



## Member States adopt the Greenhouse Gas Emissions Estimation Model

On Tuesday 9th March 2021, the Northern and Central Corridor Authorities and Stakeholders from the respective Member States held a virtual validation workshop for the report on a model for the estimation Greenhouse Gas (GHG) Emissions for the Northern and Central Corridors. The model developed

with support from TradeMark East Africa (TMEA) will support the Corridors' Transport Observatories to regularly report on performances related to GHG emissions as well as help identify possible reduction/mitigation potentials in climate change projects in the two Corridors.

### Page 1

> Member States adopt the Greenhouse Gas Emissions Estimation Model

### Page 4

> The Mombasa Port throughput registered a slight decline in 2020

### Page 6

> Northern Corridor Transit Time Indicator Improves in the Last Quarter of 2020

### Page 7

> Kenya Railways Slashes Mombasa to Naivasha ICD SGR Freight Rates by 15%

Protect Yourself  
**AGAINST**  
**COVID-19**  
Let's Stop it Together



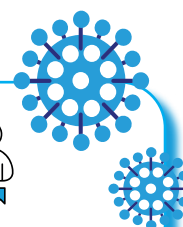
Wash Your Hands/ Sanitise



Wear a Mask



Social Distancing



Speaking during the virtual event, TMEA's Chief Technical Officer, Ms Allen Asiiimwe, said the model would be vital in addressing issues of climate change in the region.

"With the region having started to trade under AfCFTA in January 2020 and the trade volumes projected to rise, GHG emissions are also expected to increase. "The model is, therefore, an opportunity to establish baselines for member countries in the region on transport-related emissions," she said.

UNCTAD Chief of Trade Logistics Branch, Ms Frida Youssef, in her remarks, agreed that the model would help in defining a strategy to shift to sustainability patterns in the economic, environmental and social patterns.

Mr Omae Nyarandi, the Northern Corridor Secretariat Executive Secretary, revealed that the 'Green Freight Program' along the Northern Corridor was developed in 2016 to minimise health, safety and environmental impacts of freight movement with support from UNCTAD and TMEA.

"The program seeks to raise awareness on pollutant impacts and mitigation strategies; advocate for more sustainable freight transport systems and modes; and streamline transport activities through routes optimisation, loads consolidation, and reducing empty trips," he said.

"The Northern Corridor Secretariat prepared a baseline for the port of Mombasa in 2017 and that of the corridor in 2018," he added.

Mr Omae Nyarandi called for continued collaboration between the Member States of the Northern and Central Corridors to ensure all activities agreed upon in the validation exercise are implemented.

Capt. Dieudonné Dukundane, the Executive Secretary Central Corridor, remarked that green logistics and sustainable freight are a reality and called on the corridors to engage development partners, the private sector, governments and decision-makers in the implementation of the said recommendations.



[File, NCTTCA]



TMEA's Ms Asiiimwe revealed that over USD 200 million had been set aside to support regional governments and the private sector in the region to acquire new technology to support the Green Freight Programme. She urged that climate change discussions make to the centre of regional governments' cabinet discussions.

In developing the tool to estimate GHG emissions along the corridors, the study employed energy-based and activity-based methodologies. It considered fuel consumption and work done by factoring the different truck categories, routes representing different countries, vehicle make, gross weight of the categories of trucks, fuel consumption when loaded and on empty trips, the average age of the vehicle, its average speed, and type of load. For quality check, the survey's outcome- fuel efficiency of the trucks was compared with figures from similar studies in the region.



*The Central and Northern Corridors aim to reduce GHG emissions by 20% and 15%, considering 2020 and 2021 as the baselines. [File, NCTTCA]*

From the findings presented, GHG emissions of the Northern Corridor are 1.72 MMtCO<sub>2</sub>e (million metric tons of carbon dioxide equivalent) while that of the Central Corridor is 1.24 MMtCO<sub>2</sub>e. In the Northern Corridor, the GHG intensity for onward journeys was 1.0 MMtCO<sub>2</sub>e while that of the return journey when loaded was 0.30 MMtCO<sub>2</sub>e, and empty return trips at 0.42 MMtCO<sub>2</sub>e. Onward journeys in the Central Corridor contributed 0.73 MMtCO<sub>2</sub>e while the

loaded return journeys contributed 0.22 MMtCO<sub>2</sub>e and empty return journeys 0.29 MMtCO<sub>2</sub>e emissions.

GHG intensities in both corridors show that empty return trips contributed more GHG emissions compared to loaded return trips. In both corridors, exports make only 14% of the total trade resulting in a higher proportion of empty return trips, with nearly 30% of trucks loaded and 70% returning empty.

The study identified Mombasa-Nairobi, Mombasa-Busia, Mombasa-Malaba, Nairobi-Busia, Busitema-Kampala, Mbale-Goli, Mbale-Elegu, Luwero-Elegu, Luwero-Goli and Mubende-Kasindi routes in Kenya and Uganda as the most GHG intensive constituting 95% of total GHG emissions of the Northern Corridor. In the Central Corridor, Dar es Salaam to Goma, Dar es Salaam to Kigali and Dar es Salaam to Bujumbura routes contributed 98% of GHG emissions.

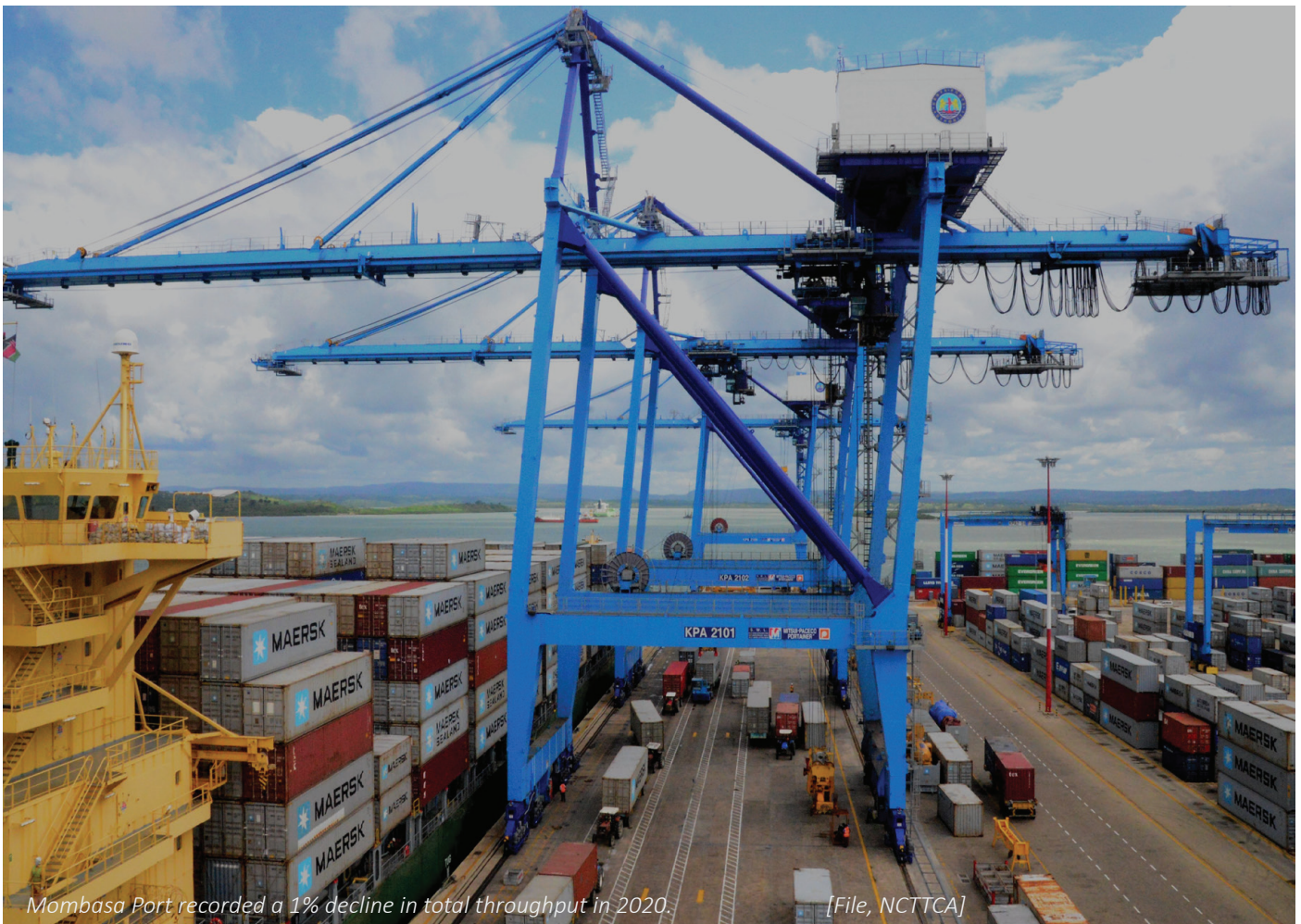
The Study report recommended reducing GHG emissions by 20% by 2030, considering 2020 as the baseline in the Central Corridor and reducing by 15% by 2030 considering 2021 as the baseline in the Northern Corridor. It argues that reducing GHG emissions for the corridor routes would translate to GHG emission reductions in the individual member countries' transport sector.

Both corridors and truck operators traversing through them ought to reduce empty return trips through route optimisation, reverse logistics for efficiency and cost-effectiveness and implement a truck aggregator model.

The study also emphasises capacity building for truck drivers on eco-driving practices, shifting focus to fuel-efficient vehicles and implementing vehicle efficiency improvement projects.



## The Mombasa Port throughput registered slight decline in 2020



**D**ata from the Northern Corridor Transport Observatory reveals that the Port of Mombasa sustained its performance in January–December 2020 with a slight decline compared to its throughput in the corresponding period in 2019. The hub recorded a throughput of 34 million metric tonnes (MT) in 2020, a 1% decline from 34.4 million MT handled in 2019. However, this was 5% short of the projected 35.9 million MT in total throughput and 1.49 million twenty-foot equivalent units (TEUs) in container traffic in 2020. The sustained performance was facilitated by previously achieved advancements on soft and hard infrastructure at the port that enhanced its efficiency.

In terms of containers handled, the port of Mombasa during the period January–December 2020 recorded a total of 1,359,579 TEUs compared to 1,416,654 TEUs in 2019, registering a 4.0% decline by 57,076 TEUs.

The COVID-19 pandemic struck when the Northern Corridor region was performing well. In January–December 2019, the Port of Mombasa recorded 34,439,264 tons with a growth of 3,515,976 tons, 11.4% compared to the 30,923,288 tons registered in the corresponding period in 2018. These numbers were on an upward trend for January and February 2020. However, they dipped from March 2020, with the Coronavirus disease declaration as a

pandemic and the subsequent worldwide sluggish economic activities occasioned by suppression of demand due to lockdowns and travel restrictions. Later in the year, as the nations started to adapt to the 'new normal', the port throughput started to moderately resume to pre-COVID-19 levels.

The Northern Corridor Transport Observatory, which is a performance monitoring tool, records that during the COVID-19 period, various industries faced challenges along their supply chain such as raw material shortages, lead time issues, reduced working hours, equipment and labour shortages, as well as truck-transport capacity constraints.

Out of the 34 million MT handled in January-December 2020, 81.5% were imports. Exports constituted 12.2% and transshipments 6%, while restows stood at 0.3%. As a percentage share of the total throughput, imports recorded a 1.5% rise from 27.6 million MT in 2019 to 28 million MT in 2020. Exports reduced from 4.3 million MT to 4 million MT while transshipment traffic struggled to meet the record growth witnessed in 2019 and dropped from 2.5 million MT to 2 million MT in 2019 and 2020, respectively.

Further, Transport Observatory reports reveal that during January-December 2020, 64.2% of the port throughput was domestic cargo (Kenya bound), transit cargo was 29.9%, and transshipment accounted for 6% of the total market share. Total transit cargo through the Port of Mombasa posted a growth of 2.2%, recording 10.2 million MT against 10 million MT handled in 2019.

Concerning transit cargo share per Northern Corridor Member State, Uganda remains the largest transit market share at 75.7%. South Sudan stands at 10.4%, DRC at 7.2 %, Rwanda at 4.2%, and Burundi takes 0.01%. Other partner States in the region constituted 2.5% of the total transit volumes through the port of Mombasa.

Transit volumes for Uganda and Burundi reduced by 5.4% and 69.9% respectively in 2020 against the volumes recorded for 2019, while transit volumes to Rwanda, South Sudan and DR Congo increased by 84.5%, 37.1% and 33.7%, respectively.

In general, the performance of the Port of Mombasa and the entire Northern Corridor was affected by disruptions caused by restrictions introduced in response to the COVID-19 pandemic,



*Traffic jams in Kenya along the Northern Corridor in the wake of the COVID-19 pandemic. [File, NCTTCA]*

undermining the smooth movement of trade flows and supply chain operations and significantly threatening to erode the trade and transport facilitation gains achieved over the years.

However, the Mombasa Port performance in 2020 when Coronavirus disease ravaged world economies is a clear indicator of the monumental infrastructural developments along the corridor. Tremendous strides have been made to enhance efficiency, including infrastructure developments at the port, faster clearance of goods with the implementation of the Single Customs Territory (SCT) across the region, development of Regional Electronic Cargo and Driver Tracking Systems, implementation of COMESA Trade Facilitation Instruments, and installation of the High-Speed Weigh in Motion (HSWIM) improving the weighbridge crossing time. Currently, 23 OSBPs have been identified across the region, with

15 OSBPs already established. Business processes have also been significantly automated, and the quality of road conditions along the corridor improved.

The implementation of the Standard Gauge Railway (SGR) in Kenya and the establishment of Inland Container Depots in Nairobi and Naivasha have contributed to the speedy evacuation of cargo from the port.

While the long-term economic impact of COVID-19 remains uncertain, the ongoing works at the port of Mombasa to construct new berths, linking of Naivasha ICD to the Metre Gauge Railway (MGR), the kick-off of trading under the African Continental Free Trade Area (AfCFTA), and the envisioned Dongo Kundu Special Economic Zone, among other initiatives, are set to improve the Mombasa Port efficiency translating to even better performance.



# Kenya Railways Slashes Mombasa to Naivasha ICD SGR Freight Rates by 15%

**K**enya Railways (KR) has reduced the Standard Gauge Railway (SGR) cargo tariffs by 15% to promote Naivasha Inland Container Depot's (Naivasha ICD) use. The new freight rates came into effect on 16th February 2021.

Through an update on their website, KR says that a 20ft

container on an upward journey (Mombasa- Naivasha) will now be charged USD 510 from USD 600 previously charged. On the same route, a 40ft container of up to 20.9 tonnes will be charged USD 725 from USD 850, while a 40ft container above 21 tonnes will be charged USD 775 from USD 910.

The move follows an outcry by the Private Sector on issues with operational efficiency and cost-effectiveness of Naivasha ICD and the request through a multi-stakeholder report produced in November 2020 for a 50% reduction on freight rates. The report commissioned by The Kenya Private Sector Alliance (KEPSA) in partnership with the Shippers Council of East Africa (SCEA) had proposed the reduction of rates from USD 600 to USD300 for 20ft container, from USD 800 to USD 400 for 40ft container of up to 20.9 tonnes, and from USD 910 to USD 500 for 40ft container above 21 tonnes.

Commencing operations in May 2020, the facility was expected to reduce transport costs, guarantee minimum non-tariff barriers (NTBs), facilitate fast and predictable cargo evacuation from origin to destination, and reduce greenhouse gas emissions generated from the transport sector, amongst others.

With the new rates, KR says that goods destined for the hinterland, Uganda, Rwanda, South Sudan, Burundi, Ethiopia, and the Democratic Republic of Congo can now be delivered cost-effectively to and from Naivasha, thus reducing the cost of doing business and spurring regional economic growth through trade facilitation.

Kenya Railways has in the recent past resumed the double-stack trains, each hauling 152 TEUs per move. The move is set to increase cargo evacuation speed from the Port of Mombasa to the ICDs. They (KR) are keen to sustain the efforts to reduce cargo dwell time at the Port of Mombasa.

Rehabilitation works on the Metre Gauge Railway are underway to link the Naivasha ICD to the Kenya-Uganda border to bring cargo even closer to destination for the transit countries.



A rubber-tyred gantry crane loads a container onto a truck in Naivasha ICD. [File, NCTTCA]

On a downward journey (Naivasha to Mombasa), the new rates indicate that a 20ft container will be charged USD 255, USD 360 for a 40ft container of up to 20.9 tonnes and USD 390 for a 40ft container above 21 tonnes. Hauling of empty containers by rail back to the port will cost shippers USD 120

compared to USD 180 charge if they wish to transport by road. Conventional cargo is charged at a rate of USD 0.044 per ton/Km (tonne per kilometres). The rail distance from Mombasa to Naivasha ICD is 553 kilometres. However, it is noteworthy that the freight rates do not cover handling charges.

# Northern Corridor Transit Time Indicator Improves in the Last Quarter of 2020

**T**ransit Time in almost all routes along the Northern Corridor improved during the last quarter of 2020 following reduced border crossing times due to initiatives to facilitate easier border crossing for truck drivers and crew.

According to the Northern Corridor Dashboard Quarterly Performance Report for the period October to December 2020, transit time from Mombasa to Kampala reduced from 167 to 131 hours, 167 to 135 hours from Mombasa to Elegu, 214 to 187 hours from Mombasa to Kigali,



*Transit time is affected by Non-Tariff Barriers (NTBs), road conditions, inspections, road accidents, insecurity, driver resting time, among others. [unsplash.com]*

and from 216 to 160 hours Mombasa to Mpondwe. The positive trend was greatly attributed to the opening up of borders by the Northern Corridor Member States and implementing the Regional Electronic Cargo and Driver Tracking System (RECDTS).

Since the declaration of COVID-19 as a pandemic by the World Health

Organisation (WHO) in March 2020, transit time was on a steady rise. The worrying trend was due to measures put in place by the Member States, including lockdowns, curfews, social distancing, disinfection, mandatory COVID-19 testing and, in some cases, relay trucking to prevent transmission of the Coronavirus disease across borders.

Transit time measures the time taken by transporters from the port to deliver cargo to the destination. It is affected by numerous factors that occasion delays and stoppages along the corridor from Non-Tariff Barriers (NTBs) to road conditions, inspections, road accidents, insecurity, driver resting time, among others. The COVID-19 pandemic presented a challenge for movement of goods with Health Ministries in the Member States instituting protocols requiring truck drivers to be tested and present a COVID-19 free certificate at the border, social distancing and travel curfews.

The Mombasa Port and Northern Corridor Community Charter (MPNCCC) target for transit time from Mombasa to Malaba was 60 hours by December 2020, and from Mombasa to Busia, 65 hours by December 2020. From the quarterly report, the average transit time improved significantly from 121 hours in October 2020 to 82 hours in December 2020 along the Mombasa-Malaba route. More than half of the trucks to Malaba recorded an average of 108 hours transit time in October and an average of 80 hours in December 2020. The average transit time from Mombasa to Busia reduced from 115 to 83 hours, and from Mombasa to Taveta border reduced from 34 to 26 hours in October and December 2020, respectively.

In Rwanda along the Northern Corridor, the average transit time from Cyanika to Rubavu improved from 38 hours in October to 19 hours in December 2020. Kagitumba to Mururu route transit time worsened from 53 hours to 60 hours in December 2020.

In Burundi, under the ASYCUDA system, the average transit time from Bujumbura to Kanyaru-Haut and Nemba/Gasenye (export routes) was inconsistent over the period varying from as high as 299 hours to a low of 240 hours on Kanyaru route.

The quarterly report points out that barriers to cargo movement still exist

along the route, resulting in prevailing inefficiencies. Truck drivers from Bujumbura to Gasenyi/Nemba border took an average of 182 to 299 hours, 240 to 299 hours from Bujumbura to Kanyaru Haut, 39 to 46 hours from Kanyaru Haut to Bujumbura, and 21 to 67 hours from Kayanza to Kanyaru Haut, in October and December 2020 respectively. The report also records an average transit time of 84 hours from Kayanza to Gasenyi.

the Vehicle Load Control Charter that commits users of the corridor to comply with load limits to protect the roads from pre-mature damage due to overloading.

Weighbridges in Kenya along the Northern Corridor are fully automated and installed with High-Speed Weigh in Motion (HSWIM), except for the Busia weighbridge. The quarterly report records a steady performance of over

Although the opening up of borders by the Northern Corridor Member States and the implementation of RECDTS were crucial in reducing transit time, the region has invested immensely towards the reduction of transit time through improvement and expansion of road infrastructure, implementation of the Single Customs Territory framework for clearance of goods, Installation of One-Stop Border Posts (OSBPs), among others. These initiatives have enhanced the efficiency of the corridor and, to no small extent, played a part in reversing the effects of Coronavirus disease on transit time.

The report says that improvements in road infrastructure around the seaport and the corridor at large and the implementation of Standard Gauge Railway (SGR) have significantly played a part in the recovery during the quarter. However, it notes that there is still a challenge of automated data exchange among the member States participating in the SCT framework of clearing goods. The SCT platform for the exchange of data on goods being cleared is not efficient. The report echoes a recommendation from previous Northern Corridor Transport Observatory studies to adopt a single transit system for the Northern Corridor for clearance of internationally traded goods.

In addition to the implemented initiatives, the report argues that a detailed assessment of the regional level vulnerability to put in place national and trans-boundary disaster mitigation measures will transform the Northern Corridor into a resilient corridor and reduce transport costs.



COVID-19 testing protocols notwithstanding, the long delays within Burundi were due to steep terrain and poor road conditions resulting from damage by rain and overloaded vehicles.

The quality of transport infrastructure is crucial to reducing transit times and subsequent reduction of transport costs. Overloading is a major factor in the depreciation of transport infrastructure. The transport observatory monitors the efficient performance of the weighbridges and the level of implementation of

95% compliance levels except for Busia weighbridge, whose compliance level ranged between 81% and 90%. Low compliance at the Busia weighbridge could be attributed to the weighbridge not implementing the HSWIM technology, reducing its efficacy.

To avoid transit delays and penalties to cargo transporters, measures are required by both transporters and the road authorities to ensure compliance and efficiency of the weighbridges.



# THE NORTHERN CORRIDOR **Digest**



**NORTHERN CORRIDOR  
TRANSIT AND TRANSPORT  
COORDINATION AUTHORITY**



*Growing Prosperity Through Trade*



**Belgium**  
partner in development



Global Affairs  
Canada



**MINISTRY OF  
FOREIGN AFFAIRS  
OF DENMARK**  
*Danida*



Ministry for Foreign  
Affairs of Finland



**Irish Aid**  
Government of Ireland  
Rialtas na hÉireann



Ministry of Foreign Affairs of the  
Netherlands



**NORWEGIAN MINISTRY  
OF FOREIGN AFFAIRS**



**USAID**  
FROM THE AMERICAN PEOPLE

 @NorthernCorridor

 NorthernCorridor



The Permanent Secretariat  
1196 Links Road, Nyali  
P.O. Box 34068-80118  
Mombasa, Kenya



Telephone  
+254 729 923574  
+254 733 532485



E-mail:  
ttca@ttcanc.org  
Website:  
www.ttcanc.org

