

Report

The role of the African Continental Free Trade Area in promoting a resilient recovery in Africa

John Asafu-Adjaye, George Boateng, Jodie Keane, Max Mendez-Parra, Michelle Moraa, Uchechukwu Nwokediuko, Laetitia Pettinotti and Lily Sommer

November 2021





Readers are encouraged to reproduce material for their own publications, as long as they are not being sold commercially. ODI requests due acknowledgement and a copy of the publication. For online use, we ask readers to link to the original resource on the ODI website. The views presented in this paper are those of the author(s) and do not necessarily represent the views of ODI or our partners.

This work is licensed under CC BY-NC-ND 4.0.

How to cite: Asafu-Adjaye, J., Boateng, G., Keane, J., et al. (2021) *The role of the AfCFTA in promoting a resilient recovery in Africa*. ODI Research Report. London: ODI (<https://odi.org/en/publications/the-role-of-the-afcfta-in-promoting-a-resilient-recovery-in-africa>)

Photo: CCo Fabersam by Pixabay.

Acknowledgements

About this publication

This report has been funded by the United Kingdom's Foreign, Commonwealth and Development Office (FCDO) as part of the Supporting Investment and Trade in Africa (SITA) programme.

It does not necessarily reflect the views or positions of FCDO, Overseas Development Institute (ODI), African Trade Policy Centre (ATPC) or African Centre for Economic Transformation (ACET). We are grateful to the external review, Professor Peter Draper, Executive Director, Institute of International Trade, University of Adelaide, for his constructive comments. Any errors are the responsibility of the authors.

About the authors

John Asafu-Adjaye: Dr John Asafu-Adjaye is Senior Fellow at the African Center for Economic Transformation (ACET) where he leads research work under the economic management and governance programme. Prior to joining ACET he held a position as an Associate Professor of Economics at the University of Queensland, Brisbane, Australia.

George Boateng: George is a researcher at ACET working in the fields of trade, agriculture, and skills development. His policy interests focus on strengthening linkages between research and policy through open dialogues. He holds a Master of Science Degree in Rural Development and Management from the China Agricultural University (CAU) in Beijing, China. He also holds a certificate in Climate Change from the United Nations Institute for Training and Research (UNITAR), and a certificate in New Structural Economics from Peking University (PKU), Beijing, China. He was previously a Southern Voices Network Scholar at the Wilson Center in Washington DC.

Jodie Keane: is a Senior Research Fellow with ODI's International Economic Development Group whose research focuses on the trade and climate nexus. She is an experienced trade economist and project manager who has worked with multiple governments and international organisations to achieve trade and development outcomes. She has a PhD in economics from SOAS University of London, taught seminars on comparative economic growth in Africa and Asia (SOAS) and on the political economy of trade at the Department of International Relations, London School of Economics. She has published journal articles, book chapters, and edited volumes on global value chains and Least Developed Countries.

Max Mendez-Parra: is a Principal Research Fellow with ODI's International Economic Development Group. Max is currently leading the SITA programme which contributes to the development goals of African economies and the UK's efforts to support trade, investment and development on the continent, in partnership with the Secretariat of the African Continental Free Trade Area (AfCFTA) and African Trade Policy Centre (ATPC) of the United Nations Economic Commission for Africa (UNECA), with support from the UK Foreign, Commonwealth and Development Office (FCDO). He has provided advice to many organisations including the European Commission, DFID, FAO, UNECE, UNCTAD and GIZ among others. He has more than 21 years' experience of assessing trade agreements and supporting trade negotiations for developing countries in particular, and obtained his PhD in Economics from the University of Sussex.

Michelle Moraa: is a graduate student at the University of Geneva specialising in trade and sustainability.

Uchechukwu Nwokediuko: Uche is a policy researcher and former management consultant with experience in public health, regional integration, and agriculture. His interests lie in strengthening the delivery of public services in Africa in a bid to close the gap between Africa and the rest of the world. He holds a Masters in Public Policy from the University of Oxford and is an alumnus of the Africa Initiative for Governance Scholarship.

Laetitia Pettinotti: Senior Research Officer at ODI's International Economic Development Group. She is a development economist working at the intersection of economic transformation, climate change and gender. She completed her post-doctorate at the Grantham Research Institute at the London School of Economics, working on sustainable and inclusive economic growth in development corridors in East Africa. Laetitia holds a PhD in environmental economics from the University of the Basque Country.

Lily Sommer: is a Trade Policy Consultant. Her research is on African trade policy with a focus on the linkages between trade and industrialisation, poverty, gender and climate change. She previously worked at UNECA's ATPC, where she managed the Centre's work programmes on informal cross-border trade, standards, human rights and trade and climate change.

Contents

Acknowledgements / i

Display items / iv

Acronyms/Glossary / v

Abstract / vi

1 Introduction / 1

2 Economic recovery strategies / 3

2.1 Summary of response measures / 4

2.2 Emphasis on trade policy within recovery / 5

2.3 Degree of alignment between recovery and NDCs / 7

3 Alignment between recovery strategies / 10

3.1 The GRAP and the AGSP / 10

3.2 Assessment of alignment between recovery strategies and GRAP/AGSP / 11

4 Links with the AfCFTA / 15

4.1 Links between recovery, the GRAP and AfCFTA / 15

4.2 Specific links between recovery, GRAP and the AfCFTA / 20

5 Opportunities to increase ambition / 23

5.1 Need for greater alignment: renewable energy / 23

5.2 Need for greater clarity: climate-smart agriculture / 23

5.3 Opportunities to increase ambition in the future / 24

5.4 Need for advocacy / 24

6 Conclusions / 26

References / 28

Display items

Tables

Table 1 Degree of green and climate ambition within recovery efforts / 4

Table 2 Examples of degrees of alignment between stimulus and NDCs / 9

Table 3 Recovery and alignment with GRAP / 12

Table 4 Recovery and alignment with the AGSP / 14

Table 5 Links between GRAP and AfCFTA / 16

Table 6 Examples of how the AfCFTA can support resilient recoveries / 21

Table 7 Summary of how the AfCFTA can support green and resilient recoveries / 25

Figures

Figure 1 Covid-19 response expenditures / 3

Acronyms/Glossary

AfCFTA	African Continental Free Trade Area
AfT	Aid for Trade
AGSP	African Green Stimulus Programme
AU	African Union
CAP	Coronavirus Alleviation Programme
CARES	Covid-19 Alleviation and Revitalizations of Enterprises Support
CST	Communications Service Tax
ECOWAS	Economic Community of West African States
EAC	East African Community
ECA	Economic Commission for Africa
ESP	Economic Sustainability Plan
GHG	greenhouse gas
GRAP	Green Recovery Action Plan
ICT	information and communications technology
INDC	Intended National Determined Contribution
IPR	intellectual property rights
ISDS	investor–state dispute settlement
LDCs	Least Developed Countries
LNG	Liquefied Natural Gas
MSMEs	micro, small and medium enterprises
NBS	natural-based solutions
NCCAMS	National Climate Change Adaptation and Mitigation Strategy
NCCAS	National Climate Change Adaptation Strategy
NDC	Nationally Determined Contribution
SMEs	Small and medium enterprises
SPS	sanitary and phytosanitary
UNFCCC	United Nations Framework Convention on Climate Change
VAT	value-added tax

Abstract

Over time, assuming the platform it lays is extended and deepened, the African Continental Free Trade Area (AfCFTA) is set to change Africa's production and trade landscape. However, environmental and climate considerations have not featured prominently in its development. Within this context, the African Union's Green Recovery Action Plan (GRAP) identifies several priorities for cooperation in the coming five years to support a resilient and green economic recovery. This plan is articulated within Agenda 2063 of African Union (AU), which aims to transform the economies of Africa by increasing intra-continental trade and investment, where the AfCFTA constitutes the main instrument. The concurrent implementation of the GRAP and AfCFTA provides a pivotal opportunity to build resilient and green intra-continental trade and investment to support recovery objectives. This report identifies how the GRAP and AfCFTA together can support resilient and sustainable recoveries for six African countries: Ghana, Kenya, Mozambique, Nigeria, Rwanda, and South Africa. It shows clear opportunities to boost ambition and secure more resilient recoveries within the existing provisions of the AfCFTA, as well as in future negotiations. However, there is also an important opportunity to embed environmental and climate considerations within the AfCFTA, in line with the GRAP, which could further stimulate more resilient recoveries.

1 Introduction

The economic crisis induced by Covid-19 hit Africa at a challenging time. The growth in global trade had been sluggish for some years amid rising protectionist sentiment. The shock has accentuated existing socio-economic vulnerabilities and stretched coping capacities. Plans for an accelerated post-Covid economic recovery are putting the question of development pathways to the fore. The continent includes middle-income, low-income and least developed countries (LDCs) and all are confronted with the challenge of creating resilient development trajectories in the face of constantly evolving risks.

These development pathways must be compatible with the overarching objective of transforming the economies of the African countries. The AfCFTA, which aims to increase and diversify intra-African trade and investment, constitutes an important political and economic tool to achieve this objective. If fully implemented, the AfCFTA can lay the foundations required to shift Africa's production and trade landscape and therefore has important implications for tackling climate change on the continent. The extraction-led model of many African countries has led to Africa's export basket being dominated by natural resources, with fossil fuels and minerals making up over half of exports to the rest of the world, and manufactured goods accounting for only one-fifth (Keane et al., 2020). In comparison, nearly half of intra-African trade is based on these manufactured goods, with extractive sectors playing a much smaller role, at around one-quarter (ibid.).

The AfCFTA has the potential to help unlock opportunities in Africa's non-extractive sectors; expanded intra-regional trade can become climate-compatible if supported by the enabling

policies. Furthermore, trade under the AfCFTA can offer an important tool for supporting climate change mitigation and adaptation policies. Mitigating climate change will depend on the ability of African countries to move towards low carbon manufacturing, which requires access to and the diffusion of low-carbon technologies, which can be facilitated through trade and investment. Trade can also help to bridge differences in demand and supply, so that countries where climate change creates scarcity are able to meet their needs through importing from countries with surpluses; this includes both on an extra-continental as well as intra-continental basis.

While policy objectives for post-Covid recovery efforts in African countries include building resilient and green value chains, the means of implementation are not specified. Moreover, the relationship to climate action as specified in nationally determined contributions (NDCs) on reducing emissions often remains unclear. Within this context, the Green Recovery Action Plan (GRAP) of the African Union (AU) identifies several priorities for cooperation in the coming five years to support a resilient and green economic recovery. This plan is articulated within the AU's Agenda 2063, which aims to transform the economies of Africa through increased intra-continental trade and investment, for which the AfCFTA constitutes the main instrument. The GRAP also complements the African Green Stimulus Programme (AGSP), an African-led initiative endorsed by the AU and African Ministerial Conference on the Environment initiated in 2020 in response to the Covid-19 pandemic, which is also intended to help operationalise the provisions of the United Nations Framework Convention on Climate Change

(UNFCCC). The concurrent implementation of the GRAP and AfCFTA provides an important opportunity to shape resilient and green intra-continental trade and investment. Alignment between AfCFTA negotiations and implementation with the actions of the GRAP can help put Africa on a more sustainable and resilient economic recovery path.

This analysis identifies how the GRAP can support resilient and sustainable recoveries. It discusses how the AfCFTA can be used, together with other instruments enshrined in the GRAP, to build resilient sectors and value chains and support more ambitious recovery agendas for Ghana, Kenya, Mozambique, Nigeria, Rwanda, and South Africa. These countries have been selected because of their comparative elements, which are described in our methodology.

It should be emphasised that our starting point is that the full implementation of the AfCFTA and conclusion of negotiations can support resilient recoveries and responses to future shocks through enhancing and deepening intra-African trade, reducing trade barriers, and enabling the greater flows of goods, services, people and ideas. In addition, the AfCFTA can also help to shape resilient recoveries within the context of the broader sustainability objectives of the GRAP and the AGSP, and given countries' own climate change mitigation and adaptation efforts.

The effects of other countries' efforts to green trade will also affect African trade and therefore part of resilience building is adapting to these future trends.

This report is structured as follows. First, we review emerging patterns of economic recovery for the African case studies. This includes the focus of stimulus measures and overall indication of green recovery and climate-related ambitions, and the role of trade and trade policy. We also provide an assessment of the extent to which there is alignment between recovery strategies and NDCs. We then proceed to assess the degree of alignment between recovery strategies and the GRAP and the AGSP, which are intended to be mutually supportive.

We identify where there is convergence and divergence using a traffic-light code system based on our qualitative assessment of stimulus measures to date. We then proceed to draw out the trade-related implications of the GRAP and the potential role of the AfCFTA, both in a general sense and with specific reference to the examples of convergence and divergence identified through the case study analysis. We then proceed to explore how ambitions could be raised within stimulus programmes, the GRAP and ongoing implementation and future negotiation of the AfCFTA. Finally, we conclude with a summary of our overall findings and recommendations.

2 Economic recovery strategies

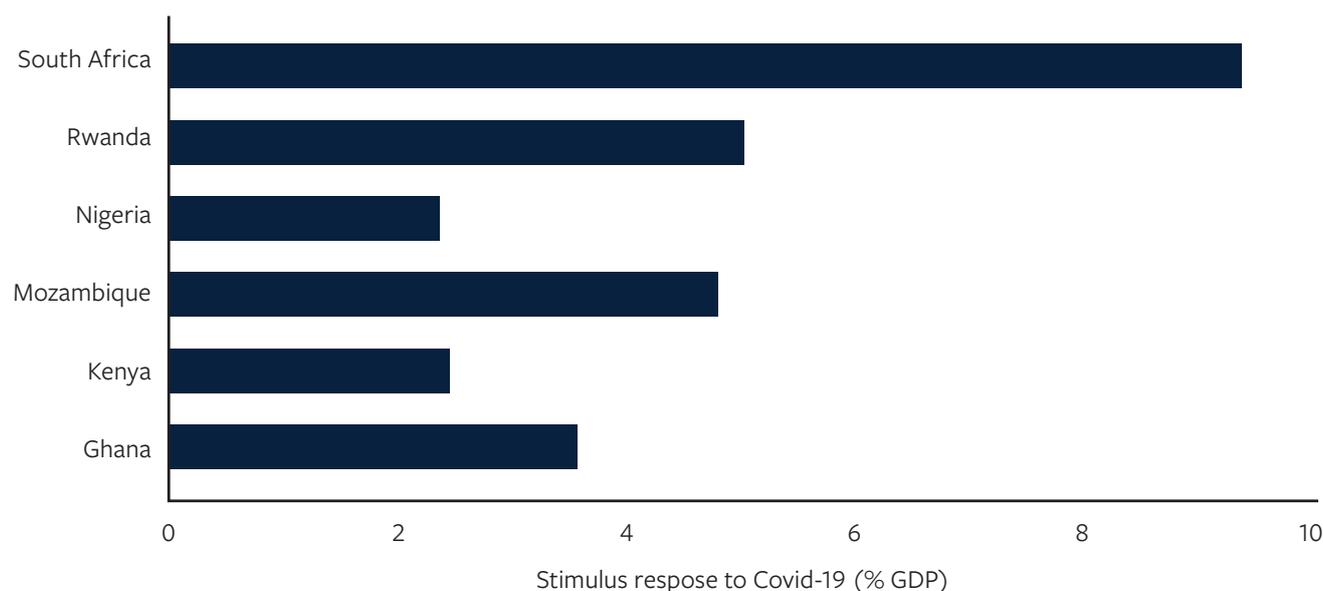
It is widely acknowledged that the vulnerabilities exposed by the pandemic are a precursor to those that will arise from the pending climate emergency and that post-Covid-19 recovery strategies must set economies on green and resilient recovery trajectories. However, all governments must strike a careful balance in the design and implementation of recovery measures, which on the one hand present an opportunity to ‘build back better and greener’, but on the other require political commitment and fiscal space. The more limited fiscal space available for African economies in the aftermath of Covid-19 underscores the imperative of leveraging trade policy to facilitate green recovery efforts at the continental level.

The stimulus packages in our case study countries clearly vary by share of GDP, reflecting varying

fiscal resources available (Figure 1). However, there are also some clear commonalities in terms of the focus of recovery efforts on measures that might boost economic and social outcomes and address environmental concerns.

In some recovery strategies, the role of trade and trade policy in supporting recovery efforts is recognised explicitly. In others, the implications are rather more implicit, working through demand and supply effects. Our assessment of recovery strategies aims to make their trade-related policy implications more explicit. It seeks to provide the empirical basis for the latter components of this study, which articulate how the AfCFTA can support green recovery efforts through greater alignment with the GRAP.

Figure 1 Covid-19 response expenditures



Source: IMF (2021c); the estimate for Rwanda is based on an approximation of the government's Government's Economic Recovery Plan estimated to be 10.1% of GDP over FY 2019/20 to FY 2023/24, or four years).

This section is organised as follows. A summary of African recovery strategies is provided. This includes an overall indication of the degree of green recovery and climate-related ambition. We summarise recovery efforts, taking note of how initial response measures to the pandemic have evolved to become broader developmental objectives. The degree of alignment between recovery strategies and NDCs is then analysed, and the trade-related implications discussed. The section concludes by indicating which countries' recovery strategies are most in sync with stated climate ambitions, where there is ambiguity, and where greater alignment is needed.

2.1 Summary of response measures

For all the countries reviewed, overall response measures focus on those initiatives which have greater economic multipliers than climate multipliers. In some cases, there is some ambiguity where detail on response measures is lacking. Table 1 summarises the degree of green and climate ambition within recovery efforts, based on the results of the case study analyses summarised in Annex 1.

Some of the measures have a degree of ambiguity and further information on the implementation of the announced recovery measures is required.

On the face of it, many of the examples highlighted below could be interpreted as 'business as usual' recovery objectives. Some examples of this include:

- *Incentivise the use of pension funds for roads and housing development (Nigeria)*: it is not clear the extent to which measures will include clean physical infrastructure investment or building efficiency spending for renovations and retrofits, including improved insulation, heating and domestic energy storage systems.
- *Establish a programme to organise artisanal miners and develop the mineral value-chain in geo-political zones (Nigeria)*: it is not clear if this will also support sustainable agriculture and ecosystem regeneration.
- *Investment incentives (Rwanda)*: greenfield investments are eligible for incentives based on construction value thresholds, and similarly in the agro-processing sector. However, it is not known how measures could support clean energy infrastructure investment or sustainable agriculture.
- *Transport sector support (Rwanda)*: includes support for the hard-hit transport sector in the form of fuel subsidies, loans and tax relief. These measures don't seem to target the promotion of clean transport infrastructure or to support clean energy and connectivity.

Table 1 Degree of green and climate ambition within recovery efforts

Country	Count of measures			
	High climate, high economic multiplier	High climate, low economic multiplier	Low climate, high economic multiplier	Low climate, low economic multiplier
Ghana	1	1	5	7
Kenya	2	2	3	7
Mozambique	0	0	4	8
Nigeria	7	0	8	6
Rwanda	0	0	5	14
South Africa	4	4	6	4

Source: Adapted from summary of case studies in Annex 1. Based on the classification developed by Hepburn et al. (2020), summarised in Annex 2: Case study methodology note.

2.2 Emphasis on trade policy within recovery

As country recovery strategies have evolved, there has been a greater emphasis on the role of trade. This is evident in the case of South Africa, Kenya and Ghana. In Kenya, there is a clear emphasis on green recovery elements and climate change, though the links to trade policy require greater elaboration. The links to trade policy are less apparent in the case of Nigeria. For the two LDCs analysed – Mozambique and Rwanda – there is a greater emphasis on the role of trade within economic recovery in the case of Rwanda. However, in both cases, there is a clear absence of stimulus measures that can be classified as having high climate multipliers. This may reflect limited resources for stimulus packages, as well as capacity constraints – especially in view of the level of ambition specified in recently submitted NDCs, analysed in the following section.

Ghana: the Government of Ghana's first economic response to the Covid-19 pandemic was the Coronavirus Alleviation Programme (CAP) that provided 3 billion Ghanaian cedis (\$510 million) as macroeconomic stimulus. In May 2020, the government developed the Ghana Covid-19 Alleviation and Revitalizations of Enterprises Support (CARES) programme that aims to build on the immediate response provided by the CAP and move the economy from recovery to stabilisation and revitalisation. The CARES programme is designed to be implemented in two phases over a period of three years (2020–2023). It has a focus on specific sectors: supporting commercial farming, building light manufacturing, agro-processing and food import substitution (rice, poultry, cassava, sugar, tomatoes), pharmaceuticals, textiles and garments, technology and digital economy, as well as housing and construction. The CARES

programme also seeks to leverage AfCFTA to establish Ghana as a regional hub for finance, manufacturing, ports and logistics.

Kenya: the initial response identified key pillars of the economic recovery strategy: the healthcare system, the private sector, small and medium-sized enterprises, the eight-point stimulus plan, information and communication technology, green growth, economic management and governance, resilience to global supply chain shocks, disaster risk management, inequality and social protection, multilateral and regional collaboration, mobilising diaspora resources, security, and policy, legal and institutional reforms. While this strategy did not define terms such as 'green growth' or 'resilient supply chains', the budget statement published in February 2021 referred to 'facilitated clean, green, resilient growth' and 'enhanced resilience of the economy to global supply chain shocks' (Republic of Kenya, 2021). It states that economic recovery will emphasise climate change adaptation and mitigation, but it is not clear how this objective relates to other elements, including the resilience of global supply chains, where there is no specific mention of climate or green elements within the description of measures to boost resilience.

Mozambique: as in most countries around the world, health expenditures and social support measures were prioritised in response to the pandemic. Initial recovery efforts focused on fiscal consolidation, given the acute need for debt reduction. Reconstruction efforts after natural disasters in 2019 continue alongside Covid-19 responses. While support to small and medium-sized enterprises has been provided, there has been limited emphasis on directly trade-related recovery efforts. Instead, the focus has been lowering the cost of key imports through tariff exemptions and VAT exemptions, especially for

food and medical equipment. Similarly, efforts have been made to keep energy costs low, particularly for households. There have been specific challenges meeting the demands of firms in financial distress, with funds having overly restrictive eligibility criteria. As discussed by the World Bank (2021), firm-level support measures were either insufficient or hindered by procedural bottlenecks; direct support (transfers) were not among the measures taken and government support was not conditioned on the preservation of jobs, or any other conditionalities such as improved production practices. Overall, it is fair to say that response measures have concentrated on the short-term response to Covid-19. Although the need for a longer-term strategy that focuses on economic and export diversification is recognised, there is limited information on what that entails in terms of trade policy. Instead, there continues to be a reliance on extractive industries, such as LNG, albeit with a view to strengthening domestic linkages.

Nigeria: in June 2020 the Federal Executive Council of Nigeria adopted a 2.3 trillion naira Economic Sustainability Plan (ESP) which includes a fiscal stimulus, monetary policy measures and real economy sectoral measures to mitigate the impact the economic crisis. Guiding the ESP is a ‘minimal import’ policy and the promotion of domestic goods and services in view of ‘achieving self-sufficiency in critical sectors of our economy and curbing unnecessary demand for foreign exchange’. This political choice is in reaction to Nigeria’s reliance on oil and gas as key exports and sources of 90% of the country’s foreign exchange. The ESP states that saving on foreign exchange and supporting the domestic market will increase resilience to shocks. There is specific reference to job retention and creation in micro, small and medium enterprises (MSMEs) in the export sector (N50 billion for an export expansion facility) and

specific measures to support the 5Million Solar Power Naija plan, which requires the importation of materials and services inputs not available within the country.

Rwanda: recovery efforts have focused on those with low and negative climate ambition, as indicated by Table 1, which assesses measures applied to date using the Hepburn et al. (2020) classification. Reducing the costs of imported products sourced domestically and regionally (within the East African Community – EAC) features within measures to promote construction. The promotion of manufacturing and agro-processing is emphasised within the Manufacture and Recover Program, but, it is unclear whether this is intended to boost exports or substitute for imports. The recovery measures applied to date are broad-based, intended to boost aggregate demand and the supply of specific inputs for the construction industry, known for high economic multipliers.

South Africa: the South African recovery strategy is phased in three parts. The first is focused on rescuing the economy through short-term responses to the acute health risks of the pandemic. The second is focused on recovery from the impacts of the pandemic through supporting investment and employment, while the third phase aims to pivot the economy towards an accelerated growth paradigm to ensure long-term growth. The underlying principle of the South African recovery strategy is ‘localisation through industrialisation’ and a reorientation towards localising procurement of inputs to strengthen domestic industrial networks. While this may appear counterintuitive to cross-border trade and indicate an inward shift, one of the objectives of this initiative is to ‘develop export competitive sectors to expand the sales of South African products on the continent and beyond’.

The priority value chains in this initiative include construction, agro-processing, health care, basic consumer goods and capital goods. Another key priority in the recovery strategy is on enhancing economic diplomacy and further integration in intra-African trade, although this is not elaborated further.

2.3 Degree of alignment between recovery and NDCs

There are varying degrees of alignment between recovery strategies and NDCs. This section first summarises the case studies with greater alignment, and then proceeds to review those with the least. The results are summarised in Table 2.

Ghana: the 2015 intended NDC builds on national policies and documents that aim to address mitigation, adaptation and technology transfer. To achieve its mitigation goals, Ghana committed to an unconditional 15% reduction in its GHG emissions by 2030.⁴ Overall, there is a mixed degree of alignment between Ghana's recovery measures and its NDC, and there is a need for greater clarity on how stimulus measures will be implemented. For example, the promotion of Ghana's light manufacturing industry is not linked to the NDC objective of doubling energy efficiency improvements to 20% in industrial facilities. Subsidies for electricity use by households are not linked to the NDC objectives of scaling up renewable energy penetration. There is alignment, however, in the case of establishing a national food security committee, as well as measures to support commercial farming.

Kenya: further to Kenya's initial submission in 2016, an updated submission was made in 2020 which includes a more aggressive emissions reductions

target. The revised NDC contains a non-exhaustive list of mitigation and adaptation measures and builds on the provisions of the Kenya's Vision 2030 Development Programme, National Climate Change Action Plan, and the National Adaptation Plan. Overall, there are aspects of the stimulus package which are strongly aligned with Kenya's NDC; this includes in relation to rehabilitation and conservation of forests, nature-based solutions for flood risk management, and food security. However, the stimulus package places more limited emphasis on improving the energy generation mix, energy efficiency (in energy and construction), as well as low-carbon and efficient transport, despite the objectives of its NDC.

Mozambique: as documented within the National Climate Change Adaptation and Mitigation Strategy (NCCAMS), the national priority is 'to increase resilience in the communities and the national economy including the reduction of climate risks, and promote a low-carbon development and the green economy through the integration of adaptation and mitigation in sectorial and local planning'. These objectives are intended to be met within three periods: short (2015–2019), medium (2020–2024) and long (2025–2030). The strategic actions included within the National Adaptation Plan (NAP) – correspond to the NCCAMS. Comparing these objectives to those measures intended to support Mozambique's recovery, it becomes clear there is very little overlap except in relation to specific VAT exemptions on certain agricultural products (related to food security, though not so much to increasing agricultural resilience), and in the case of other fiscal measures intended to support vulnerable groups and to increase health care expenditures (which could assist in relation to vector-borne diseases related to climate change).

Nigeria: Nigeria submitted its first NDC in 2017 (the second is due by end of 2021) which includes an economy-wide mitigation goal¹ set to be achieved through direct GHG reductions, such as ending gas flaring during oil extraction, and low-carbon economic transition such as reducing fossil fuel dependency towards a mixed energy system and improving energy efficiency by 30%. Nigeria's NDC also includes an adaptation component focused on improved preparedness for climate impacts at the different governance levels from state to village. There is some alignment between recovery measures and Nigeria's NDC, including on food and agriculture and MSME support. However, greater details are needed, particularly regarding infrastructure support and how this supports NDC objectives such as 'to switch car to bus', and similarly in the case of how housing developments will support energy efficiency objectives. Further, the pronounced focus on measures to support industry do not seem to align with low carbon transition objectives (despite some support to promote solar energy).

Rwanda: Rwanda's NDC submitted in 2020 provides for both mitigation and adaptation, including the reduction of GHG emissions relative to a business-as-usual emissions baseline over the period 2015–2030 and seeking to prioritise

adaptation interventions. In relation to mitigation, the areas of action that feature are specified within Rwanda's Green Growth and Climate Resilience Strategy. There is some overlap between the recovery measures in broad terms and the GRAP. The recovery strategy provides some support related to the areas of action – such as investment incentives for new factories, specific support for agro-processing, subsidies to the transportation sector – but the emphasis on 'green', 'sustainable' and 'resilient' is missing. The areas of focus in relation to adaptation for Rwanda are somewhat broader, with a focus on water, agriculture, land and forestry, human settlement, health, transportation and mining, as well as some cross-sectoral measures like access to finance.

South Africa: submitted in 2015, South Africa's NDC is supplementary to the National Climate Change Response Policy (2011), which details both mitigation and adaptation measures. The National Climate Change Adaptation Strategy (NCCAS) provides a guideline for how it aims to achieve climate change adaptation and resilience. The NCCAS is used as the basis for South Africa's obligations for adaptation components stated in its NDC (2015). There is some overlap and linkages between stimulus measures and South Africa's NDC that can be explored further.

1 An unconditional target of GHG reduction of 20% below business as usual by 2030 and a conditional target of 45% reduction below business as usual by 2030. The target is conditional on receiving international climate finance support.

Table 2 Examples of degrees of alignment between stimulus and NDCs

Country	Strong alignment	Limited alignment
Ghana	The support to commercial farming and establishment of a national food security committee aligns well with adaptation and food security objectives.	Subsidies for electricity use by households are not linked to the NDC objectives of scaling up renewable energy penetration.
Kenya	The Greening Kenya campaign aligns with adaptation objectives to rehabilitate and conserve degraded forests and supports mitigation objectives such as achieving a tree cover of at least 10% and scaling up nature-based solutions.	Supply of farm inputs through e-vouchers targeting 200,000 small-scale farmers could better support climate smart agriculture objectives.
Mozambique	No examples of strong alignment.	NDC calls for promotion of transfer and adoption of clean and climate change resilient technologies. However, stimulus package provides for subsidies for fossil fuels (household gas).
Nigeria	Promotion of solar energy is in line with mitigation component commitment to installing 13,000 megawatts of off-grid solar panels.	Off-grid and decentralised natural gas could be feeding into the 'secure energy backup' in case of emergency. But gas use would keep Nigeria in fossil fuel dependency.
Rwanda	No examples of strong alignment.	Incentives for greenfield and brownfield investment are not linked to NDC objectives of promoting green industry and measures do not distinguish between firms using greener technology or practices.
South Africa	Creation of 50,000 new job opportunities in environmental programmes is linked to NDC industrial policy actions. The finalisation of bioenergy regulations will assist renewable energy investments but other regulatory measures across renewables could also be considered.	The stimulus could further elaborate on how it intends to phase out coal fired power stations, such as its plans to retrofit old Mpumalanga power stations with solar panels.

Source: Adapted from summary of case studies, Annex 1.

3 Alignment between recovery strategies

This section begins by providing an overview of GRAP and the AGSP. It then proceeds to summarise the results of our assessment of the degree to which country recovery strategies are aligned with these based on the results of the case studies presented in Annex 1.

3.1 The GRAP and the AGSP

The objective of the GRAP, launched by the AU in July 2021 and which will run until 2027, is to position Africa on a path to response, recovery and growth in a sustainable, inclusive and green way. Specifically, the plan aims to achieve two broad objectives:

- to strengthen collaboration on a broad range of priorities in support of the AU's objective for the continent's sustainable and green recovery from Covid-19
- to support the realisation of a shared vision for a prosperous, secure, inclusive and innovative future for Africa.

It recognises that the Covid-19 pandemic has compounded the tight fiscal constraints, declining economic growth and large debts faced by most African states, and that this challenges the attainment of the goals of the 2030 Sustainable Development Agenda and the AU's Agenda 2063. Annex 2 summarises the GRAP in more detail.

Overall, there are five priority areas and key intervention areas:

- **Renewable energy:** promoting renewable energy, energy efficiency and access and supporting a just transition.
 - **Biodiversity and nature-based solutions:** promoting sustainable land management, forestry, oceans and ecotourism.
 - **Climate-resilient agriculture:** boosting agricultural output as a tool for economic development and green jobs.
 - **Green and resilient cities:** ensuring water management and enhancing information and communications technology (ICT).
- The GRAP was prepared to complement the AGSP, which was initiated towards the end of 2020 during the pandemic. As well as supporting Agenda 2063, the AGSP is intended to help operationalise the provisions of the UNFCCC and the Paris Agreement regarding finance, technology transfer and capacity building for African countries. It aims to achieve the following broad objectives:
1. Support the rapid response in support of sectors hardest hit by the pandemic.
 2. Build synergies, forge partnerships and enhance cooperation and coordination of existing climate change, biodiversity, desertification, land degradation and green economy programme amongst member states of the AU.
 3. Enhance political ambition and help to scale up implementation of existing and new projects and programmes in key areas through financial resource mobilisation and technical and capacity building support in support of the green recovery of Africa.
 4. Support the longer-term development of a transformative green economy in Africa.
- **Climate finance:** increasing the flow, efficiency and impact of finance in reducing emissions through mitigation and reducing vulnerability through adaptation.

5. Provide direction and support on medium-term interventions in key sectors to enhance their catalytic recovery.

Based on these objectives, the AGSP details 12 interlinked priorities: air quality, chemicals and waste management; biodiversity; ecotourism; land degradation and desertification, drought; climate action: blue economy; climate-smart agriculture and resilient food systems; sustainable forest management; water use and conservation; renewable energy; green urbanisation and smart cities; and information and communications technology (ICT).

South Africa played a leading role in the development of the AGSP, with President Cyril Ramaphosa in the AU chair when the pandemic unfolded. This led to a push to link the environmental agenda to the health response on the continent. The AGSP was designed to come up with short-term solutions but also to look at support and stabilisation in the medium term, meaning interventions of 3–5 years. The AGSP builds on the suite of sustainable development initiatives laid out in Agenda 2063, including environment, climate change, renewable energy and biodiversity.

The rationale behind the AGSP is to stimulate existing programmes on the continent through enhanced coordination, scaling up existing programmes and identifying new ones. It was designed not to supersede or replace existing programmes but instead to support their implementation through encouraging synergies and best-practice approaches. In this regard, the AGSP is intended to provide a broad platform for green stimulus activities and initiatives to grow at scale, but not necessarily to influence the structure or details of these programmes directly. The next steps will include mobilising technical and financial resources to scale up existing programmes.

There was an intention to consider trade implications in the design of the AGSP, but because the AfCFTA agreement and trade negotiations had not concluded by the release of the AGSP, there are no direct references. Instead, these synergies are to be explored and elaborated further as the AfCFTA process evolves.

It is important to emphasise that whilst there is no direct mention of manufacturing within the GRAP, there is within the AGSP, with regard to:

- **Boosting the circular economy and sustainable consumption and production:** As new sustainable business models and technologies emerge, greater opportunities in agriculture, manufacturing, construction and waste management can be harnessed through the circular economy to create jobs, improve livelihoods and reduce poverty.
- **Enhancing investment into renewable energy:** Supporting African countries to pursue significant investments in renewable energy, energy efficiency, clean cooking and in the local manufacturing/assembly facilities that support these. The pursuit of renewables should also drive the development of the up-stream value chain, so that countries also build local manufacturing or assembly of equipment and associated appliances used in renewables.

3.2 Assessment of alignment between recovery strategies and GRAP/AGSP

In this section, we review how country recovery strategies are aligned with the GRAP and the AGSP. To do this, we adopt a traffic light system to indicate the degree of convergence (green) or divergence (red) between recovery strategies. For the GRAP, we highlight relevant provisions, while for the AGSP we simply note either the

presence or absence of connected measures. The methodology is summarised in Appendix 2.

3.2.1 Alignment between recovery and GRAP

The results from our assessment of African recovery packages and alignment with the GRAP, summarised in Table 3, suggests a need for considerably greater effort. Overall, the results suggest that South Africa and Kenya have the most aligned recovery packages. The country least aligned is Mozambique, followed by Nigeria and Rwanda.

What is clear from Table 3 is that overall recovery strategies are least aligned with the GRAP category of renewable energy, followed by climate finance and biodiversity and nature-based solutions. Given the high dependence of African economies on fossil fuels and the wider issues regarding securing a just transition, this is an expected result. There are obvious links to climate finance, of course, as well as those that can be

made to nature-based solutions and the ability of African economies to tap into carbon markets to support transition objectives. These issues are discussed further in the next section, where links to trade policy are articulated.

Where there seems to be the most ambiguity regarding stimulus measures is in relation to the GRAP objectives on climate-resilient agriculture. While all recovery measures emphasise the agricultural sector, the link to climate-resilient or climate-smart agriculture is not always made. This means that stimulus packages also tend to have limited alignment with country NDC and adaptation plans. The second area where there seems to be most ambiguity between stimulus programmes and alignment with GRAP is in relation to objectives regarding green and resilient cities. While stimulus packages have included measures to support the digital economy, these have not always been encompassed within a broader long-term framework of support (e.g. temporary reductions of fees on digital transactions).

Table 3 Recovery and alignment with GRAP

GRAP	Ghana	Kenya	Mozambique	Nigeria	Rwanda	South Africa
Climate finance	Liquidity support for enterprises, but no link to climate	Greening Kenya campaign; youth employment measures; seed capital for small and medium enterprises (SMEs)	Credit lines extended to microbusiness; no links to climate	Support to solar, but also liquified natural gas and petroleum gas	Subsidies to business provided but no links to climate	Land Bank equity investments: The Land Bank equity investment strategy focuses on natural capital
Renewable energy	Subsidies for electricity, households and business	No incentives/support for transition	Subsidies to kitchen gas; no mention of promotion of renewable energy	Support for fossil gas that would otherwise be flared, outweighs solar panel incentives	No mention	Finalising bioenergy regulations

Continued on next page

Table 3 Recovery and alignment with GRAP continued

GRAP	Ghana	Kenya	Mozambique	Nigeria	Rwanda	South Africa
Biodiversity and nature-based solutions	Support for commercial farming but limited emphasis on sustainable production	Greening Kenya campaign; support for ecotourism	No mention	Increased land conversion to agriculture; no emphasis on sustainability	Support to tourism but links to eco-tourism unclear	Creation of 50,000 new job opportunities in environmental programmes; development of a globally recognised biodiversity protocol
Climate-resilient agriculture	Planting for Food and Jobs Programme, but not known if climate smart	Inputs through e-vouchers targeting 200,000 small-scale farmers	VAT exemptions for some agricultural products, no links to climate	Uncertainty as to design of agricultural boost programme	Promotion of agro-processing; no mention of links to resilient agriculture	Support for agriculture, tourism and other sectors with high job-creation potential
Green and resilient cities	Fast track digitalisation; reduced communications service tax	Hiring 1,000 interns in information technology; enhancing water provision	Lowering fees and charges for digital transactions through commercial banks, mobile banking, and e-currency	National Digital Switch Over	Fees for digital transaction waived (temporary)	Objective to make greater use of green infrastructure bonds

Source: Adapted from country case studies summarised in Appendix 1. Appendix 2 summarises the methodology.

Note: Green indicates explicit alignment as per provisions outlined in the recovery plan; yellow indicates possibility of alignment between agendas but lack of details at present preclude evaluation; red indicates no clear overlap between recovery measures and the GRAP.

3.2.2 Alignment between recovery and AGSP

In relation to alignment between stimulus measures with the AGSP, summarised in Table 4, there seems to be extremely limited alignment in the case of combating land degradation, desertification and drought, and also in enhancing climate action and investing in the blue economy. The reasons for this are related to the absence of climate change considerations within agriculture sector stimulus measures as well as the absence, in many cases, of specific reference to climate action within stimulus packages.

Of course, the relevance of the green stimulus programme to the blue economy may be limited in the case of land-locked economies such as Rwanda, though as part of the Great Lakes region even this is debatable.

Overall, the degree of alignment between stimulus measures and the AGSP is highest in the case of South Africa, followed by Kenya, Ghana, Nigeria and Rwanda, and lowest for Mozambique. Again, these differences may reflect the relative fiscal stimulus packages as well as capacity constraints.

Table 4 Recovery and alignment with the AGSP

Green Stimulus	Ghana	Kenya	Mozambique	Nigeria	Rwanda	South Africa
Improving air quality, enhancing chemicals and waste management and promoting the circular economy	✓	×	×	×	×	✓
Conserving biodiversity and combatting the illegal wildlife exploitation and trade	×	✓	×	×	×	✓
Revitalising eco-tourism and the biodiversity economy	×	✓	×	×	✓	✓
Combating land degradation, desertification and drought	×	×	×	×	×	×
Enhancing climate action	×	×	×	×	×	✓
Investing in the blue economy	×	×	×	×	×	✓
Scaling up climate-smart agriculture and food security systems	✓	✓	✓	✓	✓	✓
Supporting sustainable management of forests	×	✓	×	×	×	×
Improving water conservation and use	✓	✓	×	✓	×	✓
Investing in renewable energy	×	×	×	✓	×	✓
Developing smart cities and promoting green urbanisation	✓	×	×	✓	✓	✓
Enhancing ICT	✓	✓	×	✓	✓	✓

Source: Adapted from country case studies summarised in Appendix 1. Appendix 2 summarises the methodology.

Note: P denotes overlap between the AGSP's thematic area and the country's recovery plan. Green indicates explicit alignment as per provisions outlined in the recovery plan; yellow indicates possibility of alignment between agendas but lack of details at present preclude evaluation; red indicates no clear overlap between recovery measures and the AGSP.

4 Links with the AfCFTA

In this section, we review how the implementation of the AfCFTA can support both countries' own recovery efforts and the GRAP and the AGSP, now and in the future. This exercise can be done by exploring theoretical links, without any reference to the case studies (Table 5). However, in this section we also provide some specific examples drawn from the case studies summarised in Annex 1 to show how the AfCFTA can support African countries' recoveries.

This section begins with a general overview of the GRAP's links to trade, both explicit and implicit, and how these relate to the AfCFTA and its two main protocols: Phase I (goods, services, dispute settlement mechanism) and Phase II (intellectual property rights, investment, competition and e-commerce). It then proceeds to explore some specific examples of recovery strategies that exhibit a high degree of alignment with the GRAP and how the AfCFTA can support these, as well as some where there is less alignment.

4.1 Links between recovery, the GRAP and AfCFTA

The GRAP explicitly references trade under three of its five priority areas: renewable energy; nature-based solutions and biodiversity; and resilient agriculture. For example, the plan calls for improvements in clean cooking technologies to reduce fuelwood trade and the associated rate of deforestation. It encourages the effective management and legal and sustainable use of wildlife to counter the illegal wildlife trade. Under agriculture, the GRAP emphasises opportunities for intra-African trade and investment in the green agro-industry sector under the AfCFTA. In the two other GRAP priority areas – climate finance

and green and resilient cities – the links to trade policy are more rather more implicit. However, the digital transformation agenda included within the resilient cities priority area of the GRAP has obvious links to trade policy.

The summary of the links between the GRAP and AfCFTA presented in Table 5 is intended to articulate the current links to the AfCFTA as well as the future links that can be made, with a view to future negotiations. We summarise the key points in the following sub-sections before proceeding to examine how greater alignment between recovery, GRAP and the AfCFTA can be achieved in practice with reference to the findings from the case study analysis.

Climate finance: According to the GRAP, the financing gap for implementing the full scope of African NDCs is estimated at \$3 trillion by 2030. Climate finance is broad and includes both climate supportive investments, such as investments in green infrastructure and renewable energy deployment, as well as climate-friendly investment, such as ensuring investment undertakes environmental impact assessment requirements. This priority area also includes carbon markets, which has some links to the emphasis within country recovery strategies, as discussed in the next section.

Climate finance in the context of the AfCFTA is closely related to the investment protocol, which is yet to be negotiated. Regulatory convergence on investment may be required to develop common incentives to facilitate investment in climate-friendly research and development (R&D), technologies and infrastructure in a broader African market. Through facilitating and reducing the costs of cross-border climate-friendly

investments, the AfCFTA investment protocol offers an opportunity to improve the accessibility and efficiency of financial flows for both mitigation and adaptation, as called for in the GRAP.

The GRAP highlights the need to transform NDCs into a pipeline of bankable projects. The largest source of carbon emissions by sector differs hugely between countries. According

to the Economic Commission for Africa (ECA), the sectors contributing the most GHG in our case study countries are agriculture, (Kenya, Rwanda); energy (South Africa); and land-use change and forestry (Mozambique, Nigeria) (ECA, forthcoming). This implies that different sectors should be specifically targeted under AfCFTA's goods and services liberalisation agenda in order to support NDC objectives.

Table 5 Links between GRAP and AfCFTA

GRAP	Trade-related implications	Link to AfCFTA	
		Current (Phase I)	Future negs (Phase II)
Climate finance	Border measures: services (finance)	Services schedules	Investment
	Behind-the-border measures: competition; subsidies	Subsidies	
Renewable energy	Border measures: environmental goods and services; industrial goods; sensitive products/exclusion; quantitative restrictions	Industrial goods schedule of commitments: 7% 'sensitive'; 3% excluded	Intellectual property Investment
	Behind-the-border measures: standards; labels; subsidies; investment and investor-state dispute settlement (ISDS); government procurement	Services schedules Rules of origin Subsidies	Government procurement Competition
	Border measures: sensitive products/exclusion; quantitative restrictions; mandated due diligence	Agricultural trade and tariff schedule commitments:	Environmental exemptions Intellectual property
Nature-based solutions	Behind-the-border measures: safeguards; export duties; safeguards; standards; labels; intellectual property	7% 'sensitive'; 3% excluded	
	Border measures: agriculture market access; sensitive products/exclusion; quantitative restrictions; mandated due diligence	Agricultural trade and tariff schedule commitments:	Intellectual property Investment and DSM
Resilient agriculture	Behind-the-border measures: intellectual property; investment and ISDS; subsidies	7% 'sensitive'; 3% excluded Subsidies	
	Border measures: environmental goods and services; industrial goods; sensitive products/exclusion; quantitative restrictions	Industrial goods schedule of commitments: 7% 'sensitive'; 3% excluded	Intellectual property Investment
Green and resilient cities	Behind-the-border measures: standards; labels; subsidies; investment and ISDS; government procurement	Subsidies	Government procurement Competition

Note: The trade-related implications column adapts the classification developed by Deere Birkbeck (2021)

Finally, the AfCFTA offers a platform for developing a common and stronger position on climate-related issues in the multilateral setting, including on climate finance. Global Aid for Trade (AfT) programmes contain explicit environmental objectives, but a coherent framework to mainstream climate concerns into all AfT projects is lacking. Greater coherence is required to better enable countries to seize sustainable trade opportunities. The proportion of AfT investments with an explicit environmental objective averaged 20% in 2007, rising to almost 40% by 2014. These investments have predominantly supported renewable energy projects, low-carbon transportation systems and sustainable agriculture (Lammersen and Hynes, 2016).

African countries can use the AfCFTA as a pan-African platform to advocate a complementary approach between AfT and climate adaptation funds, based on NDCs and national adaptation programmes of action, targeting some of the sectors previously mentioned that are also priority areas within the GRAP. Furthermore, the AfCFTA could support a development-oriented carbon trading mechanism through its investment provisions and consider how best to adapt to carbon border adjustment mechanisms being considered by key trading partners such as the EU. Finally, the framework developed by the AfCFTA could support a united African position in discussions on fossil fuels under the World Trade Organization (WTO) Subsidies and Countervailing Measures Agreement.

Renewable energy: Currently the scalability and deployment of renewable energy in Africa is limited. The clean energy transition will require many countries to restructure their production systems away from extractive industries. Fifty-two African countries have NDC commitments to either develop energy efficiency policies or launch

renewable energy projects. Yet currently, 80% of Africa's electricity generation is fossil-fuel based, and 2500 power plants are planned, with only about 10% of the new power to be generated from renewables (ECA, forthcoming). In the short term, importing renewable technologies offers a solution to scaling renewable energy in Africa and can be supported through a favourable tariff regime. In the medium to long-term efforts will be required to (a) phase out fossil fuel plants, (b) provide a regulatory environment that favours renewables, and (c) invest in building capacities to develop renewable technologies on the continent. The GRAP highlights that 'a situation where Africa would enter a new era of external import dependence on renewable technology at a time when foreign exchange will be difficult to obtain due to the Covid-19 and economic disruption needs to be avoided'.

Currently, intra-African trade does not cover a significant number of renewable inputs. However, larger economies, such as Egypt, Morocco, and South Africa, have become the leaders in the renewables sector, supported by more advanced regulatory environments and financial markets. The AfCFTA can support the increased flow of technologies from these leaders to others in Africa, supported by liberalisation in the environmental goods schedule of the AfCFTA and the investment protocol to be negotiated.

For renewable energy technologies such as biogas, studies indicate the economic and technical feasibility of certain crops (maize, sugarcane, cassava, palm oil, jatropha, etc). In addition to being economically viable, biomass energy solutions can generate significant development multipliers. The primary benefit of biomass is that it cannot be depleted like fossil fuels. With an abundance of plants in Africa, biomass offers a primary source of renewable energy that can be used as a sustainable

alternative to fossil fuels. remains unresolved issues with respect to carbon pricing and carbon border taxes, production systems based on renewables like biomass will help to enhance competitiveness in the low carbon economy that is emerging characterised by carbon pricing and carbon border taxes. The food sector employs over 500 million people in African agriculture, with 450 million smallholder farmers. Harnessing biomass waste for sustainable energy production can help to increase access to energy for agriculture, increase yields and higher incomes, lower food loss, enhance food security and encourage cleaner and safe cooking methods. Since crops such as maize and sugarcane are cultivated in many African countries at both the large and small scale, there is potential for cross-border export opportunities related to biomass energy.

There is also potential for sub-regional trade through the interconnection and increased information exchange among Africa's Clean Energy Corridors, a regional initiative supported by the International Renewable Energy Agency to accelerate the development of renewable energy potential and cross-border trade of renewable power. The AfCFTA offers a platform for linking up and consolidating Africa's two sub-regional corridors: the West Africa Clean Energy Corridor for the Economic Community of West African States (ECOWAS) and the Africa Clean Energy Corridor for eastern and southern African countries. Many countries that participate in sub-regional pools have not been able to mobilise sufficient funds to finance supporting infrastructure projects. An expansive energy market under the AfCFTA is expected to attract private sector investments and development financing to allow for the funding of new technologies and infrastructure to reduce production costs, increase capacity, and maximise energy generation.

As African member states finalise their tariff schedules under the AfCFTA, it will be important that renewable energy technologies, such as wind turbines, solar panels and photovoltaic systems, are not included under sensitive or exclusion lists and instead feature within the 90% non-sensitive lists of liberalised goods under the AfCFTA. Assessing the status of trade in environmental goods in Africa using the Jacob and Møller (2017) methodology, which identifies four categories of environmental goods – renewable energy, environmental monitoring & assessment, environmental protection, and environmentally preferable goods – suggests that the continent currently both imports and exports the highest share of environmental protection goods, and the lowest share of renewable energy of all regions (ECA, forthcoming). The ECA and ECOWAS have already included the 15 renewable energy Harmonised System codes in their 90% non-sensitive lists. This means the trade of these renewable energy goods within the AfCFTA could continue and pave the way for more renewable energy projects.

Finally, appropriate intellectual property rights structures under the AfCFTA will be required to incentivise and facilitate the development and diffusion of renewable energy technologies. A natural option could be for AfCFTA IPR protocol to refer to or replicate Articles 27.2 and 27.3 of the WTO Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement that confirms that inventions can be excluded from patentability to protect animal or plant life or health or to avoid prejudice to nature or environment (Keane et al., 2021).

Biodiversity and nature-based solutions:

There are obvious links between this pillar of the GRAP and the emphasis on development-oriented carbon markets referred to in the climate finance pillar. Policy-makers may consider how

nature-based solutions, such as forest assets, may feature within domestic carbon markets and emissions trading schemes. These measures may be developed not only to leverage climate finance, but also to adapt to the imposition of carbon border adjustment mechanisms by extra-African trade partners in the future.

There are different entry points to support sustainable trade in biodiversity through the AfCFTA. This includes consideration of market access, services, investment, IPR and competition policy (UNCTAD, 2021). Examples include considering reductions for sustainably produced goods and services with local value addition and reducing non-tariff barriers including through harmonised African quality standards to promote value-added products and services that promote biodiversity and BioTrade principles.²

The Sanitary and Phytosanitary (SPS) Annex of the AfCFTA requires that African states have in place a functioning SPS system, and they are encouraged to use international standards as their basis.³ These standards can support biodiversity objectives, but weak capacity within institutions will need to be addressed particularly since climate change will increase pressures on existing systems.

The AfCFTA IPR protocol can be designed to establish basic principles on a set of IPRs – and potentially on related biodiversity and traditional knowledge matters – that would favour countries and actors involved in the trade of sustainably sourced products. For example, African leaders

could consider establishing a mandate to develop an additional legal instrument on cooperation on trade, environment, and sustainable development; this could build on the African Nature Convention and the AU Practical Guidelines for the Coordinated Implementation of the Nagoya Protocol.⁴

Finally, liberalisation of business and financial services relevant to the environment to help African enterprises gain access to expertise and capital on an intra-African basis can support initiatives on biodiversity and nature-based solutions. In addition to a focus on biodiversity and nature-based solutions, the GRAP highlights the promotion of sustainable blue economies and eco-tourism as two critical areas under the biodiversity and nature-based solutions cluster. Economic and trade activities associated with the ocean include traditional sectors such as commercial fishing, coastal tourism and maritime transport; hence, market access for these sectors should be considered within the broader framework of the AfCFTA and what it can add relative to other international agreements.

Climate-resilient agriculture: The GRAP calls for a coordinated approach to making agriculture and broader rural communities more resilient. The ECA estimates that intra-African exports in agriculture and food products will increase by between 20% (\$9.5 billion) and 35% (\$16.8 billion) relative to the baseline without AfCFTA in place in 2040 (depending on the ambition of the scenario). The largest gains are found in meat products, milk and dairy products, sugar, beverages and tobacco, vegetables/fruit/nuts

² BioTrade is when a product or service sourced from biodiversity is commercialised and traded in a way that respects people and nature. See UNCTAD BioTrade initiative (<https://unctad.org/topic/trade-and-environment/biotrade>).

³ Such as the CODEX Alimentarius, the International Office of Epizootics or the International Plant Protection Convention, which regulate the use of toxic pesticides and veterinary medicines, invasive alien species, and animal diseases. See van der Ven and Signe (2021).

⁴ The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Resulting from their Utilization.

and paddy and processed rice (ECA, 2020). The AfCFTA Annexes on Trade Facilitation, Customs Cooperation, Technical Barriers to Trade and SPS are also expected to boost rural connectivity and development, increasing agricultural market access and cross-border agricultural trade and enhancing food security.

These agriculture-related gains from the AfCFTA are not guaranteed, especially given the effects of climate change. The effects of the trade gains on the climate also deserve greater attention (for example, methane emissions from some types of agricultural production). However, the AfCFTA can be crafted to ensure tariff liberalisation schedules promote agricultural development and intra-African trade and build resilience to trade shocks by enabling trade to flow between members. Enforceable rules should be created to ensure global discipline in the use of trade measures that impede crisis response, such as export restrictions on food or medicine or restrictive intellectual property rights that prevent the diffusion of clean technologies to developing countries. The need for transparency and predictability in policies affecting trade is always pressing, but it is particularly urgent during a crisis. Technology can also play a vital role through adaptation measures in genetic improvement, integrated watershed management, improvements to irrigation systems, revalidation of agricultural technologies, incorporation of weather information systems and crop diversification.

Phase II of the AfCFTA negotiations offer an opportunity to make building resilience in agriculture a more central objective of Africa's continental integration process, with reference to the protocols on IPR and investment. As

highlighted in the GRAP, scaling up financing for climate change adaptation in agriculture relies not only on technological innovations but also on the supporting institutional, policy and investment environments.

Green and resilient cities: As highlighted in the GRAP, Africa's growing population will need new systems for transport and mobility. Development of the infrastructure and industry that shape cities can be decoupled from a high-emissions trajectory to avoid lock-ins that are costly to fix later. This will require significant investments which can be facilitated by the AfCFTA Investment Protocol. Regulatory convergence on investment issues under the AfCFTA is expected to facilitate access by both African and foreign investors in a broader African market. Multi-modal urban transportation investments will be needed. Looking ahead, the ECA is supporting AU Member States to align their AfCFTA National Implementation Strategies with urban consumption and production opportunities in goods and services.⁵

4.2 Specific links between recovery, GRAP and the AfCFTA

Moving from the general to the specific, in this section, we focus on the areas specifically identified within country recovery strategies which have the greatest and least alignment with the GRAP and explore how the AfCFTA could be used to support a more resilient recovery. We draw on some examples of convergence and divergence between country recovery strategies and their degree of alignment with the GRAP and summarise these in Table 6. In the following section we describe how levels of ambition could be increased.

5 To facilitate this, in 2021, ECA will launch a policy toolkit to assist African policy makers in leveraging the potential of resilient cities to boost economic development via intra-regional trade. The GRAP offers a complementary policy document to support the integration of green considerations into the application of this policy toolkit.

Table 6 Examples of how the AfCFTA can support resilient recoveries

Stimulus measure	Green recovery implications	Links to the AfCFTA
Kenya: Greening Kenya Campaign; renovation of facilities and the restructuring of business operations in tourism	Biodiversity and nature-based solutions – sustainable land management, forestry, oceans, and ecotourism	Current protocols: market access; tariffs on sensitive products; safeguards; due diligence; standards. Services: labour mobility; digital trade Future protocols: investment, IPR, and competition policy
Ghana: reduce Communications Service Tax (CST) from 9% to 5% to support remote working and online services	Green and resilient cities (enhancing ICT)	Current protocols: services Future protocols: e-commerce; competition; investment, IPR
Nigeria: tariff exemption on goods and services for the delivery of solar-power farms; subsidies to finance solar-power farms	Renewable energy	Current protocols: tariffs on environmental goods; subsidies (Art. 17) Future protocols: investment, IPR and competition policy

Source: Adapted from case studies summarised in Annex 1.

Note: Uses colour code indicated in Table 3.

4.2.1 Biodiversity and nature-based solutions

The biodiversity and nature-based solutions pillar of GRAP seeks to promote sustainable land management, forestry, oceans and ecotourism. The Greening Kenya campaign, with its emphasis on growing trees and achieving more than 10% forest cover in the country, is clearly in alignment with these objectives. The links to the AfCFTA are mostly related to current protocols regarding market access (e.g. on forestry products and services), tariffs on sensitive products, and standards.

Issues regarding supply chain diligence have not yet been considered within AfCFTA negotiations. A number of Africa's trade partners, however, are considering how to strengthen due diligence within supply chains to ensure sustainable trade outcomes (like the UK Environment Bill which legislates for enhanced due diligence to prevent illegal logging products in supply chains).⁶

The renovation of facilities and business operations in tourism may also be related to ecotourism, although more detail is needed. The services protocol and existing provisions on labour mobility and digital trade are of relevance to tourism, as well as the development of harmonised standards.

6 See the UK Environment Act 2021 (<https://bills.parliament.uk/bills/2593>).

4.2.2 Green and resilient cities

The green and resilient cities pillar of the GRAP includes using enhanced ICT. Like most case studies analysed in this study, Ghana has provided specific support measures to support the digital economy, and this includes the reduction of the CST to support remote working and online services. However, it is unclear how this measure may be related to the broader aspirations of the GRAP. For example, is the reduction in the CST permanent? Is it related to broader measures to support working from home, reduced pressure on existing transportation systems and therefore the development of green and resilient cities? There are clear links to the existing AfCFTA protocol on trade in services as well as those under negotiation related to e-commerce, competition policy, investment and IPR.

4.2.3 Renewable energy

The renewable energy pillar of the GRAP seeks to promote renewable energy and energy efficiency and provide access in supporting a just transition. Given the results summarised in Table 3, this is clearly the area where there is the most limited degree of alignment with recovery strategies. This is unsurprising in view of the challenges of transitioning towards renewable energy sources for some of the case study countries, given their dependence on fossil fuels. In the case of Nigeria (coded red), although it has some specific measures to support solar industry development (Table 6), these pale in significance compared to the emphasis on existing fossil-fuel-based industries.

5 Opportunities to increase ambition

The opportunities to increase the climate ambition of resilient recovery efforts are of course underpinned by fiscal considerations. However, as the analysis has shown, greater alignment with the GRAP and the AfCFTA trade can also support these efforts. In this sense, there are opportunities to increase ambition now, based on existing provisions of the AfCFTA, as well as in the future, considering ongoing Phase II negotiations. There is a window of opportunity to embed environmental considerations within its protocols.

As countries embark on implementation of the AfCFTA, complementary reforms will also be needed to ensure African firms are able to compete in a new green world compatible with the goals laid out in the GRAP. With this context, the ECA is launching a new project to assist member states to develop AfCFTA national implementation strategies that integrate environmental considerations.

This section reviews in turn those areas where there is a need for greater alignment between recovery initiatives and the GRAP, where there is a need for greater clarity, and where there are opportunities to raise ambition in view of the current and future provisions of the AfCFTA. Overall, across all pillars of the GRAP, the findings derived from the case studies suggest that future AfCFTA negotiations on areas such as e-commerce, investment, IPR and competition will be critical to support resilient recoveries.

5.1 Need for greater alignment: renewable energy

Our analysis suggests the greatest need is for alignment between recovery strategies and the

renewable energy objectives of the GRAP. This area is particularly challenging in view of the issues around securing a just transition. It also requires the effective operationalisation of other pillars of the GRAP, such as on climate finance. However, the effective implementation of the AfCFTA now and negotiation of its future provisions can also help to raise country ambition in this area. There are already provisions within the AfCFTA to support the provision of subsidies to the renewable sector. However, it is important to note that these are not unique to the AfCFTA since they are in essence the same as the WTO's Agreement on Subsidies and Countervailing Measures. Therefore, it is fair to say that the only value addition is that non-WTO African members will now also be bound in the same way as WTO African members.

There is a need to create a framework that supports, promotes and facilitate green investments and enables climate finance flows through the identification of bankable projects. Competition policy could be crafted to encourage private sector investments in innovations around energy efficiency improvements, with overall market access considerations shaping the ability of relevant technology to flow across borders.

5.2 Need for greater clarity: climate-smart agriculture

All recovery strategies reviewed have emphasised the agricultural sector and many refer to food security. However, the links to climate-smart agriculture have not yet been made and greater clarity is needed to ensure greater alignment with GRAP and more ambition on resilient recovery. The AfCFTA can support this where countries prioritise the reduction of agricultural tariffs to

encourage intra-African agricultural trade to enhance resilience to climate-driven agricultural shocks, as well as non-tariff measures. There will also be a need to consider how crops for biofuel production can support the objectives of GRAP.

The commercialisation of the agricultural sector is referred to in several of the case studies analysed. This objective, in view of building greater productive capacity for a resilient agricultural sector, can be supported in the future by the AfCFTA's competition policy. The framework can encourage private sector investment in climate-resilient agriculture. Used in conjunction with the investment protocol, a conducive framework can stimulate enhanced intra-African trade and investment in climate-smart agriculture. Clearly, affordable access to climate-smart agricultural technologies will be key; this aspect requires careful consideration within liberalisation schedules and with a view to future negotiations on IPR to spur African innovations and support intra-African trade in this sector.

5.3 Opportunities to increase ambition in the future

Measures to support the digital economy have featured prominently within recovery strategies but it is unclear which are intended to be permanent and therefore in line with the transformation envisaged within the GRAP. To raise the ambition of recovery strategies in line with GRAP, it will be important to consider how digital economy measures could induce the scale of transformation needed to create green and resilient cities. Clearly, future negotiations on the e-commerce protocol could support these objectives. However, it is important that these negotiations don't lose sight of the broader digital trade agenda (some of which is being discussed by WTO members).

5.4 Need for advocacy

There will be a need for advocacy regarding greater ambition to secure resilient recoveries. Given the limited prominence of environmental and climate concerns within the AfCFTA so far, there is a need for greater awareness of the potential the agreement holds for addressing them (Table 7).

Currently, the agreement provides for general environmental exceptions, with state parties able to adopt measures that are inconsistent with the Protocol on Trade in Goods if measures are 'necessary to protect human, animal or plant life or health and...relate to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption' (Art 26, General Exceptions, AfCFTA Protocol on Trade in Goods).

In addition to considering how the legal text of the future protocols will be shaped, state parties to the AfCFTA will need support to reflect on their institutional mandates and current regulatory framework outside of the negotiations. In some cases, it will be possible to mainstream resilient recovery ambitions within the existing framework of implementation of the AfCFTA, for example by ensuring that sensitive lists do not include environmental goods and services. In the case of e-commerce, digital trade has supported resilience within the context of the Covid-19 pandemic. Future intra-African negotiations in this area should seek to increase the ability of digital trade to support resilience in view of the objectives of GRAP, which is a transformative agenda. However, this longer-term aspiration is not yet reflected in the country recovery strategies reviewed.

Table 7 Summary of how the AfCFTA can support green and resilient recoveries

Now	Future
Identify environmental goods and services in the yet-to-be submitted/approved national schedules	Investment: create a framework that supports, promotes and facilitates green investments and climate finance flows; bankable projects
Consider how to use rules of origin to support sustainability objectives through relaxations for environmental goods and services	Intellectual property: develop a regime that supports African economies to access green technologies, biodiversity and nature-based solutions and supports the transition to green and resilient economies, including in relation to digital trade
Make use of harmonised environmental standards, e.g. promote use of the Eco Mark Africa tourism sustainability standard	Competition policy: develop a framework to encourage private sector investments in innovations around energy efficiency improvements, nature-based solutions and climate-resilient agriculture
Develop eco-friendly models for the movement and goods and people	Digital trade: digital trade underpins modern manufacturing, as well as the development of climate smart agriculture; digital platforms also reduce the need for travel; data localisation requirements can hinder cross-border data flows
Consider regulatory and enforcement for environmental sustainability, including restricting and prohibiting environmentally harmful goods and services as well as upgrading SPS systems	

6 Conclusions

There are major differences between the African case studies in terms of resources devoted to responding to Covid-19 as well as in their varying emphasis on trade in supporting recovery and specific policy measures. All have emphasised health and social sectors and those with high economic multipliers. There are some direct, as well as many indirect, references to the role of trade in driving recovery, but greening trade objectives do not yet feature prominently. Over time, however, there has been a greater emphasis within some recovery strategies on resilience, which, as we define it, relates to green growth and climate change objectives.

There seems to be the greater alignment between NDCs and the GRAP as compared to recovery strategies and the GRAP. This is of course, an expected result given that NDCs are intended to be supported by finance including from international sources. What this illustrates is that resilient recovery endeavours are constrained by finance, and in the case of the LDCs, capacity constraints too.

The limited overall alignment between country recovery strategies and the GRAP is in many cases due to a lack of clarity about how specific stimulus measures within sectors may be operationalised in practice. The analysis has shown how greater alignment could be achieved by removing some of this ambiguity and providing specific linkages between recovery strategies and the GRAP. We have shown how the protocols of the AfCFTA – now and in the future – *can* support resilient recovery endeavours.

Of course, much remains to be negotiated within the AfCFTA and the current period is a crucial time for these continuing deliberations. However,

the flexibility, exemptions and other related provisions of the existing protocols can already be invoked to deal with environmental concerns, even though there may be no specific mention of climate change. Looking ahead, in view of the role that future negotiations on protocols on digital trade, investment, IPR and competition could play in supporting resilient recoveries, there may be a need to refer more explicitly to environmental objectives and climate change. There are different ways in which this could be achieved: perhaps through a specific environmental protocol, a trade and sustainability chapter, or through ensuring future protocols make specific reference to climate change.

The formulation of an African position on trade and environmental sustainability and climate change within the AfCFTA could strengthen positions at the multilateral level. This relates to discussions on greening AfT, as well as advocating international agreement on border carbon adjustment mechanisms and their relationship to carbon standards and carbon markets. Within the GRAP, there is a strong emphasis on development-orientated carbon markets that needs to be reflected within trade policy, including regarding the creation of harmonised standards and the appropriate frameworks to support climate-finance-related investments.

The key recommendations arising from this analysis are as follow:

- AfCFTA member states must agree on a list of environmental goods and services based on their capability to mitigate and adapt to climate change and to contribute to the economic recovery.

- Eliminate tariffs and other restrictions to the intra-African trade in environmental goods and services. Member states should refrain from including these products and services in their lists of sensitive products.
- Member states and regional economic communities can also advance unilaterally in the elimination of Most Favoured Nation duties on the same products.
- Introduce flexibilities in rules of origin that facilitate the trade in environmental goods.
- Develop an Africa-wide system of environmental and climate standards for products and services (e.g. Eco Mark for tourism)
- Develop a framework that supports, promotes and facilitates the green investments and climate finance flows required to support intra-African cooperation for large scale-renewable energy investments.
- Member states, through their investment promotion agencies, should prioritise green investment in the promotion and facilitation of inward and outward investment.
- Develop a regime in the IPR protocol negotiations that supports the transfer and adoption of green technologies between African economies
- Articulate the AfCFTA protocols on IPRs, investment and competition policy to promote and facilitate investment in renewable energies and technologies that support climate change objectives.
- Ensure the AfCFTA provisions on digital trade facilitate cross-border data flows and the promotion of modern manufacturing and climate-smart agriculture.
- Consider the environmental and climate change dimensions of the continental value chains resulting from the implementation of the AfCFTA.

References

- African Union** (2021) *African Union Green Recovery Action Plan 2020-2026*. Addis Ababa: African Union.
- Al Jazeera** (2021) 'South African scientists monitoring new coronavirus variant' Al Jazeera News (www.aljazeera.com/news/2021/8/30/south-africa-scientists-detect-new-covid-variant).
- CAT** (2021) 'Nigeria, CAT Climate Target Update Tracker'. Webpage. Climate Action Tracker (<https://climateactiontracker.org/climate-target-update-tracker/nigeria>).
- CAT** (2021) 'Kenya, CAT Climate Target Update Tracker'. Webpage. Climate Action Tracker (<https://climateactiontracker.org/climate-target-update-tracker/kenya>).
- CNBC** (2021) 'South Africa unrest and Covid measures are starting to derail its economic recovery' CNBC News (<https://www.cnbc.com/2021/08/02/south-africa-unrest-and-covid-measures-are-starting-to-derail-its-economic-recovery.html>)
- Deere Birkbeck, C.** (2021) *Greening international trade: pathways forward*. Geneva: Global Governance Centre and the Forum on Trade, Environment & the SDGs (www.graduateinstitute.ch/sites/internet/files/2021-07/Greening%20International%20Trade_18.07.2021.pdf).
- ECA – Economic Commission for Africa** (2020) *Identifying priority products and value chains for standards harmonization in Africa: technical study*. Addis Ababa: United Nations Economic Commission for Africa and African Union (<https://hdl.handle.net/10855/43813>).
- Federal Government of Nigeria** (2017) Approved Nigeria's INDC. Nationally Determined Contributions. Bonn, Germany: UNFCCC, p. 23 (www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nigeria%20First/Approved%20Nigeria's%20INDC_271115.pdf).
- Federal Government of Nigeria** (2020) *Bouncing back: Nigeria Economic Sustainability Plan*. Abuja: Federal Government of Nigeria (<https://media.premiumtimesng.com/wp-content/files/2020/06/ESC-Plan-compressed-1.pdf>).
- Government of South Africa** (2020) 'The South African economic reconstruction and recovery plan' Government of South Africa, (www.gov.za/sites/default/files/gcis_document/202010/south-african-economic-reconstruction-and-recovery-plan.pdf)
- Hepburn, C., O'Callaghan, B., Stern, N., et al.** (2020) 'Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?' *Oxford Review of Economic Policy* 36(S1): S359–S381 (<https://doi.org/10.1093/oxrep/graa015>).
- IMF** (2021a) Mozambique at a Glance, International Monetary Fund: Washington, D.C. [accessed 26 October 2021] (available at: <https://www.imf.org/en/Countries/MOZ#whatsnew>).
- IMF** (2021b) 'IMF staff completes review mission to Rwanda'. IMF press release no. 21/123 (www.imf.org/en/News/Articles/2021/05/06/pr21123-rwanda-imf-staff-completes-review-mission-to-rwanda).
- IMF** (2021c) Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic. Webpage. October (www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19).
- International Growth Centre** (2021) Executive Summary: Mozambique Country Strategy Note (www.theigc.org/wp-content/uploads/2015/11/Mozambique-CSN.pdf).
- Jacob A. and Møller A.** (2017) *Policy landscape of trade in environmental goods and services*. ARTNeT Working Paper Series No. 166. Bangkok: Economic and Social Commission for Asia and the Pacific.

- Keane J., Mender-Parra M., Pettinotti L. and Sommer L.** (2021) *The climate and trade nexus in Africa*. ODI report. London, UK: ODI
- KPMG** (2020) 'Mozambique: government and institution measures in response to COVID-19' KPMG webpage, 28 October (<https://home.kpmg/xx/en/home/insights/2020/04/mozambique-government-and-institution-measures-in-response-to-covid.html>).
- Lammersen, F. and Hynes, W.** (2016) *Aid for trade and the Sustainable Development Agenda*. Paris: OECD (<https://doi.org/10.1787/69af6b8e-en>).
- National Treasury of Kenya** (2020c) *Post-COVID-19 economic recovery strategy* (www.treasury.go.ke/component/jdownloads/send/226-strategies/1709-draft-post-covid-19-economic-recovery-strategy-2020-2022.html).
- ND GAIN** (2018) 'Rankings'. Notre Dame Global Adaptation Initiative webpage (<https://gain.nd.edu/our-work/country-index/rankings>).
- Our World in Data** (2021) 'Ghana: CO2 country profile'. Our World in Data webpage (<https://ourworldindata.org/co2/country/ghana>).
- PwC** (2017) *Assessing the impact of gas flaring on the Nigerian economy*. Lagos: PwC (www.pwc.com/ng/en/assets/pdf/gas-flaring-impact2.pdf).
- Republic of Ghana** (2015) 'Ghana's Intended Nationally Determined Contribution (INDC) and accompanying explanatory note' (www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ghana%20First/GH_INDC_2392015.pdf).
- Republic of Ghana** (2021) *Ghana Covid-19 alleviation and revitalization of enterprises support*. Ministry of Finance, Republic of Ghana (www.mofep.gov.gh/sites/default/files/news/care-program.pdf).
- Republic of Kenya** (2015) 'Kenya's Intended Nationally Determined Contribution (INDC) and accompanying explanatory note'. Ministry of Environment and Forestry, Republic of Kenya ([www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya%27s%20First%20%20NDC%20\(updated%20version\).pdf](http://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya%27s%20First%20%20NDC%20(updated%20version).pdf)).
- Republic of Kenya** (2021) Building back better: Strategy for resilient and sustainable economic recovery. 2021 budget policy statement (www.parliament.go.ke/sites/default/files/2021-02/2021%20Budget%20Policy%20Statement%20from%20the%20National%20Treasury.-compressed.pdf).
- Republic of Mozambique** (2015) Intended Nationally Determined Contribution (INDC) of Mozambique to the United Nations Framework Convention on Climate Change (UNFCCC) (https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Mozambique%20First/MOZ_INDC_Final_Version.pdf).
- Reuters** (2021) South Africa Riots Will Push Economy into 3% Contraction in Q3, Reuters [accessed July 16 2021] (www.reuters.com/world/africa/south-africa-riots-will-push-economy-into-3-contraction-q3-jpmorgan-2021-07-16/)
- Van der Ven, C. and Signe, L.** (2021) 'Greening the AfCFTA: It is not too late'. Africa Growth Initiative at Brookings, policy brief. Washington DC (www.brookings.edu/research/greening-the-afcfta-it-is-not-too-late).
- UNCTAD – United Nations Conference on Trade and Development** (2021) *Implications of the African Continental Free Trade Area for trade and biodiversity: policy and regulatory recommendations*. Geneva: UNCTAD.
- UNDP** (2021) 'South Africa'. Webpage. UNDP Climate Change Adaptation (www.adaptation-undp.org/explore/africa/south-africa).

World Bank (2020a) Global economic prospects. June. Washington DC: World Bank
(www.worldbank.org/en/publication/global-economic-prospects).

World Bank (2020b) <Nigeria in times of COVID-19: laying foundations for a strong recovery>. Washington DC: World Bank (<https://documents1.worldbank.org/curated/en/695491593024516552/pdf/Nigeria-in-Times-of-COVID-19-Laying-Foundations-for-a-Strong-Recovery.pdf>).

World Bank (2021a) Mozambique economic update: setting the stage for recovery>. Washington DC: World Bank (<https://openknowledge.worldbank.org/handle/10986/35214>).

World Bank (2021b) <Rwanda economic update, January 2021: protect and promote human capital in a post-COVID-19 world>. Kigali: World Bank (<https://openknowledge.worldbank.org/handle/10986/35111> License: CC BY 3.0 IGO).

World Health Organization (2021) Kenya: WHO coronavirus (COVID-19) dashboard. Webpage (<https://covid19.who.int/region/afro/country/ke>).