



GREENING PORTS THROUGH COOL LOGISTICS

Maritime & Transport Business Solutions B.V.

Intermodal Africa



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SPEAKER INTRODUCTION



Victor Timmermans

Director Operations MTBS

Head of Commerce North and East Africa

Former Director Business Development at Port of Rotterdam

OUR MISSION

MTBS creates value by delivering innovative advisory solutions



Our mission is to **unlock value** in the **port and transport industry**

On the interface of land and water and public and private interests, ports are the most strategic nodes in the global transport network. MTBS believes that ports offer a unique value proposition. It is the mission of MTBS to unlock and protect this value by offering its clients innovative business solutions.

Business Advisory



M&A



Training

**Port Finance
International**

an MTBS company



OUR COMPANY

Since 2005, MTBS as trusted partner is delivering sustainable value to clients in the maritime supply chain



Founded in 2005 in Rotterdam, we now operate globally with six international branches across three continents



We are your trusted partner for all port related advisory services from transactions to master planning



We build on a proven track record of successful transactions and projects on the full breadth of the port value chain around the world



We unlock unique client value through our combination of sector specialisation, global experience, and deep local understanding

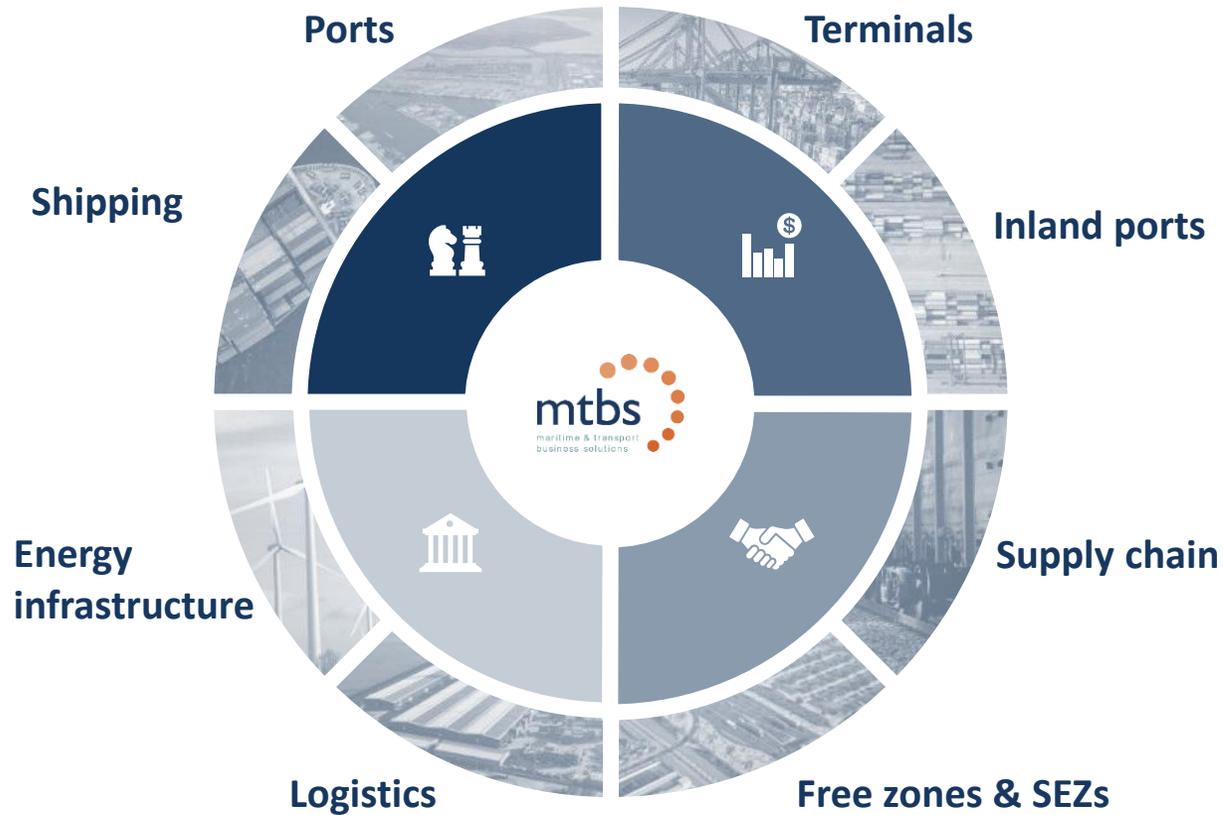


We do this with a passionate, diverse team of 50+ professionals with 11 nationalities



OUR SERVICE OFFERING

MTBS is your trusted advisor for boardroom decision-making



Strategy

We provide boardroom advice to our clients on commercial strategies, go-to-market plans, expansion initiatives, port policies, masterplans, energy transition, organisational reforms, investment/divestment planning and a wide range of other strategic topics.



Valuation

Our deep expertise allows us to efficiently execute any port-centric valuation project through structuring the optimal value of an investment, bankability assessments, feasibility studies, business cases & demand forecasts and financial modelling.



Transaction

With our long-standing global experience, we support our clients with full end-to-end transaction advisory services, including PPP structuring, global roadshows, tender document drafting, transaction management, mergers & acquisitions, negotiations, contract drafting and post-contract services.

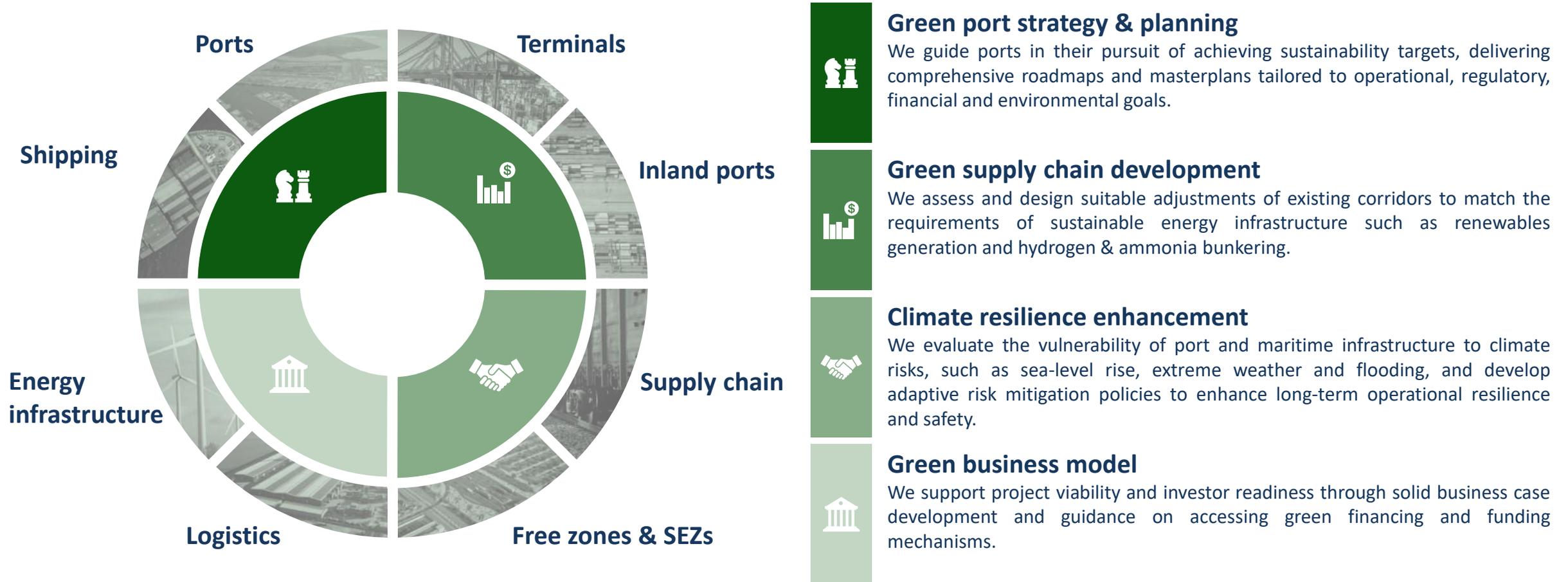


Finance

Our strong network and sector specialisation enable us to successfully support clients in project finance, financial structuring, due diligence and the procurement of finance.

OUR SERVICE OFFERING

MTBS offers a wide range of sustainability products to realise green ambitions and targets



OUR EXPERIENCE

We are backed by experience with over 750 projects across more than 125 countries



750+
Projects



40+
Transactions



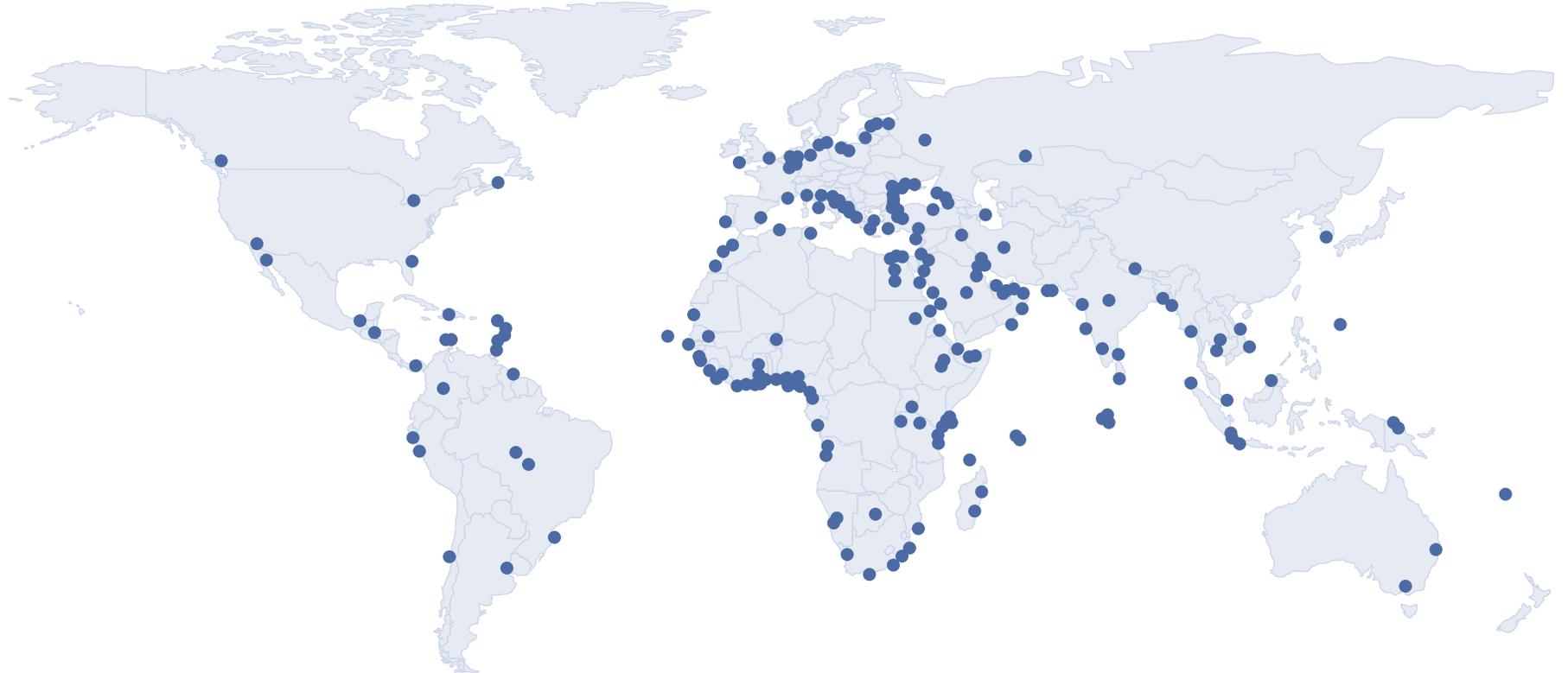
125+
Countries



250+
Clients



50+
Governments



SUCCESSFULLY CLOSED TRANSACTIONS

MTBS provides full-spectrum transaction advisory, with a proven track record illustrated by the selection of transactions below

MERGERS & ACQUISITIONS			CONCESSIONS			LENDERS ADVISORY		
 <p><i>Exclusive Transaction & Financial Advisor</i></p> <p>Meratus Buy Side</p>  <p>Meratus Group acquires an 80.19% stake in PT ICTSI Jasa Prima</p> <p><i>Deal Size Confidential 2024</i></p>	 <p><i>Commercial & Technical Advisor</i></p> <p>AIIM Buy Side</p>  <p>Acquisition of a significant minority stake in Incorp Ltd, owner of Bulkstream Ltd</p> <p><i>Deal Size Confidential 2024</i></p>	 <p><i>Exclusive Transaction & Financial Advisor</i></p> <p>BMF Port Burgas Sell Side</p>  <p>BMF Port Burgas sales a significant portion of interest to Three Seas Initiative Investment Fund</p> <p><i>Deal Size Confidential 2022</i></p>	 <p><i>Exclusive Transaction & Financial Advisor</i></p> <p>TAS Consortium Buy Side</p>  <p>Concession for the expansion and operation of the Patimban Container Terminal</p> <p><i>Deal Size Confidential 2025</i></p>	 <p><i>Exclusive Transaction & Financial Advisor</i></p> <p>Gambia Ports Authority Sell Side</p>  <p>Concession for the development and operation of Banjul Port to Aibayrak Group</p> <p><i>Deal Size Confidential 2024</i></p>	 <p><i>Exclusive Transaction Advisor</i></p> <p>Namport – Port of Walvis Bay Sell Side</p>  <p>Namport signed a 25-year concession agreement for the Walvis Bay container terminal with TiL</p> <p><i>Deal Size Confidential 2024</i></p>	 <p><i>Financial Advisor</i></p> <p>Standard Bank Lender's Due Diligence</p>  <p>Commercial, Financial, and Technical Lender's Due Diligence for Senior Debt Financing</p> <p><i>Deal Size USD 90 million 2022</i></p>		
 <p><i>Commercial Advisor</i></p> <p>COSCO Shipping Buy Side</p>  <p>Financial & Commercial Due Diligence for the acquisition of 60% shares in Chancay Terminal</p> <p><i>Deal Size USD 225 million 2019</i></p>	 <p><i>Commercial Advisor</i></p> <p>China Merchants Port Holdings Buy Side</p>  <p>Commercial & Operational Due Diligence for the acquisition of 90% of TCP</p> <p><i>Deal Size USD 925 million 2017</i></p>	 <p><i>Commercial Transaction Advisor</i></p> <p>Cosco Group Buy Side</p>  <p>Commercial advisor for the acquisition of shares in Piraeus Port Authority</p> <p><i>Deal Size USD 369 million 2015</i></p>	 <p><i>Transaction Advisor</i></p> <p>Port of Rijeka Authority – Zagreb Deep Sea Container Terminal Sell Side</p>  <p>Port of Rijeka Authority signed a 50-year concession agreement for Zagreb Deep Sea Container Terminal with Rijeka Gateway</p> <p><i>Deal Size Confidential 2021</i></p>	 <p><i>Commercial Advisor</i></p> <p>AD Port Ports Group Buy Side</p>  <p>AD Ports Group signed a 20-year agreement to operate and develop the multi-purpose Terminal in Luanda</p> <p><i>Deal Size Confidential 2021</i></p>	 <p><i>Transaction Advisor</i></p> <p>Port of Olivia Sell Side</p>  <p>USPA awarded the 35-year concession of the Port of Olivia to QTerminals</p> <p><i>Deal Size USD 123 million 2021</i></p>	 <p><i>Financial Advisor</i></p> <p>ICBC Lender's Due Diligence</p>  <p>Lender's Due Diligence for the provision of a project finance loan</p> <p><i>Loan Size USD 35 million 2018</i></p>		

WHY GREEN PORTS MATTER

The sustainability imperative

Three key drivers transforming port landscape

1

LEGISLATION

- Paris Agreement
- IMO - MARPOL
- UN Sustainable Development Goals

2

MARKET PRESSURE

- Consumers requiring sustainable products
- Consumers requiring sustainable transportation

3

GREEN CONDITIONS FOR FINANCING

- World Bank conditions for port development financing
- Fossil Fuel Projects



KENYA COOL LOGISTICS

As example for Djibouti and Ethiopia?



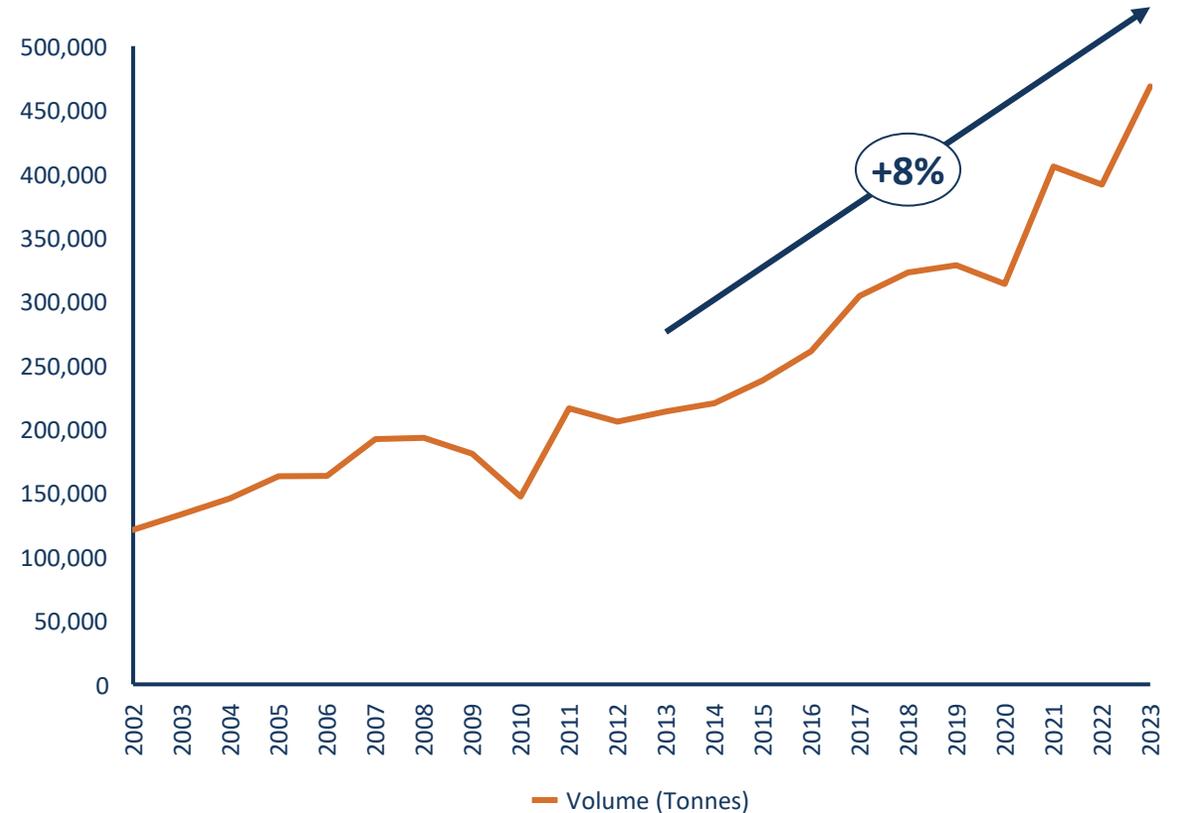
KENYA'S HORTICULTURE EXPORT INDUSTRY | CURRENT SITUATION

The Kenyan horticulture export market has grown rapidly over the past decades, with most exports going to Europe (Netherlands, UK and France) and Middle East (UAE)

Cool logistics are important for Kenya's horticultural industry

- Kenya's horticulture export products are increasingly important to Kenyan economy
- Volumes increased from 214,000 tonnes in 2013 to 468,000 tonnes in 2023 (CAGR 8.2%).
- Major export markets are the Netherlands (27.3%), UK (14.3%), France (12.9%), UAE (5.8%) and Germany (5.1%).
- Main export products:
 - **Flowers (52%)** – mainly cut flowers (including roses, carnations and chrysanthemums)
 - **Fruits (29%)** – mainly avocados
 - **Vegetables (19%)**

Development of Kenya's horticulture exports (2002-2023)

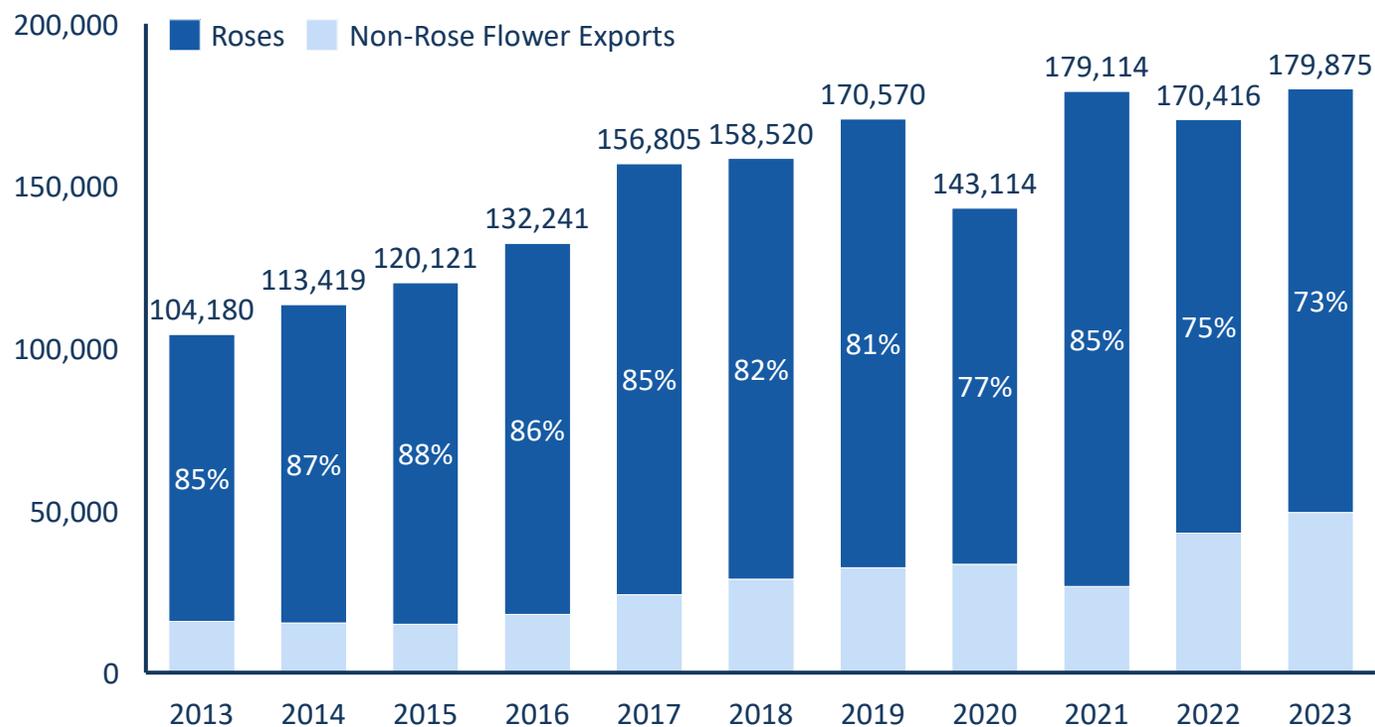


KENYA'S HORTICULTURE EXPORT INDUSTRY (FLOWERS) | CURRENT SITUATION

Kenya's flower sector experienced strong growth throughout the 2010s, followed by a post-2019 stabilisation. Kenyan floriculture exports also increased, with roses being the most important export crop.

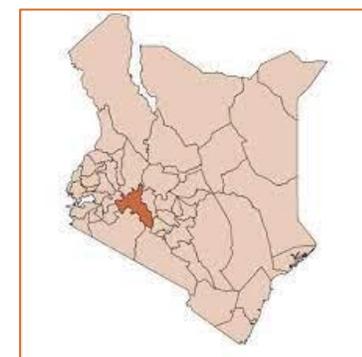
- Kenya is one of the world's leading exporters of cut flowers
- Enablers are Kenya's favourable climatic conditions, an abundant labour force, and strategic proximity to key European markets
- Roses are the most important export crop, followed by secondary exports (with chrysanthemums and carnations as the most important)

Kenyan Flower Exports (tonnes)



Kenya's Flower Production

	# of identified farms	Hectares	Average Size (Ha)	Relevance to NCC
Naivasha	36	1,754 (27%)	49	Key Market
Nakuru & West Kenya	52	2,010 (33%)	47	Key Market
Mount Kenya	25	1,163 (19%)	39	Unlikely Market
Others	30	1,065 (19%)	36	Unlikely Market

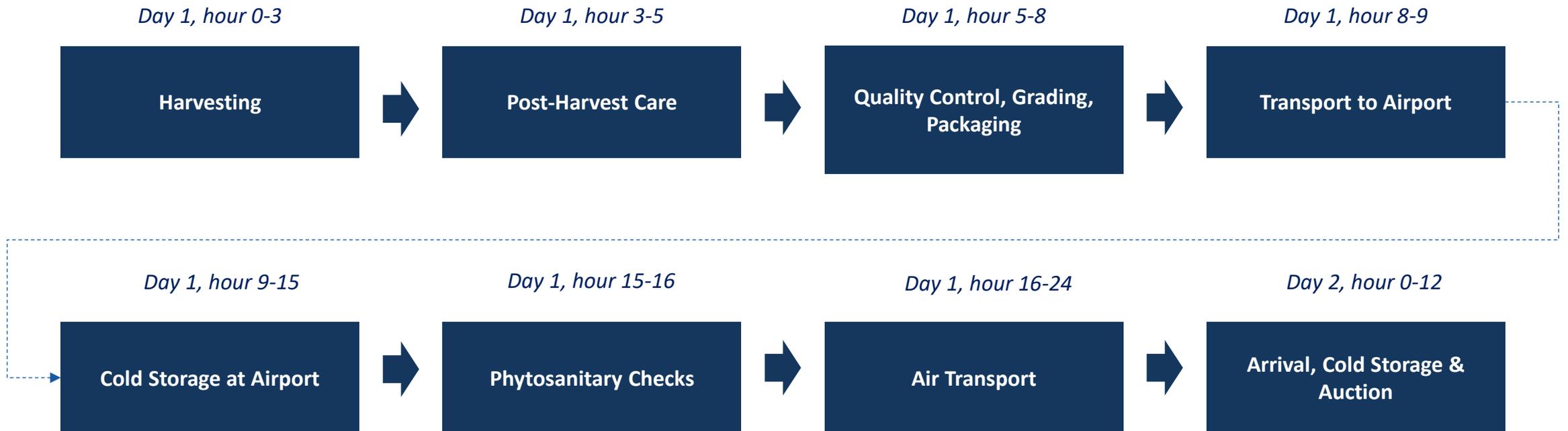


KENYA'S HORTICULTURE EXPORT INDUSTRY (FLOWERS) | CURRENT SITUATION

Kenyan flowers are currently predominantly transported via air freight to international export markets.

Current Modus Operandi : Airfreight

- Airfreight is the main mode of transport for Kenyan flowers
- Main advantage: speed offered by airfreight modality (short shelf-life)



HORTICULTURE EXPORTS VIA SEA | DESIRED SITUATION

Due to increased airfreight prices and environmental concerns, national policy objectives are to increase the volume of horticulture exports via sea freight logistics



By 2030, move 50% of Kenya's flower exports to sea freight logistics

Constraints

- **Perishability and Transit Time:** Due to short shelf life of flowers, no option to transport via sea
- **Mindset and Technical Knowledge:** Growers were reluctant to be first movers in sea shipping
- **Lack of Cold Chain Infrastructure:** Unbroken cold chain from farm to destination is required for seafreight

Innovation of cold chain technology



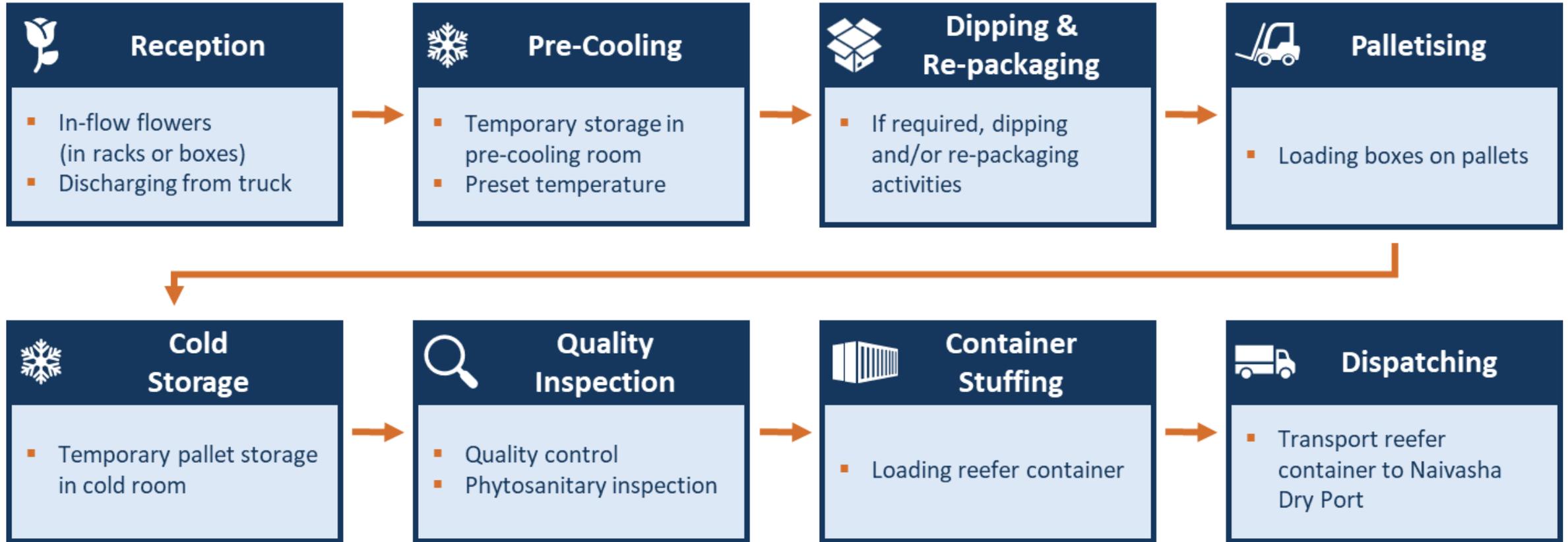
introduces opportunities for seafreight

Benefits

- **Lower logistics costs:** Transportation via sea freight is cheaper than increasing prices for air freight
- **Anticipating Seasonality:** strategic advantage in planning for peak seasons such as Valentine's Day, Mother's Day, and Christmas
- **Environmental Sustainability:** reduction of environmental concerns due to lower levels of emission

HORTICULTURE EXPORTS VIA SEA | DESIRED SITUATION

Through the innovation of *dipping* flowers, the shelf life is extended and made ready for transportation via sea freight



HORTICULTURE EXPORTS VIA SEA | DESIRED SITUATION

Through the innovation of *dipping* flowers, the shelf life is extended and made ready for transportation via seafreight



A well-functioning cool chain is **key** for the transition from air to sea



Processing



Packaging



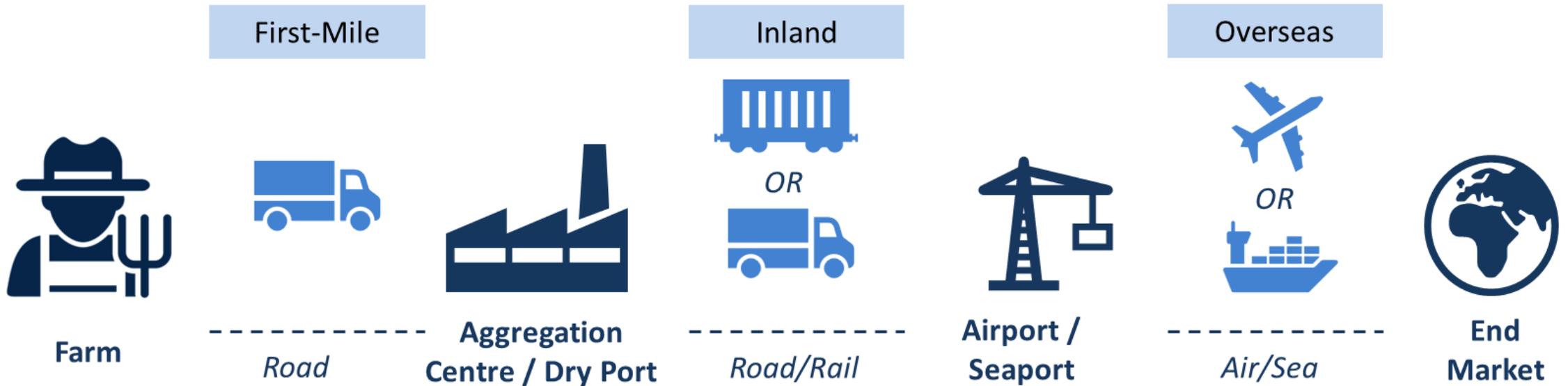
Cooling



Inspection

CHALLENGES IN KENYA'S COOL LOGISTICS

We assessed the main challenges across the three stages of Kenya's Cool Logistics System for exporting horticulture products



CHALLENGES IN KENYA'S COOL LOGISTICS | FIRST MILE LOGISTICS

We assessed the main challenges across the three stages of Kenya's Cool Logistics System for exporting horticulture products



Avocados



Non-refrigerated transport during first mile logistics



Poor road conditions



Flowers



Inconsistent temperature across farms



Improper genset use during transit due to fuel pressures and limited awareness



CHALLENGES IN KENYA'S COOL LOGISTICS | OVERSEAS TRANSPORTATION

We assessed the main challenges across the three stages of Kenya's Cool Logistics System for exporting horticulture products



Challenges to adopt Sea Freight



Red Sea Crisis (extended transit times up to 40+ days)



Status Quo Bias (concerns about longer transit times)



No dedicated gates or lanes for reefer containers at Port of Mombasa



Lacking Real-Time Traceability at Port of Mombasa



THE ETHIOPIAN RESPONSE

Cool Port Addis



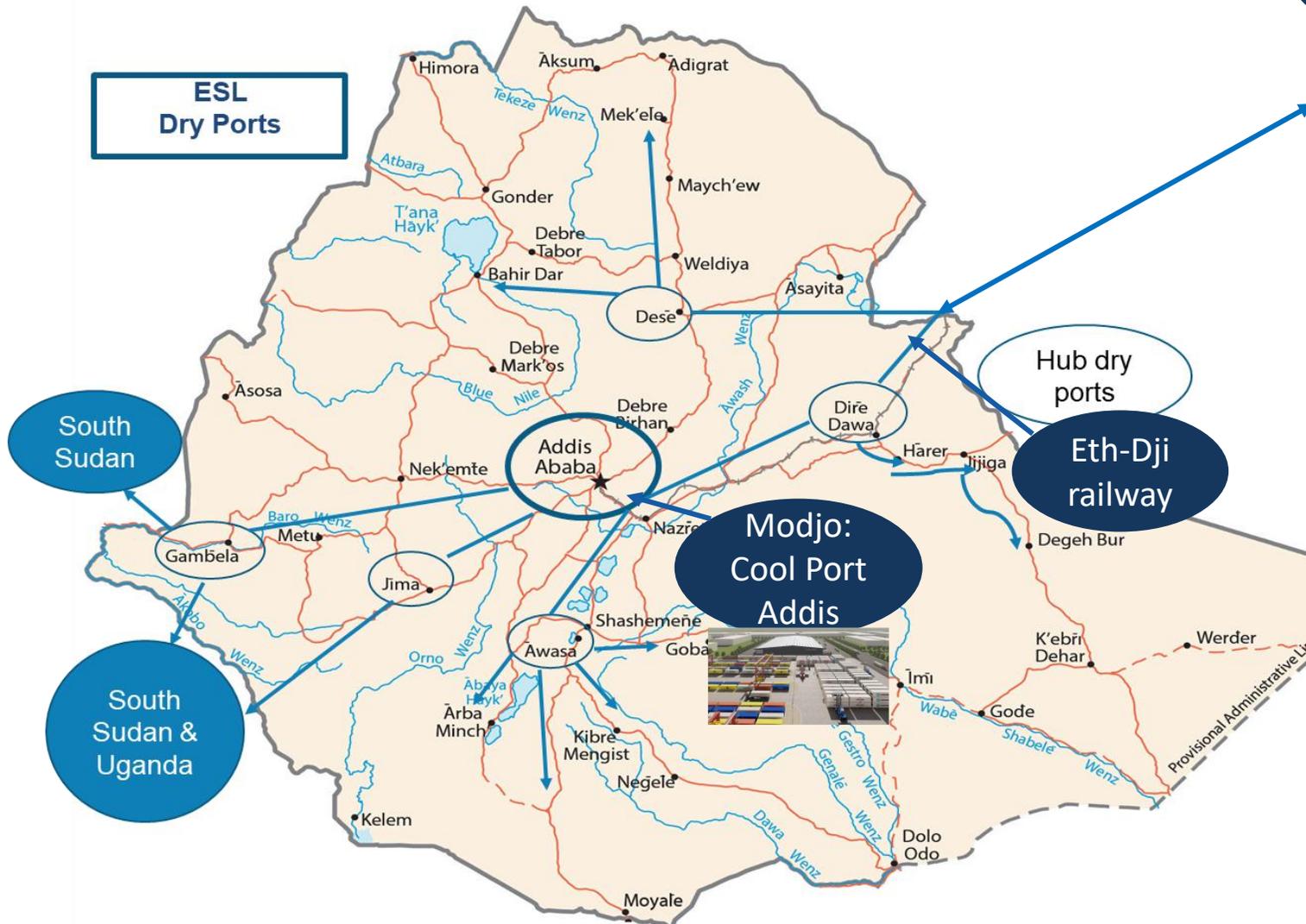
COOL PORT ADDIS

Optimisation of your logistic chain



ETHIOPIA – DJIBOUTI COOL LOGISTICS OPPORTUNITIES

Unlock Ethiopia-Djibouti cold chain value potential



- Captive incremental container volumes for SGTD
- Value added logistics
- Availability perishables all year round in Djibouti
- Job creation

Contact

Address Wijnhaven 3^e
P.O. Box 601
3011 WG Rotterdam
The Netherlands

Telephone +31 (0)653805100

Email Victor.timmermans@mtbs.nl



Since its formation in 2005, MTBS is proud to call the **historic White House in Rotterdam** its home port in the old port of Rotterdam. A landmark building since its completion in 1898 and Europe's first skyscraper.