

Finance Tackles Asian Utility Emissions

A report from the Preventable Surprises dialogue, March 2018

As befits a 24-hour-a-day industry that soils the air with around-the-clock emissions, our online dialogue on Asian utilities never slept. The Australians kicked us off each morning while the Californians got the final word each day. In all 31 participants from Australia, Japan, Republic of Korea, China, Singapore, India, UK, Germany, Denmark and the United States took part, representing the investor community, think tanks, NGOs, science, and law.

The dialogue structure included two days of topic-driven discussion, organised into seven threads. The third day offered an opportunity to put forward suggestions of projects for collaborative action. Most of the interaction occurred on the first two days, however participants showed interest in pursuing joint initiatives in the post-event survey.

A high-level summary of the dialogue is provided in the event infographic produced by Convetit, the online platform we used for the dialogue (also attached). While the infographic offers snapshots from each discussion thread, this report synthesizes the rich discussion over three days into four themes. Following the executive summary, each theme is explored in more detail.

Executive summary and recommendations

1. Developing effective narratives for different stakeholders

'The key to pushing action on climate change by Asian utilities is tackling issues besides climate change. Why? Because climate change, as an issue, is not front and center in Asia in the public debate. Thus, it does not inform the local politics, and by extension, local policies.'

The loudest message from the dialogue was that demands about climate change and Paris commitments are not particularly effective in an Asian context, where awareness of climate change is low, despite its potentially devastating impact. Participants rated as more effective speaking about specific environmental impacts – air pollution, water scarcity, sea level rise, ecological harmony – and about commercial opportunities from new technologies.

Recommendations for investors and others

- Consider which argument will have most traction with your audience. Use local knowledge to develop a framing that puts urgency into your arguments.
- Focus on opportunity as well as risk.
- When discussing stranded assets, understand the dynamics of the regulated market and be aware of any signs of change.

2. Finding leverage points to use with investors

'To permanently change the behaviour of Asian utilities regarding climate change, we must take an ecosystem mindset, working on policy, influencers, and champions within each company to induce change.'

As with framing a narrative, an oblique approach may also be needed, although forceful stewardship is in early stages. Collaboration is key, but needs to not be 'lowest common denominator.'

Recommendations for investors

- Be aware of local reporting requirements but also encourage utility companies to report using a clear progression path to addressing impact on the environment and transition pathways.
- Engage with investee companies on the opportunities arising from the energy transition.
- Avoid buying bonds that finance new coal capacity.
- Collaborate on engagement, respecting local knowledge and perspectives.
- Make use of fossil fuel free indices where possible.
- Use expansive definition of fiduciary duty.

3. Zeroing in on the role of new-coal financiers

'Are investors and banks addressing the issue of new coal? Not really. While many Western investors acknowledge the urgency of decarbonizing energy production, this does not stop them from buying bonds of companies like China's State Power Investment Corporation or India's National Thermal Power Corporation. Together, these two companies are planning to build a coal plant fleet as large as Germany's. Investors who are concerned about climate change need to "walk the talk" and stop investing in these and other coal plant developers.'

There was a sharp focus on the role of banks, both Eastern and Western, funding coal plants that they would not fund in their own country. Investors in banks need to be much more forceful in calling out this hypocrisy.

Recommendations for the finance sector

- Shareholders in banks that are continuing to fund coal plants anywhere in the world should exercise forceful stewardship with the threat of divestment if action is not taken.
- Shareholders should request banks share a plan for transitioning out of financing coal and into financing renewables in low-income countries.
- Fossil fuel campaigners should coordinate between East and West to ensure that Asian banks do not simply replace Western banks in financing coal development.
- Fossil fuel campaigners should look at the broad spectrum of coal financing.

4. Coal Country: Japan

'We believe energy policy in China, India, Korea may be at a turning point, but that Japan is a key blockage and its impact through funding in other emerging Asian nations is profound. It is imperative global investors demand that corporate Japan, which has no long-term interest in coal but substantial interest in the renewables revolution, stand up and deploy their political capital on the issue.'

There are different political currents in Japan's energy policy, however there is a high risk that Japan will be slow to make the energy transition, which will damage both the Japanese economy and the planet. Investors have an interest in accelerating the country's energy transition.

Recommendations for finance

- In any engagement with Japanese companies, investors should be asking them to influence the Japanese Government's energy policy.
- Senior investment professionals should collaborate on roundtable discussions with METI about the opportunities for Japan in the energy transition.
- Investors in Japanese power companies should encourage the sector to prepare transition plans under a number of assumptions about Japanese government policy.

1. Developing Effective Narratives for Different Stakeholders

'The key to pushing action on climate change by Asian utilities is tackling issues besides climate change. Why? Because climate change, as an issue, is not front and center in Asia in the public debate. Thus, it does not inform the local politics, and by extension, local policies.

'Instead the issues that do inform local politics are air pollution, water pollution/scarcity, government regulation and public opinion (where it is appropriate). Look at Singapore - modern developed city-state but arch-conservative on climate. But 2015 haze issue was a game changer, and that same year, <u>banks were compelled</u> to incorporate ESG into lending criteria.'

The strongest message from the dialogue was the paradoxical one, that addressing climate change head-on was counterproductive in Asia. This, despite the dialogue opening with stark warnings about the impact that climate change would have on Asia:

- 'Asia is, on a number of dimensions, the region most at risk from climate change. Between 1996 and 2015 six of the countries most affected (loss of life and economic losses) by extreme weather events were in Asia.'
- 'Asia's population is increasingly urbanised and coastal, making it particularly vulnerable to sea level rise (SLR) by 2100. IPCC estimates are 30 to 80cm of SL rise,

but more recent work adds considerable high-end uncertainty, especially on slightly longer timescales; it is worth noting that the last time in Earth history that CO2 concentrations were ~400 ppm, SL was 5-20 metres higher, giving some sense of the long-term challenge. Globally, sea level related flood losses are estimated at \$6 billion/year in 2005, rising to \$52 billion/year in 2050 (based on the modest 30-80 cm predictions). With 13 of the 20 most affected cities being in Asia, it will bear a disproportionate cost.'

- 'Cyclones caused an estimated loss of \$220 billion in the Asia Pacific region between 1980 and 2014. This equated to 30% of financial losses worldwide. In addition the region suffered 93% of cyclone-related mortality worldwide. Climate change-induced changes in cyclone intensity and location remain difficult to predict, but the region is bearing a disproportionate amount of the risk, increasingly the subject of scrutiny by insurers and investors.'
- 'A number of dimensions of climate change in the region are likely to be significant but hard to quantify. These include the impact on crop yields, glacier melt and river flooding, as well as the costs of adaptation, e.g. flood protection, resilience of supply chains, and adapting to increasing migration from hotter to less hot areas, or from rural to urban areas if crops fail, or agriculture becomes unviable. The Asian monsoon systems are some of the most important in the world, with respect to flooding hazard but also agriculture; again, this is a profound but difficult to constrain risk. I would also particularly flag the shared dependencies on annual glacier melt which is an essential source of drinking and agricultural water to several countries; these reservoirs are under considerable threat, exposing many people to resource depletion and conflict.'

Despite this litany of potential disasters, many participants made the point that framing the need for a rapid energy transition in terms of climate change and the Paris commitments would fail, for several reasons:

- Asians could well respond that they did not create the climate crisis and should not carry the burden of solving it – particularly while major Western nations were dragging their feet in responding.
- Development is a higher priority than tackling climate change, and the two things are seen as incompatible
- Even more than in the West, general public awareness of, and concern about, climate change as such is very low.

If climate change is not the effective narrative to drive change within utilities, the governments that steer them and the public at large, then what is? We heard many suggestions.

Sea level rise

Sea level rise is particularly hard to predict, and therefore has not featured as fully as some dialogue participants felt it should in the IPCC reports. The US National Oceanic and Atmospheric Administration's latest assessment is 2.5m rise by 2100, excluding storm intensity and surge impacts. This has a general impact on the economy, including for power plants:

- 'The potential impact on the Pearl River Delta which is responsible for 40% of Chinese exports, but which is less than 2 metres above sea level built upon a sinking delta and for which "hard" defences are apparently not considered to be feasible.'
- 'The costs for large Asia Pacific ports to elevate themselves to adapt to climate change range from US\$31 billion to US\$ 49 billion, according to a paper we produced commissioned by HSBC.'
- 'On top of the sea level rise there is also the potential for storm surges and Kong tides. The outcome is that we can potentially estimate the extent of mitigation that Asian utilities will need to implement just to control their risks to an acceptable level.'

Water scarcity

Water scarcity is rapidly rising in importance in climate discussions. Even without climate change, the expanding power sector would be facing water scarcity, given the amount of water needed to produce power.

- 'Yes by all means let us bring water into the discussion. The best source of information I know is China Water Risk http://chinawaterrisk.org/. The CEO Debrah Tan is an encyclopedia of insight.'
- 'From our (CDP) 2017 global water report: "Companies are becoming more aware that water can seriously impact the bottom line. This year, companies reporting to CDP disclosed water-related financial impacts of more than US\$14 billion a vast increase from the US\$2.6 billion reported last year...The Energy sector is particularly exposed to these impacts, with almost half (47%) reporting paying penalties or fines last year." 'http://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.r81.cf3.rackcdn.com/cms/reports/documents/000/001/306/original/CDP-Global-Water-Report-2016.pdf?1484156313
- "To put it in perspective, freshwater consumption from Indian thermal utilities grew by 43% from 2011-2016, from 1.5 to 2.1 billion cubic meters a year. During the same period coal thermal utility generation grew by 40%, a strong correlation. When energy starts competing with agriculture and domestic purposes for scarce water resources, I can see a strong social/ethical argument emerging."

Air pollution

Air pollution is a significant cause of premature deaths in China. India, though less talked about, is worse, with more <u>deaths</u> as well as the highest number of <u>cities</u> where air pollution consistently exceeds safe limits. Arguably, there are no Asian countries where air pollution is not a concern. While litigation on air pollution in Europe is based on failure to meet legal standards, cases have also been brought in India, Pakistan, Bangladesh and Nepal based on fundamental constitutional rights to health and a clean environment (*Mapping Climate Change and Air Pollution Litigation in the Asia Pacific Region, The Hon Justice Brian Preston*).

• 'Investors need to be wary about funding companies that are causing air pollution in China, because air pollution is now a political issue tied to the highest levels of government. President Xi's "China Dream" vision is connected to this idea that "Ecological Harmony" (i.e. the provision of safe air, food and water) is in the core interests of the Chinese people. Any company that blatantly disregards environmental regulations, or worse, violates the current "zeitgeist", will face significant censure by authorities.'

• 'There is a significant amount of groundswell pressure building up in major Indian cities on air pollution. The 'right to breathe' has been taken forward through isolated cases as a core constitutional issue, which is intended to shape future laws aimed at the corporate sector. This could one day impact retail investing in utility and automobile stocks.'

Stranded assets

In many regions new coal generation is under construction—there is \$540bn of new coal projects in the pipeline. Asia has 332 GW planned, 62% of all new planned coal plants. Climate scenario modelling shows all coal capacity needs to close or cease generation by 2040. This gives the world just over 20 years to shutter 2,000 GW. This is an enormous ask, and with enormous changes comes the potential for vast asset stranding and risk for investors. Anything that cannot recover its costs is effectively a stranded asset, and today's planned coal capacity represents \$100bn of misallocated capital.

The challenge for investors and others is that in highly regulated markets, such as most Asian countries and parts of the US, the government can manipulate prices and other parameters so as to delay the moment of reckoning when fossil fuel plants become economically uncompetitive.

'Where fossil fuels are either still competitive or are protected in regulated markets like the USA or China, the disruption is yet to be felt. Investors and power asset owners both need to be ready for the energy transition, and aware of the potential for enormous asset stranding.'

Hence dialogue participants had different views about the effectiveness of the stranded asset argument.

- 'We're getting there in many regions, but in others, (e.g. Japan, Vietnam, Indonesia) vested interests linked to incumbent power and coal are winning the day. Stranded asset arguments, I fear remain secondary where this is the case—that is, the local governments need to strand these assets with their policy directions.'
- 'Although there is a possibility that the profitability of coal fired power plants may deteriorate in the future, in the current cost-based pool market, (i) generation costs of coal power projects are relatively low, and thus have a higher dispatch rate; and (ii) due to the "settlement adjustment factor" coal plants are compensated at a fixed return rate. Therefore, the market considers coal fired power projects as low risk, low return projects.'
- 'The response mentions that 'dispatch order/generation costs' and 'fixed return rates' make coal power low risk/low return projects. I believe this shows why Asian public financial institutions are so into coal. How the power market is operated or how power is priced is the key issue—there may be a limit to naming and shaming such public financial institutions, unless we go into the unfair market structures of these countries.'

There was a sense that eventually economics would trump politics—despite the very salient issue of job losses, particularly in China. That said: *'From my experience, we would need to see the market liberalization with Chinese characteristics. What happened in the West will not be the same as the East'*

Technological opportunity

Many participants spoke about the need to frame the transition as an opportunity, and in parallel to get it out of the ESG box and have it seen as a core strategic, economic and financial issue. This narrative seemed particularly appealing in India and China:

- 'If 'climate risk' is reframed as a 'green opportunity', we will see greater traction in India. ...We have a situation where ESG risk analysis is not particularly mainstreamed in India, i.e. there's no level playing field where all financial institutions and banks operating in the country are concerned about ESG. If one FI decides not to invest or lend money to a company, it will go to other less climate concerned players in the market to access capital (and there's a lot of no strings attached capital floating about in India). This is why coal is still king there.'
- 'Renewable energy is definitely picking up as a 'green opportunity' though, because there is 'exclusive capital' channeled through green bonds being made available alongside dedicated PE & VC capital really focussed on this. ... It's a switch in narrative essentially, from risk to opportunity, and offering something (i.e. low cost green debt and lithium for example) to enable that. NTPC, India's largest state owned utility company, has floated green bonds recently and is diversifying into solar, so investors in that green bond with strong ESG risk frameworks are happy too. Engage with an 'opportunity'.'
- 'China already dominates the global solar-panel market, but now it is expanding its support for oil-saving technologies, funding the development and production of everything from batteries to electric cars. The goal is not just to reduce China's dependence on foreign oil and gas but also to avoid putting the country at an economic disadvantage relative to the United States, which will see its own growth boosted by its exports of oil and gas to China. China's aims are also strategic. By taking the lead in green energy, Beijing hopes to make itself an energy exporter to rival the United States, offering other countries the opportunity to reduce their purchases of foreign oil and gas—and cut their carbon emissions in the process.'
- 'If Beijing's new energy strategy succeeds, it will help both the global fight against climate change and China's ambition to replace the United States as the most important player in many regional alliances and trading relationships. That ambition has been bolstered by the Trump administration's backward-looking approach to energy policy.'

Other issues

In particular locations, there may be other persuasive arguments:

• 'I'd like to point out that many communities surrounding those power plants near coast lines are significantly dependent on fishing. Oceans cannot even stand 2 degree temperature increase, as most scientists consider 1.5 degree would be the highest to keep oceanic ecosystems healthy. Such risks could trigger stronger local oppositions in the future.'

Recommendations for investors and others

- Consider which argument will have most traction with your audience. Use local knowledge to develop a framing that puts urgency into your arguments.
- Focus on opportunity as well as risk.
- When discussing stranded assets, understand the dynamics of the regulated market and be aware of any signs of change.

2. Finding leverage points to use with investors

'To permanently change the behaviour of Asian utilities regarding climate change, we must take an ecosystem mindset, working on policy, influencers, and champions within each company to induce change.'

Most utility companies in the region are majority owned by government or government-linked domestic investors. In addition, in most countries the energy market is closely managed by the government. For instance in Japan: 'Corporates, investors and the utilities look to the government for long-term energy plans. Government policy and detailed regulations (e.g. planning, siting, import tariffs on fuel, subsidies, etc.) determine the costs of fossil fuel vs nuclear vs renewables. But it remains the case that renewable power is NOT cheaper in Japan and other parts of Asia due to a plethora of government regulations favoring large-scale fossil fuel capacity and disadvantaging distributed and smaller scale renewables units.'

The following leverage points were identified in the dialogue. Most involve collaboration between Western and local investors.

Push for increased reporting on environmental impact

- 'At CDP, we are firm believers that disclosure is a critical first step for insight and action. The current state of disclosure of Asia Electric Utilities companies shows that we have a long way to go to achieve this. In 2017, only a handful of 30 Asian utilities responded to the CDP Climate Change questionnaire (3 from Japan, 2 from Hong Kong, 1 from Malaysia and 1 from India).'
- 'CLP 002 HK has set the benchmark for disclosure with a climate change strategy that looks out beyond 2030. In many ways this mirrors what the HK government has been planning.'
- 'I do agree with you that financial institutions should come together and demand a level playing field from regulators in terms of mandating all financial institutions to collect full emissions data (an environmental KYC of sorts). This would enable analysts to at least do a peer-to-peer comparison amongst FIs. Once financed emissions are understood can we truly talk about understanding climate-related financial risk.'
- In the Indian context in particular environmental reporting needs to include water: 'I would like to start seeing water disclosure reports from companies (utilities prioritised). To me water availability, efficiency and related operational risks are in-your-face results of invisible GhG emissions and the distant notion of

climate change. Water availability is the ultimate climate related financial risk....

No water, no power plant and no sustained and healthy economic growth.'

There was a warning, however, that reporting needs to go wider than current emissions for investors to have a good view of the environmental impact of a particular company: 'CLP may be a leading CDP discloser in the region, but the company is planning to build over 3,000 MW of new coal-fired capacity at a time when the UN and other bodies have clearly warned that there is no room for new coal plants. I have trouble cheering when companies that are flouting the Paris climate goals receive kudos because of their climate risk reporting. Their reporting may be better than many of their regional peers, but we've put CLP on our watch list of companies that investors should refrain from investing in.'

The role of TCFD

In this context, there was some discussion of the salience of TCFD, and whether its reporting requirements went far enough to meet the challenge.

- 'I note that the TCFD has recently held meetings in Singapore with Asia companies and investors, so I presume we will see increasing take-up of the TCFD recommendations. I think it is important to ensure this does not become a boxticking exercise, as appears to be happening in Australia to some extent.'
- 'An important outcome of this dialogue is to engage TCFD on the need for business models to evolve to a low-carbon platform and do so quickly.'
- 'There is a long history of sustainability-orientated innovation and investment in Japan/Asia but the companies expect this to be supported by a policy framework. If this happens, they are perfectly capable and willing to change their business models.'
- 'In this context, many in Japan regard TCFD as another West-originating questionnaire, like CDP, without regulatory buy-in or indications that there will be policy support, and hence cannot really see how it changes the game'.
- 'Investors are actively working on what good climate disclosure looks like including how TCFD can be woven into their disclosures considering the breadth of their reporting requirements. See Guide produced in conjunction with Aus/NZ Investor Group on Climaate Change and AIGCC.' http://aigcc.net/wp-content/uploads/2017/04/IGCC-TRANSPARENCY-in-TRANSITION-FINAL.pdf
- The Japanese Ministry of Environment created a TCFD alternative in 2011 after the Great East Japan Earthquake. 'This was a Japanese-led amalgamation of many of the so-called Western-led approaches (Equator, CDP, etc) and it was supported/adopted by around 200 Japanese financial institutions. But as it was voluntary, it did not lead to the rapid, substantive change in practices or culture that may have been achieved had it been mandated either through the financial authority or the Nikkei/TOPIX listing rules. ... Because of the multi-dimensional, cascading nature of the March 11 disaster the lens was not limited to climate (as it had originally been framed) but it was aimed at creating "sustainable society" both in Japan and globally.

https://www.env.go.jp/en/policy/finance/principles/financial_action.pdf

And of course there are a growing number of local stewardship codes: 'Regarding domestic efforts, at the time of the report, five out of 12 major Asia Pacific markets had stewardship principles or codes. This has already increased to eight out of 12. We also reviewed public disclosure for a total of 30 significant domestic institutional investors.

This found that 16 have CG policies, 15 of which referred to ESG, and nine of which referenced climate change. Eight investors referenced mitigation actions in relation to climate change. Of the investors with a climate change policy, three were in Australia, two in South Korea and there was one each for Malaysia, Singapore, Taiwan, and Thailand.

The bottom line is, if investors are going to engage with companies on disclosure, it needs to be disclosure that links to the TCFD business model, but goes beyond the impact of scenarios on the company: 'If companies are going to get involved in TCFD scenario planning, then it should be exploring the real extremes, not just IEA scenarios. Rather than answering the question: "what would be the impact on us of a 2degC scenario", the real question is: "what are you going to do to create a 2degC world" - a very different perspective. Perhaps this could be explored in Asia.'

Fear vs. greed

The value of appealing to greed rather than fear should not be minimized when opportunities bound in the clean energy space: 'Concrete evidence of the "greed" story is bubbling up and needs to be emphasized, e.g. Bloomberg NEF's analysis of the \$10 trillion market for renewable power equipment, mostly in Asia. Today Japan's Softbank & Saudi announced a "\$200bn" investment in a massive new solar project in the desert kingdom (http://money.cnn.com/2018/03/28/technology/softbank-saudi-arabia-solar-park/index.html). These are the pitches that get business and finance to sit up and take notice. There is a role for climate finance to ensure these projects happen sooner rather than later and coal/fossil fuel vested interests' narratives are slapped down by analysis of the business opportunities this energy revolution will bring to the region. And investors need to question all companies they own in Asia: "what are you doing about this huge opportunity and where is it in your business model" (this is what TFCD says).'

Engaging collaboratively

Moving from the 'ask' to the method of engagement, participants flagged a number of different models of engagement that they felt had been successful.

- 'When I met the IPPs in December 2016 they all stated it was the first systematic conversation they had had with an investor group on ESG issues. It was quite surprising given how far the dialogue has progressed in other markets. There's definitely a need for investors to push management harder to disclose performance and strategy.'
- 'I have helped to organise a climate panel with Calpers/Calsters and other big name US investors articulating their concern on Asia-climate risk. A closed roundtable will follow with 5 global asset managers and 5 large and more progressive Japanese companies to discuss (hopefully in a candid way) the issues at hand, including the ones at this forum. So these interactions are starting to happen, I think it's important that this be replicated in Korea, Taiwan and other nations with large stock markets and foreign investors and that the framing be around government policy/market risks.'
- 'Due to our responsible investment standards, we might not be able to approve the companies for our portfolio due to specific ESG-related concerns. In that case, we selectively engage with the market leaders or key players, which has the potential to influence industry practice. We take the position as 'potential investors', and this

- is relevant since we would lose investment opportunities due to such concerns and we would want the companies to address them, so we can invest.'
- 'I've seen increasing numbers of Asian companies, including utilities, are willing to meet with responsible investors in the US, so those roadshows or analyst conferences might also be a potential entry point as well for smaller investors.'

The Climate Action 100+ initiative is intended to enable Asian and Western investors to collaborate on engagement: 'Not only do Asian investors NOT have extensive engagement experience, but they are also need to 'get up to speed' quickly on climate issues. Working with and learning from their peers through this initiative is designed to speed up this process. '

However, the framing needs to acknowledge that 'getting up to speed on climate issues' may mean something different in Asia, as pointed out in the first section. And engagement on the energy transition need not be limited to energy utility companies: 'We are encouraging outside investors to broach the subject of government policy on energy/climate with all companies in Asia when they meet. To ask them "what are you doing to create a more favourable policy pathway for clean energy?" – this posed to Panasonic, Toyota, Daiwa House, Samsung etc. This is where the real power lies in Asia, let's help deploy it!'

Fiduciary responsibility

Alongside engagement, investors face important decisions about portfolio composition and performance benchmarks. Participants had a range of ideas:

Indexes:

- 'There are nowadays numerous fossil free indices against which funds can be tracked, and investments in such funds have performed well over time. Making fossil free investments the default option for passive investments by asset managers could trigger the financial stampede out of the fossil fuel sector that we need.'
- 'I understand Storebrand has created a coal-free fund in which they substituted every coal stock with stocks having a similar risk profile, and achieved a tracking error of less than 100 basis points. I'm also confident that we could demonstrate strong performance of a coal-free portfolio over the past 1, 2, 3, 5, 10 or 20 years. (This analysis is waiting to be done, using the GCEL criteria!) And with the indices we seem to have a bit of a chicken-and-egg situation, in that the indices say they'll do whatever their customers ask for, and the customers keep referring to the indices.'

Holdings

• 'Just last April, state-owned SGCC, the State Grid Corporation of China, sold bonds in value of almost US\$ 1 billion through a consortium of Australian, US and European banks. My point is that Western investors, which are buying these bonds (as well as the banks peddling them) are, in fact, helping to fuel the pipeline of new coal projects. The key ask in this context is not necessarily divestment, it is for investors

- to stop making NEW investments in companies that are expanding coal-fired capacity.'
- 'Our "Global Coal Exit List" (see www.coalexit.org) tries to cover all parts of the industry and also includes a forward-looking aspect addressing all the different types of companies developing new coal infrastructure (think Marubeni or Sumitomo). By introducing a more holistic model for coal divestment, we hope to set a mold that can also be applied to other fossil fuels.'

Fiduciary duty

• 'Possible strategies for asset owners (and their trustees) include re-defining responsibilities of investment officers of asset owners to emphasize the longer-term risks, even that the trade-off exists. Including the consideration of system-level issues would be critical. This also could mean the re-definition of fiduciary duty being not only protecting the assets of beneficiaries but protecting beneficiaries (physically or economically beyond the assets they are managing, etc.)'

Recommendations for investors

- Be aware of local reporting requirements but also encourage utility companies to report using a clear progression path to addressing impact on the environment and transition pathways.
- Engage with investee companies on the opportunities arising from the energy transition.
- Avoid buying bonds that finance new coal capacity.
- Collaborate on engagement, respecting local knowledge and perspectives.
- Make use of fossil fuel free indices where possible.
- Use expansive definition of fiduciary duty.

3. Zeroing in on the role of new-coal financiers

'Together, China's State Power Investment Corporation and India's National Thermal Power Corporation are planning to build a coal plant fleet as large as Germany's. Banks and investors who are concerned about climate change need to "walk the talk" and stop investing in these and other coal plant developers.'

There was a strong argument that debt is at least as important as equities as a target for investor action, as evidenced by recent press coverage shared with the dialogue:

- https://www.nytimes.com/2018/02/27/climate/coal-kenya-china-power.html
- http://www.eco-business.com/news/singapore-has-declared-2018-the-year-of-climate-actionso-why-are-its-banks-still-funding-coal/

'The crux of their argument is that "debt investors are regularly required to decide whether or not to refinance. Existing debt is paid back and new refinancing is sought. This is the 'pinch-point' for them and for the companies that they finance. I think we might well see some of the larger more committed debt investors quietly cut their exposure to fossil

fuel companies by walking away from refinancing opportunities ... And then, much later, start talking about the fact that they have already done this."'

European and US investors who are concerned about Asian utility emissions would do well to start by looking at the behaviour of banks in their own backyard. As with Chinese banks, there is a tendency to adopt different lending practices at home and abroad, or to assume that green credentials can somehow offset the continued support for the expansion of fossil fuel power generation.

- 'Our focus should not only be on Asian coal plant operators and developers, but also on the global banks which are financing these companies. When it comes to coal power, most banks' policies are still notoriously weak. UK banks (some of which are especially active in Asia), for example, only exclude financing of new coal power plants in developed countries, conveniently ignoring the fact that 90% of new coal capacity is planned outside the developed world. Climate conscious investors should therefore use their investor muscle to push global banks like HSBC, Standard Chartered and Citigroup to adopt policies that prevent them from financing coal plant developers in Asia and elsewhere.'
- 'We should also be drawing attention to the disconnect between the climate warnings being sounded by banks such as HSBC and Citi in their various research reports, and their continuing support for fossil fuel expansion.'
- 'I recall that 15 years ago (or so), HSBC in Hong Kong was developing their sustainability reporting in reference to this point. We did discuss at the time to include in their annual reports a detailed listing of the lending to projects / stocks / funds / indices involved in fossil fuel usage and expansion. Nothing came of it, but perhaps we could seek to extend the Equator (Sullivan) principals, combining that with the TCFD recommendations?'
- 'British banks are, however, conspicuously absent from this trend and banks like HSBC and Standard Chartered are still bankrolling many of Asia's largest coal plant developers. I did a quick calculation on HSBC. Over the past 3 years, HSBC has provided loans or underwriting services to companies, which collectively plan to build over 254,000 MW of new coal-fired capacity. This is equal to the entire operating coal fleet of India, the UK and Poland combined. It's really time for HSBC to become the target of a concerted NGO campaign in the UK.'
- From RE100 annual report: "Going 100% renewable for global electricity use is one of five new commitments that HSBC is making to tackle climate change and support sustainable growth in the communities it serves. HSBC also pledged to provide \$US100 billion in sustainable financing and investment by 2025; discontinue the financing of new coal-fired plants in **developed markets** and of thermal coal mines worldwide; adopt the recommendations of the Task Force on Climate-related Financial Disclosures to improve transparency; and lead and shape the debate around sustainable finance and investment." 'Ideas for calling them out on their hypocrisy?'
- 'Ensure they report on what they are financing in every market. They did not do this previously as I noted in an earlier comment. Anyone know someone that has a shareholding we can piggyback on and make some resolutions?'

• 'It seems to me there's an opportunity to use some very strong language around economic colonialism ("we don't want dirty coal in our country but we're happy to fund it in yours")'

One participant drew attention to the particular risks of financing new coal power in conditions of water stress in India: 'Water stress in India is quite widely recognised as a major physical/operational risk. In fact, HSBC itself has recognised India as most at risk from the effects of climate change. Since coal thermal power stations are reliant on freshwater for operating and 40% of India's coal thermal power plants are in water stressed areas, the climate-related financial risk of HSBC and other banks exposing their loan books to yet more thermal power operations seems all the more apparent. I believe this water risk angle should be leveraged by asset managers to pressure HSBC (using their own report against them) and Standard Chartered to de-risk and avoid exposing their loan book to new projects in India and other water-stressed countries.'

One argument against action on banks is that Chinese or other banks would simply pick up the lending slack. Therefore coordination between East and West will be important, as this example shows: 'What is notable (about the Adani case) is that after the Australian banks had distanced themselves from the project, there was a possibility of Chinese bank involvement as an alternative. Here the campaign had to incorporate an "insider" strategy that complemented the public grassroots campaign, to tackle this possibility. Long story short is that local campaigners working together with international campaigners did come up with a strategy, and this was successfully implemented. Chinese banks publicly announced that they were not interested in the project.

I think this is a unique and important example of how work on coal finance needs to incorporate strategies that will be effective, increasingly so, in the developed countries and on financing parties from the global South. My ongoing dilemma with the amazing coal divestment work done by Urgewald and other key players, is that I do not see the same waves of momentum washing up on the shores of Asia. Certainly not in Singapore (Hong Kong - maybe), and far be it, in China and less-developed countries.

Recommendations for the finance sector

- Shareholders in banks that are continuing to fund coal plants anywhere in the world should exercise forceful stewardship, with the threat of divestment if action is not taken
- Shareholders should request banks share a plan for transitioning out of financing coal and into financing renewables in low-income countries
- Fossil fuel campaigners should coordinate between East and West to ensure that Asian banks do not simply replace Western banks in financing coal development
- Fossil fuel campaigners should look at the broad spectrum of coal financing

Coal Country: Japan

'We believe energy policy in China, India, Korea may be at a turning point, but that Japan is a key blockage and its impact through funding in other emerging Asian nations' energy policy is profound. It is imperative global investors demand corporate Japan, which has no long-term interest in coal but substantial interests in the renewables revolution, stand up and deploy its political capital on the issue.'

There was a sense in the dialogue that, while other major Asian countries acknowledged, for different reasons, the need for the energy transition, Japan had not done so in a way that was leading to meaningful action—as this article, shared with the dialogue, indicates. https://www.reuters.com/article/us-japan-energy/japan-task-force-echoes-foreign-minister-calls-to-back-renewables-over-coal-nuclear-idUSKCN1G40UX

Some acknowledged the importance of the Foreign Minister's stance, in contradiction to the Government's stated energy policy, and that of Mutsuyoshi Nishimura, Former ambassador of Japan to the UN Climate Change Negotiations.

- 'Some maverick politicians, (the Foreign Minister Kano, the Minister of Environment) are making strong statements favouring renewables and questioning vested interest lobbying at the highest level. I suspect a great number of the domestic coal projects will not go ahead. A concern remains the overseas-funded ones including some mega projects in Indonesia. Once the concrete is poured it initiates a coal value chain dependency and expansion. Clearly the overseas coal projects are a target for the campaign community and I understand work is underway in certain countries to demonstrate high levels of corruption in aid recipient countries where the projects are underway, so clear investor risk there.'
- 'Mutsuyoshi Nishimura has said that "Coal power is becoming increasingly contentious in Japan. It is not a welcome energy form for most local communities. Public protests and lawsuits are likely to occur in the future on this issue. The coal lobby in Japan clearly recognizes the challenges ahead for the fuel." Mutsuyoshi goes on to say that a combination of a carbon price coupled with the everdecreasing costs of renewables could provide major opportunities for Japan.'

There were mixed views about the extent to which the Japanese Government pension fund (GPIF) would help to drive change, despite its commitment to using ESG as a filter.

- 'To address the points on ESG as a framing for this in Asia. I think tactically it's the wrong approach. ESG box-ticking has been going on in Japan and Asia for some time, at least a decade or more with no real impact on mainstream investment activity. It also is counter to the TCFD recommendations which advise climate risk be positioned as mainstream business risk, with the framing and details sector and company specific. This is not how ESG analysis works, with its matrix approach and existence largely outside of effective decision making.'
- 'I would not be too excited about the Japan government pension fund's announcement on ESG. It covers a very small portion of investments. GPIF is not allowed by its mandate to engage companies directly and it will not make any

- comments on specific issues, hence no risk disclosure and actions on these, a la TCFD. My Japanese friends in this field are not waiting on the pension fund to drive anything radical anytime soon.'
- 'My Japanese contacts view GPIF as very conservative and probably highly unlikely publicly to get involved in energy policy debates hope I am wrong.'
- 'GPIF may be able to emphasize climate change as an issue, including 'low-carbon transition', etc.'
- 'In their current investment principles, there is no mention of "climate change" (they mention ESG).'
- 'It might also be helpful to encourage them to integrate specific/explicit investment beliefs/principles on climate change, as many other asset owners now state either in their investment principles or beliefs (CalPERS has two beliefs among ten investment beliefs containing the word 'climate change') as part of institutionalization of climate risk management.'

Some thought that TCFD could be a lever.

- 'Maybe we can suggest that GPIF fully and actively utilize the specific 'asks' in the TCFD recommendations toward asset managers as an engagement tool/guide. The increase in discussions of the TCFD recommendations might be useful. We can also suggest incorporating the TCFD-related questions in their RFI forms for asset managers as well as updating manager selection guidelines.'
- 'It is easier for the GPIF to rationalize the specific reference to the TCFD, given their authority tied to the FSB, the G20 as well as the context of Paris Agreement, than integrating climate change as a stand-alone issue. Of course, the discussion eventually needs to go beyond the TCFD, but it might be a practical starting point.'

Participants then discussed some more oblique strategies. The first involved engaging a wider range of companies to become engaged with Japan's energy policy, particularly those signed up to the RE100.

- 'We argue that the most effective role for forceful stewardship in this context is to engage with Japanese technology, finance, healthcare, consumer goods, materials etc. companies explaining the high level of concern at Japan's energy policy. Investors can demand that these companies (e.g. Panasonic, Ricoh, Toyota) utilise their political clout (which far exceeds that of the utilities) to shift government policy.'
- 'We are encouraging outside investors to broach the subject of government policy on energy/climate with all companies in Asia when they meet. To ask them "what are you doing to create a more favourable policy pathway for clean energy?" this posed to Panasonic, Toyota, Daiwa House, Samsung etc etc. This is where the real power lies in Asia, let's help deploy it!'
- 'The broader engagements with ranges of industries would be the key, not only emphasizing risks, but also emphasizing the opportunities in pushing renewables. Other industries, outside of utilities, would be looking at global markets, which would be more susceptible by communicating expectations of the investors as well as other stakeholders as 'shifting global expectations.'
- 'In the RE100 group there are four companies from Japan: Askul, an e-commerce company; Daiwa House Group, one of Japan's largest homebuilders; the electronics

company RICOH (and the first Japanese company to join RE100); and Restaurant chain Watami Co.'

A second approach is for investors to engage in a dialogue with the Japanese government on Japanese energy policy. Such a dialogue would need to pay attention to the framing discussed in the first section and focus on the business opportunities from the energy transition.

- 'In our work on Japan we do not mention climate at all. It's all about the business case for renewables vs coal. Japan, Korea & other economies poor in resources but strong in technology should be rushing fully into the renewable revolution and supporting their domestic sectors here. This has been echoed by Japan's Foreign Minister several times as well as certain leading business voices. So the angle of missing out on one of the century's profound global market opportunities (BNEF quote a \$10 trillion spend on renewables infrastructure between now and 2040) is extremely compelling in Asia (and it's absolutely true) as well as effective.'
- 'Broad, policy-level discussion needs to be more active. It might even be helpful to raise issues of "national energy security" combined with long-term industrial policy, whether or not focusing on fossil fuel resources. This could address the global tide against carbon while focussing on technological strengths that could be used to develop low-carbon technologies. This would make more long-term sense than depending on resources you cannot even extract within the country and which carry significant price fluctuation. Currently, not much discussion of climate change being 'material' risk can be seen among mainstream media outlets. It is useful to raise basic issues of why coal is not really "cheap" in the long run since Japanese firms use the current low price as a rationale for natural gas and coal.'
- 'METI is currently reviewing the basic energy mix, and it already indicates that it will essentially not change the energy mix for regional stability and national security reasons. Namely, Japan is expected to remain pro-coal (limiting to ¼ of energy mix) and pro-nuclear energy (20-22%) and retain the CO2 reduction target of 26 per cent by 2030 (against 2013 levels). This, despite the warning by the Ministry of Environment and the Ministry of Foreign Services that Japan will miss the Paris target (https://thediplomat.com/2018/02/why-japan-is-rethinking-its-energy-diplomacy/).
- 'In terms of what institutional investors can do to Japanese utilities in the lobbying space? There is no easy answer, but I would focus on what is realistic (meaning METI's possible landing zone).
 - Request METI to make the 2016 efficiency standards for coal fire plants mandatory, and include those plant projects already under development. (METI set out as from April 2016 that all new coal plants should aim at a heat efficiency of at least 42%, equivalent to so-called ultra-super-critical plants, and that existing plants a heat efficiency of at least 41% by 2030.)
 - Using existing Govt-to-Govt platforms, such as the EU-Japan FTA, submit a joint EU-Japan institutional investors' view on how the enlarged trading bloc should envisage the energy and climate issues. The FTA has a chapter on Sustainable Development and Corporate Governance. METI is interested in upgrading a bilateral CSR working group with the EU (DG Grow) for three years into a FTA-related dialogue mechanism to discuss each other's policy designs of non-financial reporting, investor-company dialogues on

SDGs, climate and human rights. By using this 'legitimate' channel, the lobbying may gain some traction and credibility.'

• 'In quite recent times major institutional investors have engaged with foreign govts on (traditional) corporate governance matters with impact. ICGN has facilitated this with many EMs. The fund manager representatives were senior and speaking on behalf of their firms. How could we get this to happen so that Blackrock, SSGA, etc. are at the table and with the right level of representation?'

These types of engagements would need to acknowledge that the interlocking nature of the Japanese economy poses additional problems in trying to accelerate the transition to a low carbon energy system: 'A significant structural challenge to consider in the case of Japanese utilities, including coal and natural gas, would be of the inter-locking relationship with the wholesale trading firms, many of which are significant rights-holders in coal and natural gas (particularly shale gas) extraction. These trading firms are closely affiliated with mega banks, many of which have significant business relationships with these utilities. Not to mention the fact that Japanese industries such as the ones in capital goods as well as construction, which have served the Japanese electric utilities sector, have been strongly supporting the coal/natural gas push, not only in the form of domestic energy policy but also promoting the technologies such as "clean" coal to various markets, mainly in Asia. These strategies have been closely coordinated between business sectors and the METI. Also note that these are often brokered by the LDP party, which is currently controlling the National Diet.'

However, it may be that METI's hard line stance will soften as media commentary on the energy transition grows:

- 'We are seeing increasing mention in Japanese media of the risks of its unique and lonely focus on coal among G7 nations. See this piece in the Nikkei on the downturn in coal engineering (https://asia.nikkei.com/Business/Trends/Renewable-energy-rise-forces-layoffs-at-Mitsubishi-Hitachi-Power). I am hearing the fate of GE, a once well-respected company in Japan, and its link to GE's over-dependence on fossil fuel value chains is being discussed. These hit home in Japan as these types of companies are at the core of Japan Inc.'
- You made a critical point, which is Japan is being left out in the low-carbon shift. It is notable that all the firms you listed, along with Toshiba, would all have (or had) a significant nuclear business, all of which are on the verge of collapse, now taking an another misstep with fossil fuel instead of renewables.'
- 'At the COP 23, there was a group of people protesting against Japanese coal policy, at which Japanese policy and business delegates were appalled. Increasing Japanese media exposure to the issue/ debate is critical through media outreach. Unfortunately, virtually no media coverage on COP 23 in Japan reported that story, except one in their special programs.'

Investors should also be mindful that changes are happening at the prefectural level: 'As central governments and established companies lag on low-carbon policies, there have been some notable developments at the local level. Some prefectural governments have worked directly with companies to shift toward low-carbon by developing mega solar projects. SoftBank's SB Energy is a good example, having over 30 mega solar and wind projects across Japan, many of which are independent of utilities companies. This would be

another way to break through from the bottom-up, since the deregulation of retail electricity (though with fierce resistance from the utilities). In this regard, engaging with regional banks to further support the shift would be a viable option.'

Recommendations for finance

- In any engagement with Japanese companies investors should be asking them to influence the Japanese Government's energy policy
- Senior investment professionals should collaborate on roundtable discussions with METI about the opportunities for Japan in the energy transition
- Investors in Japanese power companies should encourage them to prepare transition plans, under a number of assumptions about Japanese government policy.