T20 Policy Brief

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Task Force 02

SUSTAINABLE CLIMATE ACTION AND INCLUSIVE JUST ENERGY TRANSITIONS

Developing Climate-Related Information Disclosure to Unlock Private Climate Finance and Support Financial Stability in the G20 Economies

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Abstract

While the Group of Twenty (G20) countries are committed to the United Nations Conference of the Parties' Agreement goals, these countries are also large greenhouse gas (GHG) emitters, and many countries are highly vulnerable to climate change. Many of them face huge financing gaps to support climate mitigation action and achieve carbon neutrality by 2050 or a little after, while their economic growth potential is high, and their populations keep growing. These countries are at diverse stages of economic development and implement diverse climate finance strategies, while having a growing energy demand. Using Asia as an example, this policy brief will focus on the merits of climate-related information disclosure to scale-up private climate finance, and to support low-carbon development. The policy brief will present the development of climate disclosure in Asia, identify challenges and opportunities, and offer a roadmap and recommendations applicable to the G20 countries.

Keywords: Climate Change, Climate Disclosure, GHG Emissions, Low-Carbon Transition, Scope 3 Emissions.

Diagnosis of the Issue

Large Low-carbon Investment Needs

The G20 countries and emerging and developing economies (EMDEs) need a substantial amount of finance to reduce greenhouse gas (GHG) emissions significantly and achieve carbon neutrality by 2050 or soon after. This is due to the rapid GHG emissions in the EMDEs (Figure 1). Figure 1 indicates the annual GHG emissions of the world, advanced economies, and EMDEs from 1990 to 2021, as well as their nationally determined contributions (NDC) emissions targets set for 2030. While data on advanced economies indicate a declining trend, EMDEs data show a continuous trend and these economies, especially in Asia, will continue to emit a substantial amount of GHG emissions.

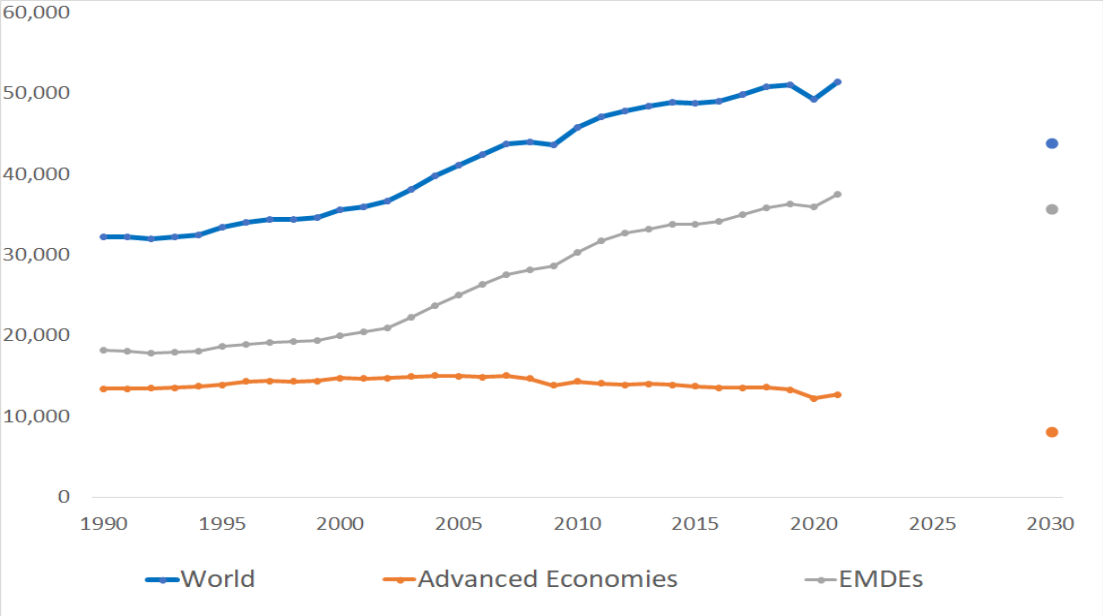

FIGURE 1. GHG Emissions and NDCs (million metric tons of CO_2 equivalent)

EMDEs = emerging and developing economies, GHG = greenhouse gas, NDC = nationally determined contributions. *Notes*: Data refer to total *GHG emissions, excluding land use, land-use* change and forestry (*LULUCF*). Dots in the figure refer to the nationally determined contributions. *Source*: Prepared by the authors based on the International Monetary Fund's Climate Change Dashboard (accessed on 12 March 2024).

In particular, Asia is becoming the center of global GHG emissions due to growing energy demand, which mirrors its robust economic growth and strong manufacturing base. The People's Republic of China (PRC), India, and Southeast Asia together are estimated to account for 70% of the world's increase in electricity demand from 2023 to 2025 (IEA and IFC 2023). Moreover, Asia relies heavily on coal-fired power generation with an average operating life of coal-fired power plants being around 14 years—much less than about the 45-year average in the United States and Europe. This makes the

replacement of coal-fired power plants with renewable energy plants more difficult in Asia. Therefore, Asian economies need to focus on three challenges: (i) accelerating an increase in renewable energy supply, (ii) reducing GHG emissions from the operation of existing emissions-intensive power plants and (ii) phasing out coal-fired power plants before the cost is fully recovered or install abatement measures. To achieve net-zero GHG emissions based on the International Energy Agency's (IEA) scenario, Asia needs to expand annual clean energy investments from $62.3 billion in 2022 to $138.6 billion in 2026–2030 and $165.8 billion in 2031–2035 (IEA and IFC 2023).

Table 1 shows that the PRC's clean energy investment amounted to $511 billion in 2022 and accounted for about 80% of the total investment in Asia. While other Asian economies invested only $112 billion in 2022, their annual investment needs to grow quickly to reach $711 billion by 2031–2035. To promote decarbonization and meet growing electricity demand, other Asian economies will need about six times more investment than the current level. Even excluding the PRC, Asia's investment will be the largest among EMDEs. So far, EMDEs excluding the PRC, represent nearly 70% of the world's population, but their clean energy investment accounts for only 20% of the global total. This clearly reflects the shortage of private capital due to political, economic, and exchange rate risks.

TABLE 1. Annual Clean Investment Required under the Net-zero Scenario ($ billion)

	2015	2022	Net Zero Scenario (1) 2026-2030	(2) 2031-2035	(2)/2020 level
EMDEs	538	773	2,222	2,805	4
People's Republic of China (PRC)	287	511	853	947	2
EMDEs excluding PRC	251	262	1,369	1,858	7
Southeast Asia	28	30	185	244	8
India and Other Asia	76	82	348	467	6
Africa	26	32	203	265	8
Latin America	63	66	243	332	5
Middle East and Eurasia	57	52	390	550	11
Asian EMDEs	391	623	1,386	1,658	3

EMDEs = emerging and developing economies.

Source: Prepared by the authors based on IEA and IFC (2023).

Constrained Private Climate Finance

To reduce GHG emissions and achieve net-zero targets by around 2050, all the committed countries need to transform industries so that they decarbonize and become more environmentally sustainable. They need to expand renewable energy and energy efficiency investments and promote research and development in decarbonization technology especially in regard to industrial processes, sustainable chemical feedstock solutions, implement new food production solutions, decarbonize and green the transport and building sectors, while implementing necessary comprehensive climate policies including carbon pricing and environmental regulations.

This comprehensive agenda requires redirecting private finance to accelerate sustainable finance. Many of the necessary investments, such as in renewable energy and energy infrastructure such as power grids, are expected to be undertaken by companies in

the form of large-scale investment projects which, by far, exceed the capacity of public finance.

However, one major constraint to scale-up private capital to support these investments is the relatively low credit ratings in EMDEs (Figure 2). Many global financial institutions and institutional investors are subject to stringent financial regulations following the 2008 global financial crisis. Thus, these investors tend to prioritize investment-grade bonds with a credit rating of BBB or higher and invest mainly in developed and some large emerging economies. Overall, private investors often hesitate to invest in EMDEs because about 80% of EMDEs' government bonds have a speculative rating of BB or lower, with high political and exchange rate risks. Consequently, financial institutions that invest in speculative-grade securities (BB or lower) require additional capital to build up a buffer, and these investments often do not provide enough returns to justify the additional capital costs, making private finance flows toward EMDEs less attractive. Moreover, the funding positions of EMDEs have deteriorated further following the novel coronavirus disease (COVID-19) pandemic in 2020 and rising interest rates in 2021–2023, making fundraising and borrowing even more difficult.

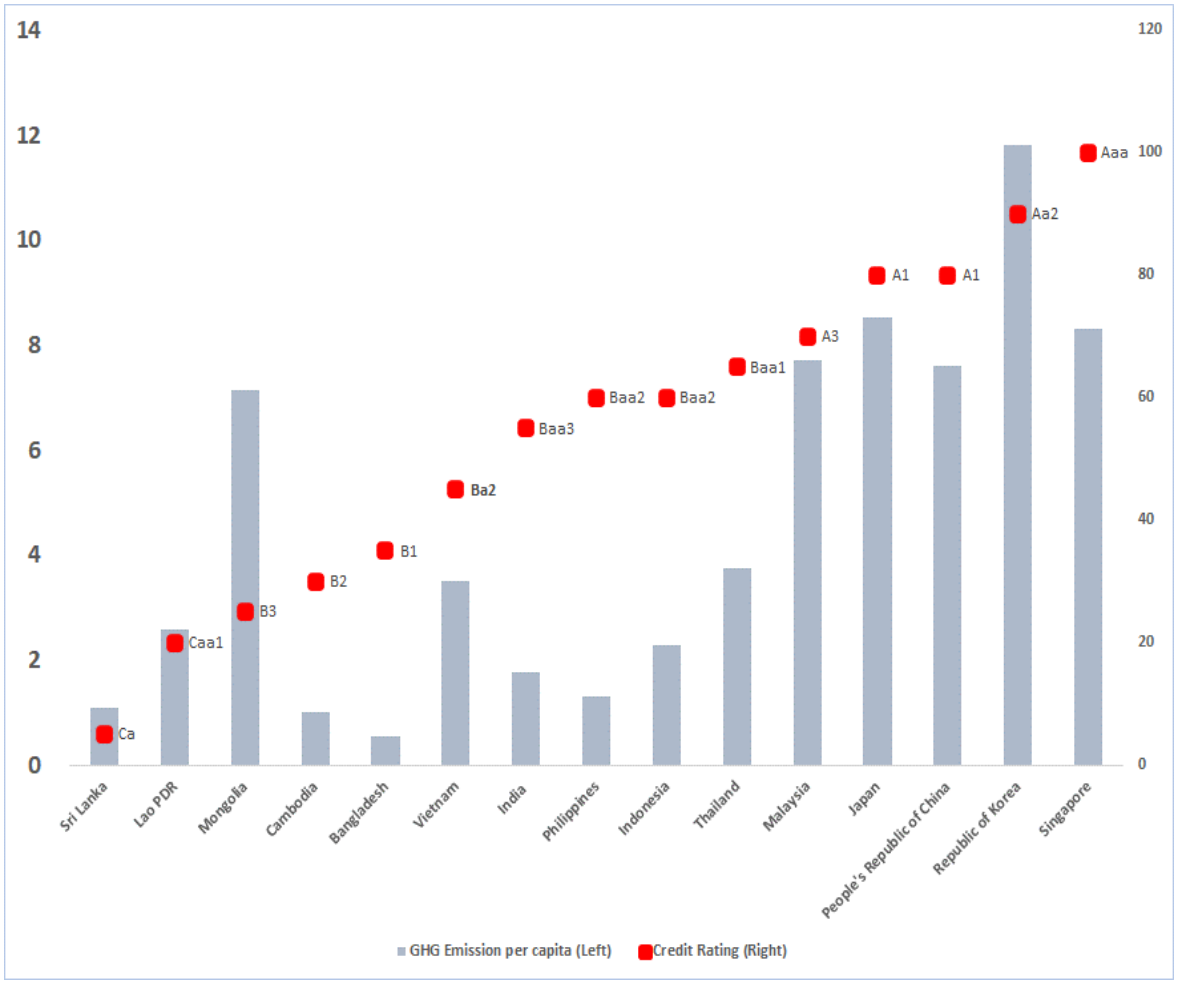

FIGURE 2. Per Capita GHG Emissions (tons, CO_2 equivalent) and Sovereign Credit Ratings

GHG = greenhouse gas, Lao PDR = Lao People's Democratic Republic.

Note: The sovereign credit rating is adjusted to the numerical number from 0 to 100.

Source: Prepared by the authors based on S&P Global and Our World in Data.

Centrality of Climate-related Disclosures to Scale up Climate Finance

The necessary climate transition requires large investments by companies. To ensure this transformation takes place at scale, it is necessary for investors and financial

institutions to allocate more funds to low-carbon activities. Thus, promoting climate-related information disclosure in companies, i.e., corporate climate disclosure, is essential to assess companies' plans and activities and ensure investors and financial institutions direct their investments where these can be the most impactful to support the reduction of GHG emissions and net zero targets.

Corporate climate disclosure has the potential to provide more information on the potential risks associated with carbon-intensive companies and also on the new opportunities created by the transition. As companies increasingly face physical risks, transition risks, and associated litigation risks (liability risks), financial institutions including banks and investors financing those companies will face potential losses. Thus, they have to understand that their loans and investments provided to emissions-intensive companies may become nonperforming in the future if those companies find it difficult to recover the costs of fixed asset investment—thus, making those assets stranded, lowering companies' repayment capacity and returns, and creating a risk on the stability of the whole financial system.

With corporate climate disclosure, financial institutions including banks and investors can also adjust their choice and make smarter investments supporting the necessary transition.

In this journey, promoting climate-related corporate information disclosure based on the Task Force on Climate-Related Financial Disclosure (TCFD) recommendations and the International Sustainability Standards Board (ISSB) disclosure standards is an essential step since investors need this information to assess companies and their activities before making financing decisions.

A key aspect of this exercise is to report on all GHG emissions. A growing number of large listed companies across the globe are making efforts to reduce GHG emissions from operations not only from their direct production activities (Scope 1 emissions) and purchased electricity (Scope 2 emissions), but also all indirect emissions that occur in their value chain, due to the supply of raw materials, intermediate input and machinery, and their transportation (Scope 3 emissions). Since these suppliers often include large and small companies in EMDEs, it is important for these companies to be prepared for collecting, measuring, and reporting data, as this process has a cost.

Situation in Asia: Divergent Approaches in Supporting Corporate Climate Disclosure

In Asia, financial regulators have been adopting divergent approaches toward corporate disclosure and related policies (such as taxonomies, technology roadmaps, and transition finance). Based on a survey including responses from 12 Asian economies, it was found that the majority of financial regulators have not yet formally endorsed specific climate-related disclosure recommendations and standards such as the TCFD recommendations or the ISSB standards. However, half of them have set a timeline for their adoption in the near future (Shirai and Dang 2024). About 75% of these regulators have required or recommended to disclose GHG emissions data (either Scope 1 and 2 only or Scope 1, 2, and 3 emissions data) while 25% are silent about it. Meanwhile, many respondents mentioned facing challenges around the disclosures particularly for Scope 3 emissions data, as there is a significant absence of reliable primary data (data provided directly by suppliers).

Initially, companies have to rely substantially on secondary data (data provided by third parties, such as emissions factors provided by the government in the relevant

jurisdiction or released by some international organizations such as the IEA) due to a lack of primary data. Using secondary data has limitations because data are based on average statistics and companies are not able to reflect their emissions reduction efforts made jointly with their suppliers through extensive engagement. While some advanced economies release detailed emissions factor data, which refer to parameters and coefficients used in calculation of GHG emissions by sources by companies, such data are not available for many EMDEs.

In addition, publishing transition plans (which describe detailed actions to achieve emissions targets) and climate scenario analysis (which performs resilience of companies' business models against various global temperature scenarios)—key components of the strategic pillar of the TCFD recommendations and the ISSB standards—have not been required by most regulators (Shirai 2023a). Some Asian economies have adopted other disclosure standards such as the Global Reporting Initiative standards and thus are not familiar with the TCFD recommendations and the ISSB standards. Figure 3 indicates that about 60% of the regulators have adopted the TCFD recommendations by law or on a voluntary basis (with or without a Comply or Explain basis), while some other economies have adopted disclosure standards other than the TCFD recommendations.

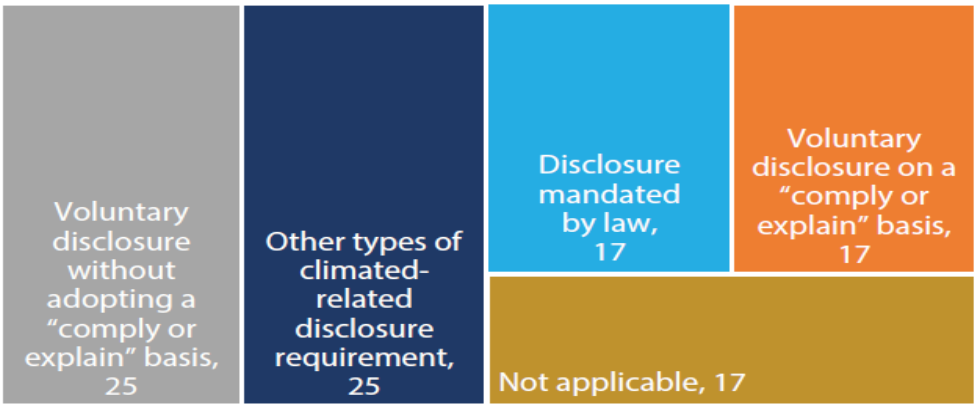

FIGURE 3. Types of Disclosure Implementation Based on TCFD Recommendations (%)

TCFD = Task Force on Climate-Related Financial Disclosure.

Source: Shirai and Dang (2024).

About half of the respondents have indicated plans to adopt the ISSB standards fully without making adjustments reflecting specific features of the economies. Around 75% of regulators plan to apply the ISSB standards to a subcategory of companies (such as listed companies), while around 60% plan to require external audits or assurance (Figure 4).

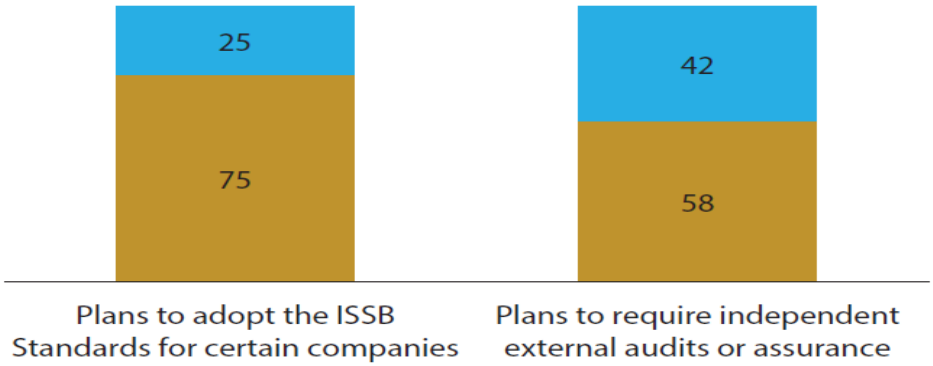

FIGURE 4. Plan to Adopt ISSB Standards for Certain Types of Companies and Need for External Assurance (%)

ISSB = International Sustainability Standards Board.

Source: Shirai and Dang (2024).

Overall, practices in Asia are diverse and it takes time to require companies to disclose GHG emissions data and targets, credible transition plans, and scenario analysis without creating rules that would be too expensive to implement for companies. Overall, building an enabling framework to support sound sustainable reporting and corporate climate disclosure requires ambition and sequencing. As the G20 countries face similar challenges and opted for heterogeneous approaches, the following recommendations are proposed.

Recommendations for the G20 Countries and Scenario of Outcomes

Promoting reliable, comparable, and consistent corporate climate-related information disclosure and reporting should be recognized as a foundation for evaluating and monitoring climate-related financial risks (Shirai 2023a, 2023b) and scale-up private climate finance. The G20 leaders' declaration should include a reference to this key ingredient to direct private capital where it would be the most impactful to respond to the climate emergency. Sustainability reporting and climate disclosure can in turn contribute to safeguarding long-term financial stability by raising awareness of climate-related financial risks among G20 financial institutions and fostering the growth of sustainable finance markets resulting from increased trust from investors and financial institutions.

At the level of each G20 country, and to expedite this process to generate the best outcome possible for G20 economies and the world, it is crucial for the G20 governments to encourage G20 companies to disclose accurate GHG emissions data, emissions reduction and net-zero targets, and other climate-related information in alignment with the TCFD recommendations and the ISSB standards.

All committed G20 countries and their regulators should establish ambitious regulatory frameworks promoting climate disclosure in a phased approach. The G20 countries should mandate all four pillars of the TCFD guidelines with clear disclosure requirements on transition plans and climate scenario analysis (both in the strategy pillar) and metrics and targets with some timelines.

1. Establishing a framework based on international standards with gradual obligations and increasing scope

First, the G20 countries that have not yet established a framework to support climate-related information disclosure for companies and financial institutions within their jurisdiction should publicly endorse the TCFD recommendations and the ISSB standards (International Financial Reporting Standards Sustainability Disclosure Standards [IFRS S2]). They can first encourage companies and financial institutions to voluntarily disclose information in line with the TCFD recommendations with a "comply or explain" approach. As companies become more familiar with disclosure and reporting practices, the possibility of making TCFD-based disclosure and reporting mandatory should be considered. Since ISSB/IFRS S2 requires more comprehensive and detailed disclosure, initial efforts of promoting corporate disclosure can be targeted towards large and/or listed companies that are already familiar with the TCFD recommendations, for instance, those which are in the prime or main segment of the stock exchange of a jurisdiction. Later, the G20 countries can consider aligning climate disclosure fully with ISSB/IFRS S2 for all companies, with potential adjustments in the disclosure requirements to strike a balance between the benefits and burdens associated with disclosure for non-listed entities or small and medium-sized enterprises.

2. Gradual mandatory disclosure of GHG emissions

The disclosure of GHG emissions and targets should also be implemented in a phased approach. If most of the companies in a jurisdiction are unfamiliar with TCFD-based disclosure practices, the regulator should, first, encourage companies to disclose GHG emissions data for Scope 1 and Scope 2 categories. Subsequently, the regulator can

require disclosure of Scope 3 GHG emissions data with a clear timeline. Similarly, companies should be encouraged to set GHG emissions targets for the medium term (e.g., 2030) and long term (e.g., achieving net-zero emissions by 2050) using Scope 1 and Scope 2 categories, first and expand to Scope 3 at a later stage. To make this process smoother, companies should also be encouraged to establish short-term GHG emissions targets (e.g., for the next 1–5 years) that align with their medium- (2030) and long-term targets (2050).

All G20 financial regulators in charge of promoting corporate climate-related disclosure should develop roadmaps that will lead to accountable and high-quality mandatory disclosure and reporting systems, since voluntary disclosure presents inherent limitations. To support this process, it is critical to provide adequate training to companies and the more advanced G20 economies should provide technical assistance to EMDEs' financial regulators to raise awareness on the importance of climate disclosure and develop their capacities to implement adequate regulation.

Addressing climate change requires a public and private response and climate-related information disclosure will play a critical role to direct resources where these funds can have the greatest impact. To support this agenda, the G20 policy makers have a key role to play. They should build a national consensus to ensure all public and private stakeholders are onboard. Adopting climate disclosure practices in line with international standards is also a way to encourage corporations to be better prepared to face climate physical and transition risks. It is therefore a critical instrument to promote decarbonization and create a climate resilient private sector.

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