



United Nations
Economic Commission for Africa

Implications of the African Continental Free Trade Area for demand of Maritime Transport Infrastructure and Services



Mombasa, Kenya
05th May 2023

Outline

- **Research questions**
- **African Continental Free Trade Area (AfCFTA) in brief**
- **AfCFTA / Infrastructure Development Scenarios**
- **Maritime Transport Sector**
- **Multimodal Transport Comparisons**
- **Investment opportunities**
- **Key Messages**

**ECA's research
unpacks AfCFTA
investment
opportunities in
the transport
sector by
answering the
following
questions**

- **How will implementation of AfCFTA affect demand for maritime transport infrastructure and services?**
- **What would be the demand for different modes of transport, and what are the implications for investment in infrastructure development?**
- **What would be the infrastructure and equipment needs for different transport modes?**



Research adds value by identifying infrastructure and equipment needs to support investment decisions

Objective 1:

Infrastructure needs in scenario where AfCFTA is implemented

Output 1:

Criticality analysis of existing and planned road and railway network, airports, and maritime ports

Objective 2:

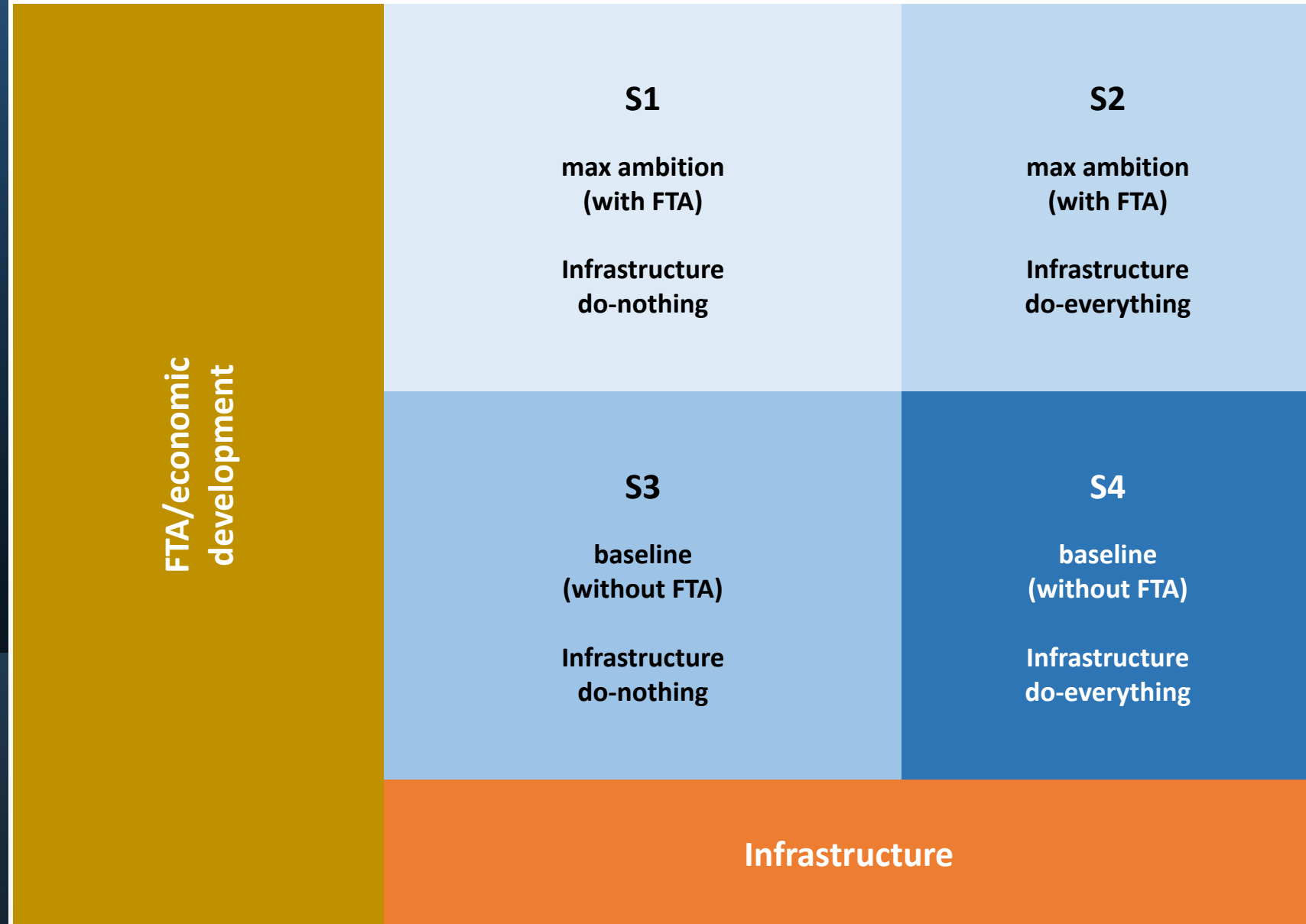
Equipment needs in scenario where AfCFTA is implemented

Output 2:

Estimation of the truck fleet, aircraft fleet, vessel fleet, train fleet



+ Growth in freight movement depends on time horizon, implementation of AfCFTA and planned infrastructure projects
+ S2 is optimal from an AU policy perspective





Maritime Transport



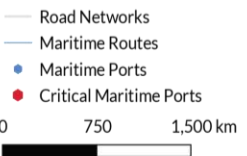
Africa's Maritime Transport Infrastructure

Critical ports with current network

Critical ports with current network plus planned project



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

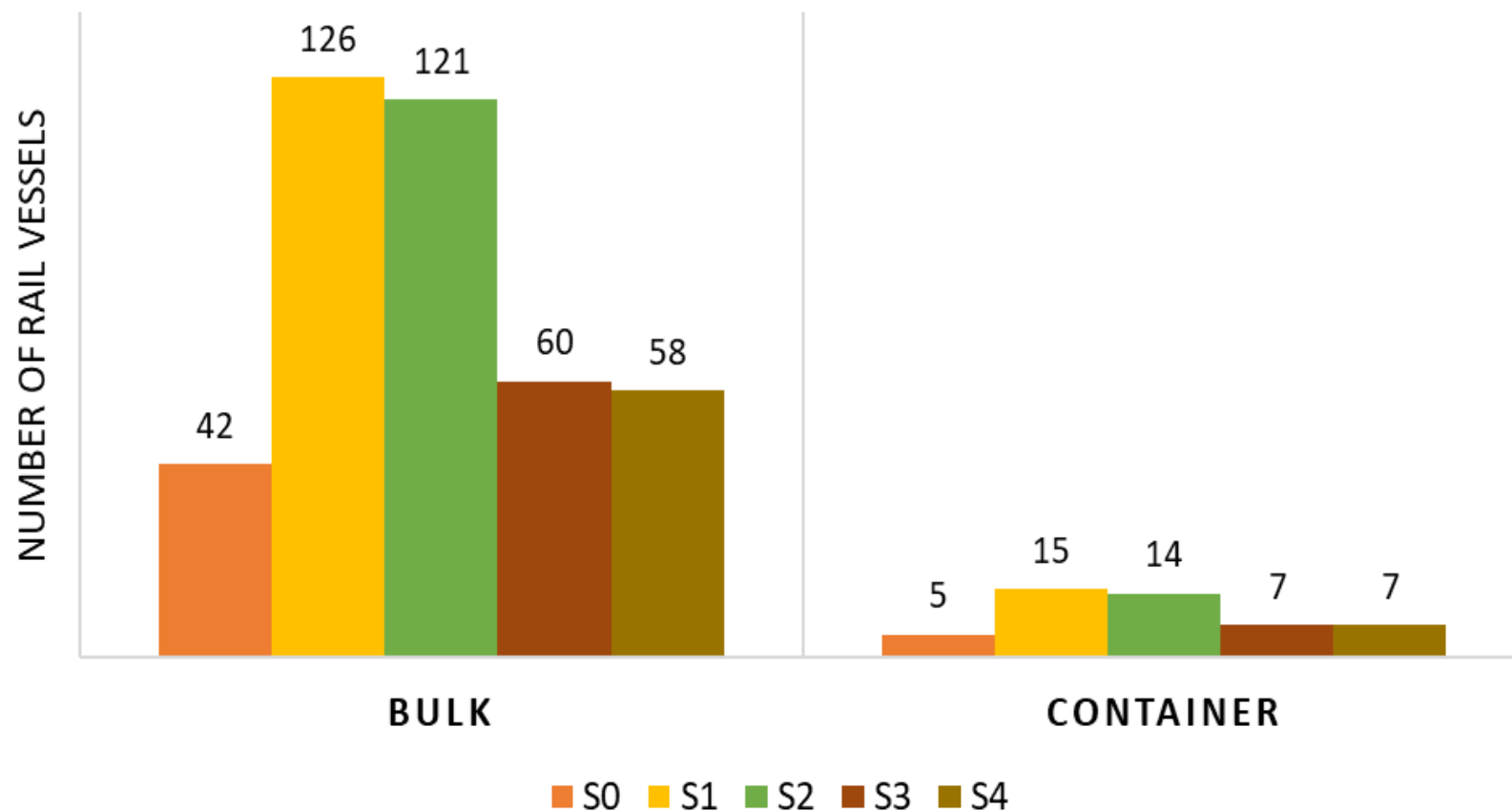


Implementing
AfCFTA would
double maritime
freight from 58 to
131.5 million
tonnes

- Africa's maritime network includes 142 links connecting 65 ports; accounts for 22.1% of intra-African freight transport
 - ✓ Share will increase by 0.6% to 22.7% if both AfCFTA and planned infrastructure projects are implemented
 - ✓ Will increase by 1.5% if AfCFTA is implemented but planned projects are not
- Maritime ports that require upgrades (critical ports) are located in: Central Africa (Gabon), Western Africa (Ghana, Gambia), Eastern Africa (Somalia, Comoros, Mauritius) and Southern

AfCFTA requires 126 vessels for bulk cargo and 15 vessels for container cargo by 2030. This reduces to 121 and 14 vessels respectively if planned infrastructure projects are also implemented

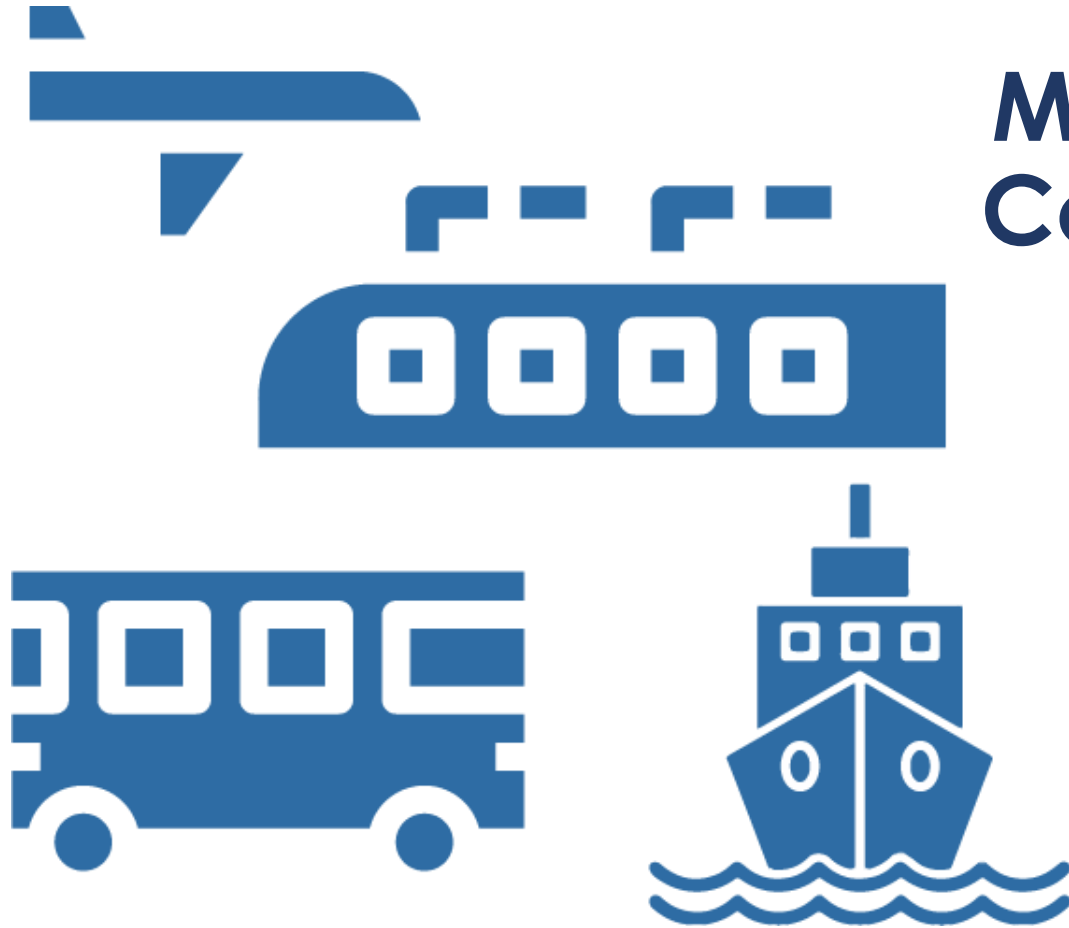
MARITIME MODE



Number of vessels according to the scenario by type of load.

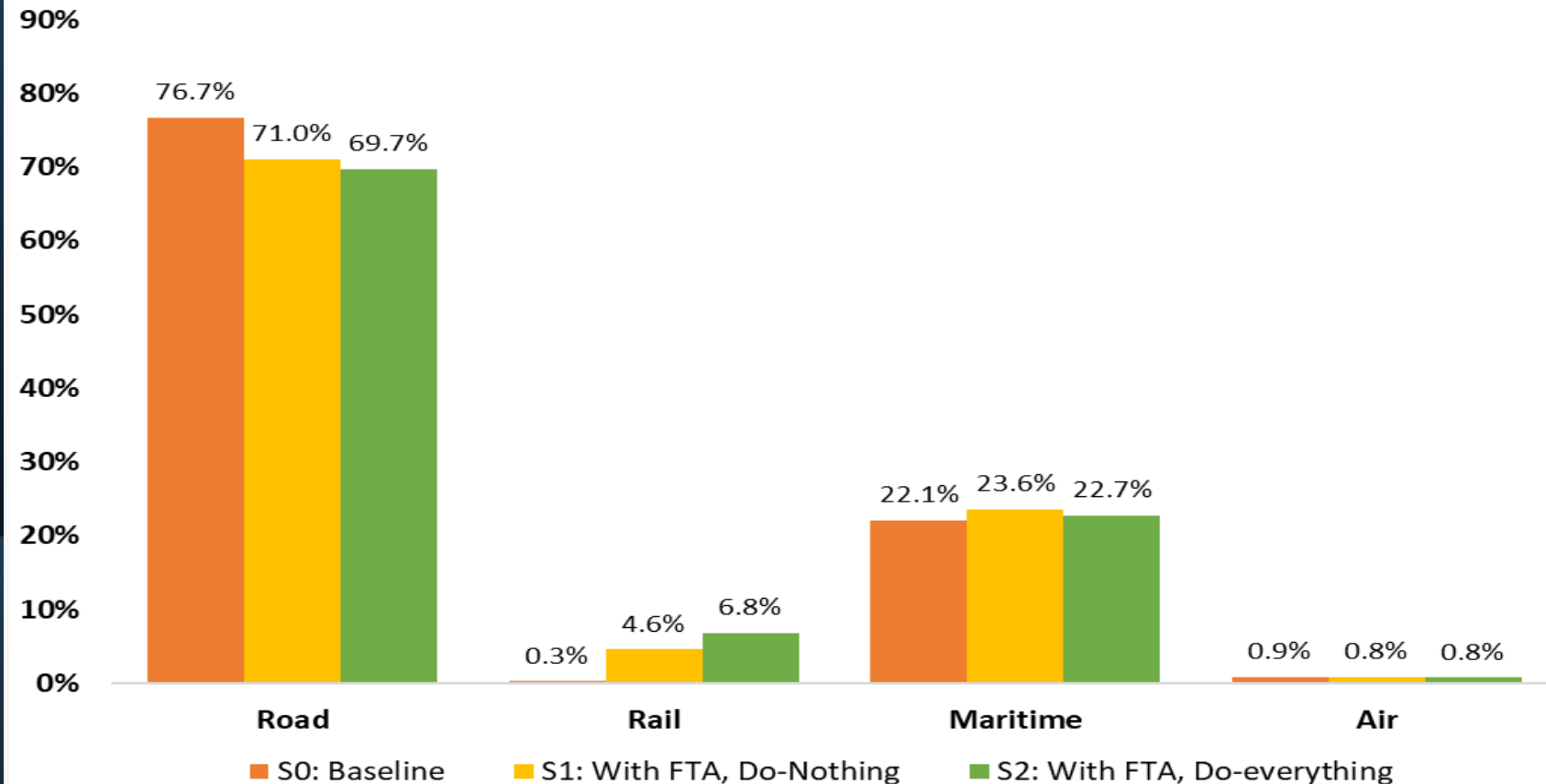


Multimodal Transport: Comparison by Mode



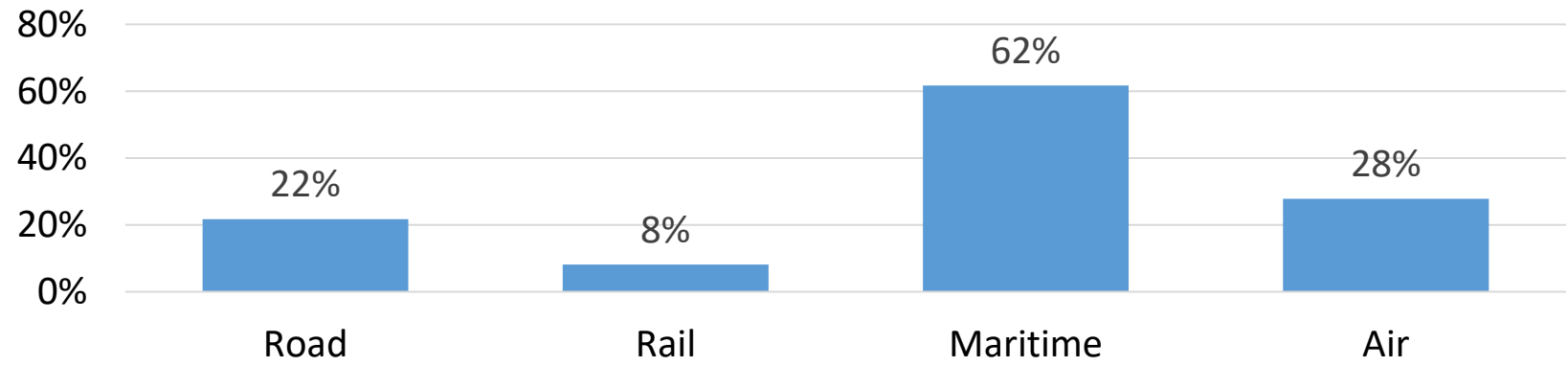
+ Roads currently carry the lion's share of freight in Africa

+ AfCFTA provides an opportunity to build Africa's railway network



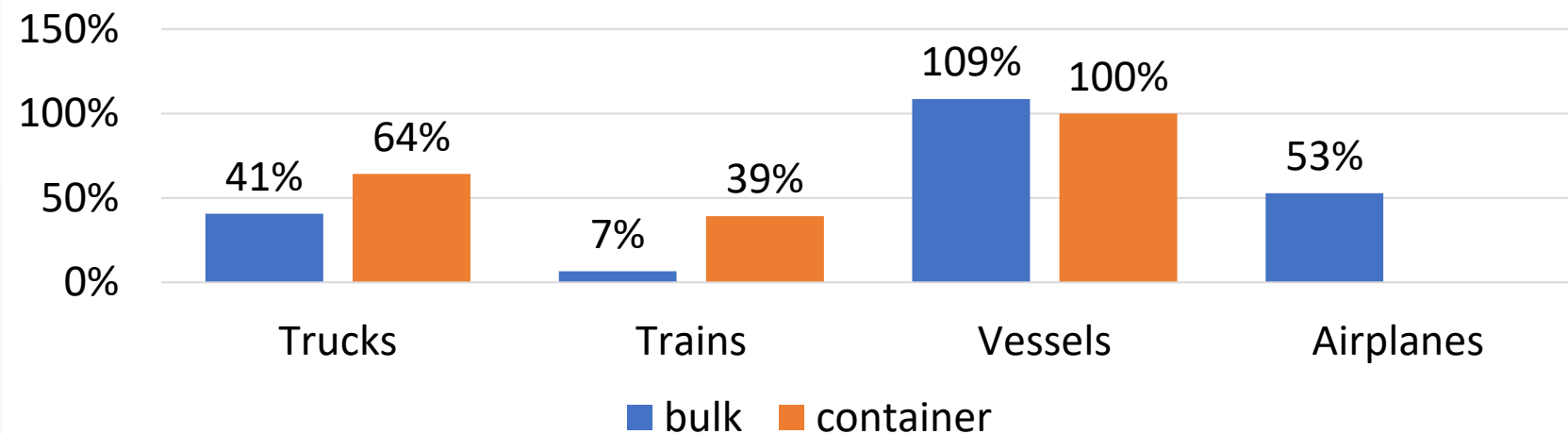
AfCFTA would increase intra-Africa freight demand by 28%; demand for maritime freight will increase the most

% change in demand (tonnes) - With FTA vs Without FTA (planned infrastructure implemented, 2030)

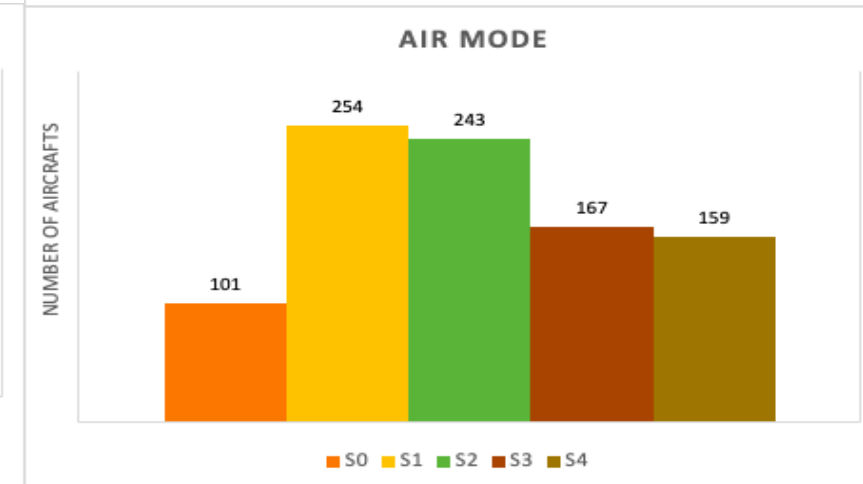
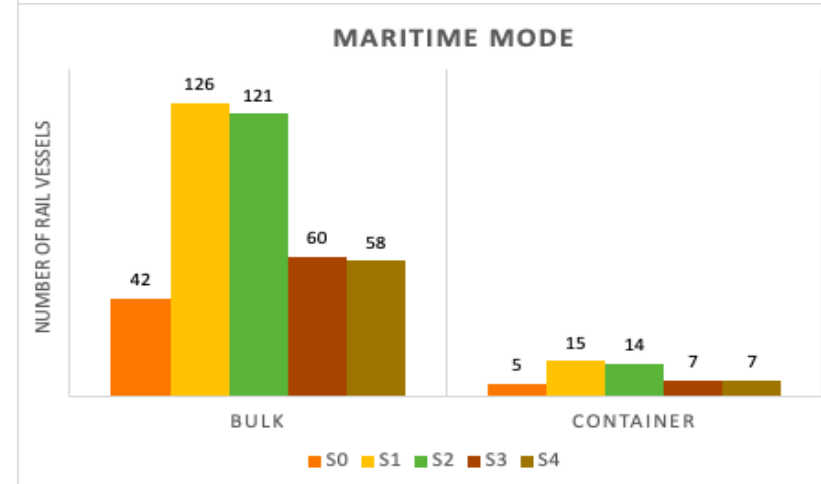
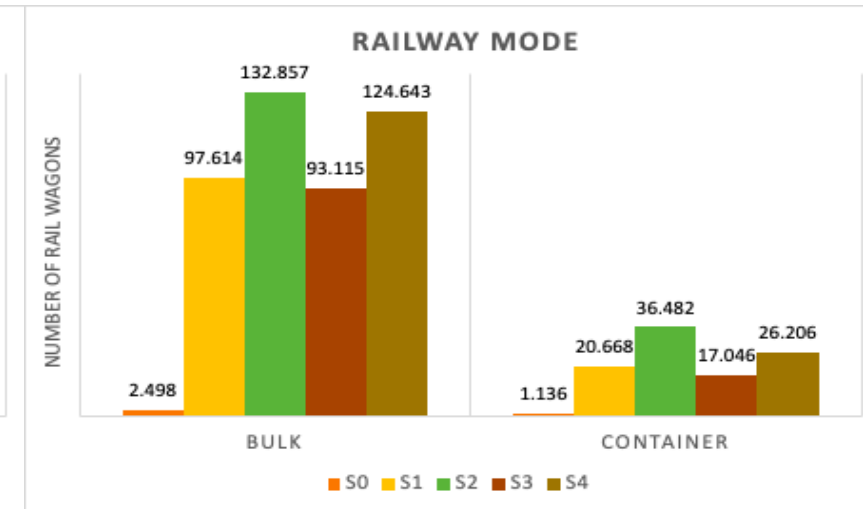
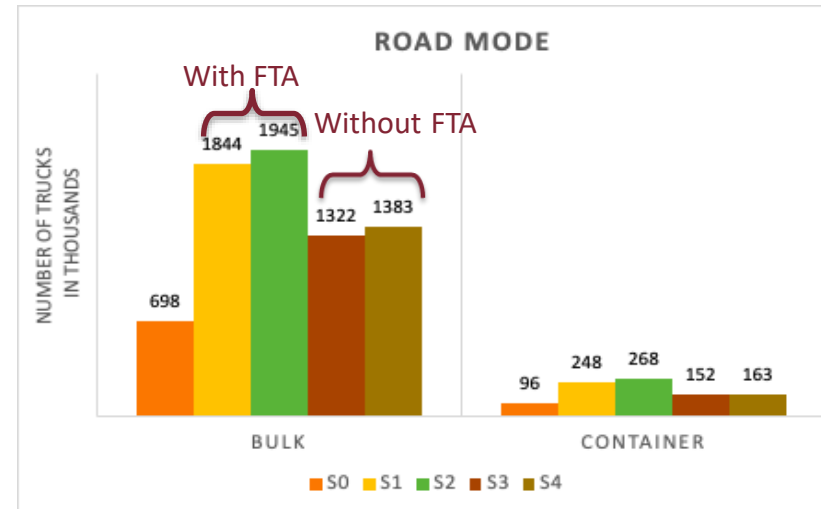


AfCFTA would increase transport equipment needs significantly for all modes of transport (1)

**% change in fleet needs - With FTA vs Without FTA
(planned infrastructure implemented, 2030)**



AfCFTA would increase transport equipment needs significantly for all modes of transport (2)



Investment Opportunities



Location of critical maritime ports

- Central Africa (Gabon)
- Western Africa (Ghana, Gambia)
- Eastern Africa (Somalia, Comoros, Mauritius)
- Southern Africa (Mozambique, Madagascar, Namibia).

Number of equipment required by transport mode if AfCFTA and planned infrastructure are implemented

Unit	Truck	Railway wagon	Vessel	Aircraft
Bulk	1,945,141	132,857	121	243
Container	268,438	36,482	14	-



Estimated costs for equipment required by transport mode (million USD)

Parameter	Trucks	Rail wagons	Vessels	Airplanes
Bulk (million USD)	291,771.2	26,571.4	4,235	25,758
Container (million USD)	53,687.6	9,120.5	420	



Regional Investment Opportunities

- Expected high demand for trucks in West and Southern Africa
- Expected high demand for rolling stock in West Africa, and North Africa
- Expected high demand for aircraft in West Africa, North Africa and Southern Africa
- Expected high demand for vessels in North Africa, East Africa and West Africa.



- The transport sector will strongly benefit from AfCFTA
- This benefit will be optimized if AfCFTA is accompanied by implementation of regional infrastructure projects
- The estimated cost of trucks required as a result of AfCFTA is US\$ 345 billion
- The estimated cost of aircrafts required as a result of AfCFTA is US\$ 25 billion
- The estimated cost of rail wagons required as a result of AfCFTA is US\$36 billion
- The estimated cost of vessels required as a result of AfCFTA is US\$ 4 billion

Key messages



Key messages

- Implementing AfCFTA and planned infrastructure projects would result in the need for 2,213,579 trucks, 169,339 rail wagons, 135 vessels and 243 aircraft
- Rail currently transports just 0.3% of total intra-Africa freight. This increases to 6.8% with the implementation of AfCFTA
- The estimated cost of equipment required by different transport modes to cope with AfCFTA is about U\$411 billion
- Investment opportunities in infrastructure development and fleet expansion vary across subregions for different modes of transport





THANK YOU!