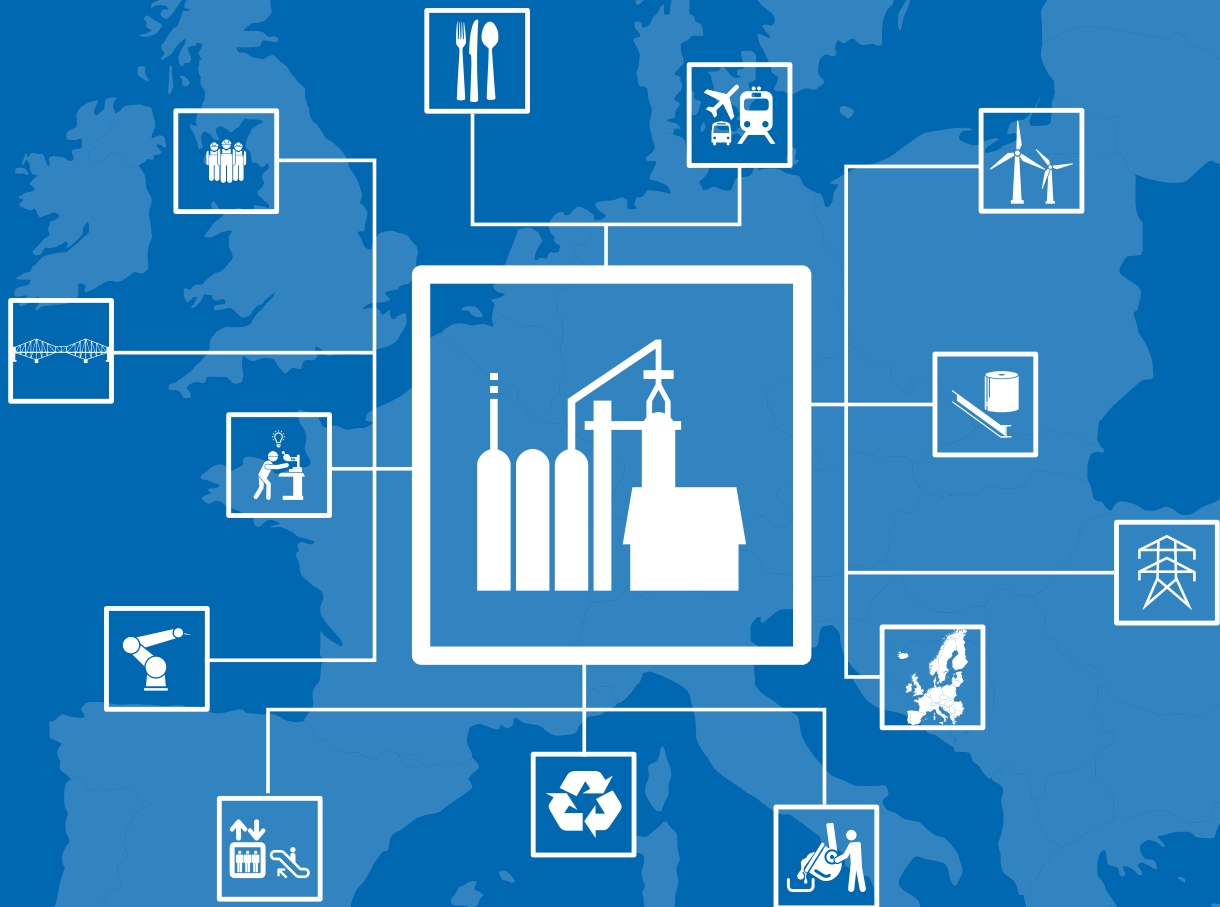


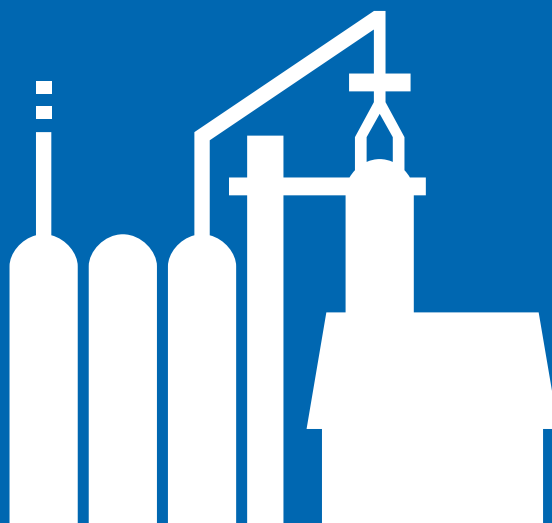
EUROFER
The European Steel Association

Annual Report 2017





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2016 proved to be an important year for the European steel industry. Economically, the industry saw modest demand growth continue, though imports continued to rise. Politically and legislatively, several dossiers advanced that will affect the shape of the industry for years to come. Chief amongst these are the future Emissions Trading System (EU ETS) post-2020, the Circular Economy and Waste Framework package, and the ongoing reform of Europe's trade policy.

In 2016, the EU economy grew at a modest rate of 1.9%. It is expected to continue at a marginally lower rate in 2017. Positive indicators and hard data signal that the economic recovery is likely to continue, though at a marginally lower rate in 2017. Investment will only gain traction from 2018 onwards.

Steel demand continues to grow cautiously. Overall, the EU steel market expanded by 3.2% in 2016. However, for the fourth year in a row, imports grew more strongly than the actual EU steel market and again absorbed the modest increase in demand.

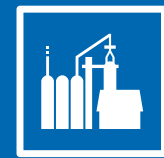
Indeed, the real economic news came in the form of the trade situation of steel. Total imports rose by more than 9% in 2016, hitting a multi-year peak. For the fourth year in a row, imports grew more strongly than the actual steel market in the EU. The growth in steel demand was almost entirely absorbed by imports. The share of these imports reached 24% of the EU market – an all-time record – in the second half of 2016. Historically, the share of imports has been around 17%. This shows the pressure European industry is facing given the degree of dumping and unfair trading practices by third country competitors.

The gradual recovery of the European steel industry is being hampered by this unfair trade. In the absence of structural solutions for excess global capacity and state subsidisation, overproduction will persist and will continue to severely distort world trade in steel. This being the case, remedial measures to restore fair trade conditions in the steel sector must prevail. EUROFER therefore continues to urge the European Commission to vigorously implement trade defence measures against dumping into the EU on an ongoing basis.

The need for the modernisation of Trade Defence Instruments (TDI) came even more sharply into focus in 2016. Whereas the dossier had been entirely blocked in the Council for many years, under the Slovak Presidency of the EU a compromise was pushed through.

The resulting TDI agreement included a set of conditions and thresholds for the lifting of the 'Lesser Duty Rule' (LDR) that are unrealistically hard to meet. The EU is one of the only major trading regions to apply the LDR. The rule cuts down duties to levels which often do not defend industry effectively against the injury caused by dumping.

The proposed change would allow countries that compete unfairly to avoid the anti-dumping measures without having to dismantle the majority of their trade distortions. Until a realistically applicable alternative is put forward, Europe's trade defences will continue to lack the efficiency and effectiveness required to see off unfairly cheap imports dumped on the domestic market from countries such as China, Iran, and Russia, among others.



A related challenge is what to do about China's claim to deserve Market Economy Status (MES). This is was not resolved in 2016, though a European Commission proposal was put forward in November of that year.

The European Commission proposal is for a modification of Europe's trade defence methodology that would remove the distinction under EU law between market and non-market economies. This opens the door to the possibility of case-by-case anti-dumping cases being carried out using a new 'non-standard' methodology that would use an approach close to that deployed in the US.

EUROFER is open to such a revised methodology, but has reservations about the feasibility of the approach taken in the proposal. Compared to the approach in the US the draft legislation abandons the established references to non-market economies which have justified the use of a non-standard methodology. Moreover, the new case-by-case assessment shifts the burden of proof for applying a non-standard methodology initially to the EU itself. EUROFER will be working hard on this legislative file during 2017.

In early 2017, the Waste Framework Directive proposal advanced through the Parliamentary stages. There have been ambitious and practical improvements over the earlier proposals. The EU must now take concrete steps to build a functioning Circular Economy in Europe. The issue of 'real' recycling is still not fully settled, though there has been progress. Recycling should be calculated at the stage where the sorted waste is actually processed into new products, though this has not yet been finalised.

Finally, the legislative process for EU ETS post-2020 reform peaked in early 2017 having been at the centre of EUROFER's activities for much of 2015 and 2016. Progress in the European Parliament was stable, with MEPs voting through a package which included some, though by no means all, of the elements necessary to establish a global level playing field for the steel industry. Member state policy makers have taken a more stringent approach that undermines the declared objective of improving the EU's global industrial competitiveness.

EUROFER strongly suggests that, at least at the level of the 10% most efficient steel installations, there must be no direct or indirect costs resulting from the EU ETS system. Not only do our foreign industrial competitors not face carbon costs, innovation to reduce emissions requires investment. An EU ETS that reduces the ability of even the best players in the market to finance low-carbon development is not fit for the post-2020 period. EUROFER thus continues to call for balance in climate and industrial policy, as well as support for the necessary investment.

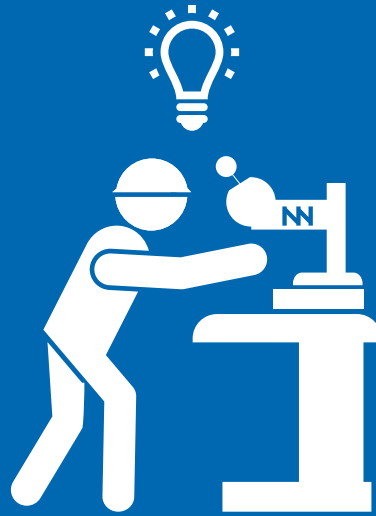
EUROFER and its members work hard to represent steel in Europe. As an industry we represent hundreds of thousands of highly-skilled employees working across Europe to deliver the most innovative steel products in the world. We need a stable and consistent policy environment with economic conditions to make this possible in the long run – and we continue to cooperate with policy makers to make this a reality.



Geert Van Poelvoorde
President



Axel Eggert
Director General



EU RECOVERY ON TRACK DESPITE UNCERTAINTIES IN 2016

The economic recovery in the EU remained on track in 2016. GDP grew by 1.9%, primarily driven by domestic demand and in particular private consumption which was supported by improving real disposable incomes, low interest and inflation rates and low energy costs.

In contrast, investment failed to gain significant momentum over the year, as economic and political uncertainty apparently outweighed positive influences, such as easing financing conditions, improving corporate profits and the ongoing strength of household spending. Business prospects were obscured by concerns about the economic health of China and other emerging economies as well as on the outcome of the Brexit referendum and of the presidential elections in the US.

However, the impact of the 'Leave' vote in the UK Brexit referendum on confidence was short-lived and rather minor. Sharp knock-on effects on economic activity and the euro were absent. Economic indicators gained strength towards the end of the year, as the Trump victory also failed to dent confidence.

EU ECONOMY WELL POSITIONED FOR ONGOING REBOUND IN 2017

The basic economic growth scenario is for the recovery to continue in 2017, albeit at a slightly slower growth rate than in the preceding two years due to fading tailwinds from very low oil prices and inflation. This is expected to result in private consumption growth moderating somewhat over the year. Improved prospects for global growth and, as a consequence

international trade, bode well for the EU export sector, with Eurozone entrepreneurs for the time being benefitting from the weakened euro.

STEEL USING SECTORS: AUTOMOTIVE INDUSTRY AGAIN BEST IN CLASS

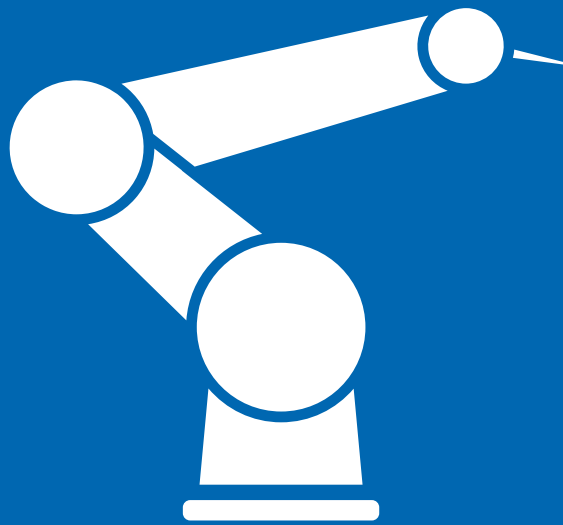
Having grown relatively strongly in the first half, activity in steel-using sectors gained only little momentum in the second half of 2016. Construction activity was particularly weak in Central Europe, with activity registering a double-digit decline. Mechanical engineering activity in the EU was also rather sluggish as a result of capital expenditure failing to gain traction. Meanwhile, activity in the transport equipment sector in general, and the automotive industry in particular, continued to expand at a robust pace. All in all, activity in steel-using sectors grew by 1.7% in 2016.

Prospects for 2017 are again mildly positive. Total production activity in steel-using sectors in the EU is forecast to expand by around 2%, supported by solid consumer demand in the EU and the export-oriented sectors benefiting from an expected strengthening of international trade.



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CRUDE STEEL PRODUCTION

Crude steel production in the EU amounted to 162 million tonnes in 2016, a reduction of 2.4% compared with 2015. This drop in output is largely explained by steel trade distortions in both the domestic and export markets of EU steel producers.

RISING IMPORTS ABSORB 24% OF EU STEEL DEMAND IN THE SECOND HALF OF 2016

EU apparent steel consumption grew by 3.2% over the full year 2016. Distributors trimming stocks, a common – largely seasonal – phenomenon in the second half of the year, weighed on the otherwise positive trend in real steel consumption in the third quarter. On balance, the total stock reduction in 2016 was slightly lower than in the preceding year.

In 2017, apparent steel consumption is forecast to continue to grow, albeit at a modest rate, thanks to the ongoing expected recovery in real steel consumption and the mildly positive impact of the stock cycle.

EUROFER's key concern is that the gradual recovery of steel demand in the EU market is being hampered by unfair trade. In the absence of structural solutions for excess global capacity and state subsidisation, overproduction will persist and will continue to severely distort world trade in steel. This being the case, remedial measures to restore fair trade conditions in the steel sector must prevail. EUROFER therefore urges the European Commission to continue to vigorously implement trade defence measures against dumping into the EU.

TRADE VOLUMES

Total imports in 2016 rose by 9% to the highest annual level since the previous peak in 2007. However, market conditions in 2007 were completely different from those in 2016 as they were characterised by strong growth in demand and in domestic deliveries by EU steel mills. For the fourth year in a row, imports grew more strongly than the actual steel market in the EU and yet again absorbed the modest increase in demand. In the second half of 2016, imports accounted for 24% of the EU market. Total finished product imports grew by 10% in 2016, with similar growth in the flat product and long product segments.

The major exporters in 2016 of flat products to the EU were China, the Russian Federation and South Korea, together accounting for 51% of total flat product exports to the EU. The main countries of origin for long products in 2016 were Turkey, the Russian Federation, Ukraine and Belarus. Their combined exports had a share of 56% in total long products exports to the EU.

At the product group level, a sharp rise was observed in the import of hot-dipped metal coated sheets (+48%), organic coated sheets (+17%), wire rod (+16%), merchant bars (+16%), and heavy sections (+44%).

EU producers will remain vulnerable to unfair imports entering the EU market in 2017. Fundamental problems, such as global excess capacity and government subsidisation, remain a threat to the balance of global steel markets. Without structural solutions at a global scale this will encourage the persistence of over-production, protectionist measures and trade diversion.



EU exports to third countries decreased by 11% in 2016. The drop in semis exports amounted to 62% whereas exports of finished steel products dropped by 6% year-on-year, with flat product exports falling by 5%, and long product exports by 7% year-on-year. In combination with the 9% increase in third country imports, the EU remained a net importer of steel products in 2016.

The total trade deficit amounted to 10.8 million tonnes in 2016; this deficit reflects net imports of semis and flat products and a trade surplus in long products.

Compared with 2015, the trade deficit in semis and, particularly, in flat products, increased significantly. By contrast, the trade surplus in long products fell over the period.

With regards to the main destination countries for EU products: Turkey and the United States were the key destinations for flat product exports. Algeria, Turkey and the US were the main destinations for long products.

For the time being, competitive pressures in the international markets for steel products remain intense. However, the global economy is showing signs of continued – though mild – recovery in 2017 and 2018. As a consequence, a slight recovery in global steel demand is to be expected, though without the necessary supply-side measures competitive pressures on the global steel market will remain extremely fierce.

DELIVERIES OF STEEL (ALL QUALITIES EXCEPT STAINLESS STEEL)

Total deliveries of finished products increased marginally in 2016. The very modest increase in domestic deliveries into the EU market was more or less nullified by the significant drop in export deliveries.

Total Steel Deliveries	0.5%
Of which to the EU28 market	1.6%
Of which to export markets	-6.2%

In 2016, total flat product deliveries stabilised at the level from the year before. While EU domestic deliveries grew by 1.2%, deliveries to export markets outside the EU fell by 7.2%.

Total Flat Product Deliveries	0.0%
Of which to the EU28 market	1.2%
Of which to export markets	-7.2%

Total long product deliveries increased only slightly. The 4.1% drop in export deliveries weighed down on the 2.4% growth in EU domestic deliveries.

Total Long Product Deliveries	1.1%
Of which to the EU28 market	2.4%
Of which to export markets	-4.1%



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STAINLESS STEELS

Following the global stagnation in stainless steel production in 2015, stainless steel melting by EU producers increased by 1.6% in 2016, falling slightly short of 7.3 million tonnes. Worldwide annual melting production for 2016 strongly increased to around 45.8 million tonnes, which represents a year-on-year increase of around 10.2%. This was driven by the 15.7% increase in Chinese production, which now accounts for around 55% of total worldwide production.

The EU market supply for stainless steel products increased by 6.6% in 2016. Total deliveries of stainless steel finished products by Community producers to the EU market increased by 5.6% year-on-year. Imports from third countries grew by 9.9%, reflecting the structural imbalance in Asia and the need for Asian producers to unload their excess capacities in Europe.

In the flat products segment, EU apparent consumption increased by 7.1% in 2016 compared with 2015. Imports from third countries grew to a larger extent, especially in the hot rolled products market, with an overall increase by 11.9%. European mills' deliveries increased by 5.7%.

In the long products category, market supply in the EU increased by 4.8% year-on-year as domestic supplies increased by 5.8%, while imports from third countries further increased by 2.5%.

Overall, despite the demand improvement registered in 2016, EU stainless steel companies will remain under pressure in 2017. This is primarily as a consequence of overcapacities in Asia, which have boosted EU imports of stainless steel products to an overall 23.1% market share in the EU28 market in 2016.



ALLOY SPECIAL STEELS (OTHER THAN STAINLESS)

The economic environment for alloy special steels slightly improved during 2016 compared to 2015. Although the automotive industry continued its robust growth, special steels demand from the mechanical engineering sector failed to gain strength. However, after stabilising at a low level during the year, the oil and gas industry began showing somewhat positive signals which may indicate a partial recovery in 2017.

The EU market supply of alloy special steels rose by 1.4% in 2016, with supplies from Union producers growing by 1.3% year on year and imports by 2.4%. At the same time, exports by European producers to non-EU markets dropped by 5.5%, resulting in the slight increase in total deliveries of around 0.7%.

EU producers' total deliveries of tool and high-speed steels declined by 4.1% in 2016. This development was not only

based on poorer EU28 domestic demand, down by 3.2%, but also on supplies to non-EU markets, which decreased by 5.7% year-on-year.

In alloy engineering steels, exports by EU mills to non-EU markets fell sharply, by 5.4%. By contrast, EU market supply improved by 1.6% compared with 2015, with deliveries from Union producers growing by 1.5%, and imports from third countries growing by 2.7%. On a product level the experience has been somewhat different, with the increase in the alloy engineering steel bars market supply of 1.5% being totally absorbed by imports from third countries, which also grew sharply by 11.5% year-on-year.

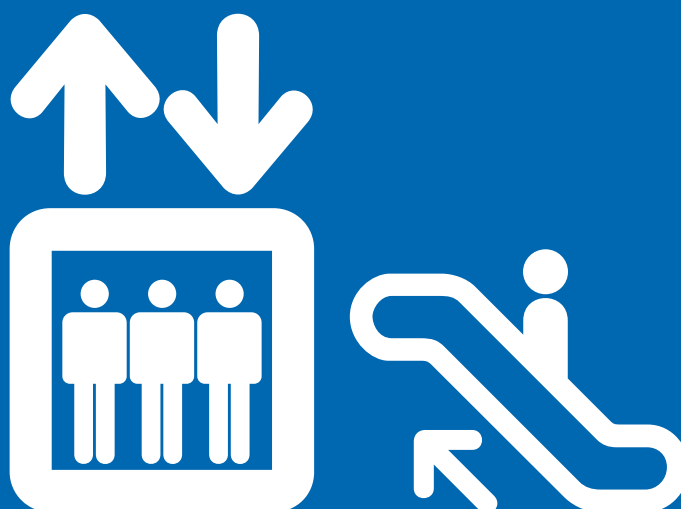


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TRADE DEFENCE INSTRUMENT MODERNISATION

The gradual recovery of the European steel industry is being hampered by unfair trade practices. In the absence of structural solutions for excess global capacity and state subsidisation, overproduction will persist and will continue to severely distort world trade in steel. This being the case, remedial measures to restore fair trade conditions in the steel sector must prevail. EUROFER therefore continues to urge the European Commission to vigorously implement trade defence measures against dumping into the EU on an ongoing basis.

As a consequence of sustained injurious dumping, the need to modernise and strengthen the EU's Trade Defence Instruments (TDI) has come even more sharply into focus since 2015. Whereas the Commission's proposal on TDI modernisation had been entirely blocked in the Council for many years, in the context of the steel crisis a Council compromise was pushed through under the Slovak Presidency.

While progress is usually a good thing, this compromise included a set of conditions and thresholds for the lifting of the 'Lesser Duty Rule' (LDR) that are arbitrary and unrealistically hard to meet for important steel segments.

The EU is the only major trading region that systematically applies the LDR.

EUROFER has called on member states to further improve the compromise proposal, including realistic percentage thresholds for the triggering of LDR adjustment.

MARKET ECONOMY STATUS OF CHINA

China's excess steel production and exports continue to distort markets worldwide. During 2016 a number of anti-dumping cases were concluded with measures imposed at various levels on a range of steel products. These have partially deflected the flood of imports directly from China into Europe, but the challenge of what to do about the country's claim to deserve Market Economy Status (MES) was not resolved in 2016, despite the 'deadline' date derived from China's World Trade Organisation (WTO) accession protocol.

In this context, the European Commission proposed a modification of Europe's trade defence methodology in November 2016 that would remove the distinction under EU law between market and non-market economies. This throws open the door to the possibility of case-by-case anti-dumping cases being carried out using a new 'non-standard' methodology that would use an approach close to that deployed in the US.

EUROFER is open to such a revised non-standard methodology being adopted in EU legislation. However, its effectiveness and workability, notably regarding the placing of the burden of proof and on access to the new methodology, will depend on the implementation practises developed by the Commission in individual cases.

EU TRADE CASES

In 2016, the EU finished steel trade balance turned negative driven by surging imports and declining exports.



EU imports have reached a record market share of 24% at the cost of EU domestic deliveries in a moderately but gradually growing European market.

Chinese steel imports fell by 19% in 2016, making up 22% of total EU finished steel imports, down from 30% of total imports in 2015. As trade defence measures are reducing the volume of Chinese imports into the EU, these imports are being systematically replaced by those from other countries, most notably Iran, India, Turkey and South Korea.

Given intensifying low-priced, unfair import competition, EUROFER strengthened its import monitoring to cover all basic flat and long steel products.

EUROFER has acted proactively, asking for the Commission to use additional tools available to it as part of the EU's trade defence armoury. This has included, for example, the opening of investigations based on a threat of injury. The registration of imports has been a part of every proceeding in which the legal requirements have been met. In the Cold-Rolled Flat steel case against China and Russia, the Commission collected duties retro-actively for the first time.

In 2016, final anti-dumping measures were imposed on imports of Chinese High Fatigue Performance Rebar, and on Chinese and Russian Cold-Rolled Flat products. Steel trade remedy actions were initiated on imports of Chinese Hot

Rolled Flat on the basis of threat of injury, both dumping and subsidy, Heavy Plate from China, Rebars from Belarus, Hot Rolled Flat from Russia, Ukraine, Brazil, Iran and Serbia, and on Corrosion Resistant Steel from China. In parallel, EUROFER requested an expiry review of the anti-subsidy measures applicable to imports of Stainless Steel Cold-Finished Bars from India, and the investigation was opened in April 2016.

PROLIFERATION OF THIRD COUNTRY STEEL TRADE AND MARKET DISTORTIONS

In the context of worsening global excess steel capacity and soft global steel demand, third countries are increasingly tackling import competition through a combination of increased tariff and non-tariff barriers (Mexico, India, Algeria, South Africa, US, etc.)

In December 2015, Algeria introduced an import quota combined with a non-automatic licence regime applicable on imports of rebar (a long steel product for reinforcing construction) and wire rod. This quantitative restriction, infringing the EU–Algeria Association Agreement, caps overall rebar and wire rod imports. The measures mainly impacts southern European countries. EUROFER has since called on the Commission to ensure the continuation of the preferential, duty-free market access to the Algerian market for rebar.



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IRON ORE

Iron ore spot prices strengthened over the year 2016.

The seaborne iron ore market began 2016 on a weak note. Steel market sentiment in China was depressed due to the absence of clear indications for an improvement in domestic demand conditions. Ahead of the Lunar New Year holiday in February 2016, there was some speculative buying in anticipation of better demand after the holiday period, pushing prices higher.

However, the situation changed significantly from March 2016. Chinese government stimulus measures aimed at slowing the downward trend in GDP growth started to have a positive impact on business activity. Measures included boosting credit growth, relaxing housing policies and expanding infrastructure spending. As a result, industrial and construction activity picked up steam over the March-April period. Spot prices for seaborne iron ore peaked in late April on the back of a rapid rise in Chinese domestic steel prices, with buyers looking to lock in ore costs before further increases occurred.

The global iron ore market came off the boil in May due to weaker sentiment, ample supply of ore and interventions by the Chinese authorities to cool down trading in ferrous futures.

From July to October, the market was rather volatile, with spot prices moving in a fairly narrow band. Since October iron ore spot prices have trended upwards on stronger downstream demand and steel pricing in China, as well as some inventory restocking. Demand for higher quality grades with low

impurities rose, allowing mills to reduce the use of expensive coking coal. Rallying coal, coke and steel prices led to ore sellers raising iron spot prices in November and December as spot supply remained tight. The '62% Fe' benchmark spot price for Chinese imports ended 2016 at around \$73/tonne.

HARD COKING COAL

Hard coking coal prices rallied in the second half of 2016 on supply shortage.

Coking coal buying activity was rather lively at the start of 2016, reflecting rather low coal inventory levels. Deals were transacted to re-stock in the lead-up to the Chinese New Year holidays

Prices nudged up late February, reflecting improving sentiment combined with domestic supply constraints in China after the holiday period. Coking coal prices rose up to the end of April on tight Australian and US spot supply, expected further rises in Chinese coking coal prices and robust steel margins. The market quietened in May as demand started to slow, leading to sellers offloading cargoes at more competitive prices.

Coking coal prices shot up very sharply in the third quarter of 2016 on tight supply. Not only was domestic supply in China reduced due to logistical problems and production cuts in the Shanxi mining region, but also due to accidents in Australian mines. Very low mill and port stocks pushed Chinese buyers into the seaborne spot market. After September, international buyers also joined the procurement spree. Coking coal prices continued their bull-run in October and first half of November. At the end of the year, buyers opted



for a wait-and-see position, which caused the spot price for premium hard coking coal FOB Port east coast Australia to soften to around \$240/tonne.

SCRAP PRICES

A correction in scrap prices in the second half of 2016 was led by Turkey.

Buying activity was quiet in January 2016, but prices began moving up in early February as buyers returned to the market. Prices remained range-bound until late April. Scrap prices surged in May owing to synchronised price rallies across the global steel markets making alternatives, such as billets, too expensive.

Falling domestic steel prices in China fuelled uncertainty

in May, and accordingly scrap prices remained flat in very quiet trading conditions over the summer period. Scrap prices began firming up again in late October as Turkish mills bought feedstock to cash in on stronger domestic demand for steel products. During the first half of November, scrap retained its competitive edge over billets and the BOF route, reflecting rising billet, coking coal and iron ore prices. BOF producers globally were also heard to be increasing the scrap ratio in their feed mix. This drove a strong upward trend in US and Japanese scrap prices. At the end of 2016, stabilising or falling prices of raw materials, steel products and futures in China, dampened the uptrend.

The scrap price in Europe (shredded, delivered) ended 2016 at approximately €240/tonne.



Raw Materials & Scrap Market

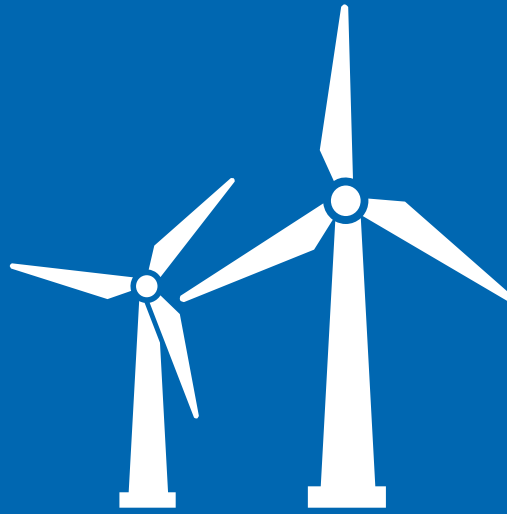
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CIRCULAR ECONOMY

The Circular Economy package launched by the Commission in 2015 has been deployed into the revision of different pieces of legislation in 2016 and EUROFER's action mainly focused on promoting the steel sector's position. Steel is a permanent material (British Standard Institution (BSI) standard 8905:2011), fit for the purpose of the Circular Economy whilst European steel producers are part of the foundation of an enhanced sustainability and Circular Economy.

EUROFER's input into the revision of the Waste Framework Directive and associated pieces of legislation has been focused on: promoting the market acceptance of steel co-generated products, getting recognition for the steel industry along the recycling value chain as a 'final recycler', and promoting a more holistic and risk-based approach when dealing with hazardous substances in products at their end-of-life and recycling phases. The Environment Committee of the Parliament supported parts of EUROFER's proposals. Further EUROFER advocacy actions are planned during the next legislative steps which will take place in 2017.



The European Commission proposed a new fertilisers regulation with the scope of promoting the use of more secondary raw materials for the production and commercialisation of fertilisers. The draft proposal was supported by EUROFER and by EUROSLAG. However, some member states proposed limiting the total chromium content of the fertiliser materials included in the regulation, de facto shutting off market access to some types of ferrous slag. EUROFER has initiated an advocacy action with member states in order to eliminate this limitation as it does not have a scientific basis. EUROFER action in 2017 will focus on the EU Parliament, where the text will be further discussed.

CHEMICALS



Raw Materials & Scrap Market

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2016 was marked by intense discussion of the chemical regulatory and legislative files that have either direct or indirect impact on the steel sector. In particular, the authorisation processes under REACH Regulation (EC) 1907/2006. Amongst others, the Commission prioritised the addition to the Authorisation List of Coal Tar Pitch High Temperature and Anthracene Oil. 2016 also saw the advancement of Directive 2011/65/EU, which deals with the Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS). EUROFER, together with the European General Galvanisers Association (EGGA), filed the application for the renewal of the 6a Exemption for lead in machining and galvanised steels followed by the necessary advocacy. EUROFER is also part of the Cross-Industry



Initiative (CII), through which joint industry efforts have resulted in, amongst other things, greater recognition by REACH authorities of Occupational Safety and Health (OSH) legislation as an appropriate alternative risk control measure for managing chemical risks at the workplace. Further work on the alignment between OSH and REACH will follow. In particular, the CII will seek to contribute to the development of criteria for when OSH should be used instead of applying REACH Candidate Listing and Authorisation.

WATER

EUROFER, together with three other study partners – the European Chemical Industry Council (CEFIC), the European Refinery Industry (CONCAWE) and the European Association of Mining Industries (Euromines) – undertook a Work Programme consisting of four packages to measure the content of free cyanides in natural water bodies. The existing analytical methodology for free cyanides is not sufficiently accurate to detect environmental levels of free cyanides in the required concentration range. Work Package 3 on the characterisation of parameters influencing cyanide levels in natural waters was finalised in 2016. EUROFER also committed to further work on the development of an Environmental Quality Standard (EQS) for iron. Chronic tests on iron and aluminium toxicity studies were completed in 2016 which will further contribute to compliance with requirements for the establishment of this EQS for iron.



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AIR POLICY REVIEW

The revised National Emissions Ceilings Directive (NEC-D) was published in the EU Official Journal at the end of 2016. During the legislative process, EUROFER stressed the importance of recognising that there are several sources of air pollution (traffic etc) and the principle of fair burden sharing/contribution. EUROFER supports a share for the industry aligned with the Best Available Techniques (BAT) principle, rejecting any proposal of measures beyond the BAT level (BAT meaning that which is technically and economically feasible). Each member state will now draw up and implement national air pollution control programmes.

The revision of the mercury strategy is on-going at EU level. The advocacy actions undertaken by EUROFER have aimed

to avoid any overlapping and inconsistency with the existing BAT conclusions for the iron and steel sector (Commission Implementing Decision 2012/135/EU) in the context of the Better Regulation package from the Commission.

Other issues were the publication of the Council Decision accepting the amendments of the Long-Range Transboundary Air Pollution (LRTAP) on Heavy Metals and Persistent Organic Pollutants (POPs) as well as the on-going discussions on REFIT (Regulatory fitness) on nature legislation. The EUROFER secretariat will continue monitoring related legislation in 2017.

BEST AVAILABLE TECHNIQUES REFERENCE DOCUMENTS (BREFS)

Under the Industrial Emissions Directive (IED), decisions on Best Available Techniques (BAT) conclusions establish the legal reference for the Emission Limit Values in the permits. As a result, the establishment of BREFs has gained increased importance.

During 2016 the Final Draft of the LCP (Large Combustion Plant) BREF and the European IPPC Bureau (EIPPCB) assessment of the EUROFER split views were released. The EIPPCB considered that there are enough appropriate technical arguments to support some of the critical EUROFER split-views (mainly adaptations to some of the BAT-AELs footnotes on NO_x, SO₂ and dust, due to the particularities of iron and steel process gases (both in terms of quality and quantity). EUROFER advocacy actions have focused on having these amendments embedded in the BAT conclusions (future Commission Implementing Decision). Meetings have been organised with Commission services and Cabinets. The IED Article 75 Committee vote is expected during the first semester of 2017.

At the end of 2016 the kick-off meeting of the Ferrous Metal Processing (FMP BREF) took place to agree on the scope of the revision and the identification of the Key Environmental Issues (KEIs). EUROFER FMP Shadow Working Groups on Hot Rolling, Cold Rolling and Hot Dip Galvanizing are involved in this important file. During 2017 the data collection from the best performing plants will take place, as well as the initial update of the BAT candidates.

For the Surface Treatment Using Solvents (STS) BREF, the European Coil Coating Association (ECCA)/EUROFER shadow working group is handling the revision process. Data collection finished at the end of last year and now EIPPCB and Technical Working Group members have started to analyse the information collected. EIPPCB will release the so



called Draft 1 (D1), including the initial proposal for the BAT conclusions during 2017.

For the Waste Treatment (WT) BREF EUROFER and its members provided comments for the 'D1'. In early 2017, EIPPCB released the background paper and the revised proposal for the BAT conclusions were discussed by the Technical Working Group at the final meeting that took place at the end of March 2017.

The EUROFER secretariat has also started working on the potential impact for the steel sector of the current Commission proposal on Waste Gas Treatment in the Chemical Sector (WGC) BREF. A call for initial positions for the Technical Working members was released by the EIPPCB and EUROFER and its members are working to provide timely input. The kick-off meeting of the Technical Working Group will take place during this year to define the scope of the revision process.



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PRODUCT RELATED ENVIRONMENTAL ISSUES

Life Cycle Thinking continues to be a central theme of product environmental policy making. EUROFER is actively engaged in several ongoing legislative and pre-legislative initiatives. In 2016 the association welcomed two important standardisation requests from the Commission. The first is in relation to the resource efficiency characteristics of energy related products. EUROFER is participating in the joint CEN/CENELEC TC10 to help develop standards for the calculation of the durability, reparability and recyclability of products. The second mandate from the Commission seeks to better align current standards on the environmental assessment of construction products, in particular by amending EN

15804 on Environmental Product Declarations (EPDs) so that they align more closely with the Product Environmental Footprint (PEF) methodology. The mandatory inclusion of the end-of-life benefits of material reuse and recycling, and the clarification of the reporting of emissions from waste recovery operations, is essential in ensuring the credibility of EPDs and their contribution to a more resource efficient supply chain. The full recognition of the value of iron and steelmaking slag by-products in reducing emissions and improving resource efficiency in other sectors is also required.

A related Joint Research Centre (JRC) project on Environmental Indicators for Resource Efficient Buildings aims to promote alignment of existing building assessment methods into a common set of lifecycle based indicators. It will also integrate relatively new aspects of design for adaptability, disassembly and recyclability. EUROFER is a member of the expert advisory group and we expect the final set of indicators to be published in the summer of 2017. As well as participating in these initiatives directly, EUROFER continues to coordinate construction sector-related activities through the Metals for Buildings platform and with worldsteel.

The Product Environmental Footprint pilot projects are coming to an end in 2017 and so it will be important to consolidate the past three years' conclusions into the final product category rules for metal sheet. In particular, the recognition of the environmental benefits of recycling materials at the end-of-life in the circular footprint formula is positive. The work being done to recognise limitations and improve the robustness of certain impact categories – such as eco-toxicity and resource depletion potential – is also welcome.

In 2017, new proposals to limit CO₂ emissions from vehicles from 2021 onwards will be published. In recognition of the growing importance of embedded emissions, EUROFER expects to see incentives to consider the full lifecycle emissions form part of the proposals.



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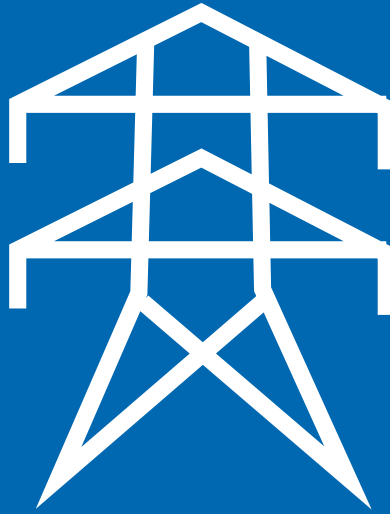


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16 CLIMATE CHANGE & ENERGY



REVIEW OF THE EU EMISSIONS TRADING SYSTEM POST 2020

During the last year the Commission proposal has been widely debated and analysed by the co-legislators. EUROFER has been deeply involved in the debate, taking part in several events, conferences and hearings organised in the European Parliament. In order to contribute to a transparent and fact-based discussion, we have supported third party studies on the projected impact of the EU ETS legislation, as well as on the sector's exposure to international competition and cost pass-through. Examples of this engagement are the studies published by Ecofys and NERA Consulting.

EUROFER position's on the EU ETS revision is that the system should not lead to direct or indirect carbon costs at the level of 10% most efficient installations in sectors at risk of carbon leakage.

In the European Parliament, the Industry Committee adopted its opinion in October 2016, while the Environment Committee voted on its report in December. The European Parliament adopted a significant number of amendments over the initial Commission EU ETS proposal on 15 February 2017, followed by the Council on 28 February 2017. While the Parliament's changes improved the proposal somewhat, the Council's proposals would seriously threaten the steel industry's competitiveness.

Trilogue negotiations with the Commission are now under way (at the time of writing). EUROFER will continue to be involved in the debate and represent the sector's voice to relevant policymakers.

ENERGY UNION STRATEGY

Last year the Commission began the implementation of the Energy Union Strategy by launching several public consultations. These consultations are on key pieces of legislation that will be reviewed or introduced soon in the field of energy efficiency, renewables, market design, and EU governance. EUROFER contributed to these consultations by developing papers that reflect the sector's perspective.

EUROFER has stressed that high EU energy and regulatory costs hamper recovery and investment in the sector. The availability of affordable and competitively priced energy is of foremost interest for energy-intensive industries, including steel. There must be a clear commitment by the EU to effectively reduce the gap in industrial energy prices and costs between the EU and its main competitors.

In particular, the EU should develop a cost-effective strategy for the decarbonisation of power generation. The full offset of indirect EU ETS costs passed on energy prices should be possible for energy intensive sectors such as steel, as well as exemptions from taxes, levies, including grid levies, and other costs relating to the support and development of low carbon generation. EU policies must not constrain member states from exploiting indigenous energy resources, including unconventional gas.

In November 2016 the European Commission published the 'Clean Energy for All Europeans' package, which included proposals on the Renewable Energy Directive, Energy Efficiency Directive, Energy Efficiency of Buildings Directive,



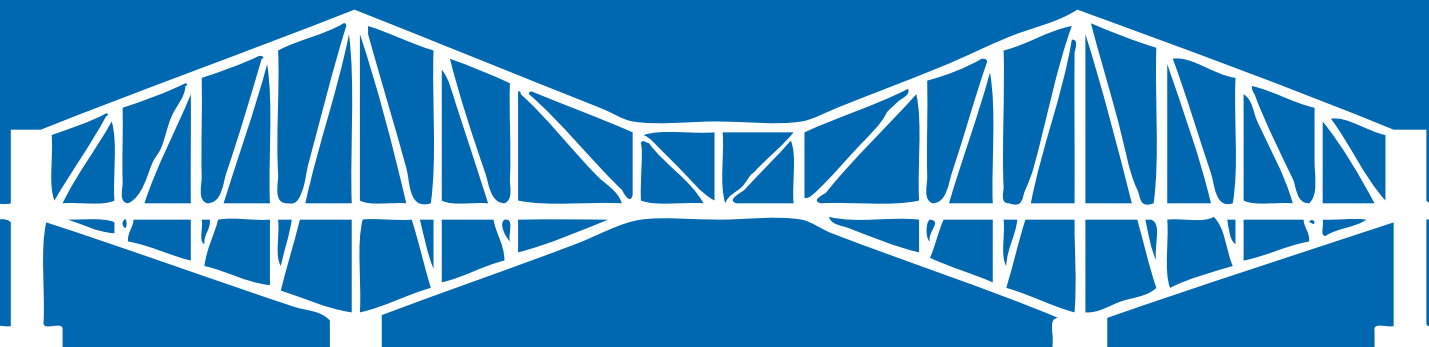
Electricity Market Design (Electricity Regulation and Directive Regulation on Risk Preparedness, Regulation establishing a European Union Agency for the Cooperation of Energy Regulators), Ecodesign, and the Regulation on the Energy Union's Governance. The package included also a report on energy prices and costs in several energy-intensive sectors including steel, to which EUROFER members contributed by supplying relevant data in the course of the year. EUROFER will represent the concerns of the sector in the upcoming decision making process on these pieces of legislation.



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18 SUSTAINABILITY



STRATEGY

Steel is a sustainable, permanent material. This is particularly the case when its recycling characteristics are taken into consideration. Sustainability assessment and reporting is an important part of further developing a strategy for steel being produced in the EU. Most EUROFER members are very active in this process and they demonstrate their accountability in annual reports either in a separate Corporate Social Responsibility reports or as part of their integrated company reports. By doing so, they address issues highlighted by their different stakeholders.

EUROFER's stakeholders - besides its own members - include the European institutions, up and downstream businesses in the steel industry's value chains, banks, research centres and academia.

In 2015, for the first time, a coherent sustainability strategy was established in EUROFER with the objective of developing an overarching narrative on, as well as specific initiatives for, sustainability.

This strategy is based on 4 agreed principles:

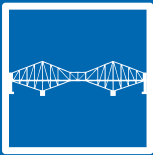
1. support for steel as a sustainable and permanent material;
2. support for steel made in Europe and the EU steel industry as a sustainable producer;
3. recognition that each steel sector segment faces specific market environments wherein the very concept of 'sustainability' may require different approaches;
4. understanding that specific sustainability initiatives undertaken by a given segment must fit into the overall steel strategy and must not negatively affect the work done in other segments.

Based on these principles the EUROFER Sustainability Credentials Working Group published, in April 2016, the first sustainability vision document. Entitled 'Steel: the Backbone of Sustainability in Europe', this 'vision paper' reflects on the contribution of the sector to the socio-economic growth, sustainable production and products, and the circular economy. The vision grew up from the interplay between EUROFER's expertise and the intense interaction with sustainability professionals in the European steel industry, as well as consultation with the most important stakeholders. In this publication, EUROFER examines global industry trends in sustainability.

The first in depth analysis of this sustainability vision took place in October 2016 at an internal workshop on 'Steel in the Circular Economy' organised in Brussels by EUROFER and the European Steel Technology Platform (ESTEP). This workshop was attended by 75 steel sustainability professionals. The keynote speaker was Professor Julian Allwood from Cambridge University. Professor Allwood is a highly respected expert on sustainability, with a particular focus on material flows and the future of the metals industry in Europe. The outcome of this workshop will lead to a Sustainability Roadmap towards 2025 and more sustainability oriented external activities and events in 2017.

REBAR WORKING GROUP AND THE SUSTSTEEL PROJECT

An initiative on rebar - based on the SustSteel project - with the aim of having a European standard established, began in 2015. This initiative fits in with the overall sustainability strategy and the process will only be applicable to rebar within the limits of the agreed sustainability principles. Currently, European Commission services are proceeding with further analysis of the elements of environmental



sustainability, resolving how to introduce them in the mandate (amendment of the 'M115' in the Construction Product Regulation) at hand (and later on in the future EN 10080).

In the meantime, the 'Sustainability for Steel Construction Products Mark' (SustSteel) project continues as a voluntary certification scheme.



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20 STAINLESS & SPECIALTY STEELS



STAINLESS STEELS: HEALTH AND ENVIRONMENT

The most important health and environment issues for the European stainless steel industry in 2016 were the continued struggle towards harmonised compensation for CO₂ pass-through costs of the necessary magnitude for stainless steel produced in Electric Arc Furnaces (EAF), and the effort to gain a level playing field in the European energy market.

Stainless steel is probably one of the finest examples of a metal in the circular economy. Thanks to its high intrinsic value almost all stainless scrap is collected and re-melted, and relatively little is lost. This influences the carbon footprint of stainless in a very positive way by reducing the direct emissions of the steel's production. However, due to limited scrap availability in Europe it remains necessary to produce stainless steels out of virgin materials, such as ferrochromium and ferronickel. Most of these virgin materials are imported from outside the EU. Accordingly, the CO₂ footprint of stainless is occurs mainly in the upstream business.

ABOUT STAINLESS STEEL

Stainless steel is the term used to describe a remarkable and extremely versatile family of steel grades, which are known for their corrosion and heat resistant properties. All stainless steels contain iron as the main element, and a minimum of 10.5% chromium. At this level, chromium reacts with oxygen and moisture in the environment to form a protective, adherent, and coherent oxide film which envelopes its entire surface. The passive layer on stainless steels exhibits a truly remarkable property: when damaged, it self-repairs as the chromium in the steel reacts rapidly with oxygen and

moisture in the environment to reform the protective layer. Increasing the chromium content beyond the minimum of 10.5% confers even greater corrosion resistance.

Besides chromium, nickel is another of the main alloying constituents in many stainless steels. The addition of 8% or more nickel modifies the mechanical properties and improves corrosion resistance further, as does the addition of molybdenum and other substances. The use of chromium and nickel as alloying constituents ensures corrosion resistance, longevity, durability and clean-ability. Due to their characteristics, stainless steel is widely applied in a wide range of products in the food industry, medical devices, kitchen utensils, cutlery, automotive- and aerospace industries, construction materials, toys and furniture.



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GLOBAL HARMONISED SYSTEM

The Global Harmonised System (GHS) for classification was set up at OECD/UN level and has been in use in Europe since 2009 under the Regulation on the Classification, Labelling and Packaging of products (CLP). Nickel is one of the few metals which has been classified. The case of nickel is highly illustrative of the difficulty in classifying metals. It is classified as carcinogenic (category 2, suspected for humans) by inhalation. However, inhalation is only possible if the material is in powdered form – in 'massive' form inhalation is obviously impossible. For the time being it has not been possible to discriminate within the classification by forms. Nickel is also classified as a skin sensitiser and as having specific target organ system toxicity.

COBALT



In addition to this existing classification, in April 2016 the National Institute for Public Health and the Environment in the Netherlands (RIVM) submitted a classification to the European Chemicals Agency (ECHA) to consider, which is currently being processed.

The proposal as it stands, classifies cobalt metal as:

- **Carcinogenic (C)** category 1B H350 (for all routes of exposure) with a Specific Concentration Limit (SCL) of 0.01%
- **Mutagenic (M)** category 2 (H341)
- **Reprotoxic (R)** category 1B (H360F)

Until now, the available data only has supported the classification of cobalt metal as a category 1B carcinogen H350i (inhalation only), as reflected in the industry's self-classification under its REACH obligations.

Normally, cobalt is not intentionally added. It is present in steel because it is naturally present in the raw materials or the scrap metal used to make it. The concentrations in steel, either stainless or carbon, are usually much less than 1% but higher than the proposed SCL. In some cases cobalt is added to obtain specific desirable characteristics in the final steel product. This cobalt is not bio-available as the cobalt atoms are firmly sequestered in the metal matrix of the steel (alloy) itself. EUROFER is involved in a project to demonstrate this limited bio-availability using bio-elution testing.

The steel industry agrees that cobalt metal should be classified as Carcinogenic (C) Category 1B based on the available evidence, but only for the inhalation route. There is no demonstrable evidence to suggest that it is a carcinogen via other routes, and nor is there evidence that it is mutagenic or reprotoxic.

If the Netherlands' proposal were to be adopted, these classifications would have significant and negative consequences for steel. This would particularly be the case for stainless steels, high-alloy steel, superalloys and their secondary feed materials, as well as for the critical applications in which they are used.

EUROFER has submitted information on the socio-economic impact of this proposal to the Public Consultation, and supports the Cobalt Development Institute and Team Stainless¹ in its scientific argumentation against this proposal to limit the classification to Carcinogenic 1b H351 I (inhalation only).



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¹ Team Stainless is a cooperation between the International Stainless Steel Federation, EUROFER, International Nickel Study Group, Nickel Institute, International Chromium Development Association and the International Molybdenum Association stimulating the use of stainless steel globally



EUROFER POSITION PAPER ON TRANSPORT

In 2016 EUROFER developed its first position paper on transport called, 'Priority transport issues for the European steel industry'. The paper aims to highlight the role transport plays in the competitiveness of the steel industry. Steel transport and logistics operations take place within a diverse and complex European Union with different member state traditions, customs and rules. The key areas in the field of transport are identified, including those which have a direct impact on the steel industry's operations within the different modes of transport it uses: road, rail, inland waterway and maritime transport.

In each priority transport area within the different modes the current challenges are highlighted and suggestions for the policy makers provided. Some already have recent legislation in place and some have regulation waiting to be revised in the near future. The paper therefore not only provides suggestions for improvements based on experience but also provides valuable input from a shipper's point of view for the policy makers to take into account in their legislative work.

Other general priority transport issues are also mentioned in the position paper, such as the Trans-European Transport Network (TEN-T) comprising of roads, railway lines, inland waterways, inland and maritime ports, airports and rail-road terminals throughout the EU Member States. In addition, digitalisation and traceability will play an increasing role in the future of transport operations.

ROAD TRANSPORT

In 2017 EU's road transport legislation will see major

revisions taking place, especially in the areas of access to the profession and to the road haulage market, social aspects and enforcement and, road charging which together form the 'Mobility Package, Road Initiatives' package to be launched later this year. EUROFER therefore continues to actively monitor issues, such as supporting a European transport area consisting of border controls (refugees crisis, Schengen, etc), rest time and minimum wage regulations for drivers (cabotage legislation), driver shortages and short-term capacity problems, strikes, tax and social dumping within EU countries (letter box companies), infrastructure pricing with Eurovignette implementation and standardisation of automatic payment devices (European Electronic Toll Service (EETS)). In addition, emphasis is given to the weights and dimensions of vehicles in international transport which still create obstacles in cross-border transport and in finding solutions for congestion problems around urban areas.

RAIL TRANSPORT

The legislative work on the Fourth Railway Package was finished in 2016, however many challenges still remain. The steel industry, as a shipper of heavy goods, has historically had extensive cooperation with rail where the structural capacity problem of freight trains – particularly in busy corridors – is notable. EUROFER priority areas therefore include Rail Freight Corridors (RFC) and improving the interoperability of the national railway systems. This is the key issue for the development of international rail freight's success and attractiveness for shippers. Single wagon services also continue to form an essential part of rail transport for steel, with some steel producing countries transporting almost half of their dispatched goods via the single wagon system. There numerous challenges exist, particularly in the form of



the cancellation of single wagon services in certain areas in the EU. In addition, the reduction of railway noise will be one of the issues to be tackled in the near future. In the EU, with both densely and sparsely populated areas and diverse natural conditions, a 'one size fits all' solution will not be feasible, especially with regards the costly replacement of cast iron brakes with composition brake blocks.

BARGE AND INLAND WATERWAY TRANSPORT

Inland navigation is an important mode of transport in many central European member states. It is therefore one of EUROFER's priority modes, one which has its own specific challenges. Neglected infrastructure, natural events, and aged locks and ship lifts all are obstacles to establishing a reliable transport service. Investment in specific barge sizes and the cost-effective modernisation of inland vessels are also emphasised.

MARITIME TRANSPORT

Maritime transport remains one of the key areas for EUROFER, particularly regarding the EU Ports Regulation which was adopted in 2016. Europe's ports are vital gateways, linking its transport corridors to the rest of the world. For the steel industry they are key to its sustainability as raw material supply and shipments overseas are basic elements of its business operations. New investment, the enhanced efficiency of port operations, high-quality services and the improved governance of European ports are vital. Dockside services (cargo operations in ports) are another important dimension that plays a major part in the overall

cost structure of sea freight for shippers. These operations should offer better handling capacity in terms of loading/unloading rates and appropriate costs. EUROFER advocates that these services should be fully liberalised and harmonised at European level, especially regarding contracting regulation, flexibility and professional qualifications. The International Convention for the Safety of Life at Sea (SOLAS) convention for the weighing of containers came into force on 1 July 2016. This sets a mandatory 'Verification of the Gross Mass' of a container without which the carriers will not accept containers on board. EUROFER followed this issue as it was a big change from previous operations and a transition time was needed in order to avoid possible problems due to the ports having to fine tune their systems and procedures. Other maritime issues EUROFER follows closely are those related to European climate protection policies (including a possible maritime transport EU ETS), emission control areas and improving the availability of vessels operating bulk & general cargo.

OTHER TRANSPORT RELATED ISSUES

EUROFER re-joined the European Shipper's Council in 2016 and actively participates in its Maritime, Railway and Inland Transport Councils, as well as in the Transport Working Group of BusinessEurope.



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EMPLOYMENT IN THE STEEL SECTOR

In 2016, the employment level in the European steel industry declined slightly to approximately 318,000 direct employees. This is down compared to the figure of 322,000 recorded in 2015.

ACTIVITIES OF THE SECTORAL SOCIAL DIALOGUE COMMITTEE ON STEEL

The Sectoral Social Dialogue Committee (SSDC) on Steel seeks to contribute to the sustainability and competitiveness of the steel sector in Europe. EUROFER and the industriAll European Trade Union, the social partners in the SSDC, have built up a shared understanding and mutual trust since 2006.

In 2017, Mr Michael Bach (IG Metall) was nominated chairman of the Sectoral Social Dialogue Committee on Steel, succeeding Mr Robert Joos (GSV), who chaired the Committee for two years.

STRUCTURAL CHANGE

In 2016, EUROFER and industriAll continued to share views on topics of mutual interest, in particular the improving of EU industrial competitiveness compared to that of its non-EU competitors.

Topics discussed also included energy and climate policy, with a special focus on the revision of the EU Emission Trading Scheme, the evolution of the EU steel market, the latest developments in the modernisation of Trade Defence Instruments, and the European Commission proposal on a non-standard anti-dumping duty calculation methodology (published on 9 November 2016).

The following joint initiatives were undertaken by EUROFER and industriAll:

- European Industrial Manifesto for Free and Fair Trade was signed by employers and employees from manufacturing sectors, among which EUROFER and industriAll, in February 2016.
- A joint position on the Review of the EU ETS post 2020: reconciling climate ambition with industry's competitiveness and employment, in November 2016.

TRAINING AND EDUCATION

The recent Commission's Blueprint Skills Agenda pilot project is a new framework for strategic cooperation between key stakeholders to develop concrete actions to satisfy short and medium term skills. The idea is to support a selection of sectors (including the steel industry). In light of this blueprint, the Committee discussed joint involvement in this new initiative. The project will potentially begin in early 2018.

HEALTH AND SAFETY

The EU Social Partners discussed the possibility of refreshing this working group. This could begin by exchanging best practices on health and safety. A clear working programme should be defined and agreed upon by the Committee in 2017.



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GLOSSARY OF ACRONYMS

ACER – European Union Agency for the Cooperation of Energy Regulators	OECD – Organisation for Economic Cooperation and Development
BAT – Best Available Techniques	OSH – Occupational Safety and Health
BAT-AELs – Best Available Techniques - Associated Emission Levels	PEF – Product Environmental Footprint
BREFs – Best Available Techniques Reference Documents	POPs – Persistent Organic Pollutants
BREF-FMP – Ferrous Metal Processing BREF	REACH – Registration, Evaluation, Authorisation and Restriction of Chemicals
BREF-LCP – Large Combustion Plants BREF	REFIT – Regulatory Fitness and Performance programme
BREF-STs – Surface Treatment Using Solvents BREF	RFC – Rail Freight Corridors
BREF-WGC – Waste Gas Treatment in the Chemical Sector BREF	RoHS – Restriction of Hazardous Substances Directive
BREF-WT – Waste Treatment BREF	SCL – Specific Concentration Limit
BSI – British Standards Institution	SO₂ – Sulphur Dioxide
BusinessEurope – Confederation of European Business	SOLAS – International Convention for the Safety of Life at Sea
CEPIC – European Chemical Industry Council	SSDC – Sectoral Social Dialogue Committee
CEN – European Committee for Standardisation	TDI – Trade Defence Instruments
CENELEC – European Committee for Electrotechnical Standardisation	TEN-T – Trans-European Transport Network
CII – Cross-Industry Initiative	UN – United Nations
CLP – Regulation on the Classification, Labelling and Packaging of products	US – United States of America
CONCAWE – European Refinery Industry	WTO – World Trade Organisation
CSCF – Cross Sectoral Correction Factor	
EAF – Electric Arc Furnace	
ECCA – European Coil Coating Association	
EETS – European Electronic Toll Service	
EGGA – European General Galvanizers Association	
EIPPCB – European Integrated Pollution Prevention and Control Bureau	
EPDs – Environmental Product Declarations	
EQS – Environmental Quality Standard	
ESTEP – European Steel Technology Platform	
EU – European Union	
EU ETS – European Union Emissions Trading System	
EUROFER – European Steel Association	
Euromines – European Association of Mining Industries	
GHS – Global Harmonised System for classification	
GSV – Groupement de la Sidérurgie - Staalindustrie Verbond	
IED – Industrial Emissions Directive	
IG Metall – Industriegewerkschaft Metall	
industriAll – European Trade Union	
IPPC – Integrated Pollution Prevention and Control	
ISSF – International Stainless Steel Forum	
JRC – Joint Research Centre	
KEIs – Key Environmental Issues	
LDR – Lesser Duty Rule	
LRTAP – Long-Range Transboundary Air Pollution	
MES – Market Economy Status	
NEC-D – National Emissions Ceilings Directive	
NO_x – Nitrous Oxides	



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Companies

Acciaieria Arvedi	http://www.arvedi.it
Acerinox	http://www.acerinox.es
AG Siderurgica Balboa	http://www.grupoag.es/siderurgicabalboa_en/empresa/empresa.php
Aperam	http://www.aperam.com
ArcelorMittal	http://www.arcelormittal.com
Badische Stahlwerke	http://www.bsw-kehl.de
Celsa Group	http://www.gcelsa.com
CMC Poland	http://www.cmcpoland.com
Deutsche Edelstahlwerke	http://www.dew-stahl.com
Dillinger Hütte	http://www.dillinger.de
Duferdofin Nucor	http://www.duferdofin.it
FNsteel Group	http://www.fnsteel.eu
Georgsmarienhütte	http://www.gmh.de
Halyvourgiki	http://www.halyvourgiki.com
Helliniki Halyvourgia	http://www.hlv.gr
ILVA	http://www.gruppoilva.com/
ISD Dunafer	http://www.dunafer.hu
ISD Huta Czestochowa	http://www.isd-hcz.com.pl
Lech-Stahlwerke	http://www.lech-stahlwerke.de
Marienhütte	http://www.marienhuette.at
Metinvest Trameal	http://www.trameal.it
NLMK Europe	http://www.eu.nlmk.com
Officine Tecnosider	http://www.officinetecnosider.it
Outokumpu	http://www.outokumpu.com
Promet Steel JSC	https://www.promet.metinvestholding.com/en
Riva Forni Elettrici	http://www.rivafe.com
Saarstahl AG	http://www.saarstahl.de
Salzgitter AG	http://www.salzgitter-ag.de
Sidenor	http://www.sidenor.gr
Siderurgia Nacional - Empresa de Produtos Longos SA	
SIJ - Slovenian Steel Group	http://www.sij.si
Stahlwerk Thüringen	http://www.CSN-sections.com
Štore Steel	http://www.store-steel.si
Tata Steel Europe	http://www.tatasteeleurope.com
ThyssenKrupp AG	http://www.thyssenkrupp.com
Třinecké Železářny	http://www.trz.cz
U.S. Steel Košice	http://www.usske.sk
Vitkovice Steel	http://www.vitkovicesteel.com
voestalpine	http://www.voestalpine.com



National Associations

AUSTRIA	Fachverband der Bergwerke und Eisenerzeugenden Industrie https://www.wko.at/branchen/industrie/bergwerke-stahl/start.html
BELGIUM	Groupement de la Sidérurgie - GSV http://www.steelbel.be
BULGARIA	Bulgarian Association of the Metallurgical Industries - BAMI http://www.bcm-bg.com/index.php
CZECH REPUBLIC	Hutnictvi Železa http://www.hz.cz
FINLAND	Metallinjalostajat http://www.teknologiateollisuus.fi/
FRANCE	A3M - Alliance des Minerais, Minéraux et Métaux http://www.a3m-asso.fr/ Chambre Syndicale des Producteurs d'Aciers Fins et Spéciaux http://www.spas.fr
GERMANY	Wirtschaftsvereinigung Stahl http://www.wvstahl.de Edelstahl-Vereinigung http://www.stahl-online.de/stahl_zentrum/edelstahl_vereinigung_e_v.htm
GREECE	Hellenic Steelmakers' Union - ENXE
HUNGARY	Magyar Vas-és Acélpári Egyesülés http://www.mvae.hu
ITALY	Federacciai http://www.federacciai.it
POLAND	Hutnicza Izba Przemysłowo-Handlowa http://www.hiph.com.pl
ROMANIA	Uniunea Producătorilor de Oțel din România – UniRomSider
SPAIN	Unión de Empresas Siderúrgicas - UNESID http://www.unesid.org
SWEDEN	Jernkontoret http://www.jernkontoret.se
UNITED KINGDOM	UK Steel http://www.uksteel.org.uk

ASSOCIATE MEMBERS

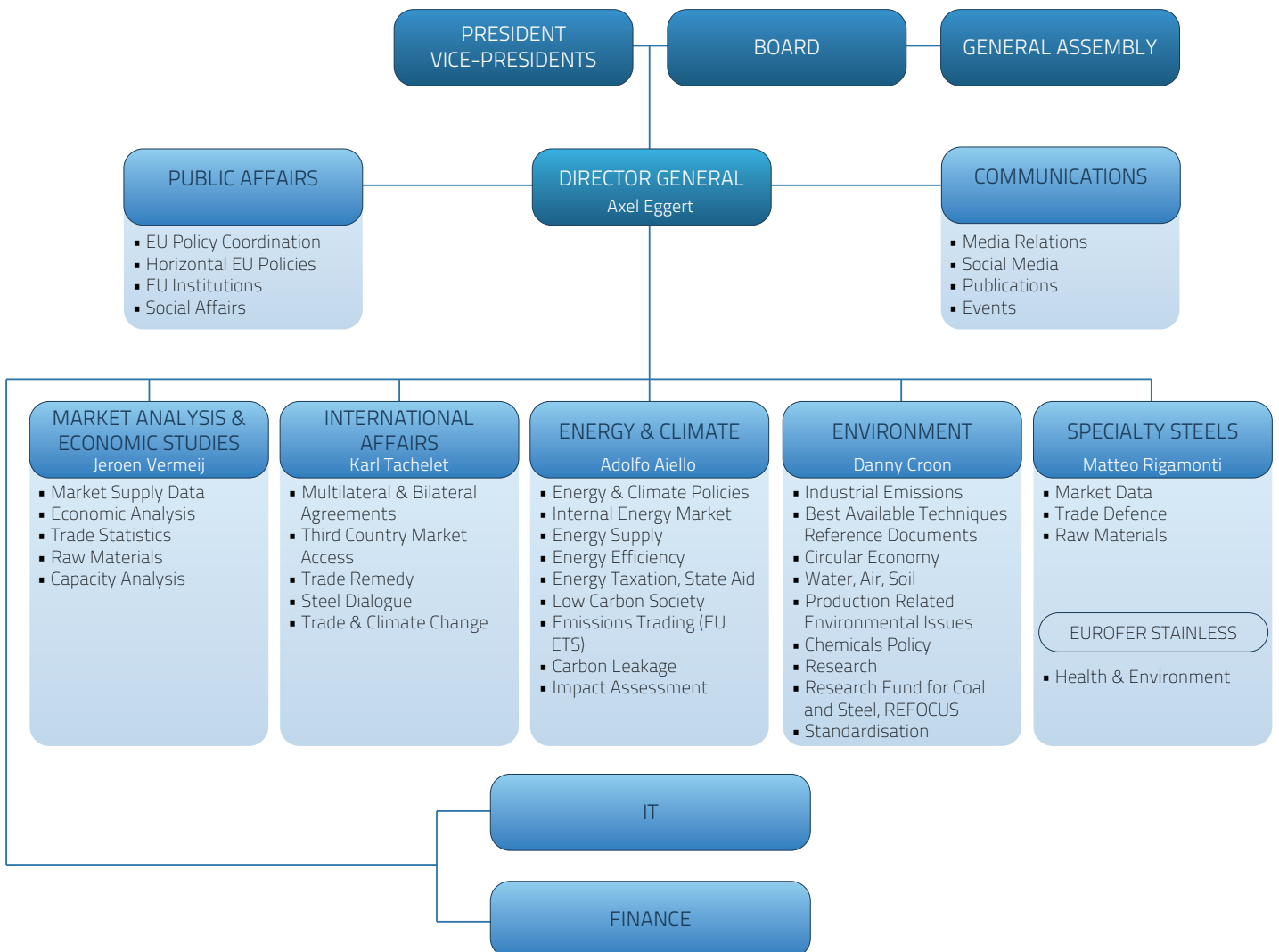
Çolakoglu Metalurji	http://www.colakoglu.com.tr
Türkiye Çelik Üreticileri Derneği - TÇÜD	http://www.dcu.org.tr
Diler Demir Çelik Endüstrisi ve Ticaret	http://www.dilerhld.com/diler_demircelik/index.html
Erdemir - Ereğli Demir ve Çelik Fabrikaları	http://www.erdemir.com.tr
Isdemir - Iskenderun Demir ve Çelik Fabrikaları	http://www.isdemir.com.tr
Swiss Steel	http://www.swiss-steel.com

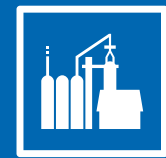
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Alloy Engineering Long Products
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 Zinc & Tin

ORGANIGRAMME





ABOUT THE EUROPEAN STEEL ASSOCIATION (EUROFER)

EUROFER is located in Brussels and was founded in 1976. It represents close to the entirety of steel production in the European Union. EUROFER members are steel companies and national steel federations throughout the EU. The major steel companies and national steel federations in Switzerland and Turkey are associate members.

ABOUT THE EUROPEAN STEEL INDUSTRY

The European steel industry is a world leader in innovation and environmental sustainability. It has a turnover of around €170 billion and directly employs around 320,000 highly-skilled people, producing on average 170 million tonnes of steel per year. More than 500 steel production sites across 22 EU Member States provide direct and indirect employment to millions more European citizens. Closely integrated with Europe's manufacturing and construction industries, steel is the backbone for development, growth and employment in Europe.

Steel is the most versatile industrial material in the world. The thousands of different grades and types of steel developed by the industry make the modern world possible. Steel is 100% recyclable and therefore is a fundamental part of the circular economy. As a basic engineering material, steel is also an essential factor in the development and deployment of innovative, CO₂-mitigating technologies, improving resource efficiency and fostering sustainable development in Europe.

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