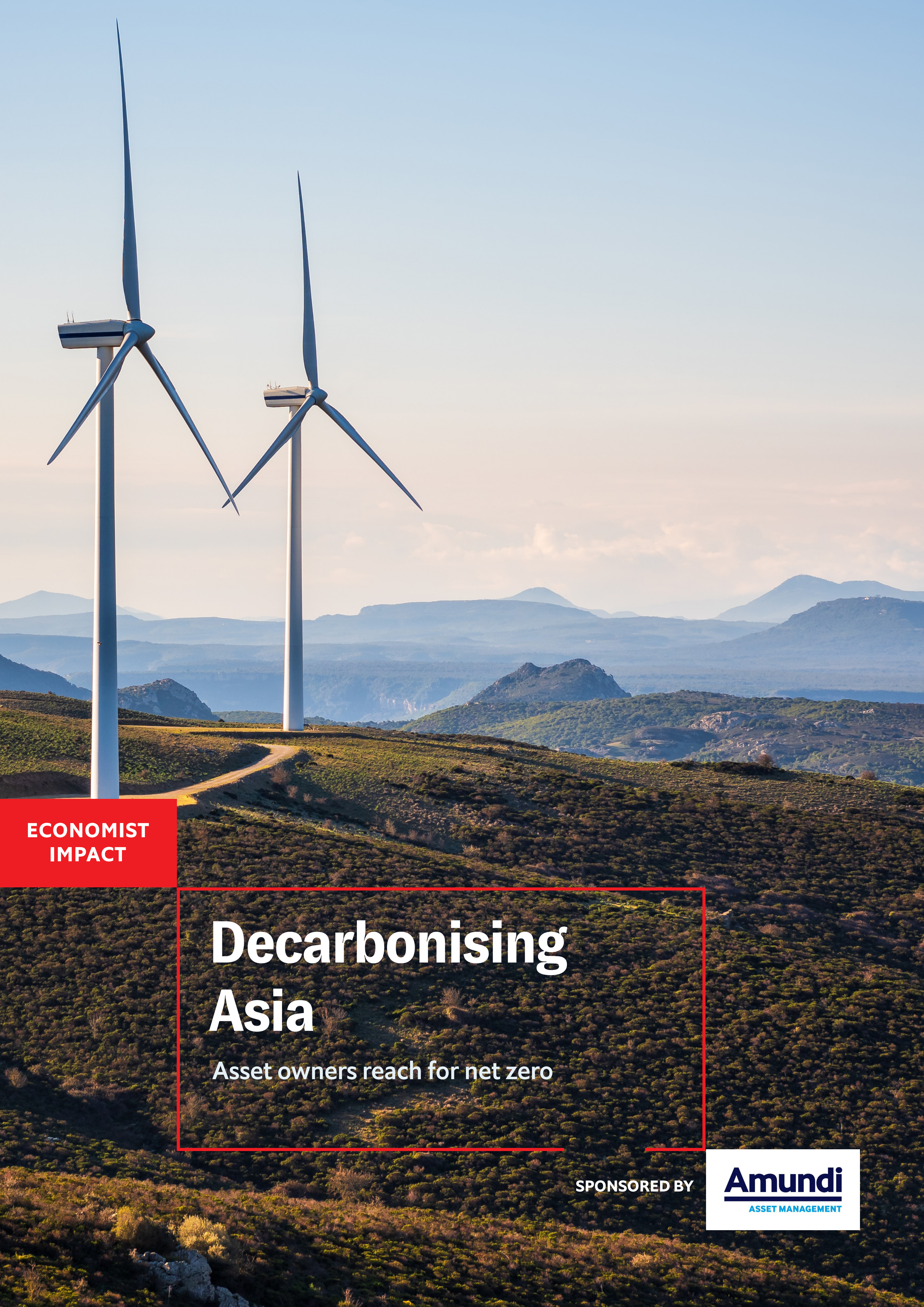

ECONOMIST IMPACT

Decarbonising Asia

Asset owners reach for net zero

SPONSORED BY Amundi ASSET MANAGEMENT

Contents

About the research

Decarbonising Asia: Asset owners reach for net zero is an Economist Impact report, sponsored by Amundi. Denis McCauley is the author and Siddharth Poddar is the editor. It is based on in-depth interviews conducted with five executives at asset-owner and asset-management firms and other financial institutions, and secondary research, done between December 2021 and March 2022.

Our thanks are due to the following individuals for their time and insights:

- Kerry Adams-Strump, director of group ESG, Prudential
- Laura Cha, chairman, Hong Kong Exchanges and Clearing (HKEX)
- Shin Furuno, senior manager - ESG Strategy and Solutions, Sumitomo Mitsui Trust Bank
- Eric Nietsch, head of ESG, Asia, Manulife Investment Management
- Eddie Yue, chief executive, Hong Kong Monetary Authority (HKMA)

Introduction

COP26 may have taken place in Glasgow,[1] but Asia was very much on its participants' minds. Rightfully so: according to a recent study, of the 100 cities in the world most at risk from climate change, 99 are in this region.[2] In this context, commitments to reach carbon neutrality made by several Asian governments—including those of Japan, South Korea, India, Indonesia and China—before and during the conference were welcome. Their challenge, of course, is to translate commitment to action. The record to date is far from promising: of ten Asia-Pacific countries monitored by the Climate Action Tracker, the measures taken by nine of them to meet the 1.5-degree global warming target set by the 2015 Paris Agreement are deemed "highly" or "critically" insufficient.[3]

Climate Action Tracker: Country compatibility with Paris Agreement

Critically insufficient	Highly insufficient	Insufficient	Almost sufficient	Paris Agreement compatible
Iran (Islamic Republic of)	Argentina	Chile	Costa Rica	--
Russian Federation	Australia	European Union	Ethiopia	
Singapore	Brazil	Germany	Kenya	
Thailand	Canada	Japan	Morocco	
Turkey	China	Norway	Nepal	
Vietnam	Colombia	Peru	Nigeria	
	India	South Africa	The Gambia	
	Indonesia	Switzerland	United Kingdom	
	Kazakhstan	United States		
	Mexico			
	New Zealand			
	Saudi Arabia			
	South Korea			
	United Arab Emirates			
	Ukraine			

Source: Climate Analytics and NewClimate Institute; ©Climate Action Tracker (sourced March 18, 2022)

[1] COP26, the 2021 United Nations Climate Change Conference, took place in October and November 2021.

[2] "Asia Is Home to 99 of the World's 100 Cities Facing the Greatest Environmental Challenges", Time, May 13, 2021: https://time.com/6048106/asia-environment-risk-cities/. The study was conducted by Verisk Maplecroft, a risk consultancy.

[3] Climate Action Tracker website: https://climateactiontracker.org/countries/.

"COP26 reaffirmed that the global financial system has a key role to play in the decarbonisation transition by channelling more financing to activities that are consistent with a pathway towards low GHG emission and climate-resilient development."

Eddie Yue, chief executive, Hong Kong Monetary Authority

Particularly in the emerging world, countries cannot hope to meet their carbon-reduction commitments without very large amounts of public and private investment, probably exceeding the annual target of US$100 billion of climate finance that was re-confirmed in Glasgow. This helps explain an intensification of discussions within the international finance community in recent years about how to unlock such levels of investment. Investment industry executives we interviewed for this report consider this an extremely positive development. One is Eric Nietsch, Asia head of ESG (environmental, social, governance) at Manulife Investment Management: "There is a new sense in the investment industry that it really needs to step up its decarbonisation efforts, and we're seeing a lot of big commitments from large, systemically important institutions. Now they need to translate those into concrete actions."

According to Eddie Yue, chief executive of the Hong Kong Monetary Authority (HKMA), the role played by asset owners (AOs) in supporting greenhouse gas (GHG) reduction is critical, as "the capital flows to be mobilised to meet these targets go well beyond the scale of any one state or agency."

Through their investment strategies, AOs in Asia (pension funds, insurance company general accounts, sovereign wealth funds and other institutional investors) are well-positioned to facilitate a substantial reduction in carbon intensity in the region's economies. Of the world's top 100 AOs, those of Asia-Pacific constitute the largest regional share (37%) in terms of assets under management (AUM).[4]

Although publicly announced targets for achieving carbon neutrality are still forthcoming from most of Asia's AOs,[5] many are making their intentions clear. For example, five Asian AOs to date have joined the UN-Convened Net Zero Asset Owner Alliance (NZAOA), which was formed in 2019. The first was insurance provider Prudential. According to Kerry Adams-Strump, its director of group ESG, "the prevailing approach and rules very much reflect a European perspective thus far. There needs to be an understanding of the particular dynamics of the developing markets in Asia and Africa that we operate in. Being in the room, as part of the alliance, is the best way to do that."

Many more Asian institutions are members of the Asia Investor Group on Climate Change (AIGCC), which came into existence in 2016 and pursues similar aims as the NZAOA.

The proof of AOs' commitment to reaching Asia's (and the world's) net-zero goals lies, of course, in how they aim to decarbonise their portfolios. This report, based on discussions with senior executives at AOs, asset management firms (AMs) and other financial institutions, as well as extensive desk research, sheds light on how AOs intend to bring net zero closer to reality in Asia.

[4] Willis Towers Watson-The Thinking Ahead Institute, *The Asset Owner 100: The most influential capital on the planet*, November 21, https://www.thinkingaheadinstitute.org/research-papers/the-asset-owner-100-2021/.

[5] At the time of writing, only Temasek among Asia's ten largest asset owners had publicly announced a target year (2050) for attaining carbon neutrality. Outside this group, Prudential has also made such a commitment.

Toward greener portfolios

In theory, reducing or eliminating fossil fuel investments from portfolios is among the most reliable ways of encouraging the decarbonisation of industries and, ultimately, economies. In practice, divesting from coal and other sources of carbon poses complex issues. This is more the case in Asia, where larger economies are still heavily reliant on the consumption—and production—of carbon-based fuels for economic growth (see "The ethics of decarbonisation").

"A shift away from coal is the direction of travel among big investors in Asia, although the general understanding is that it's not happening at the speed required to achieve net zero by 2050," says Shin Furuno, senior manager for ESG strategy and solutions at Sumitomo Mitsui Trust Bank. A senior manager we interviewed at one institution agrees that the pace of coal phase-out in Asia needs to increase, but adds that massive investment in the infrastructure for green electricity must accompany it. "Trying to phase out coal without green electrification is too simplistic," she says.

Fortunately, investors have options to choose from in Asia to finance the development of such infrastructure. Mr Furuno separates these into already commercially viable technologies and those that require other policy measures to support their development and commercialisation. The former include solar and wind power, site level battery energy storage and electric vehicles. The latter group consists of emerging technologies such as long duration

An inclusive path to decarbonisation

The pros and cons of a divestment strategy for asset owners (AOs) tend to be argued from a practical perspective: how best to bring about real decarbonisation of portfolios. Prudential, according to Kerry Adams-Strump, its director of group ESG, also applies an equitable lens when considering investment choices—that of inclusion.

Such considerations come squarely into play in devising approaches to phase out coal in Asian and other developing markets. Prudential's policy is to divest from a company if it derives 30% or more of its revenue from coal production. If less than 30%, Prudential will seek to actively collaborate and engage with it, either through dialogue or by exercising voting rights, in order to encourage its transition. But, says Ms Adams-Strump, the choice is not always clear cut. She explains: "In some of our markets, the main energy supplier is at least part-owned by the government or it's a nationalised supplier. There may be no other energy supplier for customers to go to in the country. We can't automatically say that we must divest from that business. If it's starved of capital and fails, how do people living in the country get their energy?"

"From our perspective, that would not be in the spirit of inclusive transition," says Ms Adams-Strump. "It's far more important to be engaging with those companies, understanding and assisting their transition plans."

"While the EU has moved early in many areas, including policy, Asia presents distinct opportunities for driving innovation and technology in the net-zero transition."

Laura Cha, Chairman, Hong Kong Exchanges and Clearing (HKEX)

energy storage and 'green hydrogen', the use of which promises to help stabilise electricity grids with distributed renewable energy sources and significantly reduce the emissions needed to produce steel and other industrial materials. Although these might be considered risky investments today due to their relatively early stage of development, Mr Furuno believes these can eventually make a substantial contribution to decarbonisation in Asia, given the booming levels of construction activity and growing energy demand expected in the region for the foreseeable future.[6]

AOs and other investors are also likely soon to take advantage of the growth of carbon trading in Asia, according to Mr Furuno. "China's launch of a national emissions-trading scheme in 2021 is a big deal," he says. Once national carbon pricing regimes are up and running, they are likely to favourably impact the valuations of green technology producers and other companies in the region with demonstrably low carbon footprints. Other such schemes are under consideration in South Korea and Indonesia, and some experts believe that Southeast Asia has significant potential to benefit from the development of voluntary carbon-trading markets.[7]

12 decarbonising technologies for cities

Technologies identified by Economist Impact that can help cities achieve their carbon-emission targets while creating jobs, lowering energy costs for residents, and improving overall quality of life*

Technology and Thematic area	Impact	Scalability	Investment
Buildings and Construction			
Building automation systems (BAS)	Medium	Medium	Low
Digital twins	Medium	Medium	Medium
High-efficiency heat pumps	High	Very high	Medium
Low-carbon cement & concrete alternatives	High	Very high	Low
Cool roofs	High	High	Low
Dynamic glass	High	Very high	Medium

[6] The Global Alliance for Buildings and Construction expects building stock in Asia to double by 2050. *Global status report for buildings and construction*, October 2021, https://globalabc.org/resources/publications/2021-global-status-report-buildings-and-construction.

[7] Imperial College London, *Voluntary Carbon Markets in ASEAN: Challenges and Opportunities for Scaling Up*, July 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1026880/Green_Finance_COP26_Universities_Network_Policy_Report.pdf

12 decarbonising technologies for cities

Technologies identified by Economist Impact that can help cities achieve their carbon-emission targets while creating jobs, lowering energy costs for residents, and improving overall quality of life*

Technology and Thematic area	Impact	Scalability	Investment
Environmentally friendly insulation	Medium	Very high	Low
Green roofs	Medium	High	Medium
High-performance glass	High	High	Low
City Infrastructure			
District heating & cooling systems (DHC)	High	Medium	Medium
Smart grids & smart meters	High	High	High
Unified communications (VOIP)	Medium	High	High
Waste robotics	High	Very high	Low
Battery energy storage	Medium	High	High
Distributed energy storage	High	Medium	Very high
Distributed solar power	High	High	High
Subway advanced control system	High	Low	Low
Thermal energy storage	High	High	Medium
Transportation			
Autonomous vehicles (AV)	Medium	Medium	High
Hydrogen transport vehicles	Medium	Medium	Medium
Mobility as a Service (MaaS)	Medium	High	Medium
Vehicle-to-grid technologies (V2G)	High	Medium	Low
Battery operation enhancements	Medium	Medium	Medium
Electric vehicles (EV)	Medium	Medium	Very high
Electric vehicle charging ports	Medium	High	High
Smart charging	High	High	Medium

Source: Reproduced from Sustainable Disruption: 12 decarbonisation technologies for cities, written by Economist Impact and sponsored by Osborne Clarke, November 2021, https://impact.economist.com/sustainability/net-zero-and-energy/sustainable-disruption-12-decarbonising-technologies-for-cities
* Economist Impact rated each technology (shortlisting them from larger list of 26) according to the impact it is anticipated to have on emissions, its current ability to scale, and the current level of private and public investment available to finance its growth.

Widening the scope of engagement

The Investor Agenda—a joint initiative of seven advisory and advocacy groups[8]—sets out climate-investment expectations for AOs, AMs and other investors in four areas: investment, engagement, advocacy and disclosure. In January 2022, it published ten case studies of institutional investors that it deems exhibit best practices in these areas. Among the institutions, two are in Asia: Japan-based Sumitomo Mitsui Trust Asset Management and South Korea's Mirae Asset Global Investments.[9] The first is commended in particular for its bilateral engagement with portfolio companies, up to and including shareholder voting, and for its advocacy work, which includes pressing governments in the region for change in climate policies.

The case studies highlight the need for AOs and AMs, in Asia and elsewhere, to do much more than adjust their investment strategies to advance the transition to net zero. "Capital allocation toward greener investments is just one part of AOs' decarbonisation toolkit," says Prudential's Ms Adams-Strump. "For us, active engagement with emitters is extremely important, whether through direct dialogue, working through wider investment groups or exercising our voting rights."

Manulife Investment Management, according to Mr Nietsch, also takes a multi-pronged approach to decarbonisation. Much of its engagement work is done with its fixed income and equity teams. (The use of the former is particularly helpful when trying to influence state-owned or family-owned businesses where fixed income is an important part of the capital structure, he says.) Manulife also engages with invested companies on a collaborative basis through the AIGCC or Climate 100+ groups. Like other large investors, the company also seeks to influence the development of sustainability taxonomies, says Mr Nietsch. He cites, in particular, contributions his team is making to taxonomy development in Japan and Singapore.

"It's always a pendulum, but right now the trend is towards engagement. People are questioning divestment as an approach."

Eric Nietsch, head of ESG, Asia, Manulife Investment Management

[8] The groups are: AIGCC, CDP, Ceres, Investor Group on Climate Change (IGCC), Institutional Investors Group on Climate Change (IGCC), Principals for Responsible Investment (PRI) and United Nations Environment Programme Finance Initiative (UNEP FI). For details about its initiatives, see https://theinvestoragenda.org/.

[9] For the full set of ten case studies, see https://theinvestoragenda.org/casestudies/.

All in for net zero

Some of Asia's largest AOs are vocal advocates within the investment community for the virtues of net zero and ESG investment strategies. Thailand's Government Pension Fund (GPF) and Japan's Government Pension Investment Fund (GPIF) are prominent examples.[10] Other AOs and AMs make their voices heard through associations such as the AIGCC.

As one of Asia's largest stock exchange operators, HKEX is in a unique position to influence investors about their approach to decarbonisation. According to Mrs Cha, it provides guidance to issuers in diverse ways. "In May 2021 we launched the HKEX ESG Academy webinar series," she notes. "And in November 2021 we published a guide to help issuers prepare for TCFD-aligned climate reporting ahead of the mandatory disclosure requirements coming in 2025." HKEX also published a Practical Net-Zero Guide for Business to help companies understand their GHG emissions.[11] Other initiatives include the launch, in December 2021, of a Green Asia Summit that convened business leaders, policymakers and sustainability experts from different countries to share ideas on making the transition to low-carbon economies. HKEX plans for this to be an annual event, says Mrs Cha.

Beefing up disclosure

An area of focus of engagement work by asset owners and managers has been efforts to improve invested companies' disclosure of environmental risks and other climate-related data. Asian regulators and other financial institutions are striving to achieve the same at a market-wide level. In Hong Kong, for example, the Green and Sustainable Finance Cross-Agency Steering Group, which is chaired by the Hong Kong Monetary Authority (HKMA) and the Securities and Futures Commission, intends to mandate climate-related disclosures across relevant sectors by 2025 in alignment with the Task Force on Climate-Related Financial

"While setting targets is constructive to the global transition, one should be mindful of the challenges to setting and achieving them. Carbon footprint and intensity are measured based on company-reported data, and there remains a paucity of reliable and comparable carbon data due to inadequate corporate disclosure."

- Eddie Yue, chief executive, Hong Kong Monetary Authority

[10] On the Thai GPF approach to net zero, see https://news.un.org/en/story/2021/08/1096652. On the ESG activism of Japan's GPIF, see https://www.disruptionbanking.com/2021/08/04/what-is-changing-the-japanese-approach-to-esg/

[11] See https://www.hkex.com.hk/-/media/HKEX_Common/Market/Stage/Resources-Library/Guidance-Materials/HKEX-Net-Zero-Guide_E.pdf

Disclosures (TCFD) framework. HKMA itself, according to chief executive Eddie Yue, has sought to set an example by implementing climate disclosures in its annual report and committing to their full TCFD alignment by the same year.

Hong Kong Exchanges and Clearing (HKEX), also a member of the Steering Group, has been undertaking similar efforts for issuers on its exchange. "A lack of transparent, high-quality ESG data is exacerbating greenwashing risks and stalling the global transition to net zero," says HKEX chairman Laura Cha. "To remedy this, we've been providing guidance to over 2,500 issuers on our markets, to help them meet investor demand for greater disclosure and transparency around how they plan to reach net-zero targets." HKEX issued a detail set of climate disclosure requirements in November 2021.[12]

Another member of the Steering Group, the Mandatory Provident Fund Authority (MPFA), undertook a similar initiative at around the same time, issuing a set of "principles for adopting sustainable investing". According to the MPFA, the principles guide constituent members in integrating ESG risk factors into their investments and making "relevant disclosure" to MPF scheme members.[13]

Japan is one of the pacesetters in Asia in climate-related disclosure. In June 2021, the Tokyo Stock Exchange (TSE) issued revisions to its corporate governance code (CGC), advising companies that aim to be listed in its Prime Market to align climate disclosures with TCFD guidelines. If they fail to do so, they should provide an explanation why. The revisions also indirectly suggest that companies establish a sustainability committee at board or executive management level.

"This is a real change in climate disclosure practices," says Shin Furuno of Sumitomo Mitsui Trust Bank. Although nothing is mandatory, he says, the over 800 companies that want to be listed on this market are likely to take the guidance very seriously.

[12] "Exchange publishes corporate governance and ESG (climate disclosures) guidance", HKEX press release, November 5, 2021, https://www.hkex.com.hk/News/Regulatory-Announcements/2021/211105news?sc_lang=en.

[13] Source: a written MPFA submission to Economist Impact for this research.

Conclusion

AOs have their work cut out for them in prodding portfolio companies along the path to net-zero emissions. NGO scrutiny suggests that the net-zero pledges of the world's largest companies cannot currently be taken at face value.[14] That few Asian companies yet figure in such studies should not be cause for comfort in the region; the more large businesses that announce such commitments, the more they will come under activist scrutiny.

"For climate investment to flow, there needs to be clear regulation, clear short- and medium-term government targets, and economic incentives for corporations to shift their business models."

Shin Furuno, senior manager - ESG Strategy and Solutions, Sumitomo Mitsui Trust Bank

Asia's AOs have the financial clout to change the behaviour of carbon emitters in their portfolios and hold them to account for failure to meet pledges. And there is little reason to doubt AOs' commitment to do this. But they cannot do it alone. "COP26 made clear that the scale of the decarbonisation challenge is such that government and the private sector need each other to bring about change," says Ms Adams-Strump.

There are positive signs that governments in Asia are gaining a better understanding of the policy levers at their disposal to influence companies' climate behaviour in ways that complement those of AOs and other investors. China's emissions-trading initiative is an example, as are regulators' moves to introduce mandatory TCFD-aligned disclosure requirements.

The stars are aligning for an acceleration of Asia's progress toward a low-carbon future. AOs and policymakers cannot let their resolve to bring this about weaken, lest the opportunity be missed.

[14] For example: NewClimate Institute and Carbon Watch, *Corporate Climate Responsibility Monitor 2022*, February 2022, https://newclimate.org/2022/02/07/press-release-corporate-climate-responsibility-monitor-2022/

ECONOMIST IMPACT

LONDON

20 Cabot Square
London, E14 4QW
United Kingdom
Tel: (44.20) 7576 8000
Fax: (44.20) 7576 8500
Email: london@eiu.com

GENEVA

Rue de l'Athénée 32
1206 Geneva
Switzerland
Tel: (41) 22 566 2470
Fax: (41) 22 346 93 47
Email: geneva@eiu.com

NEW YORK

750 Third Avenue
5th Floor
New York, NY 10017
United States
Tel: (1.212) 554 0600
Fax: (1.212) 586 1181/2
Email: americas@eiu.com

DUBAI

Office 1301a
Aurora Tower
Dubai Media City
Dubai
Tel: (971) 4 433 4202
Fax: (971) 4 438 0224
Email: dubai@eiu.com

HONG KONG

1301
12 Taikoo Wan Road
Taikoo Shing
Hong Kong
Tel: (852) 2585 3888
Fax: (852) 2802 7638
Email: asia@eiu.com

SINGAPORE

8 Cross Street
#23-01 Manulife Tower
Singapore
048424
Tel: (65) 6534 5177
Fax: (65) 6534 5077
Email: asia@eiu.com