

LEAN & GREEN ACTION PLAN

1ST STAR

[Name organization]

[Logo]

Prepared by:	Version:	Date:

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For any questions, please contact us by e-mail or phone.

2 DESCRIPTION OF ORGANIZATION AND SCOPE

2.1 Description of organization

Describe the following aspects of your organization

Core business
Branch
Role in the supply chain (shipper, transporter, logistics service provider, retailer, etc.)
Activities per (logistic) branch (incl. location)
Organization of transport* (own/outsourced/charter)
**when applicable*

2.2 Scope

Describe and substantiate the scope of activities subject to emission reduction measures. The scope should be determined by - as a minimum - taking all outbound logistics activities in your country and warehousing activities if applicable

Description logistic activities	In scope	Out of scope
1		
2		
3		
4		
5		

Reasoning	In scope	Out of scope

2.3 Business unit

Specify the Logistic unit (e.g. weight (tons), linear load meters, m3, pallets, roll containers, etc.) in which your transport volumes can be expressed. Explain why you choose this specific logistic unit.

Logistics unit	Explanation

2.4 Quantification of logistic activities

Quantify the (in scope) logistic activities in the sample format beneath. Current rows are examples and can be removed or altered by doubling clicking the table.

Customer / flow	Modality	Fuel type	Fuel unit	Quantity	Emission factor	CO2 (kg)	Volume	Volume	Source (TMS, WMS, default, estimation)	Transport: Own / outsourced	Scope in/out
							Unit	Multiple units			
Customer 1	Road	diesel	liter		3,2	1	1		TMS	Own	In
Flow xx	Road					-	-		WMS	Own	In
	Road					-	-		Estimation	Own	In
	Road					1	-		ERP	Outsourced	Out
	Barge									Outsourced	In
	Train									Outsourced	In
	Air					-	-				
	Sea					-	-				
		Energy type	Energy unit	Quantity	Emission factor	CO2 (kg)			Source (TMS, WMS, default, estimation)	Warehouse: Own / outsourced	Scope in/out
	Warehouse	Power grey	kWh	-	0,649	-	xxxx	xxxx	Invoice	Own	In
	Depot	Power green	kWh	-	0	-	xxxx	xxxx	Invoice	Own	In
	DC	Natuaral gas	M3	-	1,89	-	xxxx	xxxx	Invoice	Own	In
Transshipment											-
Totalen						**2**	**1**				
In scope						**1**	**1**				
						50,00%	**100,00%**				

Scope = 12 months or year	2020
From May 2020 to April 2021	

Scope determination:
Lean & Green has a minimum scope (see below %), at least transport from to your own country & warehousing
Which periode (12 months or year). And fill in on rows 32/33 (bleu)

Column J can be filled, if you use more then 1 unit for volume (pallet, M3, loadmeter, parcel etc).

	% in scope (outbound flows)
First star	50%
Second star	65%
Third star	75%
Fourth star	85%
Fifth star	90%

Note: in the Netherlands at least 85% in scope for the EED exemption for logistics

3.1 Calculation CO_2 baseline (reference)

Calculate the CO_2 baseline of the logistic activities in scope. The CO_2 baseline includes absolute CO_2 emission (in tons) and relative CO_2 emission (in CO_2 per business unit). Use the white cell in the monitoring tool (table beneath), to specify the amount of 'Fuel', 'Logistic unit', 'Electricity', 'Gas consumption' and 'Volume'. The content in the table can be altered by double-clicking it. If applicable, fill also the monitoring sheets on the following pages (e.g. when your baseline is 2017, fill the 2018 da a on the next page)

Selected Base Year	2015

Please enter your values

Volume Overview

	Quantity Base Year	Unit of Measure	Estimated Growth Rate	Base year 2015	2016	2017	2018	2019	2020
Forecast volume shipped	***450.000***	***pallets***	***1,25%***	***450.000***	***455.625***	***461.320***	***467.087***	***472.925***	***478.837***
Forecast driving distance		km							
Forecast weight shipped		t							
Forecast weight / distance		t/km							
Forecast cubic meters shipped		m2							
Forecast loading meters		lm							
Others		...							

Absolute Consumptions

Emission Type	Energy Source	Unit of Measure	Source	2015 Actual	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast
Emissions - Fuel	Gasoline	Liter	...	7.800	7.800	7.800	7.800	7.800	7.800
Emissions - Fuel	Diesel	Liter	...	875.000	875.000	875.000	875.000	875.000	875.000
Emissions - Energy	Electricity - green	kWh	...	344.000	344.000	344.000	344.000	344.000	344.000
			Total	**1.226.800**	**1.226.800**	**1.226.800**	**1.226.800**	**1.226.800**	**1.226.800**

Absolute Emissions

Emission Type	Energy Source	Unit of Measure	Emission Factor WTW	2015 Actual	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast
Emissions - Fuel	Gasoline	Liter	***2,84***	22.152	22.152	22.152	22.152	22.152	22.152
Emissions - Fuel	Diesel	Liter	***3,15***	2.756.250	2.756.250	2.756.250	2.756.250	2.756.250	2.756.250
Emissions - Energy	Electricity - green	kWh	***0***	-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
				-	-	-	-	-	-
			Total	**2.778.402**	**2.778.402**	**2.778.402**	**2.778.402**	**2.778.402**	**2.778.402**

Relative Emission Reduction

	2015	2016	2017	2018	2019	2020
CO2e / volume shipped	6,17	6,10	6,02	5,95	5,87	5,80
CO2e reduction		**-1,23%**	**-2,45%**	**-3,66%**	**-4,85%**	**-6,02%**

KPI´s

	2015	2016	2017	2018	2019	2020
CO2e / km						
CO2e / t						
CO2e / tkm						
CO2e / m2						
CO2e / lm						
CO2e / ...						

3.2 Substantiate baseline emission level

Describe and/or substantiate the reasoning behind the determination of the CO2 baseline.

Substantiate CO2 baseline year ; why did you choose this year as baseline?
Describe the sources you derived the data from
Describe and substantiate assumptions*

**if applicable*

4 REDUCTION MEASURES

4.1 Calculation reduction measures

Calculate the CO2 reduction (in %) of the measures in sample table 4.

- Define the proposed measure, specified or transport and warehousing
- Determine the expected reduction (in %) for each measure, based on the used source (Column “Reduction based on source”).
- Define the share of the transport to which the measure is applied (Column “Applicable to % of transport”). E.g.: Improvement of planning applies to 10 of 20 trucks = 50%.
- Projected reduction is calculated automatically (Column “Projected reduction”)
- Define the distribution between transport and warehousing as defined in the scope; e.g. when in the baseline year Transport is 900,000 ton CO2 and Warehousing 100,000 ton CO2; fill in 90% Transport and 10% Warehousing

Part I Transport Measures	Savings based on source	On which % of Transport it applies to	Planned savings
A. Planning (less km / fuel)			
Optimize linehaul & delivery vans	20%	5%	1%
Reduction of Kilometers	2%	50%	1%
...			0%
...			0%
B. Volume (load)			
Load improvement	2%	100%	2%
...			0%
Total savings, less kilometers per transported unit			4%
C. Soft measures (less liters per km)			
Monitoring fuel consumption	1%	100%	1%
Green driving training / competition?	1%	100%	1%
			0%
			0%
Total savings, less liters per kilometer driven			2%
D. Other fuels / energy (less CO2 per liter)			
Replace	10%	10%	1%
...			0%
Total savings, less CO2 emissions per liter			1%
TOTAL Part I Transport Measures			6,861%

Part II Warehousing Measures	Savings according to source	On which % of Warehousing it applies to	Planned savings
			0,0%
			0,0%
Total savings Warehousing			0%
TOTAL Part II Warehousing Measures			0,0%

YELLOW = input field for the organization

	Part	Savings
Savings Warehousing	0%	0,00%
Savings Transport	100%	6,86%
Savings target		**6,86%**

4.2 Description reduction measures

Describe each reduction measure as per the format beneath

Measure 1	
Describe the proposed measure	
Which actions are part of this measure?	
What is the timeline? (Start, stop, evaluation frequency)	
Describe the used data sources used to determine the reduction. Refer to suppliers, internal research, calculation methodology and/or external reports, etc.	
Who is responsible for this measure, who will be monitoring the effect and progress of the measure?	
What is the frequency of reporting on progress/results?	
Adjustments: How will the measure be adjusted if necessary, based on the results achieved.	
Results: What is the result that is achieved? (If already implemented)	

Measure 2:	
Describe the proposed measure	
Which actions are part of this measure?	
What is the timeline? (Start, stop, evaluation frequency)	
Describe the used data sources used to determine the reduction. Refer to suppliers, internal research, calculation methodology and/or external reports, etc.	
Who is responsible for this measure, who will be monitoring the effect and progress of the measure?	
What is the frequency of reporting on progress/results?	
Adjustments: How will the measure be adjusted if necessary, based on the results achieved.	
Results: What is the result that is achieved? (If already implemented)	

Measure 3:	
Describe the proposed measure	
Which actions are part of this measure?	
What is the timeline? (Start, stop, evaluation frequency)	
Describe the used data sources used to determine the reduction. Refer to suppliers, internal research, calculation methodology and/or external reports, etc.	
Who is responsible for this measure, who will be monitoring the effect and progress of the measure?	
What is the frequency of reporting on progress/results?	
Adjustments: How will the measure be adjusted if necessary, based on the results achieved.	
Results: What is the result that is achieved? (If already implemented)	

Measure 4:	
Describe the proposed measure	
Which actions are part of this measure?	
What is the timeline? (Start, stop, evaluation frequency)	
Describe the used data sources used to determine the reduction. Refer to suppliers, internal research, calculation methodology and/or external reports, etc.	
Who is responsible for this measure, who will be monitoring the effect and progress of the measure?	
What is the frequency of reporting on progress/results?	
Adjustments: How will the measure be adjusted if necessary, based on the results achieved.	
Results: What is the result that is achieved? (If already implemented)	

After final completion of the toolkit please save your completed pdf-file.

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Lean & Green Europe combines corporate responsibility for reducing footprints with continuous improvement of operational performance and value for customers.
Lean & Green Europe develops community-driven practical tools and guidelines for applying international emission calculation standards.
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Other publications in this series:

- #1 2013 Giving significance to big data in supply chains
- #2 2015 Metrics for continuous improvement of the supply chain performance
- #3 2016 Analytics
- #4 2016 Introduction to the calculation of CO_2 emissions for participation in Lean & Green
- #5 2017 Carbon productivity in global supply chains
- #6 2018 Data maturity levels

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