

WELCOME TO EU GLASS INDUSTRIES NEWS



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EU COMMUNITY NEWS

NEW EU LEGISLATION

Commission Regulations

Commission Implementing Regulation (EU) 2017/1925 of 12 October 2017 amending Annex I to Council Regulation (EEC) No 2658/87 on the tariff and statistical nomenclature and on the Common Customs Tariff

Regulation (EEC) No 2658/87 established a goods nomenclature (hereinafter referred to as the 'Combined Nomenclature' or the 'CN') to meet, at one and the same time, the requirements of the Common Customs Tariff (CCT), the external trade statistics of the Union, and other Union policies concerning the importation or exportation of goods. In the interests of legislative simplification, it is appropriate to modernise the CN and to adapt its structure.

The new Regulation 2017/1925 amends the Annex I to this preceding regulation No 2658/87. With effect from 1 January 2018, the new Annex will complete and update the version of the CN, together with the autonomous and conventional rates of duty resulting from measures adopted by the Council or by the Commission.

Glass and glass products are listed as from Page 456. There is no change compared with the preceding CCT classification.

All details at:

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:282:TOC>

20819/O.J. L282 - 2017.10.31

Commission Regulation EU 2017/1997 of 7 November 2017

This Regulation extends the definitive countervailing and anti-dumping duty on imports of crystalline silicon photovoltaic modules and key components (i.e. cells) originating in or consigned from the People's Republic of China to imports of crystalline silicon photovoltaic modules and key components (i.e. cells) consigned from Malaysia and Taiwan, whether declared as originating in Malaysia and in Taiwan or not.

After investigation, it appeared that Jinko Malaysia is a genuine Malaysian producer of crystalline silicon photovoltaic modules and cells that was incorporated in January 2015 and which started commercial production of modules and cells in June/July the same year. The Commission concluded that the company Jinko Solar Technology SDN.BHD should be added to the list of companies that are exempted from the countervailing

duty and anti-dumping duty imposed by Implementing Regulation (EU) 2016/184 and Implementing Regulation (EU) 2016/185, respectively.

All details on page 1 at:

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:289:TOC>

20820/O.J. L289 - 2017.11.08

Commission Directive

Commission Directive (EU) 2017/2096 of 15 November 2017

This new Directive amends Annex II to Directive 2000/53/EC of the European Parliament and of the Council **on end-of life vehicles**.

Article 4(2)(a) of Directive 2000/53/EC prohibits the use of lead, mercury, cadmium and hexavalent chromium in materials and components of vehicles put on the market after 1 July 2003. **Annex II to Directive 2000/53/EC lists vehicle materials and components exempt** from the prohibition set out in Article 4(2)(a) thereof. That Annex is to be amended on a regular basis according to technical and scientific progress and exemptions 2(c), 3 and 5 regarding the use of lead and mercury are to be reviewed.

This annex has just been updated as follows:

- Lead and lead compounds in components

	<i>Materials & Components</i>	<i>Scope and Expiry Date of Exemption</i>
8(b).	Lead in solders in electrical applications other than soldering on electronic circuit boards or on glass	Vehicles type-approved before 1 st January 2011 and spare parts for these vehicles
8(c).	Lead in finishes on terminals of electrolyte aluminium capacitors	Vehicles type-approved before 1 st January 2013 and spare parts for these vehicles
8(d).	Lead used in soldering on glass in mass airflow sensors	Vehicles type-approved before 1 st January 2015 and spare parts of such vehicles
8(i).	Lead in solders in electrical glazing applications on glass except for soldering in laminated glazing	Vehicles type-approved before 1 st January 2016 and after that date as spare parts for these vehicles
8(j).	Lead in solders for soldering of laminated glazing	Vehicles type-approved before 1 st January 2020 and after that date as spare parts for these vehicles
10(a).	Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound.	This exemption does not cover the use of lead in glass in bulbs and glaze of spark plugs.

- Mercury

	<i>Materials & Components</i>	<i>Scope and Expiry Date of Exemption</i>
15(a).	Discharge lamps for headlight application	Vehicles type-approved before 1 st July 2012 and spare parts for these vehicles
15(b).	Fluorescent tubes used in instrument panel displays	Vehicles type-approved before 1 st July 2012 and spare parts for these vehicles

Member States shall adopt and publish by 6 June 2018 the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith communicate to the Commission the text of those provisions.

All details on page 24 at:

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:299:TOC>

20821/O.J. L299 - 2017.11.16

Parliament and Council Directive

Directive EU 2017/2102 of 15 November 2017

This new Directive amends the Directive 2011/65/EU of the European Parliament and of the Council on the **restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE)**.

Secondary market operations for EEE, which involve repair, replacement of spare parts, refurbishment and reuse, and retrofitting, should be facilitated to promote a circular economy in the Union. A high level of protection of human health and the environment should be ensured, including through the environmentally sound recovery and disposal of waste EEE.

Certain niche product groups should be excluded from the scope of Directive 2011/65/EU as their inclusion would bring negligible environmental or health benefits and introduce unresolvable compliance problems or market distortions that cannot effectively be addressed through the exemption mechanism provided for in that Directive. **Pipes in organs are built using a specific type of lead-based alloy**, for which no alternative has been found so far. Most pipe organs are kept in the same place for centuries and their turnover rate is negligible. Pipe organs **should therefore be excluded from the scope of Directive 2011/65/EU** as their inclusion would bring negligible benefit in terms of the substitution of lead.

All details on page 24 at:

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:305:TOC>

20822/O.J. L305 - 2017.11.21

TRADE POLICY

EU New Anti-Dumping Methodology

The European Parliament voted by an overwhelming majority in Strasbourg on 15 November to approve the new EU methodology for calculating anti-dumping duties, which is based on an assessment of market distortions in third countries where state interference in the economy is significant.

Parliament voted by 554 to 48, with 80 abstentions, to approve the inter-institutional agreement reached on 3 October between its negotiators, led by rapporteur Salvatore Cicu (EPP, Italy), and those of the Estonian Presidency of the Council of the EU and the European Commission.

The new methodology is neutral towards third countries and fully complies with the EU's obligations towards the WTO by removing the previous distinction made between market economies and non-market economies in anti-dumping calculations – it seeks in particular to resolve the question of how to treat China in EU anti-dumping investigations following the expiry, in December 2016, of provisions on this issue contained in China's WTO accession protocol.

The Commission, rather, will have to prove that there is a significant market distortion between the sales price of a product and its production costs. On that basis, it will be permitted to set a price for the product through reference, for example, to the product price in a country with a similar level of economic development or relevant non-distorted international costs and prices.

The Commission will also draft country and sector specific reports detailing the distortions. In line with current practice, EU companies will have to lodge complaints but they will be able to use the Commission reports to substantiate their claims.

The new EU anti-dumping legislation will be the very first to take account of international labour and environment standards. In addition, Parliament has ensured that European companies will not have to bear any additional burden of proof in anti-dumping cases and that trade unions will be able to have an input.

The new rules will come into force after they are formally adopted by the Council and published in the Official Journal of the EU.

20823/Press Release – 2017.11.15

Dual Use Controls

The European Commission's annual report on controlling exports of products with both civilian and military use shows progress in tightening controls. Covering 2016, the report points to clear progress in tightening controls on the export of sensitive 'dual-use' products, such as nuclear technology, chemical equipment or high-tech electronics, that can be used for both civilian or military purposes.

Exports of such goods are controlled so as to prevent the proliferation of dangerous weapons that could affect international security, be misused for terrorism or cause human rights violations.

In 2016 the Commission made its annual proposal for modernising EU export controls, and updated the EU list of dual-use items to incorporate modifications agreed in the multilateral export control regimes. These actions represented important steps forward towards updating and strengthening controls.

The report looks at the activities of the Dual-Use Coordination Group, a body made up of Commission and Member State officials. Positive developments include the Group's development of an EU-level IT infrastructure for secure information exchange and its publishing of guidelines to help exporters apply controls.

The report also shows action taken by the Group to ensure transparency and dialogue with industry and academia, such as the EU Export Control Forum of 12 December 2016. The Forum provided stakeholders from industry and civil society the opportunity to discuss export control reform with representatives from the European Parliament, Member States and the Commission.

According to the report, in 2015 the value of controlled dual-use exports reached EUR 44 bn, representing 2.5% of total extra-EU exports.

Report: http://trade.ec.europa.eu/doclib/docs/2017/november/tradoc_156396.pdf

20824/Press Release – 2017.11.21

EU / Chile

The EU and Chile formally launched on 16 November in Brussels the negotiations to modernise the existing EU-Chile Association Agreement.

The modernisation of the Association Agreement is an expression of both Chile and EU's willingness to deepen the already excellent bilateral relations and expand to new areas of collaboration. Both parties share values of democracy, rule of law, human rights and gender equality and are engaged in multilateral fora and work together to promote them as well as sustainable development, the fight against climate change and the promotion of innovation as transversal elements of their modernised Agreement.

Cooperation in areas such as space, research social issues, including decent employment, education, training and opportunities for the youth, ocean governance, digital policy, and disaster preparedness, among many others, shall be further reinforced in the modernised Agreement and will enable us to break new ground.

In the trade field, the existing Association Agreement has been a great success and has increased trade flows substantially. However, the agreement is now 14 years old and does not address the full range of important trade and investment issues.

In these new negotiations the EU have also the opportunity to conclude a trade agreement of the highest calibre that covers all issues, including those that reflect the shared values such as trade and sustainable development, help for small and medium-sized companies, anti-corruption, and trade and gender.

EU Trade information page:

<http://ec.europa.eu/trade/policy/countries-and-regions/countries/chile/>

20825/Press Release – 2017.11.16

ENVIRONMENT & ENERGY

CLIMATE: COP 23 in Bonn from 6 to 17 November 2017

COP 23, which ended on 18 November, allowed the 195 parties at the negotiating table to detail the rules for implementing the first universal climate agreement and to give themselves one year – a year of dialogue throughout 2018 – to finalise the said rules and procedures and to assess the level of their emissions. For the European negotiators, this was progress, modest certainly but undeniable and encouraging.

This transition COP, the first since Donald Trump announced the withdrawal of the United States, did not deliver any miracles: the offers on greenhouse gas emissions reductions are below the Paris targets – they would bring average global warming of over 3°C by 2100, rather than 2°C, or even 1.5°, maximum – and the poorest and most vulnerable countries were left far from satisfied.

Raising the level of ambition by 2020. The Talanoa dialogue (a traditional approach used in Fiji to engage in inclusive, participatory and transparent dialogue), which will be launched in 2018 and brought to a conclusion at COP 24 in Katowice, Poland (December 2018), will allow the parties to assess in a fully transparent their respective level of emissions with a view to stepping up their efforts and doing better. This will be on the basis of comparable data on the responsibility incumbent on each party, without criticising those not doing so well and only to help raise the level of ambition. That is the roadmap agreed for this dialogue and the spirit in which it should be undertaken “to prepare for more ambitious action”, said COP President and Prime Minister of Fiji Frank Bainimarama.

By the end of 2018, but before COP 24, the Inter-Governmental Panel on Climate Change (IPCC) will have published its report on what the target of average global warming of 1.5°C means scientifically – information of capital importance for the Talanoa dialogue.

The EU will also ratify this year the Doha amendment to the Kyoto Protocol, a decisive step pre-2020 climate action, and the EU mitigation target will probably be -26% by 2020 (compared with 1990), rather than -20%.

The amendment, which establishes the second commitment period of the Kyoto Protocol (from 1 January 2013 to 31 December 2020), is of huge importance in putting the world on track for meeting the targets of the Paris climate agreement. The commitments are only those of the industrialised countries that are parties to the Kyoto Protocol. The amendment contains a provision that makes it possible to automatically amend a party's target to prevent an increase in its emissions over the 2013-2020 period greater than its emissions in the 2008-2010 period. To date, 88 parties have accepted the amendment. To bring it into force requires 144 of the 192 parties to the Kyoto Protocol to ratify it.

20826/Press Release – 2017.11.20

CLIMATE: EU Greenhouse Gas Emissions

Greenhouse gas emissions in the EU fell slightly by 0.7% in 2016 on the 2015 levels, according to flash estimates from the European Environment Agency (EEA), and the EU is well-placed to collectively meeting its climate target for 2020 (-20% compared with 1990), since the figures show that emissions last year were 23% below the 1990 levels.

The EEA's projections show that 7 Member States (Germany, Austria, Belgium, Finland, Ireland, Luxembourg and Malta) must immediately step up their efforts to achieve their national targets as part of the collective burden-sharing for 2020.

The EEA say that extra efforts by all and by the EU collectively will need to be considerable if the long-term targets are to be met.

The slight fall in emissions recorded last year is largely due to an increase in the share of renewable energy and moving from coal to gas in the range of fuels used to generate electricity, despite an increase in the consumption of energy and the growth of emission in the building and transport sectors.

In sectors covered by the ETS (industry, energy and flights within the European Economic Area), emissions fell by 2.6% last year due to the phasing out of coal in a number of member states, but emissions from air operators (3% of total emissions covered by the ETS) rose by 7.6% in 2016 on 2015.

In a press release, the Commissioner said that the new CO₂ rules for cars and vans for post-2020, unveiled on 8 November, will encourage innovative technology.

20827/Press Release – 2017.11.07

EU Second 'Clean Mobility Package': New Car and Van CO₂ Emissions

On 8 November, the European Commission published a draft regulation on average EU CO₂ emissions post-2020 for new private cars and light vans as part of the second clean mobility package with a view to accelerating the transition to low-carbon transport, as required by the Paris Climate Agreement, and to maintain European industry's competitiveness and innovation so it doesn't get outstripped by China, which is planning to bring 7 million electric cars on the market by 2025.

To this end, the European institution suggested that the EU should have an **emission reduction target of 30% for 2030 for cars and vans on the 2021 level** (in other words compared with 95 g/km for cars and 147g/km for vans under the current EU rules), with an intermediate objective of -15% for 2025.

Along with this, there would be a system to encourage the introduction onto the market for **zero or low-carbon vehicles**, which would enable manufacturers putting clean vehicles on the market in future (emitting zero to 50 g/CO₂/km) to benefit from zero emission as a 'reward' that looks like the right for the rest of their fleet to pollute more. This reward in terms of credits would, however, be capped at 5% a year in order to ensure the environmental integrity of the proposal, explains the Commission.

No compulsory quotas for electric vehicles are planned. The Commission preferred to suggest 'benchmarks' of 15% of a manufacturer's fleet for 2025 to 2029 and 30% in 2030 in order to allow are manufacturers free to choose the technology they want to use and to reward those that beat the benchmarks.

Emission controls will be stepped up. Under the draft regulation, the European Commission will check that the gap between laboratory and real driving tests does not exceed 20%. To this end, it will use fuel measurement counters that vehicles will have to be equipped with in the future. The Commission says the amount of fuel used indicates the level of emissions.

The regulation will be revised in 2024 to enable the objectives to be adjusted where necessary if the gap is not respected in the light of aggregated data on fuel consumption. Manufacturers not respecting the regulation's objective would be fined €95 for each gram of overshoot.

The proposed new standards for lorries, buses and shuttle services will be unveiled by the Commission in 2018. The new CO₂ standards would cut fuel consumption and allow consumers to save €1,500 over a vehicle's lifetime.

20828/Press Release – 2017.11.08

EU ETS: Triologue Negotiations on Long-Term ETS Reform

The European Parliament and Council have reached a provisional agreement to revise the EU Emissions Trading System (EU ETS) for the period after 2021-2030 on 8 November. This revision will contribute to put the EU on track to achieving a significant



part of its commitment under the Paris Agreement to reduce greenhouse gas emissions by at least 40% by 2030.

The EU Emission Trading System puts a cap on the carbon dioxide (CO₂) emitted by more than 11,000 installations in the power sector and energy intensive industry through a market-based cap and trade system.

Building on the Commission's proposal, the **main improvements** agreed by Parliament and Council include:

- Significant changes to the system in order to speed up emissions reductions and strengthen the Market Stability Reserve to speed up the reduction of the current oversupply of allowances on the carbon market;
- Additional safeguards to provide European industry with extra protection, if needed, against the risk of carbon leakage;
- Several support mechanisms to help the industry and the power sectors meet the innovation and investment challenges of the transition to a low-carbon economy.

Basically, the final adjustments were made to the **solidarity funds for modernisation and for innovation**. The agreement will guarantee that the funds will be used to promote low-carbon technologies rather than supporting plans to generate electricity from fossil fuels. The compromise does, however foresee an exception for urban heating in the two poorest member states.

Other key elements include raising to **2.2% a year the annual emissions reduction trajectory (LRF – linear reduction factor)**, **doubling the market stability reserve (MSR) volume**, eliminating excess quotas from the reserve on an annual basis from 2023 onwards (rather than 2024) and protecting European industry from carbon leakage.

The provisions of the new ETS directive will be kept under regular review, including **carbon leakage rules (relocation) and the LRF**.

To protect industry against the risk of carbon leakage and avoid the application of a cross-sectoral correction factor (CSCF) which could penalise the best performing energy-intensive companies, the new directive contains the following provisions:

- The share of allowances to be auctioned will be 57%, with a conditional lowering of the auction share by 3% if the CSCF is to be applied;
 - Free allocation rules are to be better aligned with the production levels of companies and the benchmarks used to determine free allocation will be updated;
 - The sectors at the highest risk of relocating their production outside the EU will receive full free allocation while sectors less exposed to carbon leakage will receive one of 30%; a gradual phase-out of that free allocation for the less exposed sectors will start after 2026, with the exception of the district heating sector;
 - Up to 200 million allowances will be returned to the MSR if not used during the period 2021-2030;
 - Member States can continue to provide compensation for indirect carbon costs in line with state aid rules.
-

To encourage innovation and investment in the low-carbon transition, the **NER (new entrants' reserve) 300** will be built up initially with the receipts from the auction of 400 million allowances – possibly increased by up to 50 million allowances if the cross-sectoral correction factor is not triggered. Solidarity funds (innovation and modernisation funds) will help the less well-off EU states modernise their energy sector

Following the political agreement (a 'trilogue' negotiation between the European Parliament, the Council and the Commission), the text was presented to the EU member states' permanent representatives on the COREPER Committee and endorsed as well on 22 November.

Following the recommendations of its rapporteur, UK MEP Julie Girling (ECR), Parliament's environment committee also endorsed on 28 November by a substantial majority (57 votes to 3, with 2 abstentions) the provisional inter-institutional agreement on the reform. Parliament's plenary session vote is scheduled for February 2018.

Next Steps: Once endorsed by both co-legislators (Council and Parliament), the revised EU ETS Directive will be published in the Official Journal of the Union and enters into force 20 days after publication.

20829/Press Release – 2017.11.09, 22, 28

Swiss and EU Emissions Allowances Trading Schemes Linked

The EU's Emissions Trading Scheme (ETS), the cost-effective market instrument that helps to tackle climate change, is now linked to the Swiss ETS. The Council of the EU gave its approval for signing the agreement to link up the two schemes on 10 November. The European Parliament's environment committee gave also the go-ahead on 28 November.

The EU and Swiss ETS schemes follow the same principles: trading greenhouse gas allowances and an absolute cap on emissions. They also have similar structures.

Both schemes incorporate a linear reduction factor to annually decrease the quantity of CO₂ allowances on the market and cover the 2013-2020 period. They also apply to large and energy-intensive installations in the industrial and energy sectors.

The main difference is that as opposed to the European ETS, the Swiss scheme does not yet include emissions from the aviation sector but Switzerland is currently working on measures to extend its ETS to this sector.

The EU Parliament will vote in the December plenary session (11-14 December) in Strasbourg. The agreement can only formally enter into force on 1 January 2018 if this condition has been met.

20830/Press Release – 2017.11.10, 28

EU Air Quality

At the Clean Air Forum in Paris on 16 November, the European Commission and the European Environmental Agency (EEA) launched a new **index that allows European citizens to monitor air quality in real time**.

The new index has an interactive map on the EEA website. It provides information on the current air quality situation based on measurements from more than 2,000 air quality monitoring stations across Europe.

It measures five key pollutants: particulate matter (PM2.5 and PM10), ground-level ozone (O3), nitrogen dioxide (NO2) and sulphur dioxide (SO2).

By zooming in on a town or a region, users can check the local air quality situation, illustrated by means of a colour code, ranging from green when air quality is “good” to dark red when it is “very poor”. At the time of writing this article, air quality in Brussels, for example, was shown on the map as being fair with regard to PM2.5. Stations which have yet to provide data, largely in Italy and Greece, are shown in grey.

On the same day, the Commission also published an **Air Quality Atlas**, which has been developed by its Joint Research Centre and maps of the sources of fine particles, such as dust, smoke, soot, pollen and soil particles. According to this document, the main sources of air pollution are our human activities, with transport, farming, industry and residential heating the biggest culprits.

Each year, over 400,000 citizens die prematurely in the EU as a result of poor air quality, more than ten times the number of deaths by road traffic accidents, the Commission points out.

The new index is available at: <http://airindex.eea.europa.eu/>

20831/Press Release – 2017.11.16

Revision of the EU Energy Efficiency & Renewable Energies Directives

Between now and 2030, the **share of renewable energies** in gross energy consumption at EU level should be **at least 35% and the energy efficiency target 40%**, the committee on industry and energy of the European Parliament stated, in its adoption on 28 November of its position on the revision of two directives that are part of the package of clean energy measures.

Renewable energies

Whilst the European Commission recommended a binding target at European level of 27% for renewable energies, the MEPs adopted a compromise amendment of the S&D, EPP and ALDE groups setting this minimum threshold at 35%, together with indicative targets at member state level. There is a provision whereby member states could depart from the 35% renewable energies target for up to 2030 by as much as 10%, in cases for which reasons were provided.

The MEPs rejected the compromise amendment tabled by the Greens/EFA, GUE/NGL and EFDD groups, which called for the introduction of national renewables targets, as is currently the case up to 2020.

As regards the support regimes, the MEPs left room for two options: the application by the member states of the principle of technological neutrality and the authorisation of calls for tender to support less mature and more expensive technologies.

Aside from measures aiming to reduce the administrative burden, the parliamentary committee furthermore adopted provisions authorising individuals to produce and consume renewable energy without being subject to any fixed fee or tax. This calls into question the Spanish 'sun tax', which requires individuals who own solar panels to pay for the electricity they produce for their own use. According to MEPs, individuals should also be authorised to join local communities of producers of renewable energy without being subjected to excessive conditions or procedures.

As for transport, the MEPs take the view that the member states should ensure that the share of renewables in final consumption will stand as at least 12% by 2030.

The 'Blanco López' report was adopted by a comfortable majority (43 votes to 14 with 7 abstentions). It has yet to pass the test of the plenary, which will probably be attempted in January of next year, before the inter-institutional negotiations with the Council begin. These will start once the member states have reached a political agreement in principle ('general orientation'), which they may do at the 'Energy' Council of Monday 18 December.

Binding EU target of 40% energy efficiency

Unlike the relatively strong compromise on renewable energies, the narrow majority (33 votes to 30 with 2 abstentions) on the revision of the directive on energy efficiency seems far less solid.

The European Left and environmental organisations welcomed as a victory the adoption of the compromise amendment of the S&D, GUE/NGL, ALDE, Greens/EFA and EFDD groups, introducing a binding target of 40% for energy efficiency at EU level up to 2020 and requiring the member states to set national targets that will also be binding. These national targets must cover the whole of the energy supply chain, from production to end consumption.

20832/Press Release – 2017.11.28

REACH: Classification, Labelling and Packaging (CLP)

The delay for public consultation commenting period on REACH CLP - harmonized classification and labelling - proposals will be extended from 45 to 60 days on 1st January 2018.

The reason for this is to allow more time for the parties concerned to prepare and submit their comments.

20833/ECHA Press Release – 2017.11.22

SOCIAL ISSUES

EU Gothenburg Social Summit 2017

European Heads of State or Government met in Gothenburg on 17 November 2017 with EU institutions, social partners, civil society, students and leading experts at the Social Summit for Fair Jobs and Growth, organised by the Swedish Government and the European Commission.

On 28 November, the President of the European Commission, Jean-Claude Juncker, and the Swedish Prime Minister, Stefan Löfven, presented the final report from the Gothenburg Social Summit, during which the inter-institutional proclamation on the European bill of social rights was adopted. This final report (available in English, German and French at the following link: <http://www.socialsummit17.se/concluding-report/>) will serve as the basis for the next European Council in December. This event will focus on the follow-up to the Gothenburg Summit, addressing the social dimension in the discussion on the future of the EU.

More info at www.socialsummit17.se

20834/EP Press Release – 2017.11.28

Unemployment Rates

The **euro area** seasonally-adjusted unemployment rate was **8.9%** in **September 2017**, down from 9% in August 2017. This is the lowest rate recorded in the euro area since January 2009. The **EU-28** unemployment rate was **7.5%** in September 2017, stable compared to August 2017. This is also the lowest rate recorded in the EU28 since November 2008.

Eurostat estimates that 18.446 million people in the EU28 were unemployed in September 2017, a decrease by 116,000 in the EU28 and by 96,000 in the euro area compared with August 2017.

Czechia	2.7%	Slovenia	6.4%
Germany	3.6%	Sweden	6.7%
Malta	4.1%	Belgium	7.1%
Hungary (August)	4.2%	Slovakia	7.2%
UK (July)	4.2%	Lithuania	7.7%
Poland	4.6%	Latvia	7.9%
Netherlands	4.7%	Portugal	8.6%
Romania	5.0%	Finland	8.7%
Estonia (August)	5.4%	France	9.7%
Austria	5.6%	Cyprus	10.3%
Denmark	5.7%	Croatia	10.5%
Luxembourg	6.0%	Italy	11.1%
Bulgaria	6.1%	Spain	16.7%
Ireland	6.1%	Greece (July)	21.0%

Elsewhere

USA	4.1%	Russia	5.1%
Canada	6.3%	Brazil	12.4%
Japan	2.8%	Australia	5.4%
Switzerland	3.0%	India	3.46%
Turkey	10.6%	China	3.95%

20835/Eurostat Press Release – 2017.10.31

GENERAL ISSUES

Future of the European Union

BREXIT Developments



500 days have already passed since the British referendum of 23 June 2016 and there is the same amount to go until the UK leaves the EU on 29 March 2019 at midnight "*Brussels time*".

Very little major progress was noted at **the latest round of talks on Brexit on 9 and 10 November**. However, discussions allowed some additional progress on citizens' rights and the border between the Republic of Ireland and Northern Ireland, with the identification of common principles on the common travel area or maintaining cooperation either side of the border, the two men reported.

With bad news piling up for no. 10 Downing Street, the British government must - within two weeks - both clarify how it plans to honour its financial commitments and suggest specific areas to avoid going back to a hard border between the two Irelands. If it fails to do so, the decision to start talks on the future partnership will not be made before the end of this year.

On **Northern Ireland**, the situation still seems complex. The Irish government, backed by the European Commission, is reported to be calling for Northern Ireland to remain in the customs union following Brexit. This would be the only way of avoiding a return to a border between the Republic of Ireland and Northern Ireland, which is part of the UK. In order to preserve the 1998 agreement that removed all physical borders from the island, the Brexit agreement must respect the integrity of the single market and customs union, to which the Republic belongs. Dublin wants the UK to continue to comply with a raft of European rules, for instance on customs and agriculture, to ensure that trade with Northern Ireland is preserved.

The ministers of General Affairs Council on 20 November took stock of the current negotiations on Brexit and stressed the importance of the coming weeks to make a breakthrough in negotiations ahead of the December European summit.

20836/Press Release – 2017.11.13, 20

BREXIT: EU Technical Preparations In Case of No Agreement

On 12 November, the EU's negotiator for the withdrawal of the United Kingdom from the EU, Michel Barnier, explained that the EU was making preparations for a 'no deal' situation with the United Kingdom, with a new round of talks ending on 10 November with no major breakthroughs.

"It is not my preferred option, which would be to go back 44 years. But it is a possibility. Everyone must plan for it, states and businesses alike. We are also making technical preparations for it", Barnier said.

He reiterated that London had been given two weeks to provide the necessary guarantees ahead of the talks on the future partnership, particularly guarantees on budgetary commitments.

"The UK will leave the EU in 2019, two years before the end of the 2014-2020 budget. What was decided between 28 must now be resolved between 28. Otherwise, we will have to cut programmes by around 14%, the equivalent to the British contribution", he explained. *"Theresa May has undertaken to pay the contributions to 2019 in 2020, plus other commitments, but has not clarified which. We know what these commitments are",* he said, referring to the guarantees given to the European Investment Bank, the European Development Fund, aid to Turkey and Ukraine and the pensions of European civil servants.

20837/Press Release – 2017.11.13

BREXIT: European Medicines Agency (EMA) and European Banking Authority (EBA) Will Move

Following a secret vote on 20 November, the competent ministers (European affairs, foreign affairs or health) of the 27 member states decided to relocate the two European agencies currently based in London: the European Medicines Agency (EMA) and the European Banking Authority (EBA) will be going to Amsterdam and Paris respectively from the end of March 2019, when Brexit takes effect.

EMA

The first decision concerned the relocation of the EMA, which currently employs 900 people. In the first round of voting, Milan, Copenhagen and Amsterdam received the bulk of the votes among the 19 candidates' cities, before Copenhagen was rejected.

EBA

Eight cities were candidates to host the European Banking Authority, which employs a staff of 170. Paris, Dublin and Frankfurt quickly took leading positions, with Frankfurt then ruled out in a second round.

These decisions on the agencies were made at a 'General Affairs' Council of 27 ('article 50' format).

20838/Press Releases – 2017.11.20

Inflation Rate

Latest Eurostat figures show that the annual inflation rate was **1.4% in October 2017 in the Euro area**, down from 1.5% in September 2017. **The EU28 annual inflation was 1.87 in October**, down from 1.8% in September.

The largest upward impacts to euro area annual inflation came from fuels for transport (+ 0.1%), accommodation services (+ 0.08%) and milk, cheese & eggs (+ 0.06%), while telecommunication (- 0.11%), garments (- 0.07%) and social protection (- 0.04%) had the biggest downward impacts.

Cyprus	0.4%	Spain	1.7%
Ireland	0.5%	Sweden	1.7%
Finland	0.5%	Belgium	1.8%
Greece	0.5%	Slovakia	1.8%
Italy	1.1%	Portugal	1.9%
France	1.2%	Luxembourg	2.0%
Netherlands	1.3%	Romania	2.0%
Slovenia	1.3%	Hungary	2.2%
Denmark	1.4%	Austria	2.3%
Bulgaria	1.5%	Latvia	2.7%
Germany	1.5%	Czech Republic	2.8%
Malta	1.5%	U K	3.0%
Croatia	1.6%	Estonia	4.0%
Poland	1.6%	Lithuania	4.2%

Elsewhere

USA	2.0%	Russia	2.7%
Canada	1.4%	Brazil	2.7%
Japan	0.7%	Australia	1.8%
Switzerland	0.7%	India	3.58%
Turkey	11.9%	China	1.9%

20839/Eurostat News Release – 2017.11.16

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GLASS NEWS

FLAT GLASS

Glass Companies

Saint-Gobain



Reporting **sales for the first nine months of 2017**, Pierre-André de Chalendar, Chairman and Chief Executive Officer of Saint-Gobain, said: “The third quarter confirmed the upbeat trends seen in the first half excluding the impact of the cyber-attack. All Business Sectors and regions advanced, including France. We continued to see a good price effect against a tougher basis for comparison, but not yet sufficient in all of the Group’s businesses given the more inflationary raw material and energy cost environment. The Group continued to focus on its strategic priorities, signing 23 acquisitions since the beginning of the year, including the recently finalized Glava (insulation market in Norway) deal.

Saint-Gobain confirms its objective for the full year 2017 and expects the like-for-like increase in operating income for the second half to be above the level achieved in the first half despite ongoing inflationary pressure on costs.

Consolidated sales for the first nine months of 2017 came in at EUR 30,570 million, compared to EUR 29,306 million for the first nine months of 2016.

On a like-for-like basis, **sales were up 4.2% over nine months** and 5.6% in the third quarter, continuing the first half’s upbeat trends excluding the impact of the cyber-attack. Innovative Materials sales climbed 4.8% over the nine-month period, including 6.1% in the third quarter.

Flat Glass delivered further good organic growth in the quarter, at 4.6% (5.3% for the nine-month period). The automotive business continued to report good volume growth in all regions, despite a less favourable mix effect compared to the first half. Sales linked to construction markets remained at good levels across Western Europe, with float glass price trends stabilizing and higher prices for transformed glass; Asia and emerging countries again performed well although we expect a negative impact from the earthquake in Mexico which affected our facilities.

High-Performance Materials (HPM) sales rose 8.7% over the quarter (4.5% over the nine-month period), driven by all regions and businesses, particularly Ceramics, which was boosted by exceptionally strong sales of refractories during the summer.

The Group expects the following trends for the fourth quarter:

- gradual improvement of construction markets in France;

- continued upbeat trends overall in other Western European countries, despite less visibility in the UK and Germany still hesitant;
- positive market conditions in North American construction;
- good organic growth in Asia and emerging countries;
- ongoing inflationary pressure on costs.

20840/Press Release – 2017.10.30

AGC

AGC

1. AGC Flat Glass Italia officially inaugurated its **new float line in Cuneo (Northern Italy) on 3 November** with an opening ceremony attended by the AGC Group President and CEO, Takuya Shimamura, the Regional President - Building & Industrial Glass Europe, Philippe Bastien, representatives of the local authorities and the press.

After a cold repair process of three months and an investment of around EUR 25 million, the new float presents high-end technologies that will enhance the plant's productivity and its environmental impact in addition to improving the performance of the existing product ranges produced in Cuneo.



AGC Flat Glass Italia official inauguration

During the summer, renovation work was carried out on the Cuneo plant using the most innovative design techniques. The upgraded float line will significantly increase the plant capacity, reducing energy consumption by 25%, with a corresponding positive impact on its performance and product quality. Lower energy consumption also means a remarkable reduction in atmospheric emissions, with 50% less CO (carbon monoxide), 14% less CO₂ (carbon dioxide) and 30% less NO_x (nitrogen oxides).

The Cuneo site manufactures a wide range of products in various thicknesses, from 3 to 25 millimetres. Besides clear float, the site now also produces the renewed Planibel Linea Azzurra range, a float glass made solely in this plant. Available in thicknesses from 8 to 25 mm, this special glass has a slightly bluish tint. It is made from nickel-free materials without any inclusions, yielding a unique product that is easy to cut and process. It is therefore particularly suitable for large glazed surfaces and the most refined furniture creations.

In addition to these float products, the plant manufactures SMART solar control glazing as well as Planibel ClearSight, AGC's anti-reflective glass, thanks to its four high-tech processing lines.

"AGC Flat Glass Italia and its Cuneo plant are one of the outstanding features of the Group that I have the honour to lead. I am glad to celebrate this important goal achieved by the Italian management. This operation will increase our competitiveness on the market. Such a development will allow us to reach two aims: supporting our leadership with high-performance products and contributing to a sustainable future," says Takuya Shimamura, AGC Group's President and CEO. "Increased capacity, extended range of products, greater energy efficiency and better environmental performance turn this refurbishment into a rebirth for Cuneo's furnace. For the whole plant, that importantly means restored competitiveness on the way to long term sustainability," adds Philippe Bastien, Regional President - Building & Industrial Glass Europe.

20841/Press Release – 2017.11.10

2. **AGC Glass has ordered a batch plant and cullet return system from Zippe for its second float glass line in Guaratingueta, Brazil.**

Zippe will supply the entire plant with the exception of the concrete works turn-key. AGC and Zippe will both rely on a Siemens SPS System S7 400H control system. Zippe's standard remote access was implemented in order to realise future plant extensions and modifications as efficiently as possible.

The cullet return is controlled by a Siemens S7 300 SPS and connected with the batch plant control system by a fibre optic cable.

20842/Press Release – 2017.11.14

3. **Asahi India Glass (AIS) is to commence production at its Taloja float glass plant.** The Taloja plant will add to AIS's scale and flexibility in providing supplies to customers in the architectural and auto segments, which includes all leading automotive OEMS. The company also has a fifth auto glass plant in Gujarat, India.



The Taloja plant will have the capability to produce high-quality value-added glass for the architectural and automotive glass segments, with an installed capacity to manufacture 550 tonnes of glass per day.

Mr. Sanjay Labroo, MD & CEO, Asahi India Glass (AIS) said: "The Taloja plant will not only increase our capacity by approximately 60% but it will have the ability to make the highest grades of glass for the architectural market directly, and for value-added purposes such as mirroring, hard-coating, soft-coating and high-level processing.

It will also have the capability to make the highest standards of automotive raw glass giving AIS 100% capability to make our own automotive glass.”

The formal inauguration of the Taloja Plant was held on 9th November and attended by Mr. Masahiro Takeda, Regional President – Asia Pacific, Building & Industrial Glass, Asahi Glass Co. (AGC), along with Mr. Sanjay Labroo, MD & CEO, Asahi India Glass Ltd (AIS), Mr. Sanjay Ganjoo COO, Architectural Glass, AIS, along with other senior management members.

20843/Press Release – 2017.11.14

4. AGC Glass has launched its new **AGC North America website**: www.agcglass.com . The new site is a resource for architects and designers looking to specify glass. The website provides extensive information, imagery, and downloadable content regarding AGC products, making the look and performance of AGC’s products easier than ever to examine and evaluate. The site’s product pages help visitors find the right product to match their specification requirements by pulling key data points such as light transmission, solar heat gain coefficient, light-to-solar gain, and U-Value. In addition, AGC’s Architectural Glass Visualizer, Decorative Glass Visualizer, and Glass Calculator are all housed on the site. The new website also has a portfolio of completed projects with large-format photography, corresponding application and project team details. Last but not least, connecting with AGC North America has been simplified. In fact, the site enables customers to contact the appropriate AGC rep by simply providing detailed project information or requesting specific product information using one of many online forms.

20844/Press Release – 2017.11.20

Pilkington

1. Pilkington Italia has commenced warm-up of the **new furnace** for glass production at its **Porto Marghera plant, in Venice, Italy**. The new line, which has been upgraded with the latest technologies, will produce roughly 600 tons of float glass daily, including Pilkington Optiwhite.



The product - a low-iron extra clear float glass with high light transmission - is practically colourless, and the green cast inherent to other glasses is not present. It is therefore ideal for use where glass edges are visible or where a neutral colour is desired. As its light transmission is higher than clear float glass, it is perfect for applications where transparency and purity of colour are desired. The investment will also include the installation of emission control systems in the atmosphere, in compliance with environmental regulations, and create 60 jobs.

20845/Press Release – 2017.10.31

2. Pilkington launches **two new textured glass patterns.**

The new products, Pilkington Cassini™ and Pilkington Tribal™, add to the manufacturer's existing texture glass range, which helps homeowners maintain privacy and security while adding style to windows and doors, partitions, dividers, splash-backs and cupboards.



Pilkington Cassini™ (pictured) features fine line detail that offers a multi-layered effect, resulting in a modern design influenced by the mosaics of Barcelona. It's achieved by engraving the roller, which marks the pattern onto the glass during the manufacturing process, using cutting-edge technology.

In contrast, Pilkington Tribal™ has a hand-drawn finish inspired by Aztec patterns. To achieve this look, Pilkington used traditional hand-engraving methods when creating the roller to produce a modern patterned glass that's steeped in history.

Ian Bateson, specialist in hand-etching, said: "Hand-etching is a dying art in this country, with so many patterns relying on computer aided design these days. I've been helping create textured glass with Pilkington for over 40 years and I'm proud that this traditional, hand-drawn method is still making its way into the manufacturing of new products."

Leo Pyrah, texture glass product manager at Pilkington, added: "Working with leading trend forecasters, we've created two new contemporary and stylish patterns that complement our existing range.

"The new products will help to capture demand from homeowners, who are increasingly looking for ways to create more privacy while still maintaining a pleasing aesthetic and functionality for home interiors."

Pilkington Texture Glass offers 21 different designs ranging from traditional to contemporary, allowing maximum light in while maintaining a chosen level of privacy or obscuration.

20846/Press Release – 2017.11.14

3. The **Pilkington Spectrum smartphone app** is now available to use on-the-go to find Pilkington products that most closely match project requirements.



The app allows users to find Pilkington products that most closely match their project requirements. The calculator was previously only available through the Pilkington website, but has now been optimised for use on mobile devices to make the process of specifying glass quicker and easier.

Users of the app can search parameters including U-value, g-value, light transmittance and sound insulation to help find products that meet their needs.

The app can be used to specify glass for a variety of configurations, including single glazing, insulating glass units (double, triple and quadruple glazing), secondary glazing and double window configurations. Customers and specifiers can build up their own library of favourite configurations and, for CE Marking, access the Declaration of Performance. For convenience, results can be emailed direct to the mailbox.

The database includes a comprehensive range of Pilkington products, provided by benefit-led categories such as solar control, thermal insulation and self-cleaning.

Phil Brown, European regulatory marketing manager at Pilkington, said: “We've received great feedback for Pilkington Spectrum over the past few months, but we wanted to make sure it is accessible to everyone, no matter where they are. We're pleased that the new Spectrum app now offers customers an advanced, online technical service that can be accessed via mobile device. The app will make it quicker and easier for users to find and select the products they need, regardless of their level of glass product knowledge.”

The new Spectrum app for iPhones and iPads is available to download from the Apple iTunes store at: <https://goo.gl/px2hVi>.

It can also be downloaded from the Google Play Store for Android devices at: <https://goo.gl/Dc777i>.

20847/Press Release – 2017.11.21

Guardian



1. Guardian Glass has inaugurated an **emissions control system at its Dudelange, Luxembourg float plant.**

Mrs. Carole Dieschbourg, Luxembourg's Minister of the Environment, and Mr. Dan Biancalana, Mayor of Dudelange, joined Guardian Glass in Europe leadership for the official inauguration of the control system.

Guus Boekhoudt, Vice President of Guardian Glass in Europe; Jose Miguel Villacorta, Dudelange Plant Manager, and Jean Ries, Director Government and Public Affairs Guardian Europe all also witnessed the massive installation that reduces NOx, SOx and dust from the float glass process.



The control system has been fully operational for four months and ensures the Dudelange plant complies with limits set by the Luxembourgish Environment Agency and with the EU Industrial Emission directive. A similar system was installed at the Guardian Glass Bascharage, Luxembourg plant in 2013.

"With this new emissions control system, Guardian Glass affirms its commitment to the efficient use of natural resources while operating in a way that protects the safety, health and well-being of its employees, the environment and the communities in which it operates," said Guus Boekhoudt.

20848/Press Release – 2017.11.15

2. Guardian Glass will supply the **façade glass for the world's tallest building – the Jeddah Tower (Saudi Arabia)– which will be more than a kilometre high.**

Jeddah Tower (also known as Kingdom Tower) is an unprecedented project that dares to go beyond the one-kilometre threshold.

The over USD 1.2billion (GBP 800million) supertall building structure, to be completed in 2019, will cover an area of 5.3 million square meters and include 439 apartments, 200 hotel rooms, 59 elevators and 2,205 parking spaces. It is set to break new world records for tallest building, highest occupied floor, highest architectural top, highest tip and highest sky terrace.



Guardian Glass will provide more than 400,000 square meters, the area of approximately 55 football fields, of aesthetic and functional glass panels that meet the iconic landmark's complex energy and performance requirements.

The glass chosen for the massive structure is a custom-made, double-pane glass system combining Guardian Glass' popular SunGuard® Silver 20 and SunGuard® Neutral 60 coated glass products. The robust technology is made to withstand a 2.5-meter radius sway without breakage or leakage.

Guardian Glass Middle East & Africa General Manager Mohammad Al Ibrahim said, "The unprecedented size and height of the Jeddah Tower required us to carefully work with the business team to select a glass system that offers a balance between energy savings and light transmission. For that reason, we have combined two of our most popular and reliable Guardian SunGuard products that we are confident will offer the best performance without compromising aesthetics."

As a high-performance, solar-reflective coated glass, the exterior SunGuard® Silver 20 pane will help block daytime heat yet allow for abundant natural light and provide a luxurious silver-green aesthetic. The interior pane, with SunGuard® Neutral 60, will help protect against indirect night-time heat. The skyscraper's unique, circular, glass-floored sky terrace, located more than 610 meters (2,000 feet) above ground level, will also be supplied by Guardian Glass.

The glass will be manufactured at the Al Jubail Guardian plant, then delivered to UAAC (United Arab Aluminium Co.) factory in Jeddah, where the glass will be processed into double glazed units, structurally glazed to the frame with high-performance secondary structural sealant applied. The fully assembled curtain wall system will then be delivered to site for installation.

Guardian's trained and certified Technical Advisory Centre (TAC) team of experts will be available to provide around-the-clock support on the project to optimize results. An onsite team will work closely with UAAC to provide consistent supervision, maintenance and long-term post-project service.

Jeddah Tower will be an exciting addition to Guardian Glass' extensive portfolio of iconic landmarks and developments in hospitality, retail, residential, corporate and institutional properties in the Middle East and around the world.

20849/Press Release – 2017.11.09

3. Guardian Glass has **extended its SunGuard® SuperNeutral™ (SN) range of high performance solar control glass** with a product that provides the highest light transmission in the portfolio.

Guardian SunGuard SN 75 HT and SN 75 Ultra HT offers, respectively, a light transmission of 75% and 76%, which is 5% and 6% higher than other coated glass products from the Guardian SunGuard SuperNeutral range. This high light transmission supports building owners, architects and designers in their effort to effectively introduce more natural daylighting into their projects.

SunGuard SN 75 HT is also aesthetically appealing with its highly desirable, consistent, neutral appearance and low level of outside reflection. Colour neutrality of SunGuard SN 75 Ultra HT is particularly high as it is produced on Guardian UltraClear™ low-iron glass, providing a much more neutral tone when viewed from both inside and outside the building.



As well as its high light transmission, Guardian SunGuard SN 75 HT provides a low solar factor of 40% and excellent thermal performance – Ug value of 1.0 W/m²K – helping to balance temperature levels of interior rooms throughout the year. Due to this unrivalled combination of properties, SunGuard SN 75 HT contributes to a more comfortable living and working environment.

Nicolas Gouzou, Product Manager at Guardian Glass Europe comments: “People have a natural attraction and need for daylight. Independent studies show that introducing a proper daylighting plan can help increase concentration and have a positive impact on occupant wellbeing, productivity and sense of satisfaction.”

20850/Press Release – 2017.11.13

Press Glass

According to calculations made by Interseroh, which is an independent verifying unit, Press Glass saved 562 tons of natural resources in all its plants in 2016. This way the company also reduced emission of greenhouse gases by 103 tons. Recycling included plastics, steel, paper and wood.

For many years Press Glass has been implementing activities towards the protection of the natural environment and natural resources.

“We know how important it is to implement activities towards environmental protection so we remember to save natural resources in our production. For over 10 years now our production has been complying with the global environmental protection system ISO 14001. The fact that we have also joined the resources SAVED programme intended to protect natural resources by recycling is testimony to our activities dedicated to environmental protection,” says Anna Drabczyk, OHS, fire safety and environmental specialist, coordinator for environmental protection at Press Glass.

20851/Press Release – 2017.11.23



CTIEC in Bangladesh

China Triumph International Engineering Co., Ltd. (CTIEC) will be providing the second 600tpd float glass line for Nasir Float Glass Industries after signing the contract for this work at the end of October.



The No.1 line of 600tpd float glass project contract was originally signed in 2015, and this float glass production line is still under construction with steady progress. The demand of float glass is growing along with a fast economic development in Bangladesh. According to the company vision, Mr. Nasir decided to start the second line of 600tpd float glass project, and selected CTIEC as the general contractor.

CTIEC has already constructed several projects for Nasir Group since 2002, facilitating the Nasir Group to become the largest glass manufacturer in Bangladesh. All the established projects including 250tpd float glass line, 100tpd glassware production line, 20tpd tubing glass production line, 250tpd to 400tpd float glass renovation project bring considerable profits to the customer.

20852/Press Release – 2017.11.10

Orda Glass (Kazakhstan)

Stewart Engineers, an investor, EPC contractor, and technical advisor for the **Orda Glass** facility in Kazakhstan has completed the process steel installation for the project. The 600tonnes/day facility will be **Kazakhstan's first float production line** and is due to **be completed in 2018.**

China Triumph engineering group has recently been added to the project, taking over civil construction from a domestic builder.

On completion, the site will manufacture products including pyrolytic nanotechnology coated glass (low-e pro, solar control, reflective, TCO) with glass thickness ranging from 2-12mm, as well as architectural and automotive glass.

Orda Glass will also have laminating capabilities with future expansion to other value added products.

20853/Press Release – 2017.11.15

Pittsburgh Glass Works

PGW has confirmed the closure of production plant at Creighton, which will take place during 2018.



Pittsburgh Glass Works, LLC (PGW) confirmed that recent discussions between the company and the United Steel Workers (USW) did not produce a long-term solution to the challenges facing **PGW's auto-glass manufacturing plant in Creighton, Pennsylvania**, which will result in a phased close-out of production at the plant in June, 2018 – about seven months from now.

The Creighton facility is one of the company's eight automotive glass manufacturing plants in the United States, with 193 hourly workers. Creighton is the oldest facility in the PGW system, with a two-story production layout that creates significant operational challenges.

The 130-year-old facility also would require significant utility upgrades and additional infrastructure improvements to be able to support further production investments.

The initial transition of production from Creighton is scheduled to take place in January of 2018, with a shift of certain customer orders to Evansville, Indiana for fulfilment.

Creighton's second production line will continue operations until the summer of 2018, with the final closure of operations in Creighton currently scheduled for June.

20854/Press Release – 2017.11.22

Vitro Architectural Glass

Vitro Architectural Glass's Fresno, California, float glass manufacturing plant is celebrating its 50th anniversary.

The milestone comes as the facility implements new technology to enhance the environmental performance of the glass-manufacturing process for Starphire Ultra-Clear glass and other residential and commercial flat glass products.

The process, which involves injecting ammonia into the facility's oxygen-fueled (oxy-fuel) glass furnace, will reduce nitrogen oxide (NOx) emissions, making it one of the lowest NOx-emitting float glass plants in the US.

Using cleaner, more environmentally advanced processes in its operations has been a hallmark of the plant's efforts to manufacture glass more efficiently and reduce its carbon footprint.



In 2000 Fresno became the first flat glass manufacturing plant in the company to install and operate an oxy-fuel float tank. At the time, the facility was the lowest NOx-emitting plant in the US.

In 2014 the float glass tank was relined and a new furnace was installed. That summer, the plant started manufacturing Starphire Ultra-Clear glass with oxy-fuel furnace technology.

Starphire glass is believed to be the only ultra-low-iron glass in the world manufactured on an oxy-fuel float glass line.

Operated with Vitro-owned and patented technology, the furnace uses oxygen to combust sand, silica and other raw materials, reducing natural gas consumption by 15%, carbon emissions by 10% and NOx emissions by more than 50% compared to traditional gas/air-fired glass furnaces.

The Fresno plant is one of only six flat glass production facilities worldwide to use this process in its manufacturing operations.

The plant was acquired by Vitro Glass in 2016 when the company purchased PPG's flat glass manufacturing and glass coatings operations in the US and Canada.

The Fresno plant employs 150 people and produces 600 tons of glass per day, ranging in thickness from 2.5 to 12mm.

Javier Gutierrez, plant manager, said: "We've made excellent progress improving our furnace operation, and we've made numerous upgrades throughout the plant to ensure that we're safe, productive and efficient."

20855/Press Release – 2017.11.17

Bangkok Float Glass

Bangkok Float Glass (BGF) plans to invest Bt7.5 billion (\$229.7 million) in another furnace and factory in the next five years.

The facility expansion is line with the company's business plan to boost sale revenue from Bt500 million (\$15.3 million) this year to approximately Bt4 billion (\$122.5 million) over the period, to be driven by exports.

The company's goal is to be a leading glass manufacturer and distributor in Asean.

BGF is a manufacturer and distributor of float glass panels under the Bangkok Glass (BG) company.

BGF recently launched its first glass factory with a production capacity of 219,000 tonnes per year. BGF Float Glass is located in Srimahaphote, Prachinburi, Thailand covering an area of 150 rais.

The factory's construction budget of Bt5 billion has taken into account an expansion in capacity to meet demand in both domestic and other Asean markets.

20856/Press Release – 2017.11.28

HG-glas / Glaston



Glaston has closed a deal for two FC Series™ flat tempering furnaces to **HG-glas (Heylen-Geerts Glas Industrie) located in Herentals, Belgium**. The furnaces will be delivered during 2018.

Founded in 1900, HG-glas has for over 20 years specialized in industrial glass treatment to meet the high quality standard industry needs. The company was one of the first independent glass processing companies in Belgium to buy a tempering furnace. Thanks to a consistent expansion plan HG-glas is today able to offer a wide range of highest quality glass products.

In order to meet the growing demand HG-glas decided to invest in two new FC Series™ lines. Both lines will be integrated into an automated production line to be more productive, increase the energy savings and overall yield.

“Investments in latest technology and carefully maintained machines has enabled us to deliver high quality products. Today we can offer a wide range of glasses in various sizes and thicknesses thus giving us a solid position on the market,” says Marc Vermeulen, Managing Director at HG-glas.

The FC Series™ is well-known for high capacity, energy efficiency, built-in process intelligence and ease of use and above all for the premium quality of its end products.

20857/Press Release – 2017.11.15

Miscellaneous

Onyx Solar PV Glass



Onyx Solar glass is used in the Sierra eFacility, the second greenest NC building in the world, achieving 103 points out of 110 points in the LEED-NC rating system. Coimbatore is home of India's highest ranking Green Building rated by GBCI under LEED (New Construction v2009), the second in the world: the “Sierra eFacility” building. It scored 103 points out of 110 points in the LEED-NC rating system. It combines transparent photovoltaic glass manufactured by Onyx Solar (1,245×635mm glass units) with conventional glass, achieving an aesthetic and functional result.



Sierra eFacility offers an idea of how the buildings of the future should be. It will be operating at Net Zero Energy and is fully Carbon Neutral in overall operations. It also uses environmentally friendly building materials and high-performance glass, such as Onyx Solar PV glass, which not only is aesthetically pleasing but also generates free and clean electricity from the sun, improves the building's energy efficiency and filters harmful radiation. And it doesn't obstruct the view.

The most sustainable building in the Northern Hemisphere, located in Valladolid (Spain), also integrates transparent photovoltaic glass manufactured by Onyx Solar.

20858/Press Release – 2017.11.14

Swiss-RE Next

A new office building with a unique façade is being built in Zurich. The building's extremely interesting, powerful undulating glass envelope creates the overall effect of a glass skin.



This new office building planned by Diener & Diener Architekten is currently being built at the headquarters of Swiss Re Ltd. in Zurich.

The company carrying out the work, Frener & Reifer, is responsible for, among other things, the powerful steel transom/mullion façade and the front-mounted undulating glass façade of the new building at Mythenquai.

The new building is characterized by its unique façade, an extremely interesting, powerful undulating glass envelope. The transparent material is used here as a building block to create the overall effect of a glass skin.

The six floors of the light-filled building blend in effortlessly and elegantly with the prominent lake front at the lower basin of Lake Zurich.

The undulating glass harmonises with the waves of the lake while its soft lines and associated light and shadow effects break the rigid surface of the material. Over 900 vertically arranged glass wave units will be fabricated, attached to stainless steel mounting brackets and connected by rods to form the 6,475 m² large front-mounted undulating glass façade. The installation of the thermal façade began in September 2015.

20859/Press Release – 2017.11.22

Sea-green Solar Glass Solar Panels Cover School in Denmark

The International School Nordhavn in Copenhagen is covered by 1,200 sea green solar arrays, creating a soothing and refreshing aesthetic appearance to the school and for its students, while keeping the air cleaner.



Sea Green is possibly the most soothing calm colour of the entire colour spectrum. Imagine how wonderful it must be to be encompassed and surrounded by 1,200 sea green solar arrays as a student at C.F. Møller-designed International School Nordhavn in Copenhagen. It is clean-tech magic informing the architecture – not only soothing to the eye but refreshing to the student's mind and body as the solar panels produce clean energy and keep the air cleaner while adding to the building's aesthetic.

The **specific solar technology was developed by Swiss research institute EPFL (École Polytechnique Fédérale de Lausanne)**. In general, solar technology used as part of the fundamental components of a building is called building-integrated solar PV (BIPV). This is reportedly one of the largest BIPV projects in Denmark.

By a detailed and ingenious process, the tinting of the solar and thermal panels turns the panels into beautiful architectural features in their own right. The shimmering sea-green panels mesmerize the eye. An interesting point is that no pigments were used to make them. The panels are clear. The oceanic sea green colour is thanks to technology that adds fine particles to the glass surface. It is the appearance of coloured panels that we see.

Explaining the process of light interference developed over the years in EPFL labs, Jean-Louis Scartezzini, the head of the Solar Energy and Building Physics Laboratory (LESO-PB) says, “The iris effect creates a colourful rainbow on a very thin layer. We used the same principle and adapted for glass. The colour comes from a process of light interference developed over a number of years in EPFL labs. Light interference is one way of producing colour. It’s a similar effect to that seen in soap bubbles, on the wings of some butterflies, and in a layer of oil on the surface of the water.”

The panels cover much the building. As such, the panels provide the school with 300 MWh of electricity per year, which meets more than half of the school’s energy needs. “In reality, controlling the light reflected by the solar panels so that they produce only one colour without reducing energy efficiency was a real challenge. The researchers aimed to be able to define the u of their solar panels – such as brick red, royal blue, golden yellow or sea green – by ensuring that only certain wavelengths are reflected. This required a series of digital simulations and a special manufacturing process, and it took 12 years to get from the first sample to the first coloured solar facade. The researchers developed special filters, which they applied to the glass panels in nanometric layers. The filter design determines which wavelengths of light will be reflected as visible colour. The rest of the sunlight is absorbed by the solar panel and converted into energy.”

Andreas Schüler led this project from the start. He provides more details: “We have a free hand in developing our filters – we can achieve specific refraction indexes by combining different oxides. We work layer by layer, using between 3 and 13 layers in any given filter design. We have to find the right composition and thickness of layers so that they reflect the desired wavelengths while at the same time meeting the solar power requirements.

“Making evenly coloured samples was difficult. A discrepancy of only 5 nanometers would affect the colour. We thus had to achieve nanometric precision at a scale of a square meter.”

There were problems such as the size of the machines. They had to be at least 100 meters (330 feet) long in order to apply the layers of the filter.

“We looked for partners in Europe, but companies here weren’t willing to take the chance. It turned out that **Emirates Glass** had the factory, the machines and the desire to take on this project,” said Nicolas Jolissaint, an engineer at SwissINSO, an EPFL spin-off. **Emirates Insolaire** was set up as a joint venture and is thus the entity that ended up producing the coloured panels for the Copenhagen International School.

British Glass: Pooling Ideas to Close the Flat Glass Recycling Loop

A **workshop organized by British Glass and Zero Waste Scotland**, explored how flat glass recycling can be increased to support material efficiency and reduce CO₂ emissions and energy use.

A call for applications to an GBP 18 million Circular Economy Investment Fund brought together people from across the building, demolition, waste processing and glass industries recently.

It's estimated that in Scotland only around a third of waste flat glass is recycled. Although glass can be re-melted indefinitely, most glazing, refurbishment and demolition glass waste ends up as aggregate, if it avoids landfill.

But if this glass was used to make new glass products far more energy and carbon dioxide would be saved: every tonne of glass that goes back to re-melt saves energy and around 246kg of carbon dioxide (compared to using virgin raw materials).

This workshop was an opportunity for representatives from across the supply chain to share knowledge, generate ideas and make connections that might translate into bids to Scotland's Circular Economy Investment Fund. As part of the day, Chris Holcroft and Valli Murthy of British Glass gave a presentation on the markets for flat glass waste – which can be used in a wide range of glass products (not just flat glass, but also bottles, jars, ballotini and fibre glass) as well as cement and concrete.

They explained the importance of maintaining the quality of waste glass for recycling (cullet) and the types of contamination that need to be avoided.

Valli Murthy from British Glass said: "It was fantastic seeing representatives from different parts of the flat glass supply loop, who would not have met without this workshop. The probing questions they asked showed they were really starting to think outside the box to come up with new ways they could work together to recycle flat glass. We're excited to see how this dialog continues, and the initiatives it generates.

"Increasing the use of cullet is an important part of the glass industry's decarbonisation plans, and British Glass will continue to provide support to anyone who wants to play a part in getting more flat glass recycled."

This event was part of British Glass' involvement in the European FISSAC partnership project, which is identifying practical ways to increase construction waste recycling.

20861/Press Release – 2017.11.08



CONTAINER GLASS

Glass Companies

O-I

1. O-I reports third quarter 2017 results

Owens-Illinois, Inc. (O-I) has reported financial results for the third quarter ended 30 September 2017. For the third quarter, earnings from continuing operations were USD 0.77 per share (diluted), up 13% compared with USD 0.68 per share in 2016, primarily driven by improved segment operating profit in Europe and Latin America, and lower interest and tax expense.

Net sales were USD 1.8 billion, an increase of almost 5% compared to the prior year third quarter, primarily due to favourable currency translation. Price increased 1% on a global basis, while shipments were on par with the prior year. Earnings from continuing operations before income taxes were USD 172 million, an increase of 12% compared with the same period in 2016. Segment operating profit of reportable segments for the third quarter of 2017 was USD 260 million, an increase of 10% compared with prior year.

Notable gains were reported in Europe and Latin America, which more than compensated for external weakness in North America.

Europe benefited from a favourable sales mix, a currency tailwind and the receipt of an energy credit, as expected. The increase in Latin America was driven by a 7% increase in shipments including double-digit gains in Brazil and a reduction in total systems cost. Strategic initiatives in commercial programs and end-to-end supply chain management continue to generate benefits as planned.

In Europe, sales volumes increased 1% and segment operating profit reported USD 81 million, which was USD 17 million, or 27%, higher than the prior year quarter. Much of the increase was due to the receipt of an energy credit in third quarter of 2017, as expected, whereas Europe received a similar energy credit in the fourth quarter of the prior year. Setting aside the energy credit, Europe is performing well, driven by a favourable sales mix, the benefits of strategic initiatives and the positive impact of currency translation.

20862/Press Release – 2017.10.30

2. O-I to build Mexican furnace by 2019

O-I is set to build a fifth furnace at its glass container production plant in Nava, Mexico. The world's largest glass container manufacturer has also expanded its 50-50 joint venture with Constellation Brands.

The joint venture operates the container production plant in Nava, Mexico that provides bottles exclusively for Constellation's adjacent brewery.

The brewery brews Mexican beer brands for export to the United States, which is the fastest growing category in beer in the US.



The relationship now provides for the addition of a fifth furnace to be operational by the end of 2019 and has extended the term of the joint venture agreement by ten years, to 2034.

The original joint venture agreement included the expansion of the glass production plant from one furnace to four furnaces by 2018. Three furnaces currently operate with the fourth furnace expected to be operational in the first half of 2018.

The Nava plant will be the largest container factory in the world once the furnace is installed. The capacity expansion is estimated to cost approximately \$140 million and will be financed by equal contributions from both partners.

O-I CEO Andres Lopez said: "This investment will allow both companies to realise additional attractive opportunities in Mexican beer exports to the US, leveraging the success at the joint venture's factory in Nava, while bolstering O-I's relationship with a key strategic customer."

20863/Press Release – 2017.10.31

Ardagh

During November's UK Packaging Awards, Ardagh was awarded the **Packaging Company of the Year**.



Judges were impressed by the design in the intricate detailing of the Duerr's jar texture. Ardagh Group was awarded the Packaging Company of the Year at the UK Packaging Awards, held in London this week.

In making their decision the judges commented: "It has been a transformational year for Ardagh. Material acquisition bedded down and listed on NYSE. The clear winner of packaging company of the year."

Paul Coulson, Chairman and Chief Executive of Ardagh said: "We are delighted to win this fantastic award, which reflects our long-established record of investment in product innovation, operational excellence and sustainability.

"All 2,500 colleagues at our nine UK plants have contributed to Ardagh's successful development into a leading global packaging group over the past two decades, and can feel justifiably proud of this latest accolade. We remain focused on the further growth and development of our business in the UK and globally."

The company is also delighted to win the **Glass Pack of the Year Award** (Other Drinks and Foods) for its Duerr's preserve jar that looks and feels like citrus peel.

Judges were impressed by the design in the intricate detailing of the Duerr's jar texture, and said: "It is wonderfully tactile and aesthetically pleasing, this is an attractive pack with clever orange peel imitation. It should certainly appeal to the intended younger consumer."

20864/Press Release – 2017.11.29

Verallia Group



1. Verallia: 3rd quarter 2017 results show robust financial performance, strong activity, EBITDA margin improvement

In line with the previous quarters, Verallia achieved a robust financial performance in Q3. Revenue increased by 5.7% at constant exchange rates, driven by higher volumes, a better mix and prices in South America.

In Europe, the 4.6% increase at constant exchange rates was supported by higher volumes in most countries as well as a better mix, in line with previous quarters trend.

In South America, revenue was negatively impacted by exchange rates evolution, mainly the weakening of the Argentinean Peso against Euro. At constant exchange rates, revenue grew by 13.4%, mainly driven by prices in a highly inflationary environment. Volumes resisted well in a challenging context.

EBITDA was up 8.4% at constant exchange rates, supported by manufacturing performance improvement and higher volumes.

In Europe, the strong 7.4% increase in EBITDA at constant exchange rates was driven by higher volumes and an improved manufacturing performance, which partly offset the negative costs evolution. Sales prices were stable.

In South America, EBITDA was negatively impacted by exchange rates evolution, attributable to the depreciation of the Argentinean Peso against Euro. At constant exchange rates, the robust 12.8% EBITDA increase was attributable to a good level of activity in volumes as well as the pass-through of inflation into sales prices.

Verallia generated a strong operating cash-flow in the quarter, at EUR 104.1 million, up EUR 72.4 million year-on-year. An improved operational performance, a good management of the working capital and the positive impact of factoring contributed to this increase.

For the rest of the year, Verallia anticipates a moderate growth in revenue at constant foreign exchange rates as well as a further improvement of EBITDA. Capital expenditures for the year 2017 are expected to be in the same range as in 2016.

20865/Press Release – 2017.11.20

2. Vidrieras Canarias

Germany's Ilis has installed its 100th StrainScope real time polarimeter (S4/20 cord tester) for Vidrieras Canarias, in Las Palmas, Spain (part of the Verallia group) and is used to perform fast and easy measurement of cord stresses close to production.

The robust housing and user-friendly software interface make the StrainScope a versatile and reliable tool for industrial quality assurance and process optimisation.

Also available in the hollow glass product range are the StrainScope S3/180 for objective and quick measurement of annealing stress and the StrainScope S3/30 immersion polarimeter for measurement of wall stresses in thermally strengthened tableware.

20866/Press Release – 2017.11.14

Vetropack



Vetropack Holding has appointed two new business division managers for the Business Division Czech Republic/Slovakia, and the Business Division Switzerland/Austria.



From left: Boris Sluka and Johann Eggerth

With effect from 1 January 2018, Boris Sluka (1965) will take over as General Manager of the Business Division Czech Republic/Slovakia, which comprises the two companies Vetropack Moravia Glass, a.s. and Vetropack Nemšová s.r.o. With effect from 1 March 2018, Johann Eggerth (1967) will take over as General Manager of the Business Division Switzerland/Austria, which comprises the Swiss company Vetropack Ltd and Vetropack Austria GmbH. He has also been appointed a member of Group Management.

Boris Sluka graduated from the Technical University in Bratislava, Slovakia, and continued his education on a part-time basis while working in, among other places, France, Russia and Austria. In recent years he has worked mainly in the automotive industry. As a senior manager at various well-known automotive suppliers, including Matador a.s. and Plastic Omnium Auto Exteriors Ltd., and also at companies making machine tools, he acquired not only international industry experience but also considerable expertise in focused management in a dynamic environment.

The current General Manager of the Vetropack Business Division Czech Republic/Slovakia, Gregor Gábel, will be commencing his well-earned retirement after the handover period.

Johann Eggerth, the newly appointed General Manager of the Business Division Switzerland/Austria, graduated from the Montanuniversität Leoben (in Metallurgy/Materials Engineering) and likewise has very broad international professional experience. For example, he worked as a project leader and product manager at Voest-Alpine Industrieanlagenbau and on international consultancy projects for McKinsey & Company before setting up and running the engineering and consultancy company Festool Engineering for the Festool Group. Since 2012, he has been CEO at the Tirolean family-owned paint company Adler. His main task there was to develop and implement a viable strategy for internationalisation and growth, a task which has now been completed.

Johann Eggerth will take over as General Manager of the Business Division Switzerland/Austria from Johann Reiter who – as already announced in February 2017 – will assume full responsibility for the operational management of Vetropack Group with effect from 1 January 2018.

Until his successor arrives on 1 March 2018, Johann Reiter will continue as General Manager of the Business Division Switzerland/Austria alongside his work as Group CEO.

20867/Press Release – 2017.11.06

Şişecam



Sisecam is to build a 410t/d furnace at its Eskişehir glass packaging factory in Turkey. Şişecam will increase the annual production capacity of glass packaging in Turkey to approximately 1.2 million tons by launching the new furnace that will be equipped with new technology in accordance with Industry 4.0 and have a production capacity of 150 thousand tons per year.

20868/Press Release – 2017.11.21

Beatson Clark



Beatson Clark exhibited at Craft Beer Italy 22-23 November 2017. Craft Beer Italy is a new conference and exhibition focusing on technologies, raw materials and marketing for the craft beer industry staged by the organisers of BrauBeviale, the annual drinks trade fair which takes place in Munich.

Alongside demonstrations of embossing techniques and samples of standard and bespoke beer bottles, Beatson Clark run a pub quiz and invited brewery representatives to win a free trial pallet of glass or free sample mould equipment for their own customised bottle.



Charlotte Taylor, Marketing Manager at Beatson Clark said: “The craft beer sector is growing exponentially across the world, and while the US and the UK are leading the way other European countries are now getting on board. We already work with two craft breweries in Italy and we’re looking forward to meeting many more at this exciting event. As well as water, barley, hops and yeast, all brewers need beer bottles! We have an outstanding range of bottles in our general sale range that are perfect for small breweries, including our new champagne-style 500ml and 330ml Skittle bottles. For breweries with a larger budget we have an expert team of in-house designers who can create stunning bespoke designs for customers. And we can even add embossing to our standard bottle shapes to reduce the overall cost of a unique bottle.”

Beatson Clark specialises in providing glass packaging solutions for niche brands in the food, drink and pharmaceutical markets worldwide. The key to its success has been flexibility, innovation and the high quality of its containers.

Beatson Clark's customers are at the core of its business and the company is proud of the long-standing partnerships it has developed thanks to the outstanding level of service it offers.

20869/Press Release – 2017.11.13

Croxsons



UK glass packaging company, Croxsons, has created primary packaging and cork closures for Brighton Gin's new 350ml Two-Pitch bottle. Croxsons designed the original 700ml bottle and cork closure for the distiller as a start-up, including its recent 50ml miniature range and the glass packaging firm was in the mix once again as Brighton Gin launched its handbag-sized product.

The collaboration between both parties - from design through to the finished product - is indicative of Croxsons' commitment to the 'customer journey' - the steps it undertakes to ensure clients get their product in the right bottle, with the right closure.

Confidence in Croxsons' abilities to create authentic packaging that readily appeals to modern consumers is evident as Brighton Gin continues to expand its range.

This connection between brand owner and packaging supplier saw Brighton Gin win the Gold Packaging Award and overall White Spirits Packaging Trophy at the recent 48th International Wine & Spirit Competition (IWSC) held in London.



Croxsons' Tim Croxson said: "Product differentiation in the spirits category is essential - packaging has evolved and brands are challenging the norm of the perception of what a product should look like; the motive being to make a strong connection with the consumer. Brighton Gin is indicative of this trend."

20870/Press Release – 2017.11.03

Heinz-Glas

Heinz-Glas has unveiled a flacon that features a digital screen on its front. The Times Square perfume bottle has a digital screen to where consumers can upload a message, video or music.



Whenever the consumer lifts the bottle, the flacon plays the selected media, such as a song or film footage.

The company has been working in partnership with the multimedia business DS.Xpress for two years to design and make the bottle.

Virginia Elliott, Chief Sales Officer at Heinz-Glas said: “This new next generation flacon is the integration of the digital era with classic glassmaking. This is the beginning of being able to something we never thought possible.”

The refillable Flacon means customers can personalise their own bottle. In order to do so they have to register on the Heinz-Glas website.

The flacon can be customised with a personal message and optimised in an intuitive way. The customer can upload their own images, videos and music, they can select their favourites and send them to the flacon.

Ms Elliott said: “You can give this as a present to a loved one and they will not just have a nice experience with the perfume but with the flacon as well.”

Tests had been carried out to ensure the screen does not react if the alcoholic content of the bottle splashes onto it.

Second and third generation bottles are planned in six months and in a year’s time, she said.

20871/Press Release – 2017.11.21

Stölzle Masnières



Digital glassmaking has enabled Stölzle’s Masnières site in France to offer its customers finished samples in less than four weeks.

The site is the company’s centre of excellence for perfumery and cosmetics and it now offers its customers more flexibility in development and in production runs.

The site’s Managing Director, Etienne Gruyez, said: “The industry is adapting to keep relevant with the digital big bang.

For example, we can provide new finished samples to our customers in less than four weeks thanks to a complete digitalisation of the design phase. Digital printing allows us to also minimise errors and reduce costs.”



When it comes to the development of new products, all departments involved, including the mould shop, its team of product developers and designers, along with its decoration facility, are fully integrated and co-operate closely with each other.

This ensures the availability of a finished, decorated glass sample within a four-week development process.

The site has also installed new production equipment which allows it to manufacture two different items – meaning two different shapes – simultaneously on the same production line. This reduces the minimum order quantity and the number of moulds required for an item.

20872/Press Release – 2017.11.07

Verescence

verescence

French perfumery and cosmetic glass manufacturer Verescence has unveiled its largest glass melting furnace at its flagship plant. It spent €30 million to renovate its Mers-Les-Bains site in the Somme region of France, of which €11 million was spent for the reconstruction of the furnace. The investment was part of its Excellence 2018 plan and more specifically the Mers 2018 plan.

The new furnace has a reduced energy consumption of 15% and a 40% reduction in CO2 emissions., and the group’s largest with an output capacity of 700,000 bottles per day. The furnace is dedicated to bottles made with Xtra Flint glass, a glass of an outstanding quality and appreciated by high-end perfumery players for its brightness and transparency.

The rebuilding of the furnace was also an opportunity to renovate the entire manufacturing area through various improvements both in terms of work efficiency and working conditions.

The modernisation process was designed with the aim to improve the plant’s amenities (social areas, offices), some of which are still ongoing and offering more modern and comfortable work and rest areas for the employees.

Verescence is the only glassmaker to have been certified in all its European plants according to the Best Manufacturing Practices in the cosmetic industry.

20873/Press Release – 2017.11.15

Miscellaneous

PepsiCo India

PepsiCo India Holdings will use non-returnable glass bottles for its packaging for the first time. The Indian subsidiary of US food and beverages company PepsiCo has introduced the non-returnable glass bottle with a twist-and-turn cap for its Pepsi Black zero-calorie carbonated beverage, reports Live Mint.

Until this point, Pepsi Black had been available in cans and polyethylene terephthalate (PET) bottles.

Non-returnable glass bottles have their advantages. "Cola is best enjoyed chilled and from a glass bottle. Non-returnable glass bottles also make on-the-go consumption possible. And these bottles can be re-used at home. This is an experience driven packaging disruption," said Raj Rishi Singh, director (marketing for Pepsi), PepsiCo India. The company will initially sell Pepsi Black in non-returnable glass bottles in metro cities, and will extend the reach to other towns.

The price will remain the same as the price of cans. Like 250ml cans, the 250ml non-returnable glass bottles are available at Rs25.

The company will not drastically move to the new form of packaging. It will initially be restricted to niche products such as Pepsi Black.

The company is also selling the sparkling version of Himalayan, a water brand owned by NourishCo Beverages in 'well-designed glass bottles' that was earlier sold in PET. NourishCo Beverages is a joint venture between Tata Global Beverages Ltd and PepsiCo.

20874/Press Release – 2017.11.20

Belarus to Eliminate Glass Debris

Belarus is moving ahead in its intent to set up a deposit system for the collection of empty containers, in its aim to reduce the amount of debris that settles in the oceans and landfills. The amount of garbage in Belarus is planned to be reduced thanks to a deposit system for the collection of empty containers, Victor Margelov, co-chairman of the Union of Legal Entities 'Republican Confederation of Entrepreneurship' said.

"The introduction of a deposit system is a question that cannot be translated into money. A glass bottle is a material that does not decompose at all, that's why glass should not fall on landfills in principle! There is a positive experience of the USSR, where the bottle was wrapped up more than 8 times before turning into cullet, and we buy a disposable, beautiful, often imported bottles, which is dirty and unsuitable for re-use, and no more than 10% is used again," he added.

Some years ago, an empty bottle could be handed over for 12 kopecks, which is several times more than the cost price.

With the same declaration of intentions to introduce this system, Belarus has moved far more than Ukraine.

First of all, the need to introduce such a system has been introduced by a separate item into the Belarusian National Agency for Waste Management. In addition, the government is actively working to create an infrastructure for the effective launch of the system.

The bill registered by a group of people's deputies is still not considered, and all the recommendations of Germany on the need for this kind of environmental protection are unrequited. Recall, the deposit (collateral) collection system successfully operates in Sweden, Germany, Norway, Finland, Denmark, Estonia. For example, in Norway, thanks to this system, 95% of containers are collected, in Finland - 93.3%, and in Denmark – 89%.

The principle of the depository system of collecting is that when you deliver the packaging in a special machine, it returns some of the money paid when buying a drink. The more bottles are surrendered - the more they can be reused or recycled. This, in turn, reduces the amount of debris that settles in the oceans and landfills.

20875/Press Release – 2017.11.28

Beverage Packaging Market in Europe



HTF new report on the *Beverage Packaging Market in Europe 2017-2021* covers detailed analysis, competitive landscape, forecast and strategies, highlighting the latest trend of lightweight packaging. The study covers geographic analysis that includes regions such as UK, Germany, France, Italy, Netherlands and important players/vendors including Amcor, Ball, Crown Holdings, and Owens-Illinois, Allied Glass Containers, AptarGroup, Ardagh, Can-Pack, etc. The report will help user gain market insights, future trends and growth prospects for the forecast period of 2017-2021.

Research analysts forecast the beverage packaging market in Europe to grow at a CAGR of 4.19% during the period 2017-2021.

Lightweight packaging is one of the major trends in the beverage packaging industry in Europe as it helps vendors in reducing the cost of transportation of the products. According to the report, one of the major drivers for this market is Rise in demand for packaging of functional beverages. Functional beverages include ingredients like vitamins, herbs, minerals, amino acids, as well as raw fruits or vegetables. Beverages, such as sports drinks, ready-to-drink (RTD) teas, energy drinks, enhanced water, enhanced fruit drinks, and soy drinks are functional beverages, and their demand has increased multiple-folds in Europe.

20876/Press Release – 2017.11.02

Global Wine Packaging Market Outlook 2017

The Global Wine Packaging Market 2017 report predicts strong future growth of the Wine Packaging market in all its geographical and product segments.

Combining the data integration and analysis capabilities with the relevant findings, the report has predicted strong future growth of the Wine Packaging market in all its geographical and product segments.

The report begins with a market overview and moves on to cover the growth prospects of the Wine Packaging market and includes a detailed segmentation analysis, presenting product specification, manufacturing process, and product cost structure etc. Production is separated by regions, technology and applications. Analysis also covers upstream raw materials, equipment, downstream client survey, marketing channels, industry development trend and proposals. In the end, the report includes Wine Packaging new project SWOT analysis, investment feasibility analysis, investment return analysis, and development trend analysis.

Top Manufacturers Analysis in Wine Packaging Market include: Vidrala, Consol Glass, Rexam, Bormioli Rocco, Vetropack Holding, Vitro Packaging, Saint-Gobain, Smufit Kappa, Wiegand-Glass, Hindusthan National Glass & Industries, Acor, Owens-Illinois, Koa Glass.

Questions are answered in Wine Packaging Market report:

- Which application segments will perform well in the Wine Packaging over the next few years?
- Which are the markets where companies should establish a presence?
- What are the restraints that will threaten growth rate?
- What are the forecasted growth rates for the Wine Packaging market as a whole and for each segment within it?

The manufacturing cost of products and the pricing structure adopted by the market is also evaluated in the report. Other parameters crucial in determining trends in the market such as consumption demand and supply figures, cost of production, gross profit margins, and selling price of product and services are also included within the ambit of the report.

20877/Press Release – 2017.11.08

DOMESTIC TABLEWARE AND CRYSTAL GLASS

Glass Company

Libbey Group

Libbey Inc. reported results for the third quarter ended September 30, 2017.

Business Highlights

- Net sales \$187.3 million, down 4.8 percent versus prior year, or down 6.2 percent in constant currency.
- Net loss of \$(78.8) million, down \$81.7 million versus prior year, driven by a \$79.7 million non-cash goodwill impairment charge associated with the Latin America segment.
- Adjusted EBITDA (Table 1) \$20.0 million, compared to \$24.7 million in the third quarter of the prior year.

"Competitive pressures and challenging market conditions, as well as a handful of unusual weather-related events and natural disasters, hindered our performance during the quarter. However, the improvements we expected to drive performance in the second half, such as improved profitability in EMEA and the launch of our e-commerce capabilities, began to materialize in the third quarter, and we look for them to contribute to a stronger fourth quarter. Teams across our business are actively working to leverage our e-commerce capabilities and new product offerings to return the Company to profitable growth," said Chief Executive Officer William Foley.

Net sales in the EMEA segment were favourably impacted by increased volumes in the business-to-business channel and favourable price and mix in the segment.

Outlook

The Company updated its full-year 2017 Adjusted EBITDA margin outlook to reflect lower-than-expected third-quarter results, as well as its expectation for year-over-year sales growth in the fourth quarter. The Adjusted EBITDA margin for the full year is now expected to be in the 9 percent to 10 percent range. As previously guided, the Company still expects:

- Net sales decline in the low-to-mid single digits, compared to the full-year 2016, on a reported basis
- Capital expenditures of approximately \$50 million

The Company expects to provide its preliminary full-year 2018 outlook in conjunction with the release of its fourth-quarter and full-year 2017 results early next year.

20878/Press Release – 2017.10.31

Miscellaneous

New Report on Drinkware Market

A new report has been published which gives a panorama of the drinkware market in terms of growth trends, applications and important regions.

The Drinkware Market size is anticipated to see significant growth prospects from 2017 to 2022. The objective of Drinkware market report is to provide a detailed analysis of the Drinkware industry and its impact based on applications and on different geographical regions; strategically analyse the growth trends, future prospects: R&D spending and trail investments.

Major companies include: Zalto, Rona, Prsr, Ocean, Nachtmann, CSK, RCR, Luminarc, SPZ, Cheer.

20879/Press Release – 2017.11.03

Marketreportsworld: Crystalware and Glassware Market Industry Forecast to 2022

According to the recent report on the Crystalware and Glassware Market from Marketreportsworld, the sector is expected to grow at a substantial compound annual growth rate during the forecast period 2017-2022.

The report provides the newest industry data and industry future trends, enabling to identify the products and end users driving revenue growth and profitability. The report comprises of various company profiles of fundamental market players of the crystalware and glassware market.

With thorough market segments in terms of different countries, this report divides the market into a few key countries, with sales (consumption), revenue, market share, and growth rate of the market in these countries over the forecast period 2017-2022.

20880/Press Release – 2017.11.08

REINFORCEMENT GLASS FIBRES

No Specific News This Month On This Sector

SPECIAL GLASS

Glass Companies

SCHOTT



1. Schott has opened a **new packaging production plant in China**, highlighting its philosophy of keeping production sites close to the customers and markets.



Schott's new packaging production plant in China is located at the Schott Xinkang headquarters in Jinyun, Zhejiang, which will produce two billion pieces a year, and is managed by the joint venture Schott Xinkang.

The site will enable the company to provide Chinese pharmaceutical manufacturers with packaging products even more effectively in the future.

The plant highlights Schott's philosophy of keeping production sites close to the customers and markets, and is located at the Schott Xinkang headquarters in Jinyun, Zhejiang, and will manufacture ampoules, vials and cartridges made of glass tubing for the domestic pharma industry.

The new production facility adds to the company's global production network, which includes manufacturing sites in 13 countries.

This year the Schott group also invested in its plants in Müllheim, Germany; Lebanon, USA; and St. Gallen, Switzerland; among others.

20881/Schott Press Release – 2017.11.09

2. Schott has entered into an agreement with its current joint venture partner NEC Corporation to purchase 100% of the **joint venture NEC Schott Components**. NEC Schott Components Corporation is a leading manufacturer of glass-sealed components and thermal links used to protect sensitive electronics and appliances. Schott is looking to further strengthen its position on the important Japanese market for electronic components. For this reason, the company has decided to enter into an agreement with its current joint venture partner NEC Corporation to purchase the remaining shares in the joint venture NEC Schott Components Corp., Minakuchi (Japan).

With the acquisition of NEC Corporation's 49% share, the joint venture will become a fully-owned Schott subsidiary. The transaction is expected to be concluded by the end of the year.

NEC Schott Components Corp. is one of Japan's leading electronic component manufacturers for glass-to-metal seals and thermal fuses. Key applications for these products include electronic devices, consumer electronics, the automotive industry and optoelectronics. NEC Schott Components Corp. was founded in 2000 and employs around 190 people.



20882/Schott Press Release – 2017.11.30

Corning

CORNING

Corning Inc.'s shares rose 6.6% last week after the glassmaker's **sales increased in its latest quarter** as more consumer electronics featured its scratch-resistant glass, Gorilla Glass. Corning Inc. reported **sales of USD 2.6 billion, up 4% from a year before, with the biggest boosts coming from its specialty-materials business, led by stronger shipments of Gorilla Glass.**

Specialty-materials sales rose 26% to USD 373 million. Corning first introduced its damage-resistant Gorilla Glass a decade ago and has refined it over the years for use in products ranging from car windows to Android watches and Apple iPhones.

Sales in the company's optical-communications unit rose 15%, with Chief Executive Wendell Weeks saying on an earnings call with analysts that the company celebrated a "major milestone" during the quarter when it produced its 1 billionth kilometre of fibre. "That's one-third of the optical fibre ever produced in the history of the world," he said. "It's also enough to go to the sun and back 3 1/2 times."

Corning said it expects to meet or beat its 2017 sales guidance and increase its dividends by at least 10% in each of the next two years. While revenue increased in four of Corning's five segments, sales in the company's display technologies unit slid 15% to USD 768 million as LCD glass prices declined.

Overall for the third quarter, Corning reported a profit of USD 390 million, or 39 cents a share, compared with USD 284 million, or 26 cents a share, the year before.

Excluding currency fluctuations and other items, the company said it earned 43 cents a share, up from 42 cents a year before. Core sales, which excludes special items, rose 6% to USD 2.7 billion. Shares in Corning are up 32% this year.

20883/Press Release – 2017.10.31

Jenoptik



The Jenoptik Group consolidated its performance over the first half-year. The Group revenue increased by 7.0% to EUR 526.8 million, EBIT improved strongly by 15.9% to EUR 52.0 million, Executive Board is expecting revenue and EBIT margin for the full year 2017 at the upper end of the original guidance.

“Momentum in our business is strong and demand in our markets remains buoyant. In the third quarter, we also successfully completed another acquisition that will give us access to new markets and boost future growth in the USA. Following positive business performance and with the prospect of a strong fourth quarter, we have firmed up the outlook for the full year at the upper end of the originally forecasted range – including acquisitions revenue will be even slightly above,” says Stefan Traeger, President & CEO of Jenoptik AG.

Group revenue rose by 7.0% in the first nine months, to EUR 526.8 million (prior year EUR 492.6 million). Revenue increased by 7.7% in the third quarter alone, with growth seen in optical systems for the semiconductor equipment industry and in the healthcare & industry sector. The Group also reported increased demand for traffic safety technology.

On a regional level, growth momentum came from abroad, in particular from the Americas. Revenue here increased by a significant 34.9% to EUR 120.0 million (prior year EUR 89.0 million). All three segments contributed toward this positive development. Overall, the share of revenue generated abroad climbed from 65.3% in the prior year to a present 71.3%.

20884/Press Release – 2017.11.13

Miscellaneous

Nanostructured Glass Panels May Take Over Antireflective Films

You may never again need to buy antireflective films for your phone thanks to these nanostructured glass panels.



A team of researchers has developed a special surface for glass. Most electronic devices – including smartphones – come with glass panels which protect the displays underneath from damage or contamination. While durable, glass is highly reflective, which becomes an even larger problem when used with display technologies such as OLED that are not as bright as traditional LCD panels.

One possible solution is to buy antireflective films, but not everyone likes those aesthetically-speaking, and more importantly, they eventually rip or peel.

A team of researchers headed by Andreas Liapis is likely to answer that in the negative: they have developed a special surface for glass, comprised of highly transmissive nanoscale cones, which substantially improves the readability of the screen even under direct sunlight. Liapis' team is addressing that issue by creating a nanostructured surface on which copolymer materials are assembled. The subsequent etching of the glass surface and the formation of the nanostructures take place on this template, effectively transforming the surface of the glass into a forest of "highly transmissive nanoscale cones." These cones, with their sharp tips, are modelled after the optical properties of antireflective films, according to the researchers.

In multiple experiments, the team has found that the average transmission of visible light remained higher than 90% even at 70 degrees from the surface normal. While this isn't the first study to report the antireflective nature of nanoscale structures, Liapis' report would be one of the first attempts by researchers to develop a commercially viable means to produce antireflective nanostructured surfaces.

20885/Press Release – 2017.11.17

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DIVERSE

GLASS & SUPPLIERS

Sisecam Group



Sisecam Group reported consolidated net sales of TL 8 billion and a net profit of TL 1.2 billion in the first nine months of 2017. The Group's consolidated EBITDA reached TL 2.2 billion for the same period.

The group increased its total consolidated net sales revenue by 32.2% year-over-year in the first nine months of 2017, reaching TL 8 billion.

In the same period, Sisecam produced 3.6 million tons of glass, 1.7 million tons of soda and 2.7 million tons of industrial raw materials. The share of international sales is 58%. Sisecam Group reported total investments of TL 556 million and continued to support the national economy with an export volume of USD 489 million in the first nine months of 2017. "Our aim is to further strengthen the Group's financial structure by focusing on sustainable growth and operational excellence. Efforts to optimize production facilities and the cost structure will continue at an increasing pace, with a special emphasis on increased use of automated systems," Prof. Ahmet Kirman, Vice Chairman and Chief Executive Officer, said.

20886/Press Release – 2017.11.27

Bulgaria Forms Glass Association

The Bulgarian glass industry is to be represented by the **Association of Glass Producers in Bulgaria**. The Association of Glass Producers in Bulgaria brings together the members of the glass industry in Bulgaria.

The main objective of the association is to represent the interests of the entire Bulgarian glass industry at home and within the European Union.

Lydia Shouleva, President of the Association of Glass Producers, said: "The Bulgarian glass industry has made great progress in the last decade, thanks to the investments of the manufacturers, particularly in flat glass, automotive glass and glassware. The establishment of this association is a crucial step forward for the glass industry. The association will support the industry via its expertise and aims to be an effective platform to address and overcome the industry's challenges."

The association was officially registered on 26 June 2017 in Sofia and held its first regular assembly on 25 September 2017.

20887/Press Release – 2017.11.23

Celsian Appoints Joost Lavèn from O-I



Celsian Glass & Solar in Eindhoven (The Netherlands) has appointed Joost Laven as its segment leader for furnace support.

Mr Laven (1984) has a master in mechanical engineering from Delft University of Technology and specialises in energy management.



He joined O-I Manufacturing in 2011 and since then has held several jobs in operations and energy optimisation.

His last role at O-I was as batch and furnace manager and plant project manager at the Schiedam plant. Earlier this year O-I decided to close both lines at its Schiedam facility.

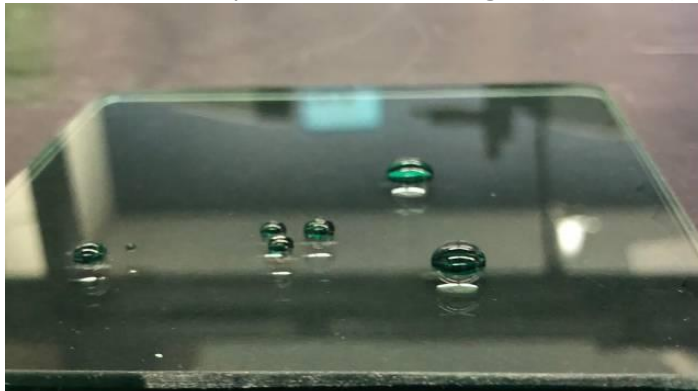
Mr Laven will support further growth of CelSian and look after the commercial segments energy and emission reduction as well as furnace lifetime.

20888/Press Release – 2017.10.31

Henkel Invests in Advanced Materials Start-up NBD Nanotechnologies



Henkel is continuing to invest in innovations with its recent interest in NBD Nanotechnologies, demonstrating its commitment to collaborate with promising start-ups that provide access to cutting-edge future technologies. Leading materials and solutions provider in the global coatings market, Henkel Adhesive Technologies, is continuing to strengthen its expertise in this highly innovative field by investing into US-based advanced materials start-up NBD Nanotechnologies (NBD Nano).



“As part of our innovation strategy at Adhesive Technologies we have established a strong scouting process for new technologies and applications,” said Michael Todd, Global Head of Innovation & New Business Development at Henkel Adhesive Technologies. “The investment in NBD Nano demonstrates our commitment to collaborate with promising start-ups that provide access to cutting-edge future technologies.”

NBD Nano, headquartered in Boston, Massachusetts, is an advanced materials start-up with expertise in adjusting surface properties such as repellency or adhesion. Through its proprietary platform technology, the company is creating additives for plastics and coatings which provide customized surface solutions that are both durable and adaptive. NBD Nano’s technology can be used in manifold applications – from electronics and consumer goods to automotive. Its product offerings include RepelShell™ coating additives that provide excellent water repellency to car glass and DirtBlock™ coatings that significantly reduce the dirt pick-up on solar modules or architectural glass in buildings.

“Functional coatings are one of our key search fields for future innovations in our Adhesive Technologies business,” said Paolo Bavaj, Head of Corporate Venturing at Henkel Adhesive Technologies. “Based on its robust technology platform, NBD Nano has demonstrated the ability to provide cost-effective surface solutions with unique and durable performances for a large variety of applications and on many different substrates.”

For NBD Nano, the Series B funding round lies the basis for accelerated commercialization and customer adoption of its products. “We are ready for the next phase of commercialization. With Henkel, the global leader in the adhesives market, as one of our investors we are looking forward to integrating our innovative solutions in the commercial marketplace,” said Deckard Sorensen, President of NBD Nano.

20889/Press Release – 2017.11.16

Corning Museum of Glass

The Corning Museum of Glass (CMoG) will be the first museum in the United States to present the exhibition **Glass of the Architects: Vienna, 1900-1937**, a cooperation of the MAK and Le Stanze Del Vetro **from 23 June 2018 to 7 January 2019**. The exhibition will explore a transformative moment in Austrian design. Glass design of this period emerged from a confluence of ideas, individuals, and cultures and reflected a spirit of modernity. The exhibition will include a total of 172 works, 50 of which are from CMoG’s permanent collection and introduced to the presentation in Corning. At CMoG, the exhibition is curated by Assistant Curator Alexandra Ruggiero. At the MAK and Le Stanze Del Vetro, the exhibition was curated by Rainald Franz, MAK Curator, Glass and Ceramics Collection.

“We are thrilled to partner with the MAK and Le Stanze Del Vetro to present this groundbreaking exhibition in the US,” said Ruggiero. “We look forward to displaying objects from our own collection alongside the iconic works from the collections of the MAK and J. & L. Lobmeyr.”

While in Corning, the exhibition will also include select loans in other media from North American collections, complementing the glass on view and further shaping our visitors' understanding of this important moment in Austrian design."



Vase with Birds, about 1916. Manufactured by Joh. Oertel & Co. and Glasfachschule Haida (Nový Bór). Glass, mould-blown, enamelled, stained, and polished

At the turn of the 20th century in Europe, the term architect was applied to those who designed building structures, as well as those who designed all aspects of interior decoration. As these designers sought to establish a modern style in Austria, they took inspiration from nature and their regional traditions, as well as from international artistic styles and movements. Glass was a prized material in which to express their ideas. They built upon existing traditions of glassmaking by leveraging the existing network of design and technical schools, and relying on manufacturers, retailers, and exhibitions to promote and disseminate their ideas on a global scale. Leaders in the development of modern Austrian design whose work will be on view in the exhibition include: Josef Hoffmann (1870–1956), Koloman Moser (1868–1918), Otto Prutscher (1880–1949), Dagobert Peche (1887–1923), Michael Powolny (1871–1954), Vally (Valerie) Wieselthier (1895–1945), Oswald Haerdtl (1899–1959), and Adolf Loos (1870–1933).

The objects on display will illustrate the immense variety of techniques and the varied aesthetics of Austrian glass during this period. For instance, Vase with Birds, decorated by the Glasfachshule Haida (Nový Bór), and Oswald Haerdtl's Candy dishes, produced by J. & L. Lobmeyr, both have delicate appearances, but were produced in vastly different ways: the vase is enamelled, while the decoration on the candy dish is provided by its skillfully executed form. The bronzit decoration of Urban Janke's Jardinière captures the geometric, black and white patterns most closely associated with modern Austrian design.

The stacked elements of Josef Hoffmann's blue tableware set and the geometric form of Emanuel Josef Margold's cut glass Lidded Vase are examples of architectonic motifs translated into glass design.

Glass was also a fixture in significant avant-garde exhibitions of this period, from the VIII Secession Exhibition in Vienna in 1900, to the Werkbund Exhibition in Cologne in 1914, in the Exposition internationale des Arts décoratifs et industriels modernes in Paris in 1925, and beyond. One of the highlights on view in the exhibition will be a mirrored room designed by Josef Hoffmann for the Austrian Pavilion at the 1937 Paris Exposition. Featuring reflective, mirrored-glass panelling comprising the walls, floor, and ceiling, glass light fixtures, and glass decorative elements, the room is a Gesamtkunstwerk—total work of art that illustrates beautifully how architects conceived glass as an ideal material to create harmonious, complete environments.

Designed by Annabelle Selldorf and Sara Lopercolo, of Selldorf Architects, in partnership with CMOG's exhibition teams, the exhibit will incorporate digital technology to bring to life the architecture and exhibitions of the period, all of which had an extraordinary impact on the public's perception of design during this era.

Based in Vienna, Austria, the MAK is a museum and laboratory for applied art at the interface of design, architecture and contemporary art. Founded in 1864, it is the second oldest museum of decorative arts in the world. The MAK's core competency is to deal with these areas in a contemporary manner in order to create new perspectives and to explore border areas based on the tradition of the house. The University of Applied Arts (Kunstgewerbeschule) grew out of the museum, and celebrates its 150th anniversary this year. This school first brought together architects, designers and glass makers.

Based in Venice, Italy, Le Stanze Del Vetro is a long-term joint initiative of the Fondazione Giorgio Cini and the Pentagram Stiftung, devoted to the study of glass art in the 20th and 21st centuries. The work done by the Fondazione Cini and the Pentagram Stiftung in preserving, archiving and digitalizing the Venetian glassmaker's archives – and in staging the internationally acclaimed Le Stanze Del Vetro exhibitions – parallels that done by the MAK with respect to the Wiener Werkstatte legacy.

20890/Press Release – 2017.11.22

SEMINARS / CONFERENCES / WORKSHOPS

ICCG12: 12th international conference on coatings



The 12th edition of the ICCG international scientific conference will take place in Würzburg (Germany) **on 12 June 2018** and will also include an accompanying exhibition, which will be a marketplace for innovation.

In 2018, participants in this biannual conference, technical exhibition and industry get-together, will "*Dive into the World of Coatings*" and will find this motto reflected on a number of very different levels which all serve to create an attractive meeting space for scientists, technologists, managers, and practitioners from research, teaching and industry. There will be opportunities to discuss all kind of topics in the field of large-area coatings on glass and plastics.

To foster the idea of networking and to offer a platform for future projects, the accompanying exhibition will be turned into a marketplace for innovation. Exhibitors will have the opportunity to give short presentations or to host innovation talks to introduce latest developments. There will also be room for B2B meetings which may lead to follow-up contacts at a later stage. It is also seen that there is time available for in-depth discussions without having to miss out on a talk or skip a presentation.

The application of coatings onto glass and plastics is still of major importance to create high added value products. Large area deposition of inorganic materials under atmospheric or vacuum conditions has become the basis of energy savings, harvesting, and storage.

Optical thin films dominate the market in consumer electronics and communication networks. Emerging markets and new business opportunities for high volume products rely on coatings on flexible substrates generated either through plasma enhanced processes or wet chemical deposition techniques. Advanced materials and hybrid nanocomposites present further options to create multifunctional and even active surfaces contributing to the development of high-tech products and services. The 12th ICCG will highlight these international market trends, discuss new relevant materials and deposition technologies. We will bring together experts from science and industry as well as other stakeholders defining the future of surfaces and coatings.

Prior to the conference, on Monday afternoon 11 June 2018, several short courses will be given by experts in the field of thin films and coatings. These educational lectures are intended to provide fundamental and technological background on specific conference topics.

Conference program

- Introductory session
- Markets and business in the field on coatings on glass and plastics - Chairmen: Dr. K. Suzuki, Mr. J. Vitkala

The conference will be organized in several sessions:

Technical sessions

1. Advanced vacuum processes - Chairmen: Prof. Dr. G. Bräuer, Dr. J. Strümpfel
2. Atmospheric pressure processes - Chairmen: Prof. Dr. K. Spee, Dr. J. Pütz
3. Film growth, metrology, process control, simulation - Chairmen: Mr. R. Shimshock, Dr. T. Kälber, Prof. Dr. B. Szyszka
4. Energy conversion, lighting, displays - Chairmen: Dr. M. Junghänel, Dr. D. Bernt
5. Optics, sensors, life sciences, packaging - Chairmen: Dr. G. Ockenfuss, Prof. Y. Shigesato
6. Architectural and automotive glazing - Chairmen: Prof. S. Oktik, Dr. R. Thielsch

Panel discussion: Electromobility and autonomous driving and its influence on coatings on glass and plastics

ICCG12 is organized by the International Organizing Committee of ICCG, Fraunhofer Institute for Silicate Research ISC and Vincentz Network.

20891/Press Release – 2017.11.21

Call for Abstracts for the 79th Conference on Glass Problems

The 79th Conference on Glass Problems (GPC) invites engineers, educators, students, and solutions providers working on various aspects of glass manufacturing to submit an abstract for an oral presentation at this premier industry conference. The 79th Conference on Glass Problems is organized by the Glass Manufacturing Industry Council and Alfred University, and endorsed by The American Ceramic Society.

Broad topics of interest include:

- Furnace design and reconstruction
- Physics and chemistry of the melting process
- Thermodynamics and reaction kinetics of oxide systems relevant to industrial glass melting
- Modeling of glass melting and processing
- Combustion and heat transfer
- Refractories
- Safety
- Raw materials: engineered, minerals, and chemicals, batching and recycling
- Forming
- Energy efficiency and management
- Environmental impact of glass
- Advanced process controls and sensors
- New topics (relevant to glass manufacturing)

79th GPC selected oral presentation authors are required to submit a paper for publication in the proceedings of the conference.

The 79th annual GPC will run November 5-8, 2018, once again at the Greater Columbus Convention Center in Columbus, Ohio.

The conference is the largest glass manufacturing conference in North America, and attracts glass manufacturers and suppliers worldwide to exchange innovations and problem solutions. Co-organized by the Glass Manufacturing Industry Council and Alfred University, the conference provides expert lectures, panel discussions and focused courses and symposia, along with exhibiting and networking opportunities. True to its tagline, GPC is the conference where glass manufacturers meet. Submit your abstract today to become a part of the technical program.

To submit an abstract:

<http://glassproblemsconference.org/wp-content/uploads/2017/08/79th-GPC-Call-for-Abstracts-Form.pdf>

Fill in the abstract submission form fields and return the completed abstract submission form as an email attachment to Donna Banks at dbanks@gmic.org.

Deadline for submission of abstracts is January 24, 2018, 9 pm EST — no exceptions
If you have questions about the 79th Conference on Glass Problems, please visit <http://glassproblemsconference.org>.

20892/Press Release – 2017.09.05

Sisecam Group hosted the annual meeting of International Commission on Glass (ICG)



Sisecam Group brought together the leading names of the global glass industry to discuss the future of the industry and new technologies in Istanbul.

Sisecam Glass Symposium, organized for the 32nd time this year, hosted the annual meeting of International Commission on Glass (ICG) as well as over 400 participants from 25 countries.

The event also hosted the annual meeting of International Commission on Glass (ICG), which brought together glass industry representatives, universities and scientific institutions from around the world. The future of the glass industry and new technologies were discussed at this international organization during 22-25 October 2017 in Istanbul.

Prof. Ahmet Kirman, Sisecam Group Vice Chairman and CEO, said that this important event, which brought together representatives of the glass industry and academics in Istanbul, offered a productive platform for cooperation and exchange of ideas. “The 32nd Sisecam Glass Symposium promoted the development of the global glass industry by allowing participants to exchange information on innovations in glass science and technology. We will continue to provide a platform that allows participants to engage in for global cooperation, establish close ties and share the latest developments in the global industry.”

Stating that the global glass industry has been quite volatile and unpredictable in recent years, Prof. Kirman said: “Despite all these circumstances, I believe that Sisecam and other players have taken major steps to further advance the glass industry. Glass has always been a material that makes people’s lives better. Academic research, innovation and R&D will continue to be a top priority in the future.”

Dr. Manoj Choudhary, International Commission on Glass (ICG) President, said that the technical program, the logistics, the facilities and the social dimensions of the organization in Istanbul were outstanding.

“Over 400 participants from 25 countries had the opportunities to attend parallel technical sessions on a variety of glass science and technology topics, plenary session, panel discussions, as well as special events such as the William R. Prindle Memorial Session, the Youth Outreach Event, and very special Opening and Closing Ceremonies. In addition, various ICG meeting were held. The meetings were an important forum for exchanging ideas, advancing knowledge, and promoting collaboration among the members of the global glass community. They also provided an excellent venue for renewing old friendships and establishing new ones. The ICG community is going to use the Istanbul meeting as a template for our future annual meetings,” said Dr. Choudhary.

Prof. Sener Oktik, Sisecam Group Chief Research and Technological Development Officer, said that they were involved in a considerable number of R&D projects in cooperation with 13 international institutions in 19 countries.

“We are proud to undertake these efforts at the Sisecam Science and Technology Center, one of the most advanced centers in Europe. The global glass industry is faced with major technological, environmental and social opportunities and challenges. We believe that this large-scale event offered a global platform for discussing exciting advances in glass technology. The symposium consisted of five parallel sessions, three panels, 30 speeches and 120 presentations, 20 of them posters,” said Prof. Oktik.

Challenging Glass Conference 6

The next edition of the Challenging Glass Conference will take place **17 and 18 May 2018 at TU Delft in the Netherlands.**

Challenging Glass is an international bi-annual conference that aims at gathering world class designers, engineers, researchers and industry partners to discuss on the architectural and structural use of glass.

Key-dates for authors

Paper submission deadline	1 January 2018
Paper review notification	1 March 2018
Paper revision deadline	18 March 2018
Conference	17-18 May 2018

Conference themes: Projects & Case studies, Joints & Fixings & Adhesives, Strength & Stability, Laminated Glass & Interlayer Properties, Hybrid & Composite Glass Components, Numerical Modelling & Experimental Validation, Curved & Bended Glass, Architectural Design, Geometries & Lighting, Structural Glass Design Philosophy & Structural Safety, Insulating Glass Units, Glass in Facades.

20894/Press Release – 2017.07.06



15th PNCS / 14th European Society of Glass (ESG) Conferences

We wish to draw to your attention that the abstract submission for contributions to the **International Conference on the Physics of Non-Crystalline Solids (PNCS)** is now open. The submission of abstracts will be possible until December, 31th 2017 through the online abstract submission function on the conference homepage:

<https://pncs-esg-2018.sciencesconf.org/user/submit>

The PNCS-ESG conference will be held at the Convention Centre at Saint-Malo, France, from July 9-13, 2018. It aims to provide a forum to present the most recent developments on the physics of non-crystalline solids and the ways to improve the quality and the performance of glass products in their various applications.

For further information (plenary and invited speakers, venue, hotel accommodations, travelling information, etc.), please visit the conference website:

<https://pncs-esg-2018.sciencesconf.org>



20895/Press Release – 2017.10.14