

Your partner in essential chemistry for a sustainable future

Sustainability report 2019 - executive summary

We see sustainability not just as the right thing to do, but as a true business opportunity that delivers value to everyone involved.

From reducing our environmental impact, to developing greener products and processes, to collaborating to develop new solutions and help the industry progress, sustainability is a cornerstone of our overall strategy to achieve long term success.



Sustainable growth

We work together with customers, suppliers, and other partners to develop new and leading solutions that have smaller footprints or enable our customers to deliver benefits in more sustainable ways.



€1.9 billion revenue of Eco-Premium Solutions¹, which have a significant sustainability benefit over the most common alternative



20% of revenue originated from of Eco-Premium Solutions with a direct customer benefit



Improved eco-efficiency

We are committed to continuously reducing our impact on the environment. The focus of our operational eco-efficiency agenda is to increase raw material efficiency, reduce energy consumption, and decrease both emissions to air and water and the production of waste.



29% reduction in carbon emissions per ton of product since 2009



24% reduction in waste per ton of product since 2009



44% renewable energy



Engaging with people & partners

We strive to have a positive impact on people's lives through our products every day. We develop, listen to, and empower our employees, partners, and local communities to make our industry safer and more sustainable in all dimensions.



Nouryon was a top-quartile safety performer in 2019



60 key suppliers assessed on sustainability in 2019



20% women in leadership positions

¹ Eco-Premium Solutions are products that have a significant sustainability benefit over the most common alternative in the market, taking into account emissions, use of natural resources, toxicity, waste and other key criteria. Bio-based polymers and our Dissolvine® biodegradable chelating agents are just two of the many examples.

Environmental data sheet

	Unit	2009	2017	2018	2019	% change 2009-2019
Company carbon footprint – cradle-to-gate						
Direct emissions	kton CO ₂ equivalent	1,167	1,417	1,408	1,161	
Indirect emissions ²	kton CO ₂ equivalent	2,069	1,623	1,581	1,772	
Scope 3 upstream emissions ³	kton CO ₂ equivalent				1,989	
Total					4,922	
Product carbon footprint – operational emissions						
Direct emissions ⁴	kton CO ₂ equivalent	1,167	1,240	1,217	977	
Indirect emissions ²	kton CO ₂ equivalent	2,069	1,623	1,581	1,772	
Product carbon footprint	kg CO ₂ equivalent/ton	281	200	200	199	-29%
Energy consumption						
Total energy consumption	TJ	76,839	91,601	92,155	87,805	
Energy intensity	GJ/ton of production	6.67	6.41	6.59	6.35	-5%
NOx emissions						
NOx absolute emissions	Ton	1,458	1,403	1,312	1,087	
NOx emission intensity	Kg/ton of production	0.13	0.10	0.09	0.08	-38%
SOx emissions						
SOx absolute emissions	Ton	5,323	4,022	3,275	3,412	
SOx emission intensity	Kg/ton of production	0.46	0.28	0.23	0.25	-47%
Emission to water (COD)⁵						
COD absolute emissions	Ton	1,202	1,210	1,257	961	
COD emission intensity	Kg/ton of production	0.10	0.08	0.09	0.07	-33%
Fresh water use (excl. cooling water)						
Total	1000 m ³	27,469	27,540	28,747	27,742	
Per ton of production	m ³	2.39	1.93	2.05	2,01	-16%
Waste⁶						
Total waste	Ton	62,705	58,834	56,629	57,222	
Per ton of production	Kg	5.45	4.12	4.05	4.14	-24%
Hazardous waste	Ton		20,141	20,187	20,240	
Of which to landfill	Ton		473	338	437	

² Indirect emissions are calculated based on the market-based approach

³ Includes only emissions due to purchase of raw materials. Because of change of methodology and scope, data for prior years are not comparable anymore and are hence left out

⁴ Direct emissions are corrected for emissions due to generation and sale of energy to third parties

⁵ Chemical Oxygen Demand directly discharged to surface water

⁶ Waste means any substance or object arising from our routine operations which we discard or intend to discard, or we are required to discard. Hazardous waste is waste that is classified and regulated as such according to the national, state or local legislation in place