



# Envirometer

Report 2022

**EeStairs Nederland bv**

Compiled on 30-03-2023

# Preface

De Milieubarometer vertaalt gegevens zoals elektriciteitsverbruik en afvalproductie naar grafieken en tabellen die de milieubelasting van het bedrijf inzichtelijk maken. In dit rapport worden de Milieubarometer uitkomsten van EeStairs Nederland bv samengevat in enkele grafieken en tabellen.

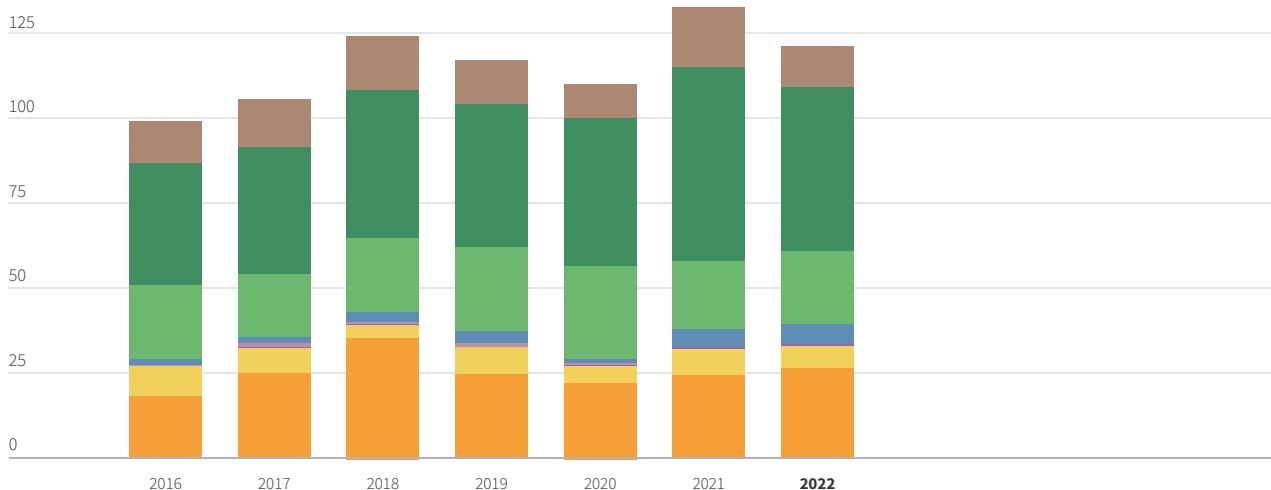
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# Environmental burden

## Multiyear graph - Total

% compared to 2016



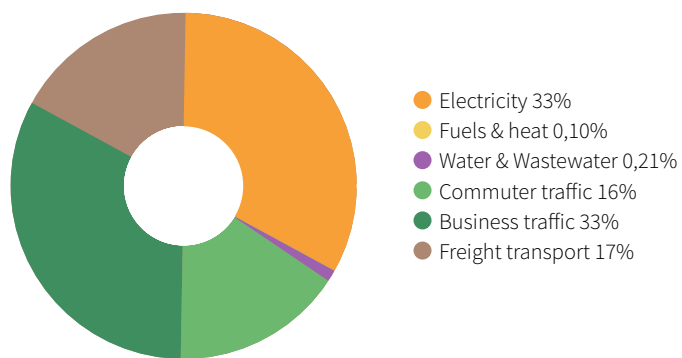
- Electricity
- Fuels & heat
- Water & Wastewater
- Emissions
- Commercial waste
- Commuter traffic
- Business traffic
- Freight transport

This chart shows the distribution of the environmental impact among the themes. The calculated environmental impact is the combination of environmental damage such as fine dust, acidification and greenhouse effect. The environmental impact of the first year in the chart is set at 100%.

# CO2

Total

2022

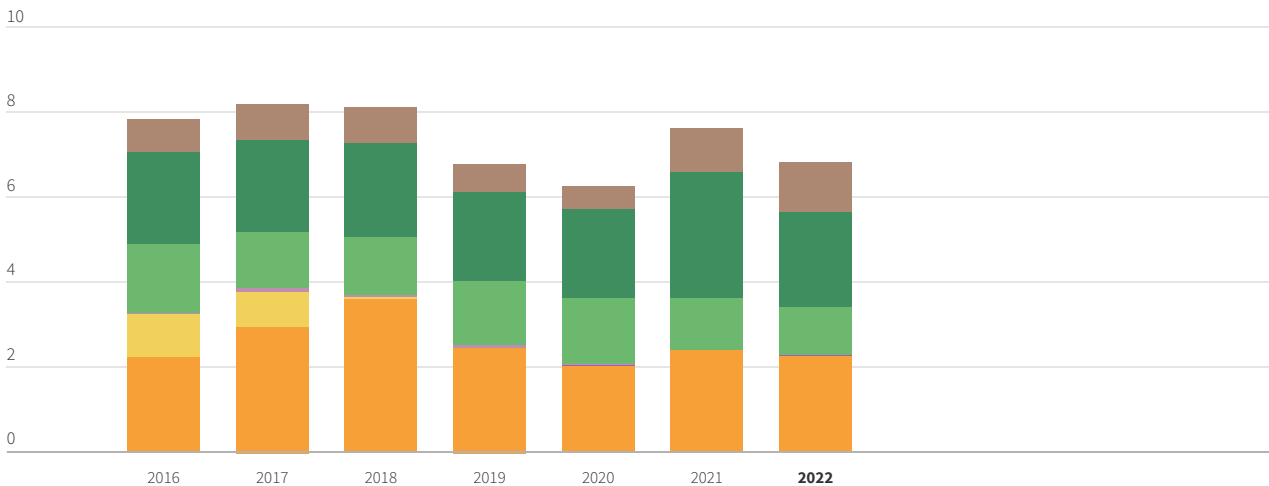


The pie chart shows the distribution of CO2 emissions over the themes. The larger the slice, the more this theme contributes to the overall CO2 footprint of the company.

# CO2

## Multiyear graph - Total per Employees

Tonne CO<sub>2</sub> / fte



- Electricity
- Fuels & heat
- Water & Wastewater
- Emissions
- Commuter traffic
- Business traffic
- Freight transport

This chart is a graphical representation of the CO2 footprint in tonnes of CO2 per year. The larger a theme in this graph, the greater the contribution of that theme to the emission of greenhouse gases. No CO2 emission is allocated to waste.

If CO2 emissions are compensated, the CO2 offset is shown in the blue column.

This graph is calculated per Employees. This makes the outcome less dependent on the size. Therefore the outcome is more comparable to previous years and/or other companies.

# CO2-footprint

## Per fte - CO<sub>2</sub> Thematically

	Theme		CO <sub>2</sub> -parameter	CO <sub>2</sub> -equivalent
<b>Electricity</b>				
Self generated electricity - solar	Electricity	3.836 kWh / fte	0 kg CO <sub>2</sub> / kWh	0 tonnes CO <sub>2</sub> / fte
Returned self-generated electricity	Electricity	1.228 feed-in kWh / fte	0 kg CO <sub>2</sub> / feed-in kWh	0 tonnes CO <sub>2</sub> / fte
Purchased electricity	Electricity	4.404 kWh / fte	24,6 kg CO <sub>2</sub> / kWh	2,30 tonnes CO <sub>2</sub> / fte
			<i>Subtotal</i>	<b>2,30 tonnes CO<sub>2</sub> / fte</b>
<b>Fuels &amp; heat</b>				
Natural gas used for heating	Fuels & heat	0 m3 / fte	kg CO <sub>2</sub> / m3	0 tonnes CO <sub>2</sub> / fte
Woodchips from own waste wood	Fuels & heat	15 GJ / fte	22,3 kg CO <sub>2</sub> / GJ	0,00711 tonnes CO <sub>2</sub> / fte
Woodchips	Fuels & heat	0 kg droge stof / fte	kg CO <sub>2</sub> / kg droge stof	0 tonnes CO <sub>2</sub> / fte
			<i>Subtotal</i>	<b>0,00711 tonnes CO<sub>2</sub> / fte</b>
<b>Water &amp; Wastewater</b>				
Drinking-water	Water & Wastewater	11,1 m3 / fte	14,0 kg CO <sub>2</sub> / m3	0,00332 tonnes CO <sub>2</sub> / fte
Wastewater	Water & Wastewater	0,372 PU / fte	1.386 kg CO <sub>2</sub> / PU	0,0110 tonnes CO <sub>2</sub> / fte
			<i>Subtotal</i>	<b>0,0143 tonnes CO<sub>2</sub> / fte</b>
<b>Emissions</b>				
Solvents	Emissions	-1,98 kg / fte	376 kg CO <sub>2</sub> / kg	-0,0158 tonnes CO <sub>2</sub> / fte
			<i>Subtotal</i>	<b>-0,0158 tonnes CO<sub>2</sub> / fte</b>
<b>Commuter traffic</b>				
Public transport	Commuter traffic	435 passenger km / fte	0,705 kg CO <sub>2</sub> / passenger km	0,00653 tonnes CO <sub>2</sub> / fte
Bicycle and walking	Commuter traffic	1.073 km / fte	0 kg CO <sub>2</sub> / km	0 tonnes CO <sub>2</sub> / fte
Passenger car	Commuter traffic	5.842 km / fte	9,07 kg CO <sub>2</sub> / km	1,13 tonnes CO <sub>2</sub> / fte
			<i>Subtotal</i>	<b>1,13 tonnes CO<sub>2</sub> / fte</b>
<b>Business traffic</b>				
Electric cars (charging at the company)	Business traffic	141 kWh / fte	24,6 kg CO <sub>2</sub> / kWh	0,0737 tonnes CO <sub>2</sub> / fte
Passenger car (in litres) gasoline	Business traffic	95,2 litre / fte	131 kg CO <sub>2</sub> / litre	0,265 tonnes CO <sub>2</sub> / fte
Passenger car (in litres) diesel	Business traffic	0 litre / fte	kg CO <sub>2</sub> / litre	0 tonnes CO <sub>2</sub> / fte
Delivery van (in litres) diesel	Business traffic	587 litre / fte	153 kg CO <sub>2</sub> / litre	1,92 tonnes CO <sub>2</sub> / fte
			<i>Subtotal</i>	<b>2,25 tonnes CO<sub>2</sub> / fte</b>
<b>Freight transport</b>				
Truck Euro VI (in litres) diesel	Freight transport	358 litre / fte	153 kg CO <sub>2</sub> / litre	1,17 tonnes CO <sub>2</sub> / fte
			<i>Subtotal</i>	<b>1,17 tonnes CO<sub>2</sub> / fte</b>
			<b>CO<sub>2</sub> Emissions</b>	<b>6,86tonnes CO<sub>2</sub> / fte</b>












This CO2 footprint shows how much greenhouse gas is emitted and eventually offset by the purchase of CO2 compensation. CO2 emissions in this footprint are grouped by theme. The footprint also shows which contributes most to CO2 emissions.

# Indicators









		2022	2020	2021	2019	2017	2016	2018
<b>Energy</b>								
Percentage night or off-peak electricity	%	21,4	18,4	19,7	17,8	21,9	20,1	21,0
Electricity consumption per floor area	kWh/m <sup>2</sup>							
Electricity consumption per units	kWh/units							
<b>Fuels &amp; Heat &amp; Cold</b>								
Total fuel consumption per units	m <sup>3</sup> gas eq./units							
Heating energy consumption per building volume	m <sup>3</sup> gas eq./m <sup>3</sup>							
<b>Water and waste water</b>								
Tapwater consumption per office staff member	m <sup>3</sup> /fte	11,1	16,5	11,6	10,2	6,38	4,62	9,79
<b>Waste</b>								
Sorting of waste	%	28,1	83,7	44,8	55,1	51,6	67,2	50,3
Waste per employee	kg/fte	808	621	762	593	624	858	663
<b>Transport</b>								
Fuel consumption road haulage per units	litre diesel eq./units							
<b>Raw materials</b>								
Raw material 1 per employee	Units/fte							












These indicators translate annual data like 'total electricity' to more comprehensible numbers like 'kWh/m<sup>2</sup> floor area' or 'sortingpercentage of waste'. Indicators also enable comparison with the environmental performance of larger or smaller organizations.

# Measures








Industry - Woodworking and Furniture	Status	Year	Erkende maatregel	Moment
<b>Use an internal or shadow price on carbon</b> Basic data - management: general	● START			
<b>Make your business/product climate neutral</b> Basic data, Compensation - management: general	● START	2025		
<b>Encourage good behavior</b> Basic data - management: general	● START	2025		
<b>Compare your Envirometer with peers</b> Basic data - management: measuring	● START	2025		
<b>Work on CO2-reduction in the value chain</b> Basic data - management: measuring	● START			
<b>Turn off equipment after hours</b> Electricity - electrical devices	● START			
<b>Energy efficient electric motor</b> Electricity - electrical devices	● DONE	2020	 GB3, FF1	Dependent
<b>Switch to (real) green power</b> Electricity - renewable energy	● RESEARCH	2021		
<b>Solar panels (or PV panels)</b> Electricity - renewable energy	● DONE	2017		
<b>Ask a dead zone between cooling and heating</b> Electricity, Fuels & heat - building heating, cooling of a building	● START			
<b>Ventilation outdoor times</b> Electricity, Fuels & heat - ventilation	● DONE	2017	 GB1, GB6	Independent
<b>Frequency controlled fan (dust) extraction</b> Electricity, Fuels & heat - ventilation	● DONE	2020	 GB4	Independent
<b>Local exhaust ventilation (LEV)</b> Electricity, Fuels & heat - ventilation	● DONE	2020	 GB5	Independent
<b>Let in daylight through the roof</b> Electricity - lighting	● DONE	2017		
<b>Turn off lights by (part of) space</b> Electricity - lighting	● DONE	2017		
<b>Control outdoor lights with twilight switch and timer or motion sensor</b> Electricity - lighting	● DONE	2017	 GD10	Independent
<b>Motion detection for lighting</b> Electricity - lighting	● DONE	2017	 GD11	Independent
<b>Daylight-responsive lighting control</b> Electricity - lighting	● DONE	2017	 GD12, GD13, GD14	Dependent
<b>Energy-saving accent lighting</b> Electricity - lighting	● DONE	2017	 GD5	Independent
<b>Turn off advertising lights at twilight switch and timer</b> Electricity - lighting	● DONE	2017	 GD6	Independent
<b>Energy efficient outdoor lighting</b> Electricity - lighting	● DONE	2017	 GD7	Independent
<b>Energy efficient lighting advertisement</b> Electricity - lighting	● DONE	2017	 GD8	Independent



Industry - Woodworking and Furniture	Status	Year	Erkende maatregel	Moment
<b>Safety lighting</b> Electricity - <i>lighting</i>	● DONE	2017	 GD9	Natural
<b>LED emergency lighting</b> Electricity - <i>lighting</i>	● DONE	2017	 GD9	Natural
<b>Reduce fan speed of room coolers in server rooms</b> Electricity - <i>ict</i>	● DONE	2017		
<b>Desktop computers, laptops and computer screens with Energy Star</b> Electricity - <i>ict</i>	● START			
<b>Energy efficient UPS (uninterruptable power system) in server room</b> Electricity - <i>ict</i>	● START			
<b>Energy-efficient ICT appliances in the office space</b> Electricity - <i>ict</i>	● START			
<b>Energy efficient cooler for server room</b> Electricity - <i>ict</i>	● START			
<b>Power management on servers</b> Electricity - <i>ict</i>	● START			
<b>Encourage energy-efficient ICT behavior</b> Electricity - <i>ict</i>	● START			
<b>Virtualization of servers</b> Electricity - <i>ict</i>	● DONE	2016		
<b>Free cooling for server rooms</b> Electricity - <i>ict</i>	● START			
<b>Reduce office equipment</b> Electricity, Office Paper - <i>ict, office</i>	● DONE	2016	 FE1	Natural
<b>Energy saving opportunities in construction and conversion</b> Electricity, Fuels & heat - <i>management: general</i>	● DONE	2018		
<b>Satisfy (recognized) measures Activities Decree</b> Basic data, Business traffic, Commercial waste, Commuter traffic, Electricity, Freight transport, Fuels & heat, Hazardous waste, Passenger transport, Visitor traffic - <i>management: general</i>	● CONTINUOUS			
<b>Effective management and maintenance of mandatory (energy) measures</b> Electricity, Fuels & heat - <i>management: general</i>	● DONE	2020	 alle EM	Dependent
<b>Monitor and analyze energy consumption (power management)</b> Electricity, Fuels & heat - <i>management: measuring</i>	● CONTINUOUS	2018		
<b>Detect and repair leaks of compressed air</b> Electricity - <i>compressed air</i>	● CONTINUOUS	2018		
<b>Switch compressor off as much as possible</b> Electricity - <i>compressed air</i>	● DONE	2018	 FC2	Independent
<b>Optimal control of the compressed air system</b> Electricity - <i>compressed air</i>	● START	2025	 FC3	Natural
<b>Lower temperature of inlet air for the compressor</b> Electricity - <i>compressed air</i>	● START	2025	 FC4	Independent
<b>HR blow gun or vacuum</b> Electricity - <i>compressed air</i>	● START		 FC5	Independent
<b>Hybrid system of heat pump with central heating boiler</b> Fuels & heat - <i>building heating, renewable energy</i>	● START			

Industry - Woodworking and Furniture	Status	Year	Erkende maatregel	Moment
<b>Win heat from ventilation air</b> Fuels & heat - <i>ventilation</i>	● DONE	2017	 PB4	Independent
<b>Check structural function of the heating arrangement</b> Fuels & heat - <i>building heating</i>	● START			
<b>Sustainable heating</b> Fuels & heat - <i>building heating</i>	● DONE	2017		
<b>wood Incinerator</b> Fuels & heat - <i>building heating</i>	● DONE	2017		
<b>Night temperature</b> Fuels & heat - <i>building heating</i>	● START			
<b>Temperature sensors climate installation at the right place</b> Fuels & heat - <i>building heating</i>	● START			
<b>Radiant heating system</b> Fuels & heat - <i>building heating</i>	● DONE	2018	 FA2b, PA2	Natural
<b>Weather compensated (central heating) control</b> Fuels & heat - <i>building heating</i>	● DONE	2017	 FA3	Independent
<b>Programmable timer for space heating</b> Fuels & heat - <i>building heating</i>	● DONE	2017	 FA4	Independent
<b>Insulate pipes</b> Fuels & heat - ( <i>hot</i> ) <i>water, reducing energy loss</i>	● DONE	2017	 GC5, FB1a, PB3	Independent
<b>Large-scale isolation measures</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017		
<b>Double glazing and low-e glass</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017		
<b>Insulate flat roof</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017		
<b>Insulate roof</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017		
<b>Improve sealing of air leaks</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017		
<b>Insulate ducts</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017	 GB2	Independent
<b>Make passdoors in large shed or garage doors</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017	 GC1	Independent
<b>Isolate service doors</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017	 GC2a	Natural
<b>insulate appendages</b> Fuels & heat - <i>reducing energy loss</i>	● DONE	2017	 GC5, FB1b, PB3	Independent
<b>Automatically turn-off exhaust of the spray booth</b> Fuels & heat - <i>painting and spraying</i>	● DONE	2017	 PA1	Independent
<b>Use open burner system for spray booth</b> Fuels & heat - <i>painting and spraying</i>	● START		 PA2	Natural
<b>Optimize creation of paints and lacquers</b> Commercial waste, Emissions, Hazardous waste - <i>painting and spraying, waste prevention</i>	● START			
<b>Optimize storage and inventory of paints and lacquers</b> Commercial waste, Emissions, Hazardous waste - <i>painting and spraying, purchasing and inventory management, waste prevention</i>	● START			

Industry - Woodworking and Furniture	Status	Year	Erkende maatregel	Moment
<b>Optimize painting and spraying</b> Commercial waste, Emissions, Hazardous waste - <i>painting and spraying, waste prevention</i>	● DO	2020		
<b>Biodegradable adhesives and adhesives without organic solvents</b> Emissions - <i>adhesives and sealants</i>	● START			
<b>Clean sealing equipment with soap or a knife</b> Emissions, Hazardous waste - <i>adhesives and sealants</i>	● START			
<b>Keep a solvent registration</b> Emissions - <i>management: measuring</i>	● START	2025		
<b>Close paint cans</b> Emissions, Hazardous waste - <i>painting and spraying</i>	● DONE	2016		
<b>Reduce overspray (with HVLP spray guns)</b> Emissions, Hazardous waste - <i>painting and spraying</i>	● START			
<b>Recovery system lacquer overspray</b> Emissions, Hazardous waste - <i>painting and spraying</i>	● START			
<b>UV lacquer</b> Emissions - <i>painting and spraying</i>	● START			
<b>Make agreements with suppliers on packaging</b> Commercial waste - <i>purchasing and inventory management, waste prevention</i>	● START	2025		
<b>Waste monitoring</b> Commercial waste, Hazardous waste - <i>management: measuring, waste prevention, waste separation</i>	● START			
<b>Bulk packaging for kit</b> Commercial waste - <i>adhesives and sealants, waste prevention</i>	● DONE	2016		
<b>Bulk packaging for paints and lacquers</b> Commercial waste - <i>painting and spraying, waste prevention</i>	● START	2025		
<b>bulk Packaging</b> Commercial waste - <i>waste prevention</i>	● START			
<b>Use wood residues</b> Commercial waste - <i>construction, waste prevention, woodworking</i>	● DONE	2017		
<b>Reuse packaging</b> Commercial waste - <i>packaging, waste prevention</i>	● DONE	2018		
<b>Wood cutting with crosscut installation</b> Commercial waste - <i>waste prevention, woodworking</i>	● DONE	2017		
<b>Plate cutting optimization by computer and automatic beam saw</b> Commercial waste - <i>waste prevention, woodworking</i>	● DONE	2017		
<b>Print and copy two sided</b> Commercial waste, Office Paper - <i>office, waste prevention</i>	● DONE	2016		
<b>Use/ask for returnable pallets</b> Commercial waste - <i>waste prevention</i>	● DONE	2016		
<b>Use return packaging</b> Commercial waste - <i>waste prevention</i>	● DONE	2016		
<b>Reduce paper use</b> Commercial waste, Office Paper - <i>office, waste prevention</i>	● START	2025		
<b>Prevent lumber waste</b> Commercial waste - <i>construction, waste prevention, woodworking</i>	● DONE	2017		

Industry - Woodworking and Furniture	Status	Year	Erkende maatregel	Moment
<b>Avoid waste wood by finger jointing timber</b> Commercial waste - <i>waste prevention, woodworking</i>	● DONE	2016		
<b>Make agreements with waste collector on waste separation</b> Commercial waste - <i>waste separation</i>	● DONE	2016		
<b>Separate (construction and carpentry) wood waste</b> Commercial waste - <i>waste separation</i>	● DONE	2017	 *	
<b>Separate wooden waste (from packaging)</b> Commercial waste - <i>waste separation</i>	● DONE	2017	 *	
<b>Separate collection of plastic</b> Commercial waste - <i>waste separation</i>	● START		 *	
<b>Separation of metal packaging</b> Commercial waste - <i>waste separation</i>	● DONE	2016	 *	
<b>Separation of paper and cardboard</b> Commercial waste - <i>waste separation</i>	● DONE	2016	 *	
<b>Separate collection of white and brown goods</b> Commercial waste - <i>waste separation</i>	● START		 *	
<b>Separate collection of hazardous waste</b> Hazardous waste - <i>waste separation</i>	● DONE	2016	 *	
<b>Use caulking gun optimal</b> Hazardous waste - <i>adhesives and sealants</i>	● START			
<b>Reduce discharge of unused adhesives</b> Hazardous waste - <i>adhesives and sealants</i>	● START			
<b>Reduce packaging of adhesives</b> Hazardous waste - <i>adhesives and sealants</i>	● START			
<b>Dosing / mixing system for two-component paint</b> Hazardous waste - <i>painting and spraying</i>	● START			
<b>Color mixing system</b> Hazardous waste - <i>painting and spraying</i>	● START			
<b>Parking policy</b> Commuter traffic, Visitor traffic - <i>transport: other mobility</i>	● DONE	2017		
<b>Recruitment policy aimed at employees from nearby</b> Commuter traffic - <i>transport: less kilometres</i>	● DONE	2016		
<b>Carpooling</b> Commuter traffic - <i>transport: drive, transport: less kilometres</i>	● DONE	2016		
<b>Maximize the refund of commuter car kilometers</b> Commuter traffic - <i>transport: less kilometres, transport: other mobility</i>	● DONE	2016		
<b>Arrangements to enable less travel days for employees</b> Business traffic, Commuter traffic - <i>transport: less kilometres</i>	● DONE	2016		
<b>Contribution to removal expenses to encourage living close to work</b> Commuter traffic - <i>transport: less kilometres</i>	● START			
<b>Mobility budgets</b> Business traffic, Commuter traffic - <i>transport: other mobility</i>	● DONE	2016		
<b>Services that support the use of bicycles</b> Business traffic, Commuter traffic - <i>transport: other mobility</i>	● DONE	2017		
<b>Monitor fuel consumption</b> Business traffic, Freight transport - <i>shipping, transport: fleetmanagement</i>	● DONE	2016		

Industry - Woodworking and Furniture	Status	Year	Erkende maatregel	Moment
<b>Acquire assignments in the neighbourhood</b> Business traffic, Freight transport - <i>transport: less kilometres</i>	● DONE	2016		
<b>Charging station for electric vehicles</b> Business traffic - <i>transport: other mobility</i>	● DONE	2017		
<b>Sustainable fuels for passenger cars and vans</b> Business traffic - <i>transport: purchasing vehicles</i>	● START			
<b>Electric vans</b> Business traffic, Freight transport - <i>transport: purchasing vehicles</i>	● RESEARCH			
<b>Electric cars</b> Business traffic - <i>transport: purchasing vehicles</i>	● DONE	2020		
<b>Clean and efficient vans</b> Business traffic, Freight transport - <i>transport: purchasing vehicles</i>	● DONE	2020		
<b>Keep tires well inflated</b> Business traffic, Freight transport - <i>transport: drive, transport: fleetmanagement</i>	● CONTINUOUS			
<b>Fuel-saving equipment</b> Business traffic, Freight transport - <i>transport: fleetmanagement</i>	● DONE	2016		
<b>Energy-efficient driving style (ecodriving)</b> Business traffic, Freight transport - <i>transport: drive, transport: fleetmanagement</i>	● START			
<b>Soot filters on diesel vehicles</b> Business traffic, Freight transport - <i>transport: fleetmanagement</i>	● DONE	2016		
<b>Green up your fleet and vehicle maintenance</b> Business traffic, Freight transport - <i>transport: fleetmanagement</i>	● DONE	2016		
<b>Lower the rolling and air resistance of vehicles</b> Business traffic, Freight transport - <i>transport: drive, transport: fleetmanagement</i>	● START			
<b>Transportation savings through innovation process, product or chain</b> Freight transport - <i>transport: less kilometres</i>	● START			
<b>sustainable fuels for trucks</b> Freight transport - <i>transport: purchasing vehicles</i>	● START			
<b>Larger and lighter trucks</b> Freight transport - <i>transport: purchasing vehicles</i>	● START			
<b>Clean and efficient lorries</b> Freight transport - <i>transport: purchasing vehicles</i>	● START			
<b>Buy durable goods transport on the road</b> Freight transport - <i>transport: fleetmanagement</i>	● START			
<b>Routing and / or navigation freight</b> Freight transport - <i>transport: drive, transport: fleetmanagement</i>	● DONE	2016		
<b>Reduce the air resistance of trucks</b> Freight transport - <i>transport: fleetmanagement</i>	● DONE	2016		
<b>climate compensation</b> Compensation - <i>management: general</i>	● START	2025		

This list shows which of the measures in the Envirometer have already been carried out and which have been planned. Also measures that have not yet been assessed are shown. Measures that are not applicable are excluded from this table.

Measures with the blue 'government label' are 'accepted measures', obligatory for this business sector in the Netherlands. The 'number' and 'moment' also refer to the official list with 'accepted measures'.



DE WERKPLAATS VOOR  
DUURZAAM ONDERNEMEN

The Envirometer is a product of Stimular Foundation. Stimular translates the growing demand for sustainability into practical tools and working methods for companies, trade associations, governments and healthcare providers. Stimular wants to accelerate the sustainability of companies and organizations by sharing knowledge and experience, for example on [stimular.nl/doe-it-zelf](https://stimular.nl/doe-it-zelf). Aim is to show entrepreneurs and managers what their greatest impact on sustainability is and how they can reduce this impact.