

ACTIVITY REPORT 2016

MOVING TO A LOW CARBON SOCIETY



EUROPEAN ALUMINIUM

THE ALUMINIUM EFFECT



80+ members across the aluminium value chain
600 plants in 30 European countries
39.5 billion euros annual turnover



1 million+ direct and indirect jobs



75% of all aluminium ever produced is still in use



Recycling saves 95% of the energy needed for primary production



Compared to steel, 200kg of aluminium in a car can save up to 16g of CO2 per km



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THE OPENER

INTERVIEW WITH KJETIL EBBESBERG
AND GERD GÖTZ

Kjetil Ebbesberg, Chair of European Aluminium and Executive Vice-President Rolled Products at Hydro
Gerd Götz, Director General of European Aluminium

How was 2016 for the industry?

KE: In one word – exciting! The entire industry has been working together on a few targeted campaigns that are critical to our competitiveness; trade in particular. Trade is a big issue now and for years to come as it impacts all of our members across the value chain. That is why we are promoting our vision for free and fair trade in our activities at EU and national level.

GG: Full of energy and driven by professional teams! Members and the secretariat connected with stakeholders on a whole new level through our holistic agenda: the Drivers of Change. Our market groups are now campaigning at full speed on standards, packaging, transport, buildings and recycling. If you take EU Commissioner Vella's endorsement of our Sustainability Roadmap to 2025, it is clear that we are making our voice heard.

Kjetil, you said that trade is now at the top of the industry's agenda. Why is this?

KE: The EU is rethinking its anti-dumping legislation; this will have a significant impact on the European aluminium industry. There are massive overcapacities in a number of countries, including China. These threaten our entire value chain in Europe. Going forward, the EU needs to maintain a strong trade defence system that ensures free and fair trade for all. We advocate for the right to compete within a rules-based trading system.

Presumably trade is one of the industry's Drivers of Change. Are there others?

GG: Indeed, trade is one of the Drivers of Change, but there are two others: energy and the circular economy. These three campaigns – plus two supporting industry initiatives on innovation and sustainability – make up the Drivers of Change publication. But we are also looking ahead to future campaigns on low-carbon buildings and mobility! This single living document ensures that any policymaker, in five minutes or less, can understand our industry's key priorities.



DID YOU KNOW that the industry invested more than €1.1 billion in Auto Body Sheet capacity over the last decade?

Tell us about the industry's innovation initiative. How is it different from other initiatives?

KE: We launched the Innovation Hub in 2015 as a way to facilitate the sharing of ideas, know-how and breakthrough thinking. Although it does also enable members to discover funding opportunities, it is much more than that. The Hub is about creating a community of innovation-minded partners – from company experts to academics to policymakers – that sees a key role for aluminium in a low-carbon Europe.

GG: Innovation and sustainability are core pillars for us. Without a clear plan to innovate, the road to sustainability will be tough. With the ratification of the climate agreement reached at COP21 in Paris, this commitment is more

important than ever. We are regularly tracking progress and also seeking input from a new advisory group on how to further our efforts. These senior experts from outside our industry will undoubtedly challenge us to reach technological progress, seeing as sustainability and innovation go hand-in-hand.

Looking ahead, what should we expect for 2017?

KE: You should expect us to stay focused on policies relevant to our industry. We will take a leading role in the debate on low-carbon mobility. Lowering CO2 emissions in transport is a must and lightweighting plays an essential part in reaching this aim. We will also remain active on energy-related issues. Next year brings the new electricity market design for Europe. We hope that this market

secures energy at predictable and affordable costs for all consumers, including our industry.

GG: I think we will be more European than ever. We will work closely with our allies across Europe – national aluminium associations and other strategic partners like Eurometaux – to echo our activities at EU level. We will also advocate for a robust revision of the Energy Performance of Buildings Directive and continue to expand our unique initiatives like Every Can Counts. In short, we are equipped to deliver on our strategic plans and make aluminium known as the permanent material of choice in Brussels and beyond.



From Left to Right: Kjetil Ebbesberg, Chair of European Aluminium and Executive Vice-President Rolled Products at Hydro with Gerd Götz, Director General of European Aluminium

INDUSTRY OVERVIEW

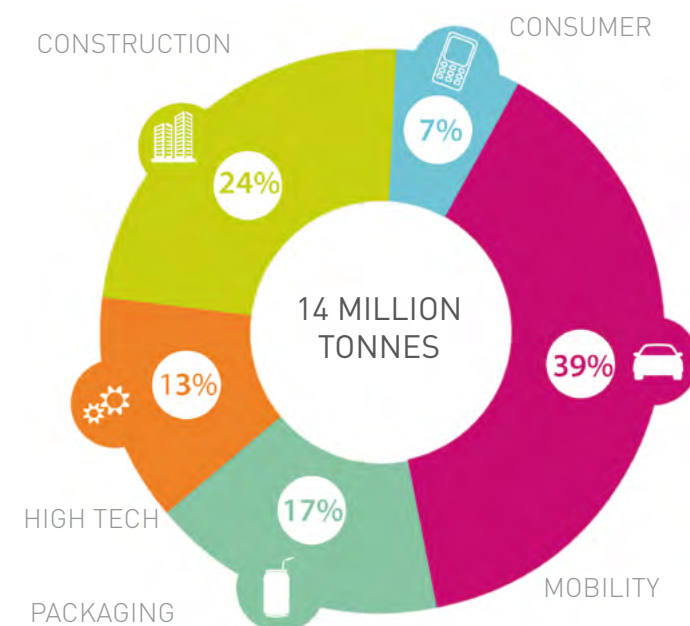
CHALLENGES AND OPPORTUNITIES FOR THE WHOLE VALUE CHAIN

The aluminium value chain stretches from alumina, the raw material used for the metal, through primary production to semi-finished, end-use products and ultimately to recycling.

There is a growing demand for aluminium products. However, a global threat of overcapacity, for example in China, is exerting pressure on the whole industry.

Stricter climate change and energy regulations mean that producers based in Europe face higher compliance costs. Challenges in accessing aluminium scrap in the EU are exacerbating these issues.

If Europe's industry is to evolve and remain competitive, it needs to address these challenges.



STATE OF PLAY: PRODUCTION OUTLOOK IN EUROPE

Aluminium is the material of choice for a range of strategic applications, including mobility, packaging and construction. The 2% growth rate in Europe for 2016, compared to an average of 1% per year since 2009, confirms its importance. This positive trend is expected to continue in 2017.

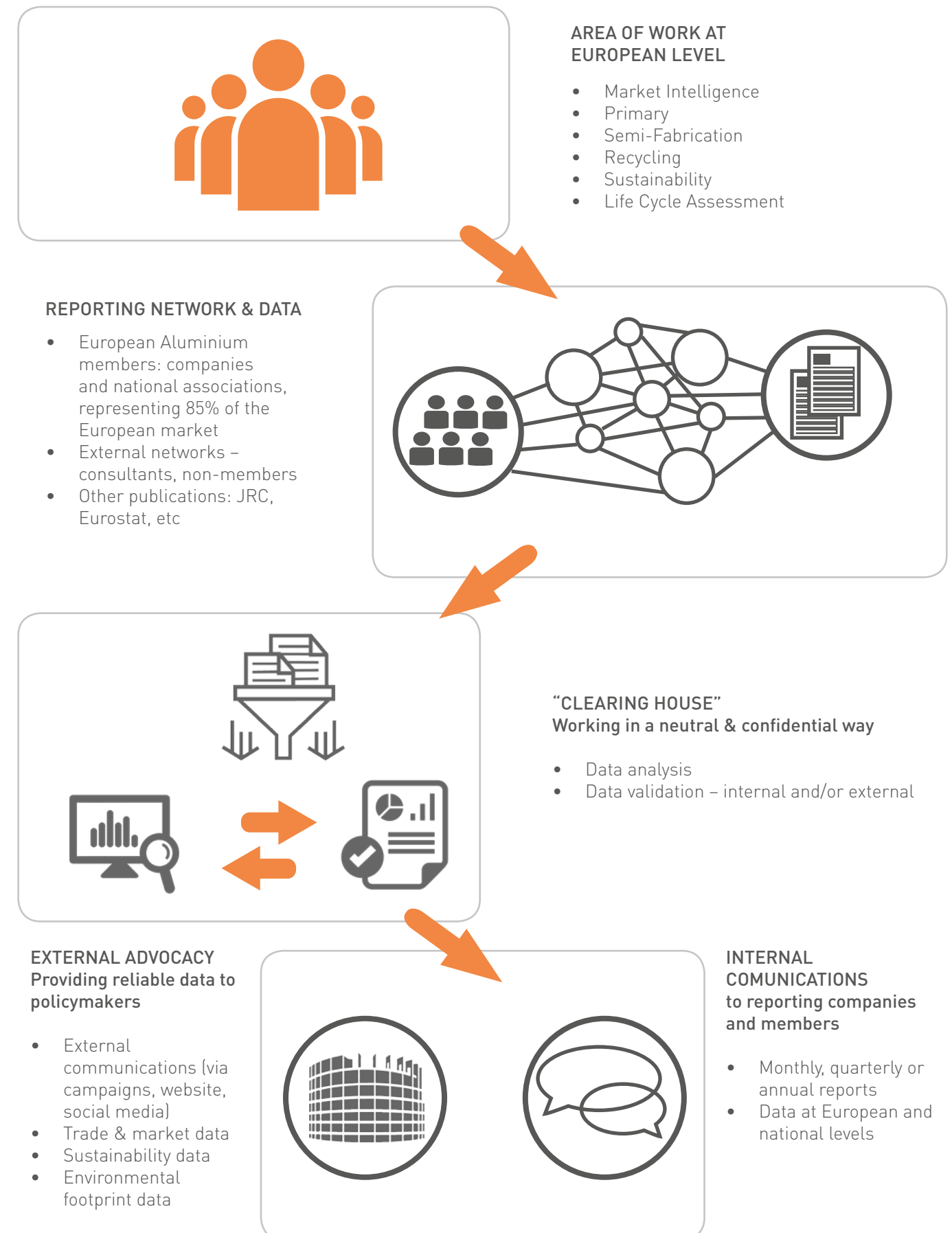
Primary aluminium production in Europe has rebounded following a difficult period. Production increased by 1.1% in 2016 to 4.3 million tonnes and a further growth of 1.3% in 2017 is forecast by European Aluminium data. However, the EU still imports roughly half of its metals supply; 5.9 Mt in 2016.

Moreover, significant production overcapacities around the world are increasing the price pressure on European industries. Overcapacity in China is five times greater than total EU production (2.2 million tonnes).

European demand for semi-finished aluminium products remains strong. The shipments of flat-rolled products, such as those used to produce cans or cars, amounted to 5.1 million tonnes (+2.4%) in 2016; a growth of 1.9% is forecast for 2017. Demand for extruded products, for example as used in windows and machinery, saw a 1.6% increase in 2016 to 3.0 million tonnes and the foreseen growth for 2017 is 1.2%. These increases are against a backdrop of ongoing pressure from imports.

The recycling sector is flourishing, processing growing quantities of scrap. Europe's demand for aluminium scrap increased by 2% in 2016 compared with 2015, reaching a record 7.7 million tonnes. This reflects the societal shift from a linear to a circular economy and the aluminium industry's commitment to sustainability. However, access to scrap remains an issue, with around 900kt of aluminium scrap exported from the EU – mainly to Asia – during 2016.

DATA: SERVING OUR MEMBERS AND SUPPORTING EVIDENCE-BASED POLICYMAKING



DRIVING A NEW AGENDA

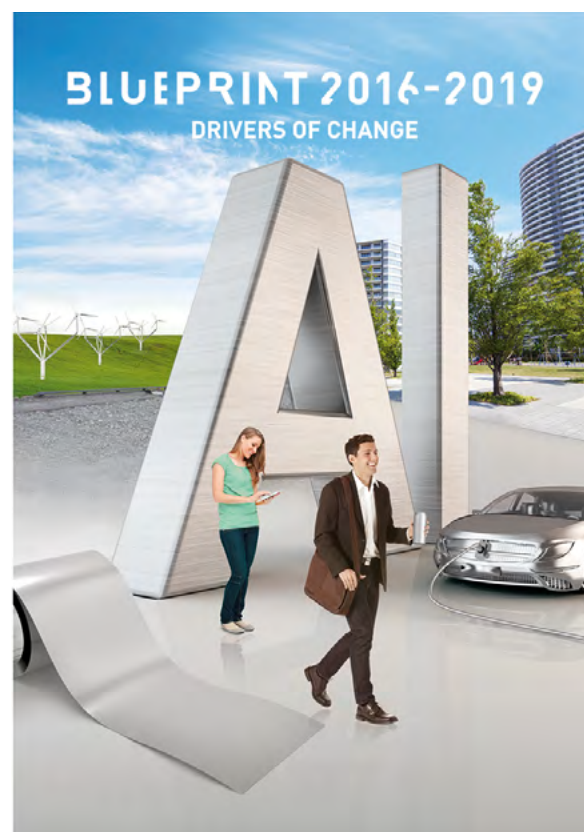
ONE DOCUMENT, ONE STORY: THE DRIVERS OF CHANGE

Policymakers adopted a wide range of legislative proposals in 2016 likely to shape the competitiveness of strategic industries such as aluminium. The European Commission's long-term plans, sectoral legislations, strategic roadmaps and general policy frameworks are defining the political landscape.

In response, European Aluminium launched its 'Drivers of Change', a strategic blueprint for 2016-2019. This positions industry as a leading actor in a number of important legislative reforms, notably trade, energy and circular economy. It also defines the major voluntary initiatives – the Sustainability Roadmap and the Innovation Hub – that aim to shape the low carbon economy over the coming decades. Full of smart ideas to guide the reader, the 'Drivers of Change' packages key facts and figures succinctly and accessibly for a range of audiences. This document has become a must-read for policymakers and is one of the most frequent downloads from our website.

The rise of the trade agenda: More than Market Economy Status

International trade rules are pivotal for our industry. In 2016, discussions accelerated on Europe's trade defence instruments and anti-dumping reforms, driven by the debate on whether the EU should grant China 'Market Economy Status' within the WTO. European Aluminium took a leading role within AEGIS Europe – the largest industrial alliance uniting more than 30 different manufacturing industries – with the purpose of promoting a sound legal basis for defining fair trade rules vis-à-vis third countries. This integrated advocacy and communications plan delivered a more balanced debate across the European institutions. It also saw the launch of a public consultation as well as the European Parliament categorically rejecting Market Economy Status for China. With the Commission publishing its new anti-dumping proposals in late 2016, this topic remains a priority.



Drivers of Change Brochure

Coordination with our American and Canadian counterparts boosted transatlantic cooperation in combating global overcapacities. We testified before the US Congress International Trade Committee, providing evidence and arguments on the risks posed by increased aluminium overcapacities. European and international media covered this event in detail.

We also continued our efforts to address other sensitive trade-related issues, including quota suspensions, common duty position, code misclassifications and Free Trade Agreements (FTAs). Our contributions included technical support, coordination, monitoring and building networks.

ETS campaign: Consolidating our leadership

We worked with the European Parliament and Council in defining a more predictable and workable Emissions Trading System (ETS) for 2021-2030. This included scenarios for new 'hybrid' schemes for ensuring a level playing field in Europe, focusing on indirect carbon costs systems and benchmarks. These were debated in a special European Parliament committee and integrated into EU reports and national plans. A study by energy consultancy Ecofys demonstrated the feasibility and impact of our model.

The ETS Phase IV campaign was nominated as a finalist in the "Best Lobbying Campaign 2016" category by the European Association Awards 2017.

We also made an exhaustive assessment of the Energy Winter Package adopted in late 2016. A new campaign on the electricity market design reform and the revision of the renewables directive is likely.

Circular Economy: Aluminium as the permanent material

The circular economy helps position the aluminium industry as setting standards in sustainable practices. Europe is a leader in aluminium recycling; however, increased scrap exporting continues to make it dependent on primary imports.

We developed a position paper and visuals explaining the permanent material concept. This was recognised by the European Parliament's Industry Committee.

Our association cooperated with other materials associations – non-ferrous metals, paper, cardboard, glass and plastics – to define a common position supporting measuring recycling rates at the input stage of the final recycling process and to improve the traceability of waste at each stage in the recycling value chain.

European Aluminium worked closely with Member States and the European Parliament to recognise all recovery options (incinerator bottom ash) and realistic aluminium packaging recycling rates. Critical points were the potential market restrictions against single-use (but recyclable) packaging and strong support in favour of the bio-economy and bio-based packaging.

Finally, to minimise leakage of aluminium scrap from Europe and ensure a level playing field with global competitors, we have called for the reference to equivalent environmental, health and safety conditions to apply to exported scrap.

The European Parliament's last compromise text is supportive, whereas at Council level the compromise may not fulfil all our requests.



Drivers of Change Factsheets

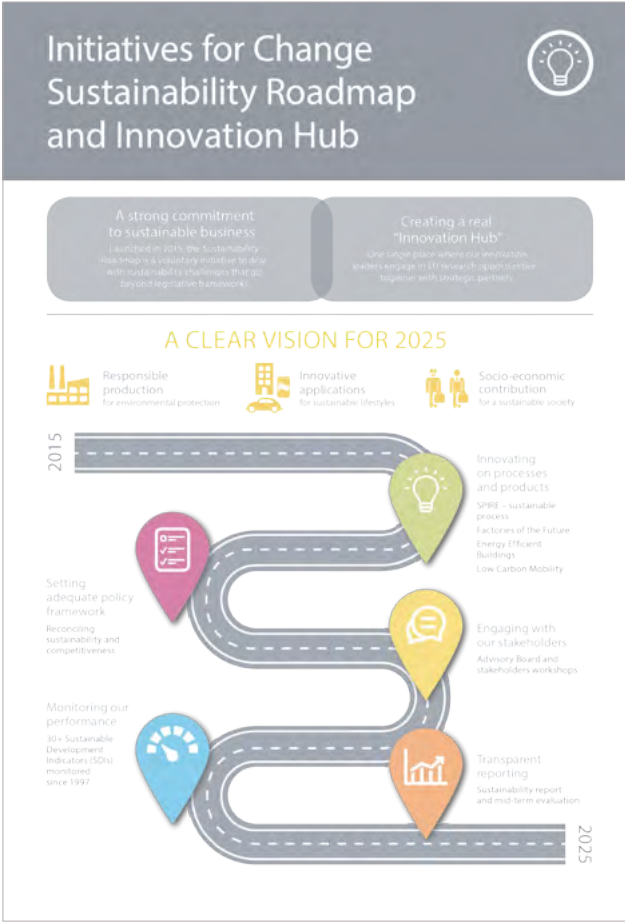
Rolling out the Sustainability Roadmap

Throughout 2016, European Aluminium and its members began to implement the ‘Sustainability Roadmap to 2025’. This unique industry initiative, launched in 2015, sets ambitious targets and commitments for the entire aluminium value chain in three areas:

- 1. Responsible production for environmental protection
- 2. Innovative applications for sustainable lifestyles
- 3. Socio-economic contribution for a sustainable society

The Roadmap reflects the industry’s vision that aluminium is the ideal material to meet the society’s demands for more sustainable lifestyles. It aligns fully with global commitments on sustainability, i.e. the COP21 Paris agreement and the UN Sustainable Development Goals.

We believe that continuing to reduce our industry’s environmental footprint and increasing its positive contribution to society goes hand-in-hand with ensuring that Europe’s aluminium industry remains competitive. We have already taken concrete steps on our key objectives, and are exploring solutions and best practices in a number of areas, including treating hazardous industrial waste, reducing energy consumption and sustaining employee welfare.



Initiatives of Change Brochure



“Aluminium’s demand is growing. That means that there are very obvious benefits to closing the loop and maximising recycling wherever possible. I know that we are on similar wavelengths here. Your Sustainability Roadmap for the aluminium industry to 2025 and the Aluminium 2050 Low Carbon Roadmap both apply the principles of the circular economic model.”

Karmenu Vella, EU Environment Commissioner

More than experts: The Advisory group

The launch of the Roadmap has set our industry on a challenging journey. Innovation and EU policies are important levers to achieve our ambitions; however, we also recognise that we need external input to deliver success. Our next step will be to engage high-level sustainability experts to create an Advisory Board. Its role will be to provide guidance in how to further develop the Roadmap and also to challenge and broaden the scope of our actions.

In parallel, we will continue to monitor and report – regularly and transparently – on a broad set of sustainability indicators. These will track our progress and allow us to engage in a dialogue with the fullest spectrum of our stakeholders.

European Aluminium has joined the Aluminium Stewardship Initiative (ASI) as an associate member. Our membership naturally complements the work by our members in delivering the voluntary targets of the Roadmap by 2025. Our ultimate objective is to create synergies and reinforce our engagement with key stakeholders.

The Innovation Hub: Developing sound R&D project proposals along the value chain

Our Innovation Hub developed a number of activities in 2016 to launch the research community on our innovation journey. In May, more than 50 experts and innovation leaders from member companies, academia and research organisations took part in a workshop. It marked the official publication of the mapping report, the document that defines the Hub’s objectives and the goals of the European aluminium industry’s R&D priorities. This is essential to secure a consistent and complementary approach to innovation throughout the value chain. It is also vital that any innovation is positioned within the widest context to extract the maximum benefit and ensure that it helps create a more sustainable society. The details of this holistic approach are set out in the mapping document.

Later in the year, more than 20 aluminium manufacturing experts brainstormed potential innovation projects at Manchester University. This enabled the industry to connect successfully with Research and Technological organisations and other potential partners. As a result, the Hub members are now screening and refining a number of project ideas, which will be proposed to partners for submission as Horizon 2020 calls in 2017.



Building a stakeholder community

It is vitally important to construct the Innovation Hub around a large stakeholder community that also covers the wider societal dimension. Currently, bringing innovation to market requires addressing not only the technological aspects but also other societal dimensions, such as financial, legislative or market acceptance. This is why it is essential that the stakeholder community extends beyond the scientific and technology spheres and why European Aluminium has begun liaising with policymakers from DG Research and DG Growth.

We have also communicated on the Innovation Hub at conferences, including the High-Level conference of the European Innovation Partnership on Raw Materials. This includes publishing an original leaflet on the Innovation Hub to promote the Hub in Europe.



The Innovation Hub leaflet

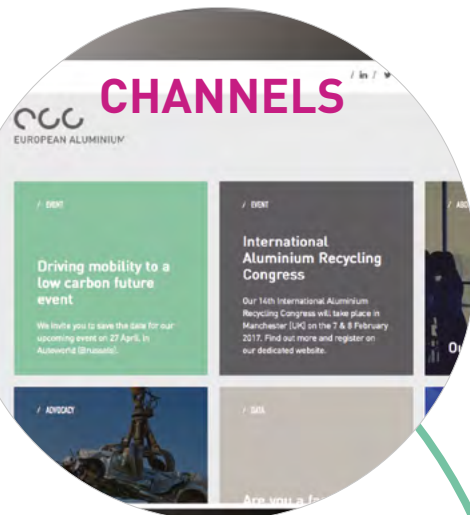
CONNECTING DOTS

ENSURING OUR VOICE IS HEARD

PEOPLE



CHANNELS



COMMUNITY



NETWORKS



MEDIA



Our communications and social media activity blended seamlessly with our advocacy to deliver a series of successes

IN THE MEDIA

We actively engage with media both in Brussels and beyond. In 2016, our messages on trade, mobility and the circular economy were picked up by specialised, EU and global media alike.

FINANCIAL TIMES

Western aluminium makers face new threat

"Our concern is one word: overcapacity," says Maximo Miccinilli. European Aluminium estimates that China has excess aluminium capacity of 10m tonnes a year currently.

ENDS Europe

MEPs' beefed up circular economy ambition welcomed

European Aluminium also welcomed the MEPs' call on the Commission to consider setting recycling targets for construction and demolition waste. But it regretted the lack of proposals to address the leakage of waste to other parts of the world.

Aluminium INSIDER

Study Projects Use of Aluminium in Cars to Increase by Almost One Third Over Next Decade

"Without lightweight cars there can be no energy efficient mobility. Aluminium is therefore an integral part of the EU's transition to a low carbon society," said Dieter Höll.

EURACTIV

Walking the same path: Free and fair trade for Europe and aluminium

International trade can only be free and fair if global competitors adhere to the same market rules and environmental, social and health standards, writes Gerd Götz.

INSIDE U.S. TRADE'S

WORLD TRADE ONLINE

Industry criticizes Commission's new antidumping methodology proposal

"Amidst the uncertainty around this new legal framework, the EU should ensure a strong and well established foundation," Gerd Götz said. "That foundation is without a doubt the EU's longstanding five-market economy criteria."

THE PARLIAMENT

Permanent materials: A circular economy game changer

The move towards a true resource efficient and circular economy is an invitation to think differently about the way we produce, consume and use, argues Maarten Labberton.

Metal Bulletin

EU regulatory impacts on aluminium recycling

European Commission proposals to create a true circular economy can impact the volumes of raw material for aluminium recycling if they are effectively implemented, writes Magdalena Garczynska.

ALUMINIUM INTERNATIONAL TODAY

The Circular Economy: Boosting the potential of aluminium recycling?

"Aluminium set an example by applying the concept of a circular economy long before it entered the political sphere," says Gerd Götz.

POLITICO

Commission pitches solution to Chinese market economy riddle

"Today the European Commission announced a completely new paradigm for EU trade. The question of market economy or non-market economy could virtually disappear overnight," said Gerd Götz.

SUSTAINABILITY REPORTING

Driving policy and shaping views through evidence-based data

Thanks to direct data collection and validation by our members, we gained strong insights into how the European aluminium industry is performing from an environmental, economic and social perspective. This performance is summarised in our sustainability highlights.

This publication supports our advocacy efforts in line with the Drivers of Change. We regularly inform policy makers and opinion leaders about the progress to date, helping create a transparent debate around the opportunities and challenges for our entire value chain.

“The only way to ensure sound policy making is by using reliable and up-to-date data.”

Rosa García Piñeiro, Chair Sustainability Committee, European Aluminium



2015 Sustainability Highlights

TIMELINE OF ACTIVITIES IN 2016



THE YEAR IN REVIEW

A CULTURE OF RESPONSIBILITY

Throughout 2016, European Aluminium supported its members in their efforts to improve environmental performance, safeguard workers' health and safety and explore innovative technologies, as set out in our Sustainability Roadmap towards 2025. These activities ran in parallel with industry's request to the EU institutions for an enabling legislative framework, which is essential to support long-term investments.

Revised Non-Ferrous Metals BREF

Following eight years of intense discussions, the revised Best Available Techniques Reference (BREF) document for the non-ferrous metals was published in the EU Official Journal. This document will provide the basis for granting environmental permits to aluminium primary production and recycling facilities for the coming eight years. European Aluminium will follow the implementation process closely to ensure the approach is consistent and cost-effective across Europe.

Coal Tar Pitch assessment under REACH

Coal Tar Pitch, High temperature (CTP) has a number of vital applications in primary aluminium production, including in anodes for the electrolytic process. Due to its hazardous properties, this substance is heavily regulated in the EU, with ambitious requirements already met for its industrial use. Additionally, the uses of CTP will also be subject to the authorisation procedure under REACH.

Thanks to supporting arguments from European Aluminium, the European Chemicals Agency (ECHA) has confirmed that anode production for the aluminium industry constitutes an 'intermediate' use of CTP, and as such is exempt from authorisation.

European Aluminium will support its members in preparing timely applications for authorisation for the remaining relevant uses of CTP.

Management of industrial waste

In line with the relevant target in the Sustainability Roadmap, we assembled a Task Force of experts from our members with the aim of "reducing and recycling as much as possible industrial waste and banning the landfill of recyclable hazardous industrial waste." The first step covered assessing the main flows of hazardous wastes and identifying potential treatment options for recycling and co-processing. The next steps will be to identify and execute dedicated projects to bridge the technological, logistical and financial gaps, potentially in conjunction with other interested stakeholders.

Environment and Life Cycle Assessment Workshop

The 2016 annual EHS Workshop focused on 'Environment & Life Cycle Assessment'. The Workshop is designed to encourage the exchange of best practices within the membership and with relevant external stakeholders.

This year, the keynote speech was delivered by Hugo Schally, Head of Unit 'Sustainable Production, Products and Consumption' at the European Commission's Directorate-General for Environment. He highlighted the Commission's environmental priorities for the coming years. The subsequent session created a lively exchange between participants covering a range of topics, including reducing industrial emissions, handling industrial waste and managing hazardous substances.

The 2017 workshop will focus on 'Safety in the workplace'.



Hugo-Maria Schally, Head of Unit "Sustainable Production, Products and Consumption" (DG ENV) at EHS workshop

MOBILITY

In July 2016, the European Commission presented its new strategy on low-emission mobility. This is an essential part of the broader shift to the low-carbon, circular economy needed to keep Europe competitive while catering to the mobility needs of people and goods.

The COP21 Paris agreement made Europe's ambition clear; by the middle of the century, greenhouse gas emissions from transport should be at least 60% lower than 1990 levels and on a clear path to zero. Transport creates almost a quarter of Europe's greenhouse gas emissions and is the leading cause of air pollution in cities. Therefore, the Commission is likely to propose tough initiatives to address this issue.

This new strategy focuses on three areas:

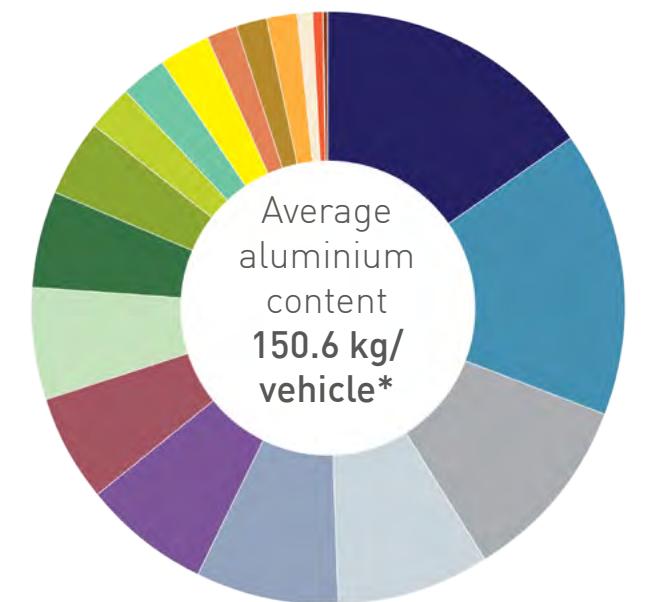
1. Increasing the efficiency of transport systems
2. Accelerating deployment of low-emission transport alternatives
3. Moving towards zero-emission vehicles

The most strategically relevant legislations are the proposals to revise CO2 limits for cars and vans and those for monitoring and reporting CO2 emissions from heavy duty vehicles. This may lead to a proposal to set fuel efficiency standards for trucks and buses in the future.

“Without lightweight cars there can be no energy efficient mobility. Aluminium is an integral part of the EU's transition to a low carbon society, we hope that the European Commission's strategy for decarbonising transport stresses the benefits of lightweight materials such as aluminium.”

Dieter Höll, Chair Automotive & Transport Board, European Aluminium

Average component content per vehicle 2016
Total European car production



*The aluminium content of cars produced in Europe could reach nearly 200 kg per vehicle by 2025, up from 150 kg today.

During 2016, European Aluminium advocated for material neutrality in all regulations for cars, vans and heavy duty vehicles. In cars and vans, we sought to change how the CO2 target is implemented; this would allow the full potential of lightweighting in reaching future targets to be realised. For heavy duty vehicles, we want to ensure that lightweighting is correctly implemented in the calculation tool and that any future fuel efficiency regulation encourages lightweighting.

During the first half of 2017, we will focus our advocacy campaign on lightweight mobility. The highlight will be an event dedicated to Mobility as part of our Spring Meeting on 27 April in Brussels.



©Jaguar MENA

Study on Aluminium content in cars

In 2016 we also published a new study on the aluminium content of cars. The study, conducted with Ducker Worldwide, uses data from automotive companies and suppliers, European Aluminium member companies and existing Ducker Worldwide data. It offers a revealing insight into how aluminium is being deployed in European cars.

The study analyses the use of aluminium castings, extrusions, forgings and sheets for 33 component groups in a sample of 93 car models. This was subsequently extrapolated to cover the entire 2016 production forecast for EU28. It showed that in 2016, the average European car incorporated 150 kg of aluminium, an amount expected to rise to nearly 200 kg by 2025. Auto Body Sheet has the greatest potential for growth, with a predicted increase of 110% in the next 10 years.

Investments on the rise

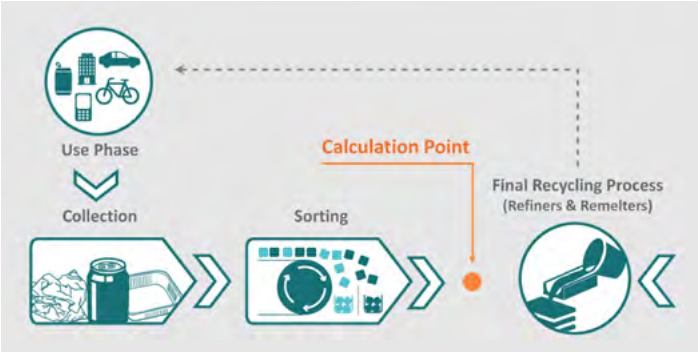
While the demand for aluminium Auto Body Sheet (ABS) is growing fast, our industry is prepared to support the car industry in executing their lightweight vision. More than EUR 1.1 bn was invested in ABS capacity over the past 10 years and we expect to see a capacity increase by 65% over the next two years, according to our internal survey.

PACKAGING

Packaging in the Circular Economy debate

Discussions on the EU's Circular Economy proposals increasingly centred on the European Parliament. European Aluminium voiced its concerns on some of the proposed amendments as they related to packaging, engaging directly with MEPs as well as indirectly via coalitions including Metal Packaging Europe and the EUROPEN Packaging Chain Forum.

A core topic was identifying the appropriate point of measurement for genuine recycling. European Aluminium supports a calculating from a point placed immediately after the final sorting phase (infographic below), an option that should also incorporate extra metal recovered by treating incinerator bottom ash. We also believe that Permanent Materials such as aluminium should be recognised as fit for 'multiple recycling'. Single use but recyclable packaging should not be restricted, given its specific purpose and contribution to reducing food waste and thus the circular economy.



Point of measurement - measuring real recycling

Video: "Aluminium: the permanent material!"

Working with Galloo Recycling, European Aluminium developed a video for stakeholders and EU institutions explaining how even very thin aluminium can be recovered from incinerator bottom ash. The video also stressed the industry's preferred solution of separate collection and sorting for packaging. MEP Karl Heinz-Florenz introduced the video at a cross-industry event in the European Parliament. The video is generating 100 new views per month.

Roadmap towards 75% in 2025

European Aluminium supports the proposed split metal recycling targets and believes that aluminium can make the ambitious 2025 recycling target of 75%. Industry believes this is feasible, providing that all existing national systems improve their performances. To address this, a Packaging

Group Task Force, composed of national aluminium recycling experts and representatives from the European Aluminium Foil Association, developed a roadmap with concrete recycling projects for the various types of aluminium packaging. We also chose to partner with Nespresso to include items such as coffee capsules into existing extended producer responsibility (EPR) schemes. Currently, overall aluminium packaging recycling is greater than 60%. However, we have decided to undertake a 'reality check' based on the future point of measurement.

Aluminium beverage can recycling currently stands at 71.3%; however, there is still room for improvement. A study by the BOKU University of Vienna demonstrated the important role that informal can collection plays in several countries. These activities can be formalised through initiatives such as voluntary take-back machines and by improving existing EPR systems.

“The industry is committed to recycling. But, as the BOKU University study shows, additional investment and effort is needed to ensure valuable scrap like aluminium beverage cans stays in the official recycling loop.”

Raphael Thevenin, Chair Packaging Group, European Aluminium

Packaging Seminar

This year's packaging seminar was held in Mallorca, Spain, in cooperation with ARPAL, hosted by Mallorcan Environmental and Technology Park TIRME and sponsored by Galloo.

It included 15 expert speeches, networking events and a visit to TIRME, a state-of-the-art collection and sorting centre equipped with bottom ash treatment.

Lively debates stressed the importance of extra investment in adding more aluminium packaging scrap into the EU's circular economy. Experts concluded that aluminium packaging should never end up in landfills and preferably not in waste-to-energy plants. They also agreed that the new EU recycling targets can only be met with the help of national experts, partners and EU-wide networks. The next edition will be held from 20 to 22 September 2017 in Rotterdam in the Netherlands.



Voluntary Take Back Machine (VTBM) ©CanPack Recycling

Every Can Counts

At European level, highlights were two social media campaigns, namely CanDunk and OlympiCan, which were implemented and run through each national Facebook page. They promoted the importance of drinks can recycling and highlighted how the Every Can Counts programme has developed.

Launched in the UK in 2009, the Every Can Counts brand is today present in ten EU countries, the latest addition being Serbia, and is looking to expand even further in 2017.



Every Can Counts in numbers

RECYCLING

Driving the circular economy

Recycling is the cornerstone of the circular economy in Europe. We work to accelerate the shift to a low-carbon economy.

Classification of lead: Making steps forward through coordinated advocacy efforts

The European Commission has chosen to classify metals containing more than 0.3% of lead in massive form and 0.03% of lead in powder form as toxic for reproduction. This follows the European Chemical Agency's recommendation on the new harmonised classification of lead to classify all forms at 0.03%. The European Commission's decision is in line with the aluminium industry's position.

Industry advocacy, with the European Commission, in close cooperation with Eurometaux, was a major factor. This showcased the results of bioelution tests performed by industry. Once these criteria are recognised on an OECD level, they will apply when classifying and assessing toxicity of lead-containing metals.

Bioavailability is key to indicating the toxicity of lead-containing metals. Our experts provided convincing arguments against classifying alloys in massive form that contain greater than 0.03% of lead as toxic for reproduction. Currently, metals in massive form do not require labelling. The legislation defining all the mentioned values was published in the Regulation (EU) 2016/1179.

European Aluminium is cooperating with associations to feed into the work of ECVAM (European Reference Laboratory for Alternatives to Animal Testing) and ECHA (European Chemicals Agency), which has a Commission mandate to develop a 'validated bioelution method'.

Scrap types: Classification manual and periodic statistics

European Aluminium has developed a classification manual for scrap types. This will help align how members define the various types of scrap consumed. The initial statistics were shared with members at our Autumn Recycling Division Meeting, and we foresee regular updates and improvements.

European Aluminium will also use this manual as a basis for guidelines helping customs authorities better assess aluminium scrap shipments types.

“Our material is permanent, meaning all aluminium products can be endlessly recycled and reused, from beverage cans and cars to window frames and bicycles.”

Roberta Niboli, Vice-Chair, European Aluminium

Work in progress: Exemptions of lead in aluminium RoHS Directive

Working with our experts and a network of electrical goods manufacturers, we created an influential working group advocating an extension to the current exemption, "Lead as an alloying element in aluminium containing up to 0.4% lead by weight". Our industry positioned itself as a constructive partner of the European Commission, voicing its concerns at a special hearing related to the Directive's exemptions.

This is the outcome of coordinated advocacy efforts based on constructive dialogues with the European Commission and all national governments. Through bilateral meetings, technical submissions and multi-sectoral cooperation, we managed to increase technical collaboration on the existing RoHS2 Annex III exemptions from the substance restrictions. In line with our interests, the European Commission has chosen to launch a four-week Stakeholder Consultation and take legislative action in the first quarter of 2017.

Circular economy event in Beijing, China

European Aluminium took part in a three-day mission to Beijing led by the EU Environment Commissioner Karmenu Vella and Director General Calleja Crespo. The main topics were Chinese and European circular economy policies and legislation as well as the sustainable use of natural resources. European Aluminium Director General Gerd Götz also discussed areas of common interest with the Chinese Nonferrous Metals Industry Association (CNIA).

“Europe is, per capita, the world’s largest recycler, with around half of all aluminium in production being recycled. This is something that Europe and its leaders should be immensely proud of.”

Roland Scharf-Bergmann, Chair
Recycling Division, European
Aluminium

PRODUCT ENVIRONMENTAL FOOTPRINT (PEF)

Product Environmental Footprint (PEF)

The right data and methods are essential for a fair environmental assessment of products. The PEF is a European Commission initiative that aims to define harmonised rules to compare different products' environmental performance. European Aluminium is taking part in the PEFs of metal sheet and (packaged) beer. We are also members of horizontal working groups addressing building and packaging markets.

European Aluminium advocacy on the allocation method for recycling has made major progress in the last three years. The default approach (i.e. 50/50 PEF methodology), crediting 50% of the recycled content and 50% of the end-of-life (EoL) recycling, has shifted to 20/80 for metals.

While this evolution is welcome, our aim is still to secure the full credit and the correct parameters for calculating the environmental benefits of EoL aluminium recycling. The final PEF guidance document will be published in 2017.

European Aluminium is now updating its lifecycle inventory datasets, used to calculate the PEF of aluminium products. The updating of this dataset will help provide robust aluminium data for the European Commission's PEF public database.



Aluminium remelting furnace ©HAI



STANDARDS

Why standards matter
Standards make dialogue between suppliers, customers and authorities possible. They provide a common language for certifying performance and for securing conformity with legislation. European Aluminium advocacy covers all aspects of standards, from energy and environmental performance to aluminium alloys and products.

Greenhouse gas emissions from European Smelters
EN 19694, a harmonised European approach for monitoring and reporting greenhouse gas emissions in energy intensive industries, was published. Its fourth part focuses on the aluminium industry.

Aluminium alloys and special applications
Several aluminium standards were revised to enhance market transparency. The revisions covered new alloys and updated technical delivery conditions, mechanical properties and tolerances. These revisions were made to; EN 485-1/2, dealing with sheets, strips and plates; EN 754-7/8, dealing with cold drawn rod/bars and tubes; and EN 755-1/7/8/9 dealing with extruded rod/bars, tubes and profiles.

For special applications, two aluminium standards were published: EN 16773, a guideline for the production of foils for food containers and EN 12392 detailing requirements for wrought and cast aluminium products used in devices that fall under the scope of the Pressure Equipment Directive.

Due to be published in 2017, a revised version of EN 515, dealing with temper designations of wrought products and the brand new EN 16914, dealing with technical delivery conditions for hot-rolled armour plates, will improve the accuracy of future contracts.

Coming soon too, EN 15088 on semi-finished structural aluminium products for construction works will improve compliance with the Construction Products Regulation and increase distinction from EN 1090-1, which deals with execution of aluminium structures.

The revision of Eurocode 9, covering the design of aluminium structures, is ongoing with the aim to make it more customer-friendly and to extend design rules. Revision has also begun on EN 1676, covering specifications for ingots for remelting; EN 1706, on the chemical composition and mechanical properties of castings, and also on several anodisation standards. Standards dealing with building products are described in the next section.

BUILDING

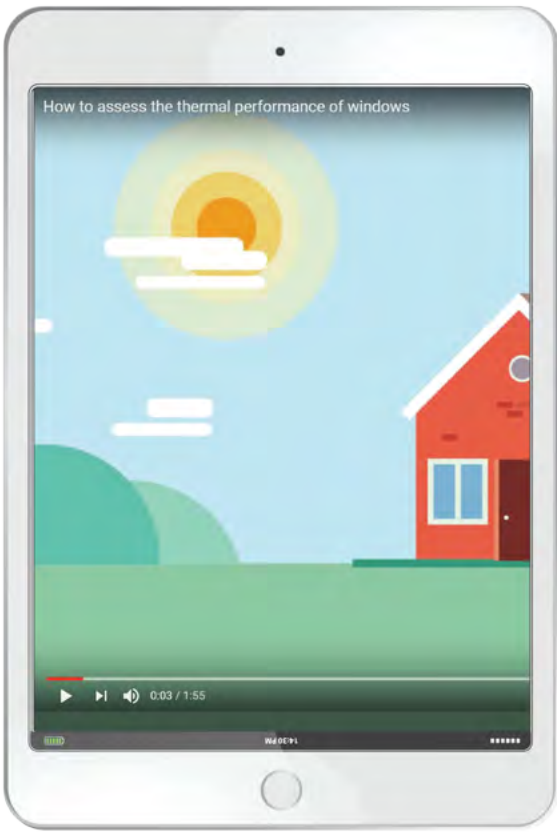
Energy Performance of Buildings
European Aluminium created an animation and a series of infographics to support better assessment of the performance of transparent building elements to help stimulate debate around the revision of the Energy Performance of Buildings Directive. These stressed that insulation is only part of the story; solar heat gains and daylight are equally significant. We also formed an alliance with other stakeholders to emphasise the importance of this.

The European Commission’s work on window energy labelling is still ongoing. Meanwhile, a majority of Member States and stakeholders, including European Aluminium, had already opposed point-of-sale labels in 2015 for being unable to capture site-specific factors. Our animation, ‘Why choosing windows requires personalised advice’, explains the importance of these factors and is now available in three languages.

We launched a measurement campaign to compare ventilated claddings’ performance with alternative solutions. In addition, we helped advance the E2VENT project, which aims at incorporating innovative ventilation and heat recovery systems to improve energy efficiency. This three and a half year project is funded by European Commission’s Horizon 2020 programme.



Titanic Museum in Belfast ©Klein



Animation: How to assess the thermal performance of windows

European Aluminium produced several Environmental Product Declarations for windows, doors, curtain walls and continuously anodised building products. In the Waste Framework Directive revision, European Aluminium is seeking a true recycling target that better rewards materials contributing to the circular economy. This target should clearly and specifically exclude backfilling operations set for construction and demolition waste.

“Aluminium’s design flexibility and recyclability make it the material of choice to enhance buildings’ energy efficiency and sustainability.”

Erik Rasker & Yannis Angelis,
Co-Chairs Building Board,
European Aluminium

Sustainable Building Products and Buildings
European Aluminium advocates for greater recognition of the benefits of end-of-life recycling at several levels, from the ongoing European Commission studies on resource-efficient building indicators to European and International standards dealing with buildings’ sustainability. Most notably, we are working on convergence between the Product Environmental Footprint methodology, as proposed by the European Commission and the standard EN 15804, which covers environmental declarations for building products.

Smart Regulatory Compliance
The Construction Products Regulation sets out harmonised rules for marketing in the EU and provides a common language for declaring performance and CE marking. European Aluminium seeks simplified procedures and improved technical specifications that deliver a fair balance between declared performance reliability and compliance costs. The table below provides an overview of the latest achievements and ongoing work.

Fire resisting doors & windows	New EN 16034 allows performance declaration and CE marking
External doors and windows	EN 14351-1 under revision
Curtain walling connectors	New EN 16758 to assess mechanical performance
Bonded glazing	Project to reduce testing and compliance costs ongoing
Balustrades and handrails	Least onerous performance assessment system defended
Roofing and cladding sheets	EN 507 & EN 508-2 extension to cladding & anodising ongoing
Aluminium composite materials	European Assessment Document in preparation

ABOUT US

80+ MEMBERS ACROSS 30 EUROPEAN COUNTRIES

EUROPEAN ALUMINIUM MEMBERS as of March 2017

Alumina, Primary Production

- Alcoa
- Alro
- Alteo
- Aluminium of Greece
- Hydro
- Kubal
- Nordural
- Rio Tinto
- Slovalco
- Talum
- Trimet Aluminium

Rolling, Extrusion, Casting, Foundries

- Aleris
- Al invest Bridlicná
- Alumil
- Amag
- Arconic
- Assan
- Bridgnorth Aluminium
- Constellium
- Elval
- Etem
- Eural Gnutti
- Gränges
- Hammerer Aluminium Industries (HAI)
- Hydal – HAP
- Hydro
- Impexmetal
- Impol
- Mäkelä Alu
- Metra Aluminium
- Novelis
- Purso
- ProfilGruppen
- Sapa
- Slim Aluminium
- Step-G
- Vimetco

Building Market Group

- 3A Composites*
- Arconic Architectural Products
- Aleris
- Alumil
- Coil*
- Elval Colour
- Etem
- Hydro Aluminium Rolled Products
- Kawneer
- Novelis
- Profils Systèmes
- Reynaers Aluminium*
- Sapa Building Systems
- Schüco International*
- Slim Aluminium

Packaging Market Group

- Constellium
- Elval
- Hydro
- Novelis

Automotive and Transport Market Group

- Alcoa
- Aleris
- Arconic
- Amag
- Constellium
- Hydro
- Novelis
- Sapa
- Raffmetal
- Rio Tinto
- Trimet Aluminium

Recycling

- ABB*
- Aluminio La Estrella
- Alusigma
- Amag
- Arconic
- Assan Alüminyum
- BAGR
- Befesa
- Constellium
- Daiki Aluminium Industry*
- Elval
- EP.AL.ME
- Eural Gnutti
- Gränges
- Hammerer Aluminium Industries (HAI)
- Hydro
- Idalsa
- Igora*
- Impexmetal
- Intals
- Kuusakoski
- MEC*
- Novelis
- Polst
- Prodigio
- Raffineria Metalli Capra
- Raffmetal
- Real Alloy
- R.V.A.
- Sacal - Società Alluminio
- Carisio
- Sapa
- Scepter
- ScholzAlu
- Società Alluminio Veneto
- Stena Aluminium
- Trimet Aluminium

European and National Associations

- European Aluminium Foil Association (EAFA)
- European Association for Surface Treatment on Aluminium (ESTAL)
- Aluminium Federation UK (ALFED)
- Aluminium Association of Greece
- Aluminium Center Belgium
- Aluminium Denmark
- Asociación Española de Refinadores de Aluminio (ASERAL)
- Associazione Italiana Raffinatori Alluminio (ASSIRAL)
- Association française de l'aluminium (AFA)
- Aluminium-Verband Schweiz Fachgruppe Halbzeug
- Austrian Non-Ferrous Metals Federation – WKO
- Centro Italiano Alluminio (CENTROAL)
- Gesamtverband der Aluminiumindustrie e.V. (GDA)
- Icelandic Association of Aluminium Producers – Samál
- Svenskt Aluminium
- Talsad
- Vereniging Nederlandse Metallurgische Industrie (VNMI)



* Associated member

EXECUTIVE COMMITTEE MEMBERS

- Chair**
Kjetil Ebbesberg
Executive Vice President, Rolled Products, Hydro

Vice Chair
Roberta Niboli
Chief Executive Officer, Raffmetal S.p.A.

Treasurer
Simon Baker
President, Alcoa Europe

Member
Emilo Braghi
SVP & President, Novelis Europe
- Member**
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Member of the Executive Board, Elval

Member
Jean-Marc Germain
Chief Executive Officer, Constellium

Member
Jack Govers
Executive Vice President, President of Aleris Europe and Global Markets

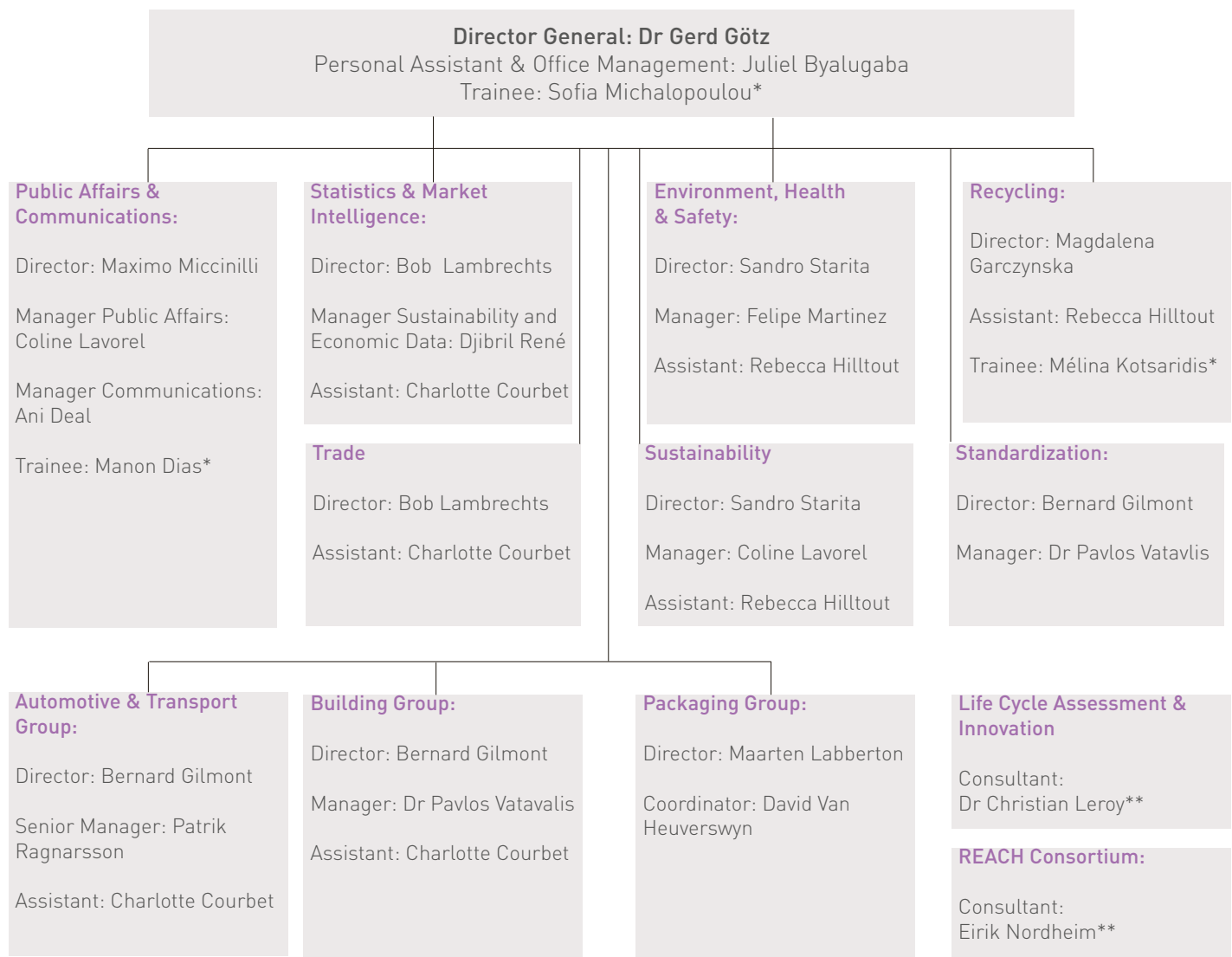
Member
Simon Pelletier
General Manager, Global Metal Sales, Aluminium, Rio Tinto
- Member**
Will Savage
Chief Executive, Aluminium Federation UK

Member
John Thuestad
Executive Vice President, Sapa Extrusion Europe



L to R: Simon Baker (Alcoa), Jack Govers (Aleris), Roman Stifner (replacing Will Savage, Aluminium Federation UK), Simon Pelletier (Rio Tinto), Sabine Schauer (replacing Emilio Braghi, Novelis), Kjetil Ebbesberg (Hydro), Constantin Catsaros (Elval), Roberta Niboli (Raffmetal), John Thuestad (Sapa), Jean-Marc Germain (Constellium), Gerd Götz (European Aluminium), on the occasion of the Autumn Meetings 2016.

OUR SECRETARIAT



[*] temporary - [**] consultant - Status March 2017



ABOUT EUROPEAN ALUMINIUM

European Aluminium, founded in 1981 and based in Brussels, is the voice of the aluminium industry in Europe. We actively engage with decision makers and the wider stakeholder community to promote the outstanding properties of aluminium, secure growth and optimise the contribution our metal can make to meeting Europe's sustainability challenges. Through environmental and technical expertise, economic and statistical analysis, scientific research, education and sharing of best practices, public affairs and communication activities, European Aluminium promotes the use of aluminium as a material with permanent properties that is part of the solution to achieving sustainable goals, while maintaining and improving the image of the industry, of the material and of its applications among their stakeholders. Our 80+ members include primary aluminium producers; downstream manufacturers of extruded, rolled and cast aluminium; producers of recycled aluminium and national aluminium associations are representing more than 600 plants in 30 European countries. Aluminium products are used in a wide range of markets, including automotive, transport, high-tech engineering, building, construction and packaging.

Follow us on Twitter  @EU_Aluminium



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