Annexes

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

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Appendix 1 Case studies

Ghana

Introduction

Ghana registered its first Covid-19 case in April 2020. The government implemented precautionary measures such as lockdowns that affected economic and social activities in the country. Stay-at-home requirements, coupled with restriction on international travel and the work-from-home mandate meant that many business activities were significantly reduced and, in some cases, halted. This contributed to a fall in GDP growth from 6.5% in 2019 to 0.4% in 2020 as all sectors except agriculture contracted.[1] Travel restrictions, import restrictions and stringent border control measures affected global supply chains, impacting on domestic retail and manufacturing.

While these measures arguably contributed to the drop in emission levels of CO_2 and other GHGs, the pandemic put the government in a position where huge financial investments were required to contain the spread of the Covid-19 virus and provide relief and welfare measures its citizens. These translated into fiscal constraints reflected in the rise of public debt from 62.4% in 2019 to 76.1% of GDP in 2020 (Republic of Ghana, 2021), with a significant amount of this funding directed to containment measures and the provision of economic stimulus packages to the businesses and individual.

New measures and initiatives aimed at kick-starting economic activities such as manufacturing, trade and services have tended to put at risk the progress made on the environmental front and on Ghana's commitments to climate action such as the UNFCCC. The AfFCTA that came into force on 1 January 2021 is a key policy tool that could spur more economic activity and trade but could have negative effects on Ghana's environmental capital through the high social and environmental costs of regional integration.

This case study seeks to explore how Ghana can recover from the pandemic in an economically resilient manner, ensuring increased economic activity while strengthening a transition to a green and environmentally sustainable economy. It will analyse the government's response programme within the context of the AfCFTA and key environmental policy documents such as the AU's GRAP and the AGSP. It concludes with recommendations on how the government could strengthen local implementation of the AfCFTA to deliver a green recovery and on how the current and future rounds of negotiations on the AfCFTA could support a climate-friendly and resilient integration of the continent's trade.

Emerging patterns of economic recovery

Summary of economic recovery strategies

The government's first economic response to the Covid-19 pandemic was the Coronavirus Alleviation Programme (CAP) that provided GHC 3 billion ($510 million) as macroeconomic stimulus. In May 2020, the government developed the Ghana Covid-19 Alleviation and Revitalizations of Enterprises Support (Ghana CARES) programme that sought to build on the immediate response

1 From World Bank Data webpage (https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=GH).

provided by the CAP and move the economy from recovery to stabilisation and revitalisation. The CARES programme was designed to be implemented in two phases over a period of three years (2020–2023). The first phase focused on stabilising the economy in 2020 with an additional GHC 2 billion, while the second phase will focus on revitalisation and transformation of businesses with an injection of GHC 100 billion.

The fiscal response from the government is complemented by monetary and tax policies aimed at alleviating financial pressures from enterprises and individuals. These include the flexibilities such as extension of tax filing dates, waivers, reductions, and strategic deductibles. The Bank of Ghana also cut its policy rates and reduced capital requirements to provide additional liquidity for the private sector.

Assessment of economic stimulus based on Hepburn's archetypes

Using a framework provided by Hepburn et al. (2020), the different stimulus measures provided by the government can be assessed to determine their economic multiplier effect and alignment with a climate-friendly ambition (Table 8).

Table 8 Ghana's economic stimulus: multipliers and climate ambition

Stimulus measure	Type	Climate ambition	Economic multiplier
Fiscal			
Waiver of interests and penalties	A	Low	Low
Facility to assist large businesses to borrow at lower interest rates and at longer tenor	C	Low	Low
CAP Business Support Scheme and NBSSI/Mastercard Foundation Scheme for MSMEs; clear outstanding payments with businesses and pay current obligations to businesses	D	Low	High
Reduction of Communications Service Tax (CST)	G	Low	Low
Extension of tax filing deadlines	I	Low	Low
Tax exemptions for donations towards Covid-19 and emoluments of health care workers	J	Low	Low
Relief provision of water and sanitation for households for three months, distribution of hot meals and food packages, subsidy for electricity use in households and businesses	K	Low	High
Covid-19 Emergency Preparedness and Response Plan (EPRP), financial relief for frontline health workers, Agenda 111[2]	M	High	High
Seed-Fund for a retraining Programme to help workers who are laid off to either upgrade their skills or acquire new skills	N	Low	High
Unemployment Insurance Scheme for workers and provision of temporary income support for laid off workers	O	Low	High

2 Agenda 111 is a government initiative to invest in healthcare by the construction of hospitals with accommodation for clinical staff, regional hospitals, a center for disease control, psychiatric hospitals, etc. It is estimated to be the largest government health investment in the last 50 years.

Stimulus measure	Type	Climate ambition	Economic multiplier
Increase local content in government procurement	R	Low	High
Establish a National Food Security Committee	W	High	Low
Monetary			
Bank of Ghana cut its policy rate by 150 basis points to 14.5% and reserve requirement ratio by 2%	C, D	Low	Low
Lower primary reserve requirement from 10% to 8%, and 6% for community banks and savings/loan companies, lowering the capital conservation buffer from 3% to 1.5%	C, D	Low	Low

From the assessment above, the government's response to the pandemic focuses more on stimulating the economy to recovery with initiatives that are not particularly aligned with a high climate ambition. Stimulus initiatives focus on providing immediate support to individuals and enterprises through providing basic needs for water, food and electricity, strengthening the capacity of health systems to deal with the pandemic, and providing financial support to individuals and businesses to keep them afloat through economic downturns. The few initiatives that have climate ambition focus more on building resilience, in health and food sectors, than on developing systems that lead to a transition from the status quo to a greener economy.

Alignment of economic stimulus with NDCs

Ghana submitted its Intended Nationally Determined Contribution (INDC) to the UNFCCC in 2015. The INDC builds on national policies and documents that aim to address the mitigation, adaptation, and technology transfer. To achieve its mitigation goals, Ghana committed to an unconditional 15% reduction in its GHG emissions by 2030 (Republic of Ghana, 2015).

With international financial support to implement the NDCs, Ghana anticipates reducing its GHG emissions by 30% from business-as-usual levels of 2015. As of 2019, CO_2 emissions had reduced by 6.25% from 2015 levels, with consistent increases from 2017 (Our World in Data, 2021).

Overall, Ghana, through its NDCs, will deploy mitigation strategies that will focus on transition to renewable energy in terms of generation and domestic use, sustainable mass transportation, sustainable utilisation of forests, urban solid waste management, energy efficiency improvements in industries, and on contributing to the Green Cooling Africa Initiative. Its adaptation strategies will focus on agriculture and food security, resilient infrastructure in built environments, climate change and health, water resources, and gender and the vulnerable.

Analysis reveals that the stimulus from the government have a mixed alignment or correlation with the adaptation and mitigation strategies contained in the INDCs (see Table 9). Specifically, the stimulus package targets an immediate response for businesses and individuals with a focus on economic sustenance, containment of the spread and treatment of the coronavirus, and provision of necessities for individuals and enterprises.

Table 9 Stimulus measures and related INDCs, with ratings

Stimulus measure	Components in INDCs	Assessment
CAP Business Support Scheme and NBSSI/Mastercard Foundation Scheme for MSMEs, including the PFJ Programme, water and sanitation, etc.	**Adaptation** Agriculture resilience building in climate vulnerable landscape **Mitigation** Adopt alternative urban solid waste management	Stimulus could be better aligned with mitigation and adaptation strategies by ensuring that businesses supported by the schemes promote transitions to green practices such as climate smart agriculture, etc.
Relief for provision of water and sanitation for households for three months	**Adaptation** Strengthen equitable distribution and access to water for 20% of the population living in climate change risk communities	Stimulus aligns with adaptation strategy in the INDC. However, initiative is temporary
Subsidy for electricity use in households and businesses (100% subsidy for lifeline customers; 50% for all others)	**Mitigation** Energy efficiency improvement to 20% in power plants, expand the adoption of market-based cleaner cooking solutions, promote clean rural households lighting, scale up renewable energy penetration by 10% by 2030, double energy efficiency improvement to 20% in industrial facilities	Stimulus focuses on provision of the electricity to users but lacks any green ambition
Covid-19 Emergency Preparedness and Response Plan (EPRP), relief for health workers, Agenda 111	**Adaptation** Strengthen climate-related disease surveillance in vulnerable communities in three districts; adopt climate change informed health information systems including traditional knowledge on health risk management	Stimulus covers for the immediate response and strengthening of health systems against health pandemics but does not include mitigating steps against climate related diseases
Establish a National Food Security Committee	**Adaptation** Agriculture and food security	Stimulus aligns with adaptation strategy
Support commercial farming and attract educated youth into agriculture	**Adaptation** Agriculture and food security	Stimulus aligns with adaptation strategy
Build Ghana's light manufacturing sector and develop engineering/ machine tools and ICT/digital economy industries	**Mitigation** Double energy efficiency improvement to 20% in industrial facilities	Lack of clarity if stimulus is targeted at improving energy efficiency
Fast-track digitisation – expedite implementation of government digital initiatives, digitise fiscal revenue collection; expand the fibre network backbone; and increase digital literacy and online education	**Adaptation** Resilient infrastructure in built environment: city-wide resilient infrastructure planning	Stimulus focuses on implementing e-governance and improving access to and the use of ICT

Stimulus measure	Components in INDCs	Assessment
Develop Ghana's housing and construction industry – strengthening the housing mortgage and construction finance scheme, taking measures to facilitate access to land with secure titles by real estate developers	**Adaptation** Resilient infrastructure in built environment: city-wide resilient infrastructure planning	Stimulus focuses on financing and land use and does not specify climate friendly housing or infrastructural development practices/methods
Establish Ghana as a Regional Hub by establishing: International Financial Services Centre (IFSC); a regional manufacturing hub for the West Africa region; and a ports and logistics hub	**Mitigation** Scale-up sustainable mass transportation; scale-up renewable energy penetration by 10% by 2030; promote clean rural households lighting; double energy efficiency in power plants	Stimulus is related to mitigation target. However, it is unclear if the transformation to a regional hub will emphasise climate friendly initiatives in the INDC

Note: Red – weak alignment; amber – considerable alignment; green – strong alignment.

Alignment of economic stimulus with the GRAP and the AGSP

The GRAP focuses on five priority areas: climate finance, renewable energy; biodiversity and nature-based solutions; climate resilient agriculture; and green and resilient cities. For each, the GRAP identifies key interventions.

i. Climate finance: increase the flow, efficiency and impact of finance in reducing emissions, through mitigation, and vulnerability through adaptation.
ii. Renewable energy: promoting renewable energy, energy efficiency and access and supporting a just transition.
iii. Biodiversity and nature-based solutions: solutions that include sustainable land management, forestry, oceans and ecotourism.
iv. Climate-resilient agriculture: agriculture as a tool for economic development and green jobs.
v. Green and resilient cities: water management and enhancing ICT.

The ASGP aims to achieve the following broad objectives:

i. Support rapid response in support of sectors hardest hit by the pandemic.
ii. Focus, build synergies, forge partnerships, and enhance cooperation and coordination of existing climate change, biodiversity, desertification, land degradation and green economy programmes.
iii. Enhance political ambition and support in scaling up implementation of existing and new projects and programmes in key areas through financial resource mobilisation, technical and capacity building support in support of a green recovery.
iv. Support the development of a longer-term transformative green economy of Africa.
v. Provide direction and support on medium-term interventions of key sectors identified in the AGSP to enhance their catalytic recovery.

The AGSP details 12 interlinked priorities: air quality, chemicals and waste management; biodiversity; ecotourism; land degradation, 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 ICT.

Ghana's stimulus package covers similar focus areas as the GRAP and AGSP. However, the specificity of how the initiatives will be implemented determine the level of alignment of the stimulus with the GRAP and AGSP – see Table 10. Analyses however reveal that there is at least broad alignment in terms of sectors targeted by the GRAP and AGSP.

Table 10 Stimulus measures and the GRAP and ASGP, with ratings

Stimulus measure	Related Areas in GRAP and AGSP	Assessment
Liquidity support for large, medium, and small enterprises through the CAP Business Support Scheme	**GRAP:** climate finance – increasing flows, efficiency, and impact	Lack of clarity on whether the stimulus applies broadly to all types of enterprises, including those that negatively impact climate change, or if support prioritises climate-friendly businesses
Provision of support for the National Food Buffer Stock Company and the Ghana Commodity Exchange to increase food stock levels. Expansion of support from 1.2 million to 1.5 million farmers (fertiliser, seeds, extension services etc.) under the PFJ Programme	**GRAP:** resilient agriculture – focusing on economic development and green jobs **ASGP:** scaling up climate smart agriculture and food security systems	Stimulus aligns with the focus on economic development through resilient agriculture. However, it does not specify if the focus of the support for farmers will target smart agricultural practices
Reduce the CST from 9% to 5% to reduce the cost of communication services to the consumer as a lot more people work remotely and use online services	**GRAP:** green and resilient cities – enhancing ICT **ASGP:** enhancing ICT	Initiative supports the ICT penetration and adoption. However, it is unclear if the tax reduction is temporary and will be sustained in the long run
Provision of water and sanitation for households for three months	**GRAP:** green and resilient cities – focus on water resources **ASGP:** improving water use and conservation; improving waste management	Details on the extent of sanitation provided by the stimulus is unclear. Stimulus focuses on water provision and less on conservation and use. Initiative is also temporary
Subsidy for electricity use in households and businesses (100% subsidy for lifeline customers; 50% for all others)	**GRAP:** supporting renewable energy and energy efficiency **ASGP:** investing in renewable energy; promoting green urbanisation	Stimulus is focused on direct provision for users to alleviate financial burden. It is unclear on if stimulus targets use of green or renewable sources, or improved efficiency. Stimulus is also temporary

Stimulus measure	Related Areas in GRAP and AGSP	Assessment
Establish a National Food Security Committee	**GRAP:** resilient agriculture **ASGP:** scaling up climate smart agriculture and food security systems	Strong alignment of stimulus, GRAP and ASGP in ensuring food security and resilience
Support commercial farming and attract educated youth into agriculture	**GRAP:** resilient agriculture **ASGP:** scaling up climate smart agriculture and food security systems	Stimulus does not mention or indicate a focus on embedding climate-smart agricultural practices
Build Ghana's light manufacturing sector – agro-processing, food import substitution, pharma, textiles, and garments	**ASGP:** investing in renewable energy; scaling up climate smart agriculture and food security systems	Stimulus does not specify if the development of the indicated sectors will utilise climate-friendly approaches
Develop engineering/machine tools and ICT/digital economy industries – manufacture machine tools to support our industrialisation and advance Ghana's overall technological capability in engineering	**GRAP:** green and resilient cities – enhancing ICT **ASGP:** enhancing ICT	Stimulus is focused on enhancing ICT use in industries and on developing the ICT economy
Fast-track digitisation – expedite implementation of government digital initiatives, digitise fiscal revenue collection; expand the fibre network backbone; and increase digital literacy and online education	**ASGP:** enhancing ICT; developing smart cities	Stimulus is focused on enhancing ICT use in governance and use in education
Develop Ghana's Housing and Construction Industry – strengthening the housing mortgage and construction finance scheme taking measures to facilitate access to land with secure titles by real estate developers	**AGSP:** developing smart cities; enhancing chemical waste management and circular economy	Stimulus focuses on financing and land use and does not specify climate-friendly housing or infrastructural development practices/methods, or on resource efficiency
Establish Ghana as a Regional Hub by establishing: IFSC; a regional manufacturing hub for the West Africa region; and a ports and logistics hub	**AGSP:** investing in blue economy; enhancing chemical and waste management and circular economy; investing in renewable energy; enhancing ICT	Stimulus is broadly defined without the specification of implementation details to determine how the development of the IFSC, manufacturing hub and logistic hub

Note: Red – weak alignment; amber – considerable alignment; green – strong alignment.

Trade-related implications of a climate-aligned stimulus plan

The success of Ghana's plan to stabilise, revitalise and transform its economy is dependent on integration and cooperation, especially in the African region. Analysis indicates that there are several trade-related implications of the stimulus package (see Table 11). These would require the implementation of the existing trade facilitation and regional integration instruments such as the AfCFTA.

The trade-related implications of the stimulus plan and the corresponding green recovery aspects centre on the following areas:

i. Access to inputs: most initiatives under the CARES programme will require inputs from markets that may be limited by tariffs and other trade barriers including IPR, customs regimes and operations, infrastructure, movement of labour, etc.
ii. Integration into regional value chains and markets: the implementation of some initiatives will require cross-border integration of market and sectoral policies. For example, integrating the telecommunications and IT services markets will be important for digitising governance and deepening internet penetration in Ghana. Also, integrating green power pools and the agricultural sector would be key for agro-processing and manufacturing.
iii. Competition policy: supportive regional competition policies are necessary to encourage market entry, protect new entrants and protect consumers in sectors such as ICT and manufacturing. These would be required to sustain the effect of measures to reduce the cost of internet adoption and use, such as reducing the CST.
iv. Knowledge transfer: the use of innovative tools and methods required for climate-smart agriculture or digitisation would require moving beyond negotiations on IPRs to the sustainable and voluntary transfer of technology and know-how. This is particularly important with respect to renewable energy and improving efficiencies in the energy and manufacturing sectors.
v. Cross-border movement of finance: the integration and clearing and settlement payment systems that enable cross-border trade is vital for the implementation of initiatives aimed at making Ghana a regional hub.

Table 11 Trade-related and green recovery implications

Stimulus measure	Green recovery implications	Trade-related implications
Liquidity support for large, medium, and small enterprises in agrobusinesses, water and sanitation, commerce and trade, technology, education, services, manufacturing, food and beverages and creative industry	Climate finance	Access to inputs and services needed for resilient recovery of identified sectors; integration into regional markets/value chains
Provision of support for the National Food Buffer Stock Company and the Ghana Commodity Exchange to increase food stock levels; expansion of support from 1.2 million to 1.5 million farmers under the PFJ Programme	Smart agriculture and food security systems	Access to green inputs and markets affected by trade regulations and barriers – payment systems, custom regimes, infrastructure for connectedness
Reduce the CST from 9% to 5% to reduce the cost of communication services to the consumer as a lot more people work remotely and utilise online services	Enhancing ICT	Cross-border telecommunications market integration, supportive regional competition policy for telecommunications and IT service providers, investments, access to intellectual property, etc.
Subsidy for electricity use in households and businesses (100% subsidy for lifeline customers; 50% for all others)	Renewable energy and energy efficiency	Regional integration of green energy markets; access to inputs and tools that maybe affected by physical and technical trade barriers such as standards, labels, intellectual property
Establish a National Food Security Committee	Smart agriculture and food security systems	Access to inputs that are affected by trade barriers – technology, IPR, tariffs, labour mobility
Support Commercial Farming and Attract Educated youth into Agriculture	Smart agriculture and food security systems	Access to inputs that are affected by trade barriers – technology, IPR, tariffs, labour mobility; integration into regional markets/ value chains
Build Ghana's Light Manufacturing Sector – agro-processing, food import substitution, pharma, textiles and garments	Investing in renewable energy; scaling up climate smart agriculture and food security systems	Access to inputs that are affected by trade barriers – technology, IPR, tariffs, labour mobility; Integration with regional supply chains
Develop Engineering/machine tools and ICT/digital Economy Industries – manufacture machine tools to support our industrialisation and advance Ghana's overall technological capability in engineering	Enhancing ICT	Use of IPR, knowledge transfer, access to inputs; access to markets to sell outcomes
Fast-track digitisation	Enhancing ICT	Regional ICT integration, trade in services, use of IPR, access to inputs
Establish Ghana as a regional hub by establishing (IFSC; a regional manufacturing hub for the West Africa region; and a ports and logistics hub	Investing in blue economy; enhancing chemical and waste management and circular economy; investing in renewable energy; enhancing ICT	Access to markets and regional/global supply chains, cross-border capital movement, movement of people

Links to AfCFTA implementation and negotiations

Ghana has begun local implementation of the AfCFTA by aligning policies to its commitments. The trade implications as identified above have ramifications for the implementation of the AfCFTA and future negotiations on the treaty.

Implications for AfCFTA implementation

i. Ghana will need to work within the existing trade facilitation arrangements of the ECOWAS region and with other African nations to ensure access to the necessary inputs for the implementation of recovery measures. This would include the implementation of local initiatives, such as legislative acts that domesticate the provisions of the AfCFTA agreement, and working with other state parties to conclude the Schedule of Tariff Concessions, Schedule of Specific Commitments in Services, and the Rules of Origin.
ii. Beyond finalising the annex on the Schedule of Specific Commitments in Services, member states implement policies that reduce technical barriers affecting the setting up of businesses of nationals of other member states. This would include implementing policies that reduce the transaction cost of the registration and operationalisation of businesses. It will be important to leverage technology for business registration processes to improve the ease of doing business in Ghana.
iii. Transportation and the movement of people have been adversely affected by the Covid-19 pandemic with transporters facing technical barriers at borders due to restrictions and numerous health checks. To strengthen access to inputs and markets, Ghana will need to collaborate with neighbouring countries and the ECOWAS to innovate a comprehensive model that allows for cross-border movement of people while protecting the health of operatives at the borders and the population more broadly.
iv. The ministries of trade, finance, and environment science and technology would need to collaborate on policies to ensure that trade investments and finance incorporate the provisions of environmental policies and regulations. This could be achieved through the implementation of policy planning tools such as the Medium-Term Expenditure Framework, ensuring that environment sustainability and resilience are incorporated and influence public procurements, production and consumption of goods and services.
v. To deepen integration of regional value chains, Ghana would need to work with other member states to ensure harmonisation of sector policies that currently constitute technical barriers to trade such as technical specifications and requirements for goods. Harmonisation of standards will ensure that inputs into the value chains meet technical and specific green requirements across member states. The African Organization for Standardization should work with the standards organisations of member states to utilise the recognition and certification provided by the Eco Mark Africa system.
vi. Complementary to the harmonisation of sectoral policies is the need for technical assistance to the government in the development of technical proposals and in the implementation of policies that are aligned with environmental sustainability. At the regional level, the AfCFTA Secretariat could facilitate similar technical assistance to member states.

Implications for future negotiations

i. Negotiations on intellectual property would be required to ensure that innovation is incentivised within Ghana and the AfCFTA. This should be accompanied with favourable policies and regional collaboration that supports the voluntary transfer of knowledge through upskilling and reskilling of the workforce, especially in the real sectors of the economy such as agriculture, manufacturing, transportation, etc. Hence, Phase 2 negotiations of the AfFCTA must elaborate on innovation while ensuring a robust competition framework that promotes trade, increases consumer surplus, and strengthens the bargaining power of Africa in intercontinental negotiations.
ii. Ghana will need to work with member states to improve infrastructure connecting markets such as the construction of regional highways, water ways, and transport corridors via climate-friendly considerations. The future AfCFTA negotiations on the investment protocol should address the investment framework to guide multi-state investments that protect environmental sustainability and resilience.
iii. The AU may consider an addendum to the current negotiation areas to include a protocol on environmental sustainability and resilience. This would ensure that boosting trade and economic development through the implementation of the free trade area does not aggravate the deterioration of the environmental and natural capital of the continent but reinforces national and regional efforts.
iv. The AfCFTA provides a Dispute Settlement Mechanism and establishes a Dispute Settlement Body for matters relating to the implementation of the AfCFTA. However, there is no similar institution that is responsible for regulating or enforcing African states' commitments to climate action. Given the inherent tensions between regional trade integration and the preservation of environmental capital, the AU Commission should establish a Dispute Settlement and Regulation Body for climate action in Africa.

Kenya

Introduction

Kenya registered its first Covid-19 case in April 2020. In response, the government implemented measures to contain the transmission of the virus through lockdowns and restrictions of travel. These measures had an impact on economic activities such as trade as international travel, as import restrictions and other stringent border control measures impacted on domestic retail and manufacturing. The tourism sector was hit hard as travel was restricted to necessary business travel. GDP growth fell from 5.37% in 2019 to -0.3% in 2020.[3]

While some consider these measures to have been both demand-driven and timely, others suggest that they did little to ensure that Kenya's response was both economically and environmentally resilient.[4] In addition, the country's renewed Nationally Determined Contributions, which indicate a stronger financial commitment on climate action from the government of $8 billion by 2030 (Republic of Kenya, 2015), would require investment and incorporation of climate-friendly approaches to ongoing and new projects that require both private and public sector participation and collaboration.

New measures and initiatives aimed at kick-starting economic activities such as manufacturing, trade and services have tended to put at risk the progress made on the environmental front and on Kenya's commitments to climate action such as the UNFCCC. The AfFCTA will be a key policy tool to spur more economic activity and trade but could have negative effects on Kenya's environmental capital through the high social and environmental costs of regional integration.

This case study seeks to explore how Kenya can recover from the pandemic in a manner that is economically resilient, ensuring increased economic activity while strengthening a transition to a green and environmentally sustainable economy. This case study will analyse the government's response programme within the context of the AfCFTA and key environmental policy documents such as the AU's GRAP and the AGSP. It concludes with recommendations on how the Government of Kenya could strengthen local implementation of the AfCFTA to deliver a green recovery and on how the current and future rounds of negotiations on the AfCFTA can support a climate-friendly and resilient integration of the continent's trade.

Emerging patterns of economic recovery

Summary of economic recovery strategies

The government set up on 31 March an Emergency Response Fund of over 13 billion Kenyan shillings to tackle the impacts of the Covid-19 pandemic. This included a mix of fiscal and monetary measures that focused on increasing liquidity for businesses and individuals. Most of these measures focused on providing immediate relief and were implemented through new and revised tax policies such as VAT for goods and services,

3 From World Bank Data webpage (https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=KE).
4 From engagements with Kenyan stakeholder.

PAYE taxes, and VAT refunds. Other measures focused on social protection via cash transfers and direct provision of goods.

Beyond measures aimed at the providing relief to businesses and individuals, the government's response included measured aimed at building economic resilience. These include measures such as a credit guarantee scheme, investments in education through the hiring of teachers and ICT interns, youth employment schemes, health system strengthening measures, the Greening Kenya initiative and flood control measures.

Assessment of economic stimulus based on Hepburn's archetypes

Using the framework provided by Hepburn et al. (2020), the different stimulus measures provided by the government can be assessed to determine their economic multiplier effect and alignment with climate-friendly ambition (Table 12).

Table 12 Kenya's economic stimulus: multipliers and climate ambition

Stimulus measure	Type	Climate ambition	Economic multiplier
Fiscal			
Flexibility to banks regarding loan classification and provisioning for loans that were performing on 2 March 2020, but were restructured due to the pandemic; the Central Bank of Kenya suspended the listing of negative credit information for borrowers whose loans became non-performing after 1 April 2020 for six months	A	Low	Low
Funds for expediting payments of existing obligations to maintain cash flow for businesses during the crisis	B	Low	Low
Seed capital for the SME Credit Guarantee Scheme; Supply of farm inputs through e-vouchers targeting 200,000 small scale farmers; support renovation of facilities and the restructuring of business operations in tourism	D	Low	Low
Fast-tracking of payments if VAT refunds; reduction of standard VAT rate from 16% to 25%	G	Low	Low
Full income tax reliefs for qualifying persons; reduction of PAYE rate from 30% to 25%	H	Low	Low
KsH170 billion for tax relief, reductions, and refund for individuals, MSMEs, corporates; reduction of the turnover tax rate on small and medium businesses from 3% to 1%	I	Low	Low
Social protection (food relief); Ksh850 million to enhance the provision of water facilities	K	Low	High
Recruitment of teachers and interns; rehabilitation of classrooms and infrastructure upgrade	L	High	High
Health systems strengthening measures; expansion of bed capacity in public hospitals; Ksh40 billion (0.4% of GDP) earmarked for Covid-related expenditure	M	High	High
Social protection (cash transfers); increased funding for cash transfers in 2020/21 budget	O	Low	High
New youth employment scheme	P	Low	Low
Hire local labour for rehabilitation public infrastructure	Q	Low	High
Greening Kenya Campaign	V	High	Low
Flood control measures	W	High	Low

The government's response took a relatively balanced view, ensuring that the response to Covid-19 not only addressed the immediate need to stimulate the economy by injecting funds and creating immediate jobs but also the need to build environmental sustainability and resilience to future pandemics and natural disasters. Investments in initiatives such as the Greening Kenya Campaign and in flood control measures indicate that environmental sustainability is a government priority amid fiscal and other socio-economic pressures exacerbated by the pandemic. This focus may be related to the fact that agriculture, Kenya's most important economic sector, is highly dependent on climate-sensitive natural resources. Overall, it is fair to say that as Kenya's stimulus package has evolved, there has been a greater emphasis on greening trade policy aspects, though more detail on specific policy measures is needed (Box 1).

Box 1 Emphasis on green recovery and climate within stimulus measures

The FY2020/21 budget includes the economic stimulus package, which amounts to 0.5% of GDP (Ksh 56.2 billion or $513 million) and will run to June 2021. Based on this plan, the Treasury has identified key pillars of the economic recovery strategy: the healthcare system, the private sector, SMEs, the eight-point stimulus plan, ICT, 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 (National Treasury of Kenya, 2020).

The strategy does not define terms such as 'green growth' or 'resilient supply chains'. However, the Budget Statement published in February 2021 does define slightly different terms, referring to 'facilitated clean, green, resilient growth' and 'enhanced resilience of the economy to global supply chain shocks'. In addition, it states that economic recovery will emphasise climate change adaption and mitigation. However, it is not clear how this objective relates to other elements, including the resilience of global supply chains: there is no specific mention of climate or green elements within the description of measures to boost resilience.

There are plans to support electric cars and light trains, support small businesses in recycling, employ young people in tree planting, promote solar and wind power to support wind farming and transition Kenya to a low emissions environment (National Treasury of Kenya, 2020). More support will be directed towards the Financing Locally Led Climate Action programme. These policies should have a positive impact on climate change and encourage long-term growth (Hepburn et al., 2020). However, actual tracking of the implementation of these announcements is required. Similarly, more project detail is required, for example regarding the 'Greening Kenya' and 'Buy Kenyan' campaigns.

Source: Keane at al. (2020)

Alignment of economic stimulus with NDCs

Kenya submitted its first NDC to the UNFCCC in 2016. The NDC set out measures to abate emissions of GHGs by 30% from the business-as-usual scenario in 2016.[3] Kenya made an updated submission in 2020 indicating a more aggressive target of reducing GHG emissions by 32% of business-as-usual levels, an alignment with her sustainable development agenda, and greater financial commitment from the government to achieving the targets.

Kenya's CAT[5] ratings remain unchanged despite its stronger NDC target. It also suggests that Kenya has the scope to commit to even higher targets in line with the Ministry of Environment and Natural Resources' predictions of 60% reductions in emission by 2030 from business-as-usual levels in 2017. However, the revised NDCs contain 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.

Emissions reduced due to slowdown in economic slowdown and international trade. This decrease could be sustained if the government factors in climate mitigation policies in its recovery measures. Our analysis reveals that aspects of the stimulus package from the government are strongly aligned with adaptation measures contained in the NDCs. For instance, measures strengthen access of credit lines to women, youth and vulnerable populations, social safety nets, rehabilitation and conservation of forests, nature-based solutions for flood risk management, and food security. In terms of alignment with mitigation measures, the stimulus package strongly aligns with efforts to achieve land degradation neutrality, enhancement of REDD+ activities and nature-based solutions.

However, the stimulus package places minimal priority on other key mitigation and adaptation measures, such as improving the energy generation mix, improving energy efficiency (in energy and construction), low carbon and efficient transport systems, climate-smart agriculture, tourism, and sustainable waste and sanitation management systems. Furthermore, some policies that form part of the government's response package put at risk progress made in transitioning to a greener economy. For example, the Finance Bill 2020 allows for taxes on clean cooking and solar energy products, threatening the progress made towards the adoption and use of greener sources of energy.[5]

Table 13 Stimulus measures and related INDCs, with ratings

Stimulus measure	Components in INDCs	Assessment
Tax measures such as VAT refunds, reliefs, PAYE reduction, profit taxes reduction for SMEs; Youth employment scheme	**Adaptation** Develop social safety net structures for women, youth, and other vulnerable groups within the CCCFs	Tax measures provide a form of safety net for individuals including women, children, and other vulnerable groups (temporary)
Seed capital for SME Credit Guarantee Scheme	**Adaptation** Strengthen access of women, youth, and other vulnerable groups to enterprise funds, climate finance and credit lines.	Stimulus aligns with adaptation strategy
Supply of farm inputs through e-vouchers targeting 200,000 small-scale farmers	**Mitigation** Mainstream Climate Smart Agriculture (CSA) towards increased productivity through value chain approach to support the transformation of agriculture (crop, livestock, and fisheries) **Adaptation** CSA in line with Kenya CSA strategy with emphasis on efficient livestock management services	Stimulus focuses on agriculture but could be better aligned if focused on the promotion of CSA practices
Social protection via food relief	**Adaptation** Develop social safety net structures for women, youth, and other vulnerable groups within the CCCFs	Stimulus aligns with adaptation strategy in NDC
Enhancement of the provision of water facilities	**Adaptation** Promote water harvesting and storage at county and household levels **Mitigation** Enhancement of energy and resource efficiency across sectors	Stimulus could go beyond the provision of water facilities and focus on methods to promote water harvesting and use
Health system strengthening	**Adaptation** Reduce the risk of malaria, other vector-borne diseases and other health conditions	Stimulus aligns with adaptation strategy
Social protection via cash transfer	**Adaptation** Develop social safety nets for women, youth, and other vulnerable groups within CCCFs; strengthen access of women, youth, and other vulnerable groups to enterprise funds, climate finance and credit lines	Stimulus aligns with adaptation strategy
Greening Kenya Campaign	**Adaptation** Rehabilitation and conservation of degraded forests; plant 350,000 agro-forest trees in farmlands established **Mitigation** Making progress towards achieving a tree cover of at least 10% of land area; make efforts towards achieving land degradation neutrality; scaling up nature-based solutions; Enhancement of REDD+ activities	Stimulus aligns with adaptation and mitigation strategy
Flood control measures	**Adaptation** Flood risk management and incorporating nature-based solutions	Stimulus aligns with adaptation strategy

Note: Red – weak alignment; amber – considerable alignment; green – strong alignment.

Alignment of economic stimulus with the GRAP and AGSP

The GRAP focuses on five priority areas: climate finance, renewable energy, biodiversity and nature-based solutions, climate resilient agriculture, and green and resilient cities. For each of these areas, the GRAP identifies key intervention on which it focuses.

- **Climate finance:** increase the flow, efficiency, and impact of finance in reducing emissions, through mitigation, and vulnerability through adaptation.
- **Renewable energy:** promote renewable energy, energy efficiency and access and support a just transition.
- **Biodiversity and nature-based solutions:** solutions that include sustainable land management, forestry, oceans, and ecotourism.
- **Climate-resilient agriculture:** agriculture as a tool for economic development and green jobs.
- **Green and resilient cities:** water management and enhancing ICT.

The ASGP aims to achieve the following broad objectives:

- Support the rapid response in support of sectors hardest hit by the pandemic.
- Focus, build synergies, forge partnerships, and enhance cooperation and coordination of existing climate change, biodiversity, desertification, land degradation and green economy programmes.
- Enhance political ambition and support in scaling up implementation of existing and new projects and programmes in key areas through financial resource mobilisation, technical and capacity building support in support of the green recovery of Africa.
- Support the longer-term development of a transformative green economy of Africa.
- Provide direction and support on medium-term interventions of key sectors identified in the AGSP to enhance their catalytic recovery.

The AGSP details 12 interlinked priorities: air quality, chemicals and waste management; biodiversity; ecotourism; land degradation, 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 ICT.

Table 14 Stimulus measures and the GRAP and ASGP, with ratings

Stimulus measure	Related Areas in GRAP and AGSP	Assessment
Support for renovation of facilities and the restructuring of business operations in tourism	**GRAP:** Biodiversity and nature-based solutions – sustainable land management, forestry, oceans and ecotourism	Unclear if support for tourism factors in resilient action plans, or climate risk and vulnerability assessments
Seed capital for the SME Credit Guarantee Scheme	**GRAP:** Climate finance – improve accessibility of finance to women, youth, and vulnerable groups to increase adaptation and build resilience to climate shock	Unclear if credit scheme focuses on initiatives related to green business practices and a green transition
Inputs through e-vouchers targeting 200,000 small-scale farmers	**GRAP:** Resilient agriculture – focusing on economic development and green jobs **ASGP:** Scaling up climate-smart agriculture and food security systems	Unclear if support provided to small-scale farmers are in line with climate smart/resilient agriculture
Enhance the provision of water facilities	**GRAP:** Green and resilient cities – focus on water resources **ASGP:** Improving water use and conservation, Improving waste management	Stimulus does not focus on water use, conservation or sanitation
Hiring 1,000 interns in information technology	**GRAP:** Green and resilient cities – enhancing ICT **ASGP:** Enhancing ICT	Stimulus is in line with the GRAP and ASGP
Social protection via cash transfer; youth employment scheme	**GRAP:** Climate finance – improve accessibility of finance to women, youth, and vulnerable groups to increase adaptation and build resilience to climate shocks	Strong alignment of stimulus, GRAP and ASGP
Greening Kenya Campaign	**GRAP:** Biodiversity and NBS – sustainable land management and forestry **ASGP:** Combating land degradation, desertification and drought and the sustainable management of forests	Strong alignment of stimulus, GRAP and ASGP
Flood control measures	**ASGP:** Investing in the blue economy – including mitigation of natural disasters such as floods	Strong alignment of stimulus, GRAP and ASGP

Note: Red – weak alignment; amber – considerable alignment; green – strong alignment.

Kenya's stimulus package has considerable alignment with four of the five priority areas of the GRAP. Key measures of the stimulus package have strong alignment with biodiversity and nature-based solutions, green and resilient cities through ICT, and improving access to finance for women, youth and the vulnerable to increase their resilience. Initiatives focused on agriculture could be better aligned with strengthening the transition to climate-smart/resilient agriculture and improving sanitation, water management and use.

While the stimulus package has commendable alignment with the GRAP and AGSP, there are no initiatives targeting the transition from fossil fuels to renewable energy, the adoption of cleaner cooking methods, or improvements in energy efficiency. While these opportunities exist to increase the alignment of the stimulus measures with green elements, our overall assessment indicates that Kenya's stimulus measures will bring about a recovery from the pandemic that aligns with aspirations for a green transition and environmentally resilient economy.

Trade-related implications of a climate-aligned stimulus plan

The assessment of the success of Kenya's recovery from the Covid-19 pandemic is in its early phases, as the country, as with most parts of the world, is still dealing with the third wave of the virus. However, there are significant trade implications of the government's recovery/stimulus plan that must be emphasised, especially within the context of the GRAP and AfCFTA (see Table 15).

- These trade implications cut across access to inputs (sensitive products, safeguards and standards, quantitative restrictions, IPR), labour mobility, regional market integration, investments and competition. These are discussed in turn in the subsequent paragraphs.
- **Access to inputs:** Kenya's initiatives that are centred on the use of nature-based solutions and climate-smart agriculture techniques would require green inputs from markets that may be limited by tariffs and other non-tariff barriers such as sensitive products, safeguards and standards, quantitative restrictions, labour mobility and IPRs.
- **Regional market integration:** the integration of markets will be critical for Kenya to actualise the benefits from its investments in ICT and developing green and resilient cities. The adoption and use of ICT is a key lever for a transition to a green economy.
- **Investments:** initiatives such as seed capital investments in SMEs including fintech companies, improving water use and conservation and flood mitigation measures would require multilateral investments from member states and even non-government actors. Coordination and cooperation of parties on investments is especially important given the interconnectedness and interdependence of parties when it comes to environmental sustainability. For example, countries sharing similar riparian areas around Lake Victoria and the Nile have a common interest in water use and conservation in the region and therefore would need to make joint investments to protect the collective interests.
- **Competition:** Supportive competition policies are necessary to encourage market entry and protect new entrants and consumers in sectors such as ICT. These would be required to sustain the effect of measures that aim to reduce the cost of internet adoption/use and a transition to a greener economy.

Table 15 Trade-related implication for a green recovery

Stimulus measure	Green recovery implications	Trade-related implications
Renovation of facilities and the restructuring of business operations in tourism; Greening Kenya Campaign	Biodiversity and nature-based solutions – sustainable land management, forestry, oceans, and ecotourism	Tariffs on sensitive products; safeguards and standards; labour mobility; e-commerce
Supply of farm inputs through e-vouchers targeting 200,000 small-scale farmers	Climate-smart/resilient agriculture	Tariffs on sensitive products; labour mobility; quantitative restrictions, import prohibitions; safeguards and standards; integration into regional markets/value chains
Social protection (cash transfers); new youth employment scheme; seed capital for the SME Credit Guarantee Scheme	Climate finance – improve accessibility of finance to women, youth, and vulnerable groups to increase adaptation and build resilience to climate shock	Services (finance); investments
Provision of water facilities	Improving water use and conservation; improving waste management	Access to green inputs that are affected by trade barriers – IPR; knowledge transfer; contingency measures; investments
Investments in information technology	Green and resilient cities – enhancing ICT	Cross-border ICT integration; services; supportive regional competition policy for service providers; contingency measures; IPR, investments, and knowledge transfer
Flood control measures	Investing in the blue economy – including mitigation of natural disasters such as floods	Investments

Links to AfCFTA implementation and negotiations

Kenya's implementation of the AfCFTA has benefited from the pre-existing relations it has as a member of the EAC. It has begun local implementation of the AfCFTA by aligning policies to its AfCFTA commitments. The trade implications as identified above have ramifications for implementation of the AfCFTA and the future negotiations on the treaty.

Implications for AfCFTA implementation

Kenya would need to work with other state parties to the AfCFTA to conclude the ongoing negotiations on the Schedule of Tariff Concessions, Schedule of Specific Commitments in Services, and the Rules of Origin. In the meantime, the Most Favoured Nation principle applies.

Kenya would need to build on the progress made in the Climate Change Act to ensure that government procedures, even at county level, incorporate the provision of the Climate Act to inform key activities such as public procurements, public project designs, and budgets. The development and adoption of the Green Public Procurement Framework should inform the local implementation of the AfCFTA.

As the AfCFTA is implemented, local collaboration between academia, government, and the private sector for promoting education, innovation, and investments in green markets as the AfCFTA is implemented to ensure that environmentally friendly solutions are identified through targeted research and that the private sector is incentivised to invest in such opportunities based on favourable government policies.

Implications for future negotiations

For Kenya to achieve its goal of developing green and resilient cities via the adoption and use of ICT and related technologies such as machine learning and manufacturing, the use of IPR needs to be negotiated firstly among AfCFTA member states and then on the global stage. Forthcoming negotiations on the use of IPRs need to ensure that the protocol is favourable to and prioritises the reduction of IPR barriers that affect a transition from the status quo to green and resilient cities.

Closely related to the negotiation of the protocol on IPR that has environment-related concessions is the need to have a favourable competition policy that incentivises private sector investments for innovations around energy efficiency improvements, nature-based solutions, climate-resilient agriculture, etc. Given that the protocol on IPR is yet to negotiated, Kenya and member states have an opportunity to ensure that the protocol negotiated encourages innovation around climate action and environmental sustainability. This would encourage cross-border and cross-continental investments in countries with a favourable investment climate.

The total cost of implementing Kenya's revised NDC is estimated at $62 billion by 2030.[5] The GRAP aims to have NDCs transformed into a pipeline of projects. Hence the investment protocol to be negotiated provides an opportunity to develop a multi-actor investment framework that guides inter-state, inter region, and private sector financing for climate-friendly projects that would put African economies on a path to fulfilling their commitments to climate action.

The future AfCFTA negotiations provide a unique opportunity for negotiations on a protocol to that ensures that trade liberalisation does not put climate action and environmental sustainability at risk, but rather strengthens and reinforces a commitment to a green and resilient economic transition.

Mozambique

Assessment of emerging patterns of economic recovery

Mozambique was still recovering from the effects of Cyclone Idai and Kenneth in 2019 when the Covid-19 pandemic struck in early 2020. The combined social and economic effects have been devasting, coming at a time of substantial budgetary pressures. The combined effect of these factors led to negative economic growth in 2020, estimated at -1.3% (International Growth Centre, 2021). Mozambique is an LDC exhibiting extreme economic and environmental vulnerabilities. It is also in debt distress. The expenditures required to respond to Covid-19 have necessitated support from the IMF and Mozambique has benefited from the G20 debt suspension initiative. Public debt reached 133.8% of GDP in 2021 and is expected to rise in 2022.[5] The current account deficit has widened substantially and – given the country's limited export basket and dependence on commodity exports and LNG-related service inputs – it is considered vulnerable to external shocks (World Bank, 2021a).

It is estimated that since January 2020, fiscal responses to the pandemic by Mozambique have reached around 4.8% of GDP, focusing mainly on the health sector, and accelerated and deferred expenditures.[6] Tax relief measures were introduced through a fiscal package which extended VAT exemptions and tariff exemptions on food, medicine and medical equipment (KPMG, 2020). There have been increases in budget allocations for health, from about 2 billion meticais (0.2% of GDP) to about MT3.3 billion (0.3% of GDP). The focus of measures has been to support businesses and families, the latter being supported mainly through reducing utility costs and covering remuneration for absences caused by Covid-19 for employees (World Bank, 2021a).

A number of monetary measures have also been adopted to increase liquidity, including reducing reserve requirements, as well as lowering fees. Support from development partners for economy recovery endeavours has also been sought, including for small and medium-sized industries. Some of these types of initiatives can be termed real economy measures, with perhaps more direct trade-related effects. The cumulative sum of these efforts is summarised in Table 16, which also categorises relief measures according to their climate ambition and long-run multipliers, adapting the framework developed by Hepburn et al. (2020). The relief measures deployed tend to feature mainly within the categories of low climate/low multiplier.

5 See IMF (2021a) Mozambique at a Glance, available at: https://www.imf.org/en/Countries/MOZ#whatsnew
6 See IMF Database of Fiscal Policy Responses to Covid-19, updated October 2021.

Table 16 Categorisation of relief measures

Archetype	Stimulus measures	Low climate, high multiplier	Low climate, low multiplier	Trade-related impacts
G	Lowering fees and charges for digital transactions through commercial banks, mobile banking and e-currency	Low/negative	Low	Demand
K	Temporary and well-targeted tax exemptions to support families and the health sector (VAT and important tariff exemptions on food, medicine, and medical equipment)	Low/negative	High	Demand
K	Increased cash transfers and subsidies to the poorest households (e.g. suspension of water charges)	Low/negative	High	Demand
G	Subsidies to kitchen gas bottles	Low/negative	Low	Supply; competition
D	Support to MSMEs including postponement of income and tax payments, reduction of electricity tariffs	Low/negative	High	Competition; services
G	VAT exemption on sugar, vegetable oil and soap	Low/negative	Low	Supply; competition
C	Introduced a foreign currency credit line for institutions participating in the interbank market	Low/negative	Low	Demand
C	Encouraged loan restructuring, including foreign currency loans	Low/negative	Low	Demand
C	Reduced reserve requirements by 150 basis points for both foreign currency and domestic currency deposits (to 11.5% and 34.5%, respectively)	Low/negative	Low	Demand
C	Reduced the policy rate by 100 bps to 10.25 and lifted the twice a week access restriction on standing lending facility	Low/negative	Low	Demand
C	Introduced requirement for exporters to exchange at least 30% of FX proceeds into domestic currency	Low/negative	Low	Demand
D	Credit lines extended to finance microbusinesses	Low/negative	High	Demand

Note: Uses the classification developed by Hepburn et al. (2020)

Recovery efforts and trade-related implications

Like most countries around the world in response to the pandemic, health expenditures and social support measures were prioritised. Initial recovery efforts have focused on fiscal consolidation measures given the acute need for debt reduction. Reconstruction efforts after the natural disasters of 2019 continue in addition to Covid-19 responses. While support to SMEs 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, there has been a focus on keeping existing energy costs low, particularly for households.

There have been specific challenges in available funds meeting the demands of firms (given financial distress) with overly restrictive eligibility criteria. As discussed by the World Bank (2021a), 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 needs to Covid-19. Although it is recognised that a longer-term strategy is needed which focuses on economic and export diversification there is limited information on what that entails in terms of trade policy. Instead, there continues to be a seeming reliance on extractive industries, such as LNG, albeit with a view to strengthening linkages (World Bank, 2021a).

Alignment with NDCs

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’ (Republic of Mozambique, 2015). 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 Adaption Plan (NAP) – which corresponds to the NCCAMS – include:

- reduce climate risks through the strengthening of the early warning system and of the capacity to prepare and respond to climate risks
- improve the capacity for integrated water resources management including building climate resilient hydraulic infrastructures
- increase the effectiveness of land use and spatial planning (protection of floodplains, coastal and other areas vulnerable to floods)
- increase the resilience of agriculture, livestock, and fisheries, guaranteeing the adequate levels of food security and nutrition
- increase the adaptive capacity of the most vulnerable groups
- reduce people’s vulnerability to climate change related vector-borne diseases or other diseases
- ensure biodiversity protection
- reduce soil degradation and promote mechanisms for the planting of trees for local use
- develop climate resilience mechanisms for infrastructures, urban areas, and other human settlements and tourist coastal zones
- align the legal and institutional framework with the NCCAMS

- strengthen research and systematic observation institutions for the collection of data related to vulnerability assessment and adaptation to climate change
- develop and ameliorate the level of knowledge and capacity to act on climate change
- promote the transfer and adoption of clean and climate change resilient technologies.

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 more than to increasing the resilience of agriculture) and in the case of other fiscal measures intended to support vulnerable groups and increase health care expenditures (which could assist in relation to vector-borne diseases related to climate change).

Mozambique's recovery and the GRAP and AGSP

There is very little overlap or alignment between Mozambique's recovery strategy and the AU's GRAP and the AGSP as indicated by Tables 18 and 19. However, there does appear to be greater alignment between its NDC and stimulus measures, as indicated by Table 17.

Table 17 Alignment of stimulus with Mozambique's NDC

Stimulus measures	Adaptation/mitigation component in NDC	Assessment
Increased cash transfers and subsidies to the poorest households (e.g. suspension of water charges) VAT exemption on sugar, vegetable oil and soap	Increase the resilience of agriculture, livestock, and fisheries, guaranteeing the adequate levels of food security and nutrition	Subsidies provided to increase food security and VAT exemptions for agricultural products are temporary measures not related to boosting resilience of agricultural production systems
Household subsidies to kitchen gas bottles	Promote the transfer and adoption of clean and climate change resilient technologies	Subsidies provided for fossil fuels not adoption of cleaner technologies

Table 18 Recovery and alignment with GRAP

Stimulus measures	Link to GRAP
Credit lines extended to finance microbusinesses	Climate finance
Increased cash transfers and subsidies to the poorest households (e.g. suspension of water charges); subsidies to kitchen gas bottles Support to MSMEs including postponement of income and tax payments, reduction of electricity tariffs	Renewable energy
No related measures	Nature-based solutions
VAT exemption on sugar, vegetable oil, and soap	Resilient agriculture
Lowering fees and charges for digital transactions through commercial banks, mobile banking, and e-currency	Green and resilient cities

Table 19 Alignment between recovery and AGSP

Green stimulus	Mozambique	Assessment
Improving air quality, enhancing chemicals and waste management and promoting the circular economy	×	Not mentioned
Conserving biodiversity and combatting the illegal wildlife exploitation and trade	×	Not mentioned
Revitalising eco-tourism and the biodiversity economy	×	Not mentioned
Combating land degradation, desertification and drought	×	Not mentioned
Enhancing climate action	×	Not mentioned
Investing in the blue economy	×	Not mentioned
Scaling up climate-smart agriculture and food security systems	✓	Cash transfers and subsidies, vat exemptions for basic food stuffs are intended to boost food security but are temporary measures and not related to climate smart agricultural systems.
Supporting sustainable management of forests	×	Not mentioned
Improving water conservation and use	×	Not mentioned
Investing in renewable energy	×	Subsidies provided to support households use of bottled gas
Developing smart cities and promoting green urbanisation	×	Not mentioned
Enhancing ICT	×	Not mentioned

Nigeria

Introduction

The 2014–2016 collapse of oil prices, a key economic sector for Nigerian export earnings and government revenues, coupled with the Covid-19 pandemic in 2020 has hit the Nigerian economy hard, with an expected 0.4% recession in 2021. The crisis is expected to push an additional 5 million Nigerians into poverty, reaching a total 7 million (World Bank, 2020). Like other countries on the continent, Nigeria reacted to the Covid-19 enforced economic slowdown with stimulus programmes to maintain or restart the economy.

The extent to which these recovery programmes align with climate goals and trade ambitions is mapped out in the present case study to highlight implementation opportunities to deliver on recovery, climate goals and trade ambitions.

Climate ambitions are taken as the ones embodied by Nigeria's NDCs and the Africa-wide vision developed in the GRAP and the AGSP. Trade ambitions are taken as the ones defined in the AfCFTA.

Nigeria is highly vulnerable to climate change and has low adaptive capacity (ND GAIN, 2018). Given the transversality of climate risks and the cross-sectoral response needed, ensuring alignment between different agendas is key. The climate issue calls for a systemic approach that brings about the linkages between different economic sectors and at different governance levels.

Emerging patterns of economic recovery

Summary of economic recovery strategies linked to trade

Despite a narrow fiscal space inherited from the 2016 recession induced by the oil shock, 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. However, this policy has limited compatibility with the goals of the AfCFTA, despite the allowance made in the Agreement for the 'right of State Parties to achieve legitimate policy objectives'.

None of the 27 measures focuses on leveraging trade for recovery (see Federal Government of Nigeria (2020) for the full list of measures), but two measures mention trade in name. The first (ID 18 in Table 21) focuses on job retention and creation in MSMEs in the export sector (N50 billion for export expansion facility). The second measure relates to the 5 million solar-powered homes plan (ID 11). Given the absence of domestic production, solar panels will be imported, although the ESP foresees the implantation of solar panel manufacturers in the country, hence creating jobs and growing the manufacturing sector, while preserving foreign earnings.

A further three measures have direct links trade policy:

- Agriculture (ID 9): conversion of land to agricultural use and support for bolstering agro-processing is one of the key measures (N635 billion). It could be linked to support to agricultural exports but, the plan primarily relies on government guaranteed buy for the output.
- Construction sector (ID 10, 12, 19, 21): many hard infrastructure projects are listed (water, sanitation and hygiene, roads, housing development) which will realistically rely on imports of materials, parts and services at some point.
- Service trade (ID 13, 27): the ESP plans to create 1 million jobs in the digital outsourcing sector (e.g. call centres, document digitisation, book-keeping etc) which could support trade in digital services, linking to the AfCTFA's agenda. However, the ESP casts the public sector as the primary buyer. It is unclear how the plan will support private sector uptake domestically and internationally, even though the ESP recognises digital outsourcing as a key source of foreign earnings.
- Energy sector (ID 14,15): the natural gas (compressed and liquified) sector development focuses on domestic uptake and mentions that export opportunities may arise, but no support plan is outlined.

Table 20 Trade-related recovery measures

ID	Trade-related recovery measures	Detail
9	Food and agriculture	N634.98 billion for the creation of 5 million jobs in the agricultural sector while boosting agricultural production and guaranteeing food security: • convert land to agricultural use (20,000 to 100,000 hectares) • interest-free credit for small holders • guaranteed market access
10	Infrastructure sector	N317.29 billion for mass housing strategy divided into two tracks. Track 1 will involve building of 300,000 homes across the country while Track 2 will leverage existing institutions to build additional 25,515 affordable homes across the country in 12 months. Materials sourced from Nigeria will be used for construction.
11	Energy	N240 billion to create 250,000 jobs in the energy sector while providing solar power to 5 million households by 2023. The 5 million households targeted by the programme are currently not connected to the national grid.
12	Infrastructure sector	N50 billion for direct labour in national infrastructure projects to create jobs for youths and women in relevant priority sectors.
13	Digital economy support	Launch of programme to create 1 million jobs in digital outsourcing. Develop a national workforce for jobs of the future by enhancing the competence and capacity of Nigerian youth to participate in job intensive technology sectors.
14	Energy	N90 billion for the launch a national programme to promote domestic use of compressed natural gas and support the creation of 1 million jobs.

ID	Trade-related recovery measures	Detail
15	Energy	N23.4 billion to support the creation of 1 million jobs through the conversion of 30 million homes from dirty fuels (kerosene, charcoal and diesel) to LPG and achieve emissions reduction in GHGs while also applying LPG in other sectors such as agriculture, power generation, transport, industry and technology.
18	MSME support	N350 billion to support the creation jobs in MSMEs' priority sectors using Bank of Industry, Nigerian Export-Import Bank, and other national development banks: • priority sectors include the export sector, healthcare, agro-processing, the creative industry but also the oil and gas industry • provide targeted tariff reduction and trade finance facilities to support strategic imports and serve as a boost to economic activity.
19	Infrastructure sector	N60 billion to create 296,000 jobs in the construction and rehabilitation of roads in the six geo-political zones of the country through to use of local resources.
21	Infrastructure sector	N10.29 billion to fast-track the implementation of the National Water Supply, Sanitation and Hygiene programme.
27	Digital economy support	N15 billion to fast-track the implementation of the National Digital Switch Over Programme: • develop digital infrastructure in strategic locations and gap fillers installed in difficult to reach areas • engage with equipment manufacturers to expand manufacturing in preparation for roll-out.

Source: Federal Government of Nigeria (2020)

Categorisation of recovery measures in terms of climate ambitions

Overall, the announced recovery measures score low and may well be negative in terms of climate ambitions (especially all measures related to support to the fossil fuel and aviation industry) according to the Hepburn et al. (2020) classification. Nonetheless, a few measures support high climate ambitions and deliver high long-term economic multipliers: solar-powered homes (ID 11), workers retraining in the digital economy (ID 13), connectivity roll-out (ID 27), health investments (ID 20, 21).

A few recovery measures linked to trade (as listed in the previous sub-section and in Table 20) qualify as high climate ambitions: the solar-powered homes (ID11), the WASH infrastructure investment (ID21) and the improved digital connectivity measures (ID27). Lack of detail can also preclude certainty on the extent of the climate ambition of the measure (ID12 – workers would be retrained for which sectors? ID18 – what sectors, type of goods or services would be targeted for MSMEs export expansion?)

Some measures could support greater climate ambitions if adjusted. The planned land use conversion (ID9) can be tailored to be climate-smart i.e. first, not converting carbon sink land (e.g. damming floodplains, draining peatlands, deforesting land) into agricultural use and selecting crops and practices that will be suitable under climate change. Similarly, the mass housing strategy (ID 10) could be made energy efficient in the context of expected increase in the number and intensity of heatwaves in the country.

The switch from kerosene, diesel and charcoal to natural gas for firms and households' consumption (ID14, 15), while emitting less GHG, still locks Nigeria into fossil fuel dependency and scores as low/negative ambition. The switch corresponds to the ambition of the Nigeria Gas Flare Commercialisation Programme: to invest in the gas exploitation of the oil industry (PwC, 2017). Road construction (ID19) scores as low/negative in terms of climate ambitions, especially in conjunction with the currently subsidised domestic oil prices.

Alignment of trade-related recovery measures with NDCs

Nigeria submitted its first NDC in 2017; the second is due by end of 2021. Trade is not mentioned in Nigeria's NDC.

The country's first NDC includes an economy-wide mitigation goal[7] set to be achieved through direct GHG reductions, such as ending gas flaring during oil extraction, and low carbon transition of the economy such as reducing fossil fuel dependency towards a mixed energy system and improving energy efficiency by 30% (Federal Government of Nigeria, 2017; CAT, 2021).

Table 21 Trade-related recovery measures and Hepburn et al. classification

		Cluster	Hepburn	Climate ambition	Long run economic multiplier
Real sector	9	Food and agriculture	P	Low/Negative	Low
	10	Infrastructure sector	R	Low/Negative	High
	11	Energy	T	High/Positive	High
	12	Infrastructure sector	N	High/Positive	High
	13	Digital economy support	N, D	Low/Negative, Low/Negative	High, High
	14	Energy	R	Low/Negative	High
	15	Energy	R	Low/Negative	High
	18	MSME support	D	Low/Negative	High
	19	Infrastructure sector	Q	Low/Negative	High
	21	Infrastructure sector	M	High/Positive	High
	27	Digital economy support	S	High/Positive	High

7 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 to receiving international climate finance support.

Nigeria's NDC also includes an adaptation component focused on improved preparedness for climate impacts at the different governance levels from state to village. The plan cuts across several sectors: agriculture, forests, energy, transports, industry and vulnerable groups (Federal Government of Nigeria, 2017).

The trade-related recovery packages align with certain NDC components (Table 22).

In total, these recovery measures correspond to an allocation of about N180 billion.

Table 22 Alignment of trade-related recovery measures with Nigeria's NDC

ID	Trade-related recovery measures	Adaptation/mitigation component in NDC
9	Food and agriculture	Climate-smart agriculture and reforestation are key measures of the mitigation and adaptation components. It can also be linked to the objective of reducing climate impacts on key sectors and vulnerable communities
10	Infrastructure sector	No detail on the energy efficiency of the housing development but the NDC commits to an economy-wide 30% energy efficiency improvement by 2030
11	Energy	The mitigation component commits to installing 13,000 MW of off-grid solar panels
12	Infrastructure sector	No detail on infrastructure targeted for job creation, but the measure could be aligned with the NDC target of reforestation, for example
13	Digital economy support	Digital technology is not included in the NDC but the application of artificial intelligence and other digital technologies to disaster risk reduction has developed since 2017 when the NDC was published
14	Energy	Off-grid and decentralised natural gas could be feeding into the 'secure energy backup' in case of emergency. But as discussed, gas use would keep Nigeria in fossil fuel dependency
15	Energy	
18	MSME support	Under the adaptation component, increased awareness and preparedness to climate impacts in ongoing business planning would align with the recovery measure's objective of job creation and retention
19	Infrastructure sector	Road building may align with the mitigation component 'to switch car to bus', but in the absence of measures for low carbon buses or city toll for cars, it is unlikely improved roads will support NDC delivery
21	Infrastructure sector	WASH roll-out aligns with the adaptation goal of reducing impacts on key sectors and vulnerable communities
27	Digital economy support	Digital technology is not included in the NDC but digital connectivity can be crucial in early warning systems for disaster risk reduction

Source: Federal Government of Nigeria (2017)

Alignment with GRAP and AGSP

This section uses a traffic-light system to highlight Nigeria's recovery agenda alignment or misalignment with the GRAP and the AGSP. The GRAP and AGSP, both documents emitted by the AU, put a green recovery at the core of their agendas.

Out of all recovery measures, some are in direct opposition to the GRAP and AGSP agendas. For example, ID 1 provides a number of protectionist measures to the oil sector, which act as in-kind subsidies to fossil fuels and contradicts climate finance (one of the objectives of the GRAP). Similarly, ID16 establishes a programme to organise artisanal miners and develop the mineral value-chain. Such measure could negatively impact biodiversity and nature-based solutions as outlined in the GRAP and AGSP. Other measures are unclear in terms of impact and hence whether they are compatible with AU's agendas. For example, ID 17 mentions support to tourism, but there is no mention of ecotourism, which could be developed. But opportunities also exist in Nigeria's ESP to further objectives supported in the GRAP and AGSP. For example, the ESP focuses efforts on debt-relief and could mention the use of debt for climate swaps.

Table 23 lists trade-related recovery measures (as per Table 20) and their link to the GRAP and AGSP, highlighting where the agendas match or not.

Table 23 Recovery measures, GRAP and trade-related implications

ID	Trade-related recovery measures	Link to GRAP/AGSP
11; 14; 15	Support measures to energy [ID11,14; 15] include solar energy but also LNG and liquefied petroleum gas and ID 3 states the need to identify finance to enact the energy plan. While the two AU agendas promote the renewable energy sector, Nigeria's ESP supports fossil gas that cannot be considered as clean energy investment even though the plan concerns the commercialisation of fossil gas that would otherwise be flared, releasing CO2 in the atmosphere.[8]	Climate finance (GRAP) Renewable energy (GRAP & AGSP)
9; 18	The agricultural production boost programme and the support measures for MSMEs including those in the agro-processing sector could be designed to include resilience to climate as per the two AU agendas. At the moment there is uncertainty as to the design of the programme.	Resilient agriculture (GRAP) Scaling up climate smart agriculture and food security systems (AGSP)
10; 12; 21	Investment in housing (ID 10), infrastructure projects and in water and sanitation infrastructures (ID 21) could feed into the GRAP and AGSP if designed to be climate-proof.	Green and resilient cities (GRAP) Green urbanisation and smart cities (AGSP)
13; 27	The digital economy drive of the ESP aligns with the AGSP component on enhancing ICT. As described in the previous section, ICT can support solutions in the field of disaster risk prevention in the context of climate change.	Enhancing ICT (AGSP)

8 Methane gas is a by-product of oil extraction and is generally 'flared' by oil producers i.e. burnt into CO2, rather than released in the atmosphere as CH_4. But, the methane gas could be put to productive use, hence, the ESP measure to use the by-product gas for domestic consumption.

Links to the AfCFTA

Nigeria's recovery measures have focused on fiscal and monetary levers but they nonetheless have linkages with trade. In this sense, assessing which AfCFTA provisions already align, or could potentially align, with the climate-compatible recovery measures outlined in the previous sections could ensure ccross-sectoral and cross-governance coordination.

AfCFTA provisions that align with climate compatible recovery actions

AfCFTA protocols on trade in goods and trade in services enshrined flexibility to achieve legitimate objectives in public health, safety, environment, public morals and the protection of cultural diversity. General exceptions are applicable to measures necessary to protect human, animal and or plant life or health and answering the climate change emergency would fit squarely in these exceptions which are mentioned in the following.

- The preamble to the Agreement (page 2).
- General exceptions Article 26 of the Protocol on Trade in Goods relating to the adoption or enforcement of measures that are necessary to protect human, animal or plant life or health.
- Article 15 of the Protocol on Trade in Services recognises the need to protect human, animal or plant life or health. This is in addition to the preamble of that protocol specifically recognising the right of State Parties to pursue legitimate national policy objectives, including overall sustainable development and the need not compromise consumer protection, environmental protection and overall sustainable development.
- Articles on subsidies stated that nothing shall be construed to prevent State Parties from using subsidies in relation to their development programmes.

Effective implementation of the ESP's trade-related recovery measures has implications for the trade protocols and agreements. The 5 million solar-powered homes plan (ID 11) requires materials and services inputs that may not be available within the country, hence importation may be required. The AfCFTA protocols on trade in goods and the corresponding one in services have implications for the effectiveness of this plan. What are the tariffs and non-tariff measures facing the required inputs? What are the domestic regulations governing the required services?

Issues in agricultural development especially as it relates to support for bolstering agro-processing (ID 9) are central to agricultural trade negotiations under three pillars: market access (including SPS and TBT), domestic supports and export subsidies. Investment in technology and materials, subsidies as a form of incentives to promote food security goal and efficient services are required to meet the goal. Thus, relevant protocols of the AfCFTA where these issues were negotiated are not only relevant but may be revisited. Indeed, Article 28 of the Agreement is explicit, saying 'This Agreement shall be subject to review every five (5) years after its entry into force, by State Parties, to ensure effectiveness, achieve deeper integration, and adapt to evolving regional and international developments.' The Agreement further states that 'State Parties may make recommendations for amendments, in accordance with Article 29 taking into account experience acquired and progress achieved during the implementation of this Agreement.' It is important to note that the Agreement has been in effect for over two years, since 30 May 2019. State Parties should be preparing for issues to be tabled for review, among which climate concerns should be included.

Apart from services that are required in the process of producing goods, provisioning of direct services for consumption such as empowering people in digital outsourcing (ID13) has implications for the negotiations in the trade in services. The African Union has identified five priority services sectors: transport, communications, financial services, tourism and business services. To achieve the ESP goals, relevant areas of negotiations in trade in services should receive appropriate attention. Tourism is one of the priority services sectors. However, negotiation would be more beneficial from a climate perspective if issues in eco-tourism are integrated. Similarly, financial services negotiations may consider the whole gamut of climate finance, including debt-for-climate swap, differential interest rates or subsidies to address climate challenge.

The development of Nigerian energy sector has over the years depended on foreign investment; efforts have equally been geared towards promoting local content. The outputs of the sector, crude oil and natural gas, also rely on the foreign market. The goal of the ESP in this sector therefore has implications for trade in goods, trade in services and investment, among others.

Infrastructure development was prominent in the ESP agenda, and construction projects for socio-economic development requires inputs from different markets. Some of the trade implications include issues in trade facilitation, foreign construction services and importation of construction equipment and materials.

Table 24 Recovery measures, trade-related implications and the AfCFTA

Trade-related recovery measures	Trade-related implications	Link to AfCFTA	
		Current	Future
Renewable and fossil energy power plans [ID 11, 14, 15]	Financial and business services agreements, subsides, competition policy, investment, subsidies, tariff schedule	Services, subsidies National tariff schedule	Competition; investment
Agricultural production boost programme [ID 9, 18]	National tariff schedule (special and sensitive, products); services, subsidies, quantitative restriction, export competition	National tariff schedule	
Infrastructure investment [ID 10; 12; 21]	Services, ICT, quantitative restrictions, local content, subsidies	Services	
Digital economy switch-over programme [ID 13; 27]	Services, investment, ICT, quantitative restrictions, local content, subsidies	National tariff schedule, ICT	Investment; IPR

Opportunities to increase ambition

The current state of play in the negotiations and implementation of the AfCFTA Agreement presents opportunities for greater alignment between the ESP, the country's climate ambitions and the Agreement. Just like most trade pacts, the link between trade and environment is very sparse in the AfCFTA agreements. While the flexibility, exemptions and other related provisions of the AfCFTA could be effectively invoked to deal with environmental concerns, ongoing phases of negotiations provide opportunities to mainstream environmental and sustainable development issues into the trade pact.

Member states are expected to reflect environmental goods in the yet-to-be submitted/approved national schedule of tariff concession. Targeted tariff reductions are expected to address environmental and sustainable development concerns such as tourism development (integrating ecotourism) and agricultural development (becoming environmentally sustainable). Similarly, other annexes to the framework agreement that have clauses for revision should also reflect environmental concerns of member states. Similarly, in the process of making offers on the priority services, namely transport, communications, financial services, tourism, and business services, member states should ensure that environmental concerns are not relegated.

The second phase negotiations present an opportunity to incorporate environmental concerns directly into the different protocols on investment, intellectual property and competition policy. Thus, member states should design negotiations in these areas with appropriate consideration for environmental issues. Similarly, negotiations of non-priority services are still open to incorporation of environmental concerns. Similarly, the third phase of negotiations on e-commerce is equally important from the perspective of the environment and sustainable development.

Table 25 Nigeria recovery measures, GRAP and AfCFTA

Opportunities	Link to GRAP and ESP's trade-related recovery measures	Link to AfCFTA implementation and negotiation
Tariff exemption on goods and services for the delivery of solar-power farms	Climate finance and renewable energy [ID 11; 14; 15]	Yet-to-be submitted national schedule of tariff concession
Subsidies to finance solar-power farms		Article 17 states that 'Nothing ... shall ... prevent State Parties from using subsidies in relation to their development programme'

Opportunities	Link to GRAP and ESP's trade-related recovery measures	Link to AfCFTA implementation and negotiation
Targeted tariff reduction/ exemption to support strategic import of inputs into agro-processing	Resilient and climate-smart agriculture [ID 9; 18]	Yet-to-be submitted national schedule of tariff concession
Subsidies trade finance facilities to support strategic import		Article 17 states that 'Nothing … shall … prevent State Parties from using subsidies in relation to their development programme'
Waivers and concessions for using subsidies to develop agricultural value chain		Invoke Articles 28 and 29 of the AfCFTA Agreement
Seeking generous market access conditions for processed agricultural exports		Yet-to-be submitted national schedule of tariff concession
Seeking and negotiating mutual recognition for SPS and TBT		Invoke Annexes on SPS and TBT, Article 10 of the Protocol on Trade in Services
Access to finance towards developing green and resilient cities	Infrastructure, green and resilient cities [ID 10; 12; 21]	Yet-to-be concluded protocol on trade financial services
Access to materials, services and technologies		Yet-to-be negotiated Protocols on IP, Investment
Investment in digitalisation and innovative technologies	Enhancing ICT [ID 13; 27]	Yet-to-be negotiated Protocols on IP, investment, ICT, e-commerce
Promoting the use of digital technologies for public and private businesses		Yet-to-be negotiated Protocols on IP, investment, ICT, e-commerce
Investment in digital solution		Yet-to-be negotiated protocols on IP, investment

Conclusions

The current version of the AfCFTA, just like most trade pacts, does not explicitly incorporate climate concerns. However, various Articles in the agreement can be deployed to address climate concerns by State Parties. Some annexes, such as those relating to Rules of Origin and Schedules of Tariff Concessions, are works in progress, hence providing scope for greater alignment between trade-related recovery measures, GRAP and the AfCFTA.

Greater alignment could be envisaged during the subsequent phases of negotiations (Phases II and III). However, for alignment to be achieved, Nigeria and other State Parties would have to make conscious efforts at mainstreaming climate concerns into the trade pact. Finally, irrespective of the level and depth of the envisaged alignment, the ultimate determinant is the effectiveness of the implementation by State Parties.

Rwanda

Assessment of emerging patterns of economic recovery

Rwanda was expected to experience an 8% expansion of GDP prior to the pandemic, but experienced a contraction of 0.2% in 2020, and an increase in public debt from 58.1% of GDP in 2019 to 66% in 2020 (World Bank, 2021). These measures, due to their effects on public expenditures, have raised the risk rating of debt distress from 'low' to 'moderate' (World Bank, 2021b). However, they are also underpinning the expected economic recovery in 2021, with an expected rebound of 5.1% GDP growth (IMF 2021b).

Rwanda responded to the pandemic by putting in place the Economic Recovery Plan (ERP), which includes support to firms and households. The Social Protection Relief and Recovery component provides: (1) relief to vulnerable households by easing requirements for ongoing assistance programs, using Rwanda's extensive, decentralised administrative structure to provide in-kind assistance, and improving access to health and primary education services; and (2) financial assistance to households and micro-enterprises, and jobs through labour-intensive investment projects (World Bank, 2021b).

Subsequently, in December 2020, Rwanda launched the Manufacture and Build to Recover Program (MBRP) to 'fast-track private sector investments in manufacturing and construction and boost economic recovery efforts with specific incentives and key performance indicators'. The MBRP was designed to significantly reduce the cost of setting up industries for selected products as well as to help existing firms expand current operations with a focus on construction materials, agro-processing, and hygiene and sanitation products.

The MBRP explicitly recognises the role of trade policy in supporting recovery efforts, with specific measures to support the sourcing of inputs from outside of the EAC. The ERP and subsequent initiatives like the MBRP comprise specific fiscal, monetary and investment incentives, as summarised in Table 26. The fiscal measures listed in Table 26 includes specific factory construction incentives which will have knock-on effects on trade because they are targeted at the development of specific industries. For example, greenfield investments are eligible for incentives where total construction value is $1 million or greater; brownfield investments eligible for incentives where total construction value is $1 million or 20% of total investment; and, agro-processing sector eligible for incentives where total investment is $100,000 or greater.

The ERP has mainly targeted firms hardest hit by the pandemic, such as SMEs and the hospitality industry. The revised FY20/21 budget accommodates more Covid-19-related spending, including support for the hard-hit transport sector in the form of fuel subsidies, loans and tax relief.

Table 26 Rwanda recovery measures

Archetype	Stimulus measures	Climate ambition	Long-run economic multipliers	Trade effects/ policy
K	Support to vulnerable households via food distribution program (door-to-door provision of basic food stuffs every three days)	Low/Negative	High	Demand
O	Cash transfers to casual workers	Low/Negative	High	Demand
I	Tax deferral; suspension of down payments on outstanding tax for amicable settlement; softening of enforcement for tax arrears collection	Low/Negative	Low	Demand
H	Tax exemptions for private school teachers and tourism and hotel employees earning less than 150,000 Rwanda francs a month	Low/Negative	Low	Demand
G	VAT exemption for locally produced masks	Low/Negative	Low	Supply; competition
O	Salaries of top civil servants for the month of April were redirected to welfare programmes	Low/Negative	High	Demand
J	MBRP adopted at the end of 2020 provides for VAT exemptions on construction and tax credits	Low/Negative	Low	Supply; competition
G	VAT exemption on imported construction materials not available in the EAC (part of the MBRP)	Low/Negative	Low	Supply; competition
G	VAT exemption for construction materials sourced domestically	Low/Negative	Low	Supply; Competition
H	Tax credits off-setting 2021 PAYE and CIT and Reduced PAYE per additional employee	Low/Negative	Low	Demand
J	General construction incentives for greenfield, brownfield and agro-processing for minimum investment thresholds	Low/Negative	Low	Investment; services
D	Support to affected businesses through subsidised loans from commercial banks and MFIs; credit guarantees, targeting SMEs and hard-hit sectors such as hospitality industry	Low/Negative	High	Competition; services
D	Subsidies, loans and tax relief to transportation sector	Low/Negative	High	Competition; services
C	An extended lending facility worth RWF 50 billion to banks	Low/Negative	Low	Demand
C	Lowering of the reserve requirement ratio by 100 basis points (from 5 to 4 percent) effective from April 1	Low/Negative	Low	Demand
A	Loan repayment conditions eased (temporarily) for impacted borrowers	Low/Negative	Low	Demand
G	Charges on electronic money transactions waivered	Low/Negative	Low	Demand
C	Central bank cut the policy rate by 50 points to 4.5%	Low/Negative	Low	Demand
C/D	Central bank restricted dividend distribution by banks and insurers to preserve capital positions	Low/Negative	Low	Demand

Note: Adapted from the Hepburn et al. (2020) framework

Recovery efforts and trade-related implications

- Recovery efforts have overall focused on those with low and negative climate ambition, as indicated by Table 26, which assesses measures applied to date using the Hepburn et al. (2020) classification.
- Reducing the costs of imported products sourced regionally (within the EAC) and domestically features within measures to promote construction.
- The promotion of manufacturing and agro-processing is emphasised within the MBRP, 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 in particular, known for high economic multipliers.

Alignment with NDCs

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, it references the specific areas of action that feature within Rwanda's Green Growth and Climate Resilience Strategy, which include:

- sustainable intensification of small-scale farming
- agricultural diversity for local and export markets
- integrated water resource management and planning
- sustainable land use management and planning
- low carbon mix of power generation for national grid
- sustainable small-scale energy installations in rural areas
- green industry and private sector investment
- climate compatible mining
- efficient resilient transport systems
- low-carbon urban settlements
- ecotourism, conservation and payments for environmental services (PES) promotion
- Sustainable forestry, agro-forestry and biomass energy
- disaster management and disease prevention
- climate data and projections

Clearly, there is some overlap with the focus of recovery measures in fairly broad terms for some of the areas of action. However, there clearly could be a more explicit focus on green industry, sustainable farming, and resilient transport systems within the recovery strategy. Currently 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 adaption 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-sectional measures like access to finance. Table 27 summarises the degree of potential overlap between recovery measures to date and Rwanda's objectives as summarised in its NDC and where a greater emphasis on green recovery could ensure greater alignment.

Table 27 Alignment of stimulus with NDCs

Stimulus measures	Adaptation/mitigation component in NDC	Assessment
	Adaptation component of NDC	
Incentives for agro-processing	Agriculture	Stimulus could include specific measures to support sustainable and resilient agricultural production
Subsidies, loans and tax relief to transportation sector	Transportation	Stimulus measures to transportation could both support and be continent on specific adaptation measures
Extended lending facilities to banks	Finance	No conditionality attached to enhanced lending facilities
	Mitigation component of NDC	
Incentives for agro-processing	Sustainable intensification of small-scale farming Agricultural diversity for local and export markets	Investment incentives do not distinguish between firms based on sustainable production or diversification of markets
Incentives for greenfield and brownfield investment	Green industry and private sector investment	Investment incentives do not distinguish between firms using greener technology or practices
Subsidies, loans and tax relief to transportation sector	Efficient resilient transport systems	Stimulus measures to support transportation could be continent on improvements in processes and emissions reductions – in line with resilient transportation system ambitions
Financial support to affected business in tourism and hospitality	Ecotourism, conservation and PES	Broad-based support measures do not provide incentives for movement into ecotourism

Summary of trade-related implications

- While fiscal incentives are provided for investment, no other investment policy considerations are considered – with limited alignment with objectives specified in Rwanda's NDC, such as the objective of green industry.
- While the MBRP clearly takes trade policy into consideration, given that it provides for VAT exemptions on imported construction materials not available in the EAC as well as VAT exemptions for construction materials sourced domestically, no link is made to African continental trade policy.
- Similarly, no link is made to the sourcing of environmentally friendly inputs, that could support Rwanda's NDC objectives such as low carbon urban settlements.
- There is no targeting of firms or incentives regarding methods of production for the sectors in which investment is sought, such as construction and agro-processing or brownfield (lease or purchase of pre-existing facilities).

- Nor are there any links made between the promotion of agro-processing and the promotion of sustainable small-scale production and agricultural diversity for local and export markets, as specified in Rwanda's NDC.

Alignment between recovery and the AU's GRAP

There is limited degree of alignment between Rwanda's recovery and the GRAP, as indicated by Table 28. An overall assessment has been made to classify the extent to which specific aspects of recovery efforts are aligned to the GRAP (coded Green), where there is some alignment (amber) and where greater alignment is needed (red). This classification has been based on the overall orientation of the recovery strategy to date.

It is important to note that there does seem to be a greater degree of alignment between Rwanda's NDC and both the GRAP and AGSP. This indicates that Rwanda's weak alignment with the GRAP is related to fiscal space: the recovery strategy to date is focused on immediate objectives and measures with higher economic multipliers (according to the Hepburn et al., 2020 classification).

Table 28 Recovery and alignment with GRAP

Stimulus measures	Link to GRAP/AGSP
Subsidies and loans to affected sectors such as hospitality and transportation sector. However, no link to the promotion of ecotourism, nor to resilient transportation as per NDC and therefore to potential climate finance linkages. Overall, there is very little linkage between national projects already included within Rwanda NDC.	Climate finance
There is no specific mention of the promotion of renewable energy within any of the recovery measures targeted at households or firms.	Renewable energy
There is no specific mention of any of the areas of the areas included within the GRAPs nature-based solutions. While support to the tourism sector and hospitality industry has been provided as part of targeted support to firms, the linkages to ecotourism have not been articulated.	Nature-based solutions
While specific measures are included for the promotion of agro-processing, there is no mention of links to resilient agriculture.	Resilient agriculture
While support to firms has been provided, there is no mention of specific support to facilitate adoption of technologies or improvements in processing included in the MBRP. Support to the transportation sector has been provided but there does not seem to be any link to emissions. Fees for digital transactions have been temporarily waived but no digital elements feature within recovery efforts.	Green and resilient cities

Note: Based on analysis of Table 26

Table 29 Alignment between recovery and AGSP

Green stimulus	Rwanda	Assessment
Improving air quality, enhancing chemicals and waste management and promoting the circular economy	×	Stimulus measures to transportation could support improvements in air quality
Conserving biodiversity and combatting the illegal wildlife exploitation and trade	×	Not mentioned
Revitalising eco-tourism and the biodiversity economy	✓	While tourism and hospitality are a focus, no specific measures to promote ecotourism
Combating land degradation, desertification and drought	×	Not mentioned
Enhancing climate action	×	Not explicitly mentioned
Investing in the blue economy	×	Not applicable
Scaling up climate smart agriculture and food security systems	✓	Support for agro-processing does not distinguish between firms based on sustainable production
Supporting sustainable management of forests	×	Not mentioned
Improving water conservation and use	×	Not mentioned
Investing in renewable energy	×	Not mentioned
Developing smart cities and promoting green urbanisation	✓	Private sector support is provided but not linked to greener production. Construction materials from EAC and domestic markets have VAT waived, but this applies to all goods not those that could support green urbanisation and smart cities
Enhancing ICT	✓	Fees waived for electronic transactions, temporarily

Table 30 Alignment between Rwanda's NDC and GRAP

Rwanda's NDC	Link to GRAP
Access to finance (adaptation)	Climate finance
Low carbon mix of power generation for national grid Sustainable small-scale energy installations in rural areas	Renewable energy
Ecotourism, conservation and PES promotion Climate compatible mining Sustainable forestry, agro-forestry and biomass energy	Nature-based solutions
Sustainable intensification of small-scale farming Agricultural diversity for local and export markets	Resilient agriculture
Low-carbon urban settlements Efficient resilient transport systems	Green and resilient cities

Note: NDC assessment includes both adaptation and mitigation measures

How can the AfCFTA support and boost recovery ambitions?

This section articulates the trade-policy related linkages between recovery efforts and the GRAP and the AfCFTA for Rwanda. It refers to the current provisions of the AfCFTA for Rwanda and those under negotiation. It begins with the provisions that most align with climate compatible recovery ambitions – those that have been identified as 'amber' measures. It then explores how greater alignment could be achieved and where ambition could be raised, with a focus on those measures identified as 'red'.

Opportunities to increase ambition

Services such as tourism and hospitality both feature as priority areas within the Phase I protocols on trade in goods and services. Rwanda should prioritise the harmonisation and strengthening of environmental standards to promote the objective of ecotourism included within GRAP, including under the African Quality Standards Agenda. Addressing non-tariff barriers in this sector could facilitate the market access of providers and therefore boost recovery objectives.

While boosting agro-processing capabilities is a focus of recovery efforts, greater alignment could be achieved through ensuring that the supply of agricultural inputs are produced in line with the objectives of GRAP and the promotion of resilient agriculture. This could be achieved through consideration of standards, as well as investment and intellectual property to be negotiated under the AfCFTA.

In terms of future negotiations, ensuring investment frameworks support green recovery efforts is clearly a priority. This is in view of the emphasis placed on investment incentives within the MBRP and promotion of the construction of factories. Ensuring access to inputs that can support Rwanda's aspirations for low-carbon urban settlements and green industry and private sector investment will also be important, and there are specific roles that the AFCFTA could play in this regard. This includes through supporting trade in environmental goods and services. Rwanda's VAT exemptions on imported goods from the EAC could be extended to AfCFTA partners and consider the promotion of environmental goods and services.

There are opportunities to promote the manufacture of climate technologies on the African continent as well as the import of climate technologies to boost manufacturing, which could be given greater consideration by Rwanda in view of efforts to boost manufacturing and the aspirations of the GRAP related to green and resilient cities. Investment incentives could be related to firms' adoption of greener and cleaner technologies for manufacturing, which has trade policy linkages to investment and intellectual property provisions being negotiated under the AfCFTA.

Incentivising building retrofits and climate-smart green building investments is one way in which to better align Rwanda's recovery strategy to GRAP while maintaining a focus on construction and better linking to new trade policy instruments being negotiated under the AfCFTA. There is an opportunity to tap into trade for dissemination and use of climate technologies to avoid locking countries into GHG-intensive dependencies.

Related to the emphasis on construction in Rwanda's recovery is energy efficiency – an area that does not receive much attention within Rwanda's recovery but which features within the GRAP (again related to green and resilient cities and renewable energy). Within these two pillars, the emphasis is also on the development of resilient transportation systems; hence, there is much scope to advance Rwanda's recovery with a greater emphasis on securing resilient transportation systems rather than maintenance of business as usual.

Table 31 Recovery, GRAP and trade-related implications

Recovery focus and links to GRAP	Trade-related implications	Link to AfCFTA	
		Current	**Future**
Nature-based solutions While support to the tourism sector and hospitality industry has been provided as part of targeted support to firms, the linkages to ecotourism have not been articulated.	**Border measures:** sensitive products/exclusion; quantitative restrictions; mandated due diligence **Behind-the-border measures**: safeguards; export duties; safeguards; standards; labels; intellectual property	Services (Phase I): tourism is a priority Standards for eco-tourism providers under the African Quality Standards Agenda	Investment (Phase II)
Resilient agriculture While specific measures are included for the promotion of agro-processing, there is no mention of links to resilient agriculture.	**Border measures**: agriculture market access; sensitive products/exclusion; quantitative restrictions; mandated due diligence **Behind-the-border measures**: intellectual property; investment and ISDS	Goods (Phase I): Agriculture market access Standards and regulations (Phase I)	Investment (Phase II) IP (Phase II)
Green and resilient cities Targeted private sector support does not promote specific technologies or improvements in processes; similarly in the case of support to transportation. Only waiving of fees features as part of efforts to boost digital trade. VAT exemption on imported construction materials not available in the EAC (part of the MBRP) and sourced domestically.	**Border measures**: environmental goods and services; industrial goods; sensitive products/exclusion; quantitative restrictions **Behind-the-border measures**: standards; labels; subsidies; investment and ISDS; government procurement	Services (Phase I): transportation a priority Goods (Phase I): Environmental Goods and Services	Investment (Phase II) IP (Phase II) Procurement E-Commerce (Phase III)
Climate finance			
Subsidies and loans to affected sectors such as hospitality and transportation sector. However, no link to the promotion of ecotourism, nor to resilient transportation as per NDC and therefore to potential climate finance linkages.	**Border measures**: services (Finance) **Behind-the-border**: competition; subsidies	Services schedules Subsidies	Investment (Phase II) Competition (Phase II)

Recovery focus and links to GRAP	Trade-related implications	Link to AfCFTA	
		Current	Future
Renewable energy			
No specific mention of the promotion of renewable energy within any of the recovery measures targeted at households or firms.	**Border measures**: Environmental goods and services; industrial goods; sensitive products/exclusion; quantitative restrictions **Behind-the-border measures:** standards; labels; subsidies; investment and ISDS; government procurement	Industrial Goods schedule of commitments: 7% 'sensitive'; 3% excluded. Services schedules Rules of origin Subsidies	Intellectual Property (Phase II) Investment (Phase II) Competition (Phase II)

Conclusions and recommendations

Rwanda's focus within recovery efforts has been immediate recovery followed by broader support for manufacturing. While there is some explicit mention of trade policy, including at the regional level, to secure inputs to boost manufacturing capabilities, there is no mention of African continental policy.

Currently, there is weak overall alignment between Rwanda's recovery strategy and the GRAP – as indicated by Table 28. There is also limited alignment with the AGSP (Table 29). However, there does appear to be a greater degree of alignment overall between Rwanda's NDC and the GRAP (and AGSP) as indicated by Table 30.

Despite this, it is possible to articulate the trade policy linkages between recovery and the role that the AfCFTA can play, including in those areas where there is potential alignment with the GRAP. The specific areas have been identified in Table 31 and fall mainly within the spheres of the following.

Future negotiations:

- **Investment:** ensuring climate considerations feature within the AfCFTA maintaining the right to regulate and promotion of green investment.
- **Intellectual property:** easing of barriers to patent registration and stronger patent protection, specifically for climate technologies developed on the continent.
- **Digital:** support the broader agenda of the GRAP though AfCFTA provisions on e-commerce and boost recovery efforts that include digital.
- **Competition:** ensure competition regulations fuel green innovation without being harmed by environmental regulations.

Current schedules:

- **Environmental goods and services:** define these within the AfCFTA and promote tariff reductions and removal of non-tariff barriers. Ensure environmental goods and services do not feature within sensitive or exclusion lists.
- **Sustainable agriculture:** support the development through quality standards and work to reduce the inclusion of products within exclusion/sensitive goods lists.

South Africa

Introduction

Over the past decade, the South African economy has been beset by numerous challenges including low levels of investment and growth, revenue leakages and a rising budget deficit (Government of South Africa, 2020). The economic restrictions imposed in response to the Covid-19 pandemic further exacerbated this situation with significant drops in GDP and a significant decline in key sectors such as construction, manufacturing and transport (World Bank, 2020).

Projections by the International Monetary Fund (IMF) and the South African Reserve Bank (SARB) estimate that the South African economy should grow in 2021 by 3.6% and drop subsequently to 2.5% in 2022 (OECD, 2020; World Bank, 2020).

These uncertainties, coupled with the historical challenges of inequality, poverty and corruption are likely to complicate the recovery process. The tense undercurrent of unrest and riots has also revealed frustrations among the population towards the government and is expected to force an economic contraction of 3% and further bring down growth (Reuters, 2021). The primary sites for these riots, KwaZulu-Natal and Gauteng, play a significant role in the South African economy, contributing half of its GDP as well as situating half of the country's population. Additionally, the port of Durban in KwaZulu-Natal is the country's main trade hub to the Southern African region, facilitating close to 70% of South Africa's imports (CNBC, 2021).

Like other African countries, the South African recovery strategy will need to balance its containment of the pandemic through ongoing restrictions and lockdowns while also stimulating the economy. South Africa has been the hardest hit by the pandemic on the continent, with close to 2.7 million cases recorded to date and a strict tiered lockdown system that has significantly impacted economic activity (Al Jazeera, 2021).

In addition to these challenges, there is the ever present and inescapable reality of climate change that threatens to worsen the already vulnerable situation on the continent. South Africa is situated within a drought belt and its economy is largely concentrated on climate sensitive activities such as coal production, agriculture and forestry (UNDP, 2021).

This case study seeks to investigate the extent to which South Africa has included environmental considerations into its recovery strategies, and more specifically how these are linked to the climate ambitions outlined in their NDCs. It also aims to map out the extent to which the recovery programme aligns with the continental GRAP and AGSP.

Emerging patterns of economic recovery

Overview of South Africa's economic stimulus package

In response to the global pandemic, South Africa adopted the Economic Reconstruction and Recovery Plan in October 2020, which aims to coordinate an effective response to the health risks of the pandemic and simultaneously revive the economy through targeted measures. Recovery measures are also outlined in the Supplementary Budget Review which gives more detail on fiscal interventions.

The South African recovery strategy is phased in three parts. The first part is focused on preservation of the economy through immediate, 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 is to pivot the economy to an accelerated growth paradigm to ensure long-term growth.

The government's first response was the Covid-19 fiscal package of R500 billion in relief which included R190 billion in main budget spending. From the first phase, R145 billion was allocated immediately to support households and businesses as well as primary health care. R70 billion was dedicated to tax policy measures and R200 billion was dedicated to a loan guarantee scheme to support short term economic growth.

Categorisation of recovery measures in terms of climate ambitions

Table 32 South Africa's recovery measures

Archetype	Stimulus measures	Climate ambition	Long-run economic multipliers	Trade effects/ policy
A	Reduced interest rates	Low/Negative	Low	Demand
A	Additional support to bond markets	Low/Negative	Low	Demand
H	Tax relief measures	Low/Negative	Low	Demand
D	Easing flow of credit to households	Low/Negative	High	Demand
A	Temporary payment holidays	Low/Negative	Low	Demand
M	Investments in public health system	High/Positive	High	Investment; services
D	Temporary household grants	Low/Negative	High	Demand
D	Loan guarantee scheme for small businesses	Low/Negative	High	Competition; services
O	Unemployment insurance funds	Low/Negative	High	Demand
D	Small and informal business support, job creation and protection	Low/Negative	High	Competition; services
Q, R	Infrastructure funds	Low/Negative	High	Investment; services
L	Basic and higher education investments	High/Positive	High	Investment; services
M	Support to health and other frontline services	High/Positive	High	Investment; services
V	Land bank equity investments	High/Positive	Low	Investment; services
N	Support for agriculture, tourism and other sectors with high job creation potential	High/Positive	Low	Competition; services
T	Finalising bioenergy regulations	High/Positive	High	Investment; services

Note: Adapted from the Hepburn et al. (2020) framework

Recovery efforts and trade-related implications

- As per the Hepburn et al. (2020) classification, the South African recovery effort has largely been focused on measures with a low and negative climate ambition, as can be observed in Table 32.
- The underlying principle of the South African recovery strategy is 'localisation through industrialisation' and a reorientation towards localising procurement of inputs to strengthen its domestic industrial networks. While this may appear counterintuitive to cross-border trade and indicate an inward shift to production, 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 within the strategy.

Alignment of trade-related recovery measures with NDCs

In September 2021 South Africa updated its NDC with more ambitious emission targets and an aim to keep emissions within the range of 350-420 million tonnes of carbon dioxide equivalent (Mt CO_2e) by the year 2030. The primary considerations behind its submission were to balance its development objectives with urgent climate action. The NDC outlines a mitigation strategy to realise the potential of a low carbon economy and significant investments into the transformation of the energy sector as well as aiming to transform South Africa's future energy mix to replace ageing and obsolete coal-fired power plants with renewable energy technologies.

The update signifies a progression from the first submitted NDC and is a reflection of South Africa's highest possible level of ambition. The 2021 NDC has reduced the upper range of its 2025 and 2030 targets. In addition to these new developments, the update also contains the first communication regarding adaptation and provides a detailed adaptation strategy that South Africa will adopt to contribute to global adaptation goals. This NDC also presents the first Adaptation Communication and builds off the National Climate Change Adaptation Strategy adopted in 2020. The NCCAS is used as the basis for South Africa's obligations for adaptation components stated in its NDC. The South African stimulus plan has a moderate degree of alignment with aspects outlined its current NDC as it prioritises increased investments in health, agriculture, infrastructure, biodiversity, human settlements and the water and energy sectors.

Table 33 Alignment of stimulus with NDCs

Stimulus measures	Adaptation/mitigation component in NDC	Assessment
	Adaptation component of NDC	
Development and implementation of a globally recognised bio-diversity protocol and biodiversity economy infrastructure rollout inclusive of protected areas	Integrative national action plan focused on vulnerable sectors and geographic vulnerabilities	Stimulus could develop more interventions around vulnerable sectors such as are outlined in the National Adaptation Strategy
	Biodiversity: enhance the monitoring of climate change impacts on biodiversity and ecological infrastructure	The stimulus outlines various measures that address biodiversity and protected areas
Not specified in the stimulus measures	Development of national framework for early warning, vulnerability and adaptation monitoring system	Stimulus needs to include measures that support the development of adaptation frameworks
	Water sector: enhance water security; and hydro effectively deploy flood protection measures, and hydro-metrological monitoring systems	Stimulus needs to include measures that specify how water security will be achieved especially as South Africa is incredibly vulnerable to water shortages
Agriculture and Agro-processing master plan Suite of measures outlined in the Comprehensive Land and Agrarian Strategy	Agriculture: development of early warning climate systems for small scale farmers; and supporting climate smart agriculture. The development of a multi-hazard early warning system; capacity building for the farming sector on climate change	Stimulus mentions two master plans intended to jumpstart agricultural initiatives and create employment in this sector
Scaling up capacity of the health systems	Health: monitoring, surveillance and early warning systems for climate-induced diseases	Stimulus outlines various health measures and capacity expansion for its health systems
There is mention of improving social infrastructure delivery in the stimulus	Human settlement: ensure urban planning and design incorporates climate change concerns	The human settlement aspect needs to be elaborated further within the stimulus documents and discuss how it will integrate climate change concerns with settlement
Infrastructure investments and a large-scale infrastructure delivery program is outlined within the stimulus	Infrastructure: ensure the development and deployment of climate-resilient infrastructure that enhances water and energy security	Infrastructure investments are covered in the stimulus plans and is intended to play a critical role in South Africa's recovery
	Mitigation component of NDC	
Integrated resource plan	Integrated energy and electricity plans	Stimulus details plans to integrate its energy and electricity plans and diversify its energy mix

Stimulus measures	Adaptation/mitigation component in NDC	Assessment
Finalising bioenergy regulations	Renewable energy investments	The recovery strategy could develop other regulatory reforms that apply to a broader range of renewable technologies
Integrated resource plan	High efficiency coal-fired power station	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
Creation of 50,000 new job opportunities in environmental programmes	Industrial policy action plans	Stimulus could outline further the job creation opportunities that will arise from other green economy interventions
South Africa has developed an agriculture and agro-processing master plan that details a suite of measures that will create jobs in agricultural value chains	Investments into agriculture and forestry	Stimulus has outlined interventions into the agricultural sector but not elaborated on measures specific to the forestry sector

Alignment with GRAP and the AGSP

Alignment of country recovery strategy with GRAP and the AGSP

South Africa played the leading role in the development of the AGSP as a result of its president serving as AU chair at the time the pandemic was unfolding. This led to a push to link the environmental agenda to the overall health response on the continent. It has largely focused on the AGSP as a legacy programme of South Africa's chairing of the African Ministerial Conference on the Environment, as well as the Committee of African Heads of State and Government of the AU. It has also played a leading role in the development of the GRAP, although this has been primarily driven by the European Commission and the UK. The South African position has been to continue to invest efforts in the operationalisation of the AGSP and to push for it to deliver on its mandate as provided by the African Ministers of Environment.

At present, there is a moderate degree of alignment between the South African recovery strategy and both the GRAP and the AGSP as can be observed in Table 34. An overall assessment has been made to classify the extent to which specific aspects of recovery efforts are aligned to the GRAP (coded green), where there is some alignment (amber) and where greater alignment is needed (red). This classification has been based on the overall orientation of the recovery strategy to date.

Table 34 Recovery and alignment with GRAP

Stimulus measures	Link to GRAP
Support for agriculture, tourism and other sectors with high job creation potential; there is moderate alignment within the recovery strategies and the AGSP and GRAP with regard to supporting eco-tourism and conserving biodiversity. Additionally, the development and implementation of a globally recognised biodiversity protocol and strengthened support for the biodiversity economy is related to the measures outlined in the GRAP	Biodiversity and nature-based solutions Climate-smart and green agriculture
Land Bank equity investments: the Land Bank equity investment strategy focuses on natural capital and as such, aligns strongly with aspects in both the GRAP and AGSP	Climate finance Biodiversity and nature-based solutions
Infrastructure funds: within the national strategy, there is the objective to make greater use of green infrastructure bonds and therefore this aligns to the objectives within the GRAP and AGSP	Green and resilient cities
Finalising bioenergy regulations: this stimulus measure is in strong alignment with the renewable energy objectives in the GRAP and AGSP	Renewable energy
Small and informal business support, job creation and protection: the national recovery strategy emphasises support for SMEs and there is scope to include green related business activities and worker trainings centred around the green economy	Climate finance

Table 35 Alignment between recovery and the AGSP

Green stimulus	South Africa	Assessment
Improving air quality, enhancing chemicals and waste management and promoting the circular economy	✓	There are measures that relate to the circular economy which includes waste picker integration and the revitalisation of buy back centres. There are also ongoing discussions within the South African private sector on promoting Extended Producer Responsibility legislation which will further enhance the circular economy. Social employment programmes such as the 'War on Waste' campaign are also intended to build the circular economy and create mass employment opportunities.
Conserving biodiversity and combatting the illegal wildlife exploitation and trade	✓	There are planned interventions within the recovery strategy to develop and implement a globally recognised biodiversity protocol and support the biodiversity economy. There are also plans to implement a biodiversity economy infrastructure that is inclusive of protected areas.
Revitalising eco-tourism and the biodiversity economy	✓	The strengthened biodiversity protocols are among the measures adopted to boost eco-tourism.
Combating land degradation, desertification and drought	×	There is no explicit reference to these aspects within the key recovery documents.

Green stimulus	South Africa	Assessment
Enhancing climate action	✓	There are various measures adopted in the recovery strategy that enhance climate action, mostly centred around green economy interventions.
Investing in the blue economy	✓	The planned interventions related to the blue economy include: Intermediary solutions for aquaculture products Revitalisation and upgrading of government hatcheries and research centres.
Scaling up climate smart agriculture and food security systems	✓	South Africa has developed an Agriculture and Agro-processing Master plan that details a suite of measures that will create jobs in agricultural value chains.
Supporting sustainable management of forests	×	There is no explicit reference to these aspects within the key recovery documents.
Improving water conservation and use	✓	Retrofitting private and public buildings with measures to improve water efficiency.
Investing in renewable energy	✓	Within the recovery strategy there are plans to diversify South Africa's main energy sources and embrace the use of renewables. Finalising bioenergy regulations is one of the measures being implemented under the recovery strategy.
Developing smart cities and promoting green urbanisation	✓	Within the strategy there are plans to retrofit public and private buildings with energy and water efficiency measures.
Enhancing ICT	✓	There are numerous planned measures with regards to the ICT sector such as advancing manufacturing through artificial intelligence, increasing broadband connectivity in schools and expediting digital migration among others.

Table 36 Alignment between South Africa's NDC and GRAP

South Africa's NDC	Link to GRAP/GESP
• National and sub-national policy and legislation development and budget reprioritisation • Development of climate change adaptation investment pipeline projects	Climate finance
• Renewable energy investments	Renewable energy
• Enhance the monitoring of climate change impacts on biodiversity and ecological infrastructure	Nature-based solutions
• Investments into agriculture and forestry • Development of early warning systems for small scale farmers • Development of a multi-hazard early-warning system • Capacity building for the farming sector on climate change	Resilient agriculture

South Africa's NDC	Link to GRAP/GESP
• Development of national framework for early warning, vulnerability and adaptation monitoring system • Ensure urban planning and design incorporates climate change concerns • Consideration of climate risks in the new settlements and mainstreaming of climate science into building standards • Ensure the development and deployment of climate-resilient infrastructure that enhance water and energy security	Green and resilient cities

Note: NDC assessment includes both adaptation and mitigation measures

Links to the AfCFTA

There is considerable space to increase the ambition of the South African recovery strategy from a climate perspective while simultaneously promoting intra-regional trade. Integrating the AfCFTA protocols and supporting the priority sectors identified can play a significant role in boosting its recovery objectives.

The South African recovery strategy has identified several key value chains, including construction, agro-processing, healthcare, basic consumer and capital goods, and tourism, among others. These measures are in line with the objectives of the Phase I protocols of the AfCFTA which focus on the trade in goods and services. Support for agriculture, tourism and sectors with high job creation potential is highlighted within the recovery documents as a priority.

More specifically, for industries such as agro-processing there could be greater focus on climate smart and resilient agriculture promoted through the AfCFTA, for instance with agricultural inputs. For the tourism sector, South Africa could boost its eco-tourism objectives by harmonising related environmental standards and promoting the use of the Eco Mark Africa tourism sustainability standard.

As negotiations for the phase II and III protocols finalise, there is scope for South Africa to include measures that incorporate these protocols into their recovery strategy. Regarding investment frameworks, there are already planned measures such as the Land Bank equity investment strategy. As the development bank for South Africa's agricultural sector, this strategy has meant that these investments are increasingly climate responsive as drought continues to impact South Africa's farmers.

The recovery strategy has also highlighted measures to enhance information, communication and technology through the use of artificial intelligence to advance manufacturing processes and expedite digital migration, which falls into one of the five priority service sectors identified in the phase I protocols.

Conclusions and recommendations

According to a joint study by the Oxford University Economic Recovery Project and the UNECA, in 2020 South Africa dedicated only 0.3% of GDP for recovery as compared to an average of 2.1% among the G20 countries and 1.6% in low- and middle-income countries. Additionally, recovery spending in South Africa has totalled only 11.5% of GDP compared to 14.2% of GDP in the G20.

Increased green recovery spending on sectors such as renewable energy and other green investments will create many benefits for South Africa such as improving air quality, reducing poverty and reducing disaster risks from climate change. According to the Oxford University Economic Recovery Project, green investments should be rolled out with investments into health, education, infrastructure and agriculture so as to fully realise the social and environmental co-benefits.

South Africa is slowly transitioning to greater renewable energy generation. Initiatives such as the Renewable Energy Independent Power Producer Programme have led to increased procurement of large-scale renewable projects, but they still do not meet the country's energy requirements.

The stimulus plan alignment with the GRAP and AGSP is moderate and covers a broad section of environmental concerns and as such should be further elaborated and intensified.

Appendix 2 Methodology

The research approach will be qualitative and based on detailed case study analysis of the following country case studies: Ghana, Kenya, Nigeria, South Africa and Mozambique and Rwanda. These case studies have been selected in view of the comparisons that they may provide.

South Africa and Nigeria feature as the African countries with the largest shares of GhG emissions in exports, while Rwanda is one of the lowest and Mozambique is in the median range.

The sectoral composition of African exports by destination is varied, with differences in the roles of intra-African trade and identified trade and vulnerability pathways.

Mozambique and Rwanda as Least Developed Countries have high economic and environmental vulnerabilities, including to climate change.

More information on climate related vulnerabilities for intra- and extra-African trade is available in Keane et al. (2020).

The research will be undertaken step by step as follows:

Step 1: Assessment of patterns of economic recovery

- Summary of economic recovery strategies and changes over time.
- Categorisation of fiscal and monetary measures, using the framework developed by Hepburn et al. (2020) with examples of its application in Keane et al. (2021).
- Assessment of degree of alignment of recovery measures with Nationally Determined Contributions.

Step 2: Alignment of economic recovery with GRAP and Green Economic Stimulus

- Assessment of degree of alignment of country recovery strategy with GRAP and Green Economic Stimulus Programme.
- Use of a traffic light system in order to assess overall alignment.

Step 3: Trade-related implications and links to the AfCFTA

- Describe most relevant AfCFTA provisions in view of orientation of economic recovery and degree of alignment with GRAP.
- Describe how greater alignment could be achieved between recovery strategies, GRAP and the AfCFTA.

Each step in the analysis is described in the following sub-sections.

Step 1: Assessment of emerging patterns of economic recovery

The first part of the analysis will begin with analysis of Covid-19 recovery strategies for the selected case studies, to ascertain emerging patterns of economic recovery. It will comprise an analysis of the overall stimulus packages initiated to counteract economic slowdowns induced by Covid-19. It will then classify the extent to which stimulus measures may be considered either low or high climate ambition, adapting the framework of Hepburn et al. (2020). This will provide a basis for consideration of how to align green recovery strategies with the GRAP and the African Green Stimulus Program approved by Environment Ministers.

An example of how this exercise can be undertaken is summarised in Table 37. The process of classifying fiscal and monetary stimulus can help to reveal some of the ambiguity that may exist. For example, retrofitting buildings could be high or low climate ambition depending on the extent to which its objective relates to supporting energy efficiency, as opposed to immediate job creation. These are the types of examples that will need to be documented and analysed carefully in order to clearly link to GRAP and related trade and investment policy within the AfCFTA.

The next step will be to determine the degree of alignment between Covid-19 recovery strategies, countries own Nationally Determined Contributions (NDCs). Whilst we acknowledge the difficulties in measuring financing needs in general, and especially for adaptation climate-related activities within the NDCs, with actual needs often under-estimated – they convey a government's ambitions to reduce national emissions and adapt to the impacts of **climate change. We will also analyse more recent government statements on climate action ahead of COP26. This includes at the high-level political forum for sustainable development.**

Table 37 Categorisation of relief measures

Archetype	Relief measures	Climate ambition	Long-run economic multipliers
A	Temporary waiver of interest payments	Low/Negative	Low
B	Assisted bankruptcy	Low/Negative	Low
C	Liquidity support for large corporations	Low/Negative	Low
D	Liquidity support for households, start-up SMEs	Low/Negative	High
E	Airline bailouts	Low/Negative	Low
F	Not for profits, education research, health inst. Bailouts		
G	Reduction in VAT and other taxes	Low/Negative	Low
H	Income tax cuts	Low/Negative	Low
I	Business tax deferrals	Low/Negative	Low
J	Business tax relief for strategic and structural adj.	Low/Negative	Low
K	Direct provision of basic needs	Low/Negative	High
L	Education investment	High/Positive	High
M	Healthcare investment	High/Positive	High
N	Worker retraining	High/Positive	High
O	Targeted direct cash transfers or temporary wage increases	Low/Negative	High
P	Rural support policies	Low/Negative	Low
Q	Traditional transport infrastructure investment	Low/Negative	High
R	Project based infrastructure grants	Low/Negative	High
S	Connectivity infrastructure investment	High/Positive	High
T	Clean energy infrastructure investment	High/Positive	High
U	Building upgrades (energy efficiency)	High/Positive	Low
V	Green spaces and natural infrastructure investment	High/Positive	Low
W	Disaster preparedness, capacity building	High/Positive	Low
X	General R&D spending	High/Positive	High
Y	Clean R&D spending	High/Positive	High

Source: Hepburn et al. (2020)

All of the African case studies (Kenya, Ghana, Mozambique, Nigeria, South Africa, Rwanda) have an adaptation component in their NDC. Whilst in some cases, the adaptation component can be more vision setting rather than implementation focused, the priority areas should be identified and summarised in order to assess alignment with the GRAP and African Green Stimulus Programme. It is not possible within the scope of this assignment to analyse all adaptation plans. However, it may be possible to assess generally the overall level of ambition of the NDC with reference to sources such as Climate Action Tracker.

Step 2: The African Union's Growth and Recovery Action Plan

The next part of the analysis will focus on the GRAP and alignment with Africa's Green Stimulus Programme. It will then describe how country recovery strategies described in the previous Section can be aligned to specific trade-related implications included within the GRAP. This includes:

- Renewable energy: promoting investments, energy efficiency and access.
- Biodiversity and nature based-solutions: sustainable land management, forestry, oceans and ecotourism.
- Climate resilient agriculture.
- Green and resilient cities: focus on water and enhancing information, communication and technology.
- Climate finance: whilst the issues regarding financing feature most prominently within the GRAP, there are links to carbon markets and emissions trading schemes which may be mentioned in country NDCs.

Through this approach different country emphasis and priorities within recovery efforts, relevance to the GRAP and the potential trade-related implications will be highlighted.

A qualitative assessment will be used to assess the overall alignment between country recovery strategies and the GRAP. This will take the form of a traffic light system which assesses the extent to which recovery strategies are aligned (green), where there is some alignment (amber) and where greater alignment is needed (red). This scoring methodology will be based on an overall assessment of the orientation of the recovery strategy, as well as the specific elements included within it.

Step 3: The AfCFTA and resilient recoveries

This step in the analysis will deepen the previous sections analysis of trade-related implications with specific reference to the AfCFTA and its current provisions as well as those under negotiation. It will describe in detail how the trade-related implications identified within the GRAP relate to the AfCFTA now and in the future and what steps need to be taken to ensure greater alignment.

Step 4: Opportunities to increase ambition

Based on the results of the analyses, the focus will be on how the GRAP and AfCFTA could support increased ambition within country recovery strategies, as well as how the GRAP and the AfCFTA could also be more ambitious. Because the AfCFTA hasn't incorporated green considerations to date, these can be recommended for consideration using the GRAP and the African Green Stimulus Programme as the as the framework to support greater alignment. This approach will assist in ensuring greater alignment between recovery strategies and the identification of specific trade policy levers to support these processes.