Envirometer report

2017

Stimular

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Milieubarometer - 2017

Stimular

The Envirometer translates data such as electricity and waste production to graphs and tables showing the environmental impact of the company. This report presents the results of the Envirometer, summarized in several graphs and tables.

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De werkplaats voor
Duurzaam Ondernemen

The Envirometer is a product of Stimular Foundation. Stimular Foundation disseminates knowledge about Sustainability and develops practical tools for small and medium enterprises and organizations that are comparable. Foundation Stimular is the workshop for Sustainable Entrepreneurship!
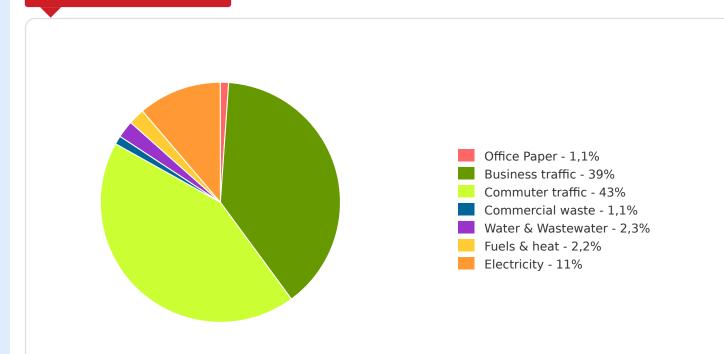
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Environmental burden

This graph shows the division of the enviromental burden between the themes. The larger the part of the circle the more this theme accounts for the total environmental burden of the company.
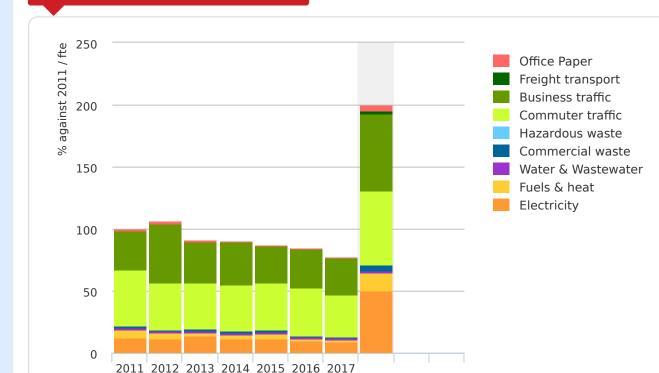
Pie chart environmental burden 2017

- Office Paper - 1,1%
- Business traffic - 39%
- Commuter traffic - 43%
- Commercial waste - 1,1%
- Water & Wastewater - 2,3%
- Fuels & heat - 2,2%
- Electricity - 11%

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 reference year (usually the first year) is set at 100%.

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

The column with the grey background shows the industry average. The difference with this average shows on which themes the company has a low, medium or high score compared to peers.

Multi-year graph environmental burden per employees

Legend:
- Office Paper
- Freight transport
- Business traffic
- Commuter traffic
- Hazardous waste
- Commercial waste
- Water & Wastewater
- Fuels & heat
- Electricity

1 2011 2 2012 3 2013 4 2014 5 2015 6 2016 7 2017 8 Average office - grey power - per fte (industry sector average)

CO2

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.

CO2-footprint (thematically)

		CO$_2$-parameter	CO$_2$-equivalent
Electricity			
Purchased electricity	4.116 kWh	0,526 kg CO2 / kWh	2,17 tonnes CO2
Subtotal			*2,17 tonnes CO2*
Fuels & heat			
Heat (CHP)	15,4 GJ	36,0 kg CO2 / GJ	0,554 tonnes CO2
Subtotal			*0,554 tonnes CO2*
Water & Wastewater			
Drinking-water	58,0 m3	0,298 kg CO2 / m3	0,0173 tonnes CO2
Waste water	3,00 PU	29,5 kg CO2 / PU	0,0884 tonnes CO2
Subtotal			*0,106 tonnes CO2*
Commuter traffic			
Public transport	64.714 passenger km	0,0610 kg CO2 / passenger km	3,95 tonnes CO2
Bicycle and walking	8.866 km	0 kg CO2 / km	0 tonnes CO2
Passenger car	3.841 km	0,220 kg CO2 / km	0,843 tonnes CO2
Subtotal			*4,79 tonnes CO2*
Business traffic			
Public transport	34.534 passenger km	0,0610 kg CO2 / passenger km	2,11 tonnes CO2
Bicycle and walking	866 km	0 kg CO2 / km	0 tonnes CO2
Declared km passenger car	6.879 km	0,220 kg CO2 / km	1,51 tonnes CO2
Car sharing km	3.852 km	0,220 kg CO2 / km	0,846 tonnes CO2
Aeroplane medium distance (750-2500 km)	0 passenger km	0,200 kg CO2 / passenger km	0 tonnes CO2
Subtotal			*4,46 tonnes CO2*
Office Paper			
Environmentally certified paper	18.322 sheet A4 (80 grams)	0,00604 kg CO2 / sheet A4 (80 grams)	0,111 tonnes CO2
Subtotal			*0,111 tonnes CO2*
Total			12,2 tonnes CO2
Compensation			12,2 tonnes CO2
Net CO2 emission			**0 tonnes CO2**

Other items

▼ Explanation

The indicators translate the annual data like 'total electricity' to more comprehensible numbers like 'kWh/m2 floor area' or 'sortingpercentage of waste'. Indicators also enable comparison with the environmental performance of larger or smaller organizations.

The right column shows the industry average. Comparison with this average makes apparent ta which points the company scores low, medium or high compared to peers. The differences and similarities are starting points for gaining additional environmental benefits and / or financial gain.

Efficiency indicators

		2011 (1)	2012 (2)	2013 (3)	2014 (4)	2015 (5)	2016 (6)	2017 (7)	Sector (8)
Energy									
Electricity consumption per employee	kWh/fte	633	597	710	582	576	479	447	2.586
Electricity consumption per floor area	kWh/m2	24,2	26,9	28,1	24,2	23,9	20,6	20,6	85,6
Fuels									
Heating energy consumption per building volume	m3 gas eq./m3	2,61	2,14	0,883	1,51	1,91	0,887	0,885	2,21
Building related energy									
Total energy consumption building	GJ	94,1	89,7	67,6	72,6	80,0	54,2	54,1	
Building-related energy consumption per floor area	GJ/m2	0,470	0,448	0,338	0,363	0,400	0,271	0,271	1,03
Water and waste water									
Tapwater consumption per office staff member	m3/fte	5,24	6,3	6,3	6,30	6,30	6,3	6,3	7,12
Waste									
Sorting of waste	%	59,1	59,1	59,1	63,5	65,2	77,4	77,4	49,8
Waste per employee	kg/fte	60,1	51,1	58,2	55,4	55,4	53,6	50,1	170
Transport									
Commuter traffic mileage per employee	km/fte	11.421	9.747	9.296	9.177	9.463	9.595	8.415	7.121
Share of public and unmotorised transport in commuter traffic	%	94,4	95,1	93,4	93,6	94,7	94,9	95,0	46,4
Share of public and unmotorised transport in business traffic	%	53,4	55,4	65,4	75,4	67,6	67,9	76,7	13,3
CO2 and Compensation									
CO2 emissions per employee	tonne CO2/fte	1,83	1,90	1,63	1,62	1,55	1,46	1,32	3,74

		2011 (1)	2012 (2)	2013 (3)	2014 (4)	2015 (5)	2016 (6)	2017 (7)	Sector (8)
Office Paper									
Paper purchases per employee	kg/fte	16,3	23,5	18,9	14,0	14,0	11,7	9,96	48,4

Explanation (sidebar)

This list shows which of the measures in the Envirometer have already been carried out and which have been planned. Measures that are not applicable or not yet assessed 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' als refer to the official list with 'accepted measures'.

Measures

		Nr.	Moment	Status	Execution year
Basic data					
Management: general	Encourage good behavior			Done	2015
Management: measuring	Compare your Envirometer with peers			Done	
Electricity					
Building heating	Frequency controlled heating pump			To investigate	
Cooling of a building	Cool heat nuisance to suck at the source			To investigate	
Cooling of a building	Cool with cold air - free cooling	🏛	* None	Done	
Cooling of a building	Awnings (for cold rooms)			Done	
Lighting	Energy-saving accent lighting			Done	
Lighting	Energy efficient outdoor lighting	🏛 13	zelfstandig	To investigate	
Lighting	Replace conventional fluorescent lighting	🏛 10	zelfstandig	Done	
Lighting	Replace incandescent by CFL	🏛 11, 14	zelfstandig	Done	
Lighting	Control outdoor lights with twilight switch and timer or motion sensor	🏛 12ab	afhankelijk	To investigate	
Lighting	Replace CFL lamp with LED lamp			Done	
Renewable energy, Purchasing and inventory management	Switch to (real) green power			Done	
Renewable energy	Solar panels (or PV panels)			Done	
Electrical devices	Turn off equipment after hours			Done	
ICT	Reduce office equipment	🏛 FF1	natuurlijk	Done	
ICT	Energy-efficient displays			Done	
ICT	Energy-efficient printers and copiers			Done	
ICT	Energy-efficient workstations			Done	
ICT, Office	Follow-me printing			To investigate	
ICT	laptops			Done	
Management: measuring	Monitor and analyze your energy consumption (power management)	🏛 39	zelfstandig	Done	
Purchasing and inventory	climate compensation			Done	

	Nr.	Moment	Status	Execution year
management				
Fuels & heat				
Reducing energy loss	Insulate flat roof			To investigate	2017
(hot) water	Service valves, water boilers and heaters			Done	
Water & Wastewater				
(hot) water	Cool tap water stead of cooled bottle water			Done	
Commercial waste				
Waste separation	Make agreements with waste collector on waste separation			Done	
Waste separation	Separation of paper and cardboard	🛡	* None	Done	
Waste separation	Separate collection of white and brown goods	🛡	* None	Done	
Office	Print and copy two sided			Done	
Office	Reduce paper use			Done	
Purchasing and inventory management	Make agreements with suppliers on packaging			To investigate	
Commuter traffic				
Transport: Facilities	Services that support the use of bicycles			Done	
Transport: Facilities	Provide a car for business trips			Done	
Transport: Facilities	Reduce the number of parking spaces			To investigate	
Transport: organizing	Arrangements for working at home and / or telecommuting			Done	
Transport: organizing	Arrangements to enable less travel days for employees			To investigate	2018
Transport: organizing	Scheme for bike-of-business			Done	
Transport: organizing	Scheme which supports the use of the bicycle			Done	
Transport: organizing	Reimbursed storage costs bike station or transit stop			To investigate	2018

		Nr.	Moment	Status	Execution year
Transport: organizing, Transport: planning	Customized combined (public) transport			Done	
Transport: organizing	Maximize the refund of commuter car kilometers			Done	
Transport: organizing	Recruitment policy aimed at employees from nearby			Done	
Transport: organizing	Parking policy			To investigate	
Business traffic					
Transport: Facilities	Videoconferencing and conference call			Done	
Transport: Facilities	Bicycle sharing system for business use			Done	
Transport: driving	Energy-efficient driving style (ecodriving)			To investigate	2018
Office Paper					
Office	Digital invoicing			To-do short term	
Office	Use environmental criteria in the procurement of office supplies			Done	
Office	Paper with an eco-label			Done	
Compensation					
Management: general	Make your business/product climate neutral			Done	