

# **Overseas Coal Projects Raise Questions for Sumitomo**

Trading House Lags Behind Its Japanese Peers on Thermal Coal

## **Executive Summary**

Sumitomo Corporation reported a ¥26bn (US\$251m) impairment on the value of its Australian coal-fired power investment in the second quarter of its 2020 financial year (FY2020). Sumitomo and joint venture partner Kansai Electric had failed to refinance loans on the Bluewaters Power coal plant in Western Australia as a growing wave of major banks decline further coal funding.

The loss at Bluewaters has contributed to Sumitomo's largest first half loss ever (-¥60bn) and is adding to what the company is expecting will be its worst full-year performance as it forecasts a FY2020 loss of –¥150bn (-US\$1.4bn). Sumitomo is the only major Japanese trading house forecasting a loss this year.

This loss in the face of an accelerating global energy transition, along with major issues with Sumitomo coal power projects in developing nations, are raising important questions of strategic direction for the company and its investors.

## Coal Policies of Trading House Peers and the Japanese Government Are Leaving Sumitomo Behind

Following years of growing criticism over its financing of coal power in developing nations, the Japanese government tightened the conditions for such financial support in July 2020. Japan's environment minister has claimed that the new conditions are tight enough to effectively rule out further financing.

This move followed an announcement that old, inefficient coal plants in Japan would be shut down by 2030, which could see around 100 coal power units closed by that year. Since then both **JERA** – Japan's biggest power generator – and **J-Power** have both stated that they will fall into line with this policy and close all inefficient coal power plants by 2030.

The Japanese government went a step further in October 2020, announcing it would target net-zero emissions for the nation by 2050. This is the most significant shift in Japanese energy policy yet and will see a further, long term move away from coal towards renewables.

From being considered a laggard on coal policy, the Japanese government has quickly taken the initiative on policy which has left Sumitomo and its coal projects behind.

With the exception of Sumitomo, the major Japanese trading houses have taken significant first steps away thermal coal power and mining. These steps were taken over the 2018-2020 period prior to the significant policy changes on coal-fired power from the Japanese government in the second half of 2020. As well as lagging behind government coal policy, Sumitomo has clearly been left behind by its trading house peers.

Whilst the other trading houses have been divesting thermal coal mine holdings, Sumitomo's equity share of thermal coal production increased significantly in FY2019. When **Mitsubishi** Corp sold its investment in the Australian Clermont thermal coal mine in 2018, the stake was acquired by a joint venture of Sumitomo and Glencore. Sumitomo's thermal coal production may increase again if its Bluewaters Coal joint venture is forced to take control of the coal mine that is currently struggling to supply the power station with fuel.

Amongst other Japanese trading houses, Mitsubishi, **Marubeni**, and **Mitsui** no longer hold investments in thermal coal mines. Furthermore, Marubeni has withdrawn from three overseas coal power projects in South Africa, Botswana and the Philippines.

**Sojitz** Corporation announced that it had agreed to sell its 30% stake in an Indonesian thermal coal mine in 2019. In March 2020 Sojitz announced the sale of its 10% stake in the Moolarben thermal coal mine in Australia. As a result of these divestments, Sojitz's equity share of thermal coal sales will decrease significantly in FY2020. Sojitz made clear in their 31 March 2019 financial results presentation that it does not have any current coal-fired power projects.

In February 2020, **Itochu** Corporation issued a release stating "we therefore hereby commit ourselves, as our policy, to neither develop any new coal-fired power generation business nor to acquire any new thermal coal mining interest." In the same release it noted that it had sold its interest in Glencore's Rolleston thermal coal mine operation. In October 2020, Mitsui announced it would sell all its stakes in coal-fired power plants by 2030 in order to help meet its target of reaching net zero emissions by 2050.

#### Sumitomo's Coal Power Projects Are Adding to Financial Burden in Developing Nations

Sumitomo is constructing the 1,200 megawatt (MW) Matarbari 1 coal-fired power plant in **Bangladesh** with an expected, excessive cost of US\$4.5bn. However, Bangladesh already has too much power capacity with much of it standing idle whilst receiving capacity payments (totaling US\$1.1bn in fiscal year 2018-19). Rising capacity payments are placing more financial pressure on the Bangladesh Power Development Board, which is making significant losses each year, leading to the need for large government subsidies and power tariff increases.

Sumitomo is also the identified EPC (engineering, procurement, and construction) contractor for the 1,200MW Matarbari 2 coal power plant for which a preparatory survey is shortly to commence. Adding the Matarbari 1 and 2 coal power plants will

only make overcapacity and financial burden within the Bangladesh power system worse.

The financial crisis within **Indonesia's** power system is even larger than Bangladesh's. Sumitomo is part of a consortium constructing a 2,000MW extension to the Tanjung Jati B coal-fired power station in Indonesia. Nearing completion, this plant will only add to the growing financial pressure on state-owned power utility PLN as inflexible payments to coal-fired independent power plants (IPPs) increase. The subsidy needed to cover losses driven by these IPP payments may reach US\$6.5bn for 2020 and may almost double to US\$11.4bn in the next two years in the absence of tariff increases.

After long development delays, the construction of Sumitomo's 1,320MW supercritical Van Phong 1 coal-fired power plant has begun in **Vietnam**. Most of the commercial banks that financed Van Phong 1 have since released new coal policies that distance themselves from further lending to coal.

The wave of banks pulling away from coal finance has been a factor in persuading the Vietnamese government to reassess its coal power build out plans amid concerns that further coal power projects will not be able to secure funding. The long development times for coal projects – often running significantly over schedule – has also raised concerns that such projects won't be built quick enough to meet Vietnam's growing power demand.

As a result, it is now expected that the nation's next iteration of its power development plan - National Power Development Plan VIII – will cancel or postpone up to 17GW of coal-fired power projects.

Having started development in 2011 and with an expected completion date of 2024, the Van Phong 1 coal power project demonstrates why the Vietnamese government is increasingly concerned about the long development timeframes of such coal projects. Van Phong's 13-year development (assuming no further delays) means that it has been superseded and outclassed by renewable energy technology that it is far quicker to develop, more acceptable to major investors and local communities, and increasingly cheaper than expensive coal power technology.

#### Major Investors Demanding More Action on Coal

In August 2020, leading Norwegian asset manager **Storebrand** - with US\$91bn of assets under management - announced that it had divested a number of shareholdings in line with its updated climate policy. These included Kansai Electric and Mitsui & Co, which have been excluded from its investments as they were considered to be too slow in moving away from coal. Kansai Electric is Sumitomo's 50:50 joint venture partner in the Bluewaters Coal power plant.

Further investor pressure on companies involved in the coal sector is coming from the **Norwegian oil fund** – the world's largest sovereign wealth fund. The US\$1 trillion fund's latest investment exclusions were announced in May 2020 and included Sasol, RWE, AGL, Glencore and Anglo American – all excluded based on their operations within coal mining or coal-fired power. The Norwegian oil fund is a

major shareholder in Sumitomo via Norges Bank Investment Management (NBIM) which manages the fund (see Annexure I).

**NBIM** also placed several companies under observation for their coal activities including BHP which has thermal coal mining operations and investments in addition to coking coal mining ventures with Mitsubishi and Mitsui. BHP has subsequently responded to growing investor pressure by announcing its intention to exit thermal coal entirely and to sell the two coking coal mines it owns with Mitsui. The Norwegian oil fund has previously excluded a number of Japanese power utilities and South Korean power utility KEPCO which has come under increasing investor pressure for its overseas coal construction projects.

In May 2020, it was revealed that **BlackRock** – the world's largest asset manager – had written to KEPCO's CEO seeking a rationale for its continued investments in new coal projects overseas and raising concerns over "several controversial coal projects" which include the company's plans to invest in coal-fired power plants in Vietnam and Indonesia. This followed BlackRock's pledge in January 2020 that it would make climate-friendly investment a priority across its funds.

In October 2020, KEPCO announced that it would no longer take part in overseas coal power projects after struggling to weather the controversy that enveloped the company—and the Korean government—after it pushed ahead with investments in Jawa 9 & 10 in Indonesia and the Vung Ang 2 project in Vietnam. It also withdrew from coal power proposals in South Africa and the Philippines.

In the same month, BlackRock revolted at the annual general meeting of AGL – which operates coal-fired power plants in Australia alongside Sumitomo's Bluewaters Power – calling for the hastened closure of AGL's coal plants. BlackRock is also a major shareholder in Sumitomo Corporation (Annexure I).

Meanwhile **GE**, a global leader in coal-fired power technology, has announced plans to stop coal power construction as power utilities increase focus on renewable energy. The move will relieve pressure on the company from investors with ESG (environment, social and governance) concerns over its coal power activities. The coal-fired power technology business provides a relatively small part of the conglomerate's overall revenues, making the end of coal power activities relatively straightforward for GE.

Despite the COVID-19 pandemic, there has been no let-up in investor pressure on companies that are exposed to coal – if anything the rate has only increased. Investors have seen Sumitomo react to an uncertain future for shale gas by exiting the business and may increasingly ask questions about when Sumitomo will react to the poor long term outlook for thermal coal and the financial burden that coal-fired power is placing on developing nations.

As major investors further tighten their restrictions on coal going forward, Japanese trading houses are likely to increasingly be on investors' radars thanks to their coal mining and coal-fired power businesses. As the coal laggard amongst its peers, Sumitomo is likely to be the first Japanese trading house to feel this heightened investor pressure.

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### Introduction

The coronavirus pandemic has not slowed down the energy transition away from coal towards renewable energy. In fact, 2020 has seen an acceleration in commitments to reduce carbon emissions which will further drive this transition. Japanese announcements have been central to this acceleration. Government policy has now caught up with those of some of the nation's major trading houses which had already implemented policies distancing themselves from coal.

Sumitomo's ongoing coal projects are looking increasingly problematic to investors.

However, Sumitomo Corporation has fallen behind the progress made by its Japanese trading house peers and has now been left behind by national government policy. In this context, Sumitomo's ongoing coal projects are looking increasingly problematic to investors.

#### Sumitomo Forecasts Largest Ever Loss

The significant shifts in Japanese government policy on energy and increasing headwinds faced by its coal power projects come as Sumitomo is forecasting that it will make its largest ever loss in the current fiscal year (FY2020) ending March 2021. The forecast loss of ¥150 billion<sup>1</sup> (US\$1.4 billion) makes Sumitomo the only Japanese trading house forecasting a loss in FY2020 (Figure 1).

Sumitomo duly reported a record first half loss for FY2020. The  $\pm$ 60bn (US $\pm$ 580m) loss included a  $\pm$ 26bn (US $\pm$ 251m) impairment on the value of its Australian coal-fired power investment taken in the second quarter.<sup>2</sup>

In addition, FY2020 losses have been driven by Sumitomo's Mineral Resources, Energy, Chemical and Electronics business segment. Losses within this segment in the first quarter were dominated by a ¥55bn (US\$532m) impairment at the company's nickel mining and refining business in Madagascar. However, reduced profitability within the segment is also partially driven by lower coal prices impacting Sumitomo's Australian coal mining investments.

Thermal coal prices have been at a decade low on falling demand amid the coronavirus-induced global economic slump. However, with ever-cheaper renewable energy dominating power investment, China and India seeking to prioritize their domestic coal industries over imports, and emerging thermal coal

<sup>&</sup>lt;sup>1</sup> Sumitomo Corp. Quarterly Results for FY2020: Three-month period ending June 30, 2020. 7 August 2020.

<sup>&</sup>lt;sup>2</sup> Sumitomo Corp. Quarterly Results for FY2020: Six-month period ended September 30, 2020. 6 November 2020.

markets now reducing emphasis on imported coal,<sup>3</sup> seaborne thermal coal prices and volumes may not recover to recent peaks.

Sumitomo also booked a ¥7bn (US\$68m) loss at its tight oil and shale gas business in the U.S., as the company sold its entire stake in the Marcellus shale gas project in September 2020 for an undisclosed sum. The company had already booked an impairment on the investment back in 2015 on the back of reduced oil and gas prices.

Figure 1: Prior Year Actual and Current Year Forecast Trading House Net Profit (billion Yen)



Source: Marubeni, Mitsubishi, Mitsui, Sojitz, Itochu, Toyota Tsusho, Sumitomo financial presentations.

## Major Issues with Sumitomo's Overseas Coal Projects

In Australia, Sumitomo's coal-fired power plant has fallen foul of bank's increasing reluctance to finance coal, resulting in a significant impairment loss in FY2020. Meanwhile, in developing nations, Sumitomo's badly delayed coal power projects are contributing to major power utility financial crises. These crises will result in

<sup>&</sup>lt;sup>3</sup> Asia Times. Coal exporters should brace for disappointment. 16 September 2020.

unsustainable government subsidies and rising power tariffs, hindering the development of these nations.

#### Australia

Sumitomo owns 50% of Bluewaters Power along with Japanese power utility Kansai Electric Power Company. Bluewaters owns and operates a 434MW coal-fired power station in the state of Western Australia (WA). Completed in 2009, it is the state's newest coal power station and generates around 15% of its power. It is also the state's only privately-owned coal-fired power station with the others all state-owned. Sumitomo and Kansai Electric bought Bluewaters Power for A\$1.2bn in 2011 from the administrators of previous owner, the failed Griffin Group.<sup>4</sup>

In the second quarter of FY2020, Sumitomo recognized a A\$345m (US\$251m) impairment<sup>5</sup> on its approximately A\$600m initial investment in Bluewaters Power, following a failure to refinance loans on the power plant. The failure to line up new bank funding to re-finance almost A\$400m of loans due to be repaid in August 2020 is a further sign that it's becoming everharder to finance even existing coal-fired power projects as more and more banks distance themselves from further lending to coal power and mining. More than 120 major global banks and insurers have unveiled policies which restrict coal financing and announcements continue to be made on an almost weekly basis. The list includes major Japanese banks such as Mitsubishi UFI Financial Group, Mizuho Financial Group and Sumitomo-Mitsui Banking Corporation.<sup>6</sup>

Sumitomo recognized a A\$345m impairment on its approximately A\$600m initial investment in Bluewaters Power.

Sumitomo and Kansai Electric had offered Bluewaters' bank lenders 66c in the dollar on repayment but this offer was rejected. The bank lenders then began to sell the debt at a 25%-30% discount to vulture funds – distressed debt investment specialists.<sup>7</sup> These vulture funds may sue for full repayment of the debt or call for a debt restructure that could see Sumitomo and Kansai lose control of Bluewaters in a

<sup>&</sup>lt;sup>4</sup> Australian Financial Review. Bluewaters Japanese owners return to debt holders with higher offer. 27 July 2020.

<sup>&</sup>lt;sup>5</sup> Sumitomo Corp. Quarterly Results for FY2020: Six-month period ended September 30, 2020. 6 November 2020.

<sup>&</sup>lt;sup>6</sup> IEEFA. Over 100 and counting: Financial institutions are restricting thermal coal funding.

<sup>&</sup>lt;sup>7</sup> Australian Financial Review. Soliton Capital latest on the scene at Bluewaters. 6 August 2020.

debt for equity swap that allows the vulture funds take over the company.<sup>8</sup>

At the same times, Bluewaters is also faced with a major crisis over its coal supply. Miner Griffin Coal – previously part of the Griffin Group that originally owned Bluewaters Power - is the power station's sole fuel supplier but it has been losing A\$6m a month and is unable to deliver coal as contracted. Bluewaters has stated that it intends to utilize supply-breach provisions in its contract to take over the mine and secure fuel supply, a move that would increase Sumitomo's equity share of thermal coal production again.<sup>9</sup>

This crisis for coal in WA comes as Australia is accelerating its energy transition towards renewable energy. Almost one in four Australian households has rooftop solar, reducing daytime power demand. This, combined with a surge in utility-scale solar and wind power plants, is pushing down wholesale power prices in the nations east-coast electricity market to as low as US\$29/MWh in some cases – below the cost at which some coal-fired power plants purchase their fuel. The result could be that Australian coal power plants are forced to close earlier than planned.<sup>10</sup> After initially falling behind the progress in the east of the country, renewable energy development is now well underway in Western Australia, further undermining the future of coal-fired power in the state. In October 2020, the combined power output of renewable energy sources was larger than fossil fuelbased (coal and gas) generation for the first time in WA.<sup>11</sup>



# Figure 2: Western Australia Power Capacity - Whole of System Plan 2020, Techtopia Scenario (MW)

Source: Energy Transformation Task Force, Western Australia Government.

<sup>&</sup>lt;sup>8</sup> IEEFA. American vulture funds prepare to feast on Australia's Bluewaters Coal Power Station. 4 September 2020.

<sup>&</sup>lt;sup>9</sup> Australian Financial Review. WA coal in crisis as Griffin accused of contract breaches. 21 July 2020.

<sup>&</sup>lt;sup>10</sup> Bloomberg. Solar Surge is Making Coal Plants Unprofitable in Top Exporter. 23 July 2020.

<sup>&</sup>lt;sup>11</sup> RenewEconomy. Renewables overtake coal and gas for the first time in Western Australia. 2 November 2020.

The Western Australian government's 2019 Energy Transformation Strategy states that "The age and cost of our coal-fired generators, combined with competition from cleaner, cheaper electricity produced by both large-scale wind and solar farms and rooftop solar PV, means Western Australia's coal-fired power stations will need to be retired within the coming decades."<sup>12</sup>

In October 2020, the WA government launched the new Whole of System Plan developed by the state's Energy Transition Taskforce. The plan models lowest-cost power capacity additions out to 2040 under four different scenarios that "can be used as a guide to investment and energy policy decisions necessary to capitalize on the benefits of low emission, low marginal cost renewable energy".<sup>13</sup>

The key findings from the Whole of System Plan modelling include that coal-fired power will decline under all four scenarios as it continues to be displaced by rooftop solar. The displacement of coal leads to a need to ramp coal power stations up and down more frequently, causing increased operating and maintenance costs according to the modelling. Meanwhile, Western Australia reaches at least 70% renewable energy generation capacity by 2040 under all the scenarios.

Sumitomo itself is aware of the energy transition that is accelerating in Western Australia and has begun to invest in renewables in the state. In January 2019, Sumitomo acquired Infinite Energy, WA's largest provider of solar systems, for an undisclosed sum. A spokesperson for Sumitomo stated, "Energy markets around the world are in a rapid transition to clean, renewable generation and the Infinite Energy acquisition recognises this."<sup>14</sup>

Western Australia is fast becoming an example of a developed power system entering rapid transition. Sumitomo's 2011 investment in coal-fired power in the state has resulted in a loss of US\$251m so far – a poor outcome for Sumitomo shareholders. The last nine years since 2011 has seen the economics of renewable energy turn on its head followed by a wave of major financial institutions abandoning coal lending, events that have overwhelmed Sumitomo's coal investment rationale.

#### Bangladesh

As a fast-developing nation with expectations of strong power demand growth, Bangladesh's power status is obviously very different to Australia's but the future role for coal in the developing nation is increasingly clouded. Once considered one of the last remaining growth markets for coal-fired power in Asia, the Bangladesh government now seems to be increasingly aware of the growing risks that surround its coal power plans.

Sumitomo is constructing a 1,200MW coal-fired power plant for Coal Power Generation Company Bangladesh at Matarbari with an expected cost of US\$4.5bn. This plant is particularly expensive due to the need for construction of a port to

<sup>&</sup>lt;sup>12</sup> Government of Western Australia. Energy Transformation Strategy. 2019.

<sup>&</sup>lt;sup>13</sup> Government of Western Australia. Whole of System Plan. August 2020.

<sup>&</sup>lt;sup>14</sup> The West Australian. Sumitomo buys WA solar power group Infinite Energy. 24 January 2019.

receive imported coal, river dredging, raising the low-lying site to avoid flooding, and construction of transmission infrastructure. The project is being financed by the Japan International Cooperation Agency (JICA)<sup>15</sup> with credit insurance provided by Japan's government-owned Nippon Export and Investment Insurance (NEXI).

The project fits into Bangladesh's most recent Power System Master Plan (PSMP) which planned for the nation to become highly reliant on imported coal- and LNG-fired power, technologies that Japan is able to export to Bangladesh. The plan was written by Japanese power utility TEPCO and funded by JICA, Japan's overseas development agency.

The high cost of the project will reportedly lead to a high per kWh tariff to recoup the outlay. In May 2019, it was reported that the cost would be BDT13 per kWh (US\$153/MWh) and that a second 1,200MW Matarbari plant was being planned to lower the tariff by sharing the related infrastructure between two plants.<sup>16</sup>

The Bangladesh government has requested loan assistance from JICA for this second project (Matarbari 2) and Sumitomo is again the intended EPC contractor for the plant. In June 2020, Japan's Ministry of Foreign Affairs confirmed its decision for JICA to fund a preparatory survey for the Matarbari 2 project.

#### **Overcapacity in Bangladesh**

In its original press release from June 2014 announcing its agreement to fund Matarbari 1, JICA stated that the project would "mitigate climate change in addition to alleviating the power shortage and improving the stable power supply in Bangladesh."<sup>17</sup>

Since then, the status of power generation in Bangladesh has changed significantly. From having insufficient power generation to meet growing demand, Bangladesh now has far too much capacity which is causing a financial crisis to build up within the nation's power system.<sup>18</sup> Capacity payments to idle plants increase per unit cost of power generation, increasing financial stress on the Bangladesh Power Development Board (BPDB), the state-owned power utility.

Overall power capacity utilization in Bangladesh for 2018-19 was just 43%. On some days, up to two-thirds of capacity in Bangladesh is unutilized, a situation that has grown worse in recent years leading to rising capacity payments to plants that are compensated whether or not they are utilized. In fiscal year 2018-19 capacity payments reached US\$1.1bn.<sup>19</sup>

<sup>&</sup>lt;sup>15</sup> JICA. Signing of Japanese ODA Loan Agreement with Bangladesh. 1 July 2019.

<sup>&</sup>lt;sup>16</sup> EnergyBangla. Plan to construct 2<sup>nd</sup> power plant to reduce cost of Matarbari project. 31 May 2019.

<sup>&</sup>lt;sup>17</sup> JICA. Signing of Japanese ODA Loan Agreement with the People's Republic of Bangladesh. 16 June 2014.

<sup>&</sup>lt;sup>18</sup> IEEFA. Bangladesh's power system headed for financial disaster due to overcapacity in coal, LNG power. 18 May 2020.

<sup>&</sup>lt;sup>19</sup> Financial Express. Extravagance in power generation. 8 December 2019.

The current power capacity addition plan set out in the Revisited Power System Master Plan (PSMP) looks certain to lock in a very high level of overcapacity out to at least 2030, suggesting further capacity payments to idle plants into the long term if the planned coal- and LNG-fired power plants come online.

In an indication of what lies ahead for Bangladesh, the recently-completed Payra coal-fired power plant – the first of a proposed fleet of planned power plants to run on imported coal - is reportedly receiving capacity payments of US\$19m a month whilst half its capacity sits idle due to a delayed transmission line connection. Commenting on the delay, the BPDB Chairman stated: "In that case the Payra power plant is going to be a burden and would only increase the government's power subsidy".<sup>20</sup>

Bangladesh's overcapacity situation is now being made worse by COVID-19 and its economic impacts which are reducing power demand growth further below expectations.

#### Growing Financial Crisis Within Bangladesh's Power System

The BPDB is making significant losses each year which has led to the need for larger government subsidies and power tariff increases. The pandemic-induced economic downturn threatens to reduce BPDB's revenues whilst it continues to make capacity payments to generators. The power minister has stated that even larger financial losses will be made as a result.<sup>21</sup>

In February 2020 the retail tariff was increased by 5.3% to Tk7.13 per unit, the first time the retail tariff has been increased since 2017. The wholesale tariff was increased for the first time since 2015 to Tk5.17, an 8.4% increase. More tariff increases should be expected in future.

<sup>&</sup>lt;sup>20</sup> New Age. Payra power plant set to become economic burden on Bangladesh. 14 March 2020.

<sup>&</sup>lt;sup>21</sup> Daily Prothom Alo. Power sector braces for huge loss due to coronavirus. 17 April 2020.

Fiscal Year		Tk m	USD m
	Opening Cash in Hand	66,835	786
2016-17	Net Cashflow	(29,434)	(346)
2010-17	Cash Received From Govt as Subsidy	39,940	469
	Closing Cash in Hand	77,341	909
	Opening Cash in Hand	77,341	909
2017-18	Net Cashflow	(73,584)	(865)
2017-18	Cash Received From Govt as Subsidy	45,059	530
	Closing Cash in Hand	48,816	574
	Opening Cash in Hand	48,816	574
2018-19	Net Cashflow	(78,111)	(918)
2018-19	Cash Received From Govt as Subsidy	79,667	936
	Closing Cash in Hand	50,372	592

Table 1: Bangladesh Power Development Board Summarized Cash Flows2016-17 to 2018-19

Source: Bangladesh Power Development Board Annual Reports.

The decision to raise tariffs followed a submission by the BPDB to the Bangladesh Energy Regulatory Commission in late 2019 that requested either a tariff increase or larger subsidy from the government.

BPDB's consistent, heavy losses are the result of consumer tariffs that are lower than the cost at which it generates or purchases power, a situation now being made worse by overcapacity and rising capacity payments. In fiscal year 2018-19, BPDB received a Tk80bn (US\$936m) government subsidy to limit its losses and resolve a significant cash flow shortfall (Table 1).

It is likely that subsidies or power tariffs (mostly likely both) will need to keep rising in the long term in response to the high expense of power generated from imported fossil fuels. Adding the Matarbari 1 and 2 coal power plants will only make this situation worse. JICA's role is to provide development assistance yet financing two coal power projects will increase overcapacity and financial stress resulting in higher taxpayer-funded government subsidies and increased tariff burden on Bangladesh consumers. This is a poor outcome for a development agency.

The Bangladesh government is concerned about the cost of coal-fired power and the increasing difficulty in securing finance.

Sumitomo's investment is likely to be protected from the overcapacity issue by its undisclosed power purchase agreement (PPA) which may see it receive capacity payments even if the power plants sit idle much of the time amidst Bangladesh's

overcapacity. This would further increase the financial burden on the nation's power system.

There are now increasing indications that the Bangladesh government is concerned about the cost of coal-fired power and the increasing difficulty in securing finance for such projects as more global banks institute policies restricting them from funding coal power. In August 2020, it was reported than Bangladesh's power ministry is seeking approval from the Prime Minister to cancel 13 proposed coalfired power plants, and to replace them with LNG projects.<sup>22</sup>

In a further indication that the government is concerned about overcapacity, a Bangladesh power ministry official has indicated that surplus capacity will be addressed in the next Power System Master Plan due in 2021. TEPCO is once again tasked with drafting the new plan, presenting it with an opportunity to correct the mistakes of the last plan which led Bangladesh down the road to expensive excess capacity. According to the power ministry, the new plan will also "look at five major areas, including: demand forecast, future technology, fuel issues, environment, and renewable energy"<sup>23</sup>; an indication that the Bangladesh government is more alive to the issues of over-estimated demand forecasts and the numerous benefits of modern, renewable power technology.

Sumitomo shareholders may want the company to be similarly alive to these issues and rule out involvement in Matarbari 2.

#### Indonesia

Sumitomo is part of a consortium along with Kansai Electric and a subsidiary of the Astra Group developing a 2,000MW extension to the Tanjung Jati B coal-fired power station in Indonesia via its subsidiary PT Central Java Power. Originally intended to be completed by 2019, the plant is still under construction. The project is being financed by Japan's export credit agency, the Japan Bank for International Cooperation (JBIC) and a number of major Japanese commercial banks.

As an independent power plant being built under a build, operate, transfer (BOT) model, the plant will supply power to state-owned power utility PLN for 25 years before ownership is transferred. Nearing completion, this plant will only add to the growing financial pressure on PLN due to the inflexible capacity payments that require PLN to pay for the power despite current excess capacity in the Jawa-Bali grid. The build-up of independent power project (IPP) capacity with inflexible guaranteed payment terms is threatening PLN with a financial crisis that dwarfs the one simultaneously building up within the power system of Bangladesh.

PLN has seen its misguided reliance on new coal IPPs lead to the need for rapidly escalating government subsidies. PLN's delayed 2018 financial results revealed that increased IPP payments, along with higher fuel costs, had led to the need for a 75%

<sup>&</sup>lt;sup>22</sup> Business Standard. Bangladesh to abandon coal, go for LNG. 25 August 2020.

<sup>&</sup>lt;sup>23</sup> Business Standard. Surplus capacity to get priority in power master plan review. 14 September 2020.

increase in subsidy from the government. The subsidy reached an enormous US $^{124}$  US $^{24}$ 

PLN simply cannot afford its current strategy of relying on more coal IPPs. With more of these projects set to come online, PLN's IPP payments are set to increase further still. IEEFA has forecast that government subsidy payments to PLN will reach US\$6.5bn for 2020 and will almost double to US\$11.4bn in the next two years in the absence of tariff increases.<sup>26</sup> Further reliance on government subsidies is unsustainable and it seems inevitable that power tariffs will have to increase. However, this may be a difficult sell to power consumers while PLN refuses to reform and if it continues to ignore the growing benefits of ever-cheaper renewable energy technology.

PLN is on course for increased losses as more coal power plants are added despite Indonesia being the world's largest exporter of thermal coal. Having been built under the false premise that coal is cheap, it's clear that Indonesia has suffered from increased losses while electrification goals have not been met.

Meanwhile, Sumitomo is also the EPC contractor for an under-construction 315MW extension to PLN's Banten Lontar coal-fired power station. In 2015, Sumitomo noted that this plant formed part of Indonesia's plan to add 35GW of power capacity in the 2015-2019 period in order to meet power demand growth expectations.<sup>27</sup> However, such forecasts have proven to be too optimistic.

For the 2021-29 period, PLN is forecasting annual power demand growth of 5.2% - in line with pre COVID-19 projections. This is despite the fact that the average for 2013 -2018 was 4.6%.<sup>28</sup> Such miss-forecasts are the basis for planning too much capacity development which can result in higher tariffs, subsidies and capacity payments that are unaffordable. In July 2019, a previous interim chief executive of Indonesian state-owned utility PLN publicly acknowledged that the plan for a fleet of new coal-fired power plants should be re-evaluated due to lower-thanexpected electricity demand growth.<sup>29</sup>

Sumitomo's coal-fired power construction in Indonesia is contributing to the growing financial crisis within its power system.

Sumitomo's coal-fired power construction in Indonesia is contributing to the

<sup>&</sup>lt;sup>24</sup> IEEFA. PLN's fractured finances require real leadership. 30 May 2019.

<sup>&</sup>lt;sup>25</sup> IEEFA, Playing With Matches – Who Should Take Responsibility for PLN's Financial Mess?, April 2020.

<sup>&</sup>lt;sup>26</sup> IEEFA. Running Out of Options: Six Questions for PLN. October 2020.

<sup>&</sup>lt;sup>27</sup> Sumitomo Corp. Contracts Awarded for Construction of Unit 4 of Lontar Coal Fired Steam Power Plant in Indonesia. 24 September 2015.

<sup>&</sup>lt;sup>28</sup> IEEFA. 2019 energy plan falls short. 4 March 2019.

<sup>&</sup>lt;sup>29</sup> IEEFA. The Case for System Transformation in Indonesia. November 2019.

growing financial crisis within its power system.

#### Vietnam

After long development delays, the construction of Sumitomo's 1,320MW supercritical Van Phong 1 coal-fired power plant has begun under a BOT model. While Sumitomo's stated policy is to "refrain from building new coal-fired power plants", it leaves itself 'wiggle room' to make exceptions on a case-by-case basis if a project is considered "essential for the economic and industrial development of local communities that conform to policies established by Japan and the host country". By way of confirmation that the project conforms to Vietnamese power policy, Sumitomo cites Vietnam's 2016 National Power Development Plan VII.<sup>30</sup>

A second project – Van Phong 2 - was originally planned to be built by a South Korean/Vietnamese consortium but has since been cancelled. Sumitomo was also the EPC contractor for the 688MW Duyen Hai-3 extension project that was commissioned in May 2020 using supercritical technology.

The construction of new coal-fired power plants in Vietnam has been highly controversial amongst local communities living in the vicinity of the projects, and is now increasingly controversial amongst major investors. In May 2020 it was revealed that BlackRock – the world's largest asset manager – had written to the Chief Executive of South Korean utility KEPCO, asking for an explanation for the companies' continued investment in coal-fired power in Vietnam and Indonesia.<sup>31</sup> IEEFA recently highlighted that KEPCO's risky overseas coal projects raise important questions for KEPCO's board and management.<sup>32</sup> Since then, KEPCO has announced that its Vietnamese project will be the last coal-fired power project it constructs overseas, simultaneously also withdrawing from coal power projects in South Africa and the Philippines.<sup>33</sup>

The Van Phong 1 project would likely never have reached construction without the financial support from Japan's export credit agency, JBIC. In April 2019, JBIC announced that it was lending US\$1.2bn of the total US\$2bn debt to the project, with the remainder financed by a syndicate of Asian commercial banks enabled by insurance from NEXI.<sup>34</sup>

Since then, most of these commercial banks have released new coal policies that distance themselves from further lending to coal projects.<sup>35</sup> These include Sumitomo

<sup>&</sup>lt;sup>30</sup> Sumitomo Corp. Construction Commences on Van Phong 1 Coal-fired Power Project in Vietnam. 26 August 2019.

<sup>&</sup>lt;sup>31</sup> Sydney Morning Herald. Everyone was watching': BlackRock is showing its hand on coal. 8 June 2020.

<sup>&</sup>lt;sup>32</sup> IEEFA. Question Time for KEPCO's Board: Overseas Investments Add Risk and Unstable Returns to KEPCO's Stressed Financial Outlook. June 2020.

<sup>&</sup>lt;sup>33</sup> Power Engineering. South Korea's KEPCO cancels foreign coal power investment. 20 October 2020.

<sup>&</sup>lt;sup>34</sup> JBIC. Project Finance for Van Phong 1 Coal-Fired Power Generation Project in the Republic of Vietnam. 19 April 2019.

<sup>&</sup>lt;sup>35</sup> IEEFA. Financial institutions are restricting thermal coal funding.

Mitsui Banking Corporation, Mitsubishi UFJ, Mizuho Bank, OCBC Bank and DBS Bank.

The wave of banks pulling away from coal finance has been a factor in persuading the Vietnamese government to reassess its coal power build out plans amid concerns that further coal power projects won't be able to secure funding. The long development times for coal projects – often running significantly over schedule – has also raised concerns that such projects won't be built quick enough to meet Vietnam's growing power demand.

It is now expected that Vietnam's next iteration of its power development plan -National Power Development Plan VIII – will significantly reduce further coal power projects with up to 17GW of proposed coal power plants cancelled or postponed until after 2030 (which means they will most likely never be built).<sup>36</sup>

With coal-fired power unable to meet power demand growth expectations in a timely affordable manner, the new plan will increase focus on quicker-to-build and cheaper renewable energy. Vietnam has already seen a recent boom in renewable energy installations which put the slow development timeframes of coal power into full context.

The nation added more than 4GW of solar power within a 12-month period up to the end of June 2019. The average construction period for those solar plants was just 275 days.<sup>37</sup> Vietnam is also developing wind energy and has begun construction of offshore wind. Global wind turbine giant Vestas has an offshore wind project pipeline in Vietnam of over 1GW.<sup>38</sup> In July 2020, a memorandum of understanding was signed for development of another offshore wind project with a capacity of 3.5GW.<sup>39</sup> The government has so far approved a pipeline of 11.6GW of wind power capacity by 2025.

Van Phong 1 demonstrates why the Vietnamese government is increasingly concerned about the long development timeframes of such coal projects.

Having started development in 2011 and with an expected completion date of 2024, Van Phong 1 demonstrates why the Vietnamese government is increasingly concerned about the long development timeframes of such coal projects. The fact that so many of its financiers have since turned away from further coal funding further highlights why Vietnam is now reducing emphasis on coal and increasing focus on wind and solar. Furthermore, Van Phong's 13-year development timeframe (assuming no further delays) means that it has been superseded and outclassed by

<sup>&</sup>lt;sup>36</sup> IEEFA. Vietnam's EVN Faces the Future: Time to Get Renewables Right. September 2020.

<sup>&</sup>lt;sup>37</sup> Rystad Energy. Vietnam overtakes Australia in commissioned utility PV. 4 July 2019.

<sup>&</sup>lt;sup>38</sup> IEEFA. Latest deal pushes Vestas' near-shore wind turbine pipeline in Vietnam above 1GW. 13 August 2020.

<sup>&</sup>lt;sup>39</sup> The Asset. Consortium signs MoU on giant offshore wind project in Vietnam. 29 July 2020.

renewable energy technology that is far quicker to develop, more acceptable to major investors and local communities, and increasingly cheaper than expensive coal power technology.

### **Significant Changes to Japanese Coal Policy**

Since JBIC announced its funding of Van Phong 1 and JICA's preparatory survey support for Matabari 2 was revealed, a change of Japanese government policy has meant that, in theory, such projects would not be supported by Japanese public finance going forward. Following years of growing criticism, the Japanese government tightened the conditions for its financial support of coal power construction overseas in July 2020. Japan's environment minister claimed that the new conditions are tight enough to effectively rule out further financing.<sup>40</sup> The policy change does not apply to projects already being planned, including Matarbari 2.

Japan's move on overseas coal plant financing followed an announcement that old, inefficient coal plants in Japan would be shut down by 2030, which could see around 100 coal power units closed by that year.<sup>41</sup> Since then both JERA<sup>42</sup> – Japan's biggest power generator – and J-Power<sup>43</sup> have both stated that they will 'fall into line' with this policy and close all inefficient coal power plants by 2030.

However, the Japanese government went a step further in October 2020 when it announced that it would target net-zero emissions for the nation by 2050.<sup>44</sup> This is the most significant shift in Japanese energy policy yet and will see a further, long term move away from coal and towards renewables. Japan's move followed China's announcement that it was targeting net zero emissions by 2060. South Korea followed suit two days after Japan, likewise, committing to a net zero emissions target by 2050.

## Japanese Trading Houses' Shift from Coal to Renewables Has Begun

With the exception of Sumitomo, the major trading houses have taken significant first steps away thermal coal power and mining. These steps were taken over the 2018-2020 period in the absence of significant policy changes on coal-fired power from the Japanese government. In the second half of 2020, major shifts from the government saw

Sumitomo is lagging not just its trading house peers but also the Japanese government.

<sup>&</sup>lt;sup>40</sup> Financial Times. Japan vows to slash financing of coal power in developing world. 13 July 2020.

<sup>&</sup>lt;sup>41</sup> Reuters. Japan to accelerate closure of old coal plants. 3 July 2020.

<sup>&</sup>lt;sup>42</sup> Reuters. Japan's JERA to shut inefficient coal-fired power plants by 2030. 13 October 2020.

<sup>&</sup>lt;sup>43</sup> Reuters. J-Power to close old coal-fired power plants by 2030. 30 October 2020.

<sup>&</sup>lt;sup>44</sup> Reuters. PM Suga says Japan will attain zero-emissions, carbon neutral society by 2050. 26 October 2020.

national policy catch up with these trading house policies. Sumitomo is now lagging not just its trading house peers but also the Japanese government.

#### Marubeni

**Marubeni Corporation began the trend of Japanese trading houses beginning their shift away from coal in September 2018** when it revealed a new policy that committed the company to no longer enter any new coal-fired power projects "as a general principle". Some loopholes were included that could allow Marubeni to take on a new coal power project under certain circumstances although it does not appear to have done so to date. The new policy did not apply to Marubeni's existing projects already under development. In addition, the company committed to begin its exit from existing coal power plants, with a target to reduce such holdings by half by 2030.<sup>45</sup>

Since this new policy was instituted, Marubeni has withdrawn from three overseas coal power projects that it had under development. In May 2019 it was revealed that Marubeni would be backing out of its bid for 20% of the Saint Raphael coal power project in the Philippines. The project proponent has stated that Marubeni's decision to back away was in line with its new investment strategy and that "they were given instruction not to invest in coal plants anymore all over the world".<sup>46</sup> Marubeni also announced its withdrawal from the Morupule B coal power extension project in Botswana in October 2019.<sup>47</sup>

In November 2020, Marubeni revealed that it was withdrawing from the Thabametsi coal power proposal in South Africa.<sup>48</sup> This project had been faced with considerable headwinds including a South African economy that was seeing growth and power demand declining even before COVID-19. Major South African banks which historically would have funded such proposals have also put in place new policies of their own that distance themselves from new coal projects.<sup>49</sup> The project had recently taken a major setback when Marubeni's consortium partner KEPCO of South Korea stated that it would either cancel its involvement in the project or see it converted to an LNG power project as it announced it would no longer take on further coal-fired power projects overseas.<sup>50</sup>

Marubeni has also withdrawn from investments in thermal coal mines and no longer holds any stakes in operating thermal coal mines, with only coking coal investments remaining.<sup>51</sup>

<sup>&</sup>lt;sup>45</sup> Marubeni Corp. Notification Regarding Business Policies Pertaining to Sustainability. 18 September 2018.

 <sup>&</sup>lt;sup>46</sup> Manila Bulletin. Marubeni drops bid on \$1.4-B Consunji coal-fired power project. 12 May 2019.
 <sup>47</sup> Marubeni Corp. Update to Coal-Fired Generation Business and Renewable Energy Generation

Business. 4 October 2019.

 <sup>&</sup>lt;sup>48</sup> Reuters. Marubeni to pull out of S. African coal-fired power plant project. 12 November 2020.
 <sup>49</sup> IEEFA. Financial institutions are restricting thermal coal funding.

<sup>&</sup>lt;sup>50</sup> Mining Weekly. Kepco cancels investment in South African coal energy plant. 16 October 2020.

<sup>&</sup>lt;sup>51</sup> Marubeni Corp. Consolidated Financial Results for the Fiscal Year Ended March 31, 2020. 7 May 2020.

At the same time, Marubeni has been increasing focus on renewable energy investment overseas. The company has continued investment in solar in the Middle East with stakes in projects in Oman and Qatar following the completion of the 1.2GW Sweihan solar project in United Arab Emirates (UAE) in which Marubeni has a 20% interest.

Marubeni acquired Chenya Energy, a Taiwanese solar power developer and operator, in February 2020. As a result, Marubeni now owns one of the world's largest floating solar plants from which it will gain experience in this emerging sector of the solar market.<sup>52</sup>

The company has also entered the distributed solar market with the 2019 acquisition of a stake in African off-grid solar home system provider Azuri, following its 2018 acquisition of a stake in off-grid community solar provider WASSHA Inc in Tanzania.<sup>53</sup> Marubeni is also about to enter the commercial rooftop solar space in Mexico via its Kiwapower joint venture.<sup>54</sup>

Marubeni is also targeting 1.5GW of solar power along with 1GW of battery storage across Australian commercial and industrial sites in Australia over five years, in partnership with renewables fund CEP Energy.<sup>55</sup>

Following years of investment in European offshore wind by Japanese trading houses including Marubeni, Japan's first large-scale offshore wind farm is to begin construction off Akita with Marubeni's involvement. In addition to an investment in the project proponent, it also has an investment in UK offshore wind power installer Seajacks International which has the installation contract for the Akita project.<sup>56</sup>

#### Mitsubishi

**Like Marubeni, Mitsubishi Corporation no longer holds any thermal coal mine investments** following the sale of its stakes in Australian mines in late 2018.<sup>57</sup> It sold its 10% stake in the Ulan thermal coal mine to Glencore and sold its 31% interest in the Clermont mine to joint venture partner GS Coal Pty Ltd. GS Coal is a company controlled equally by Glencore and Sumitomo Corporation – Sumitomo is the only Japanese trading house to have been increasing its thermal coal mine investments whilst others divested.

Following this, Mitsubishi Materials – a separate entity within the Mitsubishi Group

<sup>54</sup> Reuters. New Japanese-backed solar company bets on Mexican energy market. 23 July 2020.
 <sup>55</sup> RenewEconomy. CEP and Marubeni unveil plans for 1GW battery and 1.5GW of solar in

<sup>&</sup>lt;sup>52</sup> Marubeni Corp. Marubeni Acquires a Solar Power Developer and Operator in Taiwan. 27 February 2020.

<sup>&</sup>lt;sup>53</sup> Marubeni Corp. Marubeni to Enter into the Solar Home System Business for Off-Grid Areas in Africa by Investing in Azuri. 3 June 2019.

Australia. 21 October 2020.

<sup>&</sup>lt;sup>56</sup> Marubeni Corp. Seajacks (U.K.) Signing of Turbine Foundation Installation Contract. 27 March 2020.

<sup>&</sup>lt;sup>57</sup> Mitsubishi Corp. Mitsubishi has Reached Agreement to Sell its Interests in the Clermont and Ulan Coal Mines in Australia. 18 December 2018.

– sold its 11% stake in Australian thermal coal miner New Hope Corporation in February 2020<sup>58</sup> as the Group continued their shift away from thermal coal.

Mitsubishi still has a Vietnamese coal-fired power plant under development. The longdelayed Vung Ang 2 project has faced numerous development difficulties including the withdrawal of Mitsubishi's fellow project sponsor CLP from the project after introducing a new policy to no longer invest in coal power. In October 2020, South Korea's KEPCO announced it was acquiring a stake in the Vung Ang 2 project. Sumitomo is the only Japanese trading house to have been increasing its thermal coal mine investments whilst others divested.

As is the case with other Japanese trading houses, Mitsubishi has been investing in offshore wind in Europe in the lead-up to the coming expansion of offshore wind installations around the coast of Japan. The company has offshore wind investments in the Netherlands, Belgium and the UK.<sup>59</sup> It has also become a major player in transmission infrastructure for offshore wind. In February 2020, Mitsubishi and consortium partner Chubu Electric were named preferred bidder for another offshore wind transmission project – a GBP1.2bn proposal to link up with the Hornsea One offshore wind farm.<sup>60</sup> Including this project, Mitsubishi will be operating nine of the 23 offshore transmission links in the UK, making it the market leader.

In February 2019, Mitsubishi acquired a 20% stake in OVO Group for US\$257m.<sup>61</sup> The Group's flagship business is OVO Energy - at the time the leading independent power supplier in the UK which prioritizes supply of renewable energy and provides power on a carbon neutral basis. The investment financed an expansion of OVO Energy - the business launched in Australia in late 2019. In September 2019, OVO Energy agreed to a GBP500m takeover of SSE's retail business, making OVO the second largest electricity and gas supplier in the UK.<sup>62</sup>

In March 2020, Mitsubishi and Chubu Electric completed their US\$4.5bn takeover of Dutch energy supplier and renewable energy generator Eneco. Mitsubishi holds 80% of the investment and stated that the move was intended to "accelerate its own renewable developments in Europe and around the world."<sup>63</sup>

 <sup>&</sup>lt;sup>58</sup> Reuters. Mitsubishi Materials sells down stake in coal miner New Hope. 21 February 2020.
 <sup>59</sup> S&P Global. Japan's influence in European offshore wind starts to bear fruit back home. 24 July 2020.

<sup>&</sup>lt;sup>60</sup> Mitsubishi Corp. Mitsubishi Corporation and Chubu Electric Power Consortium Named Preferred Bidder for Offshore Transmission Asset in the UK. 27 February 2020.

<sup>&</sup>lt;sup>61</sup> Reuters. Mitsubishi Corp. takes 20 percent stake in UK's OVO Energy. 14 February 2019.

<sup>&</sup>lt;sup>62</sup> BBC News. SSE sale of retail business to Ovo creates new UK energy giant. 13 September 2019.

<sup>&</sup>lt;sup>63</sup> Mitsubishi Corp. MC and Chubu to acquire Dutch Energy Supply Company "Eneco". 25 March 2020.

Mitsubishi has also moved into the off-grid solar space in developing countries. In August 2019, Mitsubishi furthered its move into African off-grid solar by investing in BBOXX, a provider of solar home systems across the continent.<sup>64</sup>

#### Mitsui

**Mitsui & Co. has also sold out of its thermal coal mine investments**. In December 2018, Mitsui agreed to sell its 10% holding in the Bengalla thermal coal mine in Australia as part of the company's thermal coal strategy "to refrain from accumulating new assets while existing assets are under thorough review for divestiture possibilities."<sup>65</sup>

With this divestment, Mitsui has exited Australian thermal coal and now only owns stakes in less technologically challenged Australian coking coal mines. Mitsui also holds a 15% stake in Vale's Moatize coal mine in Mozambique, a project originally envisaged as a coking coal mine. However, in 2019 the mine produced more thermal coal than coking coal. This investment has not been performing well for Mitsui, even prior to the outbreak of COVID-19.

In 2019, the production and sales of the Moatize mine both dropped 24% over the prior year as productivity at its processing plants declined significantly.<sup>66</sup> In November 2019 Mitsui announced that it expected to recognize an impairment in the value of its Moatize business investments, which also includes a 50% holding in the Nacala Corridor rail and port infrastructure that exports Moatize coal. Mitsui's share of the Moatize and Nacala projects were held at book value of US\$600m as at the end of September 2019.<sup>67</sup> In its full year financial results to 31 March 2020, Mitsui recognized a US\$200m loss on impairment of investments and provision for doubtful debts due to revised assumptions of proven reserves at the mine.<sup>68</sup> Mitsui recognized another US\$48m impairment on its Moatize investment in the first quarter of the current financial year ending 31 March 2021.<sup>69</sup>

COVID-19 has impacted the Moatize mine significantly this year with reduced demand for seaborne coal leading to the mine slowing and then temporarily ceasing production in June 2020. As a result, production and sales for the first six months of 2020 declined 29% and 34% over the prior comparable period.<sup>70</sup> Thermal coal is still accounting for the majority of sales and almost half of production at Moatize.

In October 2020, Mitsui announced it would sell all its stakes in coal-fired power plants by 2030 in order to help meet its target of reaching net zero emissions by

<sup>&</sup>lt;sup>64</sup> Mitsubishi Corp Mitsubishi Corporation to Invest in Next Generation Utility BBOXX Limited. 28 August 2019.

<sup>&</sup>lt;sup>65</sup> Mitsui & Co. Mitsui to Sell its Interest in Bengalla Joint Venture. 3 December 2018.

<sup>&</sup>lt;sup>66</sup> Vale. Production and Sales in 4Q19 and 2019.

<sup>&</sup>lt;sup>67</sup> Mitsui & Co. Mitsui Expects Recognition of Impairment Loss for Moatize Business. 27 November 2019.

<sup>&</sup>lt;sup>68</sup> Mitsui & Co. Consolidated Financial Results for the Year Ended March 31, 2020.

<sup>&</sup>lt;sup>69</sup> Mitsui & Co. 1<sup>st</sup> Quarter Financial Results FY Ending March 2021. 31 July 2020.

<sup>&</sup>lt;sup>70</sup> Vale. Production and Sales in 2Q20.

2050. Mitsui currently holds stakes in coal power plants in Indonesia, China, Morocco and Malaysia.<sup>71</sup>

In addition to beginning its exit from thermal coal, Mitsui has also made further renewable energy investments overseas and, like Marubeni and Mitsubishi, has entered the distributed solar market in developing countries. In June 2019 Mitsui announced an investment in a 49% stake in Indian distributed solar provider Marvel Solren.<sup>72</sup>

Mitsui is in a consortium with EDF of France to build an 87MW wind farm in Morocco. In September 2020, financing for the project was announced with JBIC among the lenders.<sup>73</sup>

As at 31 March 2020, Mitsui held an equity share of power generation capacity of 11.1GW of which 14% is renewable energy. Mitsui has a target of increasing this to 30% by 2030, directionally sensible but a relatively modest target by global standards.

#### Sojitz

**Sojitz Corporation has continued the trend of most Japanese trading houses divesting from thermal coal**. In March 2019, the company announced that it had agreed to sell its 30% stake in PT Bara Alam Utama which operates a thermal coal mine in South Sumatra, Indonesia. Sojitz noted that "this strategic share sale furthers Sojitz's shift away from thermal coal investments as the company continues to rebalance its coal assets in light of rising global concern for the environment and long-term business sustainability."<sup>74</sup>

Following this, in March 2020 Sojitz announced the sale of its 10% stake in the Moolarben thermal coal mine to project partner Yancoal for A\$300m.<sup>75</sup> As a result of these divestments, Sojitz's equity share of thermal coal sales will decrease significantly in FY2020 (year ending 31 March 2021). The company's coking coal sales will increase following its acquisition and restart of the Gregory Crinum coking coal mine from BHP and Mitsubishi Corp<sup>76</sup> (Figure 3). Sojitz still operates, and has 96% ownership of, the Minerva thermal coal mine in Queensland, Australia.

<sup>&</sup>lt;sup>71</sup> Reuters. Exclusive: Mitsui & Co to sell all stakes in coal-fired power plants by 2030 – CEO. 12 October 2020.

<sup>&</sup>lt;sup>72</sup> Mitsui & Co. Mitsui and Mahindra Susten to co-invest in distributed solar power projects in India. 4 June 2019.

<sup>&</sup>lt;sup>73</sup> Mitsui & Co. Financing agreement for the Taza Onshore Wind Power Generation Plant in the Kingdom of Morocco comes into force. 9 September 2020.

<sup>&</sup>lt;sup>74</sup> Sojitz Corp. Sojitz Divests Interests in Thermal Coal Assets, BAU Coal Mine, in Indonesia. 11 March 2019.

<sup>&</sup>lt;sup>75</sup> Sojitz Corp. Sojitz to Divest Interest in Moorlarben Coal Mine, Australia. 27 March 2020.

<sup>&</sup>lt;sup>76</sup> Sojitz Corp. Sojitz Completes Acquisition of Australia's Gregory Crinum Mine. 27 March 2019.



#### Figure 3: Sojitz Corporation, Change in Coal Sales Volume

Source: Sojitz Corporation.

Sojitz's approach to coal investment is set out in three policies:

- Reducing thermal coal equity assets to half or less by 2030.
- In principle, not acquiring new thermal coal equity.
- Not undertaking new initiatives in the coal-fired power generation business.

Sojitz made clear in their 31 March 2019 financial results presentation that it does not have any current coal-fired power projects.<sup>77</sup>

Like other Japanese trading houses, Sojitz is increasing its interest in offshore wind although the company's focus is on the rapidly emerging offshore wind market of Taiwan rather than Europe. In April 2019, Sojitz acquired a 9% interest in one of Taiwan's largest offshore wind proposals – the 640MW Yunlin project. Noting the significant potential for offshore wind in Japan, Sojitz stated that it aims to acquire the expertise to contribute to the expansion of the offshore wind industry domestically.<sup>78</sup>

In addition, Sojitz has overseas interests in onshore wind in the U.S. and Ireland and is entering the solar market in Mexico, Peru and Chile.

#### Itochu

In February 2020, Itochu Corporation issued a release stating "we therefore hereby commit ourselves, as our policy, to neither develop any new coal-fired power generation business nor to acquire any new thermal coal mining interest." In the same release it noted that it had sold its interest in Glencore's Rolleston

<sup>&</sup>lt;sup>77</sup> Sojitz Corp. Financial Results for the Year Ended March 31, 2020. 30 April 2020.

<sup>&</sup>lt;sup>78</sup> Sojitz Corp. Sojitz Joins One of Taiwan's Largest Offshore Wind Power Projects. 5 April 2019.

thermal coal mine operation.79

Itochu still holds investment stakes in Glencore's Ravensworth North thermal coal operations, Whitehaven Coal's Maules Creek operation and Glencore's undeveloped Wandoan thermal coal mining proposal.<sup>80</sup> It also holds a 20% stake in Drummond International which operates thermal coal mines in Columbia. Itochu is forecasting a slightly increased share of coal sales (+3%) for the year ending 31 March 2021 due to higher sales at its Drummond investment.<sup>81</sup>

Itochu also has a 32% interest in a 1.9GW coal-fired power plant in Central Java, Indonesia that is currently under construction. This project has suffered long delays – development began in 2011 and it has now been under development for nine years. Local opposition to the project, which exacerbated the difficulty in acquiring land for the plant, contributed to the long delay.

The financiers of the project include JBIC, a consortium of major Japanese and Singaporean commercial banks that have since began to distance themselves from coal power, and the World Bank. The World Bank has since withdrawn from financing any more coal power plants.<sup>82</sup> Power generated for the plant will be sold to PLN so will increase the financial strain on the state-owned power utility in the same way as Sumitomo's Indonesian coal power projects will do.

With a policy to cease developing further overseas coal plants, apparently without loopholes, Itochu has continued investment in renewable energy outside Japan. Recent overseas renewable energy moves include Itochu's sixth investment in wind power in the U.S. with a view to increased further investment in renewables in the country.<sup>83</sup> Also in 2020, Itochu invested in Eguana Technologies which sells energy storage systems in the U.S., Europe and Australia.<sup>84</sup>

#### Toyota Tsusho

In its 2019 Mid-term Business Plan, Toyota Tsusho Corporation introduced a renewable energy strategy as one of three priority areas for the company with an aim to accelerate its global renewables expansion and enter new countries within the renewable energy sector.<sup>85</sup> Toyota Tsusho holds 60% of Eurus Energy, Japan's largest wind power producer, with the remaining 40% owned by Japanese power utility TEPCO. Eurus Energy has already invested in renewable energy overseas with projects in the U.S., and across Europe.

<sup>&</sup>lt;sup>79</sup> Itochu Corp. Coal-related business policy. 14 February 2020.

<sup>&</sup>lt;sup>80</sup> Itochu Corp. Our Businesses – Coal.

<sup>&</sup>lt;sup>81</sup> Itochu Corp. Supplementary Information on FY2021 1<sup>st</sup> Quarter Business Results Summary. 5 August 2020.

<sup>&</sup>lt;sup>82</sup> Reuters. World Bank pulls out of Kosovo coal power plant project. 11 October 2018.

<sup>&</sup>lt;sup>83</sup> Itochu Corp. Itochu Announces Investment in Wind Power Plants in Nebraska and Minnesota. 17 March 2020.

<sup>&</sup>lt;sup>84</sup> Itochu Corp. Itochu Announces Expansion of Energy Storage Systems in North America, Australia and Europe. 16 March 2020.

<sup>&</sup>lt;sup>85</sup> Toyota Tsusho Corp. Integrated Report 2019.

Another of the three priority areas for the company is its African growth strategy – Africa has been a place of particular geographical focus for Toyota Tsusho. The Africa and renewable energy strategies have been coming together in many of the company's recent renewable energy investments overseas across a range of technologies.

Toyota Tsusho marked the completion of Egypt's first wind power IPP project at the end of 2019. The company holds 40% of the investment.<sup>86</sup> Toyota Tsusho completed a geothermal plant at Olkaria, Kenya in 2015 and is amongst the bidders shortlisted to develop the next geothermal project at the same location. Itochu Corp and Sumitomo Corp are also on the shortlist.<sup>87</sup> In February 2020, Toyota Tsusho announced it had signed a contract to develop a geothermal power plant in Ethiopia supported by JICA.<sup>88</sup>

Along with other Japanese trading houses, Toyota Tsusho has invested in African off-grid solar. In July 2019 it announced an investment in Powerhive, a U.S. provider of mini-grid solar solutions to off-grid areas of Kenya.

In further investment in Kenya, construction of Africa's first large-scale solar-windbattery storage hybrid project began in January 2020. The project is being developed by Eurus Energy and Windlab of Australia.<sup>89</sup> Toyota Tsusho has also signed a memorandum of understanding for the development of solar and battery storage projects in Zambia.<sup>90</sup>

Although Toyota Tsusho's focus is clearly on renewable energy within the power sector, it does still have a few coal investments. The company has invested in two small coal-fired power plants in the Philippines, one of which is still under development and which the company invested in back in 2015.<sup>91</sup> Toyota Tsusho also owns a small stake in Glencore's Bulga coking and thermal coal operation in Australia via its Tomen Corporation subsidiary.

### **Sumitomo Lagging Behind on Coal**

In its 2019 Integrated Report, Sumitomo included a statement about its policy on thermal coal mining and coal-fired power.<sup>92</sup> This stated that the company will "not have new development in the coal-fired power generation business. However, we [will] make a decision individually about new development in cases where the project is essential to the economic and industrial development of the local

<sup>&</sup>lt;sup>86</sup> Toyota Tsusho Corp. Toyota Tsusho and Eurus Energy Hold Ceremon to Mark Completion of Egypt's First Wind Power IPP Project. 6 December 2019.

<sup>&</sup>lt;sup>87</sup> Think Geoenergy. Five groups shortlisted for 140 MW PPP Olkaria VI project with KenGen, Kenya. 12 May 2020.

<sup>&</sup>lt;sup>88</sup> Toyota Tsusho Corp. Toyota Tsusho Signed a Contract with Ethiopian Electric Power to Construct Small-Scale Geothermal Power Plant. 28 February 2020.

<sup>&</sup>lt;sup>89</sup> Construction Review Online. Construction of Meru County Energy Park kicks off. 16 January 2020.

<sup>&</sup>lt;sup>90</sup> Toyota Tsusho Corp. Toyota Tsusho Signs 16 MOUs with 10 African Nations. 30 August 2019.

 <sup>&</sup>lt;sup>91</sup> Manila Standard. Toyota Tsusho joins Alsons' power plant ty-in Zamboanga plant. 24 May 2015.
 <sup>92</sup> Sumitomo Corp. Integrated Report 2019.

community and where the project is complying with the policies of the Japanese and host country governments based on the international initiatives to mitigate climate change issues".

This loophole means the policy has not ended Sumitomo's appetite for taking on coal-fired power projects. It noted in its Integrated Report that the Van Phong coal power project in Vietnam is under development, based on this loophole. Sumitomo is also the identified EPC contractor for the Matarbari 2 coal power plant in Bangladesh for which a preparatory survey is shortly to commence.

In addition, Sumitomo's equity share of thermal coal production rose significantly in FY2019 after several years of declines, following the company's GS Coal joint venture acquiring an additional 31% of the Clermont coal mine in Australia from Mitsubishi Corp<sup>93</sup> (Figure 4).

Whilst other Japanese trading houses have been divesting thermal coal investments, Sumitomo has been a buyer. Sumitomo's share of thermal coal production may increase again if its Bluewaters Coal joint venture is forced to take control of the mine that is struggling to supply its Australian power station with coal.

In June 2020, Sumitomo amended its coal policy, adding: "Regarding the development of thermal power generation and fossil energy concession, we will work on the premise of carbon neutralization in 2050", but without including any detail as to how this would be achieved.<sup>94</sup>

<sup>&</sup>lt;sup>93</sup> Sumitomo Corp. Additional acquisition of Australian Clermont coal mine interest. 18 December 2018.

<sup>&</sup>lt;sup>94</sup> Sumitomo Corp. "Policies on Climate Change Issues" Reviewed. 18 June 2020.





Source: Sumitomo Corp.

Although some of the coal policies of other Japanese trading houses include loopholes, they appear to have made more progress in distancing themselves from thermal coal than Sumitomo. Marubeni, Mitsubishi and Mitsui no longer hold investments in thermal coal mines (although their coking coal investments produce some thermal coal as a secondary product). Mitsui, Marubeni, Itochu and Sojitz have all clearly made more progress on their exit from coal-fired power too. Sumitomo Corp is clearly lagging its peers in distancing itself from products that its major investors increasingly want it to move away from.

## Sumitomo's Renewable Energy Investment

Although Sumitomo lags behind the other Japanese trading houses on coal, it has been investing in renewable energy along with its peers. In fact, amongst the Japanese trading houses, it is Sumitomo that has been the most active in the European offshore wind sector (Table 2).<sup>95</sup>

Most recently, Sumitomo has announced it is part of a consortium to develop the Five Estuaries offshore wind project in the UK. The project neighbors the operational Galloper offshore wind project which was developed by the same consortium partners.<sup>96</sup>

<sup>&</sup>lt;sup>95</sup> S&P Platts. Japan's influence in European offshore wind starts to bear fruit back home. 24 July 2020.

<sup>&</sup>lt;sup>96</sup> Sumitomo Corp. Sumitomo Corporation participates in development of Five Estuaries Offshore Wind Farm in the UK. 29 September 2020.

Company	Project	Country	Capacity (MW)	Stake (%)	Status
Itochu Corp	Butendiek	Germany	288	22.5*	Operating
Marubeni Corp	Gunfleet Sands 1 & 2	UK	173	49.9**	Operating
waruberir corp	Westermost Rough	UK	210	25**	Operating
	Borselle 3 & 4	Netherlands	732	15	Construction
Mitcubichi Corp	Luchterduinen	Netherlands	129	50	Operating
Mitsubishi Corp	Moray East	UK	950	16.7	Construction
	Norther	Belgium	370	25	Operating
	Belwind	Belgium	165	39**	Operating
	Dieppe Le Treport	France	496	29.5	Development
	Galloper	UK	353	12.5	Operating
Cumitana Cara	Nobelwind	Belgium	165	39	Operating
Sumitomo Corp	Northwester 2	Belgium	219	30	Construction
	Northwind	Belgium	216	30	Operating
	Raceback	UK	573	12.5	Operating
	Yeu Noirmoutier	France	496	29.5	Development

## Table 2: European Offshore Wind Investments by Select JapaneseTrading Houses

\* In a consortium with CITIC Pacific Ltd

\*\* No longer holds stake in the project.

Source: S&P Global Market Intelligence, Global Wind Energy Council, company disclosures.

The company will use the experience gained in the European offshore wind project to help it develop projects within the burgeoning Japanese offshore market.<sup>97</sup> Offshore wind has been identified as a key growth sector within Japan's power market which will only be boosted by the government's recent commitment to reach net zero emissions by 2050.

## **Major Investors Demanding More Action on Coal**

The August 2020 announcement by Warren Buffet's Berkshire Hathaway that it had acquired 5% of five Japanese trading houses – Itochu, Marubeni, Mitsubishi, Mitsui and Sumitomo, via its subsidiary the National Indemnity Company, was a significant demonstration of global investment support for these companies.<sup>98</sup> However, due to their involvement in coal mining and coal-fired power, the investment environment for the trading houses is not necessarily straightforward.

In the same month as the Berkshire Hathaway announcement, Norwegian asset manager Storebrand, with US\$91bn of assets under management, announced in August 2020 that it had divested a number of shareholdings in line with its updated climate policy.<sup>99</sup> These included two Japanese power utilities and Mitsui & Co which have been excluded from its investments as they were considered to be too slow in

 <sup>&</sup>lt;sup>97</sup> Wind Power Monthly. RWE and Sumitomo target offshore wind off Akita. 1 June 2020.
 <sup>98</sup> Berkshire Hathaway. Berkshire Hathaway acquires 5% passive stakes in each of five leading Japanese trading companies. 31 August 2020.

<sup>&</sup>lt;sup>99</sup> Financial Times. Storebrand dumps oil and mining stocks on climate change lobbying. 24 August 2020.

moving away from coal. One of the Japanese power utilities Storebrand divested was Kansai Electric – Sumitomo's 50:50 joint venture partner in the Bluewaters Coal power plant.

Further investor pressure on companies involved in the coal sector is coming from the Norwegian oil fund – the world's largest sovereign wealth fund. The US\$1 trillion fund's latest investment exclusions were announced in May 2020 and included Sasol, RWE, AGL, Glencore and Anglo American – all excluded based on their operations within coal mining or coal-fired power.<sup>100</sup> The Norwegian oil fund is a major shareholder in Sumitomo Corp via Norges Bank Investment Management (NBIM) which manages the fund (see Annexure I).

NBIM also placed several companies under observation for their coal activities including BHP which has thermal coal mining operations and investments in addition to coking coal mining ventures with Mitsubishi and Mitsui. BHP has subsequently responded to growing investor pressure by announcing its intention to exit thermal coal entirely and to sell the two coking coal mines it owns with Mitsui.<sup>101</sup>

The Norwegian oil fund has previously excluded a number of Japanese power utilities and South Korean power utility KEPCO which has come under increasing investor pressure for its overseas coal activities. The fund is now also asking some of the companies it invests in for detailed climate-related data in order for it to assess carbon risk within its portfolio.<sup>102</sup>

In May 2020, it was revealed that BlackRock – the world's largest asset manager – had written to KEPCO's CEO seeking a rationale for its continued investments in coal and raising concerns over "several controversial coal projects" which include the company's plans to invest in coal-fired power plants in Vietnam and Indonesia. This followed BlackRock's pledge in January 2020 that it would make climate-friendly investment a priority across its funds.<sup>103</sup>

In October 2020, KEPCO announced that it would no longer take part in overseas coal power projects after struggling to weather the controversy that enveloped the company—and the Korean government—after it pushed ahead with investments in Jawa 9 & 10 in Indonesia and the Vung Ang 2 project in Vietnam. It also withdrew from coal power proposals in South Africa and the Philippines.<sup>104</sup>

BlackRock is also a major shareholder in Sumitomo Corporation (Annexure I). In its 2020 stewardship report, BlackRock disclosed that substantive engagement with companies it invests in on a range of issues numbered over 3,000, an increase of 50% over the prior year. Engagements with Japanese companies on environmental

- <sup>101</sup> Financial Times. BHP responds to investor pressure with thermal coal exit. 19 August 2020.
  <sup>102</sup> Reuters. Norway wealth fund to test business model of biggest CO2 emitters. 3 September 2020.
- <sup>103</sup> Bloomberg. BlackRock Warns Korean Utility on Overseas Coal Plant Push. 28 May 2020.
  <sup>104</sup> Global Construction Review. "No more overseas coal power projects", says South Korea's KEPCO. 16 October 2020.

<sup>&</sup>lt;sup>100</sup> Norges Bank Investment Management. Exclusion and observation of coal companies. 13 May 2020.

issues doubled in the 2020 period compared to the prior year. Sumitomo Corporation was among the 3,000 companies engaged by BlackRock over the period ending June 30<sup>th</sup> 2020. The percentage of Japanese company annual meetings where BlackRock voted against one or more management recommendations was steady at over one-third.<sup>105</sup>

BlackRock identified 244 companies that were not making sufficient progress on climate risk in 2020. It took voting action against 53 of these and the remaining 191 were placed 'on watch'. The list of 53 companies that BlackRock took voting action against was dominated by those in the energy and power utility sectors and included Arch Coal Inc and Peabody Energy Corp.<sup>106</sup>

October 2020 also saw BlackRock revolt at the annual general meeting of AGL – which operates coal-fired power plants in Australia along with Sumitomo's Bluewaters – calling for the hastened closure of the AGL's coal plants.<sup>107</sup>

Other major investors have voiced dissatisfaction over Asian coal power projects. Legal and General Investment Management – another Sumitomo shareholder – has asked South Korea's Samsung C&T Corporation not to invest in any coal-fired power projects whilst it engages the company on its involvement in the same Vung Ang 2 coal power proposal that KEPCO has invested in.<sup>108</sup>

Even Berkshire Hathaway is under investor pressure on its exposure to coal, which has only increased via its investments in Sumitomo and other Japanese trading houses. New York City Comptroller Scott Stringer wrote to Berkshire Hathaway on behalf of three pension funds in April 2020, urging them to cease investing in coal projects.<sup>109</sup> The Norwegian oil fund has had Berkshire Hathaway Energy under observation for its activities within the coal sector since July 2018.

Meanwhile GE, a global leader in coal-fired power technology, has announced plans to stop coal power construction as power utilities increasingly focus on renewable energy.<sup>110</sup> The move will relieve pressure on the company from investors with ESG (environment, social and governance) concerns over its coal power activities. The coal-fired power technology business provides a relatively small part of the conglomerates' overall revenues, making the end of coal power activities relatively straightforward for GE.

Despite the pandemic, there has been no let-up in investor pressure on companies that are exposed to coal – if anything the rate at which the pressure is building has only increased. Investors who have seen Sumitomo react to an uncertain future for

<sup>&</sup>lt;sup>105</sup> BlackRock. Investment Stewardship Annual Report. September 2020.

<sup>&</sup>lt;sup>106</sup> BlackRock. Our approach to sustainability. July 2020.

 <sup>&</sup>lt;sup>107</sup> Financial Times. BlackRock calls on AGL to hasten closure of coal-fired plants. 7 October 2020.
 <sup>108</sup> Bloomberg. Samsung C&T Targeted by Activists Over Vietnam Coal Project. 31 August 2020.

<sup>&</sup>lt;sup>109</sup> Economic Times. Berkshire, AIG urged by NYC's comptroller to divest from coal. 26 April 2020.

<sup>&</sup>lt;sup>110</sup> Reuters. GE plans to stop making coal-fired power plants. 21 September 2020.

shale gas by exiting the business<sup>111</sup> may increasingly ask questions about when Sumitomo will react to the poor long term outlook for thermal coal.

As major investors further tighten their restrictions on coal going forward, the Japanese trading houses are likely to come further into view on investors' radar for their coal mining and coal-fired power businesses. As the coal laggard amongst its peers, Sumitomo is likely to be the first Japanese trading house to feel this heightened investor pressure.

<sup>&</sup>lt;sup>111</sup> Reuters. Japan's Sumitomo sells all of its stake in U.S. Marcellus shale gas project. 8 September 2020.

## Annexure 1

## Sumitomo Corporation Top 50 Shareholders November 2020

#	Investor Name	Position (M)	Value (\$ M)	% Outstanding	Filing Date
1	Berkshire Hathaway Inc.	63.12	819.34	5.04%	24-08-2020
2	Nomura Asset Management Co., Ltd.	57.85	639.20	4.62%	15-07-2020
3	Wells Capital Management Inc.	55.29	637.11	4.42%	31-03-2020
4	Orbis Investment Management Ltd.	52.69	582.19	4.21%	06-07-2020
5	Mitsubishi UFJ Trust and Banking Corporation	39.08	446.99	3.12%	22-06-2020
6	The Vanguard Group, Inc.	31.20	372.38	2.49%	30-09-2020
7	Sumitomo Life Insurance Co.	30.86	355.52	2.47%	31-03-2020
8	Daiwa Asset Management Co., Ltd.	22.50	268.47	1.80%	30-09-2020
9	Nikko Asset Management Co., Ltd.	22.15	264.36	1.77%	30-09-2020
10	Mitsui Sumitomo Insurance Co Ltd	19.00	218.92	1.52%	31-03-2020
11	Norges Bank Investment Management (NBIM)	17.19	256.50	1.37%	31-12-2019
12	BlackRock Institutional Trust Company, N.A.	17.16	187.74	1.37%	31-10-2020
13	Mitsubishi UFJ Kokusai Asset Management Co., Ltd.	10.38	118.73	0.83%	22-06-2020
14	T. Rowe Price Associates, Inc.	9.69	115.67	0.77%	30-09-2020
15	Nippon Steel Corp	7.87	90.68	0.63%	31-03-2020
16	Nomura International Plc.	7.29	80.60	0.58%	15-07-2020
17	T. Rowe Price International (UK) Ltd.	6.29	75.04	0.50%	30-09-2020
18	Geode Capital Management, L.L.C.	5.58	61.02	0.45%	31-10-2020
19	Sumitomo Realty & Development Co Ltd	5.27	60.75	0.42%	31-03-2020
20	Sumitomo Warehouse Co Ltd	4.38	50.52	0.35%	31-03-2020
21	BlackRock Advisors (UK) Limited	4.29	51.19	0.34%	30-09-2020
22	Nisshin Seifun Group Inc	4.18	48.17	0.33%	31-03-2020
23	CPP Investment Board	3.85	44.33	0.31%	31-03-2020
24	Sumitomo Osaka Cement Co Ltd	3.80	43.81	0.30%	31-03-2020
25	Sumitomo Forestry Co Ltd	3.62	41.67	0.29%	31-03-2020
26	Mitsui OSK Lines Ltd	3.21	37.02	0.26%	31-03-2020
27	BlackRock Investment Management (UK) Ltd.	3.05	36.35	0.24%	30-09-2020
28	Yamato Kogyo Co Ltd	2.87	33.05	0.23%	31-03-2020
29	BlackRock Japan Co., Ltd.	2.78	33.12	0.22%	30-09-2020
30	California Public Employees' Retirement System	2.76	41.70	0.22%	30-06-2019
31	Nomura Securities Co., Ltd.	2.58	28.50	0.21%	15-07-2020
32	Charles Schwab Investment Management, Inc.	2.55	27.94	0.20%	31-10-2020
33	Asset Management One Co., Ltd.	2.46	29.41	0.20%	30-09-2020
34	Dimensional Fund Advisors, L.P.	2.39	26.15	0.19%	31-10-2020
35	State Street Global Advisors (US)	2.26	24.75	0.18%	31-10-2020
36	Nuveen LLC	2.22	26.49	0.18%	30-09-2020
37	Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.	2.18	24.91	0.17%	22-06-2020

38	Tokyo Steel Manufacturing Co Ltd	2.08	23.95	0.17%	31-03-2020
39	Sumitomo Metal Mining Co Ltd	2.00	23.05	0.16%	31-03-2020
40	Sumitomo Chemical Co Ltd	1.93	22.18	0.15%	31-03-2020
41	Daibiru Corp	1.91	21.97	0.15%	31-03-2020
42	PGGM Vermogensbeheer B.V.	1.83	27.34	0.15%	31-12-2019
43	Mellon Investments Corporation	1.79	19.61	0.14%	31-10-2020
44	UBS Asset Management (UK) Ltd.	1.70	20.26	0.14%	30-09-2020
45	Allianz Global Investors GmbH	1.53	18.29	0.12%	30-09-2020
46	Yamazaki Baking Co Ltd	1.45	21.68	0.12%	31-12-2019
47	TD Asset Management Inc.	1.42	16.95	0.11%	30-09-2020
48	Sumitomo Electric Industries Ltd	1.36	15.63	0.11%	31-03-2020
49	The Shizuoka Bank, Ltd.	1.34	15.39	0.11%	31-03-2020
50	Rengo Co Ltd	1.33	15.38	0.11%	31-03-2020

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