

Policy Insights

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Catalysing Sustainable Finance for the African Regional Infrastructure Agenda

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African perspectives
Global insights

Executive summary

The African Continental Free Trade Area has great potential to drive stronger regional trade, boost growth and alleviate poverty. However, these outcomes are dependent on regional infrastructure across the continent being overhauled. African countries have traditionally struggled to find bankable infrastructure projects that will attract investment, because of the projects' scale and inherent complexity, as well as related capacity constraints.

In recent years, additional global challenges such as accelerating climate change and COVID-19 have changed the ways in which infrastructure is being built and financed. Finance for infrastructure development is now increasingly linked to a project's sustainability beyond financial viability, ie, environmental, social and/or climate-related sustainability. As one of the most vulnerable regions to the impact of climate change, Africa has much to gain from the global shift towards sustainable finance for infrastructure. What complicates the search for finance, however, especially for regional projects, is that it comes with additional requirements, such as the need for supporting frameworks and institutions as well as specialised data collection and analytical techniques that demonstrate specific sustainability outcomes.

Africa's regional infrastructure agenda, the Programme for Infrastructure Development in Africa, is focusing on developing regional infrastructure in more sustainable ways, particularly in its support for two emerging sustainable infrastructure initiatives – the Alliance for Green Infrastructure in Africa and the Green Infrastructure Corridor for Intra-African Trade. These and other regional initiatives need to prioritise technical assistance and capacity building, the development of harmonised regional and continental sustainability frameworks, and the coordination of regional efforts to leverage resources most effectively. The African Continental Free Trade Area in turn can adopt a stronger sustainability stance to support the continent's regional infrastructure agenda. Lastly, African policymakers and institutions can learn from other regions, such as the Association of Southeast Nations, which are actively pursuing a regional approach to sustainable infrastructure development.

Introduction

The AU's ambitious agenda to integrate African markets into a single free trade area, the African Continental Free Trade Area (AfCFTA), holds immense potential for the development of the region. According to World Bank estimates, the AfCFTA has the potential to increase real income on the continent by \$450 billion and increase total exports by \$560 billion, while lifting 30 million people out of extreme poverty by 2035.¹ The AfCFTA recently had its

¹ The World Bank, 'The African Continental Free Trade Area', July 27, 2020, <https://www.worldbank.org/en/topic/trade/publication/the-african-continental-free-trade-area>.

one-year anniversary, with trade under its auspices having officially commenced in January 2021. Hard infrastructure, in particular, is critical both for physically moving goods across the continent and for providing the energy, water, and information and communication technology (ICT) connectivity needed by regional industries to trade under the AfCFTA. However, Africa's annual infrastructure financing deficit remains close to \$100 billion, with a lack of transportation infrastructure accounting for 40% of logistics costs in Africa. An estimated \$411 billion in transport infrastructure is required to facilitate effective trade under the AfCFTA.²

Over the past two decades, several regional strategies, programmes and initiatives have been launched to attract internal and external financing for regional infrastructure projects. The continent's official regional infrastructure plan, the AU's Programme for Infrastructure Development in Africa (PIDA), set an objective in 2012 to develop over 400 regionally significant³ projects in the transport, water, energy and ICT sectors by 2040.⁴ However, attracting finance for cross-border and regionally significant projects remains the bane of infrastructure development efforts on the continent. The lack of regulatory harmonisation among economies and differing fiscal capacities and political considerations as well as poor investment environments and a dearth of bankable projects all increase the difficulty of attracting finance for regional infrastructure projects. According to the latest figures, of the 329 original PIDA projects (for which data is available), only 23% are operational and 40% have not reached financial closure,⁵ with many projects having been halted or abandoned.

While the AfCFTA's progress to date provides impetus to drive the regional infrastructure agenda, emerging global trends are also continually shifting and reshaping this agenda. The COVID-19 pandemic, for example, has altered both regional and national policy and financing priorities, placing the most immediate financing focus on public health solutions and social support measures. Additionally, the intensifying global climate crisis continues to change the way that infrastructure is financed and built. 'Sustainable' infrastructure financing methods, including climate, green and social finance, are becoming more prevalent and are also well aligned to global commitments under the Sustainable Development Goals (SDGs), which advocate clean energy (SDG 7) and sustainable infrastructure (SDG 9). International development finance institutions (DFIs), donors and private financial institutions are increasingly requiring that projects make positive social and environmental contributions. It is therefore crucial that African countries, many of which are extremely vulnerable to climate change impacts, take advantage of different sustainable finance options. This will not only contribute to the mobilisation of adequate funds to close the continent's infrastructure

2 Anthony Kitmo, 'Intra-Africa trade in need of more investment to move cargo,' *Zawya*, March 10, 2022, <https://www.zawya.com/en/opinion/business-insights/intra-africa-trade-in-need-of-more-investment-to-move-cargo-ckkfyiea>; Samson Berhane, 'Infrastructural Gaps and Lack of Financing for Transport Are Key to Success for AfCFTA,' *AllAfrica*, February 11, 2022, <https://allafrica.com/stories/202202110695.html>.

3 Regional projects are either cross-border projects or single-country projects with regional impacts.

4 AU, 'The Integrated Corridor Approach: "A Holistic Infrastructure Planning Framework to establish PIDA-PAP 2"' (Strategic Note, AU, Addis Ababa, 2020), https://pp2.au-pida.org/wp-content/uploads/2020/04/English-Strategic-Note_Integrated-Corridor-Approach-and-Selection-Criteria-AUC.pdf.

5 PIDA, 'PIDA Projects Dashboard,' <https://www.au-pida.org/pida-projects/>.

gap and increase trade under the AfCFTA, but also support sustainable livelihoods on the continent by increasing countries' resilience to climate impacts.

This policy insights aims to assess Africa's regional infrastructure agenda and the potential of sustainable financing options to support this agenda and ultimately strengthen regional trade and development. It explores current sustainable infrastructure financing trends and challenges, including lessons that can be learnt from the ASEAN regional bloc in Southeast Asia.

The global sustainable finance landscape

Defining sustainable finance

The global sustainable finance landscape is nascent and continually evolving. As such, universal definitions for 'sustainable' finance have yet to be harmonised and agreed upon. Some common classifications used in the sustainable finance space, particularly with respect to sustainable bonds, include:

- Climate finance: contributing to climate change mitigation (reducing greenhouse gas (GHG) emissions to slow global warming) or climate change adaptation (adapting and reducing vulnerability to existing and expected climate change impacts).⁶
- Green finance: contributing to improved environmental outcomes, eg, pollution prevention, enhanced biodiversity, energy efficiency, circular economy, water and wastewater management, climate change mitigation and adaptation⁷ (with green finance covering a broader range of topics than climate finance).
- Social finance: supporting the resolution of complex social challenges, including poverty, inequality, and health and education shortcomings.⁸
- Sustainable finance: often an encompassing term referring to one or more of the above types of finance.⁹

Traditional forms of development finance, including grants, debt instruments, mezzanine finance, equity and other blended mechanisms, are now also offered as 'sustainable' versions under the above categorisations and are earmarked for projects with demonstrable environmental, social or climate benefits.

6 Climate Bonds Initiative, 'Understanding Climate Bonds,' <https://www.climatebonds.net/resources/understanding>.

7 International Capital Market Association (ICMA), 'Green Bond Principles,' <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/>.

8 ICMA, 'Social Bond Principles,' <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/social-bond-principles-sbp/>.

9 ICMA, 'Sustainability Bond Guidelines,' <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Sustainability-Bond-Guidelines-June-2021-140621.pdf>.

Global industry bodies, knowledge partners, financial institutions, and regional and national governments are developing frameworks to lend credibility to different sustainable finance offerings. These frameworks set out guidelines for defining eligible projects, measuring sustainability outcomes and verifying that funds are used appropriately. Emerging frameworks that are now widely accepted include the Climate Bonds Initiative’s Climate Bonds Standard; the International Capital Markets Association (ICMA) Green Bond Principles, Social Bond Principles and Sustainability Bond Principles; the World Bank Resilience Rating System; the Common Principles for Climate Mitigation Finance Tracking; and the Common Principles for Adaptation Finance Tracking.¹⁰

Some examples of potentially eligible sustainable projects and project design considerations in the priority PIDA infrastructure sectors are detailed below.

TABLE 1 SUSTAINABILITY CONSIDERATIONS IN PIDA INFRASTRUCTURE SECTORS ^a	
Sector	Sustainability considerations
Transport	<ul style="list-style-type: none"> Climate adaptation projects, including road rehabilitation and climate proofing, revision of design criteria (and building to those criteria) informed by climate information and risks, implementation of slope protection and new plantations, spot upgrades in crucial areas, including elevation of low-lying road links, and employment of soil technology to protect rural roads. Climate mitigation projects that reduce emissions per kilometre driven, reduce emissions per unit transported, or reduce the number of trips taken or the necessity for or the duration of trips. Social projects that provide affordable, basic transport infrastructure to marginalised or underserved populations.
Water	<ul style="list-style-type: none"> Climate adaptation projects that reduce water shortages and improve the efficiency of water use and water quality. Examples include water collection, water treatment, water supply, wastewater collection networks, wastewater treatment facilities, sanitation, water harvesting and irrigation, and riverine and coastal ecosystem management and protection. Mitigation projects that do not contribute to GHG emissions above a baseline. Social projects that provide affordable, basic water infrastructure or sanitation services to marginalised or underserved populations.

10 ICMA, ‘Sustainable Finance,’ <https://www.icmagroup.org/sustainable-finance/>; CBI, ‘Climate Bonds Standard and Certification Scheme,’ <https://www.climatebonds.net/standard>; World Bank Group, ‘Resilience Rating System: A Methodology for Building and Tracking Resilience to Climate Change’ (Washington, D.C.: World Bank, 2021), <https://openknowledge.worldbank.org/handle/10986/35039>; World Bank, ‘Common Principles for Climate Mitigation Finance Tracking,’ <https://www.worldbank.org/content/dam/Worldbank/document/Climate/common-principles-for-climate-mitigation-finance-tracking.pdf>; EIB, ‘Common Principles for Climate Change Adaptation Finance Tracking,’ https://www.eib.org/attachments/documents/mdb_idfc_adaptation_common_principles_en.pdf.

Energy	<ul style="list-style-type: none"> • Adaptation projects that reduce cuts to energy supply resulting from climate change, including climate-proofing power generation and transmission and distribution (T&D) assets, improving resilience of hydropower generation, increasing access to reliable and affordable energy, and enhancing regional coordination through river basin organisations, power pools and development banks to collectively manage shared water resources. • Mitigation projects that eliminate GHG emissions, including renewable power such as wind, solar, tidal, hydropower, biomass, biogas and geothermal. Projects that retrofit transmission lines or substations to reduce energy usage. • Social projects that provide affordable basic energy infrastructure to marginalised or underserved populations.
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Note: a) Although ICT is a PIDA priority regional sector, it is not included in this table as ICT typically receives very little climate or social finance.

Sources: GCA, 'Financial Innovation for Climate Adaptation in Africa' (GCA, Rotterdam, October 2021), <https://gca.org/wp-content/uploads/2021/10/GCA-CPI-Financial-Innovation-for-Climate-Adaptation-in-Africa.pdf>; ICMA, 'Social Bond Principles Voluntary Process Guidelines for Issuing Social Bonds' (ICMA, Zurich, June 2021), https://www.icmagroup.org/assets/documents/Sustainable-finance/2022-updates/Social-Bond-Principles_June-2022v2-130722.pdf; UNDP, 'Workplan Guidance for preparing for an I&FF Assessment, Chapter IV: Assessment of I&FF for Mitigation in the Transport Sector' (UNDP, New York, December 7, 2020), <https://www.ndcs.undp.org/content/dam/LECB/docs/iff/iff%20methodology/iff%20methodology%20english/undp-iff-chapter-4-transport-mitigation-en.pdf>

Mapping global and African sustainable finance flows

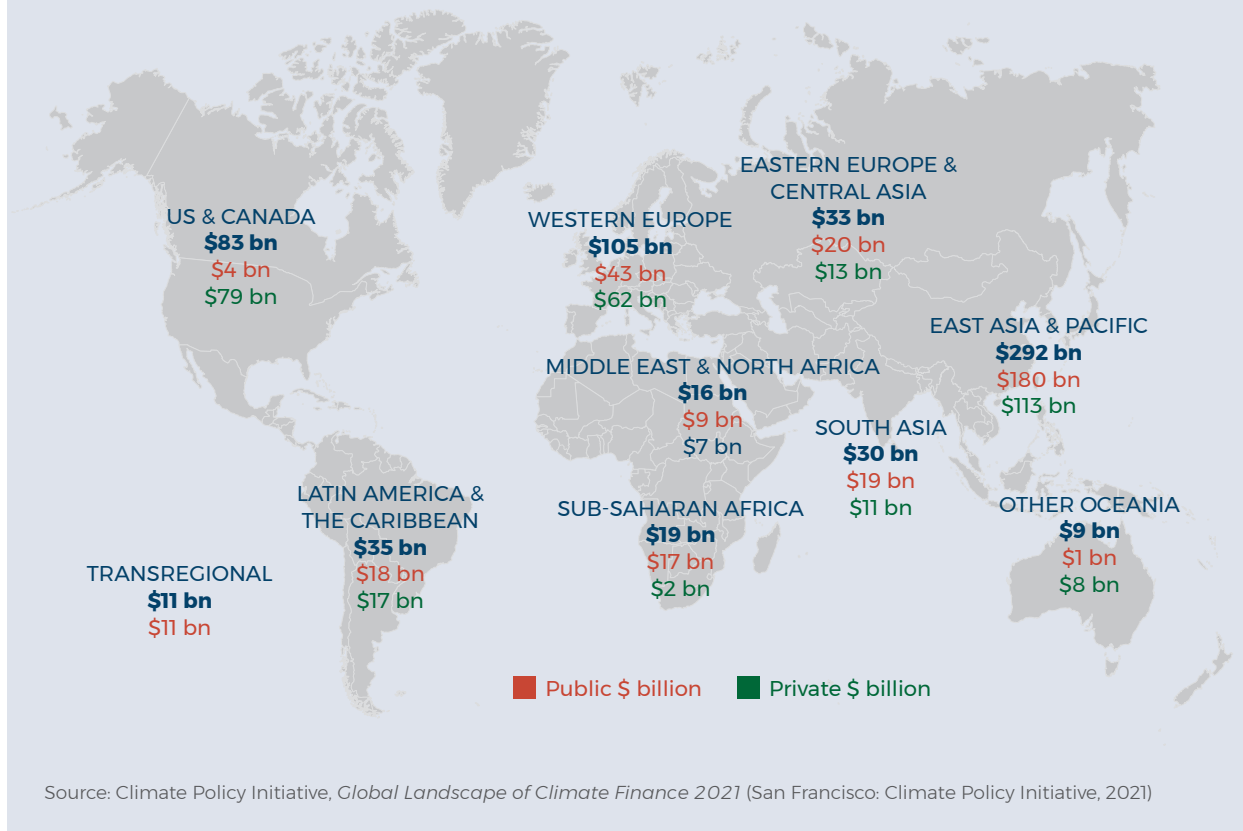
As the categories for different types of sustainable finance are still evolving and often overlap, it is difficult to accurately map total sustainable finance flows. Figures are most readily available for climate finance. Figure 1 from the Climate Policy Initiative provides the most recent estimates of private and public climate finance as an average of 2019 and 2020 figures, which together total \$633 billion.

Public climate finance commitments are increasing rapidly alongside the unfolding climate crisis. This trend may serve to benefit African countries which are currently accessing public finance much more readily than private finance, as shown in Figure 1. In 2021, multilateral development banks (MDBs) collectively committed to providing \$50 billion of global climate finance per year (\$32 billion to support mitigation and \$18 billion to support adaptation).¹¹ The World Bank has set a target to devote 35% of its total funding to supporting climate finance from 2021 to 2025, while the African Development Bank (AfDB) aims to double its provision of climate finance to \$25 billion from 2020 to 2025. The International Monetary Fund (IMF) has in turn committed a portion of its Special Drawing Rights (SDRs) to the provision of low-cost financing to developing countries to support climate resilience and resilience to future global shocks through a Resilience and Sustainability Trust.¹²

¹¹ Global Centre on Adaptation, 'Financial Innovation for Climate Adaptation in Africa' (GCA, Rotterdam, October 2021), <https://gca.org/wp-content/uploads/2021/10/GCA-CPI-Financial-Innovation-for-Climate-Adaptation-in-Africa.pdf>;

¹² GCA, 'Financial Innovation for Climate Adaptation.'

Figure 1 Destination regions for public/private climate finance (\$ billion, 2019/2020 annual average)



Multilateral climate finance funds also earmark finance for developing countries. For example, the Green Climate Fund (GCF) currently has a \$14 billion portfolio, two-thirds of which is directed towards least-developed countries (LDCs) and small island developing states. At the bilateral level, the G7 countries have committed to mobilising \$100 billion in climate finance from 2021 to 2025, including a \$1.2 billion contribution to the GCF and \$1.3 billion to other bilateral and multilateral climate programmes, in their 2021 budget.¹³ Furthermore, at the November 2021 COP26 summit, the Glasgow Financial Alliance for Net Zero, an initiative by 450 global private financial institutions, announced that it would be allocating an additional \$130 trillion to green projects in developing countries.¹⁴

Market-based sustainable financial instruments are also becoming more prevalent globally, including green, social, climate, sustainable and sustainability-linked bonds,¹⁵ debt swaps

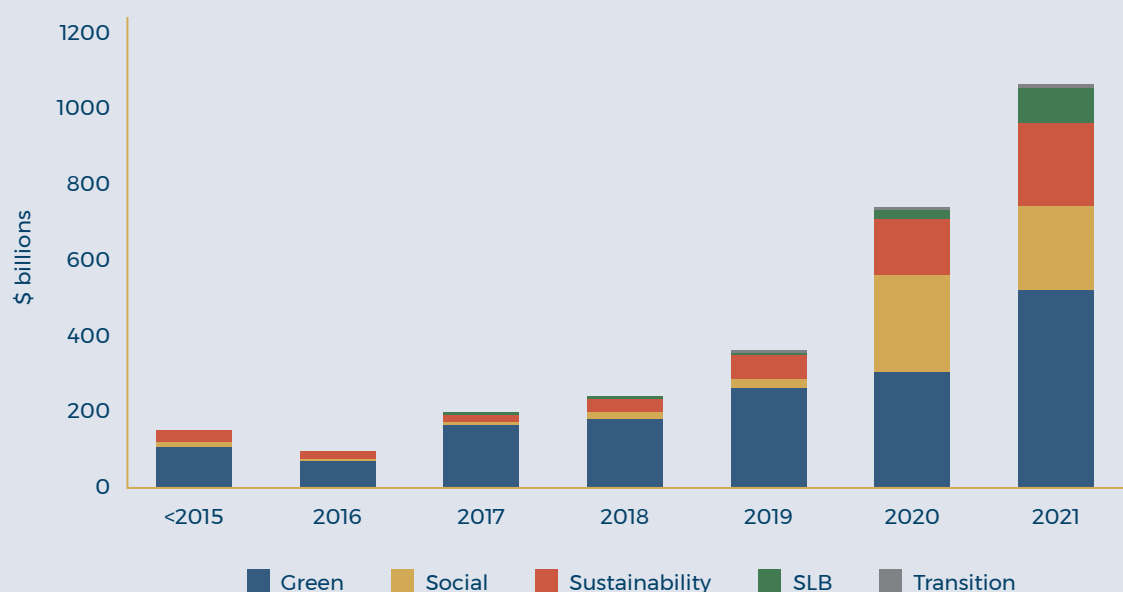
¹³ GCA, 'Financial Innovation for Climate Adaptation.'

¹⁴ Onke Ngcuka, 'Climate finance: Industrialised countries fail to meet funding pledges for Africa,' Friedrich Ebert Stiftung, November 11, 2021, <https://www.fes.de/en/shaping-a-just-world/article-in-shaping-a-just-world/climate-finance-industrialised-countries-fail-to-meet-funding-pledges-for-africa>.

¹⁵ According to the International Capital Markets Association, sustainability-linked bonds are not tied to the 'use of proceeds' for sustainable purposes as is the case with green, social or sustainability bonds. Sustainability-linked bonds are rather tied to the performance of the investment against pre-determined sustainability KPIs.

and various public/private blended financial instruments. As of 2021, the market for sustainable investment products was well above \$3 trillion in value, including \$1 trillion in green bonds, \$212 billion in social bonds, \$218 billion in mixed-sustainability bonds and more than \$1.7 trillion in sustainability funds.¹⁶ However, the African continent constitutes only 0.4% of the current global green bonds market,¹⁷ and only 12 green bonds have been issued in African countries, two of which have been issued by sovereigns and two by municipal governments.¹⁸

Figure 2 Global green, social and sustainability debt issuance (2015–2021)



Source: Climate Bonds Initiative, 'Sustainable Debt: Global State of the Market 2021,' https://www.climatebonds.net/files/reports/cbi_global_sotm_2021_02h_0.pdf

Sustainable finance for African regional infrastructure development

Continental infrastructure financing needs and considerations

Africa's regional infrastructure agenda under the PIDA requires considerable amounts of external finance, as the agenda supports many LDCs with constrained national budgets.

¹⁶ UNCTAD, *World Investment Report* (Geneva: UNCTAD, 2021), <https://unctad.org/webflyer/worldinvestment-report-2021>.

¹⁷ Rand Merchant Bank, 'Green Bonds Issuance in Africa: How Africa Can Unlock the Potential of Green Bonds,' November 21, 2021, <https://www.rmb.co.za/news/green-bonds-issuance-in-africa>.

¹⁸ Judith Tyson, 'Green bonds in sub-Saharan Africa' (Policy Brief 3, Overseas Development Institute, London, May 2021).

TABLE 2 SUB-SAHARAN AFRICAN GREEN BOND ISSUES (2014–2020)

Issuer	Value (issue currency)	Issuing currency	\$ (millions)	Issuer	Country	Year	Use of proceeds
Standard Bank Group	200	USD	200.0	Financial institution	South Africa	2020	Water, energy, buildings
Acom Project Limited	4300	KES	40.9	Corporate	Kenya	2019	Buildings
Federal Government of Nigeria	15000	NGN	41.4	Sovereign	Nigeria	2019	Conservation, energy, transportation
Nedbank	1662	ZAR	116.7	Financial institution	South Africa	2019	Energy
North South Power	8500	NGN	23.5	Corporate	Nigeria	2019	–
Access Bank	15000	NGN	41.5	Financial institution	Nigeria	2019	–
Bank of Windhoek	66	NAD	4.6	Financial institution	Namibia	2018	Energy, transportaion
Republic of Seychelles	15	USD	15.0	Sovereign	Seychelles	2018	Conservation
Growthpoint	1100	ZAR	97.3	Corporate	South Africa	2018	–
Federal Government of Nigeria	10690	NGN	29.7	Sovereign	Nigeria	2017	Energy
City of Cape Town	1000	ZAR	73.8	Municipal	South Africa	2017	Conservation, urban infrastructure
City of Johannesburg	1460	ZAR	137.8	Municipal	South Africa	2014	Energy, transportation

Source: Judith Tyson, 'Developing green bond markets for Africa' (Policy Brief 3, Overseas Development Institute, London, July 2021), http://cdn-odi-production.s3.amazonaws.com/media/documents/Policy_Brief_3_FINAL_.pdf

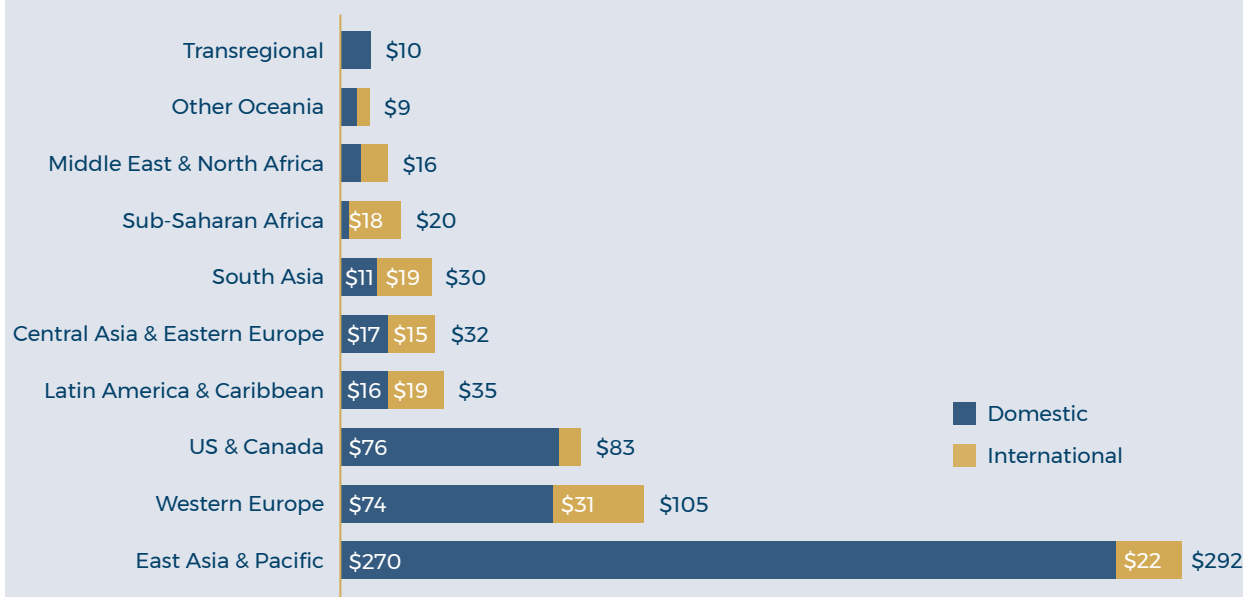
Moreover, Africa is one of the most climate-impacted regions in the world; seven of the 10 countries most vulnerable to climate change are in Africa.¹⁹ Large-scale hard infrastructure projects come with significant environmental, social and climate impacts and vulnerabilities. Transportation and energy infrastructures, for example, are contributing to global emissions, while rising sea levels and extreme weather events are causing increasing damage to roads, rails, bridges and ports, and negatively impacting water availability. It is therefore imperative that African infrastructure is financed with a sustainability focus. Cross-border transportation infrastructure, for example, which is critical for efficient trade under the AfCFTA, is vulnerable to damage from floods. If designed with flood-resilience features, such infrastructure will operate more efficiently, with fewer disruptions, and attract lower maintenance costs.

¹⁹ AfDB, 'Climate Change in Africa,' <https://www.afdb.org/en/cop25/climate-change-africa>.

The bulk of available sustainable finance (in Africa as well as globally) is directed towards climate mitigation, in line with the most urgent priorities of developed countries with carbon-intensive economies. Africa's energy requirements are growing as the continent continues to industrialise, and cross-border transportation developments underpinning the AfCFTA will also increase GHG emissions. Therefore, the need for mitigation strategies cannot be ignored. African countries currently contribute less than 4% to global GHG emissions responsible for climate change.²⁰ However, as Africa is significantly impacted by severe, climate change-induced weather and temperature patterns, adaptation finance currently holds far more significance for sustainable development on the continent. While the sub-Saharan African region attracted the largest share of international adaptation finance in 2019/2020 at \$7.3 billion, it actually needed nearly double that amount. Adaptation finance still constitutes roughly half the finance directed towards mitigation efforts on the continent (see Figures 3 and 4).²¹

For all of these reasons, accessing the growing pool of sustainable finance (and particularly adaptation finance) is critical for supporting African infrastructures, economies and livelihoods.

Figure 3 Domestic and international climate flows by destination region (\$ billion, 2019/2020 annual average)

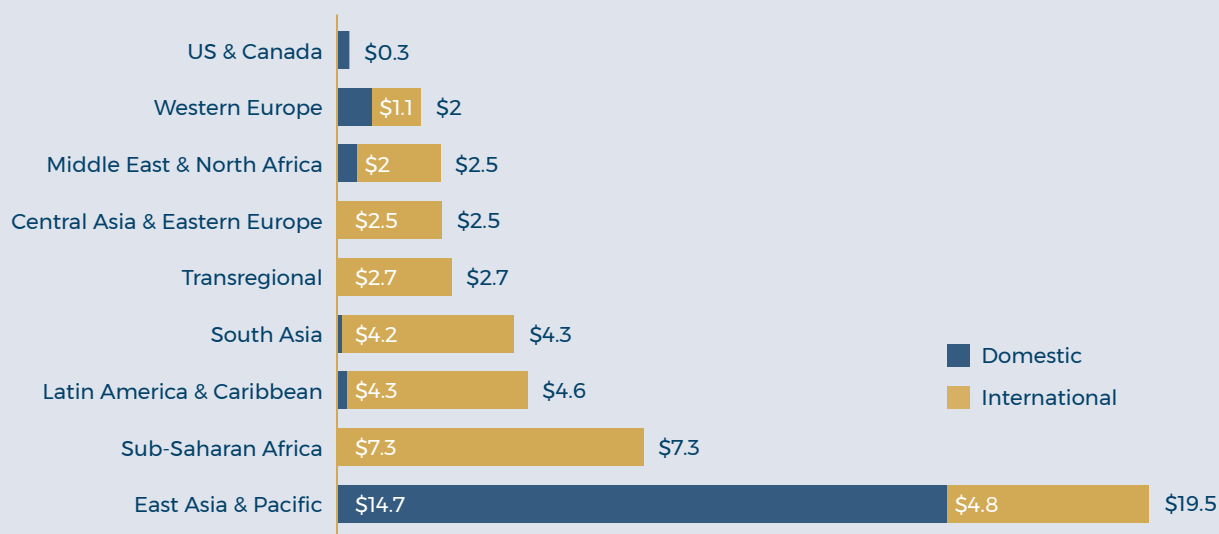


Source: Climate Policy Initiative, *Global Landscape of Climate Finance 2021* (San Francisco: Climate Policy Initiative, 2021)

20 Kaledzi and Hairsine, 'African nations miss out.'

21 CPI, *Global Landscape of Climate Finance*.

Figure 4 Adaptation finance by destination region (\$ billion, 2019/2020 annual average)



Source: Climate Policy Initiative, *Global Landscape of Climate Finance 2021* (San Francisco: Climate Policy Initiative, 2021)

Developing regions, and Africa in particular, have generally struggled to access significant pools of sustainable finance, especially for infrastructure purposes. This is due in part to developed countries failing to meet their financing commitments to developing countries in recent years.²² Figure 3 shows that most climate finance still flows to developed regions.²³ However, various addressable challenges are preventing African countries from accessing sustainable finance that is available to, and in some cases even earmarked for, developing countries. Only 46% of adaptation finance committed to Africa from 2014 to 2018 was actually disbursed, while a slightly higher proportion (56%) of mitigation finance was disbursed.²⁴ Some common barriers that African countries (and more broadly, developing countries) face in accessing sustainable finance are outlined in Table 3.²⁵

Regional projects are inherently more complex from the regulatory, political and technical perspective and have the potential to exacerbate all the above-mentioned challenges. For example, regional projects (especially transportation projects covering large territories) are more likely to encounter differing climate baselines within a single project, which increases

22 Ngcuka, 'Climate finance: Industrialised countries'; Isaac Kaledzi and Kate Hairsine, 'African nations miss out on climate funding,' DW, November 11, 2021, <https://www.dw.com/en/african-nations-miss-out-on-climate-funding/a-59787149>.

23 Climate Policy Initiative, *Global Landscape of Climate Finance*.

24 Georgia Sawidou and Christopher Trisos, 'This is how much investment is needed to mitigate climate change across Africa' (Davos: World Economic Forum, October 2021).

25 Private Sector Development & Infrastructure Project Preparation Specialist, AUDA-NEPAD, interview by Chelsea Markowitz, March 2022; Former Financial Sector Green Bonds Implementation Specialist, interview by Chelsea Markowitz, March 2022; Kaledzi and Hairsine, 'African nations miss out.'

the cost and difficulty of motivating climate adaptation or mitigation cases. Additionally, countries engaging in joint regional projects may have different technical capacities, institutional development levels and sustainability needs, thus adding to the complexity of harmonising and executing such projects in sustainable ways.

TABLE 3 COMMON BARRIERS FACED BY DEVELOPING COUNTRIES IN ACCESSING SUSTAINABLE FINANCE

Framework development

Many financiers/funds require applicants to develop sustainability-related frameworks in order to access different types of finance. For example, to access adaptation finance from the Global Environmental Facility or Global Climate Fund, countries are required to develop National Adaptation Plans (NAPs), which cover institutional adaptation frameworks and coordination mechanisms, impact and evaluation systems, and strategies for mobilising private investment. In order to issue sustainable bonds, the issuer (national/ regional government or local financial institution) is required to develop a bond framework which defines processes for use of proceeds, project selection and evaluation, management of proceeds and impact reporting. Governments and/or local financial institutions often do not have in-house expertise to develop these frameworks.

Capacity, resources and data to evaluate sustainability risks and impacts

Climate projects, in particular, must provide robust evidence of mitigation or adaptation benefits through climate risk, vulnerability and impact studies. These studies require strong qualitative and quantitative climate expertise, which is scarce in many developing countries. Many countries also do not have robust historical climate data records which are required to prove adaptation cases.

Bankable project pipelines

While not unique to ‘sustainable’ finance, many large-scale infrastructure projects struggle to attract finance, especially private/commercial finance, due to their risk-return profile. This is especially the case in certain sectors, such as transportation and water. Sustainability requirements add to the existing bankability challenges by introducing new complexities and costs. ‘Bankable’ sustainable projects must often be structured using complex, blended financing mechanisms which also call for significant time, financial outlay and stakeholder coordination.

Capital market development

In addition (and this is not unique to sustainable finance), many African countries have underdeveloped capital markets and low credit ratings, underpinned by significant public debt and poor debt management. These constraints make sustainable market-based instruments financially risky and difficult to access for African countries.

Source: Judith Tyson, ‘Developing green bond markets for Africa’ (Policy Brief 3, Overseas Development Institute, London, July 2021), http://cdn-odi-production.s3.amazonaws.com/media/documents/Policy_Brief_3_FINAL_.pdf

To address all the challenges above and prepare applications for sustainable finance, countries must access significant technical assistance and grant finance. Various financial institutions and funds are helping countries in the region to access concessional sustainable finance more easily:

- Global climate finance facilities such as the GCF and the Global Environmental Facility, which provide grant finance, have supported infrastructure projects in Africa in

renewable energy and transboundary water resource management. The GCF offers ‘country readiness programmes’ which provide grants and technical assistance to countries to help them access GCF funds.²⁶

- The AfDB is a GCF-accredited facility and since 2016 has mobilised \$189.6 million in concessional finance for climate mitigation and adaptation.²⁷ The AfDB launched the Africa Adaptation Acceleration Program in January 2021 and has since committed \$12.5 billion to support adaptation, including project preparation.²⁸ The AfDB has also issued 10 green bonds and eight social bonds, which have supported sectors aligned to the PIDA agenda, but the bank has yet to support regional projects.
- The Development Bank of Southern Africa (DBSA), a South Africa- and Southern Africa-focused infrastructure DFI, has also established a Climate Finance Facility in partnership with the GCF, which has primarily supported renewable energy projects.

AU efforts to support sustainable regional infrastructure

African countries, regional institutions and development partners have in recent years adopted various measures to facilitate the design of projects and supporting frameworks to improve the continent’s capacity to attract sustainable finance for infrastructure purposes. This policy insights focuses specifically on the significance of various measures supporting the continent’s regional infrastructure agenda (including PIDA and where it intersects with the AfCFTA).

TABLE 4 GROUPING OF SELECTION CRITERIA AND WEIGHTING FOR PIDA (PAP 2)

Category	Criteria	Weight
Regional integration	Regional project	Pass/fail
	Clear agreement from concerned countries	Pass/fail
Inclusiveness & sustainability	Gender sensitivity	10%
	Rural connectivity	5%
	Climate friendliness	10%
Economic & financial impact	Corridor planning	15%
	Job creation	10%
	Economic impact	25%
	Financial attractiveness for private sector investment	20%
	Smart/innovative technologies	5%

Source: AU, ‘The Integrated Corridor Approach: “A Holistic Infrastructure Planning Framework to establish PIDA-PAP 2”’ (Strategic Note, AU, Addis Ababa, 2020)

26 GCF, ‘Country Readiness.’

27 AfDB, ‘Green Climate Fund.’

28 AfDB, *Africa Climate Change Fund Annual Report 2020* (Abidjan: African Development Bank, 2021).

PIDA's most recent implementation plan, the 2021 Priority Action Plan (PAP) II, has streamlined its original 400-project pipeline to a priority 69 projects based on revised project selection criteria.²⁹ In addition to the standard PIDA requirement that projects are regional in nature (either cross-border projects or projects with a regional impact), PIDA projects are now graded according to eight criteria, including climate friendliness, gender sensitivity and rural connectivity (the latter two criteria potentially applying to social finance) (see Table 4).

Among the 69 streamlined priority PIDA projects,³⁰ seven have been designed with explicit climate considerations, which may improve the prospects of attracting sustainable finance, including solar and wind energy projects (potential for climate mitigation finance) and transboundary water management projects (potential for green or social finance). Another water supply PIDA project is being designed with inbuilt climate-resilience measures. Many other PIDA projects, such as hydropower and road/rail developments, also have potential to be designed with adaptation measures to reduce their vulnerability to climate impacts and to strengthen access to sustainable finance.

Based on the research undertaken for this policy insights, two PIDA projects have so far accessed finance earmarked for sustainability initiatives. The Abidjan Lagos Coastal Corridor and the Batoka Gorge Hydropower Project both received grant finance in 2016 from the Africa Climate Change Fund (a multilateral donor trust fund) to integrate climate-resilience measures into project development. The \$0.8 million grant also provided capacity building to policymakers across the continent with a view to integrating climate resilience into transportation and energy projects.³¹

Regarding the AfCFTA protocols that have been concluded thus far, the Protocol on Trade in Goods and Protocol on Trade in Services make reference to sustainability considerations. The Protocol on Trade in Services makes provision for states to introduce regulations to meet legitimate national policy objectives, including environmental protection and sustainable development considerations, in line with the requirements of the Protocol.³²

The Protocol on Trade in Goods makes similar provisions, allowing countries to adopt measures that may be inconsistent with the Protocol so as to protect human, animal or plant life or health, and to conserve natural resources. These provisions conceivably allow countries policy space under the AfCFTA to adopt measures that favour trade in intermediate goods and services and thereby support sustainable infrastructure (eg, inputs for renewable energy technology or renewable energy services). Beyond these non-binding clauses, however, the focus on sustainability within the AfCFTA as a whole is far more

29 AU, 'The Integrated Corridor Approach.'

30 PIDA, 'Approved Projects,' <https://pp2.au-pida.org/approved-projects/>.

31 AfDB, 'ACCF grants \$0.8 million to enhance climate finance readiness in Côte d'Ivoire and to make two transboundary projects climate-resilient,' 2016, <https://www.afdb.org/ar/news-and-events/accf-grants-us-0-8-million-to-enhance-climate-finance-readiness-in-cote-divoire-and-to-make-two-transboundary-projects-climate-resilient-15870>.

32 Colette van der Ven and Landry Signé, 'Greening the AfCFTA: It is not too late' (Policy Brief, Africa Growth Initiative at Brookings, Washington D.C., September 2021), <https://www.brookings.edu/wp-content/uploads/2021/09/21.09.15-Greening-the-AfCFTA.pdf>.

limited and presents opportunities for improvement, especially in light of the soon-to-be-negotiated Protocol on Investment.³³

Acknowledging this context, the remainder of this policy insights explores possible future solutions aimed at attracting a greater proportion of sustainable infrastructure finance for regional projects in Africa. This will be achieved by examining the Association of Southeast Asian Nations' (ASEAN's) regional approach to sustainable infrastructure financing and by leveraging existing and developing institutions, frameworks and financing facilities in Africa.

Lessons from ASEAN: A regional approach to sustainable finance

African countries and regional institutions can learn from the ways in which other regions (and particularly ASEAN) addressed some of the abovementioned challenges when looking to secure sustainable financing for infrastructure purposes.

It must be noted that ASEAN (a regional economic community [REC] comprising 10 countries) cannot be directly compared to the AU (55 countries comprising multiple RECs). However, ASEAN is a developing region that is highly vulnerable to the effects of climate change (three of its member states experienced the most acute climate change impacts globally during the period 2000–2019³⁴) and has pursued a distinctly regional approach to securing sustainable infrastructure finance. ASEAN therefore offers important lessons on how to adopt a regional approach to sustainable infrastructure financing and development, which can be adapted, with discretion, to the AU and PIDA contexts.

ASEAN's regional sustainable finance frameworks

ASEAN's regional approach to finance is grounded in the ASEAN Capital Markets Forum (ACMF),³⁵ which was established in 2004 and comprises regulators from all member states. This forum has served as a platform for the development of various regional sustainability frameworks, including ASEAN green, social and sustainability bond standards, as well as various guidance documents, including an SDG Bond Toolkit and a Roadmap for ASEAN Sustainable Capital Markets. Recently, in November 2021, ASEAN produced the first version of its Taxonomy for Sustainable Finance.³⁶ A sustainable finance taxonomy (or green, social or transition taxonomy) is an important tool when outlining a country's or region's overarching sustainability priorities and classifying eligible sustainable projects for investors.

33 Van der Ven and Signé, 'Greening the AfCFTA.'

34 David Eckstein, Vera Künzel and Laura Schäfer, 'Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2019 and 2000–2019' (Briefing Paper, German Watch, Bonn, January 2021).

35 ASEAN Capital Markets Forum, October 2019, <https://www.theacmf.org/>.

36 ASEAN, 'ASEAN Sectoral Bodies Release ASEAN Taxonomy for Sustainable Finance – Version 1,' November 10, 2021, <https://asean.org/asean-sectoral-bodies-release-asean-taxonomy-for-sustainable-finance-version-1/>.

ASEAN's regional approach to developing sustainability standards reduces the regulatory complexities inherent in cross-border projects, as multi-country investments are underpinned by a single sustainability framework. The standards also have the potential to increase the attractiveness of the region for single-country investments by reducing some upfront due diligence costs and potentially boosting investor confidence if an investor has already invested in another ASEAN member state and is familiar and comfortable with the standards. The framework also guides ASEAN member states with less-developed national sustainability frameworks in accessing sustainable finance.

This approach has resulted in a number of successful transactions. Thailand, Malaysia, Indonesia and Philippines were among the top 15 countries for dollar-value green bond issuances in emerging markets from 2012 to 2020, having issued over \$7.5 billion in green bonds in 2020.³⁷ (In Africa, only South Africa is in the top 15 countries for such bond issuances.)

The ASEAN Catalytic Green Finance Facility

In 2019, ASEAN and the Asian Development Bank (ADB) established a targeted initiative to support the region's sustainable financing agenda: the ASEAN Catalytic Green Finance Facility (ACGF). Established under the banner of the existing ADB-funded ASEAN Infrastructure Fund (AIF), the ACGF specifically targets 'green', early-stage project advisory and support services to facilitate a pipeline of bankable green infrastructure projects.³⁸ Specific support services include project structuring and origination, the allocation of funds for de-risking purposes, and knowledge, awareness and capacity building for pipeline development. Capacity-building activities include investor roundtables, training in innovative financial instruments for senior and mid-level ASEAN officials, and technical assistance to support pipeline development.

The ACGF receives concessional resources from the AIF, the ADB and other development partners to support project-level de-risking. It also receives various ADB technical assistance resources and grants from development partners to support the establishment and operation of the Facility, project structuring and origination, and knowledge and capacity-building initiatives. The Facility has formed co-financing partnerships with the ADB, Agence Française de Développement, European Investment Bank, the EU, Kreditanstalt für Wiederaufbau and the government of The Republic of Korea, as well as a number of in-kind knowledge partnerships.

The 2019–2021 pilot phase of the ACGF was aimed at mitigation, with the goal of achieving a reduction of (at the very least) 150,000 tons of carbon dioxide equivalent per year and increasing the proportion of renewable energy to 25% of the region's energy mix by 2025.

³⁷ Amundi Asset Management and International Finance Corporation, *Emerging Market Green Bonds Report 2020: On the Road to Green Recovery* (Washington D.C.: Amundi and IFC, Spring 2021).

³⁸ ADB and ACGF, *Operations Plan 2019–2021* (Mandaluyong: ADB, 2019).

The Facility's longer-term goal is to shift the focus to low-emission and climate-resilient infrastructure development.

TABLE 5 EXAMPLES OF INFRASTRUCTURE PROJECTS SUPPORTED BY THE ACGF					
Name	Year	Country	Value	Project description (including sustainable design elements)	ACGF role
EDSA (Epifanio de los Santos Avenue) Greenways Project	2019	Philippines	\$179 million	The construction of elevated, disaster-resilient public walkways at mass transit stations in Manila to support the transition from private to public transportation modes and to increase the public's use of zero-emission transportation.	The ACGF provided a \$15 million loan to support project construction (the loan constituting 8% of the total project cost, with the remaining funds coming from an ordinary ADB loan and the government of the Philippines).
Sustainable Financing Framework and Sustainable Bond	2020	Thailand	\$964 million (bond value)	<p>The proceeds will be used to finance a mass rapid transit project and support other COVID recovery-related social projects.</p> <p>The ADB is also helping the government to develop internal systems to monitor the use of bond proceeds and prepare post-issuance reports. These measures will help to lay the foundations for more green, social and sustainability bond issuances.</p>	ACGF funds supported the bond framework development and external reviews to help Thailand's Ministry of Finance and National Housing Authority design green, social and sustainability bonds based on global and ASEAN standards and best practices.
National Solar Park Project	2019	Cambodia	\$26.71 million	The construction of a 60 MW solar park and solar photovoltaic plants in Kampong Chhnang Province to diversify the country's energy generation mix towards the greater use of clean power. The project has delivered Cambodia's lowest solar energy tariff.	The ACGF provided technical assistance to plan the project's development and bidding process. The project was financed by the ADB, Strategic Climate Fund, Électricité du Cambodge and government counterparty financing.

Source: ADB, 'The ASEAN Catalytic Green Finance Facility: 12 Things to Know,' March 22, 2021, <https://www.adb.org/news/features/asean-catalytic-green-finance-facility-acgf-12-things-know>

Since its establishment, the ACGF has supported various sustainable projects. ACGF resources have been used to support de-risking vehicles, green and sustainable bond issuances, and countries' green COVID recovery policies and strategies. As of late 2021, the ACGF was providing resources in support of 12 projects at the project-concept stage and six projects at the project-structuring stage (including mobilising private finance and building

climate baselines).³⁹ The ACGF has also provided technical assistance to 22 projects, conducted eight roundtable events and provided training to 42 ASEAN officials. Table 5 provides details of three ASEAN infrastructure projects that have received ACGF support, including how the resources have been leveraged.⁴⁰

ASEAN and the ACGF have also successfully adapted its agenda in line with recent global challenges. In response to the COVID-19 crisis, ASEAN launched a Green Recovery Platform in November 2021, which aims to mobilise further development partner financing to support the ACGF.⁴¹ However, in addition to meeting the ACGF criteria, Green Recovery projects must demonstrate that they will create jobs in environmentally friendly sectors and companies, thus driving a socially, economically and environmentally sustainable recovery from COVID-19. Partners, including the GCF, the Foreign and Commonwealth Development Office of the United Kingdom, the EU and Cassa Depositi e Prestiti (Italy's state bank), have pledged a combined \$665 million to support the Platform, in addition to the \$1.4 billion in existing ACGF co-financing pledges.⁴²

All of the ASEAN initiatives mentioned above have received funding from the ADB, which has played a major role in supporting the region's climate focus. In 2015, the ADB led all the MDBs globally by making the first climate commitment to double its climate finance from \$3 billion to \$6 billion that year, a target that the institution managed to exceed. More recently, in 2021, the ADB committed to make 75% of its finance climate sensitive by 2030.⁴³

ASEAN's approach to supporting sustainable infrastructure financing in the region, ie, by developing sustainability frameworks, taxonomies and a green infrastructure fund, targets some of the most serious bottlenecks that the AU also currently faces, including a lack of capacity, technical expertise and bankable projects, as well as weak regional sustainability framework development and harmonisation.

Looking forward: New developments and opportunities for Africa

This section examines possible measures to leverage three unfolding initiatives in Africa aimed at supporting sustainable regional infrastructure, namely the proposed Alliance for Green Infrastructure in Africa, the proposed Green Infrastructure Corridor for Intra-African Trade and the emerging AfCFTA protocols.

39 Asian Development Bank, 'The ASEAN Catalytic Green Finance Facility (ACGF): 12 Things to Know,' March 22, 2021, <https://www.adb.org/news/features/asean-catalytic-green-finance-facility-acgf-12-things-know>.

40 ADB, 'The ASEAN Catalytic Green Finance Facility.'

41 ADB, 'Partners Pledge \$665 Million to Support Green Recovery in ASEAN,' November 2, 2021, <https://www.adb.org/news/partners-pledge-665-million-support-green-recovery-asean>.

42 ADB, 'Partners Pledge \$665 Million.'

43 ADB and ACGF, *Green Finance Strategies for Post-COVID 19 Economic Recovery in Southeast Asia* (Mandaluyong: ADB, 2020).

In February 2022 at the 6th AU Summit, the AfDB proposed the establishment of the Alliance for Green Infrastructure in Africa (the Alliance)⁴⁴ in partnership with Africa50, the AU Commission and the AU Development Agency (AUDA) for the purpose of supporting investment in green and sustainable infrastructure in Africa and supporting Africa's transition to net zero more broadly. The objectives of the proposed initiative are two-fold:

- To develop and fund a robust pipeline of bankable, green infrastructure projects.
- To catalyse the financing of green infrastructure projects, both rapidly and at scale.⁴⁵

The initiative seeks to mobilise financing from Alliance members, other development finance institutions, commercial financial institutions and foundations, public and private global and African institutional investors, project sponsors, multilateral development banks' sovereign operations and G-20 bilateral donors. The Alliance has set itself a target of \$500 million for early-stage project development and preparation, aimed at catalysing \$10 billion in investment opportunities. Projects will be developed by Africa50 and co-development partners as well as private third-party developers.⁴⁶ Although the Alliance is still at the conception phase, the initiative has already reportedly generated interest among potential international DFIs and philanthropic institutional partners.

Considering the challenges that the region faces in mobilising sustainable finance for infrastructure development, the Alliance could play an important role in targeting regional bottlenecks and supporting the development of a sustainable pipeline, and potentially addressing the region's low levels of private sector participation. As the Alliance appears to have a very similar focus to that of the ACGF (finance that is catalytic, regional, focused on pre-project preparation, and green), the ACGF operations plan⁴⁷ can therefore serve as a useful guide for the AfDB and AU in the structuring of a successful, sustainable regional infrastructure facility, with potential opportunities for knowledge sharing between the two entities. Specific ACGF components that may be instructive for the Alliance include its targeted two-year pilot phase with a narrower project focus, partnerships with global platforms offering concessional sustainable finance such as the GCF, and the strong focus on regional capacity building, technical assistance and in-kind knowledge partnerships. Given the pressing adaptation finance needs in Africa, the Alliance's pilot phase should have a stronger focus on climate adaptation projects. For example, an in-kind partnership for the Alliance could focus on bringing in experts to train African specialists in conducting climate risk studies and navigating the complex application process for climate adaptation finance. Only after these capacity issues are addressed will projects begin to attract external finance.

44 Nicolette Pombo-van Zyl, 'Alliance for Green Infrastructure in Africa to bolster capital investment,' ESI Africa, February 18, 2022, <https://www.esi-africa.com/industry-sectors/business-and-markets/alliance-for-green-infrastructure-in-africa-to-bolster-capital-investment/>.

45 Pombo-van Zyl, 'Alliance for Green Infrastructure in Africa.'

46 Pombo-van Zyl, 'Alliance for Green Infrastructure in Africa.'

47 ADB and ACGF, *Operations Plan 2019-2021*.

In 2021 the AUDA–New Partnership for Africa’s Development (NEPAD) under PIDA launched the Green Infrastructure Corridor for Intra-African Trade, which is being implemented from 2021 to 2024, with support from the German government (Federal Ministry for Economic Cooperation and Development/Deutsche Gesellschaft für Internationale Zusammenarbeit).⁴⁸ The initiative seeks to provide advisory services to African countries to support the development of climate-resilient, low-emissions infrastructure and to attract green finance, with the ultimate objective of supporting regional trade under the AfCFTA. The project has identified the Central Corridor (comprising Rwanda, Burundi, Tanzania, the DRC and Uganda) as the pilot corridor.

The Green Infrastructure Corridor will support the development of a green infrastructure action plan and a climate-friendly project pipeline with a ‘green label’ to signal to investors the projects that meet a trusted standard.⁴⁹ This initiative represents a potential platform from which African regional sustainability standards can be developed to reduce the complexities associated with cross-border investments in green regional projects. For example, the initiative can support the development of a continental or corridor-specific sustainable finance taxonomy, which harmonises the region’s sustainability project selection criteria, or it can draft regional frameworks to support the issuance of specific financial products, such as sustainable bonds. These instruments will both increase the certainty for investors that sustainability requirements will be met and reduce the complexities of cross-border investments. ASEAN’s sustainable taxonomy and frameworks can be instructive in this regard.

Given that the Alliance for Green Infrastructure in Africa and the Green Infrastructure Corridor initiatives have the same ultimate objective of spurring green infrastructure development in Africa, coordination between the two will also be beneficial and will improve efficiencies. For example, the initiatives should engage in knowledge sharing and coordinated project prioritisation so as to pool resources for viable projects. While the Alliance is still being conceptualised, AUDA–NEPAD can leverage its partnership role to promote the integration of regional/cross-border project selection criteria. This will ensure that projects with regional significance are included in the Alliance pipeline.⁵⁰ Moreover, close coordination between the Green Infrastructure Corridor and the AfDB will be beneficial as the AfDB has substantial experience in successfully mobilising sustainable finance for infrastructure purposes. However, to date, the AfDB has not supported PIDA projects as part of its sustainable financial envelope.

As African-driven initiatives, the Alliance for Green Infrastructure and the Green Infrastructure Corridor both have an opportunity to prioritise and direct available technical assistance towards de-risking projects that are most relevant to Africa’s specific sustainability and infrastructure needs. The bulk of international sustainable infrastructure

48 AUDA–NEPAD, interview.

49 AUDA–NEPAD, interview.

50 AUDA–NEPAD, interview; Former Financial Sector Green Bonds Implementation Specialist, interview.

finance is currently channelled towards renewable energy projects, as these satisfy developed countries' most pressing emission-mitigation needs. In Africa, however, other focus areas require more urgent attention, including road and rail infrastructure, which is necessary to connect the continent and facilitate regional trade under the AfCFTA, as well as adaptation-focused projects which are required to 'climate-proof' large-scale regional infrastructure.⁵¹

The AfCFTA can also support sustainable infrastructure development in the region by integrating sustainability considerations more prominently into its protocols. This could be achieved in two ways. First, the soon-to-be-negotiated AfCFTA Protocol on Investment presents opportunities to channel regional investments into sustainably designed infrastructure. AfCFTA policymakers should, as a minimum, outline similar provisions in the Protocol on Investment to those in the existing Protocol on Trade in Goods, such as allowing countries to supersede the regulations of the Protocol to restrict investment into environmentally harmful projects (eg, high-emission sectors). The Protocol can also potentially allow for subsidies to support investments in 'sustainable' sectors, such as renewable energy and/or projects designed with climate-resilient measures, and can also prohibit signatory countries from adopting a 'race-to-the-bottom' approach and relaxing sustainability requirements in order to attract investment.⁵² Second, AfCFTA policymakers could consider a separate protocol on trade, investment and sustainability to demonstrate a clearer commitment to promoting sustainable trade and investment in the region, thus allowing the abovementioned trade and investment measures to be binding in nature.⁵³

Conclusion and policy considerations

As climate, environmental and social impacts become increasingly important, financing and the sustainable building of infrastructure have become necessities. The following policy considerations are intended to support Africa's continental integration agenda by facilitating finance for sustainable regional infrastructure development:

- Explore, under the AUDA-NEPAD Green Infrastructure Corridor for Intra-African Trade, the possibility of developing a regional sustainability taxonomy or bond framework to standardise sustainability definitions, focus areas and project eligibility criteria and to simplify the process of attracting sustainable finance for regional projects.
- Establish a coordination platform between the Alliance for Green Infrastructure in Africa and the Green Infrastructure Corridor for Intra-African Trade to leverage synergies in project selection, technical assistance and knowledge sharing (including ensuring that a regional/cross-border project focus is integrated into the Alliance for Green Infrastructure).

51 Sawidou and Trisos, 'This is how much investment is needed'; GCA, *Financial Innovation*; AUDA-NEPAD, interview.

52 Van der Ven and Signé, 'Greening the AfCFTA.'

53 Van der Ven and Signé, 'Greening the AfCFTA.'

- As part of the conceptualisation and structuring of the Alliance for Green Infrastructure in Africa, the Alliance should organise a knowledge-sharing event or smaller engagement with the relevant parties from the ASEAN Catalytic Green Finance Facility to extract lessons and obtain guidance from an initiative with a similar mandate that is operational and providing support to projects.
- Integrate design considerations into both the Green Infrastructure Corridor for Intra-African Trade and the Alliance for Green Infrastructure in Africa to ensure that both initiatives are focused on key African priorities (eg, infrastructure designed with climate adaptation measures, and investment in cross-border transportation) and that available grant resources and in-kind knowledge partnerships are directed towards these priority areas.
- Integrate sustainability considerations into the AfCFTA Protocol on Investment, such as imposing restrictions on investments in environmentally harmful sectors, allowing national subsidies to support sustainable projects, or prohibiting countries from relaxing national sustainability requirements to attract greater investment. Also consider the development of a separate AfCFTA protocol on trade, investment and sustainability to demonstrate a clearer, more binding commitment to the promotion of sustainable investments under the AfCFTA.

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