ACCR Investor Briefing

Electric Power Development Co., Ltd. (J-POWER) (TYO: 9513)

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About ACCR

The [Australasian Centre for Corporate Responsibility](link) is a philanthropically-funded, not for profit, research and shareholder advocacy organisation that monitors environmental, social and governance (ESG) practices and performance of listed companies. We undertake research and highlight emerging areas of business risk through private and public engagement, including the filing of shareholder proposals.

Background

J-POWER, Japan's largest coal power operator and sixth largest energy utility[1], has publicly committed to transitioning towards carbon neutrality[2]. Still, evidence indicates a significant gap between its decarbonisation strategy and the goals of the Paris Agreement. The company lacks a defined phase-out schedule for domestic coal assets, an essential component for achieving a net zero pathway, which advanced economies like Japan should aim to reach by 2035, per the International Energy Agency (IEA)[3].

At J-POWER's annual general meeting on 28 June 2023, shareholders have the opportunity to vote on two resolutions. The resolutions call on the Company to set and disclose credible short- and medium-term emissions reduction targets, aligned with the goals of the Paris Agreement; and disclose how remuneration policies incentivise progress against emission reduction targets.

The resolutions are co-filed by Amundi, the largest European asset manager, HSBC Global Asset Management, and the Australasian Centre for Corporate Responsibility (ACCR), and are supported by Man Group, the world's largest publicly traded hedge fund company. The three institutional investors - Man, Amundi and HSBC GAM - have been co-engaging with J-POWER for 18 months - individually, longer.

In light of the significant divergence between J-POWER's current decarbonisation strategy and the goals set by the Paris Agreement, combined with the company's lack of substantial progress following our previous resolution, each investor is also signalling an intent to vote against the re-election of the director principally responsible for J-POWER's climate strategy, Representative Director (Executive Vice President) Hitoshi Kanno.

This briefing addresses matters in relation to the proposal and presents a summary of the investor group's concerns and case for support. Detailed company analysis can be found in the report by Carbon Tracker, published on 30 November 2022.[4] Please also refer to ACCR's analysis, published on its website.[5]

Proposals put forward by the shareholder group

Owing to local legal requirements, the shareholder group has presented a package consisting of two proposals, each framed as a partial amendment to the Company's Articles of Incorporation. Each proposal stands alone legally, but we believe the package is in the interests of shareholders. Each proposal, as well as the formal reasoning given to the Company, are set out below:

Proposal 1

Partial amendment to the Articles of Incorporation

(1) Details of the proposal

The following clause shall be added to the Articles of Incorporation:

1. To promote the long-term value of the Company, the Company shall set and disclose a business plan to achieve science-based short- and medium-term GHG emissions reduction targets aligned with the goals of the Paris Agreement.
2. The Company shall report, in its annual reporting, on its progress against such targets at reasonable cost and omitting proprietary information.

(2) Reason for the proposal

Long-term institutional investors in the Company see its corporate value depending upon a credible decarbonisation strategy and short-, medium- and long-term GHG emissions reduction targets aligned with the goals of the Paris Agreement and investor expectations.

While we welcome the Company's intention to achieve carbon neutrality by 2050, the Company's targets are not yet aligned with the goals of the Paris Agreement. In particular, the Company has presented no indicative schedule for the retirement of its coal-fired power assets and has instead presented a plan that involves capital expenditure into speculative technology prolonging the life of these

[1] ACCR, ACCR Company Engagement: J-POWER, link.
[2] J-POWER, J-POWER Blue Mission 2050, link.
[3] International Energy Agency (IEA), World Energy Outlook 2022, October 2022, link.
[4] Carbon Tracker, Corporate Profile - J Power, 30 Nov 2022, link
[5] ACCR, Investor Briefing - Electric Power Development Co., Ltd (J-POWER) 2023 AGM, 23 May 2023, link.

assets. This presents a range of material financial risks to shareholders, including the risks arising from anticipated changes in GHG emissions-related public policy.

Setting science-based targets, and disclosing a business plan to achieve them, would best manage these risks and protect corporate value. Disclosure of the Company's assessment of how material capital expenditure aligns with those targets in the business plan would assist shareholders.

Proposal 2

Partial amendment to the Articles of Incorporation

(1) Details of the proposal

The following clause shall be added to the Articles of Incorporation:

> The Company shall disclose, in its annual reporting, details of how the Company's remuneration policies will incentivise progress against the Company's science-based short- and medium-term GHG emissions reduction targets, at a reasonable cost and omitting proprietary information.

(2) Reason for the proposal

Long-term institutional investors in the Company consider a direct linkage between remuneration and achievement of GHG emissions reduction targets to be in the Company's interests, as an important mechanism to incentivise executive performance against decarbonisation goals and protect corporate value.

The attraction of these proposals is that they are high-level and non-prescriptive, yet designed to direct the Company's focus to material areas of improvement, where shareholders can monitor and measure successful implementation. The proposals are carefully drafted to avoid an inappropriate level of shareholder involvement in the detail of company strategy development. Instead, the principles-based approach provides guidance but leaves discretion about the detail to the judgement of the Company's board and management.

The language is embedded within clear and widely accepted institutional investor expectations such as the Climate Action 100+ Net-Zero Company Benchmark, Climate Action 100+ Global Sector Strategies: Investor Interventions to Accelerate Net Zero Electric Utilities and AIGCC Investor Expectations of Asian Electric Utilities Companies[6].

The reference to "science-based" is consistent with Article 4.1 of the Paris Agreement[7] and calls upon the company to adopt a science-based method to set GHG reduction targets in line with investor expectations.

ACCR and the co-engagement group believe that these proposals are in the best interests of shareholders and present a strong case for support.

PROPOSAL 1 — TARGET-SETTING

Case for support

J-POWER has announced short-, medium- and long-term targets for reducing CO2 emissions from its domestic electric power business including reducing such emissions to net zero by 2050. We welcome J-POWER's commitments but the targets remain seriously insufficient and the current decarbonisation strategy does not set out a credible path to meet them.

There is a clear rationale for this proposal for the following reasons:

1. J-POWER's current short-and medium-term emissions reduction targets are not aligned with the goals of the Paris Agreement, being to pursue efforts to limit warming to 1.5°C.
2. J-POWER's short-, medium- and long-term emissions reduction targets do not apply to its overseas business.
3. J-POWER's current decarbonisation strategy lacks detail and relies upon high-cost, coal-based technologies unproven at scale, which face significant financial risks and technical, safety, and economic uncertainties.
4. J-POWER's plans place an over-reliance on unabated coal into the future, inconsistent with the goals of the Paris Agreement.
5. The co-engagement group sees J-POWER's long-term corporate value depending upon a credible Paris-aligned decarbonisation strategy and emissions reduction targets. Their absence presents a range of material financial risks to shareholders.

ACCR and the co-engaging investors consider that setting science-based targets and disclosing a business plan to achieve them would best protect long-term corporate value.

J-POWER's emissions reduction targets

In February 2021, J-POWER announced a medium-term target of reducing CO2 emissions from its domestic electric power business by 40% by 2030 (compared to average results from FY2017 to FY2019) and a long-term target of reducing such emissions to net zero by 2050. In May 2022, the Company announced a short-term target of reducing CO2 emissions by 7 million tonnes by 2025 (compared to average results from FY2017 to FY2019).

In a significant move in 2021, Japan revised its nationally determined contribution (NDC) under the Paris Agreement, increasing its emission reduction target to 46% by 2030 compared to 2013[8]. Legislative steps were also taken to enforce net zero targets for 2050[9].

[6] Climate Action 100+, Net Zero Company Benchmark, October 2022, link; The Institutional Investors Group on Climate Change, Global sector strategies: Investor interventions to accelerate net zero electric utilities, October 2021, link; Asia Investor Group on Climate Change, Investor Expectations of Asian Electric Utilities Companies: Crossover to net zero, November 2020, link.
[7] Article 4.1 of the Paris Agreement refers to emissions reductions "in accordance with best available science".

[8] Japan Ministry of Economy, Trade and Industry (METI), Outline of Strategic Energy Plan, October 2021, link.
[9] United Nations Framework Convention on Climate Change, "Japan's Nationally Determined Contribution (NDC)," updated June 2022, link.

Japan's commitment to a decarbonised future was further underlined by its support for the G-7 Summit statement from June 2022, proposing the power sector should "fully or predominantly" decarbonise by 2035[10]. To navigate towards its preliminary emission reduction target, Japan's sixth Strategic Energy Plan (SEP) outlined an approach to downsize the role of coal in electricity generation, proposing a decrease from 30% in 2021 to 19% in 2030[11].

Whilst Japan's recent uplift in ambition represents a positive shift towards decarbonisation, it is important to emphasise that these targets are still insufficient to meet the goals required to limit global warming to 1.5°C, as set out in the Paris Agreement. Recent analysis by Climate Action Tracker rated Japan's NDC as "almost sufficient" when compared to required domestic efforts, and "insufficient" when compared to Japan's fair share of the global carbon budget[12].

In May 2023, J-POWER's 2023 Medium-Term Management Plan introduced an updated emissions reduction target for 2030, in line with the Japanese Government's 2013 reference year[13]. This resulted in a new baseline of 48.77 MtCO2e, up from the previous 46.6 MtCO2e (average emissions between FY2017-19). Consequently, the 2030 target for emissions reduction has been revised upwards from 40% to 44%, and further to 46%. However, this seemingly ambitious commitment represents only an additional reduction of 1.3 MtCO2e, suggesting that from an investor's standpoint, this revised goal does not denote a significant enhancement of efforts towards reducing emissions. J-POWER's emission reduction targets, set at 19% by 2025 and 46% by 2030 from a 2013 baseline, still fall short of the IEA's recommended goals. To fully conform with a 1.5°C net-zero emissions pathway for electricity generation in advanced economies, emissions should be curtailed by at least 49% by 2025 and 81% by 2030. Science-based sectoral decarbonisation trajectories, which investment community expectations have embraced, underline that electric utilities in advanced economies like Japan should attain net zero emissions by 2035[14].

Additionally, J-POWER's short-, mid-and long-term greenhouse gas reduction objectives are focused on its domestic electric power business and do not consider the considerable scope of the Company's overseas operations. The Company's disclosed emissions data does not encompass all group subsidiaries, including those involved in transmission and electricity-related sectors[15], and as a result, comprehensively understanding and tracking the group's total emissions poses significant challenges.

In assessing J-POWER's climate targets, it is clear that these commitments fall short of international climate guidelines, despite alignment attempts with Japan's emissions baseline and decarbonisation targets. Moreover, the exclusion of emissions from sizeable overseas operations and other group subsidiaries suggests a potentially underestimated total carbon footprint, raising questions about the true extent of J-POWER's climate impact. This discrepancy, coupled with modest real-world emissions reduction impact, heightens investment risks tied to climate action inadequacy. As such, it's critical for J-POWER to increase transparency in its emissions accounting and decisively enhance its short- and medium-term climate targets. Aligning with a 1.5°C pathway is not just environmentally responsible—it's a strategic imperative to ensure financial resilience in a rapidly decarbonising global economy.

J-POWER's decarbonisation strategy

J-POWER's decarbonisation strategy is set out in its Blue Mission 2050 and medium-term business plan[16]. It relies heavily upon burning coal alongside imported fossil fuel-derived ammonia, coal gasification and carbon capture, utilisation and storage (CCUS). There is also no concrete plan to retire old coal assets. This approach carries a risk of creating stranded assets, particularly since the Company's decarbonisation plan, set to accelerate after 2030, lacks clear details on these technologies' role and efficacy in emissions reduction.

Independent economic analysis, including from Carbon Tracker[17] and Bloomberg New Energy Finance[18], has highlighted the financial risks of over-reliance upon such technologies in the electric utilities sector. In particular, Bloomberg reported that CO2 emissions from a coal power plant burning ammonia at a co-firing ratio of below 50% will still emit as much CO2 as a natural gas-fueled combined cycle gas turbine. Operating at a ratio above 20:80 ammonia to coal has not yet been technically established and would come at a significant cost [19]. Furthermore, coal power plants co-firing ammonia may also emit more nitrous oxide, a greenhouse gas with a global warming potential 273 times larger than that of CO2 for a 100-year time scale.

In an earlier report on ammonia co-firing, coal gasification and CCUS in February 2022[20], TransitionZero found that such technologies are high-cost with limited carbon-reduction potential in the electricity sector. Compounding the issue, Japan's sixth Strategic Energy Plan only proposes a modest 1% of the electricity supply from ammonia and hydrogen in 2030[21].

In considering CCS, Wood Mackenzie found that by 2040, renewables and storage have lower levelised cost of electricity (LCOE) compared to other options, stating, "CCS options remain

[10] European Council, Council of the European Union, G7 Leaders' Communiqué - Executive summary, 28 June 2022, link.
[11] Japan Ministry of Economy, Trade and Industry (METI), Outline of Strategic Energy Plan, October 2021, link.
[12] Climate Action Tracker, Japan, updated 17 May 2023, link.
[13] J-POWER, Progress of J-POWER Medium-term Management Plan, 10 May 2023, link.
[14] IEA, World Energy Outl 2022, An updated roadmap to net zero emissions by 2050, Nov 2022, link.
[15] Climate Integrate, Assessing Net Zero: Integrity Review of 10 Japanese Companies, May 2023, link.

[16] The short-term 7 MtCO2 reduction target by 2025 was published on 11 May 2022 in J-POWER's Progress of J-POWER Medium-Term Management Plan (2022 and 2023), link, link, respectively.
[17] Carbon Tracker, Corporate Profile - J Power, 30 Nov 2022, link.
[18] Bloomberg New Energy Finance, Japan's costly ammonia coal co-firing strategy, September 2022.
[19] E3G, Explained: Why ammonia co-firing in coal power generation is a flawed approach, 5 April 2023, link.
[20] TransitionZero, Coal-de-sac: Advanced coal in Japan - The role of advanced coal technologies in decarbonising Japan's electricity sector, February 2022, link.
[21] Japan Ministry of Economy, Trade and Industry (METI), Outline of Strategic Energy Plan, October 2021, link.

more expensive than renewables and thus will only fulfil the role of providing dependable capacity"[22]. Asia Investor Group on Climate Change (AIGCC) points to additional significant technical challenges including scalability, suitability and transport alongside difficulties in financing commercially.

Analysis by Carbon Tracker, based on its modelling of the IEA Net Zero Emissions (NZE) scenario by 2050, has further suggested that J-POWER would need to phase out all of its domestic coal capacity without carbon capture by 2030[23]. In fact, more than half of this capacity should be decommissioned as early as 2024[24]. Despite this, J-POWER has signalled its intention to continue operating coal-fired power plants in Japan until 2050 and has not committed to the phase-out of unabated coal-fired generation[25].

J-POWER has already consumed 95% of its carbon budget available to 2025[26], based on its share of total allowable global emissions in a 1.5°C IEA net zero emissions pathway. This emissions trajectory calls for an urgent re-evaluation of its strategies. It is a pattern of operation, disjointed from global decarbonisation targets and obligations under the Paris Agreement, that portends considerable investment risk. To safeguard investment value and contribute to global climate action, it is imperative that J-POWER realigns its decarbonisation strategy and practices to ensure robust, compliant and sustainable operations. This will position the Company to capitalise on opportunities that the climate transition presents, particularly in the electricity sector.

Renewable energy plans

Whilst J-POWER's strategy acknowledges the importance of renewable energy, it falls short of harnessing its potential as a primary decarbonisation tool. Notably, an undue focus is being placed on extending the life of coal power plants, which detracts from the necessary push towards cleaner energy solutions.

The Company has set a global target of growing its renewable energy portfolio to over 1,500 MW by FY2025, relative to FY2017[27]. This represents a modest 15% growth in J-POWER's renewable energy portfolio between 2019 and 2025. Although this is a step in the right direction, it pales in comparison to Japan's Strategic Energy Plan of 2021, which anticipates a significant 100%-113% growth in combined solar, geothermal, hydro, and wind power between 2019 and 2030[28].

Beyond 2025, J-POWER has declared an intention to continue developing its renewables portfolio. However, it has failed to provide a specific numerical target, creating uncertainty about its future commitment to renewable energy.

Moreover, the vast majority of J-POWER's planned renewable projects and acquisitions are located overseas. This indicates a missed opportunity to contribute substantially to the decarbonisation of Japan's energy grid and to achieving its domestic decarbonisation targets.

Overall, whilst J-POWER's renewable energy strategy includes some positive elements, it lacks the necessary ambition and specificity needed to align with Japan's national targets or with the goals of the Paris Agreement. For the Company to enhance its position in the eyes of forward-looking investors, a clear and robust renewable energy strategy, with a primary focus on decarbonising the domestic energy grid, is imperative.

We encourage J-POWER to set out a clearer path for increased renewable energy investment to capture these opportunities domestically and reduce transition risk to its business.

Capex alignment

J-POWER's capital expenditure (CAPEX) strategy, involving substantial investment in coal power generation and experimental "advanced coal" technologies, presents a significant challenge. The Company has yet to commit to aligning future capital expenditure with its long-term emissions reduction targets, nor has it disclosed the methodology for aligning CAPEX with decarbonisation objectives.

In light of considerations around long-term profitability and risk mitigation, it's noteworthy that best practices developed by investor groups and standards such as the Task Force on Climate-related Financial Disclosures (TCFD), Science-Based Targets initiative (SBTi), Carbon Disclosure Project (CDP), Institutional Investors Group on Climate Change (IIGCC), and the Principles for Responsible Investment (PRI) have gained wide recognition. These frameworks underline the importance of aligning CAPEX with climate targets and decarbonisation goals, a path that, if adopted by J-POWER, could help the Company navigate environmental and financial risks while addressing investor expectations on climate-conscious strategies.

Investors are placing increasing value on companies that demonstrate transparency in managing climate-related financial risks and show a committed alignment to a 1.5°C pathway. By clearly illustrating its alignment methodology and adjusting its CAPEX to match a 1.5°C trajectory, J-POWER could improve its positioning in an investment environment that continues to grow in its recognition of climate consciousness. This proposal is consistent with mitigating future financial risk while synchronising with evolving investor expectations.

[22]Asia Investor Group on Climate Change & Wood Mackenzie, Carbon Capture and Storage in the decisive decade for decarbonisation, December 2021, link.
[23]Carbon Tracker, Corporate Profile - J Power, 30 Nov 2022, link.
[24]Ibid.
[25]J-Power, Integrated Report 2022, link.
[26]See, ACCR, Investor Briefing - Electric Power Development Co., Ltd (J-POWER) 2023 AGM, 23 May 2023, link.
[27] J-POWER, Progress of J-POWER Medium-term Management Plan, 11 May 2022, link.
[28]Japan Ministry of Economy, Trade and Industry (METI), Outline of Strategic Energy Plan, October 2021, link.

PROPOSAL 2 — REMUNERATION ALIGNMENT

Case for support

Please note: This proposal adopts the language in the IIGCC Global Sector Strategies: Investor Interventions to Accelerate Net Zero Electric Utilities[29]. It does not require executive remuneration linked to J-POWER's emissions reduction targets but rather a disclosure of how its remuneration policies will incentivise progress against its targets. It preserves management discretion.

Whilst we welcome J-POWER's recent step towards linking executive compensation to climate change and recognising the importance of aligning remuneration with environmental objectives[30], there is a need for increased transparency over J-POWER's remuneration policies. This applies both to its general policies and specifically in relation to the linkage to climate change. The current level of disclosure regarding how remuneration is determined and the specific mechanisms by which it incentivises progress against climate targets is insufficient.

Enhancing transparency and providing clearer information on the evaluation process, the weight given to climate-related factors, and the overall alignment of remuneration with climate objectives are crucial steps for J-POWER. These measures will contribute to improved accountability, increased investor confidence, and a demonstration of the Company's commitment to decarbonisation. This perspective aligns with the IIGCC Global Sector Strategies, which emphasises the importance of comprehensive disclosure in remuneration policies to incentivise progress toward greenhouse gas emissions reduction targets.

Furthermore, the Company's categorisation of "Response to Climate Change" as one among several evaluation indices dilutes the necessary focus on climate-related matters. To drive meaningful progress, it is imperative for J-POWER to establish a clear and quantifiable climate-related metric that can effectively guide decision-making.

While the increase in performance-linked compensation to 20% of total recompense may be perceived as a positive step, the absence of a stronger link to climate objectives raises uncertainties regarding its impact on fostering climate-focused leadership. J-POWER should strive for greater transparency by providing detailed breakdowns of how non-financial evaluations are conducted and weighted in relation to non-financial performance.

Aligning short- and medium-term compensation incentives with the strategic objective of achieving the Company's emissions reduction targets is paramount to protecting corporate value and facilitating a successful transition to a sustainable future. Active engagement from investors is crucial in advocating for improved clarity in the evaluation process and advocating for stronger ties between leadership remuneration and tangible climate action.

To preserve management discretion, however, the proposal only calls for disclosure of how J-POWER's remuneration policies will incentivise progress against its GHG emissions reduction targets.

DIRECTOR RESPONSIBILITY

Case for support

The conduct of J-POWER's board, notably its response to critical shareholder votes at the 2022 AGM, suggests a lapse in essential corporate governance practices. A substantially similar resolution in 2022, which called for stricter emissions targets for J-POWER, secured the support of 26% of shareholders[31]. Given the lack of a sufficient response to this vote and the significant risks to the long-term value of the Company of J-POWER's current climate plan, each member of the co-engagement group has this year individually indicated their intent to vote against Representative Director Hitoshi Kanno, who holds responsibility for J-POWER's decarbonisation strategy.

As the direct architect of the Company's decarbonisation plan, 'Blue Mission 2050', Director Kanno appears to fall short in managing various risks that pose significant threats to shareholder value. This is evident from the Company's sustained unresponsiveness to shareholder concerns over two AGM cycles, despite numerous direct engagements with Director Kanno.

The ability to engage effectively with significant shareholder concerns has not been demonstrated by the board. A pattern of deficient climate competency across the board also seems to limit the development and implementation of a robust and credible decarbonisation strategy[32]. This shortcoming further questions Director Kanno's capacity to manage climate-related risks effectively.

Given these observations, the co-engaging shareholder group finds it challenging to express confidence in Director Kanno's ability to navigate the complexities of climate-related risks effectively. This concern underpins the case for investors to reconsider supporting Director Kanno, with the aim of catalysing stronger climate action and risk management in J-POWER.

[29] The Institutional Investors Group on Climate Change (IIGCC), Global Sector Strategies: Invest interventions to accelerate net zero electric utilities, October 2021, link.

[30] J-POWER, Notice Concerning the Partial Change in the Performance-linked Compensation, 28 February 2023, link.

[31] ACCR, Strong call by J-POWER shareholders to strengthen decarbonisation strategy, 28 June 2022, link.

[32] J-POWER, Integrated Report, 2022, link. See Skill Matrix, p.80. Note that Climate change competencies are not included in this skills matrix.

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