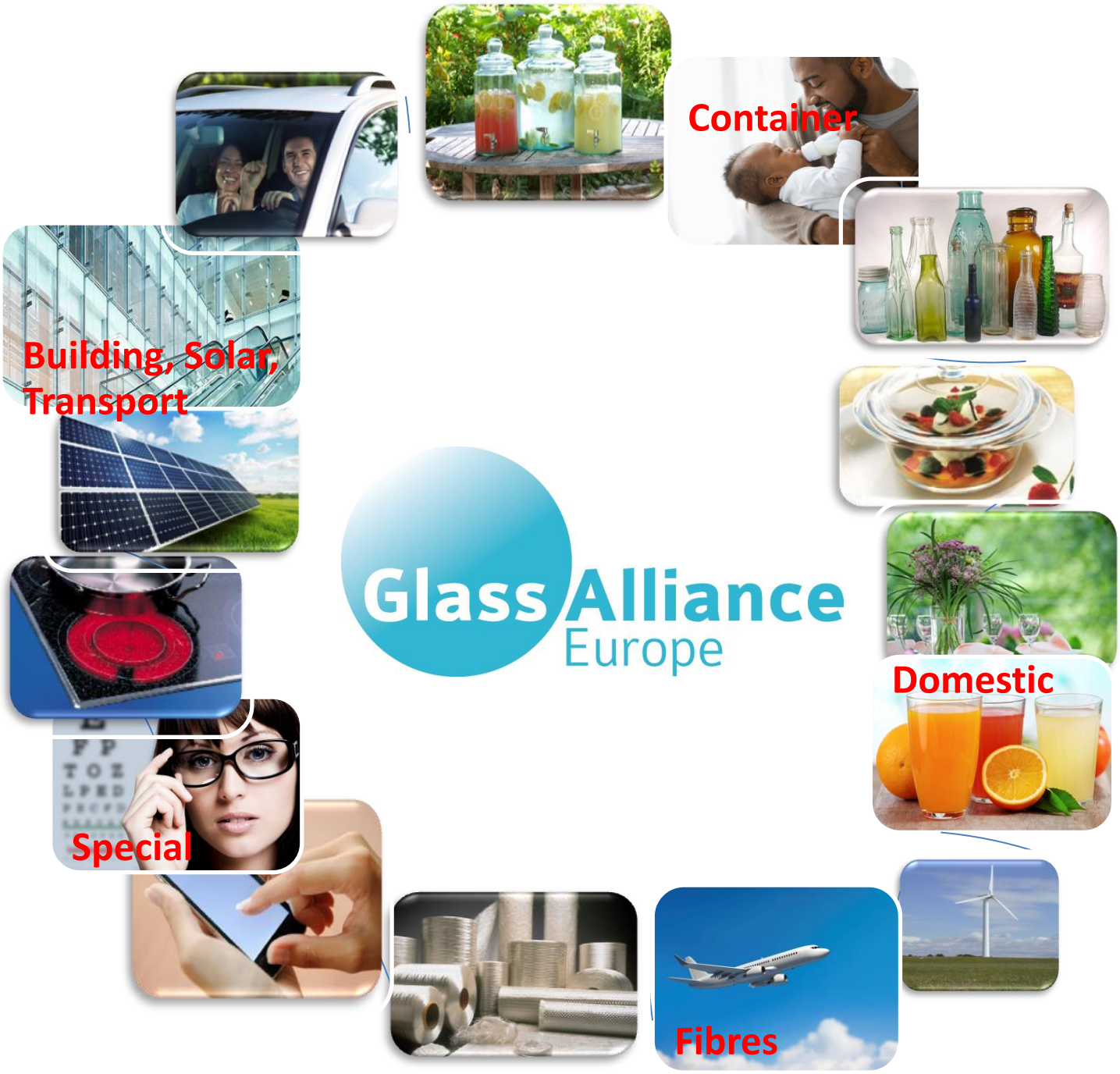

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Newsletter N°342

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Glass Alliance Europe

Newsletter N°342

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COMMUNITY NEWS

A. EU NEW LEGISLATION

Commission Directives

Commission Delegated Directive (EU) 2017/1009 of 13 March 2017

For the purposes of adapting to technical progress, the Commission amended Annex III to Directive 2011/65/EU as regards an **exemption for cadmium and lead in filter glasses and glasses used for reflectance standards.**

Directive 2011/65/EU prohibits the use of lead and cadmium in electrical and electronic equipment placed on the market. Optical filter glasses containing cadmium or lead are used in a wide variety of optical applications for many types of electrical and electronic equipment. Both cadmium and lead are used because of the unique optical properties that their use enables, such as 'sharp cut-off' in the visible spectrum that is unaffected by viewing angle.

Though various substitution routes exist, substitutes do not provide sufficient cut-off performance for all applications. In the few cases where alternatives are said to supply sufficient performance in this respect, the materials used are too sensitive to environmental conditions of operation and thus not sufficiently reliable.

In this sense, alternatives are still not suitable for many applications, for which finding alternatives is complicated and time-demanding, thus five years is a justified duration for the categories 1 to 7 and 10.

Certain optical filter glasses containing cadmium and/or lead should therefore be exempted until 21 July 2021 for categories 1 to 7 and 10. In view of the innovation cycles for the electrical and electronic equipment affected, the duration of this exemption is unlikely to have adverse impacts on innovation.

In Annex III to Directive 2011/65/EU, point 13(b) is replaced by the following:

'13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	Applies to categories 8, 9 and 11; expires on: — 21 July 2023 for category 8 in vitro diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11; — 21 July 2021 for other subcategories of categories 8 and 9
13(b)-(I)	Lead in ion coloured optical filter glass types	

13(b)-(II)	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10'
13(b)-(III)	Cadmium and lead in glazes used for reflectance standards	

Commission Delegated Directive (EU) 2017/1011 of 15 March 2017

For the purposes of adapting to technical progress, the Commission amended Annex III to Directive 2011/65/EU as regards an **exemption for lead in white glasses used for optical applications.**

Lead-based glasses are used because they have unique combinations of properties and characteristics, such as light transmission performance, optical dispersion, thermal conductivity, birefringence and others.

Lead-free optical glasses of alternative designs exist in the form of lead-free glass, plastic lenses and alternative equipment design. Nonetheless, those alternatives cannot provide for several properties and their combinations comparable to lead-based glasses.

Where finding substitutes was relatively straightforward, this has already occurred and substitutes are being used. Alternatives for the remaining applications are still not available. Thus, substitution for the full application range is not possible in general. **Lead in white glasses used for optical applications should therefore be exempted until 21 July 2021 for categories 1 to 7 and 10. In view of the innovation cycles for this type of optical applications, the duration of this exemption is unlikely to have adverse impacts on innovation.**

In Annex III to Directive 2011/65/EU, point 13(a) is replaced by the following:

'13(a)	Lead in white glasses used for optical applications	Applies to all categories; expires on: — 21 July 2023 for category 8 in vitro diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11; — 21 July 2021 for all other categories and subcategories'

Member States shall adopt and publish, by 6 July 2018 at the latest, the laws, regulations and administrative provisions necessary to comply with both Directives.

*All details on **cadmium** on page 21 and on **lead** on page 53 at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:153:TOC*

B. TRADE POLICY

New EU Antidumping Methodology: EU Parliament's Position

The European Commission's anti-dumping investigations into third-country exporters should take account of whether that country respects international tax, environmental and social standards, the Parliament Committee on International Trade said on 20 June.
"By creating clear and tough anti-dumping rules, we can protect citizens from the negative effects of globalisation", Cicu said in a Parliament press release.
According to the MEPs, it should be possible to penalise non-European companies that practise unusually low prices, as these are in breach of the multilateral agreements, such as the Paris Climate Agreement, or the base conventions of the International Labour Organisation. *"It is not about protectionism, but protections: protecting common goods, the environment and workers, both here and there"*, said Yannick Jadot (Greens/EFA, France).

The MEPs wish the Commission to draw up detailed reports describing the specific situation of a given sector of activity, such as steel, or of a country, in terms of unfair commercial practices. They have tightened up the proposal on the table by making it obligatory to use international prices, rather than the prices of countries practising dumping, to determine whether there is a market distortion. Furthermore, European businesses should not face a greater administrative burden than that of the procedure currently in place when asking the Commission to launch an anti-dumping investigation.
"China does not and will not have market economy status, as there are no longer any grounds for this. We have removed all references to this status. This new methodology allows the EU to get around this question and ensure that European companies are protected from unfair competition", said French EPP members Tokia Saïfi and Franck Proust. On behalf of the ECR group, Belgium's Sanders Loones called for a balance between opening up the European markets and an end to European naivety in trade matters.

Negotiations on this text will start in mid-July with the Council of the EU, unless the MEPs object to the draft 'Cicu' report between now and Parliament's July plenary session. The member states reached their negotiating position in May (*see* EUROPE 11780). According to a parliamentary source, one of the differences between the MEPs' position and that of the member states lies in the fact that Parliament's list of indicators to determine the existence of market distortions is broader than the Council's.

At the same time, inter-institutional negotiations are underway on the modernisation of the trade defence instruments.

The European leaders reiterated the importance of respecting standards that are *"central to the European way of life"*, such as environmental, social, health and consumer standards.

20557/Press Release – 2017.06.20

EU Multilateral Trade Rules Are Effective Against Unfairly High Tariffs for EU Exports

Russia informed recently that it had lowered its import tariffs on certain products, as a result of the dispute launched by the EU in 2014. The lowering of customs tariffs in Russia is good news for EU industries and exporters. The announcement is also an example of effectiveness of the multilateral trade rules and their successful use by the EU.

In this particular dispute, the EU challenged Russia's customs duties on paper, refrigerators and palm oil set above the level to which Russia committed while joining the World Trade Organization. Those measures were severely hampering trade in important sectors. EU exports of the products concerned to Russia were worth approximately €600 million a year before the dispute was launched. In a ruling circulated on 12 August 2016, a WTO panel confirmed that Russian import duties on these products violated WTO rules.

This is though only one of many successful cases brought by the EU to the WTO dispute settlement in the last years. The EU legal action in the WTO allowed also for instance to improve access of EU firms to raw materials sources in China and to remove Chinese extra duties on European steel tubes and x-ray scanners.

Effective enforcement of existing trade rules is one of the key points of the EU's trade policy strategy 'Trade for All' of 2015.

20558/DG Trade Press Release – 2017.06.20

EU/Singapore Free Trade Agreement

On 26 June, the European Parliament's Research Service published a briefing on the EU-Singapore free trade agreement. This agreement was concluded in December 2012, then in October 2014 after finalisation of its chapter on investment. The EU-Singapore agreement is the second free trade agreement concluded by the EU with an Asian economy – the first being that with South Korea, which was concluded in 2009. It is also the first free trade agreement to be concluded by the EU with a country from the Association of Southeast Asian Nations (ASEAN). Furthermore, the EU-Singapore agreement is the first comprehensive free trade agreement negotiated and finalised by the EU since the Lisbon Treaty entered into force.

As a new generation trade agreement, it will go further in many aspects than the current WTO commitments. The EU-Singapore free trade agreement still has to be signed and ratified. It formed the subject of a European Court of Justice opinion on the allocation of competences between the EU and its member states for its conclusion and ratification.

The European Parliament rapporteur for this agreement is David Martin (S&D, UK).

The briefing can be consulted at:
http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/607255/EPRS_BRI(2017)607255_EN.pdf.

20559/DG Trade Press Release – 2017.06.27

C. ENVIRONMENT & ENERGY

EU ETS: Inter-institutional Negotiations on Post-2020 ETS Reform

1. Draft regulation on non-ETS effort sharing (sectors not covered by the ETS, i.e. transport, agriculture, buildings and waste)

In voting on 14 June on the draft regulation on the sharing of effort among the member states in reducing greenhouse gas emissions from 2021 to 2030 in sectors not covered by the ETS – transport, agriculture, buildings and waste – the **European Parliament** marginally toughened the initial European Commission proposal, much to the satisfaction of rapporteur Gerben-Jan Gerbrandy (ALDE, Netherlands).
Everyone congratulated Gerbrandy on the excellent work he had done and considerable effort he had put in.

On the basis of the amended text,

- Parliament approved the negotiating mandate for the interinstitutional talks to try to come to an agreement at first reading on the regulation that seeks to cut emissions from non-ETS sectors by 30% by 2030, compared with 2005 levels. The challenge is great since these sectors currently contribute 60% of the EU's total greenhouse gas emissions and will have to help the EU achieve its target under the Paris climate agreement of reducing its emissions by at least 40% compared with 1990 levels between now and 2030.
- The amended text takes 2018 as the reference year for member states' emissions reduction trajectory (based on average emissions, 2016-2017) rather than 2020 as the Commission had proposed. Climate activists approve this change.
- Parliament restored the Lulucf (Land use, land-use change and forestry) flexibility to 280 million tonnes of CO_2 as proposed by the Commission, allowing forestry credits to be used to achieve national targets (the environment committee capped flexibility at 190 million tonnes).
- The early action reserve advocated by the environment committee to encourage the countries of Eastern Europe, whose per capita GDP is lower than the Community average, has been increased to 90 million tonnes of CO2, rather than 70 million.
- The text mentions the EU's long-term climate target (reducing emissions by 80% by 2050) and, in so doing, reiterates the conclusions of the 2009 European Council.

Council wants agreement on non-ETS effort sharing before COP 23

In the wake of the announcement by the Trump administration of its withdrawal from the Paris Agreement, the **European Council** said it is more necessary than ever that the EU makes progress towards adopting legislation on reducing emissions from key sectors not covered by the emissions trading system (ETS): that would be the best response the EU could give to the US defection. European environment and climate ministers met in Luxembourg on 19 June. With this spirit, they demonstrated their desire to reach political agreement by October, before COP 23, on the draft regulation on the sharing of effort among member states on reducing greenhouse gas emissions in the transport, agriculture, buildings and waste sectors (-30% for the 2021-2030 period by comparison with 2005) – a proposal on which the European Parliament has just voted.

Denmark, Germany, Italy and Luxembourg expressed their disappointment that the political agreement could not be reached in this session. They all acknowledged, however, that, despite the significant efforts of the Maltese Presidency, further discussions would be needed in the Council working group in order to make progress on the basis of the compromise proposals on the table. Estonian minister Siim Kiisler, speaking for the incoming Estonian Presidency of the Council, gave assurances that he, too, would do his utmost.

Summarising the debate, José Herrera, chairing this last Environment Council under the Maltese Presidency, noted *"the desire to maintain the momentum, both domestically and internationally, and to remain united in order to reach an agreement before COP 23"*. With regard to effort-sharing, he welcomed the agreement in principle to his compromise proposal that the emphasis be put on the final areas of disagreement.

Luxembourg's Green environment minister Carole Dieschbourg was the most outspoken, warning her counterparts against any attempt to water down efforts that could damage implementation of the Paris Agreement. *"Implementation must be faultless. The credibility of the EU is at stake"*, she warned, arguing for a review clause for the two pieces of legislation that is in line with the five-yearly objectives review cycle of the Paris Agreement.

Effort-sharing. With regard to the safety reserve, the additional flexibility proposed by the Presidency to help those countries, such as Italy and Spain, which have already made significant efforts to reach their 2020 target was relatively well received. But while a number of countries (Spain, Sweden, Belgium and Denmark) emphasised that it can only be acceptable so long as other elements of the package are not touched, others, particularly among the low-income countries, felt that their allocation was too low. Polish minister Jan Szyszko suggested that a reserve of 230 million tonnes of CO_2 equivalent.

Lulucf. On including emissions/absorption by forests, the countries where forestry is significant, determined that account be taken of the sustainable management of forests and harvested products, are still not satisfied. Differences remain between the countries which want the forest reference level to be based on historic data and the forest countries which are keen to have a reference that takes projections into

account. These latter countries would also like member states to be responsible for reviewing reference levels. Denmark, Italy, Spain and the Netherlands called for robust, credible accounting rules.

Parliament ready to negotiate with Council on non-ETS emissions reductions

The European Parliament environment committee gave the green light on 22 June to the opening of inter-institutional negotiations on the draft EU regulation establishing effort-sharing among member states in reducing CO_2 emissions from the – sectors which will be required to reduce their emissions by 30% in the course of the period from 2021 to 2030, compared with 2005, as their contribution to the EU climate target of a cut of at least 40% in emissions by 2030. It was by the very wide margin of 534 votes to 88, with 56 abstentions, that rapporteur Gerben Jan Gerbrandy (ALDE, Netherlands) was granted a mandate to negotiate with the Council of the EU. The Council hopes to agree its position in October.

20560/Press Release – 2017.06.14, 19 & 22

2. **European Parliament and Council negotiators are still some way off agreement on the structural reform of the ETS for the 2021-2030 period**, the EU's main market instrument for achieving its climate targets at the lowest possible cost.

The second inter-institutional negotiating meeting on 27 June was long but inconclusive and it is already being taken as read that the incoming Estonian Presidency of the Council will have much to do on this issue this summer.

The meeting, the first with the Parliament's new chief negotiator, Julie Girling (ECR, UK), came a month after it was initially scheduled, and Girling set out the Parliament's general position. The first trialogue meeting took place on 4 April.

This second trialogue allowed the two sides to present and explain their respective positions on the three most important points: strengthening the ETS, protecting against carbon leakage, and solidarity funds, including the modernisation fund.

At this stage, however, no progress has been made, with each side sticking to its position and everyone aware that altering even a single figure could change the balance of the reform which seeks to make the ETS more effective and to raise the price of carbon per tonne in the EU.

The positions of the Parliament and the Council differ on the compensation for indirect carbon costs and on the potential percentage reduction in quotas up for auction against free allowances.

Negotiators have agreed to give themselves two weeks to identify the points on which they might have some movement. A further trialogue meeting will take place in two weeks' time, possibly on 10 July, to provide political direction for the technical work that will be done during the summer.

Another trialogue could be held in the autumn but no date has yet been set and there is nothing to suggest that it will be the last. The goal remains to reach agreement before COP 23 (Bonn, 6-17 November, under Fijian chairmanship). With this agreement and the general approach that is hoped will come from the October Environment Council on effort-sharing among member states in reducing emissions from non-ETS sectors, the EU could go into COP 23 showing that it is taking action.

20561/Press Release – 2017.06.29

3. Paris Climate Agreement

The deep regret already expressed by the EU about the decision by the administration of Donald Trump to withdraw the United States from the Paris Climate Agreement and the EU's determination to rapidly make progress with implementing said agreement were formally put in writing by the Council of the EU in Luxembourg on 19 June.

The Council pointed out that the Paris Climate Agreement was ambitious but not prescriptive, such that each country can find its own way to contribute to the objectives of tackling climate change, which threatens development, peace and stability across the whole world, the conclusions document explains.

The European heads of state reaffirmed:

- the EU's commitment to full and rapid implementation of the Paris Climate Agreement, including financing commitments for climate action (the $100 billion a year by 2020 promised by developed countries to help adjustment and reduction efforts by developing countries) and taking the lead of the global transition to a clean economy,
- the EU's determination to boost climate democracy and cooperation with parties to the Paris Climate Agreement, particularly with countries most vulnerable to climate deregulation, in a gesture of solidarity with future generations and responsibility towards the planet. The European Commission and Council will be invited to implement these European Council guidelines.

Describing the Trump administration's decision as profoundly regrettable, the Council of the EU welcomes, by contrast, the many firm statements in favour of the Paris Agreement by a large number of countries, be they major states or small vulnerable islands. During a visit to the EU institutions on 28 June, Michael Bloomberg, **the United Nations Special Envoy for Cities and Climate Change and former mayor of New York** (who is very engaged in the fight against climate change), provided the EU with assurances of the commitment of US citizens and local authorities in the fight against climate change.

The conclusions state that the Paris Agreement is *"a key element"* for the modernisation of European industry and the implementation of the 2030 Agenda for Sustainable Development.

The Council reiterates the unfaltering support by the EU and its member states to the United Nations' multilateral system, *"recalling the particular responsibility of major economies, accounting for some 80% of global emissions, and call on all partners to keep up the momentum created in 2015 towards successful results at COP 23 and COP 24"*.

The conclusions also promise to increase cooperation with the most vulnerable countries, as a sign of solidarity with future generations. *"The EU is sticking to the Paris Agreement. We cannot afford a domino effect following the United States decision",* Luxembourg's Prime Minister Xavier Bettel stated.

Revision of 'Energy Efficiency' and 'Performance of Buildings' Directives

The energy ministers of the EU struggled to reach general approaches of the Council on the draft revised directives on the energy efficiency and energy performance of buildings, two key texts of the clean energy package presented by the Commission at the end of last year. They will usher in tense negotiations under the Estonian Presidency with the Parliament and the Commission, particularly on the first of the two texts, the ambition of which has been scaled down considerably.

As regards the **draft revised directive on energy efficiency**, the ministers finally accepted a compromise abandoning a reference to the binding nature of the 30% energy efficiency target up to 2030. The text refers only to an "overall objective" of 30% energy efficiency.

The compromise is also built around flexibility regarding the compulsory objective of 1.5% energy savings, leaving the member states free to reduce this objective to 1% from 2024, unless the medium-term impact assessment shows that the EU is not on course to reach its targets by 2030.

Germany, France, Sweden, Denmark and Luxembourg have annexed a political statement stressing the higher level of ambition needed for the EU to comply with its commitments under the international climate agreement.

The Commissioner for Energy, Miguel Arias Cañete, who was bitterly disappointed by the watering down of the level of ambition in the Commission's initial text, also said that he would fight alongside the European Parliament to reverse the trend.

As regards the **revised directive on the energy performance of buildings**, which aims to promote and support the viable renovation of buildings and the decarbonisation of the European stock of buildings, a sector which accounts for 40% of all energy consumed in Europe, the ministers reached a compromise on a proposal that requires the member states to establish long-term renovation strategies, whilst tackling energy poverty.

Another significant feature of the revised text is the promotion of electro-mobility, by requiring at least one charging point for every ten parking spaces for electric vehicles in non-residential buildings and pre-cabling for every parking space in residential buildings. These requirements will apply to all buildings with more than ten parking spaces.

20563/Press Release – 2017.06.26

Simplified EU Framework for Energy Labelling

The Council of EU Ministers adopted without debate the regulation establishing a simplified framework for energy labelling, paving the way for new labels to be phased in from the end of 2019, providing information about the performance of household devices (washing machines, televisions, refrigerators, etc.). This text, which aims to replace the 2010 directive, retains its main principles, but clarifies it by tightening up and extending its scope of application.

Following the inter-institutional agreement concluded in March on the draft revised regulation proposed by the Commission in summer 2015 and revising the framework established by the 2010 directive for the labelling of low-energy products, itself

introduced in 1995, the European Parliament gave its green light on 13 June to returning to a **simplified energy labelling system running from 'A' to 'G'**, replacing the current classification system based on differing scales (A+, A++, A+++, etc.), which could be confusing to consumers. This new system will make the new energy labelling stricter, more homogenous and more able to follow the pace of technological progress.

The new text also contains clearer rules on promotional campaigns, national incentives to promote higher efficiency categories and aims to improve the application mechanisms and transparency towards customers by creating a database of products covered by energy labelling requirements.

20564/Press Release – 2017.06.26

Consumer Confidence in Chemicals Improving 10 years after REACH Entry into Force

On 1 June 2007, the REACH Regulation, cornerstone of EU chemicals legislation, entered into force. One of the reasons for developing REACH was to improve citizens' confidence in the EU regulatory framework and the safety of products.

Commissioner Bieńkowska presented the findings of the Eurobarometer survey on chemical safety in her keynote speech at the Helsinki chemicals forum. The study reveals the impact REACH has made in its 10 years' existence.

44% of EU citizens consider that safety of chemicals contained in products has improved in the last 10-15 years. They also have a higher level of confidence in products manufactured in the EU compared to those imported from outside.

Two-thirds of citizens feel concerned about being exposed to hazardous chemicals, while in general, citizens in Northern Europe feel better informed about the potential dangers of chemicals than citizens in Southern Europe. The main sources of information used by the public to get such information are product labels and media.

Other findings of the Eurobarometer survey are as follows:

- Perceptions of safety vary considerably between EU countries, although almost half of the respondents think that chemical products are safe for human health and the environment. Correspondingly, half of the respondents say that the current level of regulation and standards in the EU is not high enough and should be increased.
- 2 in 3 respondents know that if they ask whether a product contains particularly hazardous chemicals, the seller is required by law to inform them. Only a small minority does not think this is the case.
- There are varying perceptions of who currently has and who should have responsibility for ensuring the safety of chemicals contained in consumer products in the EU. 3 in 10 respondents think this responsibility currently lies with multiple actors (i.e. EU authorities, national authorities or manufacturers), while more than 4 in 10 respondents think that this responsibility should lie with more than one actor.
- The cornerstone of safety information is the label, as regulated by the EU's CLP Regulation. Awareness and comprehension of hazard pictograms on the CLP label vary across the different pictograms. They are quite high for certain pictograms, especially for the 'flammability' pictogram, but only 1 in 5 say that they have seen the serious

health hazard pictogram before, and just 1 in 6 know the meaning of the exclamation mark pictogram.

This survey contributes to the Commission's REACH REFIT evaluation and to the fitness check of chemical legislation (excluding REACH), providing information on the general public's perception of chemical safety. The target sample size in most countries was 1,000 interviews. In total, 28,157 interviews were conducted.

20565/Press Release – 2017.06.08

RoHS – Revision of the Restriction of Hazardous Substances Directive

The Council and Parliament came to an agreement on a revised directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (Directive 2011/65/EU, known as the **RoHS 2** Directive). The text will exclude pipe organs from the scope of the directive, as no alternatives exist. To address the Commission concerns arising from the "open-scope" product group (category 11) that was created at the previous revision, the text will ensure the possibility of secondary market operations (e.g. reselling, second-hand market) for electrical and electronic equipment that was not covered by RoHS 2 and the use of spare parts for such equipment if they are put on the market before 22 July 2019.

20566/Press Release – 2017.06.22

Circular Economy: "Waste" Package

Parliament and Council negotiators, assisted by the Commission, handed over their work on 26 June in an attempt to push forward the draft revision of the EU "Waste" Directives, a key element in the December 2015 "Circular Economy" package. Although a little progress had been made, this meeting of trialogue negotiators was inconclusive. The negotiators mainly debated the framework directive on waste and highlighted the importance of the technical work undertaken on waste treatment hierarchy, food waste, exemptions for feed materials for animals reared on food waste, bi-products, the expiry of the waste status, which all took place after the first trialogue meeting on 30 May.
In a more general way, they were only able to examine three other directives due to the lack of time: the sensitive question of targets (preparations for the reuse of municipal waste, recycling packaging waste, ceilings on landfills) and exemptions.

The Parliament submitted a text in an effort to obtain a compromise on the EU waste hierarchy. It would like to include a new annex in the framework directive (annex 4A), which would contain the indicative list of economic instruments that have an incentive value. The Council will analyse this proposal to see whether it can be discussed at the working group but at first glance, it appears that this list, if it is to be envisaged, goes much further than the member states want.

The negotiators agreed to come back and provide more detail about the technical aspects of this legislative package in an effort to make progress before the next inter-institutional negotiating meeting planned for 26 September. 4 to 5 technical meetings have now been planned for this purpose, the first on 29-30 June and the following will probably be on 12-13 July.
The Maltese Council Presidency will continue to work on this dossier over the next few weeks and it will be up to the Estonian Presidency to continue with.

20567/Press Release – 2017.06.27

Estonian Presidency of Council of EU

Eco-innovation and the fight against climate change are the two major environmental priorities of the Estonian Presidency taking over the Council of the EU beginning on 1 July for the next six months. These two priorities will also be on the agenda of the informal Environmental Council meeting on 13 and 14 July next in Tallinn.
Both of them will be guided by the imperative of making progress with EU policies and legislation to help Europe's transition towards a low carbon circular economy and the priority of achieving sustainable development and implementing the Paris Climate Agreement. At the beginning of the Estonian Presidency, a high-level UN policy forum on sustainable development will take place (10-19 July). At the end of the Presidency the COP 23 will take place in Bonn on 6-7 November – two major events on the International Agenda.

Eco-innovation. This priority is shared by the next forthcoming Presidencies of the Council of the EU (Estonia, Bulgaria and Austria).

- The informal meeting of the Environment Council will host the Tallinn "Creative Hub" and the first day of the Council on 13 July will focus on this. Informal ministerial discussion should help to facilitate the adoption of Council conclusions in October, a month in which the Estonian Presidency would like to focus on the issue of innovation.
- On 6 September, the Presidency will be organising a conference that will bring together representatives from academia, governments and digital technology experts. They will have 48 hours to locate concrete innovative solutions to respond to specific problems arising from the circular economy such as, for example, secondary materials. The objective is to be able to deploy these solutions effectively.
- Another high-level conference will be organised in Tallinn (24-26 October) on digital technologies used in eco-innovation and eco-innovative solutions for green infrastructure in smart cities.

At a legislative level, the Presidency intends to make progress with inter-institutional negotiations on the "Waste" package, a key legislative section of the EU action plan for the circular economy and on which a third trialogue is planned for 26 September. Hitherto, the dossier has mainly been tackled at a technical level and this will continue because a work meeting will take place every week until the end of October.

Climate negotiations and legislation: this subject will be on the agenda on 14 July during the informal Environment Council meeting dedicated to the international aspects of this dossier and the implementation of the Paris Agreement for which EU heads of state and government have just repeated their unstinting commitment, including the financial section, by highlighting the importance of innovation.
At a legislative level, the Presidency will get down to work in July on the Lulucf project (contribution of agriculture and forestry to the EU's climate goals) in an effort to reach a compromise by September. One source indicated *"bilateral contacts have already taken place in effort to understand how we can move forward"*.

International meetings: As well as the high-level UN forum on sustainable development this July and the COP 23 in November, the Estonian Presidency will get to grips with preparing many different international conferences planned for September: the International Convention to Combat Desertification (6-16 September), a meeting of the parties to the Aarhus Convention (11-15), the general conference of the International Atomic Energy Agency (18-22), Minamata Convention COP on Mercury (24-29 September).

20568/Press Release – 2017.06.27

D. SOCIAL ISSUES

Workers' Protection against Carcinogenic and Mutagenic Agents

At the Employment, Social Policy, Health and Consumer Affairs Council (EPSCO) on 15 June, the European commissioner for employment and social affairs, Marianne Thyssen, announced a **new review in 2018 of the directive on the protection of workers against the risks linked to exposure to carcinogenic and mutagenic agents**.
This will be the third revision in three years. For the time being, not much information has filtered through and the substance of this development is still unknown. The announcement was made the same day as the ministers for social affairs were adopting a general approach on a second draft revision of the directive on seven carcinogenic and mutagenic agents (Directive 2004/37/EC). This fast track adoption took place six months after the European Commission proposal.

On 28 June 2017, the Maltese presidency and the European Parliament reached a **provisional agreement** on this new directive:

- **Reprotoxic substances**: The Commission will have to assess the possibility of including reprotoxic substances in the scope of the directive by the first quarter of 2019 at the latest, and may present a legislative proposal on the matter.
- **Chromium VI**: It was preliminary agreed to have an exposure limit value of 0,010 mg/m3 for a period of 5 years after the date of transposition, which limit will subsequently be lowered to 0,005 mg/m3. A derogation was introduced for

welding and plasma cutting processes or similar work processes that generate fumes, with an exposure limit value of 0.025 mg/m3 for a period of 5 years after the transposition date, and 0,005 mg/m3 thereafter.

- **Hardwood dust**: The Council and the EP agreed on an exposure limit value of 3 mg/m3 for five years after the entry into force of the directive and thereafter to 2 mg/m3
- **Respiratory crystalline silica dust: the limit is set at 0.1mg/m3.** The Commission committed to evaluate the need to modify the limit (e.g. whether to set it at 0.05mg/m3), five years after the entry into force of the amendment (which will mean in principle in 2025).
- The Commission committed itself to evaluate the need to modify the limit value for respirable crystalline silica dust as part of the next evaluation of the implementation of the Directive.
- **Health surveillance**: the doctor or authority responsible for the health surveillance of workers within member states may indicate that health surveillance must continue after the end of exposure for as long as they consider it necessary to safeguard the health of the worker concerned.

The directive proposes to set exposure limits for a further 11 carcinogens in addition to those covered by the existing 2004 directive. These are: respirable crystalline silica dust, 1,2-Epoxypropane, 1,3-Butadiene, 2-Nitropropane, acrylamide, certain chromium (VI) compounds, ethylene oxide, o-toluidine, refractory ceramic fibres, Bromoethylene and Hydrazine.
The directive also revises the limits for vinyl chloride monomer and hardwood dusts in the light of more recent scientific data.

There will be minimum requirements for eliminating and reducing all carcinogens and mutagens. Employers will also have to identify and assess risks to workers who are associated with exposure to specific carcinogens (and mutagens), and must prevent exposure where risks exist.

20569/Press Release – 2017.06.15 & 29

Unemployment Rates

The **euro area** seasonally-adjusted unemployment rate was **9.3%** in April 2017, down from 9.4% in March 2017. This remains the lowest rate recorded in the euro area since March 2009. The **EU-28** unemployment rate was **7.8%** in April 2017, down from 7.9% in March 2017. This is also the lowest rate recorded in the EU28 since December 2008. Eurostat estimates that 19.121 million people in the EU28 were unemployed in April 2017, a decrease by 253,000 in the EU28 and by 233,000 in the euro area compared with March 2017.

Czechia	3.2%	Sweden	6.6%
Germany	3.9%	Belgium	6.8%
Malta	4.1%	Lithuania	7.5%
Hungary (March)	4.3%	Slovenia	7.5%
UK (Feb.)	4.4%	Slovakia	8.3%
Poland	4.8%	Latvia	8.3%
Netherlands	5.1%	Finland	9.0%
Romania	5.3%	France	9.5%
Estonia (March)	5.4%	Portugal	9.8%
Austria	5.5%	Croatia	11.0%
Denmark	5.7%	Italy	11.1%
Luxembourg	5.9%	Cyprus	11.6%
Ireland	6.4%	Spain	17.8%
Bulgaria	6.4%	Greece (Jan.)	23.2%

Elsewhere

USA	4.3%	Russia	5.3%
Canada	6.5%	Brazil	13.6%
Japan	2.8%	Australia	5.7%
Switzerland	3.1%	India	4.9%
Turkey	12.6%	China	3.97%

20570/Eurostat News Release – 2017.05.31

E. GENERAL ISSUES

EU Innovation: Progress Needed

The EU's innovation performance last year continued to grow despite somewhat uneven progress observed around Europe. This is one of the main findings of the latest Innovation Scoreboard published recently by the European Commission. Overall, innovation performance has improved in 15 countries, though large differences exist between these Member States. Sweden remains the innovation leader while Lithuania, Malta, the Netherlands, Austria and UK are the fastest growing innovators. From a global perspective, the EU is catching up with Canada and the US, but South Korea and Japan are pulling ahead. China shows the fastest progress among international competitors.

Elżbieta **Bieńkowska**, Commissioner for Internal Market, Industry, Entrepreneurship and SMEs, said: *"EU industry continues to innovate, but we are still lagging behind*

global innovation leaders. In times of globalisation and rapid technology changes, innovation remains essential for the prosperity of our citizens and the wider European economy. The Commission's Start-up and Scale-up Initiative and New Skills Agenda aim to further improve an ecosystem for innovation to thrive."
Carlos **Moedas**, Commissioner for Research, Science and Innovation, said: *"The Scoreboard shows that still more can be done to improve research and innovation performance. That's why we're gearing up support to breakthrough innovators through the pilot European Innovation Council under the EU's Horizon 2020 research and innovation framework programme."*

The 2017 EU Innovation Scoreboard, which is accompanied also by the Regional Innovation Scoreboard shows that:
Sweden is once more the EU **innovation leader**, followed by Denmark, Finland, the Netherlands, the United Kingdom –for the first time an innovation leader- and Germany.
In selected areas of innovation, the EU leaders are:
Denmark – human resources and innovation-friendly environment;
Luxembourg – attractive research systems and intellectual assets;
Finland – finance and support;
Germany – firm investments;
Ireland – innovation in SMEs and employment impacts;
Belgium – innovation linkages and collaboration;
United Kingdom – sales effects.

Regional innovative hubs exist also in moderate innovator countries, as shown by the Regional Innovation Scoreboard: Prague in the Czech Republic, Bratislava in Slovakia, and the Basque Country in Spain.
Innovation **performance has improved most** in the area of international co-publications, broadband penetration, the number of university graduates and doctorates, and ICT training.
Venture capital investments and the share of SMEs introducing innovations have been in **strong decline**.

Over the next two years, innovation performance is **expected to increase** by 2%.

20571/Eurostat News Release – 2017.06.20

Better Regulation: The REFIT Platform Adopts 13 New Opinions

The REFIT platform adopted on 7 June thirteen opinions containing specific suggestions on making the existing European laws more effective.
This platform is made up of the European Commission, the national authorities and other interested parties and aims to improve existing EU legislation. The opinions adopted by the platform include measures aiming to:
- increase consumer health and food safety by establishing suitable limits for chlorate residues in food;

- improve consumer satisfaction by providing a clear definition of the terms vegan' and 'vegetarian' in food labelling;
- examine the feasibility of harmonising identity and residence documents of citizens;
- improve consultation mechanisms available to citizens.

The opinions adopted bring the total number of recommendations adopted by the REFIT platform so far to 45. They will feed into the work of the Commission in drawing up the Commission's programme of work for 2018, which is to be adopted in October of this year.

20572/News Release – 2017.06.08

Industries and Patent Offices Confirm Commitment to Work Together

On 31 May BusinessEurope with its partners from US, Japan, Korea and China held their annual meeting with the Presidents of the Patent Offices from their regions in Malta. Industries and Patent Offices celebrated five years of cooperation, took stock of progress achieved so far and set out the next steps in their cooperation to make it fit for purpose and continuously adapting it to the needs of users. A special publication celebrating this cooperation was launched.

20573/News Release – 2017.06.02

Future of the European Union

New 6th Scenario for the Future of the EU

European Commission

On 20 June, two days before the June European summit, more than 250 civil society organisations - involved in the defence of social rights, the environment, development aid and culture - presented a sixth scenario for the future of the European Union of 27 member states, in reference to the five scenarios put forward by the European Commission in March. This vision places the criterion of sustainability at the heart of the European project and rolls it out across all European sectoral policies. It aims to preserve democratic rules, tax justice and human rights both inside the EU and outside it. The post-2020 multi-annual financial framework must be adapted in line with these ambitions, the organisations stress.

For more information, see:
http://www.foeeurope.org/sites/default/files/other/2017/sustainable-europe-for-citizens-6th-scenario.pdf

20574/News Release – 2017.06.20

BREXIT Developments

1. Kick-Off for Brexit Talks

The European Union and the United Kingdom officially started negotiations to lead to the withdrawal of the United Kingdom from the EU, theoretically at the end of March 2019. The negotiators of both sides, Michel Barnier of France for the EU and Brexit Minister David Davis for the British government, started these talks on 19 June and announced at a joint press conference that they had agreed on the structure of the talks and the priority matters to resolve, such as the question of the rights of European and British citizens.

Barnier summed it up as a "useful first session", at which he and his opposite number had agreed on the dates, organisation and priorities of the talks. He began the press conference by saying that Davis had also agreed to the idea of settling the uncertainty caused by Brexit as soon as possible and resolving matters related to the citizens, financial aspects and Ireland, before moving on to defining the future relationship with London.

Davis confirmed that his government's priority was to remedy the uncertainty as soon as possible, particularly on citizens' rights, on which he feels it will be possible to make swift progress; however, the British negotiator also stressed that Brexit could not be concluded without having discussed and taken account of the future relationship. He also swept aside any contradiction with the EU and the positions adopted by the 27, also dismissing the fact that London has so far failed to make its voice heard on this point. As things turn out, negotiations will take place in the order called for by the EU, which wanted a precise sequence.

On the terms of the withdrawal, Davis was very clear, reiterating that despite differences of opinion within the current government, London did not intend to remain in the single market or customs union and would, as anticipated, be seeking a free-trade deal.

For his part, the EU negotiator reiterated that a fair and balanced agreement was possible and would be considerably better than no deal. Even so, Barnier is in no mood to make concessions. "The United Kingdom is leaving the EU, not the other way around", he said. "Everybody has to take their responsibilities and accept the consequences", he stressed.

Basically, the negotiations will take up one week a month, with the rest of the month given over to working on proposals and reporting back to the parties concerned.

Three working groups will be set up: citizens, financial aspects and other dossiers. However, there will be no working group on Ireland, a highly sensitive dossier that will have to be negotiated at the highest level.

As regards the timetable, the next round of talks will be held on or around 17 July, then 28 August.

Davis said that London's objective was to build a strong and special partnership with the EU. Speaking the day after another terrorist attack in London, the British negotiator also said that "it is at times like these that we remember the values and resolutions we share with our closest allies in Europe". "There is more that unites us than that divides us".

The negotiations opened with the EU still in doubt in recent days as to the real intentions of the British government and over its current fragility. Speaking to the press, Barnier said that there is currently no contact in sight other than Davis.
Barnier warned London several times of the risks of failing to reach an agreement in a timely fashion. The EU negotiator intends that sufficient progress be made on the aspects of the divorce concerning the rights of European and British citizens, financial aspects and the Northern Irish border by autumn 2017 to be able to move to the next phase: the future relationship between the EU and London.
According to the timetable of Article 50 of the Treaty of the EU, everything must theoretically be negotiated by October 2018 in order to allow time for the necessary ratifications and the United Kingdom to leave the EU just before the European elections of 2019.

At the **European Parliament**, President Antonio Tajani and the Parliament's Coordinator for Brexit, the Belgian Liberal Guy Verhofstadt, highlighted the need to protect citizens.
"The European Parliament's position is clear. Preserving the rights of the millions of European citizens concerned by Brexit, guaranteeing the conclusions of the Good Friday Agreement for Northern Ireland and honouring the financial commitments made by the British government will be the key elements for the European Parliament to give its approval to any withdrawal agreement", Tajani said. Any agreement on Brexit will require the approval of the European Parliament to enter into force.
Verhofstadt welcomed the fact that the timetable for the talks, which is already "fairly tight", is being respected.
On behalf of the ECR Group, Syed Kamall, the leader of the British Conservatives who campaigned for the UK to leave, said that it was important that the talks have started. A calm, constructive and cooperative approach to these talks will bring a maximum of progress in the coming weeks and months, he commented.

20575/News Release – 2017.06.19

2. First UK Proposal on Rights of EU Citizens

British Prime Minister May proposed a *"fair and serious"* offer under which no European living legally in the UK will be forced to leave the country after Brexit.
EU citizens already in the UK – and those who might arrive legally during a grace period of a maximum of two years – would have the possibility of accumulating a five-year period of residency. This will give them the right to *"settled status",* offering the same working rights, pension rights, NHS and other public service care rights they will keep for life.
One of the questions that remains to be answered is the cut-off date on which Europeans setting up in the UK will no longer be able to benefit from the same rights. According to the British, this date should fall after the triggering of Article 50 (29 March 2017) and at the latest on the day the UK leaves the EU. The EU27 consider this to be the day of the UK's definitive withdrawal from the EU (potentially March 2019).

May nevertheless warned her counterparts that she rejected any authority from the EU Court of Justice when settling disputes on the rights of EU citizens after Brexit. Only *"our very respectable law courts"* will be able to settle these disputes, she said. The EU27 deem the British initiative of presenting an offer quite positive, but discussions on the authority of the EU Court of Justice should nevertheless take place quickly, and many further explanations and details on related issues still need to be discussed.

20576/News Release – 2017.06.23

3. Criteria for Relocation of London-based EU Agencies

The European Medicines Agency and the **European Banking Authority** are currently based in London. The 27 European affairs ministers defined six criteria aiming to ensure a swift, smooth relocation of the two European agencies following Brexit, i.e.

- The assurance that the agency can be set up on site and can take up its functions at the day of the UK's withdrawal from the EU,
- Accessibility of the location,
- Existence of adequate education facilities for the children of agency staff,
- Appropriate access to the labour market, social security and medical care for both children and spouses,
- Business continuity,
- Geographical spread.
- proximity to schools for the children of the officials employed by the agencies, office space and means of integrating into the labour market of the county concerned)

Countries wishing to host the agencies are many: France has proposed Lille for the European Medicines Agency (EMA) and Amsterdam, Copenhagen, Stockholm and Barcelona have all been proposed by their respective countries. Frankfurt, Paris and Prague are in the running for the European Banking Authority (EBA). Vienna, Dublin and Warsaw have been put forward by their countries as candidates for the two agencies.

The proposed procedure will go through a number of stages in the course of which the member states will award points to the candidates of their choice. In the first round, each member state will be able to register a first, second and third choice.
If a country is the first choice of 14 or more member states – a majority – then it will be the winner. Otherwise all the first, second and third votes will be counted: first choice votes will receive three points, second choice two points and third choice one point. The top three will go forward to the second round.
In the event of more than three offers having the largest number of points, all those with the same points total will go into the second round of voting.
In the second round, member states will have only one point to award. Here again, any country receiving 14 or more votes will be declared the winner; otherwise a third round will be needed. If it proves impossible to separate the countries after the third round, the winner will be decided by drawing lots.
Member states have until the end of July to submit their candidacies.

In September, the European Commission will produce an assessment of the candidate cities using six selected criteria.
The EU27 will then take note of the assessment of the European cities at the European summit in October and will proceed to a final vote in November.

The procedure can be consulted at:
https://drive.google.com/file/d/0B3jeKY5PJU8wQ08yTkwwVVR4RnM/view

20577/News Release – 2017.06.23

Estonian Council Presidency from 1st July to 31st December 2017

Council of the European Union

EU2017.EE

The Estonian Presidency of the Council of the EU will start on 1st July. The Estonian government outlined the issues and values that Estonia wishes to focus on over the next six months.

The programme of the Estonian Presidency of the Council of the European Union is composed of four priority areas:

- an open and innovative European economy
- a safe and secure Europe
- a digital Europe and the free movement of data
- an inclusive and sustainable Europe

First, Estonia feels that an **attractive business environment** and **functioning trade partnerships** help stimulate job creation and the economy. Cutting down on excessive bureaucracy, and making it easy to do business is essential for an open and innovative economy. Supporting economic growth and job creation means taking full advantage of the potential of the single market. Scientific research must also be supported to keep Europe open to innovation and new technologies. Integrating EU energy systems and markets is vital for ensuring a secure and affordable energy supply for consumers.

Second, the Estonian Presidency values the **security and safety of Europe**. A Europe without internal borders requires joint solutions in security and external border policies, as well as in migration and asylum policy. In many ways, security is reliant on modern IT solutions and databases, and closer cross-border cooperation. During the Estonian Presidency, Estonia will make an effort to reinforce surveillance over Europe's external borders, and hopes to contribute to providing security, peace, and stability in the EU's immediate neighbourhood and beyond.

Third, Estonia considers it important to **develop the digital society**, the precondition of which is the free movement of data. Quick, high-quality and available internet connectivity is one of the cornerstones of a smart, data-led economy. The EU is at an early stage in developing a data-led economy. The Estonian Presidency will emphasise that **digital society** needs to be **developed** in all aspects of life.

Fourth, the Estonian Presidency deems it important to **stand for an inclusive Europe**, where equal opportunities are ensured for all. This means supporting a better balance

in work and family life, increasing the opportunities for young people, as well as expanding volunteer activities. Estonia finds it important to promote a cleaner living environment, which can be ensured with the help of a green economy and implementing the agreement on climate change.

#eu2017ee

20578/News Release eu2017.ee – 2017.06.23

Inflation Rate

Latest Eurostat figures show that the annual inflation rate was **1.4% in May 2017 in the Euro area**, down from 1.9% in April. **The EU28** annual inflation was **1.6% in May,** down from 2% in April.
The largest upward impacts to euro area annual inflation came from fuels and transport (+ 0.19%), accommodation services (+ 0.07%) and heating oil (+ 0.06%), while telecommunication (- 0.10%), garments (- 0.06%) and social protection (- 0.04%) had the biggest downward impacts.

Ireland	0.0%	Slovenia	1.5%
Romania	0.5%	Italy	1.6%
Denmark	0.7%	Portugal	1.7%
Netherlands	0.7%	Sweden	1.8%
France	0.9%	Belgium	1.9%
Cyprus	0.9%	Luxembourg	1.9%
Finland	0.9%	Spain	2.0%
Croatia	1.0%	Hungary	2.1%
Malta	1.1%	Austria	2.1%
Slovakia	1.1%	Czech Republic	2.5%
Bulgaria	1.4%	Latvia	2.7%
Germany	1.4%	U K	2.9%
Greece	1.5%	Lithuania	3.2%
Poland	1.5%	Estonia	3.5%

Elsewhere

USA	2.2%	Russia	4.1%
Canada	1.6%	Brazil	4.1%
Japan	0.4%	Australia	2.1%
Switzerland	0.5%	India	3.0%
Turkey	11.7%	China	1.5%

20579/Eurostat News Release – 2017.06.16

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GLASS NEWS

A. FLAT GLASS

Glass Companies

Saint-Gobain

1. The Compagnie de Saint-Gobain has entered into exclusive talks with the founding families and shareholders of Norwegian company **Glava A/S** to buy their shares, with the support of the company's management.

Saint-Gobain already owned 17.08% of Glava, which has manufactured products under an Isover licence since 1960. Saint-Gobain said the acquisition - which was subject to approval of the Norwegian anti-trust authorities - would allow it to reinforce its position in the Nordics in line with its strategy.

20580/Press Release – 2017.06.21

2. Saint-Gobain to build flat glass plant in Mexico

Saint-Gobain is to start up a new flat glass (float) production line in Saltillo, Mexico, scheduled to come on stream at the beginning of 2020, manufacturing glass for the automotive and construction sectors.

The new line will meet growing domestic demand and supply Central America, the Caribbean and North America. The investment will reinforce Saint-Gobain's position in building and automotive glass in Mexico.

The extra capacity will complement Saint-Gobain's manufacturing base in the region with the Cuautla site already including two floats and their associated lines for mirrors and laminated glass, one thin-film coater line in operation and another under construction.

This new float line project in Mexico marks a new step in the Group's expansion strategy into high-growth countries.

20581/Press Release – 2017.06.29

AGC

1. AGC Sustainability Report 2017 online

Environment is one of the four shared values of the AGC group and an essential part of the company's Social Responsibility. AGC Glass Europe is taking its environmental responsibility seriously and turned this responsibility into a challenge. This challenge is taken on every day by all the sites of AGC Glass Europe and their continuous commitment for the environment results in more sustainable production operations and greener products and services.

In the company's yearly sustainability report, now online on http://www.agc-glass.eu/en/sustainability, AGC communicates on where it stands and how it has improved. It covers the environmental achievements of AGC Glass Europe, operating with two divisions: Building & Industrial Glass Division (including Primary Operations and Processing) and Automotive Division.

- **Energy production**: the total output of photovoltaic installations at AGC sites reached 6697 MWh in 2016.
- **Air**: on a comparable basis, per ton of glass sold, Primary Operations has reduced its direct CO2 emissions with by 11% since 2002. There has been a reduction of around 45% in the specific dust emissions since 1998.
- **Water:** from 1998 to 2016, AGC has managed to reduce water consumption by 71% on a comparable basis.
- **Solid waste**: today, the amount of solid waste produced by the Group is around 230,000 tonnes/year, of which around 98% is further recycled or recovered on site by its suppliers or contractors.
- **Transport**: 72% of all raw materials is transported by ship or train, taking about 54,500 trucks per year off the road. In 2016, about 88,000 tonnes of finished glass products were transported in combined train and truck transport, taking about 4,400 trucks per year off the road.
- **Packaging**: today most of the glass packaging is reusable. AGC Glass Europe achieves a very high level of packaging reuse. In Belgium 98% of the packaging is reused.
- **Recycling**: AGC Glass Europe recycles around 1,000,000 tonnes of cullet per year, saving about 1,150,000 tonnes of raw material and 300,000 tonnes of CO2 emissions.

AGC has developed a holistic approach to fully assess its environmental footprint. Life Cycle Analysis, measurement of carbon footprint and the Cradle to Cradle CertifiedCM program for products are the three ways used to assess its integrated environmental approach.

Cradle to Cradle certification: In 2016, AGC Glass Europe renewed its Cradle to Cradle certifications for float glass, magnetron-coated glass, glossy painted glass, matt painted glass, acid-etched glass, mirrors and laminated glass for two years under the new, more stringent version 3.1 of Cradle to Cradle. In addition, AGC Glass Europe has successfully obtained, as the world's first and only glassmaker, Cradle to Cradle Certified Bronze for its insulating glass products in January 2017. AGC now offers the broadest portfolio of certified products at Silver and Bronze level.

- **Carbon footprint**: Calculating both savings and emissions leads to a final result of 1:10 (i.e. 34,500,000 tonnes of CO2 vs. 3,400,000 tonnes), meaning that for each tonne of CO2 emitted by AGC Glass Europe activities, nearly 10 tonnes of CO2 are saved thanks to the use of our products. The ratio and - on the basis of the same perimeter - the results have improved since 2009.

20582/Press Release – 2017.06.26

2. Asahi India Glass greenfield automotive glass plant

Asahi India Glass Ltd.

Asahi India Glass Limited (AIS) has announced its plans to invest in a state-of-the-art Greenfield Automotive Glass Plant near Mehsana in Gujarat.
The investment is being made to primarily meet the automotive glass requirements of M/s. Maruti Suzuki India Limited at its newly-established Gujarat plant. AIS will make an investment of up to Rs.500 crore in the facility in two phases, to be implemented in modules. In the first phase, the plant will have capacities to produce 1 million laminated glasses and 1.2 million tempered glass sets per annum. Investment for the first phase was approved at the recently-held AIS board meeting. This investment is in line with the MAKE IN INDIA initiative launched by the Government of India, and with this investment, AIS will further expand its footprint across India with manufacturing plants and advanced sub-assembly units across multiple locations in the country.
The new plant will be a state-of-the-art facility, equipped with the latest global technologies in automotive glass, and will also have the ability to manufacture the entire range of higher value-added automotive glass products. The Gujarat plant will further add to the scale and flexibility of AIS in providing seamless supplies to customers across India. AIS will continue with its thoughtful expansion programs, both greenfield and brownfield, to further strengthen its position as India's leading value-added and integrated glass company.

20583/Press Release – 2017.06.02

3. AGC Glass to install new coater in North America

AGC Glass will install a new MSVD glass coater in North America to serve the residential and commercial glass markets. The new coater will reinforce the company's commitment to deliver the widest range of products to North America. "The growth of the low-E market and the demand for complex products are driving glass manufacturers to provide higher-performing products," says Mark Twente, director of marketing for AGC Glass North America. "Our new coater is not only designed to provide the products of today, but to create the products of tomorrow. This investment in North America, along with our world-renowned R&D and world-class service, positions us to exceed the needs of our customers for the long term."

20584/Press Release – 2017.06.23

4. PT Asahimas Flat Glass: float glass plant in operation on schedule

EME Maschinenfabrik Clasen GmbH and its sister company Shanghai Precision Dosing & Weighing System Co. Ltd. have jointly realized a turnkey batch plant for PT Asahimas Flat Glass Tbk(AMG) Cikampek, Indonesia.

After the successful implementation of the batch plant and cullet recycling at AGC Guarantingueta, Brazil, and AGC Klin, Russia, AGC subsidiary in Indonesia has also decided for EME technology. EME and Shanghai Precision were commissioned to design the whole batch plant, supply all systems and equipment for raw materials reception, dosing, weighing, mixing and batch transfer.
The new float line has a capacity of 700 tons/d and was successfully put into operation on schedule.

20585/Press Release – 2017.06.02

5. AGC Asahi Glass to sell stake in architectural glass subsidiary

AGC Asahi Glass will sell all (100%) shares of AGC Flat Glass Philippines, Inc. ("AGPH") to TQMP Glass Manufacturing Corp. (Headquarters: Philippines; President: Paul Vincent C. Go) by the end of December 2017. The sale is subject to approval by Philippine antitrust authorities. The impact on the company's consolidated performance is minor.
In 1988, AGC made a capital injection to acquire a 49% stake in a local corporation engaged in the architectural glass sector in the Philippines. AGC subsequently increased its equity ratio to 100%, and renamed the subsidiary to AGPH, which for many years played an important role as a part of AGC Group's global strategy in the architectural glass sector. However, intensified competition in the Philippines in the past few years has led to a persistent decline in financial performance.

Under the AGC Group's mid-term management plan, AGC plus-2017, AGC's architectural glass business is placing a greater emphasis on high value-added products and diverting the company resources to other locations where AGC has a more competitive advantage over other players in the market. As a part of these initiatives, AGC has decided to sell all shares of AGPH.
With the sale of this stock, the AGC Group withdraws from the manufacture of architectural glass in the Philippines. Nevertheless, it will strengthen sales of high value-added products such as solar control glass and mirrors produced at other bases.

20586/Press Release – 2017.06.22

Guardian

1. Guardian Glass Selects Carleton, Michigan Site for New Jumbo Coater

Guardian Glass new jumbo coater will be installed at its Carleton, Michigan, USA glass manufacturing complex.
"Architects are increasingly designing projects with larger glass sizes to deliver desired aesthetics with more expansive views and higher daylight penetration," said Rick Zoulek, vice president - Americas, Guardian Glass.
"Guardian's new jumbo coater will combine the larger size glass that architects demand with the world-class energy savings of the Guardian SunGuard portfolio of high performance, low-E coatings."
By coating glass in jumbo sizes, Guardian can supply larger sheets of coated glass to its customers for fabrication into finished insulating glass units for glass facades and

windows, reduce lead times and create value for customers by increasing their product offerings, and allowing them to reduce inventory and waste.
Gerry Hool, Carleton plant manager, Guardian Glass, said: "By co-locating the jumbo coater with our only US plant with two float glass lines, we will support Guardian customers by increasing product and service offerings and innovating faster."
The site is also located across from the company's Science and Technology Centre.

20587/Press Release – 2017.06.13

2. Guardian Glass projects win AIA Design Excellence Awards

Guardian SunGuard® glass is the product of choice for three projects that are setting the standard in design and sustainability, according to the AIA and the Committee on the Environment (COTE):

- Bristol Community College John J. Sbrega Health and Science Building in Fall River, Massachusetts
- Brock Environmental Center in Virginia Beach, Virginia
- Discovery Elementary School in Arlington, Virginia

"These COTE winners are a real testament to the science of glass and its ability to help projects achieve incredible efficiency and aesthetics," says Brian Schulz, product manager, Guardian Glass North America.
"Three very different projects using three very different, high performance SunGuard glass products that allow abundant daylight while managing solar heat gain. "Glass is a critical and complicated material," Schulz adds. "The building team has to manage daylight, aesthetics, glare and energy savings while considering climate, elevation and other performance and environmental considerations. We're thrilled these architects recognize the superior performance of Guardian SunGuard® glass."

The John J. Sbrega Health and Science Building at Bristol Community College sets the standard as the first zero net energy academic science building in the Northeast. It boasts operational savings of USD 103,000 per year. Designed by Sasaki Associates, the building was carefully oriented and windows located so daylight enters where needed, including the south and north ends of the building through a two-story tall curtain wall and on the east side through a clerestory.

SunGuard® SuperNeutral® 54 glass allows a high degree of visible light transmission and has less glare transmitted to the interior compared to other leading products while maintaining a neutral appearance. The Brock Environmental Centre is a hub for the Chesapeake Bay Foundation. SmithGroupJJR designed the centre to surpass LEED®Platinum requirements, achieving zero-net-CO? emissions, zero waste, and Living Building Challenge certification from the International Living Future Institute. The Centre's form and orientation maximize opportunities for daylighting. Carefully placed windows provide optimal daylight, views, and ventilation, without excessive heat gain.

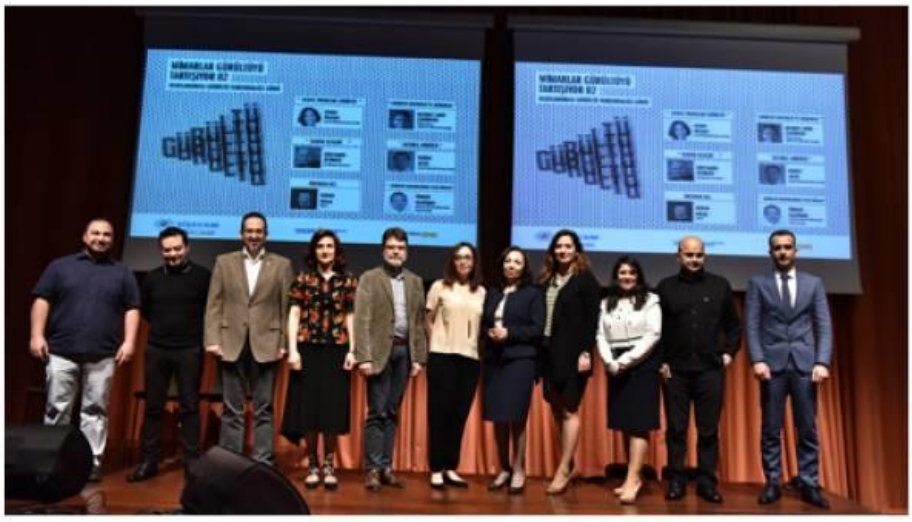
Guardian Glass Europe's SunGuard® SuperNeutral® 70/41 glass helps minimize heat gain while reducing the need for artificial light and offers excellent solar protection combined with outstanding thermal insulation. Discovery Elementary School is the first net zero energy school in the Mid-Atlantic, the largest in the US, and the second-largest fully conditioned zero energy building of any type in North America.
VMDO Architects designed the school with a 38% glazing percentage to allow for abundant natural light and views deep into the building. It's well documented that students with access to outdoor views perform better than those without access to windows.

Triple silver Guardian SunGuard® SNX 62/27 glass offers a high visible light transmission of 62% while maintaining a low solar heat gain coefficient of 0.27 to help with the building's energy management. The COTE Top Ten Awards is the industry's premier program celebrating sustainable design excellence. Now in their 21st year, the Top Ten Awards highlight projects that exemplify the integration of great design and great performance. The Guardian SunGuard® glass product line for commercial applications offers excellent solar control and a wide variety of colours and performance levels. SunGuard® glass products provide innovative, leading solutions for appearance, economics and energy efficiency, and are available through an international network of independent Guardian Select® fabricators.

20588/Press Release – 2017.06.12

SISECAM

Sisecam Flat Glass hosted the "Architects Discuss Noise 02" event held in cooperation with Istanbul Association of Architects in Private Practice (Istanbul SMD) and Building Information Centre (YEM). The event, which was held for the second time this year at Building Information Centre (YEM), addressed the architectural approaches and experiences in the field of noise control.
The special event for the 'International Noise Awareness', which brought together the leading figures of the architecture and building industry, addressed the issue of noise, discussing architectural approaches and experiences in the field of noise control. Both physiological and psychological impacts of noise on human health was addressed at the event, and the issue of noise was discussed from various perspectives.



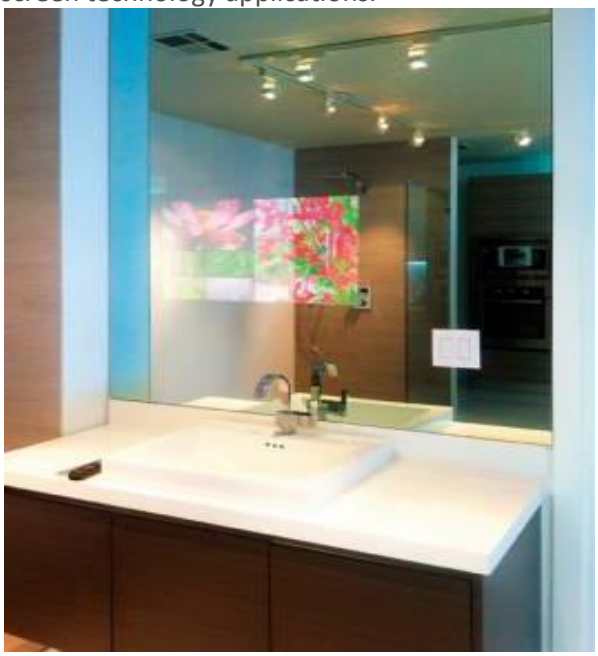
The event was moderated by Deniz Bayramoglu and enjoyed the participation of Aydan Volkan, Founding Partner of Kreatif Architects, Bünyamin Derman, Founder of db Architects, Kerem Piker, Founder of KPM Architects, Mehmet Emin Cakerkaya, Partner of Tekeli-Sisa Architects, Murat Aksu, Founding Partner of MuuM Architects, and Türker Talayman, Founding Partner of Talayman Acoustic Design, who attended the event as guest speakers.

The participants of the event had the chance to test Sisecam Acoustic Laminated Glass, Sisecam's Noise Control Glass, were informed on the products of Sisecam Flat Glass and the methods to fight the negative impact of noise.

20589/Press Release – 2017.06.12

NSG Group

NSG has released its new generation of transparent mirrors to be used in projected capacitive touch screen technology applications.



Pilkington MirroView™ is one of the latest avant-garde products in the glass world. It is a clear float glass on which a highly reflective coating is deposited. The coating has a neutral colour and is extremely durable. It is a non-conductive (dielectric) coating and allows the glass to be used in projected capacitive touch screen technology applications. This product range is intended for installation in flat screen displays, such as TVs or touch screens. Placed in front of a video source, when the device is off, Pilkington MirroView™ maintains a mirrored appearance, hiding the screen. When the screen is turned on, the bright image on the screen is easily visible through Pilkington MirroView™ and the previous reflecting image disappears.
The improved coating has a very smooth surface for excellent tactile experience and offers a neutral colour rendering in reflection.
The pyrolytic coating, extremely resistant, does not degrade over time and gives the product a virtually unlimited lifetime.

The range is divided into two product types:

- Pilkington MirroView™, designed for situations with reduced ambient light such as bathrooms, bars, etc., where it offers light transmission of 22% and reflection on the coated side of 66%, and
- Pilkington MirroView™ 50/50, which, due to the evolution of the product, is designed for applications in high brightness environments, such as shops, shopping malls, airport transit areas, railways, etc., and offers light transmission of 37% and reflection from the coated side of 50%.

In addition to being suitable for traditional mirror applications, both products are also compatible with the production of Smart Mirrors.

20590/Press Release – 2017.06.30

Fuyao Glass

Fuyao Glass, Chinese auto glass manufacturer, will be increasing its overseas investments in Germany, Russia and the US. Total investments are set to reach USD 200 million. "As the largest auto glass producer, we shoulder the responsibility to supply products for most global auto manufacturers," said Cao Dewang, chairman of Fuyao Glass Group. "Our investment strategy is to follow our customers and meet their requirements. We will spend one-third of our annual investment budget of RMB 4.2 billion (USD 608 million) abroad in 2017, and Germany, the US and Russia are our destinations."

Fuyao will invest about RMB 600-700 million in Heidelberg, Germany, to set up an auto glass factory to serve clients such as Daimler AG, Audi AG, Volkswagen AG, Bentley Motors Ltd and Jaguar Land Rover Automotive Plc. The company is also selecting a new site in the southern part of the US this year to build a new factory.

In October 2016, Fuyao completed its automotive glass manufacturing centre in Dayton, Ohio. The plant, involving a total investment of USD 600 million, is expected to produce five million units of glass annually, accounting for a 25% market share in the US. The facility in Dayton will supply customers including General Motors Co, Chrysler LLC, Hyundai Motor Co, Honda Motor Co and Kia Motors Co.
"We will increase our investments to USD 1 billion in the US and create 5,000 jobs. The company's fixed investments both at home and abroad will increase by 10-20% annually, depending on market conditions. Although there are some voices going against the tide of globalization, we are determined to go abroad based on our own business development requirements and customers' needs," according to Cao.

Fuyao's annual revenue totalled RMB 16.6 billion in 2016, increasing 22.5% year-on-year, and its profit totaled RMB 3.14 billion, increasing 20.7% year-on-year. The company's overseas revenue totalled RMB 5.6 billion last year, up 25% year-on-year. China, the world's largest auto market, saw auto sales reach a record high of 28 million vehicles last year, up 13.7% year-on-year, according to the China's Association of Automobile Manufacturers.

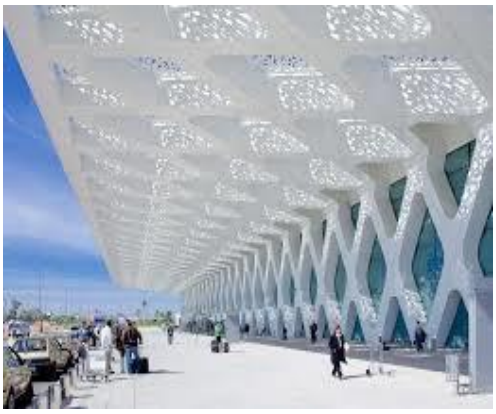
20591/Press Release – 2017.06.30

Tvitec

Tvitec manufactures more than 22,000 meters of different architectural glass solutions for Marrakech airport.

Marrakech-Menara Airport is architecturally considered as one of the most beautiful in the world and its recent enlargement has only emphasized this idea. High-performance glass played a crucial role in the project of the new terminal, not only for the aesthetic result of the work but also for the technical requirements for the construction of such a mega infrastructure.

Tvitec was requested to supply the highly-efficient glass for the enlargement of the Moroccan airport through the company SGTM with very tight deadlines to match the opening date with a relevant international summit. The transformer produced a total of more than 22,000 meters of different glass solutions for both the exterior facade and the interiors for handrails and elevators, as well as for the stunning dome located in the main access to the terminal.



The insulated glass dominating the project incorporates intelligent solar control coatings as Guardian SG HP Bronze 40/27 and Climaguard Premium combined with laminated, tempered and printed glass which contribute to the safety of the building, as well as to guarantee the acoustic insulation.

Of the nearly 5,000 pieces that make up the extraordinary glass wall of Marrakech airport enlargement, more than a thousand are treated with a very unique and exclusive print. Most of them are located in the great dome and are also characterized by their huge triangular shape.

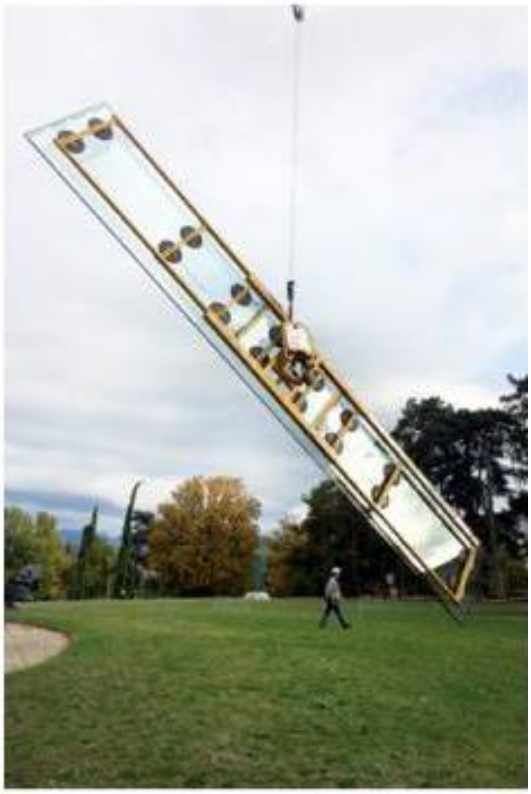
The project manager of Tvitec, David Abad, pointed out the great technological capacity of Tvitec to transform glass at both national and international level: "Otherwise it wouldn't have been possible to complete the project with the high quality and the deadlines required," he said.

"The large dimensions of the glass units obliged us to carry out considerable efforts in the field of logistics," said Bibiana Prieto, the project coordinator at Tvitec, in reference to the triangular pieces that in many cases exceeded 2.5 meters in height.

20592/Press Release – 2017.06.09

Sedak

Sedak delivered the impressive 13m-high tempered double IGUs produced fully automatically and packed in specially fabricated boxes adjusted to the dimensions of the formats and corresponding to safety requirements.



The 13m-high glass being transported to its position

The renovation of the UNO building “United Nations Conference on Trade and Development” in Geneva shows how today’s production technology makes monumental protection possible also for buildings with glass façades. The 13m-high insulating glass units, which in 1971 had been fabricated manually and during an effortful process, had now to be replaced. Sedak delivered tempered double IGUs produced fully automatically. The dimensions are still impressive.
It was a spectacular exchange: In 2016, parts of the glass façade of the UNO building “United Nations Conference on Trade and Development” in Geneva (second headquarters of the United Nations) were replaced. The about 45-year-old glazing had become foggy; some of the glass units had cracked; the bonding of the support structure of the glass façade had aged. Due to monumental protection, the new glass

units had to be true to the original, i.e. of the same oversize dimensions. Additionally, the special supporting structure of the building was supposed to be maintained. The dimensions of the glass units were exceptional for the year 1971. They were manufactured manually out of non-tempered glass and were said to be perhaps the largest units that had been produced by then. Today, sedak provides tempered insulating glass up to 15m manufactured fully automatically.
Sedak produced a total of nine double IGUs out of 12mm thick basic glass (dimensions: three units in 2.29m x 7.84m, six units in 2.29m x 13.10m). The single glass panes had been produced as heat-strengthened safety glass to guarantee a higher break resistance.

20593/Press Release – 2017.06.23

Scheuten

Scheuten Glass has a fully-renewed website with almost 1,000 pages, with more news, projects, videos and background information, as well as a number of new and interesting tools.
For over 60 years, Scheuten has been focused on developing and producing high quality glass products.
Scheuten belongs to the top five independent glass companies in Europe and has been supporting its customers since 1950 with a wide range of high-quality glass products and in conducting glass-engineering projects. Through its network of regional manufacturing facilities and offices in the Netherlands, Belgium and Germany the company provides reliably and promptly glass products with thermal and sound insulation, fire, sun and heat protection, injury and burglary safety and design to the (inter)national construction industry.

20594/Press Release – 2017.06.26

Miscellaneous

Technavio Global Coated Flat Glass Market Report until 2021

technavio

Technavio has announced the top five leading vendors in its recent global coated flat glass market report
The research study by Technavio on the global coated flat glass market for 2017-2021 provides a detailed industry analysis based on the technology (pyrolytic coating, magnetron sputtering technology, sol-gel technology, and nanotechnology), type (coated low-E glass, coated solar control glass, and coated self-cleaning glass), application (residential, commercial, automotive, and solar), and geography (Europe, the Americas, APAC, and MEA).
“The global coated flat glass market is projected to grow to nearly USD 34,600 million by 2021, at a CAGR of more than 6% over the forecast period. The recycling of glass waste material in glass manufacturing process is a key factor impacting the market growth,” says Hitesh Bhatia, a lead analyst at Technavio for glass and ceramics research.

The global coated flat glass market is characterized by a highly fragmented market landscape with a mix of several well-established and small players. Major vendors operating in the market include ASAHI GLASS, Euroglas, Guardian Industries, Nippon Sheet Glass, and Saint-Gobain.
The demand for coated flat glass is growing due to increase in the number of high-end buildings, which is leading to huge investment in terms of customized design, size, and advanced features. Therefore, vendors are coming up with new product features. Glass walls, glass façade buildings, and glass roof panels are some of the upcoming trends in the global coated flat glass market.
Asahi Glass specializes in the manufacturing of sheet glass. The company has three business divisions on the basis of their glass applications. The company caters the glass markets for automotive, construction, domestic household, and solar applications. Euroglas was established by the association of five autonomous medium- and small-sized glass processing companies. The company is involved in the production of float glass, extra-white glass, laminated safety glass, coated glass for solar control and thermal insulation, solar glass, and glass for interior applications. Guardian Industries is a manufacturer of glass, automotive products, and building products. The glass products segment of the company offers glass products to the commercial, residential, interior, automotive, and technical glass industries. Nippon Sheet Glass manufactures and sells glass and glazing systems for the construction (solar control glass, fire-resistant glass, and safety and security glazing), automotive, and technical glass markets. It has manufacturing operations in 28 countries and offers products in 130 countries.
Saint-Gobain is involved in the habitat and construction market. It designs, manufactures, and distributes building and high-performance materials. The company caters to the automotive, buildings, ceramics, cement and glass, chemical, defense and security, display glass, energy, life sciences, electronic ceramics and semiconductors, and oil and gas industries.

20595/Press Release – 2017.06.21

US Producer Price Index (PPI) in the Door and Window Industry

Prices of materials used in the door and window industry went in several directions in May, according to Producer Price Index (PPI) data released by the Bureau of Labor Statistics (BLS).
The monthly PPI for flat glass in the commodity category edged down 0.2% to 132.9 in May after going unchanged in April. Those prices were up 0.6% from a year ago, signalling that prices continue to level out over the 12-month span. The index for flat glass manufacturing in the industry classification stands at 103.9, indicating a 0.1% price increase for the month and a 1.4% increase from May 2016. This also shows a flattening of prices compared to previous year-over-year changes earlier in 2017 and in 2016.

The cost of thermoplastic resins and plastic materials rose 3.1% since April, and are up 11.3% from last year. Prices for thermosetting resins and plastic materials fell 0.4% since April, but are up 4.1% since 2016. Fiberglass plastic product prices fell 0.5% since last month.

Prices for wood window units were unchanged from April and are up 2% since May 2016. Prices for wood doors for interior and exterior applications rose 0.3% during the past month. They're up 4.5% since last years. Metal windows rose 0.1% from April's reading, and metal doors and frames were up 0.2%.
The cost of builders' hardware, which includes hardware used in doors and windows, increased 1.4% from April, and up 2.7% for the year.
The prices of softwood lumber and OSB increased by 2.2% and 3.3%, respectively, in May.

20596/Press Release – 2017.06.26

B. CONTAINER GLASS

Glass Companies

Ardagh

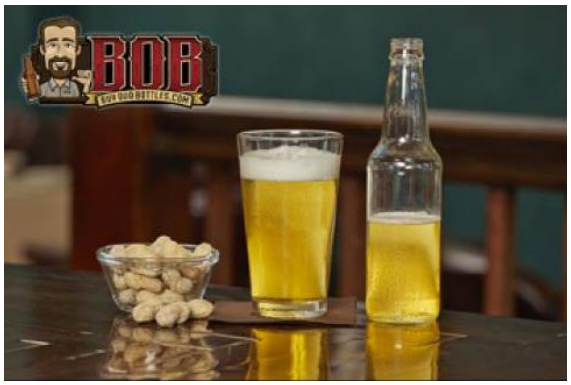
1. Enhanced glass embossing process

Technology traditionally used in the chocolate industry has been adapted by Ardagh's Design Team to create differentiation through high definition glass embossing, adding textures and feature enhancement to a standard never seen before in glass packaging. Unlike regular, two-dimensional embossing, the new process known as Sculptured Embossing allows glass sculpting to be achieved on multiple levels, creating intricate, lifelike detail, depth and dimension, enabling the premiumisation of glass bottles and jars.
The technology has recently been used to replicate different texture effects including wooden planking and citrus peel, as well as to enhance the definition of scripted text and other branding icons.

Carsten Berkau, OEG Design Manager - Glass Europe, said: "The technology has brought benefits in terms of both design aesthetic and quality improvement, which has made it a real win with our customers. "Following its success and positive customer feedback, we have invested in two in-house design licenses for the Sculptured Embossing software, which are available to our glass customers worldwide."
In the spirit sector, the technology has been used for Whyte and Mackay's Claymore Whisky bottle. A more premium look and feel has been achieved by replicating the crest artwork on the label with an intricately embossed crest on the back of the bottle. The new design features embossing across five different depths to add definition to the swords, scrolling, rose petals and banner.
The technology has also been used in the food sector to add texture and expression to glass packaging in a way that is incredibly lifelike. A recent example is the new Duerr's Citrus Jar, which is sculpted to look like a citrus fruit with its peel effect.
Duerr's Managing Director, Mark Duerr said: "The Ardagh design team applied their expertise and embraced new technology to find a balance between meeting the aesthetic of the design brief with the practicalities of volume production."

20597/Press Release – 2017.06.02

2. Addition of a 12oz clear (flint) beer bottle to its BOBTM site (BuyOurBottles.com).



Ardagh Group, Glass – North America, has announced the addition of a 12oz clear (flint) beer bottle to its BOBTM site (BuyOurBottles.com). Manufactured in the US using 100% and endlessly recyclable flint glass, the 12oz Clear Peak bottle with twist-off closure is now available for purchase on the BOB site.
"With the bottle expansion in flint glass, craft brewers, craft soda and cider customers, and functional beverage and kombucha customers can benefit from brand differentiation with a trusted product that fully protects the flavour of their beverage," said John Orr, Vice President of Craft Beer Sales for Ardagh Group's North American Glass division.
Packaging is what the consumer interacts with most, and often, the quality of the product is best expressed through the brand's package. Excel Bottling Company Inc., based in Illinois, recently began using the new Clear Peak bottle for its flavoured soda brands.
"We have been really pleased with the quality of the glass, the outstanding customer service and the support from Ardagh Group since we started using them for all of our

glass needs," said Mitch Reed, Operations Manager at Excel Bottling Company Inc. The BOB site portfolio now includes nine different beer bottles.

20598/Press Release – 2017.06.20

Vidrala

Vidrala, S.A. has executed a letter of intent for the **acquisition of a controlling stake in the Portuguese company Santos Barosa Vidros,** subject to the conduction of the relevant legal and financial reviews, as well as to the execution of the corresponding transaction agreements. In addition, the closing of the transaction will be conditioned upon the approval by the relevant antitrust authorities.
Santos Barosa manufactures and sells glass containers and owns a major production facility located in Marinha Grande, Portugal. The company produces around 400,000 glass tons per year, with an estimated turnover for 2017 ranging between EUR 130 and 135 million, and an estimated operating result, EBITDA, ranging between EUR 32 and 34 million.
The agreed transaction price amounts to an enterprise value equivalent to EUR 250 million, approximately. Said figure could vary moderately depending on the indebtedness effectively assumed at the transaction closing. The execution of the definitive documents and the closing of the transaction are expected to take place during the third quarter of 2017.
Vidrala's board of directors and the management team have been admiring for years the quality of the business developed by Santos Barosa, grounded in modern manufacturing facilities and solid commercial relationships with their clients. Vidrala has shown capacity for the integration of companies within the group, fostering their respective positionings, promoting customer satisfaction and contributing to their local futures through its proved expertise in the glass packaging business and its strongly industrial long-term vision.
Adding this complementary business to our network will result in compelling benefits to customers, employees and shareholders.

20599/Press Release – 2017.06.26

Bormioli Rocco Pharma

Bormioli Rocco Pharma is one of the major European players in the pharmaceutical primary packaging industry, with a leadership position gained through solid technological know-how, high production standards and strongly active sales strategy. Andrea Fulvi, Sales Director of the company, reviews the previous year's budget and announces the 2017 sales strategies.
"What emerges is, without any doubt, the brilliant results achieved by the Pharma Business Unit, currently representing about 50% of the whole Bormioli Rocco industrial group. In 2016, this unit has reached a total turnover of more than EUR 200 million thanks to important growth rate."

"The current year also got off to a good start for Bormioli Rocco Pharma, confirming the great 2016 performance and expanding its production by substantial investments in glass and plastic packaging manufacturing plants."

Mr. Fulvi outlines the detailed plan for 2017, based on the synergy between several strategic sales pillars:

1) **Consolidation**. Through long-term partnerships with the key customers, the company aims to strengthen its position on the key markets. Moreover, the enhancement of cross-selling will give further boost to partnerships by offering an even larger number of complete packaging solutions. In the first quarter of 2017, Bormioli Rocco Pharma has already closed several multi-year contracts with some of the most important global pharmaceutical players.
2) **Expansion into new markets**, possible thanks to highly dynamic sales efforts acting on the synergy between promotion of brand awareness and activities to forge strong partnerships with local agents and distributors. The results confirm these business choices: 100 new customers acquired in 2016 and more than 40 in the first quarter of 2017. Bormioli Rocco Pharma mainly targets markets with the highest potential in pharmaceutical industry such as US, LATAM and Far East. For these areas, the company has already launched dedicated development plans, including the enhancement of the logistic platforms in order to satisfy the increasing demanding requirements in terms of quality and service.
3) **Exploring new segments** of the pharmaceutical market, such as BioTech, Diagnostics and Animal Health. It will also be crucial to focus on the Global Key Account Manager role to provide better coverage for strategic projects and meet the needs of the major multinational pharmaceutical companies.
4) **Product innovation**. The Pharma B.U. pipeline has never been more flourishing than it is now with Delta Glass Vials, Type I Amber Glass, Safe&Easy pediatric pack, Dual-Chamber systems and the new model of Dry Powder Inhaler. Moreover, the pipeline is constantly expanding with several other projects. Such large-scale innovation allows Bormioli Rocco Pharma to fully meet customers' needs and to become their reference point for the development of more complex projects.

20600/Press Release – 2017.06.27

Venvidrio (Venezuela)

Venezolana del Vidrio (Venvidrio) is reportedly on the brink of bankruptcy. In fact, 90% of its operational capacity is paralyzed, raw material inventories are empty and nine of the 11 lines are damaged. 600 Venvidrio workers have been dismissed.
The machinery of the plant located in Los Guayos, east of Carabobo, has deteriorated since October 2010 when the national leader ordered the expropriation of Owens-Illinois (O-I) Venezuela. At that time, the company supplied more than 60% of the national demand for glass containers for the food, pharmaceutical and cosmetic industries, with 2.1 million units per year.
The expectations of the Government at the beginning of its administration were to raise those numbers up to 6 million.

Today they do not reach a million and only manufacture glass containers for liqueurs and mayonnaise, according to Hernán Serrano, a member of the Frente Amplios de Trabajadores of the region.
Compounding the problems is a lack of soda ash, which has to be imported.

20601/Press Release – 2017.06.19

BG Container Glass (BGC) (Bangkok Glass)

BG Container Glass (BGC), a subsidiary of Bangkok Glass, is to build a 400 tonnes a day furnace in Ratchaburi, Thailand at a cost of Bt2 billion ($58.8 million).
Supasin Leelarit, Bangkok Glass executive vice president for the group, said the factory would support greater domestic demand for glass containers. It will also help overcome an energy shortage in the company's factory in Rayong, which is facing an inadequate supply of natural gas.
The Ratchaburi plant will be completed and ready to start operations in the third quarter of next year.
BGC currently operates five glass-container factories in Pathum Thani, Ayutthaya, Khon Kaen, Rayong and Prachin Buri, with combined production capacity of 3,335 tonnes per day or 1.2 million tonnes a year (around 4.5 billion bottles a year).
The company currently controls 39% of Thailand's glass-container market, which is worth more than Bt30 billion.

Supasisn said Bangkok Glass was ready to move forward with its strategies to enter different business segments across the Asean region.
Last year, Bangkok Glass confirmed its intention of becoming a "total glass solutions provider". Thus, BGC was established as Bangkok Glass's latest subsidiary and in charge of the production and distribution of glass containers, both in Thailand and elsewhere in the Asean region.
"BGC aims to grow its sales by 10% to 920,000 tonnes this year. We increased our sales by 4% year on year in the first six months of this year," Supasin said.

The company exported almost 10% of its production to countries including Myanmar, Malaysia, Australia, Spain and South Africa. In Spain in particular, its prices are competitive with local suppliers.
"Our exports are aimed at coping with the problem of economic fluctuations in Thailand. However, the internal demand for glass containers in Thailand is still high and we are able to sustain our growth every year. So we need to respond to domestic demand as our priority. That is why we keep the export proportion at only 10% of our production," he said.

20602/Press Release – 2017.06.19

Miscellaneous

FEVE Celebrates its 40th Anniversary and New Executive Team

FEVE – the European Container Glass Federation is pleased to announce the election of its executive team for the 2017-2019 term of office at its Annual General Assembly held yesterday in Brussels. These appointments mark a significant milestone as FEVE celebrates its 40th anniversary this year.

Johan Gorter, Chief Executive Officer of Ardagh Glass Europe, has been elected as President of the association: "It is an honour to take on this role and I believe that collectively, we can continue to drive innovation and sustainable growth in the glass packaging sector", said Mr. Gorter. "In the last fifteen years, the consumption of products packed in glass has increased across Europe despite a challenging economy. To ensure that we retain our leadership position I will support our industry in its efforts to drive technology advancement, energy efficiency and circular economy policies which are critical for Europe's future," he added.

Jean-Pierre Floris, Chairman and CEO of Verallia Group, has also been elected Vice-President. Commenting on the new FEVE presidency, Jean-Pierre Floris said: "I am delighted to support the new FEVE president. The executive team remains as committed as ever to grow the competitiveness of the container glass industry and deliver sustainable packaging solutions to our customers."

Today, the container glass industry is a pioneer of the EU circular economy. In the last fifteen years, bottle-to-bottle glass recycling has increased by 139% throughout Europe. Some 1.5 million bottle banks are available across the region and an average of 74% of Europe's glass is collected for recycling, marking the success of separate collection for glass introduced in Europe in the 1970s and the commitment of the industry to attain the highest recycling rates.

The industry is also an important contributor to the European economy. Every year over €600 million are invested in energy efficiency, decarbonization and upgrades over the 160 manufacturing plants across Europe, contributing to maintain a total of 125,000 direct and indirect jobs. Investments in innovation help to modernize production processes and to produce glass bottles that are 30% lighter than 20 years ago, while still maintaining their product preservation qualities, recyclability, and innovative design.

For more information about the 40th anniversary: *www.feve.org/40-year-anniversary*

20603/Press Release – 2017.06.15

Global Glass Packaging Market by 2025

The Global Glass Packaging Market was valued at USD 53.61 billion in 2016, according to a new report published by Coherent Market Insights. Increasing alcoholic beverages and beer packaging end-use industry to meet the demand from ever increasing population, and the consumer and industry preference for the use of glass products to keep consumables safe is surging demand for glass packaging market. Glass packaging is made from sustainable materials such as soda, lime, silica, and others.

The glass products derived from these sources are completely recyclable and can be reused to make into new products as well. The plastics bottles used for packaging are very harmful, and lead to chemical interaction with the consumables. Thus, glass bottles are the ideal packaging option for alcoholic & soft beverages and beer manufacturers, as they have the ability to keep the consumable safe, and healthy for a longer period of time.

There are various types of glass used for packaging such as Type I, Type II, Type III, and Type IV glasses. Type I and Type III glass are most widely preferred for packaging in food, different beverages, and pharmaceutical end-users.

The global glass packaging market is segmented into various end-use industries namely alcoholic beverages (except beer), beer, food items & soft beverages, pharmaceuticals, and others. Alcoholic beverages (except beer) is the largest end-use industry segment, followed by beer. Alcoholic beverages and beer are experiencing rapid growth in Europe and Asia-Pacific regions. Wine and spirit manufacturers are widely preferring attractive shape glass bottles for packaging. Adding to this, beer manufacturing companies are relying on glass bottles due to their ability to keep the liquid safe for a longer period of time even after non-refrigeration. Hence, the huge consumption of glass packaging in alcoholic beverages and beer end-use industry is fueling the growth of the glass packaging market.

Moreover, in pharmaceuticals industries, product protection and safety are of the utmost importance. Owing to this, the inert material, namely, glass is the most ideal packaging option for the pharmaceutical industry, as glass packaging safeguards contents from oxygen ingress and cross-contamination, hence providing the ultimate protection. This in turn is coupling the growth of glass packaging over the following decade.

Key takeaways of the market:

* Asia-Pacific is projected to be the largest region in the global glass packaging market. The region has accounted for around 38.5% share of the overall glass packaging market in 2016, in terms of revenue. The market in this region is expected to be primarily driven by rampant consumption of glass packaging in alcoholic beverages, and beer end-use industries. The increasing population, increasing production due to economical raw material cost, and rise in the standard of living are the major factors for positioning Asia-Pacific as the largest market for glass packaging. Whiskies, beer, brandy, cognac and local spirits in glass bottles are experiencing a particularly sharp increase in ASEAN, China and India countries owing to largely country-specific factors. Local spirits are particularly dynamic in China, where baijiu is widely purchased and is set to account for the strongest unit volume growth in Asia-Pacific region. Also, alcohol is now most widely accepted in Indian culture. This is due to various communal changes which are enabling brand owners to make their products more widely

available through retail expansion, especially in more remote rural areas. Adding to this, a well-established returnable glass bottle system in India, which involves low-income earners retrieving empty glass bottles, also favours glass.

* Europe is expected to emerge as the second-largest market over the forecast period. The sudden rise in beer consumption, technological advancements in France and Germany, growing pharmaceuticals industry, and rising preference of attractive shape glass bottles by spirit and wine manufacturers are the major driving factors for the growth of the glass packaging market in the region. Also, Europe is one of the largest region in the manufacturing of wine, which in turn is coupling the growth of glass packaging in the region.

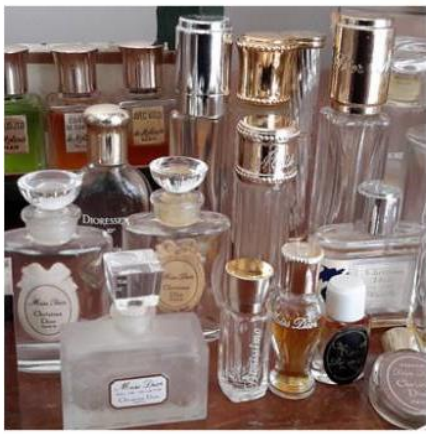
* North America is the third largest region in global glass packaging market in 2016. The market in the region is expected to grow at a steady pace through 2025. The declining beer consumption in the region is the major factor for the steady growth. However, there is a moderate growth in the alcoholic beverages (except beer) would be the key factor in maintaining pace over the following decade in the region. Furthermore, the growing pharmaceutical industry is also paving its way in maintaining moderate growth for the glass packaging market in the region.

* In the following years, there is a key challenge which could be a key restrain factor for the growth of the glass packaging market. KHS, a company based in Germany has launched an **InnoPET Plasmax** 20Q barrier coating system, which is specially designed for large production lines. This technology covers the inner walls polyethylene terephthalate (PET) bottles with a wafer-thin protective coating of SiOx glass (pure glass). This will allow the end-users to fill sensitive products such as beer, wine and juice, into PET containers, resulting in a longer shelf life and enabling the quality, flavour and vitamin content of your bottled products to be maintained over a long period. The InnoPET 20Q can process bottles of between 0.1 and 1.5 litres in size and achieves outputs of up to 40,000 PET bottles per hour. This technology can majorly replace glass bottles from beer, wines, and soft beverages end-users, due to the biodegradable or recyclable nature of PET.
Owing to this, Van Pur a brewing company, based in Poland has invested on InnoPET Plasmax technology, and is the first company in Poland, and second in Europe to opt for this technology. Test results have shown good outstanding results with a shelf life up to eight months, which is directly comparable to that beer bottled in glass. Also, the economical and cost-effective aspects of this PLASMAX technology will lead to a key restraint for glass packaging over the following decade.

* Saint-Gobain S.A, Amcor, Bormioli Rocco, Ardagh Group, China Glass Holdings, Gerresheimer AG, Hindusthan National Glass & Industries, Heinz-Glass, Koa Glass, Orora Packaging Australia, Nihon Yamamura Glass, Owens-Illinois Inc., Piramal Glass and Consol Glass are some of the key players in global glass packaging market. Major players in the global glass packaging market include Saint-Gobain S.A, Amcor, Bormioli Rocco, Ardagh Group, China Glass Holdings, Gerresheimer AG, Hindusthan National Glass & Industries, Heinz-Glass, Koa Glass, Orora Packaging Australia, Nihon Yamam.

Cosmetic and Perfume Glass Bottle Market Size Estimation 2017-2022

The Global Cosmetic and Perfume Glass Bottle Market Research Report 2017 to 2022 provides information on trends and developments, and focuses on markets and materials, capacities and technologies.



Companies mentioned are SGD Group, Pochet, Vitro Packaging, HEINZ-GLAS, Gerresheimer, Piramal Glass, Zignago Vetro, Saver Glass, Bormioli Luigi, Stolzle Glass, Pragati Glass.

The global Cosmetic and Perfume Glass Bottle market consists of different international, regional, and local vendors. The market competition is foreseen to grow higher with the rise in technological innovation and M&A activities in the future. Moreover, many local and regional vendors are offering specific application products for varied end-users. The new vendor entrants in the market are finding it hard to compete with the international vendors based on quality, reliability, and innovations in technology.

This report segments the global Cosmetic and Perfume Glass Bottle market on the basis of types:

- By Capacities: 0-50 ml, 50-150 ml, >150ml, (<15 ml;15ml-30ml;30ml-50ml;50ml-100ml;100ml-150ml;>150ML),
- By Shape: Round; Oval; Square; Ladder; Sphere; Cone; Curve; Other.
- On the basis of application, the global Cosmetic and Perfume Glass Bottle market is segmented into Cosmetic Glass Bottle and Perfume Glass Bottle.

Essential points covered in Global Cosmetic and Perfume Glass Bottle Market 2017 Research are:

- What will the market size and the growth rate be in 2022?
- What are the key factors driving the global Cosmetic and Perfume Glass Bottle market?
- What are the key market trends impacting the growth of the global Cosmetic and Perfume Glass Bottle market?
- What are the challenges to market growth?
- Who are the key vendors in the global Cosmetic and Perfume Glass Bottle market?

- What are the market opportunities and threats faced by the vendors in the global Cosmetic and Perfume Glass Bottle market?
- Trending factors influencing the market shares of the North America, Europe, China, Japan, Southeast Asia, India.
- What are the key outcomes of the five forces analysis of the global Cosmetic and Perfume Glass Bottle market?

Geographically, this report is segmented into several key Regions, with production, consumption, revenue (million USD), and market share and growth rate of Cosmetic and Perfume Glass Bottle in these regions, from 2012 to 2022 (forecast), covering North America, Europe, China, Japan, Southeast Asia, India.

The report provides a basic overview of the Cosmetic and Perfume Glass Bottle industry including definitions, classifications, applications and industry chain structure. And development policies and plans are discussed as well as manufacturing processes and cost structures.

The report also focuses on global major leading industry players with information such as company profiles, product picture and specifications, sales, market share and contact information. What's more, the Cosmetic and Perfume Glass Bottle industry development trends and marketing channels are analysed.

The research includes historic data from 2012 to 2016 and forecasts until 2022 which makes the reports an invaluable resource for industry executives, marketing, sales and product managers, consultants, analysts, and other people looking for key industry data in readily accessible documents with clearly presented tables and graphs. The report will make detailed analysis mainly on above questions and in-depth research on the development environment, market size, development trend, operation situation and future development trend of Cosmetic and Perfume Glass Bottle on the basis of stating current situation of the industry in 2017 so as to make comprehensive organization and judgment on the competition situation and development trend of Cosmetic and Perfume Glass Bottle Market and assist manufacturers and investment organization to better grasp the development course of Cosmetic and Perfume Glass Bottle Market.

The study was conducted using an objective combination of primary and secondary information including inputs from key participants in the industry. The report contains a comprehensive market and vendor landscape in addition to a SWOT analysis of the key vendors.

C. REINFORCEMENT GLASS FIBRES

Glass Company

Owens Corning

1. Owens Corning has received all regulatory clearances and completed the **acquisition of Pittsburgh Corning**, the world's leading producer (FOAMGLAS®) of cellular glass insulation systems for commercial and industrial markets, for approximately $560 million in cash, on a cash free and debt free basis.
   "Owens Corning and Pittsburgh Corning have shared a common heritage," said Julian Francis, president of Owens Corning's Insulation Business. "Now, they have a shared future in making Owens Corning the world's leading provider of insulation solutions with fiberglass, foam, mineral fibre, and cellular glass. We are excited with the opportunities this acquisition brings to the company."
   Pittsburgh Corning employs over 1,100 people in 17 countries. It operates facilities in the United States, Belgium, Czech Republic, and China. It produces FOAMGLAS® cellular glass, a sustainable, high-performance insulation offering water and fire resistance, high compressive strength, and long-lasting thermal protection. Pittsburgh Corning delivered 2016 sales of over $240 million.
   20606/Press Release – 2017.06.27

2. Owens Corning published its **2016 Sustainability Report** on 22 June. The company's 11th annual report, themed It All Adds Up, documents the actions and efforts driving its global "handprint" and environmental footprint progress. Owens Corning has a long history of expanding its positive impact through sustainability. It is a core value of the company, exemplified through the actions of its 16,000 employees around the world.

   "I am proud of the progress our employees have made toward advancing our sustainability goals and in doing our part to make a positive impact on the world," said Vice President and Chief Sustainability Officer Frank O'Brien-Bernini. "Our unwavering commitment to sustainability has been broadened and deepened as we continually challenge ourselves to collaborate more with others to amplify our impact around the globe. We look forward to continuing this momentum for the benefit of our company and the planet."

   The report features progress of the past year against four strategic sustainability pillars. Highlights of 2016 include:

Operations Sustainability

- Continued to focus on environmental footprint reduction with particulate matter emissions and water use down 23% and 37%, respectively, relative to 2010 levels, which exceed the company's 2020 goals
- Began purchasing power from 250 megawatts of new wind power capacity, the equivalent of the yearly electricity use of 65,000 U.S. homes

Product and Supply Chain Sustainability

- Earned the following product certifications:
  - Asthma and Allergy Foundation of America's asthma & allergy friendly™ certification for Pure Safety® insulation
  - Living Product Imperative certification and Declare Labels for unfaced batt insulation and unbonded loosefill
  - Cradle to Cradle Material Health certification for extruded polystyrene foam insulation
- Facilitated the recycling of 2.5 billion pounds of roofing shingles, and 1.3 billion pounds of glass (used in Owens Corning insulation)

Energy Efficiency and Durable Material Solutions at Scale

- Helped apply insulation solutions in low-income housing in Chile, reducing the need to heat homes by burning wood, which is the country's main source of air pollution
- Worked with wind turbine manufacturers to help make this renewable energy more economical via Owens Corning's composites portfolio, material science experts, and rapid prototyping capability

Safety, Health, Employee Engagement and Community Vitality

- Launched a science-based global wellness program for employees and their families
- Initiated a global program – including education, counseling, and medication – to help all employees and family members live tobacco-free
- Partnered with Habitat for Humanity and World Vision to provide safe, energy-efficient housing for 1,500 families in need in the U.S., Canada, and China
- Began work with the Concrete Preservation Institute to restore the historic Battleship Row mooring quays and help U.S. military personnel transition to civilian jobs

Owens Corning's 2016 Sustainability Report is consistent with Global Reporting Initiative (GRI) guidelines known as GRI-G4. GRI's Sustainability Reporting Guidelines set a globally applicable framework for reporting the economic, environmental, and social dimensions of an organization's activities, products, and services.
The full report is available online at: *https://w.owenscorning.com/corporate/sustainability*.

20607/Press Release – 2017.06.22

D. SPECIAL GLASS

Glass Companies

CORNING

CORNING

Apple's latest announcement of its USD 200 million investment in Corning's manufacturing facility in Harrodsburg, Ky., solidified its commitment to US manufacturing. The Harrodsburg plant has been churning out screens made of Gorilla Glass for Apple iPhones since 2007. And although a majority of Gorilla Glass is made overseas near Apple's other suppliers, the Harrodsburg facility is where Corning's researchers develop and fine-tune their ideas and processes.

"This partnership started 10 years ago with the very first iPhone, and today every customer that buys an iPhone or iPad anywhere in the world touches glass that was developed in America," Apple's COO Jeff Williams stated in a company press release. "A chapter that will not only enable next-generation mobile consumer electronics, but also sustain and create high-value manufacturing jobs," Corning CEO Wendell Weeks said.

"Corning's longstanding relationship with Apple has also helped create nearly 1,000 American jobs and allowed us to continue growing and expanding in the US," Weeks added in the release. "This investment will ensure our plant in Harrodsburg remains a global centre of excellence for glass technology."

20608/Press Release – 2017.06.01

SCHOTT

SCHOTT glass made of ideas

1. SCHOTT's **ultra-thin smartphone protective glass** is available as screen protector glass for a number of smartphone models, and is sold by the mobile phone accessory brand BLACK ROCK.

The mobile phone accessory brand BLACK ROCK is now offering the ultra-thin glass SCHOTT AS 87 eco as screen protector glass for a number of smartphone models. The product can be found at major electronics retailers such as Media Markt and Saturn. The ultra-thin glass from SCHOTT is not only convincing under laboratory conditions, but also when utilized as a protective display for smartphones, where it responds reliably to the daily challenges the devices are constantly confronted with. Techy fanatics can now reliably protect their smartphones from scratches and cracks to their display screens. An especially noteworthy aspect of the journey to German

retail mobile accessory shelves is that the packaging includes the SCHOTT logo, which indicates premium quality. This was made possible thanks to a co-branding agreement between SCHOTT and BLACK ROCK, a subsidiary of German-based HAMA Hamaphot Hanke & Thomas GmbH & Co KG.

Effective immediately, BLACK ROCK screen protector products are made using SCHOTT AS 87 eco with a thickness range of 0.1–0.3 mm. The glass is manufactured at SCHOTT's northern German production site in Gruenenplan and processed into a screen protector by BLACK ROCK's Chinese partners. The German mobile phone accessory group has placed it as a premium product within its "X-TREME" product line. The screen protector is compatible with a number of current smartphone models including for the popular series of iPhones from Apple – iPhone 4 SE; 4.7 inch iPhone 6, 6S, 7; 5.5 inch / iPhone 6 Plus, 6S Plus, 7 Plus – as well as the Samsung Galaxy S7. A special variation of the glass with slightly curved edges protects the outer curved exterior of the Samsung Galaxy S8 "Infinity Display", uncompromising in its confrontations with the daily challenges mobiles face in their constant usage.

"As a provider of premium accessories, we are very pleased to be able to offer a robust special glass, which has the added benefit of being produced in Germany," notes Hans Claussen, CEO of BLACK ROCK, adding, "With just a 0.1 mm thickness, the glass is thinner than most of its competitors' products – and it was achieved without making any compromises to its durability. The glass has a Moh's hardness of 9, making it almost as hard as sapphire glass – only diamonds are tougher." The production of SCHOTT AS 87 eco in Germany is environmentally friendly: After the aluminosilicate glass is drawn through the melter and formed into the desired thickness, a chemical hardening takes place via an ion exchange treatment by Asian partner companies. This process ensures that the glass is extremely resilient and robust when confronted by external influences. In contrast to other suppliers of ultra-thin aluminosilicate glass, SCHOTT has eliminated the use of hydrofluoric acid during the slimming process, a harmful and hazardous material. SCHOTT AS 87 eco complies with the international RoHS and REACH standards, is free of hazardous substances and available in thicknesses from 50 to 400 micrometres.

20609/Press Release – 2017.06.28

2. SCHOTT is presenting its **new phosphate laser glass for high-power lasers at LASER** World of Photonics in Munich, where visitors to the event will also be able to discover high-precision optical components.

APG-760 phosphate laser glass is made for high-performance applications at 1.05 µm. The glass is available in various versions and can be flexibly adapted to the needs and requirements of applications. Dielectric coatings are also possible.

The glass has improved thermomechanical properties and is best suited as an active material in laser systems with high pulse powers, for example in femtosecond laser systems. The new laser glass was developed in Duryea in the US where production and refining are carried out. The glass is available with Nd3+ doping from 1% to 4%. Besides the new APG-760 phosphate laser glass, visitors to LASER World of Photonics in Munich will be able to discover high-precision optical components. Prisms and aspherical lenses are manufactured according to customer-specific specifications and ensure exceptional image quality in optical systems due to their precise processing.

In Duryea, Pennsylvania, the Carl Zeiss Foundation subsidiary with its approximately 200 employees has been advancing research on optical materials for years. Just this January, SCHOTT Advanced Optics introduced the new infrared material IRG27 and the laser glass BLG-80, both developed in Duryea like the new APG-760.

20610Press Release – 2017.06.29

E. DOMESTIC TABLEWARE AND CRYSTAL GLASS

Glass Companies

Zwiesel KristallGlas

Zwiesel KristallGlas celebrates the 10th anniversary of the highest crystal glass pyramid in the world. With a height of over 8 metres the glass pyramid from ZWIESEL KRISTALLGLAS has been the highest in the world since 2007. An impressive amount of 93,665 Tritan® crystal glasses from the range NECKAR were used in order to build the masterpiece in front of the Zwiesel factory outlet. The glasses of the freestanding pyramid are arranged adhesive-free over 65 levels.

The total weight of the glass pyramid is remarkable 11 tonnes – but no problem for the stemmed glasses thanks to patented Tritan® technology.
This technology developed by ZWIESEL KRISTALLGLAS makes the glasses especially break-resistant and also ensures an enduring shine.
In May 2017, the glass pyramid celebrates its 10th anniversary and it still shines just like it did on the first day! Especially created for this anniversary we rebuild a "little sister" of the pyramid in Paris: not far from the Louvre a small, temporary version of the glass pyramid will be built on the occasion of a customer event. 1,496 martini glasses from the range BAR SPECIAL will be stacked in 16 rows to create a four-sided pyramid.

20611/Press Release – 2017.05.29

Baccarat

Fortune Fountain Capital is buying a controlling stake in French crystal maker Baccarat, further demonstrating the growing weight of Chinese investments in France.
Fortune Fountain Capital (FFC) has signed an agreement to buy a controlling stake in French crystal maker Baccarat from US investment firms Starwood Capital Group and L Catterton.
Under the binding agreement, FFC will pay EUR 222.70 per share, valuing the 88.8% stake at EUR 164 million (EUR 184 million).
The acquisition of the renowned Paris-based firm, founded in 1764, is another illustration of the growing weight of Chinese investments in France, whose tourist and wine industries have a great appeal in the world's second-biggest economy. The price reflects a 2.1% premium compared with Baccarat's closing stock price on 18 May. Press reports then about a potential sale of the company triggered a spike in the share price, which closed at EUR 259.90.
Baccarat turned a profit for the first time in four years in 2016. Its revenue over the period amounted to EUR 148.3 million with earnings before interest, tax, depreciation and amortization (Ebitda) of EUR 12.9 million.
"The acquisition... will enable Baccarat to accelerate its strategic international plans, including expansion into emerging markets such as Asia and the Middle East, as well as continued growth across existing developed markets, particularly North America," FFC said in a statement. The Chinese financial firm said it would keep the current workforce and management, including chief executive Daniela Riccardi.

Chinese investors poured a record USD 23 billion into Europe in 2015, including USD 3.6 billion in France, the number three destination for Chinese deals after Britain and Germany, according to a research report by US law firm Baker & McKenzie. China's Fosun took control of French holiday group Club Med in 2015 and is in talks to buy a stake in French ski resorts operator Compagnie des Alpes.
Jin Jiang International also bought Europe's second-biggest budget operator Louvre Hotels for EUR 1.3 billion in 2015.

20612/Press Release – 2017.06.05

Durobor

The takeover of the Durobor tableware manufacturer in Soignies (Belgium) by the Dutchman Herman Green was validated by the Commercial Court of Mons. The "Durobor NewCo" project will consist in the construction of a new plant in the region.

20613/Press Release – 2017.06.27-28

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IN BRIEF

GLASS & SUPPLIERS

The German glass industry starts out 2017 with revenue growth

The glass industry recorded clear growth in revenue in the first quarter of 2017. All segments developed positively compared to the same period in the previous year and contributed to the very satisfactory overall first quarter result.
The glass industry's total revenue in Germany rose by 3.7 percent to EUR 2.37 billion in the first quarter of 2017. Domestic revenue accounted for EUR 1.37 billion (up 1.3 percent) of that figure, while foreign revenue rose by 7.1 percent to EUR 1.00 billion. Last year foreign and domestic revenue grew at a relatively similar rate. This year, so far, foreign revenue growth has been much stronger than domestic revenue growth. The most important trading partners for the German glass industry were France, the Netherlands, China and the USA.

Segment results

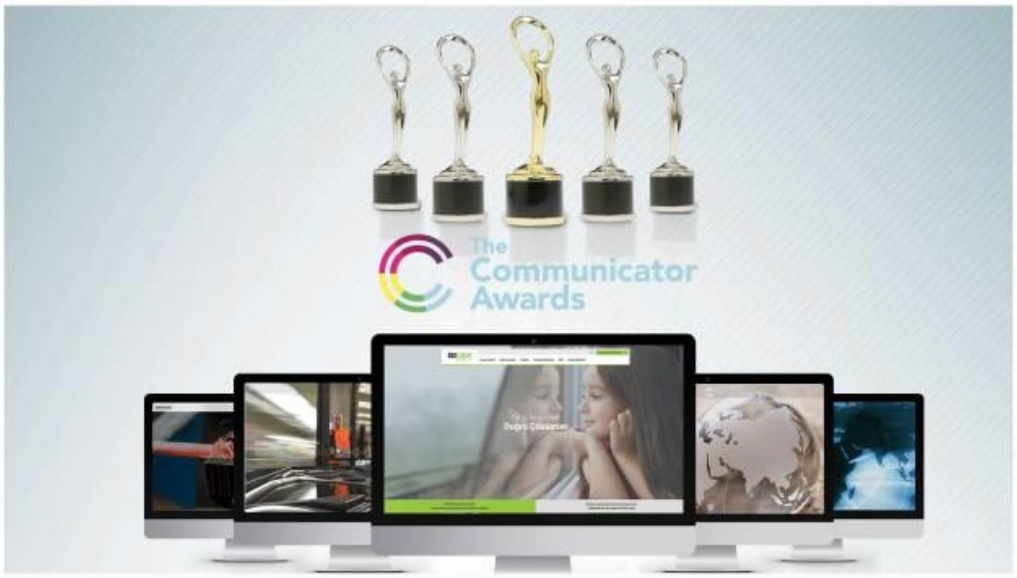
- Revenue in the flat glass segment increased by 3.2 percent to EUR 252 million in Q1. There was 5.0 percent growth in revenue to EUR 907 million in the flat glass finishing segment. Glass fibre manufacturers also reported a good first quarter result with 5.8 percent growth in revenue to EUR 257 million. Revenue growth in the special glass industry was slightly lower, increasing by 1.0 percent EUR 3.56 million.
- Positive development in the hollow glass segment
  The hollow glass segment, which includes tableware and container glass, reported very satisfactory Q1 revenue of EUR 590 million (up 2.9 percent).

BV-Glas President Dr Frank Heinricht commented: "German-made glass is still in high demand, both here and abroad. We're confident that the German glass industry will continue to be a strong player on the international markets with its high quality and innovative products, despite 'America first' and 'Brexit'."

20614/Press Release – 2017.06.07

Sisecam Group wins awards in the 'Communicator Awards'

A global actor in all main areas of glass such as flat glass, glassware, glass packaging and glass fibre, Sisecam Group has received several awards for its websites in 'Communicator Awards, the most prestigious international award program in the field of marketing and communication.



Operating in four main fields of activity consisting of "Flat Glass", "Glassware", "Glass Packaging" and "Chemicals", Sisecam Group, the global player of the glass industry, has won five awards in the 'Communicator Awards' for its Sisecam Flat Glass, Isicam Systems, Sisecam Glass Packaging, Denizli Glass and Richard Fritz Holding GmbH websites.
In the 'Communicator Awards', which is one of the most prestigious award programs in the field of marketing and communication, Sisecam Flat Glass, Sisecam Glass Packaging, Richard Fritz Holding GmbH and Denizli Glass websites won "Award of Distinction" in the category of "Website/Professional Service", while Isicam Systems website won the "Award of Excellence" in the same category.

Held for the 23rd time this year, Communicator Awards evaluates thousands of projects both from the US and around the world. The evaluations are made by a jury consisting of leading professionals in various areas of visual arts, who are members of the International Academy of the Visual Arts and who work at leading companies such as Estee Lauder, MTV Networks, Pitney Bowes, Sotheby's Institute of Art, Time, Inc, Victoria's Secret, Wired and Yahoo in managerial positions.
Communicator Awards is an international prestigious awards program honoring the most innovative and original works from all around the world in the field of marketing and communication. Extending with online video and social categories in its 23rd year, the Communicator Awards recognise achievement across all areas of the industry ranging from efficient marketing strategies to online videos and integrated campaigns, and receives more than 6,000 applications every year.

Air Products

Air Products has started to supply its integrated oxy-fuel solution's supply to Chengdu Jin Gu Pharmaceutical Packaging, one of China's leading pharmaceutical glass packaging companies, in the Sichuan Province.
Jin Gu's manufacturing process involves advanced technologies that include Air Products' cutting-edge offering. The company has set an industry benchmark for the pharmaceutical glass market in China with proven results of successful oxy-fuel conversion. These credentials will further help other glass manufacturers in the western region to address the increasingly stringent environmental regulations through innovative oxy-fuel technology.
Oxy-fuel technology provides several benefits. It is instrumental in lowering over 50% nitrogen oxide emissions. Other benefits include 10-20% in energy savings, about 25% production augmentation, reduction of capital, and improvement in efficiency and glass quality.

In order to support Jin Gu in converting furnaces to oxy-fuel, Air Products has customized an integrated solution that encompasses the company's Cleanfire mini HRi oxy-fuel burners, liquid oxygen, technical support on glass formulation improvement, and computational fluid dynamics simulations of the glass melting furnace to ensure smooth conversion under a tight schedule.
Air Products is known for its leadership and worldwide track record in oxy-fuel technology within the pharmaceutical and overall glass industry. This strengthens the company's commitment to support the sustainable development of China's glass industry. In addition to Jin Gu, Air Products also provides its integrated oxy-fuel solution to other types of glass makers, including fiberglass, glass containers for food and drink, and heat resistant glass for home appliances.

20616/Press Release – 2017.06.06

Corning Museum of Glass

CORNING

The Corning Museum of Glass (CMoG) has announced a new research residency program for artists, which will allow them to utilize the Museum's resources, including the permanent collections and the holdings of the Rakow Research Library, to inform their practice.
Named for CMoG's former executive director, The David Whitehouse Artist Residency for Research will enable artists to be in residence for up to three weeks to explore materials at the Rakow Library, the world's foremost library on the art and history of glass and glassmaking, and to use the other extraordinary scholarly resources available at the Museum, including the knowledgeable staff who work in all parts of the organization. This residency will be focused on research, whereas CMoG's two other residencies are geared toward artists creating new work.

"This residency is the first of its kind at The Corning Museum of Glass," said Amy Schwartz, director of The Studio, CMoG's internationally renowned glassmaking facility. "It was inspired by the number of artists who have told us that they want to spend time at CMoG just looking, thinking, and taking advantage of all things glass that we offer."

The David Whitehouse Artist Residency for Research will give artists the chance to step out of their studios and spend some time studying topics they feel will further their knowledge of glass. In addition to using resources at the Rakow Library and spending time in the collection, residents will have access to the Museum's expert curatorial and science staff members.

One resident will be selected for the first year and will be in residence for up to three weeks in 2018. While in Corning, the artist will be asked to give a presentation about their work and research. Applications for 2018 can be accessed on the CMoG website and are due by 31 August 2017. Artists who feel they would benefit from using the resources of the Rakow Library and from spending some time at The Corning Museum of Glass are encouraged to apply.

Other CMoG residencies include The Studio's collaboration with the Kohler Arts Centre to offer a joint residency for artists interested in working with glass, iron, brass, or clay; and the Specialty Glass Residency - a partnership with Corning Incorporated established in 2014 - which allows artists to experiment with specialty glass materials in the creation of new work.

The Museum also offers the Rakow Grant for Glass Research, which is awarded to one or more scholars annually and fosters scholarly research in the history of glass and glassmaking from antiquity until the mid-20th century. These awards have been granted to scholars working in archaeology and anthropology, art history, conservation, and science and technology.

"This new residency will essentially serve as a Rakow Grant for glass artists," said Karol Wight, president and executive director of CMoG. "David Whitehouse was a highly-regarded scholar and worked to build the incredible resources of the Rakow Library, but he was also a major supporter of artists working in glass today. The idea of bringing artists to CMoG to use the Library is exciting. We hope it will nurture their curiosity and inspire new lines of inquiry in their work."

The idea for this residency was inspired by the Rakow Library's new exhibition, Curious and Curiouser: Surprising Finds from the Rakow Library, which focuses on the ways in which artists and scholars have been inspired by their "surprising finds" in the Library's collection. The exhibition is on view through February 2019.

20617/Press Release – 2017.06.23

Ferro Corporation

Ferro Corporation, a leading global provider of functional coatings and colour solutions, is making investments in its Ferro Pigments business to increase capacity and optimize production of its Ultramarine pigments product lines.
"As a global leader in Ultramarine pigments, we are committed to meeting growing demand for our products and enabling the success of our customers through continuous innovation, supply of high-quality products, and through superior technical support and service," said Matthias P. Bell, Vice President, the Americas and Colour Solutions. "This comprehensive program will be implemented globally over the next 18 months, with immediate focus on increasing capacity for high-grade product lines and optimizing production by early 2018."
In addition to increasing capacity, investments will focus on equipment and technology upgrades supporting environmental/health/safety, quality, and future product development objectives.

20618/Press Release – 2017.06.30

IMA-Europe Appoints Dr Roger Doome as its Acting Secretary General

The IMA-Europe Board of Directors appointed Dr Roger Doome as Acting Secretary General, effective as of 1 June 2017. Dr Doome takes over the duties of Dr Didier Jans, who represented the European Industrial Minerals Association for a period of 2 years. The IMA-Europe Board of Directors would like to thank Dr Jans for his contributions to IMA-Europe and wishes him all the best for the future.
Dr Roger Doome has been working for IMA-Europe for 17 years, fulfilling several roles. As the IMA-Europe Technical and Financial Director, he has been leading the administrative staff and team of scientific advisers in the areas of health & safety, environment and product stewardship, with a particular focus on chemical policy. He is recognised as a REACH expert and contributes to EU consultative fora and regulatory platforms. In addition, he is the Secretary General of EBA, EUBA, EUROFEL, KPC-Europe and CCA-Europe, respectively the European trade federations for borates, bentonite, feldspar, kaolin & clays, and calcium carbonate & dolomite, members of IMA-Europe. Dr Roger Doome holds a PhD in chemistry, a MAS in physics and a BCS in Financial Management.

20619/Press Release – 2017.06.15

Phoenix Award to British Engineer for the first time in 36 years

This year's Phoenix Award goes to a British engineer - James O'Callaghan, co-founder of British structural engineering consultancy Eckersley O'Callaghan.

James O'Callaghan has been selected as the 47th recipient of the Phoenix Award and 'Glass Person of the Year 2017'. This distinguished global award recognises outstanding contributions to the international glass industry. James is the first structural engineer to receive this award, and the first British recipient since Sir Alistair Pilkington, the inventor of the float glass process, was awarded the prize in 1981.
The Award celebrates James' contribution to advancing the application of structural glass in the built environment. His work has seen glass panels grow in size with connection details rationalised on a journey of projects that has incrementally increased transparency, ambition and redefined industry benchmarks. His success in innovation has been achieved through close collaboration between engineering design, academic research and industrial developments. He is widely acknowledged to be an authority within the industry.
James joined Dewhurst Macfarlane & Partners (DMP) in 1995 where he first discovered glass as a structural material. He then worked with DMP and Rafael Viñoly Architects on the Samsung Jong-Ro Building in South Korea which, at that time, had the world's largest structural glass façade.
In 2001 James was introduced to Steve Jobs, leading to a design partnership with Apple that has defined glass as a key element in the identity of their stores. James has since engineered the highly innovative designs for the glass stairs, bridges, facades, and other structural elements for Apple retail stores around the world, as well as supporting many other clients with their building projects. Apple Zorlu Glass Lantern, Istanbul, was awarded the IStructE Supreme Award for Excellence in Structural Engineering in 2014.

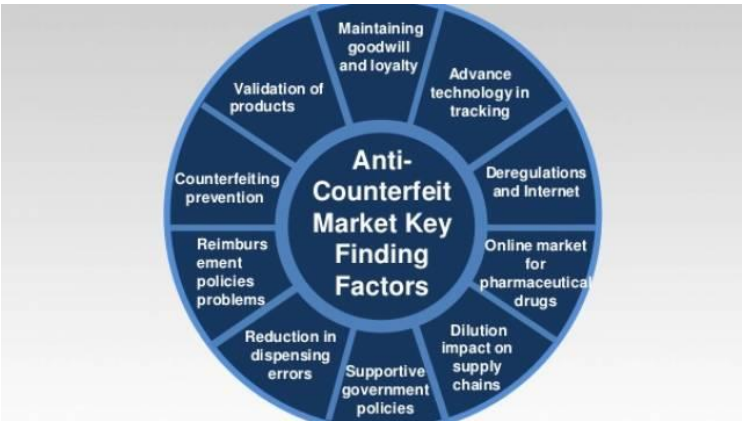
James and Brian Eckersley co-founded engineering design practice Eckersley O'Callaghan in 2004. The 90-strong practice is based in London with studios in New York, San Francisco, Paris and Shanghai; supporting projects all around the world. In 2016 James was awarded the UK's IABSE Milne Medal, the highest accolade awarded to an individual engineer for excellence in structural design, and the firm was named Building Award's 'Engineering Consultant of the Year 2016'.

20620/Press Release – 2017.06.22

Visiongain: Anti-Counterfeit Packaging Technologies Market Report 2017-2027

The new report from Visiongain discusses issues and trends affecting the Anti-Counterfeit Packaging Technologies market, with discussions, including qualitative analyses regarding:

- Growing RFID market
- Growth in Food & Beverages
- Government regulations



In Asia-Pacific, South East Asian countries such as Indonesia, Malaysia, and Thailand are showing significant growth in demand for anti-counterfeit packaging technologies due to increase in demand from end-use applications such as consumer durables, food & beverages, and automotive. These stated factors are also responsible for the growth of the market in Asia-Pacific. North America and Europe, which are the largest markets for anti-counterfeit packaging technologies, together accounted for 71.72% of the global market, in value, in 2017.

The global Anti-Counterfeit packaging technologies market can be segmented into Coding & Printing Technology, RFID (Radio Frequency Identification), Holograms, Security Labels, Packaging designs and Others. Globally, the Anti-Counterfeit packaging technologies market is dominated by Coding & Printing, followed by holograms and then security labels.

Visiongain's 169-page report provides 117 tables, charts, and graphs covering 12 leading and distinct submarkets, with the most lucrative areas in the industry and future market prospects. The report also includes financial results, trends, opportunities, and revenue predictions.
According to the report, there will be increasing growth in the Anti-Counterfeit Packaging Technologies worldwide from 2017 to 2027.

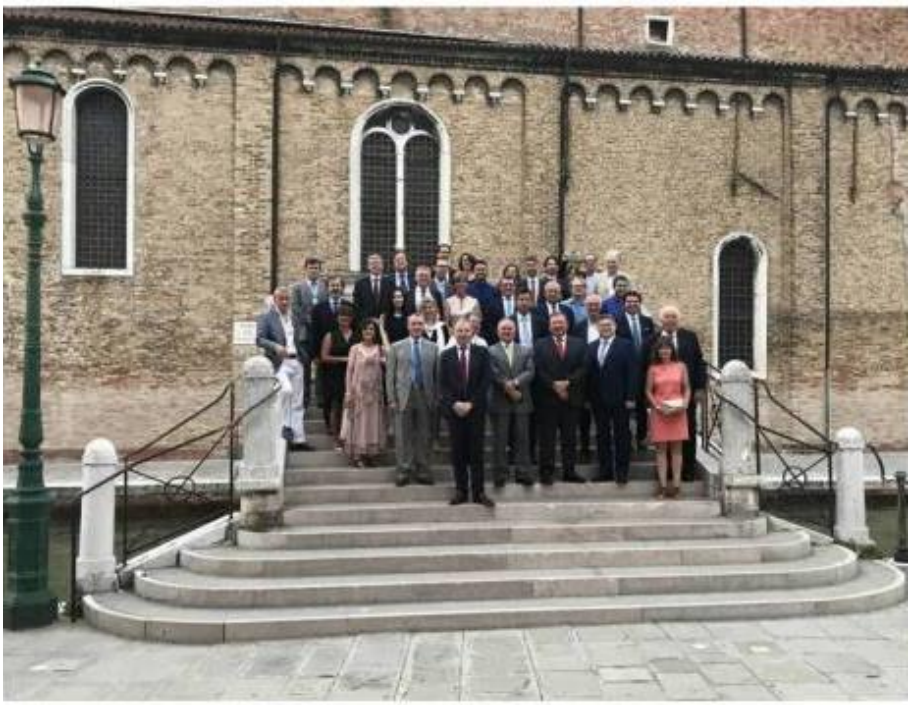
The report features news, insights, the latest developments and an in-depth survey of the Anti-Counterfeit Packaging Technologies market with up-to-date analysis as well as tables, graphs and charts, along with exclusive quantitative and qualitative analyses with independent predictions.

20620/Press Release – 2017.06.30

SEMINARS / CONFERENCES / WORKSHOPS

Vitrum: International Convention of glass associations – two days of exchange, comparison ideas and opportunities in Murano

The first International Convention of Glass Associations was organized in Murano, Venice, by Vitrum, with the support of ICE Agenzia. Representatives of the main international associations connected to the glass sector, along with members of the press from all over the world, came together for this two-day event, on 21st and 22nd June.



It brought together delegations from Italy, Germany, France, UK, Spain, Poland, Russia, Brazil, Slovakia and the US. Thanks to the support of ICE Agenzia, the organizers of Vitrum were able, this year for the first time, to bring together leading representatives of the industry to address together the most topical issues for the glass industry worldwide.

In Murano, national and international representatives of the sector met to discuss proposals, objectives and issues, also offering journalists present a competent and attentive audience to seize new ideas and opportunities.

- The first day, the delegations were welcomed to the island of Murano, at the Stazione Sperimentale del Vetro, a par excellence research centre and a national and international reference point for companies, associations, universities and institutions connected to the world of glass. The 18 associations taking part in the convention spoke about their main activities and services, followed by a visit to the labs of the Stazione Sperimentale del Vetro. The evening provided networking opportunities during a dinner at one of the most typical and exclusive restaurants of Murano.
- The second day of the Convention started off with a visit to the Abate Zanetti High School of Glass "Scuola del Vetro", where the delegates discovered this new but, at the same time, historical and exclusive training centre for the glass art of Murano: the first class with 8 students, who have just finished their first year, but next year the first class will have 19 students. During this visit, the guests also attended a practical demonstration of the skills of the Murano maestro glassmakers. At the end of the morning, the Convention started up again at the Stazione Sperimentale del Vetro.

Some of the topics discussed during the second day of the Convention:

- Making glass the material that the building and construction sectors cannot do without;
- Strengthening its ever more protagonist role with regards to renewable energy, but also in niche sectors such as high-tech, advanced telecommunications;
- Becoming a 'critical force' towards the most important European political parties to promote changes and updated of standards and regulations for the sector;
- Incentivising the development of solutions able to focus on energy savings and efficiency;
- Foster technical consultations at all levels and around the world for the promotion of good practices;
- Responding to the growing need of communication in the sector, leveraging on the importance of transferring to the general public the importance of the everyday use of glass;
- Promoting culture, education and a high level of continuous updating in companies;
- Enhance the concept of network, so that in one big community the new workers and also historical operators of the sector can confront and stimulate new ideas with each other, drawing from a technical, historical and artistic culture that is accessible to future generations.

This is the start of a roadmap that will put glass and the processes it undergoes in the spotlight. The upcoming appointments have been fixed – on 4 October during Vitrum 2017, the work groups will hold their first operations meeting and, in the spring of 2018 there will be the second appointment in Murano.
"We hope to have been successful in creating a new means of communication for the entire sector", said Ms. Biason, Vitrum Director. "We trust that these annual appointments with the Convention of the Associations will become an important time to meet and discuss, essential for the entire sector, able to continuously renew interest in the industry, its future and on the criticalities that we will be ever more able to face together, with a view to working together and cooperating."

20621/Press Release – 2017.06.27

The International Commission on Glass Conference in Montpellier on July 3 - 7.

9th workshop for new researchers in glass science and technology glass formation, structure, and properties and how numerical modelling can help to disentangle some key technological challenges in glasses.
The workshop will be composed of two interwoven threads. The first thread will overview fundamentals in glass science emphasising structure-property relationships, experimental techniques and material simulations. Specific properties, their structural dependence, and applications will be discussed, e.g. optical behaviour, transport phenomena, nucleation and crystallisation, and strength. The second thread this year will focus on a variety of process and product simulations. On the one hand, numerical technologies combined with experiments offer the optimal design guide for key industrial processes, e.g. heat transfer, melt flow, and glass forming. On the other hand, stress analysis and data-oriented technologies are beneficial to designing products of sufficient quality. In the sessions where the two threads overlap, all participants will cross two bridges: one between science and technology, the other between academia and industry. The lecturers will be world experts in their fields.
A significant aspect of the workshop will be student-centred projects that will help participants to develop their understanding by applying what they know to specific issues.
The pre-registration deadline for the conference has been extended to June 1, 2017. For more information about the conference, please visit *www.icglass.org*.

20622/Press Release – 2017.05.03

Vitrum Announces Innovations for 2017

New services that add value for exhibitors and seminars for trade professionals make the 20th edition of the glass industry trade show even more inviting.

Expectations are on the rise for Vitrum 2017, the international exhibition that will open its doors on **October 3rd**, attracting the world of glass processing to Fiera Milano Rho. **This year the show will focus specifically on the close connection between all the industry's players** – foreign and Italian businesses, domestic and international glass industry associations, institutional stakeholders, research centres and trade press from around the world. Vitrum stakes its claim as the "***House of Glass***", the ideal setting for machinery manufacturers and operators, researchers, technicians, industry professionals and institutional stakeholders to meet and share ideas that drive product innovation and optimization, and stimulate growth of the industry.

Detailed information about all the promotional tools for exhibitors is now available on the Vitrum website at:
http://www.vitrum-milano.com/sito/wp-content/uploads/2017/01/PresentazioneServiziVitrum_GB.pdf

20623/Press Release – 2017.02.10

Şişecam Glass Symposium, Istanbul

The 2017 ICG Annual Meeting will be held in conjunction with 32nd Şişecam Glass Symposium in **Istanbul, Turkey on October 22-25, 2017**.
Şişecam and ICG proudly invite visitors to Istanbul, the city which connects two continents, to share, discuss and connect knowledge about the latest developments on glass science and manufacturing technology.
All presenters must be registered to attend the 2017 ICG Annual Meeting. All abstracts must be submitted via the online system. Please note that abstracts sent by mail, fax or e-mail will not be accepted. All abstracts will be published on the Book of Abstracts. The papers and presentations will be uploaded on the web site upon the authorization of the author, after the conference.

Topics will include:

- Glass formation, transition, relaxation and modelling
- Glass properties
- Crystallization and glass ceramics
- Chemical durability and leaching
- Nuclear waste vitrification
- Surface properties and coatings
- Bioactive and sol-gel glasses

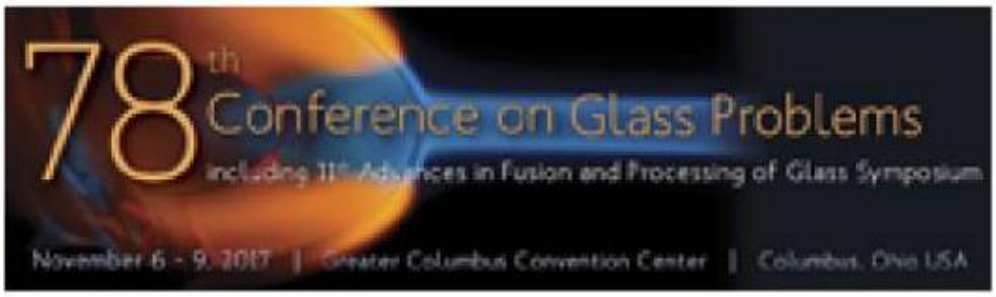
- Glass melting, forming
- Energy and environment
- Raw materials
- Refractories

Early Bird Registration July 31, 2017
INFO at: SCIENTIFIC SECRETARIAT: Şişecam STC
Tel: +90 850 206 0488
ORGANISING SECRETARIAT: Serenas Group
Tel: +90 312 440 50 11
E-mail: *info@icgistanbul2017.com*
For more information *visit* *www.icgistanbul2017.com*

20624/Press Release – 2016.06.08

Conference on Glass Problems at its 78th edition

The 78th Conference on Glass Problems will be taking place 6-9 November 2017 at the Greater Columbus Convention Centre. This year's conference programme is doubled in size, and also includes the 11th Advances in Fusion and Processing of Glass symposium (AFPG), organized in collaboration with the American Ceramic Society's Glass and Optical Materials Division.



Registration is now open for the 78th Conference on Glass Problems with Advances in Fusion and Processing of Glass symposium. This content-rich, technically-oriented combined conference attracts glass manufacturers, suppliers, and researchers worldwide to exchange innovations and solutions.
Invited experts will present the latest technologies, problem solutions and innovations in glass melting, refractories, energy efficiency, process control, modelling, safety, emissions, raw materials & batching, forming, and more.
GMIC Symposium — Reducing Construction, Rebuild, & Hot Repair Times for Glass Manufacturing Furnaces will focus on the latest technologies to significantly support reducing the time to construct and rebuild furnaces. It provides a forum for the audience to gain technical knowledge and exchange experiences with each other in support of streamlined project execution.
The event will also include a series of Short Courses for Glass Manufacturers: Fundamentals of Batch and Furnace Operation, Instructor: C. Philip Ross, Glass Industry Consulting International. The course is an introduction to the principles of commercial glass production employed in Batch & Furnace operations by US Glass producers. Raw Materials, Glass Technology & Properties, Melting Furnaces, and

Environmental Issues will all be touched upon. Suggested attendees could be vendors or newer individuals to glass manufacturing seeking an introduction to the issues faced in glass production.

Exploring the Changing Safety Landscape of Silica, Hexavalent Chromium, and Confined Space in the Glass Industry, Instructor: Dragan Savic, Vice President of Glass Technology and Safety Staff Augmentation, SCT. Savic, a leader in the safety industry, will delve into the changes in OSHA standards and guidelines for crystalline silica, hexavalent chromium, and confined space, all of which are/can be critical hazards for those working in the glass industry.

Fundamentals of Glass Melting Control Systems, Instructors: Dale Gaerke, Senior Member, The International Society of Automation (ISA), Retired Director of R&D; Controls and Electrical Engineering for Owens-Illinois, Inc. The course is an introduction and general overview of the control system features and adjustments typically employed in regenerative glass melters by US glass producers. Focus will be on control system settings for regenerative gas fired melters with time for in depth open discussion and questions. This can also include discussion of oil fired and oxy/gas fired melter issues. Suggested attendees are newer individuals to glass melting control systems and their operational adjustments.

More information can be found at: https://t.e2ma.net/click/9r2ot/dfrm3i/9z04qg

20625/Press Release – 2016.06.07

GlassPrint 2017 – Solutions For Glass Decoration

Europe's only dedicated event for glass decoration, the seventh GlassPrint conference and exhibition returns to **Düsseldorf, Germany on 29-30 November 2017**.

Following an excellent response to the early-bird delegate and exhibitor registration offer that launched last month, the organisers anticipate the largest GlassPrint event yet, following on from GlassPrint 2015 that was deemed an outstanding success by a record audience of 200 glassmakers, decorators, end-users, suppliers and brand owners from 26 different countries in Europe, North America, Asia and the Middle East.

Taking place at the easily accessible Radisson Blu Scandinavia Hotel in Düsseldorf, GlassPrint 2017 delegates will benefit from an extensive conference programme that will see industry experts present detailed solutions for flat and hollow glass decoration, covering the latest advanced digital and screen technologies. Industry figureheads will provide keynote presentations and a specially selected panel of glass decoration experts will join together for the GlassPrint LIVE open forum to answer topical questions from the audience.

GlassPrint will be staged immediately after the Direct Container Print conference (www.dcp2017.org) that will introduce printers, packaging manufacturers and brand owners to the potential of direct to shape container decoration on plastics.

20626/Press Release – 2017.02.24

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