

WELCOME TO EU GLASS INDUSTRIES NEWS





Happy New Year 2018!

Thank you for your interest and cooperation over this year.
Wishing you a Merry Christmas and a Successful New Year!

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INTERNAL & MEMBERS' NEWS

FEVE 40th Anniversary

FEVE celebrated its 40th anniversary with a lively exchange of views on the future circular economy strategy on 5th December.

Two years ago, in December 2015, the European Commission published its Circular Economy Package. One of the first and major actions of this package was the revision of the waste legislation, including the Waste Framework, the Landfill and the Packaging & Packaging Waste Directives. With these discussions still ongoing between the EU institutions, the upcoming EU Plastics Strategy expected for the end of 2017 will – once again – reshape several policy areas of direct concern to the packaging sector: design, collection, implementation of Extended Producer Responsibility schemes, to name but a few.

These issues were discussed with leading CEOs of the glass packaging industry, high-level speakers from the European Commission, the food and beverage sector, packaging supply chain, and municipalities. The panel was followed by a discussion with the audience.

The event itself gathered over 100 participants to listen to a high-level panel composed of Kestutis Sadauskas (European Commission), Hans van Bochove (Europen & Coca Cola European Partners), Morag Garden (Scotch Whisky Association), Vitaliano Torno (O-I Europe) and Susan Hansen (Rabobank). Adeline Farrelly, FEVE Secretary-General welcomed guests, and Johannes Schick CEO Stölzle Glass Group gave the closing remarks. It was an important occasion for the container glass industry to engage with policymakers and stakeholders on how to best address packaging waste and concerns over measures for plastics that could directly impact other materials. Panelists and members of the audience highlighted that any measures to reduce plastic waste or incentivize plastics recycling must be seen in the light of a competitive market for packaging, where some materials are already delivering safe, economically-viable and resource-efficient solutions – such as glass, which can be recycled over and over again without loss of its intrinsic properties.

The event was followed by a celebratory musical drink with the *Bottle Boys* Band.

More details on <http://feve.org/40-year-anniversary/> and <http://feve.org/feves-40th-anniversary-event/>

20896/FEVE News - 2017.12.20



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EU COMMUNITY NEWS

NEW EU LEGISLATION

Council Decision

N° (EU) 2017/2240 of 10 November 2017

This Council Decision validates the signing and provisional application of the **Agreement between the European Union and the Swiss Confederation on the linking of their greenhouse gas emissions trading systems.**

On 20 December 2010, the Council authorised the Commission to open negotiations with the Swiss Confederation for the linking of their greenhouse gas emissions trading systems ('ETS'). The negotiations were successfully concluded by the initialling of the Agreement between the European Union and the Swiss Confederation on the linking of their greenhouse gas emissions trading systems.

To ensure coordination between the Parties and to take account of relevant legislative developments, including the adoption and entry into force of the relevant Swiss rules extending the Swiss ETS to aviation and the need to amend Annex I (Part B) of the Agreement, the Agreement should be applied on a provisional basis, pending the completion of the procedures necessary for its entry into force.

All details on page 3 at:

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:322:TOC>

20897/O.J. L322 - 2017.12.07

TRADE POLICY

New EU Anti-Dumping Methodology

On 4th December, the EU Council of Ministers approved the new EU anti-dumping methodology for calculating anti-dumping duties. This is based on an assessment of the market distortions in the third countries where state interference in the economy is significant.

The governments of the 28 EU member states thus approved the text adopted by the European Parliament on 15 November, which was the fruit of an inter-institutional agreement concluded on 3 October. This text was signed formally on 13 December and the new rules will enter into force a day after their publication in the Official Journal of the EU on 19 December.



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The new EU anti-dumping methodology is neutral with regard to the third countries and is fully in line with the EU's obligations at the WTO by removing the previous distinction between market economies and non-market economies in the anti-dumping calculation.

The Commission will instead have to prove the existence of a significant market distortion between the sales price of a product and the cost of production. On this basis, a price can be set for the product by referring, for example, to the price of the product in a country with a similar level of economic development or to relevant undistorted international prices and costs.

The Commission will also draft specific reports on the countries or sectors describing the distortions. In line with current practice, EU businesses will have to lodge complaints, but they will be able to use Commission reports to support their case.

The new EU anti-dumping legislation will be the very first to take account of international standards on the environment and labour.

20898/Press Release – 2017.12.04

EU Trade Defence Instruments

The negotiators from the European Parliament (led by their rapporteur Christofer Fjellner – EPP, Sweden), Estonian Presidency of the EU Council and the Commission reached a political agreement on the draft update of the EU's trade defence instruments (TDI) on 5th December.

The changes that have been agreed to the EU's anti-dumping and anti-subsidy regulations aim to adapt the EU's trade defence arsenal to the challenges of the global economy by making the TDI more effective, transparent and easy to use by companies, as well as by allowing the EU to impose higher import duties (in some cases) on products that are dumped.

Under the terms of the agreement that has been concluded,

- the new rules will shorten the current period of investigation by nine months for the establishment of provisional measures, and will make the system more transparent.
- European companies will benefit from an early warning system that will help them adapt to the new situation in case duties are imposed.
- Smaller companies will receive assistance from a specific help desk, to make it easier for them to trigger and participate in trade defence proceedings.
- In certain cases, the EU will furthermore adapt its 'lesser duty' rule and will be able to impose higher duties on the import of products that are unfairly subsidised or that are dumped and that come from countries where the prices of raw materials and energy are distorted.

Following the example of what was obtained as part of the EU's recently adopted new anti-dumping methodology, the European Parliament obtained the recognition, through the future regulation, of international standards on labour and the environment.



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These standards will not be taken into account for the derogations to the 'lesser duty' rule, as the Greens/EFA Groups wanted when it campaigned for this rule not to apply to countries where the social and environmental standards are below the fundamental conventions of the ILO and multilateral agreements on the environment (like the international Paris Agreement on the climate). The standards will, however, be taken into account in the injury margin, which will strengthen the anti-dumping measures.

As part of its annual public report on the EU's TDI, the Commission has also agreed to report on how exporting countries conform with these standards, and on how it has taken account of this in its investigations.

No commitment to a minimum price (like that negotiated in 2013 with China on solar panels) will be possible with third countries that have not ratified the ILO conventions and the international agreements on the environment (like the Paris Agreement). In addition, the agreement introduces the possibility for the first time for unions to lodge complaints together with industry.

The new rules to the EU's trade defence arsenal will enter into force as soon as the EU Council and European Parliament have given their definitive green light.

20899/Press Release – 2017.12.06

ENVIRONMENT & ENERGY

CLIMATE: Paris Agreement Fully Supported by EU-28

The heads of state or government of the Twenty-Eight discussed the climate dossier and once again reiterated loud and clear their commitment and that of the EU collectively to apply the Paris Climate Agreement (concluded on 12 December 2015), rapidly and fully. They previously did so on 21 June, in reaction to the announced withdrawal of the Trump Administration from this universal agreement.

Reference to the Paris Climate Agreement was added to their conclusions by request of France, following its 'One Planet Summit' initiative held in Paris to mark the second anniversary of this universal agreement. The European Council welcomes the results of the 'One Planet Summit', which aimed to scale up public and private funding in favour of climate action, just three weeks after COP 23 was held in Bonn.

The leaders' eyes are now all turned to COP 24 (Katowice, Poland, December 2018), as it is here that the rules and procedures to implement the Paris Agreement will be finalised and adopted. The conclusions refer to this.

The European Council reaffirms the commitment of the EU and its member states to take a leading role in the fight against climate change, for instance by adopting the relevant legislation of the EU.



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This includes: the 'clean energy' package and the legislation concerning the long-term reform of the emissions quotas trading system (ETS) of the EU, sharing the effort between the member states to reduce greenhouse gas emissions in areas not covered by the ETS and the draft 'LULUCF' regulation on emissions/absorptions from agriculture and forestry.

Inter-institutional negotiations will continue in 2018.

DG Climate Press release on http://europa.eu/rapid/press-release_IP-17-5163_en.htm

20900/Press Release – 2017.12.14

Inter-Institutional Negotiations on Non-ETS Effort Sharing

Despite their best efforts, the Estonian Presidency of the Council of the EU and the European Parliament negotiators, assisted by the Commission, were unable to resolve one issue on the draft regulation establishing effort-sharing in reducing greenhouse gas emissions from sectors not included in the EU emissions trading scheme (ETS) – transport, buildings, agriculture and waste: the starting point of the greenhouse gas emissions trajectory for the member states. It will be for the next Bulgarian Presidency of the Council to pick up the reins and try to break the deadlock in a matter that is of the highest importance in helping to achieve a 30% reduction in emissions from these sectors between 2021 and 2030, compared with 2005.

Initially the Council proposed 2020 as the starting point. Parliament wanted 2018 the Estonian Presidency, representing the member states, could offer nothing better than mid-2019, a date that Parliament negotiators could not accept.

Successive attempts to squeeze agreement from the Parliament, by tinkering with other parts of the text, for example, by reducing the amount of the safety reserve or the percentage of surplus quotas on the market that could be set aside, were unable to break the impasse.

This failure contrasts with the success of a few hours earlier the same day in Strasbourg in negotiations on a provisional inter-institutional agreement on the draft complementary regulation on the contribution of agriculture and forestry to tackling climate change.

20901/Press Release – 2017.12.15

Swiss and EU Emissions Allowances Trading Schemes Linked

The European Parliament, following the line charted by its rapporteur, Christofer Fjellner (EPP, Sweden), gave its approval in Strasbourg on 12 December to the conclusion on behalf of the EU of the provisional agreement that will link the EU's emissions trading scheme (ETS) and its Swiss equivalent. MEPs voted by a very wide majority (547 to 50, with 56 abstentions) to give the go-ahead to the agreement. The main difference between the two is that this Swiss scheme, unlike the European ETS, does not yet include emissions from the aviation sector.



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Switzerland is, however, working on measures to extend its ETS to this sector. It is only once this condition is met that the agreement can formally come into force, on 1 January 2018.

See Official Journal publication referred to on page 2 of this edition.

20902/Press Release – 2017.12.12

EU Circular Economy

To speed up its transition towards a circular economy, the EU must focus on eco-innovation which will help improve environmental performance and increase resilience throughout the life cycle of products in all sectors, encourage re-thinking of supply chains and minimise waste reduction, the Council of the EU has said.

In its conclusions on **eco-innovation**, the Council sets out the ways and means, through eco-innovation, **to encourage sustainable economic and social development** which can support and restore a healthy environment. In so doing, it formalises the avenues for action which it outlined at the informal meeting of environment ministers in Tallinn on 13 July 2017.

The Council calls on the European Commission to carry out and present an assessment of product categories with high circularity potential, such as electronics and textiles, for which the availability of product information is most critical to advance eco-design, re-use, repair and recycling. It calls on the Commission to develop and present product sustainability and circularity criteria for these product categories.

Member states are called on to make active use of product sustainability and circularity criteria, for example, in the process of green public procurement and by further developing the collective extended producer responsibility schemes and the smart criteria used to modulate the fees to adequately reward for design for circularity. The Commission will assist by publishing guidance for the member states and businesses.

The Council is persuaded of the need to further boost the circular economy through environmental policies, particularly in relation to climate, waste and water, as well as through other policies – industrial, agricultural and research, for instance.

The Council stresses the importance of a monitoring framework with reliable indicators to measure progress towards a resource-efficient circular economy. It also stresses the need to formulate ambitious and realistic targets at EU level, which adequately reflect progress along the whole value chain, with particular attention being paid to the earlier stages of the product life-cycle and which support EU industrial targets.

It urges the Commission to present options and actions with a view to a more coherent product policy framework at EU level. The Council underlines that substitution of substances of concern, such as substances of very high concern, persistent organic pollutants and endocrine disruptors, should be encouraged as an innovation factor.



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It asks the Commission to present an ambitious strategy for a non-toxic environment early in 2018 in accordance with the objectives set out in the 7th environmental action programme (EAP). It recognises that information on the environmental and health-related characteristics of products and services are instrumental in the transition to the circular economy

20903/Press Release – 2017.12.18

Revision of EU Waste Directives

The outgoing Estonian Presidency of the Council of the EU and European Parliament negotiators led by Simona Bonafé (S&D, Italy), assisted by the European Commission, reached a provisional inter-institutional agreement on 18 December on revision of the waste directives. The sixth trialogue meeting was therefore the decisive one.

Agreements concerns the revision of fourth texts: the framework directive on waste, the packaging and packaging waste directive, the landfill directive and the directive on electrical and electronic waste.

It clarifies the **definitions of key waste concepts** and sets **new binding targets** for waste reduction by 2025, 2030 and 2035. It sets out **stricter methods and rules** for calculating progress towards these objectives and stricter requirements on the separate collection of waste. It also strengthens implementation of the waste hierarchy by means of economic instruments and measures that seek to prevent wastes reduction. It puts in place minimum requirements for **extended producer responsibility schemes**.

Municipal waste. The recycling of preparation for reuse rate should be 55% in 2025, 60% in 2030 and 65% in 2035. The 2035 target is subject to review. A time derogation of five years will be allowed member states which recycled less than 20% or landfilled more than 60% in 2013.

Landfill. The amount of municipal waste for landfill will be capped at 10% in 2035. There will be a five-year derogation for member states which landfilled more than 60% in 2013. Member states using the derogation will be required, however, to take the necessary measures to reduce the amount of municipal waste landfilled to 25% or less of the total amount of municipal waste generated by 2035.

Packaging. The overall target for recycling packaging waste will be 65% by 2025 and 70% by 2030, with specific objectives for the various materials: plastics - 50% by 2025 and 55% by 2030; wood -25% by 2025 and 30% by 2030; ferrous metals - 70% by 2025 and 80% by 2030; aluminium - 50% by 2025 and 60% by 2030; **glass - 70% by 2025 and 75% by 2030**; paper and cardboard - 75% by 2025 and 85% by 2030.

A 15% derogation may be used for one of the sub-targets or divided between two sub-targets. When using derogation, the target must not fall below 30%.

For glass and paper/cardboard, the target must not fall below 60% (meaning it cannot fall below the level of 2008 target).



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The European Environment Commissioner hailed the agreement: *“Modernising our European waste legislation will drive the efforts of member states to cut the amount of waste we generate, to reduce the materials we bury and burn, and to increase re-use and recycling.*

The deal reached this morning will strengthen our ‘waste hierarchy’ by placing prevention, re-use and recycling clearly above landfilling and incineration. This agreement will make our economies more resource efficient, create jobs and reduce impacts on the environment and resource depletion. The 2030 targets for packaging waste will help to reduce marine pollution and to reach Europe’s targets under the sustainable development goals”.

European strategy on plastics is expected at the start of 2018.

The provisions of the inter-institutional agreement still have to be drafted in detail. The terms of the agreement will be presented to the member states ambassadors to the EU on 20 December. It will not, however, be before 2018 that the agreement is discussed and approved by the Council of the EU. This will happen in the first quarter.

20904/Press Release – 2017.12.15 & 18

Tightened EU Rules for Safer and Cleaner Cars

The European Parliament, the Council and the Commission reached a political agreement to significantly raise the quality level and independence of vehicle type-approval and testing, increase checks of cars that are already on the EU market and strengthen the overall system with European oversight (compliance with EU law).

The main building blocks of the new rules are:

1. Raise the quality level and independence of type-approval and testing before a car is placed on the market:

Technical services will be regularly and independently audited, on the basis of stringent performance criteria, to obtain and maintain their designation by a Member State for testing and inspecting new car models. The Commission and other Member States will be able to challenge a designation when something is wrong.

National type-approval authorities will be subject to Commission audits to ensure that the relevant rules are implemented and enforced rigorously across the EU.

The Commission's proposal to modify the remuneration system to avoid that technical services are paid directly by the manufacturer was not maintained.

2. Increase checks of cars that are already on the EU market:

While the current type-approval rules deal mainly with *ex ante* controls of prototypes taken from the production line, in the future Member States will have to carry out regular spot-checks on vehicles already on their market and such results will be made publicly available.



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All Member States will now be able to immediately take safeguard measures against non-compliant vehicles on their territory without having to wait for the authority that issued the type-approval to take action, as is currently still the case.

3. European oversight:

In the future, the Commission will carry out market checks independently from Member States and will have the possibility to initiate EU-wide recalls. It will have the power to challenge the designation of technical services, and to impose administrative penalties on manufacturers or technical services of up to €30,000 per non-compliant car. The Commission will lead a new enforcement forum to ensure a more uniform interpretation of relevant EU legislation, complete transparency on cases of non-compliance, and better and more coordinated market surveillance activities by Member States.

The new Regulation maintains the current **ban on defeat devices**, which national authorities have a standing obligation to police and enforce, but goes a step further. In the future, car manufacturers will have to provide access to the car's software protocols. This measure goes hand in hand with the Real Driving Emissions package, which will make it very difficult to circumvent emission requirements and includes an obligation for manufacturers to disclose their emissions reduction strategies, as is the case in the U.S.

The Type-Approval Regulation complements a number of other important Commission initiatives for clean mobility, including new and improved car emissions tests which became mandatory on 1 September 2017, and proposals for new CO₂ emissions targets to help accelerate the transition to low- and zero emission vehicles.

Next steps

The preliminary political agreement reached by the European Parliament, Council and Commission in so-called trilogue negotiations is now subject to formal approval by the European Parliament and Council. The Regulation will then be directly applicable in all Member States and will become mandatory on 1 September 2020.

20905/Press Release – 2017.12.07

SOCIAL ISSUES

Unemployment Rates

The **euro area** seasonally-adjusted unemployment rate was **8.8%** in **October 2017**, down from 8.9% in September 2017. This is the lowest rate recorded in the euro area since January 2009. The **EU-28** unemployment rate was **7.4%** in October 2017, down from 7.5% in September 2017. This is also the lowest rate recorded in the EU28 since November 2008.



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Eurostat estimates that 18.243 million people in the EU28 were unemployed in October 2017, a decrease by 111,000 in the EU28 and by 88,000 in the euro area compared with September 2017.

Czechia	2.7%	Slovenia	6.2%
Malta	3.5%	Sweden	6.7%
Germany	3.6%	Belgium	6.9%
Hungary (Sept.)	4.1%	Slovakia	7.0%
UK (August)	4.2%	Lithuania	7.1%
Netherlands	4.5%	Latvia	8.2%
Poland	4.6%	Portugal	8.5%
Romania	4.9%	Finland	8.7%
Austria	5.4%	France	9.4%
Denmark	5.6%	Cyprus	10.2%
Luxembourg	5.7%	Croatia	10.5%
Estonia (Sept.)	5.8%	Italy	11.1%
Ireland	6.0%	Spain	16.7%
Bulgaria	6.1%	Greece (August)	20.6%

Elsewhere

USA	4.1%	Russia	5.1%
Canada	5.9%	Brazil	12.2%
Japan	2.8%	Australia	5.4%
Switzerland	3.1%	India	3.46%
Turkey	10.6%	China	3.95%

20906/Eurostat Press Release – 2017.11.30

GENERAL ISSUES

Member States Call for Long-Term Industrial Strategy for EU

On 30 November during the first day of the Competitiveness Council, the Member States adopted conclusions in which they called on the European Commission to continue the elaboration of **a global industrial strategy for the Union up to 2030 and beyond**. They also called for this strategy to contain medium and long-term objectives for industry, together with an action plan with concrete measures. During the day, the Member States and representatives from industry held lengthy discussions of their vision for the



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industrial strategy on the basis of a detailed report presented by the Estonian Presidency of the Council of the European Union.

During the speeches made during the debate on the industrial policy strategy, the Member States welcomed the European Commission communication that sought to provide a “renewed strategy”. They considered it as a “first step... and strong signal” on which they needed to begin building a “comprehensive” strategy for 2030 and beyond. The Estonian Presidency of the Council of the EU presented a 20-page report including a range of long-term strategic measures for:

- completing the single market for goods and services, the single digital market and the single energy market;
- supporting the digital transformation as a means of carrying out the 4th Industrial Revolution by more swiftly distributing “breakthrough” technology, new “innovative economic models”;
- promoting an international trade framework that allows for “fair competition” and enables industry in the Union to take part in the global value chains, whilst attracting foreign investment;
- focusing innovation policy and investment on the transition to sustainable technologies by creating synergies;
- implementing EU decisions and commitments in the fight against climate change and energy;
- continuing with the elaboration and implementation of the Union industrial strategy inclusively and with all the different actors concerned - this implementation should be the subject of regular follow-up during Competitiveness Council sessions and European Council Spring Summits due to begin in 2018.

The report proposes the introduction of possible adaptations in the strategy on the basis of the changing industrial situation in Europe. The full report can be seen at the following link: <http://data.consilium.europa.eu/doc/document/ST-14365-2017-INIT/en/pdf>.

Commissioner Bienkowska explained that the question of presenting a holistic industrial strategy would be debated as part of the roundtable of industrial leaders. The Commission considers that the Member States should, first of all, focus on sectoral action, such as the car industry.

20907/Press Release – 2017.12.01

Presidency of EU Council from 1st January to 30 June 2018

On January 1, 2018, a decade after its accession to the EU, **Bulgaria** will take over the rotating Presidency of the Council of the EU for the first time.

For six months Bulgaria will be the main driving force for the tasks on the agenda of the Union, it will perform the functions of an honest mediator, a political leader, a representative and a coordinator. Bulgaria’s goal is to respond to the real needs of European citizens and turn challenges into opportunities.

Top priorities today: Europe needs more security, solidarity and stability.



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Bulgaria wants to work for a Secure Europe, because the migration crisis and the terrorist acts over the past years have shown how vulnerable we are;
Stable Europe, because the citizens want to know that the European Union is taking care of their prosperity and wellbeing;
Solidary Europe, because all member states are faced with the main challenges and they can be overcome only with joint action, not at national or local level.

These goals are to be achieved through Consensus, Competitiveness and Cohesion. These three Cs are fundamental for the future of Europe, and for achieving them, one needs courage, political vision and shared efforts. The key to attaining our common goals is unity. It is not by chance that we chose “**United We Stand Strong**” for our slogan. This will be the **slogan of the Bulgarian Presidency of the Council of the EU 2018**, which Bulgaria will follow to work for unity between the member states as well as between the European institutions.

“The citizens of Bulgaria and of the European Union expect from us to find concrete solutions to concrete issues. The Bulgarian Presidency will work in a transparent manner, open to all European partners and, above all, to all European citizens. Tomorrow Europe will be what we make it today. Today is the time to build a stronger, more secure and more solidary European Union”.

20908/Press Release – 2017.12.18

2019 Presidency of Council of EU Will Be Citizen-Focused

Although it has not yet decided in detail the priorities for the Council of the EU for the first half of 2019, Romanian deputy European affairs minister Victor Negrescu has announced that it will be citizen-focused. **Romania will take over the presidency of the Council of the EU on 1 January 2019 for six months**, and is the first of the trio of presidencies for 2019-2020, the other two being Finland and Croatia.

The Romanian minister insisted on a greater cooperation among member states on important issues and subjects of importance to citizens, “because the EU must go more in the direction of what citizens expect of us”. He explained that they want the EU to do more in domains such as education and healthcare, even though the EU has little power in this regard. We believe we must talk about all the important aspects in the view of Europeans, he said, wanting an open debate with citizens and planning to organise European Convention type debates of the type proposed by French president Emmanuel Macron.

The minister wants to democratise access to the EU and access to information about it. He said he wanted to give access to European information to all citizens not just experts in the European bubble. Romania is a pro-European country, he said, but admitted that information needs to be better transmitted to citizens.



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The country will be involved in choosing the presidency's priorities. Negrescu said consultation would begin in the next few days to fine tune the priorities. He has already suggested a four-pronged approach: economic convergence and growth; security issues and security in Europe; foreign relations, EU action in the world including trade issues; and EU values be it dialogue with citizens or greater unity of the member states. Foreign Minister Teodor Melescanu said Brexit and the migration crisis should be seen as opportunities to reconcile the EU with its values, particularly its most important values. As a symbol of citizen participation, the creation of the logo for the presidency and its designation have been put out to a competition involving the public. The presidency has decided to organise meetings throughout the country during its six months in office. Meetings of ministers will take place in Bucharest, in the famous Ceausescu palace and a summit will be organised in May 2019 in Sibiu.

The presidency will be working at a complicated time: the United Kingdom is due to leave the EU and European elections are due to be held in the first half of 2019. However, Negrescu said that the European elections, which will take place at the end of the presidency's term of office, should not have too great an impact on the presidency. The European Commission will also be reaching the end of its term of office and may be tempted to push its final priorities forward insistently.

The future Romanian presidency may provide an opportunity to boost Romania's role in decision-making and restore its image, which some feel has been tarnished. When the UK leaves the EU, Romania will become the sixth biggest member state in terms of population, with its 20 million inhabitants. We want to make use of our presidency to talk more about the EU, about our position in the EU, explained Negrescu. We have been in the EU for 10 years but even after 10 years, many people see our country as a new member state, but we are no longer new after 10 years. We should start to get more involved at European level, particularly in the decision-making process, he added.

The Romanian president's advisor on European affairs and former European Commissioner, Leonard Orban, said that although Romania did not have a very important role, it did have a role and was, in general, a very pro-European country. He said what they wanted was consolidation of the EU - a stronger and deeper EU. He said this was seen at European level but the country still did not have such a wonderful image. Orban said that 10 years after joining the EU, some stereotypes still existed in the European institutions or member states. He said that sometimes there was concern that it was a poor country that had joined the EU too soon. He said the country's image had an impact on the decision-making process. He regretted that some people were harder on Romania than they were on other countries.

Work will be needed to improve the image of the country, but also the image of its politicians. Demonstrations are taking place in Romania against a current reform of the judicial system. 12,000 people demonstrated throughout the country on 10 December against the reform, which they say jeopardises the independence of the justice system and work to tackle corruption. On 11 December, the lower chamber of the Romanian parliament adopted the law in first reading, which alters the supervision of magistrates and the process of appointing public prosecutors.

20909/Press Release – 2017.12.12



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Future of the European Union

BREXIT Developments



1. London and EU agree on terms of their divorce.

The President of the European Commission, Jean-Claude Juncker, and the British Prime Minister, Theresa May, announced on 8 December that they had reached an agreement on the main aspects of the first phase of the divorce between the United Kingdom and the European Union.

The Commission immediately made a recommendation to the European Council to start the second phase of the UK's withdrawal negotiations, on the transition period, which the EU hopes will be as short as possible, and the outlines of the future trade deal between the two sides.

Since "*sufficient progress*" has been made in the first phase, leaders of the EU27 gave approval on 13 December for Brexit talks between the United Kingdom and the European Union to move on to the second phase.

On the first phase of the divorce, Barnier explained that the EU had noted real progress on the three priority questions: - respect for citizens' rights, the budgetary balance of the withdrawal and the Irish question.

However, the EU negotiator said that the Europeans would be able to begin in January on the work involving the transition period requested by London but that further clarification would be necessary from the United Kingdom on the kind of trade agreement sought in order to begin talks on the parameters of the agreement.

Additional guidelines will be necessary and it will not be until March 2018 that the European leaders would be able to adopt them, which would therefore only leave seven months to the two parties to define their future relations.

There are no new elements in the outlines of the trade agreement and future relations and the EU will be working on the basis of the redlines set out by London, namely, its refusal to belong to the Customs Union and Single Market.

Michel Barnier considers that the period now opening up until the European Council in March therefore illustrate the "final appeal" addressed to the British government to provide more details "in its vision of the future partnership with the EU".

2. Current State of the Negotiations on

Citizens: The 4.5 million citizens directly affected by Brexit, nationals of the 27 on British soil and British nationals in the EU, will retain their rights after March 2019. For instance, they will not have to pay to apply for a new permanent resident status. They will also be able to export their social rights, such as family benefits. European citizens in the UK will also be able to bring their close family and future children, born after Brexit, with no particular difficulty, under family reunification. This right was not previously fully agreed upon by London.

On the other hand, the EU has had to give in over the Court of Justice of the EU, which it wanted to have the final say in the interpretation of citizens' rights in the event of any conflict. The British courts will rule alone but will, for a period of eight years, be able to



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refer to the Court for a preliminary ruling, but with no obligation to do so. The EU had proposed a period of 15 years but, according to Barnier, eight years will be enough to establish sufficient case-law.

The British courts will have to work on the basis of the withdrawal agreement as approved at the time of Brexit.

The withdrawal 'bill': On finances, the fifteen-page provisional agreement stipulates that London accepts the calculation method presented by the EU. In particular, this method will involve London paying its commitments under the European budget for 2019 and 2020 and regularly paying other commitments it has made under various programmes, such as the refugees facility in Turkey or the trust fund for Africa. The EU has, however, made a gesture by not insisting that London cover the moving costs of the European agencies (EBA, EMA) currently based in London, Barnier added. In any event, both sides will meet regularly to calculate London's final bill. This is expected to be between €45 and €50 billion, a European source said on Friday morning.

Ireland: On Northern Ireland, May made a further commitment to avoid a physical border. However, the specific solution will come later, probably in the framework of negotiations on the UK's future status.

The fact is that London agreed that in the absence of a definitive solution, Northern Ireland would have *"full alignment"* on the rules of customs union and the single market, which is what the European side was asking for.

"This is a very good day for Ireland, north and south. We have achieved the aims we set in the first phase", an Irish government spokesperson commented.

Stating that the second phase will be tougher than the first, Barnier said that the confidence between the two partners had been established, indicating that the two sides may engage in subsequent talks with no animosity. However, throughout this second phase, there will be much work to do, to consolidate and clarify the agreement, the EU negotiator warned.

An Irish solution to an Irish problem

The preliminary deal - which has yet to be fleshed out - says the same rules should apply across the island of Ireland in at least the 12 areas covered by the 1998 Good Friday (or Belfast) peace agreement. They include agriculture, fisheries, energy, healthcare, environment and others.

But the deal goes further on regulatory alignment, noting that it should also protect the *"all-island economy"* - which could mean anything from taxes to competition law. And the deal is not clear who would be responsible for overseeing that regulatory alignment. The detail will be worked out in a second phase of talks, under a *"specific strand"* on Ireland.

In fact, the most difficult challenge is still ahead.



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Transition and trade

It leaves a lot of open questions for negotiators as they head into phase two of talks on transition and trade.

Draft transition guidelines from European Council president Donald Tusk insist the UK remain a customs union and single market member for the duration of any transition period, obey EU court judgements, pay into the EU budget and allow the free movement of people. All of that without having an EU commissioner, MEPs, judges at the European Court of Justice or any voting rights in EU meetings.

Meanwhile, “exploratory” talks on trade will not begin until well into next year, once the EU has more clarity on what the UK wants, and after EU leaders adopt a separate set of guidelines.

3. Draft Guidelines for the Transition Period and First Phase Legally-binding Text.

On 20 December, the European Commission presented the draft guidelines setting out the terms for the transition period and a draft text beginning the process of making the commitments by Jean-Claude Juncker and Theresa May on the first phase of the divorce legally binding.

In their guidelines the 27-Member States enshrine London’s request for a **transition period of about two years**. It is on this basis, therefore, that they will work. The EU27 want this period to be as short as possible. In their guidelines, they set out their conditions, indicating that the UK will be a member of the EU but without any institutional representation (no commissioner, no MEPs, no representatives in European agencies, etc. though UK European officials are covered by the first phase agreement and thus will be able to remain in place) or any decision-making power. London will also have to contribute to the European budget and respect the jurisdiction of the Court of Justice.

As for the **future trade framework**, the 27-Member States note in their text that the British government has indicated that it does not want the country to remain in the customs union or the single market. French President Emmanuel Macron said, “*The goal is to have very clear conclusions for March 2018 which provides Michel Barnier with a very clear mandate to open negotiations on future relations*”. In his view, too, it will be necessary to “*reconcile two objectives: solidarity with Ireland, which has been maintained through phase 1, and the integrity of the single market. We will make sure that these two principles are respected*”.

See the European Council guidelines of 15 December:

<http://www.consilium.europa.eu/media/32236/15-euco-art50-guidelines-en.pdf>

20910/Press Release – 2017.12.08, 12, 13, 15, 20



Happy New Year 2018!

Inflation Rate

Latest Eurostat figures show that the annual inflation rate was **1.5% in November 2017 in the Euro area**, up from 1.4% in October 2017. **The EU28 annual inflation was 1.8% in November**, up from 1.7% in October.

The largest upward impacts to euro area annual inflation came from fuels for transport (+ 0.21%), heating oil (+ 0.07%), and milk, cheese & eggs (+ 0.05%), while telecommunication (- 0.11%), garments (- 0.07%) and social protection (- 0.04%) had the biggest downward impacts.

Cyprus	0.2%	Bulgaria	1.9%
Ireland	0.5%	Sweden	1.9%
Finland	0.9%	Poland	2.0%
Greece	1.1%	Luxembourg	2.0%
Italy	1.1%	Belgium	2.1%
France	1.2%	Slovakia	2.1%
Denmark	1.3%	Austria	2.4%
Slovenia	1.4%	Czech Republic	2.5%
Malta	1.5%	Hungary	2.6%
Netherlands	1.5%	Romania	2.6%
Croatia	1.6%	Latvia	2.7%
Germany	1.8%	U K	3.1%
Spain	1.8%	Lithuania	4.2%
Portugal	1.8%	Estonia	4.5%

Elsewhere

USA	2.2%	Russia	2.5%
Canada	1.4%	Brazil	2.8%
Japan	0.2%	Australia	1.8%
Switzerland	0.8%	India	4.9%
Turkey	13.0%	China	1.7%

20911/Eurostat News Release – 2017.12.18

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Happy New Year 2018!

GLASS NEWS

FLAT GLASS

Glass Companies

Saint-Gobain



Saint-Gobain has entered into an agreement with the owners of the group Per Strand AS to acquire 100% of the shares in the company. Per Strand is the leading building distribution generalist in Northern Norway with 12 branches. Per Strand group reported sales of around €100 million in 2016. This acquisition allows Saint-Gobain to reinforce its position in Building Distribution in one of its key geographic areas. The generalist brand Optimera strengthens its nationwide market leadership position as a distributor in Norway with 115 branches. This acquisition is subject to approval of the Norwegian antitrust authority.

20912/Press Release – 2017.12.19

AGC



1. AGC: combining insulation, solar control, safety and transparency

The combination of AGC's Planibel Clearsight with Thermobel Scena enables building envelopes to literally become "invisible".



The building envelops literally become "invisible"



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Thermobel Scena is an insulating glazing unit with vertical transparent spacers for glazing applications without the use of mullions. This product is compatible with AGC's product range of low-E and solar control coated products. Homeowners and architects can choose from the list of Thermobel options, and fine-tune the Scena to performance levels suiting their needs.

Furthermore, safety can be assured by integrating a toughened safety glass and/or a laminated safety glass.

The transparent vertical spacer guarantees an optimal view combined with a maximum transparency, no visual disturbance from structural components.

By using the anti-reflective coating Planibel ClearSight in combination with Thermobel Scena, the building envelopes literally become "invisible". No more vertical framings will disturb the glazed façade while the special ClearSight coating will help reducing light reflection on the glass surface to just 0.8%. This renders the pane of glass nearly invisible, offering greater definition for any objects displayed behind it.

20913/Press Release – 2017.12.01

2. AGC and Kinestral Technologies joint ventures to accelerate global adoption of Halio™

AGC and Kinestral Technologies have set up three joint venture companies that will sell, distribute, and service Halio to the global market.



Jean-François Heris, senior executive officer of AGC and president of AGC Building and Industrial Glass Company, with S.B. Cha, CEO of Kinestral

Formed to accelerate the adoption of Halio, the new ventures – Halio North America, Halio International, and Halio China – will be the exclusive sales and marketing agents for Halio™ smart-tinting glass in the commercial and residential housing industries. Halio China includes a third partner: G-Tech Optoelectronics Corp. (GTOC), a subsidiary of the Foxconn Technology Group. The three partners have been introducing Halio in their respective markets since January. The joint ventures were formed to meet worldwide demand.



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Halio technology enables glass to tint, reducing glare and blocking unwanted solar heat – automatically or on command. Halio looks like ordinary clear glass until it tints, achieving its darkest shade in less than three minutes. Halio improves occupant comfort in smart homes and buildings while achieving the highest levels of energy efficiency.

“We are convinced that Halio technology is poised to transform the glass industry,” said Jean-François Heris, senior executive officer of AGC and president of AGC Building and Industrial Glass Company. “Natural light is the #1 most desired feature in office designs, but conventional glass requires blinds, shades, and awnings or architectural elements that block heat and glare. Halio gives people the best of the outdoors while meeting increasingly stringent energy codes.”

Jim Arnold, formerly senior vice president of sales at Control4 and DIRECTV, will head Halio North America. Alain Jardinot, a veteran executive of AGC Glass Europe, will lead Halio International, which will sell to all markets outside of North America and China. Halio China will be headed by Alex Jiang, an executive of GTOC.

20914/Press Release – 2017.12.12

NSG/Pilkington



PILKINGTON
NSG Group Flat Glass Business

After being damaged by a tornado in February this year, and undergoing furnace cold repair in May, NSG Group/Pilkington’s Ottawa plant is due to be re-opened this month. NSG Group/Pilkington’s Ottawa, Illinois float glass plant is scheduled to reopen in December 2017, according to company officials. The plant was damaged by a in February, and the plant’s furnace started cold repair in May.

“The Pilkington North America Ottawa plant is in the final stages of repairing the damages caused by the February 2017 tornado, which included replacing the damaged roof and walls, significant investments in equipment, and other work,” says Richard Altman, regional director, Architectural Glass North America, Pilkington North America Inc. “Because of the extended downtime, the decision was made to move forward on a full furnace rebuild. Once all repairs are finished, it is still projected the plant will restore production in December. A real positive is that we have been able to keep our employees working throughout the process.”

20915/Press Release – 2017.12.06

Guardian

1. Guardian has received the Quality Mark from the Saudi Arabian Standards Organization.

The Saudi Arabian Standards Organization awarded Guardian Glass its ‘Quality Mark.’ Guardian is the first glass manufacturer in Saudi Arabia to receive the award.

The Quality Mark certification was granted by SASO following a conformity assessment of the quality levels maintained at Saudi Guardian International Float Glass Ltd. covering technical procedures, product consistency and quality control, among other areas. Rigorous inspections by authorized bodies will take place periodically to ensure adherence to the strict quality standards, says the company.





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“We’re strongly committed to the high-quality standards set out by SASO,” says Wissam Kazzaz, regional marketing director, Guardian Industries.

20916/Press Release – 2017.12.18

2. Former Guardian plant in Venezuela under repair (VENVIDRIO)

Recent news regarding the former Guardian Industries flat glass plant in Venezuela states that the plant is undergoing maintenance and will not re-open until early 2018. Guardian's former Venezuela plant has the capacity to produce 450 metric tons of float glass per day. Seized by the country’s military in July 2016 when the company tried to turn off the float line for repairs, the plant is undergoing maintenance and will not re-open until early 2018. The news appears to contradict statements earlier this year from Venezuela that claimed the facility was fully operational and producing glass.

In late October, Ghimi Santini, the president of Venvidrio (and a brigadier general in the Venezuelan army), informed that he estimated operations would resume at the flat glass plant in the first quarter of 2018. He said Venvidrio is ‘reviewing’ the furnace for repair work that’s expected to take 90 days.

20917/Press Release – 2017.12.11



Press Glass

The Press Glass Group will build its 12th production facility with a surface area of 20,000 sq.m., to be constructed in the Kostrzyn-Slubice Special Economic Zone in the municipality of Nowogard in the West Pomeranian Province (Poland).

Production in the new facility will start in the second half of 2018. The facility will increase its production capacity and employment in several stages.

As a target, 300 people will be employed in Nowogard. The facility will expand the potential to service manufacturers of window and door joinery in Poland and other countries in Northern and Western Europe.

20918/Press Release – 2017.12.12

Glas Trösch

After 16 years as CEO, Erich Trösch will focus on the role of Group Chairman, with Fabian Zwick taking over as new CEO on 1 January 2018. He will keep his responsibility for float glass production and coated glass and will also take over the responsibility for fire resistant glass. Frank Studer, who already leads the Automotive division, will take over responsibility for the production of technical glass.

Zwick, a physicist, has held several executive positions within the Glas Trösch Group since he joined the company on 1 April 2002. He has been a member of the Group Management Team since 2012.

This carefully planned change to management structure will strengthen the Group’s ability to successfully master future challenges and ensure further company growth.

20919/Press Release – 2017.12.04





Happy New Year 2018!

Xinyi Glass Holdings in Canada



Xinyi Glass Holdings plans to develop its first North American manufacturing facility - a float glass plant - in Ontario. The partnership will create 400 jobs for Ontario workers.



Ontario Premier Kathleen Wynne has announced business agreements exceeding CAD 1 billion between Ontario and Chinese organizations. The Premier met with Xinyi Glass Holdings to discuss their commitment to investing in Ontario. Xinyi has selected Ontario as the location for its first North American manufacturing facility, a large float glass plant. Xinyi has planned CAD 450 million investment, outlined in an agreement in principle signed between Xinyi and the province of Ontario.

20920/Press Release – 2017.12.05

Azerfloat



Horn is the supplier of technology and machinery for Azerfloat's new project in Azerbaijan – a complete float glass line.



Azerfloat's new project in Azerbaijan involves the construction of a complete float glass line which, when completed, will produce a volume of approximately 250 tonnes of coated float glass per day. The new production facility will create about 600 new jobs. The scope of supply extends from the batch house, via the melting furnace, the tin bath and roller cooling furnace to the cold end, where the finished glass is cut, stacked,



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packed and transported away using specially developed storage technology. Supply technology includes the production of nitrogen and hydrogen as well as a shielding gas mixing and cooling water station.

Construction work on the site started 1 October 2017 in an industrial park in Sumgait. The city of Sumgait has existed for around five years and is approximately 30 kilometres from the capital Baku. With about 294,500 inhabitants, it is now the largest industrial city of Azerbaijan with more than 30 large companies, which belong mainly to the chemical and metal processing industries.

20921/Press Release – 2017.12.19

Saratovstroysteklo

JSC Saratovstroysteklo plans to modernize its production facilities - there will be new workshops with equipment for the production of energy-saving glass. The total investment in the project is more than RUB 1.5 billion. The company is expected to reach its full capacity in 2019. The volume of production will be 8 million square meters of high-tech glass per year. "At the moment, the company received a soft loan worth RUB 500 million from the Russian Industry Development Fund." Now the construction of the shop is ongoing, equipment is being purchased, " said Minister Kulikov.

23 new high-tech jobs will be created. This is the first large-scale project to produce energy-saving glass in the region. It is expected that the plant's products will be used in construction, not only in the Saratov region, but also exported to other regions and abroad.

According to the Ministry of Industry and Energy of the region, the factory for the production of window glass was established in Saratov in 1958. At that time, it was the largest factory in Europe with a continuous glass rolling system and a total area of 560 square meters. At the moment, JSC Saratovstroysteklo is one of the largest manufacturers of sheet glass in Russia, it employs 445 people.

20922/Press Release – 2017.12.13

Miscellaneous

NREL (US National Renewable Energy Laboratory)

Switchable photovoltaic windows have been developed by scientists at the US Department of Energy's National Renewable Energy Laboratory (*) (NREL). They have developed thermochromic windows capable of converting sunlight into electricity at a high efficiency. During demonstrations, the device dynamically responds to sunlight by transforming from transparent to tinted while converting sunlight into electricity.

() NREL is the US Department of Energy's primary national laboratory for renewable energy and energy efficiency research and development. NREL is operated for the Energy Department by The Alliance for Sustainable Energy, LLC.*



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Relying on such advanced materials as perovskites and single-walled carbon nanotubes, the new technology responds to heat by transforming from transparent to tinted. As the window darkens, it generates electricity. The colour change is driven by molecules (methylamine) that are reversibly absorbed into the device.

When solar energy heats up the device, the molecules are driven out, and the device is darkened. When the sun is not shining, the device is cooled back down, and the molecules re-absorb into the window device, which then appears transparent.

The NREL-developed demonstration device allows an average of 68% of light in the visible portion of the solar spectrum to pass through when it's in a transparent, or bleached, state. When the window changes colour – a process that took about 3 minutes of illumination during testing – only 3% is allowed through the window.

Existing solar window technologies are static, which means they are designed to harness a fraction of the sunlight without sacrificing too much visible light transmission needed for viewing or the comfort of building occupants.

“There is a fundamental trade-off between a good window and a good solar cell,” said Lance Wheeler, a scientist at NREL. “This technology bypasses that. We have a good solar cell when there's lots of sunshine and we have a good window when there's not.” The proof-of-concept paper published in Nature Communications established a solar power conversion efficiency of 11.3%. “There are thermochromic technologies out there but nothing that actually converts that energy into electricity,” Wheeler said. He is the lead author of the paper, “Switchable Photovoltaic Windows Enabled by Reversible Photothermal Complex Dissociation from Methylammonium Lead Iodide.”

His co-authors, all from NREL, are David Moore, Rachele Ihly, Noah Stanton, Elisa Miller, Robert Tenent, Jeffrey Blackburn, and Nathan Neale.

In testing under 1-sun illumination, the 1-square-centimeter demonstration device cycled through repeated transparent-tinted cycles, but the performance declined over the course of 20 cycles due to restructuring of the switchable layer. Ongoing research is focused on improving cycle stability.

The path to commercialization of the technology was explored last year during a two-month programme called Energy I-Corps. Teams of researchers are paired with industry mentors to learn what customers want of the technology and develop viable ways to reach the marketplace. Lance Wheeler and Robert Tenent teamed up to develop a market strategy for a product they called **SwitchGlaze**. The effort was funded by the Emerging Technologies programme within the Department of Energy's Building Technologies Office.



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Wheeler said the technology could be integrated into vehicles, buildings, and beyond. The electricity generated by the solar cell window could charge batteries to power smartphones or on-board electronics such as fans, rain sensors, and motors that would open or close the windows as programmed.

20923/Press Release – 2017.12.06

German Design Award to Continental Intelligent Glass Control and 3D Display Surface

Intelligent Glass Control and 3D display surface win award for outstanding design quality in 'Transportation' category; Better comfort, greater safety and improved energy efficiency thanks to Intelligent Glass Control; 3D display surface for flexibly presenting digital content and new configuration options in the cockpit.



Intelligent Glass Control enables the selective shading of nearly all car windows at the touch of a button.

Continental is among the winners at the 2018 German Design Awards for the third time in succession. The award will be presented in Frankfurt on 9 February 2018.

The intelligent glass can be darkened incrementally to a set level either automatically or at the touch of a button. The technology uses special films inserted into the glass that change their transparency in response to electric control signals. This can reduce CO₂ emissions by approximately four grams per kilometre. It also improves comfort and safety because drivers are no longer dazzled or distracted when folding down the sun visor, for example. Automatically darkening the windows also ensures privacy.

The option of controlling the amount of light coming through the windows increases driving comfort as well as safety.

In-vehicle displays are not only getting bigger, but also offer an ever-increasing range of features and digital content. Digital instrument clusters that can display digital content flexibly are ideal for this, although they offer only limited room for configuration. That is where the 3D display surface from Continental comes in. It enhances the conventional display with bonded and topographical elements and opens up freedom for creativity.

20924/Press Release – 2017.12.05

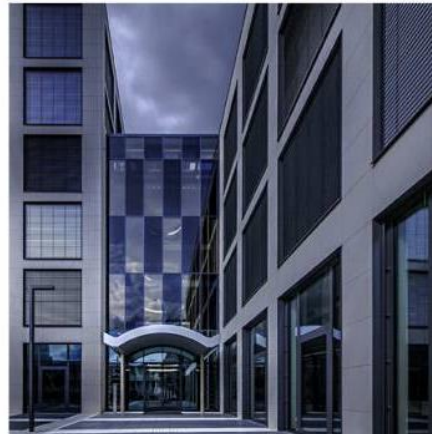


Happy New Year 2018!



EControl-Glas

When facing the challenge of transparency and protection from heat and glare, EControl glass was chosen to create the 16-metre-high glass atrium at Lapp Group's new headquarters.



The 16-metre-high glass atrium of the Lapp Group's headquarters

At the new European headquarters of the Lapp Group (U.I. Lapp GmbH) in Stuttgart-Vaihingen, the open-space concept is lived right into the detail. The transparent exterior of the administration building is characterized by large window areas; the two L-shaped wings of the building are connected by a 16-metre-high glass atrium. In order to maintain the openness, Lapp decided to use the dimmable glass EControl smart 45/8 (EControl, Plauen). It offers two advantages: an unobstructed view to the outside remains guaranteed – and the intelligent glass has a positive effect on the air conditioning of the atrium.

The main challenge was to realize both the desire for transparency and protection from heat and glare in a "visible" way. Detailed product research finally led the planners from Schwarz Architects to the perfect solution – dimmable glass from the company EControl in Plauen.

In the atrium, with its 16-metre-high glass façade, 85 m² of EControl smart 45/8 provides shading within the glass, an unobstructed view in the best weather and a pleasant climate in the foyer. With their electrochromic properties, the glass panes combat overheating of the atrium whilst maintaining transparency. The solar factor (total energy transmittance) of the dimmable triple-pane insulation glass EControl 45/8 at the strongest dimming level is only 8% – which also reduces the requirement for air conditioning. Because the panes can be regulated in steps, the shading always matches the current weather conditions. When it is dull outside, the glazing allows a lot of daylight to enter the building. External shading is unnecessary with this glass.

The highly functional principle behind the glass is the internally positioned nano-structured coating. This creates the so-called "electrochromic effect": an electrical voltage causes the glass to adopt a blue colour. "The dimming level can be controlled either automatically or manually, for example via a tablet," says EControl Managing Director Tobias John.



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The European headquarters of the Lapp Group is today regarded as exemplary in relation to the German energy saving regulations – it undercuts them by 20%. The climate-intelligent EControl glass integrates perfectly into the efficient overall structure.

20925/Press Release – 2017.12.05

Merck Facility for Liquid Crystal Window Modules



Merck has opened a new production facility for liquid crystal window modules in Veldhoven, near Eindhoven, in the Netherlands, with deliveries of the smart glass modules to start in 2018.



The investment of around EUR 15 million is a further step by Merck to expand its expertise as the market and technology leader in liquid crystals for displays by moving into other applications beyond televisions, laptops, smartphones, and tablet PCs.

In 2016, an independent business field was set up for liquid crystal window technology in order to achieve faster market penetration. Merck is the world's first supplier of this window module technology, which in comparison with previous technologies, offers new application possibilities and regulation within seconds.

Globally, the demand for smart glass is rising. In particular, the construction and automotive industries are looking for long-lived elements that can be integrated both aesthetically and functionally in many shapes and colours.

Merck does not see itself as a competitor to glass and window manufacturers, but rather will supply the modules enabling them to make these smart glass elements, windows and façades. In addition, Merck assists architects, designers as well as window and façade makers in an advisory capacity.

In smart glass, liquid crystals regulate light transmission. It serves either as sun or privacy protection. Both variants, which respond within seconds, offer users maximum convenience.

In sun protection applications, exterior blinds and their costly maintenance and repair are unnecessary. The light transmittance of the windows can be lowered down to 5% and set in a continuously variable manner. Energy savings of up to 40% are thus possible with building climate control systems.

In both the dark and the bright state, the windows remain transparent and colour-neutral and provide an unhindered view outside.



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Of particular interest to architects is their tremendous flexibility in terms of size and shape as well as the possibilities of their colour design with no effect on transparency – a further advantage in addition to switching within seconds – over competing technologies.

The privacy variant also switches within seconds from transparent to opaque. It prevents outsiders from being able to look inside conference rooms, restricted production areas or residential buildings.

The liquid crystal materials, which are marketed under the **licrivision™** brand, are also to be used in vehicles in the future. Research is currently underway for further application possibilities, for instance in air and sea travel.

Long-term tests under real conditions show that innovative liquid crystal windows also live up to their promise in practical applications.

Since 2015, the liquid crystal windows in the western façade of Merck's modular Innovation Centre in Darmstadt have been operating perfectly even on hot summer days and icy-cold winter nights.

In September 2016, the sun protection and privacy variants were installed in the new OLED production building at the Darmstadt site.

20926/Press Release – 2017.12.13

Everlam

Everlam's new stiff PVB solution for architectural laminated safety glass - Everlam™ Super Tough - provides extra safety in applications where safety can't be traded, such as glass balconies, balustrades, curtain walls, floors and stairs.

In case a glass panel breaks, Everlam™ Super Tough maintains it solidly in place for a longer time than with standard PVB, thus enabling modern design that relies on the use of beautiful over-sized glass panels with minimum visible frames. By making the glass stronger, thinner glass can be used to minimize the weight and cost of the entire glass structure.

Everlam™ Super Tough combines a high-performance product with the superior level of technical expertise.

20927/Press Release – 2017.12.14

Avancis

Avancis parent company CNBM, China's largest building materials group, has celebrated the production launch at China's most advanced CIGS PV plant.

The start of the 300 MW factory is the first production unit of the largest CIGS solar factory at this location with a planned annual output of 1.5 gigawatts.

The 55,000 square meter CIGS technology was supplied by Avancis, one of the leading manufacturers of premium thin-film modules. In further development measures, the largest and most advanced solar production facility will be expanded to a total of 270,000 square meters.





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“China has ambitious solar energy programs. By the end of March 2017, the generated solar energy in the People's Republic of China increased to 21.4 million kilowatt hours. Nevertheless, solar energy accounts for only 1% of the Chinese energy mix,” explains Oliver Just, CEO of Avancis.

“The demand for solar energy in the country is huge especially the demand for premium quality solar modules is enormous. With the start of production, we will have the opportunity to manufacture and market our high quality thin-film technology on site for the largest photovoltaic market. Especially in projects where quality and aesthetics are mission-critical factors, our glass-glass modules occupy a technological top position.”

In line with the high sustainability goals of the People's Republic of China, the expansion of solar energy through Giga Watt production facilities is being continuously advanced. In this context, CNBM has sealed three more CIGS solar factories with gigawatt production volumes in China with ground-breaking ceremonies over the last two years.

20928/Press Release – 2017.12.19

CONTAINER GLASS

Glass Companies

O-I



Owens-Illinois, Inc. (O-I) has launched a **Global Design Book** to provide inspiration for brand owners and design agencies looking for fresh ideas in glass for their foods and beverages. O-I, the world's largest glassmaker, has drawn together more than 100 glass designs from around the world and the collection illustrates the beauty, versatility, brand differentiation, colour, shape and decoration variations available in glass in a way no other packaging material can match.

Glass provides an emotional reach into consumers' deepest needs. Its unique values - purity, quality, premiumness, sustainability, health - and its design versatility come together to create a tight bond between a unique consumption experience and the product and brand promise. Andres Lopez, O-I's CEO says in the foreword to the book, "Many studies tell us consumers love glass. It's their favourite package. Only glass evokes wonder: the pleasure as you pick up an ice-cold beer bottle, the craving as you open a jar of your favourite spread, the anticipation as you watch the sommelier uncork your champagne."



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The entries are new product designs developed over the last few years by O-I design teams either from a received brief or with customers' design agencies across each of the five continents on which the company operates. They show the breadth of O-I's design expertise and also illustrate the different cultural norms which provide design cues for brands in each location.

"The book is more than selection of pretty pictures," said Marie-Laure Susset, Marketing Communications Leader for O-I Europe. "It relates a narrative of brand image and consumer trends over recent years. It tells of the growth of craft, of premiumization, or of healthy hydration."

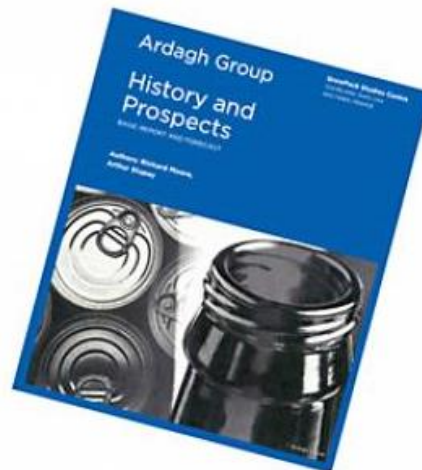
"I am grateful for the cooperation of all the brand owners whose products are featured in the book. It is very exciting to see so many great brands displayed page after page," concludes Yolanda Fernandez, Marketing Communications Specialist Europe, who led the project.

20929/Press Release – 2017.12.14

Ardagh



A recently-released study on Ardagh prepared by two packaging professionals shows the company's strategy that has taken it to its current heights, and sets out in detail its new market positions.



Two packaging professionals, Richard Moore and Arthur Stupay, have just released a new in-depth study on the Ardagh Group.

One of the least known packaging companies, Ardagh, has emerged in 2017 as an USD 8 billion-dollar mammoth, with leading positions in beverage cans, food cans and glass containers.

This 94-page report explains the Ardagh strategy that has taken it to its current heights, and sets out in detail its new market positions by end product segment and geography, for both glass and metal containers. Based on an analysis of acquisition history, segment profitability and market dynamics the authors also outline likely options for Ardagh's future moves in the industry.



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The report contains 27 sections and 20 tables, including sales and EBITDA by product line and region, and a long-term history of profitability for both Glass and Metal businesses. There are also key management bios and tables on plant locations and their activities.

The report is available from the authors' joint website www.growpackcentre.com.

20930/Press Release – 2017.12.07

Verallia Group

1. Verallia Students Graduate from Glass School

In Chalon-sur-Saône, France, nine students from the second promotion of Verallia's glass school were awarded their diploma, together with an employment contract.



Over two years, they followed a demanding training course to become experts in the hot end: the section of glass factories where molten material is transformed into bottles.

Founded in 2013, the Verallia glass school in France trains the future technical managers and supervisors of Verallia France's seven glass plants.

The two-year course accelerates the transfer of knowledge for expert positions, to which employees gain access traditionally after ten years of internal training.

20931/Press Release – 2017.12.07

2. Verallia Names Glass Design Awards Winners

Verallia has named the winner of the grand finale of its design competition, Verallia Design Awards.

Aura Ramos, Deniz Dönmez and Rohit Sahas Rabudhe, three students from the Italian edition of the contest, were selected for their project DeFiasco, a bottle for the wine market. In 2017, Verallia Design Awards were held in seven countries: Germany, Brazil, Spain, France, Italy, Portugal and Ukraine.



Happy New Year 2018!

Almost 1,000 art or design school students and recent graduates designed a glass container based on a given theme.

The participants were provided with support from the Verallia teams, in particular to provide them with details about glass and its manufacturing requirements.

Some designs have even been selected for commercial release. Such was the case of the Soirée à Rosé bottle (designed by the winner of the first competition in 2010), marketed and sold by Gérard Bertrand, and the Serac bottle (winner in 2016), selected by Maison du sud – Jeanjean. These two products have enjoyed international success.

As the number of young designers presenting a project has increased each year and as customers are keen to explore new ideas, Verallia decided to open up its competition at an international level and prepare this first grand finale.

The competitors are all winners of the various national competitions.

Italy's project De Fiasco was singled out by the jury meeting in Paris whose members include seven finalists, customers, professional designers, journalists and Verallia's sales and marketing teams. **Drawing its inspiration from a typically Italian flask-shaped bottle, De Fiasco is a new interpretation of an old bottle which at the time combined various materials (straw, laces and glass), to provide a 100% glass modern version. The original bottle finishing using straw and laces has been replaced with external engraving.**



“With the Verallia Design Awards, we are encouraging a privileged exchange with young designers around glass. We are also providing our customers with an unprecedented innovation approach, as reflected in the various sales success stories since the competition was introduced,” said Michel Giannuzzi, Chairman and Chief Executive Officer of the Verallia Group at the ceremony.

20932/Press Release – 2017.12.13



Happy New Year 2018!

Steklarna Hrastnik



Steklarna Hrastnik envisages major investments in production with the aim of further development, expansion, and growth. The first step towards this goal is a €4.2 million investment in the reinforcement of the packaging programme.

It is expected that by the spring of 2018, the lighting glass production unit will be transformed into the packaging glass production unit.

It will gradually abolish the production of lighting glass, and provide opportunities for further development of its packaging glass programme. All employees from the lighting glass production unit will be offered reassignment within the company.

Since the onset of the crisis in 2008, demand in the market of lighting glass has dropped sharply, at the expense of the increasing uptake of LED lights. Steklarna Hrastnik has also faced a sharp price competition in this market, which is promoted by cheap products from the Chinese market.

Steklarna Hrastnik invested €2.8 million in the development of lighting glass unit over the past eight years; however, they are not satisfied with the results. Andrej Božič, President of the Glass Division, explained that "We were intensely looking for ways to increase profitability and the scale of operations. Co-operation with well-known designers also failed to meet the expectations that would economically justify the continued existence of the programme."

Steklarna Hrastnik will invest €4.2 million in the purchase of a new machine for packaging glass (IS-machine) and the transfer of the existing machine to Vitrum. This will increase the efficiency of the furnace in the new investment cycle by 25 tonnes per day. Upon the acquisition of necessary permits, it plans to increase capacity in its Hrastnik plant. The goal is to increase the capacity of the furnace by 200 tonnes per day, which will also create 150 new high-value added jobs.

Since Steklarna Hrastnik is aware of the importance of the glass factory for employees, mainly from Hrastnik and the surrounding municipalities, they have been looking for ways to optimise the production and retain all employees - which they will succeed with the planned restructuring of production. All employees from the lighting glass production unit will be offered a redeployment within the company. "We will offer them conditions of employment that will be comparable with the current, if not better," said Peter Čas, General Director.

The special glass packaging and perfume and cosmetic packaging market has been an opportunity for expansion, as demand has steadily increased in recent years.

The increase in demand was exceptionally high this year. "We have decided to take action now, when the market of special glass and perfume and cosmetic packaging enables opportunity for expansion," said Mr Čas.

By reorganising production, Steklarna Hrastnik will set the conditions for optimising production, raising profitability and new investments in the coming years.



Happy New Year 2018!

Encirc



UK glass container manufacturer and bottler, Encirc, has received its first shipment of recycled cullet to its new purpose-built railhead in Elton, Cheshire.

The delivery marks the opening of the new terminal, which is expected to reduce Encirc's operational carbon emissions by more than 2400 tonnes every year.

The new railhead also will allow the manufacturer to receive 78% of the sand it needs by rail. By connecting to the British rail network, Encirc is considerably reducing its reliance on roads by around 6600 HGV journeys every year.



The site the manufacturer occupies in Elton was once a power station that operated its own railhead. Since opening its Cheshire plant in 2005, Encirc has invested in redeveloping the trainline.

Andrew Morris, Head of Logistics, Encirc said: "The reopening of the railhead has been a ground-breaking development for us. We know that our customers – much like ourselves – place sustainability high on their list of priorities.

"By investing in our new terminal, we can continue to make their supply chains more environmentally responsible, and considerably reduce the carbon footprint of our containers we produce. Our railhead is an excellent example of how a business can also embrace past technologies to offer sustainable solutions for the future."

The November shipment comprised 1600 tonnes of recycled cullet from the UK's largest glass recycler, United Resource Management (URM). Mark Wilson, Chief Executive Officer (CEO) of URM, added: "URM has invested £20m in the latest recycling technology in a new facility based at Tilbury Dock, London. The site was chosen due to its proximity to the London market and connectivity by both rail and ship that will divert significant movements of product away from road.

The deal is expected to eventually bring about 80,000 tonnes per annum of recycled glass cullet to Elton by rail from Tilbury.



Happy New Year 2018!

Part of the Vidrala Group and based in Elton, Cheshire and Derrylin, Northern Ireland, Encirc claims to have one of the most sustainable beverage supply chains in the world. The company reports to have over a 33% market share in manufacturing container glass for the food and beverage industry. It operates a “state-of-the-art” contract bottling facility, and a 52,000 sq m automated bonded warehouse.

According to the company, it uses up to 90% recycled material in the glass manufacturing process, depending on its quality and the colour of the containers being made.

Encirc said it uses “cutting-edge technology to offer customers a 360-degree service”. This involves making the glass containers, filling them with beverages and distributing the finished products to the market.

Commenting more generally on the glass market, Adrian Curry, managing director of Encirc and president of British Glass – which represents the interests of primary glass manufacturers and the glass supply chain – said: “Glass has the most powerful sustainability message. It is a permanent material, able to be recycled an infinite number of times without losing any quality – something no other packaging product can offer. “The current glass recycling rate across Europe is at 74% – a record high. However, this still leaves more than a quarter of all glass needlessly leaving the supply chain and heading into landfill. A key focus of my team as president of British Glass will be to help manufacturers and consumers develop more circular ways of working and increase their levels of sustainability.”

20934/Press Release – 2017.11.29

Saverglass

Saverglass sets out to conquer the West. To better serve the US market, the world leader in luxury perfume and spirit bottles is investing 100 million euros in a factory, located next to Guadalajara, the state capital of Jalisco, 500 kilometres to the west from Mexico. For the glassmaker, it's a question of taking advantage of the upscaling of certain spirits, such as gin, mezcal, tequila, without forgetting the bourbon (US whiskey).

In the United States, more than 2,000 artisanal distilleries have emerged in recent years. "The movement was born in Kentucky where companies began to play on authenticity while offering good quality spirits," says Loïc Quentin de Gromard, president of Saverglass, owned by the US Carlyle Fund since 2016.

Built on 25 hectares of land, the Mexican unit will start in June 2018, after more than a year of work. Located in a seismic and flood zone, its construction represented an architectural challenge to disburse the ground, before 700 metal piles were driven 25 meters deep to stabilize the building in the event of an earthquake.

Once completed, the facility will employ some 400 Mexican employees. They will produce between 150 and 160 million bottles per year, developed on demand or customized from the existing models in the Saverglass catalogue.





Happy New Year 2018!

Twenty contracts have already been signed. "Of 200 Mexican business leaders invited for a presentation of our activities, 160 accepted. A record," congratulates Loïc Quentin de Gromard.

The creation of Saverglass Mexico will have positive consequences for the Group's three French factories, based in Feuquières (Oise), Arques (Pas-de-Calais) and Le Havre (Seine-Maritime). By April, the glassmaker will recruit some 120 additional employees to replace experienced operators who have left to train their Mexican counterparts. "350 people will take turns to acculturate local technicians to our methods. Used during the creation of our plant in the United Arab Emirates, this method has been proven," says the leader.

With this operation, the workforce of Saverglass will exceed 3,000 employees. The company's turnover has surpassed 425 million euros in 2016.

20935/Press Release – 2017.12.02

Asl Ojna (Uzbekistan)

Uzbekistan glass container manufacturer Asl Ojna plans to implement eight investment projects by 2021 with a total estimated cost of \$178 million.



The company will triple the production of glassware from 200 million to 600 million conventional units a year thanks to the construction and commissioning of number 3, 4 and 5 glass melting furnaces and a raw materials enrichment plant for glass production worth \$130 million.

It has also appointed Farid Safargariyev as Acting Director.

The National Bank for Foreign Economic Affairs of Uzbekistan will invest \$30 million in the projects. The project will attract loan funds from the Fund for Reconstruction and Development of Uzbekistan for \$100 million.

Asl Oyna also intends to build a plant for the production of soft drinks worth \$5 million and capacity of 10 million litres of beverages per year until 2019.

The enterprise plans to create facilities for the production of beer and alcoholic beverages. 10 million tons of beer will be sent to the beer factory with a capacity of 10,000 tons and 600,000 decaliters worth \$6 million.

It started glass production in 2009.

20936/Press Release – 2017.12.05



Happy New Year 2018!

Miscellaneous

Global Pharmaceutical Glass Packaging Market Report



The Global Pharmaceutical Glass Packaging Market report covers the 2017-2022 market and presents a complete scenario covering product/service description, future market trends, and Pharmaceutical Glass Packaging market dynamics.

The global market for pharmaceutical glass packaging is segmented on the basis of manufacturers, product type, Pharmaceutical Glass Packaging applications, and regions. In addition to this, the Pharmaceutical Glass Packaging report also forecasts market based on dominating market trends, current market conditions, and pharmaceutical glass packaging growth aspects.

Market Breakdown will be detailed as per manufacturers, application and type, as well as by region as follows: North America: USA, Canada, Mexico, Europe: Germany, France, UK, Italy, Russia, South America: Egypt, Saudi Arabia, Nigeria, Brazil, South Africa, Asia-Pacific: Japan, China, Korea, India, and Southeast Asia.

20937/Press Release – 2017.12.19

DOMESTIC TABLEWARE AND CRYSTAL GLASS

Glass Companies

Arc

The Chef&Sommelier brand has joined forces with passionate professionals to launch three new lines: Macaron, Arpège and Primarific.

- Macaron is a range of tasting glasses designed to enrich the food and wine pairing experience and highlight the pleasure of dining. They are perfect as oenological tasting of sparkling wines.
- Arpège are elegant tumblers with retro-styled curled handles. These curls stand out in the light yet fade away when the glasses are filled.
- Primarific are tumblers with curved silhouette in shades of gold, silver, and copper, convey a warm ambiance with precious metals contrasted with the perfectly transparent wine glasses. used for water and other soft drinks.

http://www.chefsommelier.com/en_EN/drinkware/arpege.html

20938/Tableware International – December 2017





Happy New Year 2018!

Waterford

Paying continued tribute to its heritage, inspired by Ireland's contribution to world of literature and poetry, Waterford launched the new Short Stories barware range, including three new cut-crystal barware patterns – Aras, Cluin and Olann – all complemented by black marble coasters. New collection Ogham features tumblers with four key sentiments (Happiness, Joy, Love and Peace) in the ancient Celtic alphabet.



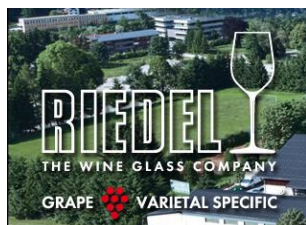
While Retro Short Stories includes two retro decanters; Whiskey and Water features a retro style DOF set of two, incorporating the words Whiskey and Water in a grey cut. Waterford extended its W Collection with a new shape and a whisky/water pair.

More at www.waterford.co.uk

20939/Tableware International – December 2017

Riedel

Riedel has unveiled the **Fatto A Mano** (handmade in Italian) **collection**, a range of grape varietal-specific wineglasses, with colourful handmade stems and bases. This is the first time Riedel has designed stemware with the purpose of being decorative, as well as functional. Crafted by master glassmakers in Austria, each bowl shape is designed to enhance a specific type of wine.



For years the Amadeo, Mamba and Cornetto **decanter**s have been a permanent and successful part of the Riedel decanter collections

All three decanters have undergone a kind of metamorphosis. In the Fatto a Mano Edition, they have optical blown glass and a black-white-black ornamental line that enhances their dynamic designs. The art of optically blown glass originated in Venice, the cradle of the most superior glassblowing techniques. Nowadays there are not many glass blowers who are proficient in this method.



Happy New Year 2018!

During his training in Murano, Maximilian Riedel was so fascinated by this technique, that he now uses it for special pieces in his collections.

Riedel recommends Amadeo and Cornetto for more mature wines and for champagne. Mamba is perfect for young, wild wines that benefit from this decanter's dual decanting function. These crystal glass decanters are handcrafted and mouth blown in Kufstein.



www.riedel.com

20940/Tableware International – December 2017

REINFORCEMENT GLASS FIBRES

Glass Company

Saint-Gobain Adfors



Saint-Gobain Adfors has finalized the acquisition of 100% of the equity capital of **Wattex**, a business owned by the founding family Baert and manufacturing **non-woven specialty products for the bitumen roof market**. Founded in 1953, and located in the region of Antwerp in Belgium, this company produces non-woven carriers made from **glass-fibre reinforced polyester** providing excellent performance to waterproofing membranes for roofs. After taking over the German firm Kirson in October, this Wattex acquisition will enable Saint-Gobain's Adfors business to develop new solutions with its customers and extend its line of reinforcement products on the roofing market. The acquisition will allow the Group to strengthen its positioning in high performance solutions for housing and construction.

20941/Press Release – 2017.12.04



Happy New Year 2018!

SPECIAL GLASS

Glass Companies

SCHOTT



SCHOTT has fully acquired NEC SCHOTT Components Corporation, Minakuchi (Japan). Looking to further strengthen its position in the important Japanese market for electronic components, SCHOTT has purchased the remaining shares in the joint venture NEC SCHOTT Components Corp. The company is one of Japan's leading electronic component manufacturers producing glass-to-metal seals and thermal fuses. Key applications for these products include electronic devices, consumer electronics, the automotive industry and optoelectronics.

The joint venture has become a fully-owned SCHOTT subsidiary. The company will now pursue its business activities under the new name SCHOTT Japan Corporation, Minakuchi (Japan).

SCHOTT furthermore expedites unification of its business activities in Japan in order to strengthen SCHOTT's brand identity in the Japanese market. Therefore, SCHOTT plans to merge SCHOTT Japan Corporation, Minakuchi with the sales company SCHOTT Nippon K.K., Tokyo. The merged company shall then continue to operate under the new name SCHOTT Japan Corporation.

20942/Press Release – 2017.12.13

Corning



Corning adds jobs to Valor Glass site in New York. Corning has invested in its Valor Glass site that will create 185 new jobs and support more than 380 jobs overall in the Southern Tier of New York, USA.

The new jobs will be located at the Corning Innovation Support Center (CISC) in Big Flats and at Corning's Research and Development Facility at Sullivan Park in Erwin.





Happy New Year 2018!

Gov. Andrew Cuomo announced Corning's investment during a visit at Sullivan Park hosted by Wendell P. Weeks, Corning chairman, chief executive officer, and president. "Corning has been a beacon of enterprise and innovation for decades, and this new expansion builds on our efforts to spur development and job growth for the Southern Tier," Gov. Cuomo said.

Corning has been awarded incentives from Empire State Development, New York State's chief economic development agency, in the form of a \$6 million capital grant to purchase manufacturing equipment and make infrastructure improvements.

"Valor Glass was invented here in the Southern Tier so it is only fitting our first significant manufacturing operation be located here," Weeks said.

Developing and manufacturing Valor Glass in the Southern Tier is part of Corning's plan announced in July to invest \$500 million and create 1000 new US jobs.

To further support the production and delivery of Valor Glass, Corning will also add jobs in the future at an existing facility in Vineland, New Jersey, and at a location in the Southeast United States.

Valor Glass reduces particle contamination, breaks and cracks while increasing throughput. As a result, Valor helps protect patients and improves pharmaceutical manufacturing.

20943/Press Release – 2017.11.30

Zeiss



Effective 1 January 2018, Dr. Karl Lamprecht for the Semiconductor Manufacturing Technology (SMT) segment and Dr. Jochen Peter for the Research & Quality Technology (including IMT Industrial Metrology and Microscopy business group) segment have been appointed to the Executive Board of the ZEISS Group.

The Supervisory Board of Carl Zeiss AG has decided to expand the Executive Board of the ZEISS Group, which currently has four members. This is in line with the implementation of the ZEISS portfolio strategy and anchors the business responsibility in the Executive Board.

Effective 1 January 2018, two positions will be added to the Executive Board of the ZEISS Group headed by President & CEO Dr. Michael Kaschke, one for the Semiconductor Manufacturing Technology segment and the other for Research & Quality Technology.

"ZEISS is still on course for further growth in important future markets, as evidenced by the record figures from the past fiscal year. The setup of ZEISS as a portfolio company initiated several years ago in line with market and customer segments is key for continuing this successful path. This is now also fully reflected in the structure of the Executive Board," says Dr. Dieter Kurz, Chairman of the Supervisory Board of Carl Zeiss AG.

Thomas Spitzenpfeil, whose responsibilities as Member of the Executive Board currently include the role as CFO and CIO, will pursue after eight successful years at ZEISS new challenges outside the ZEISS Group. He and the Supervisory Board have agreed not to extend his appointment for a third term. The Supervisory Board would like to express its sincere thanks to Mr. Spitzenpfeil for his work over the years.



Happy New Year 2018!

It has asked him to stay on, if possible, until the scheduled end of his appointment on 30 September 2018 and to support the President & CEO with integrating the new Executive Board Members.

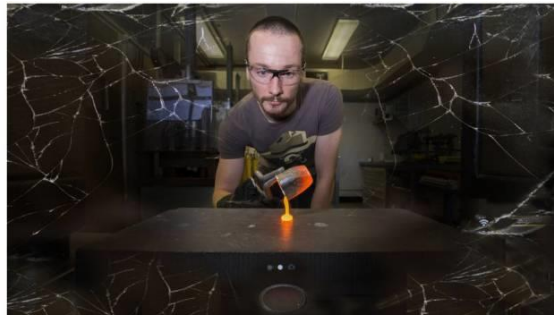
In addition to the newly appointed Members of the Executive Board headed by President & CEO Dr. Michael Kaschke, Dr. Matthias Metz, Head of the Vision Care/Consumer Products segment, Dr. Ludwin Monz, Head of the Medical Technology segment, and CFO Thomas Spitzenfeil will continue to be members of the Executive Board.

20944/Press Release – 2017.12.13

Miscellaneous

ANU (Australian National University) Shatter-proof Glass for Mobile Phones

Cracked phone screens could soon be a thing of the past — thanks to ongoing work at the Australian National University science searching for new properties to make glass harder.



Dr Charles Le Losq at the Australian National University

Research by the Australian National University (ANU) could soon help lead to the development of shatter-proof glass for mobile phones.

Lead researcher Charles Le Losq said while a particular type of glass, called aluminosilicate, was used in lots of everyday items — such as smartphones — not a lot was actually known about its structure.

Le Losq said he and a small team of researchers added elements such as sodium and potassium to glass, forming a new nano-structure on an atomic level when it was set into a pane. He said the findings could be used to make glass more flexible and resistant to fractures. "We inferred that we could use this knowledge to search for new properties and make glass harder," he said. "This will require further work of course and will also require some collaboration with the industry. "Now we can build on this but we're talking timeframes of maybe five to 10 years."

Le Losq began his research in 2010 when he was working at the Institut de Physique du Globe de Paris and completed it when he moved to the ANU in Canberra.

He said seven researchers from six universities in Australia, France, the United Kingdom and China worked together on the study.



Happy New Year 2018!

"The glass structure is still an ongoing problem for the material science community, so it's very important to do this first step," he said.

The research builds on longstanding work in the fields of chemistry, material science, physics and geochemistry about how to make smartphone screens stronger, while also ensuring they were resistant to scratches.

Le Losq said his research to date had not examined whether the modified glass he created would also be resistant to scratches, but said future experimentation and tweaking with industry could determine that. "There is some balance between having something very hard [to resist scratches] and being very brittle [weak to cracking]," he said. "That's something that would have to be addressed by future research. We're not at that stage yet.

"On a very fundamental level we're playing with two or three atoms, but now we need to extend this vision ... to really understand what happens when you add a particular type of atom in the structure of the glass and how that structure of atoms will change the glass' resistance."

20945/Press Release – 2017.12.18

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Happy New Year 2018!

DIVERSE

GLASS & SUPPLIERS

StekloSouz International Glass Forum

The StekloSouz Association of Russia held the International Forum "Glass of modern technologies - XXI" 23-24 November, with more than 220 delegates from 15 countries. From 23 to 24 November this year, the StekloSouz Association of Russia held the International Forum "Glass of modern technologies - XXI", where more than 220 delegates from 15 countries worked together to solve the strategic challenges and challenges that consumers in the various sectors of the macroeconomy are facing the global glass industry.

During the two days of the forum, the problem of technological development of the production of glass and products, raw materials, refractories of related materials and technologies were the subject of peer review and discussion. Special subjects were training and ecology.

During the period of the Annual Industry event, Certificates were issued to 25 new Members - Members of the Association who joined the StekloSouz in 2017.

At a gala dinner, in honour of the Holiday - the Day of Glass Industry Workers, Victor Ivanovich Osipov, the president of the Association, wished all veterans, specialists engaged in the Glass Industry, good health and luck in overcoming the consequences of the crisis. Participants of the Symposium visited glass factories, enterprises, including a new complex for the production of glass forms.

All Forum participants voted for the Program of Action of the StekloSouz Association of Russia for 2018. In the opinion of the delegates of the Forum, the Business Program of the Sectoral Event was completed successfully.

In 2018, under the leadership of the StekloSouz Association of Russia, it is necessary to implement the planned Program for the Development of the Glass Industry of Russia in a coordinated manner.

20946/Press Release – 2017.12.05

CO₂ Value Europe



CO₂ Value Europe, the Association dedicated to CO₂ utilization which was officially created on 30 November in Brussels by 43 founding partners from industry and research. interested in transforming CO₂ into valuable products.

Press release available on <http://www.co2value.eu/PressRelease.pdf>

20947/Press Release – 2017.11.22



Happy New Year 2018!

American Glass Research opens Netherlands testing laboratory

Agr International's American Glass Research division has opened a European testing laboratory in Delft, the Netherlands to serve glass manufacturing and beverage filling industries.

Featuring modern analysis and testing equipment, the new lab can be used to carry out a range of testing services, including performance testing of glass packaging.

The lab will also be used for fracture diagnosis, proof-of-design testing, dimensional evaluation and analysis of label, decoration and closure issues.

Agr testing laboratory is also suitable for evaluation of coating performance, audit of glass plant operations, filling line audits, glass technical consultancy and training and seminars.

In addition, the lab provides resources from AGR North American offices for material analysis, glass quality.

20948/Press Release – 2017.12.11

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



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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.

20949/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
-



Happy New Year 2018!

- 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 Centre 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>.

20950/Press Release – 2017.09.05

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.





Happy New Year 2018!

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.

20951/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>



20952/Press Release – 2017.10.14



Happy New Year 2018!

GPD Finland 2019

The Glass Performance Days (GPD) event in 2019 will celebrate its 27th year of service to the glass industry and will address the challenges the industry faces today.

In 2019, the technical sessions of the conference and workshops of the Glass Performance Days (GPD) will be addressing the challenges the industry faces today regarding the ever-changing demands on City planning, building design, energy-efficiency and environmental fit. A special focus will be on the contribution of new glass technologies to these demands. The modular program of the event will consist of the following:

* 25-26 June, Workshops

* 26-28 June, Conference Part (six parallel technical sessions each day) and Exhibition Part, including Glass Expo section for the glass product exhibition and Step Change section for start-up companies.

Step Change 2019 – A Roadmap for Industry, Innovation and Ecosystem – is the first glass industry start-up event in the world, whose goal is to bridge the gap between the glass industry with a space to engage innovators, start-ups and new technologies.

The Step Change ecosystem is unlike anything seen in the glass industry to date.

At the 2017 GPD event, over 30 glass industry start-ups came together to showcase and pitch, which provided the start-ups and industry an insight into how they can work together.

More info at <https://gpd.fi/events/gpd-finland-2019/>.

20953/Press Release – 2017.12.19