



bangchak

BANGCHAK CORPORATION PUBLIC COMPANY LIMITED

COMPANY PROFILE Q3/2023

Refinery and Trading Business



BSRC Business



Clean Power Business



Natural Resources Business



Marketing Business



Bio-Based Products Business



WHAT GUIDE US

VISION
Crafting a Sustainable World
with Evolving Greenovation

CORE VALUE

I
Innovation

AM
Agility & Mobility

B
Boldness

C
Customer
Empathy

P
Passion &
Ownership

MISSION

We commit to accelerate sustainable energy transition, while balancing energy security. We are energizing lives through greenovative solution and promoting ESG for all.



BUSINESS STRATEGIES

To achieve its short-term and long-term goals, Bangchak relies on the 4Ss Strategy.



S1 Security

Security to secure national energy supply focusing on building of energy security and accessibility for all people by executing business strategy in key focus areas consisting of oil refinery and marketing, green power businesses, and natural resource business to meet demands of the business and people.

S2 Synergy

Synergy to transform and co-creation with synergistic on products and services across each business unit focusing on pursuing of businesses consistent with Bangchak expertise and align with core business units (S1), such as oil & gas logistics and trading businesses, energy utilities & infrastructure, food & beverage, and mineral mining to optimise income and create synergistic value of portfolio.

S3 Sustainability

Sustainability to accelerate green portfolio inclusion eco-friendly businesses with Net Zero/Carbon Neutrality targets focusing on investment in clean and green businesses to support company operation in a sustainable way and to cope with global climate challenges.

S4 Scalability

Scalability to reform revenue stream with new S-curves business for long term growth focusing on exploring and creating new businesses with high growth or high potential markets as a new growth engine that create an impactful contribution to the group and to prepare for disruptive technology, emerging risks, and market volatilities.

40 YEARS TOWARDS SUSTAINABLE GROWTH

Established “Bangchak” on 8th November

Listed “BCP” in SET



1984

1994



2009

Established Biodiesel Business “BBGI”

Established Oil Trading Business **bcpt**
Established Bangchak Retail **bcr**

2016

2016

Listed “BCPG” in SET

2019

Listed “OKEA ASA” in OSLO Stock Exchange

2022

Listed “BBGI” in SET



2023

Established “BSGF” to produce & distribute Sustainable Aviation Fuel (SAF)

Acquired right over the pipeline network capacity and terminal systems through “BFPL”



Listing activity New business



Invested in OKEA ASA in Norway to expand E&P business



Invested 76.34% in ESSO (Thailand), Taking A Leading Spot in the Country’s Refinery Business, along with a Network of over 2,200 Service Stations



MANAGEMENT TEAM



Mr. Chaiwat Kovavisarach
Group Chief Executive Officer and President,
Executive Director,
Director with Authorized Signature



Mr. Somchai Tejavaniya
Chief Marketing Officer & Senior Executive Vice
President, Marketing Business Group



Mr. Pativat Tivasasit
Chief Operation Officer,
Refinery Business Unit



Ms. Phatpree Chinkulkitnivat
Chief Financial Officer and Senior Executive
Vice President, Accounting and Finance



Mr. Chokchai Atsawarangsali
Senior Executive Vice President, Corporate
Management and Organization Development



Mr. Thamarat Paryoonsuk
Senior Executive Vice President,
Refinery Business Group



Mr. Bundit Hansapaiboon
Senior Executive Vice President, appointed to
BSRC Public Company Limited

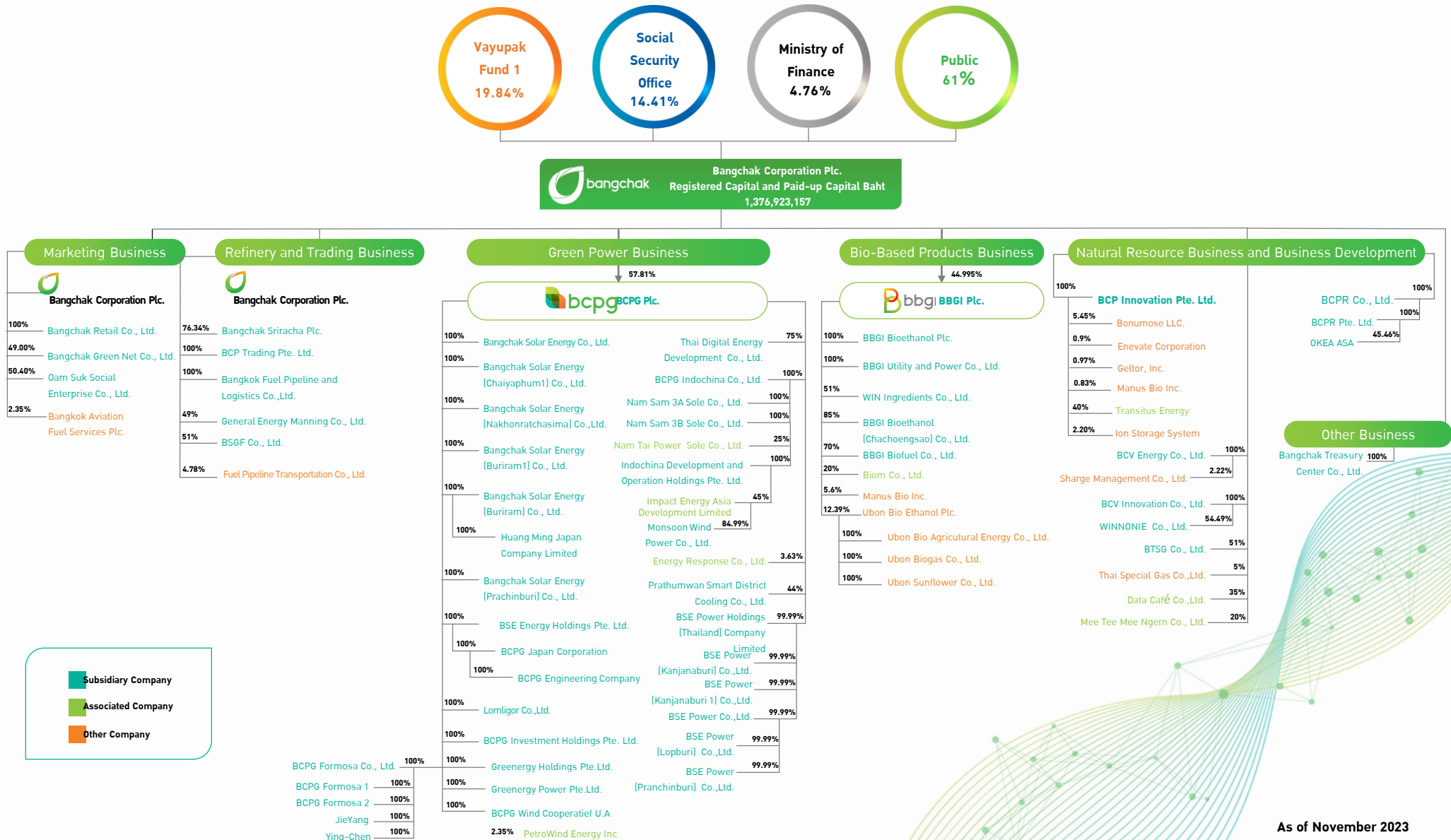


Mr. Phuwadon Suntornwipart
Senior Executive Vice President,
appointed to BCPG Public Company Limited



Mr. Kittiphong Limsuwannarot
Senior Executive Vice President,
appointed to BBGI Public Company Limited

SHAREHOLDING STRUCTURE



BANGCHAK'S BUSINESS PORTFOLIO

Bangchak Corporation Public Company Limited, a Thai energy company engaging in business alongside social and environmental stewardship, aims to enhance national energy security with innovation-oriented businesses. This goal is to strengthen business continuity and develop sustainability for organization and Thai society. Currently, the Company covers 5 main businesses from upstream to downstream.



Refinery and Trading Business Group

Complex refinery with capacity of 120 KBD. Yields are mostly premium products in the gasoline and diesel groups and are of the government-required Euro 5 standard.

Bangchak refinery focuses on improving process energy stability and enhancing the efficiency of refining processes for optimal benefits and integration with own distribution channels.



BSRC Business Group

Complex refinery with capacity of 174 KBD and the adjoining petrochemical facilities work together to produce higher-value fuels and chemical products at a competitive cost.



Marketing Business Group

Distribution channels through industrial and retail channel of more than 2,200 service stations, completed with supplementary non-oil businesses and various services and products, including convenience stores, coffee shops, car care service, and lubricants, to provide customer convenience.



Bio-Based Products Business Group

Bangchak engages in bio-based product business, including ethanol and biodiesel through BBGI PLC., **BBGI** is one of Thailand's largest biofuel producer and distributor, while aims to become a leader in premium bio-based products and biotechnology business.



Clean Power Business Group

Bangchak invests in the green power business through BCPG PLC. **BCPG** runs the power generation businesses in Thailand and overseas from various sources including solar, wind and hydropower.



Natural Resources and New Business Group

Bangchak invests in upstream petroleum exploration and production (E&P) business through **OKEA ASA**, and involves in the lithium business and innovation businesses outside Thailand.





REFINERY AND TRADING BUSINESS GROUP

Complex refinery with capacity of 120 KBD. Yields are mostly premium products in the gasoline and diesel groups and are of the government-required Euro 5 standard. Bangchak refinery focuses on improving process energy stability and enhancing the efficiency of refining processes for optimal benefits and integration with own distribution channels.



Complex refinery
with capacity of

120

KBD

PHRA KANONG REFINERY CHARACTERISTIC



Modern complex refinery with a nameplate capacity of 120,000 Barrel per day



Enhance the efficiency of refining processes for optimal benefits and stability in tandem with the reduction of carbon dioxide



Owned distribution channels for supply chain optimization

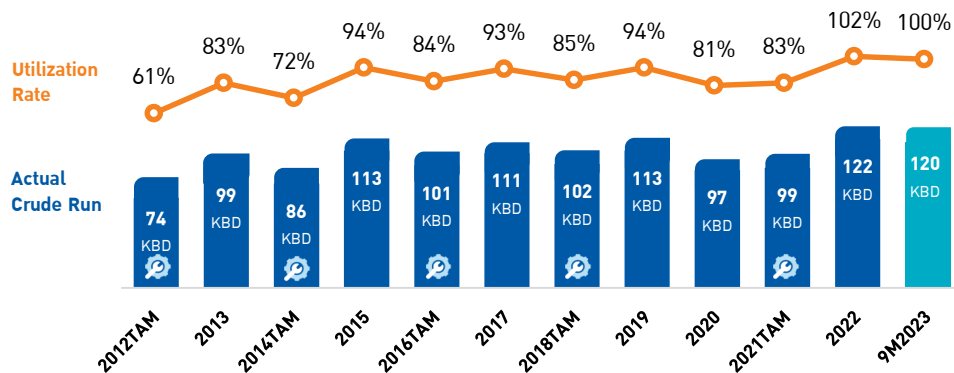


Constantly develop the oil trading business stressing growth in trading market to new business partners and new products



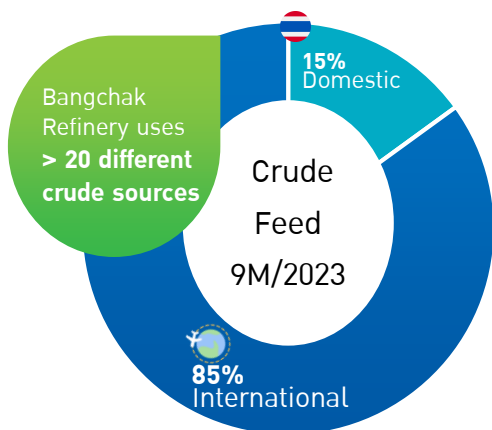
PRODUCTION PROFILE

 TAM = Turnaround Maintenance Period

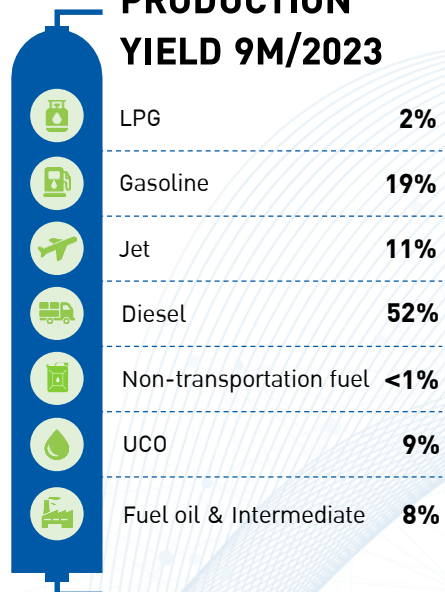


CRUDE FEED

to produce high quality and environmental friendly products



PRODUCTION YIELD 9M/2023

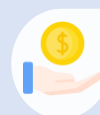


TURNAROUND MAINTENANCE CYCLE EXTENSION

From every other year, the schedule has become



INTEGRATED LOGISTICS NETWORK



Maximize asset utilization



Acquired rights over the pipeline network capacity and terminal systems



Stabilize oil distribution system



Transportation costs



Loss during shipping



Revenue



Carbon emissions from vehicular transport



bsrc BUSINESS GROUP

ESSO Thailand public company limited, has a complex refinery and the adjoining petrochemical facilities work together to produce higher-value fuels and chemical products at a competitive cost. Our operations division continuously seek opportunities to enhance margins and reduce costs with improvement projects.

SRIRACHA REFINERY CHARACTERISTIC



Complex refinery with capacity of 174 KBD



Fluidized Catalytic Cracking (FCC)



Located near Laem Chabang deep sea port, Chonburi



Petchem-Asphalt Refinery Flexible Operation mode with 50,000 Tons of Paraxylene



Refinery with capacity of

174

KBD



BANGCHAK'S VISIONARY FOR LONG-TERM STRATEGY



PHRA KHANONG REFINERY

- Complex refinery with capacity of **120 KBD**
- Producing high value specialty products



SRIRACHA REFINERY bsrc

- Complex refinery with capacity of **174 KBD**
- Located near Laem Chabang deep sea port



TRADING BUSINESS



BCP Trading Pte. Ltd.

- BCP Trading, one of leading independent oil trader in Singapore
- **Over 20 countries** for trading network
 - **More than 100 counterparties** worldwide
 - Expanded into **Biofuel trading**



REFINERY OPTIMIZATION SYNERGY ENTERPRISE



- Optimization and synergy services
- Commercial services



SAF PRODUCT bsgf

Bangchak Sustainable
Green Fuel

The first and the only one
SAF production in Thailand
with capacity of **7 KBD**



LOGISTICS BUSINESS



Bangkok Fuel Pipeline and
Logistics Co., Ltd.

- Logistic network of **pipeline, terminal, trucks and vessels.**
- Expansion of **terminal hub and fuel transportation** to cover all parts of Thailand





MARKETING BUSINESS GROUP

Main distribution channel of oil and lubricant products through more than 2,200 service stations nationwide, and directly sell to industrial sectors, as well as providing supplementary non-oil businesses

BANGCHAK'S MARKETING CHARACTERISTIC



Aiming to maintain its service standards to guarantee maximum satisfaction from consumers. Done by turning Bangchak service stations into the "Greenovative Destination"



Focusing on distribution and improvement of high-performance environmentally friendly green renewable fuels, embracing the gasohol and diesel products



Emphasizing great customer experience with non-oil business and various services including Inthanin coffee shops, partner stores, and centers for lubricant replacement and car wash



Marketing products to airlines, industrial, transport, construction and agricultural sectors



SERVICE STATIONS

as of September 2023



2,203

Total Service Stations

CURRENT NETWORK OPTIMIZATION

To enhance consumer experiences

- Employ technology to advance Loyalty Program
- Develop high-performance environmentally friendly products
- Upgrade standard of customer services

NETWORK EXPANSION

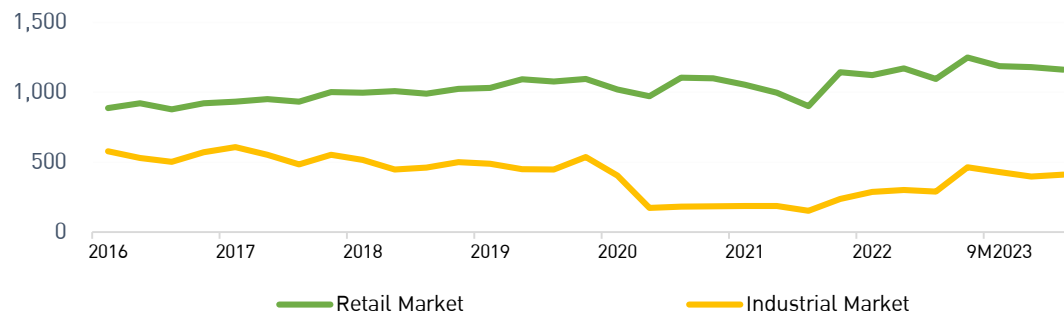
Focus on high potential areas, with service stations of distinguished character, harmoniously customized to customer needs

NON-OIL BUSINESS EXPANSION

To attract more customers and support modern consumer lifestyles

TOTAL SALES VOLUME

Sales volume has recovered to pre-COVID level
(Unit: ML/Quarter)



NON-OIL BUSINESS

as of September 2023

Focus on expanding and developing businesses such as coffee shop, convenient stores, and car care services to enhance customer experience and induce more customers to Bangchak service stations. It became a crucial part to the expansion plan of marketing business group.

1,026

Inthanin coffee shops



Inthanin

With more than 1,000 Inthanin coffee shops nationwide, both in service station and stand alone, serve 100% Arabica coffee beans roasted with specific process while giving back to the community and environment nationwide



EV CHARGING STATION





bcpg

CLEAN POWER BUSINESS GROUP

Bangchak invests in the green power business through BCPG PLC. with 57.81% shareholding portion. BCPG, established in 2015 and listed in 2016, is among Asia-Pacific's leading companies in renewable energy with solar power, hydropower, wind power and natural gas businesses in Thailand, Japan, Taiwan, Laos, Vietnam, Philippines and the United States of America. By 2025, BCPG will be a prominent renewable energy player in Asia Pacific with sustainable growth.



**World's
Greenenergy Icon**

**Evolving the world
though the green ways**

Empowering Green Lifestyle

Green Expanded

Continue to expand its green power production in the Asia-Pacific region by over **3,200 GWh per year.**

Build confidence and strength in financial position to support both short-term and long-term investment plans.

Continue investments in large energy storage system businesses to manage the use of electricity generated by green energy and to support future trends

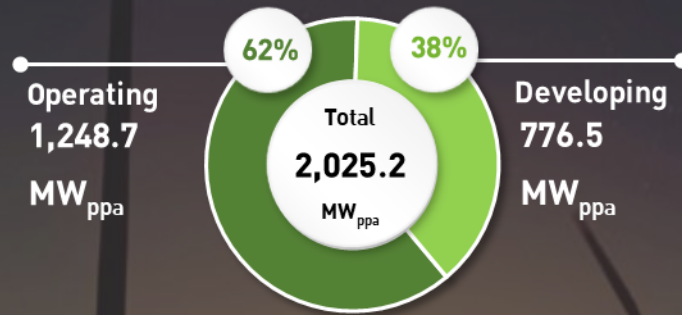
Green Innovations

Commit to developing green energy innovations to respond to sustainable energy consumption and environmentally-friendly lifestyles

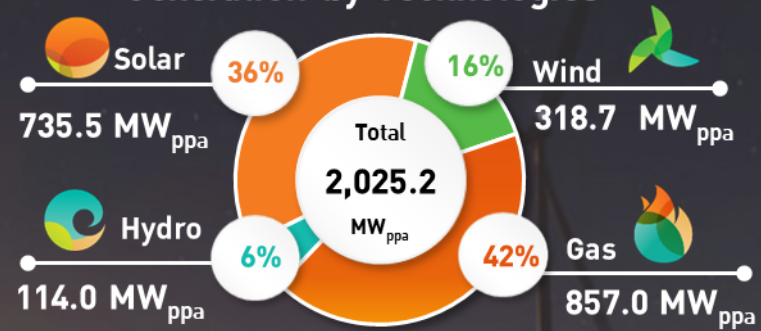
Green Target

Set a **net-zero carbon goal by 2030** to extend a balanced world to future generations

Production Capacity



Generation by Technologies



THAILAND



174.6 MW



9.0 MW



Oil Terminal 710 ML



District cooling

3,000 RT (Phase I)
(SCOD 2024)

Operating

Developing



114.0 MW



Operating

LAOS TO VIETNAM



(SCOD 2025)
290.0* MW

Developing



U.S.A



577 MW
Operating

280 MW
Upcoming: Q4/23



CHINA
• VRB



JAPAN



79.7 MW
Operating

(SCOD 2024)
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

As of September 2023



BIO-BASED PRODUCTS BUSINESS GROUP

Bangchak engages in bio-based product business, including ethanol and biodiesel through BBGI PLC., with 45.00% shareholding portion **BBGI is No. 1 biofuel producer and distributor in Thailand**, and aims to become a leader in premium bio-based products and biotechnology business.



BBGI has become a listed
company in the Stock
Exchange of Thailand since

17 March 2022.

Biodiesel Business

Biodiesel is alternative fuel to replace diesel fuels produced which from natural raw materials and it is regarded as environmentally friendly clean energy.



Bioethanol Business

Ethanol or ethyl alcohol is one of alcohols originated from the fermentation of molasses or flour plants. It is clear, colorless liquid which is inflammable and dissolvable in water and other organic solutions. So, it is variously useful by grades of the products.



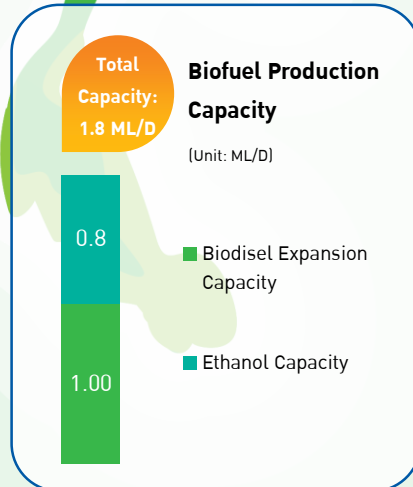
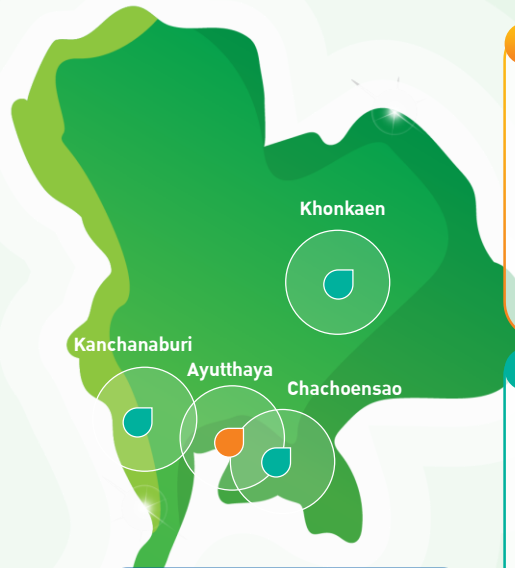
High Value Bio-Based Products

The group company expects to continue investing in this business sector with the focal area that are acknowledged by government, for example, the Special Economic Zone for any benefits it may cause. The group company is waiting for more research and development of the Biofuel by-product to generate profits



Biofuel Business

No.1 Fully Integrated Biofuel Producer in Thailand



Biodiesel Business

Ayutthaya - CPO
1,000,000 L/D
Operates under BBGI Biofuel Co.
BBGI holds 70%

Biodiesel Products

Biodiesel Refined Glycerin

Ethanol Business

Kanchanaburi - Molasses
300,000 L/D
Operates under BBGI Bioethanol Plc.
BBGI holds 100%

Khonkaen - Molasses
350,000 L/D
Operates under BBGI Bioethanol Plc.
BBGI holds 100%

Chachoengsao - Cassava
150,000 L/D
Operates under BBGI Bioethanol (Chachoengsao)
BBGI holds 85%

Ethanol Products

Fuel Grade Pharma Grade

High Value Bio-Based Products

Leading and Pioneering in Thailand

Synthetic Biology



Advanced Biotech

Invest & Partner with
World Class Biotech
Synthetic Biology
("Synbio")

1 Investing in Manus

2 Partnering with Manus

Exclusive Manufacturing
License and Distributor in
12 Countries
(Southeast Asia, Japan,
and Korea)

Trading

Distribute via B2B and B2C platforms

Distribution Platform

1 Business-to-Customer (B2C)
Food & Health Supplement



2 Business-to-Business (B2B)



NATURAL RESOURCES

Bangchak invests in upstream petroleum exploration and production (E&P) business through OKEA ASA, and involves in the lithium business and innovation businesses **over the world**.





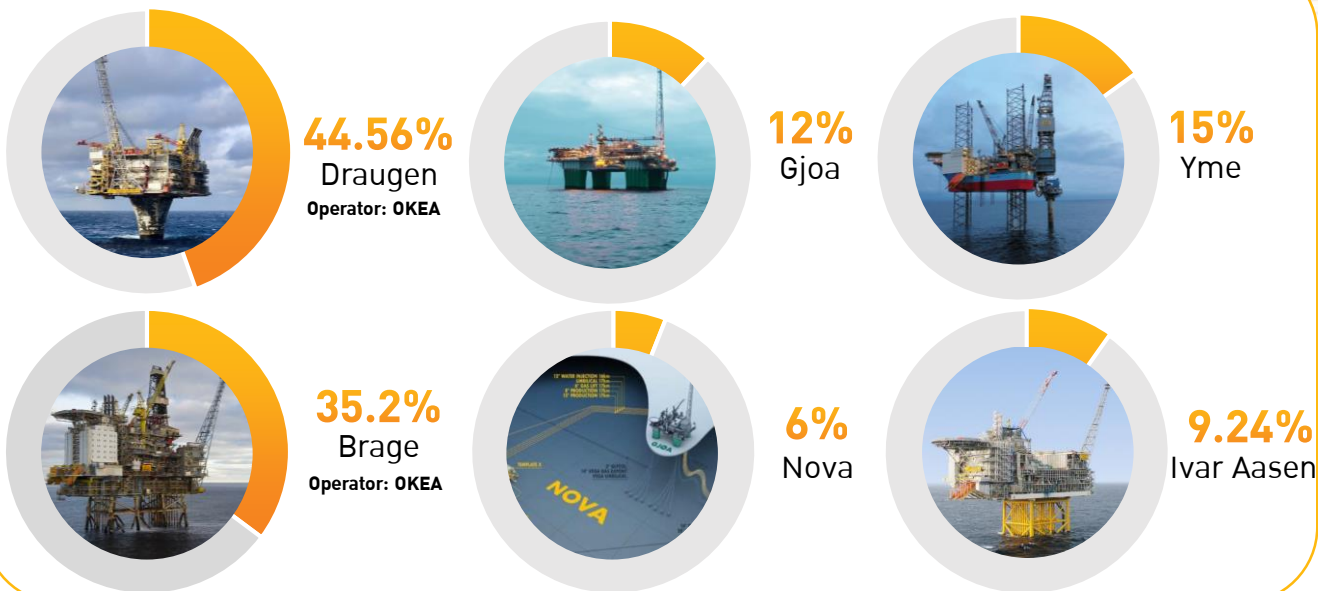
OKEA ASA

Listed in Oslo Stock Exchange

- A Norway-based oil company engaged in the oil and gas exploration and production industry
- Listed in Oslo Stock Exchange since **June 2019**



Current Asset in Production



STRENGTHENING A MORE ROBUST AND DIVERSE PRODUCTION PORTFOLIO IN NORWEGIAN CONTINENTAL SHELF

2P Reserves (mmboe)

60

+41

+68%

Production

■ Okea Base 2023

■ After Acquisition

2023 exit rate: 22-25 Kboepd

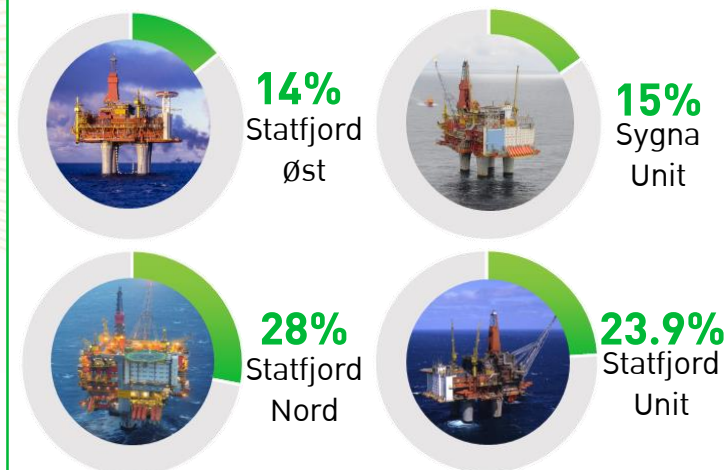
2023 After Aquisition: 35-40 Kboepd

BCPR holds **45.44%**

As of September 2023

[BCPR is one of the subsidiaries in Bangchak Group, wholly owned 100% by BCP]

New Acquisitions



* Expected Completion in Q4/2023

LithiumAmericas

Cauchari-Olaroz project in Argentina: Construction underway with the first production targeted within 2023

BCP holds offtake rights of lithium carbonate up to

6,000 tpa





BANGCHAK INITIATIVE AND INNOVATION CENTER (BiiC)

BiiC explores opportunities for collaboration with various partners to develop business innovation that will generate new income and profit. BiiC is divided into groups, as follows



Corporate Venture Capital (CVC)

Invest in global innovative and disruptive startups to create new strategic partnerships and business opportunities for Bangchak Group. Its investments has extended from green energy and bio-based businesses to hydrogen economy and carbon capture & utilization.



Research and Development (R&D)

Collaborate and fund research institutes and universities for joint research and development of innovative products in the field of green and bio-based technology, as well as intellectual property protection.



Ecosystem and Incubation (E&I)

Create an ecosystem to support innovation through collaboration and incubate the growth of internal and external startups to create new customer experiences, increase revenue and efficiency for Bangchak businesses.



Winnonie

New commercial startup from BiiC

An electric motorcycle rental platform for professional purpose that help cut the conventional costs of motorcycle payments, fuel, and maintenance into a singular all-inclusive rental service.



Each Award

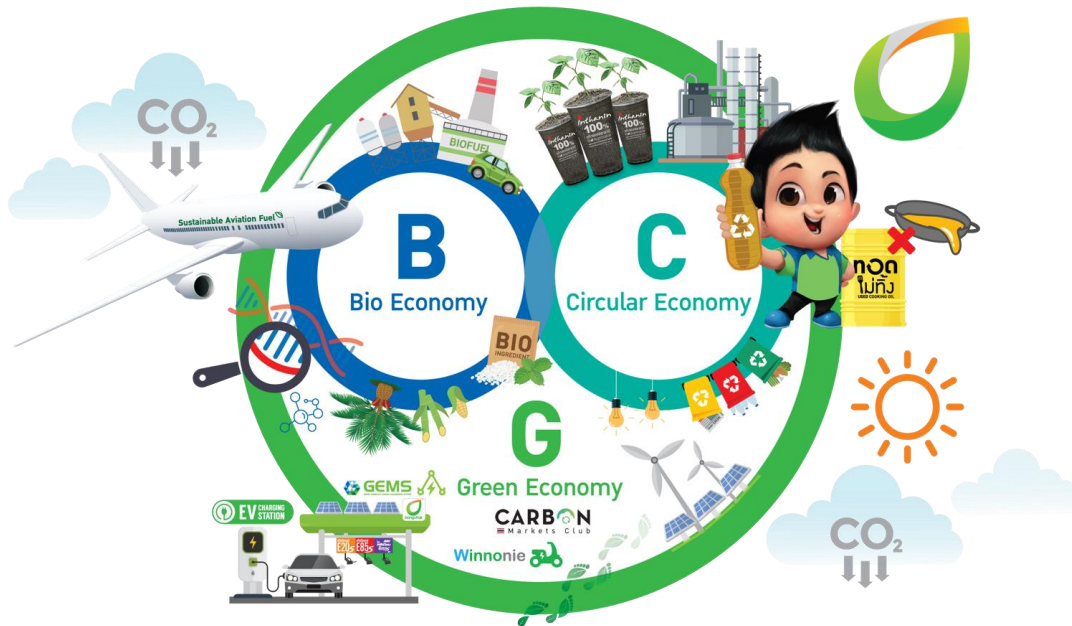
Further strengthens our commitment to develop and improve

Each award, each ranking, is a mark of trust at the national, regional, and global level.

Corporate Governance and Sustainability – 6 Awards | Leadership and Management – 10 Awards |
 Innovation – 5 Awards | Corporate Image and Branding – 3 Awards |
 Environmental and CSR – 2 Awards | Finance and Investor Relations – 1 Award |
 Human Resource Management – 2 Awards | Quality, Safety and Other – 5 Awards | 5 Certificates

- 1 Her Royal Highness Princess Maha Chakri Sirindhorn's Trophy for Sustainable Development Excellence at the Thailand Corporate Excellence Awards 2022
- 2 UN Women 2022 Thailand WEPs Awards – The First Runner-Up in the Transparency and Reporting Category
- 3 Sustainability Awards of Honor at SET Awards 2022
- 4 South East Asia MIKE Award (The Most Innovative Knowledge Enterprise) – Gold Level
- 5 HR Asia Best Companies to Work for in Asia 2022 – Thailand Region
- 6 Best Environmental Responsibility
- 7 Foundation for Thai Society Thai Awards – Organization of Excellence 2022
- 8 Thailand Top CEO of the Year for the Energy and Utilities Industry
- 9 Asia's Best CEO (Investor Relations) – Chaiwat Kovavisarach, Group Chief Executive Officer and President, Bangchak Corporation Public Company Limited
- 10 Asia's Best CFO (Investor Relations) – Surachai Kositsareewong, Senior Executive Advisor
- 11 Foundation for Thai Society Thai Awards – Best Practice Awards 2022
- 12 Superbrands Thailand 2022
- 13 Asia's Best CSR
- 14 Best Investor Relations Company

Bangchak has adopted the “**BCG Economy Model**” to create profits, values and sustainability for the Company and stakeholders.



Bio Economy

Focusing on the productive use of biological resource through the use of technology and innovation to transform agricultural products to high-valued biological products

Circular Economy

Emphasizing the worthwhile use of resources, raw materials, and products

Green Economy

focusing on overcoming environmental issues and mitigating their impacts sustainably

Sustainable Development Goals



S&P Global

MSCI
ESG RATINGS



CCC B BB BBB A AA AAA

THSI
THAILAND
SUSTAINABILITY
INVESTMENT 2022

SET **AAA**
ESG Ratings 2023

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

Conserving Nature and Society **10%**



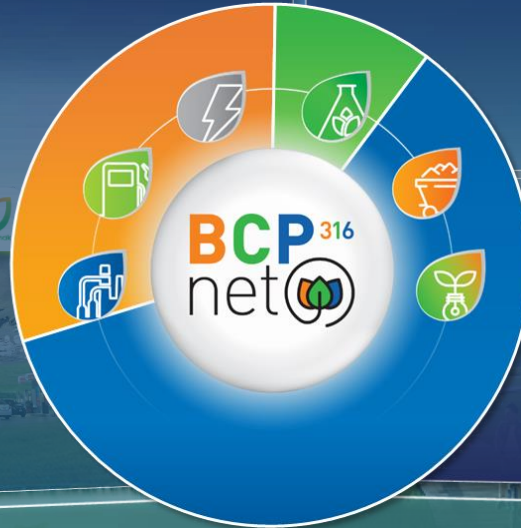
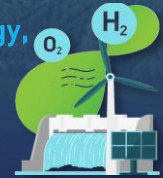
100,000 tCO₂e/y in 2030 onward

Focusing on **Agricultural, reforestation and Mangrove reforestation campaigns**

Proactive Business Growth & Transition **60%**

Green Portfolio, Future Technology, Carbon Capture and Utilization

Partnering with



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



CO₂ Reduction 80%

Compared to Conventional JET Fuel

btsg

One-Stop Solution Provider

For LNG Supply & Integrated system for logistic and industrial customer



20% less CO₂
compared to Diesel

bfpl



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



30,000 tCO₂e/year



Carbon credit linked FX with Kasikorn Bank



STOCK INFORMATION



Bangchak Corporation
Public Company Limited
As of 30 Sep 2023

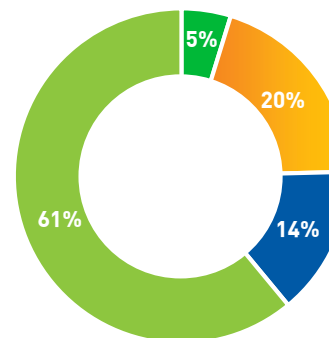
Resources/Energy & Utilities
SET100 / SETCLMV / SETTHSI
Establish Date 08/11/1984

Paid-up (MB.)	Listed Date	Par	Foreign Shareholder
1,376.92	02/08/1994	1.00 Baht	15.47%

Market Cap (MB.)	Price (THB/Share)	52 Week High/Low	NVDR Shareholder
56,798.08	41.00	41.75 / 28.75	16.17%

% OF SHAREHOLDER

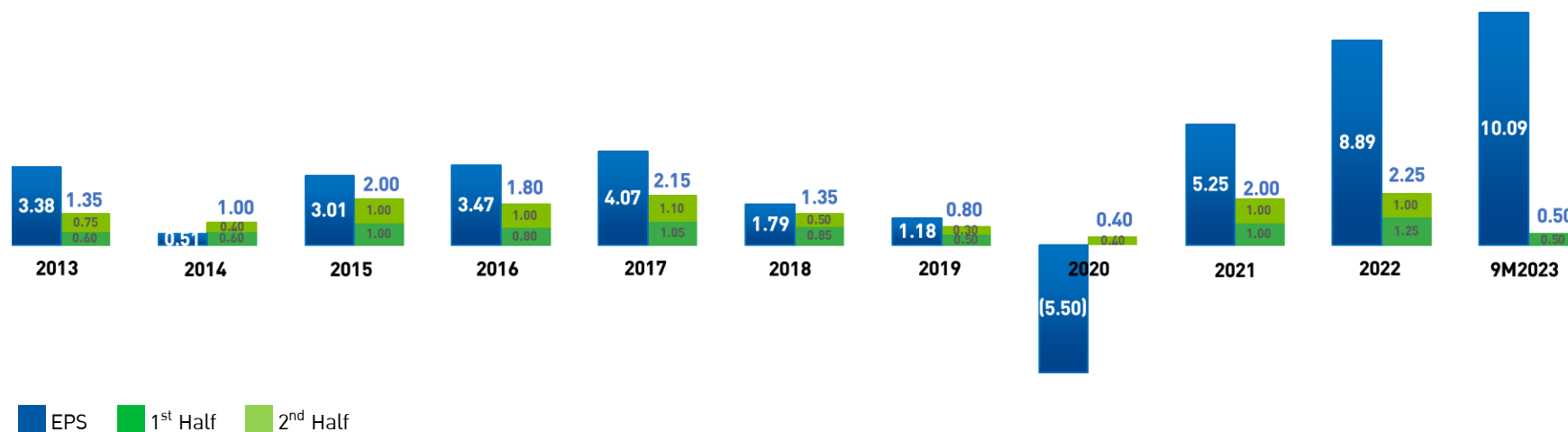
As of 7 September 2023



No. Listed shares
1,376,923,157 shares

- Ministry of Finance
- Vayupak Fund 1
- Social Security Office
- Public

DIVIDEND PAYMENT IN THE PAST 10 YEARS





BANGCHAK CORPORATION PUBLIC COMPANY LIMITED

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Bangkok 10260 Thailand.

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Email: ir@bangchak.co.th



Corporate Website



IR Website

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