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Bangkok Aviation Fuel Services Public Company Limited

Management Discussion & Analysis

For the Quarter Ended March 31, 2024

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Executive Summary

In the year 2024, the tourism situation in Thailand improved significantly, with the Tourism Authority of Thailand (TAT) setting a target of 35 million foreign tourists. This included 8 million Chinese tourists, a number close to the pre-COVID-19 outbreak levels. During the period from January to March 2024, there were 9.4 million foreign tourists, marking a 44.0% year-on-year increase, mainly due to the gradual return of tourists, particularly from China, despite the slow recovery of the Chinese market due to economic downturns. The tourism industry also benefited from the long-term visa exemption policy between Thailand and China, which started on March 1, 2024, significantly boosting Thailand's tourism industry and reviving it to its former glory. Furthermore, Thailand was ranked as the number one country to visit in a lifetime in 2024 according to CEOWORLD Magazine's "World's Best Countries To Visit In Your Lifetime 2024" list. This magazine gathers data from the opinions of 265,000 readers. Thailand's top ranking was attributed to its diverse tourism offerings, such as vibrant nightlife, delicious cuisine, lively arts and culture, excellent shopping destinations, picturesque rivers and canals, iconic temples like Wat Arun, and bustling night markets.

For the Northern Fuel Pipeline Transportation Business is considered a business that contributes to the world and the environment in various dimensions. It benefits the nation by promoting energy security and enhancing the efficiency of fuel transportation. Developing the infrastructure for fuel transportation to the region, the local population can access fuel at prices close to those in Bangkok, helping to reduce road accidents and ensuring safety from accidents caused by the transportation of fuel with large tank trucks. In terms of business, it helps reduce the cost of fuel transportation, and environmentally, it helps reduce global warming and greenhouse gas emissions. Providing fuel services through the pipeline system by a group of companies since the beginning of operations has helped reduce greenhouse gas emissions by more than 54,000tonCO²e, equivalent to planting about 5,684,200 trees. Additionally, the cumulative fuel demand in the northern region during January to February 2024 was 580.0 million liters, an increase of 1% from the same period in the previous year, which was 577.2 million liters.

In 2024, the group of companies is in the process of expanding the fuel pipeline network Phase3 (Saraburi-Ang Thong), connecting the fuel transportation system with Thai Petroleum Pipeline Company Limited (THAPPLINE). BAFS has changed the name of "FPT Pipeline Company Limited (FPT)" to "BAFS Pipeline Company Limited (BPT)" effective April 1, 2024.

Currently, BPT has been considered the operator for connecting the Saraburi-Ang Thong oil pipeline system to the Saraburi fuel depot of THAPPLINE. There will be signing of agreements for pipeline connection and land lease agreements to strengthen energy security according to the national fuel transportation infrastructure strategy. BPT aims to increase fuel transportation



volume from the eastern region to the northern region through the pipeline system by over 700 million liters per year. It is expected that this project will commence operations in 2026 to help reduce greenhouse gas emissions from fuel transportation and contribute to Thailand's transition to a low-carbon society.

The trend in the solar power generation market, particularly in the installation of solar rooftop panels, continued to grow compared to the previous year. This growth can be attributed mainly to Thailand's relatively high electricity tariffs, averaging around 4.18 Baht per unit (average rate from January to April 2024). As a result, businesses and government agencies turned to invest in installing Solar Rooftop systems on buildings and factories to control costs in the long term.

In recent times, the installation of Solar Rooftop systems in factories has been the largest and continuously growing market. While the household sector initially represented a smaller market, it has seen a significant increase in growth lately, indicating that people are increasingly looking for ways to reduce expenses. Additionally, there has been support from the Energy Regulatory Commission (ERC), which adjusted the criteria for purchasing electricity from community solar projects since March 21, 2023, by setting up a 10-year long-term purchase program (2021-2030) with a purchase price of 2.20 Baht per unit, for a total electricity quantity of up to 90MW. This has made projects more financially viable, as any surplus electricity can be sold.

Currently, the group of companies has a total solar power generation and distribution capacity of 49.4MW., divided into 36.4MW. of solar power plants in Thailand and 13MW. in Japan. In 2024, the group invested further in the Solar Rooftop business, installing systems on buildings, factories, and offices, totaling 4.05MW. As a result, the group anticipates an 8% increase in electricity generation capacity to reach 53.5MW. by the end of this year.

Unit : Million baht	10/23	40/23	10/24	Change	
		10/24	QoQ	YoY	
Total Revenues ¹	794	803	866	8%	9%
Total Expenses ²	618	827	629	(24%)	2%
Operating Profit (Loss)	176	(24)	237	>100%	34%
Net Profit (Loss) to Equity holders	52	(198)	83	>100%	59%
Earnings per Share (Baht/Share)	0.08	(0.33)	0.11	>100%	38%
EBITDA ³	407	199	455	>100%	12%
EBITDA Margin (%)	51%	25%	53%		
EBITDA Margin exc. Extra items ⁴ (%)	51%	36%	53%		

Financial Highlights

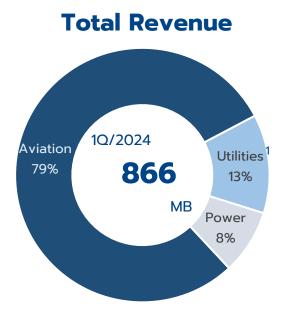
¹ Total revenues excluded finance income

² Total expenses excluded finance cost

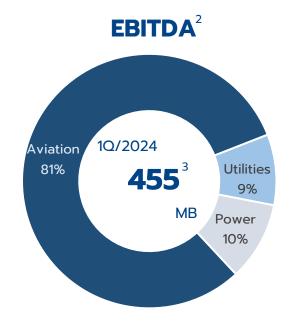
³ EBITDA = Operating profit (loss) + Depreciation and amortization

⁴ Extra items consisting of loss from impairment on asset, loss from changes in the fair value of investments and loss from selling investments in joint ventures





¹ Revenue from the electricity generation and distribution business, including dividend income from solar power plants in Japan.



 $^{\rm 2}$ % of EBITDA calculated from amount before eliminations $^{\rm 3}$ EBITDA amount after eliminations



Total Performance 10/24 vs. 10/23

Bangkok Aviation Fuel Services Public Company Limited, and its subsidiaries ("BAFS GROUP"), recorded a **total revenue** of 865.6 million baht, a 9% increase compared to the same period last year, reflecting the recovery of the aviation industry towards normalcy. Consequently, the **Aviation business**'s total revenue increased by 18%, driven by a 17% increase in aircraft refueling volume. Similarly, the **Utilities business** exhibited a 13% rise, attributed to increased fuel transportation volume across all products within the NBPT project, which grew by 41% as a result of more aggressive marketing efforts. However, this was offset by a decrease in revenue in the **Power business**, attributed to the termination of the Adder subsidy contract and the postponement of dividend income from investments in Japanese power plants to the second half of this year.

The **EBITDA** in 1Q/24 amounted to 455.2 million Baht, marking a 12% increase compared to the same period last year. This increase was primarily driven by the **Aviation business segment**, which experienced a rise in overall profit due to increased aircraft refueling volumes. Regarding overall operating expenses (excluding depreciation and amortization), there was a 6% increase attributed mainly to higher Airport Concession Fee (ACF) benefits from increased refueling volumes and personnel costs. However, depreciation and amortization expenses decreased by 6% since 3Q/23 as the Group revised the estimated useful lives of its fuel pipeline and related equipment from the original 40 years to 80 years, based on a review by management and experts. This resulted in lower depreciation expenses compared to the same period last year. Net finance costs slightly decreased, and consequently, in 1Q/24, the **net profit** attributable to the shareholders of the company amounted to 82.9 million Baht, equivalent to earnings per share of 0.11 Baht, with a net profit margin of 8%.

Key Events in 1Q/24:

Progress of the Northern Fuel Pipeline Transportation System Phase 3 (Saraburi - Ang Thong)

On April 24, 2024, Bangkok Aviation Fuel Services Public Company Limited (BAFS Pipeline Transportation; BPT), a subsidiary, was approved to be the operator to connect the Saraburi-Ang Thong fuel pipeline transportation system project with the Saraburi fuel depot of THAPPLINE to expand the fuel transportation system to the northern region, Phase 3. This route extends from the Saraburi fuel depot to the Ang Thong pipeline junction station, covering approximately 52 kilometers. It is an expansion from the Phase 1 of the northern fuel pipeline transportation system, which extends from the Bang Pa-in fuel depot to the Kamphaeng and the Phet-Phichit fuel depot, and Phase 2, which extends from Kamphaeng Phet to the Nakhon Lampang fuel depot. This expansion will enhance the fuel transportation capacity from the Sriracha fuel refinery and the Mab Ta Phut fuel refinery located in the eastern region to the northern region, through the underground pipeline system, replacing transportation by fuel tanker trucks. This



will help reduce carbon dioxide emissions, mitigate the problem of pollution from burning fuel during transportation, and also reduce accidents that may occur during long-distance driving.

Furthermore, the pipeline transportation system connector is expected to commence construction and have a commercial operation date (COD) within the year 2026. It is anticipated that this will result in an increase of fuel transportation volume through the pipeline to the northern region by over 50%. This will elevate the network of fuel pipeline transportation in the Northern Pipeline Transportation System (NBPT) expansion project to over 628 kilometers in total length, making it the longest fuel pipeline transportation system in ASEAN.

Future operational plan

The group of companies adopts a Sustainable Growth Strategy, which includes revenue and sustainability objectives, focusing on diversification across three business sectors: Aviation (AV), Utilities & Power (UP), and Business Services & Solutions (BS). The revenue structure goals are set at 50:40:10, respectively, to accommodate changes. The diversified businesses can generate cash flow and mitigate risks. The group operates with sufficient and redundant resources, managing sustainability issues across three dimensions: environmental, social, and good governance.

For the main business segment in **aviation fuel services**, the year 2024 saw promising signs of growth due to increased capacity to accommodate flights at Suvarnabhumi Airport. The expansion of runways to accommodate an additional 26 flights per hour to 94 flights per hour, expected to commence in Sep. 2024, is a significant indicator. This, coupled with positive signs from the recovery of tourist volumes, indicates continuous growth prospects for the group of companies due to the aviation sector's growth. In 2024, the group set a target of refueling aircraft with 5,000 million liters of fuel, a 16% increase from the previous year while maintaining service standards and safety.

As for **the utilities business**, the group plans to invest to boost future revenue by connecting its fuel pipeline transportation with THAPPLINE, linking the fuel pipeline network between the eastern and northern regions of Thailand. This will enhance the country's energy security. The group aims to increase its market share from northern fuel transportation to at least 70% and expects to receive carbon credits from reducing greenhouse gas emissions of no less than 100,000tonCO²e under the NFPT project in 2027. These initiatives demonstrate the group's commitment to sustainable growth. In 2024, the group continued aggressive marketing efforts and set a target of transporting 1,100 million liters of fuel through the northern pipeline, a 31% increase from the previous year.



In the power business, the group of companies remains steadfast in seeking investment opportunities in both electricity and clean energy related businesses. Thus focus on a sustainable investment strategy aimed at generating returns and strengthening financial resilience for shareholders consistently, aligned with the group's revenue structure goals. This involves diversifying investments and seeking suitable business partners both domestically and internationally. Establishing the investment targets encompass a variety of assets such as solar, wind, waste-to-energy (WTE), battery energy storage systems (BESS), eco-smart microgrids, and energy platforms. Operations are conducted while considering the needs and expectations of stakeholders, promoting social, community, and environmental development. Furthermore, investments are directed towards energy or environmentally friendly technologies. In 2024, the group anticipates BC's electricity production to reach 54MW., an 8% increase from the previous year, driven by investments in solar rooftop projects. Revenue recognition from various investment projects is expected to commence this year, with plans for further expansion in the future. This expansion emphasizes investments in greenfield power plants both domestically and internationally, such as the planned investment in Surat Eco Power Limited, holding a 30% stake in a waste-to-energy power plant with a capacity of 9.9MW., expected to commence operations in 2026.

For **the future business plan to achieve Net Zero goals**, In 2024 the company initiatives include participating in international carbon disclosure through CDP and TCFD, collaborating with business partners to develop sustainable aviation fuel (SAF), and studying the feasibility of establishing SAF and blending facilities such as those with Bangchak Corporation Public Company Limited (BCP), Mitr Phol Group and Energy Asolute public company limited (EA). Additionally, Memoranda of Understanding (MoUs) will be signed between Khon Kaen University, Naresuan University, and others to promote cooperation in research and development throughout the biofuel supply chain, from production planning to technology development for biodiesel extraction and SAF production. In the Northern Pipeline Transportation Project (NBPT), it's expected to receive carbon credits of around 44,000tonCO²e by the second quarter of 2024. There are also plans to increase the installation of solar cells, starting with facilities in Phichit and Kamphaeng Phet. Looking forward, the group aims to achieve Net Zero by 2050. By mid-2030, BAFS plans to reduce greenhouse gas emissions by 30% in Scope 1 and 2 and 20% in Scope 3, with all companies in the group aiming for a 20% reduction. It's anticipated that by 2024, the group will successfully become a Carbon Neutral Company.



Performance by Business Segment

Aviation Business

Description	1Q/23	4Q/23	1Q/24	Change	
				QoQ	YoY
Aviation Fuel Volume (Million litres)					
Don Mueang Airport	171	185	200	8%	17%
Suvarnabhumi Airport	898	961	1,053	10%	17%
Total	1,069	1,146	1,253	9%	17%
Flights ¹	59,741	64,422	68,376	6%	14%
Revenues (Million baht) ^{2/3}	586	647	694	7%	18%
Aviation EBITDA Margin (%) ³	52%	38%	54%		

¹ Total Flights was data of flights that serviced by BAFS only at BKK and DMK

² The revenue of the Aviation business segment consists of the revenue of BAFS, TARCO, and BAFS INTECH

³ Revenue and expenses excluded gain(loss) on exchange rate and loss from impairment on asset

Performance 1Q/24 vs. 1Q/23

• Total revenue amounted to 693.6 million baht, an increase of 18%, driven by the Aviation business segment, which had service revenue of 668.0 million baht, up by 19%, attributed to the recovery of total aviation fuel volume and total flight movements served by the group of companies at Suvarnabhumi Airport and Don Mueang International Airport, growing by 17% and 14%, respectively, compared to the same period last year.

However, despite the Aviation business segment being impacted by the cancellation of the reduction in excise tax for domestic aviation fuel since July 2023, total service volume has significantly increased due to the recovery of tourism and international travel, with the increase in Chinese tourist arrivals resulting in a 105% growth in fuel uplift volume from China compared to the same period last year.

• EBITDA amounted to 371.5 million baht, up by 23% due to the Aviation business segment seeing the aforementioned revenue increase. Meanwhile, operating expenses also increased, such as ACF expenses which increased in line with the revenue increase, as well as personnel expenses, leading to an EBITDA margin of 54% in 1Q/24, up from 52% in 1Q/23.



Utilities Business

Description	1Q/23 4Q/23	10/22	10/24	Change	
		10/24	QoQ	QoQ YoY	
Multi-products Fuel Volume of NBPT					
project ¹ (Million litres)	207	254	292	15%	41%
Revenues (Million baht)	97	103	110	7%	13%
Utilities EBITDA Margin (%)	21%	16%	38%		

¹ BPT's multi-products fuel pipeline transportation volume for the North Fuel Pipeline Transportation (NBPT) project

Performance 1Q/24 vs. 1Q/23

- Total revenue amounted to 109.8 million baht, increasing by 13% due to the Utilities business segment, which had service revenue from multi-products fuel transportation and fuel storage amounting to 108.2 million baht, up by 13% driven by increased volume of multi-products fuel of the NBPT project, which grew by 41% due to more aggressive marketing efforts with the fuel company clients.
- EBITDA amounted to 41.3 million baht, representing an increase of over 100% due to the revenue increase in the Utilities business segment mentioned above. Meanwhile, efficient cost control measures led to a decrease in operating expenses by 11%, attributed to repair and maintenance costs, as well as decreased testing expenses for the fuel pipeline transportation systems. Consequently, the EBITDA Margin in 1Q/24 stands at 38%, up from 21% in 1Q/23.



Power Business

Description	10/23	4Q/23	1Q/24	Change	
	10/25			QoQ	YoY
Capacity Factor (%)	16%	14%	15%		
Energy Sold (GWh)					
Thailand	14	13	13	0%	(7%)
Japan	3	3	3	0%	0%
Total	17	16	16	0%	(6%)
Revenues (Million baht) ¹					
Sale of electricity and Other Income	113	79	72	(9%)	(37%)
Dividend income from solar power	32	-	-	0%	(10.0%)
plants in Japan	52			0%	(100%)
Total	145	79	72	(9%)	(51%)
Power EBITDA Margin (%)	70%	65%	65%		

¹ Revenue and expenses excluded gain(loss) on exchange rate, loss from impairment on asset and loss from changes in the fair value of investments

Performance 1Q/24 vs. 1Q/23

- Total revenue amounted to 72.2 million baht, decreasing by 51% due to the Power business segment, which generated revenue from electricity sales amounting to 70.8 million baht, down by 22% as a result of the expiration of additional price support contracts (Adder) of two subsidiary companies in June and December 2023. This includes dividend income from investments in Japanese power plants, which was deferred from the operational results of 2023 and scheduled to be paid in the second half of 2024.
- **EBITDA amounting to 46.8 million baht decreased by 54%** due to the Power business segment experiencing the aforementioned revenue decline, resulting in an EBITDA Margin of 65% in 1Q/24, down from 70% in 1Q/23.



Financial Position



Assets

As of March 31, 2024, the Group's total assets amounted to 22,701.0 million baht, a decrease of 0.1% compared to December 31, 2023, consisting of the following key items:

- Other current financial assets amounting to 763.6 million baht decreased by 8% due to withdrawals of bank deposits and redemption of government bonds collateralized by subsidiary companies totaling 63.4 million baht to repay borrowings during the year and to manage liquidity in operations.
- Land, buildings, and equipment amounted to 14,886.4 million Baht decreased by 0.4%. This was due to depreciation expenses of 218.6 million baht netted against the increase in equipment and construction works of 95.1 million baht.
- The cost of projects under concession agreements amounted to 1,726.5 million baht, decreased by 2% from the amortization of 37.3 million baht during the period.
- Cash and cash equivalents amounted to 596.3 million baht, increasing by 14%, primarily driven by improved cash flows from operations netted against investments in land, buildings, and equipment, as well as repayments of long-term borrowings during the period.
- Account receivables and other receivables totaled 471.5 million baht, increasing by 13%, in line with the same direction as the increased revenue of the company group.



Liabilities

As of March 31, 2024, the group of companies has a total debt of 15,959.7 million baht, which decreased by 0.4% compared to December 31, 2023. The interest-bearing debt to equity ratio is 2.0 to 1. The liabilities of the company group can be categorized as follows:

- Long-term loans from banks amounted to 10,355.3 million Baht, decreasing by 3% due to the repayment of long-term loans totaling 262.0 million Baht within the period, without any additional borrowings.
- Account payables and other payables totaled 241.2 million baht, decreasing by 17% primarily because of payments made towards suppliers for projects related to the fuel pipeline transport system in overlapping areas and the expansion of fuel distribution systems during the period.
- **Estimated liabilities for employee benefits** amounted to 647.2 million baht, decreasing by 6% mainly due to actual employee benefit payments during the period amounting to 35.4 million baht.
- **Short-term loans from banks** amounted to 290.0 million baht, increasing by 100% due to additional borrowing during the period.

Equity

As of March 31, 2024, the group of companies had total equity of 6,741.4 million baht, increasing by 1% from December 31, 2023. This increase was primarily driven by accumulated comprehensive income during the period totaling 65.6 million baht netted against the payment of dividends on perpetual bond, which resemble net income from income tax, amounting to 27.6 million baht. For the equity portion attributable to shareholders of the company, it amounted to 5,511.1 million baht, increasing by 1%.



Cash Flow Statement

	For the period ended Mar 31, 2024
	Million baht
Net cash flows from operating activities	382
Net cash flows used in investing activities	(125)
Net cash flows used in financing activities	(184)
Net increase in cash and cash equivalents	73
Cash and cash equivalents at beginning of period	523
Cash and cash equivalents at end of period	596

- **Net cash flows from operating activities** amounted to 382.3 million Baht, resulting from increased revenues within the company group.
- Net cash flows used in investing activities totaled 124.9 million baht, primarily due to the company group's investments in land, buildings, and equipment amounting to 182.6 million baht, netted against withdrawals of bank deposits and redemption of government bonds collateralized amounting to 63.4 million baht.
- Net cash flows used in financing activities amounted to 183.8 million baht, mainly because the company group repaid long-term loans totaling 262.0 million baht and paid interest expenses totaling 159.4 million baht, netted against cash received from short-term loans amounting to 290.0 million baht during the period.



Key Financial Ratios

	1Q/2023	1Q/2024
Profitability Ratios		
1. Gross profit margin (%)	40.4%	47.1%
2. EBITDA Margin (%)	51.3%	52.6%
3. Net profit margin (%)	3.4%	7.6%
	Dec 31, 23	Mar 31, 24
Liquidity Ratios		
4. Current ratio (times)	0.8	0.8
Profitability Ratios		
5. Return on equity (%)	(2.8%)	(2.1%)
Operating Efficiency Ratios		
6. Return on assets (%)	(0.6%)	(0.5%)
Financial Policy Ratios		
7. Interest bearing debt to equity (times)	2.0	2.0
8. Debt to equity (times)	2.1	2.1
9. Debt service coverage ratio (times)	0.7	0.6

Key Financial Ratios Calculations

- 1. Gross profit margin = Gross profit (loss) / Service incomes and sales x 100
- 2. EBITDA Margin = EBITDA / Total revenues x 100
- 3. Net profit margin = Net profit (loss) / Total revenues x 100
- 4. Current ratio = Current assets / Current liabilities
- 5. Return on equity = Net profit (loss) (annualized) / Average equity holders of the company x 100
- 6. Return on assets = Net profit (loss) (annualized) / Average total assets x 100
- 7. Interest bearing debt to equity = Interest bearing debt* / Equity
 * Interest bearing debt = Short-term loans + long-term loans + Lease liabilities + Debentures
- 8. Debt to equity = Liabilities** / Equity
 - ** Liabilities = Total liabilities Lease liabilities Provision for land leased related to concession agreement
- Debt service coverage ratio = EBITDA (annualized) / (Short-term loans + Current portion of long-term loans + Current portion of lease liabilities)