



Arab Academy

for Science , Technology and Maritime Transport



The International Maritime Transport
and Logistics Conference

“MARLOG 13”

**Towards _____
Smart Green Blue
Infrastructure**

3-5 March 2024 - Alexandria, Egypt





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The International University of Logistics
and Transport in Wrocław



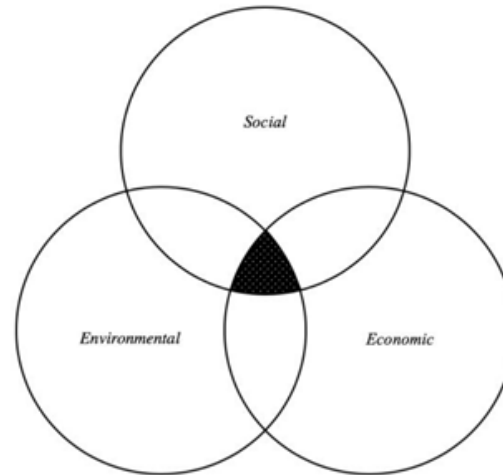
ACHIEVING SUSTAINABLE DEVELOPMENT IN LOGISTICS

A PATH TO ENVIRONMENTAL
AND ECONOMIC EFFICIENCY



Sustainable development concept

Sustainable development is a development that meets the present without compromising the ability of future generations to meet their own needs.



Model of Sustainability

Source: J. Hedberg, K. Raadik, Sustainable Logistics: A quantitative study of the importance of stakeholder alignment for sustainable business development, UMEA UNIVERSITY, 2020, p. 19

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Sustainable Development Goals

A document created by the UN General Assembly in 2015 called the “2030 Agenda for Sustainable Development” contains the Sustainable Development Goals (SDGs).

Of the 17 SDGs listed in this Agenda, the following goals may address logistics issues:

SDG-7 Affordable and clean energy

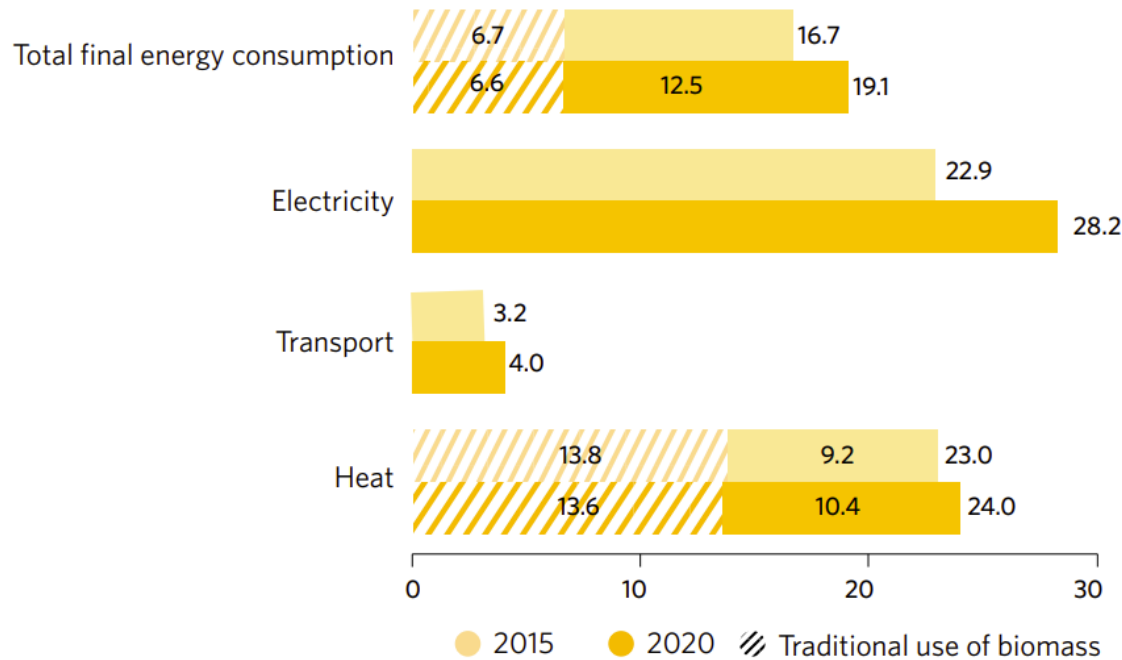
SDG-11 Sustainable cities and communities

SDG-12 Responsible consumption and production



SDG-7 Affordable and clean energy

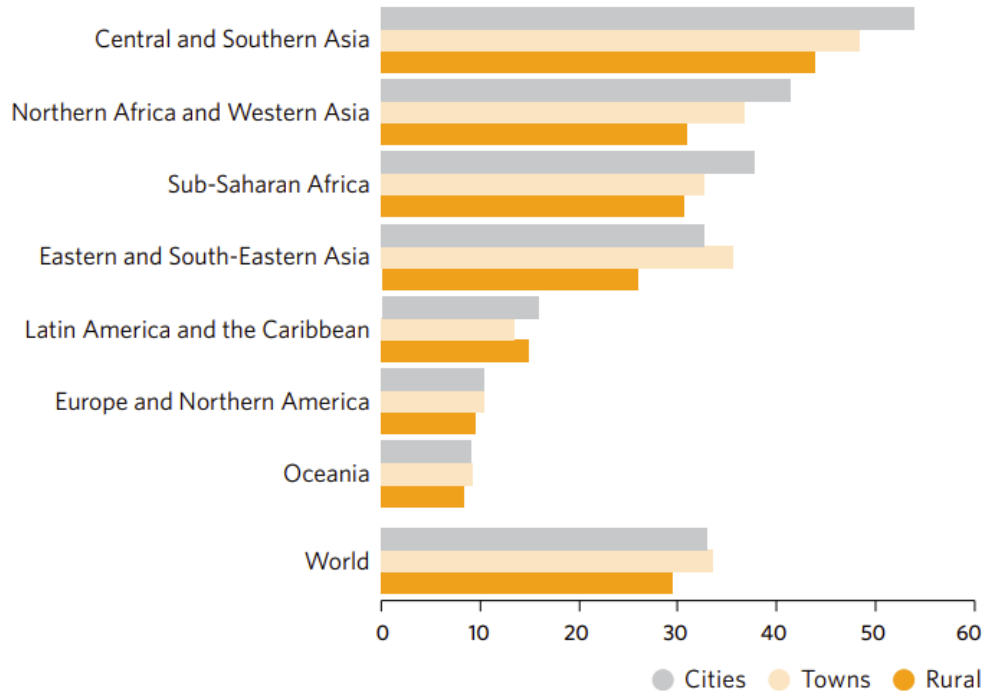
Share of renewable sources in final energy consumption and by end use, 2015 and 2020 (percentage)



Share of renewable sources in final energy consumption and by end use, 2015 and 2022
 Source: UNSTATS (2023)

SDG-11 Sustainable cities and communities

Population-weighted particulate matter (PM_{2.5}) concentrations in cities, towns and rural areas, 2019 (micrograms per cubic metre)

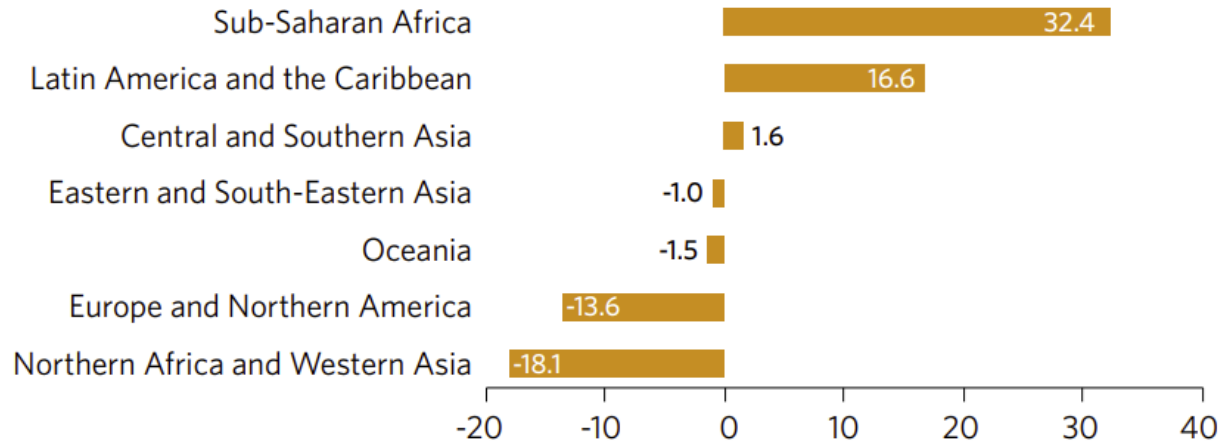


Source: UNSTATS (2023)

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SDG-12 Responsible consumption and production

Excess of domestic material consumption over material footprint, 2019 (percentage)



Source: UNSTATS

Sustainable Logistics

Sustainable logistics is defined as supply chain management practices and strategies that reduce the ecological and energy footprints of the distribution of goods which focuses on material handling, waste management, packaging and transport

Logistics is a crucial component of the supply chain, yet it is a significant contributor to air pollution. Transportation is a key operational aspect of logistics and is responsible for 24% of global CO2 emissions



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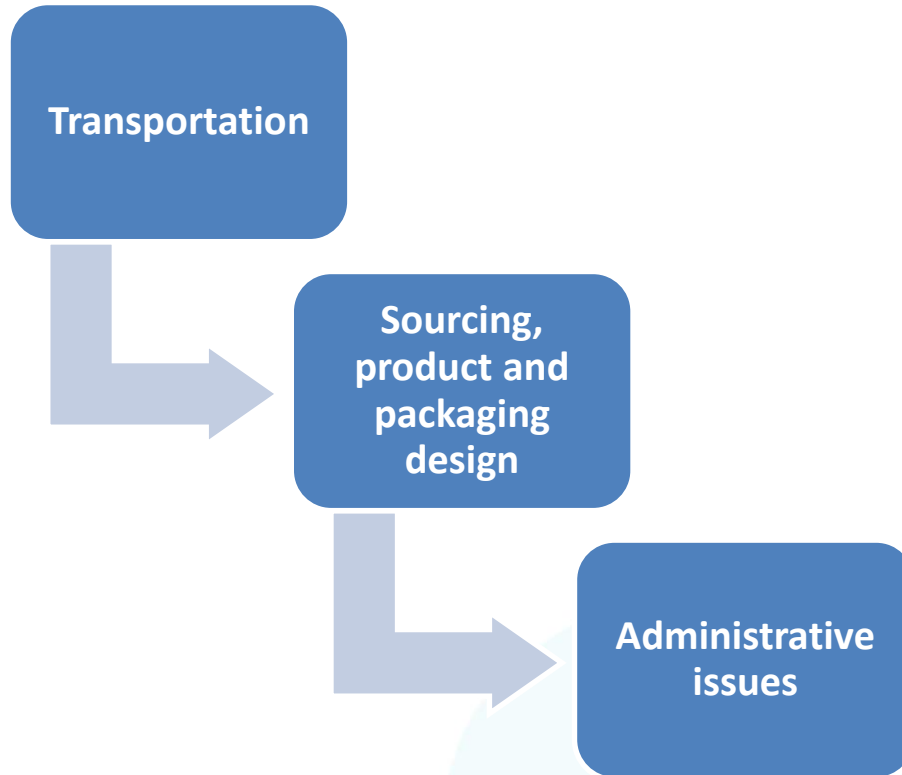
Green logistics practices in value creation perspective

<i>TYPES OF GL PRACTICES</i>	<i>VALUE CREATION PERSPECTIVE</i>	
	<i>ENVIRONMENTAL</i>	<i>ECONOMIC</i>
<i>Alternative energy</i>	v	
<i>Low carbon transportation</i>	v	
<i>Transport modes</i>	v	v
<i>Recycling materials and packaging</i>	v	v
<i>Eco-driving</i>	v	v
<i>Reverse logistics</i>	v	v
<i>Energy efficiency</i>	v	v
<i>Fleet management</i>	v	v
<i>Supply chain reorganization</i>		v
<i>Environmental control</i>	v	
<i>Green packaging</i>	v	v
<i>Vehicle use</i>	v	v
<i>Environmental training and information</i>	v	v

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The incorporation of eco-friendly practices in logistics operations and supply chains



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Thank You

