Coal divestment: AES’ Muong Dong 2 deal with Sev.en

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Public-to-private transactions that shift fossil assets into private hands and potentially reduce transparency and emission/transition accountability are a troubling theme in global finance and pose important questions around fixed income investors’ role as providers of capital.

This report offers insights into a public-private transaction involving a thermal coal plant in Vietnam. The proposed deal sees AES, a publicly traded US company, sell its 51% stake in the 1.2GW Mong Duong 2 (MD2) plant to Sev.en, a private and opaque Czech investment company that exhibits concentrated ownership, low climate ambitions, and a growth strategy emphasizing fossil fuel assets unpopular with public owners.

Important issues arise regarding emissions disclosure, change of control protections in bond documentation, and the role of ESG-focused sellers of such assets. For companies selling fossil assets, the divestment process should be conducted diligently so that investors have confidence regarding the buyer’s future environmental stewardship. AES is yet to make this case; accordingly, with the transaction still pending, we suggest relevant questions for sustainability-focused investors across AES’ USD30bn in bonds.

- AES has significantly advanced its decarbonization strategy by prioritizing renewable expansion and coal generation reduction over the past eight years. However, divesting coal assets like MD2 to a private entity with a fossil fuel-oriented strategy would likely fail to promote responsible phase-out or phase-down and does not enhance energy efficiency, contradicting this decarbonization strategy. In absolute terms, divestment is not a sufficient strategy for climate outcomes.

- Our analysis of the disclosure practices of AES, MD2, and Sev.en underscores the lack of transparency within Sev.en’s financial and environmental reporting. Additionally, Sev.en’s concentrated private ownership structure limits the avenues for engagement to discuss and implement emissions improvements at MD2.

- MD2’s outstanding project-level debt (MONDFI 5.125% July 2029) includes Change of Control (CoC) language. However, the ‘Qualified Transferee’ carve-out excludes consideration of emissions or other sustainability-related factors. The purely financial focus of such protections is a shortcoming in current market practice. Best practice CoC clauses for relevant issuers should include environmental stewardship.

- Bondholders in Posco, a co-sponsor of the project, and those in the Vietnamese sovereign are connected to the transaction in that these entities must approve the new owner. We suggest engagement opportunities for these bondholders.
Deal overview

AES Corporation (AES), an American utility and power generation company, announced in November 2023 a conditional agreement to divest its majority (51%) stake in Vietnam’s Mong Duong 2 (MD2) coal-fired power plant\(^1\), in alignment with its global strategy to shed coal assets by the end of 2025.

The buyer is Sev.en Global Investments (Sev.en GI), the financial arm of Sev.en Group, a private Czech energy firm owned by billionaire Pavel Tykac.\(^2,3\) The vehicle lacks transparency, but has been very active in acquiring coal assets globally,\(^4\) with MD2 marking its maiden Asian acquisition. It has ambitions to grow its portfolio further with public-private transactions a stated area of focus.\(^5\) Sev.en notes that it “often find[s] opportunities in areas where institutional investors no longer show interest due to their ESG constraints, but which are still vital for our economies”\(^6\). (For full details please see Appendix: Buyer: Sev.en Global Investments).

Figure 1. MD2 Asset Structure. Source: AES, AFII.

Note: The BOT (build-operate-transfer) project benefits from Government Guarantee and Undertaking (GGU) from the Government of Vietnam.

The transaction is expected to close in late 2025, subject to the required approval from the Government of Vietnam and the remaining minority partners in the coal plant.\(^7\) The sale price was not disclosed. However, analysis of AES’ 2023 annual report suggests the deal valued MD2 at $396mm.\(^8\) As detailed in the Appendix, an estimated P/E multiple for the MD2 acquisition stands at

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\(^1\) While AES is withdrawing from its coal-fired power business in Vietnam, the firm is increasing LNG-fired power activity through a joint venture between AES Corporation and Petrovietnam.


\(^3\) “AES Announces Sale of Mong Duong 2 Plant in Vietnam in Next Decarbonization Milestone”, AES, 30 Nov 2023.

\(^4\) “Sev.en Global Investments Sees Opportunity Where Others Do Not” 7 Feb 2024.


\(^6\) “Sev.en Global Investments” / Who we are, accessed 18 Mar 2024.

\(^7\) “AES 2023 10-K annual report”, AES, pg 34.

\(^8\) In its 2023 10-K, AES reports a carrying value of $413mm for MD2 at end-2023, or $396mm on a consolidated net asset basis (p. 182). It was impaired by $167mm that year. While not explicitly stated, AES’ annual report suggests that the new 2023 carrying value reflects the agreed sale price. Specifically, it states “The carrying amount of Mong Duong exceeded the agreed-upon sales price, and as a result, the Company recognized pre—tax impairment” (p. 176). These values reflect 100% of MD2, per US GAAP for controlled entities.
6.3x, and as low as 4.5x if earnings recover to 2021 levels. This implies that Sev.en could earn an unlevered 16-22% annual after-tax return on its investment.

Sources have reported that South Korea’s energy firm Posco Energy (Posco), which owns 30% of the plant, is considering selling. Additionally, the sovereign wealth fund China Investment Corporation (CIC), which owns the remaining 19%, is reported to be contemplating selling under the terms agreed upon by AES with potential buyers.⁹

The AES-Sev.en agreement follows earlier attempts by MD2’s largest owners to exit their holdings. In late 2020, AES signed an agreement to sell its 51% to an undisclosed U.S.-led consortium, at an undisclosed price. Reports later in 2021 suggested that Posco had agreed a sale of its stake that valued MD2 at over $600mm.¹⁰ Neither of these transactions ultimately took place, for undisclosed reasons.¹¹

AES’ decarbonization strategy

AES invests in and develops regulated utilities and power-generating assets and is listed in the US with a $10.6bn market capitalisation. Its strategy emphasizes its green ambitions, including a commitment to fully retire, sell, or convert its coal portfolio by the year 2025, and to increase its renewable generation capacity to 79% of its total by 2027.¹²

Notably, the MD2 plant is AES’ second-largest generation facility globally, behind a Brazilian hydro station. MD2 represents 17% of group coal capacity, and 8% of group emissions.¹³ The strategy for MD2 is therefore notable for the climate and decarbonization strategy of AES and its stakeholders. Of note, AES’ coal strategy involves monetizing existing PPA value and attempting to capitalise on infrastructure to repurpose coal sites.

As shown in Figure 2, the group has made significant and positive progress in orienting towards a decarbonization strategy, with a focus on expanding renewables and reducing coal generation over the past eight years.

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¹¹ Ibid.
¹³ “2023 Investor Day”, AES, 8 May 2023, slide 125. 8% share of AES group emissions reflects 51% of MD2 emissions, per AES ownership stake. Refer Table 3 in Appendix for details.
Divestment of coal assets – a credible decarbonization strategy?

Since 2017, AES has announced the divestment or retirement of almost 13.1 GW of coal generation. As of September 2023, AES intends to exit 6.8 GW of remaining coal capacity by 2025, of which 38% is expected to be retired or converted, while 18% is to be divested.\(^\text{14}\)

AES is targeting a carbon intensity reduction for its portfolio that aligns with a well below 2°C scenario by 2030, set at 0.16 \(\text{t CO}_2\text{e/MWh}\) for power generation, down from a 2016 baseline of 0.67 \(\text{t CO}_2\text{e/MWh}\) (as shown in Figure 3).

Divesting MD2 could appear to improve AES’ green credentials on paper as it reduces total emissions by 8% and lowers emission intensity to 0.49 \(\text{t CO}_2\text{e/MWh}\), marking a 3.4% decrease from 2022 levels. (For full details please see Appendix).

Typically, where coal assets are divested, it is important to consider the potential need for a baseline restatement for target emissions.\(^\text{15}\) In this specific case of MD2, the impact on emission intensity appears to be relatively modest, indicating that such a restatement is not critical. However, the question of baseline restatement is potentially relevant for AES’ wider coal divestment program.

Targets aside, divesting MD2 to Sev.en, a less accountable private entity that appears to have limited climate ambition, little incentive to invest in emissions reduction technology or early closures and is aggressively expanding its coal business\(^\text{16}\), raises concerns. Under the new owner, the plant will continue to operate and still emit around 6.4mm tons of \(\text{CO}_2\) annually (as shown in Figure 6). Emissions may further increase if the plant operates at higher capacity\(^\text{17,18}\) to meet rising electricity demand in Vietnam.\(^\text{19}\)

Therefore, for companies selling fossil assets, a best-practice divestment process should incorporate diligence and potentially undertakings that give stakeholders assurance regarding the asset’s future environmental performance. While this may create a tension with short-term economic value (i.e., the sale price of an asset), given that the pool of buyers committed to

\(^{14}\) “Investor Presentation”, AES, September 2023  
\(^{16}\) “Selling Coal Plants Pays No Climate Dividends”, Europe Beyond Coal, Mar 2020  
\(^{17}\) The average net capacity factor is 71.5% as at April 2022. “Fitch Affirms Vietnam-Based Mong Duong 2’s Notes at ’BB’; Outlook Positive”, Fitch Ratings, 9 Aug 2023.  
\(^{18}\) MD 2 has seen elevated capacity factor above 80% on the back of strong electricity demand in Vietnam and reduced hydropower supply. “Fitch Affirms Vietnam-Based Mong Duong 2’s Notes at ’BB’; Outlook Stable”, Fitch Ratings, 2 Sep 2020.  
sustainable practices is smaller, it can be critical for alignment with a seller’s broader climate and transition strategy, and with relevant investor frameworks.\textsuperscript{20}

The potential impact of the MD2 sale to Sev.en

Privately held companies like Sev.en are estimated in a recent LSEG study to account for over a third of high-carbon debt,\textsuperscript{21} and are “are often subject to much less scrutiny when it comes to reducing emissions and aligning with the Paris climate goals”.\textsuperscript{22} This gap is reflected in the seeming arbitrage in cost of capital that many buyers in public-private transactions in high emission sectors arguably seek to exploit.

Of note, Sev.en has been criticized in the past for its opacity and approach to fossil fuel investments in Europe, including reportedly lobbying to extend the lives of high-emitting assets.\textsuperscript{23} Related to this, we discuss below two explicit areas of concern related to the MD2 transaction. First, the prospect of reduced climate-relevant disclosure, and second, reduced scope for investor and stakeholder engagement regarding MD2.

A reduction in disclosure

Our analysis of the disclosure practices of AES, MD2,\textsuperscript{24} Sev.en Group, and Sev.en GI (see Table 1 below) highlights relevant gaps in transparency in financial and environmental reporting.

It is not entirely clear what the organizational boundaries of the varying Sev.en entities are. Based on available information, we understand ‘Sev.en Group’ to include its Czech and some of its European operations.\textsuperscript{25} At this group level, a sustainability report has been published annually since 2020. However, there is no record of financial and sustainability reporting for its financial arm, Sev.en GI, which is actively acquiring coal assets globally, including MD2 (for full details please see Appendix).

Hence, the sale of AES’ 51% stake in MD2 to Sev.en GI, potentially followed by the divestment of remaining stakes by Posco and CIC, suggests a potential reduction in public disclosure of MD2’s emissions. However, with the EU’s Corporate Sustainability Reporting Directive (CSRD) extending reporting requirements to more businesses, including private entities like Sev.en, improved disclosure in the future is plausible.\textsuperscript{26}

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\textsuperscript{21} “Tracing carbon-intensive debt”, LSEG, March 2024.
\textsuperscript{22} “A $3.2 Trillion Refinancing Wall Looms for High-Carbon Issuers”, Bloomberg, 21 Mar 2024.
\textsuperscript{23} “How is Sev.en Energy becoming a climate change villain at an accelerated speed”, Greenpeace, 2 Nov 2020.
\textsuperscript{24} MD2 referred here is AES-VCM Mong Duong Power Company Limited (MDP), a limited liability company formed by the shareholders of the AES Corporation (USA), Posco Energy (Korea) and China Investment Corporation (China).
\textsuperscript{26} “Why private businesses shouldn’t see ESG reporting as a burden – but an opportunity”, PWC, 3 Jan 2023.
Sev.en GI’s fossil fuel-oriented business strategy

Furthermore, analysis of Sev.en Group and Sev.en GI indicates that it lacks a comparable record of environmental or climate performance and targets relative to a public company like AES.27

This is evident in the contrasting strategies pursued by AES and Sev.en GI. While AES has committed to achieving net zero carbon emissions for its entire business portfolio by 2050, Sev.en GI has taken a different approach by making multiple acquisitions in coal-related industries, including the agreement to purchase MD2 (please see Appendix). Sev.en Group’s 171% increase in total Scope 1 emissions from 2018 to 2022 indicates a lack of long-term environmental targets for emission reduction.

This raises concerns that Sev.en GI’s business strategy of consistently operating and acquiring coal is at odds with a commitment to sustainability and environmental responsibility (as shown in Table 2).

Concentrated private ownership structure

Additionally, Sev.en GI and its affiliated group have a highly concentrated ownership structure.

“Pavel Tykac, its sole ultimate beneficiary, is an independent investor willing and able to support the Group’s further growth…. The owner expressed his long-term approach of continuous investment into the assets that had been acquired”.28

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This structure limits public oversight and external influence. This could hinder efforts to hold the company accountable for its environmental impact, and/or encourage transparency and responsible practices.

Overall, Sev.en’s opaque disclosure practices, fossil fuel-centric business model lacking climate ambition, and privately-owned structure constrain engagement opportunities with the company. Therefore, navigating discussions and implementing emission improvements at its MD2 plant or other coal-related assets may prove challenging.

**Mong Duong 2 – debt structure**

MD2, operating since 2014-15, initially cost $2.1bn. It is structured as a build-operate-transfer (BOT) project. Under this model, a foreign investor provides the financing and builds the power generation project, operates it for a certain period, and then transfers ownership to the Vietnamese government. The BOT contract benefits from a 25-year power purchase agreement (PPA) with state-owned Vietnam Electricity (E VN, BB/Positive) until 2040, and coal supply agreement with Vinacomin, a Vietnamese coal miner, at a regulated price.

Obligations under each of these contracts benefit from a government guarantee, which underpins MD2’s credit profile. The power plant will be transferred to the government after 25 years of operations, in 2040. We acknowledge that this return to state ownership towards the end of the plant’s life provides some mitigation of climate risks arising from the public-private transaction.

MD2 is financed under a typical non-recourse project-finance model, the structure of which essentially relies on the project’s own cash flow for debt repayment. In 2019 existing debt facilities were refinanced in part through the issuance of the $678mm amortising MONDFI 5.125% July 2029 (ISIN: USN6000DA11), which is currently indicated at z+290bps.

**Change of control – upside to 101, but unlikely**

This bond has Change of Control (CoC) language, requiring the issuer to repurchase at 101 (plus accrued; compared to a current trading price around 95.5) but only for a qualifying transaction that is also accompanied by a rating downgrade. Transfer of ownership to entities which meet the criteria of a ‘Qualified Transferee’ would not result in a change of control event, even with a rating downgrade.

The terms of the notes define a ‘Qualified Transferee’ as a controlled affiliate of the existing shareholders, or any other entity that has both (1) tangible net worth of at least $300 million or ratings of Ba1 / BB+ or better by Moody’s, S&P, or Fitch, and (2) has at least 600MW of fossil fuel electric generation facilities of which no less than 300MW is coal fired. These criteria relate to

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30 “Bot projects--the path to closure in Vietnam”, Lexology, 6 May 2020.
33 “The AES Corporation Fiscal Year 2019 10—K”, AES, 2020.This bond was part of a total USD1.12bn issued in 2019.
34 In any case Fitch announced in December that the potential ownership change to Sev.en had no short-term implications for the rating. See “Mong Duong’s Note Ratings Unaffected by Ownership Change in Near Term”, Fitch, 5 Dec 2023.
operating experience and financial strength, and Sev.en has ‘represented to AES’ that it meets them.\textsuperscript{35}

As is typical for the vanilla (i.e. non-labelled) bond market there are no criteria in the ‘Qualified Transferee’ language that relate to environmental stewardship, or other sustainability-related factors.

From the perspective of sustainability-oriented investors, the concerns outlined above relating to transparency and environmental stewardship make the purely financial focus of these CoC protections a shortcoming in current bond documentation, especially for high-emission sectors, green or sustainability-linked issues, and for issuers which are otherwise on a decarbonization path. To support effective decarbonisation, change of control clauses for relevant issuers such as MD2 should include environmental stewardship elements as best practice.

Role of AES bondholders

AES is a significant borrower in debt markets. Its capital structure includes USD16bn in bonds, of which USD3.5bn are green bonds, and a further ~USD15bn in non-recourse debt.

The sale of coal assets warrants close scrutiny from AES bondholders, particularly those who place significant importance on AES’ sustainability credentials, and/or those who have invested in its green bonds. We propose the following questions that investors may be inclined to ask the company.

Questions for AES

Based on the high-level disclosures made to date, the structure of this transaction appears relatively vanilla; it does not incorporate elements akin to Sembcorp’s financial engineering,\textsuperscript{36} for example.

However, at 6% of Vietnam’s emissions and 8% of AES’, MD2 is significant in the decarbonization and emission profiles of each. Further, there is a risk that under Sev.en’s ownership, public disclosure of the plant’s performance will be lost.

Bond investors do not appear to be financing Sev.en’s purchase of the plant, which limits any engagement opportunity with this party. However, for sustainability-focused bondholders in AES, we suggest the following questions:

\begin{itemize}
\item Are any non-financial criteria considered in assessing the fitness of the buyer, for this or other assets being sold in the coal exit strategy?
\item Does a similar ‘Qualified Transferee’ test apply to debt supporting Natural Gas assets that AES is developing currently? Would AES consider adding environmental stewardship criteria to such borrowings in future, to ensure greater alignment with its broader climate objectives?
\end{itemize}

\textsuperscript{35} “Updates on the sale of Mong Duong 2 Power Plant in Vietnam”, Singapore stock exchange release, Mong Duong Finance Holdings B.V., 30 Nov 2023.

\textsuperscript{36} Sembcorp provided vendor financing to support the sale of a large Indian coal plant which closed in 2023, thus shifting emissions from operational exposure to financial exposure. See \url{here} for a list of AFII research on Sembcorp.
- In relation to AES’ intensity targets for carbon and other emissions, how are sales of coal assets treated? Is there an adjustment of target baselines for such divestments?

Questions for other involved issuers

Bondholders at Posco, which has USD4.5bn in USD bonds outstanding, and/or the Vietnamese sovereign ($1.4bn hard currency bonds; $100.4bn total\textsuperscript{37}), are connected to the transaction in that both Posco and Vietnam have to approve the new owner.\textsuperscript{38} Relevant questions for these bondholders include:

- Are there any changes expected to operational plans/ emission targets at MD2 under the proposed new ownership?
- Has Sev.en provided any assurance regarding future emissions management and reporting for MD2?
- Will Sev.en / Mong Duong continue to publish its sustainability report?

Conclusions

Against a backdrop of large volumes of public-private transactions in high emissions sectors globally, this report provides a case study of one such transaction in Asia – the sale by US-listed AES of a 51% stake in MD2, a Vietnamese thermal coal plant, to Sev.en GI, a private Czech investment company.

The current sustainability landscape is pushing companies like AES to decarbonize. However, divesting a coal asset like MD2 to Sev.en GI, a private entity with a fossil fuel-oriented strategy, fails to promote responsible phase-out or phase-down and arguably is misaligned with AES’ ambitious broader climate strategy.

The opacity of Sev.en’s financial and environmental reporting coupled with its concentrated private ownership structure limits the avenues for investor engagement on potential emissions improvements at MD2 or other coal assets after the sale.

For companies selling fossil assets, a best practice divestment process would incorporate sustainability-focused diligence and potentially undertakings that give stakeholders assurance regarding the asset’s future environmental performance.

An analysis of MD2’s outstanding project-level debt (MONDFI 5.125% July 2029) reveals a purely financial focus in its Change of Control protections. The evidence in this transaction suggests that best practice CoC clauses for relevant issuers should include environmental stewardship.

Accordingly, with the transaction still pending, we have suggested relevant questions across these areas for sustainability-focused bondholders in AES’ USD30bn in bonds. Similarly, we suggest questions relevant to bondholders in Posco, a co-owner of the thermal plant, and those in the Vietnamese sovereign, as completion of the deal is conditional on approval from both parties.

\textsuperscript{37} Source: Bloomberg. Total including local currency debt, and loans, is $100.4bn at 18 Mar 2024.

\textsuperscript{38} “AES 2023 10-K annual report”, AES, p. 34.
Appendix

Context: public-private transactions in the fossil fuel sector

Asia is a critical engine of global growth, supported by population and development dynamics. Its growth is carbon-intensive, reflecting a reliance on coal for power generation, a situation that may persist beyond 2040 in non-OECD Asian countries. At the same time, financing availability for coal is reducing, especially in public markets. As we have detailed in earlier research, this backdrop fuels a strong incentive for public-to-private transactions in the Asian coal sector. The stark example of Sembcorp – which provided vendor financing to support the sale of a large Indian coal plant, thus merely shifting emissions from Scope 1 to 3 – highlights the potential for carbon arbitrage through the use of complex financial structures.

The volumes of public-private transactions in Asia, both in the coal and other high-emitting sectors, appear material. Transaction values are not often fully disclosed, however. AFII plans to research this area in the future. Globally, focusing solely on buyers from the private equity sector, an estimated $60bn in deals were recorded in 2020-21.

In these public-private transactions, fixed income investors often have opportunities to engage with the buyers, sellers, and banks therein. This reflects, among other factors, the fact that for many private buyers there is typically no scope for engagement by equity investors. Furthermore, equity accounts for a small share of fundraising for the fossil fuel sector globally – estimated to be as low as 10%, less than half that provided by bonds.

Buyer: Sev.en Global Investments – private company

In the Czech Republic, Sev.en Česká energie (the Group) is the largest privately owned power generation group. Its international investment arm, Sev.en Global Investments a.s. (Sev.en GI), owns generators and coal mines in Australia, the United Kingdom and the United States. They describe themselves as a long-term investor, managing approximately EUR 2,350mm of equity value, with expertise in the management of power generation and mining assets.

Our analysis has been unable to identify any significant debt (bond or loan) facilities at Sev.en GI, and reported comments from owner Pavel Tykac suggest it focuses on financing acquisitions through equity. That said, acquisition-related debt financing is still a likely feature to some extent, even if on a shorter-term (bridge) basis, and there are sizable debt instruments at certain

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39 “Coal power, mining and finance are still obstacles to net-zero”, S&P, 9 Jan 2024.
40 “APAC coal divestments: debt investors hold the key”, AFII, 6 June 2023.
41 See here for a list of AFII research on Sembcorp.
43 For private equity buyers, there are useful engagement routes for Limited Partners. See “Private Eyes Wide Shut: Private Equity Investments in Oil and Gas at Risk from Energy Transition”, Carbon Tracker, 25 Jan 2024.
44 Cojoianu et. al., Does the fossil fuel divestment movement impact new oil and gas fundraising? Journal of Economic Geography, Volume 21, Issue 1, January 2021, p. 141–164, “Bank loans were the preferred means of fundraising for the oil and gas sector (c. 64% of total fundraising over the 2000–2015 period), followed by bonds (26%) and equities (10%)”
46 “Investor Tykac looks for more acquisitions in U.S., Australia”, Reuters, 10 May 2023.
acquired entities such as Coronado (see below).\(^47\)

As of December 2022, the company mines 11mm tons of coal per annum. It also controls 2.2bn tons in proven reserves of metallurgical and thermal coal, as well as installed coal-based generation capacity of 3,090 megawatts.

Based on our analysis of the Group’s sustainability report,\(^48\) there are no clear or tangible net-zero or environmental targets set. In addition, the Group’s Scope 1 emissions have increased by 171% from 2018 to 2022.

“To some degree, we are an opportunistic investor, unlike a large corporation that sets unattainable targets to fund projects or service debt,” a Sev.en GI’s CEO said in a recent media interview.\(^49\)

| Date       | Deal/Acquisition details                                                                 | Public/Private | Equity Stakes | Asset Region | Coal Assets?
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<tbody>
<tr>
<td>March 2024</td>
<td><strong>InterGen.</strong> Acquired gas-fired power generation business.</td>
<td>Private</td>
<td>100%</td>
<td>United Kingdom</td>
<td>No</td>
</tr>
<tr>
<td>Dec 2023*</td>
<td><strong>AES.</strong> Has signed an agreement to acquire a majority stake of super-critical coal fired power plant MD2</td>
<td>Public</td>
<td>51%</td>
<td>Vietnam</td>
<td>Yes</td>
</tr>
<tr>
<td>Sept 2023</td>
<td><strong>Coronado Global Resources from the Energy &amp; Minerals Group.</strong> This company is engaged in the production and sale of metallurgical and thermal coal.</td>
<td>Public</td>
<td>51%</td>
<td>Australia</td>
<td>Yes</td>
</tr>
<tr>
<td>Dec 2022</td>
<td><strong>Delta Electricity.</strong> Acquired Delta Electricity Pty Ltd which owns and operates the coal-fired Vales Point</td>
<td>Private</td>
<td>100%</td>
<td>Australia</td>
<td>Yes</td>
</tr>
<tr>
<td>August 2021</td>
<td><strong>Golden Eagle Land</strong> with mining rights to more than 2 billion tonnes of coal reserves.</td>
<td>n.a</td>
<td>n.a</td>
<td>United States</td>
<td>Yes</td>
</tr>
<tr>
<td>June 2020</td>
<td><strong>Blackhawk Mining</strong> with annual coal production of around 9 million tonnes</td>
<td>Private</td>
<td>100%</td>
<td>United States</td>
<td>Yes</td>
</tr>
</tbody>
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\(^{47}\) For example, CRNAU $242mm 10.75% 2026, and $550mm 2025 Term Loan B.

\(^{48}\) “2022 Sustainability Report”, Sev.en Česká energie, pg 32.

\(^{49}\) “Sev.en Global Investments Sees Opportunity Where Others Do Not” 7 Feb 2024.
Corporate structure of Sev.en Group and Sev.en GI

Figure 4: Sev.en Group key corporate structure. Source: Sev.en Group.

Note: Based on our analysis Sev.en Group is frequently referred to as Sev.en Česká energie, Sev.en AG, Sev.en Energy AG, and Sev.en Energy Group.

Figure 5: Sev.en Global Investments key corporate structure. Source: Sev.en GI.
AES and MD2 carbon emissions calculation

Table 3. AES and MD2 carbon emissions calculation. Source: AES, MD2, AFII.

<table>
<thead>
<tr>
<th>MT CO2</th>
<th>AES</th>
<th>MD2</th>
<th>51% Equity Stake of MD2</th>
<th>AES after the sale of 51% MD2</th>
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</thead>
<tbody>
<tr>
<td>MWh</td>
<td>40,011,000</td>
<td>6,385,515</td>
<td>3,256,613</td>
<td>36,754,387</td>
</tr>
<tr>
<td>Emissions Intensity (MT/MWh)</td>
<td>0.51</td>
<td>0.85</td>
<td>0.85</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Note: This table is calculated using the GHG Protocol Equity Approach and estimated based on AES’ disclosed emissions.

Figure 6: MD2 carbon emissions. Source: AES.

Acquisition multiples of Mong Duong 2

In terms of acquisition multiple, MD2’s pre-tax earnings attributable to AES (51% stake) were $40mm in 2023, down from $50-56mm in the previous two years. This implies pre-tax earnings across the period of $78-110mm for MD2 in its entirety. Assuming MD2 was indeed sold at a $396mm valuation, being its impaired 2023 value in AES’ accounts (refer page 2), this implies a transaction multiple of 5.0x 2023 pre-tax earnings.

A further assumption of a 20% Vietnamese corporate tax rate50 implies a P/E (price/earnings) multiple of 6.3x 2023. Based on these assumptions, Sev.en stands to earn a 16% unlevered after-tax earnings yield on its investment, one that could rise potentially as high as 22% should earnings recover to 2021 levels.

Table 4 shows that, by applying firm-level relativities for other income statement items, a crude estimate of EBITDA at MD2 in recent years ranges from USD140-196mm. This implies a very approximate EV (enterprise value) to EBITDA multiple for MD2 of 7.4x 2023, or 5.3x 2021.

While comparable transaction multiples for generation assets are difficult to source\(^51\), these multiples are notably much lower than the current 13.6x EV/EBITDA for the broader Vietnamese equity market, and the 10.1x for the Asia-Pacific utility sector,\(^52\) and lower than respective P/E ratios of 14.9x and 8.0x. Of course, this relatively lower multiple is expected for a thermal plant.

### Table 4: Estimated Acquisition Multiples of MD2 (2021-2023). Source: AFII, AES.

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
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<tbody>
<tr>
<td><strong>AES</strong></td>
<td></td>
<td></td>
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<tr>
<td>Adjusted EBITDA ^</td>
<td>2,931</td>
<td>2,812</td>
<td></td>
</tr>
<tr>
<td>Adjusted PTC (pre-tax contribution) ^</td>
<td>1,567</td>
<td>1,658</td>
<td></td>
</tr>
<tr>
<td>EBITDA/PTC (A)</td>
<td>1.87</td>
<td>1.70</td>
<td></td>
</tr>
<tr>
<td><strong>Mong-Duong 2 (values reflect 100% of business unless stated)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-tax earnings attributable to AES (51% holding) ^</td>
<td>56</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Implied pre-tax earnings (100% of MD2) (B)</td>
<td>110</td>
<td>98</td>
<td>78</td>
</tr>
<tr>
<td>Estimated EBITDA (A x B using 2-year average for A)</td>
<td>196</td>
<td>175</td>
<td>140</td>
</tr>
<tr>
<td><strong>Asset ‘Carrying Value’ ^</strong></td>
<td>575</td>
<td>575</td>
<td>413</td>
</tr>
<tr>
<td>Net assets ^</td>
<td>396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt ^</td>
<td>639</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enterprise value (debt + net assets; assume zero cash)</td>
<td>1,035</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Estimated transaction valuation multiples</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity value / pre-tax earnings</td>
<td>3.6 x</td>
<td>4.0 x</td>
<td>5.0 x</td>
</tr>
<tr>
<td>EV / EBITDA</td>
<td>5.3 x</td>
<td>5.9 x</td>
<td>7.4 x</td>
</tr>
<tr>
<td>P/E (Price / Earnings - after-tax, assuming 20% corporate tax rate)</td>
<td>4.5 x</td>
<td>5.0 x</td>
<td>6.3 x</td>
</tr>
<tr>
<td>After-tax earnings yield (Earnings / Price)</td>
<td>22.2%</td>
<td>19.8%</td>
<td>15.8%</td>
</tr>
</tbody>
</table>

* Values from AES 2023 10-K annual report.

\(^51\) A search via Bloomberg (MA) identifies 254 M&A transactions in the Asian utility sector since Jan-2023; of these, only one incorporates data on the EV/EBITDA multiple. A longer-dated search to 2019 finds a median transaction EV/EBITDA of 6.7x, and an average of 16.9x.

\(^52\) Source: Bloomberg, Trailing EV/EBITDA for MSCI Vietnam, and MSCI All Country Asia Pacific Utility Index.
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