

Introduction to **LEAN & GREEN** *International*

*The Recognition Program for carbon reduction in logistics
for shippers, retailers and logistics service providers*

2023



Lean & Green International

COMMUNITY – sharing knowledge

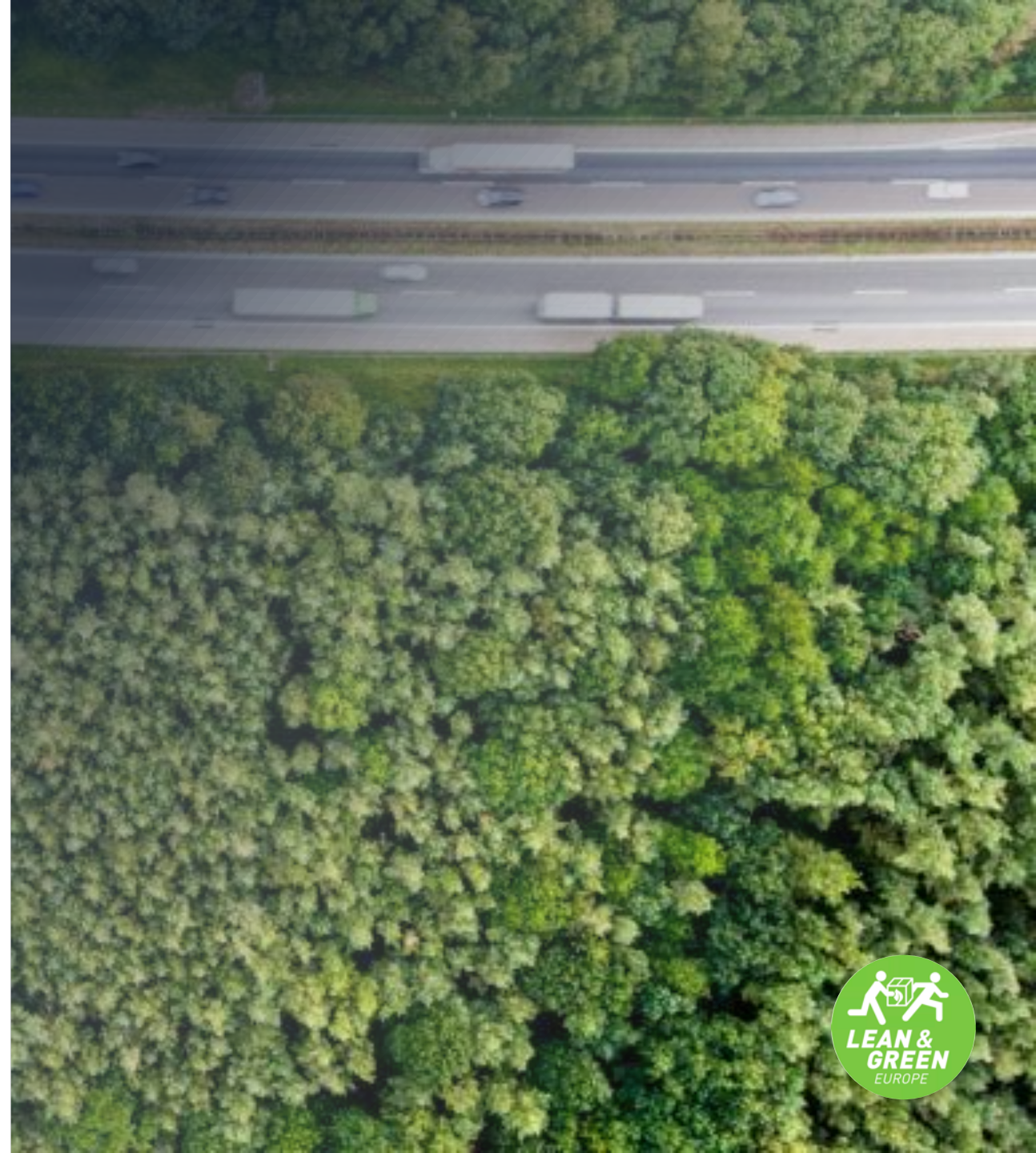
The community of Lean & Green participants is open and willing to share their experience and best practices to accelerate sustainable logistics.

INSIGHTS – measure and reduce

Annual monitoring of carbon emissions leads to better understanding how to further reduce your CO2 and report results to supply chain partners.

RECOGNITION – audit on carbon reduction

Every *Star* certification symbolizes an achieved reduction target and has been verified by an external certicator or accountant.



Lean & Green International

Leading reduction program for logistics

Founded by Connekt in the Netherlands in 2008

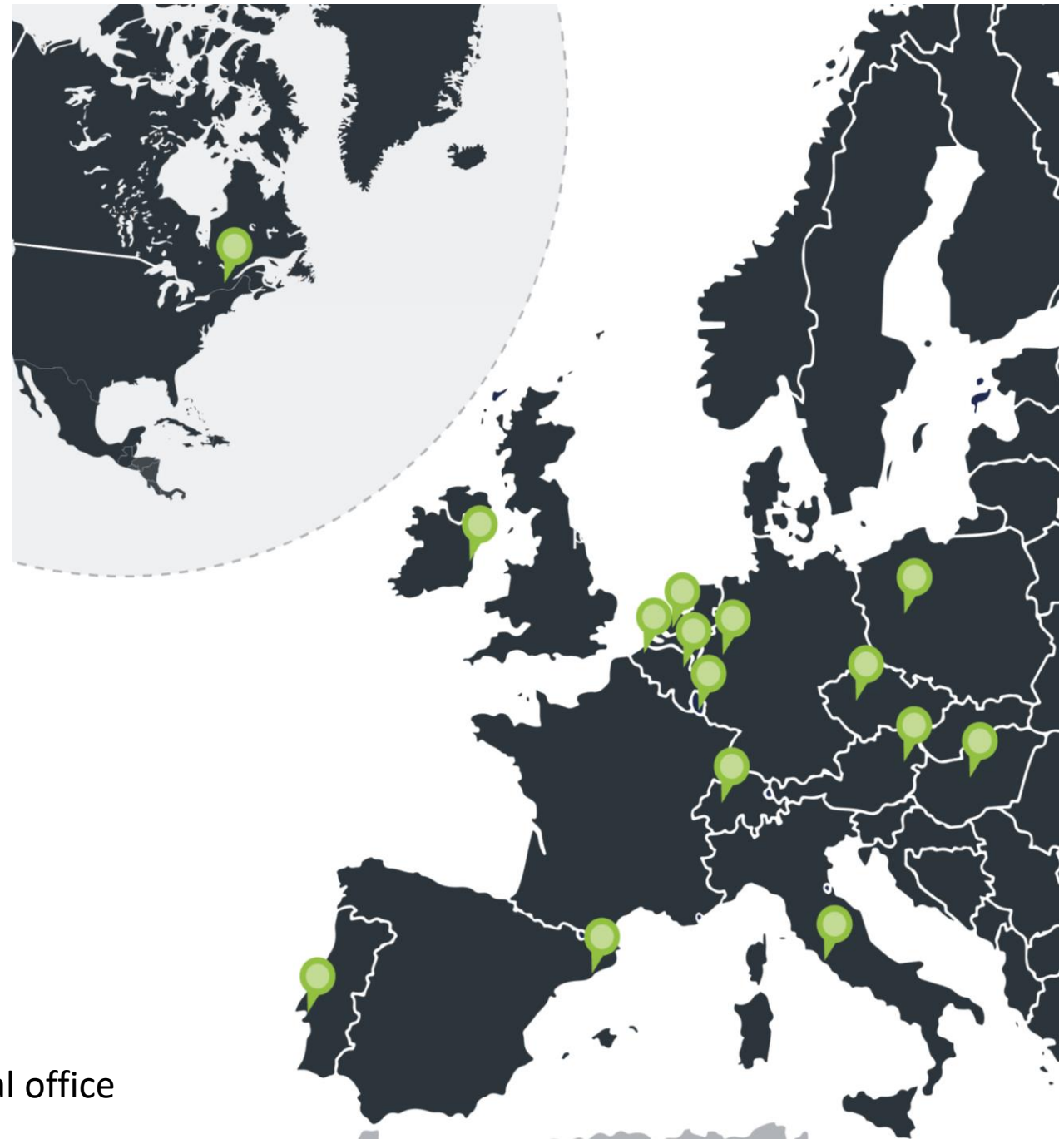
Community of 550+ participating companies

15 National Programs (+ USA, HU, SK in 2023)

International program for multinationals

5 Star framework in line with ISO 14083

Participation available in any country through International office



The Lean & Green 5-Star framework



PARIS CLIMATE GOALS ACCOMPLISHED

Data quality: Gold (perfect data)

Scope: 90%

Data: Actual real data



ON TRACK TO PARIS CLIMATE GOALS

Data quality: Gold (direct or perfect data)

Scope: 85%

Data: Actual real data



5% CO₂ REDUCTION IN MAX 2 YEARS

Data quality: Silver (actual data)

Scope: 75%



10% CO₂ REDUCTION IN MAX 3 YEARS

Data quality: Silver (actual data)

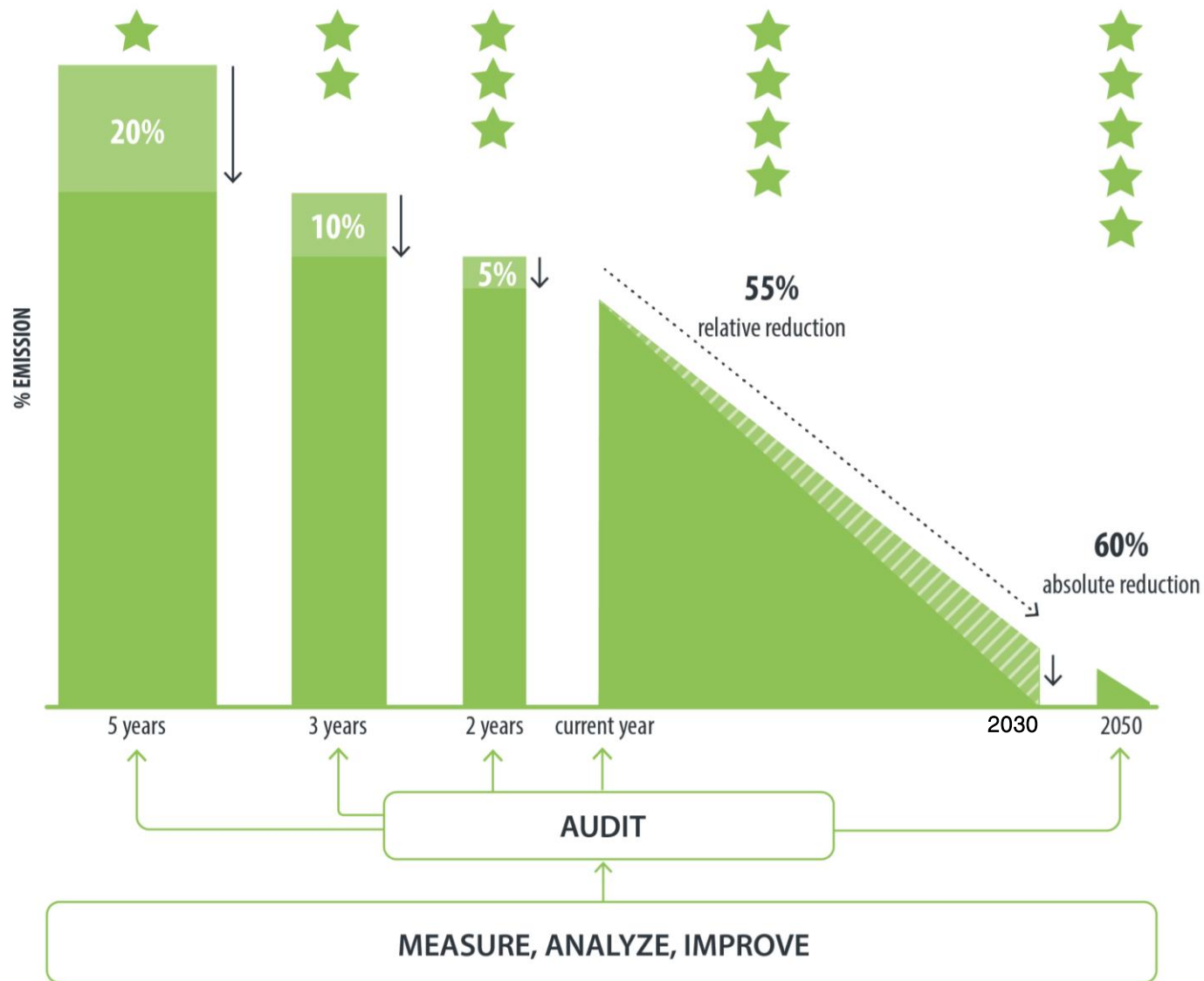
Scope: 65%



20% CO₂ REDUCTION IN MAX 5 YEARS

Data quality: Bronze (default or industry averages)

Scope: 50%



Data quality

+

Gold

Silver

Bronze

Gold+: Complete perfect data

Shipment data (zipcodes) combined with fuel consumption (liters) per shipment

Shipment data (km's+zipcodes) combined with usage liters/km per shipment

Gold: Actual data (monthly)

Shipment data (zipcodes) combined with monthly fuel consumption (liters)

Shipment data (km's+zipcodes) combined with monthly usage liters/km

Silver: Actual data (anual)

Shipment data (zipcodes) combined with anual fuel consumption (liters)

Shipment data (km's+zipcodes) combined with anual usage liters/km

Bronze: Actual data combined with estimates-aggragates-key figures

Actual volume comined with fuel estimate or industry standard (GLEC) Actual fuel combined with volume aggragates or averages.

CO2 Action Plan

ORGANISATION

Description of the organization and logistical operation.

SCOPE

Determine the percentage of volume for the analysis.

MEASURES

Describe the measures and projects for reduction.

BASE ANALYSIS

Analyse the logistical data according to requirements.



1st Star Action plan

Reduction:	20% in 5 yrs (CO2.unit)
Scope:	Minimum 50% volume (national outbound/EU)
Dataquality:	Bronze
Volume:	Annual total
Fuel:	Annual total

Measures (example):

- Internal and operational efficiency
- Fuel saving measures and fleet
- Planning



2nd Star Action Plan

Reduction:	10% in 3 yrs (CO2.unit)
Scope:	Minimum 65% volume (national outbound/EU)
Dataquality:	Silver
Volume:	Shipment data (BigMile)
Fuel:	Actual annual total/usage

Measures (example):

- Improved dataquality
- Optimisation and collaboration with customers and principals
- Sustainable energy and innovations



3rd Star Action Plan

Reduction:	5% in 2 yrs (CO2.unit)
Scope:	Minimum 75% volume (national outbound/EU)
Dataquality:	Silver
Volume:	Shipment data (BigMile)
Fuel:	Actual annual total/usage

Measures (example):

- Horizontal collaboration, supply chain improvement
- Multi modal transport, modal shift
- Zero emission transport / storage



Measures - Projects

1st Star level measures (example):

- Internal and operational efficiency
- Fuel saving measures and fleet
- Planning

2nd Star level measures (example):

- Improved dataquality
- Optimisation and collaboration with customers and principals
- Sustainable energy and innovations

3rd Star level measures (example):

- Horizontal collaboration, supply chain improvement
- Multi modal transport, modal shift
- Zero emission transport / storage

Lean & Green factors for reduction measures and projects

Sustainable/alternative fuels, energy and vehicles

Energy efficiency of vehicle and driver

Logistic efficiency, planning en infrastructure

Product density

Length of supply chain

Supply chain optimazation

Innovation

Circularity



Support from Lean & Green

INTRODUCTION

Join a webinar or request an online introduction.

ACTION PLAN

Receive all documentation once you join the program.

KICK OFF

Start of the project support with drafting your plan.

UPDATES

Periodic check-ups to steer you in the right direction.



Annual monitoring cycle

Annual

1. Scope: % volume for analysis
2. Update CO2-reduction projects
3. CO2 Data collection and analysis (BigMile)

Achieved reduction target

4. Review of data-analysis and projects (L&G)
5. External audit/verification of data and calculations (accountant)

Celebrating your Lean & Green Star(s)!

Lean & Green and CSRD

Upcoming rules and regulations:

- EU carbon reduction target is ~~55~~ 57% in 2030 (Fit For 55)
- Carbon reporting and standardisation (ISO 14083)
- Carbon pricing is part of EU Green deal plans
- CSRD reporting (including 'SCOPE 3' emissions) starting 2024/2025

Choice between having control over your actual emissions vs reporting estimations



Why companies join Lean & Green



Take responsibility. Proof of taking action against global warming.

Show actual reduction. Carbon offsetting more often seen as a temporary solution or even greenwashing.

The hunt for talent. Employees look for sustainability in employer.

Growing customer awareness. Growing demand for sustainable transport and delivery.

Activism in boardrooms. Stakeholders, strategies and risk management focus on climate.

Certification. Validated recognition and audited reduction.



Pricing Lean & Green Europe 2022/2023

Annual fees:

National Partner programs:

Pricing per country as determined by the
National Program Steering Committee

National program through international office

€ 2500,- (ex VAT)
(in case no National Partner in selected country)

Lean & Green Europe:

€ 9500,- (ex VAT)

Including:

- International recognition from Europe's leading reduction program in logistics
- Joining the Lean & Green sustainable logistics community
- Invitation to join the European steering group of leading companies
- Carbon reporting with standard version BigMile (EN16258 – ISO 14083)
- Key-accountmanagement by international office or national partner of choice

Please contact us for more pricing options with additional support and BigMile carbon analytics licence.



BigMile - Calculate and analyze transport-related emissions

Comprehensive Carbon Footprinting (cloud) software

- CO2 calculation en **allocation** in logistics
 - CO2 per unit
 - CO2 per unit kilometer
 - CO2 per customer
 - CO2 per modality
 - CO2 Benchmark
- **BigMile Carbon Footprint:** (Included in Lean & Green)
Carbon footprint and reduction opportunity's
- **BigMile Carbon Analytics:**
BI solution and optimisation tool. (Licence)



Contact us



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CASES

WOLTER KOOOPS

WOLTER KOOOPS

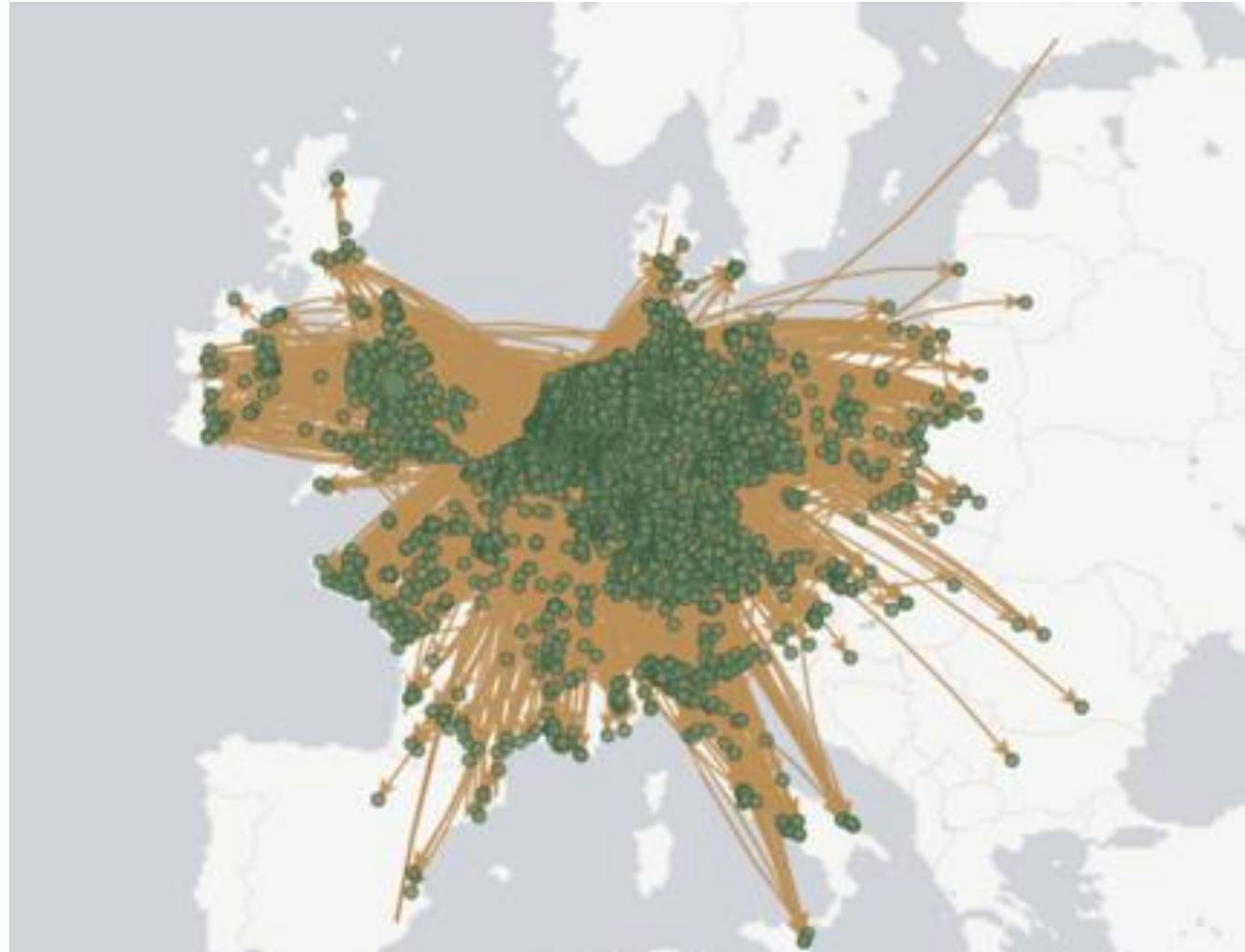
1st Lean & Green Star



WOLTER KOOPS

Fact & Figures

- Family operated since 1961
- Large fleet of 900+
- 100% Euro 6
- 5 locations in 3 countries (NL, DE, PL)
- Groupage transport, warehousing en distribution of temperature controlled products
- Food, dairy, flowers, plants, fresh
- Planning in pallets



Scope 1st Star

100% in scope where 50% is the minimum required.

Flow	In/out of scope	Percentage
Own assets	In scope	90%
Charter/subcontractor	In scope	10%

Reduction Dashboard 1st Lean & Green Star

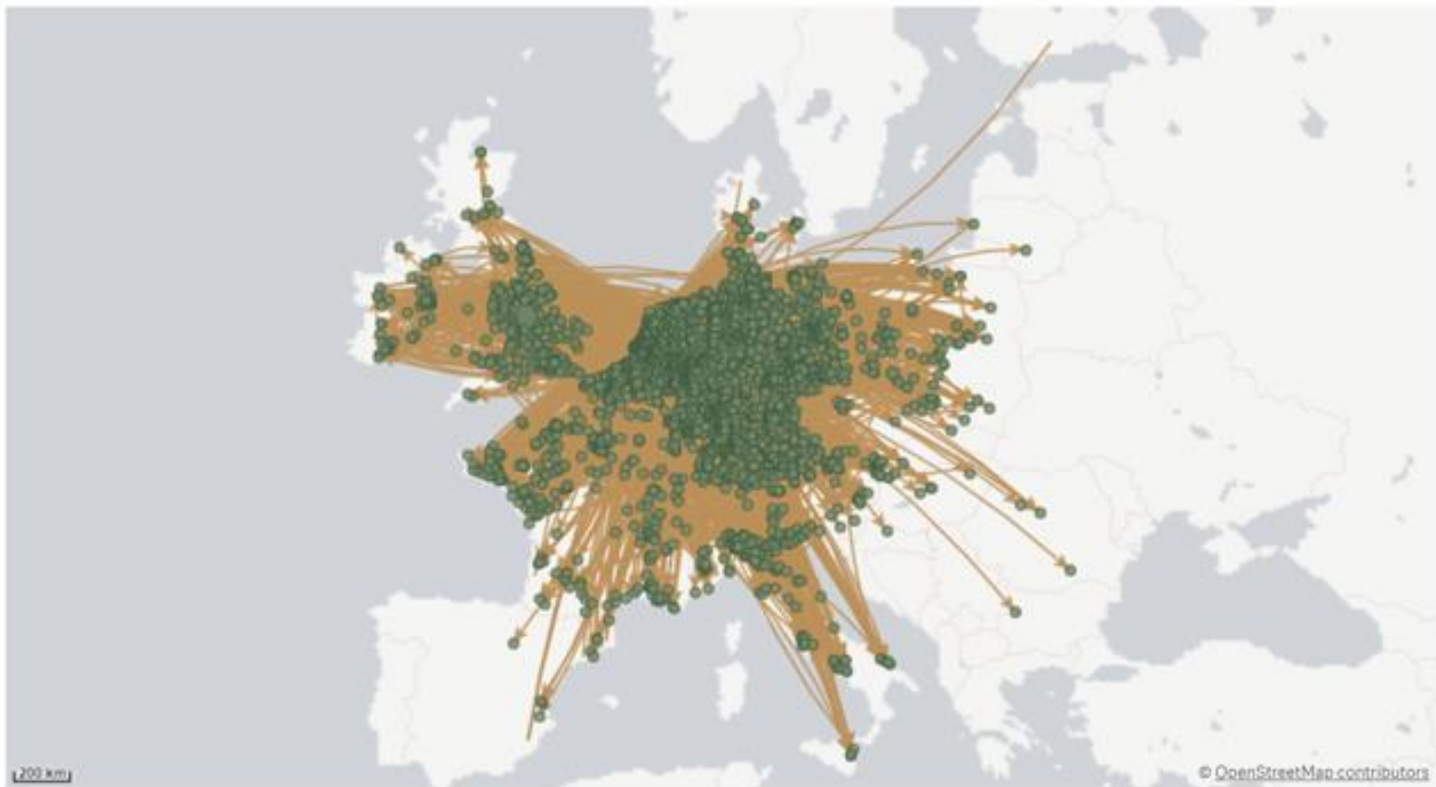
20% out of a required 20%



DASHBOARD

	Base year					Evaluation
	2014	2015	2016	2017	2018	2019
Pallets	5.811.497	6.078.692	6.181.117	6.506.204	7.111.847	7.756.396
CO2	106.957.115	107.795.194	104.954.646	104.251.874	108.615.149	114.154.922
CO2 per pallet	18,40	17,73	16,98	16,02	15,27	14,57
Reduction	Base year	4%	8%	13%	17%	20%

Totaal pallet verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



Data compleetheid

100,0%

Zendingen

540.651

Totaal verscheept (Pallet) ↗

7.726.396

Totaal kg CO₂e ↗

131.006.636

Kg CO₂e per Pallet ↗

16,96

Kg CO₂e per Pallet.km(GCD) ↗

0,0661

Datakwaliteit



Totaal verscheept per modaliteit (Pallet)



Totaal kg CO₂e per modaliteit



**WOLTER
KOOPS**

WOLTER KOOPS

Measures

- 100% Euro 6 trucks
- Speed limiter at 85 km/h
- Fulltime analysis and coaching on fuel consumption per driver
- LHV trucks
- Intermodal logistics
- Distribution concept with own logistic platforms for bundling routes
- Tires management system

Learnings

- Data Quality: Challenge to map the entire flow of goods and getting the correct data
- Insights: In carbon footprint, total emissions and emissions per pallet
- Activation: Everyone is more actively involved in reducing the carbon footprint
- Optimization: Lean & Green helps the company to reduce more
- Ambition: Already started working on project for the 2nd Lean & Green Star!



e van wijk
LOGISTICS

E. VAN WIJK

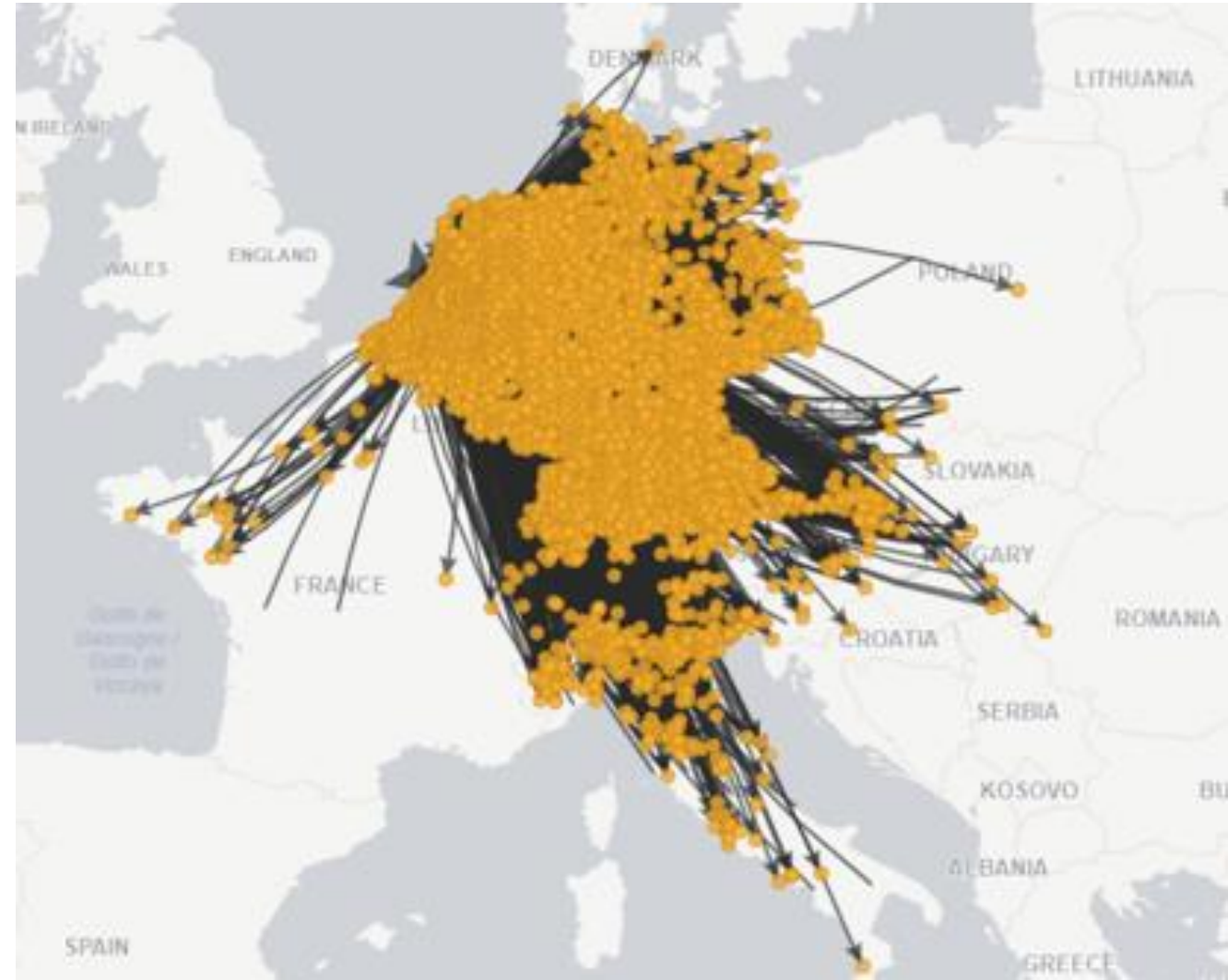
1st to 2nd Lean & Green Star





Fact & Figures (E. van Wijk Group)

- Family run since 1948
- 707 people employed
- 1650 shipments per day
- 335 trucks
- 54.000 M2 warehousing
- Located in 4 countries
- Planning in loadmeters
- Groupage Western Europe





e van wijk
LOGISTICS

Scope

70% in scope (65% is the minimum required)

Flow	In/out of scope	Percentage
Own assets	In scope	70%
Charter/subcontractor	Out of scope	30%





Reduction target 2^e Lean & Green Star

- Achieve a minimum of 10% in 3 years
- Base year: 2017
- Evaluation: 2020

E. Van Wijk used BigMile instead of the Lean & Green Dashboard



BigMile analysis – inputfile

Shipments

Opdracht Nummer	Volg Nummer	Vervoerder	Kenteken Voertuig ID	Periode brandstofverbruik	Periode energie verbruik	Datum van de zending	Hoeveelheid Laadmeter	Landcode Vertrek locatie	Postcode vertrek Locatie	Landcode bestemming	Postcode bestemming	Klant
312854480001	25658840000	E. van Wijk	24-BNX-1	2020-01	2020-01	01-01-2020	0,8	NL	8218 NK	NL	4283 JG	1
710574750001	25672990000	E. van Wijk	03-BBL-9	2020-02	2020-02	02-01-2020	0,3	NL	8447 EH	NL	4283 JG	2

Fuel Consumption

Vervoerder	Kenteken Voertuig ID	Periode brandstofverbruik	Hoeveelheid brandstof
E. van Wijk	24-BNX-1	2020-01	1.929
E. van Wijk	03-BBL-9	2020-02	2.178

Locations

Periode energie verbruik	Groene stroom (kWh)	Gas (m3)
2020-01	85933	9079
2020-02	83148	10162

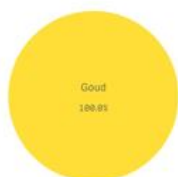
BigMile analysis

-11,06%

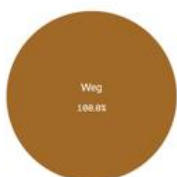
Totaal Laadmeter verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



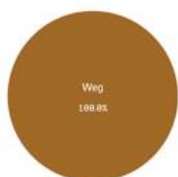
Data kwaliteit



Totaal verscheept per modaliteit (Laadmeter)



Totaal kg CO₂e per modaliteit



2017

Data compleetheid
99,3%

Zendingen
182.366

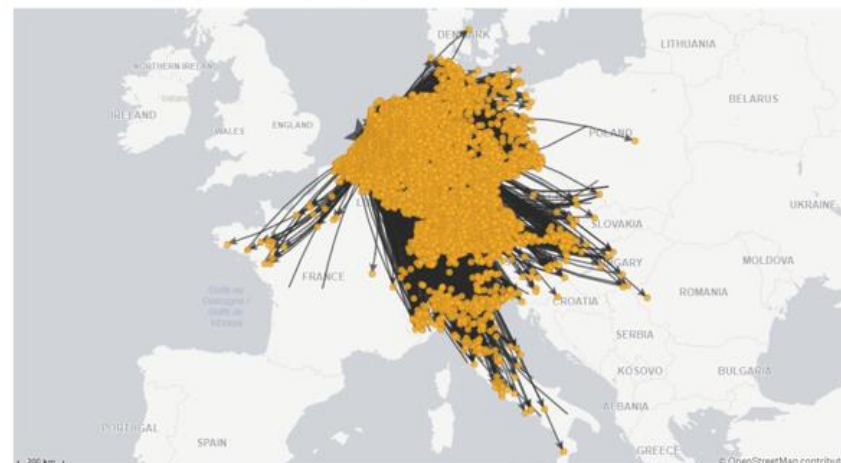
Totaal verscheept (Laadmeter) ↗
373.752

Totaal kg CO₂e ↗
13.790.688

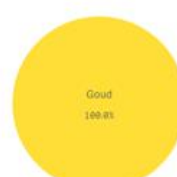
Kg CO₂e per Laadmeter ↗
36,9

Kg CO₂e per Laadmeter.km(GC...
0,1907

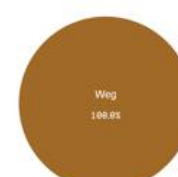
Totaal Laadmeter verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



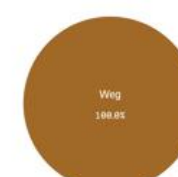
Data kwaliteit



Totaal verscheept per modaliteit (Laadmeter)



Totaal kg CO₂e per modaliteit



2020

Data compleetheid
99,6%

Zendingen
162.602

Totaal verscheept (Laadmeter) ↗
335.901

Totaal kg CO₂e ↗
11.025.726

Kg CO₂e per Laadmeter ↗
32,82

Kg CO₂e per Laadmeter.km(GC...
0,1797



Measures

- Driver Performance
- Margins monitoring for focus on efficiency (data tool to improve planning 'Margemonitor')
- LED-lighting in warehouse
- Fleet replacement
- Intensive collaboration with several customers to optimize planning



Learnings

- Data: Improved data quality thanks to insight from Lean & Green project
- Proof: Being able to show the effects of the measures they have been taking
- Awareness: More employees involved in carbon footprinting and sustainable transport

CASE Lean & Green EU

RICOH
imagine. change.

RICOH Europe
1st Star Lean & Green Europe



Introducing RESCM

RICOH
imagine. change.

Ricoh Europe Supply Chain Management
is the Central Supply Chain organisation for Ricoh in Europe, Middle-East and Africa (EMEA)

Ricoh Europe SCM



1 primary location
7 satellite locations
100 RESCM staff
430 DHL staff



Volumes per year

4.7M service parts
2.5M supplies
360K MFP's
230K printers
3600 production printers

Stock Figures

€1.7Bln turnover (FG)
€200M stock value (FG)
€280M turnover (Parts)
€50M stock value (Parts)

Delivery Capability

97% in-night service parts
97% < 48H boxed
93% < 24H supplies
>90% on requested date
<400 PPM complaints

Configurations

134K per year
45 min per machine



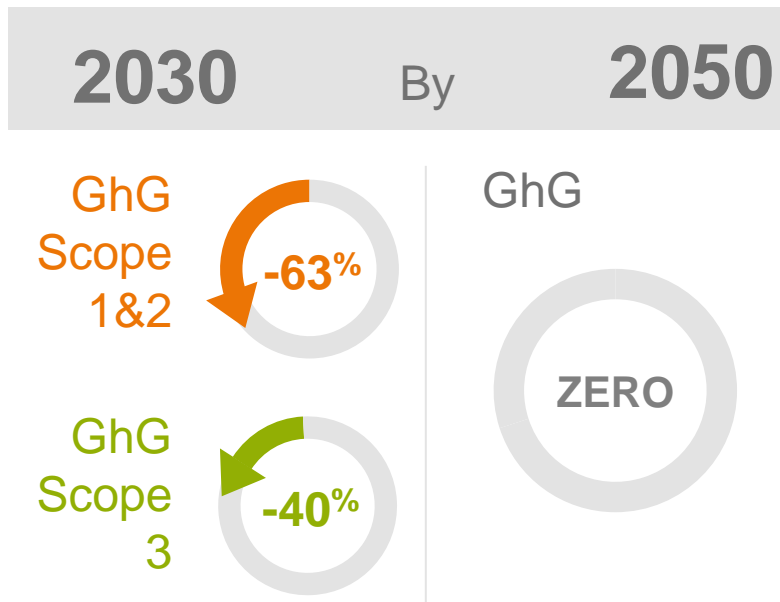


Our long-term sustainability targets

Energy conservation and prevention of global warming

Reduce total lifecycle

Greenhouse gas emissions (GhG)

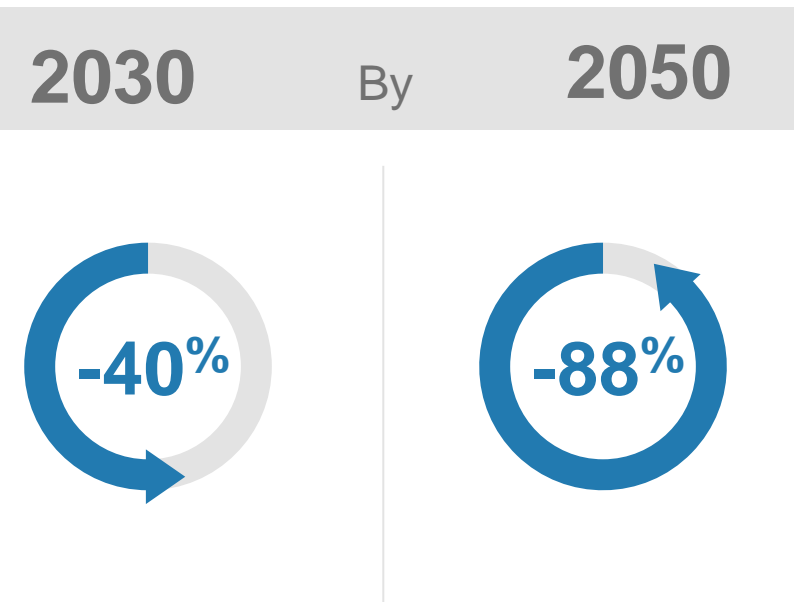


From the 2015 level



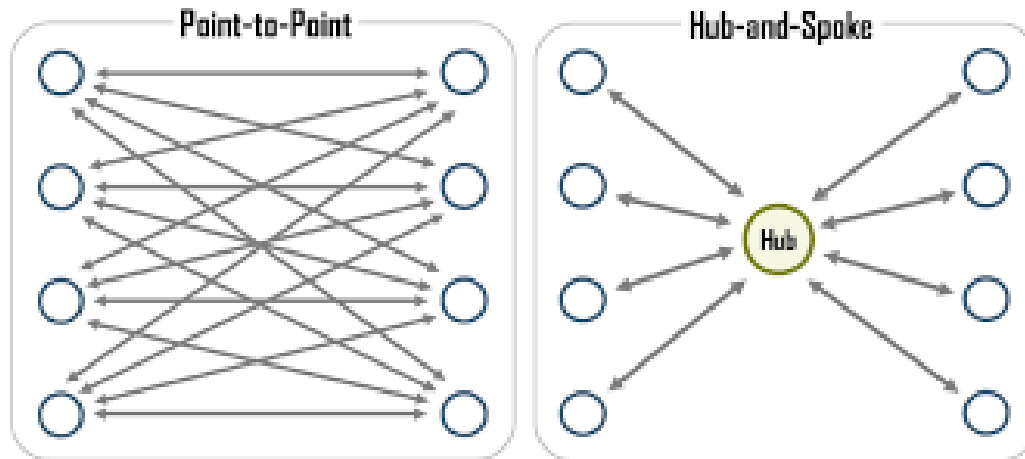
Reduce, Re-use, Recycle (circular economy)

Reduce the new input of resources (reduction of 'virgin materials' as % of total weight of all materials)





Reduction & optimization measures



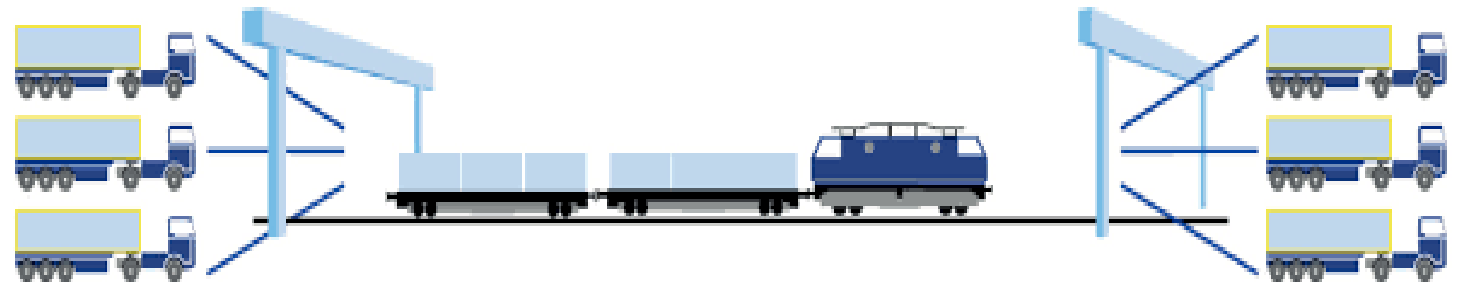
From a local to a central configuration center



Use double deck trailers



From air to container transport by rail

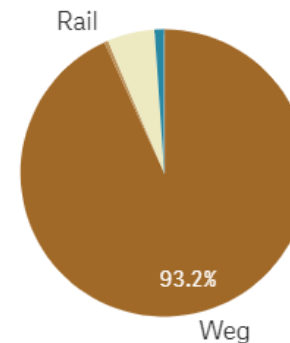
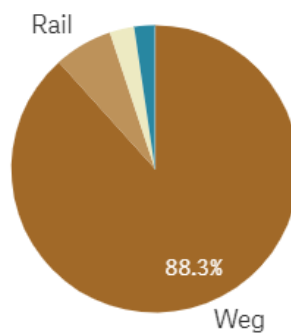


From truck to container transport by rail



2015 analysis

Totaal M3 verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



Data compleetheid

100,0%

Zendingen

64

Totaal verscheept (M3) ↗

340.188

Totaal kg CO₂e ↗

15.296.018

Kg CO₂e per M3 ↗

44,96

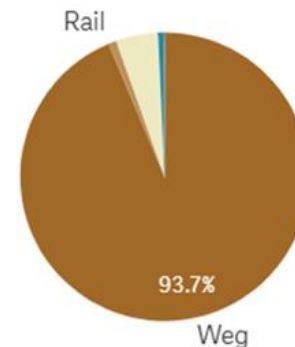
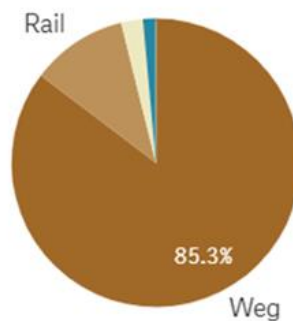
Kg CO₂e per M3.km(GCD) ↗

0,0590



2016 analysis

Totaal M3 verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



Data compleetheid

100,0%

Zendingen

64

Totaal verscheept (M3) ↗

342.069

Totaal kg CO₂e ↗

14.301.826

Kg CO₂e per M3 ↗

41,81

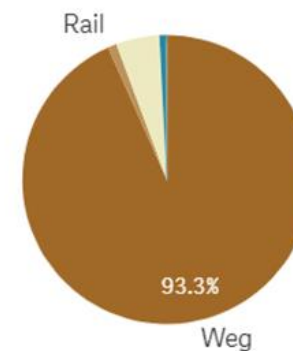
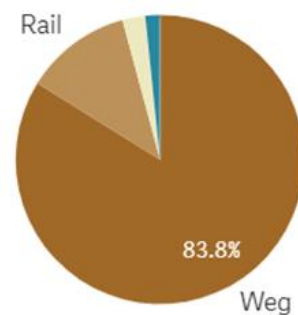
Kg CO₂e per M3.km(GCD) ↗

0,0598



2017 analysis

Totaal M3 verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



Data compleetheid

100,0%

Zendingen

67

Totaal verscheept (M3) ↗

310.491

Totaal kg CO₂e ↗

13.105.730

Kg CO₂e per M3 ↗

42,21

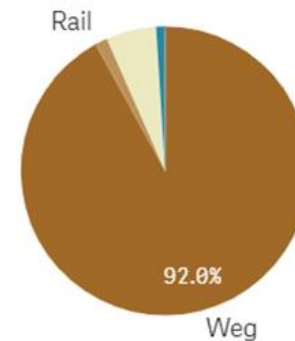
Kg CO₂e per M3.km(GCD) ↗

0,0577



2018 analysis

Totaal M3 verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



Data compleetheid

100,0%

Zendingen

69

Totaal verscheept (M3) ↗

291.159

Totaal kg CO₂e ↗

11.258.736

Kg CO₂e per M3 ↗

38,67

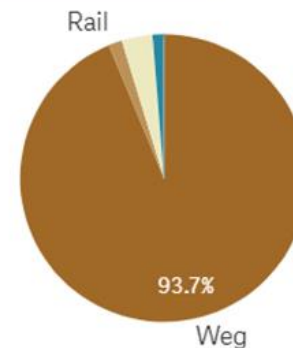
Kg CO₂e per M3.km(GCD) ↗

0,0523



2019 analysis

Totaal M3 verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



Data compleetheid

100,0%

Zendingen

68

Totaal verscheept (M3) ↗

273.430

Totaal kg CO₂e ↗

10.002.799

Kg CO₂e per M3 ↗

36,58

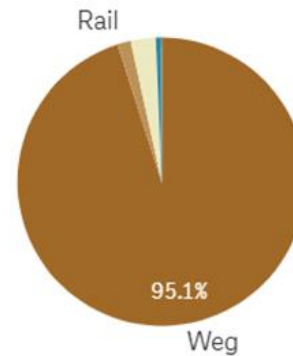
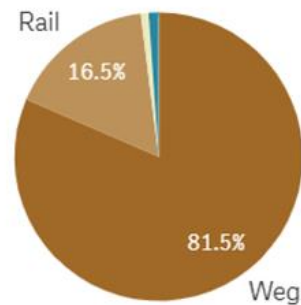
Kg CO₂e per M3.km(GCD) ↗

0,0483



2020 analysis

Totaal M3 verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



Data compleetheid

100,0%

Zendingen

67

Totaal verscheept (M3) ↗

127.928

Totaal kg CO₂e ↗

4.591.347

-23%

Kg CO₂e per M3 ↗

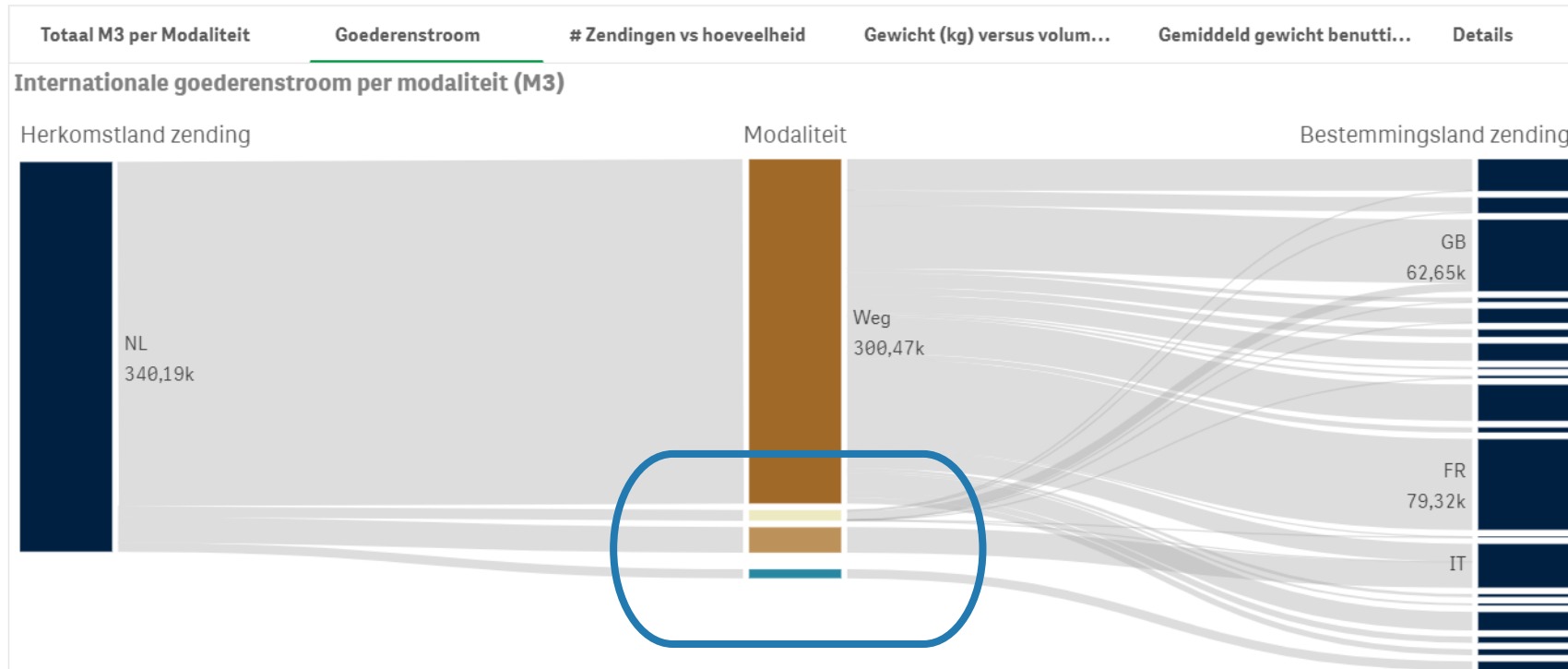
35,89

Kg CO₂e per M3.km(GCD) ↗

0,0552



2015 Modalities



Zendingen
132

Totaal verscheept (M3) [↗](#)
613.618

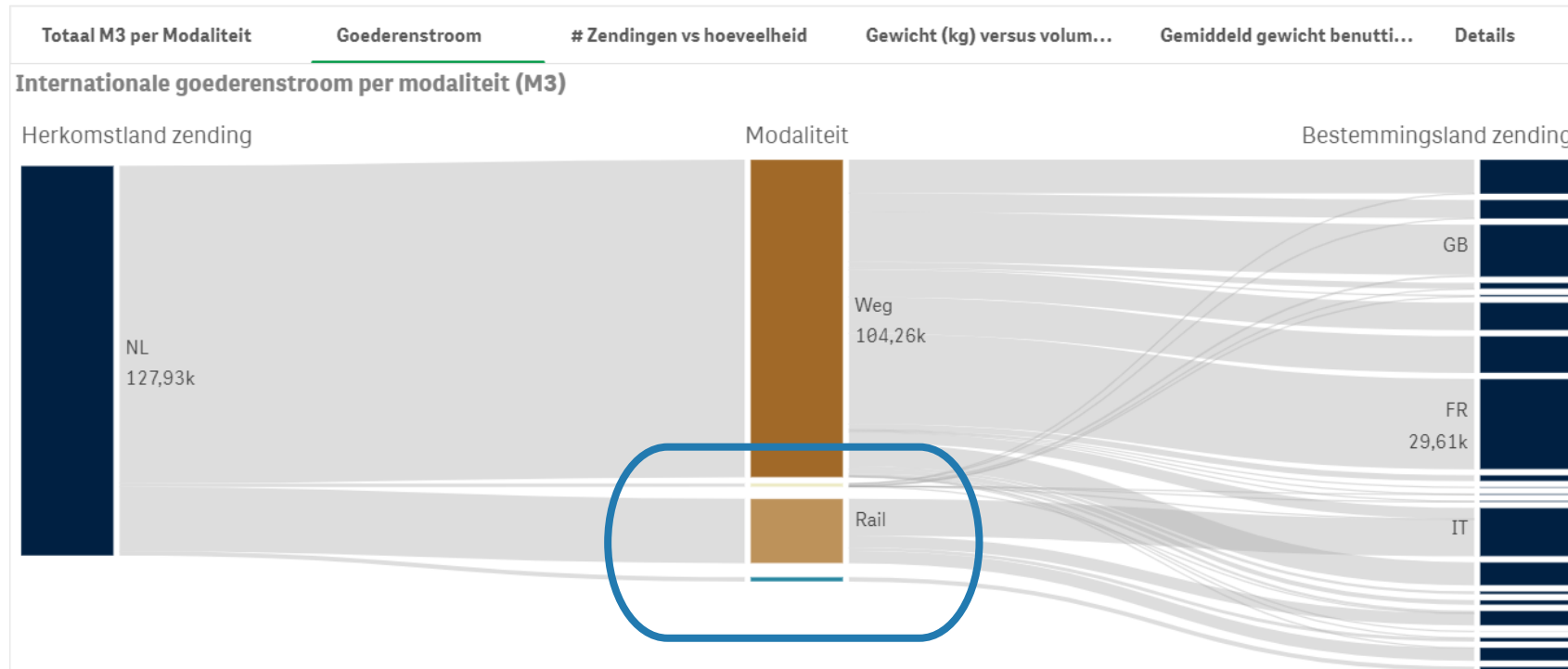
Totaal kg CO₂e [↗](#)
15.296.018

Kg CO₂e per M3 [↗](#)
44,96

Kg CO₂e per M3.km(GCD) [↗](#)
0,0590



2020 Modalities



Zendingen
67

Totaal verscheept (M3) [↗](#)
127.928

Totaal kg CO₂e [↗](#)
4.591.347

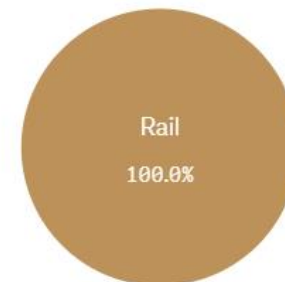
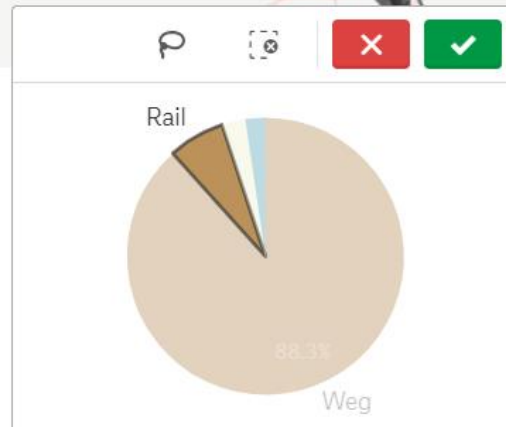
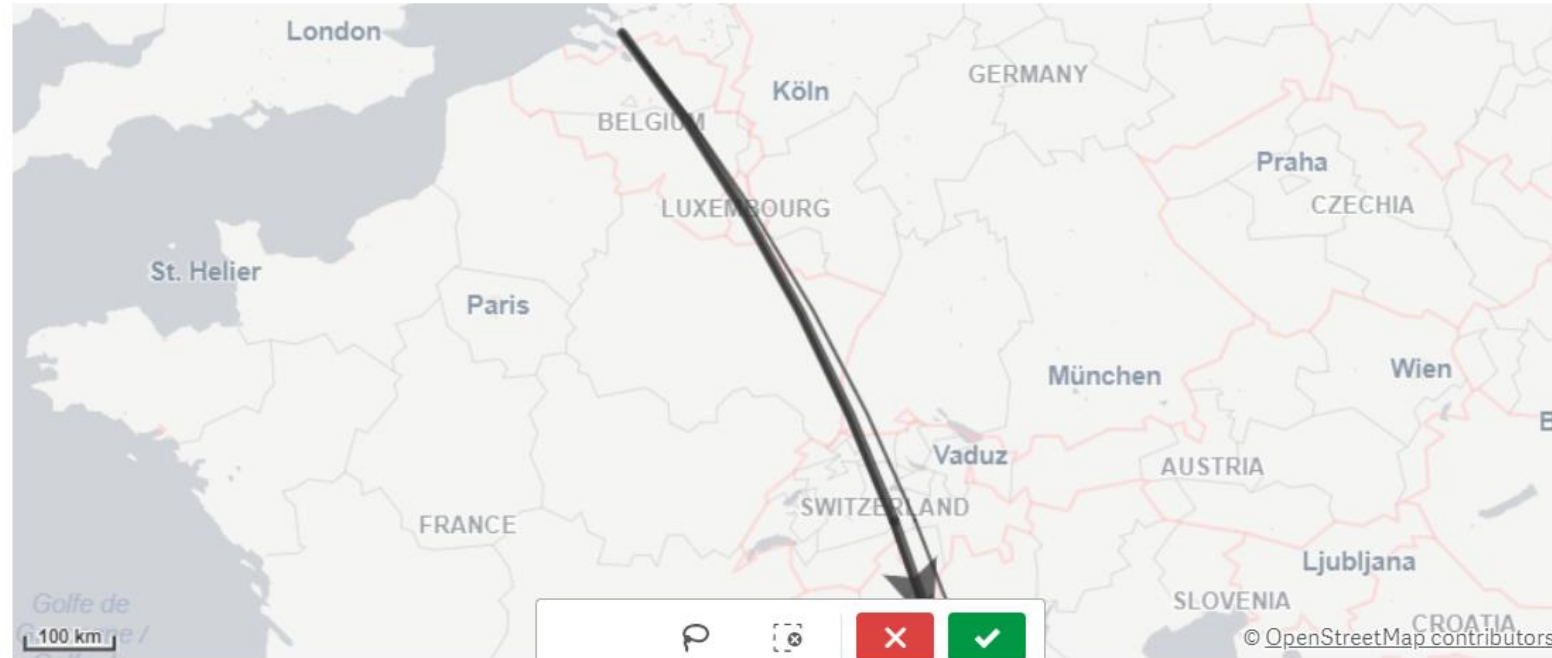
Kg CO₂e per M3 [↗](#)
35,89

Kg CO₂e per M3.km(GCD) [↗](#)
0,0552



2015 rail

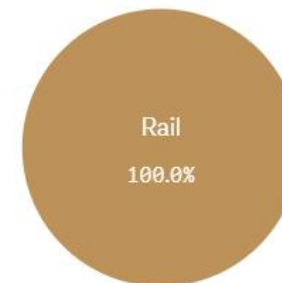
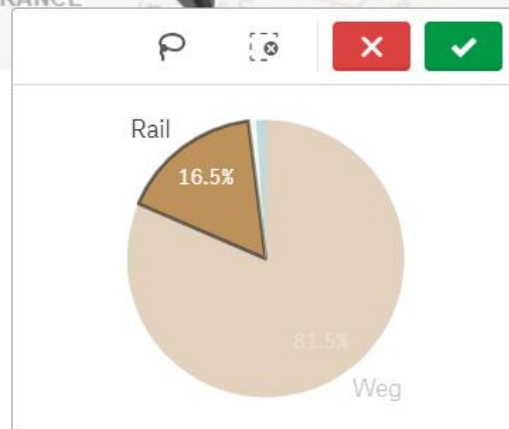
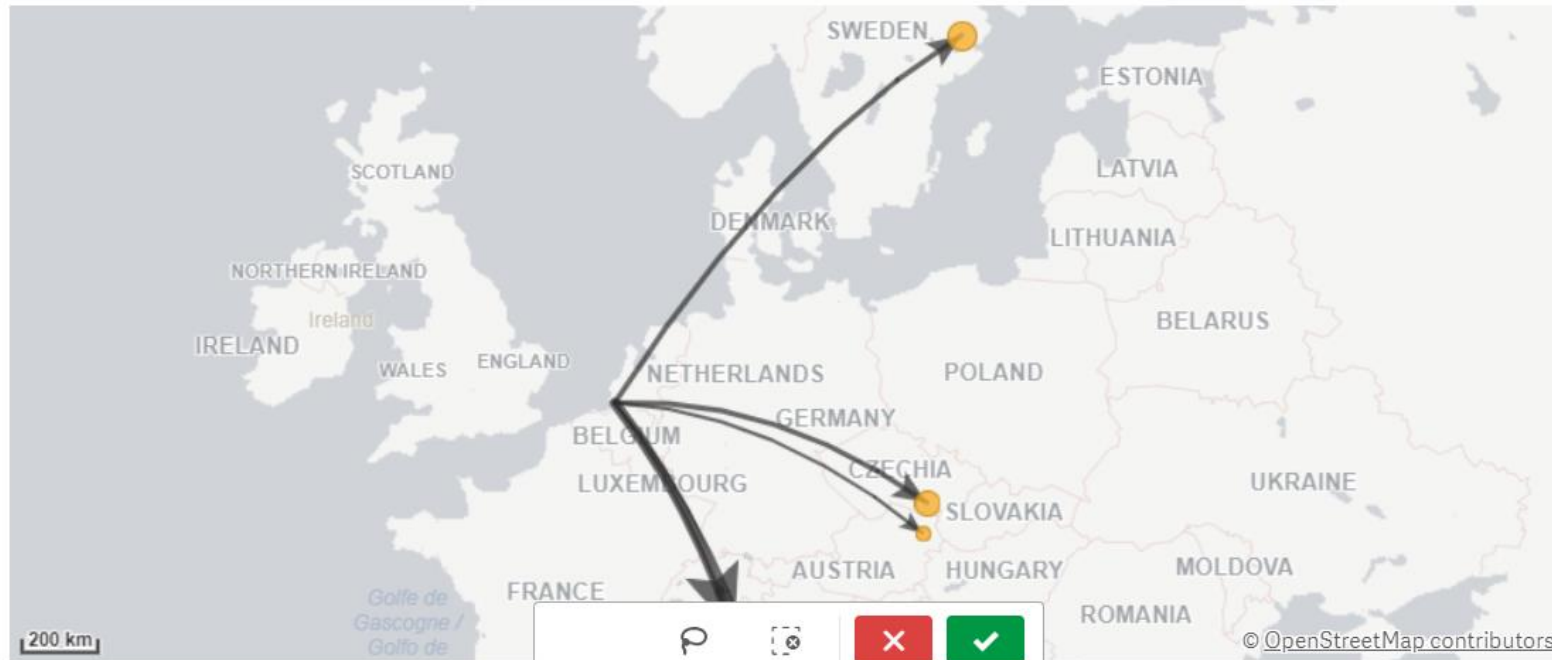
Totaal M3 verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)





2020 rail

Totaal M3 verscheept (pijlen) & Totale uitstoot (kg CO₂e) (bol)



An aerial night photograph of a city street. A tram is visible on the tracks in the foreground, moving towards the viewer. The street is illuminated by streetlights, and the surrounding buildings are lit up, creating a warm, yellowish glow. The text "ANY QUESTIONS?" is overlaid in white, bold, italicized font on the left side of the image.

ANY QUESTIONS?

