Multi-year Expert Meeting on Transport, Trade Logistics and Trade Facilitation:

Trade Logistics and the 2030 Agenda for Sustainable Development

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by

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Achieving the Sustainable Development Goals with Sustainable Freight Transport

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Agenda

• What is Sustainable Freight Transport?
• Is it a prerequisite for SDG’s?
• How to implement Sustainable Freight Transport?
Economic Development & Freight Transport

- Improvements to transport infrastructure – mainly road
- Centralisation
- Increased length of haul
- Increased freight transport intensity: ratio of tonne-km to output
- Change in commodity mix
- Lower density / higher value products
- New industrial / warehousing development not rail-connected
- Growth in output
- New patterns of consumption
- Industrialisation
- Decline in rail freight
- Stronger just-in-time pressures
- Poorer utilisation of vehicle capacity
- By less green mode
- In less full vehicles
- Much more freight being moved
- Greater environmental & social degradation
- Higher externalities per unit of freight moved

Source: Alan Mckinnon

Freight Transport Externalities

- Vehicle Ownership
- SO2
- PM2.5
- PM10
- Nox
- Black Carbon
- CH4
- N2O
- Vehicle Kilometer Travel
- Accidents
- Energy consumption
- Congestion Costs

Share in Transport Sector
What is Sustainable Freight Transport?

**ECONOMIC**
- Trade competitiveness, transport costs, energy efficiency, quality and reliability,
- Infrastructure investment and fiscal burden, freight productivity, sustainable consumption, resilience and operational continuity

**ENVIRONMENTAL**
- Air pollution, GHG emissions, water pollution, resource depletion, land use and habitat fragmentation, waste, biodiversity and ecosystems, soil quality & climate resilience

**SOCIAL**
- Safety, security, employment, labour conditions, affordability, aesthetic impacts, cultural preservation, health and noise and vibration

Sustainable Freight?
Sustainable Freight for Sustainable Development

- **Strong Impact**
- **Less Impact**

Sustainable Freight Links to Other International Processes

Making freight transport more sustainable promotes achievement of multiple international development agendas

- New Urban Agenda
- **Paris Agreement**
- Addis Ababa Action Agenda
- Sendai Framework for Disaster Risk Reduction
- Vienna Programme of Action for LLDCs
- SIDS Accelerated Modalities of Action (SAMOA) Pathway
- Decade of Action for Road Safety
- Istanbul Programme of Action for LDCs
Role of Freight in Climate Mitigation?

Freight Transport CO2 emissions from ~3.5 Gt to reduce to 1 Gt by 2050 [8Gt in 2050 BAU]

Low Carbon Modelling (400 Measures) 73% 26%
NDC (164) 44% 14%
Climate Finance (215 Projects) 89% 11%

Current Status?

20 Asian Countries Review

- Promote NMT Deliveries
- Government Subsidy Scheme (Modal shift and Avoid)
- Sustainable Urban Freight Policy/Plan
- Standardized methodology for emissions
- Initiate Toll labelling Scheme
- Developing National Green Freight Programs
- Anti-idling programs
- Low emission zones
- Freight Operators Certification Program
- Mandating Truck scrappage scheme
- Truck Fuel Economy Standard
- Energy efficient equipment in railways
- Electrification in railways
- Information campaign to increase the awareness
- Road user charge/ Congestion charge
- Enhanced building codes/Landuse Planning
- Relocation of large traffic generators
- Aerodynamic, telematics and tires technology
- Freight Exchange
- Removing diesel subsidy
- Electronic Toll Collection (ETC) system
- Vehicle size and weight restrictions
- Financial incentive for Cleaner Vehicles
- Emission standards (Euro IV Planning)
- Ecotaxis training
- Alternativefuels and vehicles
- Freight clusters
- Waterways Improvement/Ports
- Truck Stops/Parking Outside Metropolitan Areas
- Time access restrictions
- New and upgraded railways
- Enforcement
- Inspection and Maintenance
- Traffic Control
- New and upgraded roads

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Implementing Sustainable Freight Transport

Technology
Infrastructure
Market
Behaviour
Energy
Regulation

Structure of the supply chain
Modal Shift
Vehicle routeing
Utilisation
Energy Efficiency
Emission content of the energy
Other externalities per vehicle-km and per unit of throughput

Economic
Environmental
Social
Sustainable Freight

Source: Alan Mckinnon

Example - UNCTAD

Who should initiate the measure? – A review of 300 SFT measures

Government, 18%
Partnership, 35%
Private Sector, 46%
Development Agency, 0.3%

Biggest barrier – “Soft infrastructure” i.e. Capacity/Awareness/Lack of Partnerships
Capacity Building - Sustainable Freight Transport Training Modules

INTRODUCTION
FRAMEWORK
MEASUREMENT
ENVIRONMENTAL COSTS
TARGETS

FREIGHT INTENSITY
MODAL SPLIT
VEHICLE UTILISATION
ENERGY EFFICIENCY
REDUCING EMISSIONS/UNIT OF ENERGY
CITY LOGISTICS
GREENING MARITIME SUPPLY CHAIN

FINANCING
SCALING-UP - PARTNERSHIPS & PROGRAMS

UNCTAD Reference Framework for Sustainable Freight Transport

Data Collection
Stakeholder Mapping
Qualitative Evaluation
Quantitative Evaluation

Diagnosis

Visioning
Goals
Objective Visioning

Establish Targets
Establish KPI's Targets

Monitoring & Evaluation

Partnership
Sustainable Freight Program
Recognition Scheme

Enabling Factors

Implementation
Prioritisation
Identify Projects, Strategies and Policies
Identify Framework

Awareness Raising
Capacity Building
Consultations
Experimentation & Technology
Financing
Harmonisation
Institutional Legal framework

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Thank you

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