



Climate-Aligned Investments and Policy Nexus in Indonesia

Unlocking transition finance for achieving net-zero emissions

February 2025



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ABOUT CLIMATE POLICY INITIATIVE

CPI is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has seven offices around the world in Brazil, India, Indonesia, South Africa, the United Kingdom, and the United States.



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EXECUTIVE SUMMARY

This report aims to outline Indonesia's current climate-aligned policy nexus, as well as the investment gaps and barriers that hinder the flow of finance for decarbonization and sustainability efforts in the country. It also formulates three policy recommendations to streamline financial sector policies to scale up climate-aligned investment and enable alternative financing instruments to support Indonesia's transition.

Since the issuance of its [Enhanced Nationally Determined Contribution \(ENDC\)](#) in 2022, Indonesia has continued to leverage sustainable finance to meet its evolving climate targets.

Around USD 285 billion is needed by 2030 to reduce up to 43.2% of emissions from five NDC sectors in Indonesia: energy; agriculture; forestry and land use (FOLU); industrial processes and product use (IPPU), and waste (UNFCCC, 2022). Indonesia's power sector alone, as a major emissions contributor, requires at least USD 97.1 billion between 2023 and 2030 to help meet the country's ambitious targets of achieving 34% renewables in the energy mix by 2030 and net-zero emissions by 2050 (JETP CIPP, 2023). The country's Second NDC, is expected to be published by March 2025, with the goal of enhancing the government's commitment to addressing the impacts of climate change by covering new sectors including ocean, upstream oil and gas, as well as deeper and broader aspects of the industrial and agricultural sectors (MoEF, 2024).

CPI's recent tracking, [Climate-Aligned Investments in Indonesia's Financial Sector from 2015 to 2021](#), found a substantial investment gap of approximately USD 146.4 billion (a deficit of 51%) to meet the 2030 ENDC targets (CPI, 2023). Over the period of 2015 to 2021, public and private financial institutions (FIs) had only contributed USD 41.7 billion in climate finance, accounting for around 15% of Indonesia's needs. Public and private FIs contributed almost equal shares of annual climate-aligned investments, respectively at USD 3.5 billion and at USD 3.4 billion. However, it is worth noting that climate finance from private FIs, mostly from commercial FIs, represented only 3% of their total investments—pointing to great potential for them to increase their contributions.

To date, increased sustainable investment from private actors in Indonesia has mainly been driven by supporting regulations for investments and activities that are climate-aligned and beneficial to micro-, small-, and medium-sized enterprises (MSMEs). These include the Financial Services Authority (OJK)'s Sustainable Finance Roadmap Phase I (2015-19) and Phase II (2021-25) and the OJK Regulation No. 51 Year 2017 (POJK 51/2017) regarding Sustainable Finance Implementation and Sustainability Reporting. As captured in [CPI's publication on Indonesia's green banking](#) (2022), there was a 136% increase in climate-aligned investment and disclosure by FIs in Indonesia from 2017 to 2019 following the enactment of POJK 51/2017 on Sustainability Reporting and the introduction of the global framework of the Task Force on Climate-Related Financial Disclosures (TCFD). Moreover, the launch of the Indonesia Green Taxonomy 1.0 (THI 1.0) in 2022 signaled an expectation for private FIs to go beyond the principles of ESG investing toward more comprehensive efforts to achieve the country's 2050 net-zero emissions target.

A progressive approach that aligns Indonesia's financial system with the UN Sustainable Development Goals could help to fill the climate investment gap.

The Omnibus Law on Financial Sector Development and Strengthening (P2SK Law / Law No 4 Year 2022), issued in 2022, emphasizes that a sustainable finance ecosystem must have holistic support in the form of policies, regulations, norms, standards, products, transactions, and financial instruments that acknowledge the transition period and activities necessary for sustainable economic growth. Recent key updates to financial sector regulations are also designed to support national decarbonization strategies and sectoral policy developments, in line with the global sustainable finance initiatives. These include: (i) Version 1 of [Indonesia Taxonomy for Sustainable Finance \(TKBI\)](#) launched on February 2024 and the most recent update of [TKBI Version 2 \(TKBI v2\)](#) on February 2025, as an enhancement of the 2022 Indonesia Green Taxonomy, as well as, (ii) OJK Regulation No 18 Year 2023 (POJK 18/2023) on the Issuance and Requirements for Debt Securities and Sustainability-Based Bonds and Sukuk, which amended OJK Regulation No 60 Year 2017 (POJK 60/2017) on Green Bonds and Sukuk.

In addition to efforts that support Indonesia's national agenda and international initiatives, the following two key barriers to sustainable investment must be further addressed:

- i. **Contradictory policies that continue to hinder climate-aligned investment.** For instance, fossil fuel subsidies accounted for 9% of Indonesia's total state expenditure, while climate spending only accounted for 6% from 2015 to 2020, creating disincentives for the market to commit to decarbonization initiatives (CPI, 2021). Uncertainties in regulatory frameworks, as well as changes in political and market landscapes (e.g., foreign exchange risks, demand fluctuations) heighten investor perception that climate-aligned investments are more expensive and riskier than traditional investments. Such perceptions impact project outcomes and ultimately potential returns, which may further deter investment despite the availability of funds.
- ii. **Financing mismatch between the investment needs of climate-aligned projects and the various constraints faced by finance providers.** While climate-related projects are often capital-intensive and have long life-cycles, finance providers such as commercial banks are often constrained in providing long-term financing due to their reliance on short-term deposits and other debt-financing instruments such as corporate bonds, issued with a tenor of three or five years (Indonesian Central Securities Depository, 2019). Longer tenors may incur higher interest rates and greater project risks, especially in the early development and construction stages. Challenges in securing permits and social license may result in project

delays and cost overruns. To compensate these risks, finance providers usually impose higher borrowing costs (e.g., interest rates, collateral), which may burden projects in the long run.

Based on the above assessment, three policy recommendations are proposed to narrow the investment gap, activate policy enablers to unlock transition finance as new pool of capital, and address investment barriers:

<p>Harmonize sustainable finance policies to signal clear direction toward climate-aligned investment, by:</p>	<ul style="list-style-type: none"> i. enhancing Indonesia's Taxonomy for Sustainable Finance for better alignment with relevant sectoral policies, ministerial regulations, and regional/global taxonomies; and ii. developing a transition finance framework to acknowledge transition activities and their eligibility criteria.
<p>Enable alternative financial instruments to unlock and scale up transition finance, by:</p>	<ul style="list-style-type: none"> i. leveraging sustainability-linked products such as sustainability-linked loans to offer investors opportunities to support and benefit from the transition to a more sustainable economy; and ii. exploring the potential of carbon finance to incentivize vast deployment of renewable energy and low-carbon technologies and crowd in international finance.
<p>Enhance reporting and transparency through sustainability- and climate-related disclosures...</p>	<p>...on the use of investments, progress toward emissions reduction targets, and overall impact, with reference to the guidance of the International Sustainability Standards Board.</p>

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1. CURRENT POLICY OVERVIEW

Indonesia has been actively working to enhance its climate commitments and sustainable finance policies. Its Enhanced NDC (ENDC), submitted in 2022, includes targets to reduce greenhouse gas (GHG) emissions by 31.89% unconditionally and 43.20% conditionally by 2030, an increase from the previous targets of 29% and 41% respectively. The ENDC includes ambitious mitigation targets for five priority sectors—energy; agriculture; forestry and land use (FOLU); industrial processes and product use (IPPU), and waste—which account for the majority of the country’s emissions. The Second NDC (SNDC), which has been under preparation since February 2024, was initially planned to be launched at COP29 that year. However, as it required further alignment with the national economic growth target under the newly appointed President Prabowo Subianto, this document is now set to be issued by March 2025. The SNDC is expected to outline Indonesia’s strategy to limit temperature rise through various efforts, such as the inclusion of blue economy potential, wider coverage of the energy, agriculture and FOLU subsectors, as well as clear emphasis on the social and sustainability aspects of economy-wide decarbonization.

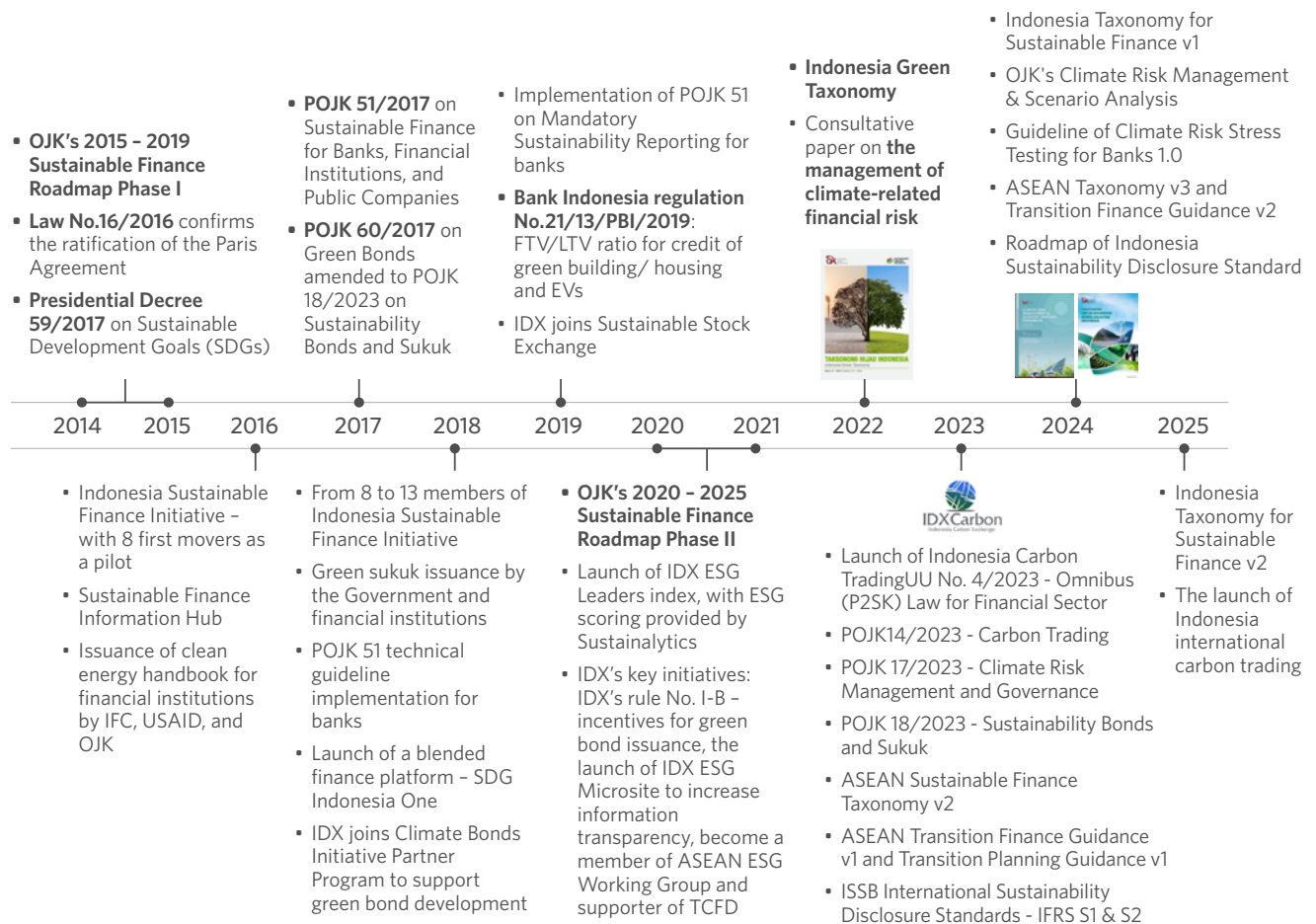
Furthermore, there is growing momentum for transitioning Indonesia to a low-carbon economy, enabling the country to meet its climate commitment, driven by major regional and global initiatives, including:

- **Indonesia’s Long-Term Strategy for Low Carbon and Climate Resilience (LTS-LCCR)** issued in 2021, highlights the importance for nations to transition away from fossil fuel energy to achieve net zero by 2060 or earlier. Indonesia aims to peak its GHG emissions by 2030, setting the stage for a gradual decline toward net zero. Hence, there is an urgency to overcome technical and regulatory barriers and accelerate investment to improve electricity transmission infrastructure, interconnectivity, and capacity of local and mini grids, and the integration of renewable energy sources, such as solar, wind, and geothermal, into the power system.
- **Indonesia’s Energy Transition Mechanism Country Platform (ETM CP)**, launched in November 2022, is managed by PT Sarana Multi Infrastruktur (PT SMI) to accelerate financing mobilization for Indonesia’s just energy transition as well as the development of its supporting infrastructure by 2060 or earlier—in line with Indonesia’s LTS-LCCR. To achieve this, a combination of early retirement of coal-fired power plants and the addition of clean energy capacity needs to be conducted concurrently.
- **The Just Energy Transition Partnership (JETP)** between Indonesia and the G7 countries, agreed during Indonesia’s G20 Presidency in November 2022, encompasses a financing commitment of USD 20 billion from both public and private sources to support Indonesia’s energy policy reforms through power sector decarbonization and energy efficiency measures.

Simultaneously, efforts to align sustainable finance initiatives with climate commitments and the UN Sustainable Development Goals (SDGs) have been captured through various policy measures, as depicted in Figure 1. Indonesia’s key policy efforts to strengthen the sustainable finance ecosystem are rooted in P2SK Law on the Financial Sector Development and Strengthening, which aims to create a more streamlined investment ecosystem and coordination among policy makers and key stakeholders. The law serves as the regulatory basis for key updates on the financial sector policies, including:

- **Broadening the coverage of green finance to the wider sustainability aspects.** While green finance focuses on emissions reduction as a key performance indicator, sustainability also considers social, governance, and economic resilience aspects. This is now regulated under POJK 18/2023 on the Issuance and Requirements for Debt Securities and Sustainability-Based Bonds and Sukuk, which amended OJK Regulation POJK 60/2017 on Green Bonds and Sukuk.
- **Aligning the Indonesia Taxonomy for Sustainable Finance (TKBI) with regional taxonomies, such as the ASEAN Taxonomy, to acknowledge transition activities and explore alternative financing mechanisms.** This is intended as a key enabler to increase interoperability between various taxonomies and ease international transactions. The alignment should provide policymakers and private actors (e.g., FIs, corporations, and investors) with common definitions on which economic activities are considered sustainable. Issued at the beginning of 2024 to refine the 2022 Indonesia Green Taxonomy (THI), TKBI is designed to support national decarbonization strategies and sectoral policy developments, and unlock transition finance (OJK, 2022). Alternative financing instruments such as sustainability-linked loans, transition bonds, and carbon finance may offer investors options to support and benefit from the transition. Moreover, implementation guidelines for the TKBI are further required to bridge gaps in climate-aligned investments, particularly on the identification and inclusion of transition activities and/or sectors.

Figure 1. Indonesia’s policy efforts to strengthen the sustainable financial ecosystem

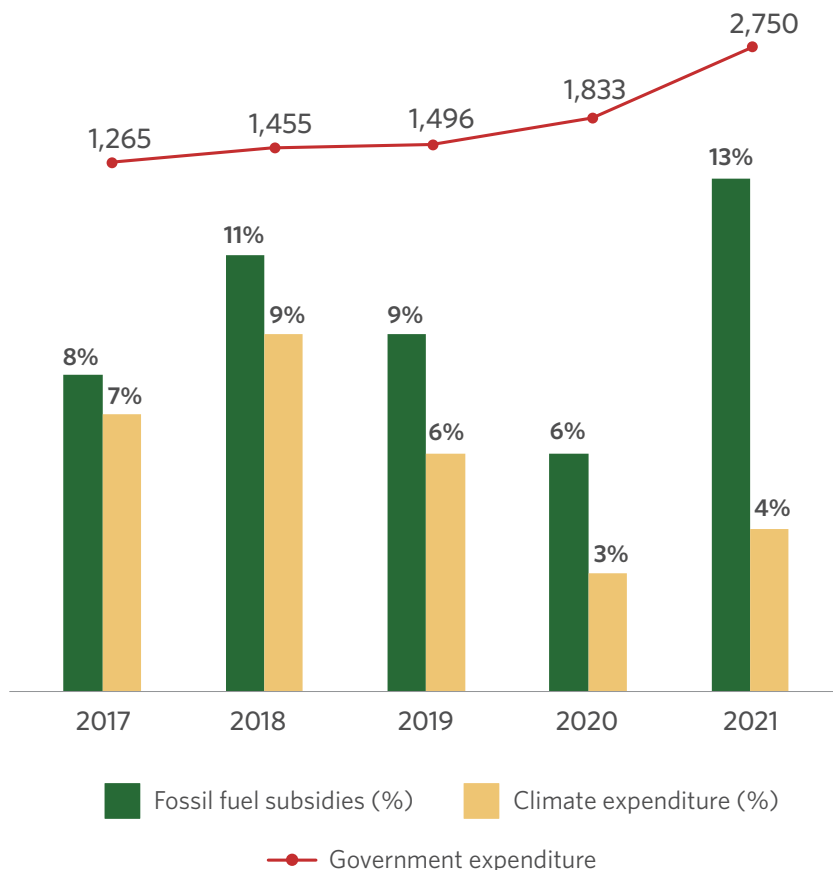


Source: IDX Presentation (2022), various sources on Indonesia’s sustainable finance regulations and policies

While financial sector policy influences the supply of financing, the demand for sustainable finance is shaped by enabling sectoral policies and regulations. For example, the Indonesian Ministry of Environment and Forestry (MoEF) Guideline for Climate Change Mitigation Actions (2018) supports pertinent ministries and government agencies to determine development activities in five NDC sectors (energy, agriculture, FOLU, IPPU, and waste) that have impacts on emissions reduction. See the Appendix for sectoral regulations that are relevant to the sustainable finance framework.

Despite having enabling regulations, some of Indonesia's key policies are still not well aligned. For instance, Government Regulation PP No. 25/2021 imposes a 0% royalty for coal, which may hinder progress toward the target of achieving 23% of renewables in the country's energy mix by 2025, as stipulated in Indonesia's National Energy General Plan (RUEN) and the LTS-LCCR. Another example is the continuation of fossil fuel subsidies that consistently outweigh climate spending (CPI, 2021; see Figure 2), even while planning to impose a carbon tax and allocate related revenues for climate action. Indonesia should avoid offering policy "carrots" for contradictory goals, as this could cause market failures.

Figure 2. Climate expenditure vs. fossil fuel subsidies in Indonesia, 2016-2021

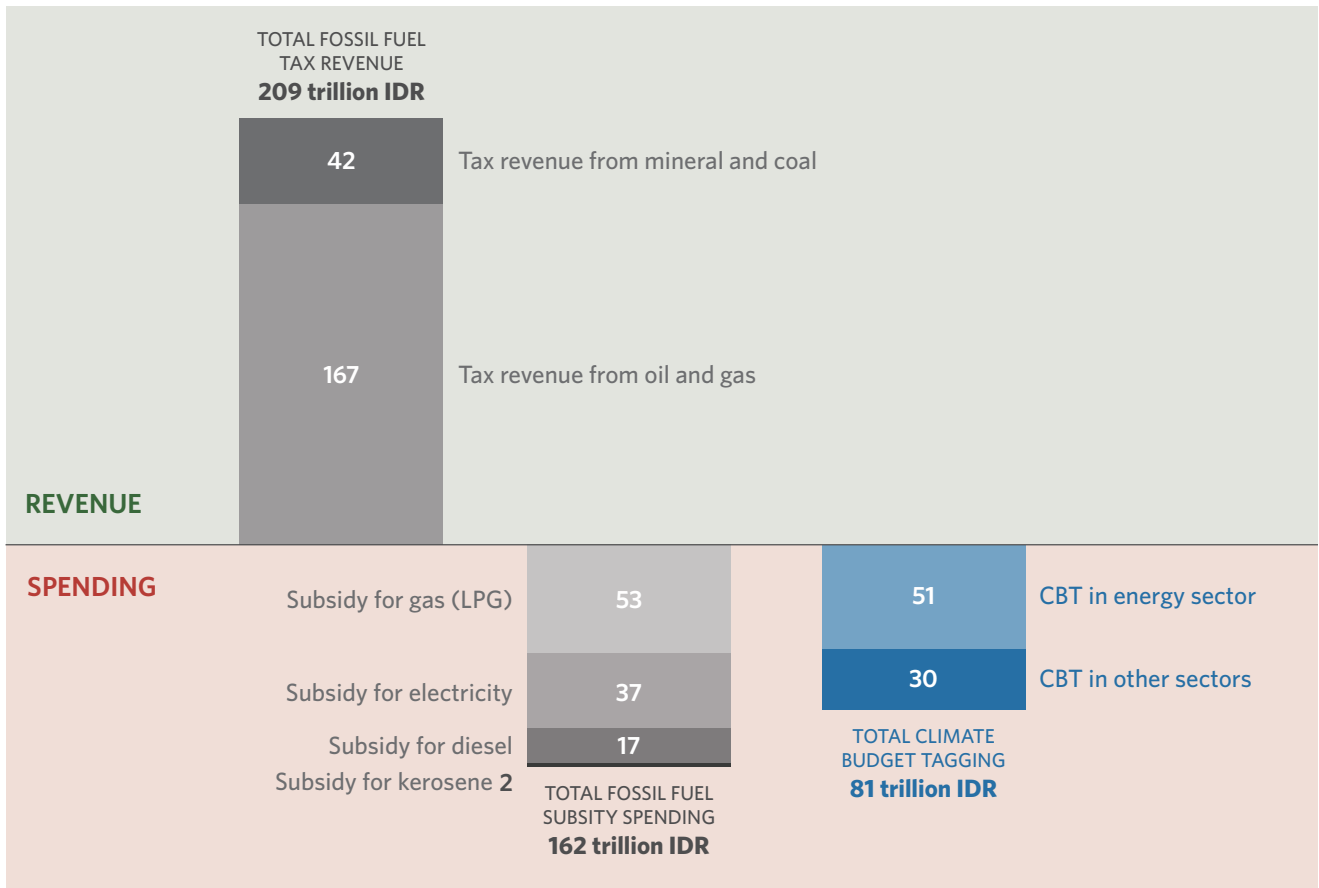


Note: Included here are subsidies provided through PLN, the state electricity company, to allow PLN to purchase coal at market rates while selling below-market-rate electricity to consumers.

Source: CPI analysis (2024), Indonesia Climate Budget Tagging Realization Report (MoF, 2020; MoF, 2024)

Moreover, fossil fuel subsidies are being spent on sectors which contribute to state revenue, but not at a significantly higher value than the subsidies themselves. While fossil fuel subsidies represent 9% of state budget spending, the fossil fuel sector only contributes 11% of state budget revenue, as shown in Figure 3.

Figure 3. Fossil fuels' contribution to state revenue vs fossil fuel subsidies, 2016-2022



Source: CPI analysis (2024), Indonesia Climate Budget Tagging Realization Report (MoF, 2020; MoF, 2024)

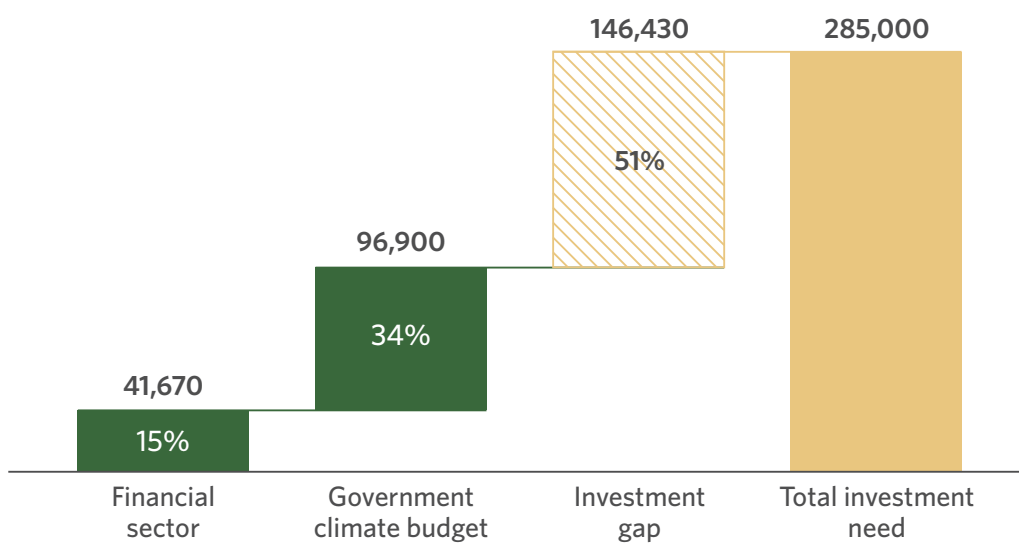
2. FLOWS AND GAPS OF CLIMATE-ALIGNED INVESTMENTS IN INDONESIA

This section assesses current climate-aligned investments from Indonesia’s financial sector—from public and private FIs. Climate-aligned finance comprises activities that directly contribute to reducing GHG emissions and improving climate resilience. This is aligned with Indonesia’s climate goals and the categorization of green sectors and/or activities under OJK Regulation POJK 51/2017 on Sustainable Finance Implementation and POJK 18/2023 on Sustainability Bonds and Sukuk. The current flows are then compared to the investment levels needed to meet Indonesia’s ENDC.

2.1 ONE-THIRD OF CLIMATE-ALIGNED INVESTMENT IS SOURCED FROM THE GOVERNMENT BUDGET

Indonesia’s annual average climate expenditure from 2016 to 2021 was USD 5.4 billion, amounting to approximately 4.3% of total state expenditure during that period. At this rate, only about one-third of the USD 285 billion needed by 2030 for [Indonesia’s ENDC](#) goals will be invested (see Figure 4). The MoF has thus noted that Indonesia cannot rely solely on the government budget to narrow this gap and must instead explore non-government sources and alternative financing strategies to achieve the country’s climate ambitions (MoF, 2020; MoF, 2023).

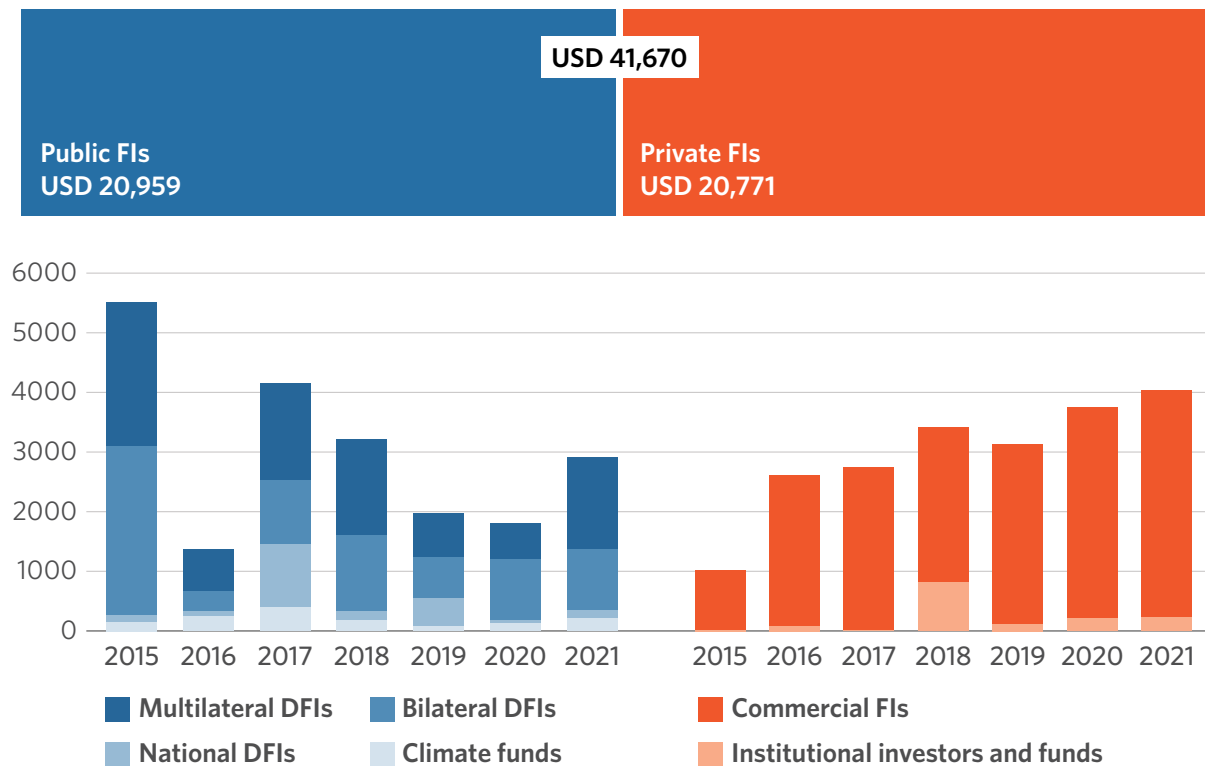
Figure 4. Investment, need, and gap to achieve the 2030 climate targets in Indonesia’s ENDC



Source: MoF (2020); MoF (2023)

CPI's most recent tracking recorded a total of USD 41.7 billion of climate-aligned investments in Indonesia's financial sector from 2015 to 2021 (CPI, 2023). Public and private FIs contributed almost equal shares of annual climate-aligned investments, at USD 3.5 billion and at USD 3.4 billion, respectively (see Figure 5). This constituted only 15% of the country's climate finance needs over the period.

Figure 5. Climate-aligned investment of public and private FIs, 2015-21



Source: CPI (2023)

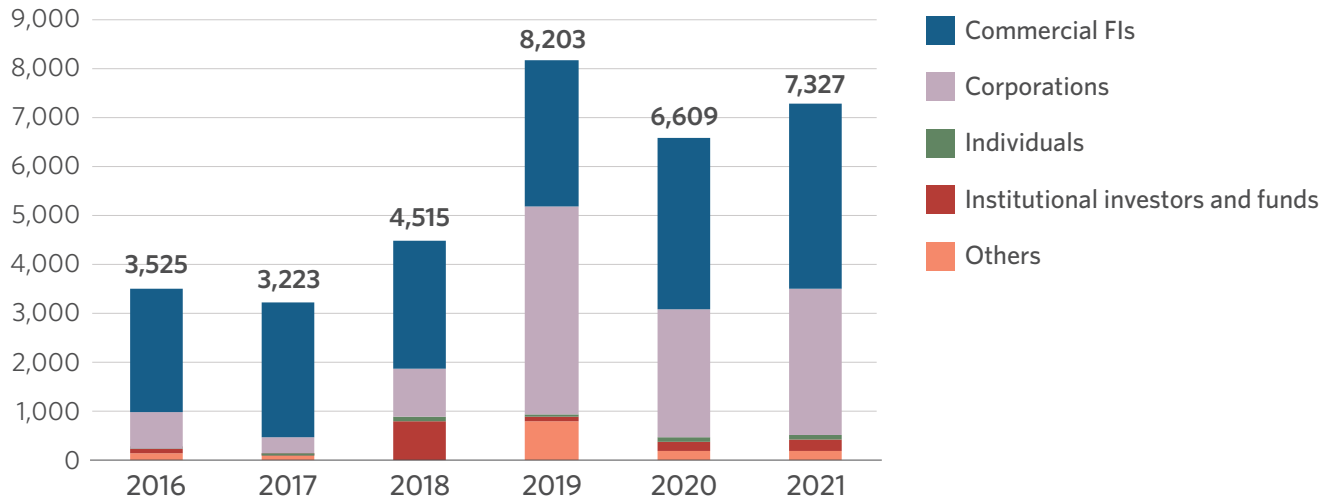
2.2 THE REMAINING INVESTMENT GAP NEEDS TO BE FILLED BY PRIVATE AND INTERNATIONAL FINANCE

Indonesia's climate-aligned investments from private FIs increased from USD 1.2 billion in 2015 to USD 4.0 billion in 2021. This significant increase, dominated by investments from commercial banks, could be partly attributed to the sustainable finance practices and reporting requirements imposed by POJK 51 in 2017. This regulation mandates the development of Sustainable Finance Action Plans and annual Sustainability Reporting, encouraging banks to identify climate and social risks and opportunities and incorporate them into their risk assessment and financial transactions.

The upward trend of investments from private FIs is further corroborated by recent data from the Financial Services Authority (OJK) and Indonesia Stock Exchange (IDX), as shown in Figure 6 below. With Indonesia's capital market capitalization at IDR 11.67 quadrillion (USD 713.7 billion) in December 2023, almost four times higher than that year's state budget, this is a potentially

significant source of finance to narrow the climate investment gap. Strong policy signals should be sent to tap transition finance, particularly for hard-to-abate sectors.

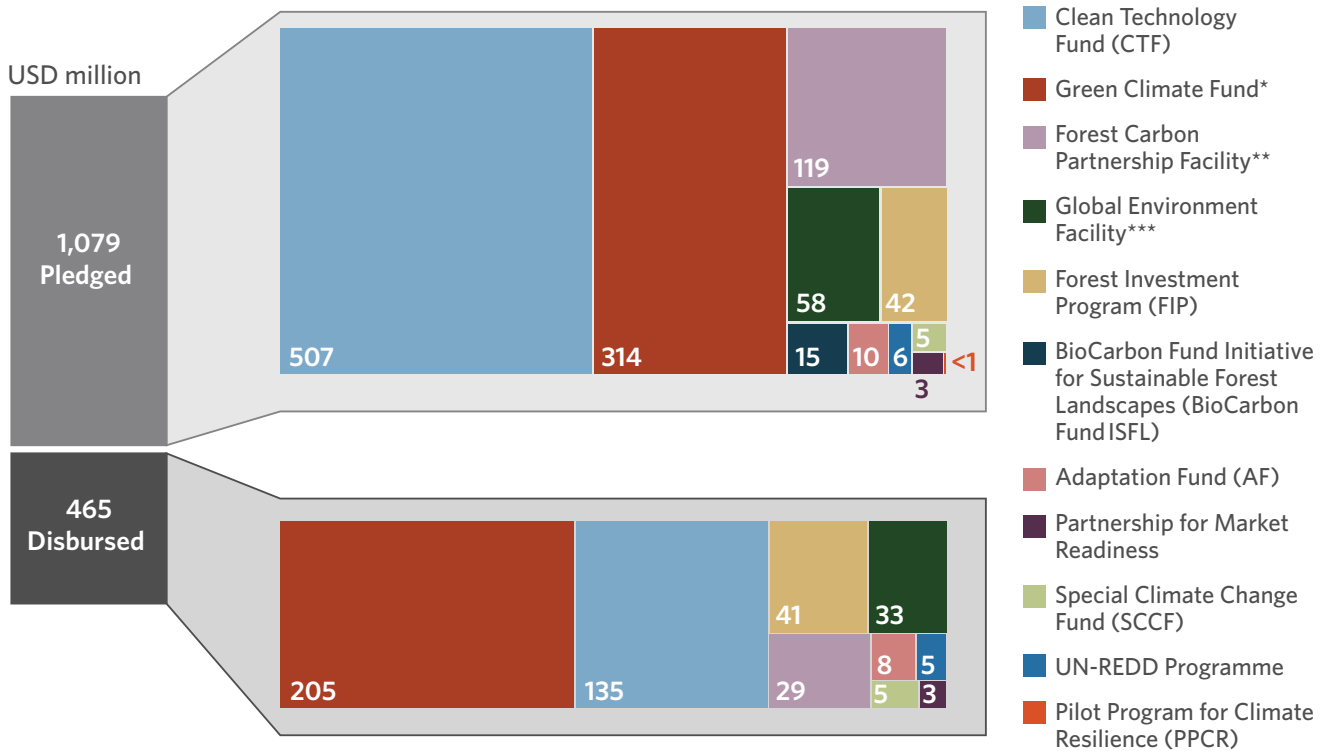
Figure 6. Private green and climate-related investments from 2016 to 2021, USD million



Source: CPI (2023)

In terms of public FIs, under the Paris Agreement, global multilateral funding missed the pledge to deliver USD 100 billion annual climate finance by 2020 (OECD, 2024). With the New Collective Quantified Goal introduced as key element of the Paris Agreement at COP29, the commitment is now tripling to USD 300 billion annual climate finance to support developing countries in their climate action to be achieved by 2025 (UNFCCC, 2024). To date, there has been a significant gap between the ambitions of public FIs and the realized investments in climate-aligned projects, particularly for adaptation in countries most vulnerable to climate change. In Indonesia, only 43% of the total funding commitment made by multilateral international climate funds were disbursed by 2023 (see Figure 7). This, nevertheless, marked significant progress as it was more than double the disbursement made in 2019 (CFU, 2024).

Figure 7. Multilateral international climate funds in Indonesia, 2006 - 2023

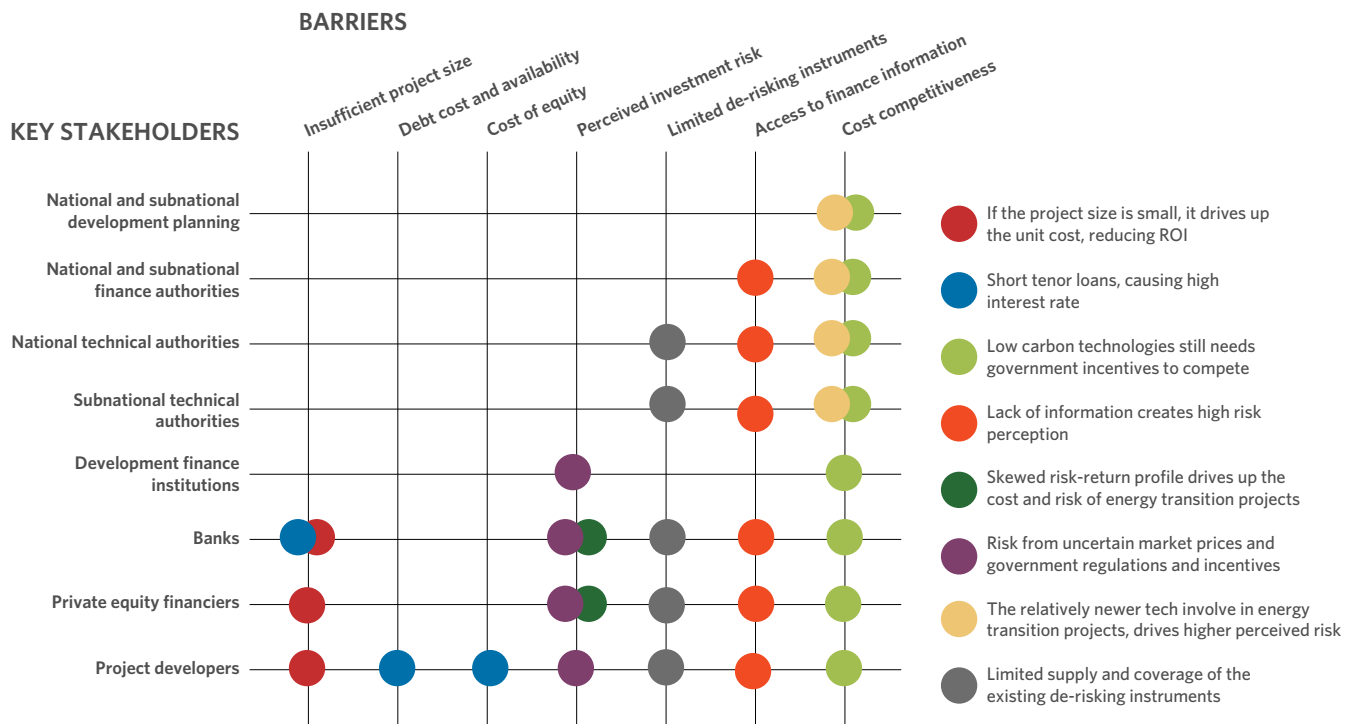


* Includes GCF-1 and GCF IRM
 ** Includes FCPF Carbon Fund and FCPF Readiness Fund
 *** Includes GEF4, GEF5, GEF6 and GEF7

Source: CPI analysis adapted from Climate Funds Update (2024)

2.3 THE IMPORTANCE OF ADDRESSING BARRIERS TO CLIMATE-ALIGNED INVESTMENT

Despite being a key driver of capital to support energy transition, the financial sector has been facing barriers to mobilizing climate-aligned investment (see Figure 8). It is therefore crucial to involve stakeholders from both the supply side of financing (i.e., financial sector regulators and authorities, banks, and other financiers) and the demand side of financing (real sector corporates, project developers, etc.) to address the following barriers and implement the enabling policy framework.

Figure 8. Barriers to climate-aligned and sustainable investment from the perspective of key stakeholders

Source: CPI (2022), CPI analysis based on Focus Group Discussions with domestic FIs, corporations, and financial service regulators (2022)

Based on CPI's focus group discussions with domestic FIs and regulators, there are two main investment barriers in Indonesia's financial sector:

- i. **Contradictory policies that continue to hinder climate-aligned investment.** For instance, fossil fuel subsidies accounted for 9% of total state expenditure, while climate spending only accounted for 6% from 2015 to 2020, creating disincentives for the market to commit to decarbonization initiatives (CPI, 2021). Uncertainties in regulatory frameworks, as well as changes in political and market landscapes (e.g., foreign exchange risks, demand fluctuations) heighten investor perception that climate-aligned investments are more expensive and riskier than traditional investments. Such perceptions impact project outcomes and ultimately potential returns, which may further deter investment despite the availability of funds.
- ii. **Financing mismatch between the investment needs of climate-aligned projects and the various constraints faced by finance providers.** While climate-related projects often capital-intensive and have long life-cycles, finance providers such as commercial banks are often constrained in providing long-term financing due to their reliance on short-term deposits and other debt-financing instruments such as corporate bonds, issued with a tenor of three or five years (Indonesian Central Securities Depository, 2019). Achieving longer tenor requires higher interest rates and greater project risks, especially in the early development and construction stages. Challenges in securing permits and social license may result in project delays and cost overruns. To compensate these risks, finance providers usually impose higher borrowing costs (e.g. interest rates, collateral), which may burden projects in the long run.

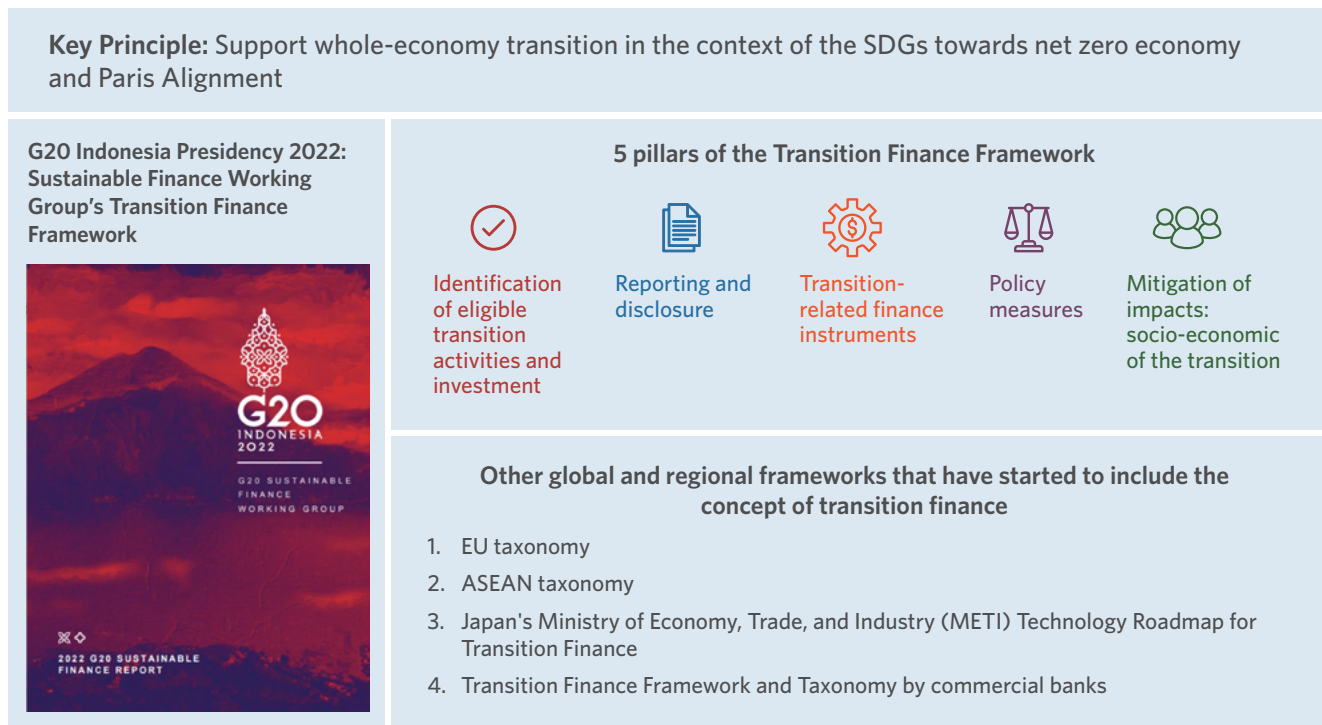
3. POLICY RECOMMENDATIONS

Relevant regulations and policies could enable the financial sector to acknowledge transitional activities and redirect investment to the required technologies. This section proposes three policy recommendations to narrow investment gap, activate policy enablers to unlock transition finance, and address barriers to climate-aligned investments.

3.1 HARMONIZE SUSTAINABLE FINANCE POLICIES TO SIGNAL CLEAR DIRECTION TOWARD CLIMATE-ALIGNED INVESTMENT

Regulators and policymakers can create a more coherent and supportive environment for sustainable finance, ultimately driving greater investment in climate-aligned activities and contributing to global climate goals, through two policy alignments:

- i. **Enhancement of Indonesia's taxonomy for better alignment** with relevant sectoral policies (e.g., the upcoming Second NDC and ministerial regulations) as well as regional and/or global taxonomies, and in line with the national documents (e.g., the ENDC and LTS-LCCR) and recent initiatives (e.g., the JETP and ETM). This is currently underway with the recent launch of Indonesia's Taxonomy for Sustainable Finance (TKBI) to more thoroughly capture transition activities within a set period and emissions threshold. The TKBI not only incorporates climate and environmental aspects but also sustainable development and social considerations. The taxonomy sets a common definition and essential criteria for what is considered aligned with both Indonesia's climate goals and the SDGs which will then send a clear signal to crowd in the capital flows. Moreover, TKBI is essentially a policy effort to increase the interoperability between Indonesia's taxonomy and the ASEAN Taxonomy (see Box 1). One of the key updates is the inclusion of transition activities as eligible for financing. Both taxonomies set measures and parameters under which the transition activities should be embedded to redirect investment into decarbonization initiatives, such as early retirement of coal-fired power plants, renewable energy development, and infrastructure investment.
- ii. **Development of transition finance framework.** While transition finance is nascent in emerging markets such as Indonesia, advanced economies have begun to incorporate this concept, through the European Union's Framework for Transition Finance and Japan's Technology Roadmap for Transition Finance, for example. Through its G20 presidency in 2022, Indonesia made an inroad with the Sustainable Finance Working Group (SFWG) Transition Finance Framework, which identified five pillars of transition finance, as shown in Figure 9.

Figure 9. G20 SFWG Transition Finance Framework

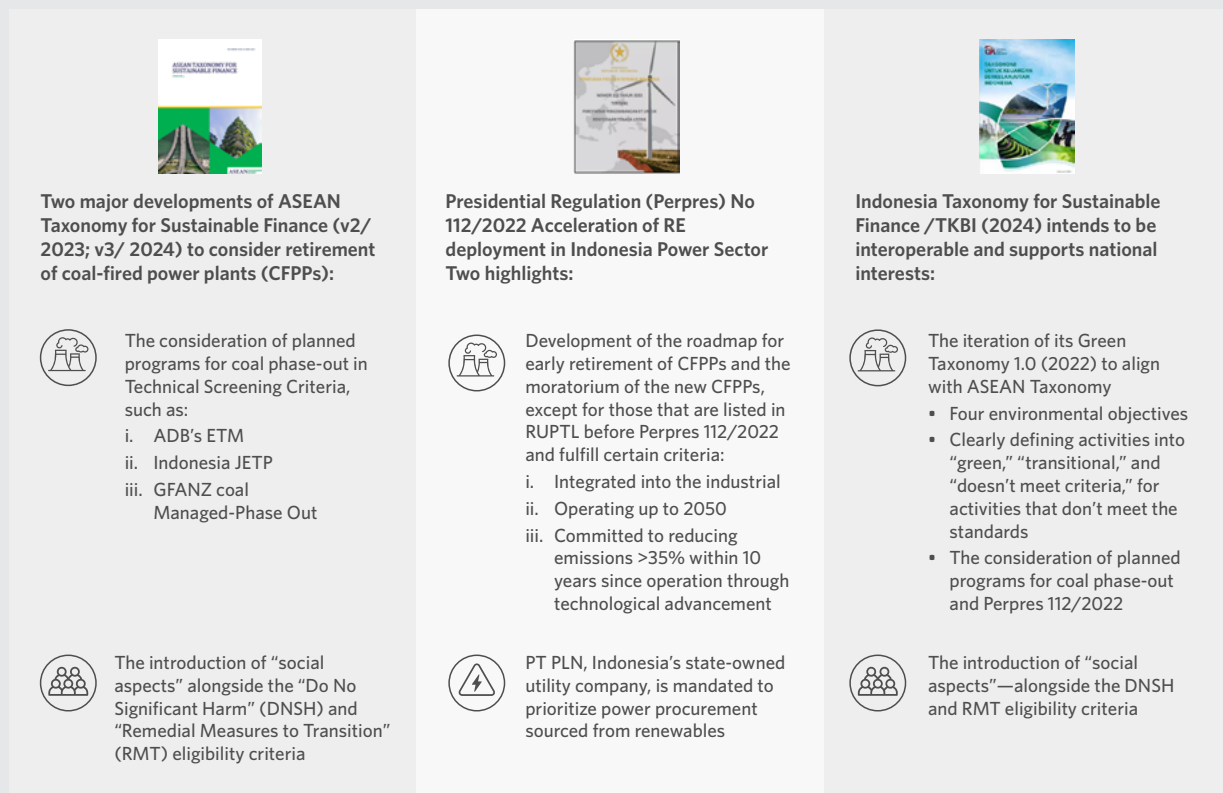
Source: G20 SFWG (2022), CPI analysis (2024)

However, since the financial sector is heavily driven by regulation, its stakeholders require stronger policies to guide transition finance implementation. Establishing guidance for comprehensive, science-based transition plans for corporates, investors, and FIs, can spur sustainable investment. Efforts are underway at the regional level. For example, the 2023 ASEAN Transition Finance Guidance addresses how entities may assess a credible transition pathway to obtain financing (ACMF, 2023). At the country level, the Monetary Authority of Singapore (MAS) recently issued a set of consultation papers proposing guidelines for FIs to have sound transition planning processes to enable effective climate mitigation and adaptation measures to a net zero economy.

Box 1. Indonesia Taxonomy for Sustainable Finance (TKBI) as a policy alignment measure at the regional level

The TKBI expands the preceding Indonesia Green taxonomy’s definition of sustainable finance to include transition finance and enhance its interoperability with ASEAN taxonomy. The scope of the TKBI includes NDC sectors to align with the national and regional policy developments. The TKBI aligns with the ASEAN taxonomy by categorizing activities according to four Environmental Objectives (EOs): mitigation, adaptation, ecosystem and biodiversity protection, and transition to circular economy. Moreover, the ASEAN taxonomy is the first regional taxonomy that considers early retirement of coal-fired power plants as “transition” activities, which offers potential synergies with Indonesian national interest and the TKBI. TKBI Version 1 launched in 2024 focused on energy sector, while the remaining NDC sectors will be gradually covered in the next iteration. For instance, TKBI most recently updated to Version 2 (TKBI v2), launched in February 2025, covering more NDC related sectors (and changes thereto) and their enabling sectors. In this version, the sectors covered have been expanded to include Construction and Real Estate (C&RE), Transportation and Storage (T&S), as well as parts of the Agriculture and Forestry sectors and Other Land Uses (AFOLU), as part of strategic steps to support the achievement of Indonesia’s commitment to sustainable development.

Figure 10. ASEAN Taxonomy and its potential synergy with Indonesia national interest and TKBI

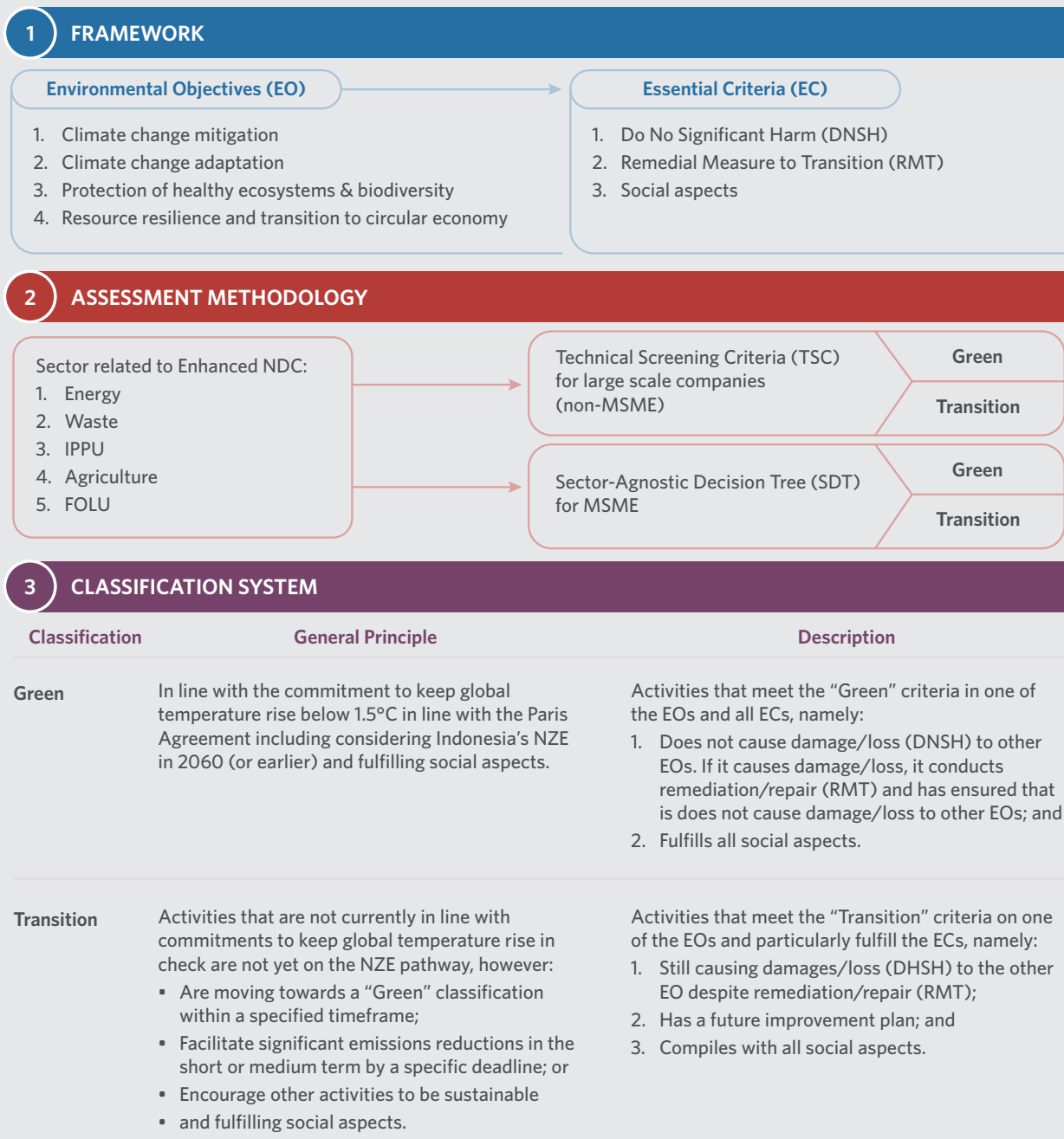


The recent development of Indonesia’s Taxonomy for Sustainable Finance shows the policy harmonization effort as it aligns with the ASEAN taxonomy as a regional benchmark and considers national interests to facilitate investment towards the activities in transition, which broaden the coverage of climate-aligned investments.

Source: ASEAN Taxonomy Version 2 (2023), OJK TKBI Version 1 (2024), MEMR (2022)

As an improvement on the 2022 Green Taxonomy, the TKBI categorizes activities as “green”, “transitional”, or “does not meet the criteria” and takes into account credibility principles by balancing environmental and socioeconomic aspects, and inclusivity by covering corporate to follow Technical Screening Criteria (TSC) and MSMEs to use Sector-Agnostic Decision Tree (SDT) to access activities classification. TSC classifies activities based on their contributions to EOs using quantitative, qualitative, and/or nature of activity-based criteria with the tiering system, while SDT used qualitative screening and decision flow with guiding questions.

Figure 11. TKBI Framework, Assessment Methodology, and Classification System



Source: OJK (2024)

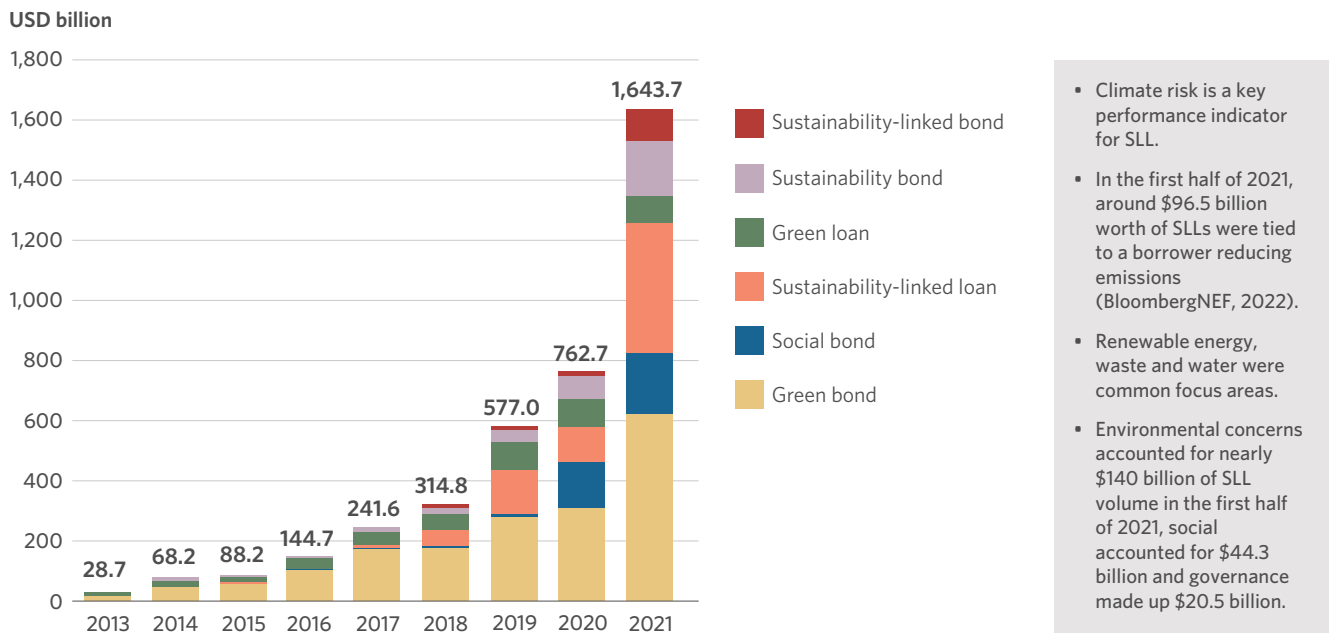
3.2 ENABLE ALTERNATIVE FINANCIAL INSTRUMENTS TO UNLOCK AND SCALE UP TRANSITION FINANCE

In addition to the harmonization of sustainable finance policies, alternative financing mechanisms such as transition finance instruments should be enabled within the financial ecosystem. A systematic and coordinated approach is required for all ecosystem stakeholders to effectively work together and mobilize transition finance. While banks play a key role in financing sustainability projects, regulatory restrictions in balance sheet, capital, and liquidity requirements (i.e., maintaining a minimum capital adequacy ratio¹ and complying with banks' legal lending limits²) require them to distribute those loans to institutional investors capable of transacting larger deal sizes with a diversified pool of assets to reduce concentration risk. Hence, shifting the investment mechanism through the structuring and securitization of green and transition assets could unlock a source of finance from the capital market by:

- i. **Leveraging sustainability-linked products such as sustainability-linked loans (SLLs) to facilitate transition finance through sustainability performance targets.** SLLs are designed to incentivize borrowers to achieve specific sustainability performance targets, while offering greater flexibility to allocate the proceeds to specific projects and also general corporate purposes (LTSA, 2023). SLLs tie loan terms to the borrower's ESG strategy and performance. Under SLLs, borrowers are rewarded with lower interest rates or relaxed loan terms if they achieve predetermined sustainability performance targets. On the other hand, failing to hit these targets can result in financial penalties. With regard to transition finance, SLLs can be targeted to high-emitting but economically important sectors that need to transition to more sustainable practices, such as energy, manufacturing, and transportation. In Indonesia, SLLs emerged in 2018 through a USD-bond transaction by a natural rubber company in the international capital market. As of 2022, published SLL deals include a five-year term SLL for an iron steel company valued at IDR 500 billion (USD 3.1 million), a syndicated SLL worth IDR 6 trillion (USD 367.0 million) for a state-owned cement producer, as well as smaller facilities provided to companies in the agrifood and forestry sectors. As investor priorities shift toward ESG metrics and the corporate sector faces increasing obligations to integrate sustainability components, demand for ESG finance solutions like SLLs in Indonesia is expected to grow. Figure 11 shows that SLLs are drawing investor interest and that climate-related aspect in relation to reducing emissions, has been the most popular sustainability performance target for SLLs to date.

¹ Based on International Regulatory for Banks, banks need to maintain the minimum ratio of capital to risk-weighted assets of 8% under BASEL II and 10.5% (which includes a 2.5% conservation buffer) under BASEL III.

² Based on the Regulation of the Central Bank of Indonesia BI Regulation No. 8/13/PBI/2006, under which the maximum limit for loans to related parties is capped at 10% of the bank's capital and for non-related parties is at 20% of the bank's capital.

Figure 12. Sustainable debt annual issuance

Source: BloombergNEF (2022)

- ii. **Exploring the potential of carbon finance to incentivize vast deployment of renewable energy and low-carbon technology and crowd in international finance.** Following recent global carbon initiatives, Indonesia is pursuing multiple carbon pricing mechanisms to support the country's broader climate and development targets, including climate change mitigation and adaptation, renewable energy mix, energy efficiency, green jobs, and low-carbon development. Under Presidential Regulation 98/2021 on carbon pricing, the first emission trading system (ETS) was launched with the power sector initiating the transaction. Moreover, through the mandate of Omnibus Law No 4/2023 (P2SK Law) on Financial Sector and POJK 14/2023 on Carbon Trading, the Indonesia Carbon Exchange (IDX Carbon) was established to facilitate the trading of carbon offsets. Monthly data shows that trading volumes have been extremely low, with only three voluntary projects listed and less than one trade per week in 2024 (IDXCarbon, 2024). This shows how simply providing trading infrastructure is not enough. There are then some important lessons that Indonesia can learn from measures taken by other countries to stimulate their offset markets. This is pivotal, especially Indonesia has just recently launched its international carbon trading on 20 January 2025, to strengthen its role in global climate action (IDXCarbon, 2025). This move follows the country's growing commitment to the Paris Agreement and aims to accelerate the global carbon market, supported by a recent agreement at COP 29 UNFCCC on the international carbon market standards, i.e. [standards for Article 6.4](#). The EU ETS and the China Certified Emission Reduction program, for example, link voluntary and ETS markets to optimally capture their market shares and increase liquidity. Meanwhile, Australia and Japan have implemented government-led offtakes to ensure a steady supply and high price of credits, therefore stimulating greater private participation in the medium to long term. Box 2 highlights the lesson learned from the Australian carbon market that can be considered for maximizing the carbon pricing mechanism and governance in Indonesia and, in turn, maximizing opportunities to crowd in international finance.

Box 2. Market fluctuations and policy impacts: Australian carbon market trends 2020-24

Australian Carbon Credit Units (ACCU) transaction volumes soared to 8.4 million in Q3 2022, driven by several policy shifts. Initially declining to AUD 26.50 in mid-August 2022 due to market adjustments and increased supply, prices rebounded to AUD 33.80 by the end of that year, following legislative milestones and the Safeguard Mechanism reforms. In early 2023, an independent review confirmed Safeguard scheme integrity, followed by a price jump to AUD 38.50 and transaction volumes reaching 3.2 million. Throughout the review period, ACCU spot prices fluctuated significantly driven by evolving market dynamics. Initially stable at an average of AUD 18.00 from Q1 2020 through early Q2 2021, prices then surged dramatically in the latter half of 2021, rising from AUD 19.75 to AUD 57.00 by January 2022. This sharp increase was attributed to a perceived supply shortage, despite increasing ACCU supply volumes, primarily from a few large transactions. This snapshot of ACCU price volatility depicted in Figure 12 is mainly influenced by political dynamic and policy interventions, including (i) exit arrangements for Commonwealth delivery contracts in Q1 2022, (ii) market speculation surrounding the Australian federal election on May 21, 2022, and (iii) policy changes to the national GHG abatement target and the Safeguard Mechanism.

The Safeguard Mechanism Reform marked a significant milestone

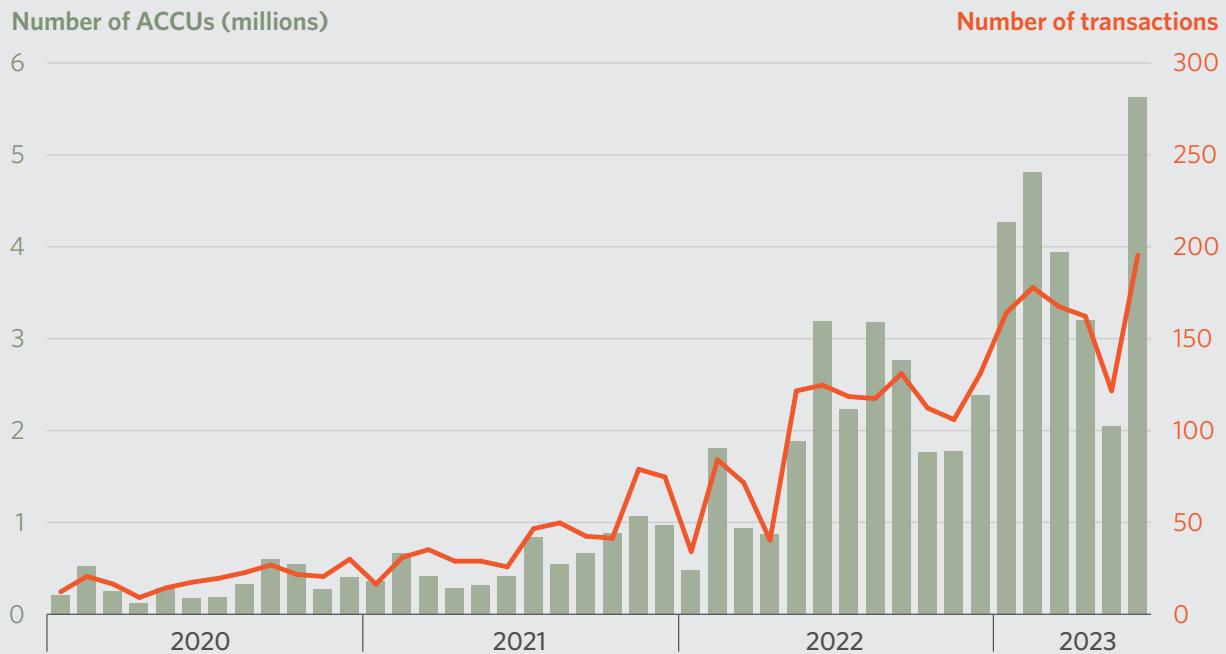
The Safeguard Mechanism aims to limit emissions from facilities that emit more than 100,000 tonnes of CO₂ equivalent annually and sets baselines for net emissions, which facilities must not exceed. It covers 219 facilities across sectors such as mining, manufacturing, transport, oil, gas, and waste, accounting for about 30% of Australia's total emissions as of 2022-23.

The key reforms are:

1. **Baseline adjustment** based on production levels, encouraging efficiency and lower emissions per unit of production. Baselines will decline predictably over time, with an annual reduction rate of 4.9% until 2030 to align with Australia's target to achieve net zero by 2050;
2. **Safeguard Mechanism Credit (SMC)**, a tradable credit, to incentivize facilities that emit less than their baseline;
3. **Tailored treatment for trade-exposed, emission-intensive industries by offering options of decarbonization efforts**, to ensure they remain competitive while reducing emission
4. **Introduction of five-year rolling emission budgets**, requiring total emissions from safeguard facilities to decrease over time

These reforms are designed to ensure that Australia's largest emitters contribute their fair share to the country's climate targets, while also providing flexibility and support to maintain economic competitiveness. Moreover, it has increased demand for ACCUs as facilities seek to comply with stricter baselines and earn SMCs.

Figure 13. ACCU market transactions – price fluctuations captured from January 2020 to June 2023 due to political dynamics and various policy interventions

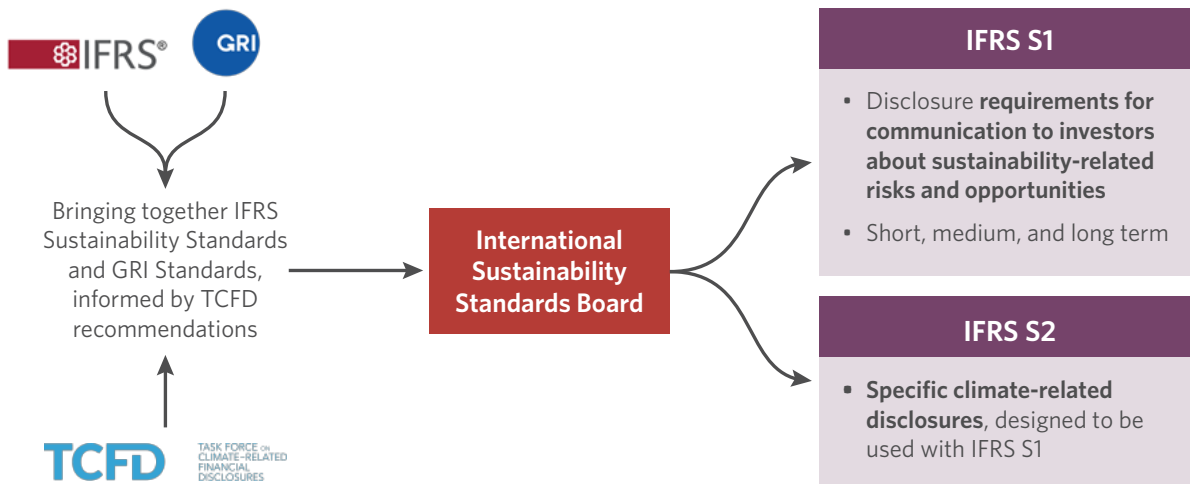


Source: CER Australia (2023)

3.3 ENHANCE REPORTING AND TRANSPARENCY THROUGH SUSTAINABILITY AND CLIMATE-RELATED DISCLOSURES TO ALIGN WITH INTERNATIONAL STANDARDS

The financial sector continues to place greater emphasis on more detailed sustainability and climate-related disclosure as the current regulation POJK 50/2017 on the annual mandatory high-level sustainability report contains limited climate-related detail. Benchmarking POJK 51's reporting requirements against the TCFD recommendations, more quantitative and qualitative measures of climate-related financial risks, exposure, and opportunities are needed to emphasize the importance of transparency in risk assessment to support informed, efficient capital-allocation decisions.

The 2022 TCFD Status Report recorded a steady increase in climate-related financial disclosures, conveying some evidence that climate-related risks are beginning to affect prices for certain types of assets (TCFD, 2022). Noting the significance of increasing transparency and reporting requirements, the International Sustainability Standard Board (ISSB) launched a universal framework in June 2023 to enhance global reporting and disclosure on sustainability: the International Financial Reporting Standards (IFRS) S1 and S2. Figure 14 shows the interconnection of ISSB with other existing sustainability disclosure standards.

Figure 14. How the ISSB interlinks with other sustainability reporting and disclosure standards

Source: ISSB (2023), IFRS (2023)

Responding to ISSB issuance, the national standard-setter for financial reporting and disclosure, the Institute of Indonesia Chartered Accountants (IAI), formed the IAI Sustainability Standards Board (IAI DSK) to develop a strategic plan to strengthen the financial and sustainability reporting ecosystem. On 3 December 2024, the IAI DSK issued the Roadmap of Indonesia Sustainability Disclosure Standards (*Peta Jalan Standar Pengungkapan Keberlanjutan*), which lays out the key steps and timeline of the adoption and implementation of IFRS S1 and S2 in Indonesia.

4. CONCLUSION

All of the action items under each policy recommendation here directly address the main challenge of climate finance gap to meet Indonesia's NDC targets. While Indonesia has been making significant strides in sustainable finance, there is a tremendous opportunity to optimize climate-aligned investments from private FIs (thus far accounting for only 3% of their total investments) as a key contributor in helping narrow the country's climate finance gap.

A combination of targeted policies on taxonomy alignment, sustainability-linked financial instruments, and climate-related disclosures is therefore essential to achieve economies of scale—unlocking transition finance while mitigating perceived risks and barriers to climate-alignment investments.

APPENDIX

The table below presents a non-exhaustive mapping of key sectoral policies on climate change and net-zero economy influencing supply and demand of sustainable finance.

Regulation	Relevance and Opportunities for Demand Creation in the Green Financing Sector and their Impact on Green Investment / Credit Facilitation
Energy	
Law no.11/2020 on Job Creation	<p>Positive impact on green investment:</p> <ul style="list-style-type: none"> • Simplification of investment requirements, risk-based approach on business licensing • Mandating of local content requirements for power generation business, supporting local environmentally friendly innovation capacity • No requirement on geothermal production royalty • Exclusion of dividend from income tax (PPh) and adjustment of tax interest <p>Adverse impact on green investment:</p> <ul style="list-style-type: none"> • Simplified business and environmental permits and sanctions • 0% royalties for coal mining, making the options of greener products less attractive
Law no.3/2000 on Mineral and Coal Mining	<p>Positive impact on green investment:</p> <ul style="list-style-type: none"> • Centralization of authority on permit issuance, expansion of exploration site, operational permit extension guarantee • Obligation on foreign-stake divestment <p>Adverse impact on green investment:</p> <ul style="list-style-type: none"> • Establishment of the exploration fund • Tax incentive on coal, making the options of greener products less attractive • Fiscal/non-fiscal incentive for downstream industry development; e.g., coal gasification
Draft Law on Renewable and New Energy	<p>Positive impact on green investment:</p> <ul style="list-style-type: none"> • Local content requirements, centralization of authority for procurement, requirement for state-owned electricity company to purchase the power generated • RE Feed-in-Tariff, subsidy/compensation, fiscal/non-fiscal incentives, blended biofuel pricing, renewable energy fund
Presidential Regulation no. 10/2021	<p>This could be contradictory to the green investment; the energy sector is being prioritized, both clean i.e. renewables and dirty sector (i.e. coal):</p> <ul style="list-style-type: none"> • List of priority sectors include procurement of facilities and infrastructure the energy sector i.e. power plants, natural and artificial gas, the coal industry and its derivatives, geothermal • Fiscal support for new technology and energy efficiency, e.g., tax holidays for power plant main components/machinery, economic infrastructure (i.e. RE power plants), gas refineries, etc.
Government Regulation no.70/ 2009 on Energy Conservation.	<p>Positive impact on green investment:</p> <ul style="list-style-type: none"> • Mandatory energy management implementation for energy users up to 6,000 TOE (tons of oil equivalent) and above per year
Industrial Processes and Product Uses	
Law no.11/2020 on Job Creation	<p>Positive impact on green investment:</p> <ul style="list-style-type: none"> • The government may provide fiscal support for import activities in substitution for local products: obtaining new technologies in green sectors • Ministries and regional governments can provide non-fiscal facilities to industrial companies that apply for Indonesian National Standard (SNI), Technical Specifications, and/or compulsory Code of Conduct • Tax holidays and tax reduction schemes in strategic industrial sectors related to introduction of new technology, structure expansion, certification, and machinery rehabilitation: catalyzing new technology in renewable energy/energy efficiency

Regulation	Relevance and Opportunities for Demand Creation in the Green Financing Sector and their Impact on Green Investment / Credit Facilitation
MoF Regulation no. 130/2020 on Tax Incentives for Corporations	<p>Positive impact on green investment:</p> <ul style="list-style-type: none"> ▪ Income tax reduction on capital injection with different company sizes ▪ The quantitative scoring for pioneer industry categorization has included the use of environmentally friendly technology and new technology for production process: promoting new green technology for climate actions ▪ Pioneer industries include agribusiness, new technology in manufacturing, electrical component including in the energy sector, and transportation components
Presidential Regulation no. 10/2021	<ul style="list-style-type: none"> ▪ IPPU is on the list of priority sectors; i.e., mineral, chemical, metal, electronics, other product for manufacture and use such as medical appliances ▪ Tax allowance for electronic component industry ▪ Tax holiday for chemical and physical industrial process ▪ Obtaining new technology in green sectors ▪ Specific incentive for new technology, for all sectors, including environmentally friendly technology and conventional items; i.e. minerals, which could be contradictory
Agriculture	
Law no.19/2019 on Farmers Protection & Empowerment	<p>Positive impact on green credit facilitation:</p> <ul style="list-style-type: none"> ▪ Governments may provide production subsidies via the use of credit guarantees in agriculture ▪ Off-taker contracts and market access are both guaranteed for government-mandated products: duty incentive for scarce commodities ▪ The central government decides the import duty tariff by considering domestic market supply and demand, prioritizing local supply chain ▪ The government is obliged to provide insurance to farmers in the event of extraordinary circumstances that cause harvest failure (e.g., climate, pests, disaster, etc.) ▪ The government is obliged to provide facilities in the form of concessional loan, subsidy, and social responsibility programs. ▪ The facilities are provided through state-owned banks and FIs as intermediaries: Concessional loans for smallholders and farmers' groups
Law no.11/2020 on Job Creation	<p>Positive impact on green investment, particularly for providing green credit facilitation (e.g., via subsidies), thus increasing funding opportunities:</p> <ul style="list-style-type: none"> ▪ Government and investor partnerships and facilitation schemes (e.g., credit, profit sharing) for plantations owned by local communities: financing opportunities for smallholders and farmers' groups ▪ Import prohibition lifted: government now decides government food reserve from import and domestic production ▪ Inclusion of social forestry in the national level for individuals, forest farming groups and cooperatives: development and investment for social forestry ▪ Integrated support for small-, and medium-sized enterprises including providing facilities (e.g., infrastructure, product marketing) by tax breaks, collateral for credit programs, and increased access to funding opportunities: government support for SMEs in agriculture
Government Regulation no.30/2012 on Sustainable Agriculture Financing	<p>Positive impact on green investment:</p> <ul style="list-style-type: none"> ▪ Funding that covers development, including intensification (i.e., infrastructure, technology, access to financing) and extensification (land designation and conversion) for sustainable agriculture, land and water conservation, and increased capability for sustainable practices and mitigating crop failure risks ▪ Government prioritization for fair market prices, accessible facilities, prioritization of domestic products: Price regulation and prioritization of domestic products ▪ Government compensation paid to farmers / farmer groups for crop failures ▪ Government financing for smallholders and farmer groups, including increased access to financing, credit for land ownership, and training: Credit instrument for land ownership for smallholders
Government Regulation no.81/2020 on Agribusiness financing	<p>Positive impact on green investment:</p> <ul style="list-style-type: none"> ▪ Lending for agribusiness may cover all aspects of the value chain (including production, harvesting, storage management, distribution, auxiliary services): Loan availability for more businesses and business activity in agriculture

Regulation	Relevance and Opportunities for Demand Creation in the Green Financing Sector and their Impact on Green Investment / Credit Facilitation
Presidential Regulation no. 10/2021	<p>Positive impact in increasing green funding opportunities:</p> <ul style="list-style-type: none"> ▪ Agriculture is on the list of priority sectors (i.e. agriculture facilities and infrastructure) and business allowed for partnership (i.e. agriculture with land size <25Ha) ▪ Tax allowance for seeds and cultivation of maize, soy, paddy, cocoa, coffee beans, pepper ▪ Concessional loan or subsidy for smallholders or farmer groups ▪ Lower or subsidized interest rates, erasure of or subsidized collateral ▪ Credit instrument for smallholders' finance
Waste	
UU no. 32/2009 Law on Environmental Protection and Management	<ul style="list-style-type: none"> ▪ Mandatory waste and residue processing and treatment for any industrial and commercial activity ▪ The government and regional government to develop economic instruments of the environment: obtaining new technology in green sectors and government incentive program
Government Regulation no. 101/2014 concerning the Management of Hazardous and Toxic Waste	<ul style="list-style-type: none"> ▪ Mandatory hazardous waste management, including reduction, storage, collection, transportation, utilization, processing and/or landfilling.
Presidential Regulation no. 97/2017 on Indonesian National Strategy Policy on Managing Domestic Waste	<ul style="list-style-type: none"> ▪ Every region in Indonesia is expected to create its own model plan (Regional Strategy Policy - <i>Jakstrada</i>) to achieve the 2025 Clean-from-Waste Indonesia goals
Law no.11/2020 on Job Creation	<p>Positive impact in increasing green funding opportunity:</p> <ul style="list-style-type: none"> ▪ Government and investor partnerships and facilitation schemes (e.g., credit, profit sharing) for plantations owned by local communities: Financing opportunities for public-private partnerships in waste management
Presidential Regulation no. 10/2021	<p>Positive impact in increasing green funding opportunity, particularly for waste sector's MSMEs:</p> <ul style="list-style-type: none"> ▪ Waste and waste management is on the list of priority sectors (i.e. waste-management facilities and infrastructure) and in list of business allowed for partnership with MSMEs (i.e., processing, distribution and building construction small and medium waste-water storage, recycling of non-metal residue) ▪ Tax allowance for waste and waste-management industry i.e. hazardous waste-water management, organic waste compost, and other waste remediation activities

Source: CPI analysis based on various sources in Indonesia sustainable finance standards

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