ASEAN CATALYTIC GREEN FINANCE FACILITY 2022
Building Southeast Asia’s Green Project Pipelines
FEBRUARY 2023
ABOUT THE ASEAN CATALYTIC GREEN FINANCE FACILITY

The Association of Southeast Asian Nations (ASEAN) Catalytic Green Finance Facility (ACGF) is a permanent facility under the ASEAN Infrastructure Fund (AIF), dedicated to accelerating green infrastructure investments in Southeast Asia. It supports ASEAN governments to prepare and finance infrastructure projects that promote environmental sustainability and contribute to climate change goals. The ACGF is owned by ASEAN governments and the Asian Development Bank (ADB) and managed by ADB.

ACGF activities benefit from financial and in-kind contributions from: Agence Française de Développement (AFD), Cassa Depositi e Prestiti (CDP), European Investment Bank (EIB), European Union (EU), Green Climate Fund (GCF), the Government of the Republic of Korea (Economic Development Co-operation Fund [EDCF] and the e-Asia and Knowledge Partnership Fund [EAKPF]), KfW, the Government of the United Kingdom (Foreign Commonwealth and Development Office [FCDO]), Climate Bonds Initiative (CBI), Global Green Growth Initiative (GGGI), Infrastructure Asia (IA), and the Organisation for Economic Co-operation and Development (OECD).

ACKNOWLEDGMENTS

This document presents progress made and achievements from the ACGF from January to December 2022. The report was prepared under the oversight of Scott Roberts, advisor and head, Southeast Asia Green Finance Hub, Alfredo Perdiguero, administrator of the ASEAN Infrastructure Fund, and Anouj Mehta, country director, Thailand Resident Mission. Naeeda Crishna Morgado, senior infrastructure specialist (Innovation and Green Finance), and Anna Taketani, ACGF partnerships specialist, led the development of this report, with inputs from Rodrigo Martinez, Ghislain De Valon, Alexis Lebel, Karthik Iyer, Martin Unzueta, Carla Lesaca, Marina Lopez Andrich, Gema Sancho-Miñana Bertomeu, and Vinh Prag. Overall coordination and production of the report was managed by Anna Taketani and Marina Lopez Andrich. Editing by Layla Yasmin Amar. Design and layout by Ross Locsin Laccay.

On cover: Aceh, Indonesia: A Decade Since the Asian Tsunami. Ten years after this unprecedented disaster, the progress achieved has been remarkable, and the lives of many of those affected by the 2004 tsunami have improved immensely; The EDSA Greenway project technical drawing (photos by ADB).
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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ACGF</td>
<td>ASEAN Catalytic Green Finance Facility</td>
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<td>ADB</td>
<td>Asian Development Bank</td>
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<td>AFD</td>
<td>Agence Française de Développement</td>
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<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>EU</td>
<td>European Union</td>
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<td>GCF</td>
<td>Green Climate Fund</td>
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<tr>
<td>GHG</td>
<td>greenhouse gas</td>
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<tr>
<td>NDC</td>
<td>nationally determined contributions</td>
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<tr>
<td>PIC</td>
<td>private, institutional, and commercial</td>
</tr>
<tr>
<td>SEA</td>
<td>Southeast Asia</td>
</tr>
<tr>
<td>SEADS</td>
<td>Southeast Asia Development Solutions</td>
</tr>
<tr>
<td>SERD</td>
<td>Southeast Asia Regional Department</td>
</tr>
<tr>
<td>SMEs</td>
<td>small- and medium-sized enterprises</td>
</tr>
<tr>
<td>tCO₂e</td>
<td>ton of carbon dioxide equivalent</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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Unless otherwise specified, “$” refers to United States dollars.
I am pleased to share with you the progress made through the work of the ASEAN Catalytic Green Finance Facility (ACGF) in 2022. Developed and launched under the ASEAN Infrastructure Fund (AIF) in 2019 as the first regional green catalytic facility in Asia, it provides ASEAN member states with tools to drive urgently needed climate finance in the region, including access to $1.9 billion in funds and technical assistance. It is more relevant and important than ever.

Southeast Asia is facing devastating consequences from climate change. Between 2000 and 2019, 3 of the 10 countries most affected by climate change were in the region according to the 2021 Global Climate Risk index. Indonesia was the 14th most affected country by climate-related extreme weather events. Future climate impacts will be even more widespread and challenging.

In response, ASEAN member states are taking proactive measures, as reflected in the ASEAN Community Vision 2025 and the ASEAN Plan for Energy Cooperation, and in the region’s active participation in the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. Together with its ASEAN partners, Indonesia is committed to taking part in combatting climate change and to delivering its nationally determined contributions (NDCs) goal of reducing carbon emissions by 2030. Indonesia’s own goal is to achieve a 29% reduction in emissions, and 41% conditional to receiving international finance support.

The Asian Development Bank (ADB) estimates that Southeast Asia needs an annual $210 billion in investments in climate-resilient infrastructure until 2030. Indonesia alone needs $74 billion per year, and the annual financing gap currently stands at $51 billion. Public finance alone cannot close this gap. A comprehensive response will require a full range of private, institutional, and commercial financing sources and innovative finance mechanisms.

The AIF recognizes the need to make infrastructure financing accessible to all, as well as the urgency to mobilize green finance in response to the region’s climate and environmental concerns. The ACGF is the region’s forefront catalytic green facility and in 2022 alone, ADB approved three ACGF-eligible projects with both AIF and ACGF partner financing: two projects supporting the energy sector in Indonesia and Cambodia, and one project promoting ocean’s health and sustainable fishing in Cambodia.

In addition, ADB approved two ACGF-eligible projects supported with technical assistance from the ACGF in 2022: a green finance facility in Indonesia and the first-of-its-kind climate action program in the Philippines.

The combination of finance from AIF, ADB, and ACGF partners together with technical assistance support, has, in just a few years, made ACGF the reference green vehicle in the region. The AIF is determined to continue to work closely with ADB and ACGF partners to support all ASEAN member states in their efforts to meet their NDCs under the Paris Agreement and achieve their Sustainable Development Goals (SDGs) to ensure a sustainable and green future for Southeast Asia.

DR. NELLA SRI HENDRIYETTY  
Director  
Center for Regional and Bilateral Policy  
Fiscal Policy Agency  
Ministry of Finance, Indonesia
MESSAGE FROM THE
CHAIR OF THE ASEAN
INFRASTRUCTURE FUND
WORKING GROUP IN ADB

Climate change is the single most pressing issue of our time and poses a serious threat for an inclusive and sustainable economic development of Southeast Asia. The subregion is exposed to increasing climate impact on both society and economy, and the last report of the Intergovernmental Panel on Climate Change was a wake-up call to reflect on the measures taken so far and realize that we are not on track to deliver on the Paris Agreement commitments. The Southeast Asia’s Green Economy Report 2021 estimated that climate losses are expected to represent up to one-third of gross domestic product (GDP) by 2050. At the same time, a thriving green economy in Southeast Asia has the potential to deliver $1 trillion in economic opportunities, creating 5 to 6 million new jobs and 6% to 8% GDP growth. Therefore, we need to act with urgency and at scale, within the critical window up to 2030, to forestall the most devastating potential climate impacts, prevent GDP loss, and spur economic opportunities.

In the aim to turn the 2020s into a decade of climate action, ASEAN member states rose to the challenge and reaffirmed their commitments to scale up climate action through strengthened NDCs in November 2022, at the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27), with eight of them pledging to achieve net zero emissions by 2060. Following this increased ambition to tackle climate change, all eyes are now on implementation.

ADB is taking steps to become the Climate Bank of Asia and the Pacific, and has pledged to deliver $100 billion in cumulative climate finance from its own resources by 2030. Within ADB, the Southeast Asia Department is supporting this ambition by the deployment of resources in several climate finance initiatives, with $3 billion in cumulative climate finance between 2019 and 2021.

The ACGF—a flagship regional initiative—is accelerating the development of green infrastructure in the ASEAN region by creating a pipeline of bankable projects and catalyzing capital from different sources. In 2022 alone, ADB approved five ACGF-eligible climate projects in Southeast Asia, three with AIF funds and two with substantial technical assistance from the ACGF during origination and structuring, cofinanced by four ACGF partners.

During the year, the ACGF also operationalized the Green Recovery Platform, launched in October 2021 at COP26, extending finance to two green projects in Cambodia. It also launched the Green, Social, Sustainability, and Other Labeled (GSS+) Bonds Initiative at the ADB Thailand Resident Mission in Bangkok to scale up green, social, and sustainability bonds across Southeast Asia, aiming to mobilize additional capital to finance green infrastructure projects. In November 2022 at COP27, ADB announced a new $15 million technical assistance platform managed by the ACGF, the “Accelerating Green Finance for Climate Transitions in Southeast Asia” or the “ACT TA”, with funds from both ADB and ACGF partners.

These are the results of ADB striving to deliver its finance commitments and fully support the climate commitments of the ASEAN member states, in collaboration with both ASEAN governments and development partners, to minimize the impacts of climate change and maximize the opportunities for a climate-resilient green future for the region.

RAMESH SUBRAMANIAM
Director General
Southeast Asia Department
Asian Development Bank
MESSAGE FROM THE ASEAN CATALYTIC GREEN FINANCE FACILITY HEAD

Projected temperature increases in Southeast Asia imply a shift to a new climate regime by the end of the century. This reality—starker every year—is galvanizing action from across the ASEAN and the global community. It is motivated by the realization that technical, financial, and institutional solutions are urgently needed to address climate challenges. The added negative impacts of the coronavirus disease (COVID-19) pandemic on regional economies and individual livelihoods make the need for sustainable finance and climate-resilient recovery imperative for the region.

A key to the climate response is financial—ensuring that capital flows into green projects, efficiently and at scale, especially from private and institutional capital sources. ADB’s analysis shows that Southeast Asia needs about $210 billion per year for climate resilient infrastructure until 2030; in many sectors, the financing gap is 50% or more. To close this gap, infrastructure projects need support to transition to bankability, develop innovative and green financing models to access private capital, and rapidly scale up successful models across sectors. However, capital is not enough. Finance mechanisms, capacities, and models for green projects must go hand in hand with national roadmaps for green finance.

The ACGF, developed by ADB in collaboration with ASEAN governments and international partners, is a proven model to address these challenges. With $1.9 billion in cofinancing funds and technical assistance, the ACGF has, in its first 4 years, successfully supported 39 projects and concepts in different stages of development. In 2022 alone, the ADB Board of Directors approved financing for five ACGF-eligible projects, three of which are cofinanced by the AIF and four by ACGF partners.

These impressive achievements are the result of a clear strategy, re-emphasized during the COVID-19 pandemic, which focuses on (i) creating de-risking and innovative green finance mechanisms such as the SDG Indonesia One Green Finance Facility, (ii) encouraging capacity development on green and innovative finance models and frameworks through its 6 Champions Program, (iii) driving concerted efforts in selected thematic areas such as financing ocean’s health through the Blue SEA Finance Hub and capital markets development through targeted support to GSS+ bonds, and (iv) leveraging global partnerships to support a green recovery in Southeast Asia through the ASEAN Green Recovery Platform.

This broad agenda requires collaboration, not only in co-financing green projects but also in co-originating and building the project pipeline itself. The ACGF provides a platform for such collective action. The achievements presented in this report are thus a reflection of the tireless collaboration between the AIF Board and the ASEAN governments, ADB, and the partners that comprise the ACGF platform. I would like to extend my sincere appreciation for all the hard work done by all these teams and look forward to yet another year of joint efforts towards a thriving, inclusive, and green economy in Southeast Asia.

SCOTT ROBERTS
Advisor, Office of the Director General
ACGF Head
Southeast Asia Department
Asian Development Bank
Line 2A (Cat Linh - Ha Dong) of the Ha Noi Metro, Viet Nam (photo by ADB).
The Association of Southeast Asian Nations (ASEAN) Catalytic Green Finance Facility (ACGF) is a regional green finance vehicle under the ASEAN Infrastructure Fund (AIF), owned by the 10 ASEAN member states and the Asian Development Bank (ADB). The ACGF has a “catalytic green finance” focus and uses its resources to de-risk green infrastructure projects to make them bankable and attract various sources of funding, including private, institutional, and commercial (PIC) funds. Since its launch in 2019, numerous achievements were made, summarized in the figure below.

**ACGF Operations Scaled Up**

In 2022, the ACGF continued to demonstrate its value, and the importance of allocating resources, from early-stage project origination to late-stage preparation and even during implementation to ensure that climate finance is built in from the start and remains at the core of the project. Concessional funds and technical assistance resources raised from partners were mobilized toward projects, including funds pledged as part of the ASEAN Green Recovery Platform launched at the 26th United Nations Climate Change Conference of the Parties (COP26). The ACGF continues to scale up operations and has made considerable progress toward targets set in the 2022–2024 rolling operational plan, as shown in the table below.
During the first 4 years of ACGF’s operation, the AIF board approved the inclusion of six ACGF-eligible projects in its formal financing pipeline, of which one was added in 2022. In total, seven projects were approved by the AIF board for inclusion in its financing pipeline between 2019 and 2022: six ACGF-eligible projects, and one project with green elements, approved under the former Inclusive Finance Facility (IFF).2

The six ACGF-eligible projects represent $3.2 billion in expected total project costs, including $70 million in financing from AIF, $1.9 billion from ADB and $464 million from four ACGF partners. Together, the projects are estimated to result in the reduction of 408,434 tons of carbon dioxide equivalent (tCO₂e) per year and have the potential to catalyze $72 million for capital expenditure and $150 million per year for operations and maintenance expenditure from PIC funds. Approximately 78% of total project costs count toward climate finance. Three of the six projects are categorized as “Priority Green” and can be considered transformative projects in terms of their potential contribution to addressing climate change and environmental sustainability.3 Of the six ACGF-eligible projects, ADB approved four, one in 2020 and the rest in 2022.4

### Projects in the AIF Pipeline

<table>
<thead>
<tr>
<th>Targets 2022–2024</th>
<th>Progress 2022</th>
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<tr>
<td>Providing de-risking funds to improve the bankability of green infrastructure projects</td>
<td>At least 6 new projects included in formal AIF/ACGF financing pipeline</td>
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<tr>
<td>Projected annual GHG emission reductions of at least 500,000 tCO₂e</td>
<td>1 new project included in the formal AIF financing pipeline</td>
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<tr>
<td>At least $450 million in financing from PIC funds identified</td>
<td>Projected annual GHG reductions for ACGF-eligible projects in the AIF portfolio and formal pipeline: 408,434 tCO₂e</td>
</tr>
<tr>
<td>At least $500 million in partner funds leveraged for ACGF projects.</td>
<td>Projected PIC funds identified: $72 million in CAPEX and $150 million in OPEX/year</td>
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<tr>
<td></td>
<td>$464 million in partner funds committed to ACGF-eligible projects in the formal AIF financing pipeline and $172 to ACGF-eligible projects supported by ACGF-related TA, plus all $300 million committed by ADB.</td>
</tr>
<tr>
<td>Originating and structuring projects, and developing a green infrastructure project pipeline</td>
<td>8 early-stage concepts developed annually with ACGF-related TA support</td>
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<tr>
<td>5 late-stage projects structured annually with ACGF-related TA support</td>
<td>11 early-stage concepts supported with ACGF-related TA in 2022</td>
</tr>
<tr>
<td>3 green and sustainability bonds issued with ACGF-related TA support</td>
<td>9 late-stage projects supported with ACGF-related TA in 2022</td>
</tr>
<tr>
<td>Building policy, knowledge, and capacity</td>
<td>3 GSS+ bonds issued with ACGF-related TA support in Thailand, at $643 million, in 2022.</td>
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<td>50 stakeholders (30% women) trained through ACGF training programs</td>
<td>76 government officials (34% women) participated in Innovative Finance Clinics, one held virtually in July and one in Singapore in September 2022</td>
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<tr>
<td>3 investor roundtables on green finance topics</td>
<td>2 green finance frameworks supported (Indonesia Blue Financing Guidelines and Philippines Sustainable Central Banking Roadmap).</td>
</tr>
<tr>
<td>3 green financing frameworks and/or policies supported</td>
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ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; AIF = ASEAN Infrastructure Fund; CAPEX = capital expenditure; GHG = greenhouse gases; GSS+ bonds = green, social, sustainability and other labelled bonds; OPEX = operational expenditure; PIC = private, institutional and commercial; TA = technical assistance; tCO₂e = tons of carbon dioxide equivalent.

Source: ADB.

1 ACGF-eligible projects are those that meet criteria on green impact, bankability, and private mobilization as described in the ACGF Investment Principles and Eligibility Criteria. This could include projects financed with or without resources from AIF, if they meet ACGF criteria.

2 The IFF (alongside the ACGF) was part of the AIF’s Green and Inclusive Infrastructure Window that the AIF Board approved in November 2018 on a pilot basis from 2019 to 2021. The permanent ACGF, approved by the AIF Board in June 2021, consolidates the earlier ACGF and IFF.

3 Priority green projects meet higher thresholds for green impact as per the ACGF eligibility criteria, and are considered transformative investments that would help countries transition to long-term climate-compatible and environmentally sustainable development and contribute significantly to the greening of their development.

4 These include: (i) Cambodia: Agricultural Value Chain Competitiveness and Safety Enhancement Project (2020); (ii) Indonesia: Sustainable and Inclusive Energy Program (Subprogram 3) (2022); (iii) Cambodia: Sustainable Coastal and Marine Fisheries Project (2022); and (iv) Cambodia: Energy Transition Sector Development Program (Subprogram 1) (2022).
Building a Robust Green Pipeline in Southeast Asia

By the end of 2022, the ACGF had provided technical assistance to 21 late-stage projects (i.e., projects under preparation) and 18 projects in early stages of development. The pipeline for ACGF project preparation support continues to grow, demonstrating demand for support to integrate climate elements and approaches to better leverage public funds. In 2022, the ACGF extended assistance to two new late-stage projects and seven new early-stage projects and concepts, including support to private sector operations, capital markets development, and for upstream studies.

This support is helping to build a strong pipeline in the region. In 2022, ADB approved for financing two additional ACGF-eligible projects that were supported by ACGF technical assistance resources. These are additional to the projects included in AIF’s financing pipeline. The projects include ADB’s first climate change policy-based loan in the Philippines, with ACGF partner cofinancing, and a green financing facility in Indonesia, which was developed with substantial ACGF-related technical support during development. Both projects represent pioneering efforts to address climate change and mobilize climate financing.

ADB has also approved a new $15 million technical assistance program to support identification and preparation of climate finance projects, including those eligible for ACGF funding. The program, Accelerating Climate Transitions through Green Finance in Southeast Asia (ACT), will run from 2022 to 2029 and will utilize ADB and ACGF partner funds for technical assistance to strengthen upstream planning, project origination, and capacity to accelerate a pipeline of green projects for the region.

Partner Funds Leveraged for Green Recovery

Of the $1.9 billion pledged to the ACGF by nine financing partners, 49% has been allocated to the financing of projects and technical assistance from ADB and four ACGF partners. This includes $62 million in concessional loans and $10.6 million in technical assistance funds under the ACGF Green Recovery Program supported by the Green Climate Fund (GCF). The allocation of GCF funds also represents the operationalization of financing under the broader $665 million ASEAN Green Recovery Platform launched at COP26.

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5 While these projects have been supported by ACGF-related technical assistance resources and meet ACGF criteria, they are not financed using AIF loan funds.
Both projects supported with GCF funds highlight the importance of ACGF partnerships in supporting a green post-pandemic recovery. In Cambodia, the Energy Transition Sector Development Program will help reform the energy sector, and GCF funds will support the roll-out of the country’s first grid-connected battery energy storage system. In the Philippines, GCF funds are allocated toward a project that will develop a city-level bus system and deploy electric buses at scale. Through their outputs and wider demonstration impact, both projects pave the way for scaling up climate-friendly and cost-effective solutions by ASEAN governments and the private sector alike.

**Special Initiatives: Expanding Resources for Early-Stage Origination**

Under the 6 Champions Program, the ACGF organized two Innovative Finance Clinics on Green Agricultural Value Chain Financing and E-mobility for Green Urban Transport, combining capacity building and project origination. The ACGF developed and delivered the clinics in close collaboration with ACGF partners and ADB sector and country teams. The clinics brought together 76 ASEAN government officials and resulted in the identification of six project concepts as candidates for ACGF support.

The Blue Southeast Asia (SEA) Finance Hub hosted at ADB’s Indonesia Resident Mission was also successful in identifying new projects. In close collaboration with ACGF partners, the team identified several early-stage projects, including a fishing port project and a marine debris reduction program, with potential for inclusion in the ADB, ACGF, and partner pipelines. In Indonesia, the hub has also supported the development of a Blue Finance Roadmap, and a Blue Finance Accelerator was launched in partnership with the United Nations Development Programme, with the aim to serve as a capacity-building instrument to identify, structure, and implement priority blue projects and strengthen access to finance for relevant small and medium-sized enterprises.

**Bonds Initiative Reaffirms Importance of Capital Markets**

Support to capital markets development as a vehicle for catalyzing PIC funds remains a core pillar of technical support offered by the ACGF. In September, the Green, Social, Sustainability, and Other Labeled (GSS+) Bonds Initiative for Southeast Asia was launched and will be hosted by the ADB Thailand Resident Mission. The initiative aims to strengthen thematic bonds issuances by governments, cities, and state-owned enterprises. During the launch roundtable, potential issuers, regulators, arrangers, and investors demonstrated growing interest for both transaction-level technical assistance and support for enabling frameworks, de-risking, and capacity building.

2022 also saw three additional GSS+ bonds of $643 million issued with ACGF technical assistance support to two new issuers in Thailand. This adds to the $5.6 billion catalyzed through three social and sustainability bonds in 2020–2021.

**Tying Knowledge and Capacity Building Closer to Project Origination**

Knowledge activities under the ACGF remained focused on financing models and approaches to support a post-pandemic green recovery, with a greater emphasis on country-specific reports. The ACGF launched two publications: the Thematic Bonds for Affordable Green Housing in Asia and the Pacific: A Case Study of Thailand’s National Housing Authority and the Green Infrastructure Investment Opportunities: Indonesia—Green Recovery 2022 in partnership with the Climate Bonds Initiative, both focused on capital markets and GSS+ bonds issuances. The ACGF was highlighted as a key platform for green and innovative finance in 36 internal and external events.

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6 The Blue SEA Finance Hub was launched in 2021 with a target of creating bankable projects worth $300 million by 2024 to catalyze at least three times capital from other sources.
Focus Forward—Towards Further Scale-up in 2023

In 2023, the ACGF will continue to scale up operations in project origination and structuring to build pipeline and portfolio toward meeting the performance targets set for 2022–2024. The number of projects and concepts supported is foreseen to increase further as additional technical assistance resources become available. Organization of Innovative Finance Clinics through the 6 Champions Program, as well as expanded activities in the Blue SEA Finance Hub and operationalization of the GSS+ Bonds Initiative are expected to generate project concepts and ideas that can be developed into concept papers and bankable projects. The ACGF will continue to participate in knowledge events and prepare targeted knowledge products in areas related to its core mandate. The ACGF will allocate resources to resume organization of investor roundtables and focus further on upstream support to green financing frameworks and policies.

Focus will remain on scaling up support in the following areas:

- technical support for project origination and structuring, targeting thematic areas with high impact potential;
- upstream support to strengthen climate investment planning, including through a high-level ASEAN dialogue on financing climate transitions;
- support to develop blue financing mechanisms through the Blue SEA Finance Hub;
- scaling up support for capital markets development through the GSS+ Bonds Initiative;
- strengthening implementation arrangements and formalizing financing arrangements for funds from the United Kingdom and the European Union; and
- launching flagship capacity building programs to develop technical competencies, ownership, and practitioner communities around green and climate finance, including through twinning partnerships.

Along the River. Electric ferries for mass public transport along the Chao Phraya River in Bangkok, Thailand (photo by ADB).
The Theppana Wind Farm in Chaiyaphum City in Chaiyaphum province (photo by ADB).
INTRODUCTION

What Is the ACGF?

The Association of Southeast Asian Nations (ASEAN) Catalytic Green Finance Facility (ACGF) is an initiative of the ASEAN Infrastructure Fund (AIF). The AIF was created in 2011 by the Asian Development Bank (ADB) and member states of the ASEAN to boost regional infrastructure. The ACGF was launched in 2019 as a pilot under the AIF to accelerate green infrastructure investment in Southeast Asia and was adopted as a permanent facility in June 2021. It is the only regionally owned green finance initiative focused on developing and scaling up climate-positive projects in the region.

The ACGF mission is to accelerate development of green infrastructure projects in Southeast Asia by better utilizing public funds to create bankable green projects able to attract private capital, integrate innovative technologies, and improve management efficiencies. The 2022–2024 rolling operational plan sets ambitious targets for both higher level climate goals, fund catalyzation and pipeline generation, and for concept development, project origination and structuring, and capacity building.

The ACGF serves as a one-stop-shop to identify, develop, and finance green projects in Southeast Asia, with a strong focus on projects that promote renewable energy, energy efficiency, green urban transport, water supply and sanitation, waste management, and climate-resilient agriculture. The ACGF offers access to (i) funds from the AIF, through two lending products with differentiated pricing based on the differing socioeconomic conditions in ASEAN countries; (ii) financing from nine ACGF partners; and (iii) technical assistance from ADB and ACGF partners. Overall, the ACGF provides access to $1.9 billion in financing from nine financing partners.

Southeast Asia Context: Growing Demand in an Increasingly Vulnerable Region

Southeast Asia is one of the most vulnerable regions in the world to climate change. Growing Southeast Asia is home to over 660 million people, and together its countries constitute the fifth largest economy in the world. Countries are especially vulnerable to the threats of climate change, largely due to long coastlines, natural hazards, and high levels of poverty in some countries, which translates into both unsustainable and non–resilient infrastructure and high dependency on climate-sensitive sectors for livelihoods. Of the 10 most affected countries by climate-related extreme weather events, 3 are in Southeast Asia.

The region’s greenhouse gas (GHG) emissions have continued to rise due to increasing emissions from energy-related sectors including transport, as well as from the agriculture, forestry, and other land use sectors. Southeast Asia now accounts for 8% of global GHG emissions. Bigger and more advanced economies in the region are large contributors of fossil fuel emissions, while the region as a whole is losing carbon sinks, such as mangroves and tropical forests, as a result of deforestation and land use change.

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Financing is needed to support ASEAN climate commitments. All ASEAN governments strengthened their commitments to reduce GHG emissions and scale up climate resilience, as reflected in updated nationally determined contributions (NDCs) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in 2020 and 2021. Of these, 8 of the 10 ASEAN member states have committed to achieving net-zero emissions by 2050 or 2060, conditional on receiving international support. Financing for net-zero targets and climate resilience will be key. ADB estimates that the region needs $210 billion every year until 2030 for investments in climate resilient infrastructure, with an annual gap estimated at $102 billion.⁵ To tackle these challenges, the ACGF provides technical assistance and concessional financing to originate, structure, and implement publicly funded green projects that catalyze private, institutional, and commercial (PIC) capital, as described in figure 1. In March 2022, the 8th ASEAN Finance Ministers’ and Central Bank Governors’ Meeting reconfirmed the robust demand for the ACGF financing and technical support and its contribution to the region’s green recovery under the post-pandemic scenario.⁶

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**Figure 1: Design Principles**

**CATALYTIC: Mobilizing resources and building pipelines**

The ACGF helps crowding in private finance by directing funds to de-risk and improve the bankability of projects. Beyond the impact of the projects themselves, the ACGF helps build urgently needed robust and green infrastructure pipelines in ASEAN member states by working with governments and partners to originate projects, provide advice and technical assistance to structure these, and raise development and private resources for projects.

**GREEN: Promoting environmental sustainability by scaling up green infrastructure**

The ACGF supports green infrastructure development in energy, transport, water, urban, and multisector projects that actively contribute to environmental sustainability and climate goals. Examples of green infrastructure include, but are not limited to, renewable energy, energy efficiency, sustainable transport systems, green cities, and sustainable water supply and sanitation.

**FACILITY: Leveraging public capital**

The ACGF uses equity provided by ASEAN member states into the AIF alongside support from ADB and other development partners. As a levering facility, it will help government in the region use public and concessional funds better, so that each dollar can mobilize commercial funds for projects that are currently not attracting these sources of finance.

ACGF = ASEAN Catalytic Green Finance Facility, ADB = Asian Development Bank, AIF = ASEAN Infrastructure Fund, ASEAN = Association of Southeast Asian Nations.

Source: ADB.

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How Does the ACGF Support Southeast Asian Countries?

The ACGF targets barriers to green finance at three levels, as illustrated in figure 2. The facility is supported by AIF resources combined with financing from donors and development partners through cofinancing agreements and technical assistance to support:

- **Funding for de-risking green infrastructure projects.** The ACGF directs financing to bridge the viability gap for green projects. A flexible approach is used to determine how loans for ACGF projects can improve bankability on a project-by-project basis. The most common use of funds is to cover a portion of the capital costs of a project to achieve bankability.

- **Project origination and structuring.** Technical assistance is provided to support origination and structuring of green infrastructure projects. The aim is to develop a pipeline of projects that integrate innovative financing mechanisms and demonstrate the potential to raise capital at scale. Support is provided to identify, originate, design, and structure green projects. This includes developing and piloting innovative financing mechanisms for green infrastructure projects for early-stage project concepts and structuring of finance-ready projects, as well as supporting upstream studies to identify green infrastructure needs that may lead to project pipeline identification.

- **Building knowledge and capacity on green finance.** Through a multi-partner platform, the ACGF builds knowledge and capacity on green finance in ASEAN countries with the specific aim of supporting the development of bankable, green project pipelines and building capacity to better identify project opportunities. In collaboration with partners, the ACGF organizes investor roundtables and trainings of government officials on green and innovative finance through the ACGF 6 Champions Program and produces knowledge products to maximize the demonstration impact. The platform leverages and builds on the strengths of existing knowledge and policy organizations.

**Figure 2: ACGF Targets Barriers to Green Finance at Three Levels**

**NATIONAL**
- Policy, knowledge, and capacity building support (technical assistance)
  - Support for national green finance strategies
  - Capacity building and training of ASEAN officials
  - Capacity building to support project implementation

**PIPELINE**
- Project origination and structuring (technical assistance)
  - Origination and structuring of green infrastructure projects
  - Development of PPP projects
  - Support to the development of green and climate bonds

**INVESTMENT**
- Funding for de-risking green infrastructure projects
  - Concessional loans to support green infrastructure projects that reduce emissions, create green jobs, and build resilience
  - Catalyze finance from public and private sources

ASEAN = Association of Southeast Asian Nations, PPP = public–private partnership.
Source: ADB.
ACGF IN NUMBERS 2019–2022
Catalyzing Funds and Generating Impact

With AIF funds*

$70 million AIF funds

$464 million Partner funds

$1.9 billion ADB funds

6 ACGF-eligible projects

$3.2 billion project costs

$72 million capex + $150 million opex/year mobilized from private sources

408,434 tCO₂e reduced/year

With technical assistance fundsb

Partner funds

$172 million

ADB funds

$400 million

2 ACGF-eligible projects

$845 million project costs

$759 million capex + $1.5 billion expected bond issuances (through PBL impact)

839,000 tCO₂e reduced/year

*Included in AIF formal financing pipeline 2019–2022; 4 projects approved by ADB Board (1 in 2020 and 3 in 2022)

bApproved by the ADB Board 2022, origination and structuring with ACGF technical assistance

Mobilizing Private, Institutional, and Commercial Funds

CAPITAL EXPENDITURES

$72 million

Energy Transition Sector Development Program, Cambodia

$759 million

SDG Indonesia One - Green Finance Facility, Indonesia

OPERATING EXPENSES

$150 million

Public Transport Projects

CAPITAL MARKETS

$6.2 billion

2020–2022 Bond Roadmaps and Issuance Support

POLICY REFORM

$1.26 billion

Sustainable and Inclusive Energy Program, Indonesia

$1.5 billion

in expected bond issuances Climate Change Policy Program, Philippines

Enabling Green Infrastructure

21 late-stage projects

18 early-stage projects and concepts supported with technical assistance

6 GSS+ bonds issued with ACGF support at $6.2 billion

4 trainings organized under the 6 Champions Program

139 ASEAN government officials trained (44% women)

26 knowledge events organized

32 knowledge products published
TIMELINE AND KEY EVENTS

2022
- One ACGF-eligible project approved for inclusion in the AIF pipeline (sustainable fisheries)
  - First two Innovative Finance Clinics for project origination held under the 6 Champions Program (agriculture value chain financing and electric vehicle fleets)
  - Financing and legal arrangements finalized with EU, GCF, and the UK, under the Green Recovery Platform.

2021
- ACGF mainstreamed as a permanent facility under the AIF
  - Thailand SDG and Sustainability Bonds issued with ACGF TA
  - $665 million ASEAN Green Recovery Platform launched at COP26

2020
- ACGF investment principles and eligibility criteria published
  - Two ACGF-eligible projects approved for inclusion in the AIF pipeline (clean energy and public transport)

2019
- ACGF launched at the 23rd ASEAN Finance Ministers’ Meeting in Thailand
  - Partners pledge $1.4 billion to support the ACGF

2018
- Creation of the ACGF as one of two new facilities under the AIF

2018
- First ACGF-eligible project approved for inclusion in the AIF pipeline (public transport)

2018
- Three GSS+ bonds issuances in Thailand with ACGF TA
- Two projects developed with ACGF technical assistance approved by the ADB Board (SDG One–Green Finance Facility, Indonesia, and Climate Change Action Program, Philippines)

2018
- Flagship reports on Blue Finance and SDG Bonds published

2018
- Blue SEA Finance Hub launched
- Two ACGF-eligible projects approved for inclusion in the AIF pipeline (energy transition and public transport)

2018
- First ACGF project in the AIF pipeline approved by the ADB Board (EDSA Greenways, Philippines)
- First Thailand SDG bond with ACGF TA support issued
- Two ACGF-eligible projects approved for inclusion in the AIF pipeline (energy transition and public transport)

2018
- Partners pledge $1.4 billion to support the ACGF
- Financing and legal arrangements finalized with EU, GCF, and the UK, under the Green Recovery Platform.

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; AIF = ASEAN Infrastructure Fund; ASEAN = Association of Southeast Asian Nations; capex = capital expenses; COP26 = 26th United Nations Climate Change Conference of the Parties; COVID-19 = coronavirus disease; EDSA = Epifanio Delos Santos Avenue; EU = European Union; GCF = Green Climate Fund; GSS+ = Green, Social, Sustainable, and other labeled bonds; opex = operational expense; SDG = Sustainable Development Goals; SEA = Southeast Asia; TA = technical assistance; tCO₂e = tons of carbon dioxide equivalent; UK = United Kingdom.

Source: ADB.
Physical activities every Sunday during the Jakarta Car-Free Day from 6 a.m. to 11 a.m., on Jalan Sudirman and other streets in central Jakarta, Indonesia (photo by ADB).
The AIF board approved piloting of the ACGF in November 2018 as one of two facilities under a new green financing window. In June 2021, 6 months ahead of the end of the 3-year pilot period, the board unanimously decided to mainstream the ACGF as a permanent facility, through a consolidation of the previous two facilities. This milestone was the result of a successful pilot period demonstrating the ACGF’s relevance and ability to create momentum and, above all, the continuous demands for the ACGF as a one-stop-shop for support throughout the project development chain—i.e., from project origination and concept development to structuring support, complemented with efforts to build policy, knowledge, and capacity on green finance across the region. Increasingly, the ACGF is turned to as a thought leader on green finance in the region.

In 2022, the ACGF scaled up operations considerably in support of a green post-pandemic recovery. The team expanded, and concessional funds and additional technical assistance resources from the funds raised under the ASEAN Green Recovery Platform started to flow alongside existing resources into projects and activities for project origination and structuring, capital markets development, and support to green recovery strategies, and to continue to increase knowledge and capacity in the field. The ACGF supported more projects than ever, at both early and late stages.

ACGF Lending Modalities and Eligibility Criteria

The ACGF makes available 18% of the AIF’s equity for the financing of green infrastructure projects, alongside financing from partners. With a growing pipeline and portfolio, the ACGF will maximize AIF resources by allocating a smaller amount of AIF equity funds into each project to leverage a larger amount of funding from ADB and partner resources. Since 2019, all AIF commitments to new investments have been channeled through the ACGF, following its lending modalities and terms, and meeting its criteria for green impact, bankability, and private sector mobilization.

Lending Modalities and Terms

As described in table 1, the ACGF offers attractive lending terms, complementing ADB and partner resources, through two modalities: (i) an ACGF Regular lending modality, open for all AIF borrowing member countries; and (ii) an ACGF Concessional lending modality, open for ADB Group A countries. The transition from London interbank offered rate (LIBOR) to the Secured Overnight Financing Rate (SOFR) was completed and in 2022, all applicable loans were transitioned to the new terms.

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7 To date, these are Cambodia, the Lao People’s Democratic Republic, and Myanmar.
### Table 1: Lending Terms

<table>
<thead>
<tr>
<th></th>
<th>ACGF Regular Lending Terms</th>
<th>ACGF Concessional Lending terms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eligible borrowers</strong></td>
<td>AIF borrowing member countries</td>
<td>AIF borrowing member countries that fall under ADB’s Group A Classification</td>
</tr>
<tr>
<td><strong>Maturity (years)</strong></td>
<td>Up to 20</td>
<td>25</td>
</tr>
<tr>
<td><strong>Grace period (years)</strong></td>
<td>Up to 7</td>
<td>5</td>
</tr>
</tbody>
</table>
| **Interest rate**      | Beginning 1 January 2022 for new loans, and from the first full interest period falling after 1 January 2022 for existing loans:  
6-month SOFR compounded in arrears plus 30 bps adjustment spread: during grace period  
6-month SOFR compounded in arrears plus 30 bps adjustment spread plus 140 bps: after grace period up to 20 years  
Previous rates:  
6-month $LIBOR: during grace period  
6-month $LIBOR plus 140 bps: after grace period up to 20 years | 1%: years 1–5  
1.5%: years 6–25  
Previous rates:  
6-month $LIBOR: during grace period  
6-month $LIBOR plus 140 bps: after grace period up to 20 years |
| **Grant element**      | None                                                                                       | >35%                                                                                           |
| **Maximum lending volume** | With ACGF (concessional) combined limit of up to 18% of AIF total equity                       | 10% of AIF total equity                                                                         |
| **Commitment fee**     | 15 bps                                                                                      | None                                                                                           |
| **Maturity premium/Prepayment premium** | As applicable for ADB OCR loans                                                                 | None                                                                                           |
| **Prepayment**         | No prepayment penalty                                                                        | None                                                                                           |

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; AIF = ASEAN Infrastructure Fund; bps = basis points; LIBOR = London Inter-bank Offered Rate; OCR = ordinary capital resources; SOFR = Secured Overnight Financing Rate.

Source: ADB.

**Investment Principles and Eligibility Criteria**

All ACGF projects must meet the [ACGF investment principles and eligibility criteria](https://www.adb.org/documents/acgf-investment-principles-eligibility-criteria). The governments of ASEAN member states and ACGF cofinancing partners jointly developed the criteria, which the AIF Board approved in November 2019. The criteria ensure that support is directed to projects that help meet climate change and environmental goals (green impact), are financially sustainable (bankable), and are designed to mobilize private, institutional, and commercial (PIC) capital in the long term.
ACGF Eligibility Criteria

- **Green impact.** Classification as “green” or “priority green” projects, with every project (i) meeting a minimum threshold for climate finance, (ii) demonstrating greenhouse gas reduction and climate resilience, and (iii) demonstrating contribution to other environmental benefits.
- **Bankability.** Potential for support to improve financial viability and/or sustainability and bankability.
- **Private capital catalyzation.** Potential to catalyze or have a roadmap in place to catalyze at least 10% resources from private, institutional, and commercial sources at any time over the first 8 years.

Cofinancing and Knowledge Partnerships

With nine cofinancing partners and four knowledge partners, the ACGF brings together a wealth of resources and knowledge on green finance in the region, as detailed in table 2 and figure 3 below. In 2022, the ACGF continued to deepen collaboration with all its cofinancing partners, to build pipeline and finance green projects across the region, and to bring in skills and expertise drawn from both knowledge and cofinancing partners in events and trainings. Both cofinancing and knowledge partners were actively involved in knowledge and capacity-building events, from co-organization and co-funding to in-kind contributions and participation in panel discussions and as speakers.

Of the estimated $1.9 billion in pledged cofinancing, $464 million was committed from four partners to five ACGF-eligible projects in the formal AIF financing pipeline with a total expected project cost of $3.1 billion.

### Table 2: Cofinancing Partners

<table>
<thead>
<tr>
<th>Pledged cofinancing through parallel or joint ADB administration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partner</strong></td>
</tr>
<tr>
<td>ADB</td>
</tr>
<tr>
<td>AFD</td>
</tr>
<tr>
<td>CDP (Italy)</td>
</tr>
<tr>
<td>EDCF (Republic of Korea)</td>
</tr>
<tr>
<td>EIB</td>
</tr>
<tr>
<td>KfW</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cofinancing managed through ADB trust funds (ADB administered)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partner</strong></td>
</tr>
<tr>
<td>GCF</td>
</tr>
<tr>
<td>FCDO (UK)</td>
</tr>
<tr>
<td>EU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge partners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partner</strong></td>
</tr>
<tr>
<td>CBI</td>
</tr>
<tr>
<td>GGGI</td>
</tr>
<tr>
<td>Infrastructure Asia</td>
</tr>
<tr>
<td>OECD</td>
</tr>
</tbody>
</table>

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; AFD = Agence française de développement; CBI = Climate Bonds Initiative; CDP = Cassa Depositi e Prestiti; EDCF = Economic Development Co-operation Fund; EIB = European Investment Bank; EU = European Union; FCDO = Foreign, Commonwealth and Development Office; GCF = Green Climate Fund; GGGI = Global Green Growth Institute; KfW = German state-owned development bank; OECD = Organisation for Economic Co-operation and Development; TA = technical assistance; UK = United Kingdom.

Source: ADB.
Operationalizing the ASEAN Green Recovery Platform

In 2022, the ACGF began operationalizing financing partnerships pledged as part of the $665 million ASEAN Green Recovery Platform announced at the 26th United Nations Climate Change Conference (COP26) in November 2021. The platform incorporates support from the European Union (EU), the Green Climate Fund (GCF), Italy’s Cassa Depositi e Prestiti (CDP), and the United Kingdom (UK) through its Foreign, Commonwealth and Development Office (FCDO) and focuses on promoting a green post-pandemic recovery that addresses environmental and climate challenges, promotes growth, and helps create green jobs.

During the year, the ACGF finalized legal agreements with GCF and the UK. Of the $300 million available from GCF for concessional cofinancing, $62 million were allocated to two ACGF-eligible projects and $10.6 million were committed in technical assistance funds under the GCF-supported ACGF Green Recovery Program.

![Figure 3: Financing Partnerships Fund Flow](image-url)

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; ASEAN = Association of Southeast Asian Nations; AFD = Agence Française de Développement; CDP = Cassa Depositi e Prestiti; EDCF = Economic Development Co-operation Fund; EIB = European Investment Bank; EU = European Union; GCF = Green Climate Fund; KfW = German state-owned development bank; UK = United Kingdom.

Source: ADB.
**Fund Allocation Process**

The ACGF proposes partner funds for projects based on specific criteria, through a transparent allocation and prioritization process, and in close dialogue with both financing partners and borrowing entities. The ACGF regularly shares the pipeline of potential projects with partners, which leads to discussions on interest from the partners based on country and sector preferences, and with the governments on country demand and interest to collaborate with a proposed partner, among others related to lending modalities, terms, and other arrangements, as shown in figure 4.

**Implementation Arrangements**

**ACGF Governance**

The ACGF operates under the institutional structure of the AIF and follows its governance structure and institutional arrangements. The AIF Board of Directors reviews the annual pipeline and approves AIF financing for ACGF-eligible projects.

The ACGF Partner Group is the main forum for dialogue with partners. In 2022, the group met twice: with the AIF Administrator and the ADB team in June 2022, and back-to-back with the AIF Board of Directors’ meeting in November 2022. The group provided input on strategic issues related to the implementation of the ACGF, reviewed the pipeline of potential ACGF projects to be supported with partner funds, and provided feedback on the implementation of ACGF technical assistance support for project origination and structuring, and for knowledge and capacity building.

**Additional Governance Arrangements for Trust FundsSupported by ACGF Partners**

For three ACGF partners—the GCF, EU, and the UK—funds are channeled through trust funds fully administered by ADB. A Green Finance Steering Group was established in 2022 and will meet periodically to guide fund allocation and provide strategic overview of the platform. ADB also appointed a Green Investment Panel to review applications for loans for investment projects and validate whether applications meet the ACGF and partner eligibility criteria.

**ADB Administration and Implementation Team**

ADB’s Southeast Asia Regional Department (SERD) administers the AIF and under this arrangement, the Southeast Asia Green Finance Hub manages the implementation of the ACGF. The Green Finance Hub team continued to be expanded in 2022, including new staff, secondees, and consultants. The team supports project origination and financial structuring, manages funds and partnerships, and implements knowledge, capacity building, and communications activities.

---

**Figure 4: Fund Allocation**

- **Long list prepared**
  Pipeline prepared based on country pipelines

- **Demand confirmed**
  Potential demand for financing confirmed with ADB sector and country teams, and governments

- **Pipeline shared**
  Pipeline shared with partners regularly, at least twice per year

- **Project details shared**
  Details on selected projects shared with partners based on partner preferences

- **Financing options discussed**
  Discussions held between ADB and partners

- **Financing options confirmed**
  Co-financing arrangements confirmed with governments

ADB = Asian Development Bank. Source: ADB.
A technician on his high post. A technician is repairing an electrical pole at the Burgos Wind and Solar Farm, Ilocos Norte, Philippines (photo by ADB).
Expanding Portfolio and Pipeline

The AIF Board approved one additional project for inclusion in its financing pipeline under the ACGF, with projected annual savings of 105,762 tons of carbon dioxide equivalent (tCO₂e), bringing the total number of ACGF-eligible projects in the AIF portfolio and pipeline to six. Of this total expected project cost for the six ACGF-eligible projects in the AIF pipeline is $3.2 billion, of which $1.9 billion will be financed by ADB, $70 million by AIF, and $464 million is earmarked to be financed by ACGF partners. Together the projects are estimated to result in the reduction of 408,434 tCO₂e and have the potential to catalyze $72 million into capital expenditure and $150 million per year into operation and maintenance expenditure from PIC funds. By the end of 2022, ADB had approved four of these projects, as detailed in table 3.

Table 3: Status of Projects Approved by the ADB Board

<table>
<thead>
<tr>
<th>Project</th>
<th>Country</th>
<th>Sector</th>
<th>Total Project Cost ($ million)</th>
<th>ADB Funding ($ million)</th>
<th>AIF Funding ($ million)</th>
<th>Partner Funding ($ million)</th>
<th>ADB Board Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects in the AIF portfolio, approved for financing by the ADB Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Transition Sector Development Program, Subprogram 1</td>
<td>Cambodia</td>
<td>Energy</td>
<td>77</td>
<td>40</td>
<td>10</td>
<td>12</td>
<td>Q4 2022</td>
</tr>
<tr>
<td>Sustainable Coastal and Marine Fisheries Project</td>
<td>Cambodia</td>
<td>ANR</td>
<td>104</td>
<td>63</td>
<td>10</td>
<td>20</td>
<td>Q4 2022</td>
</tr>
<tr>
<td>Sustainable and Inclusive Energy Program, Subprogram 3</td>
<td>Indonesia</td>
<td>Energy</td>
<td>867</td>
<td>500</td>
<td>15</td>
<td>352</td>
<td>Q4 2022</td>
</tr>
<tr>
<td>EDSA Greenways Project</td>
<td>Philippines</td>
<td>Transport</td>
<td>179</td>
<td>123</td>
<td>15</td>
<td>none</td>
<td>Q4 2020</td>
</tr>
<tr>
<td>Agricultural Value Chain Competitiveness and Safety Enhancement Project</td>
<td>Cambodia</td>
<td>Multisector</td>
<td>110</td>
<td>70</td>
<td>5</td>
<td>25</td>
<td>Q4 2020</td>
</tr>
<tr>
<td>Sustainable Development Goals Indonesia One— Green Finance Facility, Phase 1</td>
<td>Indonesia</td>
<td>Finance</td>
<td>423</td>
<td>150</td>
<td>none</td>
<td>none</td>
<td>Q1 2022</td>
</tr>
<tr>
<td>Climate Change Action Program, Subprogram 1</td>
<td>Philippines</td>
<td>Multisector</td>
<td>422</td>
<td>250</td>
<td>none</td>
<td>172</td>
<td>Q1 2022</td>
</tr>
</tbody>
</table>

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; AIF = ASEAN Infrastructure Fund; ASEAN = Association of Southeast Asian Nations; DOTr = Department of Transportation; EDSA = Epifanio de los Santos Avenue; IFF = Inclusive Finance Facility; PFIs = participating financial intermediaries.

a Approved in December 2022. Effectiveness and start of implementation is expected in 2023.
b Approved in November 2022. Effectiveness and start of implementation is expected in 2023.
c Approved in 2020 and declared effective in March 2021. Utility relocation works are in progress, including minor land acquisitions, as well as the preparation of resettlement action plans based on the detailed engineering design by the Department of Transportation (DOTr). Bidding documents for the civil works are ready for advertisement and recruitment for a construction supervision consultant is ongoing. Expressions of interest have been evaluated and DOTr is preparing to submit a shortlist for ADB approval.
d Approved in 2020 under the previous AIF IFF window and declared effective in March 2021. The AIF loan component will finance the financial intermediation output (output 1) of the project. The project is currently at the final stage of preparatory works with operations expected to start in Q1 2023. In 2022, subsidiary loan agreements were signed between the government and participating financial intermediaries (PFIs). ADB and the government approved a change in fund flow, enabling ADB to disburse directly to PFIs for onlending to other PFIs. Implementation consultants were engaged to support preparation of operating guidelines for Output 1 and assist PFIs to establish the environmental and social management systems. Utilization of AIF loan proceeds are expected to commence in Q2 2023.

Source: ADB.

In total, seven projects were approved by the AIF board for inclusion in its financing pipeline between 2019 and 2022: six ACGF eligible projects, and one project with green elements, approved under the former Inclusive Finance Facility (IFF) window.
Technical Assistance Support to Build Pipeline

Project Origination Support

Technical assistance funds are a fundamental component of ACGF operations and include support to the development of a pipeline of green and bankable projects across the region, from concept and early-stage design to late-stage structuring. An origination strategy involving all relevant stakeholders guides this work, as described in figure 5.

In 2022, the ACGF provided technical assistance to 9 projects in late stages of project structuring and 11 projects in the early stages of development, as well as other concepts and studies, including support to sovereign projects, private sector operations, capital markets development, and upstream support to studies and policy. As a result of ACGF technical support, ADB approved financing of two ACGF-eligible projects in 2022 with a total project cost of $845 million, although without AIF funding: a climate change policy-based loan in the Philippines and a green financing facility in Indonesia. The project in Indonesia is projected to result in a reduction of 839,000 tCO₂e per year.

Since its start in 2019, the ACGF has provided support to more than 40 projects, concepts, and initiatives in different stages of development.

Technical Assistance Channels

The ADB technical assistance project Green and Innovative Finance Initiative for Scaling up Southeast Asian Infrastructure, funded by both internal ADB resources and external support from the Government of the Republic of Korea through its e-Asia and Knowledge Partnership Fund (EAKPF), continued to be the main source of technical assistance funds for the ACGF in 2022.\footnote{ADB. Technical Assistance for Green and Innovative Finance Initiative for Scaling up Southeast Asian Infrastructure. \url{https://www.adb.org/projects/52077-001/main}.}

ADB has also approved a new $15 million technical assistance program to support identification and preparation of climate projects, including those eligible for ACGF financing. The program, Accelerating Climate Transitions through Green Finance in Southeast Asia (ACT), will run from 2022 to 2029 and will utilize ADB and ACGF partner funds for technical assistance to strengthen upstream planning, project origination, and capacity to accelerate a pipeline of green projects for the region.\footnote{ADB. Technical Assistance for Accelerating Climate Transitions through Green Finance in Southeast Asia. \url{https://www.adb.org/projects/56186-001/main}.}
Subprogram 3 supports the transformation of Indonesia’s energy sector through reforms initiated in 2013, which aim to (i) improve fiscal sustainability and governance, (ii) expand private investment, and (iii) promote the deployment of clean and efficient energy options.

Subprogram 3 supports the government’s ambitious energy sector reforms under the National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional, RPJMN) 2020–2024, its target of 31.89% GHG emission reduction under its nationally determined contribution, and its plans to reach net zero by 2060 and phase-out coal generation.

It was approved for financing by the ADB Board in November 2022, with both AIF and ACGF partner cofinancing.

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; EDCF = Economic Development Co-operation Fund; GHG = greenhouse gases; KfW = German state-owned development bank; tCO₂e = tons of carbon dioxide equivalent.

Source: ADB.

The project is ADB’s first significant investment in marine fisheries and represents an important milestone for ADB’s Action Plan for Healthy Oceans and Sustainable Blue Economies. It will enhance the climate resilience and fish productivity of the coastal and marine sector, support infrastructure for open-water non-fed mariculture systems and integrate seafood safety and gender elements for upgraded landing sites where catch reporting can be demonstrated. The coastal communities and interested partners will be supported through a business incubation program that offsets the risk of open-water nonfed mariculture diversification and incentivizes the establishment of commercial enterprises.

The ACGF provided substantial technical assistance support focused on the design of innovative and climate-related aspects of the project and analysis related to financial management and the private sector. This included assessment of the current fisheries financing context in Cambodia and design of fisheries value chain financing instruments and a self-sustaining marine financing facility; project financial management due diligence, and identification of private sector investment opportunities.

The project was approved for financing by the ADB Board in December 2022, with both AIF and ACGF partner cofinancing.

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; AFD = Agence française de développement; GHG = greenhouse gases; ha = hectare; tCO₂e = tons of carbon dioxide equivalent.

Source: ADB.
Box 3: Energy Transition Sector Development Program (Subprogram 1)

Country: Cambodia  
Sector: Energy

Project cost: $77.2 million  
ADB funds: $40 million  
AIF funds: $10 million  
ACGF partner funds: $12 million (GCF)

ACGF Criteria:
- Share of project cost classified as climate finance: 100% (priority green).
- Estimated GHG reduction: 161,786 tCO₂e/year.
- Estimated private investments: $80 million for OPEX and CAPEX, and $1.2 billion mobilized indirectly through policy actions in the power sector for investments in new renewable energy capacity by 2030.
- Contribution to other environmental benefits: Policy actions will have overall environmental benefits, including reduced pollutant emissions and health co-benefits.

The Energy Transition Sector Development Program will provide comprehensive support to Cambodia’s clean energy transformation and move away from fossil fuels. It will help the energy sector mainstream renewables, improve energy efficiency, adopt data-driven power system planning and regulation, and tie infrastructure investments to planning with new technologies and business models. The program combines the issuance of policies, efficiency standards and guidelines, with the roll-out of government-led programs and demonstration of investment projects, with involvement of the private sector.

The program will accelerate the transition towards an energy efficient economy and reduce greenhouse gas emissions from the energy sector, and create green jobs.

It was approved for financing by the ADB Board in December 2022, with both AIF and ACGF partner cofinancing.

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; CAPEX = capital expenditure; GCF = Green Climate Fund; GHG = greenhouse gases; OPEX = operational expenditure; tCO₂e = tons of carbon dioxide.

Source: ADB.

Box 4: Climate Change Action Program, Philippines

Country: Philippines  
Sector: Multisector

Project cost: $421.7 million  
ADB funds: $250 million  
ACGF partner funds: $172 million (AFD)

ACGF Criteria:
- Share of project cost classified as climate finance: 100% (priority green).
- Contribution to other environmental benefits: Co-benefits include adaptation and resilience, especially in urban environments via energy efficiency.
- Estimated GHG reduction and private sector financing not estimated for policy-based lending.

The program constitutes the first dedicated climate change policy-based loan undertaken by ADB and addresses climate change as its core objective. The program will increase and intensify actions to transform key sectors toward a climate-resilient and low-carbon economy. It focuses on sectors that are of national priority for climate action, targeting adaptation in highly vulnerable sectors (agriculture, natural resources, and environment), and mitigation in emissions intensive sectors (energy and transport).

The program supports NDC priorities, focusing on reducing GHG emissions from energy, transport, and urban environments; promoting climate change adaptation in agriculture and natural resources; and mobilizing climate finance at the national and local levels.

The program was approved for financing by the ADB Board in May 2022, with substantial technical assistance from the ACGF team.

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; GHG = greenhouse gases; NDC = nationally determined contribution.

Source: ADB.
### Box 5: SDG Indonesia One - Green Finance Facility, Indonesia

<table>
<thead>
<tr>
<th>Country:</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector:</td>
<td>Infrastructure finance and investment funds</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACGF Criteria:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Estimated GHG reduction: 839,000 tCO₂e/annum.</td>
</tr>
<tr>
<td>• Estimated private sector financing catalyzed: $759 million.</td>
</tr>
<tr>
<td>• Contribution to other environmental benefits: SDG co-benefits.</td>
</tr>
<tr>
<td>• Share of project cost classified as climate finance: 91% (priority green).</td>
</tr>
</tbody>
</table>

**Project cost:** $423.1 million  
**ADB funds:** $150 million

Designed as a de-risking facility, SIO-GFF aims to leverage ADB and government funds to catalyze a multiple of green funds from private, institutional, and commercial sources over time. The sovereign financial intermediary loan to Indonesia will be onlent to PT Sarana Multi Infrastruktur (PT SMI) for SIO-GFF implementation, to support the achievement of the country’s sustainable development goals through an innovative transition financing mechanism.

The facility was designed with substantial ACGF TA support and the SIO-GFF mechanism will link fund provision to subprojects with clear green - a cross cutting theme across most SDGs - and financial bankability targets.

The eligibility criteria for the identified indicative subprojects include guidelines on investment taxonomy; climate indicators (mitigation and adaptation core indicators including total tons of carbon dioxide to be avoided or reduced); environmental cobenefits, which include improved biodiversity and air, water, and soil quality; and SDG performance indicators.

**ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; GFF = green finance facility; GHG = greenhouse gases, SDG = Sustainable Development Goal; SIO = SDG Indonesia One; TA = technical assistance; tCO₂e = ton carbon dioxide equivalent.**  
**Source:** ADB.
Innovative Finance Clinics for Project Origination

The Innovative Finance Clinics under the 6 Champions Program combines origination of green projects and capacity-building for ASEAN government officials, to identify new projects and champions who can take them forward. This is achieved through proactive “clinics,” combining identification of relevant and replicable concepts and global best practices with green finance capacity building, and additional follow-on technical assistance support to develop concepts and early-stage projects.

In 2022, the team delivered the first two Innovative Finance Clinics on Green Agricultural Value Chain Financing and E-mobility for Green Urban Transport, which resulted in six project proposals that could benefit from technical assistance for concept development. A total of 151 people participated in the events—58 in the virtual clinic in July and 93 in the in-person clinic in Singapore in September—of which 76 were ASEAN government officials (34% were women) with an overall positive feedback on quality and learning.

In September, the ACGF organized the first in-person clinic as a 2-day event in Singapore titled E-mobility for Green Urban Transport. The clinic was organized in partnership with Infrastructure Asia, the Urban Climate Change Resilience Trust Fund, and the EAKPF, and showcased numerous case studies from the region and globally on structuring, planning, financing, and procuring electric vehicle projects. The clinic identified six potential early-stage projects and concepts on electric vehicle fleets and associated infrastructure deployment that could qualify for ACGF technical assistance.

The Blue SEA Finance Hub

Supporting Origination of Ocean Health Projects

The Blue SEA Finance Hub was launched in November 2021 with technical assistance support from the ACGF.13 Hosted in the ADB Indonesia Resident Mission and with a dedicated team in place, the hub supports the operationalization of ADB’s Action Plan for Healthy Oceans and Sustainable Blue Economies in ASEAN.14

In 2022, the hub rolled out its first activities to accelerate the development of a pipeline of projects that improve the sustainability and conservation of the region’s oceans, water bodies, and marine ecosystems. In support to the Indonesian Ministry of National Development Planning, the hub contributed to the development of a Blue Finance Roadmap to set the trajectory toward innovative capital market instruments, including blue bonds. In Indonesia, it also commenced project preparation support to structuring and implementation of a fishing port project and to a marine debris reduction program, both in collaboration with ACGF partners. Furthermore, the Blue SEA Finance Hub is developing an innovative marine and coastal ecosystem conservation and protection concept, also in collaboration with the ACGF and other partners.

In August 2022, the Blue Finance Accelerator was launched in partnership with the United Nations Development Programme (UNDP), under the supervision of the Government of Indonesia. A dual track of training for ‘blue’ small and medium-sized enterprises (SMEs) and local government officials, the Blue Finance Accelerator will serve as a fostering capacity-building instrument to identify, structure, and implement priority blue projects and strengthen access to finance for relevant SMEs.

The GSS+ Bonds Initiative for Southeast Asia.
In 2022, the ACGF launched the GSS+Bonds Initiative for Southeast Asia, covering a range of topics detailed in figure 6.15 The initiative, anchored and hosted at ADB’s Thailand Resident Mission, was presented to a group of investors and development stakeholders in Frankfurt in early July and subsequently successfully launched at a roundtable in Bangkok on 29 September. The roundtable evidenced growing interest from the potential issuers for both transaction level technical assistance and support for enabling frameworks, de-risking, and capacity building. Assessment is underway to enable further signature thematic bonds such as blue bonds and municipal bonds in conjunction with both sovereign and subsovereign issuers across ASEAN.

The GSS+ Bonds Initiative aims to create a programmatic capacity-building facility over a 3-year period, to strengthen thematic bonds issuances by governments, cities, and state-owned enterprises. It targets to support:

(i) six origination roundtables with global bond experts;
(ii) four or five thematic bonds issuances with a cumulative $1 billion in issuances including at least one green municipal bond; and
(iii) at least three financial mechanisms, developed and proposed to developing member countries.

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**Figure 6: GSS+ Bonds Initiative Activities**

- **Capacity Building and Policy Strengthening**
  - Development of capacity of government officials and relevant stakeholders
  - Facilitating the constitution of a green coordination committee within the central government and local governments
  - Development of policy levers, incentives, and other aspects of an enabling regulatory environment

- **“GSS Finance Program”**
  - Kick off Sustainable Finance Program with governments through:
    - Designing of a national green and sustainable financing framework
    - Development of international alliances
    - Development of national taxonomy

- **Thematic Bonds Support**
  - Support Sovereign/ SOE’s/ Municipalities for thematic bond issuances for:
    - Development of bond frameworks
    - Assisting in project selection
    - Support with external review and certification
    - Post issuance support for review and reporting

- **De-risking and Finance Facility**
  - Development of de-risking finance facility, credit enhancement structures, especially from multilateral development banks, to improve risk perception among private investors
  - Development of financing options and tools based on country specific requirement
  - Introduction of blended finance tools

- **Sub-sovereign Support**
  - Exploring further support areas for developing green/ COVID-19 recovery bonds
  - Development of shadow credit rating mechanisms and national taxonomy structure
  - Development of green project pipelines for priority financing

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ADB = Asian Development Bank; COVID-19 = coronavirus disease; GSS+ bonds = green, social, sustainability and other labelled bonds; SOE = state-owned enterprise.

Source: ADB.

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Expanding Support to Private Sector Development

In 2022, upstream support was provided to develop private sector green projects and assessments were conducted to map project pipelines and future investment opportunities in Southeast Asia. This support aims to connect private green infrastructures projects and sponsors with public authorities or regulations to envision scalability of private business models or activities and attract visibility and traction from governments. In 2022, technical assistance support was extended for a financial institution’s credit mapping of blue sectors in Thailand, commercial and industrial solar generation off-grid due diligence in Thailand and Viet Nam ahead of identified transactions, environmental and social audit support to a MRT extension line in Thailand, and a feasibility study on an e-bus transaction in Thailand.
The Ministry of Defence headquarters in Bangkok, Thailand. Bikers pass by the old royal building that is also a Bangkok landmark (photo by ADB).
The ACGF knowledge work remains focused on promoting a post-pandemic green recovery by preparing knowledge products and media content, organizing capacity-building events, and raising awareness of the ACGF and its approaches through participation in external events. This is done by sharing global knowledge and best practices in green development finance, building knowledge and capacity in governments, and enabling champions within those governments to pursue green infrastructure projects that are financed in innovative ways.

In 2022, the ACGF published two country specific reports on green finance and organized 11 knowledge and dialogue events focused on three topics: green finance and green recovery in collaboration with ADB’s Southeast Asia Development Solutions (SEADS), blue finance and ocean health under the Blue SEA Finance Hub, and capital markets through the GSS+ Bonds Initiative. Additionally, the ACGF was highlighted as a key platform for green and innovative finance in 36 internal and external events. The Appendix has details of the ACGF knowledge work.

**Country-specific Reports**

The ACGF published two knowledge products that had a specific country focus. The *Thematic Bonds for Affordable Green Housing in Asia and the Pacific: A Case Study of Thailand’s National Housing Authority*, discusses the experience of Thailand’s National Housing Authority in the issuance of thematic bonds to build green, affordable housing for the country’s low-income residents. Thailand is a good example of the importance and effectiveness of providing support from early stages to specific government agencies in undertaking the issuance process, as more green issuances take place every year, such as the B5 billion ($135 million) green bond issued in September 2022 by the Export-Import Bank of Thailand with the support of ADB and the ACGF.

Secondly, the ACGF and ADB published an updated version of the *Green Infrastructure Investment Opportunities: Indonesia—Green Recovery 2022* in partnership with the Climate Bonds Initiative and PT Sarana Multi Infrastruktur under Indonesia’s Ministry of Finance. Green infrastructure presents a huge investment opportunity in Indonesia, especially in energy and transportation, and associated green finance (including the green bond market) could be accelerated by key policy and institutional changes, as described in the report. The aim of this type of country-focused report is to serve as an additional guide for ASEAN government agencies in the early stages of infrastructure planning and project preparation, by helping identify and develop green project pipelines of interest for national and international investors.

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Leveraging ADB Flagship Knowledge Platforms

At the 2022 Southeast Asia Development Symposium in March, the ACGF organized a panel discussion for approximately 300 participants on what is needed to rapidly mobilize climate finance in Southeast Asia, and summarized findings in a blog post. The session included a panel of climate finance experts from PT Sarana Multi Infrastruktur under Indonesia’s Ministry of Finance, the Philippines central bank Bangko Sentral ng Pilipinas, the Sustainable Finance Institute Asia, and Climate Bonds Initiative, and was moderated by ADB.

At the inaugural ADB Healthy Oceans Tech and Finance Forum in January, the ACGF joined as a main partner of ADB’s Healthy Oceans Initiative representing Southeast Asia and hosted two sessions. A Special Session was held where Ahmed M. Saeed, ADB’s Vice-President for East Asia, Southeast Asia, and the Pacific launched the ACGF flagship publication Financing the Ocean Back to Health in Southeast Asia: Approaches to Mainstreaming Blue Finance.

Communications

The ACGF continued to have broad media coverage, with appearances in at least 65 articles and op-eds in media outlets and websites across the globe, from global news channels such as Reuters and Bloomberg over regional channels such as Business News Asia, to national and local news providers such as Bangkok Post and Dan Tri International.

In April, the ACGF launched ACGF News, a quarterly newsletter targeting government officials in ASEAN, development sector colleagues, and other audiences interested in innovative and sustainable infrastructure financing. Each issue features news, events, publications, and an original theme-relevant article.

Interest in and engagement with the ACGF’s social media profiles continued to grow in 2022, largely thanks to an increase in both quantity and quality of social media posts and efforts to increase the number of people working in government administration who follow the ACGF on social media. The ACGF had 300 followers on Twitter and 500 followers on LinkedIn as of September.

To subscribe to ACGF News CLICK HERE
Electric tricycle quietly riding along Legazpi Bay, Albay, Philippines. The perfect coned Mayon volcano serves as background (photo by ADB).
Lessons as Operations are Scaled Up

During its first years of implementation, as the ACGF moved from a pilot to a permanent facility, it proved its ability to influence project pipelines by originating and supporting green projects and to develop strong partnerships. Along the way, the team learned numerous lessons, among others the need for concerted efforts to promote a green recovery, the importance of attending to the lack of a strong pipeline of projects that are both green and bankable, and the need for innovative financing models to mobilize more commercial finance. The ACGF responded by expanding support to capital market development and GSS+ bond issuances, and by providing both upstream and transactional support to broader private sector operations, in addition to ongoing support to governments across the region.

As a permanent facility, the ACGF continues to reflect and learn as it scales up operations to expand both pipeline and portfolio. The ACGF’s position in the green finance landscape contributes to stronger coordination between actors in the field, and its one-stop-shop approach to support and encourage project development from its earliest stages helps build its pipeline by developing innovative financing models that can increase management efficiencies while alleviating public sector financial constraints. Involvement in concept development and project origination from an early stage, e.g., through the Innovative Finance Clinics combining capacity building and project origination, has also proven effective in identifying infrastructure needs that would benefit from green financing resources and effective structuring support. However, more is needed to build a strong pipeline of green, bankable projects in the region.

Early-stage Concept Development and Project Origination

The lack of a strong, green pipeline of projects remains, and the current financial stress felt in the region and globally exacerbates a much-needed deeper focus on generating climate-friendly infrastructure opportunities. Early involvement—in dialogue with governments, in coordination with partners, and through close collaboration with ADB country and sector teams—is crucial for origination of transformative green projects and for ensuring that these projects are designed with the potential to catalyze PIC funds. Early involvement is also key to identifying sources of financing and ensuring projects are included in ADB and partner programming and financing pipelines. This will require further efforts and resources from the ACGF in coordinating and collaborating with all stakeholders from an early stage, especially at national and subnational level.

Knowledge and Capacity Building

The roll-out of the ACGF’s Innovative Finance Clinics under the 6 Champions Program in 2022 demonstrated the important role that knowledge events can play in project origination. Well-focused clinics or roundtables, prepared in collaboration with sector specialists, have the potential to generate project concepts and ideas that can be taken forward and turned into bankable projects. Access to technical assistance funds throughout the project development process is crucial for this. Going forward, the ACGF will continue to tie its knowledge and capacity-building efforts even closer to project origination around clear thematic areas, both externally in relation to ASEAN governments and to partners, and internally in ADB, with all efforts focused on one shared objective: project origination.

Engagement in Upstream Policy Work

The development of climate projects needs to start with improved sector and city planning systems. Climate risks are not systematically integrated in sector plans, which results in limited prioritization of climate-related investments. As the ACGF’s focus is on pipeline development, however, support for upstream work will become increasingly important, especially as countries start rolling out implementation plans to support NDCs. At a national level, mobilization of green finance from banks and investors is also limited by a lack of harmonized criteria and frameworks to define green
projects. The ASEAN Taxonomy for Sustainable Finance was launched at COP26 and will serve as a reference point for national taxonomies and the region, however, further work is needed to (i) develop and set thresholds, (ii) conduct consultations with stakeholders, and (iii) build capacity to operationalize the taxonomy across ASEAN developing member countries.

**Priorities for 2023**

In 2023, the ACGF will continue to scale up operations in project origination and structuring to build pipeline and portfolio towards meeting the performance targets set for 2022–2024. The number of projects and concepts supported is foreseen to increase further as additional technical assistance resources become available.

Organization of Innovative Finance Clinics through the 6 Champions Program, as well as expanded activities in the Blue SEA Finance Hub and operationalization of the GSS+ Bonds Initiative, are expected to generate project concepts and ideas that can be developed into concept papers and bankable projects. The ACGF will continue to organize and participate in knowledge events and prepare targeted knowledge products in areas related to its core mandate.

Resources will be allocated to resume organization of investor roundtables and focus further on upstream support to green financing frameworks and policies.

Key priorities include:

- technical support for project origination and structuring, targeting thematic areas with high impact potential;
- upstream support to strengthen climate investment planning, including through a high-level ASEAN dialogue on financing climate transitions;
- support to develop blue financing mechanisms through the Blue SEA Finance Hub;
- scaling up support for capital markets development through the GSS+ Bonds Initiative;
- strengthening implementation arrangements and formalizing financing arrangements for UK and EU funds; and
- launching flagship capacity building programs to develop technical competencies, ownership, and practitioner communities around green and climate finance, including through twinning partnerships.
### Table A1: Overview of Knowledge Events, Trainings, and Knowledge Products, 2019-2022

<table>
<thead>
<tr>
<th>Type of Event</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge products developed by the ACGF</td>
<td>1</td>
<td>10</td>
<td>14</td>
<td>7</td>
<td>32</td>
</tr>
<tr>
<td>Knowledge events organized by the ACGF with partners</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>Trainings organized by the ACGF with partners</td>
<td>none</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Number of participants (ASEAN officials; percentage of women ASEAN officials)</td>
<td>none</td>
<td>62 (42; 55%)</td>
<td>28 (21; 57%)</td>
<td>151 (76; 34%)</td>
<td>241 (139; 44%)</td>
</tr>
<tr>
<td>Other knowledge events with ACGF participation</td>
<td>1</td>
<td>9</td>
<td>37</td>
<td>36</td>
<td>83</td>
</tr>
</tbody>
</table>

ACGF = ASEAN Catalytic Green Finance Facility; ASEAN = Association of Southeast Asian Nations. Source: ADB.

### Table A2: Knowledge Products Developed, 2022

<table>
<thead>
<tr>
<th>Title</th>
<th>Category</th>
<th>Downloads</th>
<th>Page Views</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic Bonds for Affordable Green Housing in Asia and the Pacific: A Case Study of Thailand’s National Housing Authority</td>
<td>Brochure</td>
<td>532</td>
<td>1,126</td>
<td><a href="https://www.adb.org/publications/thematic-bonds-green-housing-thailand">https://www.adb.org/publications/thematic-bonds-green-housing-thailand</a></td>
</tr>
</tbody>
</table>

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; ASEAN = Association of Southeast Asian Nations. Source: ADB.
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Date</th>
<th>Location</th>
<th>Type</th>
<th>Total Participants</th>
<th>Government Officials Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SDCC Healthy Oceans Technology and Innovation Forum - Session 1. Seaside Conversation with ADB’s Vice-President Ahmed M. Saeed</td>
<td>27 Jan</td>
<td>Virtual</td>
<td>Roundtable / dialogue</td>
<td>212 participants</td>
<td>15 ASEAN Officials (60% women)</td>
</tr>
<tr>
<td>2</td>
<td>SDCC Healthy Oceans Technology and Innovation Forum - Session 2. ACGF Special Session and Book Launch</td>
<td>27 Jan</td>
<td>Virtual</td>
<td>Roundtable / dialogue</td>
<td>212 participants</td>
<td>15 ASEAN Officials (60% women)</td>
</tr>
<tr>
<td>4</td>
<td>ACGF Session at SEADS Symposium: ‘Accelerating Climate Finance for Green Recovery’</td>
<td>16 Mar</td>
<td>Virtual</td>
<td>Roundtable / dialogue</td>
<td>756 participants</td>
<td>190 ASEAN officials (54% women)</td>
</tr>
<tr>
<td>6</td>
<td>Scaling Up Bonds in Southeast Asia</td>
<td>6 Jul</td>
<td>Frankfurt</td>
<td>Roundtable / dialogue</td>
<td>19 participants</td>
<td>0 ASEAN officials</td>
</tr>
<tr>
<td>7</td>
<td>6 Champions – Innovative Finance Clinic #1: Green Agricultural Value Chain Financing</td>
<td>6–7 Jul</td>
<td>Virtual</td>
<td>Training</td>
<td>58 participants</td>
<td>30 ASEAN officials (43% women)</td>
</tr>
<tr>
<td>8</td>
<td>Blue Finance Accelerator Program Kick-Off and Consultation for the Blue Economy Development in Indonesia</td>
<td>23 Aug</td>
<td>Jakarta</td>
<td>National Roundtable / dialogue</td>
<td>70 participants</td>
<td>15 ASEAN officials (40% women)</td>
</tr>
<tr>
<td>10</td>
<td>6 Champions – Innovative Finance Clinic #2: E-mobility for Green Urban Transport</td>
<td>7–8 Sep</td>
<td>Singapore</td>
<td>Training</td>
<td>93 participants</td>
<td>46 ASEAN officials (28% women)</td>
</tr>
<tr>
<td>11</td>
<td>‘Developing and Financing Green Housing in Asia’ Conference 2022</td>
<td>21 Sep</td>
<td>Hybrid</td>
<td>Roundtable / dialogue</td>
<td>295 participants</td>
<td>18 ASEAN officials (% women)</td>
</tr>
<tr>
<td>12</td>
<td>ASEAN GSS+ Bonds Initiative - The green, social, sustainable, and other labeled (GSS+) bonds initiative for Southeast Asia</td>
<td>29 Sep</td>
<td>Hybrid</td>
<td>Roundtable / dialogue</td>
<td>164 participants</td>
<td>69 ASEAN officials (28% women)</td>
</tr>
<tr>
<td>13</td>
<td>Insight Thursday: Mainstreaming Blue – The One ADB approach towards healthy oceans and blue finance</td>
<td>1 Dec</td>
<td>Hybrid / ADB HQ</td>
<td>Internal Event for ADB staff and consultants</td>
<td>101 participants</td>
<td>0 ASEAN officials</td>
</tr>
</tbody>
</table>

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; CBI = Climate Bonds Initiative; GSS+ bonds = green, social, sustainability and other labelled bonds; HQ = headquarters; PDMO = Public Debt Management Office; PT SMI = PT Sarana Multi Infrastruktur (Persero); RCI = regional cooperation and integration; SDCC = Sustainable Development and Climate Change Department; SEADS = Southeast Asia Development Symposium; SEC = Securities Exchange Commission.

Source: ADB.
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Date</th>
<th>Location</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Development of a Ten-Year Investment Framework for Haze-Free, Sustainable Land Management in Southeast Asia</td>
<td>11 Jan</td>
<td>Virtual Roundtable / dialogue</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Understanding Climate Risks: Launch of The ASEAN Climate Governance Network</td>
<td>14 Feb</td>
<td>Virtual Roundtable / dialogue</td>
<td></td>
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<tr>
<td>4</td>
<td>WWF Webinar ‘Mapping ESG Integration in Public Infrastructure Finance in the Asia Pacific’</td>
<td>14 Feb</td>
<td>Virtual Roundtable / dialogue</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Green Recovery in APAC for Google.org</td>
<td>17 Feb</td>
<td>Virtual Roundtable / dialogue</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3rd Virtual ASEAN+3 Working Group 1 Meeting</td>
<td>22 Feb</td>
<td>Virtual Meeting</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>“A Strategic Framework for Scaling up Green Capital Markets” - Multistakeholder Roundtable on the German G7 Priority of Sustainable Infrastructure and Investments</td>
<td>24 Feb</td>
<td>Virtual Roundtable / dialogue</td>
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</tr>
<tr>
<td>8</td>
<td>ADB Lecture at the National Graduate Institute for Policy Studies (GRIPS): Private Sector Development and PPPs “the 10 Myths”</td>
<td>22 Mar</td>
<td>Virtual Roundtable / dialogue</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Focus Group Discussion (FGD) on Identification of Sub Regional Projects under the Sustainable Urban Development Framework (SUDF) Program within the IMT-GT Sub Regional Economic Cooperation Framework</td>
<td>30 Mar</td>
<td>Virtual Roundtable / dialogue</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Accessing the Green Climate Fund for ADB projects</td>
<td>5 Apr</td>
<td>Virtual Internal ADB Seminar</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>8th ASEAN Finance Ministers’ and Central Bank Governors’ Meeting - Session with International Financial Institutions</td>
<td>8 Apr</td>
<td>Virtual Meeting</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>United States - ASEAN Green Economy Series Second Webinar – ‘Harnessing the Blue Economy: Towards a Sustainable Ocean in ASEAN’</td>
<td>12 Apr</td>
<td>Virtual Roundtable / dialogue</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>6th High-Level Brainstorming Dialogue on Enhancing Complementarities between the ASEAN Community Vision 2025 and the United Nations 2030 Agenda for Sustainable Development</td>
<td>30 May</td>
<td>Bangkok Roundtable / dialogue</td>
<td></td>
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<tr>
<td>18</td>
<td>Seminar on Developing the Ecosystem on Sustainable Finance in the Capital Market and Digitalization for Inclusive Finance: Embracing the Digital Fundraising in Khon Kaen, Thailand</td>
<td>21 Jun</td>
<td>Hybrid/Bangkok Roundtable / dialogue</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>‘Mekong Institute Development Partners’ Consultation Meeting 2022</td>
<td>1 Jul</td>
<td>Virtual Roundtable / dialogue</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Asian Infrastructure Forum – Ideation Roundtable</td>
<td>2 Aug</td>
<td>Singapore Roundtable / dialogue</td>
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</table>

*continued on next page*
Table D continued

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Date</th>
<th>Location</th>
<th>Type</th>
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<tbody>
<tr>
<td>21</td>
<td>Asian Infrastructure Forum – Marketplace</td>
<td>3 Aug</td>
<td>Singapore</td>
<td>Workshop</td>
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<td>22</td>
<td>Green FDI and Sustainable Infrastructure in a Changing World: APEC Investment Experts’ Group Workshop</td>
<td>19 Aug</td>
<td>Virtual</td>
<td>Workshop</td>
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<td>23</td>
<td>Seminar on Green Finance for the Committee on Monetary Affairs, Finance, Financial Institutions and Financial Markets and the Thai Banking Community</td>
<td>22 Aug</td>
<td>Virtual</td>
<td>Roundtable / dialogue</td>
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<td>24</td>
<td>G20 Policy Dialogue Circular Economy for a Stronger recovery</td>
<td>3 Sep</td>
<td>Virtual</td>
<td>Roundtable / dialogue</td>
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<td>25</td>
<td>T20 Summit 2022, Plenary Session 2: Smoothing Green and Just Energy Transition</td>
<td>5 Sep</td>
<td>Bali</td>
<td>Roundtable / dialogue</td>
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<td>26</td>
<td>Consultation Workshop for Development of Investment Framework for Haze-Free Sustainable Land Management in Southeast Asia</td>
<td>22 Sep</td>
<td>Hybrid/ Bangkok</td>
<td>Workshop</td>
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<td>27</td>
<td>Seminar on Green Finance for the Committee on Monetary Affairs, Finance, Financial Institutions and Financial Markets and the Thai Banking Community</td>
<td>22 Aug</td>
<td>Virtual</td>
<td>Roundtable / dialogue</td>
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<tr>
<td>28</td>
<td>ADB Innovation Fair</td>
<td>5 Oct</td>
<td>Hybrid/ ADB HQ Manila</td>
<td>Workshop</td>
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<tr>
<td>29</td>
<td>APEC Finance Ministers Meeting</td>
<td>19 Oct</td>
<td>Thailand</td>
<td>Roundtable / dialogue</td>
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<td>30</td>
<td>Launch of the ‘Blue Finance Instrument Development Guidelines’</td>
<td>1 Nov</td>
<td>Jakarta</td>
<td>Meeting</td>
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<tr>
<td>31</td>
<td>Road to G20: Beating Plastic Pollution from Source to Sea</td>
<td>3–4 Nov</td>
<td>Bali, Indonesia</td>
<td>Roundtable / dialogue</td>
</tr>
<tr>
<td>32</td>
<td>Session at COP27: Mobilizing Finance to Facilitate Energy Transition and Decarbonisation in ASEAN</td>
<td>9 Nov</td>
<td>Hybrid/ Sharm El Sheik, Egypt</td>
<td>Roundtable / dialogue</td>
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<td>33</td>
<td>Scaling up Green Finance in Indonesia</td>
<td>30 Nov</td>
<td>Jakarta</td>
<td>Workshop</td>
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<td>34</td>
<td>12th Annual SKBI Conference &amp; 1st SGFC Regional Conference on Greening Energy Infrastructure</td>
<td>5–6 Dec</td>
<td>Virtual</td>
<td>Conference</td>
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<td>35</td>
<td>Meeting of the OECD DAC Community of Practice on Private Finance for Sustainable Development (CoP-PF4SD) on GSSS Bond Issuances: the role of MDBs and DFIs</td>
<td>16 Dec</td>
<td>Virtual</td>
<td>Workshop</td>
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<tr>
<td>36</td>
<td>Launch of the Sustainable Central Banking Strategy BSP</td>
<td>22 Dec</td>
<td>Manila</td>
<td>Conference</td>
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</tbody>
</table>

ACGF = ASEAN Catalytic Green Finance Facility; ADB = Asian Development Bank; APEC = Asia-Pacific Economic Cooperation; ASEAN = Association of Southeast Asian Nations; ASEAN+3 = Association of Southeast Asian Nations plus Japan, China, and the Republic of Korea; BSP = Bangko Sentral ng Pilipinas, CoP = Community of Practice; COP27 = 27th Conference of the Parties to the United Nations Framework Convention on Climate Change; COVID-19 = coronavirus disease; DAC = Development Assistance Committee; DFIs = development finance institutions; G7 = Group of Seven; G20 = Group of Twenty; GSSS = green, social, sustainability and sustainability-linked; HQ = headquarters; IMT-GT = Indonesia Malaysia Thailand Growth Triangle; MDB = multilateral development bank; OECD = Organization for Economic Cooperation and Development; PF4SD = Practice on Private Finance for Sustainable Development; SDCC = Sustainable Development and Climate Change Department; SGFC = Singapore Green Finance Centre; SKBI = Sim Kee Boon Institute.

Source: ADB.

Table A5: Institutional Events Related to the ASEAN Infrastructure Fund and ACGF, 2022

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>1</td>
<td>ACGF Partners Meeting Mid-Year</td>
<td>15 Jun</td>
<td>Virtual</td>
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<tr>
<td>2</td>
<td>21st AIF Board of Directors Meeting</td>
<td>29 Jun</td>
<td>Virtual</td>
</tr>
<tr>
<td>3</td>
<td>22nd AIF Board of Directors Meeting</td>
<td>29 Nov</td>
<td>Virtual</td>
</tr>
<tr>
<td>4</td>
<td>5th AIF Board of Directors and ACGF Partners Meeting</td>
<td>29 Nov</td>
<td>Jakarta/hybrid</td>
</tr>
</tbody>
</table>

ACGF = ASEAN Catalytic Green Finance Facility; AIF = ASEAN Infrastructure Fund.
Source: ADB.
About the ASEAN Catalytic Green Finance Facility (ACGF)

The ACGF is an innovative finance facility dedicated to accelerating green infrastructure investments in Southeast Asia. It supports ASEAN governments to prepare and source public and private financing for infrastructure projects that promote environmental sustainability and contribute to climate change goals. The ACGF is a facility under the ASEAN Infrastructure Fund, owned by ASEAN member states and the Asian Development Bank, which also administers the facility.

www.adb.org/acgf   twitter.com/ACGF_facility   linkedin.com/company/acgf-facility

About the Asian Development Bank (ADB)

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members —49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.