

aperam

# Made for life

Sustainability Report 2019



# External Assurance

We declare this report in accordance with GRI core level.

Material aspects and indicators are shown on p. 8 of this report. Detailed Disclosures on Management Approach (DMA) are in the online supplement 'C'. The scope of the information and data in this report covers global operations from January to December 2019.

Aperam's production capacity is focused on:

- > 6 production sites in Brazil (Timóteo), Belgium (Châtelet, Genk), and France (Gueugnon, Imphy, Isbergues/Recyco).
- > 14 Steel Service Centres (SSC) from our Service & Solutions segment.
- > 12 transformation facilities: 5 in Service & Solutions segment; Pont de Roide and BioEnergia from Stainless & Electrical Steel segment; Rescal, Amilly, Imhua and ICS from Alloys & Specialties.
- > 16 sales offices: 10 for Service & Solutions segment and 6 from Alloys & Specialties.
- > Registered office: 12C. rue Guillaume J. Kroll, L-1882 Luxembourg.

Safety data cover Stainless & Electrical Steel, Services & Solutions and Alloys & Specialties divisions, as well as on-site contractors. Human resources data exclude contractors.

Subject to the exclusions indicated below, environmental data covers all main industrial sites, SSCs and corporate offices.

Environmental information is compiled locally and aggregated centrally. In our greenhouse gas emissions calculation we apply ISO 14404-1 and ISO 14404-2 standards, which state that biomass is considered to be carbon neutral. The CO<sub>2</sub> emissions data relate to Scopes 1 and 2.

The following exclusions apply to the environmental data:

- (1) Raw material data exclude packaging and miscellaneous parts;
- (2) Scope 3 indirect emissions.

The report represents our Communication on Progress relating to UNGC membership (see Online Supplement 'A').

## Forward-Looking Statements

This document may contain forward-looking information and statements about Aperam and its subsidiaries. These statements include financial projections and estimates and their underlying assumptions, statements regarding plans, objectives and expectations with respect to future operations, products and services, and statements regarding future performance. Forward-looking statements may be identified by the words "believe," "expect," "anticipate," "target" or similar expressions. Although Aperam's management believes that the expectations reflected in such forward-looking statements are reasonable, investors and holders of Aperam's securities are cautioned that forward-looking information and statements are subject to numerous risks and uncertainties, many of which are difficult to predict and generally beyond the control of Aperam, that could cause actual results and developments to differ materially and adversely from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include those discussed or identified in Aperam's filings with the Luxembourg Stock Market Authority for the Financial Markets (Commission de Surveillance du Secteur Financier). Aperam undertakes no obligation to publicly update its forward-looking statements or information, whether as a result of new information, future events, or otherwise.






In particular, the length and severity of the recent COVID-19 (coronavirus) outbreak, including its impacts in the sector, macroeconomic conditions and in Aperam's principal local markets may cause our actual results to be materially different than those expressed in our forward-looking statements.

## Independent assurance statement

Deloitte Audit Société à responsabilité limitée issued and unmodified limited assurance report using ISEA 3000 limited assurance with respect to the Report on the following subject matters: adherence to the Global Reporting Initiative "GRI Standard" guidelines with respect to the Principles of Materiality, Stakeholders Inclusiveness, Sustainability context and Completeness, the adherence of the disclosure in the Report to the GRI Standard "In Accordance Core" criteria and the appropriateness of the GRI Index on pages 68 and 69 of the Report and the fair presentation in all material aspects in accordance with GRI Standard Guidelines, of selected performance indicators, marked with a "\*" in the Report:

- GRI 302-3: Energy intensity (pages 28 and 30),
- GRI 303-3: Water withdrawn by source (pages 28 and 35),
- GRI 305-4: GHG emissions intensity (pages 28 and 29),
- GRI 305-7: Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions (dust only - pages 28 and 34),
- GRI 403-9: Work related injuries (LTIFR and Severity Rate only - pages 11 and 12).

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	<h2>Governance: Our Stakeholders</h2> <p>From the support of our subcontractors who assist our teams to the strong partnerships built with our suppliers and customers and up to local infrastructures - our success is dependent on the communities we operate in. Our Corporate Governance is based on the highest standards and complies with the most rigorous business ethics.</p> <p>In 2019, we took our commitment to stakeholder engagement even further by joining the ResponsibleSteel™ initiative.</p> <p>&gt; See how we continually strive to develop in a way that benefits the public at large.</p>
	<h2>About this report</h2> <p><b>GRI Index</b></p> <p><b>Country Supplements</b> - For stakeholders and available in the local languages of our three main countries of operation (Belgium, Brazil, France).</p> <p><b>Methodology Supplements</b> - United Nations' Global Compact reference; Materiality Process at Aperam; GRI Index and Disclosures on Management Approach.</p>

# Opening Words from our CEO



The Covid-19 pandemic is a challenge like none other. In addition to the healthcare and biodiversity challenges, it has also put the spotlight on such essential issues as the value of human life, freedom, and solidarity. It is forcing us to re-evaluate the type of society we want to live in and has us questioning how globalisation, individuals, companies and governments can help us build this better society.

Within this framework, our annual Sustainability Report is more meaningful than ever. It highlights how, thanks to our strong values and versatile, affordable and 100% recyclable products, Aperam is well-positioned to answer any challenge and creates real social value. And we know that by relying on our Sustainability Roadmap, based on the three pillars of our Social, Environmental and Societal responsibility, we will maintain our position as a fair and sustainable company.

Starting with our People and their Health & Safety, which is our first priority, our report covers our actions on all three of these pillars, with clear progress already visible in such fields as learning, diversity and employee engagement. However, in light of the current pandemic, I want to focus on our environmental challenges so that this key area will not be neglected or postponed when the emergency ends. But first, a short word about Safety.

Although better than the industry standard, our 2019 frequency rate was up and we again missed our objective of having zero accidents. However, our entire organisation is working to address this issue. Furthermore, a look at the Severity and Total Injury rates proves that Aperam is on the right track, enhancing our safety culture and ensuring a sustainable improvement to the safety of our employees.

Aperam's environmental performance is one of its strengths - albeit one that is not yet sufficiently recognized as a competitive advantage.

■■■ **To start, our Carbon footprint is simply the best in our industry.** It is based on sustainable practices that have a very high social and environmental value:

> **In Brazil, BioEnergia, our responsibly-managed eucalyptus forestry,** not only provides us with a charcoal replacement for coke, it is also a key local employer and, through our Foundation, an influential social actor. Thanks to the use of such state-of-the-art farming and production processes as genetic selection of seedlings, drone inspections and insect-based pest control, BioEnergia also protects water resources and biodiversity.

> **We are also a crucial player in the circular economy** and aim to be a zero waste (for landfill) company. In Europe, our furnaces have maximised their use of locally supplied scrap, thereby reducing the need to transport extractive raw materials from long distances. Our meltshops can absorb metallurgic dust, cans or tires. In addition, our Recyco unit is helping steel companies to leverage the metallic content from such by-products as dust or mud, transforming what was once waste

into a valuable input. Not only do these initiatives reduce the final product's CO<sub>2</sub> footprint, they also serve as a sustainable alternative to landfill. This in turn reduces pollution and the need to convert land into landfills.

> **Our commitment to local production also brings a lot of environmental advantages.** For example, not only do short loops reduce the time to market, because of decreased transportation needs, it also reduces CO<sub>2</sub> footprint and air emissions. This is especially the case for the heavy goods we produce and the transport of our input materials (primarily scrap). Local production and short loops also provide job opportunities for neighbours and/or end-consumers.

> **In line with the Paris agreement on climate change, in 2019 we announced our goal to reach carbon neutrality in our European operations by 2050.** This is in addition to our ambitious 2030 objectives. Our success will not only depend on our ability to enhance our current efforts, but also our ability to find new innovative solutions.

■■■ **Looking beyond CO<sub>2</sub>, we also pay a lot of attention to ensuring that our processes are safe and respectful of both the environment and society.**

> **Recent catastrophes have highlighted the array of risks and responsibilities that industrial companies must prepare for.** At Aperam, we have a robust risk assessment process that includes bottom-up assessments, cross-checks and action plans to always improve the security of our sites. These assessments are strengthened by internal prevention measures and real-life emergency drills that we organise with local stakeholders. In view of the global climate change challenge, we are currently upgrading our risk assessment process to cover long-term risks and extreme weather events.

> **We also routinely monitor our effluents to air and water.** In an increasingly urbanized world, operating plants must share natural resources with the general population and work together to ensure a balanced ecosystem. We invest a lot of effort to reduce our dust emissions, as well as our water intakes - going much further than what stringent local regulations require from us.

Our CO<sub>2</sub> footprint and dust emission record proves that sustained efforts pay off. But these efforts come at a cost, and global environmental stewardship must be supported more than it is now. To make sure fair trade producers like us are

compared equitably with manufacturers from countries with low or no environmental and/or social standards, we need supplemental support from both the political and the customer sides. This is the only way we can ensure a level playing field and truly factor responsible production into the buying decisions.

In this context, I would like to end on a positive note. Firstly, we applaud initiatives like the European Green Deal and those that promote longer-life products and a circular economy. This is a positive step, and we hope to see the programmes multiplied - and not dissolved - after the Coronavirus crisis is resolved.

Secondly, I put a lot of hope in the ResponsibleSteel™ initiative. The initiative gathers representatives from all our industry stakeholders, including unions, customers, banks, suppliers and NGOs. Together, we are building a framework to certify sites and products and, through the use of external verification, reassure everyone that our claims of responsible production processes are founded. In addition to this open and transparent reporting scheme, more detail of which can be found on p.62, this certification standard will ensure our clean and responsible steel production gets the credit it deserves. It will also provide a methodology for making sound comparisons between market players.

**Let's hope that the ultimate lesson of 2020 is that we all share the same objective of health, safety and sustainability. In the meantime, I can assure you that Aperam will continue its progress towards sustainable development.**

Sincerely yours,  
Tim Di Maulo  
Chief Executive Officer

# Company profile



EUR millions unless otherwise stated <sup>1</sup>	2019	2018	2017	2016
<b>Shipments</b> (metric tons)	<b>1.79</b>	1.97	1.94	1.92
<b>Revenues</b>	<b>4,287</b>	<b>4,704</b>	<b>4,492</b>	<b>3,887</b>
Operating costs <sup>2</sup>	<b>3,378</b>	3,635	3,381	2,903
Employee wages & benefits	<b>517</b>	527	534	502
Payments to providers of capital <sup>3</sup>	<b>240</b>	205	204	97
Payments to government	<b>37</b>	75	57	54
Community investments	<b>0.3</b>	0.3	0.9	0.5
<b>EBITDA</b>	<b>357</b>	<b>504</b>	<b>551</b>	<b>445</b>
Economic value retained	<b>210</b>	332	406	330
Direct economic value generated	<b>4,287</b>	4,704	4,492	3,887
<b>Economic value distributed</b>	<b>4,077</b>	<b>4,372</b>	<b>4,086</b>	<b>3,556</b>

**Aperam is a public limited company listed on the Luxembourg stock exchange and on Euronext Amsterdam, Brussels and Paris.**

**> 6 main plants**

**> 4 melting shops:**

Timóteo (Brazil), Châtelet and Genk (Belgium), Imphy (France)

**> 5 main cold rolling sites:**

Timóteo (Brazil), Genk (Belgium), Gueugnon, Isbergues and Imphy (France)

**> 1 FSC®-certified BioEnergia eucalyptus plantation and charcoal production facility (Brazil)**

<sup>1</sup> Differences between "Global Aperam" and the sum of the different regions and segments (next page) are due to all operations other than those in clear, together with inter segment elimination and/or non-operational items that are not segmented. For Full-Time Equivalent Employees, it is related to Headquarters.

<sup>2</sup> Operating costs include R&D costs of EUR 20 million for Aperam Group.

<sup>3</sup> Payments to capital providers = Net Cash Interest and dividends paid to capital providers and shares repurchased through share buyback programmes during the year, in line with an amount of interest paid (net) of EUR 5 million, EUR 5 million, EUR 8 million and EUR 9 million, dividends paid of EUR 142 million, EUR 130 million, EUR 106 million and EUR 87 million, and shares repurchased for EUR 93 million, EUR 70 million, EUR 90 million, and nil stated in the cash flow statements of the 2019, 2018, 2017 and 2016 Annual Reports respectively.

# About Aperam

Offering the market's most complete range



## Aperam Performance by Division GRI-201-1

Aspect	Indicator	Unit	Stainless & Electrical Steel		Services & Solutions	Alloys & Specialties
			Europe: Genk, Châtelet, Gueugnon, Isbergues & Recyco, Precision	South America: Timóteo, BioEnergia	Worldwide 14 service centers 6 transformation units 16 sales offices	Worldwide Imphy, Amilly, Rescal, Imhua (PRC), Indore -ICS (IN)
People	Own Staff (End of Period)	FTE	2,933	3,004	1,776	1,210
Shipments	Steel shipments	kt	1,113	609	706	36
Economic Contribution	Revenues	m€	2,550	860	1,765	592
	Employee Wages & Benefits		270	75	85	71
	Payments to Capital Providers <sup>(3)</sup>		154	41	15	18
	Community Investments		0.0	0.2	0.0	0.0
	Payments to Government		19	3	6	7
	EBITDA		150	125	46	50
	Economic Value Distributed		2,476	773	1,737	560
Site Management System Certification	OHSAS 18001	% of sites	100	100	79	100
	ISO 14001		100	100	47	80
	ISO 9001 (excl. Recyco, Bio, sales ofc)		100	100	95	100
	ISO 50001 (excl. Recyco, Bio, sales ofc)		60	0	16	0
	IATF 16949 (excl. Recyco, Bio, sales ofc)	%	80	100	16	60
	Others	total	**	FSC® CoC & M (BioEnergia)	2 sites ISO45001 1 site SA8000	1 site ISO 26000 2 sites EN 9100

\*\* Other specific certificates and approvals can be found at <https://www.aperam.com/documentation>.



## Stainless steel properties



### Aesthetics

It has a great variety of surface finishes from matt to bright, including brushed and engraved. It can be embossed or tinted and this makes stainless a unique and aesthetic material.



### Mechanical properties

Stainless steel has strong mechanical properties at ambient temperatures in comparison with other materials. In particular it combines ductility, elasticity and hardness, enabling it to be used in difficult metal forming modes, while offering resistance to heavy wear (friction, impact, elasticity, etc.).



### Resistance to fire

Stainless steel has the best fire resistance of all metallic materials when used in structural applications, having a critical temperature above 800°C. Stainless steel is ranked A2s1d0 for fire resistance with no toxic fume emissivity.



### Resistance to corrosion

With a minimum chromium content of 10.5%, stainless steel is continuously protected by a passive layer of chromium oxide that forms naturally on the surface through the combination of chromium and moisture in the air. If the surface is scratched, it regenerates itself. This particularity gives stainless steels their corrosion resistance.



### Cleanability and sanitation

The inert nature of stainless, together with its cleanability, make it an ideal candidate for applications related to fresh water and water treatment.

### Recyclability



Stainless steel is the “green material” par excellence and is infinitely recyclable. Within the construction sector, its actual recovery rate is close to 100%. It is environmentally neutral and inert when in contact with elements such as water, it does not leach compounds that might modify their composition. These qualities make it a material which is ideally suited to building applications exposed to adverse weather: roofs, facades, rainwater recovery systems and domestic water pipes. Stainless steel’s longevity fulfils the requirements of sustainable construction: effective selection, installation and low maintenance guarantee the user unrivalled service life.

Life cycle of stainless steel in main application sectors	Average lifetime (in years)	To landfill	Collected for recycling		
			Total	As stainless steel	As carbon steel
<b>Building and infrastructure</b>	50	15%	85%	95%	5%
<b>Transportation</b> (passenger cars)	14	10%	90%	40%	60%
<b>Transportations</b> (others)	30	10%	90%	80%	20%
<b>Industrial Machinery</b>	25	10%	90%	90%	10%
<b>Household Appliances and Electronics</b>	15	20%	80%	60%	40%
<b>Metal Goods</b>	15	20%	80%	60%	40%

*Source: Yale University/ISSF Stainless Steel Project, 2019.*





Panels set up at our Châtelet plant (Belgium) in 2019 to express publicly the different dimensions of our responsibility towards our employees, stakeholders and the environment.

# Sustainability Strategy

Our sustainability vision is rooted in our values and strengthened by a constant vigilance regarding the impact we have on all our stakeholders. This is why, in 2019, we became active participants in ResponsibleSteel™, the steel industry's first global multi-stakeholder certification programme<sup>1</sup>.

We also continue with our three-pillar roadmap to maintain our position as one of the leading players in our sector:

> People and their safety always come first. Beyond the constant attention we give to Health & Safety, we also aim to create an environment that encourages our employees to thrive and develop the innovative ideas that will drive our company to the forefront of our sector. To do this, we remain engaged with our employees, listening and finding the right personalised training and development opportunities, not only to keep them motivated and performing, but to also facilitate a sense of belonging to the Aperam family.

> As to the environment, simply complying with regulations is not enough - we aim to exceed. We redefined our targets, adopting a 2030 deadline to take our CO<sub>2</sub>, energy, water consumption and air emission reductions further. We also committed to achieving carbon neutrality by 2050. With these initiatives, we continue to demonstrate our sense of responsibility to prevent and minimize our environmental impacts today while also ensuring we can adapt to meet the challenges posed by climate change mitigation plans.

> Whether it be in our relations with our stakeholders or our corporate decision-making process, our governance is guided by our high ethical standards. We appreciate that all our stakeholders have legitimate needs, and we aim to address those needs by being a fair, transparent and trustful partner to our customers, lenders and suppliers. As to authorities and local communities, we commit to act responsibly, to proactively address concerns, and contribute to the general good.

<sup>1</sup> See page 62 and [www.responsiblesteel.org](http://www.responsiblesteel.org).

## Sustainability strategy and governance in 2019

- ▶ Members of the Board of Directors: in charge of the overall management of the Company. They decide on the direction taken based on proposals from the Leadership Team (LT), a group of nine senior executives headed by Mr. Timoteo Di Maulo, the Company's CEO. The Board of Directors has two committees, the Audit and Risk Management Committee and the Remuneration, Nomination and Corporate Governance Committee, whose purview covers compliance and other sustainability topics on a quarterly basis.
- ▶ CEO: responsible for Aperam's sustainability performance and compliance.
- ▶ CHRO, Head of Communication and Sustainability: responsible for steering the Sustainability Strategy via discussions with the rest of the Leadership Team (Aperam's Management Committee).
- ▶ LT reviews: quarterly meetings have been held since 2018 to ensure the regular involvement of the entire organisation throughout the year.

## Joining ResponsibleSteel™

In 2019, Aperam became the first stainless steel company to join ResponsibleSteel™. This initiative, which we discuss in detail on page 62-63, is a milestone for sustainability in our industry. It echoes other sectoral initiatives, such as the forestry-specific FSC® label, which uses an external certification process to give (end) customers confidence in a company's commitment to responsible forest management. As a widely recognised initiative, the FSC® label has proved to be a powerful vector of change.

For Aperam, joining ResponsibleSteel™ is not only an opportunity to advocate for best practices and tailor them not only to the specifics of the stainless-making process, but also to the needs of our customers and the issues of our suppliers. It is also the perfect way to substantiate our commitments to sustainability: ResponsibleSteel's™ external certification is irrefutable evidence that, when it comes to sustainability, Aperam doesn't just talk the talk, we walk the walk. As a member, we actively participated in the elaboration of the site-specific standard in 2019. This was done in cooperation with the association's other members, including steel-makers, NGOs specialised in environmental or social topics, suppliers from the extractive industry and customers. The discussions were passionate and reaching a consensus on the final standard, a challenge - but ultimately a victory.

In 2020, Aperam will continue to help develop the product-level standard while also organising the certification of its first sites in Europe.

## Embedding a sustainability state-of-mind into each and every process

Incorporating our sustainability roadmap into everyday decisions and ensuring perfect alignment across the organisation requires more than just awareness-raising actions. It also takes prioritisation and incentivization. Since 2018, company-wide objectives have been cascaded into the individual objectives of all employees across the organisation. The first chapter of our CEO's personal objectives is entitled "Health, Safety and Sustainability" and encompasses such topics as "Health" and "Sustainable Industry with a long term objective of zero impact on the environment". It also covers the topic of "Compliance and Company reputation", which includes business ethics, and "Diversity", with a clear initial focus on gender diversity. Although the process is repeated every year, in 2019 it was integrated into our HR IT platform and converted into pragmatic action plans for all levels of the organisation.

## Working and reporting on the right topics

Since 2013, we have used GRI4 standard principles (Global Reporting Initiative's sustainability reporting guidelines) to define our most material sustainability issues and the impact they have. The materiality of an issue is based on its potential impact on both our business and our stakeholders. This assessment, based on a 4-level scale ranging from minor to critical, is regularly reviewed and updated:

- > **2013** and **2014**: defined the materiality matrix based on stakeholder input gathered at our six major sites.
- > **2015**: updated the matrix based on a survey of Aperam's closest stakeholders - our employees.
- > **2016**: updated the matrix while expanding its scope to cover 11 major sites from all our segments and 85% of our global workforce.
- > **2017**: engaged with local authorities at each of our main sites to realise a systematic assessment of all the topics in the existing materiality matrix. This approach resulted in us incorporating a handful of new topics into our matrix and Sustainability reporting, including "Urban Integration", "Industrial Risk" and "Noise".
- > **2018**: updated the 11 matrices at site level and the consolidated version, with no major change resulting. Also added the takeaways from our all-Employee Global Climate Survey.
- > **2019**: updated the matrix based on the discussions held at ResponsibleSteel™ and reflected in the 12 principles that constitute the site-specific standard. The key takeaway of this review is that decommissioning should be incorporated to reflect some of our industry's most common external concerns, and biodiversity reported systematically, even if they are not considered as salient at the site level.

For the full details of our final 2019 consolidated matrix and its variations, see our online methodology appendices.

Material Aspect	Category	Cross-referencing with ResponsibleSteel™ Site-Level certification	Page	Comment
Occupational Health & Safety	People	Principle 3. Occupational Health and Safety	11-14	
Industrial Risk & Pollution Prevention	Environment	Principles 8, 9 and 10	40-41	
Legal & Fiscal Compliance	Governance	Principle 2. Social, Environmental and Governance Management Systems	52-55	+ Annual Report (esp. p.38)
Innovation Products/Processes	Stakeholder	Not covered by ResponsibleSteel™ Site-Level Certification	64-67	
Air & Dust Emissions	Environment	Principle 9. Noise, Emissions, Effluents and Waste	41	
Fair Business Practices	Governance	Principle 2. Social, Environmental and Governance Management Systems	52-55	With Compliance
Energy Consumption	Environment	Principle 8. Climate Change and Greenhouse Gas Emissions	29-33	
Sustainably Profitable	Governance	Principle 2. Social, Environmental and Governance Management Systems	46-47	+ Annual Report
Customer Satisfaction	Governance	Not covered by ResponsibleSteel™ Site-Level Certification	63-64	
Waste/Recycling	Environment	Principle 9. Noise, Emissions, Effluents and Waste	38-39	
Attracting Talent to our Industry	People	Principle 4. Labour Rights	17	New item 2016
Employee Engagement	People	Principle 4. Labour Rights	15-26	
Social Dialogue	People	Principle 6. Stakeholder Engagement and Communication	46-62	Here in Governance
Water Management	Environment	Principle 10. Water Stewardship	35-37	
Competition & Free Trade	Environment	Principle 1. Corporate Leadership	57	
Noise and Smells	Environment	Principle 9. Noise, Emissions, Effluents and Waste	41	Add-in 2017
Community Engagement	Governance	Principle 7. Local Communities	58-61	
Competencies & Employability	People	Principle 4. Labour Rights	22-25	
Supplier Labour Practices	People	Including Child Labour - Principle 2. Social, Environmental and Governance Management Systems	50-51	
Market Dynamics	Governance	Not covered by ResponsibleSteel™ Site-Level Certification	46,57	+ Annual Report p.23-24
Urban Integration, Circulations, Aesthetics	Governance	Not covered by ResponsibleSteel™ Site-Level Certification	61	Add-in 2017
Cash, Debt & Financing	Governance	Not covered by ResponsibleSteel™ Site-Level Certification	n/a	+ Annual Report (esp. p.44-51)
Raw Material Consumption	Environment	Principle 2. Social, Environmental and Governance Management Systems	38	Within Waste/Recycling
Diversity & Equal Opportunity	People	Principle 4. Labour Rights	18-19	+ Annual Report p.62
Transport Impact	Environment	Not covered by ResponsibleSteel™ Site-Level Certification	42	
Data Privacy and Cyber-security	Governance	Not covered by ResponsibleSteel™ Site-Level Certification	56	
Supplier Environmental Practices	Governance	Principle 2. Social, Environmental and Governance Management Systems	50-51	
Climate Change & Severe Weather Events	Environment	Principle 8. Climate Change and Greenhouse Gas Emissions	40	
Philanthropy (and Social Impact Investing)	People	Principle 7. Local Communities	58-61	
Biodiversity	Environment	Principle 11. Biodiversity	44	
Decommissioning <sup>NEW</sup>	Environment	Principle 12. Decommissioning and closure	41	



# Our People

Our top priority is the health and safety of our people. As a core value, health and safety guides all our actions. It also has the power to stop any operation or decision. So while we continue to work on programmes to improve the safety, health and well-being of our employees, we also dedicate a lot of energy towards employee development and ensuring they are prepared to meet the challenges of today - and tomorrow.

As part of our People Transformation Journey, we are upgrading our Human Resources systems to be more efficient and systematic in providing feedback, learning and development opportunities to our employees. We have great teams and we want them to continue to see us a great employer, so we tailor our programmes to their feedback.

## Health & Safety

### Occupational Safety

#### Indicators and statistics

The health and safety of all the people who work for and with Aperam is our top priority. The Lost Time Injury Frequency rate (LTIFR) for 2019 increased to 1.72\*, compared to 1.40\* in 2018. Although the severity rate of these accidents ended at 0.09\* in 2019, the number of restricted work cases, medical aid and first aid cases decreased substantially over the same period. This resulted in our Total Injury Rate (TIR<sup>2</sup>) improving considerably, from 24 in 2018 to 20.5 in 2019. We are convinced that by the actions we are putting in place on H&S culture, standards and organisation, the reduction we see on our TIR should be reflected on our main indicators in the near future.

#### SAFE training and Cultural Maturity assessments

2019 saw the continuation of the company-wide implementation of our SAFE training programme - an effort that received a Health & Safety Silver Award from the ISSF. We are now close to having Aperam's total population trained. We also started implementing Aperam's Health and Safety Expectations Framework in 2019. The framework details the behaviours we want ALL Aperam employees to demonstrate in their daily operations. Employees from all sites have been participating in interactive workshops to help us to determine the level of H&S Cultural Maturity at our sites. The results of these

workshops are transformed into detailed cultural and behavioural action plans that will be implemented in the course of 2020. The main goal of this exercise is to build and install a level of cultural maturity that allows us to become a sustainable and safe company.

**Cultural maturity workshops**

**1,661 people trained**

**Company-wide**



**2019 Recognitions**

**Aperam SAFE Training awarded by ISSF**

**Aperam S&S Poland winner** (see left) of the National Labour Inspectorate H&S Competition in the category of firms with 51-250 employees.

*“With the actions we are putting in place on Health & Safety culture, standards and organisation, we are convinced that the reduction we see on our Total Injury Rate should be reflected on our main indicators in the near future.”*



**Hans Vanhorebeek**  
Head of Health & Safety

**3 GOOD HEALTH AND WELL-BEING**

<sup>2</sup> TIR is the sum of all LTI + RW + MA + FA, divided by the hours worked and multiplied by a million.



## Voices

*“In 2019 we continued to build upon the foundations that were put in place in 2018 with our global HR IT platform (MyHR). This meant installing a leadership culture that considers providing meaningful feed-back as the key driver for the development of our people and Coaching & Learning as cornerstones of our Company and People Transformation. A company-wide initiative on Internal Coaching, started at the level of the Leadership Team, reached beyond the goals of traditional training and helped us understand that learning can never happen outside of the field of human interaction.”*

### Bert Lyssens

Chief Human Resources Officer, Head of IT, Communication and Sustainability

## At a glance (GRI 403-9)

Indicator	Unit	2019	2018	2017	2016	Page
<b>Employee</b>		<b>9,611</b>	9,777	9,599	9,558	Workforce p.17
Joiners	FTE	<b>514</b>	665	793	674	
Leavers		<b>664</b>	483	538	674	
Turnover Rate	%	<b>6.9</b>	5.0	5.7	6.7	Diversity p.18-19.
Women	% staff	<b>12.3</b>	11.8	11.9	11.9	
	% exempts	<b>20.4</b>	20.0	20.2	20.4	
<b>Fatalities - All</b>		<b>0</b>	1	0	0	Safety p.11-13
Fatalities - Employees	#	<b>0</b>	1	0	0	
Fatalities - Contractors		<b>0</b>	0	0	0	
<b>LTIFR - All</b>		<b>1.7*</b>	1.4*	1.2*	1.4*	(and Responsibility in the Value Chain p.51)
LTIFR - Employees	/1,000,000 hours	<b>1.6</b>	1.4	1.3	1.6	
LTIFR - Contractors		<b>1.9</b>	1.6	1.7	1.1	
Total Injury Rate - All		20.6	24.0	25.9	n/a	p.22
Severity Rate - All	%	0.09*	0.08	0.11	n/a	
<b>Training Hours - Total</b>	hours/ FTE	<b>35.5</b>	34	34	36	
Total People Trained	FTE	<b>8,950</b>	9,391	n/a	n/a	
<b>Absenteeism</b>	%	<b>3.10</b>	2.29	2.19	2.19	p.49
<b>Employee Satisfaction<sup>(2)</sup></b>	%	n/a <sup>(1)</sup>	86	82	n/a <sup>(1)</sup>	p.20

\* Data highlighted with a star have received external assurance. (1) No Aperam-wide survey (2) Employees that would recommend Aperam as a good employer.

## The journey to become Sustainable Safe

2019 was the year we started putting our roadmap to becoming a sustainable safe company in place. All our actions are oriented around three main axes: Standards and Tools, Organisation and Cultural Maturity.

> **Clear Group Health & Safety (H&S) standards** are a key aspect of our roadmap. In 2019, together with H&S representatives from all major sites, we revised four H&S standards covering the main hazards within our industry. In parallel to these revised standards, we also provided e-learning modules to enable all personnel to familiarise themselves with the new requirements. In Q4 2019, we launched a complete H&S audit campaign at all our sites to check that all standard requirements have been implemented.

> **2019 is also the year that we launched a new H&S organisation.** This further strengthens our corporate H&S department, which now consist of Regional H&S Leads who support and challenge sites, in addition to a dedicated person to streamline all the approaches we take on Training and Cultural Development. At site level, we created a Site Central Team, which focuses on coordinating and guiding all on-site H&S activities. We also installed H&S Support Functions within the operational departments to ensure that operational management has full authority and accountability in performing their H&S duties.

> **Together with the above mentioned audits, we also began implementing our Cultural Maturity Framework on Health & Safety.** A gap assessment was performed on most sites to define its current level of Cultural Maturity and to identify the best growth path for the future. Over 1,600 employees from all levels of the organisation participated.

As part of the assessment, workshops were organised where people from the same organisational level were anonymously asked to judge how often they see a defined positive safety behaviour around them. Based on this information, the group performs a “Five-Why” exercise on the least seen behaviours and proposes positive actions for increasing these behaviours. This very participative approach gives us a 360° evaluation of the cultural situation at a site and generates ideas for improvement that are brought up and supported by the entire population. As a result, clear action plans per site - and even per department - are being put into place to ensure we reach the next level on the Cultural Maturity ladder.

All the above described initiatives will lead us to become a truly Sustainable Safe Aperam.

## Voices

*“The cultural assessment was a really new approach for our team, everyone was very open to discuss our strengths and weaknesses.*

*The result of this assessment is like a mirror that shows us the perception of the team regarding our safety culture - which is essential for establishing a good action plan to keep improving!”*

### Philippe Deniel

Industrial Manager Isbergues S&S

H&S exercise at our Gueugnon site.



## Eliminating residual risks

> From May 2017 to May 2019, the focus of Timóteo Quality Control Circle Programme was on the plant's grey zones. Each of the 106 groups having participated in the Programme designed a project to eliminate one (or more) of the grey zones they themselves had identified. In total, 745 improvements were made. All the projects were analysed by the H&S department, prioritised and given an action plan for implementation.

The great involvement of the shopfloor and leaders was key to the Programme's success. Preliminary risk assessment has also contributed to the elimination of more than 50 grey areas in 2019 and the plan is to eliminate 60 more in 2020.



> Along similar lines, in response to a desire to accelerate the treatment of the site's residual risk areas, Gueugnon established an ambitious objective to treat 30 % of them in 2019. Thanks to the excellent collaboration of a cross-functional team, not only was this goal met, it was exceeded. Work continues in 2020.

## Occupational Health

The health and wellbeing of our people is one of our key responsibilities, and our sites are taking local actions to promote the health and wellbeing of our employees and to preempt deviations. In particular, it is important to work on topics related to organic and systemic diseases, musculoskeletal diseases, mental health risks, burn-out and all other work-related health issues.

■■■ A best practice for examining the working conditions of our employees is to run shop floor audits. The Trevo Programme in our Campinas Service Centre combines a number of H&S audit concepts, including organisation, standardisation, cleaning, self-discipline and sustainability. Fortnightly audits are run using different groups of auditors, including directors, managers and health and safety technicals, who use a specific checklist. Based on the results, an action plan is defined, implemented, and monitored.

### “THINK OUTSIDE YOUR CHAIR!”

A first company-wide programme was drafted in 2019, with a group of talents proposing a roadmap to address the key issues about Health within Aperam. The first visible action was the deployment of a campaign entitled “Think outside your chair” with periodic newsletters with information and exercises.

The working group selected some quick and easy exercises that can be done during a break. A video to illustrate these exercises will be launched in 2020, with exercises to be performed either before shifts begin in the production departments or anytime during the day for those working in the offices.

These simple exercises are safe and bring many benefits to employees, including:

1. Preventing injuries
2. Improving posture
3. Increasing flexibility
4. Increased supply of nutrients to the muscles and brainin

■■■ Aperam Services & Solutions Germany had the honour of being selected to promote operational safety at national level. The employers' liability insurance association asked the Aperam team to shoot a video on-site to show what a "culture of prevention" can look like in practice and its benefits. The video was translated into 3 languages and shared on their Internet platforms to motivate other companies to be more committed to the safety and health of their employees. Aperam Services & Solutions Germany then received its second award from the employers' liability insurance association for its commitment to developing a working culture for H&S with the implementation of the SAFE program.



*Above: Germany: the team with the Safety Award from the liability insurance association.  
Right: Corporate communications on the new Company-wide Health Programme.*



■■■ At the beginning of 2017, Aperam BioEnergia's absenteeism rate was above its target. In response, the site formed a committee to discuss the issue and propose some specific actions, such as awareness raising campaigns and close follow up on critical cases. Over the course of the next two years, the site achieved an absenteeism rate that was below its target (0.91 for 2017, with a target of 0.95, and 0.85 for 2018, with a target of 0.92). In 2019, an increasing number of accidents happening outside the company, along with many employees being diagnosed with musculoskeletal diseases or cancer, meant the committee needed to take a new approach. Given this new context, they decided to create a multidisciplinary committee composed of a doctor, nursing staff, ergonomists and psychologists.

This new committee, which meets periodically to evaluate all absences and critical cases, aims to monitor and prevent absenteeism using an individualised approach that implements corrective or preventive measures on a case-by-case basis. For example, for critical cases, such as people with diabetes, hypertension or obesity, the committee monitors the individual's condition and offers guidance on controlling the pathology. For those suffering from a musculoskeletal disease, the committee brings in an ergonomist to assess whether improvements to the individual's working condition and/or lifestyle could help improve their well-being. The committee also analyses the epidemiological profile of the company and proposes such actions as vaccination campaigns and raising awareness about preventing accidents outside of work. They have also organised individual evaluations (with ergonomist or psychologist, for example), job evaluations and investigative questionnaires, among others.

In 2019, the committee analysed a total of 142 medical certificates. Although the absenteeism rate in 2019 was 1.07, way above our 0.90 target, it would have been much higher if not for the committee's preventive actions and close follow up of critical cases. The goal in 2020 is to continue working on the health and well being of the employees.

## A highly competent and engaged workforce

### People Transformation

No company transformation without a clear people roadmap. Our strategic HR Plan is organized along 5 key dimensions and supported by the roll out of our *MyHR* Platform as its operational data-driven backbone.

In 2019, we opened our MyHR Learning Management system, a key part of our People Transformation Strategy, to all exempts. MyHR provides easy accessible short learning clips. At the end of 2019, more than 2,000 employees already completed a total of almost 20,000 courses. This is a key part of our strategy to increase (continuous) learning by leveraging digital technology.

In the next few years, we will further extend this Learning platform to our non-exempts and focus more on own created content. A first pilot, focused on H&S digital learning for all blue collars and white collars in our Genk plant, has started and is expected to Go Live in 2020 (see p.24).

The 5 axes of the Aperam People Transformation Program:

> **Competency Management:** From eight fundamental leadership competencies to a variety of business and technical skills that are vital to the future development of Aperam. Employees typically evaluate themselves and are evaluated by their manager. 90% of our exempts have participated in this process.

Next to this, the use of 180 degree peer feed-back that focuses both on performance feed-back and on competency, is strongly encouraged through the MyHR platform: more than 60% of our exempts already use this functionality and we expect to further increase this.

> **Learning:** Learning starts with qualitative feed-back from peers, managers and key stakeholders within the company. All Aperam exempts received training on how to provide meaningful feed-back. Learning is structured around engaging digital learning and coaching. Both digital learning and internal coaching have significantly increased in 2019, through the Aperam Mentorship Program. We also started creating our own content using digital content creation tools.

> **Performance Management:** Our people learn and develop through the open and honest feedback they receive, not only from hierarchical managers, but also from everybody they work with: peers, internal customers, team members, etc. Performance Management has been redesigned to focus on aligning individual and organisational goals and the use of (180 degree) participant feedback.

> **Job Mobility:** Changing jobs is always a learning experience, but on top of that it also significantly increases the interconnection of our organisation and its ability to adapt. Our *Career Portal*, on which all open vacancies are published, is a key tool to open up development opportunities.

> **Leadership:** The fuel of every transformation is our Leadership Style. Do we inspire the need to transform or do we prefer the comfort of the status quo? Our vision for the leadership needed to transform Aperam is summarized by eight key leadership competencies, on which all our exempts are evaluated (see below insert)

### Our new People-Centric HR IT Platform (*MyHR*)

Deployed in 2018-2019, our People Management System called MyHR does not only provide an efficient view on all relevant people data, it also drives more manager and employee accountability and supports the roll-out of our People Transformation Roadmap along its 5 dimensions:

### Aperam's Key Leadership competencies

We presented the new set of competencies that Aperam within our last report.

### Aperam's 8 Leadership Competencies







*To make the most of our talented workforce, we need efficient learning and performance management.*

Performance Management	2019	2018
Exempts (#)	1,002	927
<i>incl. requests of 180° Feedback</i>	498	432
Non-exempts (#)	572	0
<b>Total Performance reviews (#)</b>	<b>1,574</b>	<b>927</b>
Average performance goals (#)	5.6	7.3
Average development goals (#)	2.7	2.8

**2019 Competency evaluation**

**90% of exempts**

MyHR Learning platform	2019	2018	Main Learning topics 2019	
<b>Total training (hours)</b>	<b>341,741</b>	<b>324,051</b>	<b>Topics</b>	<b>%</b>
of which: Digital Learning (hours)	14,767	11,204	Health & Safety	54
of which: MyHR Learning (hours)	4,954		Technical skills	32
Digital courses completed (#)	18,175	n/a	Soft skills	8
Av. MyHR eLearning duration (hours)	0.27	n/a	Languages	5
<b>Employees using MyLearning (#)</b>	<b>2,518</b>	<b>n/a</b>	Ethics & Compliance	1
of which: Exempts	1036	n/a		
of which: Non-exempts	1482	n/a		

*Source: MyHR data.*

## HR 2019 Organisational Goals

The Aperam Human Resources organisation plays an important role in Aperam's People Transformation. For 2019, 10 strategic goals were defined for this organisation. The individual goals of each HR professionals are aligned with these:

1. Continue the **focus on Health & Safety** with a specific focus on Learning. (Cf. further roll-out of our Digital Learning Platform).
2. Continue to **variabilize our Manpower Cost** in line with the evolution of production volumes. This focus, for example through Temporary Unemployment Measures in our European industrial plants, allows us to avoid having to resort to more disruptive restructuring measures.
3. **Leadership Transformation**: further develop our people management and leadership skills through digital learning and internal coaching.
4. Further strengthen our **competency basis** through the roll-out of 20 transversal business skills to which the employee evaluates him/herself and is evaluated by the manager
5. **HR Digital Transformation** through the further roll-out of our global HR IT Platform ("MyHR"), but also local tools to reduce transactional low-added value administrative work in HR: Chatbot and RPA solutions.
6. Create a **Learning Culture** based on 3 fundamental axes: a. Enhancing the digital learning offer organized in Business Academies, b. Starting an internal Coaching Program for managers (Managers coach each other structured around our 8 new Leadership Competencies and c. Creating a feed-back culture through the use of peer feed-back as part of Performance Management and specific training on how to provide constructive feed-back.
7. **Act upon the 2018 Climate Survey Results**. Several actions were defined at global and local level.
8. **Stimulate Internal Mobility** through the use of the Career Portal and a stronger focus on Career Coaching.
9. Promote a new approach to **Talent Management** with 3 groups working on three strategic Sustainability topics: Health, Environment and Career Paths for Technical Talent, and presenting their findings to the Aperam Leadership Team. The focus has shifted from the traditional approach to Talent Management to a new approach where talent is evaluated, and receives feed-back, based on a concrete project assignment.
10. **Promoting diversity** with a first focus on Gender Diversity (see below).

*The 2019 HR organisation goals were defined taking into account the results of the 2018 All Employee Climate Survey that highlighted that we have further room for improvement in the area of Career Development, Performance Management and Recognition.*

## Diversity of talent

### Our workforce at a glance

Aperam's workforce is made up of 9,611 full-time equivalent employees (FTE hereafter), of which 11% exempts and 66% blue collar. Overall, approximately 98% of our staff are permanent employees, see table below (GRI 102-8). Due to the roll-out of our new master database for people-related data, some figures were adjusted including the FTE for 2018, at 9,792 instead of 9,777 reported last year.

#### Aperam Workforce

*Aperam consolidated total of Full-Time Equivalent employees, at 31/12/2019 (GRI 102-8)*

2019	Gender	Permanent	Fixed-term	TOTAL	Full-Time	Part-time
Blue Collars	Female	395	5	400	393	7
	Male	5,857	129	5,986	5,921	65
White Collars	Female	565	10	575	486	89
	Male	1,624	4	1,628	1,596	32
Exempts	Female	204	2	206	184	21
	Male	814	2	816	807	10
<b>TOTAL</b>	<b>All</b>	<b>9,459</b>	<b>152</b>	<b>9,611</b>	<b>9,387</b>	<b>224</b>
2018	Gender	Permanent	Fixed-term	TOTAL	Full-Time	Part-time
Blue Collars	Female	329	3	332	336	6
	Male	5,943	185	6,128	6055	72
White Collars	Female	597	15	612	521	91
	Male	1,637	5	1,642	1609	33
Exempts	Female	211	2	213	195	18
	Male	848	3	850	840	10
<b>TOTAL</b>	<b>All</b>	<b>9,565</b>	<b>213</b>	<b>9,777</b>	<b>9548</b>	<b>230</b>

> Our workforce has decreased slightly compared to last year, in spite of the 514 recruits added (compared to 665 in 2018). These recruits were primarily hired in the three countries that employ more than 80% of our workforce: Brazil (47% of joiners vs. 24% in 2018), France (19% vs. 34%) and Belgium (10% vs. 21%). 664 FTE left the company (compared to 483 FTE in 2018), approximately 150 (23%) of whom left for pension or pre-pension purposes (compared to 28% last year). We can also report 158 Fixed-Term contracts (less than 2%, down from 213 FTE last year) and 256 supervised workers (i.e., interims, down from 444 in 2018, 167 of which are in France, 89 at our Imphy site). This drop reflects our preference for and protection of permanent contracts during difficult economic times. These figures do not show the impact of economic unemployment.

> 21% of our 2019 joiners were women (vs 13% in 2018), a reflection of our commitment to increasing gender diversity. Although we welcomed less young professionals below the age of 25, the average age of our 2019 joiners was 28, compared to 33 last year. In 2019, as in 2018, the average seniority within Aperam

was 14 years (taking into account the years prior to the creation of Aperam in 2011). In terms of age, 28% of our staff is over 50 and less than 5% below 25.

### Attracting talent to our industry

Attracting talent in our traditional industry requires a strong employer brand. This is already the case in Brazil but leaves room for further improvement in Europe. Further developing our social media presence, for branding and direct recruitment purposes, has helped us to progress. In 2019, already more than 80% of our recruitment for exempt positions was done via Social Media.

Today, we are recruiting for a broader mix of talent than ever before. We developed a strong inflow of young graduates, through apprenticeship and internship programs, next to the recruitment of experienced professionals with a large variety of skills: from the traditional (electro-mechanical and metallurgy-oriented) technical profiles to the new Industry 4.0 oriented IT skills. A specific program focused on strengthening our purchasing organisation, through the hiring of several buyers with a solid industrial experience, was also started in 2019. Overall, in 2019, we had 245 long-term trainees (incl. Apprentices and French "VIE"), which is providing a strategic talent pipeline for the years to come.

■ ■ ■ A good example of our strategy to develop our strategic talent pipeline is to be seen in Brazil. The Brazil team regularly visits schools to introduce students to our Training Programmes and to enhance the company's reputation as an attractive place to work. Other examples in Brazil:

- Our BioEnergia organisation took part in the Forest Talent event which is exclusively reserved for the best students studying forest engineering in Brazil. Forest engineering students from the 25 universities having the highest rating from a national test are selected for the programme.
- Our S&S Ribeirão Pires site is also a partner of CAMP, an initiative of the São Paulo Commercial Association for low-income students. The programme helps open the door to new opportunities for these youngsters. In 2019, 3 out of 5 apprentices were hired for specific projects.

*Imphy teams at a local engineering school business forum. The students were invited to visit a plant later in 2019.*



*Apprentices at Ribeirão Pires.*








## Embracing diversity - with a woman's touch



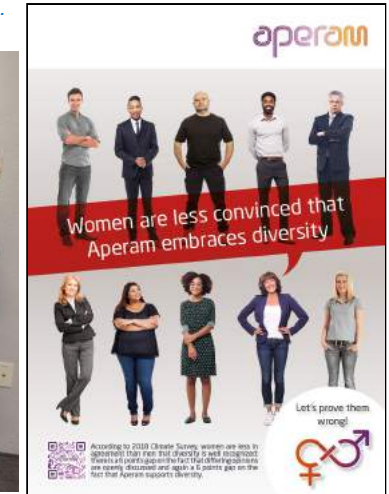
Last year we reported a new programme to improve our gender diversity and increase female representation at all levels of the Aperam organisation. Based on a self-assessment using the United Nations' Women Empowerment Principles benchmarking tool, we developed a specific Gender Diversity Charter summarising our 5-dimensional action plan. The charter was released and the programme was officially launched on International Women's Rights Day.

Based on take-aways from our all-employee climate survey, the programme highlights the areas where the gender gap is most striking and the female employee experience needs improvement. This message is promoted via posters that call for immediate action. We also added a monthly focus to our internal newsletter asking both male and female professionals for their thoughts on how to succeed within the Company and how to best close any remaining gap between the career opportunities available to men and women. Now one year into the program, we are just getting started.

The table below shows where we are - and where we intend to go.

	<b>Company-wide goals and targets</b> to improve gender diversity were cascaded from the CEO level down to the organisation in 2019 -and again in 2020, often with site-specific targets to increase the presence of women on the shopfloor.
	<b>Health, Safety and Ergonomics:</b> We ensured sufficient Women's restrooms and adapted ergonomics (lifting aids, etc.) so that women can apply to all positions in all workshops - this is good for men's health too and other types of diversity!
	<b>Equal Remuneration:</b> Based on our job evaluation methodology, we have started to highlight and address anomalies, as part of our annual salary reviews, in order to ensure the same level of compensation for the same level of job responsibilities.
	<b>Equal Career Opportunities:</b> Our Global Aperam Talent Management Program has 50% of female participants. We have also included a specific follow-up of the proportion of women in succession plans for management positions.
	<b>Fight Against Stereotypes:</b> In addition to monthly communications in our Aperam Newsletter, a specific training on how to avoid gender based stereotypes was deployed to all our exempts.

Right: Our Gender Diversity poster available in 10 languages.  
Below: Female Machine operators from S&S Campinas .



**Women in Aperam**  
**6.3% of blue collars**  
**+20% vs. 2018!**  
**12% of employees**  
**20% of exempts**  
**22% of LT members**  
**28% of Board members**



Our global approach to Gender Diversity is structured around the 5 axes mentioned in the table above. Next to this we encouraged a number of local of local initiatives:

■■■ In 2019, Genk held the first W@W day ("Woman @ Work"), an event organised by and for women with the aim of making technical jobs more attractive to women. Participants to the event were given an explanation of our company process by means of a video, and given a tour of the melt shop and cold rolling department.

■■■ The Châtelet site's gender diversity action plan covers many aspects. From focusing on improving sanitary facilities, over learning experiences to get rid of

gender based stereotypes and emotional and sexual harassment to actions to promote the attractiveness of our industry to female workers.

■■■ In France, our sites continue with their regular participation in events such as Industry Week (“semaine de l’Industrie”) and specific events like the Aperam Alloys (Imphy) management conference on the prevention of sexual violence at work, presented by the Dijon-based association FETE (Femme Égalité Emploi).

■■■ Aperam S&S Czech Republic (Usti) actively targeting female candidates has become a critical recruitment tool in a labour market with few available candidates. The site actively targets female workers through social media and has implemented several improvements to its working environment to make it more welcoming for female and male candidates.

■■■ In Brazil, our BioEnergia and Timóteo sites focused on using social media to improve the perception of our industry with female candidates. As a result 66% of all job candidates are now women (for BioEnergia) and 15% of all new hires at Timóteo last year were women (compared to 10% in 2018). For interns, the percentage is 50% at Timóteo.

In Campinas, women represent 21% of the workforce. Only in the operational area, 16% are women working in different roles. Considering only the operation of machines, the number of women responsible for equipment grew 43% in 2019.



*Women team at BioEnergia*

## Voices

*“On the shopfloor as in offices, women are often less outspoken when it comes to their career goals.*

*Management should be trained in order to encourage women and to ensure they evaluate their teams in a fully gender-neutral way, free of any gender based bias.*

*I hope that our compulsory training against Stereotypes will help in that regard.”*



### Andrea Vezzani

CEO Aperam S&S Italy



*Above: BioEnergia employee Edgar who, with only one hand, built a boat alone and now intends to build one to sail in the sea!  
Right: Logo for our Brazilian Diversity and inclusiveness programme.*



## Diversity in a broader sense

Because diversity isn't only about gender

■■■ At our Gueugnon site, the HR team regularly works with occupational specialists and national employment agencies to create personalised work arrangements for our employees with disabilities (47 are recorded at the site).

■■■ In our Timóteo site, which has the highest hiring volume of all sites, we have continued to actively recruit employees with disabilities (85 employees with disabilities working in 2019, +14 vs. 2018). This number is expected to further increase in 2020.



*In Brazil, we like to see ourselves as farmers: about 1,000 of our approx. 3,600 employees are employed in seedling, nursing and planting eucalyptus trees.*

### Career: Alexandra, Sales and Marketing coordinator



Alexandra joined Aperam (then an ArcelorMittal unit), in July 2008 in Barcelona as her second job. *"I haven't necessarily changed positions in my 11-year career, but my duties, projects and challenges have changed a lot. At the very beginning I participated in a project that gave me an accelerated vision of our business. It was a real challenge: the newcomer with no experience who ends up training people with 20 years of experience! I really had to prove myself on this, but it allowed me to start off on good foundations.*

*"Since 2011, I have been in charge of nickel alloys sales for Spain".* That's pure commercial work, she explains, with direct customers, especially in the aeronautical sector. Today, most of her time is dedicated to the development of the e-business activity of the entity. On top of that, Alexandra works on commercial communication and digital marketing.

*"These last few years, on a very different field, I am very proud to be the local correspondent in charge of compliance topics and data protection."*, she adds. For the future, Alexandra would like to continue combining several roles and maybe take on a more transversal one in her Services & Solutions Division.

#### Tips to newcomers:

You have to be curious about your environment, not confine yourself to one position and one function. Learning how to learn from others and learning how to transfer your knowledge, how to share, it helps creating trust with colleagues, communication with others is so important.

### Your Opinion Counts: our All Employee Climate Survey

The significant improvement in the participation to our 2018 All-Employee Climate survey (from 60% in 2017 to 80% in 2018) means the climate survey now constitutes an important input into the objective setting cycle of the year after. At the level of Aperam, our CEO starts the process with the definition of the Aperam Organisation Goals which are then customized by the various Senior Leaders for their organisation. One of the Aperam Organisation Goals indeed refers to the fact that all leaders need to ensure they "define action plans based on the Employee Climate Survey results".

Next to global actions following the Climate Survey, which were communicated through poster campaigns, the local management teams are encouraged to define actions based on the specific focus areas for their sites. Some examples are detailed below:

- ■ In our Aperam South America and BioEnergia sites we set up working groups that resulted in several improvements:
    - Career & Development, actions covered modifications of the hiring, succession planning and performance management process.
    - Improvements of sanitary facilities for women and the implementation of a partnership with gyms/sport promoters to encourage employees to practice more sports (gympass)
    - To promote our industry to women the team created videos named "Steel Women" in which some of our employees share their thoughts on what it means to work as a woman in an industrial environment.
- We hope to further develop this theme in 2020, expanding the Groups work to include more general workplace issues.

### Voices

*"2019 was a big – and busy – year for the HR team in Brazil. We launched the Climate Working Groups, rolled out the Leadership Academy and our mentoring initiative, introduced a new solution for white collar non-exempts, and strengthened our relationship with trade unions – all of which bring real value to Aperam South America and, more importantly, to Aperam employees."*



**Luiz Otávio Torres Procópio**

Aperam South America Head of HR & Business Partner Brazil

## Career: Rodrigo, HR International & HR Partner S&S



Rodrigo joined Aperam in 2001 as a sales analyst in Sao Paulo. After developing there for 13 years, it was time for a new challenge. After a short move to Timóteo, he moved to Luxembourg in 2016 to work as HR manager for the whole S&S Division. "It was a big decision," says Rodrigo. "I decided to get out of my comfort zone, and the company allowed me to do that. I never felt the need to look outside to keep growing!" Rodrigo remembers the warm welcome he got from the Luxembourg office, and how quickly he was able to grow his network in the city.

He also remembers the day to day challenges to move from Brazil to Europe and adds "Now we are just as comfortable here as we were in Brazil. My family is part of my journey. My first priority is always that they are ok."

Regarding career moves and opportunities, Rodrigo is adamant: "It's up to you!," he says. "Your career is in your own hands, you need to make an effort and evolve." He believes that Aperam accompanied him in all of his changes and moves. "They will help you open the doors, but you need to be willing to express yourself, update yourself, work to close the gaps, and ask for feedback. You need to balance your expectations with what the company can provide."

When asked about the future, Rodrigo smiles: "Life is a circle. The only question is, what are your expectations? I feel like I still have room to grow at Aperam."

### Tips to newcomers:

"Try to understand yourself better: what are your strengths, what are your weaknesses?"

Try to understand your environment, how it can help you and how you can help it. Be humble, don't be afraid to ask questions, challenge us and challenge yourself.

We need people who want to grow, and the company can help you do that."

In line with the company's mission and with the key take-aways from the climate surveys, our sites are also developing ways to ensure proximity with all employees:

> Over the last few years, more of our sites have deployed TV screens and intranets to more easily reach employees. These screens broadcast important information and help create a sense of community across the entire site. Other community-promoting measures include the launch of a dedicated Google+ community.

> 2019 saw the use of video skyrocket. Subtitled in many languages, they allow our sites to convey clear and direct messages from our leaders to a very large population. They have been used for topics related to Health & Safety, Human Resources, Ethics and the Environment.

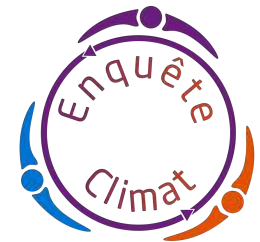
■■■ In line with their Climate Survey results, our Châtelet site decided to train team leaders on the concept of "proximity management". The training helped managers grow in their abilities to communicate, be better change agents and provide constructive feedback to their team members.

Not only is the Chatelet unit implementing its action plan, it's also regularly reporting on the actions derived from the analysis of the 2018-2019 Climate survey.



Left: Steely in Amilly

Below: Châtelet logo used to highlight the actions in response to the Climate survey.



## HR Digital Transformation

As mentioned above one of the 10 Strategic HR Organisational Goals consisted of the reduction of administrative work to free-up more time for value-added tasks. The cornerstone of this strategy is the roll-out of the MyHR global HR IT platform, that includes all Aperam employees, and starts to expand its key functionalities (especially related to Performance, Competency and Learning Management) to the non-exempts level.

However this strategy is complemented with local digitalization and automation in areas where the amount of routine type of transactions is high. One of the best examples is the volume of administrative Human Resources questions in France, our second largest country in terms of number of employees. So we launched there the first Aperam ChatBot called "Steely", which is helping employees to get instant answers to their (most frequent) questions on leave, benefits and payroll.

## Career: Nathalie, Head of Automation Department at Châtelet



Nathalie started working at the Châtelet site in 2015 as part of the Automation team. She started as an automation engineer and, later, as an automation project engineer.

After spending three years on research work, in early 2018 she took on the role of overseeing the department's daily operations, including the monitoring and maintenance of tools in operation. The time needed to master the knowledge on the processes and tools is long, but she was able to leverage her past experiences and her taste for the field.

In June 2018, she became Head of Automation Services, a position she still holds today. Here she manages a team of 17 people working in the rolling mill and steel mill on site. According to Nathalie, moving from technician to manager requires "a lot of work: not only do you need to change your posture but also adapt to the way the employees you supervise work."

### View on Gender Diversity in the industry:

"On top of the multidisciplinary theoretical aspect of an engineering degree, I also appreciated the idea of being able to work both in the office and in the workshop. Even though I was in a class composed of 2 women out of 100 students, I made my way and I always enjoy opportunities to discuss Gender Diversity."



## Voices

*"Aperam is definitely the kind of company with a lot of opportunities. Challenges are offered to you and it's always good to go look for them as well. You will be given chances provided you are mobile. I left a job that I loved, yes, but I'm getting ready for the next step, and that's exciting"*

### Pierre-Christophe Caille

Commercial Transformation Aperam S&S

## Training

To develop Aperam as a truly learning-oriented organisation, we launched our own Learning Management System, fully embedded within our People Management System in February 2019. That means not only providing a platform for designing, creating and entering content, but also for recording progress, providing online communication options about training and supporting online knowledge sharing. Not all local systems are already intertwined with this master tool and we don't have the full year 2019 on it, but we aim to get a strong reporting to follow-up on the subject.

### 2019 training follow-up

Country	2019		2018		2017		2016	
	Hours	Cost USD	Hours	Cost USD	Hours	Cost USD	Hours	Cost USD
Belgium	75,149	3,135.9	58,050	2,881.9	43,713	2,767.3	30,350	1,885.7
Brazil	143,664	565.9	126,650	622.0	176,243	850.8	191,148	823.3
France	79,257	1,271.0	99,978	1,107.1	78,122	988.1	71,123	974.0
Germany	6,775	51.2	7,677	105.4	5,576	104.1	3,395	108.0
Italy	6,712	12.5	11,105	54.3	6,203	54.2	3,575	47.9
RoW	8,962	47.4	20,591	132.5	19,168	249.5	16,780	304.4
<b>TOTAL</b>	<b>341,741</b>	<b>5,180.1</b>	<b>324,051</b>	<b>4,903.3</b>	<b>329,025</b>	<b>5,014.0</b>	<b>316,371</b>	<b>4,143.3</b>

Aperam consolidated. Total of external training hours and spent reported, without internal costs (GRI 404-1)

In 2019, we see an increase in the number of training hours (GRI 404-1), helped by strong increases in Brazil and Belgium.

Produzir aço e energia sustentável também gera muitos sorrisos.

Producing steel and sustainable energy also generates many smiles.

Aperam South America e Aperam BioEnergia, eleitas, pelo Guia Você S/A, entre as melhores empresas para se trabalhar no Brasil.

2019 | melhores empresas vocesa para trabalhar

aperam



Smiling team member from Gueugnon: training is now at employees' fingertips.

## 2020 outlook

As indicated above, we will continue to further develop the 5 dimensions of our People Strategy. In order to do this we will continue to rely on HR Processes and Tools that rely heavily on the individual accountability of employees and managers, as is the case in the MyHR Performance, Competency, Compensation and Learning Modules that we have rolled-out. Step by step we will also extend this Global Processes and Tools to our non-exempts. This often requires a high degree of local customization but the work on the extension of the Performance and Learning modules has shown that this is possible.

Our strategy could be summarized as the *journey of becoming a Learning Organisation*. This starts with the creation of a Feed-back culture, hence the importance of training on this topic (all exempts) in 2019 and the introduction of 180 degree peer feed-back for which we intend to move from 60% to almost a 100% of exempts using it.

We believe that the evolution of digital technology offers tremendous potential when it comes to Learning. We will continue to promote digital learning, using video material and further developing our own digital content creation tools that allow us to develop interactive digital learnings. This is not limited to exempt but will gradually include the entire company. A good example of this is the extension

of our Digital Learning Platform to all blue and white collars in Genk (see excerpt below).

Although still a relatively small initiative at this stage we also want to further increase the use of coaching. The Aperam Mentorship Program was started at the end of 2019 to further professionalize the use of Internal Coaching and Mentorship. Assigned mentors are trained in the basic concepts of coaching and mentoring and pair up with mentees from different organisations. The coaching mission typically lasts one year, is complemented by a mentorship contract with clear objectives agreed between mentor, mentee and first line manager. The Aperam Leadership Team has taken an exemplary role in the Program as each of its members is coaching one to two talents from other parts of the organisation.

## Opening the Learning Management System to Blue-Collars in Genk

Our MyLearning tool that promotes learning and digital learning in particular was first rolled out for Exempts globally in February 2019 and then for White-Collars Employees - those working in offices and therefore having access to a computer. As soon as in March 2019, the Genk plant launched a pilot project for Blue Collars focusing on two specific pilot areas: the BAL unit from the Cold Rolling Mill and the Grinding workshop from the Steel Plant, for a total of 40 employees.



To start, two motivated teams wrote down the requirements that this tool had to meet before proceeding to development. The training course content focused primarily on Health and Safety and job training, such as work regulations, etc. This pilot project was successfully completed in December 2019, and soon a global roll-out plan was set up and validated, with roll-out across all Aperam Genk departments planned for 2020.

The feedback received from the pilot teams was "enthusiastic" and numerous suggestions were given to further optimise the e-Learning content (process/tool) on the technical side

This is currently ongoing with the help of specialists.



## Induction of new teams

We continue with our induction of joining exempts, having them visit our plants and providing them with a detailed introduction to the fascinating world of steel.



*Aperam Gueugnon and Isbergues welcome newcomers.*

## Retaining talent retention in difficult times

Recruiting talent is always difficult, but making the most of them and keeping them even when their projects are put on hold and efforts are concentrated on resilience rather than development is even more challenging.

Below are the two most important exemples:

■■■ At the end of 2018 we had a total of 117 FTEs working on 6 Major Company Transformation Projects and on a number of smaller Programs, at the start of 2019 4 out of the 6 Major Transformation Projects were put on hold but 96% of all resources were reallocated to operational roles within the company or to new roles that were created as outcome of the Transformation Programs.

■■■ Adding a fourth shift team at the Châtelet Hot Strip Mill has been discussed since 2016. Not only did this require significant recruitment (approx 60 FTE) and important induction and/or training efforts (that we reported on last year), it also required a substantial amount of money too to make the new team autonomous. In 2019, the low volume of production did not justify the implementation of the team, so specific measures were taken to keep this additional and now well-trained staff. For example, internal mobilities were proposed to the employees in line with their competencies, thereby reducing the use of interims and sub-contractors.

## Management by objectives

We believe in management by objectives and want to ensure that all employees receive clear goals. This is handled through the MyHR IT platform or via local processes and tools.

As is indicated below, the majority of employees have Annual Performance Reviews.

### Annual Performance Reviews

Staff	2019	2018	2017	2016
Blue Collars	83%	60%	68%	71%
White Collars	80%	67%	84%	90%
Exempts	97%	98%	99%	95%
<b>Aperam</b>	<b>84%</b>	<b>68%</b>	<b>75%</b>	<b>77%</b>

*Aperam consolidated.*

## Voices

*“In our unit, we strive to have a performance review with all our employees and we reached a 100% review rate in 2019. This is not easy because a good performance review takes time!. Nevertheless, even when we have regular informal discussions, a formal review is always a good opportunity to understand everyone’s expectations and how we can work together to realise them.”*



### Christophe Thijs

CEO Aperam Benelux



## Career: Ilder, Director of Timóteo's Hot Phase

Ilder was born in Timóteo. Following in his father's footsteps, Ilder started at the plant in 1978, at the age of 18. His first role was as a production programming intern at the Cold Rolling Mill, part of his Metallurgist Technical Course. After the internship, he was hired in Process Control - a position he held for 6 years. During this period, he also followed a night course on electrical engineering at PUC, in Vale do Aço, from which

he graduated in 1984. After graduation, he started working as a Maintenance Engineer, eventually becoming the manager of this area. Taking advantage of a programme offered by Aperam, Ilder earned his Master's degree in Automation from UFMG in 1992. After that, he worked in automation and was responsible for the equipment maintenance engineering team. With the privatisation of the company and purchase by Arcelor, Ilder was able to seize many opportunities to participate and lead projects, which proved essential to his professional evolution. For example, 1990's operational performance projects aimed for a 40% cost reduction and provided him with a general vision of the different industrial processes while strengthening his resilience when faced with resistance to change. Later, Ilder worked on the negotiation of a 10-year-contract for the outsourcing of the IS/IT functions and the implementation of new Production and Energy Control Planning systems. The experience developed his expertise in negotiation strategies. In the second half of the years 2000, Ilder moved to Europe to implement the Brazilian management tool in the European plants. He learnt then how to engage with different cultures and how to accomplish results respecting differences - not to mention the personal experience! In 2009, back in Brazil, Ilder became Global Head of H&S and Head of HR in South America, a position he held until 2016. He then became Operations Director of the Timóteo plant and, in 2017, Director of Timóteo's Hot Circuit - a role he continues to hold today and where he leads approximately 1,300 people.



## Recognitions

### In South America again...

Our constant and systematic investment in the wellbeing of our people has once again been recognised - and awarded. In 2019, BioEnergia and Timóteo were awarded with second and third places respectively by Guia Você - Exame Magazine in the Siderurgical category as one of the 150 best companies to work for.

### ... and Europe too



Similar recognitions are also coming from other parts of the company, demonstrating how our entire organisation is dedicated to ensuring a good experience for all our staff. In 2019, and for the third year in a row, the French magazine "Capital" listed Aperam among France's best employers. The recognition was based on the feedback from around 20,000 respondents from companies with over 500 employees within the meta-sector "Heavy Industry & Metals". According to the latest report released in February 2019, Aperam was listed as third.

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## Voices



*“One of the most challenging aspects of Leadership is the ability to balance short term actions with the need for a longer term focus on Sustainable Growth. Learning or Development actions are mostly part of the second category as they require a sustained effort.”*

*Developing critical skills internally takes time but the potential pay-off is tremendous, not only in terms of social cost, but even more so in terms of motivation and retention.*

*That is why we have chosen to develop an HR Learning Strategy built around three pillars, Continuous Feedback, (Digital) Learning, Mentoring Program.”*

### **Marie-Pierre Duale**

*Aperam Head of Leadership & Development.*

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*Our people are our key asset: here in Gueugnon.*





# Our Planet

Our plants use immense energy and hazardous substances to transform raw materials into the precise blend of alloyed steels required by our clients. In turn, these stainless and specialty steels are used to make affordable, long-lasting and sustainable products, including energy-efficient buildings and low emission vehicles.

Although Aperam is an industry leader in sustainability, our new 2030 milestones for energy, CO<sub>2</sub>, air and water, show our commitment to minimising the impact our plants have on the environment and our neighbours. We are proud to be providing the world's "lowest CO<sub>2</sub> footprint stainless steel" and of our announced target to become carbon neutral by 2050.

## Organisation

### New vision and organisation

2019 was a milestone year with respect to our environmental roadmap.

> **Firstly, this is the year that Aperam launched its 2030 objectives and committed to achieving carbon neutrality at its European operations by 2050 (scope 1+2).** Although Aperam stands as the best player in terms of environmental impact, with a record low CO<sub>2</sub> footprint, in particular, we have to continue improving on all fields, CO<sub>2</sub> and Energy, but also Water and Waste to name a few, in order to meet the challenges of Climate change. This will request heavy investments and long-term vision from both companies and countries too, in order to adapt their infrastructure and especially their energy sources. Regulations will also be needed to ensure a level playing field between competitors.

Achieving our long-term vision demands continued improvement. It also requires an efficient and fully aligned organisation, an objective we made significant headway on in 2019.

> **Our appointment of a Head of Environment & Industrial Risks in 2018 was the first step in building our new internal organisation.**

Since then, we reinforced the organisation with additional resources, to enhance the capability to work on reporting and data management while dedicating 2 FTE to pursue, in a stand alone process, the industrial risk assessment of our main manufacturing plants. Indeed, a specific central framework is being set up to address industrial risks, together with climate-related risks (see p.40).

> The team is also working on our CO<sub>2</sub> roadmap, together with the Chief Technical Officer cabinet, Research & Development department, and a group of talent from various backgrounds that we set up in 2019 to bring in fresh ideas.

### New company alignment

> **In 2019, the new team strengthened existing routines** by arranging the convergence of the Health & Safety and Environment reporting schemes. This alignment ensures greater efficiency and focus on what has long been - and continues to be - the company's primary and undisputed priority. H&S benefits from a very strict discipline, a characteristic that we hope it will diffuse to the Environment topics. We implemented monthly reporting to report not only figures but also incidents. This is to be done in the same spirit as we do for Safety, with a specific focus on "near-miss" or minor events that could pass unnoticed as they did not create problems but which could have generated important disturbances, counter performances or even pollution.

> **A study to select a ready-made reporting system** is close to conclusion, and its adoption in 2020 should increase the scrutiny and granularity of the information shared by the units without overloading them with additional reporting.

> Last but not least, our company-wide objectives have been split into site-specific objectives. All of these have been integrated into the pre-agreed quantified individual annual objectives, called "**the organisational goals**", against which the yearly performance of each employee is assessed. Therefore, not meeting these objectives impacts the overall performance rating, which is then reflected on the "multiplier" applicable to the variable pay component: the "on-target" bonus (see Annual Report 2019, p.85). This should efficiently incentivise all our managers.



## Industrial Footprint

### Energy and CO<sub>2</sub>

#### Carbon footprint

##### Performance

With its furnaces reaching temperatures over 1600°C to melt raw materials extracted by heavy installations in operation around the globe, the steel sector is one of the world's biggest energy consumers. As such, the industry also produces a lot of CO<sub>2</sub> emissions. That's why we are particularly proud that Aperam's CO<sub>2</sub> footprint ranks among the best in our sector - the result of three main levers:

1. our European electric arc furnaces are fed with scrap metal instead of raw materials;
2. our low energy consumption and low-carbon energy mix, which impact our Scope 2 carbon emissions (see below and p.28); and
3. our Brazilian blast furnaces use charcoal instead of extractive mineral coke, which reduces our Scope 1 emissions.

> Although the standard steel-making process demands that carbon be added during the melting process, since 2009 Aperam has invested heavily to adjust its blast furnaces and processes to replace coke with carbonised (eucalyptus) trees. A second phase of investments was necessary in 2017-18 to stabilize the hearth, which had a tendency to disaggregate due to the specifics of wood charcoal chunks. Thanks to these efforts, our Brazilian operations have seen its CO<sub>2</sub> footprint decrease from 1.05 tons of slabs in 2008 to 0.40 in 2019.

> At the group level, our 2019 (scope 1+2) CO<sub>2</sub> footprint now stands at 961 kilo-tonnes (680 +281 kt), or 0.484\* t/tons of slabs<sup>3</sup>, in line with last year's performance. Representing a 35.2% decrease from 2007 and in line with our -35% 2020 objectives, this **gives us the right to claim ourselves as being as "the stainless steel producer with the lowest CO<sub>2</sub> footprint in the world"**.- GRI 305-2, 305-4, 305-5

> This reporting takes into account a few changes since last year that have a material impact. The first change is in regards to the emission factors for the electricity by country, which have been updated. Since 2012, we were using the IEA factors released in the year for all our countries. For this report, we decided to update the value to be consistent with the local reporting from our sites and use the values disclosed by the competent local authority. As a result, we are presenting figures using recent emission factors from the European Energy Agency and Brazilian Ministry that were published in 2018 and 2020 respectively.



As can be seen from the table on the next page, this update is favorable to Europe - it actually compensates for a relative increase in the intensity of our electricity consumption - but detrimental to Brazil. However, it does not offset other improvements.

> We also continue to monitor some of our Scope 3 emissions, primarily those related to our transport and IT activities. In 2019, our Scope 3 footprint related to transport and IT, as we report to the CDP, was at 512kt of CO<sub>2</sub>e and 10,1 kt of CO<sub>2</sub>e respectively. The Scope 3 footprint related to material is also a crucial point where **scrap-based producers like us can demonstrate a four- to five-fold better carbon footprint compared to industrialists who operate based on energy-intensive extractive pig-iron.**<sup>4</sup>

#### Electricity emission factor

(kgCO<sub>2</sub>e/MWh)

Country	Applied to 2012-18 footprint	Source (year of release)	Applied to 2019 footprint	Source (year of release)
Belgium	211	IEA (2013)	200	EEA (2018)
Brazil	71	IEA (2013)	80.6	MCTIC (2020)
France	73	IEA (2013)	53	EEA (2018)

IEA: International Energy Agency ; EEA: European Energy Agency ; MCTIC: Federal Brazilian minister of Science, Technologie, Innovation and Communication.

CO<sub>2</sub>

**35% intensity drop in 2019 vs 2007**

...giving us ... the

**best CO<sub>2</sub> footprint in our industry**

#### Impact of European Carbon markets

All over the world, a growing number of jurisdictions are setting up incentives to encourage companies to cut their CO<sub>2</sub> emissions. Currently, only our European operations (which represent 67% of our Scope 1 emissions) were subject to such rules in the form of fixed CO<sub>2</sub> emission allowances (or quotas), and there is no certainty that a comparable system will be established in Brazil in the near future. Based on current assumptions and ETS rules, we do not anticipate an overall shortage of free allowances before the mid-2020s.

However, to support the transition to a low carbon economy, Aperam is among the few companies in our industry to have implemented an internal price for CO<sub>2</sub> (based on scope 1+2 emissions). This internal price has been applied to all planned investments since 2016, meaning our profit calculations include the financial impact of our carbon footprint. Originally, that price was set at \$15/ton, but in the context of increasing prices, it was scaled up to €30/ton in 2018.

<sup>3</sup> ISSF 2015 average footprint 0.92tCO<sub>2</sub>e/tcs (latest information available)

<sup>4</sup> Aperam estimates & calculation, ISSF data, CRU.



Looking ahead from the roof of Aperam Châtelet.

### 2030 and 2050 targets

Our position as the industry leader in terms of CO<sub>2</sub> footprint is one we intend to keep. That's why we released a preliminary 2030 target of -15% reduction in CO<sub>2</sub> intensity versus 2015. Our ambition to be carbon neutral in 2050 will require us to revise this medium-term target upward and we are striving to define a solid action plan for doing so.

> Until we find viable technological breakthroughs capable of substantially changing the carbon intensity of our industry, our focus remains primarily on maintaining our 100% charcoal usage at Timóteo. We also remained focused on further increasing our high rate of scrap usage everywhere (see p.38) and reducing our energy consumption (see next section). The impact of public policies that require a transition to cleaner energy modes will further improve our emissions performance. Our current roadmap, which is being enriched and complemented, currently relies on energy efficiency and recovery (see next chapter), but this could be supplemented with CO<sub>2</sub> mitigation strategies.

### Forests and Carbon off-set

We have not yet studied carbon offset via CO<sub>2</sub> sequestration in depth (beyond what our forestry naturally does). Our official carbon footprint reported to the CDP is calculated according to the standard enacted by ISO 14404 and supported by our professional organisation (WorldSteel), under the assumption that the charcoal full life-cycle analysis, from forestry to consumption in a furnace, is carbon neutral.

However, when our calculations take into account studies that consider the exact carbon retention of eucalyptus and the specific CO<sub>2</sub> emission of charcoal, we actually improve by at least 10% the carbon footprint of the steel products we make in Brazil. Furthermore, we must consider that, with our well-managed forests, we stock four times more CO<sub>2</sub> than what we usually emit annually company-wide.

This is another example of how we participate in the fight against climate change, even if it is not reflected in our figures.

## Energy

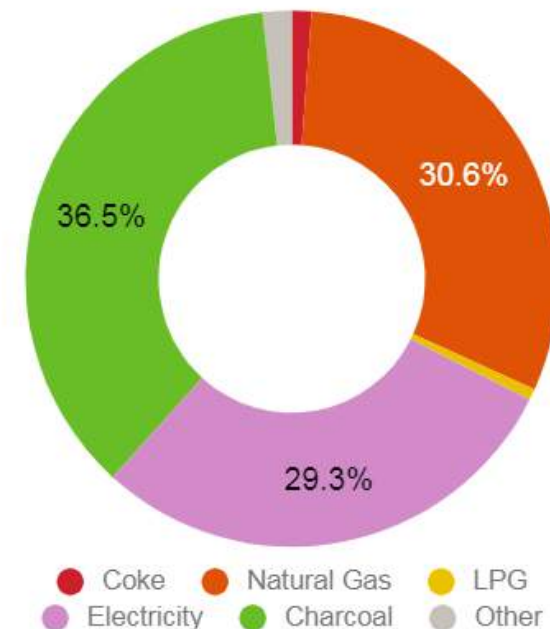
### Our 2019 mix and overall performance

Despite our ongoing projects (see below), in 2019 we saw a clear decrease in our consumption in terms of absolute value. This reflects the very difficult economic context and low utilisation rate of our industrial tools. As a result, our 2019 energy intensity has deteriorated, at 13.3\*GJ/ton of crude steel, with an increase compared to last year in Europe (+2%, much lower than the decrease in production) and in Brazil (+1%). This figure means that we have regressed, with a low -2% decrease compared to our objectives of -10% in 2020 (vs. 2012) - far from the last year's performance of -8.2% and even an increase of +4% compared to 2015 (the baseline for our 2030 objective of -15%). In other words, although we were well on track last year, 2019 saw us fall several steps back - something we hope to make up for as soon as our plants can operate at full speed (GRI 302-3, 302-4).

That being said, our energy mix remains a subject of pride, with 36% of our energy mix coming from charcoal biomass (see below, compared to 32% last year - not taking into account the fact that more than 36% of our electricity is generated from renewable sources). But even with this success, we refuse to stand still and thus remain committed to pursuing other renewable energy sources.

### Aperam 2019 energy split (%)

GRI-302-3



Descaling operations in process at a Rolling Mill.



## Energy

**36% Renewable energy**

**2019 performance  
impacted by low  
production  
-8% vs. 2018**

### Mix effect

Our energy intensity depends not only on our efforts to optimise consumption, but also on the metallurgical blend we produce. This is because not all metals melt at the same temperature. Furthermore, when we “sophisticate” our products during downstreams operations, such as when we give them a bright surface finish or transform them into wires or tiny precision strips, we use more energy than for semi-products. However, the volume of initial crude steel remains unchanged, which impacts ratios.

This means that our strategy to create more value-added products may have a negative impact on our energy intensity ratio, requiring more effort on our part to continue to improve our energy efficiency.

■■■ After installing windmills and photovoltaic panels in Genk (2017) and Châtelet (2018) respectively, we are happy to report that our Isbergues site has decided to shift to more renewable energy sources too. The plan is to install a 250kWp production unit based on 660 panels. These panels will be oriented to the south and have a 30% inclination on the floor, covering for the first time in France a surface of 3800m<sup>2</sup> that cannot be used for any human activity as part of the site's regulatory Prevention Plan for Technological Risk. We expect production to commence in Q2 2020 and envisage a quadrupling of the surface space, allowing us to produce 1GWh of clean energy every year. More news to come in our next report!

■■■ When designing our new steel service center in Haan (Germany), we had the opportunity to use geothermal energy to heat the offices. To do this, 25 vertical pits of 100 metres each were drilled to catch underground heat, which is then sent to the individual offices via a closed circuit of water. During the summer, the heat in the offices will be captured and dispatched underground, thereby avoiding the need for additional air-conditioning measures.

## Our overall approach and workstreams

Steelmakers may be big consumers of energy, but Aperam is continuously striving to improve its energy efficiency.

In 2019, we started to map the energy impact of our processes in more detail. The insights we gain from doing this will be used to develop coherent and future-proof technical concepts (e.g. in the field of waste energy valorisation). This work will serve as the basis for a mid- and long-term roadmap for decarbonisation, in line with our 2030/2050 objectives. It will also help us identify new priorities and set-up projects in the following three main areas:

> **Regarding general process optimisation**, we have several active programmes in place. For example, in Europe, we are rolling out strong management systems, often through ISO 50001 certification, while in Brazil this is done with the help of the Viridis System. Our teams are also developing high performance motors and VSD (Varying Speed Drive). VSD allows us to run motors at the exact power level needed for the planned production load (as opposed to traditional systems where motors run all the time at nominal power).

In spite of the adverse economic conditions and poor utilisation rate of our tools, these programmes continued in 2019, together with the projects aimed at enhancing the reliability of our equipment. However, unplanned stoppages, as well as the month-end shut-down to account for low activity, de-optimised our routines and generated heat losses. This in turn demanded the use of warm-up energy during restart, thus resulting in a much higher consumption than during a normal run. This explains our poor results in intensity for 2019. VSD, on the other hand, has already helped us adapt our consumption to our reduced production volumes. For example, Timóteo's dedusting systems at EAF and Charcoal Yard and the RB3 furnace that started operation in 2018-2019, each of which now use VSD, were responsible for 47,308 GJ savings in 2019, representing 64,251 GJ in a full year.

■■■ Timóteo's Waste Fighting project is a typical example of general process optimisation. Not only does it aim to identify and block energy losses, more importantly, it aims to change people's mindset to not allow losses. As a result of this initiative, Aperam Timóteo avoided 14,198 GJ of losses in 2019 (full year 33,653 GJ losses). The project continues in 2020, with the aim of being rolled out to all the site's shops. In parallel to this rollout, tools and controls are being improved to quickly detect and alert losses and thus better support those working to block them. In addition to the installation of more VSDs, other local optimisation projects will produce substantial savings.

To go further on the field of optimisation, in 2018, our Brazilian unit joined the Alliance Programme, a voluntary partnership between the Brazilian industrial



sector, CNI (Brazilian National Confederation of Industries) and government agencies.

It aims to promote energy efficiency in energy-intensive industries like ours. The programme's costs are shared between Aperam and CNI, using subsidies from a governmental agency (Procel, Eletrobrás, Ministry of Mines and Energy). In 2019, this programme's projects resulted in 17,565 GJ in benefits, including an improvement to the combustion control on the RB1 annealing furnace and EAF door burners. The programme remains ongoing and is expected to bring at least 29,235 GJ in benefits in 2020, thanks to a range of optimisation projects, including: a better modelling of the EAF's thermal balance, combustion and control improvements on the HRM furnace, reducing excess air on the RB1 annealing furnace, and increasing productivity in RC2 (GO box annealing furnaces).

*Views from the hot-rolling at our Timóteo unit.*



> **In terms of specific energy optimisation**, we like to recall that our Timóteo site re-uses around 90% of its blast furnace gas as a substitute for natural gas to fuel the melt shop's ladle heating process. The project, which concluded in 2016, was awarded for its efficiency and innovation. However, because other Aperam sites don't have blast furnaces, the project cannot be replicated. Instead, other units must focus on recovering energy from the fatal energy generated along the different steps of our process.

■■■ A good example of this can be seen at our Pont-de-Roide unit (France), which specialises in precision strips. In 2019, the 230-employees plant decided to work on the calories lost in the cooling tower recovery installation. This was done in liaison with a sub-contractor specialised in "green projects". The idea was to inject these "lost" calories into a heat-pump to reinforce our workshop's heating system. We expect to save 1.500 MWh of natural gas a year, ie. 5% of the site's annual consumption. The system will start operating in early 2020.

#### > **New technologies**

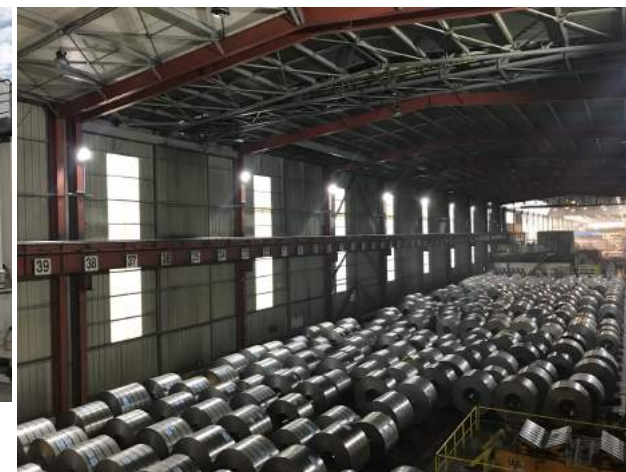
- Industry 4.0 can also help optimise the operation of the electric arc furnace, like at our Châtelet Meltingshop. Installed in just two-weeks time in 2019, what we call the SmartArc system allows faster reactions in case of problems while reducing breakage hazards. An additional benefit of the project is a reduction in electrode consumption -and subsequently, the CO<sub>2</sub> footprint- and that of the refractory. After a two-month pilot phase, we already confirmed the significant improvements brought by this innovative system.

We will continue to explore more opportunities, starting with the management of burners and slag and, later, perhaps an analysis of data linking past heat and the related production mix.

- Although less "high-tech", replacing old lighting technologies with LED lighting can result in a 50 to 60% savings in electricity consumption, in addition to other benefits such as enhanced working conditions and reduced maintenance. This switch is being rolled out across a number of sites, each at their own pace. Overall, we believe we can achieve a 1.5% saving in electricity with this project.



*Fatal energy re-use at our Pont-de-Roide unit (heat pumps).*



*New LED-lighted hall at our Gueugnon unit.*

## Voices



*“Aperam Châtelet, we started tackling the CO<sub>2</sub> & energy challenges years ago by strongly pushing for operational efficiency and making a start with photovoltaic panels in 2019. With the company objectives cascaded to the plant level, this has been even more concrete and will help ensure that our efforts are maintained on the long run.”*

**Carlo Morettin**

Aperam's Châtelet Plant Manager

Châtelet melting shop in action



## Châtelet Boost-Up Energy Challenge hunting for energy savings

Launched in March 2019 as a way of gathering ideas to reduce energy consumption and, ultimately, the energy bill, the Châtelet (Belgium) contest had employees share all their ideas, from the stimulation of behavioural changes to technical investments, via a simple form. At the end of the year, the local project unveiled 86 proposals, for a potential annual savings of half a million euros. A monthly committee examined all the submitted ideas, with a focus on those that could be implemented via behavioural adjustments and technical investments. The entire organisation was invited to contribute - not just the engineers!



Amongst the solutions collected, two proposed by our employees dealt with the compressed air. One idea introduced the use of portable sound cameras for a more efficient detection of leakages (see picture). The other one, which was implemented within one week, tackled the optimisation of the reel station. Since not all coils have the same thickness, keeping a fixed 3.5

bars pressure for the reeling of each single coil resulted in a loss of energy. Now the pressure of the air tank is modulated to the effort that is really necessary, keeping the nominal pressure only for the coils over seven millimeters-wide. As a result, 14% of the production can be coiled with less compressed air, saving over 100,000 cubic metres of compressed air and related energy. Another simple suggestion focused on avoiding heat losses. One way to do this is by having austenitics use the incubators normally reserved for ferritics when they are idle, thus keeping them hot. Another way to pile up the hot slabs to reduce heat loss and minimise the reheating time in the HRM furnaces. While adding manipulations and logistics, this idea saves 250,000 cubic metres of natural gas.

The Challenge is still ongoing and, combined with our regular communication initiatives, continues to spur motivation.

## Dust and Air Emissions

### Solidifying our improvements in dust emissions

> **Thanks to all these actions, our reductions in dust emissions continue to decrease.** In 2019, the total group consolidated emissions using regulatory methodologies ie in normal conditions of operations, indicate a -65% reduction over 2015, with 166\* tons emitted (ducted and partially diffused), compared to 203\* in 2018 and 343\* tons in 2017. This total volume corresponds to an 84 g/t cs dust emission intensity, a 5% reduction since last year (GRI 305-7). This figure confirms the results brought by our multi-year, company-wide programme, primarily focused on implementing in Timóteo and Imphy the good practices from our Belgian plants, and harnessing energies everywhere with company and site-specific targets.

> Another subject of satisfaction lies in the fact that all our additional analyses, using stress-test simulations (taking into account the dust volumes emitted when dedusting installations were dysfunctioning) and real-time measures (when available), show a greater reliability of the systems and much less variability in their efficiency. For instance, the dust emissions from Timóteo taking into account all measures made, even in times of dysfunctioning and before the reactive maintenance, amount to 259 tons, compared to 330 last year in Brazil. This also means that the average emissions of the plant in 2019, all chimneys and measures taken into account, did not exceed 20% of the total authorized volume limit.

> To homogenize our follow-ups and reach operational excellence, we aim to apply this “exhaustive” methodology to all our plants, but not all are already equipped with a real-time measurement, and even those that have it on some chimneys may have only the opacimeters and miss the measure of the flows. A first approximation of the volumes emitted would give us 292 tons and a 147 g/t intensity, much better than the 240 g/t that we recalculated for 2015 (with the same methodology) and already below our 211 g/t 2020 objective.

> We will not stop our efforts and will continue our roadmap which entails :

- complete the coverage of our dedusting equipment and containment measures so that no material diffuse dust can spread outside of our plants (workshops, slag yards, etc.), this while maintaining our performance in intensity of dust sent to the air,
- generalise the use of continuous measurement and couple the opacimeters with alerting systems that warn the teams when the performance is deteriorating, and even the management, when the measure reaches 70% of the legal limit to avoid non-compliance, even in times of dysfunctioning.

> In Europe, we also exhaustively monitor NOx and SOx to ensure full compliance with local permits and national regulations.



### NOx/SOx emissions (Europe, tons)

tons	2019	2018	2017	2016	2015
SOx	37	85	48	55	83
NOx	770	1033	910	783	917

### Continuous improvement in Châtelet

Several years into an action plan to allow the Châtelet site to cover some operations previously run in the open air and use water spread to contain fugitive emissions, our Walloon site decided to use the excavated soil from the construction of a new truck parking area to build a 6.5-meter high embankment at the slag yard.

As a result, in 2019, 3,500 m<sup>3</sup> of soil was built up as a 45-meter long barrier to prevent dust from flying and spreading over the neighbouring SNCB buildings. The aim was to foster a “chimney effect” that causes the dust to first rise up and then fall within our site’s boundaries. The efficiency of the setting will be further enhanced in 2020 with the planting of evergreens of various sizes, which will stabilise the bank and raise it further while also improving both noise containment and aesthetics.

## Water

Although much less water-intensive than mining companies (both in terms of intake quantity and quality of disposal), metallurgy plants have always withdrawn water from near-by waterways to cool down their equipment.

Over the last decade, concerns have been raised regarding water availability (see below for more information on our water sources) and the quality of water sent back into the rivers by local stakeholders as well as global analysts (see World Economic Forum Risk Analysis). We modeled along this trend with a 5% target reduction in water consumption by 2020 decided in 2015 and compared with this baseline. We now have to admit that we failed to spur sufficient energies and resources to tackle this challenge and that few local cohesive action plans were built in. Starting 2018 and very clearly in 2019, during the particularly dry periods of the summer, our sites have experienced that consumption reduction will simply be a necessity and the action plans have really muscled up, but the low loading rate that we experienced during the same period has impacted our consumption and this new trend is not reflected yet in our 2019 figures.

### Water Consumption

After continuous decreases in consumption between 2012 and 2015, and a stabilization since then, our 2019 performance looks disappointing, with stagnating water recycling ratio (95.3% vs. 95.7% in average since 2015), 23 millions of cubic meters withdrawn from various sources (for the split, see the graph aside), which corresponds to a +18% increase in the intakes in intensity.

In addition to the heavy impact linked to reduced production volumes, which des-optimize our processes, our 2019 results have been slightly impacted by a change of methodology. Indeed, to be able to compare our sites and challenge them in their optimization of water consumption, we have decided to integrate the volumes of rain that falls upon our roofs, independently from the fact that they channel and use that water or not. It is more logical because these waters are counted at the exit, since they are going to the discharge points via the gutters, but it is also a way to entice units to leverage these volumes, storing them and/or reducing proportionally the volumes withdrawn from the near-by waterways.

Overall, compared to our 2015 baseline, our consumption has increased by 15% in 2019, of which 3% are linked to this rainwater adjustment, which is not satisfactory as we aim to reduce our consumption by 40% by 2030.

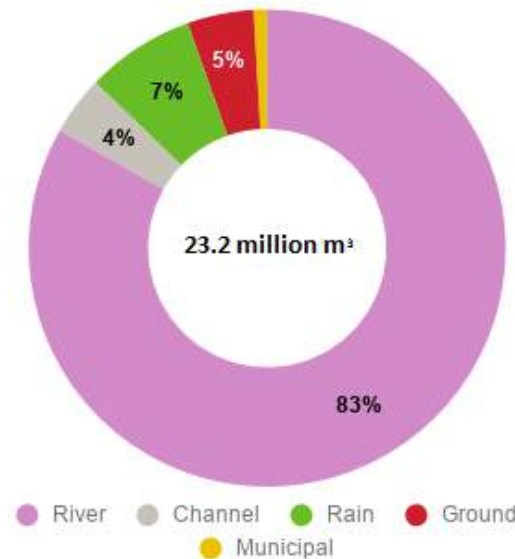
> Some of our sites are improving, such as Imphy : the unit discontinued the use of an old equipment that operated with an open circuit in late 2018 and improved its performance by 20% compared to the average 2015-2018 consumption, reaching a 96% recycling rate in 2019. If all sites can improve (Pont-de-Roide and Isbergues LC2I, for instance), most of the group performance is linked to our

Timóteo plant which accounts for more than 70% of our total consumption and reports a 4% increase in absolute value from 2018 to 2019 (incl. rainwater adjustments). Inside the plant, measures by tool are not available yet so the follow-up is still deficient and only the major leakages can be identified..

The management of Timóteo plant, the biggest within the Aperam Group, is aware of the issue and designed a very material action plan to address it. The project should reduce the site's water intake by 40% by 2023, compared to 2018 but some technical issues had to be solved in 2019 before the kick-off so we knew that the performance would not improve immediately. Adding the lower production volumes to the equation explains this year's counter performance in Timóteo but we remain confident about the future.

> As a matter of fact, it is our intention to apply to the topic of Water the same methodology that we successfully used for Dust emissions. We have to build multi-year roadmaps, like Timóteo did, including detailed measures, with real-time follow-ups in some occasions, regular maintenance and some significant investments to close the remaining open circuits and/leverage rainwater where it makes sense (sufficient continuous roof surface, inclination, etc.). Some of our units have gained in awareness with recent extreme climate events and visualise both the impact of poorly drained water as those of severe droughts.

**2019 water intake by source**  
(m<sup>3</sup> and %) GRI 303-3



**Water**  
**Improvement projects to start in 2020**

**-44% target**  
**2030 Consumption intensity vs. 2015**



■■■ For the past several years, the Saône-et-Loire region of France, where our Gueugnon site is located, experiences extensive droughts. In fact, the Arroux River, the source of the Gueugnon plant's water, now runs dry most summers. In response, authorities have implemented restrictions on water use – restrictions that do not only apply to swimming pools - also to farming and industry. Such restrictions happened again during the summer 2019, starting as early as mid-July and lasting until the end of October, garnering much local publicity by local media.

To comply with these restrictions, which also aim to protect the aquatic ecosystem, the Gueugnon site is taking significant steps to become more water efficient. For example, the site has implemented strict water monitoring actions, under the supervision of a dedicated steering and monitoring committee. For some of the site's key installations, such as the fire prevention equipment, the monitoring has predefined alert thresholds. By monitoring water levels at different locations around the site, engineers can adapt the operation of specific production tools accordingly and avoid a full stoppage of the plant. During peak drought times, the site has even gone so far as to shut down its most water-intensive processes using a well-orchestrated rotation.

The site also regularly communicates with employees and subcontractors to raise awareness about the importance of water conservation. There is also an ongoing effort to identify and immediately treat leaks within the industrial water network. As a result of these initiatives, the Gueugnon site has reduced its water use by an average of 5% per year – with 2019 seeing a remarkable 14% decrease. The site now pumps just 1/5 of the amount of water it did 12 years ago.

## Water Quality

We started to report publicly about water quality in 2016, to show that we treat our effluents and monitor our discharge into the rivers in line with our permits in terms of volumes, pH, temperature, particles of suspended solids and metals in water. Overall, our indicators deteriorated versus 2018, although they remained in line with our authorization, mainly due to our specific issues that happened at our Timóteo plant last year (they discharged 95% of the Group volumes of suspended solids into water in 2019). On their side, Aperam's Belgium and French sites have improved regularly over the last three to five years: as of 2019, they reduced the total volumes of suspended solids into the water by respectively 88% and 73% compared to 2015.

Additionally, a standard was elaborated on waste water management in order to align all the organization on Aperam's requirements and commitment to improve the quality of its waste water rejects.

■■■ With the aim of reducing the amount of chromium discharged into the water stream, in 2019 the Gueugnon site implemented a risk mapping initiative. Working with a range of stakeholders, including subcontractors involved in water treatment at the site, the Department of Health and Safety, and various laboratories and

engineering consultants, the site conducted an in-depth analysis of the discharge networks. Based on these findings, the site implemented a thorough strategy for detecting, preventing and eradicating Cr6 discharge, with a particular focus at the Final Annealing department.



Views from discharge point 5 at our Gueugnon site.

As a result of this collaborative effort and the significant internal communications behind it, the Gueugnon site saw a substantial reduction in the amount of Cr6 discharge far below regulatory requirements (20g per day) as the maximum reached during the year was 6g per day. As a result, the overall total amount of chromium discharged into the river was reduced by 40% (compared to 2015-2018 average volume).

■■■ As a follow-up to the two incidents that occurred at Châtelet in 2017 and 2018, our local teams started studying new methods for improving the quality of water discharged into the canal, which is often fished by local communities. One way to do this is by using a continuously whirling hose to trap the surface oil from the decantation basins. Another approach under analysis would introduce a chemical product to coagulate the particulate matters into a mud trifle so that they can be more easily recuperated and sent to Recyco for further recycling. Some of these projects should be launched in 2020.

■■■ Planting during the wet season is a key to BioEnergia's sustainable silviculture activities. Over the past several years, we have stopped all planting during the dry season. In 2020, we aim to take this one step further by doing our planting only during rainy days, thus eliminating the use of water from the springs. To succeed, good planning is essential, such as preparing the area and subsoil in advance of the days when high rainfall is expected. It also requires a good synergy between different departments to ensure the necessary labour is available when needed. By planting only on rainy days, we benefit from economic, environmental and social gains. To obtain the water required for the other steps of our charcoal production process, several dams were built in our area to capture rainwater. 100% of the water used in our production now comes from these reservoirs. Also, to mobilise communities, the Company created the "Água Nossa de Cada Dia" programme. It aims to raise awareness about the importance and value of preserving the areas that the water courses run through, in addition to stimulating the maintenance and increase of the volume of this resource by defining everyone's responsibilities.



*Above: Dam for rainwater capture.  
Left: Overview of our forestry in the Jequitinhonha Valley.*

■■■ In 2019, Aperam BioEnergia received the Good Environmental Practices award from the State System for the Environment and Water Resources. In particular, the award, which is already in its third edition, recognised the Company's "Recovery of areas with increased organic waste" project. By adding new plantings to the focus areas, the project aims to recover soil and make better use of the organic residues, such as wood bark, that are not used in the charcoal production process. Since 2006, 200 hectares and 77 degraded areas have been recovered.



*Above: BioEnergia's HSE Manager and Environmental Engineer receiving the award.  
Right: Handling the seedling at our BioEnergia operations.*

## Eucalyptus and water

Like all vegetation, eucalyptus requires water and nutrients to grow and survive. However, the forests at our charcoal producing unit in Brazil (BioEnergia) are grown using carefully selected cloned saplings. Comprised of a variety of eucalyptus species, these saplings require less water and nutrients and are thus particularly well suited to the unique environmental conditions of Vale do Jequitinhonha. Specially, the use of cloned eucalyptus trees is the best choice for us because:

- The selection process deprives them of the so-called pivoting roots that grow deep underground to reach water tables. Instead, our forests rely on superficial layers of water for a fully sustainable use of local resources that does not deplete deep reserves.
- Our trees are more biologically efficient than other agricultural cultivations, producing more mass from less resources. For example, it takes 2,000 L of water to produce 1 kg of potatoes, but only 350 L to produce the same mass of eucalyptus wood.
- They produce more timber from less resources. For example, it requires 1,000 L of water to get 400 g of cerrado wood, whereas that same amount of water will result in almost 2.9 kg of eucalypt wood.
- Whereas 1.7m<sup>3</sup> of water is needed to produce one ton of coke, only 0.6m<sup>3</sup> of water is needed per ton of eucalyptus-based charcoal (not counting rainwater falling in the forest).



## Waste & Recycling



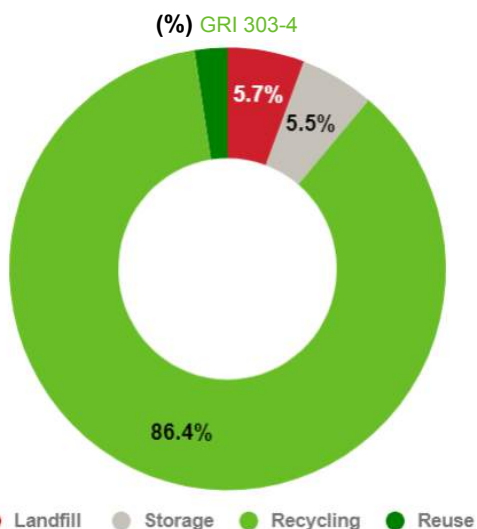
We see ourselves as a recycling champion. For example, our Recyco unit recovers the metallic content from the melting shop dust. We also produce metals that are endlessly reusable and we use a large amount of recycled materials in our production process. We are even re-using the tools from our former Isbergues melting shop, which were left idle after its closure in 2006.

As we aim to become a zero-waste (for landfill) company, we go above and beyond what is simply required. For example, on top of the standard actions that all companies take to sort normal waste (bottles, cans, etc. See the numerous recycling bins at our Ribeirão Pires site below, where even kitchen oil is stored and collected once a year!), we embrace metallurgy as a recycling channel and the recycling of by-products - the two key aspects of our responsibility on this matter.



*Left: As part of the 5-minute meetings held before any new shift at our Ribeirão Pires site, the importance of recycling for our environment and the types of materials that are recyclable (and in which bin!) are tackled too.*

### 2019 Residues split



**2019 Residues**

**<6% landfilled**

**8% Hazardous**  
of which

**68% re-used or recycled**

## Metallurgy as a recycling channel

In 2019, 24% of all our material (consumables, etc., total input of 5.5 million tons) came from recycled sources (GRI 301-2). In terms of metal input, some of our products contain over 80% metallic scrap. This is especially true for the stainless steel melt at our Genk and Châtelet sites, with our average Genk austenitics reaching over 89% in 2019.

It is important to note that using scrap raises a number of concerns, and Aperam is committed to addressing them responsibly. For instance, scrap is made from a mixture of elements from various sources, meaning traceability is often difficult. This triggers problems related to transparency, Health & Safety and Ethics, some of which are being tackled by our raw material suppliers. On our side, we need to be cautious that radioactive content can be mixed with the “normal” material coming from the dismantlement of, for example, white goods or cars.

Within the framework of its environment policy and waste recovery project, the Châtelet unit continues to participate in the annual "Cleaner Wallonia" Days (see last year's report and below pictures) and to collect and recycle cans at the melting shop. Last year, the team also strengthened the equipment used to detect and analyse samples of scrap (and slag) for radioactivity. This allows the site to better address the risks pertaining to these materials while continuing to maximise the rate of recycled scrap in our production.



In a different field, in early 2019 the site filed a formal request to extend the scope of its local permit to allow the use of scrap tyres in its Electric Arc Furnace instead of coke or coal. The request was based on testing by an external laboratory. After some concerns from neighbours regarding possible smells or air pollution, the authorities requested additional information. Following sufficient guarantees being made by the plant regarding storing and processing the tyres, authorisation was finally granted in September. Production will start in the first quarter of 2020. Not only is the project an excellent example of a circular economy, it is also Wallonia's first - and only - local option for recovering used car tyres.

## Recycling of metallurgy by-products

In 2019, our production of waste decreased by 17% vs. 2018, due to the steep decrease of our activity, with less than 6% of our by-products being sent to the landfill, the remainder being reused, recycled or stored for future recycling (see graph on previous page). Our recycling ratio stands at 94.3% +0.8 pts compared to the 2015-2018 average. [GRI 303-4](#).

> 8% of our wastes are classified as hazardous. While 68% of those are already recycled or re-used, some of our by-products, such as acids or specific treatment mud, are in wait for viable technical solutions. Engineers, R&D and a few external partners are studying the technical solutions to neutralize such delicate wastes and we hope that market opportunities will emerge with buyers ready to purchase them as a production input.

All regulations promoting the circular economy should also find a way to incentivize the use of such recycled material instead of primary materials.

*Optimizing every step of the process.*



### Our Waste-to-Value Recyco Unit



Since its opening in 2009, our Recyco subsidiary has given Aperam a true competitive advantage. The unit is fully dedicated to the valorisation of most of the wastes generated by our melt shop (dust, around 55 kt per year), hot strip mill (scales) and cold mills (pickling sludges, shot blasting dusts).

Up to now, Recyco's environmental licence was limited to only a few waste codes from the European Waste Catalogue (EWC) related to the steel industry, the casting of ferrous/non-ferrous pieces and subsequent mechanical treatments. The Nickel content from these wastes being rather low, the ferroalloys produced by the Recyco process were limited to 4-5%.

In 2017, a new business model was developed to increase Nickel production using Ni-containing waste from industries outside Aperam (eg. spent catalysts from petroleum industries) or from recycling batteries and a new licence was requested from the French environmental authorities. The team seized the opportunity to also increase the storage capacity and maximise the range of the waste covered by the current licence.

Early in 2019, the new licence was finally approved, allowing Recyco to treat waste from 10 more EWC codes. Thousands of tons of new wastes from outside Aperam have been recycled since and Recyco 2019 production reached more than 62 kt, with a significantly higher Nickel content. Our Recyco unit is now well known as an efficient waste-to-value service provider in our Industry.



## Other Initiatives

### Industrial Risk

In previous reports, we discussed the frequent exercises and simulations we run at our sites. Since the incidents that occurred at Châtelet and the subsequent start of a company-wide programme in 2018, in 2019 we implemented a stand-alone task force charged with accelerating the assessment of our various plants and operations.

#### A strong process to preempt risks

> Thanks to this Industrial Risk Assessment of our operations, we have identified the highest risks and dedicated the resources and means to mitigate them. Nevertheless, the plants continue to work on all risk scenarios (more than 5,000 so far), with progress being tracked on a monthly dashboard to ensure continuous improvement.

> Also in 2019, we decided to integrate our climate change risk assessment with this existing framework, leveraging the fact that it has already been discussed with the sites and aligned with such internal methodologies as Aperam's Risk Management approach led by our Internal Audit/Combined Assurance Department.

A working group was set up to define a climate change risk management methodology, which we will roll out in 2020 as a pilot at Timóteo and at least one of our Belgian plants. The methodology aims to organise a bottom-up assessment with respect to all risks pertaining to the industrial facilities. This site-specific assessment will be completed by a central approach to the risks related to social stability, market evolutions on the demand and supply side, and other general topics such as energy, taxes and regulations to cover the impacts of all types and scope.

This Industrial Risk assessment will request that sites envisage the risks posed by such scenarios as floods, droughts, extreme temperatures and fires of unprecedented magnitude or frequency. They will also be asked to identify the possible impacts of these scenarios. This exercise will identify possible mitigation measures that will then be included in an already existing action plan for addressing short-term industrial risks.

■■■ Speaking about extreme weather events, in August 2019, our S&S Italian site in Massalengo was hit by a hurricane. Fortunately, it happened during the summer closure period and no-one was harmed. Although part of the roof collapsed and many buildings were partially destroyed, the site managed to restart production two weeks after, by the end of normal closure period, thanks to the Aperam employees and loyal suppliers who came back from their summer holidays to quickly address the main issues. To continue operations during the repairs, which

started in October, the Massalengo team took steps to ensure the entire area remained secure. This included and to ensure the temporarily covering both the offices and the damaged industrial roofs to protect the machinery and materials inside. Aperam Italy finally completed renovating the roofs in early January 2020. Thanks to an impressive teamwork to effectively document in detail the damage caused to the plant by force majeure, the insurance carrier has agreed to provide a full refund.

This experience gives us some flavour of what could become more common in a few decades and provides a great learning opportunity for the entire organisation.



*Exercises at Aperam plants with teams dealing with chemical hazards and fires.*

#### Regular simulation exercises

We know that this subject is of particular concern to the general public, with catastrophic events happening in Brumadinho and Mariana, in Brazil and Rouen, in France, all receiving extensive media coverage and all highlighting a real unpreparedness.

We are in continuous contact with the key civil security actors at all our main sites. Along with fire brigades and local authorities, we regularly organise emergency drills at our main plants in line with our risk assessment, permits and local regulations.

■■■ In December of last year, the Gueugnon site ran a full-scale security drill ("POI" exercise). The exercise involved a fire at the TS06 mill, which injured several and threatened to inflame a nearby tank of hydrofluoric acid. As the drill was not previously announced, when the alarm went off at 8:17 am, employees and stakeholders jumped into action like it was the real thing. Thanks to Aperam's commitment to safety and our community's preparedness, everyone knew exactly what to do.

As a responsible member of the local community, Aperam is dedicated to ensuring the safety of both its employees and local citizens. That's why all stakeholders are directly involved in these emergency drills – from internal staff to local fire and police, government representatives, elected officials, and even citizens. Prior to the

drill, a leaflet was distributed to all inhabitants providing guidance on where to hide (basements, for instance), how to find information (list of radio stations) and what reactions to avoid (e.g. picking-up children at school, making phone calls instead of leaving the lines open for emergency units, etc.).

But the drill is more than just a test of our emergency preparedness, it's also an important learning opportunity. The exercise not only reminds us of the importance of being well-prepared for an emergency, it also highlights areas where we need to improve our level of preparedness. "We are generally very satisfied with the management of the drill and the professionalism demonstrated by all stakeholders," says Gueugnon site manager Lionel Martin. "The exercise was rich in lessons and will help us improve certain points." For example, the Gueugnon site is now updating its alert system to ensure all employees – regardless of their location at the time of the alert – are immediately notified about the situation.

*The emergency drill at Gueugnon.*



## Remediation and decommissioning

In line with Aperam's commitment to ensuring we have zero long-term impact on our planet, our remediation actions continued in the former Firminy/Unieux plant (France), where metallurgical activity was carried out between 1910 and 2013.

■■■ A remediation plan was elaborated to define the right depollution measures compatible with the minimisation of the potential perturbation to local neighborhoods. This was done in collaboration with local authorities (DREAL), in order. Aperam also worked with regional authorities to select an investor to establish a business on the property and create employment for the region. This remediation programme is expected to last through 2020, as agreed to with the local authorities.

## Noise & Smells

Our basic principle regarding noise is very simple: our plants aim to be fully compliant with all applicable regulations, including our operating permits and the working conditions mandated by labour regulations. To ensure the efficiency of our noise emissions, especially where our sites are located near residential areas, clear instructions are given to all actors operating in our plants, including truck drivers and subcontractors. Particular attention is given to hotspots such as scrap yards and logistics and the timing of sensitive operations. In addition, we strive to promptly react to complaints and adjust our installations as necessary.

■■■ A few years ago we mentioned the encapsulation of one of our German lines, so the team is very aware of the possible nuisances of our tools. As a result, S&S Germany has taken steps to reduce the perception of the noise generated by our operations by the neighbours of our new German site of Haan. The thickness of the rockwool used in our workshops' external walls has been adapted against the noise constraints of the city, as several residential homes are close to the site.

*S&S Germany's Haan site.*



## Transportation Impact

### Freight Transportation

As a reminder, we changed our follow-up methodology in 2018 to better reflect our operating mode. This methodology integrates our Châtelet plant as the pivotal point from which almost all our products are dispatched to our European rolling mills via rail. In the table below, we include all the tons processed in Châtelet and consider them on top of the shipments we send to our customers. For the 2019 analysis, we have also separated “short sea” transports, for example from Belgium to the United Kingdom or to Scandinavia, from truck transport.

> Using this method, and excluding overseas maritime transport (which in places like Genk, a big site, it can represent up to 15% of our shipments), 48.7% of our trips are operated by rail. This is an increase from 39.8% in 2018, a result of new railways routes in Europe and some specific projects, to be detailed further below.

#### Transportation impact (estimates<sup>(1)</sup>, excluding maritime)

Indicator <sup>(1)</sup>	Unit	2019 Global	2019 Brazil	2019 Europe	2018 Global	2017 Global
Rail traffic		<b>48.7</b>	5.1	62.3	39.8	42.5
Road traffic	% shipments (except Maritime)	<b>49.7</b>	94.9	35.6	60.1	57.0
River/Other traffic		<b>0.2</b>	0.0	0.3	0.1	0.5
Short sea		<b>1.4</b>	0.0	1.8	(NA)	(NA)
Trucks loading	%	<b>89.1</b>	95.9	85.8	91.2	88.8

<sup>(1)</sup>Estimations based on major plants and the five largest service centres.

> New railway routes have boosted our European rail transport from the north of France to Italy and Spain. It has been the main driver behind our nearly 9% increase in rail traffic. In 2019 we also started selling black coils from Belgium (Châtelet) to an Italian customer. We chose rail mode for transporting these goods and managed to load the entire shipment directly onto trains from the mill. Another best practice started in 2019 to reduce road transport was to ship 100% of the scrap from Gueugnon to Genk by rail, as we already do between Gueugnon and Châtelet.

■■■ Our Aperam Tubes unit in the Czech Republic has been purchasing stainless steel coils from our main mills for over 15 years. Taking into account Aperam’s significant efforts to reduce our CO<sub>2</sub> impact, a joint discussion started between the Isbergues mill and Usti regarding the feasibility of adapting the supply chain to our common targets and duties. Suppliers were contacted, tests were done and we were able to find a new logistic scheme that shifted a significant portion of the supply of material from trucks to trains. In 2019, the unit delivered 38% of its

supply by train - up from 14% in 2017 and 36% in 2018. Quite a change in a short period of time!

> One of our transport goals is to always use a truck’s maximum capacity. This reduces the number of trips required and, consequently, our CO<sub>2</sub> footprint. In 2019, our average overall truck load decreased, mainly due to smaller volumes and package sizes and timing constraints in Europe (especially Genk and Châtelet). However, Timóteo and BioEnergia sites in Brazil saw great results.

■■■ To optimize their loading rate (97% in 2018 and 89% in 2019), the Genk Transport Platform took advantage of a project that increased truck loading by increasing the average weight of coils shipped to our Service Center in Poland. To accomplish this, we had some carriers invest in light trailers and then contracted with them on special fares.

> Increasing average truck and rail loads; shifting from road transport to river, multimodal or rail; taking advantage of new and upcoming freight railways’ and using sea transport for short distances between southern and northern Europe have all contributed to reducing our CO<sub>2</sub> footprint. In the coming years, we will pursue efforts to have our carriers invest in trucks that can run on alternative fuels. All these initiatives are part of our programme to build a robust and sustainable supply chain for Aperam, as reflected by site-specific action plans.

#### Aperam-branded trucks.



> We continue to put a high emphasis on safety and to inspect all outbound trucks in terms of load securing, weight and protective equipment. In accordance with our Transport Charter, we encourage our carriers to promote eco-driving or quiet driving training.

■■■ In the past we have blacklisted companies that failed to comply with our H&S and Ethics standards. To better represent the reality of transport suppliers and help them progress, in 2019 we launched a European-wide pilot assessment to define our methodology with more specific guidelines and different types of approaches. The idea is to try to assess 100% of the carriers in Europe in 2020 before later expanding to Brazil.

### Cleaner mobilities

Aperam's Transport charter acknowledges the impact that freight transportation and the transportation of people (commuting, business travel) has on the environment and society.

Although Aperam has been a long time user of teleconferencing to avoid unnecessary travel, this trend advanced significantly in 2019 as many of our units developed very cohesive action plans for promoting cleaner mobilities in line with local regulations and site-specific opportunities.

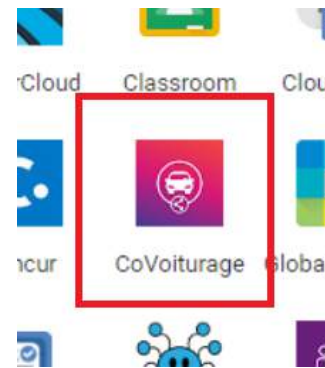
■■■ Take for example our Genk site, which took a comprehensive approach to the topic. As reported a few years back, the plant used to have bicycle policy to promote the leasing of electric bikes at a low price for employees. This was extended during the 2019 annual Collective Labour Agreement negotiation, combining it with a car policy for maximum flexibility and indexing the bicycle indemnity to the cost of life. The updated car policy now stipulates a maximum Co<sub>2</sub> emission of 135g/km - an important first step towards less emitting vehicles. To promote the use of electric vehicles among our employees, 11 charging stations for plug-in hybrid and electric cars were installed as pilots during the summer 2019. Charging a leased company car can now be done at a favourable rate and without extra taxes.

Starting January 2020, the charging of private cars will be made possible during night shifts and on weekends, with a new monitoring system being put in place to match demand and capacity.

Genk's new charging stations (windmill in the background)..



■■■ As part of our Quality of Life at Work and mobility plans, in July 2019 the Isbergues site launched an initiative to create and promote a new carpooling application.



This came in response to a survey conducted in May where 52% of the 176 respondents (a 45% participation rate!) said they were interested in using a carpooling application. The application makes it possible to offer and search for commuting trips, as well as occasional trips (business or training). To date, there are eight recurring trips, not counting non-recurring trips that are no longer in the application once the travel date has passed.

Isbergues Carpooling app.



Fauna monitoring programme registers at BioEnergia

## BioDiversity

With the exception of our brand-new Haan site, which is located in a very urban area, most of our sites are located in areas that have been industrialized from centuries. This, along with the fact that we tend to receive and with few requests from local stakeholders, has led to us seeing biodiversity as being immaterial. However, following discussions within the ResponsibleSteel™ forum, we decided to show our modest contribution to this important global challenge. Although there is no company-wide programme structuring our approach to the topic, our recently updated Environmental policy stipulates our responsibility with respect to protecting biodiversity and natural ecosystems.

Some of our plants are using natural methods to maintain their green spaces.



For example, our Gueugnon plant has been using donkeys for years to mow the lawn and is now feeding them with fruits and vegetable wastes from the canteen. Many sites are also using 'green curtains', or groves of trees planted to limit the dispersion of dust into the air and from noise bothering nearby neighbourhoods (Timóteo, Genk). These green areas, many of which are located near rivers, they have quickly become

home to a range of small fauna. In fact, it is not uncommon to see birds of all sorts, small mammals, ducks and beavers from our plants.

In this context, our Châtelet unit decided to change its approach to protecting the Sambre river's biodiversity. On top of what's being done on the industrial side to prevent such an accident from happening again, the site has become a board member of the local association "Contrat Rivière Sambre et ses Affluents". As of the end of 2019, the site's Environment Coordinator is one of only two representatives from industry in the association.

This collaboration has already resulted in several projects, including an initiative to grow aquatic plants in the river that will feed fish and provide habitat to various wildlife. To facilitate the plants' growth, the site has offered to install one of its oxygenation pumps that is no longer in use.

**The only unit that can really be considered as having a significant impact on local biodiversity is our Bioenergía forestry and carbonisation plants.** In fact, it is our sole operating unit that has a dedicated master plan for tackling the issue. Many processes are in place to minimise our impact on biodiversity, including those highlighted below:

> Biological Pest Control: Eucalyptus crops, as well as other agricultural and forest crops, are impacted by pests and diseases. In most cases, these can be combated using chemical pesticides, which can cause other environmental issues. At BioEnergia, the opposite occurs. Aiming to reduce the use of chemicals, the site uses one of the largest insect breeds that prey on pests, their so-called natural enemies. A natural solution to pest control!

> Fire Prevention: Every year during the dry season we see an increased risk of forest fires. To minimise the risk, we use surveillance towers equipped with cameras, motorized portholes in vehicles prepared for combat, water trucks

strategically distributed in the area, appropriate equipped and trained forestry workers, around-the-clock oversight and weekly meetings to update the distribution of resources.

Finally, our Fauna Monitoring Programme has recorded a significant richness in species diversity. So far, 250 species of birds have been identified, three of which are endangered and 21 endemic, and 33 species of medium and large mammals, seven of which are threatened with extinction and two endemic.

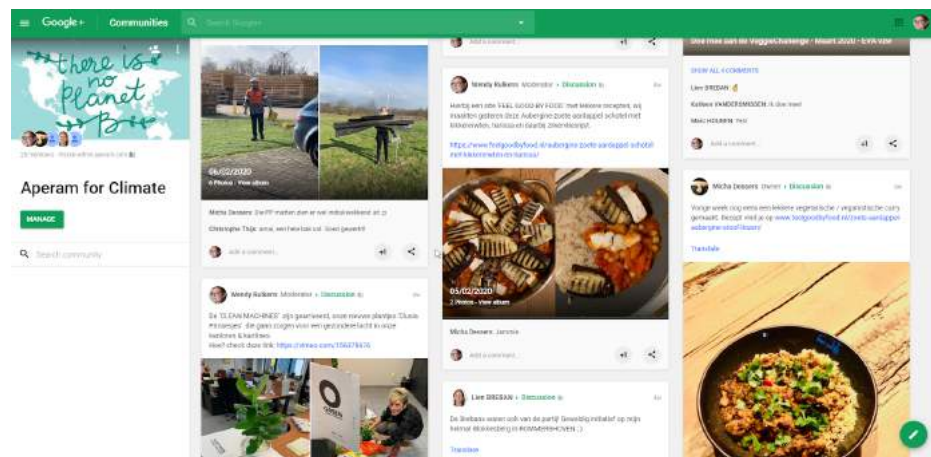
All our operations in Minas Gerais are run in such a way that they protect and promote the local biodiversity.

## Raising Awareness

Since 2017, we have held special campaigns during the week of the United Nations' World Environment Day. In 2019, our focus was on dust emissions and air quality. Our campaign reminded all employees about our own dust emission reduction objectives (see p.28 and 32) and our Freight Transportation Charter and programme (See our digital poster to the right, broadcasted together with a note from our Head of Environment & Industrial Risk).

But when it comes to raising awareness, our sites do a lot more. Below are just some of the many interesting initiatives happening across Aperam.

■■■ Aperam S&S BeNeLux launched their own “Aperam for Climate” initiative. The awareness-raising initiative is the brainchild of five enthusiastic employees, who came up with the idea of creating a climate change community during one of their daily lunch walks. The idea was simple: inform colleagues about how their actions (eg. eating meat, trash, wasting energy, transportation choices) impact our precious environment and make them (self)reflect on this. By encouraging individuals to change even a few habits can have a big impact!



A glance at the Aperam Service & Solutions Be-ne-Lux Social Media with tips and recipes.

The project officially started in October 2019. Focussing on five themes (food, energy,- nature, transport, and waste/trash), the project launched a range of actions, including a survey to check the team's awareness (to be repeated in 12 months); communicating relevant facts and figures on Plant-TV and in Google+ Community (see above picture); an effort to eradicate single-use plastics by replacing by removing plastic cups from the production area's coffee lounge and replacing plastic stirrers with wooden ones and requesting that the caterer ban plastic packaging; promoting at least one 'veggie' day per week (through recipes, videos, articles, etc.); installing air-cleaning-plants in each office/conference room and planting a flower garden in our lawn; building an “insect hotel”; planting at least 10 more trees; and regularly cleaning up our site and the surrounding public road during lunch walks.

■■■ Our Recyco subsidiary held its first Green Day in Isbergues on December 3, 2019. The purpose of the event was to exchange ideas for improving our relationship with the environment. The session began with a presentation from an independent lab accredited by the French government who controls the air quality around the Isbergues plant. This was followed by a presentation from a local consultancy specialising in environmental issues and who is a partner of Aperam and Recyco and in charge of most of the legal controls of our industrial equipment. The second half of the day was devoted to brainstorming. Over 70 participants from Recyco teams, Aperam Environment Platform partners, Recyco subcontractors, were divided into small groups and asked to propose different actions. Following a very passionate discussion, over 40 actions were proposed. These actions will now be prioritised and integrated into our yearly action plan. This event definitely showed how important environmental topics are to all our stakeholders.



Awareness-raising campaign regarding our Dust-Air emission objective, in line with the United Nations' World Environment Day global campaign.

## Voices

*“I count on each site to continue working on this area and more generally, I encourage everyone to take into account in her/his everyday decisions all our 2030 objectives.”*

### Laurent Piranda

Aperam's Head of Environment & Industrial Risk



# Interacting with our Stakeholders

We aim to achieve best practices in governance and apply the strongest business ethics. These are the keys to building trust with our customers, our employees and the communities we work in, to protecting our market position and license to operate, and ensuring our ability to thrive.

Our strong customer focus, with innovation and R&D being key pillars, is a testament to the fact that we are good at listening and able to find the right solutions - a pattern we repeat in our social dialogue and stakeholder engagement.

## Sustainably profitable

> 2019 was the worst stainless market environment since the inception of Aperam, characterised by: weak economic growth in both Europe and Brazil, aggressive imports due to inefficient safeguard measures and severe pricing pressure. Despite these challenging market conditions, Aperam delivered resilient results and continued to strengthen its cost competitiveness. In the challenging market conditions we continued to focus on cost competitiveness and delivering high quality products and services to our customers. In particular, phase 3 of our Leadership Journey® - our internal operational excellence plan - continued to progress well with €123 million accumulated gains.

> Under this plan we are targeting further transformation of our business to achieve our goal of €200 million by the end of 2020. In terms of financial performance, EBITDA reached €357 million and Free cash flow €281 million in 2019. This is the highest FCF achieved since our creation as we further strengthened our cost position. Our net debt position at the end of 2019 remained at a low level at €75 million, less than a tenth of the level when the Company was created. In this difficult environment our strong cash generation enabled us to continue investing in our asset base, particularly our Cold Rolling and Pickling line in Genk.

## Long-term strategy

### Efficiency as an employer's responsibility

> Because we were quick to restructure our downstream operations in Europe to adapt to changing market conditions, we are now better able to face headwinds

and are already well on our way to building a sustainable future for our teams. This restructuring involved reorganising our tools and reducing the number of tools used from 29 to 17 and, when necessary, responsibly downsizing our staff (see previous reports).

> As a result of its operational and financial turnaround, Aperam is now well-positioned to seize the opportunities that will come from the long-term growth forecasted for our stainless and specialty-steel markets. This responsible strategy and its efficient delivery are now recognised and often applauded by many of our stakeholders, as well as both financial and ESG analysts (see next page).

> We take pride in bringing more to the communities we operate in than just economic support. That being said, the support we provide through taxes, salaries and local purchases remains very significant - and important.. In 2019, we channeled €517 million in salaries and €37 million in taxes to local economies, compared to a respective €527 and €75 million last year (GRI 201-1 - see also our three country supplements). In some places, we are a key actor in the local economy, which reinforces our sense of responsibility and our duty to efficiency. This is reflected by the fact that local purchases at our largest sites represent 50% of total spend (vs. 50% in 2018 - both excluding raw materials<sup>5</sup>. GRI 204-1). And this does not take into account the cultural contribution we make to our communities (see page 58-60) or the positive influence we may have on our supply chain (see page 50).

<sup>5</sup> We took the opportunity this year to review the scope of our local spend to make sure that only operational expenditures (continuous spend) were considered, to the exclusion of the purchases made for large investment projects (periodical and very specific).



### Some of our 2019 recognitions

- Reconfirmed as **“AA”** by MSCI (Leadership level)



- Rated **“B”** by CDP (Management level)



- Reconfirmed in **Excellence register** by Ethibel



- Rated **Silver** by EcoVadis (Aperam Group)



### At a glance GRI 102, GRI 413-11

Indicator	Unit	2019	2018	2017	2016	2015	Page
Customer satisfaction: Alloys	Rate on 10	8.8	n/a	8.8	9.3	9.2	Customer & Innovation focus p. 64-67.
Customer satisfaction: Stainless		n/a	7.6 <sup>(2)</sup>	7.1 <sup>(1)</sup>	n/a	7.4 <sup>(1)</sup>	
Innovation (R&D spent)	\$m	20	20	18	16	16	
New products in sales - Stainless	Index base 2015 volumes	113	123 <sup>(3)</sup>	121 <sup>(3)</sup>	127 <sup>(3)</sup>	100	
New products in sales - Electrical Steel Grain-Oriented		1,735	690	157	0	100	
New products in sales - Electrical Steel Non Grain-Oriented		122	49	22	91	100	
New products in sales - Special Carbon		386	254	230	153	100	
EWC committees <sup>(4)</sup>	#	4	4	4	4	4	Sustainably profitable p. 53.
Fraud allegations reported	#	12	12	17	7	11	Risk management and Compliance p. 56.
Forensic cases founded	#	1	2	4	2	5	
-- o/w significant cases <sup>(5)</sup>	#	0	0	0	0	0	Stakeholder relationships p. 58-61.
Local purchase at main sites	%	50	50 <sup>(6)</sup>	53 <sup>(6)</sup>	53 <sup>(6)</sup>	54 <sup>(6)</sup>	
Stakeholder engagement policy coverage	% of main sites	100	64	64	n/a	n/a	

(1): Europe , (2): Brazil , (3): European and Brazilian production together (4): European Work Council initiated in April 2013 , (5): Following review by the Audit and Risk Management Committee. (6): Restated excluding capital expenditures in Brazil.



## Innovating for a sustainable, safe and profitable future

To remain sustainably profitable and competitive, we must leverage all available solutions, from the latest technologies, automation and digitalization to new ideas from our skilled and passionate workforce.

At Aperam, we do our best to spur innovation at all levels of the company. In 2018, we had a company-wide Innovation Team to boost the flow of ideas and the lead-time needed to take them from concept to reality. We also highlighted in the last report the local Innovation challenges in Timóteo and Genk, but see below the S&S contest for a continuous flow of innovative ideas and cross-fertilization. (The innovative solutions proposed to our customers are in chapter Innovative Products for Sustained Customer Loyalty p.63.)

■■■ Champion S&S, a Continuous Improvement award, was created in 2017 to award best practices amongst Aperam's Services Centers. The goal is to tackle cost competitiveness and safety performance as both are key to the sustainable growth of our business. Believing that motivation and recognition go hand-in-hand, this initiative aims to strengthen our drive for continuous improvement on the shop floor level while also boosting its contribution to our cost competitiveness and safety performance. By awarding improvement projects that further Aperam's values of leadership, ingenuity and agility, and regardless of their financial contribution, we can ensure that these values become part of the day-to-day operations of our shop floor.

In March 2019, S&S Massalengo, in Italy, won the challenge with their WCMA (World Class Manufacturing Aperam) project on machine SP301. The goal of the project was to reduce bottlenecks and improve the performance of the line to avoid the need for new investments. The gain with the project was 11% on Overall Equipment Efficiency (OEE) and the satisfaction of the operators.

Overall, 17 units from Services & Solutions with 28 projects participated in the Challenge.



*S&S Champion 2019: Massalengo.*



*Champion S&S 2nd Winner - Poland.*



*Aperam Timóteo plant, in the Brazilian "Steel Valley" in Minas Gerais.*

## Holistic approach

In 2017, we upgraded our internal validation procedures for investment files. First, we require an assessment of each investment project on five dimensions, with a view on its potential impact on Environmental, Social and Governance-related aspects. Second, we require the integration of a cost related to CO<sub>2</sub> emissions as either a cost or a bonus whenever the project improves our footprint. As the primary objective of this change was to raise awareness, the internal price was set at \$15 per ton of CO<sub>2</sub> and now its price is \$ 25 per ton of CO<sub>2</sub> (see also page 29 for the impact of European Carbon market).

In 2018, we went even further along this path. After confirming that this procedure had proved useful to changing mindsets and improving our projects, we enhanced its efficiency by improving the visibility of these assessments. As a result, starting in September 2018, these elements were put among the first criteria visible on each file and projects can be retrieved from our database based on their impact. The idea was to better monitor our efforts with a simple reporting and to be able to challenge the assessments - and eventual impacts.

Regarding 2019, we had over 6.3% of our investment projects categorised as "pure" Health & Safety and 2.0% "pure" Environmental improvements, compared to a respective 6.4% and 3.7% of the 2018 investments. This is not counting all the investment projects that combine a "pure business" purpose (capacity or productivity-driven investments, for instance) with sustainability benefits such as reductions in energy or water consumption.

Indeed, we aim to further "evangelize" the organisation so that more investments seize the opportunity to improve the sustainability of our company.

## Responsible employer

We believe that our operations are run in a constructive social climate. Our absenteeism rate of 2.3% remains almost stable since 2017 and our last Engagement Survey (2018) shows a workforce aligned with the company's strategy, ready to recommend Aperam as a good employer and feeling empowered to do their part in the production of products they are very proud of (see our last Sustainability results for detailed results).

> **We always try to facilitate an open and honest dialogue with the unions.**

Next to the information and consultation with the local works councils and union delegations that are often organized at site level and with the central works council in France, we are also further developing the dialogue at European level. Indeed, as an international company, our decisions are often taken at a regional or global level and the European Works Council (EWC) allows us to have a first high level discussion with employee representatives. Senior Management is very much engaged in this process, participating and giving a strategic outlook on the evolution of their business.

> In 2019, we had the 4 regular meetings with our EWC (select committee meetings and plenary sessions) and several extraordinary meetings took place to inform the EWC select committee of important organisational changes.

We took the opportunity of these meetings to share our updated Code of Conduct and our Gender Diversity roadmap.

Working under the EWC umbrella, a specific H&S sub-committee, consisting of employee and employer representatives continued to focus on reviewing and providing recommendations on H&S initiatives.

> In 2019, we also engaged with social partners outside of the Aperam forum as we presented our strategy with the Steel European Sector Dialogue Committee on December 2, 2019 in Brussels.

> But being a fair employer also means taking the most responsible approach when it comes to difficult missions such as redundancy plans or relocations (see previous reports) or Economical Unemployment.

No major restructuring, resulting in collective redundancies, took place in 2019 as we were able to use Temporary Employment in our French and Belgian industrial sites to variabilize our manpower costs in a challenging economic climate.



*Inaugurated in 2019, the new Miriam-Makeba primary school has added a touch of modernity to a traditionally immigrant neighbourhood in Nanterre, France. Named after the legendary South African jazz singer and anti-apartheid advocate, the 4,050 square metre building blends in perfectly with its surrounding neighbourhood, including the adjacent 113 m high Hauts-de-Seine tower. Capable of accommodating nearly 400 students and 50 staff, the building also satisfies the city's commitment to sustainable building. Wanting to use only recyclable materials in the school's design, the architects naturally choose stainless steel – which is 100% recyclable. With a façade clad in Aperam's Uginox 304 grade of stainless steel, the building has a unique bright finish that brings a touch of sparkle to the neighbourhood.*

*Miriam Makeba school, Nanterre - France, Cabinet Toa architectes © F. Delangle  
Executed using grade Aperam 304 with Uginox Rolled-On finish*

## Responsibility in the value chain

### Overall supply chain CSR risk assessment

In 2019, a new methodology was put in place to better assess both our raw and non-raw material suppliers. The method uses detailed questionnaires focused on topics related to ethics, H&S, human rights, environment, stakeholder engagement and supply chain responsibility.

> This was a big change for our non-raw materials department. Before 2019, this assessment was made by buyers and operations via a now discontinued online platform for assessing sustainability (it is still used for performance assessments). The new methodology allows the procurement team to expand the scope of its assessment of critical suppliers. In addition to subcontractors, suppliers that have a direct impact on the quality of our final products and on the production process were also requested to fill in a questionnaire. Unlike last year, this year we included suppliers from Imphy and Gueugnon, on top of Chatelet, Genk, Isbergues, Timóteo and Pont-de-Roide. In 2019, the number of critical suppliers assessed increased by 52%. Out of the 108 suppliers that were assessed, we identified 12 suppliers with potential risk regarding Health & Safety, 7 regarding the Environment, and 6 regarding Human Rights (see table below for 2019 results and comparison with previous years). Because the scope, approach, level of detail and criteria changed, we expected to have more non-compliances, which will now be tackled by the procurement team.

Local procurement coordinators and lead buyers, working together with the central team, have implemented a strong action plan for each critical supplier who showed a potential risk. The idea is to use the lessons learned from this first year of using the new methodology to validate and reinforce the criteria with buyers and suppliers. Our objective is to achieve a 100% response rate from critical suppliers in 2020 and to assess all critical suppliers every two years.

> For the global campaign on our raw material supply chain, which we conduct every two years with a follow up in between, the only change was in the questions used in the assessment, which in 2019 also included questions related to ethics. In 2019, 96 suppliers were assessed, one more than in our previous assessment in 2017. As in 2017, we identified two suppliers with potential H&S related risks. We saw substantial improvements in regards to Human Rights related risks (3 identified risks, as compared to 6 in 2017) and environmental-related risks (2 identified risks compared to 4 in 2017). These 'red' risk ratings mostly stem from a lack of satisfactory data and/or answers.

Overall, our portfolio of partners meets our responsibility criteria (with only a few exceptions, including one (monopolistic) company that accounts for several dimensions of risk). These good results are the result of our teams' constant work with our suppliers - a work that will continue in 2020.

> Regarding our transportation suppliers, in 2019 we used the same methodology as in 2018 but with a larger scope to include S&S freight partners. Out of the 86 suppliers we assessed, one company was identified as having potential H&S risks (compared to two in 2018) and three companies were identified as having potential Ethics risks (compared to one in 2018). The first is under severe follow up and progress plans. For the latter three, there is a running investigation.

> A total of 271 companies were assessed in 2019 (the results are in the table below). Every year we see more and more willingness from our suppliers to comply with our requisites. Each year we also improve our assessment methodology so we are better able to identify the companies that, like Aperam, want to straighten their commitment to Ethics, H&S, Human Rights, Labor Practices and the Environment. Global and local actions are in place to reinforce this with all our stakeholders.

**With this approach, it is only logic that we like to encourage the progress made by our suppliers** and so our sites are organising their own interactions with their local partners.

> **The most common axis of these engagements is Health & Safety.** For instance, for years now our Genk site has been distinguishing its carriers' efforts to guarantee and improve the safe loading, transport and unloading of goods, both at our company and at our customers. The safety and quality performance of the transport companies with whom we partner are monitored on the basis of clear criteria, which is what we use when making our annual "safest transport company" award. In 2019, the Genk team recognised Lux Transport NV for the improvement they achieved in 2018: they reduced safety remarks by 40%.

*Carrier Lux Transport, the "safest transport company 2018" surrounded by the Genk team.*



*The four winners of the Isbergues Energy Challenge that was organised with four local Suppliers in 2019.*



> **We're also seeing our sites take up other topics, with Ethics (Anti-Corruption) and Environment gaining speed.**

During three weeks in November-December 2019, our Isbergues site hosted an Energy Challenge. The event aimed to spur ideas and speed up our reductions in energy consumption, in line with the Company's 2030 objective. To make sure all participants knew what was at stake, event organisers highlighted the site's total energy consumption. The event was organised with the active support of four of our service providers: John Cockerill, Eiffage, TPF and MOS, who contributed financially to the bonus prize awarded to the winners.

No less than 68 ideas were put forward, covering everything from our production process to utilities and transportation. All ideas were assessed by a jury composed of representatives from the sponsoring service providers and based on a mix of criteria that weighed feasibility, environmental improvement and financial savings. On December 19th, four ideas were awarded and will begin to be implemented in 2020. The winning ideas identified opportunities to reduce electricity consumption that could be implemented in a short time frame and with little to no investment.. These included reducing the lighting on the slopes, restricting energy consumption in buildings and mitigating compressed air leaks.

### Supply Chain Risk Assessment

Supply Chain follow-up	Year	Universe covered	Not assessed *	Scope analysed	Risks identified in terms of:		
					Health & Safety	Other Human Rights & Ethics	Environment
Raw Mats	2016 <sup>1</sup>	89	14	75	9	6	7
	2017	94	13	81	3	6	4
	2018 <sup>1</sup>	95	13	82	2	2	4
	2019	96	19	77	2	3	2
Non-Raw Mats (main sites' suppliers)	2016	126	-	126	7	0	4
	2017	50	-	50	6	0	4
	2018	71	-	71	8	4	8
	2019	108	-	108	12	6	7
Transport (Europe)	2016	0	-	0	0	0	0
	2017	42	-	42	2	1	0
	2018	45	-	45	1	1	0
	2019	86	-	86	1	3	0
Total	2016 <sup>1</sup>	215	14	201	16	6	11
	2017	186	13	173	11	6	8
	2018 <sup>1</sup>	211	13	198	11	6	12
	2019	290	19	271	15	13	9

<sup>1</sup> Update and follow-up of previous year's assessment.

### Pragmatic action plans

Last year we reported our Châtelet site's initiative. This year, we turn to Italy.

■■■ A Health & Safety Pact with our subcontractors was designed in 2019 to ensure and reinforce the full commitment of both parties, Aperam Italy and its subcontractors, to workers' Health and Safety. With the Pact, both parties agree not only to comply with general Italian law but also to respect Aperam's specific approach towards safety. In particular, Aperam Italy wants its subcontractors to fully ensure their workers' safe behaviour by providing them with proper training. In doing so, our company is underlining the fundamental need for shared vigilance within our sites, no matter where the employees come from. All these actions are aimed at improving working conditions and reducing the possibility of accidents for all workers, including suppliers, external collaborators and those who are, even if only occasionally, within the company.

The Health & Safety Pact also defines a series of pecuniary sanctions to be implemented if national law and/or local procedure is violated. Violations can be classified as either a serious non-compliance (level I - €500) or very serious non-compliance (level II - €1,000). All fines will be allocated by Aperam to a fund and/or an association, as agreed upon by the parties, and used to finance safety-related awareness raising or training activities that promote a culture of safety at work.

The pact was signed with each subcontractors during individual meetings scheduled at each contract renewal.

### Advocacy

Helping our supply chain partners to get started in Sustainability requires more than accumulating static policies and engaging in a reactive manner. It takes proactive dialogue.

In the past we advised our external commercial agents to follow an online anti-corruption training (see previous reports). In 2019, our CEO again wrote to our business partners to encourage them to read our Sustainability Report and help us meet our objectives. The letter was made available in several languages and included a link to our new Code of Conduct. Directed primarily to our suppliers (but also our customers) our Code of Conduct clearly lays out that we expect anyone working for Aperam to abide by the same ethical business behaviour that we have set for ourselves. Later in the year, when the holiday season calls for celebrations and gifts, we sent a letter to all our 8,000 suppliers reminding them to refrain from offering gifts to our employees.

## Risks and Compliance

### Risk monitoring

#### A strong process in place

Our Risk Management process, facilitated by Combined Assurance Risk management function, is based on a quarterly review of our main risks and their mitigation action plans. This process combines a bottom up (in Q4) and a top down approach (in Q1-Q3) which allow to identify, assess, mitigate and monitor all risks. The process encompasses all possible areas, from taxes to natural disasters, and includes such topics as corruption, electricity prices, economic sanctions and money-laundering. Each risk is assessed in terms of impact and likelihood. This mapping is reviewed by the risk owners until the Leadership Team level. All key risks at group level are consolidated into a Global Risk Matrix, which is validated by the Audit and Risk Management Committee and are disclosed in the Aperam Annual Financial Report (p.66-67).

Aperam's risk management approach was recognised in 2016 as being 'best in class' during the external assessment of the Combined Assurance function in line with the Standards of International Internal Audit.

In November 2019, this well mastered risk management process was used to organise a specific fraud risk assessment during our first Anti-Fraud week (see next page). As part of the bottom up approach, managers at each site were asked to assess the likelihood and severity of a pre-selection of eight typical fraud-cases (see boxed text, left). Afterwards, local fraud risk assessments synthesized in matrices were discussed on sites, improving leaders' awareness. The global consolidation of these site-specific matrices allowed us to confirm our overall low risk for fraud-related activity. In total, over 300 Aperam employees with management responsibilities have participated in this fraud-specific risk assessment.

In 2019, 12 allegations relating to fraud were referred to the Group's Combined Assurance Department for investigation. At the end of 2019, nine forensic cases had been finalised, with one case founded (with no material impact on Aperam) and eight unfounded. An additional three cases remained in progress. All cases were reviewed by the Audit and Risk Management Committee, which reported appropriately to the Board of Directors.

In addition to these investigations, our Combined Assurance Department runs an average of 50 audits or advisory services per year covering the full review of our small and medium entities, high risk processes or emerging risks. Since 2018, the team has covered Sustainability-related topics such as Health & Safety and environmental issues

### Risk Monitoring

## Best-in-Class practice

**50 audits** per year, incl.

## Sustainability topics

**12 allegations** analysed in

2019 - None of material impact

### Typical risks rated during our 2019 Fraud Assessment

#### CORRUPTION

- > Active
- > Passive

#### CONFLICTS OF INTEREST

- > Personal advantage
- > Benefits of a relative

#### MISAPPROPRIATION

#### THEFTS & EMBEZZLEMENT

#### MISSTATEMENTS

- > Finance
- > Social/H&S/Environment

### Sustainability-related risks

> In regards to sustainability-related risks, we also take into account the World Economic Forum's Global Risks report. In particular, we are paying attention to the rise in environmental-related risks that we have seen in the past years (not including water-related risks, which the WEF categorises as a social risk-). (See last year's report to learn how we integrated these sustainability-related risks into our Management Seminar's debates).

> Taking into account the European Non-Financial Disclosures Principles and TCFD Guidelines, we also decided to systematically assess risks related to climate change within the framework of our bottom-up Industrial Risk Management Process (the conclusion of which are inputted into our overall Risk Management Process - see § A strong process in place). Starting in 2019, we have been building up a methodology to help our units identify the medium- to long-term risks related to the temperature increasing by 2°C to 4°C. This methodology will be deployed in the course of 2020 across our principal sites, with the aim of having a first global outlook for our 2020 reporting - see also p.40.

> Although the timeframe of the risks disclosed in our Annual reporting is much shorter (risks susceptible to impact our business within the year), in view of the incidents occurred in Gueugnon and Italy last year (see p. 65) and of the new process getting started, we have adjusted the risk disclosures from our latest Financial report, adding the risks related to severe climate events to those that can generate sudden production stoppages (§ p.63 Principal risks and uncertainties related to the Company and the stainless and specialty steel industry" of our 2019 Financial Report) such incidents as fires or breakages.

> In addition, the 2019 Financial Report integrates a new risk entitled "Risk of rising costs and operational difficulty to comply with laws and stakeholders' expectations in terms of environmental protection". There is a general public's

increasing concern for - and demand of - heavy industry like ours, a concern largely triggered by catastrophes like the Mariana disaster in Brazil and the Lubrizol fire in France. In Europe, this concern is pushing regulators to enact more stringent laws and raise the bar higher for compliance and sustainability. Another outcome has been an increased scrutiny on industrialists' performance.

We are addressing this by striving to implement even cleaner processes and strengthen our commitment and transparency towards all our stakeholders, which results in higher (monitoring) costs.

## Rolling out our compliance framework

In 2019, our Compliance Framework continued our risk mitigation efforts further, covering such topics as implementing our Global Data Privacy Regulations (GDPR), anti-money laundering and economic sanction policies. Thanks to our proper due diligence, we can confirm that, for the year 2019, we did not trade with entities from the following countries: Afghanistan, Cuba, Iran, Iraq, North Korea, Somalia, Sudan/South Sudan, Syria, Crimea Region of Ukraine, Yemen or Zimbabwe.

## Communications

When it comes to embedding compliance fully into our culture and processes, regular awareness-raising is crucial. Our communication schedule aims to cover all our topics in a few years time, focusing on just a few topics per year. In 2019, two company-wide communication initiatives were organised:

> The first awareness-raising initiative focused on our new updated Code of Conduct (see boxed text). In the build-up to the campaign, we sent out a series of three teasers via special edition newsletters (with each including our digital posters). The campaign was officially launched via a home-made video that, in addition to the digital posters, included a message from our CEO subtitled in many languages. The video was broadcast on our intranets and on plant screens, as well as being shared via email and our Google+ communities. Printed versions of the posters were also hung across our units, highlighting topics that concern all employees - from shop floor to executive management: Human Values, Communicating and Confidentiality. The posters also included a QR-Code that, when scanned using a mobile phone, provided easy access to all versions of our Code of Conduct - ensuring that anyone can quickly check what our guidelines say for a specific situation.

> In November 2019, as part of the ACFE Fraud Awareness Week, we held our first Anti-Fraud Week. Through a series of daily communications (emails, home-made cartoon videos, reminders, articles, screen material on our new Code of Conduct, etc.) we brought attention to the versatility of fraud and the need for greater vigilance. We also took the opportunity to remind everyone of our No-Gift

policy (part of our Anti-Corruption toolkit) and communicate about our updated whistleblowing system (see below).

The most important element of the initiative were the discussion workshops organised by our local compliance correspondents and their use of a centrally-designed support pack (see 'Voice', below). In the "managerial" sessions, discussions included a review of a site-specific risk matrix that was built based on participants' responses to the likelihood and severity of eight typical fraud cases (see previous page). For general sessions with employees of all ranks, our compliance correspondents dove into the specifics of fraud.



*Above: Aperam's Code of Conduct visuals used as screensaver in Brazil.*

*Below: One of our home-made videos explaining fraud in Portuguese.*



## Voice

*"Very open exchanges on a taboo subject!"*

*From our Code of Conduct and internal policies to alerting systems, all our tools to combat fraud were debated.*

*But beyond all whistleblowing channels, a culture of shared vigilance against fraud, as it exists for Health & Safety, remains the best way for our staff to identify and prevent any instance of 'crossing the red line'.*

*This is what I am trying to build here!"*



**Valérie Cantergrit**  
Aperam Imphy Alloys  
Risk Manager,  
Compliance & Data  
Protection  
correspondent

## Aperam's new Code of Business Conduct

Our original Code of Business Conduct was dated at the time of spin-off (2010). In 2019, we have updated these ethical guidelines, addressing some recurring questions from our various stakeholders and clarifying the international references that underpin our internal rules. Our objective was to make our Code as clear as possible for everyone, easy for employees to consult on a daily basis and the explicit proof that we are guided by the strongest ethics, for our business partners.

Improvements to our new Code include:

> **Firstly, to ensure consistency with our values and identity**, we reshuffled the order of the paragraphs to give precedence to Human Rights, and its subtopics related to Health & Safety and the environment. To us, legal compliance comes only after these important topics. Even so, it covers all relevant topics for a listed company in our business bound by high ethical standards.

> **Secondly, we simplified the structure and text** so it can be understood by everyone. We did this by simplifying the language, merging paragraphs that address the same topics from distinct regulations' perspective, adding examples and integrating new subjects like Social Media use. We also inserted links to our detailed guidelines so that anyone can dig further whenever needed.

> **Thirdly, we made it easy for business partners to assess our ethical standards** by clarifying the references we use as inspiration - such as the United Nations' Human Rights Charter, the Global Compact or the standards from the International Labour Office-, as well as our own expectations for third parties.

Notwithstanding these updates, the core directions given by our Code of Business Conduct are unchanged, because there is only one way to do business in Aperam, which is by applying the highest sense of ethics.

Because Aperam takes our ethical responsibility seriously, we are committed to training our employees on and informing our partners about both our expectations and commitments. To do this, we created specific e-Learning modules that explain our (updated) Code using real-life examples, and every year we remind our employees about the key principles of our ethical guidelines.

We hope that this new Code will focus future discussions on the substance, level and implementation of our commitments rather than dwelling on wording ticking off boxes. Our new Code was communicated to all our contacts on both the customer and supplier side via a letter from our CEO.

The campaign engaged over 1,000 employees worldwide. Using gamification and real-life fraud cases from our industry, raised awareness, highlighted the range and variety of our mitigation and prevention measures and insisted on the need for shared vigilance and early detection. Even though many participants were less than enthusiastic about the idea of joining a one-hour session on the subject, in the end their feedback was very positive! Many even asked that the session be repeated regularly or that function-specific meetings be held to highlight the schemes likely to happen in, say, the Human Resources or Purchasing departments. We are now thinking about the best way to follow up on these ideas.



*Above: Video from our CEO.  
Left: Posters.  
Right: access to our Code of Conduct with hyperlinks to all main policies.*



*With links to other policies*

## Alignment & behaviours

In terms of alignment, we continued with the roll-out of the routines started in 2017, including the “compliance certificate” that summarises the year’s actions for key leaders and site managers and the declaration of potential conflicts of interests, launched in 2019 during our Anti-Fraud Week.

As planned, in 2019 we saw some of our routines embedded within our Human Resources master system, thus ensuring a more efficient follow-up and perfecting our GDPR compliance. We started with our Insider Registry and continued with our annual Declarations of Potential Conflicts of Interest. Next year, we will also integrate the Compliance Certificate so that not only do we give more formality to the declaration (added to the employee file in the master system) but also grant the N+1 the practical means to check the response rate of her or his teams in real time. This way, hierarchical managers can reinforce the need for discipline on these subjects and take accountability for all their teams across the organisational pyramid, resulting in a perfect alignment within Aperam.

## Technical expertise, audit & continuous improvement

> To ensure the technical expertise of our teams on the topics relevant to them, we use a framework that matches focus to the targeted population (function, geography). Although this already makes it easier to define the necessary induction training for each employee (which will soon be integrated within our Learning Management System), we also created an Ethics & Compliance Academy. Up and running since the launch of our Learning Management System (see p.15-16), the Ethics & Compliance Academy gathers both in-house courses and external training opportunities to provide our employees with an enhanced understanding of key compliance topics and policies.

> In 2019, we added specific modules on “What is a Data Breach” and “How to Handle a Data Breach”, along with French and Portuguese versions of our Code, to the existing list of in-house modules (Global Data Privacy Regulations and Aperam’s Code of Business Conduct). We also systematically used 6 to 7-minute learning videos when rolling out our compulsory procedures (Conflicts of Interests, etc). Our (Gender) Diversity training was also deployed within this Ethics & Compliance Academy and, by the end of the year, it was the most popular Academy within our MyLearning system in terms of number of training done!

> In addition to training, we regularly refresh our policies and procedures as part of our Continuous Improvement pillar. Along these lines, on top of our new Code of Conduct (see above), we updated and merged our Anti-Fraud and Whistleblowing policies into one single policy (“Prevention of Misconduct & Whistleblowing Policy”). This policy details our commitment to anti-retaliation, as well as how we address (in a manner that is respectful of everyone’s reputation) any and all concerns on the topics covered by our Code of Conduct, from Human Rights to Conflicts of Interests, Corruption, Environmental Breaches and Data Privacy violations. Whistleblowing was also covered during our Anti Fraud Week. We used a number of channels (video, newsletters) to raise awareness about our updated alerting line and focused our discussion groups on openly addressing the taboos related to reporting misconduct. In 2020, we aim to communicate to third-parties so that any misconduct in Aperam can be reported through these lines, investigated professionally and, if founded, immediately stopped.



### Preventing conflicts of interest in Brazil

Every year, Aperam launches its Conflicts of Interest Declaration to be filled in by all exempts worldwide.

In Brazil, this target was expanded to non-exempt employees that have responsibilities or decision-making power in sensitive areas, such as the Procurement, Sourcing and Commercial departments. Starting in 2019, the Compliance and Combined Assurance (our Internal Audit) teams jointly analysed the main potential conflicts of interest that were reported. The actions taken to prevent these potential conflicts of interest from materialising vary according to the function of the person, department and type of conflict and are validated by the local Compliance Committee on behalf of the central team.

A practice that was implemented in 2018 and strengthened in 2019 is the tailor-made blockage of SAP transactions. Once the blockage is implemented, if a person tries to approve/create an order for payment in favour of a company owned by, for example, a relative or close friend, a pop-up message informing them of the potential conflict of interest appears and aborts the operation. The entire transaction is recorded in a specific folder and regularly checked.



## Global Data Privacy at Aperam

As an international company with global systems and teams located both in and outside of Europe, not only does Aperam enforce the European General Data Protection Regulation (GDPR), we also address dataflows outside the European Union. Aperam's Data Protection team is supported by local data protection correspondents at the site level. A Data Protection Committee is also in place to review all ongoing actions and exchanges with the data protection authorities. Aperam also sees compliance with the GDPR as an opportunity to rethink its day-to-day activities and customer relationships, even beyond data protection.

## Relationship with Authorities

In principle, Aperam only engages in policy debates with governments and policymakers on topics that are of concern to its business. In particular, our Code of Conduct stipulates very clearly that Aperam shall never subsidise any public body, civil servant, member of a political party or union. We also respect best practices in anti-corruption and promote a fair and competitive marketplace without the use of undue influence (see boxed text on Anti-Dumping for more information).

## Carbon markets and competition

2019 was a challenging year for Aperam, with import pressure resulting in record low prices and plants operating under capacity. This pressure primarily comes from countries with less advanced environmental standards and a much higher CO<sub>2</sub> footprint (and no quota market), not to mention lower social standards and labour laws. Compared to Aperam's products, which rely on recycled stainless steel scrap and our own forests for charcoal production in Brazil, we estimate that CO<sub>2</sub> emissions per tonne for imported stainless steel is up to five times higher.

With CO<sub>2</sub> in Europe now priced at close to EUR27/t in the spot market, we face a severe competitive cost disadvantage - one that puts the survival of our industry at risk as most imported material is not subject to any similar measures.

We are determined to be a sector leader in environmental excellence and strongly believe in our indefinitely recyclable products. However, to guarantee a sustainable future for our industry, we urge the European Commission to implement CO<sub>2</sub> related import duties to level the playing field. Not addressing this important issue will further exacerbate the displacement of our domestically produced green stainless steel with imported material - at the expense of increasing global CO<sub>2</sub> emissions and accelerated global warming. This is also why we contribute to the Steel Industry Associations' efforts to promote a fair and level playing field (see next page).

## Voice

*"In a global organisation like Aperam, engaging with all stakeholders in a structured and harmonised way is key. With respect to the GDPR, Aperam relies on local data protection correspondents. Thanks to their dedication and strong support, we have been able to further strengthen our processes and best practices in 2019. As part of our key GDPR initiatives during the year, we reinforced our camera processes and our contractual arrangements with suppliers.*



*The awareness of our stakeholders also plays an important role. With this in mind, our GDPR communications were cascaded across the Group, and an online training on how to detect and react to data breaches was proposed to our employees."*

**Bérangère Poirier**

Legal Counsel & Deputy Data Protection Officer



*Left: Cover of the newsletter shared in May 2019 with main internal stakeholders of Aperam's Data Privacy organisation.*

*Below: Screenshot of Aperam's internal GDPR training game available on My HR Learning platform.*



## Trade Defense Update

Aperam continues to work closely with steel industry associations and other local trade associations, especially in Europe and South America, to promote fair conditions for all operators in the market. Increasingly, this work has been oriented towards respect for the environment.

This activity has been particularly intense since 2018, due to the impact of US protectionist measures (section 232), the need to protect our markets from an increasing number of unfair international trade practices (dumping, various forms of government subsidies, circumvention, etc.) and a challenging economic environment.

> In Europe, these topics have always been taken up within Eurofer, our European trade association, both during the periodic meetings dedicated to the trade problems of the steel industry (External Committee) and, more specifically, within the forums dedicated to the sub-sector (Stainless Steel Working Group).

The most important issues addressed in recent years, and which Aperam will continue to follow with particular interest during 2020, include:

- Safeguard measures for steel products in the EU28
- Anti-dumping proceedings (versus China, Taiwan and Indonesia) and anti-subsidies proceedings (versus China and Indonesia) concerning the importing of certain hot rolled stainless steel sheets and coils
- A dispute in the World Trade Organisation (WTO) against Indonesian export restrictions on the raw materials used in the production of stainless steel, which unfairly limits international producers' access to the raw materials for steel production, notably nickel.

> In Brazil, Aperam has requested the Brazilian government to investigate unfair trade practices in flat stainless steel cold rolled imports through anti-dumping proceedings against China, Taiwan, South Korea, Vietnam, Finland and Germany, which became effective in 2013. This process was renewed at the end of 2019. Only China and Taiwan continued with the anti-dumping tariffs.

Stainless round tube imports from China and Taiwan were subject to the same kind of investigation with anti-dumping rights set up against both countries in 2013 and with rights against China renewed in 2019.

Cold rolled GNO electrical steels were also part of the same wave of unfair trade practice investigations, resulting in the establishment of anti-dumping rights against China, Taiwan and South Korea in 2013 and renewed in 2019, in addition to new rights enforced against Germany.

To manage and formalise common positions through Eurofer, we have used the services and assistance of several leading international law firms. We also met several times with the public administrations of France and Belgium, again within the overall European framework, to inform and influence the Member States concerned in a transparent manner. To defend specific business positions, Aperam has sometimes made individual commitments in certain parts of the world (USA, China, South Africa, India), always with the support of competent local legal offices. In 2019, the total cost of these legal activities in Europe was €203,000 (vs. €382,000 in 2018 and €102,000 in 2017), as transparently reported in the EU Transparency Register.

In Brazil, law and economic firms of unblemished reputation and international recognition are used to support Aperam South America, with the cost of such activities being €216,000 in 2019 (vs. €172,000 in 2018 and €103,000 in 2017).





## Stakeholder relationships

Aperam sites are encouraged to engage regularly with local stakeholders, as doing so is both consistent with our values and good management and also very important to our employees.

Although in Europe our actions are usually less structured, that does not mean a lack of progress (see Isbergues example below). In Brazil, we have a Foundation that invests heavily in supporting local communities, with particular attention on such topics as health, sustainability and employability (see previous page).

Beyond philanthropy or “social impact investing” (the primary purpose of our Acesita Foundation), we like to maintain sound and transparent relationships with all our stakeholders, starting with our neighbours and surrounding communities.



Imphy 2019 Stakeholders' Day: plant visit.

### A new pattern enforced in 2019

Since 2019, Aperam has been disclosing information about its operations and environmental impact to local stakeholders via our Country supplements, available in local languages, for Belgium, Brazil and France (which, together, account for >80% of our staff). This information is also shared via a set of panels hung at the entrance of our main sites that disclose site-specific performance indicators as well as a QR code giving access to a central contact form. This online contact form

serves as a portal to channel all enquiries to the relevant people, either at site level for matters concerning the local unit (eg. noise) or at a central level for general topics such as investor relations or general enquiries. Anyone can use the web-based form to report any problem 24/7 and in the local language(s) - giving us the opportunity to resolve it in its early stage. This tool supplements our Corporate Whistleblowing system, accessible through the web from anywhere in the world and in many different languages.

In 2019, in line with our roll-out plan, 100% of our eight main sites have fully cohesive engagement routines (compared to 64% in 2018, GRI 413-1). These routines cover impact assessment, formal local grievance mechanisms, local development programme or stakeholder engagement plan, and public disclosure of figures.

### Specific 2019 engagement initiatives

As in previous years, we are happy to report on a number of local initiatives that happened in 2019. For the third time, our Imphy site held its Stakeholders' Day, opening its doors to 40 people, including registered neighbours, associations, local students and scholars, local authorities, chambers of commerce, environmental agencies, fire brigades and the police.

■■■ Our Isbergues site's interactions with external stakeholders have become more structured over the years, perhaps due to the revitalisation plan the site deployed to (partially) compensate for the closure of two tools within a decade. In addition to the programme deployed by Corporate (see above), starting January 2019, the site has regularly engaged with local stakeholders and authorities to share information.



As part of this effort, a quarterly newsletter, called “Bulletin de Liaison de la Plateforme Industrielle d'Isbergues”, is now prepared together with the other companies hosted on the site. This is shared with legal authorities (Préfecture), environmental authorities (DREAL), local mayors (neighbouring cities of Isbergues

and Saint-Venant) and a local environmental association (EQVIR). One of the objectives of the newsletter is to clarify who's doing what within the boundaries of the site, as it is not easy to understand from the outside. The newsletter provides general information about the actions undertaken by the different companies with respect to industrial development, the environment, safety and sustainability. It also provides information on what is being done to strengthen the industrial

cluster's attractiveness. For instance, in 2019 articles discussed the Common Safety Day, the site's fire brigade, projects related to LED deployment, a photovoltaic study and the extension of the storage building undertaken for Recyco.

This newsletter is an extension of Aperam Isbergues's transparency strategy, which was started years ago with EQVIR, an association of neighbours who challenged the site to reduce its environmental impact. Aperam's local management (the heads of both the plant and Recyco, along with the local environment manager) meets the association on site every quarter to explain the planned investments for reducing our environmental impact (in line with Aperam's 2030 targets), discuss the latest air quality measurements, share the latest on our development projects, and highlight important news such as organisational changes or the scheduling of official visits.

These meetings have improved the quality of communication between parties. They have also been imperative to helping our neighbours better understand our business and us better understand our neighbours' expectations.

> The Service & Solution division is a federation of units having less than 200 employees, with the majority having between 50 and 100 employees and being the sole Aperam site in the country. Their sense of belonging to Aperam is therefore often fueled by local actions organised to nurture a team spirit while keeping a close link with local communities.

■■■ For example, every year Aperam Poland takes part in the "Entrepreneurship Academy", a five-day workshop where the most talented elementary school students in the city of Siemianowice Śląskie get to visit local businesses and institutions. The project has existed for several years, thanks in large part to Aperam Stainless Services & Solutions Poland. In 2019, the unit was officially recognised by the Mayor of Siemianowice Śląskie for our commitment and for creating a unique atmosphere for the children.

■■■ On a different note, a fitness course was installed in the green belt that surrounds the technology park in Haan. The course includes outdoor training equipment and is available to employees and visitors alike. Aperam and two other local companies sponsored this project. For Aperam Germany, it is both a sustainable investment in the community and an expression of our commitment to neighbourly cooperation.



*Above: S&S Germany Welcoming donation.  
Right: Aperam Brazil on Social Media.*



*Above: Services & Solutions Poland certificate.  
Right: Contemporary piece of art at Inhotim Institute (Brazil) made with stainless steel donated by Aperam South America.*



### Corporate Social Responsibility Award for Aperam Ústí

This year our Ústí unit (Czech Republic) participated for the first time in competition for the Governor's Award for Corporate Social Responsibility. Among several dozen companies and associations participating in this event in the Ústí region, we took second place in the category of companies with up to 250 employees. The assessment takes into account the social impact in the region, the company's environmental responsibility and its achievements in the area of remuneration, education, benefits and work atmosphere. This award strengthens Aperam employer brand locally, recognizing it as a socially and environmentally responsible company and listing it among the most attractive employers in the region.



*Caption: Fouquet's - Agence Vous êtes ici Architectes / VEI © 11h45 / Florent Michel  
Executed using grade Aperam 316L with Uginox Meca 8ND (super mirror finish)  
A recent renovation has restored the building to its original state. In addition to refurbishing the guest rooms and amenity areas, the project also reworked the interior courtyard. To hide the ventilation ducts that run through the space, architects added an 18 m high, 10 m wide stainless steel wall that essentially serves as a screen. Adding a contemporary aesthetic to the landscape, the material's mirror finish increases natural light and reflects the opposite façade, giving the impression that the courtyard is more spacious than it really is.*

## Urban Integration & Aesthetics

Reflecting our discussions with local officials, this chapter covers topics that encompass problems related to circulation and, in particular, the coming and going of trucks around our sites and the danger and noise that come with it, along with the parking areas and the aesthetics of our sites' surroundings.

■■■ Our Aperam Alloys site located in the town of Imphy is at the heart of the environmental agglomeration; a small town of 3,452 inhabitants that sees some 800 employees commuting daily to the industrial site. Today, the center of Imphy is undergoing several revitalization projects in order to attract new populations and to include the city in an "eco-neighborhood label" approach which covers all fields of sustainable development. Due to the lack of public transport in this small rural town located 12 km from Never, many of our employees use their private cars to go to work and the parking of cars stands as the "dark" point of the city. The Place des Martyrs that hosts the open-air market is crowded with cars that are parked for

the day, which reduces the parking options for potential customers. The factory being cut in two by a major axis of the town, employees must also travel on foot between the two parts of the Loire and Chazeau factory, but also to the company refectory, located next to the Town Hall. This also triggers a need for larger sidewalks that the city has.

The city center redesign project aims to address all these aspects, with a full redesign of the sidewalks and the promotion of soft traffic of the central avenue. In this context, in 2019, Aperam organised a new additional parking space zone inside its walls. We hope that it will help reduce the congestion in the area.

■■■ In our last report we mentioned that our Isbergues site had participated in a city programme that involved renovating the plant's walls by hanging 15 large old photographs reflecting the site's industrial history as well as scenes from daily life at the plant from the 19th century to the present.

In 2019, a slightly different variation of the same idea materialised in Châtelet. Every summer, Saturday cycling rides are organised on the network of "slow ways" (RAVeL, Réseau Autonome des Voies Lentes) that run across Belgium. On August 24th, the ride did a stopover in Châtelet, with the circuit running behind the factory for about 2 km. It was a great opportunity for the Aperam Châtelet site to highlight the site's activities, its tools and its staff! Indeed, thousands of cyclists from different parts of Belgium participate in this programme. To take advantage of this opportunity, the management decided to invest in a display of panels and tarpaulins (see also p.8) that showcased the stainless steel production process as well as the importance given to the environment via a nice picture of our photovoltaic panels. The improvement of the walls' aesthetics was also a gift to the Charleroi community, which provides the site with 65% of its staff!



*Cyclist participating in RAVeL's "Beau Velo" ride and admiring with pride the panels installed for the occasion to represent our stainless steel production circuit and environmental commitment.*



# The new global standard for a Responsible Steel industry

ResponsibleSteel™ was launched to help steel producers answer the sustainability concerns of their customers. It is a member-based not-for-profit organisation, with membership\* open to every stage of the steel supply chain.

Using an independent certification standard for both products and sites, the initiative enables producers to promote steel as the responsible material of choice.

\* Membership categories: Business Organisations (incl. steelmakers, raw material suppliers and downstream users), Civil Society & Social/ Environmental Organisations (organisations with social or environmental missions and trade unions), Associates (incl. governmental organisations, trade associations, standards bodies, conformity assessment bodies and academic institutions).

For more, check [www.responsiblesteel.org](http://www.responsiblesteel.org)

**The Standard consists of 12 principles for the responsible sourcing and production of steel:**



**Membership as part of Aperam’s strategic plan**

Aperam’s commitment to sustainability is ingrained in our values and fully aligned with our mission to produce endlessly recyclable products in a responsible manner. In Aperam, we are determined to be a sector leader in environmental excellence, recording the best carbon footprint of our industry, and also striving to adopt the best practices in terms of ethics, governance, community engagement and corporate citizenship.

*“Joining this initiative corresponds to Aperam’s strategic move to promote and make corporate responsibility more widely recognised,” says Tim di Maulo, Aperam CEO. “That is why we were the first stainless steel industrialist to join ResponsibleSteel™.”*

Our membership also serves to help us further strengthen our sustainability framework. For example, we realised that we had to communicate more on biodiversity.

**A new approach to assessment**

ResponsibleSteel™ is developing standards for both products and sites, and Aperam has been actively involved in the development of the site-specific standard released in November. The certification process will involve an independent and thorough review of policies and procedures, along with direct interviews with employees and external stakeholders.

*“This is a much more satisfactory assessment than a pure document-based approach, and one that should be all the more reassuring for the customer,” says Nicolas Changeur, Aperam CMO.*

**Benefiting everybody**

But it’s not just the end customer who will benefit from ResponsibleSteel™. The local communities we operate in, our employees, and our suppliers all stand to benefit from the high sustainability standards this initiative sets taking into account the ideas shared by members that represent their interest. On the supplier side for instance, the RS standard cooperates with existing Mining standards to assess if we can integrate their own specific grade to rate the suppliers, recognizing the efforts of the best operators without questionnaires of no added value

*“The ResponsibleSteel™ label will play a prominent role in making the steel industry a true ally in building the sustainable and responsible society we strive to live in,” adds Tim di Maulo, Aperam CEO.*



### Active membership

Aperam takes pride in being the first stainless steel industrialist to join Responsible Steel, this external certification initiative. As the standard becomes more globally recognisable, customers will likely give priority to those companies already having certification – and possibly even penalise those who don't. With this in mind, in 2020, Aperam will continue to help develop the product-level standard while also organising the certification of our European sites.

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### Voices

*“By joining Responsible Steel™, Aperam shows that we not only talk the sustainability talk, we also walk the walk.*

*By adamantly working towards the certification of our products and sites, we provide our customers irrefutable evidence that their stainless steel is certified sustainable.”*



**Nicolas Changeur**  
Chief Marketing Officer,  
LT member

### Innovative Products for Sustained Customer Loyalty

The story of 2019 was more of the same – ongoing trade tensions, increasing import pressure, and further falls in the price of stainless steel and raw materials. But in these tough times lies opportunity – an opportunity to leverage our strengths and focus on the future. At the heart of both is customer-oriented innovation.

Part of being a sustainable company is the ability to sustain customer loyalty. For Aperam, this means answering tomorrow's challenges today. By analysing megatrends and conducting customer surveys, not only is Aperam able to adapt our products to meet the immediate needs of our customers, we can also anticipate future needs and align our research and development accordingly.

One trend highlighted by these surveys is a strong demand for sustainability. As more and more of our customers strive to produce sustainable products, there is an increasing demand for a sustainable supply chain. This demand is also reflected in new regulations and enforcement mechanisms that can hold a company responsible for its entire value chain - including the actions of its suppliers.

**8.8 / 10**

### Customer Satisfaction

Regarding customer surveys, Alloys recently upgraded theirs to cover the same topics covered by the surveys used in other divisions. This positions them to not only better listen to their customers, but also incorporate this feedback into their marketing and communications.

The 2019 survey provided an 8.8 satisfaction rate out of 10 (8.6 if disregarding the new questions).



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## Voices

*“The process of answering the challenges of tomorrow begins today. As our customers look to lower their carbon footprint, Aperam has answered with new products, new innovations and new certifications. And as new technologies open new opportunities, Aperam answered by launching a joint venture for additive manufacturing.”*



**Dr. Angelique Adams**  
Chief Innovation and R&D Officer



3 R&D Centres

Comprised of 142 employees and a network of partnerships - and backed by a budget of EUR 20 million -

Aperam's Research and Development team is fundamental to our positioning as an industry leader and the development of our most recognisable brands.



142 researchers

A significant portion of our R&D budget is dedicated to high margin, value-added niche products, such as specialty alloys,

and on developing products with enhanced capabilities for new applications and end markets.

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## Building for Today

To answer our customers' immediate application needs, Aperam is constantly enhancing and, when necessary, adding to our product portfolio:

### Endur goes the distance



Set your sights higher with ENDUR, the new ultra-high strength stainless steel by Aperam. Launched in 2019, ENDUR combines the mechanical strength of high strength steels with the corrosion resistance of stainless. This innovative alloy enables the production of lighter equipment and boasts a significantly longer lifespan than other ultra-high strength steels. An

excellent solution against the effects of abrasion and corrosion, ENDUR opens

several new markets. As a low carbon alloy with chrome and nickel additions, equipment made from ENDUR benefits from increased usability, better thickness preservation, less maintenance needs, and overall reduced costs.

### Stainless Steel concrete mixer truck



Concrete mixers suffer from the combined effect of abrasion and corrosion. To try to maintain a reasonable lifespan, these mixers have traditionally been made of carbon steels. Looking to create a stainless steel alternative, Aperam began testing various options for mixer blades and drum in 2015. In 2019, we helped introduce the world's first ultralight stainless steel concrete mixer. Made from Aperam's steel, the new

ultralight stainless steel mixer is 2.4 tonnes lighter than traditional models and allows for the transportation of 1m<sup>3</sup> more concrete within the Brazilian laws. The mixer also significantly reduces gasoline consumption and thus carbon emissions and contributes to improved road safety. The project was done in cooperation with Convicta, Volkswagen Trucks, and the Brazilian Association of Concrete Services Companies (ABESC).

### Aperam Electrical Steel – the material of choice for innovation



Electrical steel is behind the Sirius Project, the world's second particle accelerator and the largest, most complex scientific infrastructure ever built in Brazil. Needing a material that could support a highly magnetic product, Aperam's E233 electric steel was the natural choice for the project. That's because E233's high electrical permeability results in low magnetic losses – an essential characteristic to the accelerator's functioning. E233 electric steel is also commonly used in wind turbines and electric motors, along with the airtight compressors used in refrigerators, freezers and air conditioning units.

## Innovation in the Time of Market Volatility

Aperam fully intends to continue to support the development of our wide-ranging stainless steel product portfolio. That being said, market realities demand that our R&D efforts shift away from low contribution margin, commodity-type products and towards developing innovative, high-margin value-added niche products, such as our alloys and specialties segment.

*New products in Sales - Volumes, Index 2015*

Product types	2019	2018	2017	2016	2015
<b>StainlessSteels</b>	<b>113</b>	123	121	127	100
<b>Electrical Steels - GO<sup>(1)</sup></b>	<b>1735</b>	690	157	0	100
<b>Electrical Steels - NGO<sup>(2)</sup></b>	<b>122</b>	49	22	91	100
<b>Special Carbon Steels</b>	<b>386</b>	254	230	153	100

<sup>(1)</sup> GO: Grain Oriented - <sup>(2)</sup> NGO: Non Grain Oriented

## Planning for tomorrow

In addition to our current product portfolio, Aperam also maintains an industry-leading product pipeline filled with the applications that will help define the future.

## Stainless Steels for cryogenic applications



Aperam is a leading provider of stainless steels for cryogenic applications, including Liquefied Natural Gas (LNG) storage. Recently, Aperam provided the stainless steel used in the construction of a new, small-scale LNG facility in Gibraltar. The regasification terminal is part of the territory's transition away from diesel power generation to cleaner burning LNG. Designed by CHART, each of the five

cryogenic tanks are 50 m long, 5.8 m in diameter, and have a capacity of 1 million litres. Once online, the 80 megawatt sustainable power plant is expected to lower NOx emissions by 80% and virtually eliminate SOx emissions. Several stainless steel grades are suitable for such uses, including classic austenitics and such high strength low alloy, economical material, as our 201LN grade, which is specifically tailored to meet the needs of cryogenic equipment fabrication.



## A new Stainless Steel for a new generation of vehicles

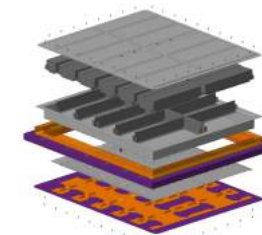
The automotive sector is undergoing a major transformation. New technologies, new regulations, and new expectations have resulted in a new generation of vehicles – a generation that demands new material solutions to reduce weight, improve safety, cut emissions, and lower costs. To meet this demand, Aperam has launched **MaX**, a new grade of Advanced High Strength Stainless Steel for body-in-white, chassis, and battery pack applications.



Thanks to a simplified production process that reduces the number of required parts from 24 to just 3, MaX helps manufacturers not only cut investment costs, but also reduce weight by up to 15% – all while maintaining the same properties. In terms of fatigue performance, MaX matches baseline measurements, and for crash resistance, it even outperforms the baseline.



With a significant potential for lightweighting, excellent fatigue properties, and the possibility to use hot forming, MaX is the material of choice for increasing chassis performance. The recommended grade for chassis components is MaX 1.2HY, with initial testing demonstrating a lightweighting potential of 25%.



With the optimised MaX battery pack, electric vehicle manufacturers can achieve a 5% reduction in weight and a corresponding increase in efficiency. Replacing a battery pack's aluminium components with MaX material can also result in a cost savings of up to 30% - all without affecting the pack's crash worthiness.

## Grain Oriented Electrical Steel powers renewable energy



Brazil is building the world's largest solar plant, and Aperam is a part of it. Over 500 tons of Aperam Grain Oriented Electrical Steel is being used to construct the plant's six three-phase transformers. With over 1 billion reais invested, the plant has an estimated capacity of generating nearly 360 GWh of energy per year. Thanks to the use of innovative bifacial solar modules that can capture energy from both ends, the plant will generate energy at a rate 18% higher than the average solar plant. When it comes online later this year, the renewable energy produced by the facility will save approximately 207 000 tons of CO<sub>2</sub> from being emitted into the air.

## First all-robotic fast food chain chooses stainless steel



Behind the tasty treats being served up by Bionicook, the world's first 100% robotic fast food chain, is stainless steel. Provided by Aperam S&S Brazil, the completely automated restaurant chose stainless steel for its food storage, packaging, and preparation applications because of the material's many unique characteristics. Not only is it completely safe when in contact with food, it also doesn't impact the product's taste, smell or colour. Furthermore, stainless steel is corrosion resistant, easy to clean, extremely strong and durable, and easily withstand both cold and hot temperatures.

## Introducing ImphyTek Powders™



On 19 November 2019, Aperam announced a new joint venture with Tekna, a global leader in advanced materials technology. Called ImphyTek Powders™, the joint venture combines Aperam's expertise in nickel and specialty alloys with Tekna's unique wire plasma technology. Together, both companies will be better positioned to address the next generation needs of their companies through the development of new, cutting-edge technologies and solutions for additive manufacturing.

## Spotlight On: Additive Manufacturing

Also called 3D printing, additive manufacturing is the process of building parts by adding successive layers of material from a 3D numerical model. The layers are added using a deposition device like a 3D printer and such feedstock as metallic powders or wire. The great thing about this technology is that not only does it streamline the production of components, it also opens the door to creating new, innovative parts that were previously unfeasible.



### Voices

*"I'm confident that this strategy will position Aperam as the partner of choice in additive manufacturing."*

#### Pr. Hervé Fraisse

Project Leader and Head of R&D Alloys

### Why is Aperam well-positioned to leverage this new market opportunity?

Aperam is a global leader in nickel alloys wire rod for welding applications. In 1920, Charles Edouard Guillaume won the Nobel Prize in Physics for discovering INVAR – a discovery he made in partnership with the IMPHY research center (now called the Pierre Chevenard Research Centre). Building on this momentum, Imphy went on to invent precision metallurgy: the elaboration of grades to perfectly match the end user's specific needs. In fact, it is by leveraging all this experience and expertise that we continue to lead the way in the development of new nickel alloys for the additive manufacturing sector.

### Does Aperam have a strategy for developing this market?

Absolutely. Following a global market study, we prepared a roadmap for the development of nickel alloys for additive manufacturing. First, we are working to establish ourselves as a leading producer of nickel alloy wires for powder. We took a big step towards achieving this with the launch of ImphyTek Powders™, our joint venture with Tekna. From here, we will look to position ourselves as a global leader in the development of wire-based deposition technologies and develop new grades dedicated to the sector.



## A Stainless Steel Company for the Digital Era

Through the use of new technologies, automation, digitisation and a fully connected organisation, Aperam continues to transform our business. In doing so, we are positioning ourselves to meet the next generation needs of our customers.

### EDI and the Supply Chain

We are convinced that digitisation is the key to simplifying our production processes and accelerating the flow of data within our supply chain. Together with our customers, we are using Electronics Data Interchange (EDI) to improve the buying and selling process by fully automating the supply chain between the supplier and the customer.

With EDI, information goes faster, is more reliable and requires less administrative oversight. Using EDI helps reduce cost, time and mistakes. It also facilitates a more efficient flow of data and documents and the provision of reliable price and product information.

### Improving customer service: e-aperam

Digitisation also drives customer experience, allowing us to provide our customers with the innovative materials they demand when and where they need them. A prime example of this is e-aperam ([www.e-aperam.com](http://www.e-aperam.com)), our intuitive, 24/7 online shopping platform. With e-aperam, not only can customers place a stainless steel order in just three steps, they can also check the material's mill certificate of quality, invoice and other order-related documents.

*“e-aperam redefines customer service. Its range of e-commerce and e-services provide our customers with a seamless, user-friendly experience that is available when and where they need it.”*

## Aperam Services & Solutions Brazil launches virtual store for stainless steel sales

TUDO O QUE VOCÊ PRECISA EM AÇO INOX  
Está na Loja Virtual da Aperam Serviços & Soluções



Digitisation is also being used to enhance sales. For example, Aperam Services & Solutions Brazil has launched the country's very first virtual store for stainless steel sales. The online store offers nearly 115 items, including bars, plates, connections, and tubes. It also features an intuitive user interface for easy navigation and an interactive customer service function that lets customers ask questions and get real-time assistance with their purchases.

Following a successful initial launch in the state of São Paulo, the site will be rolled out across Brazil. Once available country-wide, the site will play a fundamental role in promoting the many benefits of using stainless steel. As a result, it will contribute to increasing the uptake of stainless steel in Brazil.

The online store is the start of a promising new sales path for stainless steel in the digital era! Learn more at: <https://loja.aperamservicos.com.br/>

# About this Report

This report is based on Aperam figures and inspired by the following initiatives: United Nations Global Compact; Carbon Disclosure Project; ISSF Sustainable Charter; WorldSteel Sustainable Charter, ResponsibleSteel™ principles ; and the Global Reporting Initiative (see Index below). Other GRI-related references are within our Online Supplements at [www.aperam.com/sustainability](http://www.aperam.com/sustainability).

GRI Index	Disclosure code, label and reference		Reference
<b>All indicators</b>	<b>103</b>	<b>Disclosure on Management Approach Online Supplement C.</b>	
<b>Economics</b>			
<b>Economic Performance</b>	201-1	Direct economic value generated & distributed: Present report - page 5-6.	
<b>Procurement Practices</b>	204-1	Proportion of spent on local suppliers at main sites: Present report - page 46-47.	
<b>Environmental</b>			
<b>Material</b>	301-2	Recycled input materials used: Present report - page 28, 35.	
<b>Energy</b>	302-3	Energy intensity: Present report - page 28, 30.	
	302-4	Reduction in energy consumption: Present report - page 30.	
<b>Water and Effluents</b>	303-3	Total water withdrawal by source: Present report - page 28, 35.	
	306-2	Waste by type and disposal method: Present report - page 29, 38.	
<b>Emissions</b>	305-4	Greenhouse gas (GHG) emissions intensity: Present report - page 28, 29, 30.	
	305-5	Reduction in greenhouse gas (GHG) emissions: Present report - page 29.	
	305-7	NOx, SOx and other significant air emissions: Present report - page 28, 34.	
<b>Labour</b>			
<b>Occupational Health &amp; Safety</b>	403-9	Rate and gravity of injury, occupational diseases, lost days, absenteeism, number of work related fatalities, by region and by gender: Present report - page 11-12	
<b>Training &amp; Education</b>	404-1	Average hours of training per year per employee by gender, and by employee category: Present report - page 12, 16, 22.	
	404-3	Percentage of employees receiving regular performance reviews, by gender and by employee category: Present report - page 16, 24.	
<b>Supplier Assessment for Labour Practices</b>	414-2	Significant actual and potential negative impacts for labour practices in the supply chain and actions taken: Present report - page 42, 47, 50.	
<b>Society</b>			
<b>Local Communities</b>	413-1	Operations with local community engagement, impact assessments, and development programmes: Present report - page 47, 58, 60.	

General Standard Disclosure		Information or comment (Reference)
<b>Strategy &amp; Organisation</b>		
102-14	<b>CEO statement</b>	Opening Words. Current report, p.3.
102-1	<b>Name of organisation</b>	Aperam Cover
102-2	<b>Primary brands, products, and services</b>	Aperam Annual report 2019, p.11. Current report, p.6,7.
102-3	<b>Location of headquarters</b>	Back Cover
102-4	<b>Countries of operation</b>	"Company Profile" p 5, Production facilities are listed by geography in Aperam Annual Report 2019, p.12.
102-5	<b>Ownership and legal form</b>	Public limited company in Luxembourg.
102-6	<b>Markets served</b>	Key markets and sales by destination in Aperam Annual Report 2019 p.137.
102-7	<b>Scale of organisation</b>	Aperam Annual report 2019, p.11.
102-8	<b>Employees and workforce</b>	Workforce figures based on FTE as of December 2019, Full time own employees at year-end including Aperam Drosbach Headquarters, Alloys ICS and excluding Haven Genk. A small portion of the workforce at BioEnergia in Brazil is subject to variations due to seasonal factors (growing cycle of the trees: planting, harvesting etc.).
102-41	<b>Collective bargaining agreements</b>	100% of the Aperam employees are covered by collective bargaining agreements.
102-9	<b>Description of supply chain</b>	Description of supply chain available within our Online Supplement C – p.1.
102-10	<b>Changes to organisational profile</b>	None
102-11	<b>Precautionary approach</b>	See Current report, Risk Monitoring p.52.
102-12	<b>External initiatives</b>	We operate in partnership with various organisations, principally with the ResponsibleSteel™ association and Aperam Acesita Foundation in Brazil. Current report, p.58-62.
102-13	<b>Associations and advocacy organisations</b>	EUROFER, Brazil Steel Institute, ISSF and WorldSteel. Annual Report, p.48.
102-15	<b>Key impacts, risks, and opportunities</b>	Annual Report, p.65 .Current report p.52.
<b>Identified materials aspects and Boundaries</b>		
102-45	<b>Entities consolidated in financial statements</b>	Aperam Annual Report 2019, p.188.
102-46	<b>Process for defining report content</b>	In line with the GRI framework. Current report, p.9-10, Online Supplement B.
102-47	<b>List of material aspects</b>	Current report, p.10. Description of our Stakeholders groups, reporting process and materiality analysis to be found within our Online Supplement B – p.1.
103-1	<b>Material topic and its Boundary</b>	Online Supplement B – p.1 and. 3.
102-48	<b>Restatements</b>	Restatements may result from: Mergers or acquisitions, change or scope of segments, change of base years or periods, nature of business, measurement method and tools.
102-49	<b>Changes in scope and boundaries</b>	No significant changes on scope and boundaries.
<b>Stakeholder Engagement</b>		
102-40	<b>Stakeholder groups</b>	
102-42	<b>Identification and selection of stakeholders</b>	Description of our Stakeholders groups as well as our reporting process and materiality analysis is to be found within our Online Supplement B.
102-43	<b>Approach to stakeholder engagement</b>	Current report, p.59, and Online Supplements B and C.
102-44	<b>Key topics and concerns raised</b>	
102-50	<b>Reporting period</b>	
102-52	<b>Reporting cycle</b>	Calendar year 2019 (Annual) is reported into Made for life Report 2019.
102-51	<b>Previous report</b>	Previous issue reported on calendar year 2018.
102-53	<b>Contact point</b>	<a href="mailto:sustainability@aperam.com">sustainability@aperam.com</a> or <a href="mailto:contact@aperam.com">contact@aperam.com</a>
102-55	<b>Content Index</b>	Reporting to GRI 'In Accordance to Core' criteria. Current report, p 1.
102-56	<b>External assurance</b>	Limited assurance, Current report, p. 1.
<b>Governance, Ethics and integrity</b>		
102-18	<b>Governance structure</b>	Current report, p.9, Supplement D – p.1, Annual Report 2019, p. 68.
102-16	<b>Values, principles, standards, and norms</b>	Aperam Code of conduct – available on the web in multiple languages. Current report, p.54.
102-17	<b>Mechanisms for advice /concerns about ethics</b>	Training on Ethics & Compliance, assessment of supply chain on Ethics and Compliance Made for Life report p. 50, 51 and 55.



**Aperam**

12C, rue Guillaume Kroll  
L-1882 Luxembourg  
Grand Duchy of Luxembourg

Email: [contact@aperam.com](mailto:contact@aperam.com)

For all sustainability feedback: [sustainability@aperam.com](mailto:sustainability@aperam.com)



For more information, please visit our website:  
[www.aperam.com/sustainability](http://www.aperam.com/sustainability)

