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Logistics Innovation  
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in Europe

## *Setting the scene for a Zero Logistics Emissions Roadmap*

Sophie Punte

Chair Alice Working Group on Sustainability

Executive Director Smart Freight Centre

Coordinator LEARN project

**Organized by:**



# WG1 Sustainable Logistic Supply Chains



Sophie Punte

Executive Director  
Smart Freight Centre

[sophie.punte@smartfreightcentre.org](mailto:sophie.punte@smartfreightcentre.org)



Alain Baeyens

30°NORTH

[alain.baeyens@30degreesnorth.eu](mailto:alain.baeyens@30degreesnorth.eu)

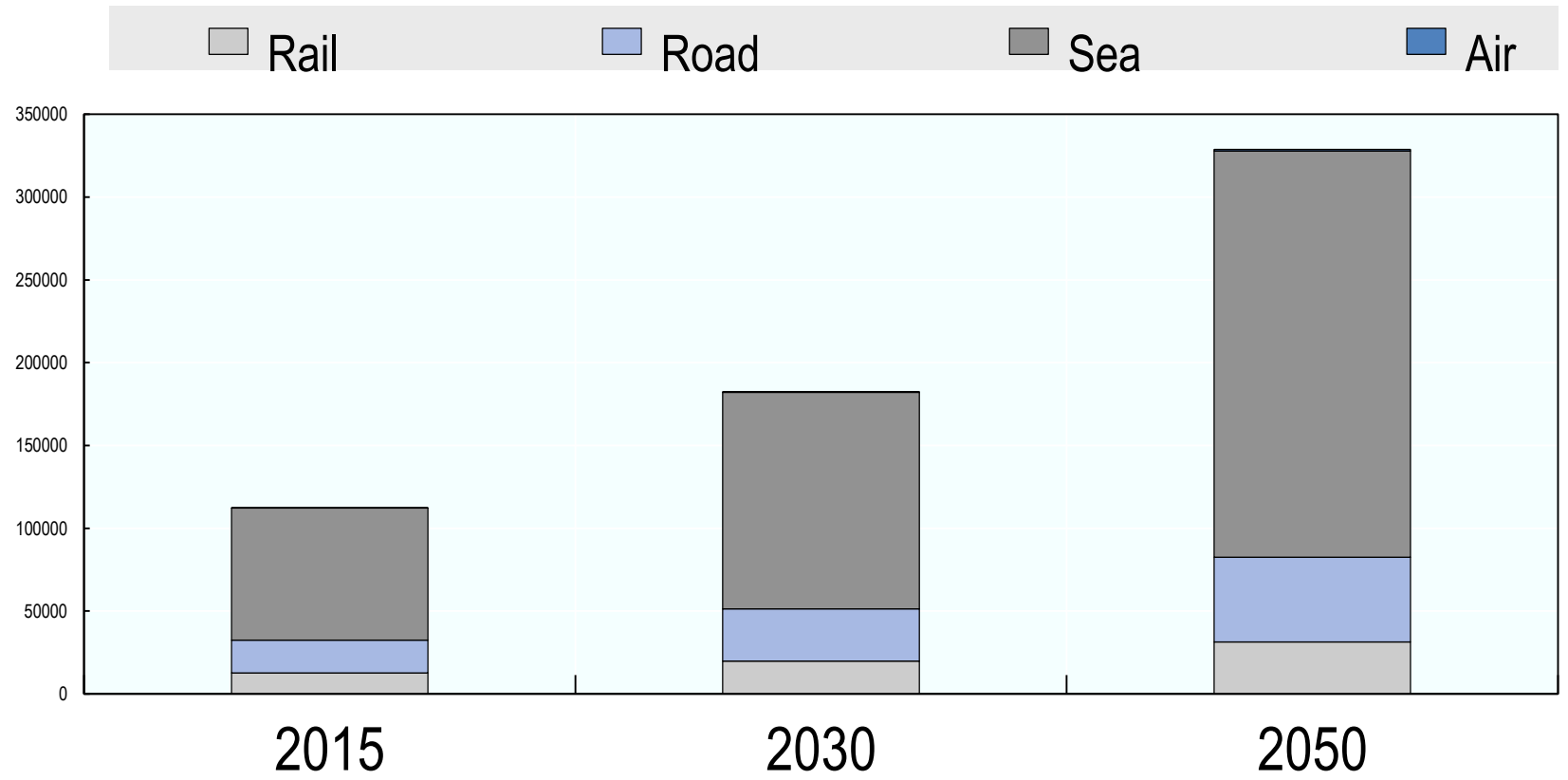


Lori Tavasszy

Professor, Freight & Logistics  
Delft University of Technology

[L.A.Tavasszy@tudelft.nl](mailto:L.A.Tavasszy@tudelft.nl)

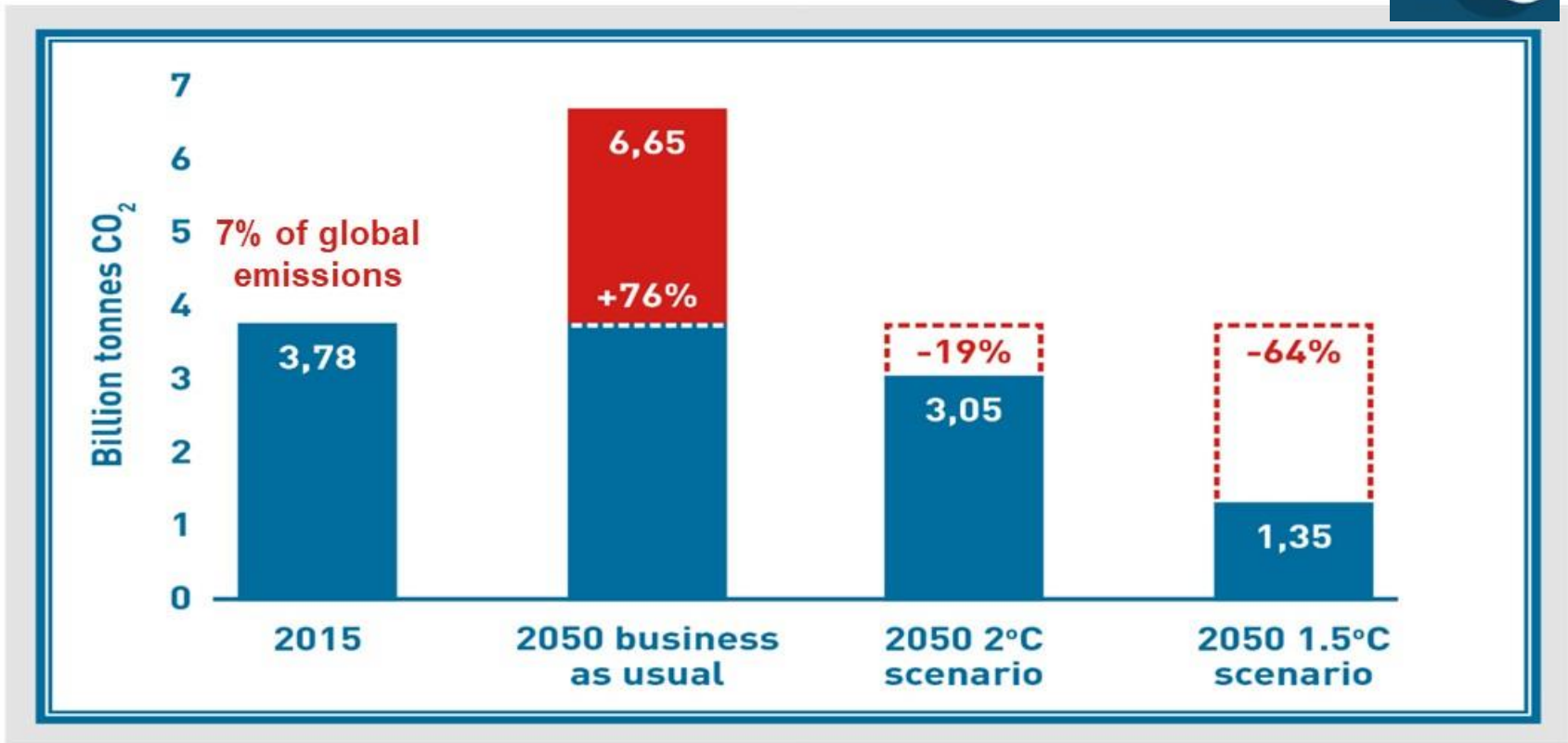
# Global freight demand: triple increase by 2050



**Freight transport demand (billion tkm) by mode**

Source: ITF Transport Outlook 2017

# Logistics emissions going up but most come down



Smart Freight Centre (2017). Smart Freight Leadership, based on data from ITF Transport Outlook 2017 and SLoCaT 2016



# Freight transport is a significant source of air pollution



# A sector in transformation



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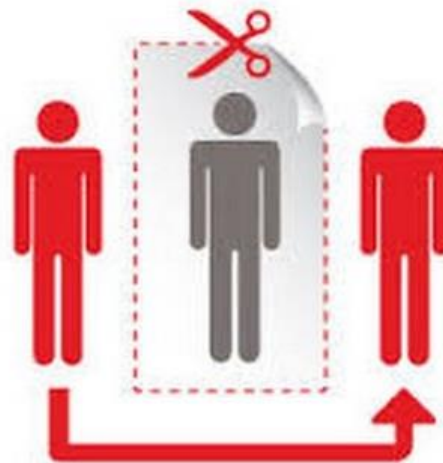
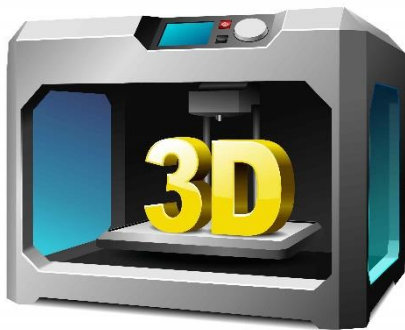
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Technological Innovation



Physical internet

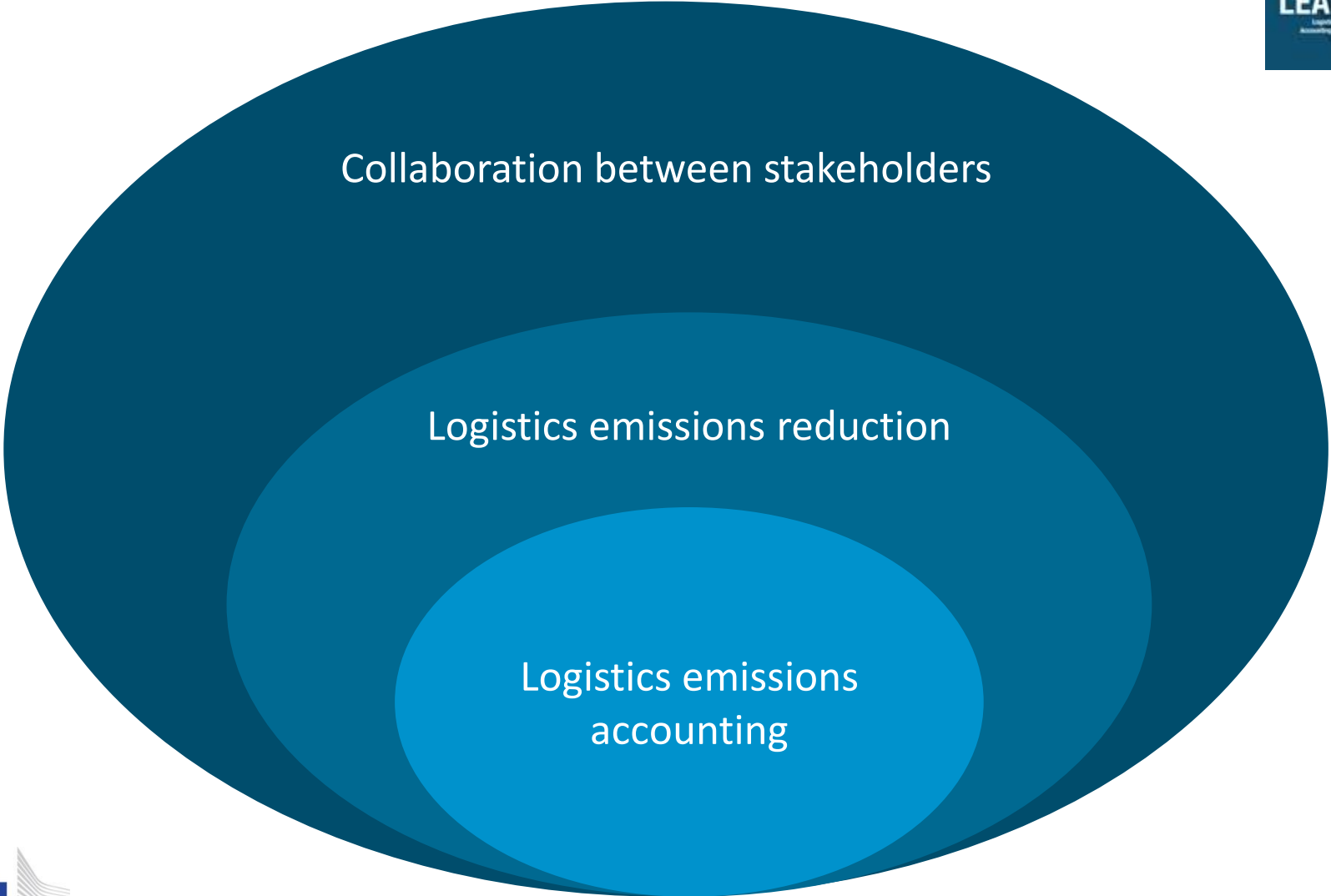


New Business Models



Regulators, investors and insurers

# How can we realize zero emission freight?





- **Methodology**

from methodology development to implementation

- **Data access and exchange**

access to the right level/type of data across modes, transshipment centers and countries/regions for accounting

- **Assurance/certification**

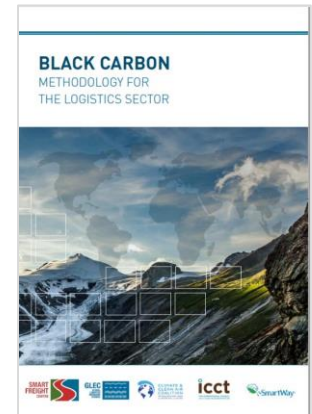
reported data are considered reliable (accurate and complete) by users/customers

- **Use of results**

organizations are using data for logistics decisions and emission reduction efforts



# GLEC Framework: universal method for logistics emissions accounting



Watch our animation video and download the GLEC Framework  
[www.smartfreightcentre.org/glec/what-is-glec](http://www.smartfreightcentre.org/glec/what-is-glec)

# The LEARN project

Empower business to reduce their carbon footprint across their global logistics supply chains by improved emissions measurement, reporting and verification (MRV)



## LEARN partners



# The LEARN project



## 1. Guidance, Label, Training & Education

Provide support to companies to measure, report and verify emissions and use data to make decisions



## 2. Testing & Validation

Test, validate and evaluate emissions MRV with companies in complex multi-modal logistics settings



## 3. Supportive Policy & Research

Promote and facilitate supportive policies and research



## 4. Network & Stakeholder Engagement

Develop and involve a LEARN multi-stakeholder network to maximize business uptake of carbon accounting and reduction



# Logistics emission reduction

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- **Switch to low carbon energy technologies**  
electrification, biofuels...
- **Transport energy efficiency**  
energy saving technologies in vehicles and barges, retrofitting, fuel economy, eco-driving, platooning...
- **Increase transport asset utilization**  
transport assets sharing, reducing empty transport legs...
- **Reduce transport intensity/restructure supply chains**  
dematerialization, 3D printing, Relocalize, Nearshoring Decentralize stocks...
- **Optimise the use of transport mode**  
multimodality, Synchromodality, Improve modal split..

# Collaboration: commercial sector where customer is king

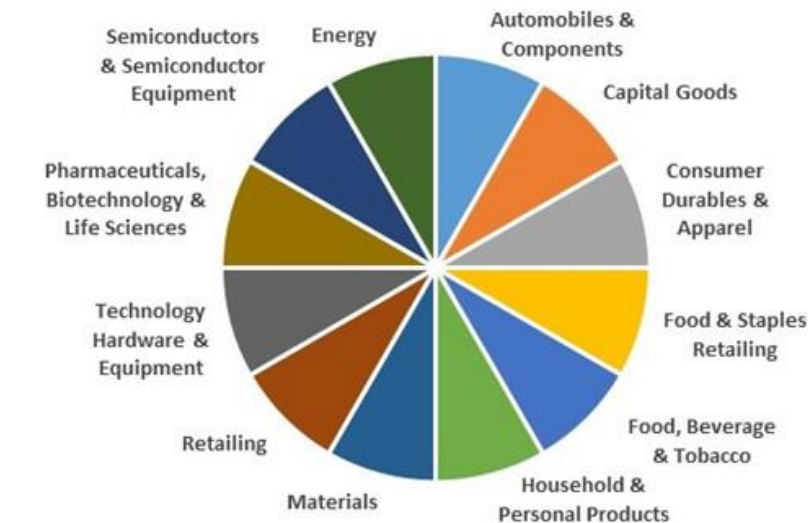


## Customers / Consumers

### Logistics Partners

- Multinational LSPs/carriers
- Local LSPs/carriers
- Operators of ports, terminals, distribution centers, warehouses
- Freight exchange platforms

### Cargo Owners



### Other Partners

- Suppliers
- Service providers
- Industry associations
- Business networks
- Programs and initiatives

## Government & Civil Society



# Collaboration: different roles



## GOVERNMENT



Provide a secure environment for innovation and action in freight and logistics

## PRIVATE SECTOR



Drive smart freight leadership across the global logistics supply chain

## CIVIL SOCIETY



Put climate and sustainable freight on the agenda and keep raising the bar

## CONSUMERS



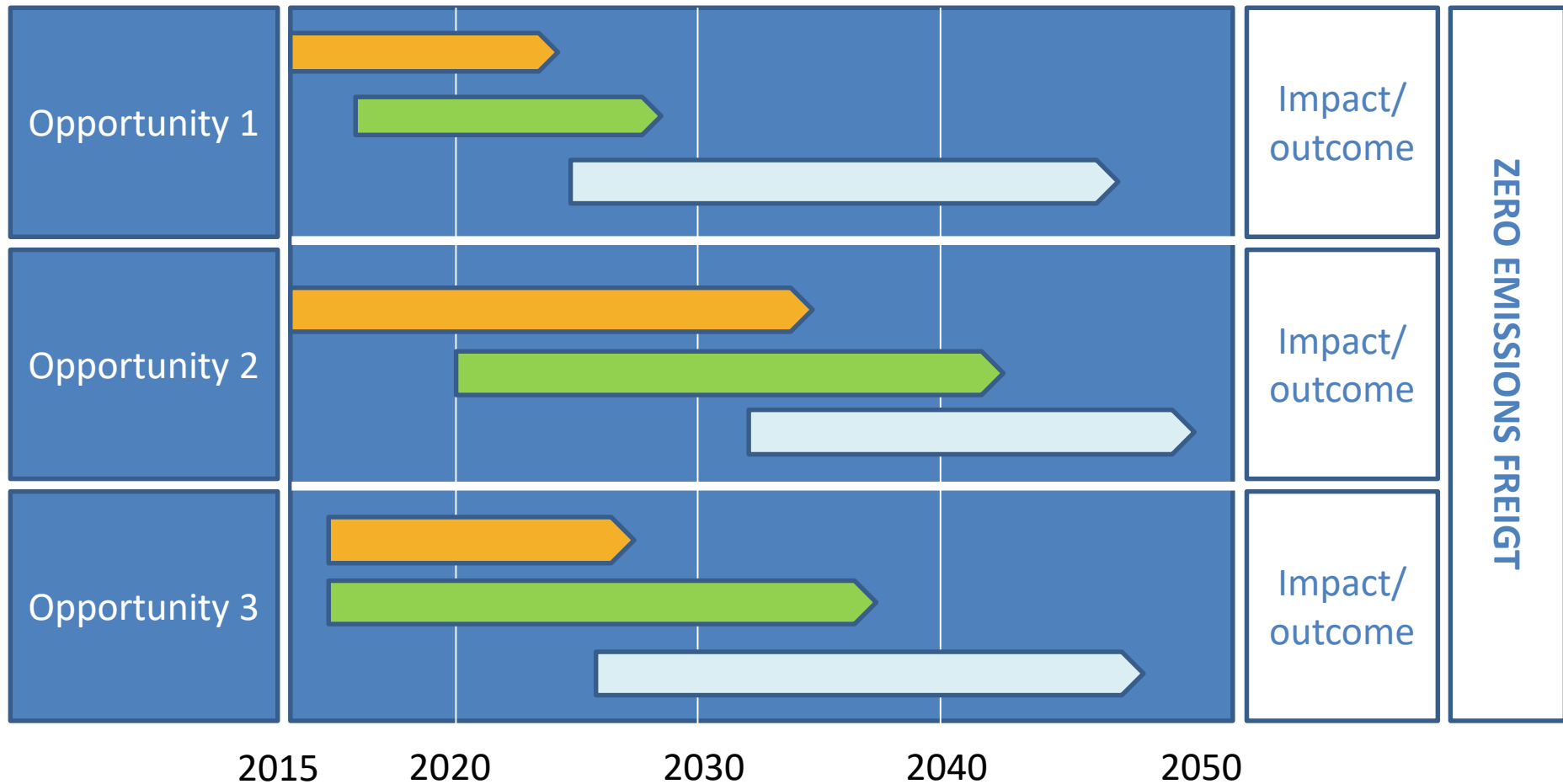
Consider impacts of goods transport in purchasing decisions

Smart Freight Centre 2017 'Smart Freight Leadership'

# Collaboration: build on existing initiatives and efforts



# Developing a roadmap

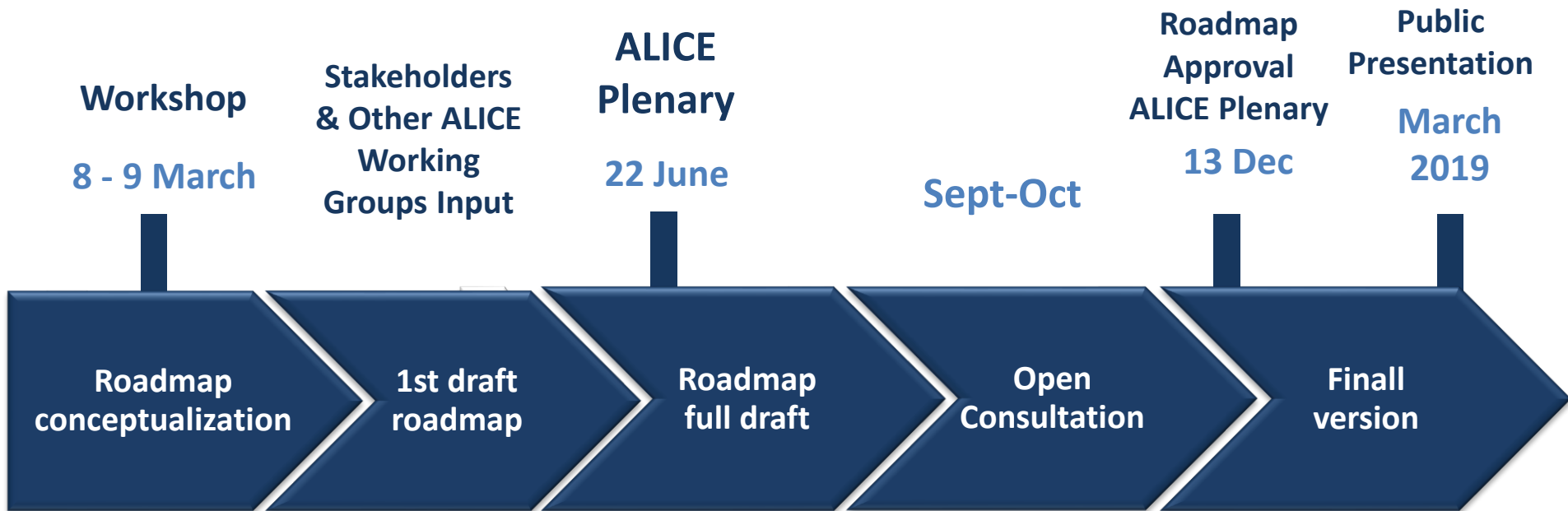


# Roadmap structure



- **Executive summary (2 pages)**
- **Introduction (3-5 pages)**
  - Overall objectives, scope and approach
  - Complementarities with other ALICE roadmaps & background
- **Logistics emissions accounting (3-5 pages)**
  - State of the art
  - 4 emission accounting enablers
  - Roadmap (milestones and timelines graphs)
- **Logistics emissions reduction (5-10 pages)**
  - State of the art
  - 5 reduction areas
  - Roadmap (milestones and timelines graphs)
- **Collaboration between stakeholders (2 pages)**

# Roadmap preparation timeline





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*Logistics innovation for a more  
competitive and sustainable industry*