



# ARGOR-HERAEUS

The golden link

## Corporate Responsibility Report 2015





## Letter from the CEOs

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Dear readers,

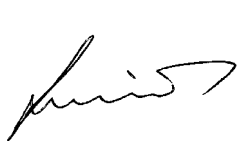
We are very happy to present our sixth annual Sustainability Report.

2015 was crucial for our growth: we officially inaugurated our affiliate in Latin America. This project, begun over ten years ago as a sales office, has now become a production facility. It is a reference point and a logistical hub for Argor-Heraeus Group in Latin America, and will perform key functions, including collection and assaying of precious metals, trading, and logistics. We are very proud of this achievement, which confirms the strategy previously launched with the opening of affiliates in Germany and Italy: development based on sustainable growth and on proximity to our customers in reference markets.

Naturally, we are aware that this strategy involves numerous responsibilities, which we take very seriously and express in actions that all of our employees perform on a daily basis, as well as in careful attention to relations and dialogue with our stakeholders. Two aspects – daily action and dialogue – in which we believe strongly and to which we give special emphasis in this edition of the Sustainability Report, as you will see below.

Therefore, we devote this year's close-up to the "journey" of precious metals from mine to final consumer, providing a simple and clear explanation of the main points along the way as well as what is done at various levels to guarantee the metal's traceability and transparency on the entire value chain.

We hope you enjoy this edition of the Report and appreciate all of the important information it contains. We do our best to improve each year's Report, and use it as a tool for internal monitoring and improvement, as well as for effective dialogue with all of you.



**Christoph Wild**

Co-CEO

Argor-Heraeus SA



**Dr. Wilfried H. Hörner**

Co-CEO

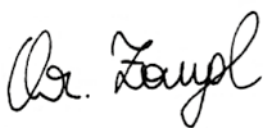
Argor-Heraeus SA

## **Argor-Heraeus Deutschland**

2015 was a particularly demanding year for Argor-Heraeus Deutschland. Despite this, we continued our work to improve the company's effectiveness and efficiency. For example, to improve the health and safety of our employees we installed a new ventilation system and appointed a safety supervisor who can provide additional support in case of an emergency. We are digitizing more and more documents to reduce our consumption of office materials. By means of these and other measures, we are committed to supporting the Parent Company's goal of an increasingly sustainable future.

### ***Three keywords for the future of sustainability in our industry?***

***Traceability***  
***Cooperation***  
***Environment***



**Christoph Zangl**

General Manager  
Argor-Heraeus Deutschland

## **Argor-Heraeus Italia**

Argor-Heraeus Italia is a trading company with minimum transformation activity. Every year, we have our performance in terms of social responsibility audited by third parties. Although we have very little environmental impact, we work daily to improve the sustainability of our operations, and have decided to purchase electricity only from renewable sources. Our management method, based on Italian Legislative Decree 231/2001, expresses our commitment to sustainable growth and our attention to the needs of all stakeholders, including shareholders, customers, suppliers, employees, country, and society in general. We are members of industry associations and contribute actively to development of the sector and its regulatory framework by dialoguing with the public administration and with all operators on the chain.

### ***Three keywords for the future of sustainability in our industry?***

***Responsibility***  
***Commitment***  
***Dialogue***



**Giuseppe Larghi**

General Manager  
Argor-Heraeus Italia

# The contribution of our affiliates to Group sustainability

## Argor-Aljba

Argor-Aljba continued its strong growth in turnover in 2015, increasing sales by 13% compared to 2014. Despite this, our energy consumption increased only about 3% thanks to optimal use of our systems. In addition, through more efficient use of water (and without the problems with closed circuits that occurred in 2014) we considerably reduced consumption of this resource as well. In 2015, Argor-Aljba installed a new production plant whose impact on consumption will be seen starting in 2016. Lastly, we invested in a modern purification plant linked to a distillation system that can operate almost without water.

### **Three keywords for the future of sustainability in our industry?**

**Growth in sales**  
**Resource consumption**  
**Optimization of uses**



**Daniele Marco Galatioto**

CEO  
Argor-Aljba

## Argor-Heraeus America Latina

2015 was a crucial year for Argor-Heraeus America Latina: we inaugurated our new plant, which is now fully operative and works at the high standards demanded by our Parent Company. We were certified by Chilean Customs Authorities to assay and export precious metal and began work to obtain new certifications (such as ISO 17025) to confirm the quality of our operations. In addition to close collaboration with the Chilean Government, we opened a dialogue with the governments of other Latin American countries to cooperate in supporting small artisanal mines in the formalisation process. We are confident that we will continue to be a reference point for the development and sustainability of the precious metals industry in Latin America.

### **Three keywords for the future of sustainability in our industry?**

**Partnership**  
**Mutual understanding**  
**Honesty**



**Max Oemick**

Chairman of the Board of Directors and General Manager  
Argor-Heraeus America Latina

Letter from the CEOs  
The contribution of our affiliates to Group sustainability

## Overview

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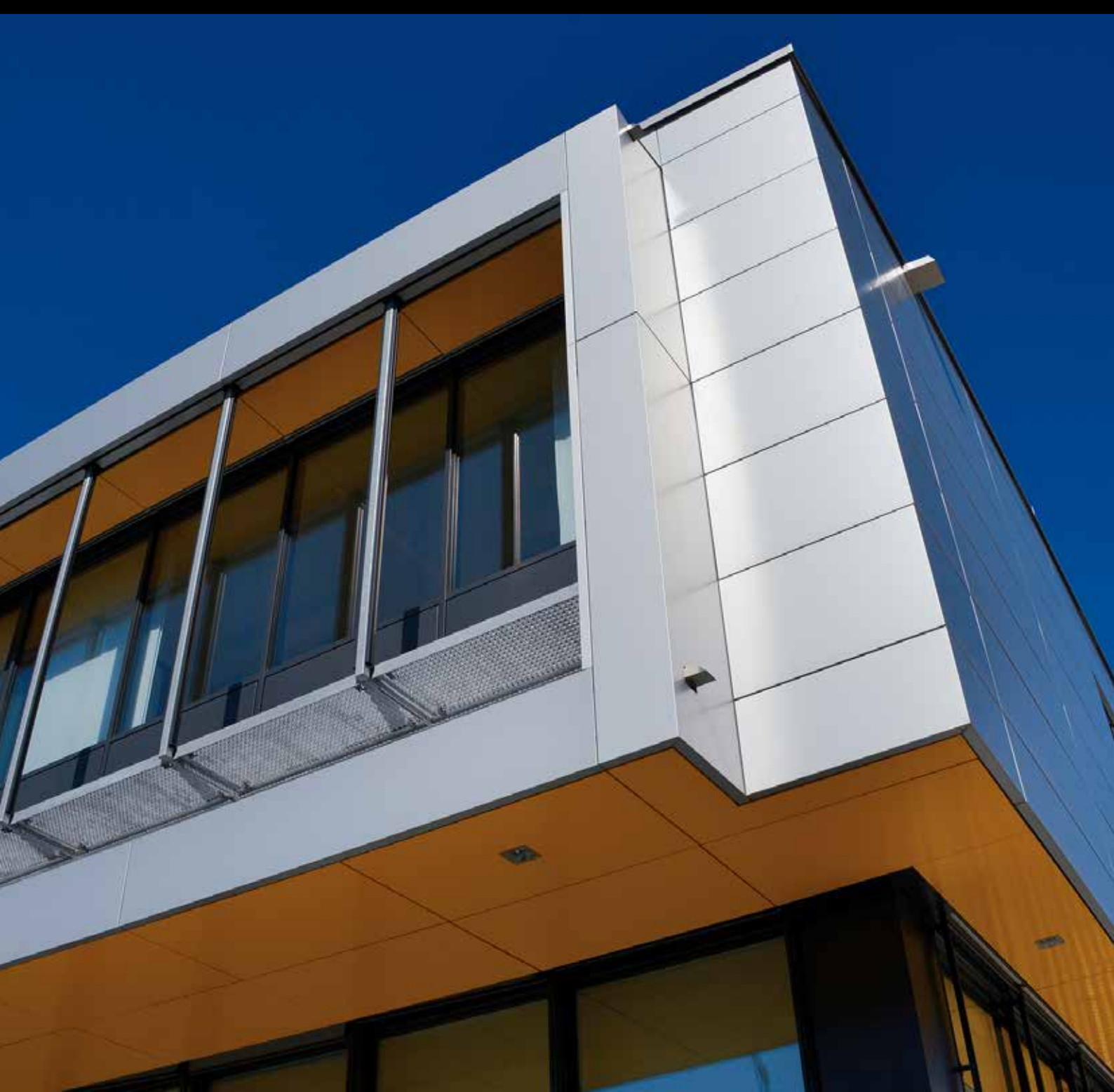
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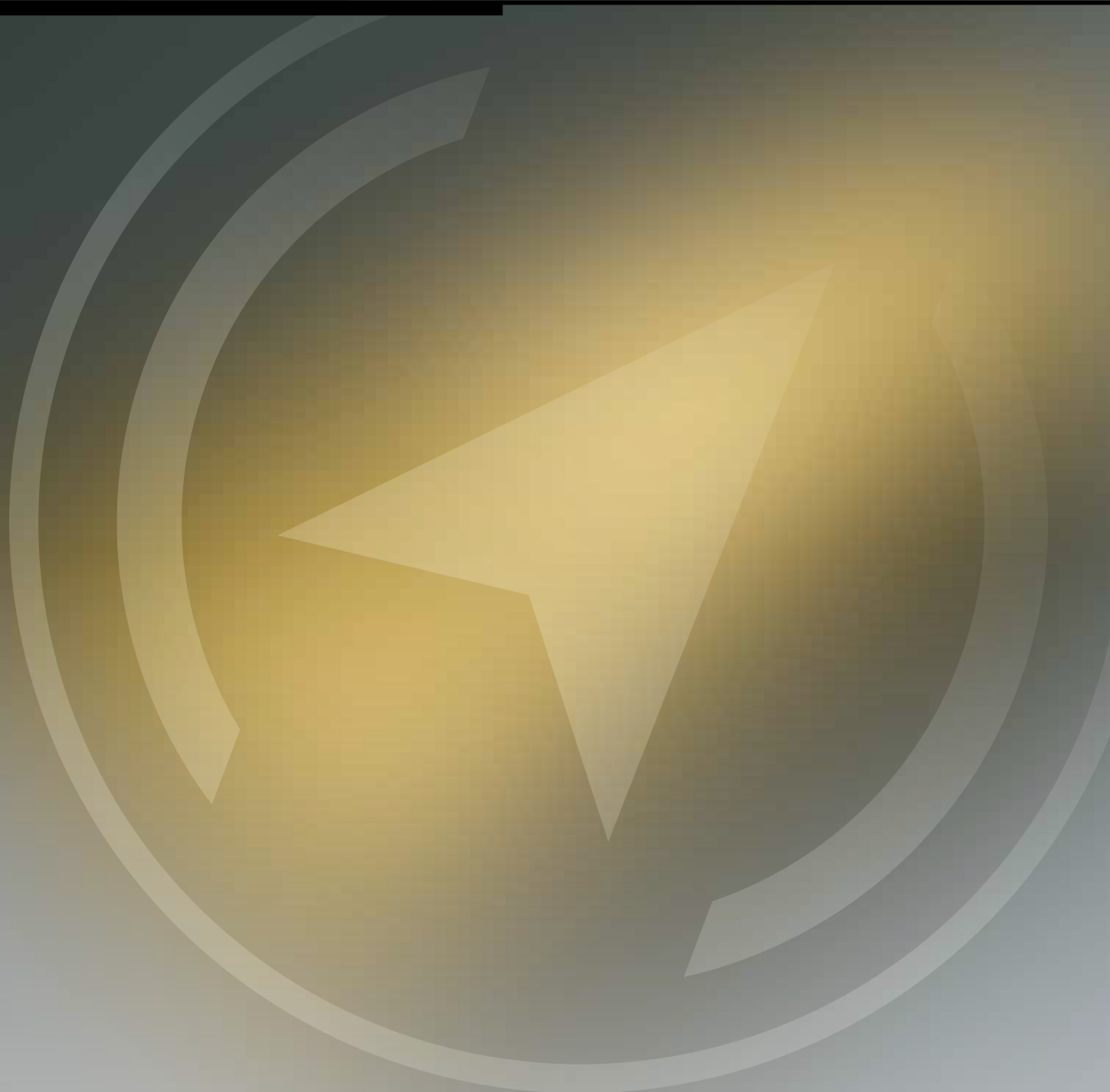
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# OVERVIEW



# GUIDE TO THE REPORT



## ***A document for everyone***

Year after year, we design this Report to be useful to all types of readers, regardless of their level of knowledge of and interest in Argor-Heraeus and precious metals.

Therefore, the texts are arranged in paragraphs with a regular structure according to various reading levels, with the titles serving as a useful guide to their contents.

For a quick look at the contents, key data are summarised in just two pages at the end of the Report.

## ***Overview: Argor-Heraeus in just a few pages***

The first part of this Sustainability Report describes the Argor-Heraeus Group, its operations and approach to sustainability, in just a few pages.

## ***Analysis: economic, environmental, and social responsibility***

The second part of the Report is devoted to economic, environmental, and social analyses, with data and information for the entire Group. Complete information and data are given with regard to the Parent Company, where over 90% of our employees work, whereas only key data is provided with regard to affiliates. To ensure clear comparison over time, we use the same indicators as in previous Reports and keep a 3-year horizon.



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### ***Close-up: the journey of precious metal***

Every year, this Sustainability Report devotes space to a subject of importance to the industry. This year, we decided to present a detailed explanation of the journey of precious metal, from extraction to sale to the final consumer, with particular emphasis on what is done to guarantee its traceability and quality. Our company and the industry as a whole devote considerable energy to this highly relevant subject.

### ***The Report: a platform for dialogue***

This Sustainability Report is very important to us as a platform for dialogue and communication with our stakeholders. This edition contains the opinions of some important local and international individuals on matters concerning sustainability.

# OUR HISTORY



## ***Deep roots***

We were founded in Ticino, a canton in southern Switzerland, in the mid-20th century, and continue to have strong ties with this territory.

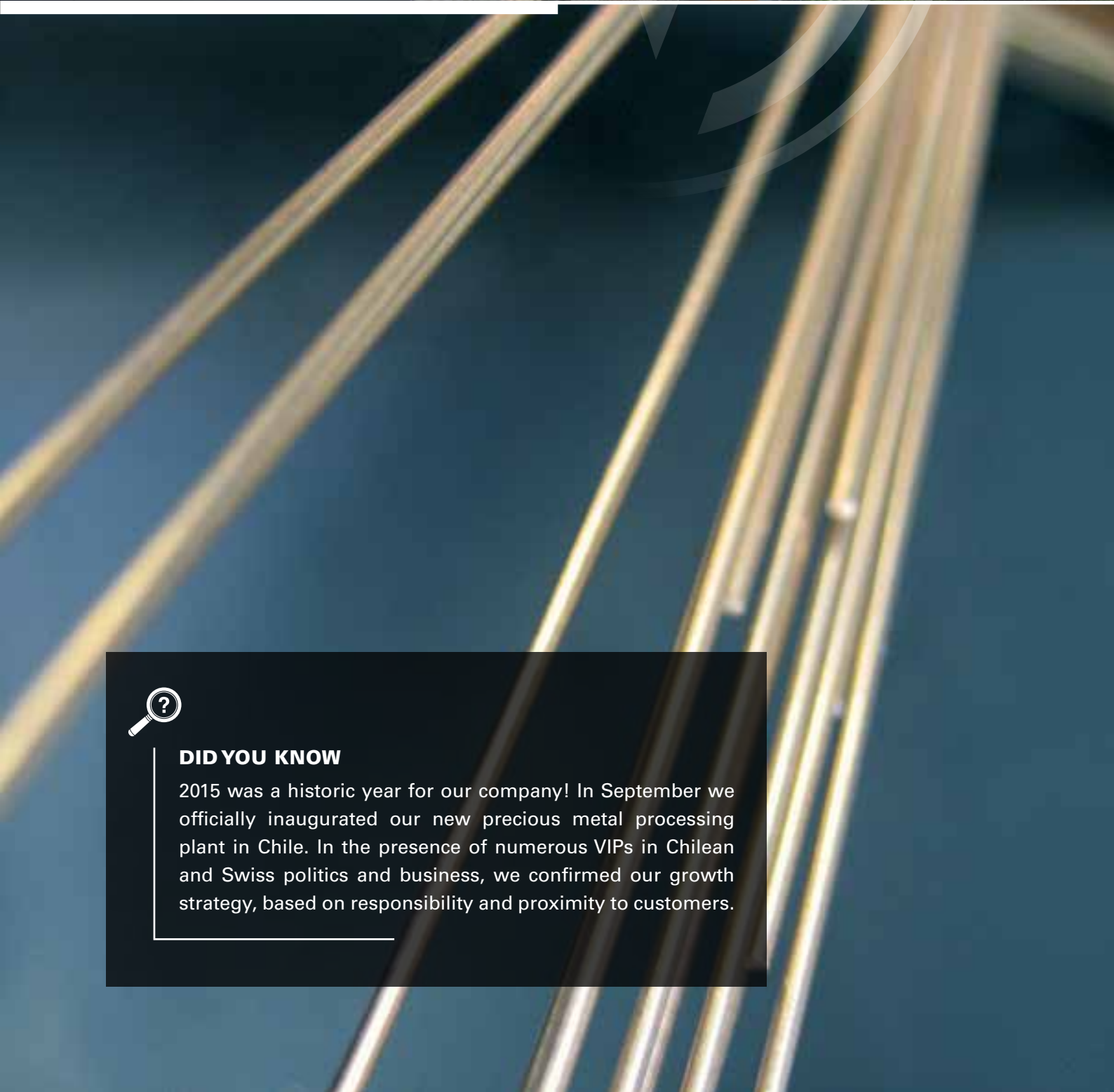
## ***Solid growth***

In over 60 years of growth, we have become a world leader in precious metal refining and transformation, maintaining a realistic outlook and concentrating on the long-term.

## ***Sustainability***

Responsibility to all of our stakeholders has always been an essential aspect of our way of doing business.

- 2015** Argor-Heraeus America Latina affiliate is officially opened
- 2013** Expansion of Mendrisio headquarters
- 2006** Argor-Heraeus Italia is formed
- 2004** An office is opened in Chile; Argor-Heraeus Deutschland and Argor-Aljba are formed
- 2002** The Austrian Mint enters the shareholder structure
- 1999** Heraeus and Management acquire 100%; entrance of Commerzbank International
- 1986** UBS and Heraeus form a joint venture and create Argor-Heraeus SA
- 1973** UBS acquires 100% of the company
- 1951** Argor SA is formed



#### **DID YOU KNOW**

2015 was a historic year for our company! In September we officially inaugurated our new precious metal processing plant in Chile. In the presence of numerous VIPs in Chilean and Swiss politics and business, we confirmed our growth strategy, based on responsibility and proximity to customers.

# OUR SHAREHOLDERS



## *History and leadership*

Our shareholders have centuries of history and are recognised leaders both internationally and in their respective business sectors.

## *Synergies and know-how*

Our relationship with shareholders is based on a common long-term vision and on industrial, operative, and strategic synergies. A solid foundation of mutual trust allows us to generate value greater than the sum of its parts.



### **DID YOU KNOW**

Products by Heraeus are often launched into space! Back in 1969, Apollo 11 positioned a laser reflecting device, with materials developed by Heraeus, on the moon. These reflectors are still being used to measure the precise distance between Earth and the moon.



## **Heraeus**

**[[heraeus.com](http://heraeus.com)]**

### **History and leadership:**

Founded in 1851, Heraeus is a private, family-run, German multinational in the precious metals and hi-tech sectors. It has over 12,000 employees and more than 100 offices in 38 countries.

### **Key synergies:**

Access to advanced R&D in technological fields.

## **Commerzbank**

**[[commerzbank.com](http://commerzbank.com)]**

### **History and leadership:**

Founded in 1870, Commerzbank is a bank with headquarters in Frankfurt and offices in more than 50 countries. With over 52,000 employees at more than 1,100 branches and 90 advisory centres, it is one of Germany's most widely-established banks.

### **Key synergies:**

Financial solidity and access to an extensive international network.

## **Austrian Mint**

**[[muenzeoesterreich.at](http://muenzeoesterreich.at)]**

### **History and leadership:**

With over 800 years of history, the Austrian Mint, wholly-controlled by the Austrian National Bank, is one of the world's largest. It produces an average of 450 million pieces per year.

### **Key synergies:**

Access to numerous distribution channels, knowledge of advanced high-precision technologies, business and marketing expertise.

## **Management**

Management's presence in the shareholder structure confirms its faith in the Company's solidity and long-term strategy.

# THE GROUP



## ***International presence, shared values and identity***

Argor-Heraeus Group operates worldwide and is present in Switzerland, Germany, Italy, and Chile.

## ***A large family***

We work in a climate of mutual trust, enjoying good times and facing difficult times together, helping one another at all times.

## ***Proximity to customers***

Our global presence offers customers many benefits: in addition to advantages deriving from physical proximity, our international presence lets us develop specific sensitivity to the needs of different markets.



### **DID YOU KNOW**

During the year we had the honour of receiving Swiss Federal Councillor Doris Leuthard as a guest at our Chilean affiliate. Councillor Leuthard, on a state visit to Chile, toured our new production plant and learned about our growth plans in Latin America. We also had the honour of meeting Michelle Bachelet, Chile's President, and explaining our plans on Chilean soil.





### **Argor-Heraeus Deutschland [Pforzheim, Germany]**

Inaugurated in 2004 in Pforzheim, in the Baden-Württemberg region, this affiliate is the reference point for the German market.

#### **What does it do?**

- Collection, assay, trading of precious metals
- Collection of industrial scrap
- Trading and logistics
- Sale of products in CoC material (grains, ingots, etc.)



### **Argor-Heraeus Italia [Cavenago-Brianza, Italy]**

Operating in Lombardy since 2006, this affiliate deals primarily with operators in the Italian goldsmith sector.

#### **What does it do?**

- Collection, assay, trading of precious metals
- Marketing of Swiss-made products for the high-end precious metals industry
- Sale of products in CoC material (grains, ingots, etc.)
- Logistics services



### **Argor-Aljba [Mendrisio, Switzerland]**

Founded in 2004, Argor-Aljba ([argor-aljba.com](http://argor-aljba.com)) is a joint-venture that develops coatings with high technology content for numerous sectors and applications.

#### **What does it do?**

- Research and development of high-tech coatings
- Production of coatings by means of the Diamond-like-Coating technique



### **Argor-Heraeus America Latina [Santiago, Chile]**

Formed in 2004, this affiliate operated as a sales office until 2015, when it became a production plant.

#### **What does it do?**

- Processing of precious metals (collection, homogenization and assay of material)
- Logistics services, serving as logistical hub for Latin American customers
- Trading of precious metals
- Sale of products in CoC material (grains, ingots, etc.)

# CORPORATE GOVERNANCE



## ***Governance at three levels***

Our Group's governance does not merely set rules to be followed: it influences the daily work of all of our employees. To achieve this, our corporate governance system is conducted at three levels – executive, managerial, and operative – and is addressed to the entire organisation. This structure, based on clear rules and strict checks for each process, ensures responsible and sustainable conduct with regard to every stakeholder

## ***Internal and external auditors***

The presence of internal and external auditors ensures that our governance procedures and quality management system are always verified and checked.



### **DID YOU KNOW**

Governance is a complex, multifaceted and, above all, constantly changing process. Every year, we work to improve this process and to certify quality by means of external certifications and audits. In 2015, in addition to the many days spent internally for such purpose, numerous external audits were also conducted.

**Internal and external auditors (private bodies and government authorities)**

**Audits and checks of process quality management system**



**What does it do?**

- Defines corporate strategy and governance
- Assesses risk
- Supports management and rest of company in daily operations

**Who is involved?**

- Shareholders Meeting
- Board of Directors
- Board of Directors Delegation
- Risk audit committee

**Executive level**



**What does it do?**

- Manages allocation and use of resources at profit and service centres
- Checks correct application of guidelines, national and international regulations, and internal rules
- Assesses responsibility of potential new partners

**Who is involved?**

- Internal Compliance Committee
- Credit committee
- Credit Office
- Personnel Commission

**Managerial level**



**What does it do?**

- Assesses quality of work performed in each department
- Monitors quality of products and processes
- Monitors safety at workplace and Company's environmental impact
- Checks quality of precious metals

**Who is involved?**

- Technical and Quality Control Offices
- Quality Control Laboratory
- Full-time supervisors for safety, quality and environment

**Operative level**

# OUR OPERATIONS



## **The golden link**

We have a key position at the centre of the value chain, between producers and final consumers. This is why we call ourselves the golden link for our customers' precious metal.

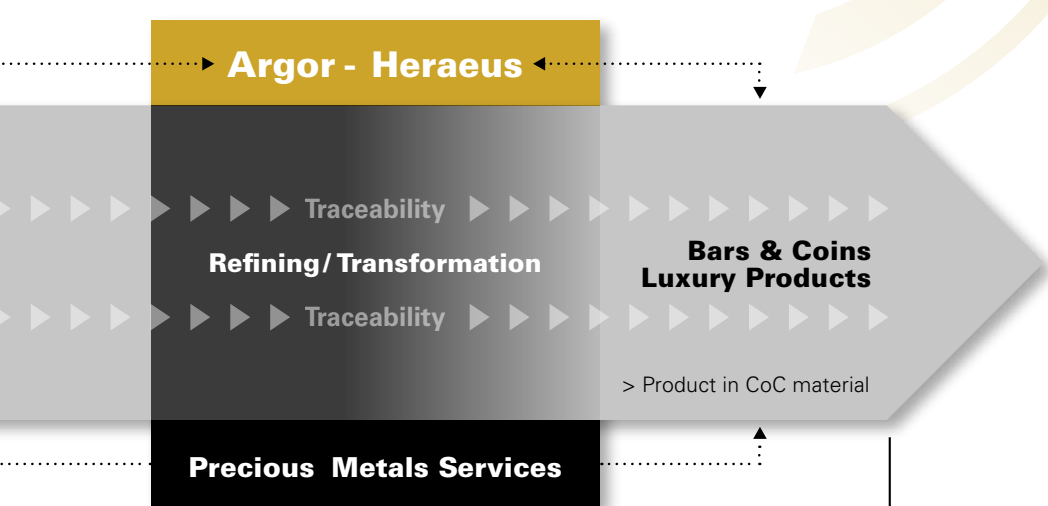
## **Innovation and compliance**

Innovation and compliance are two of the fundamental principles by means of which we create value for our customers on the entire value chain. With meticulous daily operations, and supported by the most recent regulations and standards, we work to guarantee the traceability of our customers' metal on the entire chain.



### **What kind of material do we process?**

Gold, silver, platinum, and palladium arrive at our plants in various forms: **industrial scrap** and **old jewellery**, **raw material from mines** of various sizes, or **Good Delivery material**, already high quality.



**What do we do?**

We chemically and electrolytically **refine** precious metals. We produce a wide range of **smelted and minted products** (Bars and Coins) and **luxury products** for the high-end jewellery and watch industry. We also offer our customers a series of **financial and accessory services** related to the physical trading of precious metals (Precious Metals Services).

**Who are our customers?**

Our customers are primarily **banks, mines, and professionals in the high-end watch and jewellery industry**. In our industry, suppliers are also our customers, who therefore retain ownership of the materials we process.

# OUR APPROACH TO SUSTAINABILITY



## ***A fundamental principle***

For Argor-Heraeus, sustainability has always been a fundamental principle based on which we make all of our business decisions.

## ***A concrete commitment***

Not just pretty words: our commitment to sustainability has always played a key role in our company and is supported by a series of practical tools (principles, rules, standards, etc.) that we use every day to make decisions.



### **DID YOU KNOW**

In addition to the many rules and standards that govern our industry, there are many initiatives that help small and artisanal mines in developing nations sell their products on regulated markets, preventing them from “eluding” regulations. The main initiatives are the Fairtrade and Fairmined standards, and the Better Gold Association with its Better Gold Initiative, of which we are a founding member.






### **Beyond our boundaries**

Our commitment extends beyond the company walls. Our priority is to work transparently in order to be certain of dealing only with parties who share our ethical principles and our commitment to sustainability on the entire value chain. We work constantly with all players on the chain to increase their awareness of the importance of responsibility.

### **Dialogue, cooperation, transparency**

The precious metals industry faces many economic, environmental, and social challenges. In a climate of dialogue and transparency, we work constantly with governments, international organisations, and authorities that regulate the precious metals market to ensure that the market becomes increasingly sustainable in the interests of all of its member and of society in general.

## **Players on the precious metals market**

 <b>International organisations</b>	<b>OECD</b> Organization for Economic Co-operation and Development	<b>FATF</b> Financial Action Task Force		
 <b>National laws</b>	<b>US Law</b> Dodd-Frank Act	<b>Swiss Law</b> <ul style="list-style-type: none"> <li>• FINMA</li> <li>• Money Laundering Act (AMLA)</li> <li>• Precious Metal Control Act (PMCA)</li> </ul>	Acts and ordinances on precious metals and money laundering	
 <b>Professional associations</b>	<b>RJC</b> Responsible Jewellery Council	<b>LBMA</b> London Bullion Market Association	<b>WGC</b> World Gold Council	<b>EICC/ GeSI*</b>

\*EICC - Electronic Industry Citizenship Coalition

\*GeSI - Global e-Sustainability Initiative

# ACCREDITATIONS AND RECOGNITIONS



## Global certifications

A daily commitment to all of our stakeholders: ensure responsible supply, fight money laundering and the financing of terrorism, guarantee the quality of products and processes, and much more. We face this complex challenge with accreditations and certifications by the foremost authorities regulating our industry – concrete proof of our commitment.

## Beyond certifications

We provide expertise and knowledge for the definition of the industry's quality, economic, social, and environmental standards. A considerable commitment for our experts, who participate in discussions and meetings all over the world.



**DID YOU KNOW**

We are one of the 5 referees responsible for checking the quality standards of members of the London Bullion Market Association (LBMA) Good Delivery list. The LBMA is one of the key industry organisations regulating standards for refining and trading gold and silver on the London financial market.







## A long history of commitment

**1952**

—  
Melter  
& Assayer  
Licence

**1961**

—  
**LBMA**  
Associate  
Member

—  
**LBMA**  
Good Delivery  
gold

**1974**

—  
**COMEX**  
Recognized  
operator  
gold and  
silver

**1978**

—  
Started  
providing  
vocational  
training

**1982**

—  
**TOCOM**  
Recognized  
operator  
gold and  
silver

**1992**

—  
**LBMA**  
Good Delivery  
silver

**1999**

—  
**COMEX**  
Recognized  
operator for  
platinum  
and gold

**2001**

—  
**LME**  
Silver

**2004**

—  
**LBMA**  
Referee

—  
**FINMA**  
Authorization

—  
**SAS**  
Accreditation  
ISO 17025

**2005**

—  
**DMMC**  
Recognized  
operator

—  
**RJC**  
Member

—  
CO<sub>2</sub> reduced

**2009**

—  
**LPPM**  
Good Delivery  
platinum and  
palladium

**2011**

—  
**ISO 9001**

—  
**RJC**  
Code of  
Practices

**2012**

—  
**LBMA**  
Full member

—  
**LBMA RGG**

—  
**D&B**  
Rating  
certificate

**2013**

—  
**SBGA**  
Founding  
member

**2014**

—  
**RJC CoC**  
Chain of  
Custody

—  
**ISO 14001**

—  
**OHSAS 18001**

**2015**

—  
**LRD**  
Recertification

—  
**LBMA RGG**  
Recertification

—  
**Integrated  
Management  
System - Safety,  
quality, environment**  
Recertification

## Shareholders

- Shareholders Meeting
- Continuous collaboration and periodic targeted communication
- Annual Report, Sustainability Report, sustainability video, website

## Management

- Personnel policy and incentives
- Monthly meetings of executives, middle management, administration; workshops
- Technical and professional training
- Annual Report, Sustainability Report, sustainability video, website, code of conduct



### FOCUS

In April 2015, in the context of our multi-year collaboration with SUPSI, we presented the fifth Argor-Heraeus Award for the best Master of Science in Engineering project.

## Institutions

- Continuous collaboration and periodic targeted information
- Sustainability Report, sustainability video, website
- Visits to the Company by politicians and representatives of institutions
- Visit by Federal Councillor Doris Leuthard to our Latin American affiliate
- SUPSI Award for best engineering diploma
- Sustainable mobility programme



### FOCUS

At an informational meeting organised by the Cc-Ti in cooperation with Ticino Energia, we presented our case as best practice with regard to the collaboration (with AEnEC) to optimise our consumptions.

## Industry associations

- Member of Ticino Industries Association (AITI) and of Ticino Canton Chamber of Commerce (Cc-Ti)
- Continuous collaboration with principal associations governing the precious metals sector
- Sustainability Report, sustainability video, website



## FOCUS

Along with a number of towns and companies in the Ticino Canton, we support the work of Association 18-24, which helps recent graduates of professional schools to find jobs. This year, as part of the project, we hired a young person to work at our company.

### Non-governmental organisations

- Support to local non-profit associations
- Assessment of involvement in non-profit projects linked to fair trade
- Sustainability Report, sustainability video, website

### Mass Media

- Press and media relations office activities
- Website media area, Sustainability Report, sustainability video

### Competitors

- Participation in workshops
- Participation in ASFCMP (Association suisse Fabricants et Commerçants des Métaux Précieux) platform

# RELATIONS WITH OUR STAKEHOLDER IN 2015



## FOCUS

We conduct regular safety drills with various partners. This year we organised a large-scale drill that involved 35 employees, 90 firefighters, as well as multiple police patrols and ambulance teams. The drill tested our safety procedures and the collaboration of all parties in cases of emergency.

### Employees

- Personnel policy and incentives
- Periodic newsletter
- Technical and professional training
- Sports and recreation group
- Annual Report, Sustainability Report, sustainability video, website, code of conduct
- Sustainable mobility programme

### Public services

- Regular drills during the year
- Continuous collaboration and periodic targeted information
- Sustainability Report, sustainability video, website

### Customers and suppliers

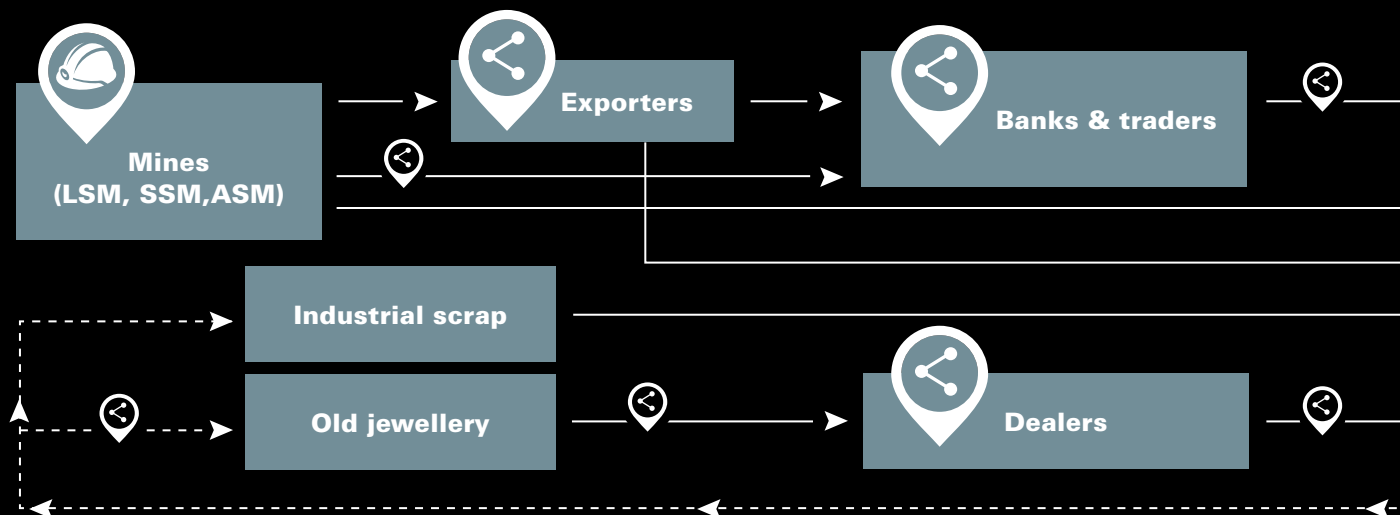
- Compliance procedures
- Targeted personalised information
- Commercial activities, targeted visits, trade fairs
- Sustainability Report and website
- Supplier assessment procedures

# CLOSE-UP

## THE JOURNEY OF PRECIOUS METAL

### SOURCE OF METAL

Most metal on the market comes directly from mines (over 70% of gold marketed in 2015 came from this source). The rest is material already in circulation, recycled from industrial applications or old jewellery.



### THE COMMITMENT FOR A MORE TRANSPARENT VALUE CHAIN



#### Under what conditions was it extracted?

One of the most crucial aspects is verification that the metal is extracted at its source with complete respect for the safety and rights of workers and of communities, in compliance with national and international laws, and with respect for the local environment.

#### What is being done:

- Supranational programmes (EU Reach Programme, etc.)
- National and international laws
- Industry standards: WGC, RJC, LBMA, OECD
- Specific standards for artisanal and small mines: Fairmined, Fairtrade, SBGI
- On-site inspections, "Finger printing"



#### Who handled it?

It is essential to know and to be able to trace all of the transfers of the precious metal to ensure the reliability of all players on the chain and to guarantee that they do not use it for illegal purposes (money laundering, financing of terrorism, corruption, etc.).

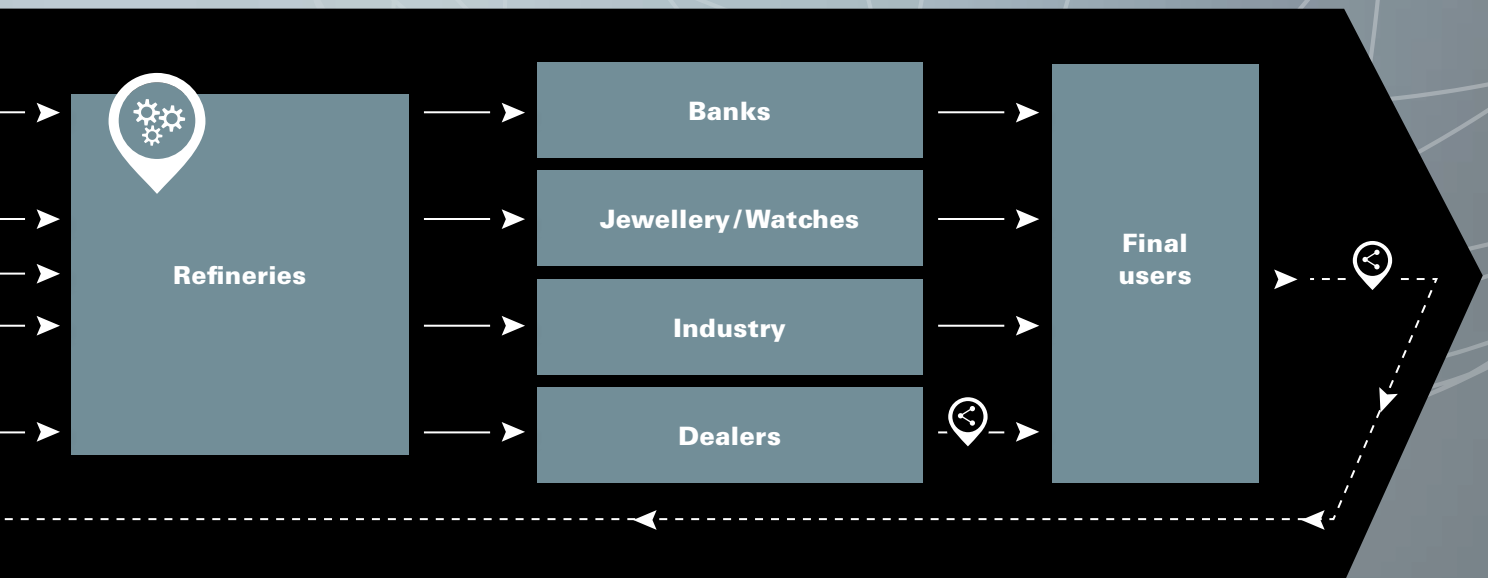
## REFINING

## / TRANSFORMATION

Refining and transformation are critical steps of the value chain because they are the link between the source of the metal and its distribution. This step involves fewer players than other steps on the chain.

## DISTRIBUTION

Precious metal has many applications. For example, about 50% of gold usually goes to the jewellery/watch market. The rest is used for investment, sold by banks, or used by industry (in electrical components, etc.). Metals such as platinum and palladium are used much more extensively in industry.



### What is being done:

- National and international laws
- Industry guidelines for traceability of metal: WGC, RJC, LBMA, OECD
- Industry initiatives (EITI, etc.)
- Corporate protocols and rules: Know your... Customer, bank, business, due diligence policy, etc.



### Is it produced safely?

Precious metal must be refined and transformed under conditions of total safety for workers and protected against theft and damage during all transfers on the chain.

### What is being done:

- National and international regulations
- Industry safety standards (OHSAS 18001, RJC CoP, etc.)
- Company safety drills
- Corporate philosophy, policy, rules



# ECONOMIC RESPONSIBILITY

Distribution of added value

**53% of added value goes to employees**



Suppliers of services and accessory products

**75% of supplies purchased in Switzerland**



Our customers

**Knowledge + compliance = Know your customer**



# DISTRIBUTION OF ADDED VALUE



## **Who benefits from the added value we generate?**

### **Promoting the growth of our company and the territory**

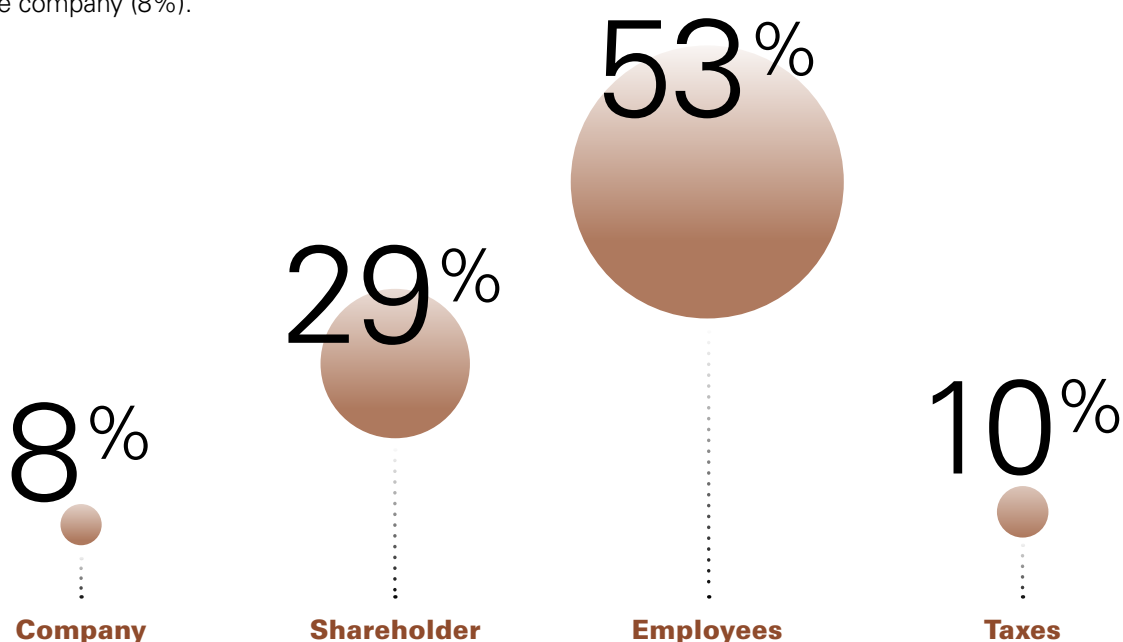
Beyond a company's annual result (certainly important), it is crucial to evaluate its overall economic impact and consider how it distributes its added value to promote its growth as well as that of the territory.

### **53% to our employees**

Over half of the added value generated in 2015 was distributed to our employees as salary, and almost one third (29%) was paid to our shareholders. The rest was used to pay taxes (10%) or was reinvested in the company (8%).

## **Over 50 million francs paid in taxes**

From the opening of our Mendrisio headquarters to now, we have paid over 50 million francs in taxes at the municipal, regional, and federal level, without considering the taxes paid by our employees.







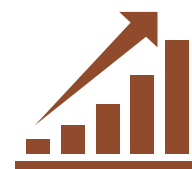
**Mendrisio is “home” for many companies. In your opinion, what is the best way for a company to contribute to the city’s growth?**

*A company contributes to the city’s growth by creating work that generates added value, transmitting the respect of rules, hiring local workers, and adopting company mobility plans.*

**Carlo Croci**  
Mayor of Mendrisio



# SUPPLIERS OF SERVICES AND ACCESSORY PRODUCTS



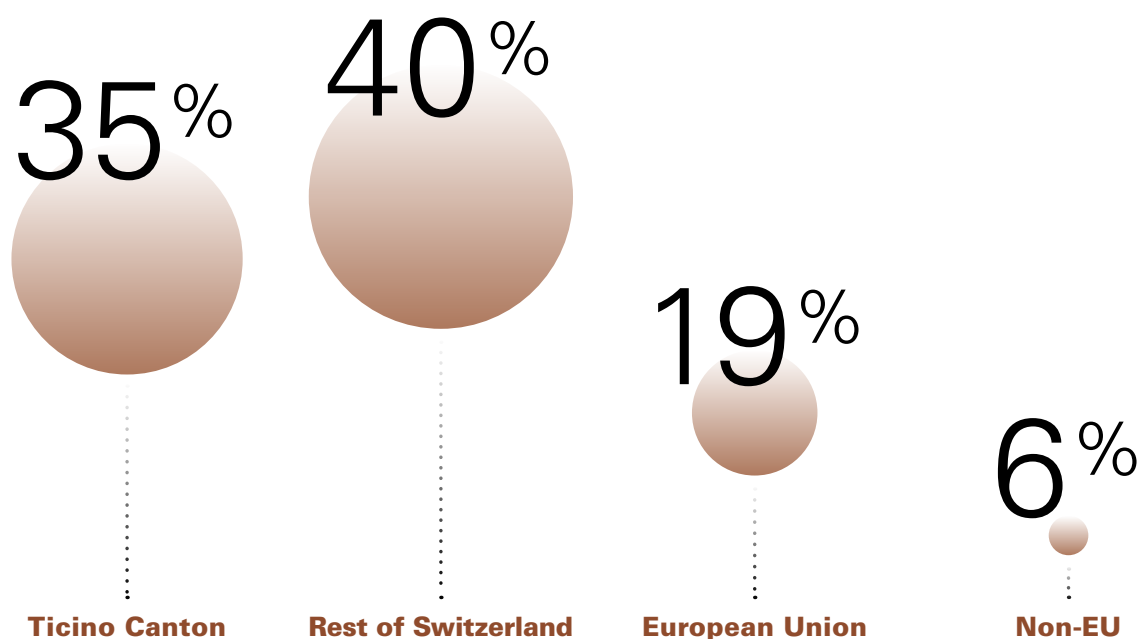
## Where are our suppliers located?

### An informed choice based on quality and shared values

When choosing suppliers, we consider more than just quality: we make certain that they share our values and commitment to sustainability. We give great importance to forming long-term relations with local suppliers whenever possible.

### 35% of expenditures for supplies went to companies in Ticino Canton

This figure is much higher than last year (28%). In 2015, a significant amount of our internal re-engineering work was performed by local companies. Another large share of expenditures for supplies (40%) went to companies in other areas of Switzerland.





**How has the attitude of local companies changed in the last 10 years with regard to sustainability?**

*For the Ticino Canton Chamber of Commerce, the social responsibility of companies is essential because it demonstrates their attention to the territory. All too often, we think that businessmen are driven only by self-interest, and we forget the many facets of their activity, including a strong commitment to economic, environmental, and social sustainability. These factors are increasingly important in terms of domestic and global competitiveness, and have therefore become fundamental to many companies' operations, while at the same time benefiting the entire economic and social fabric of the Canton.*

**Luca Albertoni**  
Director  
Ticino Canton Chamber of Commerce



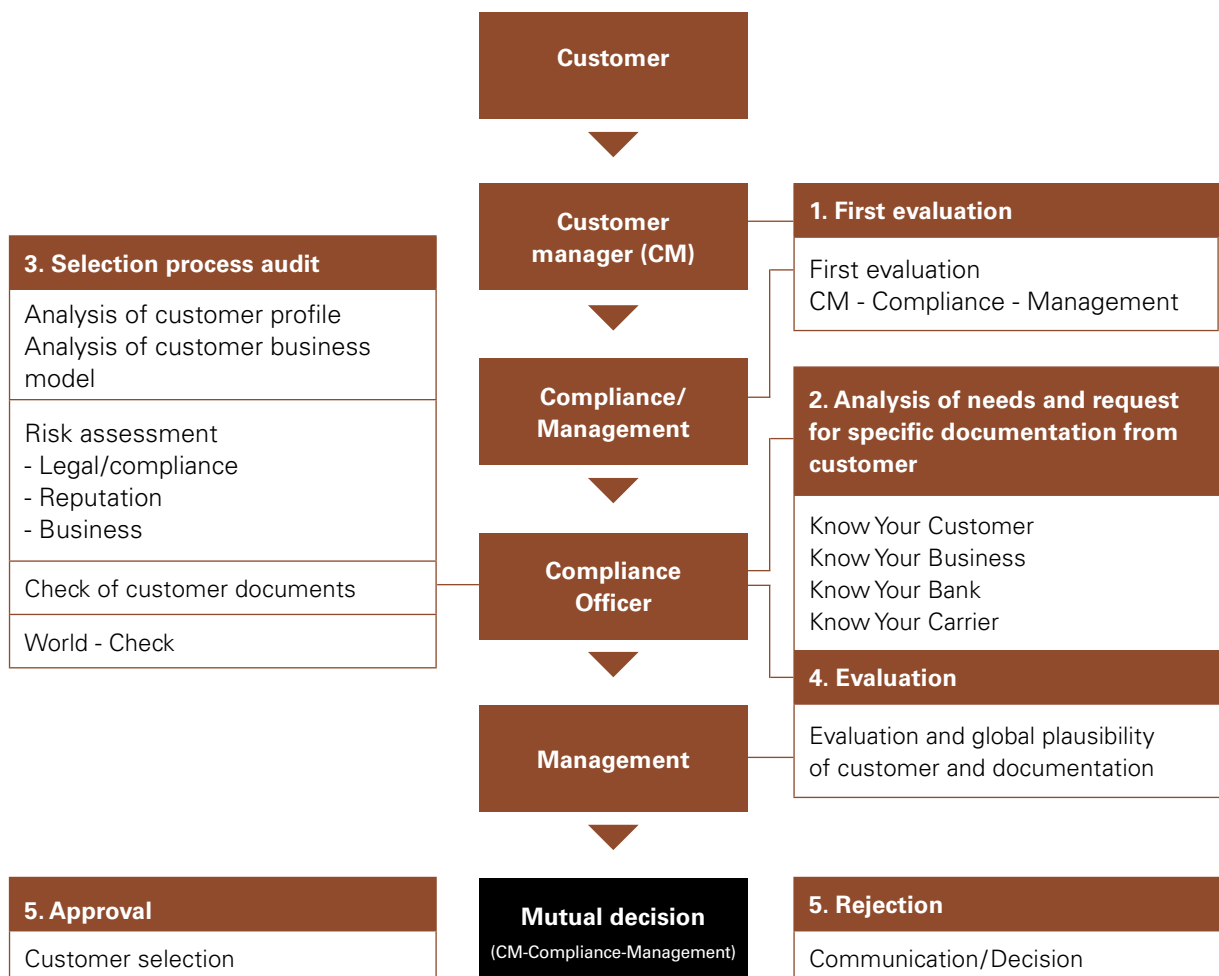
# OUR CUSTOMERS



## What criteria do we apply when evaluating our customers?

### Know your...

...customer, business, bank, carrier. This is the name of a series of strict procedures we apply to ensure that every potential customer is completely reliable and not linked in any way to illegal or dubious practices.





**If you had to choose just one word to describe the industry's future in terms of sustainability, what would it be?**

*Cooperation.*

*International organisations such as the UN and the OECD work in many ways to develop and promote objectives, guidelines, and procedures for sustainability of the precious metal value chain, supported by governments committed to passing laws against various types of unacceptable behaviour. Likewise, industry associations ((RJC, LBMA, WGC, etc.) work to develop standards that help their members apply more and more sustainable practices. Lastly, some NGOs are committed to identifying issues in a wide range of areas (human rights, environment, corruption), although we hope they might also devote the same energy to the "why and wherefore" of these issues.*

*Therefore, the "plan" to build the future of the precious metals, jewellery, and watch industry can be successful only if all of these stakeholders talk and work together.*

**Charles Chaussepied**

Chairman (until June 2016)

Responsible Jewellery Council (RJC)

**Verified and certified procedures**

We perform our audits by analysing the customer's documents, conducting on-site inspections, interviewing personnel, and much more. If we have any doubt, there is no compromise: we refuse to form a business relation. Even after we begin working with a customer, these checks continue for the duration of the relation. The procedures are verified by means of internal and external audits and are certified by the foremost industry organisations.

**Global collaboration to guarantee better metal**

We're strict when we evaluate our customers, and even stricter when evaluating ourselves. We cooperate with organisations and institutions in a wide variety of fields to guarantee our customers the highest possible standards. For example, this year we laid the foundations for an important collaboration with the United Nations Industrial Development Organization (UNIDO) to completely eliminate the use of mercury in small and artisanal mines.



# ENVIRONMENTAL RESPONSIBILITY

Water consumption

**66'935 m<sup>3</sup>**



Chemical consumption

**+11% compared to 2014**



Energy consumption

**Fuel oil: 0.3% of total**



Emissions

**Car pooling: 41 groups / 92 employees**



Waste materials, packing materials, noise

**Plastic waste: -34% compared to 2014**



# WATER CONSUMPTION



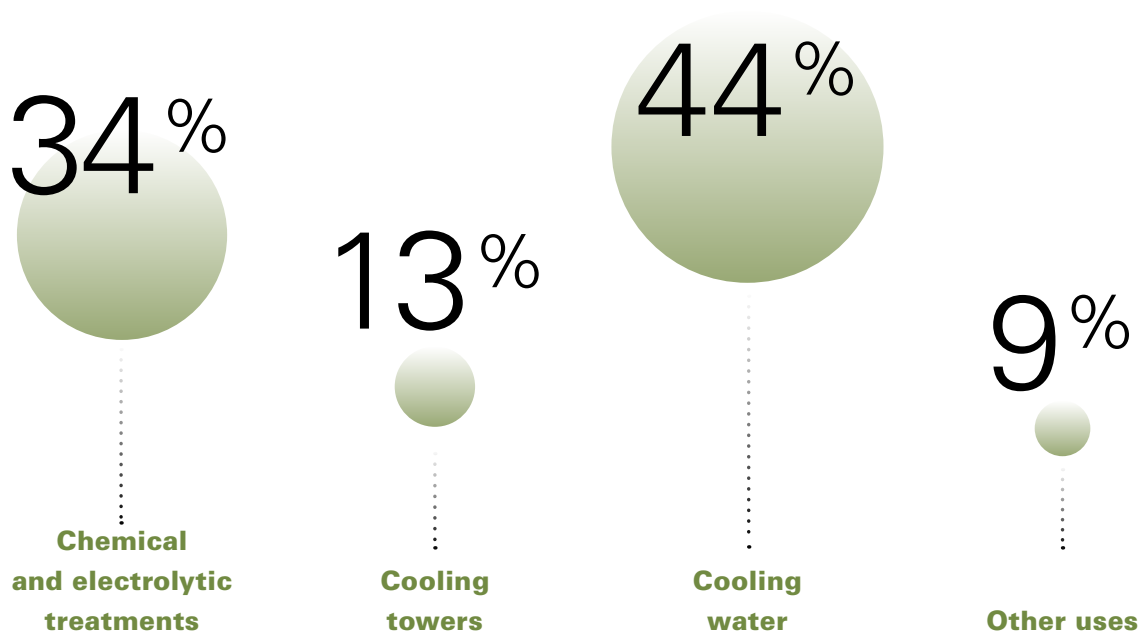
## *How is water used at Argor-Heraeus?*

### **Chemical and electrolytic reactions**

Along with other substances, water is essential for generating the chemical and electrolytic reactions needed to refine precious metals.

### **Cooling of machines**

Our machines must be constantly cooled to prevent overheating and ensure efficient operation.







**How has the attitude of local companies changed in the last 10 years with regard to sustainability?**

*By analysing the results of studies conducted over the last ten years, it becomes clear that the concept of sustainability has undergone a remarkable change. Whereas sustainability was first seen as a passing fad or as a burdensome certification process, it is now increasingly viewed as a competitive advantage and innovation driver. This cultural change is still taking place, moving toward an interpretation of economic processes that is more attentive to social and environmental aspects. With the active contribution of companies, it may also become an important factor for the competitiveness and development of the territory.*

**Jenny Assi and Caterina Carletti**

Research fellows

University of Applied Sciences and Arts of Southern Switzerland (SUPSI)



**How much water did we use in 2015?**

**+20% compared to 2014**

We consumed 66,935 cubic metres of water in 2015 - 11,409 cubic metres more than in 2014. There are two main reasons for this increase: first, we produced more smelted bars and silver grain, whose processing requires a large quantity of water. In addition, we had to use a larger quantity of water in open circuit in some departments due to technical problems (now fixed) with closed-circuit cooling systems.

**A trend toward lower consumption**

Despite this increase, water consumption in 2014-2015 was considerably lower (an average of 20-30% less) than in the two-year period prior to the opening of our new headquarters in 2013.

**TOTAL WATER CONSUMPTION IN CUBIC METRES**

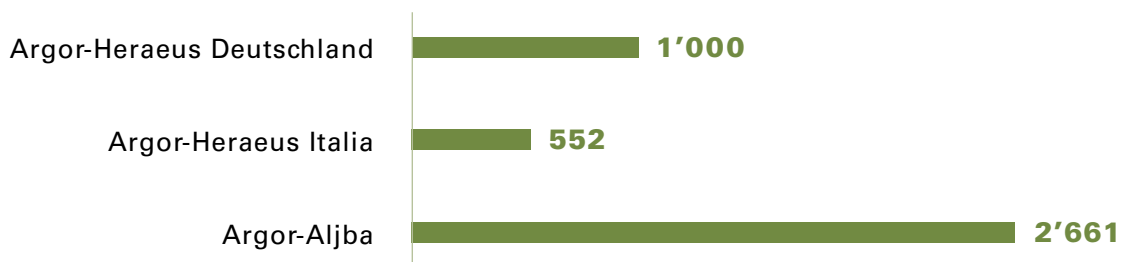




**Argor-Aljba: - 38%**

The total water consumption of our affiliates is less than one tenth that of our Mendrisio headquarters. In 2015, Argor-Aljba had significantly lower water consumption despite higher production. This is explainable in part due to irregular high consumption in 2014 caused by technical problems with closed circuits. Consumption at the other affiliates was stable.

**TOTAL WATER CONSUMPTION**  
**IN CUBIC METRES BY AFFILIATES, 2015**



***What did we do to improve our results?***

**New cooling systems: ready!**

As part of the re-engineering process begun in 2014, we installed new closed-circuit cooling systems in the chemical and foundry departments. As a result, we expect to reduce water consumption in 2016 and, most important, to limit the quantity of waste water.

# CHEMICAL CONSUMPTION



## *Why do we use chemicals?*

### **Hydrochloric acid**

Used mainly to process gold, this accounts for about one third of all chemicals utilised.

### **Nitric acid**

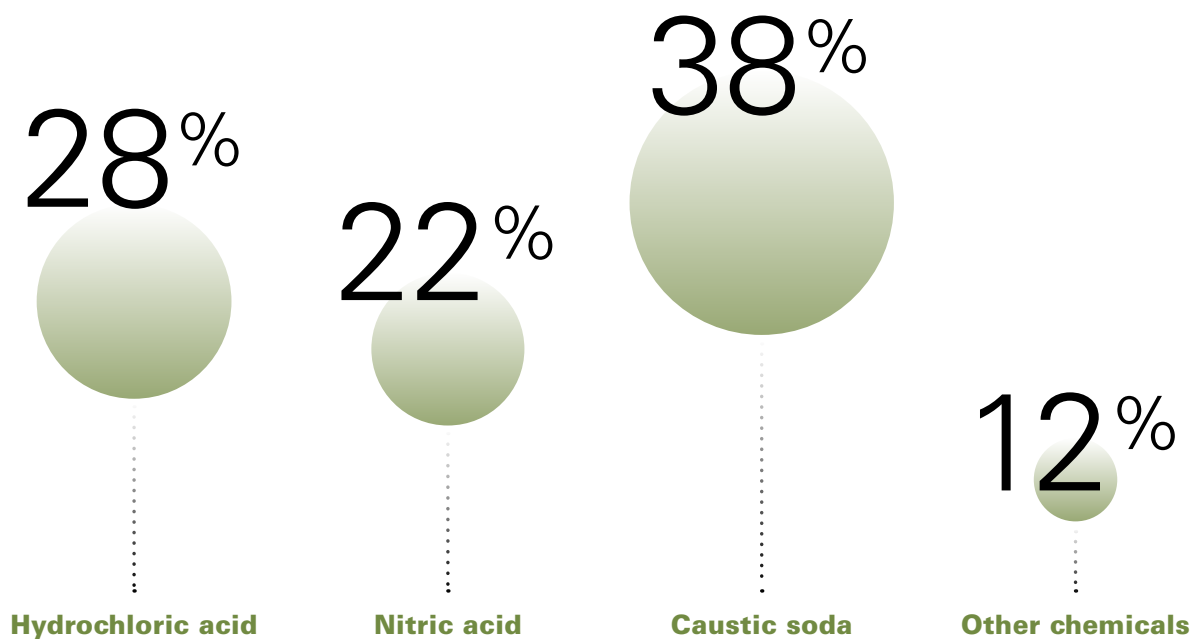
Used to trigger the reactions needed to produce silver.

### **Caustic soda**

Used in our water purification plant to neutralise acidic exhaust solutions.

### **Other chemicals**

Various other chemicals (about one tenth of the total) are used to process platinum and palladium and in a few collateral production processes.





4.5

F 4.5

630  
F

M21  
R2

M21  
B4

TOP 16  
400  
05

BRON

### ***How much did we consume?***

#### **Higher production, higher consumption: +11%**

In 2015, in line with higher production, we consumed 3,437,426 kilograms of chemicals, 336,946 kilos more than in 2014. The increase was due primarily to greater use of hydrochloric acid and nitric acid for the refining of higher quantities of gold and silver.

#### **Nitrogen oxide: lower emissions**

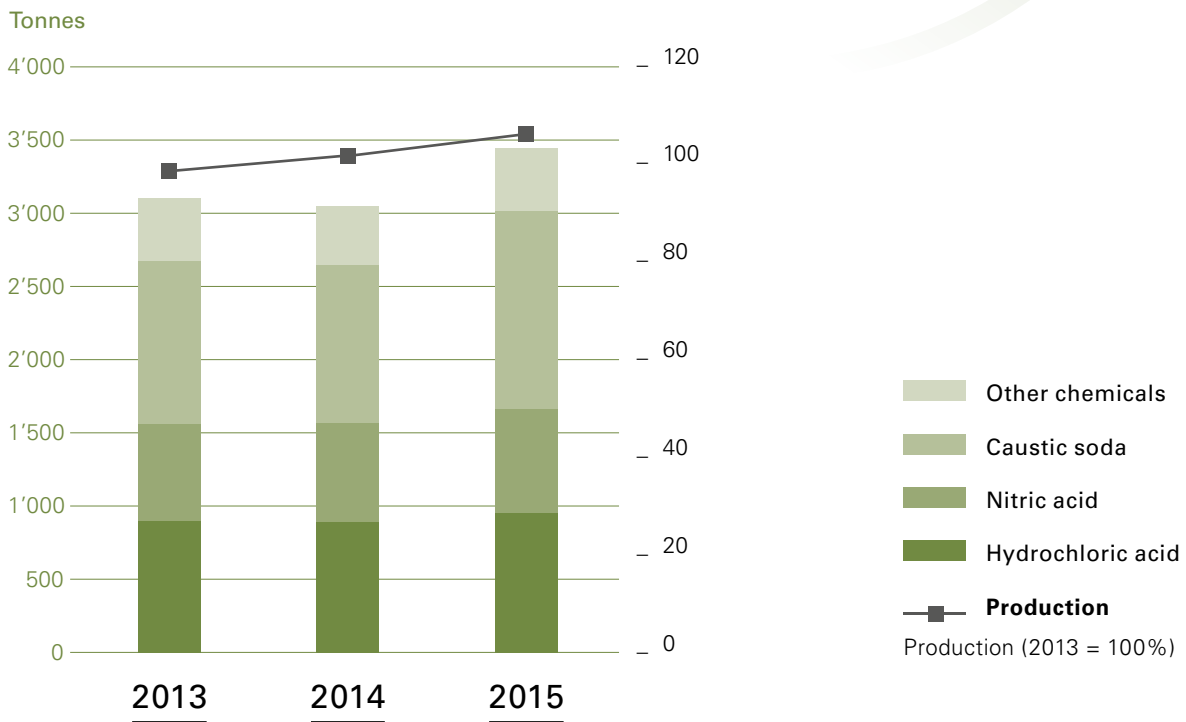
Nitrogen oxide emissions derive from the use of nitric acid in refining processes. Thanks to continuous improvements in process control and constant monitoring of emission levels, we have reduced emissions by almost 40% compared to 2012.

#### **Sludge from metal residues: 188 tonnes**

Base metals separated from precious metals when refining gold, silver, platinum, and palladium form sludge from metal residues; these are recycled as specified by law. About 188 tonnes of sludge were generated in 2015 compared to 174 tonnes in 2014 (approx. +6%).



## CHEMICAL CONSUMPTION AND PRODUCTION



### *What did we do to improve our results?*

#### **A latest-generation chemical department**

As part of the re-engineering of our plants, we have launched and almost completed the commissioning of a new chemical department. The new area, equipped with state-of-the-art instruments and machines, will optimise production processes and uses of the various chemicals (main and accessory) employed in refining metals.

# ENERGY CONSUMPTION



## *How do we use the various energy sources?*

### **Electricity**

Electricity is indispensable for operating our production plants and our infrastructure.

### **Methane and fuel oil**

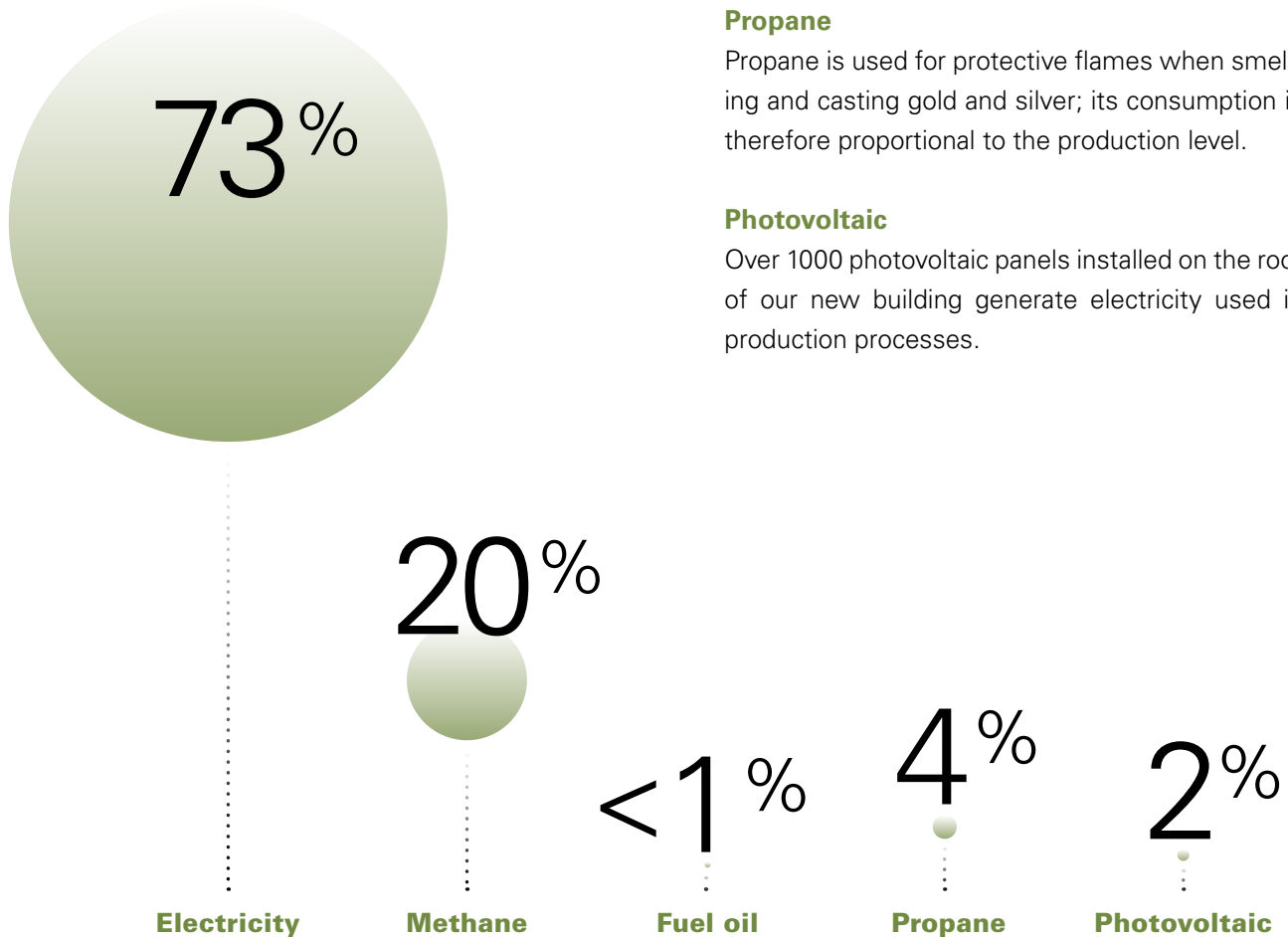
These are used to heat our buildings and for chemical processes; their consumption is influenced by the climate.

### **Propane**

Propane is used for protective flames when smelting and casting gold and silver; its consumption is therefore proportional to the production level.

### **Photovoltaic**

Over 1000 photovoltaic panels installed on the roof of our new building generate electricity used in production processes.







### How much did we consume?

#### - 2% compared to 2014

Despite higher production, total consumption was 49,533 Gigajoules, 492 less than in 2014. This saving equals the annual energy consumption of about 30 Swiss families.

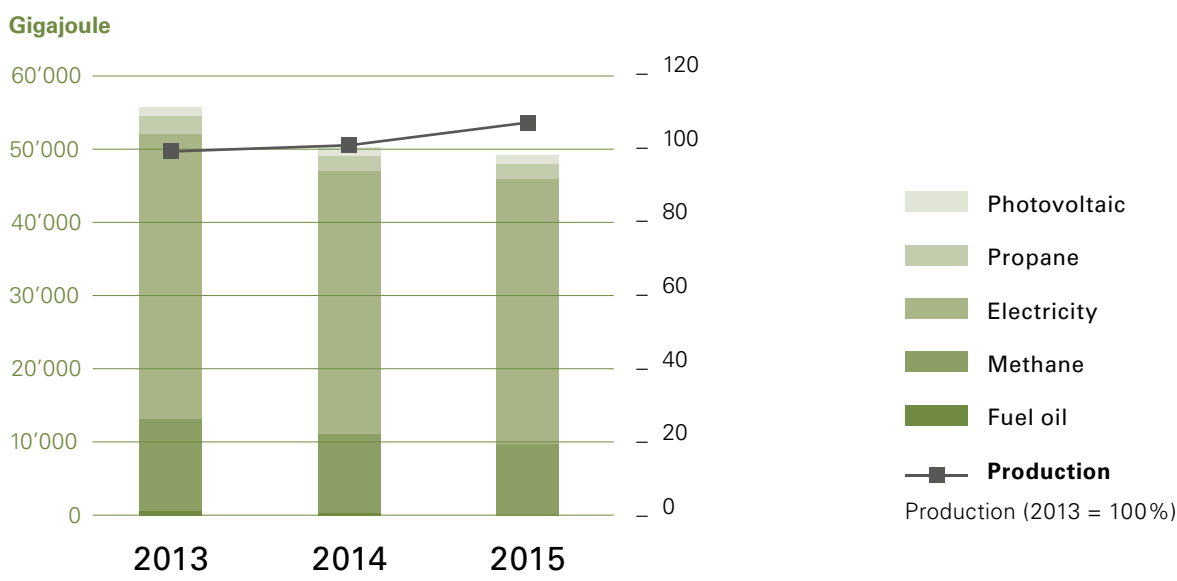
#### Progressively lower consumption

2015 had the lowest energy consumption since the inauguration of our new headquarters in 2013. We achieved this by further optimising and rationalising our energy use: for example, we improved the silver electrolysis process by making it more energy-efficient. We also installed more efficient ventilation systems that recover heat from hot fumes to heat our workrooms. In addition, the winter was relatively mild and less energy was needed to heat our buildings.

#### Fuel oil: less than 1% of the total

Consumption of fuel oil, reduced significantly in recent years, was practically eliminated in 2015. We use this energy source only when strictly needed to replace other sources. In 2015, fuel oil represented only 0.3% of our total energy consumption: an important achievement!

## ENERGY CONSUMPTION AND PRODUCTION

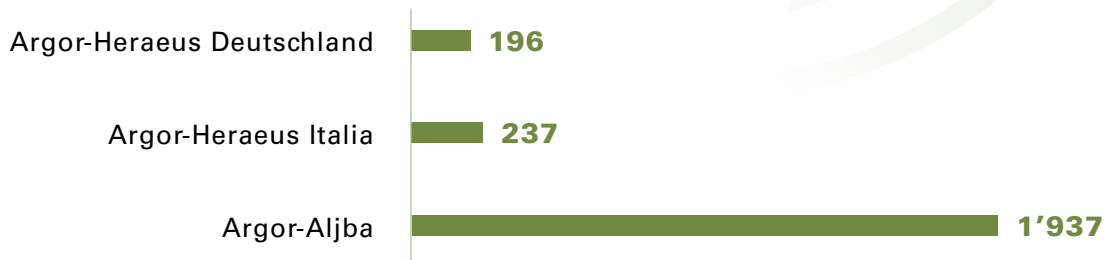


### Affiliates: stable or limited consumption

On the whole, our affiliates consume only about 5% of the energy used by the Parent Company. In 2015, consumption by our German and Italian affiliates was practically the same as in 2014 and, despite significantly increased production, Argor-Aljba was able to limit its increase over last year to +2.8% thanks to constant efforts to optimise production processes.

## ENERGY CONSUMPTION IN GIGAJOULE

### AT AFFILIATES, 2015



### What are we doing to improve our results?

#### Upgrading of infrastructure

In 2016, to increase the energy efficiency of our plants and, consequently, to lower emissions (see next section), we will replace two fans in the refinery department with new, more energy-efficient units and, for the new finished products refinery, we will commission a completely new ventilation system with high energy standards that recovers heat from exhaust air.

#### Virtuous collaborations to ensure more sustainable consumption

Since 2002, Argor-Heraeus has worked with the Agency for Energy for the Economy (AEnEC) to reduce energy consumption and CO<sub>2</sub> emissions. We are proud of this important collaboration, which constantly motivates us to improve our results, as emphasised by **Armin Eberle**, Director of AEnEC:



*Argor-Heraeus has ambitious goals, and up to 2012 was able to cut CO<sub>2</sub> emissions by 30%. It complied with the latest energy criteria when it doubled its production space in 2013. The photovoltaic system on the roof of its new building generates the equivalent of the electricity needs of about 75 homes. We congratulate Argor-Heraeus for its significant efforts to date and for its decision to continue its collaboration with AEnEC in order to achieve even greater sustainability.*

# EMISSIONS



## ***Which of our activities generate CO<sub>2</sub> emissions?***

### **Metal refining and heating of buildings**

When fossil fuels such as propane, methane, and fuel oil are used, they generate carbon dioxide that is released into the atmosphere. We need these fuels to refine precious metals and to heat our buildings.

### **Our commitment extends beyond the company gate**

Our commitment to limiting atmospheric emissions extends beyond internal activities: it also involves how we get to work every day. We and our employees are committed to reducing our impact by means of measures to promote sustainable mobility.

## ***What is the level of our atmospheric emissions?***

### **CO<sub>2</sub> increased by 11%**

In 2015, CO<sub>2</sub> emissions increased by 76 tonnes compared to 2014. This increase was attributable mainly to higher production in the year and a colder winter.



**How does the Swiss precious metals industry contribute to the development of a more responsible value chain?**

*The members of the Swiss precious metal industry association (ASFCMP) work actively to develop a responsible value chain, from mine to final consumer, by complying with national and international laws as well as by means of numerous self-imposed regulations. Although this process still has a long way to go (especially in the mining sector), our members are among the promoters and main defenders of the concept of the responsible value chain, and have fully integrated this concept in their management systems.*

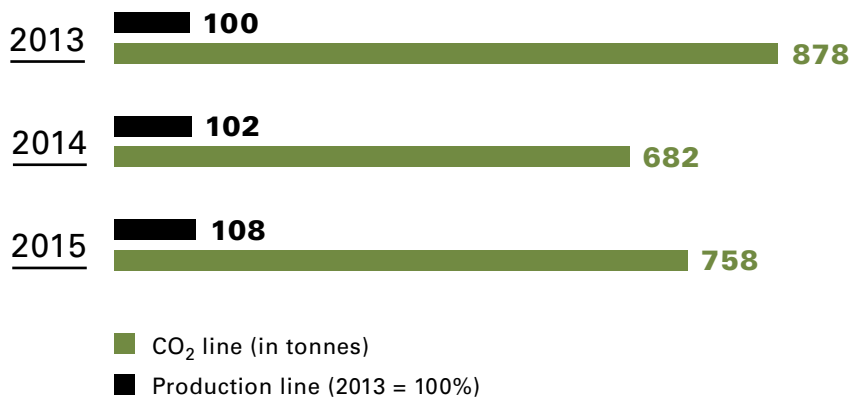
**Cédric Léger**

Chairman

Swiss precious metal industry association



## CO<sub>2</sub> EMISSIONS AND PRODUCTION



### ***What are we doing to improve our results?***

#### **Optimisation of processes and continuous cooperation**

We work in many ways to ensure that Argor-Heraeus has the lowest possible environmental impact. In addition to structural measures and process optimisation, we have been cooperating with the Canton and with the Agency for Energy for the Economy (AenEc) for years, monitoring and optimising emissions in a programme of shared objectives and results.



#### **41 car pooling groups with 92 employees**

For the last few years, we have been conducting a multifaceted programme to promote the sustainable mobility of our employees to and from work, with good results. In addition to many car pooling groups, we subsidised 50% of the annual Arcobaleno public transportation pass for 14 employees. This subsidy was funded in part by parking fees paid by individual drivers.

#### **MobAlt Project: alternative mobility solutions**

As part of our efforts to improve mobility in our region, we also participate in the MobAlt pilot project ([www.mobalt.ch](http://www.mobalt.ch)) to promote alternative mobility. The first stage of the project involved over 350 employees from 7 companies and led to development of the MobAlt smartphone app, now available to people interested in mobility solutions other than cars.

# WASTE MATERIALS, PACKAGING MATERIALS, NOISE

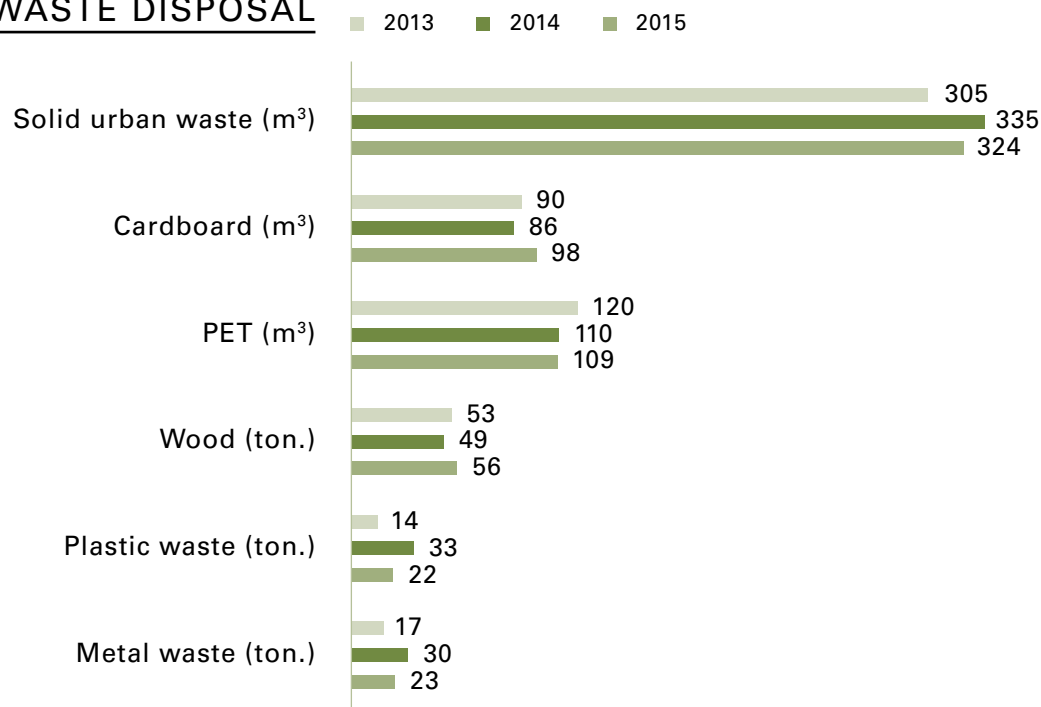


## What influenced the volume of waste produced?

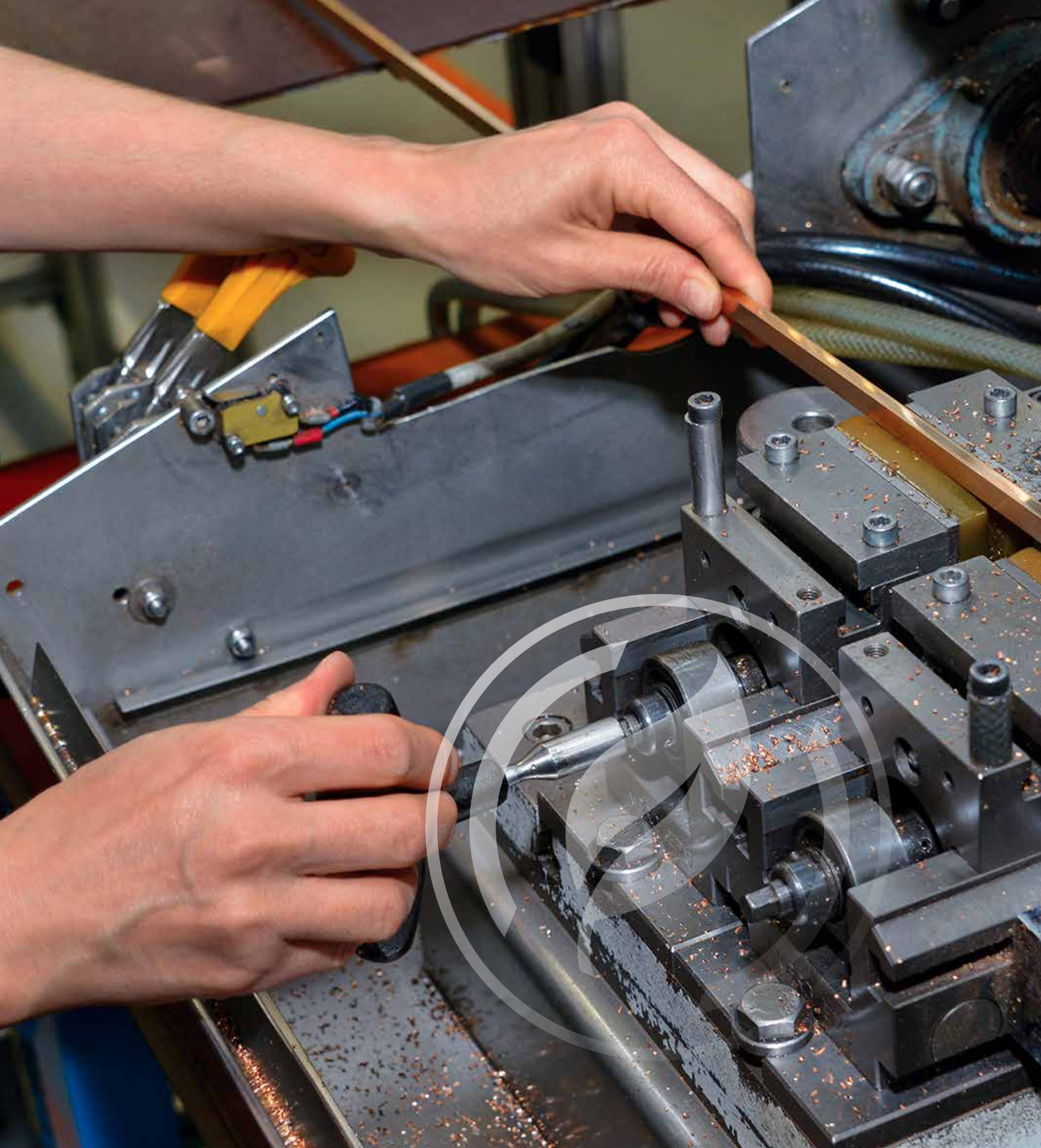
### Re-engineering and modernisation

Work to reorganise and modernise our original building continued throughout 2015. Compared to 2014 (also marked by such work), we were able to stabilise or reduce the disposal of practically all types of waste. The only exceptions were cardboard and wood, due to a larger volume of incoming metal (transported in wooden boxes) and packaging for new devices used for re-engineering work (cardboard).

## WASTE DISPOSAL







**Noise: under control**

Our plants inevitably generate noise that affects employees as well as the surrounding area. We take various steps to limit noise, including management measures to limit noise to less critical hours and infrastructural measures such as the use of machines and systems that generate the least possible noise.



# SOCIAL RESPONSIBILITY

Composition of personnel

**73% ♂ / 27% ♀**



Health and safety at the workplace

**0.99 accidents for every 100,000 hours worked**



Training

**Over 2,400 hours of training**



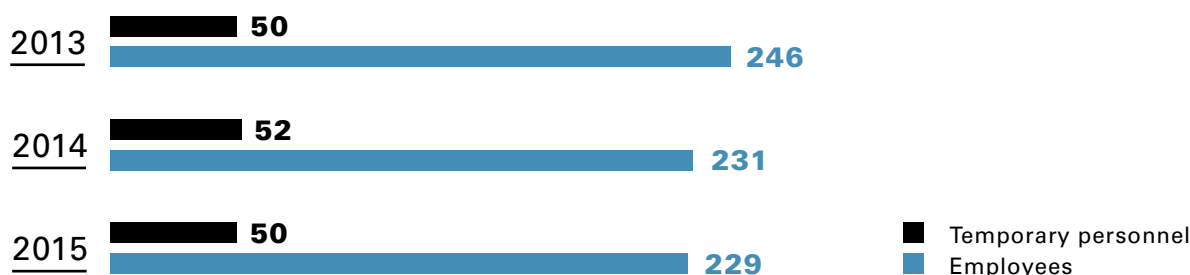
# COMPOSITION OF PERSONNEL



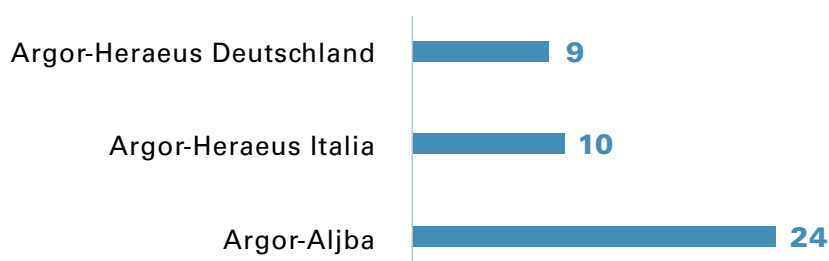
## 279 employees at our headquarters, 43 at our affiliates

Our Mendrisio headquarters has 229 employees plus 50 temporary employees needed to handle the sudden fluctuations in demand that characterise our sector. In addition, 43 people work at our affiliates. On the whole, our labour force has remained practically stable compared to last year.

### EMPLOYEES AND TEMPORARY PERSONNEL



### EMPLOYEES AT AFFILIATES, 2015





**How has the attitude of local companies changed in the last 10 years with regard to sustainability?**

*The subject of sustainability is certainly on the agenda of more companies now than 10 years ago. On the one hand, sustainability and social responsibility in general have become competitive advantages, while on the other, virtuous companies that adopt good practices in relation to employees, the environment, and society find it easier to attract talented, highly qualified personnel. Therefore, every company is compelled to add elements of sustainability.*

Stefano Modenini  
Director  
Association of Ticino's Industries (AITI)



**DISTRIBUTION OF EMPLOYEES BY GENDER, 2015**



Male

**73%**



Female

**27%**

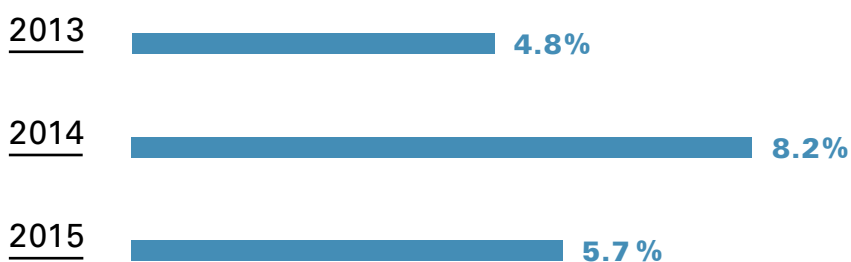
**Employees: almost 40% are residents**

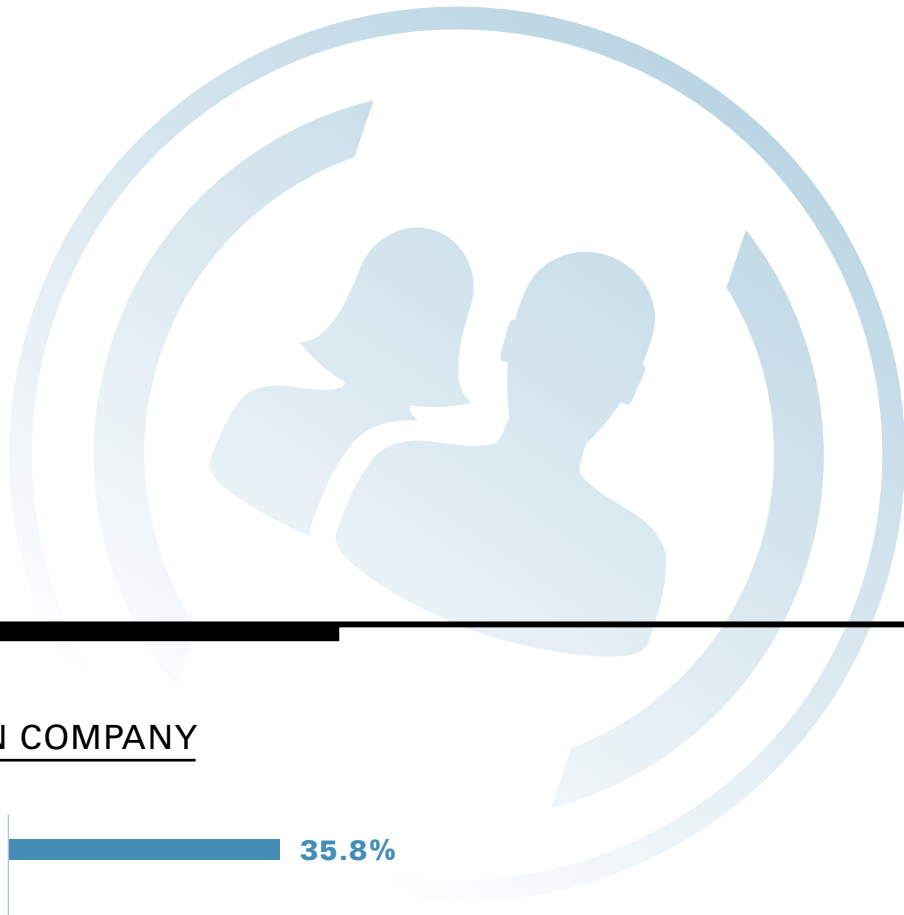
Almost 40% of our employees live in Ticino Canton (+2% compared to 2014). This is a significant figure, given our proximity to the Italian border and the predominantly industrial nature of our operations.

**Turnover down to 5.7%**

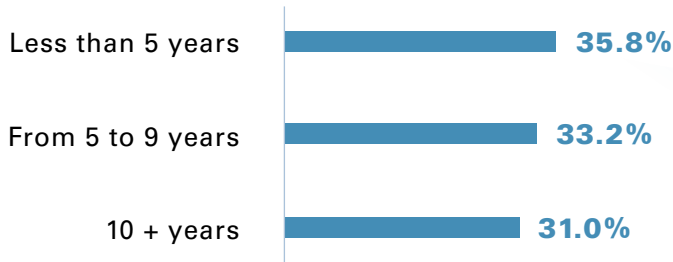
The turnover rate, i.e., the employees leaving the company during the year in proportion to the total number of employees, dropped from 8.2% in 2014 to 5.7% in 2015. Looking long-term, we see that on average our employees are very loyal: 31% have been with us for over 10 years and 33.2% from 5 to 9 years. These two figures indicate that our employees are satisfied with their jobs. In addition, it is important to note that net of new employees, 60% of the people who were with us 10 years ago are still in the Argor-Heraeus family.

**EMPLOYEE TURNOVER RATE**





## AVERAGE STAY IN COMPANY

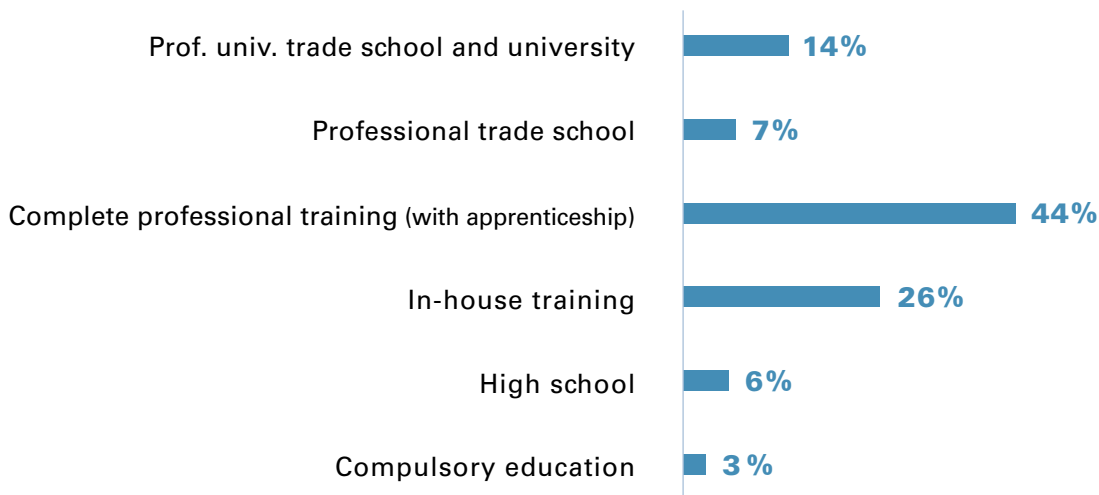


### **Highly qualified employees**

Argor-Heraeus encompasses a wide range of professions. Our family has workers, technicians, chemists, engineers, computer technicians, economists, and jurists. To these we add the complexity of an industry with numerous rules and standards

and global operations. All of this demands personnel who are trained at various levels and able to face different challenges. From 2010 to 2015, the number of our employees with a university degree or a diploma from a professional trade school increased by over 50%.

## EMPLOYEE EDUCATION LEVEL, 2015



# HEALTH AND SAFETY AT THE WORKPLACE



## How safe is Argor-Heraeus?

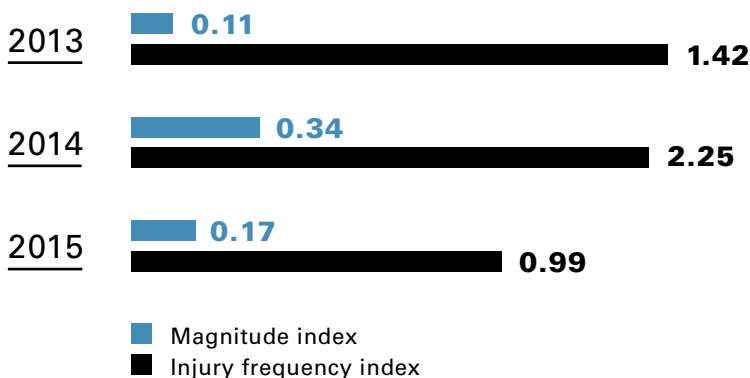
### Safety is our number one priority

Health and safety at the workplace are absolute priorities, necessary for our work to be performed in the best possible way. Therefore, by means of workshops, constant analyses of work processes, codes of conduct and regulations, a full-time safety supervisor, and collaboration with outside experts, we work every day to make our company safer.

### 0.99 accidents for every 100,000 hours worked

This is the Lost Time Injury Frequency (LTIF) Index, i.e., the number of accidents recorded for every 100,000 hours worked, for 2015. A significant improvement compared to 2014. On the other hand, the Magnitude Index (MI) expresses the number of days lost due to accidents at the workplace every 1,000 days. In 2015, this index was 0.17, also an improvement compared to 2014.

## MAGNITUDE INDEX – LOST TIME INJURY FREQUENCY INDEX





È OBBLIGATO  
L'USO  
DEI GUANTI



**Planning, training, safety drills: in your opinion, which of these is the most important for guaranteeing safety at a company?**

*All three are equally important and must be given the same consideration. Planning is the basis of everything: it is the foundation of safety and demands great care. Everyone must be involved. But planning is just words on paper: training transmits it to everyone involved, both inside and outside the company. Theory alone is not enough: with practice and safety drills we can prepare everyone and create the automatic responses needed to handle emergencies in the best and safest way.*

Corrado Tettamanti  
Commander  
Mendrisio Fire Brigade

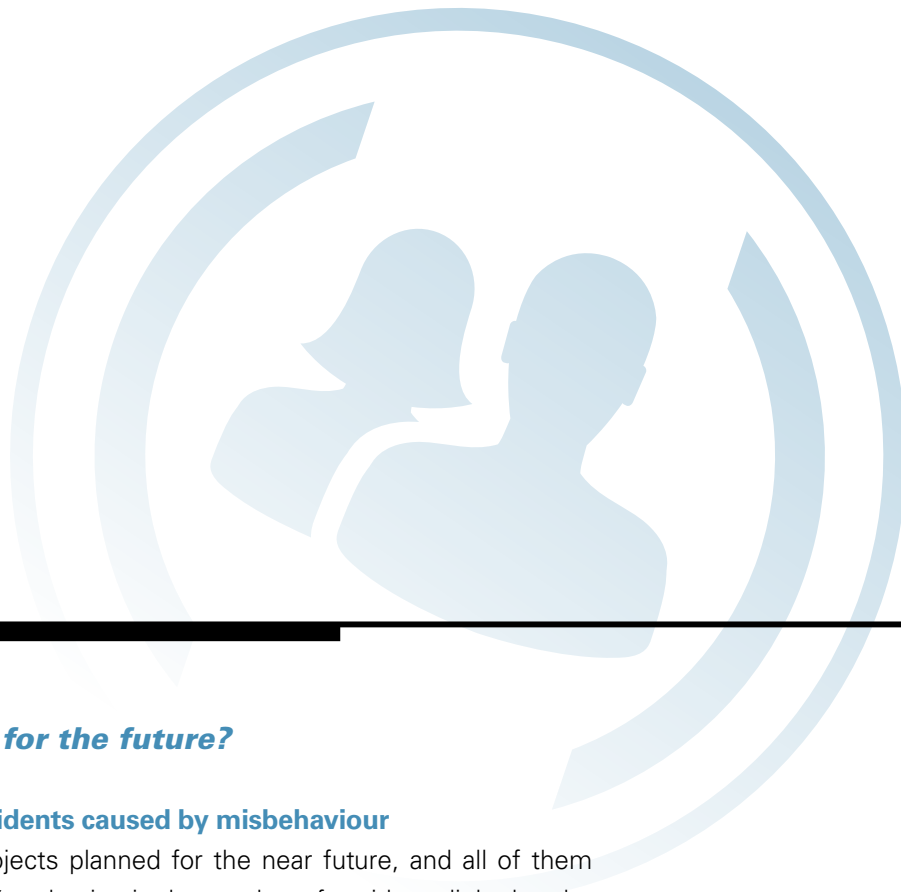
### ***What did we do to improve our results?***

#### **Re-engineering and training programme**

By means of a re-engineering programme (still under way) we revised our processes for organising work and spaces in the refinery in order to further increase worker safety. Along with this large-scale programme, we invested many hours in safety training (see section on training).

#### **Total revision of company emergency plan**

In 2015, we completely revised our company's emergency plan and updated all internal and external procedures. The new plan is part of a comprehensive safety programme in cooperation with numerous outside partners and involving numerous hours of training on emergency procedures (see section on training).



### ***What are our goals for the future?***

#### **Further reduction in accidents caused by misbehaviour**

We have many safety projects planned for the near future, and all of them have the same goal: a 10% reduction in the number of accidents linked to the handling of loads and to inefficient organisation of work.

### ***How do we intend to reach this goal?***

#### **Collaboration with SUVA on ergonomics**

We have begun working with SUVA on the subject of ergonomics in order to optimise work methods (interaction with machines, movements, procedures, posture, etc.), and are reviewing all of our work procedures to make them safer and less subject to possible risks.

#### ***“Safety Charter”***

We want to sign the SUVA “Safety Charter,” a document of concrete commitment to safety, based on the principle: “stop in case of danger / eliminate the danger / resume work.” In this way, we intend to make our employees even more aware that they are authorised to stop working when they notice a possible danger. This principle will be explained in detail in a series of training, regulatory, and information workshops.

# TRAINING

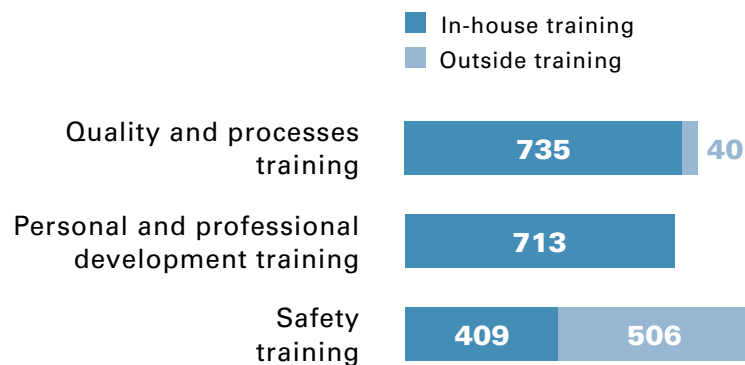


## *What does training mean at Argor-Heraeus?*

### **Safety, quality and processes, personal and professional development**

Our employees face numerous, constantly evolving challenges. This would be even more difficult without adequate preparation, so we guarantee that all members of the “Argor-Heraeus family” are totally prepared by providing in-house training courses as well as workshops with outside experts.

### TRAINING HOURS, 2015





**If you had to choose just one word to describe the industry's future in terms of sustainability, what would it be?**

*Challenging*

*Stakeholders along the entire precious metals value chain are better informed and demand safe and sustainable metal extraction methods, fair and transparent business practices, and clear and honest information for customers.*

*Although the challenge to achieve a completely responsible chain will never entirely end, it offers great opportunities for creating innovation and competitive advantages. Moreover, it helps alleviate the tendency toward excessive regulation.*

**Andrew Bone**  
Executive Director  
Responsible Jewellery Council (RJC)



### **Quality and processes training**

The number of hours devoted to quality and process training increased significantly in 2015: almost 800 hours, compared to 418 in 2014. These activities aim to ensure that all employees understand internal processes and procedures.

### **Personal and professional development training**

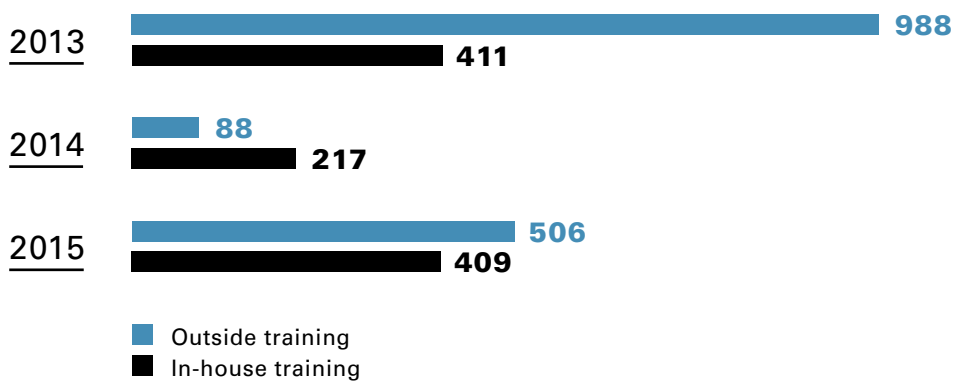
These activities focus on developing important accessory skills, such as IT, managerial ability, language skills, and many others.

### **Safety training**

We regularly conduct in-house training and refresher courses to share company practices and safety rules. In addition, we work with outside partners such as the fire brigade, ambulance service, and police force to prepare for and manage emergencies. In 2015, we invested almost 1000 hours in safety training.



## SAFETY TRAINING HOURS



### **A large drill for better preparation**

In November we conducted a large safety drill, the climax of a wide-scale collaboration, that involved about 35 employees, 90 members of the Mendrisio Fire Brigade and Lugano Chemical Emergency Centre, members of the cantonal and Mendrisio Police Force, as well as several teams of the Mendrisio ambulance service. The objective: to test safety procedures and the collaboration between our company and the various emergency rescue teams.

# 2015 AT A GLANCE



65

years in operation  
in 2016



Head-

quarters:  
Mendrisio, Canton Ticino,  
Switzerland



322

employees



Core

activities:  
precious metals refining  
and transformation



4

number of offices  
worldwide: Switzerland,  
Germany, Italy, Chile



15

number of accreditations  
and certifications



350-400

tonnes/year:  
Gold refining capacity



0.99

accidents for every  
100,000 hours worked



2'400

training hours





53%

of added value  
distributed to employees



75%

of supply expenses  
in Switzerland



Knowledge

+ compliance  
= Know your customer



66'935 m<sup>3</sup>

water consumption



+11%

compared to 2014



0,3%

Fuel oil consumption



Car pooling:

41 groups / 92 employees



- 34%

plastic waste



73% / 27%

♂ Men   ♂ Women

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