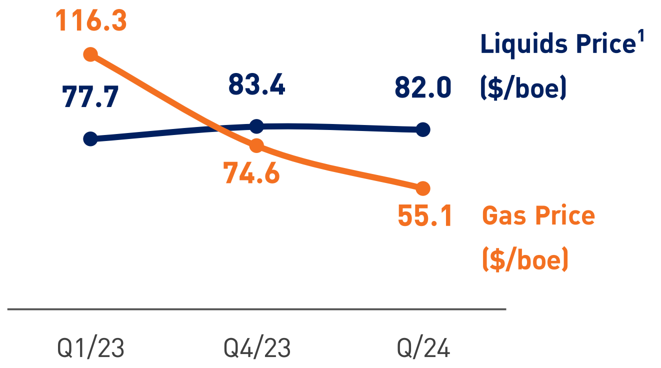
EBITDA (MB)



Revenues from Crude Oil and Gas Sales (MB)

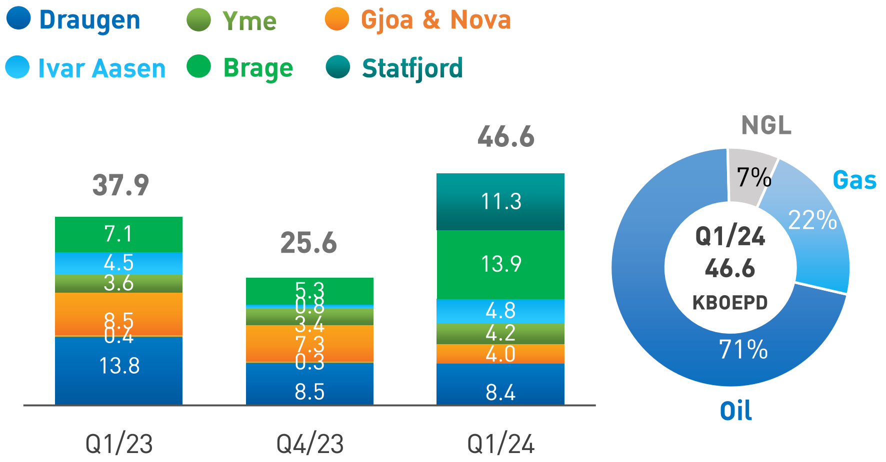


Realized Price



[1]Comprising of crude and NGL price

Sales Volumes (KBOEPD)

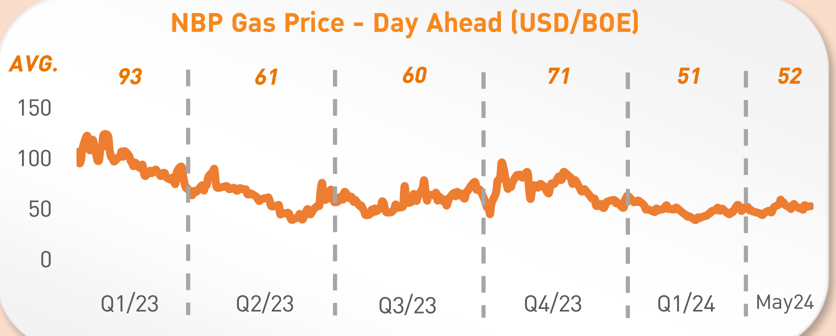


Natural Resources Business Group has once again reported another **Remarkable Record-High Operating Income and EBITDA**, supported by

- **Sale volume grew by over 82% QoQ,** due to
  - Full-quarter recognition from the recently acquired Statfjord field area
  - Additional volume generated from Hasselmus
    (an organic subsea project tie-back to the Draugen platform)
  - Overlifting position from the Brage field
- The company faces pressure from Statfjord impairments, mitigates with partial reversal of Yme fields impairment

Statfjord: Lower expected production in 2024 following a dry well drilled in late 2023

Yme: Reversal of after-tax impairment , driven by positive market price developments of crude oil during the quarter and a decrease in expected discount for Yme crude



EBITDA Structure (Consolidated)

Unit: THB Million	Q1/2023	Q4/2023	Q1/2024	QoQ	YoY
Total Revenue	**80,538**	**142,922**	**135,382**	**-5%**	**68%**
Refinery and Trading Business 1/	66,132	213,913	202,628	-5%	>100%
Marketing Business 2/	49,220	97,240	99,592	2%	>100%
Clean Power Business 3/	1,057	1,318	1,194	-9%	13%
Bio-Based Products Business 4/	2,942	4,240	4,958	17%	69%
Natural Resources Business 5/	9,772	6,710	11,595	73%	19%
Eliminations and others	(48,585)	(180,499)	(184,585)	-2%	<-100%
Accounting EBITDA	**10,992**	**10,310**	**15,308**	**48%**	**39%**
Refinery and Trading Business	4,029	1,340	4,404	>100%	9%
Marketing Business	737	2,021	1,899	-6%	>100%
Clean Power Business	852	1,048	1,411	35%	66%
Bio-Based Products Business	107	253	284	12%	>100%
Natural Resources Business	5,414	5,683	7,404	30%	37%
Eliminations and others	(147)	(36)	(94)	<-100%	36%
Profit attributable to owners of the parent	**2,741**	**(977)**	**2,437**	**>100%**	**-11%**
Earnings (Loss) per share (Baht)	**1.91**	**(0.82)**	**1.68**		

Note: 1/ EBITDA from Refinery and Trading Business of the company (BCP) and Bangchak Sriracha Plc. (BSRC) (consolidated since September 1, 2023), BCP Trading Pte. Ltd. (BCPT), Bangchak Fuel Pipeline and Logistic Co., Ltd. (BFPL), BSGF Co., Ltd (BSGF) and others

2/ EBITDA from Marketing Business of the company (BCP) and Bangchak Sriracha Plc. (BSRC) (consolidated since September 1, 2023), Bangchak Green Net Co., Ltd. (BGN), Bangchak Retail Co., Ltd., (BCR) and others

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

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

5/ EBITDA from Natural Resources Business of OKEA ASA (OKEA), BTSG Co., Ltd. (BTSG), and others

Profit and Loss (Consolidated)

Consolidated Statement of Income (THB Million)	Q1/2023	Q4/2023	Q1/2024	QoQ	YoY
Revenue from sale of goods and rendering of services	80,538	142,922	135,382	-5%	68%
Cost of sale of goods and rendering of services	(72,228)	(135,236)	(123,393)	-9%	-71%
Gross Profit	**8,309**	**7,686**	**11,989**	**56%**	**44%**
Other income	627	851	771	-9%	23%
Selling and administrative expenses	(1,860)	(4,269)	(2,884)	-32%	55%
Exploration and evaluation expenses	(78)	(72)	(169)	37%	>100%
Gain (loss) from derivatives	1,225	(1,266)	(662)	>100%	<-100%
Gain on foreign exchange	292	(22)	84	<-100%	-71%
Gain (loss) from fair value adjustment of contingent consideration	(52)	78	(31)	>100%	41%
Reversal of (loss) from impairment of assets	(412)	(6,190)	(536)	91%	-30%
Profit from operating activities	**8,052**	**(673)**	**8,563**	**>100%**	**6%**
Finance costs	(1,032)	(1,634)	(1,709)	5%	66%
Impairment gain and reversal of impairment loss (impairment loss) determined in accordance with TFRS 9	10	(5)	(67)	<-100%	<-100%
Share of profit (loss) of associates and joint ventures accounted for using equity method	29	139	547	>100%	>100%
Profit (loss) before income tax expense	**7,059**	**(2,172)**	**7,334**	**>100%**	**4%**
Tax expense	(3,689)	(1,193)	(4,544)	<-100%	-23%
Profit (loss) for the period	**3,370**	**(3,365)**	**2,790**	**<-100%**	**-17%**
Owners of the parent	**2,741**	**(977)**	**2,437**	**>100%**	**-11%**
Non-controlling interests	629	(2,388)	353	>100%	-44%
Basic earnings per share (Baht)	**1.91**	**(0.80)**	**1.68**		

Financial Ratio (Consolidated)

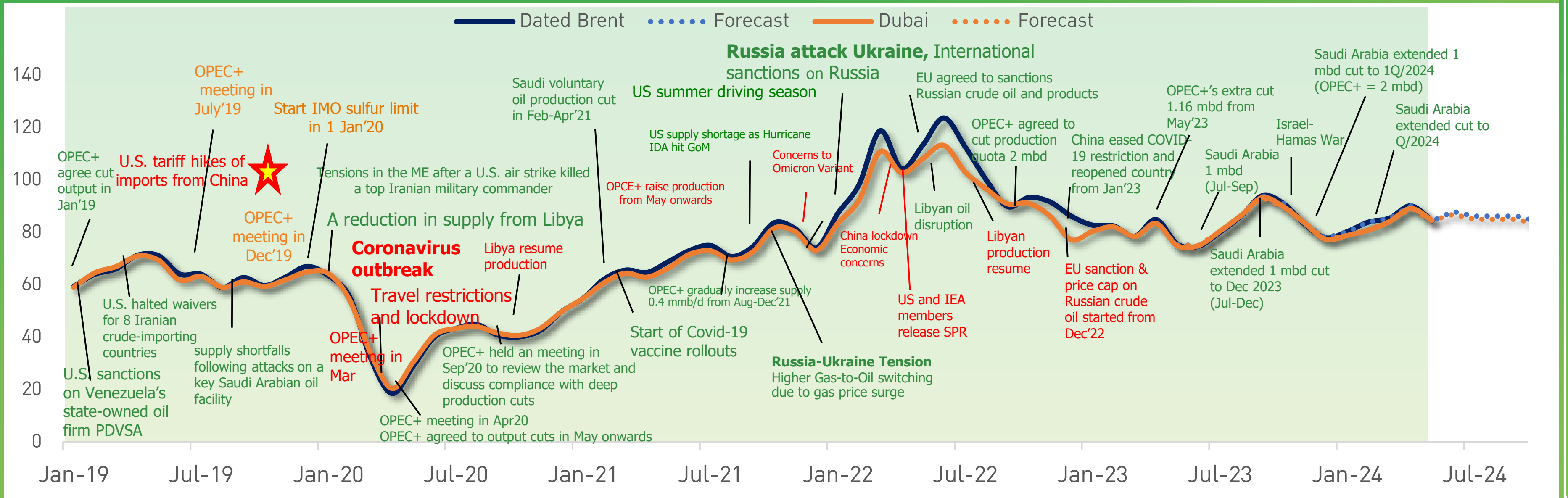
	Q1/2023	Q4/2023	Q1/2024
Profitability Ratios (%)			
Gross Profit Margin	10.34%	5.61%	9.37%
EBITDA Margin	13.69%	7.44%	11.97%
Net Profit Margin	4.19%	-2.46%	2.18%
Return of Equity (ROE)	17.76%	19.63%	18.39%
Efficiency Ratio (%)			
Return on Assets (ROA)	12.39%	8.80%	9.02%

	31 Mar 23	31 Dec 23	31 Mar 24
Liquidity Ratios (Times)			
Current Ratio	2.50	1.39	1.38
Quick Ratio	1.67	0.79	0.70
AR Turnover	24.41	20.10	23.99
Collection Period (days)	15	18	15
AP Turnover	17.06	17.02	16.28
Payment Period (days)	21	21	22
Leverage Ratios (Times)			
Net Interest-bearing Debt to Equity	0.35	0.91	0.91

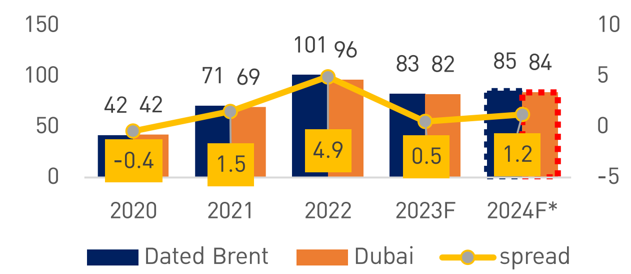
Crude Oil Price Outlook :

Crude price move around 80-90 $/BBL in 2H24, Price will be pressured by global economic slowdown weighing on oil demand particular in US and China.
However, OPEC continues stabilizing the market by keep reducing supply further into 2024 and uncertainty over geopolitical tensions

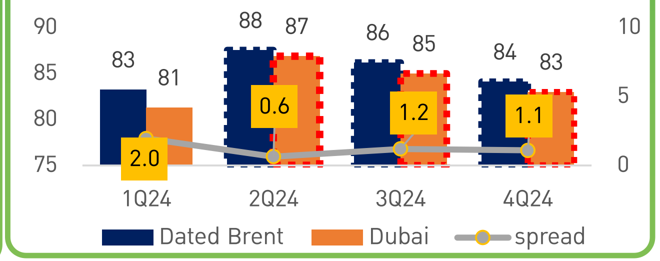
Dubai and Dated Brent-Dubai Spread



Dated Brent, Dubai Crude Price ($/BBL)



Dated Brent, Dubai Crude Price ($/BBL)



Focus on 2H24:

- Concern on economic slowdown in key markets, especially in US China.
- Continuing Supply Growth from Non-OPEC like US.
- Crude supply tightening as OPEC+ likely to extend current cuts into 2H24 to support price
- Uncertainty over geopolitical tensions.
- Oil demand during Summer driving season
- Heating oil demand during winter

Market Highlights in 2024:

- Oil market tightening due to expectation that OPEC+ and Saudi Arabia will continue stabilizing the market
- Ongoing geopolitical tension and potential impact to supply.
- China uncertainty, Economic Situation, Real Estates Crisis and Recovering Traveling Activities.
- Global economic uncertainty especially US as FED likely to keep rate higher for longer, weighing oil demand.
- Continuing Supply Growth from Non-OPEC.

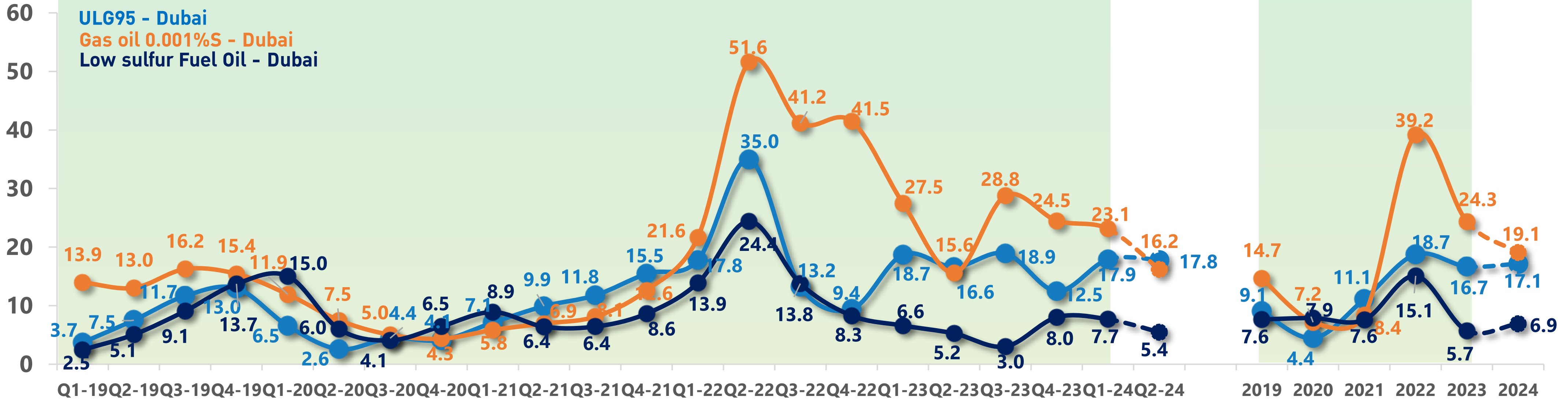
Dated Brent – DB Spread 2H24

- 2H24 spread is likely to be slightly wider due to high crude run in Europe seasonally and high heating oil demand in winter
- Europe's weak economy pressuring on oil demand
- High supply in European region especially from US
- OPEC+ and Saudi Arabia likely to extend production cut policy into 2H24 (Stronger DB)

Oil Outlook

Summer driving season in the U.S. will drive up gasoline cracks amid low inventory and the limited China's gasoline export. Stable Gasoil crack as global economic slowdown and supply continued to outstrip demand. However, the geopolitical tensions in the Middle East could limit the downside. Higher Low Sulfur Fuel Oil crack due to lower supply as AL Zour will lower export during summer while bunkering demand will increase in year end seasonally

Singapore Product Cracks Spread Outlook : $/BBL



Focus on 2H24:

- Gasoline crack will drive up by summer driving season in the U.S. and lower China's gasoline exports as demand increasing, but gains were capped by a rise in retail price will weigh on demand amid holidays tapers off in Asia.
- Gasoil crack will be stable as global economic slow down and ample supply while high freight rate are the barrier to move cargoes from Asia to Europe, but downside is limit by the ongoing geopolitical tension in the Middle East.
- Low Sulfur Fuel oil crack will be stable as seasonal bunker demand decrease will be offset with higher bunker demand from Red sea crisis. However, upside is limited as Al Zour refinery expected to export more in 2024.

Market Highlights in 2024:

- Expected demand growth to remain solid by Asian oil demand to continue drive global oil demand growth in 2024.
- China and South Asia, especially in India will drive Asia's refined oil product demand growth. However, China uncertainty, Economy, Real Estates Crisis and Recovering Traveling Activities.
- Concern over the slowdown economic due to high interest rates in several countries will weigh on demand.
- New refinery projects will ramp up, mostly in Asia and Middle East.
- Kuwait Al Zour refinery will lower export for domestic use during summer.
- High bunker fuel demand seasonally during year-end.
- Red Sea crisis could lead to higher bunker fuel demand. .

Strong Foundation for Value Creation

bangchak group

E&P Business	Return Optimization	Platform for Growth	Commitment to Net Zero
Providing Energy Security	• Synergy Realization • Shareholder Return	• To Run Multi-Refineries • Shared Services	In 2050

Financial Discipline

Strong financial management practices to ensure stability and growth

Bangchak Pathway to Net Zero 2050

Target Carbon Neutrality by 2030

Target Net Zero by 2050

Breakthrough Performance 30%

Efficiency and Process Improvement

Energy Intensity Index: EII

97.5 → 90.5

Emphasizes high quality production processes, efficiency enhancements for *Low Carbon*

- Niche Product
- Furnace Coating
- Solar Roof

BCP 316 net

Conserving Nature and Society 10%

100,000 tCO_2e/y in 2030 onward

Focusing on Agricultural, reforestation and Mangrove reforestation campaigns

Proactive Business Growth & Transition 60%

Green Portfolio, Future Technology, Carbon Capture and Utilization

Partnering with carbon clean, C-QUESTER

O_2 H_2

NET Zero Ecosystem

Winnonie

EV-Bike Platform & Battery Swapping Station

FY 2022 : 422 user, 100 stations

22,000 Users 1,000 Stations in 2025

bsgf

Thailand first Sustainable Aviation Fuel Producer

7 KBD or 1 ML/D

COD Q4/2024

CO_2 Reduction 80%

Compared to Conventional JET Fuel

btsg

One-Stop Solution Provider For LNG Supply & Integrated system for logistic and industrial customer

20% less CO_2

compared to Diesel

bfpl

BFPL's fuel transportation business, providing low-carbon fuels

30,000 tCO_2e/ year

Carbon credit linked FX with Kasikorn Bank

CARBON Markets Club

Business and Sustainability Strategies

4G Sustainability Strategies

- Your GREENovative Destination
- Green Society
- Green Production
- Green Business

Growth Balanced Portfolio Strategy

4S Business Strategies

- Scalability
- Security
- Sustainability
- Synergy

Sustainability Performances

Economic Dimension

Environment Dimension

Social Dimension

Sustainability Report