



aperam

---

# Made for life

Sustainability Report 2016

---



# External Assurance

We declare this report in accordance with GRI G4 core level.

Material aspects and indicators are shown on p8 and p9-10 of this report; detailed Disclosures on Management Approach (DMA) are in online supplement 'C'. The scope of the information and data in this report covers global operations from January to December 2016.

Aperam's production capacity is focused on:

- > 6 production sites in Brazil, Belgium and France: Genk, Gueugnon, Isbergues/Recyco, Timóteo, Châtelet, Imphy.
- > 14 Steel Service Centres (SSC from our Service & Solutions segment),
- > 13 transformation facilities: 7 in Service & Solutions segment ; Pont de Roide and BioEnergia from Stainless & Electrical Steel segment ; Rescal, Amilly, Imhua and ICS from Alloys & Specialties,
- > 26 sales offices: 20 for Service & Solutions segment and 6 from Alloys & Specialties.
- > Registered office: 12C, rue Guillaume J. Kroll, L-1882 Luxembourg.

Safety data cover Services & Solutions and Alloys & Specialties, as well as contractors on site. Human resources data exclude contractors.

Subject to the exclusions indicated below, environmental data cover all main industrial sites, SSCs and corporate offices. Environmental information is compiled locally, and then aggregated centrally. In our greenhouse gas emissions calculation we apply the standards of ISO 14404-1 and ISO 14404-2, 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').

The report does not cover any joint venture operations or activities of partner organisations.

## **Independent assurance statement**

The 'made for life' report is a component (the 'summary') of our complete sustainability reporting (the 'Report') for the year ended 31 December 2016.

The Report is composed of five items: the 'made for life report' and four Online Supplements – A, B, C and D. Our 2016 Report can be found on our website on [www.aperam.com/sustainability](http://www.aperam.com/sustainability), together with the four online supplements. The summary report provides part of the information required to satisfy GRI G4 'In Accordance Core'.

Therefore, the summary should be read with its accompanying Online Supplements to constitute the complete Report.

Deloitte Audit Société à Responsabilité issued an unmodified opinion using ISAE 3000 limited level assurance with respect to the Report on the following subject matters: adherence to the Global Reporting Initiative G4 guidelines (the 'GRI' or 'GRI Guidelines') with respect to the Principles of Materiality, Stakeholder Inclusiveness, Sustainability Context and Completeness adherence of the disclosures in the Report to the GRI 'In Accordance Core' criteria and the appropriateness of the GRI Index on pages 43-44 of the Report and; fair presentation in all material aspects in accordance with GRI Guidelines, of selected performance data, marked in the Report with a '\*':

- EN5: Energy intensity (pages 9, 22 and 23)
- EN18: CO<sub>2</sub> intensity (pages 9, 22 and 23)
- EN21: NOx, SOx and other air emissions (dust only - pages 9, 22 and 24)
- LA6: Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender (only LTIFR pages 3, 9 and 12, and Severity Rate - LDR - page 9)

The Deloitte logo, consisting of the word "Deloitte" in a bold, black, sans-serif font, followed by a small green circle.

# Contents



## About Aperam

### Our vision

An opening word from our Chief Executive Officer.

### Company profile

A global leader in Stainless and Specialties Steel, serving multiple markets through three main operating segments.

### Our values

Our mission, our values and our ambitions.



## Strategy and Performance

### Strategy

How Aperam's roadmap and reporting comply with GRI principles.

### 2016 in numbers



## Social: Our People

With safety as our top priority, Aperam aims to be a sustainable and profitable company. The key to achieving this is our productive and passionate workforce.

See how our approach ensures the safety, development and well-being of our people.



## Environment: Our Planet

As part of an energy-intensive industry consuming metallic ores and other raw materials, Aperam takes our environmental stewardship seriously.

Read about the many ways we are becoming a more sustainable company by reducing our industrial footprint and working to raise awareness about the issues.



## Governance: Our Stakeholders

From the energy of our sub-contractors who assist our teams, the strong partnership built with our suppliers and our customers, up to the local infrastructures - our success is dependent on the communities we operate in. Knowing this, our Corporate Governance is based on the highest standards and complies with the most rigorous business ethics.

See how we continually strive to develop in a way that benefits the public at large.



## About this report

### GRI Index



## Supplements - online versions only

### Country Supplements

Initiated in 2016, our Country Supplements are meant to enhance our main report, allowing stakeholders from our three most important countries of operations (Belgium, Brazil, France) to read about Aperam's core sustainability actions in their local languages.

**Methodology Supplements** - United Nations' Global Compact reference; Report Materiality Process at Aperam; GRI Index for 2016 Report and Disclosures on Management Approach.

## About Aperam



**Timoteo Di Maulo**  
**Chief Executive Officer**

At the heart of our commitment to sustainability are two core elements. First is our mission to provide reliable, recyclable stainless and alloy solutions for our customers. Our energy-efficient steel products are part of the solution to solve the challenge of global development while having a limited impact on natural resources, and our charcoal-based steel production in Brazil that uses our FSC-compliant eucalyptus plantations is a perfect example of that. Second is our identity as a socially responsible company, which for Aperam means building honest, mutually beneficial relationships with all its stakeholders.

As explained in our Annual Report, 2016 was another year of solid progress with respect to our operational and financial performance despite tough operating conditions. We continued to optimize our industrial footprint, invested in our best performing assets, strengthened our balance sheet and focused on exceeding customer expectations. Our performance track record led to an upgrade to Investment Grade by Moody's in February 2017, ranking Aperam amongst the most solid players of the industry. I am extremely proud of these achievements which have only been made possible thanks to the support and engagement of all our employees.

# Opening Word

Although we are proud of all of our accomplishments, we are engaged in a journey to reach sustainable excellence and we must continuously improve on our key priorities.

Nowhere is this more important than in the area of Health & Safety, which remains our top priority. Despite tremendous efforts to improve our performance in this area, our lost time injury frequency rate deteriorated from 0.98 in 2015 to 1.46\* in 2016 due to isolated under-performances at two of our European sites. We worked hard to reverse the situation as you will see in the following pages and started to see progress towards the end of the year.

We are continuing to make all our efforts to sustain this trend in order to reach our ultimate goal of zero accident.

Although I started with Health & Safety, as I always do, there are many other aspects to our journey to sustainable excellence. Using the three dimensions of our Sustainability Roadmap, I would like to highlight our progress on the other key sustainable priorities in 2016.

□ First, on the environmental side, our teams continue their internal efforts to spread awareness. While our energy objectives are fully integrated into everyday operations, we can further progress on many other aspects.

To demonstrate this commitment, we have set up a new compulsory procedure for assessing the impact of any new investment project on five key sustainability-related factors. I am convinced that the ingenuity of our teams and their ability to propose solutions addressing environmental issues for each single project will be a true added value going forward.

As a result, I am confident we remain on track on our long term goals, particularly as some of the actions described in this report shall bear fruit in 2017 already.

□ On the social side, which focuses on Aperam's people, our roadmap is clear. In addition to the extensive Health & Safety programme kicked off in 2016, we launched a large project that will fully upgrade our People Management processes with an integrated HR IT platform. This new system will enhance the efficiency of our competency management. Furthermore, by combining this with our first global Employee Engagement Survey aimed at a better understanding of the expectations of our employees, we can further develop our workforce and spur innovation.

Needless to say, this is a key component to our strategy, one that I am sure will foster the cohesion needed to meet our objectives with existing teams while appealing to the talents we need to hire in order to speed up our transformation. Speaking of talent, in this year's report you will notice I have given more room to our female workforce, who are changing our company's image and challenging stereotypes on a daily basis.

□ Lastly, on the governance side, Aperam continues to benchmark and implement the best practices. A key achievement in 2016 in transparency was the release of our online Country Supplements in local language. In addition, our compliance culture continues to mature, with action plans to reassert our ethics internally while also addressing risks via our first external audit.

Our objective is to become *the* standard for innovative Stainless and Specialty Steels. To achieve this, we remain committed to listening to our customers and stakeholders in order to innovate the industry's best solutions.

With this report, we ask you to evaluate our current progress and to help us to further improve in our journey to sustainable excellence.

Sincerely,

## About Aperam

# Our Values

We are a leading global Stainless and Specialty Steel producer: a leader in South America and the second largest in Europe. We are also a leading manufacturer of high value added specialty products, including electrical steels and nickel alloys. From machinery to cutlery, we are proud to be the manufacturer behind an array of products that last a lifetime and offer our industrial customers and end users both strength and versatility. With this pride, together with our values of Leadership, Ingenuity and Agility, we aim to reshape the future of our industry, position our products as solutions to global challenges, and act as a catalyst for change.

*"After just six years as an independent company, we are happy to see the fruits of our Sustainability Strategy, with Aperam increasingly being recognised as a sustainable and profitable company led in accordance with its ethics and values."*

*Leadership, Ingenuity and Agility are indeed the values that drive us in our everyday operations and in implementing our forward-looking strategy."*

**Bert Lyssens**  
Aperam CHRO,  
Head of Communication and Sustainability



### Leadership

A leading company is bold, audacious, daring, and sustainable. A catalyst is not a pioneer in everything it does. It is about being bolder and audacious in our approach while remaining relevant to the marketplace. We are a stable driving force which encourages the development of new standards in the industry. We promote sustainable solutions.

> This value is echoed not only in the way we drive change within our industry, but also in how we challenge and develop our employees. With leadership, we think long-term, we think accountability - to both our people and the communities we are part of. This can be seen in our approach to Health & Safety, Ethics, Compliance and Sustainability.



### Ingenuity

An ingenious company is clever, skilful, imaginative, and innovative. Ingenious is about thinking laterally, not literally. Our people are passionate and always keen to share their knowledge and skills. Sometimes this means developing new ideas or applications; other times it implies seeing things differently, with new eyes to find the appropriate solution without compromising quality.

> And so this characteristic of ingenuity is bred and stimulated within all our staff. Our engineers' skills and imagination have led to an array of innovative, energy-efficient steel solutions for our customers. But ingenuity can even be found across our administrative and managerial staff: from managers to communication, legal and finance: ingenuity -and innovation- is everywhere.



### Agility

An agile company is fast, adaptable, and flexible. Being agile is about moving faster and adapting to the changing market conditions with more ease. It is also about being flexible according to specific customer requirements, whether in terms of cost efficiency, lead time or product characteristics.

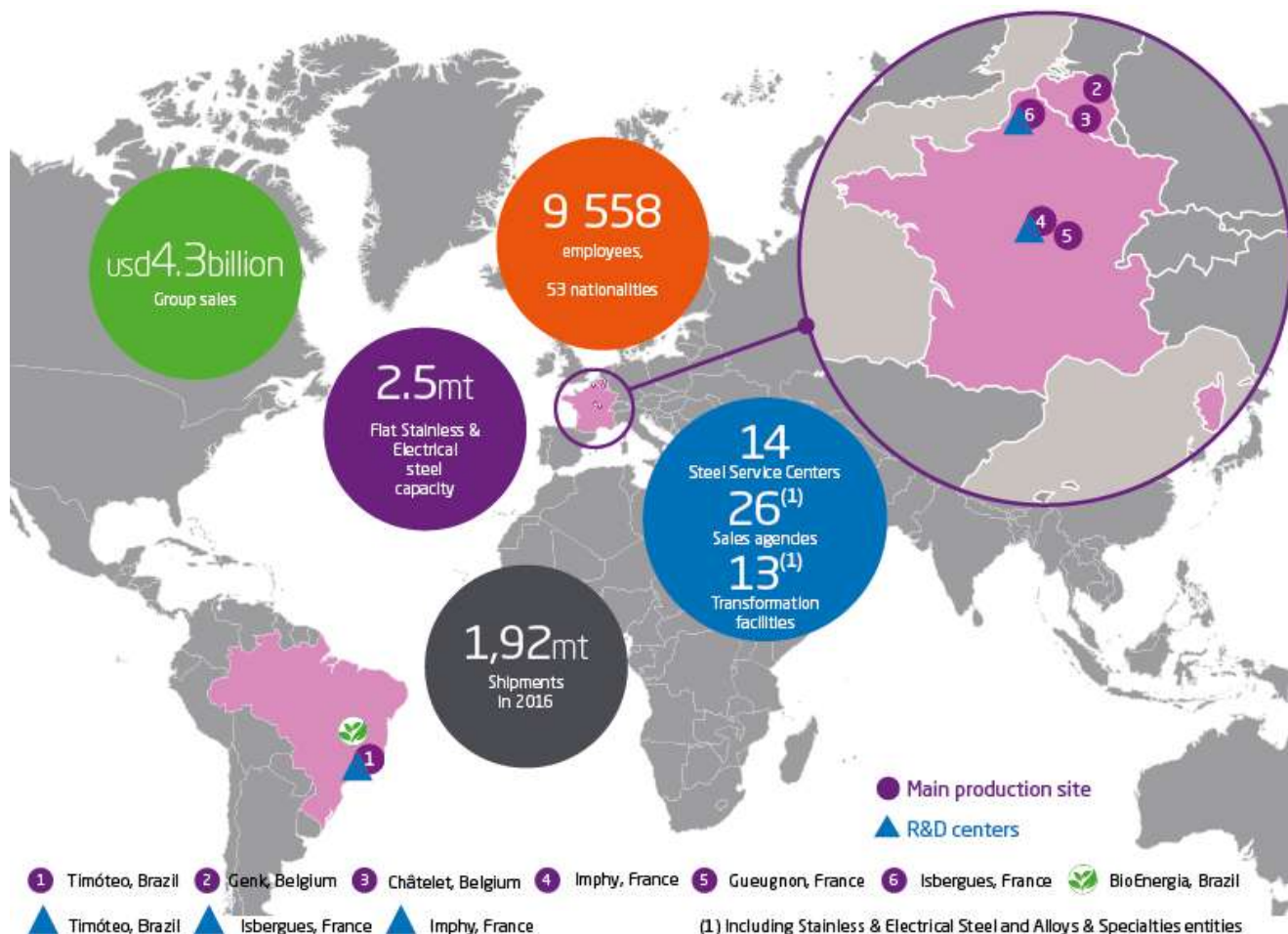
> It is because of our agility that financial analysts credited us with a three-notch increase within a single year - one of the fastest credit rating improvements ever.

Looking ahead, we are confident that our agility will be further demonstrated by the ability of our leaders and our talent to embrace opportunity and to quickly address any risk that comes our way.



## About Aperam

# Company profile



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

#### 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)



BioEnergia charcoal production facility and eucalyptus plantations (Brazil)

#### Aperam Global Performance G4-EC1

USD millions unless otherwise stated <sup>(2)</sup>	2016	2015	2014
<b>Shipments (mt)</b>	<b>1,92</b>	1,89	1,81
<b>Revenues</b>	<b>4,302</b>	4,739	5,485
Operating costs <sup>(3)</sup>	<b>3,213</b>	3,655	4,259
Employee wages & benefits	<b>556</b>	555	681
Payments to providers of capital <sup>(4)</sup>	<b>107</b>	26	65
Payments to government	<b>60</b>	70	67
Community investments	<b>0.5</b>	1.0	1.0
<b>EBITDA</b>	<b>492</b>	501	547
Economic value retained	<b>366</b>	439	393
Direct economic value generated	<b>4,302</b>	4,739	5,485
<b>Economic value distributed</b>	<b>3,937</b>	4,300	5,092

(2) Differences between "Global Aperam" and the sum of the different regions and segments (next page) are due to all operations other than those that are part of the Stainless & Electrical Steel, Services & Solutions and Alloys & Specialties operating segments, together with inter segment eliminations and/or non-operational items that are not segmented.

(3) Operating costs include R&D costs of USD 18m for Aperam Group.

(4) Payments to providers of capital = Net Cash Interest and dividends paid to capital providers during the year, in line with amount of interest paid (net) of USD 10m and dividends paid of USD 97m stated in the cash flow statement of the 2016 Annual Report. In 2014 and 2015, payments to providers of capital only related to net cash interests as there was no dividend paid.

## Our multiple markets and applications



### Earning stakeholder support through a transparent approach to sustainability reporting.

Our sustainability policies, available on our website, were inspired by international references:

- International Labour Office
- United Nations Human Rights Charter
- United Nations Global Compact
- United Nations Convention Against Corruption
- OECD Guidelines for Multinationals
- ISO standards (Quality, Energy, etc.)

This report is intended to materialise our commitment to transparency and responsible business behaviours. It is based on our interpretation of the following initiatives:

- United Nations Global Compact
- Global Reporting Initiative
- Carbon Disclosure Project
- ISSF Sustainable Charter
- WorldSteel Sustainable Charter

Aspect	Indicator	Unit	Stainless & Electrical Steel		Services & Solutions	Alloys & Specialties
			Europe: Genk, Châtelet, Gueugnon, Isbergues, Precision & Recyco	South America: Timóteo, BioEnergia	Worldwide: - 14 steel service centers - 7 transformation units - 20 sales offices	Worldwide Imphy, Amilly, Rescal (FR) Imhua (PRC), Indore -ICS (IN)
People	Own Staff (End of Period)*	FTE	3,123	3,307	1,923	1,147
Shipments	Steel shipments	kt	1,243	639	799	30
Economic Contribution	Revenues	millions of USD	2,591	919	1,964	415
	Employee Wages & Benefits		285	86	106	66
	Payments to Providers of Capital <sup>(3)</sup>		70	45	2	1
	Community Investments		0.0	0.5	0.0	0.0
	Payments to Government		26	10	16	5
	EBITDA		286	124	81	30
	Economic Value Distributed		2.4	0.8	1.9	0.4
Site Management System Certification	OHSAS 18001	% of sites	100	100	90	100 (excl. Imhua & indore)
	ISO 14001		100	100	55 (excl. Sales offices)	80 (excl. Imhua & indore)
	ISO 9001		100 (excl. Recyco)	100 (excl. Bio Energia)	95 (excl. Sales offices)	100 (excl. Imhua & indore)
	ISO 50001		60	0	3 SSC	0
	Others	total	ISO TS16949 75%	FSC CoC & M (BioE) ISO TS 16949		1 site ISO 26000 3 sites EN 9100

\* In 2016 there were 64 FTE at our Luxembourg headquarters, up from 52 FTE in 2015.



## Strategy and Performance

# Sustainability Strategy

Our sustainability strategy is a key lever towards realising our business ambitions without ever compromising our values.

Aperam places a strong emphasis on Governance with a majority of Independent Directors and Board Committees comprised exclusively of Independent Directors. Aperam is committed to adopting the best governance standards and is continuously monitoring best practices to make adjustments when necessary. Our high ethical standards are visible in our strict governance strengthened by a structured compliance program.

We are very proud that our Sustainability Strategy and our continuous efforts in this area have been recognised by ESG analysts with improved ratings and better rankings in benchmarks.

Aperam has put in place a clear organisation with respect to Sustainability as described below at the level of its Board of Directors and Leadership Team.



*Conservation centre for the departmental archives of the Nord region - Lille, France  
de Alzua+ / ZigZag Architecture  
© Sergio Grazia - Aperam 304 (Uginox Mat)*



Knowing that only sustained efforts will lead us to the results we want, in 2016 we built on the initiatives and successes of 2015.

## Sustainability Strategy and governance in 2016

The organisation, set up in 2015, remains valid and is comprised of:

- **Members of the Board of Directors:** upon proposals from the Leadership Team, they are in charge of the overall management of the Company, with their work supported by Audit & Risk Management Committee reviews.
- **CEO:** responsible for Aperam's sustainability performance and compliance.
- **CHRO, Head of Communication and Sustainability:** responsible for defining the Sustainability Strategy per discussions with and monitoring by a specific Environment, Social and Governance (ESG) Committee
- **ESG Committee\*:** meets regularly to monitor progress, propose new work streams and lead validated projects.

On several topics, and in particular in environmental-related areas, our strategy includes clear targets for 2020. Here we are already seeing some initial successes, such as the improved ratings from ESG analysts and various benchmarks (CDP, etc.). Moving forward, we expect to see even more rapid results as the organisation further incorporates our sustainability roadmap into everyday decisions. For this reason, awareness-raising actions will be accentuated, as well as updates to internal procedures (eg. internal CO<sub>2e</sub> price).

## Working and reporting on the right topics

Since 2013, Aperam has 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 both on its potential impact on 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 matrix based on a survey of our closest stakeholders: Aperam's employees.
- 2016: using a prior study on local engagement practices, we resumed the matrix update while expanding its scope. Thanks to the 11 matrices defined by the major sites from all our segments, we covered 85% of our global workforce.

This regular exercise allows us to confirm and refine our vision. Although our priority list remains more or less similar (weighting is based on the staff, thus reducing visibility of newly included sites), important variations were made clear nonetheless.

This is due to the fact that smaller sites, especially our Service & Solution Centres differ greatly from our main sites. Also, our Timoteo unit has wished to add a specific item named "Corporate Responsibility", that goes well beyond "Philanthropy" and covers social impact investing. In the group consolidated matrix, it is merged with "Philanthropy" as we considered that Aperam's Corporate Responsibility was not a specific item but the fact that we address each single material aspect below.

Lastly, late in the process we realised that a topic had to be inserted as it reflected a crucial concern expressed throughout the company and one that was already touched upon last year: 'Attracting talents to our industry'. For these reasons, we incorporated it after review and validation by the ESG committee.

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

Top Material Aspect 2016	Category	Page	Comment
Occupational Safety	People	11	
Sustainably Profitable	Governance	39	+ Annual Report
Occupational Health	People	14	
Legal & Fiscal Compliance	Governance	38	+ Annual Report
Customer Satisfaction	Governance	33	
Air & Dust Emissions	Environment	24	
Pollution Prevention	Environment	27	
Competencies & Employability	People	16	
Employee Engagement	People	15	
Product Innovation	Environment /Governance	41	Here in Governance
Energy Consumption	Environment	23	
Social Dialogue	People /Governance	30	Here in Governance
Fair Business Practices	Governance	38	With Integrity
Anti-Dumping	Governance	30-40	+ Annual Report p20-21
Waste/Recycling	Environment	25	
Cash, Debt & Financing	Governance	n/a	Annual Report p42-29
Raw Material Consumption	Environment	25	With Waste/Recycling
Diversity & Equal Opportunity	People	18	
Supplier Labor Practices	People	32	
Attracting talents to the industry	People	19	New item 2016
Water Consumption	Environment	26	

\* made of three members of the Leadership teams (the chairman being the CHRO, Head of Communication & Sustainability ; the CFO ; and the CEO of Alloys -also in charge of Health & Safety), and assisted by the Company Secretary & Head of Communications, the Head of Sustainability & Compliance, the Head of Health, Safety & Environment and the Environment Coordinator.

## Strategy and Performance

## 2016 Performance at Group...

2016 Sustainability performance			
Aspect	Indicator	Unit	2016
Occupational Health and safety G4-LA6	Fatalities (all staff <sup>1</sup> )	Total /1,000,000 hours	0
	Lost time injury frequency rate (all staff <sup>1</sup> )		1.46 *
	Lost time injury severity rate (all staff <sup>1</sup> )		0.09 *
Motivation G4-LA6	Absenteeism	%	2.19
Learning & Development G4-LA9 G4-LA11	Training	Total hours	340 135
	Employees receiving regular performance review: > Exempts	%	95
	> White Collars		90
	> Non-exempts		71
Materials consumption G4-EN2	Proportion materials used that are recycled input materials	%	27.6
Energy consumption G4-EN5	Energy intensity / 2015-2016 evolution per segment	GJ/t	12.8 *
	Renewable energy	%	36%
Emissions G4-EN18 G4-EN21	Greenhouse gas (CO <sub>2</sub> ) emissions intensity (scope 1+2) / 2015-2016 evolution per segment	tCO <sub>2</sub> eq/t	0.58 *
	Significant air emissions: Ducted dust / 2015-2016 evolution per segment	t	549.8 *
Water consumption G4-EN8	Total water withdrawal / 2015-2016 evolution per segment	million m <sup>3</sup>	23.0
	Water recycling rate / 2015-2016 evolution per segment	%	96.3
	Water withdrawals from local rivers Group / 2015-2016 evolution per segment	%	92.3
Economic Performance G4-EC1	Direct economic value generated and distributed	USD million	3 937
Procurement practices / Local development G4-EC9	Spent from local suppliers	% of purchases	57
Product stewardship, customer service G4-PR5	Customer satisfaction (survey score)	Satisfaction (score/10)	n/a 9.3 Alloys

<sup>1</sup> Internal staff + interim + contractors.



## Strategy and Performance

## ... and segment level

Group		Stainless & Electrical Steel		Services & Solutions	Alloys & Specialties
2015	2014	Europe Genk, Châtelet (BE) Gueugnon, Recyclo, Precision, Isbergues (FR)	South America Timóteo plant, BioEnergia plantations (BR)	Worldwide 7 transformation facilities, 14 service centres & 20 sales offices	Worldwide Imphy, Amilly, Rescal (FR), Imhua (PRC), Indore -ICS(IN)
1	0	0	0	0	0
0.98	1.10	3.75	0.26	1.49	0.46
0.07	0.11	0.28	0.00	0.04	0.02
2.26	2.03	3.55	0.99	2.72	2.96
309 206	314 655	informed by country - p 14			
96	95	not split by business			
85	87				
65	n/a				
30.0	28.0	+0.6 pts	-1.9 pts	N/A	+9.4 pts
12.8	13.0	+8.7 pts	-1.1 pts	+0.3 pts	+1.0 pts
37%	38%	not split by business			
0.54	0.48	+1.7 pts	+20.0 pts	-1.8 pts	+10.9 pts
520.9	441.8	-6.2 pts	+7.9 pts	N/A	-33.1 pts
22.1	22.3	+4.3 pts	+3.8 pts	+19.2 pts	-0.2 pts
95.4	95.5	+1.1 pts	-0.2 pts	-6.1 pts	same
92.0	93.0	-0.07 pts	+0.05 pts	+2.21 pts	-3.55 pts
4 300	5 485	2 345	857	1 915	383
58	62	59	49	N/A	64
7.4 Stainless E 9.2 Alloys	7.8 Stainless B 9.1 Alloys	planned for 2017	planned for 2017	N/A	9.3

2016 progress in...

# Social (Our People)

Our people are colleagues with whom we share values and a common future. Their safety is our non-negotiable priority.

In 2016, our lost time injury frequency rate was impacted by isolated deteriorating performances at two of our European sites. The Leadership Team decided to further reinforce Health & Safety training to stimulate excellence in behaviours, further leveraging the best practices in the industry and within Aperam.

We have started to see some progress towards the end of the year, and all efforts are being made to sustain this trend.

The Social pillar of our Sustainability Strategy refers first and foremost to our people (for other stakeholders, see Governance section, p29).

When it comes to our people, safety will always be our first duty and our uncompromised commitment. For this reason, we again cover this aspect extensively in this report.

In addition to a healthy and safe staff, we also want an efficient and motivated team empowered to develop, thrive and innovate for Aperam. To accomplish this, we are continuously improving our training and career development programmes and promoting proximity and team spirit.

*Health & Safety Campaign 2016, Poster 1*



So, how did we do in 2016 for our 9,558 own full-time employees (of which 10% are exempts and over 98% permanent) and our 471 supervised workers (G4-10)?

We invite you to read on and find out. And while we look back, we must also keep in mind the challenges of today, as 2017 is indeed a year of transition, with a new organisation and many projects set to be launched throughout the course of the year.

## 1. Health & Safety

**> In 2016, we conducted a complete review of our organisation.**

In 2015, our Chief Technical Officer was also in charge of safety, supported by a Group Safety expert who coordinated local resources at the plant level. In 2016, we reviewed our safety organisation, allocating two full-time persons to provide on-site safety training, along with appointing a Group Head of HSE.



Today, Guy Bélanger, our new Safety Leader, travels across the group to collect and diffuse best practices. Guy reports to Leadership

Team member Frédéric Mattei, who also leads the Alloys & Specialty segment - a segment that posted impressive safety results, these past few years.

## Voices

*"I still feel that we have a long way to go in becoming a sustainable, safe company. Even though we start every working day and begin every meeting thinking 'safety first', incidents and potential severe incidents still occur at our plants.*

*My priority is to lead the entire Aperam community, managers, workers, unions and subcontractors towards an absolute respect of Health and Safety priority. Join me in continuing to reflect about what we can do to further improve our procedures, as well as our mindsets.*

*My promise to you is that, with the entire Leadership Team, we will make no compromises to our commitment to safety until we have reached - and sustain - our goal of zero accidents."*



**Timoteo di Mauro**  
Chief Executive Officer





Picture: This Aperam Genk plant team (with one team member absent on the picture) won the Trophee 2015, awarded in February 2016, amongst 12 identified improvement proposals.

The selection procedure for the internal competition started in November 2015. Further to real-life audits conducted in January 2016, the maintenance team of the cold rolling mills was chosen as the overall winner for their MKW2 tool.

We are proud of all our teams and we want them to be proud of Aperam.

#### At a glance (G4-LA6)

Indicator	Unit	Target 2016	2016	2015	2014	Page
<b>Employee</b>	<b>FTE</b>	n/a	9,558	9,522	9,424	9
<b>Joiners</b>	<b>FTE</b>	n/a	674	834	n/a	18
<b>Fatalities - All</b>	<b>#</b>	0	0	1	0	§ Safety p9 (and § Suppliers p31)
Fatalities - Employees	#	0	0	1	0	
Fatalities - Contractors	#	0	0	0	0	
<b>LTFR - All</b>	/100000	1	1.46*	0.98	1.10	
LTIFR - Employees	/100000	1	1.60	1.03	1.24	
LTIFR - Contractors	/100000	Below 1	1.10	0.87	0.82	
<b>Absenteeism</b>	<b>%</b>	2.0	2.19	2.26	2.03	13

\*Data highlighted with a star have received external assurance.

## 2016 Health & Safety awards

To continuously enhance the safety of our sites, Aperam has internal initiatives aimed at promoting successful teams and sharing best practices. In addition to these company initiatives, in 2016 many sites also competed in local challenges, including:

- **GESiM's Special Prize**, won by a 12-member delegation from the Gueugnon rolling mill for their idea on enhancing the process for changing grinding wheels for rectification.
- The Regional and National Competition organised by the **Polish Labour Relation Commission**, which recognises the best safety conditions at work. This year, out of 17 pre-selected finalists, Aperam's Poland Service Centre took home the prize.
- **German BGHW Prevention Award**, given to our German unit for their "Safe working on factory roofs" project. The team was selected from 60 applications.



*Aperam Gueugnon team, winner of the French GESiM challenge.*



*Aperam Poland Service Centre National Award for the best safety conditions.*



*The German Service Centre received the BGHW Prevention Award 2016*

## 1.1 Safety: Our N°1 Priority

**> We kicked off the year with a tremendous effort to change mindsets in a sustainable manner.**

Based on the principle that people must first believe in a philosophy before they will apply it, Aperam decided to roll out an educational roadmap on safety. Called SAFE, the roadmap was aimed at all workshop employees and their hierarchical lines. The initiative consists of a 20-day onsite, full-time programme deployed in three phases. The programme demands dedicated trainers, committed leaders, strong organisation from the plants and the flexibility to adapt to shift planning.

Launched in 'beta' mode in spring 2016, full roll-out started in June with the programme's first phase. This five-day training week is composed of six modules featuring a mix of learning methods, including lectures, classroom exercises, shop-floor training, team field assignments and debriefings. The learning objectives for this first phase were to ensure that learners:

- recognise hazards,
- speak up,
- commit as leaders and employees.

Thanks to the support of employee representatives and unions, approximately 45 people were trained each month during the first phase roll-out. To evaluate the success of the programme, we will look for a powerful flow of change management.

That being said, initial feedback from participants make clear that the aim was understood and the efficiency recognised, meaning the course succeeded in helping to change mindsets and everyday behaviours.

■ With the same objective in mind, our Châtelet plant decided to add a little humor and creativity into the mix by hiring a theatre group. After a few visits and interviews, the group built and performed the playlet "L'Acier...curité" (see picture next page) for some 150 workers during the plant's Health & Safety week.

## Voices

*"The efforts that Aperam invests into this SAFE program are truly remarkable and exemplary of our commitment."*

*As I have seen at our Imphy site, mindsets can change. But this takes time and requires long-lasting efforts, pedagogy and ever-renewed engagement."*

*This is why having a long-term plan is so important. With our new five-year plan, proposed by Guy Bélanger and structured around six strong pillars, we are taking a fresh start while building on past successes and working towards making safety Aperam's first and foremost priority."*

### Frédéric Mattei

CEO Alloys, in charge of Group Health, Safety and Environment

### ▶ SAFE trainings in 2016

**3-phase roadmap**  
**8,900 hours**  
**835 people trained**  
**4 sites covered**

With a mix of written scenes and interactions with the audience, the show covered such topics as shared vigilance, our 'fair play' policy and the relationship between field operators and their hierarchy. Not only did the play get some good laughs, it also forced workers to reflect on the inconsistencies between talk and action and what can be done to change this.

■ Based on a best practices of our Timoteo plant, several other units, including Gueugnon and Imphy, have implemented a new safety video welcome message and quiz. Passing the quiz is a prerequisite to site entrance, but those who don't can take it again... until they memorise the basics!

To ensure all the best practices happening at all our sites are identified and shared, Guy Bélanger has launched a systematic inventory of all local policies.



## Safety N°1 priority 5-year roadmap

- Company alignment
- Training
- Behaviors
- Audits
- Technical expertise
- Communication

> Based on this, a five-year, six pillar roadmap has been established. The first pillar of this strategic plan is **alignment**, making sure that all of our 40+ sites work hand-in-hand and that no energy is lost. All best practices should be quickly shared and any risk swiftly reported.

The second pillar is **training**. Expect more training opportunities to be added to complement the SAFE programme, particularly in respect to soft skills and **behaviours**, which is also our third pillar. The fourth and fifth pillars are **audits** and **technical expertise**. Audits include not only shopfloor audits, but also fatality prevention and overall maturity assessment. We are currently simplifying our three audit methodologies to make them more efficient. Technical expertise, on the other hand, focuses on best practices and incorporates a specific focus on near-misses (a 2017 action plan).

Lastly, our **communications** will be updated to include more impactful, attention-grabbing images and videos so no-one misses the key messages.

Based on this six-pillar plan covering all aspects of change management, a new plan will be set up and improved every year until 2022, with the goal of incrementally advancing our journey to zero accidents.



Winners at Genk of the 2016 H&S Day contest having reported the most relevant near-misses.



Châtelet playlet on Safety at H&S Day 2016.

### 1.2 Health: a local focus

Contrary to the company-wide focus of safety, our health initiatives are monitored at unit level and with limited input from Headquarters. For this reason, in 2016 we saw a large variety of local actions.

> In **Brazil**, we invest a lot in prophylactic and curative health programmes. In 2016 alone, 3,939 medical check-ups and 298 psychological consults were provided. Furthermore, within the context of our extensive *Eu Pratico Saúde* plan (I Practice Health), launched last year to promote healthy attitudes in everyday life, in 2016 we invited the exhibit *Vias do Coração* to Timoteo. The exhibit's nine stations offered a range of playful content and its interactive games proved to be a hit for both young people and adults. Most importantly, it fully succeeded in raising awareness about the heart and preventing cardiovascular diseases.

> In **Europe**, health-related actions often come from national or regional programmes or site initiatives. For instance, in 2016, an initiative of our Alloys & Specialties segment echoed the French national anti-smoking campaign. Similar actions were also launched in Italy and Germany. Psycho-social risks were covered in a multitude of different ways. In France, the Quality of Life at Work programme continues (see boxed text). In Germany, units have been holding anti-stress seminars for many years with the same expert firm. As a result of this ongoing effort, corrective actions are now regularly debated.

■ In Châtelet, the process started with a survey, organised in February 2016 in cooperation with the Walloon Authorities and the UCL University.

Over 300 workers (a 51% rate) responded to the survey. Thanks to comparisons with other heavy industries, some positive points were confirmed (participation in decisions and autonomy, job interest, social support, etc.) and key weaknesses identified. In addition to the need to update our current safety policy in order to prevent serious accidents (which also have a substantial impact on the morale and overall well-being of teams), the survey also noted a need to improve our overall alertness and our ergonomics as related to computer work.

In regards to alertness and our safety policy, improvements are expected to primarily come from our Safety and SAFE programmes. In addition, the daily commitment of all actors, including supervisors and unions, will further help prevent any decrease in alertness. Finally, as many workers are spending more and more time using computers and other screens, a special focus on ergonomics will be arranged.

Seeing all these best practices happening across the company, we are considering adding a centralised level of coordination, possibly via a five-year roadmap, which could

### Quality of Life: 2016 developments

Last year we reported on the programme *Qualité de Vie au Travail* (QVT), set up at all French sites. Quality of Life at Work is based on two principles: prevention and shared vigilance. The programme clearly defined its ambitions and established a 2018 deadline.

At the end of 2016, we are on target. 47 members of local executive committees have been trained by external specialists, blending courses and simulation exercises, and the 60 members of the dedicated sites' QVT committees (mixing HR and H&S specialists with medical staff and management and employee representatives) have followed specific two-day courses for reflecting and engaging on the topic. Thanks to this extensive training, a clear breakthrough happened in terms of awareness and buy-in, with specific action plans having been set up at all 10 sites. Follow-up meetings with Work Councils will be organised in 2017 to review the metrics and share best practices.

further develop Aperam's health programmes.

## 2. Efficient teamwork

### 2.1 Employee motivation

Having engaged and motivated employees is the best way to ensure a high level of productivity, and creativity with our people.

In 2016, our global absenteeism was almost stable (2.2% vs. 2.3% in 2015 i.e. a 3% improvement) (GR-LA6).

In Brazil, one of our best performers, this rate continues to improve. This is no doubt in part because our Brazilian teams organise an annual climate survey of the entire staff, the results of which form the basis of ongoing dialogue via the intranet, social events and, as was highlighted in last year's report, social media (see boxed text for more information).

We also saw a high number of similar initiatives happening across the Group, complemented by corporate communication videos and emails sent to all workers.

#### > Take for example our Service & Solutions segment (S&S).

Comprised of 1,923 FTE spread across 39 sites worldwide, communication is essential. To help create a common identity, last year a branding campaign was launched. Says S&S CEO Johanna van Sevenant: "The goal was to engage all of our employees, emphasise how we are all working together to achieve common goals, and create a sense of pride in being part of the S&S team."

Called 'We are Proud & We are All Aperam', the campaign included a series of posters highlighting five key messages: safety, value creation, results, global presence and customer agility. The popular kick-off events (see picture) were the source of many new ideas, such as S&S Italy's decision to resume 'Family Days' in 2017.

Not only does the new brand campaign go a long way in creating a sense of belonging to a global organisation, it also promotes the many local initiatives happening across the segment.

For example, our German unit created a new frame for company car licence plates. Now, all new company cars in Austria and Germany feature a licence tag number starting with "ME- AP xxxx" and proudly stating 'Your preferred stainless supplier' (see photo).

#### > The participative programme on work enthusiasm set up in Genk

also deserves to be highlighted. Kicked-off in October 2016, it aims to prepare our workers for the fact that we will need to work longer. The programme is supported by an external specialist in Human Resources and Change Management and includes a steering committee composed of site management representatives and unions, as well as six working groups of 15 volunteer workers.

These brainstorming groups have been formed, each reflecting our diversity in age, shift systems and workshops with the goal of spurring debates and creativity. They will start their brainstorming sessions early 2017 on four guiding questions:

- What motivates you to do your job with enthusiasm?
  - What (sometimes) discourages you to do your job with enthusiasm?
  - What can Aperam do to ensure you will work with enthusiasm (...) until the end of your career?
  - What can you do to ensure you will work longer, with enthusiasm, effectively and efficiently?
- The group's suggestions will then be submitted to the steering committee, who then will review and prioritise them.

No doubt these sessions will trigger employee engagement!



Aperam tag for German and Austrian plates.

### Best steel employer in Brazil

After years of being listed as one of Brazil's best employers, in 2015 we set the goal of earning the top spot.

In 2016, Aperam was among 345 from several sectors who applied to be listed as one of 'The 150 Best Companies to Work for 2016', an initiative of *Você S/A* magazine and Fundação Instituto de Administração (FIA). 200 were pre-qualified for the contest and evaluated by specialised journalists, who used a specific methodology for identifying companies that are the best at creating top career opportunities and work conditions.

It is our pleasure to announce that Aperam was ranked first in the steel sector - thus accomplishing our goal!



Aperam South America: 7th consecutive year among the Best Steel employers

### Voices

*"We are a company that values people. Aperam systematically invests in team building activities in order to ensure self-development, a better work environment and the ability to overcome business challenges."*

**Frederico Ayres Lima**

COO, Aperam South America



Service & Solution Italy kicks-off of the campaign: "We are proud & We are all Aperam".



### > Other excellent initiatives have been launched in S&S Brazil and in Precision.

■ In the latter, an initiative based on a quality improvement programme was launched. It uses a specific intranet form to collect simple ideas for improvement from operators, along with a series of measures aimed at making people feel part of the unit's success.

In 2016, 280 suggestions were collected, with some of the best ideas rewarded (see picture). Overall, the programme generated a significant improvement in the commitment of the workforce and an impressive cut of non-quality costs: -30% in less than a year!

Although operating in the very different context of a severe national recession, S&S Brazil implemented a similar programme themselves.

■ Aimed at promoting teamwork and a sense of having a shared future, the Brazilian initiative focused on activities that make people happy and participative. From dance to sports, music, study groups, 'Casa Inox' stage acting, volunteering for environmental and social causes, to name only a few - all of these actions helped increase employee satisfaction, commitment and pride at work. According to management, the activities were a key factor in facilitating the unit's upturn. Indeed, productivity, quality and On-Time-Delivery (OTD) metrics improved significantly in a two-year period, showing the value of this method.



Onoélia, from S&S Brazil, one of the project leaders.

### > To stimulate motivation at the group level, we conducted a global employee climate survey in 2016.

Previously, our surveys were done at the local level, taking into account language and regulatory constraints. The only exception was group level surveys for exemptions.



Aperam Precision awarded Karine (SCL), David & Paul (Shearing) and Alban (Purchasing).

One challenge to launching a full, group level survey was finding a process able to manage Aperam's 10 working languages. We also had to ensure data privacy (in accordance with local laws) and confidentiality (to get transparent answers). Contracting with a specialised firm, the survey was launched during the second week of January 2017, together with a special communication plan.

The results of this inaugural global survey on engagement, recognition, work conditions, leadership style and company strategy will be revealed and discussed starting March 2017. These results will also be elaborated in the 2017 Sustainability Report and serve as the foundation for future employee engagement plans.

## 2.2 Training and development

Thanks to our formal, systematic performance reviews, we are better able to structure the way we engage with our people. Every year, our employees sit down with their hierarchical manager and fill out the Global Employee Development Plan (GEDP).

The GEDP includes the worker's objectives for the year (one of which must relate to Health & Safety), against which they are evaluated during their annual performance

## Voices

*"By improving the internal climate, people become more motivated to be their best and overcome challenges - which results in better performance. Simply said, happy people bring good results!"*

### Sergio Bustamante

COO Aperam S&S Brazil

review. All of that is discussed taking into account any problems encountered during the course of the year and career aspirations.

And truly, we encourage our people to develop a long-term view of their career and to explore new opportunities, such as a new function, a new location, or a move towards teaching and mentoring.

**> In 2016, 95% of exemptions, 90% of other white collars and 71% of non-exempts filled out their GEDPs** (vs. 96%, 85% and 65% respectively in 2015) - GR-LA11.

■ However, we are sometimes facing a lack of off-the-shelves technical training. In our last Sustainability Report, we used the Imphy EMA Internal School (Ecole des Métiers des Alliages) as an example of how we managed to offer training that fits our needs. In Imphy, this need was related to specific metallurgical competencies. A similar initiative is happening in Isbergues. With the aim of developing specific driving skills applicable to several of the key tools used at our plants (ground or overhead cranes, handling pods, trolleys, etc.), the site created Formanut, a unique common training platform. With a dedicated trainer and a tester, Formanut is Veritas-certified since 2011.

### 2016 Training follow-up

Country	2016		2015		2014	
	Hours	Cost USDK	Hours	Cost USDK	Hours	Cost USDK
Belgium	54,114	3,324.1	42,642	2,667.1	41,016	3,193.5
Brazil	191,148	823.3	186,788	868.4	193,984	1,232.9
France	71,123	974.0	56,481	979.7	55,384	1,173.1
Germany	3,395	108.0	2,965	94.2	1,880	112.8
Italy	3,575	47.9	3,831	39.9	4,579	47.8
RoW	20,408	310.1	16,500	234.5	17,812	280.8
<b>TOTAL</b>	<b>340,135</b>	<b>5,581.7</b>	<b>309,206</b>	<b>4,883.8</b>	<b>314,655</b>	<b>6,040.8</b>

Aperam consolidated. Total of external training hours and spent reported, without internal costs. (G4-LA9)

Formanut training is available to all Aperam companies located on the site, as well as other area organisations. Amongst the key advantages of this solution is the ability to propose a flexible, reactive training combined with a perfect level of safety.

In 2016 alone, 1,834 training hours were provided to 281 employees (including people from 11 external companies). Thanks to this training, our staff have the opportunity to expand their competencies, allowing for a change in jobs or the addition of a new equipment certification.

In Isbergues, Aperam has advocated for extending and harmonising team capacities. For example, last year the entire Recyco electro-mechanics team participated in a multi-skill development training. All team members benefited from a combination of external training and internal mentoring, giving them the tools necessary to handle any new challenge.

Having such a multifaceted workforce is not only good for operational flexibility, but also for our staff's career, their motivation and employability.

In parallel to this technical training, we are also investing heavily in the development of soft skills and, in particular, leadership.

■ Take for example S&S Germany, a unit that is well-aware of the fact that being technically competent does not necessarily make one a leader. Traditionally, a newly promoted head of service would learn basic leadership skills - how to manage a team, budgeting, etc. - 'on the job'. To ensure its new leaders are fully prepared for their role, S&S Germany launched an external training called 'First-time leadership', which helps new managers evolve from being a colleague to being a team leader.

Ten newly promoted managers have been trained since 2015, and initial feedback is very positive.

> **2016 saw a +10% increase in training hours**, especially in Belgium, France and Brazil (see previous page - [G4-LA9](#)). We are currently preparing the implementation of a global Learning

## Focus on mentoring practices

In connection with our age pyramid, staff renewal and the need to secure competencies, mentoring programmes are another tool being increasingly used in such places as Genk, Gueugnon and Brazil.

As developing worker competencies has a direct impact on each working unit and on overall productivity, Aperam is using mentoring as a way to pragmatically share best practices. For example, in Genk, mentors provide regular feedback to hierarchical managers, letting them know if additional training is necessary for new recruits. Mentors also provide new recruits with guidance on such in-the-field tasks as how to order working clothes and how to fill-in a near-miss declaration.

In Gueugnon, the company's most experienced employees are encouraged to participate as mentors, sharing their years of knowledge and expertise and coaching new employees and, in some cases, even accomplished workers looking to expand their competencies and improve their employability.

**André Degrange - Mentor**  
Orders Management and Shipping

*"Transferring my knowledge and contributing to the continuity of the company are my main motivations for welcoming new people as a mentor. After having followed the mentor training, I am able to better explain my day-to-day tasks and to measure the development of the mentee, such as their ability to deal with in-the-field issues. At the end of the training, my mentee will be ready to handle their job with confidence."*

**Pierre Emorin - Mentee**  
Maintenance Technician ([picture](#))

*"For a student specialised in industrial electricity like myself, to join Aperam in 2016 as an apprentice has been a great opportunity. From the beginning, I have been able to work with several types of tools and experiment with real-life situations. Having my mentor close to me made the learning phase more interesting - and faster."*

*Now, after six months, I have been hired as a full employee and I am very proud to work for such a great company."*

Management System (LMS) but, in the meantime, data are taken from the local systems

■ For instance, the French training system (see 2015 report), shows us that the majority of training hours in France were on SAFE and QVT (see p13-14), followed by finance for non-professionals, project management, and various quality and commercial topics. As can be seen, all the training sessions are fully aligned with our strategic roadmap and help develop our culture as a safe and innovative company. New in 2016 was the introduction of a systematic process for assessing training efficiency. The assessment used both on-the-spot impressions from participants and post-training evaluations on how applicable the training was to their day-to-day tasks.

Clearly, training is a key factor in enhancing our productivity and preparing for the future.

For our people, it helps with career development and facilitates a change in job function.



## Voices

*"Our future integrated HR IT platform will enable us to steer the development of critical management and technical competencies while ensuring a better link between strategic learning needs, the current level of competencies, and planned learning actions."*

**Bert Lyssens**

CHRO, Head of Communication and Sustainability



For Aperam, it is a way to lock-in the competencies we need for our future success, as identified in our strategic plans.

**> This is also one of the key drivers for the investment in an integrated HR IT platform (Competency Management and Learning Management System).** One of our key accelerators for transformation is our ability to acquire and develop future competencies. On top of this our industry is facing a shortage of key technical competencies (e.g. maintenance, metallurgy, etc.). This is why it is critical that we begin developing these competencies internally through our own Schools (Aperam Foundation Brazil, Ecole des Metiers des Alliages France) and internal coaching or mentoring programmes that link young graduates to senior experts (see previous pages).

**> However, today we are confronted with new challenges and opportunities.** As our industry continues to undergo a technological transformation, in order to maintain our competitive edge, Aperam is rapidly up-skilling in a number of areas. Many of these areas are relatively new to our industry, but will dramatically increase in importance as the digital revolution accelerates.

■ Within this context, in 2016 we focused on hiring experts from other industries and young graduates, all of who go through an intense on-the-job training with specific assignments in key company-wide projects. This induction ensures these new employees are able to quickly learn our business while also putting their fresh energy, knowledge of other sectors and bold ideas to work.

In the coming years, we will develop a number of internal learning academies around key future competencies - similar to what we have for such functions as finance.

### 2.3- Diversity in Aperam

Historically, recruitment efforts in the steel industry has focused on men, filling roles that required intense muscular strength and physical resistance.

The steel industry of today has changed. As a result, we now have more women in the workforce, including some leading production lines at our two largest rolling mill tools in France.

Because Aperam sees value in a diverse workforce, we are keen to attract the very best talent, regardless of age, gender, national origin or disabilities.

**> However, women only make up 12% of our staff** (16% in S&S Brazil, 20% of global exempts), and 17% of 2016's joiners. However, some units report a better rate, such as S&S Brazil (22% in Campinas), who state that this higher level of female employees is a driving factor behind their excellent safety and efficiency levels (see Sandra's testimony on the right)..

■ We participate in job fairs to promote the industry and the feminisation of our fields of activity (eg. in France: 'Semaine de la mixité', 'Forum des métiers au féminin').

Still, despite our best efforts, recruiting women remains difficult as few apply, especially in Europe. To move further in 2017, our French unit launched a specific workstream on gender diversity, which will be detailed in next year's report.

## Voices



*"Some traditionally feminine characteristics make a real difference in our company."*

*Women have an increased perception for details, which plays a key role in ensuring the quality of our products.*

*They also have a special sense of responsibility, especially as to safety and the environment - essential for reaching a good level of organisation on the shop floor."*

**Sandra Signorelli Andrade**  
HR Aperam S&S Brazil

*Catherine and Christian in action at Gueugnon Rolling mill.*



### The female touch at Aperam: Catherine, Rolling mill operator in Gueugnon

After 19 years in the industry, first as production worker and then as a Quality Inspector, Catherine Ligier joined Aperam in 2015. She had the opportunity to start via an apprenticeship programme set up in Gueugnon (see last report) and graduated with a Metallurgic Professional Certification, which is valid anywhere in France.

"Being a woman on the production line has never been a problem for me. What is important to me is being a part of the team and able to participate and ask questions without hesitation. Each team member is respected for who he/she is, and this is why I have always been treated with fairness and equality, even if I am the only woman in the Lamination Workshop.

I participated in the 'Forum des carrières au féminin' (Women working careers show), so I could share my experiences with other women. I recommend any woman thinking about a career in an industrial workshop to look for an opportunity that offers the time and training needed to get used to the job and the ways of the company.

Now, I intend to continue learning and working towards reaching the first Rolling Mill Operator Standard, which demands time and experience. For that, I take advantage of any opportunity I have to learn from my experienced colleagues, and I strive to expand my range of competencies to new topics, like driving forklifts and cranes."

> **Regarding people with disabilities**, as mentioned in a previous report, our ESAT partner in Alloys Amilly continues to employ people with disabilities. As this programme proved beneficial for both the disabled and non-disabled workforce, in 2016 our Alloys & Specialty segment initiated a new programme, which could soon be extended across France.

■ Our unit in Brazil launched a specific process for recruiting people with disabilities. This hiring process is combined with a range of actions aimed at increasing awareness among our employees about the

benefits of inclusiveness and the many different ways everyone can contribute to Aperam's success. To ensure a smooth onboarding process, specific care is taken to ensure teams are fully prepared to include people with disabilities and to help walk them through our routines and procedures. In 2016, 18 people with disabilities were hired. We also enrolled 10 trainees. The key objective of this recruitment initiative was to promote diversity and equal opportunities and to ensure that everybody is recognised for what they bring to the company.

> **Because of our global composition, diversity at Aperam is often defined by language and culture.** We have four main official languages: English, Dutch, French and Portuguese, and all corporate communications are dispatched in multiple language versions. In fact, many of our official communications, such as our Health & Safety campaigns and the Compliance posters (see left), are translated in up to 10 languages! In addition, site management are encouraged to use the local language of the workers, thus ensuring that proximity is not an empty word.

That being said, in order to boost creativity, at times we do utilise positive discrimination. For example, when several profiles match, sometime we will opt for the local profile, while other times we will go with a new nationality in hopes that they will bring different ideas to the teams they join. In other words, we take a multi-criteria approach to diversity, one that is tailored to our ingenuity credo.

#### 2.4- Attracting new talent to a 100-year old industry

After a decade of low recruitment efforts, it is no wonder that attracting new talent today can be challenging.

> **To refresh our approach, we changed our organisation and our recruitment methods.**

In addition to social media (the now-standard LinkedIn) and intensive campus recruitment efforts, our Human Resources are also testing such new solutions as web-forums to

▶ **674 joiners in 2016**

**80% in permanent contract, O/W 11% from short-term contract**

**31 year-old in average**

**17% are women**

Aperam Precision's Patrick (Roller) & Maxime (Maintenance) at "L'industrie en fête" fair.



pre-select candidates. Granted, a career with Aperam shouldn't be a hard sell, we just need to ensure our message highlighting the dynamics of our young, lean company with high ambitions is heard. Some candidates may have outdated notions about our industry.

But after hearing about what Aperam is really like, many quickly change their views. In particular, many young job seekers are enthusiastic about the many technical challenges that our industry faces - and the new technologies, methods and innovations that are being developed to solve them.

■ Regardless how exciting we sell the opportunities at Aperam, nothing is more effective at recruiting young talent than having them talk directly with our employees - which is exactly what we arranged at the French fair *L'Industrie en fête*. Here (see picture above), we had operators from production and maintenance on hand and ready to speak about their career within our Precision unit to all job seekers, students and potential interns.

#### Human rights training in France

In France, training sessions were organised to reinforce the message conveyed by the dual poster on our Code of Conduct and on Diversity ('Do promote Diversity' see aside, in Turkish). Posted throughout the group in spring 2016 in many different languages, the poster displayed the diversity within Aperam community.

These refreshing courses focused on the ABC of our Code, and on our sources of inspiration (Global Compact, International Labour Office, etc.). It also recalled Aperam's own policies: Human Rights, Diversity & Integration, and 'Aperam way' (we+do). Different types of violence and discrimination were discussed, reasserting Aperam's commitment to creating a safe, welcoming workplace. In line with the 'Aperam way' leadership style, all managers were asked to lead by example in terms of dignity and respect toward their staff. Likewise, employees were encouraged to stand up against discrimination and, if necessary, raise an alert. The training was very well received by all.



"Do embrace diversity" poster - in Turkish.



In addition to these job fairs, we also regularly visit student lounges to have informal conversations about internships with Aperam and the changing face of our industry, our jobs and our company. As a result, the number of apprenticeship contracts awarded and young people hired has been steadily increasing.

> In 2016, we hired 674 people, 80% of which were permanent contracts, thus lowering our average age, improving our gender diversity and adding a sense of renewal to our teams. To sustain this momentum, a lot of energy has been allocated to hiring and inducting our joiners, thus ensuring they become an integrated part of Aperam family. While the plants often have specific induction days for their employees, the many exempts who will work in transversal functions need a different approach.

■ To address this need, specific induction programmes were relaunched in 2016. As part of this, numerous newly-hired exempts were invited on a European induction trip. The programme was structured around visits to our steel plants in Belgium and France, our biggest rolling mills, our Recyco unit, and our Research Centre. The goal of this tour was to give the joiners an opportunity to learn the basics of steel, see the production tools and discuss company processes with the people in charge. Moreover, participants were able to get to know other joiners, share questions, projects and emotions. At the end of the programme, which included extensive safety briefings at each site, all the exempts left feeling

## Careers : Fanny, Product Application Engineer at Imphy



Ever since I was a child I was always interested in science. As part of my studies in chemical engineering, I looked for a training opportunity in metallurgy and joined Aperam's Research Centre (then ArcelorMittal) in Imphy. After a welding specialisation and a second internship in Imphy, I was hired in 2011 as a Welding Engineer at Imphy R&D to study the weldability of our grades. Later, in 2014, I moved to the Product Development Department, but in a progressive manner so as to be able to finalise my studies while starting my new job. In the new role, I was paired with an experienced colleague, which ensured a

comfortable transition.

Today, I have regular contact with customers, getting to know their processes and constraints, offering them the right technical solutions for their needs, and improving or developing new products. It is stimulating and it helps build my ability to make prompt decisions to difficult questions!

Although some people might look at metallurgy as a 'male' sector, I only experienced that feeling during my studies, when we were just two women among 33 men. Since I started working at Aperam, I have only seen a blend of talents. Today, our team consists of two women and three men all working in synergy. I am glad to be here and to have followed my own path - irrespective of stereotypes!

like a part of the Aperam team. Overall, this programme was not only well received by the new employees, but also by their hosts, who were happy to share their knowledge and passion (see photo).

■ On a similar note, in February 2016, Aperam Brazil warmly welcomed 150 new interns and apprentices to the Timoteo plant and the Belo Horizonte main office (see picture). Following an intense selection process, these 150 were chosen from 2,700 applicants. Apprentices will attend a one-year training at the company's Training Centre before starting work in the industrial area (see photo).



Welcoming 16 joiners in Isbergues.

Welcoming interns and apprentices in Timoteo.



## Aperam Workforce

### Renewal in progress

> Joiners: 674 ie 7% of staff  
> Leavers: 579, o/w 39% on pre-pension/pension

A sound structure  
97% full-time contracts  
10% exempts

471 supervised workers

### 2016 Aperam total workforce

TYPE	Gender	Full-Time	Part-time	TOTAL	exempts	N-exempts
Permanent Contract	Female	1,007	112	1,119	196	922
	Male	8,126	136	8,262	768	7,494
Fixed-term Contracts	Female	17	0	17	2	15
	Male	161	0	161	8	153
<b>TOTAL</b>	<b>All</b>	<b>9,311</b>	<b>247</b>	<b>9,558</b>	<b>974</b>	<b>8,584</b>

### 2015 Aperam total workforce

TYPE	Gender	Full-Time	Part-time	TOTAL	exempts	N-exempts
Permanent Contract	Female	993	113	1,106	197	909
	Male	8,143	127	8,271	775	7,496
Fixed-term Contracts	Female	14	0	14	0	14
	Male	131	0	131	0	131
<b>TOTAL</b>	<b>All</b>	<b>9,281</b>	<b>240</b>	<b>9,522</b>	<b>972</b>	<b>8,550</b>

Aperam consolidated total of Full-Time Equivalent employees, at 31/12/2016 (G4-10)

2016 progress in..

# Environment (Our Planet)

As an energy-intensive industry (Iron & Steel industry accounts for 6.7% of the Global CO<sub>2</sub> emissions according to the International Energy Agency), we consider environmental consciousness as a duty to the public-at-large and a trigger to our sustainable profitability.

As a consequence, we have started on a journey to reach our ambitious objectives in terms of energy reduction, greenhouse gas emissions, water intake and dust emissions:

- ✓ 10% target reduction in energy intensity consumption (2012 baseline)
- ✓ 35% target cut in CO<sub>2</sub> intensity by 2020 (2007 baseline)
- ✓ 5% target cut in water withdrawals by 2020 (2015 baseline)
- ✓ 12% target decrease in intensity of ducted dust emissions (2015 baseline)



Metallurgy is a heavy industry requiring immense energy and the use of hazardous substances to transform raw materials into the precise blend of alloys required by our clients. Together with cost awareness, this has resulted in the development of a unique mindset, where resource efficiency has become second nature.

Consequently, and independent of evolving regulatory standards, resource efficiency topics like energy and raw materials rank high on our priority list, which also encompass such key areas as waste management and recyclability. We also closely manage our effluents, in particular our dust emissions that are inconvenient to surrounding communities, as well as water quality.

## 1. Industrial impact

We aim to implement a structured five-year roadmap to make sure all our company targets are understood and fully reflected in our everyday decision making, including budget and business plan considerations.

Already well underway, and based upon our current set of 2020 objectives, this process will benefit from our previous efforts. For example, in 2016 two internal experts visited our main sites, the first one investigating our energy use and the second one evaluating our dust emissions. Both ended up with a clearer roadmap, with prioritised ideas and solutions. In the coming months, identical studies will be conducted on water pollution and, later on, waste.

Regarding CO<sub>2</sub> (scope 1+2), with the exception of our charcoal usage, our carbon footprint is pretty much a derivative of our energy consumption.

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

In terms of energy and CO<sub>2</sub>, our strategy is twofold. On the Brazilian side, our two blast furnaces are fuelled with charcoal (biomass) sourced from BioEnergia, our local



FSC-compliant eucalyptus forest, as a natural and renewable substitute for fossil fuels (coke). This makes our steel a leader in terms of CO<sub>2</sub> footprint. It is also a source of pride for our teams, who are keen to promote our products with 'green' labels.

On the European side, our crude steel is melted using a low consumption process based on electric arc furnaces. This process leverages the locally abundant scrap, thus using less energy (and less extractive materials) and generating a lower level of CO<sub>2</sub> emissions than traditional blast furnaces.

Taken together, this means that Aperam's CO<sub>2</sub> footprint (scope 1+2) is closely correlated to our energy consumption in Europe and to our charcoal and energy consumption in Brazil.





Picture: Island Pavilion and Footbridge - Wormsley, United Kingdom - Robin Snell and Partners

© Graham Everitt - View Pictures Ltd

Aperam 316L with Uginox Top finish

The site is on an island in the centre of a lake, surrounded by open parkland and in view of Wormsley House and the Opera Pavilion. It offers 360 degree views from around the estate. The Pavilion is designed and located to maximise panoramic views outwards and across the landscape. The Pavilion is a lightweight, factory-made product, but in contrast to its nearby relative (the 'temporary' opera pavilion), the island pavilion and bridge are permanent structures, fabricated using high quality durable materials and finishes – stainless steel as opposed to galvanised steel.

Matt Uginox Top stainless steel was selected for construction. It was picked for its bead-blasted effect and reputation for being a long lasting, maintenance-free material - a sharp contrast to the highly polished stainless steel finish of the permanent sculpture.

### Aperam's environmental footprint at a glance

Indicator	Unit	2020 target	2016	2015	2014	Page
<b>Energy consumption</b>	GJ/ t crude steel	-10% <sup>NEW</sup> intensity vs. 2012 (ie. 12.2)	12.8*	12.8	13.0	§ Energy and CO <sub>2</sub> p19-21
<b>CO<sub>2</sub> emissions</b>	t / t crude steel	-35% intensity vs. 2007 (ie. 0.49)	0.58*	0.54	0.48	
<b>Dust emissions</b>	t g /t crude steel	- -12% intensity vs 2015 (ie. 211)	549.8* 242	520.9 240	441.8 213	§ Air emissions p22
<b>Wastes - all</b>	kt	Zero waste for landfill	115	103	110	§ Waste & Recycling p23
Recycled input in production	%	n/a	27	30	28	
> Reuse rate	%	100% reused or recycled	93.3	93.5	93.4	
> Wastes: hazardous	kt	Zero waste for landfill	50.5	35.8	54	
> Wastes: non- hazard.			64.8	67.2	56	
<b>Water - intakes</b>	million m <sup>3</sup>	-5% vs. 2015 (ie. 21.1 millions m <sup>3</sup> )	23.0	22.1	22.3	§ Water p24
> Water recycling	%	n/a	96.3	95.4	95.5	
> Water discharge	million m <sup>3</sup>	n/a	14.9	14.7	16.9	
> Suspended solids into water	t	n/a	355	204	379	
> Metal discharge into water	t	n/a	7.6	6.4	10.7	

EN5 EN6 EN18 EN21 EN23 EN8 - \*Data highlighted with a star have received external assurance.

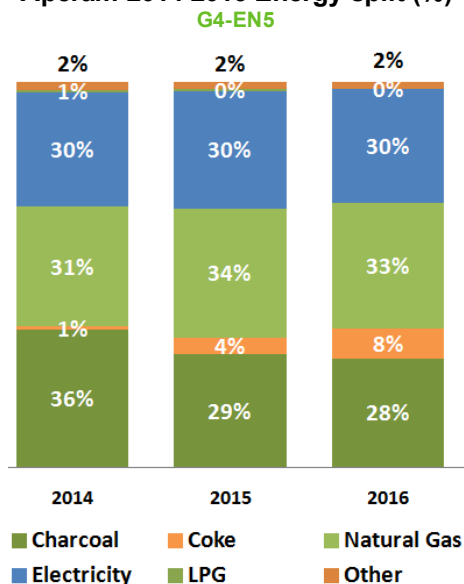
> **Regarding energy**, in 2016 consumption remained stable in terms of energy intensity (12.8\*Gj/ton of crude steel, +0.5% compared to 2015), with a positive performance in Brazil (-1%), which helped balance out an increase in Europe (+1%) and in Alloys (+9%) (G4-EN5). Our electricity mix (see right), is also reflective of our main countries of operation (Belgium, Brazil, France). As a result, and taking charcoal into account, 36% of our energy comes from renewable sources.

In terms of absolute values, our consumption increased by 5%, with a 4.5% slab production increase, showing a slight mix effect. Our consumption per slab is twice as high for Alloy products and almost three times as high for our Brazil-based production as compared to our scrap-based European production melt with electric arc furnaces.

To capitalise on a good performance in 2015, in 2016 we changed our target from a -5% to a -10% cut in energy intensity (compared to 2012). However, various technical issues impacted our 2016 performance. We hope for clear improvements in 2017.

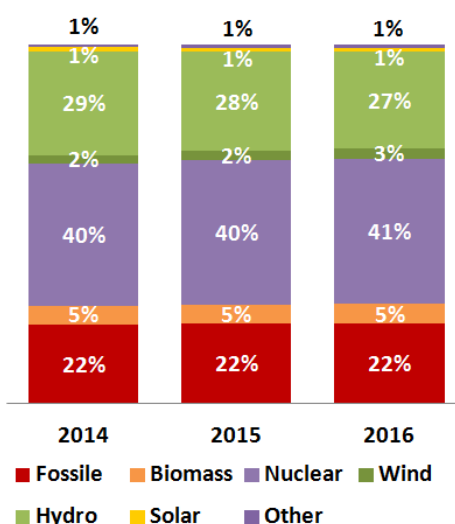
■ Last year we mentioned that some of our units were ISO-50001 certified. In 2016, S&S Germany, our largest unit in the Service & Solution segment, joined the club.

#### Aperam 2014-2016 Energy split (%)



#### Aperam Group Electricity consumption

(Split by source, %) G4-EN5



Today, all of our units are continuously engaged in an improvement process, such as can be seen with Recyco (see focus, p23). While some are deploying more metres (compressed air, power, natural gas) to track consumption in detail and better focus their efforts, others are engaging with third party actors.

■ For example, Precision is working with neighbouring industrialists and the local chamber of commerce, and our Genk unit works within the VLEEN club (see last report). In parallel, we continue to review our lighting installations at our Genk workshops, Czech unit and two Italian sites, to name a few. The initiative in Italy contributed to an action plan on mitigating night shift risks: they found that by adjusting lighting (and temperature) to working conditions, vigilance, safety and efficiency were all improved.

■ In 2016, several key projects were finalised in Timoteo. The replacement of NG/LPG gas with blast furnace gas in the melt shop ladle heating is now complete. Our Viridis energy management tool is now fully operational - although users are just starting to leverage it more extensively. In addition, the installation of high-yield motors and a few converters are also improving energy efficiency.



BioEnergia plantations

> **Regarding CO<sub>2</sub>** (scope 1 footprint), our performance, which was 0.33 tCO<sub>2</sub>/ton of crude steel in 2013-2014, was affected by a temporary stoppage of charcoal use at our Brazilian blast furnaces in 2015 (0.39) and 2016 (0.43). This explains why our scope (1+2) footprint stands temporarily at 0.58 tCO<sub>2</sub>/ton of crude steel in 2016. (G4-EN18).

However, since May 2016, charcoal usage has been normalised and our low carbon footprint is back to normal. We remain confident our 'green steel' is the way of the future. With respect to scope 3 CO<sub>2</sub>, we are just now starting to tackle transport (see p28) and are also contemplating projects to further improve our office footprint. In addition to our various awareness-raising actions regarding the impact information technologies have in terms of waste and energy consumption (especially while in idle mode), we also aim to work on Green Information Technologies.

> **Last but not least, we are now using an internal carbon pricing scheme at 15USD/ton and weigh the carbon-equivalent impact of all new investment projects.** This allows us to monitor our progress and generate new ideas. We can also give priority to the projects that have a positive environmental impact (see p40). With all these actions, notably on energy, we are sure to soon reach our sustainably target of a -35 % decrease in intensity in 2020 (compared to 2007 levels).



## 1.2- Other air emissions (dust)

*Steel plants have long been known for their high chimneys stacks, spreading in the sky continuous smokes of varying dark colours. Nowadays, they are often white (not always, see below) or invisible, with vapour mixed with those particles escaping the filtering chambers of de-dusting equipment. Indeed, regulators have produced rules and regulations to guarantee the Health & Safety of those populations concerned and we have upgraded our plants to comply fully with these constraints.*

**> We believe that we have made considerable improvements** over the past years, as recognized by our neighbours (see Isbergues' example p36 and Genk's in 2014 report). We are continuously striving to improve further to address our neighbours' legitimate requests. Knowing that further improvement implies often a full overhaul of our production scheme and industrial equipment - which takes time-, we have run an extensive audit in 2016 (with additional site-specific actions, see below) to prioritise works adequately, at group level.

We now have a list of all the actions needed to plug identified leakages and to reduce the quantities sent out into the air, in line with our -12% dust reduction objective by 2020.

**> We have also decided, in 2016, to intensify our measurement,** starting with Timoteo, to enhance the reliability of our follow-ups, identify more quickly any dysfunctioning in our dedusting installations and allow swifter maintenance interventions.

■ At Blast Furnace-based Timoteo plant, which adds up to some 90% of Aperam dust emissions, we voluntarily changed our methodology and conducted a stress-test with the aim to ensure that our dedusting systems can cope with abnormal situations. The result of this change in our internal follow-up is twofold.

- Firstly, we identified two specific steel grades for which our current systems are not fully satisfactory. We launched a study to upgrade the concerned installations and expect

## Dust in Imphy

At the heart of the city of Imphy is a complex industrial site, inherited from a XVII<sup>th</sup> century plant. Within the industrial site coexist an Aperam Alloys facility, with a melt shop and hot- and cold-rolling units, together with an another steelmaking company (formerly a sister company). A slag yard is also nearby. Since 2015, neighbours have been concerned about the dust treatment operated by a subcontractor on our slag yard. Operations, which had recently increased ten-fold to apurate historical stocks of slag, were generating noise and above all significant dust falls. In spite of the measures taken (road covering, water spills over dust piles, tarping system on truck containers), tensions continued to rise, along with fears, in liaison with the dreaded health impact from the metallic content of the dusts. Some media coverage echoed the topic at local and national level. As a result, local authorities requested a specific independent study to measure dust falls and assess their harmfulness. No significant risks related to Aperam operations were noted. Still, nuisances in terms of volumes of dusts diffused into the air were recognized.

Although not directly incriminated, Aperam engaged with all stakeholders (including its subcontractor) to find appropriate solutions with respect to our slag treatments. On top of that, leveraging some takeaways from these discussions, we are preparing a new anti-dust plan to reduce the emissions at our Imphy plant.

conclusions in the course of 2017. Some temporary dysfunctioning were also spotted and quickly corrected. Under this stress-test, out of our 43 chimneys, only eight exceeded the limits.

- Secondly, this new set of measures completes the regulatory reporting. We report a 507-ton volume of annual dust for 2016 to Brazilian regional and federal authorities, in line with all regulatory methods and using measures taken in normal conditions. However, for internal and simulation purpose only, we have voluntarily used a more stringent methodology based on stress-test measures (abnormal situations), which result in a 2016 equivalent of 533 tons of dust emissions, with a worse case scenario of up to 18% more, had we not addressed diligently some significant issues identified during the stress-test measure campaign. These simulations raised awareness at all levels on the criticality of swift reactions. They led to review the scheduling of maintenance works and to prioritise upgrades in order to ensure that we are compliant at all times, even in difficult conditions. A new workstream will be dedicated to ducted dust, with accrued scrutiny put on a few chimneys and several important upgrades in study. Another one will aim to improve on diffuse dust, that is inconvenient to neighbours.

**> At Aperam level, dust emissions are consolidated using regulatory methodologies. In 2016, 549.8\* tons of dust were emitted,** with a

+6% increase mostly due to Timoteo unit. On their side, Imphy's and other European plants' dust emissions intensity have decreased by -33% and -6% in 2016, respectively, thanks to the continuous efforts made. See Châtelet's....

■ On top of 2015 actions (notably the engagement with populations and the roof laid on the gunning shop), the plant has initiated new projects. In 2016 was therefore installed a brand-new system to avoid red fumes to spread in the air during the hot strip mill (HSM) processing.

To have less than 5 mg/Nm<sup>3</sup> emitted, a specific system was designed. The difficulty was to install the sprinklers at the right spot so that most of the dust would be captured by the droplets, while protecting the hot metal from water spills and subsequent quality issues. Finally, a 30-meter range over the last four finishing cages of the HSM was equipped with sprays designed to provide the right size of droplets to seize the very particles emitted. The water from the sprays loaded with dust are then channeled into gutters for further treatment.



*Dedusting sprays at Châtelet Hot Strip Mill.*

Thanks to this breakthrough system, fumes have reduced dramatically and no collateral damage has been identified: no accrual of dust in the workshop nor any increase in water consumption.

### 1.3 Primary resources and waste recycling

**> Optimising our use of primary resources** is a key factor to our profitability. We report that 27.6% of our input is from recyclable sources (G4-EN2).

In addition, some of the residues generated by metallurgical processes (which fluctuate with production: +8% in 2016) are 'aggressive' wastes like acids, oils and lime, which require storage and treatments - all costly measures. Put these factors together and you can see why our industry is a pioneer in the circular economy.

**> As a result, we already re-use 88.9% of our residues** (vs. 88.8% in 2015) and we are actively looking for the best solutions for obtaining our objective of 100% re-use/recycle (G4-EN23). We are also treating dusts as a way of leveraging its metallic content. Here our Recyco unit is expanding its activities outside of Aperam and serving as a true champion of the circular economy.

However, some of our by-products, like certain types of slags with a high Chromium or Molybdenum content, still require technical solutions and/or new markets - a challenge we are working with our research partners to solve.

■ Still, as can be seen in our Brazilian unit's Cruzeiroirinho project, this can take time. In 2016, the unit began excavating materials that had been in the landfill since the 70's with the aim of reselling them, something that is just now possible thanks to new technical solutions and an available market.

*Sorting of industrial waste in Imphy.*



## Recyco: Our champion of the Circular Economy

Recyco, our fully-owned French subsidiary is a specialist in metallurgical wastes recycling. This Isbergues unit uses the former melting shop's EAF to melt slags and recover their metallic content - primarily nickel.

In 2016, Recyco experienced a very good year. To optimise the utilisation rate of our installations, we opened up to new customers and increased volumes (+8,0%). We also developed new processes for recycling additional components, like sludge mud from our Alloys & Specialties business. These will soon be included in our regular portfolio of treatments.

In line with our commitment to reducing energy consumption, in 2016, Recyco reduced electrical consumption of its furnace by 6.6%. This was the result of several improvements, such as the introduction of new additives for reducing metal oxides and reducing heat losses by better isolating the furnace.

As the production of secondary raw-materials through waste recycling is Recyco's core business, we are constantly looking for ways to further minimise our environmental footprint and, in doing so, we will continue to liaise with our local stakeholders (see page 34).

The Cruzeiroirinho project has sold 142.5 kt of this waste (slag), thereby reducing our historical stock.

Along the same line, starting in August 2016, our Imphy melt shop introduced the processing of high-Molybdenum slags using a careful protocol of sorting and crushing.

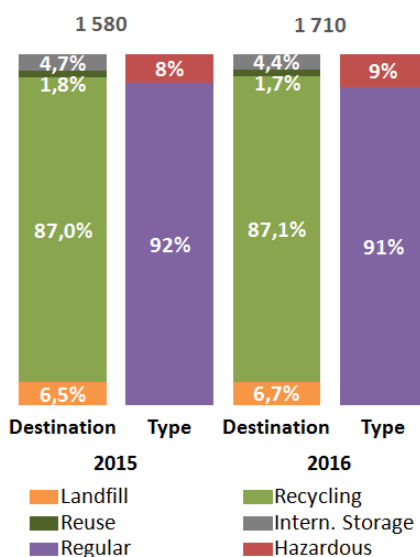
When it comes to more benign wastes, we are moving fast, leveraging best practices and experimenting with new ideas. Our units are equipped to systematically sort out wastes and are busy raising awareness (see p29).

■ For instance, inspired by Gueugnon's recycling of packaging paper (see last report), our nearby Precision unit in Pont-de-Roide installed a new machine to cut and recycle interlayer paper. This upgrade will improve workshop safety conditions, enhance productivity and increase our re-use rate. We expect the number of paper rolls treated to increase by 60%. The same goes for the pallets we use to carry material - many of our units are already reusing and recycling them.

At Precision, even defected pallets are repaired by a close-by external subcontractor (15 km away), giving them a second life and minimising the need for more wood and timber. In 2016, 1,500 pallets were repaired.

■ Meanwhile, our Châtelet plant tries to stay ahead of local regulations, especially as to the disposal of batteries, oils and electronic devices. Staff are also encouraged to sort waste just as they do home.

2015-2016 Residues split (ktonnes, %)  
G4-EN23



For example, nearly 45,000 canned beverages are consumed on site every year.

After training the staff during the April 2016 Health & Safety Day, new recycling bins were put in place, with some dedicated to cans. Considering that each can contains some stainless, they can be sent directly to our melting shop - provided they are well emptied to avoid the risk of explosion!

As a result, in 2016 already, the plant recycled over five cubic metres via this 'super-short' recycling loop.

*Cans from consumers at Châtelet EAF.*







Even for cleaning agents, the change is visible: new bins are full of cans, which in turn reduces our use of plastic bags and the kilometres travelled to

the waste sorting unit.

Step-by-step, we are progressing towards zero waste, and in Châtelet the move is particularly fast and fully supported by motivated teams!

#### 1.4 Consuming less water

To increase transparency, we decided to disclose more data regarding our water monitoring (see p22), compared to 2015, especially as it pertains to water discharge quality and volume.

> Today, we consider our indicators to be satisfactory, especially our very high recycling rate of 96.3% (vs. 95.4% in 2015). 2016 consumption was +3.9% higher, a result of specific works, a few leakages and sourced from an increase in rainwater intake (+20%). Since 2014, our levels of water discharge and metal discharged into water has decreased (-16% and -29% respectively).

With the exception of BioEnergia (see aside), we do not operate in areas with high levels of hydric stress.

Our industrial permits specify the volume we are allowed to withdraw, mostly from rivers and channels (92%), and we carefully monitor consumption and the quality of the water discharge. At Gueugnon, this is done every 40 minutes at the end of our water treatment unit! Thanks to this intense monitoring, we are quickly alerted of problems, as was the case in Imphy in 2016.

■ As pollution was suspected as being the cause of a sudden mortality of fishes in the Ixoures River, all water discharges of Imphy plant were immediately diverted to a newly invested 1.200m<sup>3</sup> containment basin, in line with Aperam's precautionary approach.

We also cooperated with competent authorities to run a swift analysis involving also all contractors present on the site.

After proving our water was pollution free (the vitality of live fish placed in the containment basin was carefully monitored for several hours), normal water discharge into the river resumed and Imphy plant production returned to nominal conditions.

> In addition to monitoring, periodic reviews are also needed.

At Isbergues, the water recycling network dates back to the 90's. As the current industrial configuration made the network suboptimal, a new study was launched for a full redesign, in cooperation with the local water agency and an expert firm.

It was decided that the new network should meet three demands: reduce consumption to avoid water withdrawals from the canal; improve the quality of water channelled and, in particular, lower the rate of particulates in suspension for a more efficient process (and an improved fire security); and fully leverage the rainwater collected.

To be continued in the 2017 report!

■ At the Timoteo plant, our biggest water consumer, a successful project for reducing consumption was launched.

It includes installing new cooling towers for air compressors, the systematic reform of the continuous castings' sand filters and the elimination of water losses from the converter cooling tower. Lastly, inverters were added to tailor intakes to real needs - no more theoretical production.

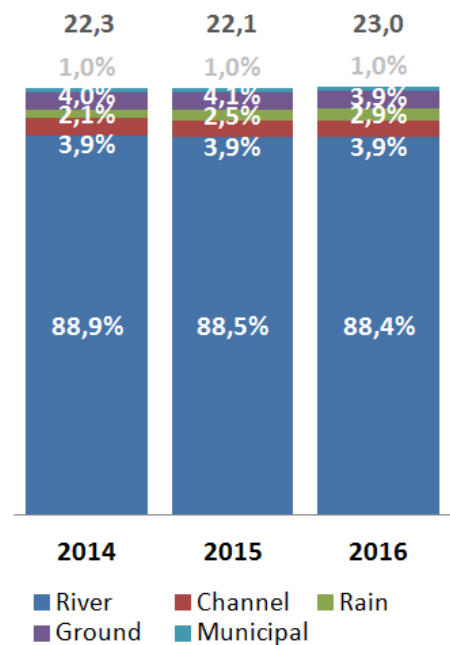
As a result, the unit expects a significant reduction in its water consumption.

*Our Aperam BioEnergia Water Week included the five municipalities in the area of activity of our BioEnergia unit.*



2014-2016 Water use by source (m3 and %)

G4-EN8



> Still, there are areas for improvement - everywhere. In 2016, the ESG committee ordered an in-depth audit at all of our main sites.

This systematic study, planned for 2017, will allow us to prioritise actions amongst all our facilities and allocate resources in the most appropriate manner and in line with our 2020 objective of -5% vs. 2015.

**Our only unit in a water-stressed area: BioEnergia, in Minas Gerais (Brazil).**

Aperam BioEnergia has 40 water dams, authorised by Minas Gerais State Water Management Agency (IGAM), which establishes the maximum volume of our water withdrawal. We carry out a strict monitoring of our water consumption, kept within the stipulated limits, and work on addressing such topics as losses by infiltration or evaporation. We also study how to contribute to the natural recovery of water sources. Our actions focus on reducing our consumption during the dry season (normally not planting in this period), creating retention basins in the forests in order to contribute to rainwater infiltration during the rainy season, and leveraging this water (alongside with that of dams) during our operational process.

According to our monitoring, BioEnergia is a responsible consumer of this valuable resource while also contributing to the awareness-raising of local communities (see left, BioEnergia's first Water Week).

## 2. Other initiatives to reduce our impact

*Reducing our environmental impact is a must-do. However, in addition to our responsibility towards future generations, we also have a responsibility to always be ready to address such emergencies as fires or pollution. To do this, we depend on regular training and on-site simulations.*

### 2.1 Pollution prevention

At our main sites, we regularly hold drills with local authorities to assess the efficiency of our procedures. In our last report, we highlighted the regular exercises happening at two French plants. This year, we look at the procedures at two Brazilian sites.

**> Timoteo is a large factory located in the middle of the town** (the town actually grew around it) with two blast furnaces and stocks of chemical substances - most of which are brought in by road.

Emergency procedures are well defined, and every employee working on the site (including subcontractors) keeps a copy of a small pocket-sized emergency guide (FPS Manual) with them at all times. This guide defines the three levels of emergencies and the relevant protocol for each, including who to contact and the normal flow of action. Furthermore, 10 emergency scenarios have been drafted, which is more than is legally required, and at least one simulation exercise is run every month (unless an actual incident occurs).

In addition to these workshops, the site benefits from a team of 15 full-time firemen who operate in shifts of four during the day and 13 at night. The efficiency of our procedures was recently confirmed during an incipient fire that was extinguished in less than 20 seconds!

■ To ensure even more efficiency, the unit also participates in the PAM-VA association, along with seven other nearby industrial plants from the Vale do Aço (Valley of Steel). The association, which also includes local authorities, meets once a month to discuss risks, mitigation actions and best practices,

Aperam S&S Brazil planting trees.



and to share resources. As an example of this sharing of best practices, Timoteo told other PAM-VA members about a new anti-fire product it used to replace similar but less-efficient materials. Now, many of the members are also using the same product. In the case of a high emergency situation (those that extend beyond an individual site's boundaries), all other companies are alerted. Not only does this allow them to prepare their site for any possible repercussions (impact on the river, etc.), but also, and more importantly, they can lend a hand with their own security teams. As an added bonus, they can also learn from these events.



UN Day of Trees at BioEnergia.

**> At BioEnergia**, their main risks are fires that could potentially destroy acres of forests, reducing valuable assets to zero, devastating the flora and fauna, and endangering nearby villages. In addition to traditional fire-prevention methods (firewalls, watchtowers, permanent watch teams fully equipped with a fire combat kit and special trucks), the unit also counts on the support of a fire-aware - and prepared - population.

■ Its 7<sup>th</sup> Week of Fire Prevention (Sipin) used a range of activities (lectures, theatre, quizzes, etc.) all aimed at reducing the lead time for fire detection/localisation, alerting the firemen and their subsequent reaction. The event also included an analysis of the region's history with fires. One of the most popular activities, especially for children, was a play that portrayed a duel between

## Offsetting our impact

In our last report, we reported on Timoteo's green belt, which serves as a layer of protection against dust and noise for the benefit of the population. This year, we focus on the efforts happening at our Campinas Service Centre, S&S Brazil's main site.

This year, local teams took part in a tree-planting project aimed at offsetting the loss of 171 trees caused by the site's expansion in 2011. The removal permit was granted by the local authorities under the condition that a formal compensatory planting was to follow and last until the trees have reached 1.8 meters height. To fulfill this condition, the Aperam teams, together with the city's Green Department, planted 5,535 seedlings of native and exotic trees in the nearby Jardim Miranda during the second half of 2014.

To ensure the smooth development of the seedlings, each plant was given a QR Code, making it easy for the Green Department to adequately monitor monthly maintenance and plan fertilising, pruning and other actions on an 'as-needed' basis until the trees reach a two-meter height.

In addition to this compensatory tree planting initiative, the unit also organised a social event where employees voluntarily planted an additional 100 seedlings. The event was a great opportunity to demonstrate the unit's environmental commitment, raise awareness and promote a team-spirit.

All-in-all, the activities had both a positive impact on the planet as well as our employees' morale and pride.

water and fire (see picture). In total, over 750 people attended the various events.

Sipin: learning through entertainment.



FPS Manual: Timoteo Security booklet cover





## Facing natural catastrophes

Overall, thanks to the location of our facilities, we believe our exposure to climate-related disasters is low (see page 38). However, one of our Alloys units in Epône (France) was impacted by the rising waters of one of the Seine's tributaries during Europe-wide flooding in May 2016. The flood damage forced all wire-drawing activity at Aperam Alloys Rescal to stop for three weeks.

Thanks to the general mobilisation of our employees, subcontractors and Imphy colleagues, Rescal overcame this disaster with limited customer impact. More importantly, when an oil tank spilled over 10,000 litres, we were able to act quickly and efficiently to contain the overflow, resulting in no pollution being incurred. Following intensive cleaning, drying and substantial repairs, partial activity resumed on June 20th. By August 4th, the factory was fully operational - an

accomplishment that was recognised by our insurers as being "a strong performance". Staying open during the summer holidays allowed us to quickly catch up.

To draw a line after this exceptional situation and to capitalise on the hard work of all employees, Rescal management organised a 'Stop & Go Day' on September 9<sup>th</sup> and in the presence of Aperam's Alloys & Specialties segment management committee. During this meeting, everyone was able to share their experiences - from flooding to re-opening. It was also an opportunity to congratulate the team for their good work and to initiate a new company dynamic built around even higher standards of cleanliness, tidiness and quality... and proven resilience.

Post-flooding Stop & Go Day at Aperam Alloys Epône.



## 2.2 Transportation impact

*The steel industry is typically viewed as being a large energy consumer (and smoke emitter). However, the industry also has a myriad of small units that have a much bigger impact on traffic and noise than they do on air emissions. In fact, from our recent study, this impact of traffic and noise ranks among the most important among our sites, not in terms of complaints or harm done, but in terms of frequency.*

> **Aware of this fact, in 2016 Aperam built its Sustainable Transport Charter** and committed to annual reporting (see table, right). This charter has since been converted into internal guidelines that were rolled-out throughout the year to Aperam employees in Logistics, Security and Purchasing. Its aim is to address our impact by continuing our efforts in security (see p32), loading optimisation (94% truck loading rate at Timoteo, 92% at Imphy) and, when possible, giving preference to sustainable modes of transportation. Here it must be noted that 100% of traffic coming from Châtelet (semi-products, not in table figures) is by rail.

■ In Brazil, where truck delivery is the norm, in 2016 our Service Centre implemented the 'Cross Docking'

method to optimise truck volumes from Campinas to São Paulo and, from here, using smaller vehicles better optimised for distributing products locally. As a result, we reduced our traffic on the road to São Paulo by four to five trucks per day. Brazil also started using double-decker trucks and trucks composed of one tractor unit and up to three semi-trailers, all of which

further optimise loading... when the roads allow it!

> **Aperam is also committed to promoting the best social and environmental standards with our suppliers.** In practice, this means encouraging and recognising the efforts of our carriers who excel in this area. This is an area that we expect to enhance in 2017.

### Transportation impact (estimations)

Indicator	Unit	2016 figure & trend
Rail traffic*	%	5% of shipments to customers
Road traffic*	%	87% of shipments to customers
Sea/River/Other traffic*	%	8% of shipments to customers
Trucks average loading*	#	89.5%, with lower rates in S&S
Eco-driving training at suppliers	h/man	Being collected for 2017
Safety audits at site checkpoints*	#	100% of outbound trucks

\* Estimations based on all our major plants and our three largest Service Centres.



Forklift and truck loading in progress at Aperam Gueugnon site.

## 2.3 Changing mindsets

*To ensure our sustainability efforts are effective, all Aperam staff must adhere to our goals. By all staff, we mean everybody - from those on the shop-floor to those focused on environmental programmes, even those in offices, quality management, purchasing and in administration. At Aperam, we all work towards sustainability.*

### > 2016 saw the launch of several new sustainability-related actions.

For example, the release of our 2015 Sustainability Report was accompanied by a communication campaign in four languages that used our group newsletters to promote our achievements. Later in the year, to celebrate World Environment Day, a series of articles re-asserted the many ways one can adopt eco-practices at work. Specifically, we focused on the efficient use of IT tools, which have a major impact on CO<sub>2</sub> because of the energy they consume, the raw materials that are extracted for making them, and the significant waste they generate. Shocked by seeing the heavy CO<sub>2</sub> impact these technologies have, many of our colleagues changed their IT habits - both at home and in the office.

> **Several of our sites organised special events.** For example, World Environment Day inspired numerous activities at Timoteo during its 'Encontro Day' (see p37).

Bouteilles plastiques vides			
Emballages en matières plastiques non rigides.			
Type Déchet	Non Dangereux (NND)	Rubrique	15 01 02
Valorisation : DMR	OR	Code OR	Non soumis à l'ADR
Conteneur	Bouteille	Statut	Tous
Filière (selon code déchet)	Neutralisation comme matière première (R2)		
Avec		Interdits	
Bouteilles plastiques "à usage minéral" vides, transparentes (jeux de sacs soufflés)		Bouteilles en verre, bouteilles plastiques soufflées, bidons, gobelets	
Quantité maximale	< 2 -	Condition stockage	Sol étanche
Conditionnement		Étiquetage	
			
Lieu de stockage Local		Étiquetage communicationnel et points de sortie sélectifs, verticaux.	
Lieu de stockage Charnier		Étiquetage communicationnel et points de sortie sélectifs, verticaux.	
Centre de recyclage		Étiquetage communicationnel et points de sortie sélectifs, verticaux.	
Lieu de dépôt ult.		Bouteilles, pratiques, etc.	

Imphy's waste management files.

### > A few local actions took the form of dedicated intranet sites.

■ For instance, our Imphy unit created an intranet site with practical information and tips in simple files.

The first page focuses on waste, explaining in detail how to sort, store and manage it efficiently. Volumes were disclosed and contact information provided in an effort to raise awareness, address common questions and gather suggestions. The site successfully facilitated the deployment of new flows in the recycling process, including for plastic bottles (see picture, bottom).



■ At Châtelet (see above), a new environmentally-focused intranet site also calls for suggestions. Initiated in 2016, it quickly gathered ideas, including some creative proposals for using recycled material to improve the site's aesthetics (flower pots made from packing boxes, for example).

The site also echoes local campaigns, like those from the Walloon region. In November 2016, it was used to instruct all staff about the five rules to prevent waste: 1) Buy, 2) Produce, 3) Use paper, 4) Distribute, and 5) Develop. The Environment Group regularly updates the site.



Châtelet sorting bins - also for cans!



## Renewal of Aperam BioEnergia FSC® certification

Aperam BioEnergia finished 2016 with two completed FSC® process cycles: Chain of Custody (CoC, with zero non-compliances!) and Forest Management (FM)!

This remarkable accomplishment puts the spotlight on the company's responsibility and the workforce's individual commitment to environmental, social, health and safety issues.

The FSC® FM certification confirms that Aperam BioEnergia used best practices in forest management, conducted in accordance with FSC® principles and criteria, conciliating ecological protection (flora and fauna, but also water reserves) with social benefits and economic feasibility. In parallel, the FSC® CoC certification ensures the traceability of the product, from the forest harvesting process to the delivery of charcoal.

BioEnergia is dedicated to the production and trading of charcoal, wood, seedlings and seeds from renewable eucalyptus forests in the state and Minas Gerais. The forests are renewed every seven years, thanks to regular planting.

The entire charcoal production of BioEnergia is destined for the furnaces of the Aperam Brazilian steel plant, which is located in the city of Timóteo, some 350 kilometres away.



2016 progress with..

# Stakeholders & Governance

Aperam is committed to applying best practice standards in corporate governance and in its dealings with all its stakeholders, as well as with respect to transparency and quality of reporting.

We aim to take the interests of all our stakeholders into account and engage with them on a regular basis.

This commitment can be seen in the approach we take with our customers, always finding the best stainless steel solutions based on our innovation capacities and R&D - a pattern we repeat in our social dialogue and community engagements.



Slitting line in Gueugnon.

We aim to achieve the best practices in governance and 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 our ability to thrive.

Our strong customer focus, with innovation and R&D being a key pillar, is 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.

## 1. Social dialogue

*As employers, we must constantly engage with our people, both face-to-face and through collective bargaining - during both good and challenging times.*

*We organise positive, constructive dialogues, aware of the fact that it can sometimes be impacted by international crisis and national debates. After all, our employees are also citizens, meaning our sites are not impervious to what's happening outside the workplace.*

### 1.1 Within Aperam

*Employee representatives and unions are a natural intermediary for our staff. They are also a familiar business partner in our discussions relating to operational organisation.*

**> We promote a positive dialogue,** ensure the right to collective bargaining and have several collective labour agreements in place for our largest sites.

The total number of days of strike in 2016 was higher than in 2015 (15 vs 9) which is largely explained by the difficult social context at a National level in France (new labour legislation). Nevertheless we believe that we have an open and constructive social climate.

Moreover, our discussions with the European Work Council resumed with four meetings in 2016 - all of which were held in a positive atmosphere.

Our unions also participated in anti-dumping demonstrations held in Brussels (see picture - right, and in front page), calling for employment protections in the steel industry.

■ In addition, as employees are expected to work longer, a program was started by HR, with the involvement of the social partners, to prepare for longer working ("Werkbaar Werken"). This is a general issue at national level as the Belgian government has been taking measures during the last years to discourage early retirement and to increase the retirement age.

This was a key element in allowing our production pattern to be thoroughly optimised and able to take full advantage of the volumes offered by a better global economy. We consider this achievement a success.

**> In beginning of 2017, we announced our decision to divest Aperam Stainless S&S Tubes Europe** with completion of the divestment on April 3, 2017.

All necessary care is being taken to implement this decision addressing social aspects and concerns of employees, in accordance to our values.

Although the news was only announced in early 2017, we think it deserves mention here.

### 1.2 Across the value chain

In the past, we have seen the negative impact that a poor social climate at one of our suppliers can have. In the case of a subcontractor, this can trigger a chain reaction within our own staff - or even disrupt our production process.

Brussels anti-dumping demonstration.





**Picture:** This picture was taken during the demonstration organised in Brussels on February 15, 2016 to protect the sustainability of our business and of our employment. On that date, thousands of steel employees and their employers from at least 17 European member states gathered in Brussels to march in protest at damaging dumping of steel products from China, and to protest against the premature granting of Market Economy Status (MES) to China.

For this action, many of our usual stakeholders, employees of all ranks, unions and communities and European competitors joined our Trade Associations to fight together for the same cause and for the benefit of all.

#### At a glance G4 PR5 - GRI

Indicator	Unit	2016	2015	2014	Page
Customer satisfaction: Alloys	Rate on 10	9.3	9.2	9.1	§ Customer & Product responsibility p32-33
Customer satisfaction: Stainless		n/a	7.4 <sup>(1)</sup>	7.8 <sup>(2)</sup>	
Innovation (R&D spent)	\$m	18	18	20	§ Innovation p38-40
EWC committees <sup>(3)</sup>	#	4	4	4	§ Social dialogue p29
Strikes	#	15	9	n/a	
Fraud allegations reported Forensic	#	7	11	9	§ Integrity and §Risk management p37-38
cases founded	#	2	5	3	
-- o/w significant cases <sup>(4)</sup>	#	0	0	0	
Local purchase at main sites	%	57	58	62	§ Engaging with our neighbours p36

(1): Europe

(2): Brazil

(3): EWC (European Work Council) initiated in April 2013

(4): Following review by the Audit & Risk Management Committee.



■ In 2016, we experienced a tragic scenario: one of our suppliers reported a fatality that occurred on a part of our Timoteo site that we had leased to them.

Because the fatality was 'outside' our company, and in line with all health and safety reporting standards and legal requirements, this fatality is not reported in our figures. Nonetheless, the trauma and its effects were very much felt inside our company. Our own production stopped and we engaged with our supplier in order to learn from this sad experience and to ensure it doesn't happen again.

We pay a lot of attention to the safety policies of all our partners. For years, subcontractors have had to sign off on specific Health & Safety guidelines and prove their commitment. We have no tolerance for any subcontractor who ignores our safety rules.

**> Prior to 2016, we used a structured process for assessing supplier practices in terms of sustainability** (starting with Health & Safety). This process was used for raw material suppliers.

In 2016, we deployed a new system and have started to integrate other important, non-raw material suppliers, into the analysis. Our new assessment method looks at supplier actions and their commitment to Health & Safety, and also covers other Human Rights topics like conflict minerals.

As a result, 89 raw material suppliers were assessed in 2016 (76 in 2015). These assessments looked at any negative impact they may have on labour practices relating to Health and Safety.

Genk signaling board at entrance.



An additional 126 other strategic non raw-material suppliers were also assessed.

Out of these 215 suppliers, 16 were identified as fostering potential socio-economical risks due to a lack of sufficient Health & Safety programmes (according to our standards). Furthermore, six suppliers showed no evidence concerning support of labour practices standards (a Human Rights topic). All of these suppliers were informed about the results and an action plan was requested to improve on these topics, to be followed in 2017.

This action comes on top of our yearly Boss-to-Boss meetings. This common Aperam practice places a specific focus on our Health & Safety procedures when meeting with suppliers and, above all, contractors (G4-LA15).

From these actions, we concluded that the majority of our main suppliers are in line with Aperam's principles and values.

**> In 2016, a working group of key non-raw material buyers was setup to upgrade our follow-up process.**

Taking inspiration from the Global Compact and the SA8000 standard, during each Quality Audit we also plan to verify our suppliers' performance in specific areas of sustainability.

The goal is to engage with our suppliers, both on human rights and the environment, as our suppliers can also a significant environmental impact that is both detrimental to our own image and to our operations (see also p24). This process will allow us to soon report also on our suppliers' environmental practices (GRI-EN33).

Through this new approach, we will be better able to recognise the performance and progress of the most mature suppliers while also encouraging new suppliers, inviting them all join our sustainable supply chain.

### Safety in the supply chain

Our ethical responsibility towards our supply chain requires us to demand more from our partners and from ourselves. A good example of this can be seen in Genk.

After a series of serious near-misses and incidents with our carriers that reflected an intolerable level of risk, a new action plan was set up to cover personal behaviour, knowledge of - and compliance with - our safety rules, and mitigating hazardous situations.

Based on a rigorous risk-analysis, a wide range of actions were rolled out, including: seminars with carriers, listing authorised tools for (un)loading, separate waiting zones, safety instructions via a multilingual video, local audits, awards & fines system and regular boss-to-boss meetings, to name a few. Through our audit system, we captured over 2,500 remarks that were analysed and, where possible, converted into corrective actions.

Carriers that were unwilling to follow this plan were banned. For some, improvements of their own safety statistics and even of their fleet have been noted.

By having a multi-faceted approach (technical and behaviour safety, plus communication) and working with all involved parties (truck drivers, their bosses and our staff), we succeeded in improving our safety awareness and results. To be continued!

## 2. Customers & Product responsibility

Within our corporate responsibility, there is also our mission to propose energy-efficient steel products as one solution to global environmental challenges. Undisputedly, its properties of endless recyclability, durability and mechanical resistance make stainless steel the perfect fabric of a sustainable society, opening up new opportunities for Aperam.

> **Our products are used mainly to tackle global environmental challenges** thanks to their unique properties such as emission reduction function for cars, highly efficient heat exchangers or are key components in food & beverage and cutlery sector where their hygienic and anti-corrosion properties are essential.

As examples, we can mention our special grades (K44X...) entering into the SCR and EGR components for cars, which allow to reduce gas emissions. Our products are also widely used in desalt plants (Duplex) in water treatment and water distribution (reduction of leakage).

The other use of stainless steel is based on its TCO which is better than other material when it comes to challenging environments where higher efficiency is required or more durable material. In that sense, it helps to reduce carbon footprints in a large variety of process.

Finally, for less than 15% of our sales stainless steel is used for aesthetics reasons.



### 2.1 Aiming for 'preferred supplier'

> **Aperam strives to better serve our customers by proposing solutions that anticipate their needs and help meet their objectives.**

We aim to be their 'preferred supplier'. With that aim, we must maintain the right level of engagement to share in our customers' successes and to overcome, in partnership, any arising difficulty.

Not only do we have to avail the right steel products for each customer, together with the expected quality, timing and price, we also have to anticipate new requests with real-time information or to address topics such as customer credit.

> **This multi-layered standard of high quality service** is reflected in the way we monitor customer satisfaction levels. Since 2014, our Alloys & Specialty segment monitors its satisfaction index annually. In 2016, it went up again, from 92.3 to 92.8% (G4-PR5).

Although our European and Brazilian stainless operations usually organise their own surveys every other year, our Brazilian unit delayed the bi-yearly survey until 2017 so as to gain improved efficiency.

### B/S/H Supplier Award

The B/S/H Supplier Award Europe ceremony was held in Berlin on September 27th 2016. The ceremony was an opportunity to recognise B/S/H's best European suppliers for their performance over the last two years in terms of quality, reliability, flexibility, innovation and price.

Following an evaluation of 2,489 suppliers from across five commodities (electrical, plastic, metal, modules & other, and packaging) and five categories (laundry, dishwashing, cooking, refrigeration, small appliances), B/S/H welcomed approximately 30 suppliers to Berlin. Aperam Stainless Europe was among these, taking home the award for Best Global Supplier 2014-2015 in the metal category (out of 425).



# B/S/H/





## 2.2 Key applications

### Building & Construction - The Philharmonic Society of Paris

■ Paris' Philharmonic Society, designed by Ateliers Jean Nouvel, captures the eye from the ring road and surrounding suburbs (see picture on the right). Over 30 years after its launch, the iconic piece completed the cultural transformation of this former slaughterhouse district.

From the outside, the metal cladding of its harmonious shapes reflects the green landscape and the movements surrounding it. As an allusion to Mr C. Escher, the main pattern of the façades assembles seven different models of a stylised bird to constitute the aluminium coating in four tints of matt grey: according to light, clouds of birds recompose. Overhanging these flat, sharp-edged façades, the heart of the building is covered with a bright stainless steel plate (Uginox Bright surface finish). Designated as the Tourbillon and developed by the HDA office, this volume seems to escape from the inside and it corresponds to the common spaces of the large philharmonic hall.

With a surface of almost 7,000 m<sup>2</sup>, the garment is an assembly of stainless steel fragments, arranged in a mixture of zones of double convex, concave curves and, in some places, almost flat.

With a thickness of 1.5 mm, the stainless steel sheets are fixed on a three-dimensional structural system combining flat plates for the frames and curved tubes. Connecting rod plies ensure the connection to the edges of the floors.

In contrast to the matte envelope, the shiny appearance of the stainless steel intensifies the relief it moulds. Besides its aesthetic appearance, its low roughness helps limit the deposition of dust and pollution residues. This particularly aggressive atmosphere, caused by the building's proximity to the ring road, justified the choice of an austenitic stainless steel grade (Aperam 316L) for a sustainable beauty.



*Philharmonie, Paris - France,  
Ateliers Jean Nouvel / Metra & Associés  
© William Beaucardet  
Aperam 316L with Uginox Bright finish*

### Automotive - MaX for light-weight stainless steel applications

■ To meet increasingly stringent environmental regulations, car makers are focusing on reducing a vehicle's overall weight, either via product redesign or with an extensive use of advanced lightweight materials – such as high-strength stainless steels like Aperam's MaX product.

High-strength steel formed by hot stamping, when used in conjunction with a light structure, achieves better in-use performance. The automotive industry uses hot stamping to produce complex parts with large in-use properties, allowing for a significant reduction in vehicle mass of between 15 to 50%.

Although martensitic boron carbon steels are well adapted to hot stamping, the industry is looking for new materials, especially those that will allow for the use of very thin parts along with complex geometry - all at an extremely competitive price.

MaX, Aperam's martensitic stainless steel (MSS), meets this demand. As MaX contains between 11 and 14% Cr, which considerably enhances its oxidation and corrosion resistance, it is not necessary to add expensive coatings for oxidation protection - making MaX compatible with fast heating processes.

Furthermore, its excellent quench hardenability make the product insensitive to cooling rates between 100°C and 1°C.

Combined with the low oxidation kinetics, this makes the hot stamping process extremely flexible.

Last but not least, MaX is nickel free, meaning it is one of the most stable and competitively priced stainless steels currently on the market.

MaX's differentiator is its unique suitability for both direct and indirect hot stamping processes. With a thickness far below its competitors, down to 0.55 mm, MaX is enabling manufacturers to reduce a vehicle's overall weight by up to 30%.

#### MaX advantage

- > Can be hardened by hot stamping up to a tensile strength of 1.6 GPa.
- > Ability to be air-quench hardened.
- > Oxidation resistance with no coating needed.
- > Outstanding fatigue behaviour.
- > Compatibility with fast heating.
- > Allows a more flexible hot stamping process (with cost savings).
- > Can be formed on either a single- or multiple-step process

Available in MaX 1.2 for chassis (1200 MPa tensile strength) and MaX 1.6 for BIW (1600 MPa tensile strength), both versions' excellent fatigue properties make it an ideal choice for such automotive chassis parts as lower control arms and engine cradles.



Also, its elevated crash performances makes it a good fit for BIW applications, such as structural panels, where energy absorption is key. Lastly, steel being fully and easily recyclable, MaX has a clear edge over other metals.

## Aperam's various shapes of steels and alloys

### Aperam Alloys



### Aperam Stainless

#### Flat products

#### Flat Precision products

#### Tubes



### Aperam Electrical Steels



Non Grain-Oriented Electrical Steels, Grain-Oriented Electrical Steels, High Permeability Grain-Oriented Electrical Steels

## Alloys and Specialty Steels

### DILVER® special steels to concentrate solar power

■ With the shift towards renewable energy, the question becomes how to best take advantage of an accessible and unlimited source of energy? This question has led researchers to look towards thermal energy sources, including solar panels, photovoltaic panels and concentrated solar power. This latter technology seems to be a very effective and economically viable solution, and is already being used in solar fields in the United States, Morocco and Spain.

How does it work? Concentrating Solar Power (CSP) technologies use lenses to focus the sun's energy to produce heat (steam), which is then converted into electricity. Heat storage allows one to continue to generate power - and remain productive - even after sunset. A glass-to-metal device, having a Coefficient of Thermal Expansion (CTE) matching to borosilicate glass and ceramics, is sealed to the solar receiver's glass cylinder, thus allowing for the transfer of fluids.

To answer this system's metal and glass sealing requirements, Aperam has DILVER®, a dedicated grade (FeNi29Co17) perfectly fitted to the requirements of the CSP - thus opening the door to a solar-fueled future.



*DILVER® Seals Glass and Metal for Concentrating Solar Power fields*

### LNG as fuel, with INVAR®

■ Aperam is an uncontested world leader in the supply of specialty materials for liquid natural gas (LNG) tankers.

Thanks to this experience, we promote INVAR® grade and its controlled expansion properties, stable down to -163°, to ensure a safe and reliable solution for the newly designed LNG fuelled vessels. Stricter environmental standards and cost efficiency requirements have caused new challenges to emerge.

To satisfy these new demands, Aperam introduced its cryogenic INVAR® for LNG fuel tanks. This new technology is acclaimed for its clean, cost-effective and flexible characteristics. The solution not only works for new ships, but also allows existing ones to be converted from fuel to LNG.

## Made for life and to protect life

A gigantic airtight enclosure was designed and built in Chernobyl to withstand extreme temperatures, earthquakes and tomados, while also being able to prevent corrosion. Clad in Aperam 316L stainless steel, in order to protect the environment from the encapsulated yet still very dangerous reactor, the structure will safely contain radioactive dust and debris for more than a century.

The stainless steel was annealed and pickled to create an evenly matte exterior finish, thus minimising reflections that could jeopardise the vision of pilots flying within view. The arch's interior skin is Aperam 304, a non-magnetic grade used to minimise radioactive dust accumulation that would impair access for dismantling reactor components.

The interior surface required 80,000 sqm of 0.5 mm thick stainless steel sheets.

*The matte stainless clad designed to cover Chernobyl power plant.*



## Voices



*"For more than 100 years, we have been using our technical know-how to design innovative steel and alloy solutions: from the Eiffel Tower to the Chernobyl cover, and from aerospace industries to renewable energies, you can count on us to address challenges of all sorts!"*

**Nicolas Changeur**  
Aperam Chief Marketing Officer



### 3. Engaging with our neighbours

Our relationship with local communities often go back decades. Even though we have remained an important economic player, as is reflected in our local purchases (58% in 2016 vs. 57% in 2015 - **GR-EC9**), in those locations where local engagement was not structured by such dedicated bodies as foundations or yearly agreements, some routines were discontinued during difficult times of recession. This, in turn, has hurt our relationship with these communities. For example, when recruitment needs were down, we often stopped our work with local universities and schools. As a consequence, we are finding that Aperam is no longer 'top of mind' at many of these schools and amongst potential recruits. This shows just how important - and fragile - these community relationships can be.

**> However, Aperam sites are still actively engaged with our neighbours.** We know that having a regular dialogue with local NGOs and neighbourhood associations can preempt problems and turn situations into opportunities. We often mention the long-lasting programmes run in Brazil under the umbrella of our Acesita Foundation (see below), but our European units also have strong links with their surrounding communities.

■ The story in Isbergues started with a delicate situation. After the closure of the melting shop, which resulted in local employment impact, this valuable asset was reconverted in 2009 into the Recyco recycling facility (see previous reports). This new activity, recovering secondary raw-materials (ferro-alloys) from wastes, created more than 80 new jobs.

At the time, EQVIR, a local neighbourhood association, voiced their concerns about the facility's possible environmental impact. Unfortunately, during the ramp-up phase, Recyco indeed faced technical problems that caused dust.

### Focus: defining Aperam's stakeholder engagement policy

In order to define Aperam's stakeholder engagement policy, share best practices and monitor further progress, a specific survey was conducted in 2016. Site managers were asked to respond to three topics: the impact of each site on key dimensions pertaining to sustainability, the current practices in terms of local stakeholder engagement, and their existing grievance mechanisms.

Some 30 responses from sites ranging from simple offices to our largest plants allowed us to drill into the details of the subject, collect interesting ideas and define future standards. These standards will specify the engagement mode promoted by Aperam with some key stakeholder groups (incl. neighbours, local authorities and academics) for each type of site (office, small plant, large plants), along with define the topics to be discussed, the ideal frequency and suggested operating mode. In addition, a standard grievance mechanism will be deployed throughout the company, using a contact form available in the local language, 24/7. This form will also invite questions and suggestions, thus further enhancing engagement for a smoother central monitoring.

This first exercise has already confirmed the impact analysis previously run at large sites, and our significant tax and employer responsibility. In addition to other environmental areas often reported, the study made clear that our impact on traffic, water and noise are relevant topics for many smaller sites. It also allowed stakeholder groups to voice suggestions, reflecting our ongoing commitment to local relationships.

From these take-aways, we will assess and report the GRI 4 indicator SO1 on an annual basis and, more importantly, enter into a continuous improvement process that lets us become even more involved in the fabric of the surrounding communities and local populations.

Dissatisfactions such as this reverberated over Isbergues' entire site - eventually catching the attention of public authorities and the local media. To address the problem, a process improvement was soon put in place, but tensions were remained high. The only exchanges between the site and the community happened during the annual meetings. Needless to say, these meetings were often very tense.

To amicably resolve this dispute sustainably, in 2015 Aperam's local managers decided to implement regular routines of transparent communications. To start, EQVIR was invited for a site tour where they saw the new installations aimed at reducing dust emissions and the maintenance plan for the roofs that involved using drones to detect leaks. The meeting was also an opportunity for managers to listen to the concerns and expectations of EQVIR, for Aperam to present our projects and challenges and, together, reach a mutual understanding - and agree upon solutions.

From this first visit, a quarterly routine was put in place in order to build a long-term relationship. Today, these regular discussions are no longer only focused on environmental issues, but serve as an open forum regarding the news of the town and prospects. An opportunity for all forces to work together towards improvement.

#### Voices

*"Aperam wants to conduct its activity with a total respect for its stakeholders: it is that simple."*



**Gérard Grimbart**  
Plant manager  
Aperam Isbergues

This initiative shows how local interactions and good terms with our closest stakeholders are necessary for smooth operations.

In previous years we mentioned the engagement set up in Genk (2015) and Imphy (2014). This year we can point to our Brazilian unit and our site in Czech Republic, along with the many other initiatives planned for Gueugnon and Italy, as testaments to Aperam's culture of openness and engagement.

■ For example, in May 2016, Aperam S&S Tubes in Usti organised an Open Day for all employees and their families, along with external guests. The idea was to give families an opportunity to learn more about the work place of their loved ones and to position the site as an attractive employer. The programme included a plant tour, which was followed by a quiz, sports exhibitions from local teams and regional champions, activities for children and a live concert.

This unit of approximately 200 employees specialised in tubes for the automotive industry managed to welcome over 430 guests, including 70 external guests.



Open day at Usti (S&S segment).

■ At Aperam Timoteo, at the request of employees, the 'Encontro Aperam' (Aperam Meeting) was relaunched after a several year hiatus.

Set on the eve of the United Nations' World Environment Day, around 3,000 employees and their families gathered in the nearby Environmental Education Center of Oikos.

In addition to recreational and educational activities on the theme of preserving natural resources (see picture), the event also promoted practical tips on saving energy, while also raising funds for social projects, thanks to the sale of cakes and beverages.

Last but not least, specific events were also organised at Aperam's offices in Sao Paulo and Belo Horizonte, all with the same idea of having a good time while thinking about the community at large.



'Encontro' at Timoteo.

■ The town of Gueugnon was selected as one of 100 cities to participate to the 30<sup>th</sup> French National Telethon, an annual charity event for research on genetic diseases. The fundraiser accounts for 3% of France's yearly donations - making it the largest national fundraising event of its kind in the world. Each city has a special challenge to achieve, and the whole event is broadcast live on national channels.

As the town of Gueugnon is strongly associated with expertise in stainless steel and agriculture, in particular the raising and breeding Charolais cows, the challenge brought these two symbols together.

Participants had to place stainless steel disks in a crate set on the platform of a scale until it surpassed the weight of a heifer standing on the opposite end.

The disks were supplied by our Gueugnon site and were available to buy from local shops. The entire €1,300 collected was donated to the telethon. Just out of interest, the total amount collected in Gueugnon was €8,100 - impressive for a town of less than 7,300 inhabitants!



Telethon day at Gueugnon.

## Aperam' Acesita Foundation

Aperam in Brazil continuously invests in social development programmes, in line with the joint interests of the company and of the neighbouring communities.

In 2016, our Acesita Foundation, which is responsible for carrying out the majority of these social initiatives, took action in the regions of Vale do Aço and Alto Jequitinhonha for the benefit of more than 75,000 people. That same year, USD 1 million (R\$ 2.86 million) was invested in programmes defined with the local leaders and in line with the diversity and needs of the local populations.

The Foundation participates in several municipal, regional and state councils, helping to analyse local needs and contributing to the roll-out of public policies aimed at increasing the wellbeing of the communities. We are currently members of the Council of the Elderly, Council for Children & Adolescents, Education Council, Council for Culture and Historic Patrimony, Vale do Aço Business Citizenship Committee, among others.

In 2016, new projects were set up. Although not all can be reported, we can highlight the projects aimed at strengthening teacher training on such topics as entrepreneurial culture, inclusive education and environmental education. Training was provided to over 1,800 professionals.

We can also mention an entrepreneurship programme for middle and high school students, which benefited 1,400 students in Timóteo and the Jequitinhonha valley. We also promoted local culture through 82 events that benefited around 35,000 people. Many other actions deserve recognition, such as those combating drug addiction, those helping to provide professional qualifications to young adults, and the support granted to the many social organisations close to Aperam's operations... To learn more about these and other Foundation initiatives, be sure to visit our website:

[www.brasil.aperam.com](http://www.brasil.aperam.com)





Compliance 2016 campaign: poster #4.

## 4. Integrity as a key element of our culture

2016 was a busy one for our Compliance Department.

**> Building on previous efforts defining our policies and rolling out the Code of Conduct training, this year we initiated new programmes (see focus on Third-Party risk) and invested a lot into cultural aspects and awareness.**

Using posters (above and p19) and home-made training, we detailed the do's and don'ts specific to Aperam.

■ For instance, together with the last poster illustrating an obvious case of fraud, a specific training pack was built with Combined Insurance and distributed throughout Aperam in local languages.

The short presentation was followed by a quiz showing that there is no specific profile for fraudsters and that fraud can occur anywhere.

The natural conclusion is that only a well-prepared and united workforce is able to identify the early warning signs and sound the alarm in time to protect Aperam's reputation and future.

**> In 2016, we had seven allegations of fraud** (vs. 11 in 2015) but **no significant case** out of the two that were considered founded, as per the review conducted by our Audit & Risk Management Committee.

## Addressing third-party risk: our external agent survey

In 2016, to address what is called the 'third-party risk', Aperam launched a first exercise to assess our risk level regarding the external agents used to support our own commercial forces. Based on an internal audit of all external agents conducted by our Combined Assurance Department, the survey collected data relating to these agents (markets served, ownership, compliance issues like gift policy, etc.) directly from the agent themselves and from their Aperam counterpart in charge of monitoring the relationship. Thus, the initiative not only led to more focused action plans for the years to come, but also raised awareness across our sales staff, educating them on red flags and triggering an increase in vigilance.

In addition to the 16-questions dispatched to our 98 agents, the cover letter also provided links to Aperam's policies (Code of Conduct, Anti-Corruption, etc.) as well as an invitation to follow a free online multilingual training proposed by an undisputable reference: the United Nations (UNODC & Global Compact) <http://thefightagainstcorruption.org/>.

A good way to promote compliance inside and outside of Aperam!

To stress this need for shared vigilance, the campaign was launched on Dec. 9th, United Nations International Day Against Corruption and under the shared slogan of 'United against Corruption' (see below).

**> Earlier in the year, we launched a specific global process that invited employees from targeted functions to report any potential conflict of interest they may encounter.** Together with the poster, screen messages were also deployed locally.

Further, in order to address specific country risks, our Brazil Compliance Committee boldly decided to roll-out the same group initiative with a bigger scope that included all line managers and, later, all staff.

■ To make sure the message was clear, dedicated face-to-face meetings were held to clarify definitions and objectives and to ensure people understood that reporting a potential conflict of interest was proof of transparency and not something to resent, fear or retaliate for.

Thanks to this excellent preparation work, a 'speak-up' culture is spreading, with some situations already being unveiled.

Where relevant, appropriate measures were set up by the local team to protect those concerned - as well as the organisation. In particular, a specific add-in was integrated into SAP to link employees with partners they may have an interest in, and prevent them from any validation in the system.

On a different topic, our Brazilian committee again paved the way with their two-fold campaign against corruption.

■ Although we have taken some actions on this topic, such as a specific training using Transparency International material for our sales staff in charge of Middle East/ CIS/ Asia, Brazil took it to the next level. In parallel to the launch of an employee campaign highlighting a local gift policy (see next page), a letter was sent out to our suppliers and customers clarifying our stance and requesting them not to send any material gift to Aperam employees.



Official French Banner for 9th Dec. 2016, International UN Day against Corruption.

The action was very positively received, strengthening our local image as a company with uncompromising business ethics.

> **Of course, other workstreams are in place to ensure compliance with evolving regulations**, such as European Market Abuse regulations (on insider trading, coming into force in 2017) and European Global Data Privacy laws (enforceable in 2018), but we believe that having the right culture is more powerful than only relying on policies. And so in 2017 we aim to go even further into compliance education and awareness.

## 5. Strategic thinking and our long-term view

*Since inception, Aperam has always taken a long-term view towards risk analysis and opportunities. This allows us to define the best strategy and maintain our position as the industry's catalyst for change.*

### 5.1 Risk management

> **We have strong risk management process led by our Combined Insurance Department**, with detailed policies and quarterly reviews done by our Audit & Risk Management Committee. This combined bottom-up and top-down approach allows us to identify, assess, mitigate and monitor all risks.

Each risk is assessed in terms of impact and likelihood using multiple criteria (cost, brand, productivity, etc.). This mapping is reviewed by the owners until the Leadership Team level and main risks at group level are consolidated into the Global Risk Matrix and validated by the Audit & Risk Management Committee. All principal risks are disclosed in Aperam's Annual Report.

> **Aperam's risk management approach was recognised in 2016 as being 'best in class'** in internal assurance, risk management and forensic services by the Institute of Internal Auditors certification and based on external assessment (see pictures).

*Brazil 2016 Gift policy teaser poster.*



In order to go beyond assurance and unlock its full potential, Aperam Combined Assurance developed a five-year strategy to complement the company's transformation.

> **Our risk mapping covers all dimensions**, including those related to environmental topics (eg. pollution, litigation), climate change (eg. change in regulations, consumer patterns) and other sustainability risks (ESG rating, etc.). Although many of these risks harbour potentially significant impacts, we often conclude that there is a low likelihood that these will manifest and, in some cases, we've even identified great opportunities.

■ The challenges of sustainability tend to increase demand for our affordable, recyclable and energy-efficient steels. Luckily, the risks associated with climate change (rising sea levels, floods, etc.) are relatively low for our company due to the location of our plants. As an example, some recent regulations addressing air pollution and the use of catalytic converters were in fact beneficial for our industry, generating a strong demand for our products (Ferritics).

On the other hand, while we understand the urgency of combating climate change, we support our trade associations (eg. EUROFER in Europe) when they claim that



**Lieven Houben**  
Head of Combined Assurance  
(Internal Assurance, Risk Management & Fraud prevention, detection and investigations)

*"We aim to be a trusted advisor by providing value-adding assurance services and facilitating change through a talent pool of future business leaders."*

*Our mission is to embed risk awareness into every single decision we make.*

*The biggest mistake we can make is believing that Aperam is immune to fraud, whereas in reality, any person and any company can fall victim to it. Our department is here to ensure that we are ready for that."*

### Best-in-Class Internal Risk Assurance, Risk Management & Forensic Services

*Combined Assurance Team Europe receiving Certification.*



*Combined Assurance Team Brazil receiving Certification.*

environmental sustainability should not jeopardise social sustainability - such as in the debate on 'carbon leakages' happening within the European Union.



■ European steelmakers fear an unbalance in global competition if those who are already the most sustainable (with the lowest CO<sub>2</sub> footprint) and the ones with the most fragile profitability, are requested to do even more in terms of environmental sustainability, while at the same time imports from other countries can freely penetrate without respecting the same level of CO<sub>2</sub> regulations.

**> Overall, Aperam tries to anticipate regulatory changes.**

In 2016, we voluntarily set up an internal CO<sub>2</sub> price of USD 15/ton to be accounted in all investment projects, not only in Europe (where the ETS market price is much lower), but also in Brazil, where CO<sub>2</sub> pricing policies are only in the conceptual phase. But the best way to stay on top of risks and make responsible decisions is to keep a long-term and all-encompassing view on things.

A good example of how our strategic thinking works can be seen in the 2016 upgrade of our procedure for validating investment projects.

## 5.2 Insightful governance

Starting in 2016, the (CAPEX) investment approval procedure demands that every project be assessed on five axis covering the three aspects of sustainability.

- Social: for a perfect alignment with our N°1 priority, we will assess the impact on Health & Safety. Only projects having a beneficial impact will be validated, all others will be rejected.

- Environment: the CO<sub>2</sub> impact assessment will be mandatory, in line with the USD 15/t CO<sub>2e</sub> pricing we use in all our profitability calculations. A second topic is to be chosen by the project teams themselves, based on a project's potential impact (air, water, etc.). The aim is that this open choice will foster questions - and ideas.

- Governance: will deal with the 'customer impact' and, more often, with the 'social footprint' (also called 'licence to operate').

For a smooth deployment of this new procedure, the qualitative assessments were based on concepts used in operations (eg. on-time delivery for the customer impact, activity or noise emissions for the social impact, etc.).

Overall, this procedure will help change mindsets across Aperam, monitor our sustainability risks and even identify opportunities for improving our ESG performance while realising important industrial projects. This is the kind of sound governance and real leadership that we strive for, and we believe this combination will make us stronger.

## 5.3 Innovation inside and out

*We cannot talk about having a long-term view without talking about innovation.*

*As a natural correlative of ingenuity, it applies as much to technical fields as to industrial processes and management methods.*

■ For instance, we were excited about being awarded a silver medal from the 'Trophées du Droit Enterprise' 2016, organised by Leaders League in Paris. This award recognises our legal team's ability to innovate and nurture a true sense of partnership with their internal customers (see picture).

Also, both our Annual and Sustainability reports were fully created in-house thanks to simple collaborative tools, reducing the need for external support while also improving internal interactions. This is a great example of how we use our agility to reduce costs.

Clearly, innovation can apply everywhere!

**> A truly powerful innovation flow is put into motion within Aperam,** extending throughout our global organisation.

To promote the most disruptive ideas generated by our teams, the theme of our 2016 internal 'challenge' was Innovation and New Technologies.

## ■ New investment validation procedure

### Qualitative appraisal of

- > Health & Safety impact
- > Customer satisfaction impact
- > Social (footprint) impact
- > CO<sub>2</sub> impact

+ [2<sup>nd</sup> environmental topic]

**+  
CO<sub>2</sub> at 15 USD/t**

## Voices



*"We have to think sustainability in our daily activities. A good example is the inclusion of a sustainability sheet in the investment approval form.*

*Now, whoever requests a project should evaluate the negative and positive impacts of their project on several axis of sustainability: impact on CO<sub>2</sub>, waste and recycling, air emissions, raw materials consumption, etc. This way I believe people will be encouraged to implement projects that have positive effects on sustainability.*

*Here in Brazil, we trained more than 90 people in this reviewed procedure, reinforcing these concepts.*

*We want Aperam to produce the 'greenest steel'!*

### Shirlleny Flores

Capex Controller, Brazil (Timoteo)



Aperam Legal team receiving the 2016 Trophée.

Over 1,000 breakthrough ideas were collected in three months, ranging from the use of new technologies like drones and robots, to the innovative roll-out of more familiar technologies like collaborative tools and the digitisation of documents.

The 12 final teams in the three categories (Commercial, Health & Safety and Cost Competitiveness) were encouraged to use high-quality, self-made videos and collaborative tools to present their ideas.

The initiative was a huge success, spreading enthusiasm at all levels of the organisation. It also drove home the important message that all our people, from shop-floor to offices, need to be creative, ingenious and agile.

*Challenge 2016 winners: a Châtelet / S&S Detroit joint team (category Health & Safety).*



**> The source of Aperam's innovative soul is its Research team. Organised into three hubs,** two in France (Imphy and Isbergues) and one in Timoteo (Brazil), together the Research hubs include roughly 130 researchers working within a mix of transversal disciplines and across numerous sectors.

These researchers examine how to substitute steel for other materials. They study the impact of what are called mega-trends and foresee the future needs of end users. With this information in hand, they can come to our customers with innovative solutions.

In 2016, our R&D investments remained at USD 18 million, the same amount as in 2015.

In a steel market overwhelmed by commodities, innovation serves as a differentiator. By fast-tracking the development of new products and by achieving a fivefold increase in innovation, Aperam is preparing itself for the future.

*Below is an overview of some of the technologies making their way through our innovation pipeline.*

#### 5.4 Products and services

##### ■ The world's first concrete mixer truck made of stainless steel

Concrete is a highly abrasive material. When you add the water needed to prepare it, you get to corrosion. Put that together and you see why the equipment used to produce concrete have a relatively short lifetime.

Customer VALEMIX challenged Aperam to come up with an innovative solution to improve the lifetime of their concrete mixer trucks.

First, Aperam developed stainless steel D410 internal cut pads, which have produced excellent results after a six month trial. Based on the amount of abrasion seen and the simulations made, these pads could be used for a total volume of 30.000m<sup>3</sup> of concrete, which is double the capacity of existing steel pads.

After this first success, Aperam went one step further and proposed to make the entire mixer bowl out of stainless steel, along with the cut pads. As a result of this new design, the new truck can have a thinner skin, increasing capacity in terms of volumes of concrete produced.

According to the initial target, the lifetime extension is expected to be about three to four times current standards.

To great fanfare, Aperam presented the world's first concrete mixer truck made out of stainless steel at the Concrete Show South 2016, a leading civil construction show in South America. Overall, the project is a great success and further proof of the ingenuity of our teams!

#### Challenge Winner in the Health & Safety category: safety cone materialisation



##### Challenge 2016 Safety Cone materialisation

One of Aperam policies forbids employees from standing on the floor within an area below any suspended load, known as 'the safety cone'.

As this area is difficult to grasp, especially when the load is high, the idea behind this winning concept is to illuminate the safety cone.

After having analysed alternatives, the team proposed to install a powerful (now blue) LED flood light on a crane's pulley system so the illuminated zone varies with the height of the load. With a cost of only EUR 5,000 per crane (way cheaper than a laser!), this simple and clever solution allows workers to easily see if they have crossed into a danger zone and crane drivers to check and stop operations if necessary.

*Challenge 2016 winning project 40,000 - 100,000 lumen led flood-light*



*Concrete mixer truck designed with Valemix.*



## ■ A new green lubricant for forming operations

Metalwork companies traditionally use petrochemical oils for most of their forming operations. Although these oils are efficient, they come with severe constraints. Firstly, their usage requires regular degreasing of tools and materials, which results in onerous operations. In addition, these oils are deemed harmful to the environment, leading to environmental restrictions (EPA, REACH) that will potentially intensify over the course of the years. De facto, many of the traditional oils that stamping companies use will no longer be available in the future. As a result, the stamping world is in dire need of a disruptive lubricant.

The answer may be AFULudine™.



Aperam joined the AFULudine™ start-up in its early stages, bringing its industrial and metallurgy skills and the ambition to avail a new solution for the processing of stainless steel. AFULudine™ is an environmentally friendly lubricant that removes the risk of damaging the metal with extreme pressure while stamping.

### AFULudine™'s advantages

- Simple and fast to use
- Efficient for severe forming operations.
- Suppress post-shaped degreasing steps with their energy and water impacts
- Significant TCO\* savings
- No chemical risks for the users
- Better working conditions at plants
- Environmentally friendly and eco-toxicity certified by accredited laboratories.

Its innovative genius is found in its chemical nature - AFULudine™ is non-toxic and fully biodegradable as it consists only of water, alcohol and dedicated active molecules that have a high reactivity with stainless steels.

For the end user, AFULudine™ is simply a game-changer. According to the utensil manufacturer Cristel, by switching to AFULudine™, the company will no longer need to clean oil from their tools, presses or other equipment, nor from their products after forming operations, allowing them to directly move to the next step in the manufacturing process (i.e. brazing). The company also fully appreciates the decrease in the use of water and detergent, improving its environmental footprint.

## Investing today to be the first tomorrow

The world is changing fast, and Aperam fully intends to continue its role as a change leader, especially as it pertains to positioning stainless steel as the sustainable material of the future.

Whether one is looking to become more sustainable themselves or is busy developing completely new products that will disrupt the status quo, Aperam's mission is to support these efforts with innovative stainless steel products and processes.

# GRI Index

GRI Index	Disclosure code and label		Information or reference
Economics			
Economic Performance	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 1
	G4-EC1	Direct economic value generated & distributed	Present report - page 5 ; Annual report 2015 page 3-4
Procurement Practices	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 1-2
	G4-EC9	Proportion of spent on local suppliers at main sites	Present report - page 36
Environmental			
Material	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 2
	G4-EN2	Percentage of materials used that are recycled input material	Present report - page 25
Energy	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 3
	G4-EN5	Energy intensity	Present report - page 23
Water	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 4
	G4-EN8	Total water withdrawal by source	Present report - page 26
Emissions	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 3
	G4-EN18	Greenhouse gas (GHG) emissions intensity	Present report - page 23
	G4-EN21	NOx, SOx and other air emissions	Present report - page 24
Wastes	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 2
	G4-EN23	Weight of waste by disposal method	Present report - page 25
Labour			
Occupational Health & Safety	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 4
	G4-LA6	Rate and gravity of injury, occupational diseases, lost days, and absenteeism, number of work related fatalities, by region and by gender	Present report - page 12
Training & Education	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 5
	G4-LA9	Average hours of training per year per employee by gender, and by employee category	Present report - page 16
	G4-LA11	Percentage of employees receiving regular performance reviews, by gender and by employee category	Present report - page 16
Supplier Assessment for Labour Practices	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 5-6
	G4-LA15	Significant actual and potential negative impacts for labour practices in the supply chain and actions taken	Present report - page 32
Society			
Local Communities	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 6
	G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programmes	Present report - page 36-37
Product and Service Labelling			
Customer Satisfaction	G4-DMA	Disclosure on Management Approach	Online Supplement C - page 6
	G4-PR5	Results of surveys measuring customer satisfaction	Present report - page 31-32



General Standard Disclosure		Information or comment	Reference								
Strategy & Organisation											
G4-1	CEO statement	Opening Word	Current report, p3								
G4-3	Name of organisation	Aperam	Cover								
G4-4	Primary brands, products, and services	Aperam Annual report 2016, p7-8	Current report, p6, 35								
G4-5	Location of headquarters	12c rue Guillaume J. Kroll, L-1882 Luxembourg	Back Cover								
G4-6	Countries of operation	Production facilities are listed by geography in Aperam Annual Report 2016, p8									
G4-7	Ownership and legal form	Public limited company in Luxembourg									
G4-8	Markets served	Sales by destination are also listed in Aperam Annual report 2016, p107									
G4-9	Scale of organisation	Aperam Annual report 2016, p7-8									
G4-10	Employees and workforce	<div><div><b>Employees</b> Figures based on FTE as of December 2016, Full time own employees at year-end including Aperam Drosbach (64) and excluding Haven Genk. Female workers: 12% of the Aperam overall; 20% of exempts. The small workforce at BioEnergia in Brazil is subject to variations due to seasonal factors (growing cycle of the trees: planting, harvesting etc.) Alloys ICS is included starting 2015 reporting (60 FTE).</div><div><b>Supervised Workers 2016</b> Total Full-Time Equivalents<table><tr><td>Europe</td><td>443</td></tr><tr><td>South America</td><td>18</td></tr><tr><td>Rest of the World</td><td>10</td></tr><tr><td>Total</td><td>471</td></tr></table></div></div>	Europe	443	South America	18	Rest of the World	10	Total	471	
Europe	443										
South America	18										
Rest of the World	10										
Total	471										
G4-11	Collective bargaining agreements	100% of the Aperam employees are covered by collective bargaining agreements									
G4-12	Description of supply chain	Description of supply chain available within our Online Supplement C – p1									
G4-13	Changes to organisational profile	Change between 2015 and 2016: liquidation of a sales agency in Russia									
G4-14	Precautionary approach	See our risk management approach	Current report, p39 Annual Report, p58								
G4-15	External initiatives	We also operate in partnership with various organisations, principally via the Aperam Acesita Foundation in Brazil.	Current report, p6, 37								
G4-16	Associations and advocacy organisations	We are also a member of EUROFER, Brazil Steel Institute and World Steel.	Current report, p6 Annual Report, p35								
Identified materials aspects and Boundaries											
G4-17	Entities included in consolidated financial statements		Annual Report, p155								
G4-18	Process for defining report content	In line with the GRI4 framework	Current report, p8, Online Supplement B – p2								
G4-19	List of material aspects	Description of our Stakeholders groups as well as our reporting process and materiality analysis is to be found within our Online Supplement C – p1	Current report, p8 Online Supplement B – p1-2								
G4-20	Aspect boundaries within/ - and without/		Online Supplement B – p1-2								
G4-21	the organisation										
G4-22	Restatements	Restatements may result from: Mergers or acquisitions, change or scope of segments (eg. precision), change of base years or periods, nature of business, measurement method									
Stakeholder Engagement											
G4-23	Changes in scope and boundaries	No significant changes on scope and boundaries									
G4-24	Stakeholder groups										
G4-25	Basis for identification and selection of stakeholders	Description of our Stakeholders groups as well as our reporting process and materiality analysis is to be found within our Online Supplement B.	Current report, p8, and Online Supplement B								
G4-26	Approach to stakeholder engagement										
G4-27	Key topics and concerns										
G4-28	Reporting period										
G4-29	Reporting cycle	Calendar year 2016 (Annual) is reported into Made for life Report 2016.									
G4-30	Previous report	Previous issue reported on calendar year 2015									
G4-31	Contact point	<a href="mailto:sustainability@aperam.com">sustainability@aperam.com</a> or <a href="mailto:contact@aperam.com">contact@aperam.com</a>									
G4-32	Content Index	Reporting to GRI G4 in accordance at Core level.	Current report, p43-44								
G4-33	External assurance	Main report, and online supplement bundle.	Current report, p1								
Governance, Ethics and integrity											
G4-34	Governance structure	p7, Supplement D – p1, Annual Report, p53									
G4-35	Values, principles, standards, and norms	Aperam Code of conduct – available on the web in multiple languages	Current report, p4								

For other GRI-related reference documents, please see the Online Supplements at [aperam.com/sustainability](http://aperam.com/sustainability).



## Aperam

12C, rue Guillaume J. 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: [aperam.com/sustainability](http://aperam.com/sustainability)

Copyright 2016 © Aperam Produced by Aperam

### Disclaimer - Forward Looking Statements

In this Sustainability Report, Aperam has made certain forward-looking statements with respect to, among other topics, its financial position, business strategy, projected costs, projected savings, and the plans and objectives of our management. Such statements are identified by the use of forward-looking verbs such as 'anticipate', 'intend', 'expect', 'plan', 'believe', or 'estimate', or words or phrases with similar meanings. Aperam's actual results may differ materially from those implied by such forward-looking statements due to the known and unknown risks and uncertainties to which it is exposed, including, without limitation, the risks described in the Annual Report. Aperam does not make any representation, warranty or prediction that the results anticipated by such forward-looking statements will be achieved. Please refer to the 'Principal risks and uncertainties related to the Company and the stainless and specialty steel industry' section of the 2016 Annual Report page 50. Such forward-looking statements represent, in each case, only one of many possible scenarios and should not necessarily be viewed as the most likely to occur or standard scenario. Aperam undertakes no obligation to publicly update its forward-looking statements, whether as a result of new information, future events or otherwise.

Unless indicated otherwise or the context otherwise requires, references in this Sustainability Report to 'Aperam', the 'Group' and the 'Company' or similar terms refer to Aperam, 'société anonyme', having its registered office at 12C, Rue Guillaume J. Kroll, L-1882 Luxembourg, Grand Duchy of Luxembourg, and to its consolidated subsidiaries.