




Your partner in essential chemistry for a sustainable future









Sustainability report 2020 – executive summary

Nouryon is contributing to a sustainable future.

From reducing our own environmental impact, to partnering to develop new innovative, sustainable solutions for our end-markets that answer societal needs, sustainability is embedded in our growth strategy, our values and in how we define our future success.

				
	IMPROVE		GROW	ENGAGE
Focus areas	Health Safety and Environment programs	Increasing energy efficiency and sourcing low carbon energy	Sustainable innovations Bio-based, biodegradable, and natural product offerings	Inclusion and diversity Learning and development Community engagement
2025 targets	Safety Ambition: Zero injuries, waste, and harm	Carbon emissions reduce by 25%* Low carbon energy increase to 60%	Sustainable solutions**	People development**

Key facts

-  Top-quartile performer in people safety
-  33% of revenue from Eco-Premium Solutions
-  95% participation in full annual performance management cycle
-  Recipient of numerous "Facility Safety Awards" from the American Chemistry Council
-  21% of revenue from Eco-Premium Solutions with a direct customer benefit
-  We conduct regular checks to measure culture and engagement
-  50% reduction in Process Safety Events
-  Acquired JM Huber's CMC business, increasing our portfolio of sustainable products
-  100% of our assigned employees completed their training

* Scope 1 and 2 (between 2020-2025)
 ** Targets being developed

2020 highlights

- **Sustainability further integrated in company strategy and values:** Launched a new company strategy and values which integrate sustainability. This complements our existing company purpose, 'Your partner in essential chemistry for a sustainable future.'
- **Top-quartile safety performance¹:** In 2020 our recordable injury rates reached a record low. We have eight lifesaving rules and host an annual Safety Day to increase awareness and share expertise.
- **Aligning with global goals:** Based on our first materiality assessment², completed in 2019, we developed our strategic framework³, aligned with the UN SDGs⁴. We support the objectives of the UN's Paris Agreement on climate change.
- **Introduced greenhouse gas mitigation strategy:** Launched global targets to reduce absolute carbon emissions by 25%⁵ and to increase the share of our low carbon energy to 60% by 2025.
- **Meeting customer needs:** Achieved an EcoVadis Silver rating, putting us in top 10% of companies rated by EcoVadis and in a good position to meet the growing expectations of our customers. In addition, the top 34% of our suppliers⁶ in terms of spend, on raw materials, energy, and logistics, are using the EcoVadis CSR platform (compared to 26% in 2019)
- **Driving sustainable innovation:** 33% of our 2020 revenue came from Eco-Premium Solutions. These solutions deliver a significant sustainability benefit to our customers over the most mainstream market alternative. Launched new sustainable products⁷ in 2020, including: anti-viral paint coatings, bio-based products that replace synthetic polymers, products that reduce air emissions, bio-degradable crop protection ingredients, and products for cool roof coatings which save energy by reducing the need for air conditioning.
- **We do it right:** 100% of assigned employees completed compliance trainings. All supplier contracts and purchase order standard terms and conditions require adherence to our Business Partner Code of Conduct. We conduct a comprehensive Enterprise Risk Management process throughout the year, and 85% of our sites have certified environmental management systems (ISO-14001).

¹ Based on annual OSHA recordable injury rates vs. chemical industry peers in the American Chemistry Council

² Based on research into sector issues, media reporting, NGO reports, and a review of international CSR frameworks and standards such as the UN Sustainable Development Goals, GRI, SASB, and DJSI.

³ 'Nouryon's Commitment to a Sustainable Future' – visit <https://www.nouryon.com/company/sustainability/>

⁴ For more information: <https://sdgs.un.org/goals>

⁵ In aggregate for Scope 1 and Scope 2

⁶ Based on the percentage of 2020 spend in raw materials, packaging, and energy (including Nobian)

⁷ New sustainable product launches and partnerships in 2020:

<https://www.nouryon.com/news-and-events/news-overview/2020/launching-ingredient-to-improve-anti-viral-paint/>

<https://www.nouryon.com/news-and-events/news-overview/2020/releasing-all-in-one-sustainable-adjuvant/>

<https://www.nouryon.com/news-and-events/news-overview/2020/nouryon-launches-new-expancel-line-for-specialty-thin-coatings-applications/>

<https://www.nouryon.com/news-and-events/news-overview/2020/collaboration-american-corporate-partners/>



Environment*

	Unit	2009	2018	2019	2020	% change 2009-2020
Company carbon footprint: Cradle-to-gate						
Direct emissions	kton CO ₂ -eq	1,167	1,408	1,185	1,182	+2%
Indirect emissions	kton CO ₂ -eq	2,069	1,581	1,772	1,739	-16%
Scope 3 upstream emissions ⁸	kton CO ₂ -eq			1,989	2,112	
Total				4,946	5,044	
Direct emissions, covered by emissions-limiting regulations	% of Direct emissions		71%	67%	69%	
Product carbon footprint: Operational emissions						
Direct emissions	kton CO ₂ -eq	1,167	1,217	1,001	1,001	-14%
Indirect emissions	kton CO ₂ -eq	2,069	1,581	1,772	1,747	-16%
Product carbon footprint	kg CO ₂ -eq/ton	281	200	199	201	-28%
Energy management						
Total energy consumption	mIn GJ	76.8	92.2	87.8	88.6	+16%
Energy intensity	GJ/ton of production	6.67	6.59	6.38	6.49	-2%
Percentage renewable ⁹	%		47	44	49	
Percentage low carbon and renewable ¹⁰	%		58	56	56	
Percentage grid electricity	%		70%	70%	71%	
Total self-generated electricity	mIn GJ		8.73	6.85	6.69	
Air quality						
NOx absolute emissions	Ton	1,458	1,312	1,012	1,000	-31%
NOx emission intensity	Kg/ton of production	0.13	0.09	0.07	0.07	-42%
SOx absolute emissions	Ton	5,323	3,275	3,412	3,003	-44%
SOx emission intensity	Kg/ton of production	0.46	0.23	0.25	0.22	-52%
VOC absolute emissions ¹¹	Ton	737	790	653	1,213	+65%
VOC emission intensity	Kg/ton of production	0.06	0.06	0.05	0.09	+39%
Emission to water (COD¹²)						
COD absolute emissions	Ton	1,202	1,257	961	871	-28%
COD emission intensity	Kg/ton of production	0.10	0.09	0.07	0.06	-39%
Water management						
Total fresh water intake	1000 m ³	253,816	189,182	177,948	177,030	-30%
Per ton of production	m ³ /ton of production	22.0	13.5	12.9	13.0	-41%
Percentage in regions with high water stress	%	0.2%	1.3%	1.4%	1.6%	
Fresh water consumption						
Total	1000 m ³	27,469	28,747	27,724	26,716	-3%
Per ton of production	m ³ /ton of production	2.39	2.05	1.98	1.96	-18%
Percentage in regions with high water stress	%	1.1%	5.7%	6.9%	8.8%	
Waste management						
Total waste	Ton	62,705	56,629	57,222	53,658	-14%
Per ton of production	Kg/ton of production	5.45	4.05	4.14	3.93	-28%
Hazardous waste	Ton	19,184	20,187	20,240	20,015	+5%
Of which to landfill	Ton	2,970	338	437	485	-84%
Percentage recycled	%	37%	33%	38%	36%	
Production quantity						
Nobian	kton		10,796	10,514	10,411	
Performance Formulations	kton		1,422	1,655	1,602	
Technology Solutions	kton		1,771	1,665	1,625	

* Note: For all figures, minor corrections to historical data may be made to improve accuracy or based on methodology updates.

⁸ In 2019, we updated our methodology for calculating Scope 3 upstream emissions. In prior years, we estimated emissions from raw materials based on the bill of materials for products. In 2019 and 2020, we use actual raw material data. Raw materials exclude intra-company transfers, trading, tolling, and utilities.

⁹ Including renewable grid electricity

¹⁰ Including low carbon and renewable grid electricity

¹¹ The increase in the 2020 volatile organic components (VOC) emissions compared to 2019 is due to the acquisition of the CMC Äänekoski site.

¹² Chemical oxygen demand

Social

	Unit	2018	2019	2020
Workforce data				
Global headcount Nouryon employees	#	10,395	10,389	9,730
% female in workforce	%	23%	24%	23%
% female in senior positions	%	26%	25%	24%
Employee turnover rate (voluntary and involuntary)	%	12%	17%	14%
Safety				
Total Recordable Incident Rate (TRIR)– Nouryon Employees and temporary workers ¹³	Per 200,000 hours worked	0.28	0.29	0.23
Lost Time Incident Rate (LTIR) – Nouryon Employees and temporary workers ¹³	Per 200,000 hours worked	0.15	0.10	0.15
Management systems				
% of manufacturing sites with OHSAS-18001/RC-18001 certifications	%			36%

¹³ TRR and LTIR of employees and temporary workers. The total reportable rate (TRR) is the number of injuries, including fatalities, resulting in a lost time case, restricted work or requiring medical treatment by a competent medical practitioner per 200 000 hours worked. The lost time injury rate (LTIR) is the number of injuries resulting in a lost time case per 200 000 hours worked according to OSHA. Temporary workers are reported together with employees since day-to-day management is by Nouryon.

Governance

	2018	2019	2020
Board			
Directors	8	9	10
Average director tenure (years)	0	1	2
Independent directors	0	0	1
Independent directors (%)	0%	0%	10%
Board diversity			
Women on the Board	0	0	1
Women on the Board (%)	0%	0%	10%
Board coverage of ESG issues			
Frequency of Board updates on ESG issues	quarterly	quarterly	quarterly
Board oversight of climate strategy? (Y/N)	Y	Y	Y
Policies			
Code of Conduct, anti-discrimination, anti-harassment ¹⁴	N	Y	Y
Anti-corruption, anti-bribery ¹⁵	N	Y	Y
Business Partner Code of Conduct, including suppliers	N	Y	Y
Health, Safety, Environment and Security (HSE&S), including product stewardship	N	N	Y
Palm oil statement	N	N	Y
Sensitive Country Policy ¹⁶	N	N	Y

¹⁴ Also including anti-money laundering, non-retaliation

¹⁵ Including availability of SpeakUp! Reporting Website or Hotline, available 24/7 and with local language support

¹⁶ For trade compliance

Economic

€ millions	2018 ¹⁷	2019 ¹⁸	2020 ¹⁹
Revenues	5,064	5,082	4,700
Adjusted EBITDA	1,071	1,128	1,162
Total assets	12,853	12,263	11,521

¹⁷ Reflects combined financial results of the Specialty Chemicals Business, prepared on a carve-out basis, and Nouryon Holding B.V.

¹⁸ Reflects financial results of Nouryon Holding B.V.

¹⁹ Reflects financial results of Nouryon Holding B.V.