Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Submission to the UNFCCC regarding the calls for submissions from the sessions in Glasgow

Topic: Matters relating to the SCF – ways to achieve Article 2.1(c) of the Paris Agreement FCCC/PA/CMA/2021/L.11, Para. 2

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I. Abbreviations

ASEAN Association of Southeast Asian Nations

CBI Chartered Banker Institute
CIF Climate Investment Funds

CRAFT Climate Resilience and Adaptation Finance & Technology Transfer

Facility

ESG environmental, social, and governance

EU European Union

GCF Green Climate Fund

GEF Global Environment Facility

GHG Greenhouse gas

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

IPCC Intergovernmental Panel on Climate Change

NAMA Nationally Appropriate Mitigation Actions

NDC Nationally Determined Contributions

NGFS Central Banks and Supervisors Network for Greening the Financial

System

NSP NAMA Support Project

PAII Paris Aligned Investment Initiative
RBA Responsible Banking Academy
SCF Standing Committee on Finance

TCFD Task Force on Climate-related Financial Disclosures

TNFD Taskforce on Nature-related Financial Disclosures

UNEP FI United Nations Environment Programme Finance Initiative
UNFCCC United Nations Framework Convention on Climate Change

1. Introduction

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH avails of more than 50 years of experience in international cooperation in a wide variety of areas, including climate change and the environment, energy and infrastructure, economic development and employment, agriculture and food security, water and urban development, as well as peace and security. The diverse expertise of our federal enterprise is in demand around the globe, with and on behalf of the German Government, European Union institutions, the United Nations, international funds and other institutions as well as governments of more than 120 partner countries for which we provide our services. The German Federal Government is our main commissioning party, which we support in achieving its objectives in the field of international cooperation towards sustainable development.

This submission responds to the call for submissions by the United Nations Framework Convention on Climate Change's (UNFCCC) Standing Committee on Finance (SCF) based on paragraph 2 of decision 10/CMA.3¹. GIZ welcomes the opportunity to submit its views regarding ways to achieve Article 2.1c of the Paris Agreement, including examples for approaches and guidelines for implementation. GIZ makes this submission based on its experience of working with ministries, financial regulatory and supervisory authorities, and financial institutions as well as other stakeholders in developing countries and emerging economies on building the conditions for aligning financial flows with the objectives of the Paris Agreement.

The findings of the latest report of the Intergovernmental Panel on Climate Change (IPCC)² highlight once more the urgency for immediate ambitious actions to keep the goals of the Paris Agreement in reach. As one of the three long-term goals of the Paris Agreement, under Article 2.1c Parties agreed to "Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development". This article is an essential means to deliver on the Paris Agreement as it enables the implementation of the long-term goals on mitigation (Article 2.1a) and adaptation (Article 2.1b). While under the UNFCCC there is still no dedicated space for parties to discuss the operationalization of Article 2.1c, the issue of how to align financial flows with sustainable development goals has long been addressed in the 2015 Addis Ababa Action Agenda on Financing Sustainable Development (and its precursor agreements) and the UN Financing for Sustainable Development Process.

Making financing flows more sustainable has gained more and more attention in the recent past. As a result, a vast number of initiatives and platforms have been established, such as the Task Force on Climate-Related Financial Disclosure (TCFD), the Central Banks and Supervisors Network for Greening the Financial System (NGFS), the Paris Collaborative on Green Budgeting, the Friends of Fossil Fuel Subsidies Reform, the Coalition of Finance Ministers for Climate Action, Paris Aligned Investment Initiative (PAII) as well as emission trading systems. The diversity of initiatives demonstrates the variety of financing flows and actors that are to be addressed within Article 2.1c.

In addition, in fora such as the G20 and the G7 the content of Article 2.1c is often addressed together with the topic of sustainable finance. For instance, through dedicated working groups or particular initiatives, like the G20 Sustainable Finance Working Group. Regarding the regulatory level, among others, the European Union (EU) is one of the frontrunners in implementing sustainable finance policies and regulatory reforms, e.g., through the EU

¹ 10/CMA.3 <u>Matters relating to the Standing Committee on Finance</u>

² IPCC Sixth Assessment Report, Contribution of Working Group III (2022)

Sustainable Finance Strategy, which entails, inter alia, the EU Taxonomy and the proposed EU Green Bond Standard. At national level, policies and strategies contributing to the implementation of Article 2.1c are also put in place. The German Federal Government, GIZ's main commissioning party, committed in its Sustainable Finance Strategy³ (adopted in 2021) to promote sustainable finance at home while at the same time supporting implementation in partner countries e.g., through its development cooperation. While sustainable finance can be a powerful tool to facilitate the goal of Article 2.1c, it is not equivalent to the interpretation and implementation of Article 2.1c.

After having introduced the relevance of the topic in this section, chapter 2 elaborates on GIZ's conceptual understanding of Article 2.1c. Chapter 3 provides a structured overview of the role technical cooperation can play in shifting financial flows. Based on GIZ's experiences in this regard, we generate an initial set of lessons learned in chapter 4. The annex encompasses a non-exhaustive selection of GIZ activities with partner countries that demonstrate how technical assistance contributes to aligning financial flows with the objectives of the Paris Agreement.

2. GIZ's understanding of Article 2.1c of the Paris Agreement

A transformation towards a carbon-neutral and climate-resilient economic system necessitates a systemic shift of the current financial flows. Accordingly, Article 2.1c of the Paris Agreement stipulates that all financial flows need to be made consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. The recently adopted Glasgow Climate Pact⁴ reconfirms this need to redirect financial flows (§54) while it highlights the leading role of developed countries and multilateral banks. However, a successful implementation of Article 2.1c requires a global effort.

Despite the undeniable importance of the third long-term goal of the Paris Agreement, there is currently no official definition of Article 2.1c nor a comprehensive description of potential implementation approaches. Against this backdrop, this section lays out GIZ's conceptual understanding of Article 2.1c.

The term "finance flows" itself is vague and all-encompassing at the same time. By referring generally to aligning "finance flows" with the goals of the Paris Agreement, Article 2.1c clearly goes beyond the provision of international public climate finance⁵ by developed countries to developing countries in accordance with Article 9. While climate finance (as per Article 9) clearly forms part of all financial flows and can thereby enhance the implementation of Article 2.1c, the scope of Article 2.1c is much wider. We share the common view, that the term may in fact refer to any financial transaction⁶. In this regard, we interpret "finance flows" in accordance with the Addis Ababa Action Agenda, taking into account public and private funds as well as international and domestic financial flows.

According to the IPCC 1,5° Report, financing the global transformation of the energy sector requires 2,4 trillion USD annually until 2035.7 In addition, adaptation financing needs amount

⁴ 1/CMA.3 Glasgow Climate Pact

³ German Federal Government (2021). <u>German Sustainable Finance Strategy</u>

⁵ According to the SCF working definition, introduced in the 2014 Biennial Assessment and Overview of Climate Finance Flows, "Climate finance aims at reducing emissions, and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts.'

⁶ Compare: Jachnik et al. (2019): <u>Tracking finance flows towards assessing their consistency with climate objectives: Proposed</u> scope, knowns and unknowns and Pauw et al. (2020): Scoping the Paris Agreement's Article 2.1(c): A brief overview of the status and way forward in the context of international cooperation and development

⁷ IPCC (2018): Global Warming of 1.5°C

to 180 billion every year until 2030.⁸ Even if the developed world fully lived up to its commitments under Article 9, developing countries would still face an enormous financing gap for the transformation of their economies, which highlights the crucial importance of Article 2.1c⁹.

Shifting financial flows in a systemic and permanent way towards activities in line with low greenhouse gas emissions and climate-resilient development requires profound changes to public policies and to the way financial actors currently operate. To achieve the transformation all actors, including the whole economy, public sector, households and the financial sector need to play a part. For example, the public sector has to set adequate regulatory framework conditions and implement climate-sensitive fiscal policies while the financial sector plays a key role as financier and hence enabler for the shift towards climate-friendly investments. In fact, private sector actors do not only increasingly face the need to account in their operations for climate-related financial risks, impacts and opportunities, but should actively finance activities in line with a low carbon and climate resilient pathway.

3. GIZ's role as technical development agency in implementing Article 2.1c

In the following, we are presenting a non-exhaustive selection of approaches applied or supported by GIZ that aim at shifting financial flows towards climate-resilient and low-carbon development pathways. These approaches are summarised by clustering them according to the Action Areas of the Addis Ababa Action Agenda. Yet, we would like to point out that the classification of one project to one action area is not absolute because GIZ follows an integrated approach that targets more than one area and that creates spill-over effects.

3.1 Aligning Domestic Public Resources

Domestic public resources are central for all countries to finance their sustainable development goals in the long-term. Therefore, GIZ supports its partner countries in strengthening their national financial means and align it with the Paris climate goals.

To begin with, we support our partner countries in **green budgeting** through the integration of climate and sustainability objectives into national budgeting frameworks (see for example Adapting public investment to climate change in Latin America or Finance Mechanisms for low carbon development in Peru). GIZ analyses potential for such approaches, e.g., by examining individual budget lines with regard to their environmental sustainability or the possibility to introduce (shadow) carbon prices. The results of the respective analysis serve as a basis for future budget planning or the adaptation of concrete public investment projects. In general, we promote **climate-friendly and resilient public investments** through the systematic integration of climate risks in the planning, prioritization, and implementation processes e.g., enabling the financing of resilient infrastructure projects and services.

Secondly, **subsidies and taxation** can either incentivise climate action or punish unsustainable behaviour. On one side, such measures can bring about an investment shift in

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⁸ CPI (2019): Tracking Adaptation Finance: Advancing Methods to Capture Finance Flows in the Landscape

⁹ However, the provision under Article 2.1c by no means lowers the obligations of developed country parties to deliver on their financial commitments under Article 9, such as the mobilization of USD 100 billion per year by 2020 and through to 2025 from a wide variety of sources including public and private, bilateral and multilateral.

¹⁰ The Addis Agenda has been selected as structuring element because it is an internationally agreed framework for financing sustainable development. Addis Action Area G (Science, technology, innovation and capacity building) is not listed separately, because capacity development is GIZ's core business and elaborated in the context of all the presented Action Areas. The lack of the categories Greening trade (area D) and Debt issues (area E) does not imply that these Action Areas are not addressed by GIZ, but – so far – these are not combined with a core focus on green/Paris-alignment.

the real economy because they make carbon-intense activities more expensive or climate-friendly activities more profitable. On the other side, additional income from newly introduced carbon taxes strengthens national budgets and allows for more public investments in climate-friendly activities. Therefore, GIZ advises finance ministries on **reforms of climate and environmentally harmful subsidies and the introduction of CO2 pricing instruments** such as CO2 taxes, emissions trading schemes and levies (see for example GIZ's <u>Global Carbon Market</u> project).

A key element of our green public finance reform approach is **designing measures in a socially equitable manner**. Based on policy impact assessments, distribution effects of planned measures and economic impacts to the country in question are analysed. To compensate for potentially negative effects of socially disadvantaged people, GIZ supports partner countries in developing concepts regarding the use of the released financial resources and designing support and compensatory measures.

3.2 Incentivising domestic and international private business and finance

To align investments with sustainability and climate goals, GIZ supports the public sector in developing guidelines to facilitate sustainable investments, thereby mobilizing private sector investments for sustainable development in partner countries. Moreover, GIZ supports local investors in building up new capacities and skills in green financing.

GIZ's approach to **creating investment opportunities for the private sector** in partner countries is threefold: Firstly, GIZ supports the development of a pipeline of bankable projects and brings financiers and project developers together (matchmaking) (see Annex - FELICITY or Get.Invest). This helps to reduce transaction costs and investments risks for the private sector. Secondly, GIZ promotes investments in companies with adaption-relevant business models through a dedicated private equity fund (CRAFT) (see Annex - NDC Assist II). Through this initiative, GIZ aims to address the specific challenges linked to mobilizing private sector finance for adaptation projects, such as a lack of information on profitable investment opportunities, adaptation hypothesis and impact measurement. Thirdly, private sector investments are enabled through GIZ's support on reviewing and reforming regulations to the benefit of private investments (see Get.Tranform).

In cooperation with commercial and public finance institutions, GIZ assists in **developing and scaling up (innovative) sustainable financial products**, such as green bonds, green credit lines and financial instruments for risk mitigation (e.g., guarantees to mitigate credit risks or market risks). The development of these financial products enables institutions to access a growing market segment, mobilises private sector means and improves their capacity to deliver on the targets of the Paris Agreement as well as the Agenda 2030. For example, the <u>Strategic Alliance</u> between the Swedish Bank and green bank pioneer <u>Skandinaviska Enskilda Banken</u> and GIZ promotes green bond market development in G20 emerging markets. In addition, GIZ supports the green bond market development in Vietnam, for instance through developing regulations on green bonds, incentivising mechanism on green bond issuance and investment and reporting on green bonds (see Annex - <u>Programme Macroeconomic Reform - Green Growth</u>).

Building sustainable finance capacities, specifically in the private sector and financial markets, is a vital part of our work. Accordingly, GIZ supports public and private actors in integrating sustainability – environmental, social and governance (ESG) – criteria in their decision-making processes and operations. Our knowledge products and trainings help to raise awareness and strengthen capacities of key market actors (regulators, financial

institutions, verifiers, rating agencies, data providers, etc.). For example, the Responsible Banking Academy (see Annex) set up in partnership with the United Nations Environment Programme Finance Initiative (UNEP FI) and the Chartered Banker Institute (CBI) seeks to support financial institutions in integrating sustainability into their strategies and business models and build the required skills of their staff. Furthermore, GIZ offers advisory services regarding the application of (climate-related financial) disclosure standards (see also 3.4).

3.3 International Development Cooperation: Implementing international public climate financing

International public financing (as per Article 9) plays a key role in facilitating climate action in developing countries. On behalf of the German government and other international institutions (e.g., the EU, the United Nations, the Green Climate Fund (GCF)), **GIZ translates international climate goals into concrete action**. As implementing agency for technical assistance, GIZ develops partner-oriented projects to enable partner countries facing and solving climate change challenges. Through its activities, GIZ contributed to reduce global greenhouse gas emission by 17 million tons in 2020 (see Annex – TI4E and Promotion of Climate-Friendly Cooking in Kenya and Senegal).

In 2020, GIZ's climate-relevant project portfolio received additional financing commitments of more than 1 billion EUR from the German government. This amount corresponds to 20 % of Germany's overall climate finance commitments from budgetary sources (including grant equivalents) in this year. Our climate-related projects are cross-sectoral, i.e., climate action is promoted in relevant sectors reaching from waste management to transport to agriculture (see Annex – Thai Rice NAMA) (and many others).

GIZ's green finance portfolio has been growing since 2017, reaching a total financing volume of 714 million EUR in 2021. This confirms the increasing relevance, GIZ and German development cooperation put on supporting partner countries through bilateral cooperation in green financing and greening finance.

Besides implementing part of the German climate finance contribution, GIZ also supports partner countries in accessing international climate finance, in particular from the GCF (see Partnering for readiness) and advises its commissioning parties on international climate funds (Global environmental Facility (GEF), Climate Investment Funds (CIFs), etc.) and multilateral development banks (e.g. Paris Alignment of multilateral development banks).

3.4 Addressing Systemic Issues

Climate change is a systemic risk that has physical and transitional implications for the financial sector. The greening of financial markets aims at increasing their accountability for climate impacts while also making them more resilient against climate shocks. Ultimately, the goal is to strengthen global financial market stability.

In cooperation with central banks, regulatory and supervisory authorities, as well as financial sector stakeholders (financial institutions, investors, insurance companies, etc.), GIZ supports partners in creating regulatory framework conditions that better align financial flows with climate resilient and low-carbon development pathways. GIZ provides support for the development of sustainable finance strategies and roadmaps, for instance through the Sustainable Finance Policy Navigator, developed by GIZ and the Frankfurt School of Finance & Management (see Annex - Sector Programme Financial Systems Development). This diagnostic tool helps public actors to conduct comprehensive country assessments of

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financial policies and regulations and provides a menu of actions as a basis for developing a national sustainable finance strategy, action plan, or roadmap. At the country level, GIZ supports the Central Bank of Brazil in the application of sustainability-related regulatory and supervisory instruments (see <u>Annex</u>).

Besides, GIZ supports the development and implementation of taxonomies and green investment standards that can incentivise the financial sector to align investments with the goals of the Paris Agreement. A key element of our support is the development of individual solutions that fit to our partners' context while ensuring international coherence. Concretely, the GIZ-UNEP FI Project "Responsible Banking Academy" (see Annex) offers a platform to banks to learn about, adapt and implement UNEP FI's Principles for Responsible Banking and other leading international investment standards. Moreover, we assist partner countries in establishing reporting systems and impact measurement approaches in accordance with international standards such as the Principles for Responsible Banking, the Task Force on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD). In the context of the GIZ Project "Preparation of the EU Sustainable Finance Action Plan to finance a green corona recovery in the ASEAN region" (see Annex), the development of taxonomies as well as the application of disclosure standards, such as the TCFD, is supported through expertise and trainings. Another GIZ programme that contributes to aligning financial flows with the goals of the Paris Agreement is a pilot project for an Environmental Stress Testing Tool, implemented through the "Emerging Market Sustainability Dialogues" (see Annex). Overall, such initiatives help to increase transparency and reduce the risk of green washing while strengthening institutional structures regarding monitoring and evaluation.

4. Lessons learned

Based on the projects and approaches applied and/or supported by GIZ to shift financial flows towards climate-resilient and carbon-neutral development pathways, the following set of initial lessons learnt can be shared:

- A well-functioning financial system oriented towards sustainability is of central importance for financing a sustainable transformation of the real economy. However, it is important to note that the public sector has a key role to play in enabling the green investment revolution by setting the right regulatory and enabling conditions. In this regard, taxes or other pricing mechanisms and regulations implemented by public actors are necessary to ensure that climate impacts are adequately reflected in investment decision-making.
- Implementing Article 2.1c requires individual solutions for partner countries. Partner countries which have less developed financial markets (such as least developed countries e.g., in Africa) may benefit from different measures than partners with more advanced financial markets (mostly middle-income countries e.g., in Asia). For example, green budgeting and fossil fuel reforms can be implemented in countries of all income groups whereas developing a national reporting system for financial markets is likely to be more useful for middle-income countries more than low-income countries.
- Translating Article 2.1c into action requires a holistic approach that holds public and private sector actors equally accountable for the transformation. Therefore, GIZ successfully implements an integrated approach that enables intersectoral learning, creates synergies (e.g., in Vietnam where GIZ supports the issuance of green bonds as well as the development of a taxonomy) and takes into account social and economic impacts of green reforms.
- A green transformation must include all sectors. Therefore, **inter-ministerial coordination is essential**. GIZ has gained vast experience in moderating and facilitating such coordination processes, for example, in the development of a green taxonomy in Vietnam, a process requiring the close involvement of various ministries.
- A political commitment on the highest national level and the involvement of strategic actors (such as central banks, finance ministry etc.) is necessary to ensure that policy reforms are well coordinated and harmonized. In addition to a high-level commitment, a strategic and aligned approach on national level is essential to ensure a smooth coordination and ultimately a successful transformation.
- The financial sector in our partner countries often still lacks incentive structures to measure and mobilise sustainable financial flows. Different instruments can help to trigger a transformation of local financial systems but will only be successful with a full political commitment.
- A climate-friendly transformation of the financial sector is often seen as a burden and less as an opportunity. Therefore, **awareness raising is needed, not only to show the benefits but also pointing out the risks of inaction** (e.g., economic costs caused through stranded assets, energy security, etc.).
- The financial sector must gain an adequate capacity level to implement the transformation based on policy reforms. GIZ has gained vast experiences in building

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up capacities in this area, for example through the development of **capacity building tools and trainings** such as the E-Learning 'Introduction to Sustainable Finance' or the implementation of workshops on disclosures according to the Task Force on Climate-related Financial Disclosures (TCFD) for financial institutions in Vietnam. Significant capacity and awareness can be built through standardized trainings, which can more easily be scaled (especially e-learnings). However, **medium-term**, **tailored support is important for embedding learnings and transforming institutions**. Due to its long-standing relationships with various partner countries and, hence, its knowledge of the relevant actors, GIZ is well placed to support short-, medium- and long-term capacity building activities.

• The specific challenges linked to mobilizing private sector finance for adaptation projects, such as a lack of information on profitable investment opportunities, adaptation hypothesis and impact measurement, requires dedicated technical assistance for both the finance demand and supply side. GIZ deploys a toolkit of measures including targeted capacity strengthening, project structuring support and dissemination of knowledge of local climate data and projections to supplement government financial incentives for private sector actors that help identifying business cases and de-risking financial transactions.

II. ANNEX

 i. Examples of projects and approaches contributing to implementing Article 2.1c

The projects are listed according to the order in which they are mentioned in chapter 3.

Title	FELICITY: Promoting sustainable investments in climate-friendly urban
	<u>infrastructure</u>
Partner institutions	European Investment Bank (EIB)
Countries	Mexico, Ecuador, Indonesia, Brazil
Commissioned by	German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV)
Duration	2017 – 2021
Project description/ intervention and outcome	 Moving away from fossil fuels and reducing climate-damaging emissions in urban infrastructure is key, especially in the energy, mobility, waste and wastewater sectors. Cities and municipalities often lack the prerequisites and know-how to develop projects that meet the standards of international financiers. The financial institutions, on the other hand, often lack the appropriate instruments to adequately advise on the preparation and implementation of investment projects and to develop partner capacities. FELICITY bridges this gap, supporting cities and municipalities to build up better capacities to prepare and implement investment projects that are eligible for funding in the area of climate-friendly urban infrastructure. Amongst others, the following activities are conducted: Developing technical, financial and economic feasibility as well as supporting tendering process and management of environmental and social risks of potential investment projects. Promoting capacities and resources for project preparation and advising on national framework conditions regarding international climate financing. Conducting knowledge management for project preparation and financing mechanisms, strengthening sector networks and developing instruments and methods for project preparation.
Further Resources	EIB: FELICITY Sustainable solutions for cities
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Title	NDC Assist II – Financing & Implementing Nationally Determined Contributions: Component "Private Adaptation Finance"
Partner institutions	NDC Partnership, CRAFT (Climate Resilience and Adaptation Finance & Technology Transfer Facility), The Lightsmith Group (private equity firm), KfW, and others
Countries	Global (component 1+ 2), Focus countries: Nigeria and Kenya (component 3)
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Duration	2021 – 2023
Project description/ intervention and outcome	 Through three pillars, the project seeks to help make the business case for adaptation and unlock the constrained potential of private actors to finance and facilitate both their own and others' adaptation and resilience to climate change: Support to the Private Equity Fund CRAFT: Tailored advisory services for seven portfolio companies of CRAFT for the strategic market introduction of adaptation-relevant technologies and services to increase resilience of those most vulnerable to the impacts of climate change. Knowledge Management: Disseminate innovative practices for private adaptation business and financing models, thus raising awareness on the necessity and opportunities of adaptation investment, aligning (private) investments with Paris goals and showcasing how to mobilize private sector investment for financing Nationally Determined Contributions (NDC) in cooperation with the NDC Partnership. During the Sankalp Africa Summit 2022, an interactive peer learning process was launched to facilitate knowledge sharing among 60 selected practitioners on business and investment opportunities in climate change adaptation solutions. Private Adaptation Investment Bootcamp (PrivABoo): Individual technical assistance, peer-learning and networking targeting Adaptation SMEs and investors to increase investment attractiveness of private sector business models and enhance private sector capacities to finance and scale business models that enhance resilience / decrease vulnerability of customers. Supporting 15 Adaptation SMEs from Kenya and Nigeria in attracting investment and scaling their business models, access to new adaptation solutions for about 160,000 people and the mobilization of at least USD 1,500,000 of private adaptation financing for supported
	companies is expected. In addition, seven selected impact investors are
	supported in building a portfolio in the area of climate change adaptation.
Further Resources	Trabacchi, Chiara, Koh, Jay, Shi, Serena and Guelig, Tara, 2020.
	Adaptation SME Accelerator Project. Adaptation Solutions Taxonomy
	Global Adaptation and Resilience Investment Working Group (GARI)

Title	Programme Macroeconomic Reform - Green Growth
Partner institutions	State Bank of Vietnam; Ministry of Finance; State Securities Commission
Countries	Vietnam
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Duration	2019 – 2022 (first phase); 2023 – 2025 (second phase)
Project description/	To strengthen the coherence of Vietnam's (green) economic policies, including
intervention and	green fiscal policies, green finance policies and public financial management,
outcome	the project provides policy advice, capacity building in regulation/policy drafting and execution in 4 areas in green financial sector reform as follows:
	 Green banking reform: develop and implement regulations and policies on green credit, incentives on green credit, climate risk and environmental risk management, reporting on green credit and environmental risk; Green capital market development: develop regulations on green bonds, verification, green taxonomy, incentive mechanism on green bond issuance and investment, reporting on green bonds, support the issuance process of Sovereign green bonds and corporate green bonds, develop local verification market for green bonds; Sustainable stock exchange: promote ESG reporting in stock exchanges thus increasing sustainable investments.
	 Digital transformation: develop strategy and action plan for digital transformation, revise and develop regulations to promote digitalization, support research on central bank digital currency (CBDC), Peer-to-Peer lending, data sharing and open banking. Digital solutions to promote green and sustainable finance are explored and realized with improved legal framework on digitalization.
Further Resources	Vietnam National Green Growth Strategy (2012)

Title	Responsible Banking Academy (RBA)
Partner institutions	United Nations Environment Programme Finance Initiative (UNEP FI),
	Chartered Banker Institute (CBI)
Countries	Global, pilot countries: Egypt, India, Mexico
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Duration	2022 – 2023
Project description/	On behalf of BMZ, the Sector Programme Financial Systems Development is
intervention and	cooperating with the UN Environment Programme's Finance Initiative (UNEP
outcome	FI) on the development of a Responsible Banking Academy (the Academy) .
	Its key objective is to provide banks with a consistent global framework for
	learning and development based on UNEP FI's Principles for
	Responsible Banking and other leading international standards and
	sustainability principles. The Academy seeks to meet growing training and
	education needs of employees in financial institutions in emerging markets and
	developing countries, so as to equip financial institutions with the
	knowledge and expertise to embed sustainability into their core strategies and operations.
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	The Academy sets out to become a global learning standard on the topic of sustainability in the financial sector, focusing primarily on banks in
	emerging markets and developing countries.
	 In addition to UNEP FI, the British Chartered Banker Institute (CBI)
	contributes with its many years of experience in setting up a learning
	platform and conveying content to banks and their employees.
	The Academy's offering will be accessible as an interactive online platform
	from Q4 2022. Furthermore, banks will be able to integrate the learning
	materials into their own learning and development systems. The on-site
	bank trainings will initially be piloted in Q4 2022 in Egypt, India, Mexico.
	The Academy will provide courses on four levels, tailored to the needs of
	different target groups within financial institutions.
Further Resources	https://www.unepfi.org/

Title	Transformative Investments for Industrial Energy Efficiency (TI4E)
Partner institutions	Ministry of Mines and Energy; Ministry of Development Industry and Foreign Trade, implementing partners: SENAI; BNDES; Desenvolve SP
Countries	Brazil
Commissioned by	NAMA Facility, German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV)
Duration	2020 – 2024
Project description/ intervention and outcome	 The industry is responsible for one third of Brazil's energy consumption and eight percent of the country's greenhouse gas emissions, amounting to 183 million tonnes of CO2e per year. Until now, Brazil's energy efficiency market has been negligible and the vast potential for energy savings remains untapped: Therefore, the NAMA Support Project (NSP) has following goals: Promote public and private industrial energy efficiency investments in Brazil and deliver a transformative push to Brazil's energy efficiency market. Focus on industrial small- and medium-sized enterprises (SMEs) within the region of São Paulo, the supply chain for energy efficiency (including energy service companies, consultants and suppliers) and on public and private financial institutions (leverage of private and public finance resources). Develop local banks' capacities and enhance their familiarity with assessing and investing in energy efficiency projects, allowing them to offer more attractive financial products, re-directing financial flows to more sustainability. Support the government to further improve its energy efficiency policies.
Further Resources	Brazil – Transformative Investments for Industrial Energy Efficiency (TI4E) (nama-facility.org)

Title	Thai Rice NAMA (Nationally Appropriate Mitigation Action)
Partner institutions	Ministry of Agriculture and Cooperatives; Ministry of Natural Resources and Environment, implementing partners: Bank of Agriculture and Agricultural
	Cooperatives (BAAC); Sustainable Rice Platform (SRP); International Rice Research Institute (IRRI); OLAM International; UTZ
Countries	Thailand
Commissioned by	NAMA Facility, German Federal Ministry for the Environment, Nature
	Conservation, Nuclear Safety and Consumer Protection (BMUV)
Duration	2018 – 2023
Project description/	Agriculture is the second largest greenhouse gas (GHG) emitting sector in
intervention and outcome	 Thailand, at the same time being highly vulnerable to adverse climate change effects. The Thai rice sector is responsible for almost 60 per cent of Thailand's emissions from agricultural activities. The Sustainable Rice Platform (SRP) a multi-stakeholder platform co-convened by UNEP and the International Rice Research Institute provides a framework for advanced farming practices, leading to higher net profits, increased yields, enhanced food safety, and lower GHG emissions. The NAMA Support Project (NSP) has following goals: Reach out to 100,000 rice farming households in Thailand in shifting from conventional to low-emission farming in Thailand. Work with farmers and farmers' associations as well as external service providers (e.g. for land-levelling) in adapting these advanced farming practices and develop respective incentive schemes including financial support. Generate additional EUR 21.5 million direct financial investments from the private sector for the implementation of innovative financial incentives. Furthermore, the Royal Thai Government has earmarked at least another EUR 25 million annually in agriculture- and mitigation-related rice production, re-directing financial flows to more sustainability. Switch to low-emission cultivation of rice which has the potential to avoid emissions of 1.664 Mt CO2e cumulative over the 5-year lifespan of the NSP with increasing annual mitigation potential, reducing baseline emissions from irrigated rice by more than 26 per cent.
	, ,
Further Resources	Thailand – Thai Rice NAMA (nama-facility.org)

Title	Sector Programme Financial Systems Development
Partner institutions	Frankfurt School of Finance & Management, Allianz Global Investors, UN
	Environment Programme Finance Initiative, UN Institute for Training and
	Research, Skandinaviska Enskilda Banken AB (SEB), etc.
Countries	Germany
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Duration	2021 – 2024
Project description/ intervention and outcome	 The project advises the BMZ on positioning sustainable finance in a number of national, regional, and international processes. These include G7, G20, European negotiations on sustainable finance policies (incl. the EU Taxonomy and the EU Green Bond Standard) and negotiations on the German Sustainable Finance Strategy. In addition, the project develops and pilots learning and capacity-building products as well as policy tools. These include, amongst others: E-Learning 'Introduction to Sustainable Finance': revision and further development of introductory, open-access, self-paced online course developed by the Emerging Markets Sustainability Dialogues (EMSD) for practitioners from finance, the public sector, academia, and other organizations. E-Learning 'Introduction to Sustainable Finance Taxonomies': Introductory, open-access, self-paced online course primarily for policymakers, who are involved in the development of a sustainable finance taxonomy (under development). Sustainable Finance Policy Navigator: development and piloting of analytical tool to assess existing financial market policies and formulate policy recommendations for sustainability-oriented policy adjustments. develoPPP Training programme for central banks in the SADC region to strengthen capacities in risk and reserve management, including a focus on sustainability, in cooperation with Allianz Global Investors.
Further Resources	Sustainable Finance Policy Navigator

Title	Green Finance Market Regulation and Green Bonds (FiBraS)
Partner institutions	Ministry of Economy of Brazil, Central Bank of Brazil
Countries	Brazil
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Duration	2018 – 2022 (first phase), 2022 – 2025 (second phase)
Project description/ intervention and	The project supports Brazil in aligning its financial sector with sustainable development goals along three workstreams:
outcome	 Improve the financial sector policy framework: Strengthen the Ministry of Economy in its coordinating role to develop a comprehensive, strategic approach to aligning the Brazilian financial sector with sustainability goals. Coordinate actions with international standards, such as those proposed in the EU. Enhance regulations and supervision of the financial sector with respect to sustainability risks, impacts and financial stability. Support the central bank and supervisors in the application of sustainability-related regulatory/supervisory instruments, such as climate risk scenario analysis and disclosure. Scale the use of sustainable finance approaches, especially together with Brazilian development banks, through training and promotion of successful sustainable financial solutions. Strengthen and utilize the largest Brazilian network on sustainable finance (LAB), with around 250 member institutions to scale sustainable finance actions in the financial industry.
Further Resources	GIZ (2020): Sustainable Finance: An Overview GIZ (2020): The green finance market emerging in Brazil

Title	Preparation of the EU Sustainable Finance Action Plan to finance a green corona recovery in the ASEAN region (Study and Expert Funds)
Partner institutions	ASEAN Secretariat, Central Bank of Vietnam, Financial Services Authority of Indonesia (OJK)
Countries	ASEAN (Indonesia & Vietnam)
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Duration	2020 – 2022
Project description/ intervention and outcome	Assess the EU Sustainable Finance Action Plan to finance a green COVID-19 recovery in the ASEAN region. Support the steering of public and private finance into climate and environmentally friendly sectors. Pilot actions in Vietnam and Indonesia for further upscaling on the regional ASEAN level on green and sustainable finance policies. The activities include amongst others: • Support of developing the ASEAN wide sustainable finance taxonomy, chaired by the ASEAN Capital Markets Forum. GIZ provided financial support and expertise to the ASEAN Taxonomy Board. • In Vietnam, GIZ carried out trainings and pilot activities with individual banks on implementing recommendations of the Task Force on Climate Related Financial Disclosure (TCFD). In addition, GIZ is supporting the issuance of green bonds. • In Indonesia, GIZ supported the development and consultation of the sustainable finance taxonomy by bringing international expertise.

Title	Emerging Markets Sustainability Dialogues (Sustainable Finance
	component)
Partner institutions	Financial institutions, financial policymakers, central banks, other market
	stakeholders in G20 emerging market economies
Countries	Brazil, China, India, Indonesia, Mexico, South Africa
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Duration	2014 – 2021
Project description/	With the objective to align the financial system with sustainable development,
intervention and outcome	 EMSD cooperates with financial institutions, regulators, academics and other stakeholders worldwide to integrate environmental, climate and social aspects into mainstream financial decision-making processes, risk management, product and market development as well as knowledge products. Project examples include: Environmental scenario analysis: Strengthen the capacity of financial institutions and regulators to take a forward-looking approach to environmental and climate risks in financial portfolios and the financial system as a whole. Environmental stress testing: Develop and test an analytical framework
	 and model that allows banks to assess the potential impact of environmental shocks on the performance of their corporate loan portfolio. Strategic Alliance on Green Bond Market Development: Support the development of prosperous and sustainable green bond markets in G20 emerging economies through awareness raising, capacity building, and advisory support. Natural Capital & Finance: Build knowledge and capacity on natural capital risks and impacts in financial institutions.
	 Different E-Learnings and training courses such as the Sustainable Finance University Course to mainstream sustainability in academic finance curricula, the E-Learning Introduction to Sustainable Finance and the Sustainable Banking trainings to promote sustainable finance practices Sustainable Stock Exchange: Promote green finance and gender equality through stock exchanges
Further Resources	Emerging Markets Sustainability Dialogues – Sustainable Finance Emerging Markets Dialogue on Finance