

## WELCOME TO EU GLASS INDUSTRIES NEWS



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## EU COMMUNITY NEWS

### NEW EU LEGISLATION

#### Council Directives

##### N° (EU) 2018/851 of 30 May 2018

This Directive **amends Directive 2008/98/EC on WASTE** and lays down measures to protect the environment and human health by preventing or reducing the generation of waste, the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use, which are crucial for the transition to a circular economy and for guaranteeing the Union's long-term competitiveness.

All details on page 109 at:

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:150:TOC>

21251/O.J. L150 – 2018.06.14

##### N° (EU) 2018/852 of 30 May 2018

This Directive **amends Directive 94/62/EC on packaging and packaging waste** and lays down measures aimed, as a first priority, at preventing the production of packaging waste and, as additional fundamental principles, at reusing packaging, at recycling and other forms of recovering packaging waste and, therefore, at reducing the final disposal of such waste in order to contribute to the transition towards a circular economy.

It also includes new minimum recycling targets.

- By 31 December 2025: recycling of minimum 65% by weight of all packaging waste,
- By 31 December 2030: recycling of minimum 70% by weight of all packaging waste.

Materials	31/12/2025	31/12/2030
Plastic	50%	55%
Wood	25%	30%
Ferrous Metals	70%	80%
Aluminium	50%	60%
<b>Glass</b>	70%	75%
Paper & Cardboard	75%	85%

All details on page 141 at:

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:150:TOC>

21252/O.J. L150 – 2018.06.14

## Council & Parliament Regulations

### N° (EU) 2018/842 of 30 May 2018

This Regulation on **binding annual greenhouse gas emission reductions by Member States from 2021 to 2030** contributes to climate action to meet commitments under the Paris Agreement and also amends Regulation (EU) No 525/2013 (GHG monitoring).

It lays down obligations on Member States with respect to their minimum contributions for the period from 2021 to 2030 to fulfilling the Union's target of reducing its greenhouse gas emissions by 30 % below 2005 levels in 2030 in the sectors covered by Article 2 of this Regulation and contributes to achieving the objectives of the Paris Agreement. This Regulation also lays down rules on determining annual emission allocations and for the evaluation of Member States' progress towards meeting their minimum contributions.

It applies to the greenhouse gas emissions from IPCC source categories of energy, industrial processes and product use, agriculture and waste as determined pursuant to Regulation (EU) No 525/2013, excluding greenhouse gas emissions from the activities listed in Annex I to Directive 2003/87/EC (EU ETS Directive).

Full details at page 26 of:

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:156:TOC>

21253/O.J. L156 – 2018.06.19

### N° (EU) 2018/844 of 30 May 2018

This Regulation is amending Directive 2010/31/EU on the **energy performance of buildings** and Directive 2012/27/EU on **energy efficiency**.

It relates to long-term renovation strategy, new buildings, technical building systems, electromobility and smart readiness indicator, inspection of heating and air-conditioning systems, with feasibility study.

Full details at page 75 of:

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:156:TOC>

21254/O.J. L156 – 2018.06.19

## Commission Regulation

### N° (EU) 2018/788 of 30 May 2018

This Regulation is implementing Regulation (EU) 2017/1993 imposing a **definitive anti-dumping duty on imports of certain open mesh fabrics of glass fibres** (TARIC codes 7019510014, 7019510015, 7019590014 and 7019590015) originating in the People's Republic of China as extended to imports of certain open mesh fabrics of glass fibres

consigned from India, Indonesia, Malaysia, Taiwan and Thailand, whether declared as originating in these countries or not following an expiry review.

In accordance with the findings described in recitals (13) to (18), the Commission concludes that the applicant fulfils the conditions for an exemption and should be added to the list of **companies that are exempted from the anti-dumping duty** imposed by Implementing Regulation (EU) 2017/199, which will be amended to include **SPG Glass Fibre PVT. LTD.**

All details on page 5 at:

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:134:TOC>

21255/O.J. L134 – 2018.05.31

## TRADE POLICY

### EU Trade Defence Instruments

The **new EU rules on trade defence** – the fruit of a long process of inter-institutional talks that started in 2013 and that were for a long time delayed by a blockage in discussions between the member states – finally **entered into force on 8 June**.

With these new rules, the EU will be able to protect itself better against unfairly low-priced imports and to fight social and environmental dumping more effectively.

In certain cases, the EU will notably have the possibility to waive the lesser duty rule in order to impose higher customs duties. This will be valid for all anti-subsidy cases and for all anti-dumping cases focusing on imports produced from raw materials and energy supplied at artificially low prices.

- The new rules will shorten the current nine-month anti-dumping investigation period to seven months. Definitive duties will have to be set up within 14 months.
- As part of its investigations, the Commission will also take into account the costs of compliance with EU social and environmental legislation when calculating the levels of duties it can impose based on economic damage caused to companies.
- It will also not accept price undertakings from countries that have a bad record on implementing core International Labour Organisation standards and environmental agreements. For the first time, trade unions will also be able to participate in trade defence investigations.

The Commission will support small and medium-sized companies (SMEs) via its specific SME helpdesk to make it easier for them to participate in trade defence proceedings, and unions will be involved during the investigations and in the evaluation of the future customs duties.

21256/Press Release – 2018.06.07

### **US Customs Duties on European Products**

Right after the announcement by US Commerce Secretary Wilbur Ross of the application to European products, from 1 June, of US customs duties of 25% on imports of steel and of 10% on imports of aluminium, the European Commission promised, on Thursday 31 May, to retaliate by implementing its 're-balancing' counter measures and by taking the issue to the WTO on 1 June. "The EU's response will be proportionate and in accordance with WTO rules", European Trade Commissioner Cecilia Malmström stated, referring to the package of counter measures providing for re-balancing measures and customs duties on US exports up to €2.8 billion.

The US measures affect EU exports worth €6.4 billion in 2017. While striving to avoid today's situation, the EU has been preparing over the last months and stands now ready to react to the US trade restrictions on steel and aluminium in a swift, firm, proportionate and fully WTO-compatible manner.

First, the EU have launched legal proceedings against the US in the WTO on 1 June. The US measures are primarily intended to protect the US domestic industry from import competition, clearly at odds with WTO rules. In addition to the WTO dispute settlement we are launching against the US measures, the EU have also coordinated action in this field with other affected partners.

The second action prepared by the EU consists of 'rebalancing' measures that are compatible with WTO rules, providing for customs duty to be applied to American exports for a total that may initially equate to €2.8 billion and then, if its complaint is upheld by the WTO, or after three years, €6.4 billion, or the equivalent of the value of the EU's exports of steel and aluminium to the US in 2017.

The Commission has worked with the member states to prepare a list of 332 American agricultural, industrial and steel products on which the EU will impose customs duty of 25% from 20 June at the earliest, possibly rising to 50% from 23 March 2021. The Commission notified the list to the WTO on 18 May.

The products targeted include steel products, motorcycles, certain textile products, including jeans, and agri-food products such as bourbon, peanut butter and orange juice.

The EU may implement its first draft of rebalancing measures within a few weeks, according to the Commission, which must now prepare an implementing regulation and agree with the member states on the products to include and the rates of customs duty. The final list of products will be discussed by the national experts in the framework of the Council of the EU's trade policy committee (TPC).

The third counter-measure consists of safeguard measures to protect the EU market from diverted goods due to these American restrictions.

On 26 March, the Commission opened a safeguard investigation into imports of steel, which may lead, within nine months, to measures compatible with WTO rules to protect the European market from redirected exports of steel from Brazil, China, Russia, South Korea, Taiwan or Turkey, which are no longer competitive in the United States.

A surveillance system for imports of aluminium has also been set in place.

### EU/Mercosur

EU and Mercosur complete latest talks. The EU and Mercosur negotiating teams met in Montevideo, Uruguay, from 4 to 8 June for a round of negotiations.

The Parties achieved progress on several issues such as services and exchanges were constructive overall but there is still work to be done, notably on cars and car parts, geographical indications, maritime transport and dairy.

The EU continues to be committed to completing an ambitious and mutually-beneficial agreement with Mercosur as soon as possible.

21258/Press Release – 2018.06.12

### Trade Barriers Removals in Third Countries

According to a report published by the European Commission on 26 June, in 2017 the European Union obtained the removal of 45 barriers to trade and investment set up in third countries. This was twice the number of barriers as in 2016.

The barriers removed spanned across 13 key EU export and investment sectors –aircraft, automotive, ceramics, ICT & electronics, machinery, pharma, medical devices, textiles, leather, agri-food, steel, paper, and services.

The Commission notably obtained the recognition of safety standards used by the EU machinery industry in Brazil's new safety legislation; the elimination of administrative barriers for services in Argentina; and the removal of restrictions on copper and aluminium scrap, and paper in Turkey.

It also obtained the removal of animal and plant health and hygiene barriers related to bovine exports from some EU member states to China, Saudi Arabia and Taiwan, and the elimination of certain restrictions on poultry exports from some EU member states to Saudi Arabia and the United Arab Emirates.

Overall, under the Juncker Commission, the Commission has obtained the removal of 88 barriers to trade and investment in third countries – which enabled European companies, between 2014 and 2016 alone, to export an additional €4.8 billion in 2017.

**Protectionist trend.** The Commission also states that in 2017, 67 new barriers were recorded in third countries, bringing the total number of existing barriers to 396 in 57 countries, and confirming the "worrying" protectionist trend identified in previous years.

China displayed the largest increase in new barriers in 2017, followed by Russia, South Africa, India and Turkey. The nine countries with the highest number of trade barriers still in place are all G20 economies. The Mediterranean region also showed a notable rise in barriers for EU companies.

21259/Press Release – 2018.06.28

## ENVIRONMENT & ENERGY

### Ministerial Conference on Climate Action (MoCA)

The EU would be in a position to be able to increase its target on greenhouse gas reduction to over 45% by 2030 as its contribution to the Paris climate agreement, Climate Action and Energy Commissioner Miguel Arias Cañete announced at the opening of the second ministerial conference on climate action (MoCA), jointly convened by the EU, Canada and China, in Brussels on 20 June.

That, he said, could be the result of the inter-institutional agreements reached on the renewable energy and energy efficiency targets and on governance rules on the energy and climate policies until 2030.

The commissioner, Canadian Environment and Climate Change Minister Catherine McKenna and Chinese Special Representative for Climate Change Xie Zhenhua called on all those taking part in the MoCA, the theme of which was *“Driving the international climate agenda for the future”*, to maintain the momentum to ensure the success of COP 24 in Katowice in December.

Cañete stressed that the Paris Agreement requires further reductions from everyone, while pointing out that the EU is responsible for only 10% of global emissions.

McKenna noted that the first MoCA, in Montreal in September 2017 had made clear that the Paris Agreement was not renegotiable. *“In Katowice we will ensure robust common guidelines that are key to ambition and financing climate action for years to come”*, she said.

Xie stated willingness to *“work hand-in-hand for a positive contribution to COP 24”*. He stressed the importance of joint, but differentiated, accountability and transparency and accountability rules in implementing the Paris Agreement. *“Our goal is a low-carbon economy and a common destiny for human beings”*, he said, highlighting the need also to address the crisis in the decline of biodiversity and marine life and to achieve the sustainable development goals.

21260/Press Release – 2018.06.20

### EU Environment Council of 25 June

#### **14 European ministers recommend 2030 objective that is more ambitious for the EU at COP24 and a 'zero emission' strategy by 2050.**

Fourteen ministers for the environment or energy (Germany, Belgium, France, Denmark, Spain, Estonia, Finland, Italy, Luxembourg, Netherlands, Portugal, United Kingdom, Slovenia and Sweden) trust that the European Union will, at the COP24 in Katowice in December, announce the EU28 has ambitions to raise the objective for 2030.



In a joint statement adopted in Luxembourg on 25 June, the ministers, meeting in “coalition for green growth” on the side lines of the Environment Council also invited the European Commission to present, in November, a long-term strategy with a scenario aimed at carbon neutrality by 2050.

They are hoping for the EU to announce a target for reducing its emissions above 40% by 2030, to contribute to compliance with the Paris Agreement on climate.

Miguel Arias Cañete, Commissioner for Climate Action, said the EU “has legislative means to raise NDCs [nationally determined contributions] to at least 45%” and will be “the only major economy” to do so, thanks to the interinstitutional agreements reached on energy efficiency and renewable energy objectives.

A carbon neutrality strategy by 2050 would go beyond the European Council’s commitments which recommend 80% to 95% reduction in emissions.

The French minister, Nicolas Hulot, called for the EU to make ratification and implementation of the Paris Agreement a condition for all trading agreements concluded by the EU.

21261/Press Release – 2018.06.25

### **Revised Renewables Directive with Binding 32% Target**

On 14 June, negotiators from the Bulgarian presidency of the Council of the EU and those of the European Parliament headed by José Blanco Lopez (S&D, Spain) reached a political agreement in trialogue on the **revised draft directive on renewable energies**, proposed in November 2016 by the Commission.

Under that agreement, the new regulatory framework is based on the **binding target of 32% of renewable energies in the EU’s primary energy mix by 2030**, including a review clause by 2023 for upward revision of the EU level target.

- A minimal share of at least 14% of fuel used must be from renewable sources for the transport sector.
- First generation biofuels from subsistence crops are capped at 2020 levels (with an additional 1% authorised) and should not exceed 7% of final consumption of road and rail transport. The share of advanced biofuels and biogas should be at least 1% in 2025 and at least 3.5% in 2030.
- Biofuels from subsistence crops such as palm oil will be gradually phased out by 2030 through a process of certification of biofuels with zero or low rates of emissions linked to the indirect change in land use, to be set in place.
- For the heating/cooling sector, the agreement provides an indicative sub-target of 1.3% growth per year of renewable use in cooling and heating installations, calculated over a 5-year period as of 2021.
- The new legislation will improve the design and stability of support schemes for renewables and will streamline and reduce administrative procedures.
- It also provides for sustainability criteria for the use of solid bio-energies.
- Another breakthrough is that the agreement provides a new right for communities, cooperatives and individuals to produce, consume, stock and sell their own renewable energy without excessive costs or administrative barriers.

On 26 June, Ambassadors from the EU member states (Coreper) ratified the political agreement concluded at the trialogue on 14 June between the Bulgarian Presidency of the Council of the EU and the European Parliament.

Once the agreement is confirmed by the Parliament, the revised directive will take effect 20 days after its publication in the EU Official Journal and member states will have 18 months in which to transpose it into their national laws.

21262/Press Release – 2018.06.14 & 26

### **Revised ‘Energy Efficiency’ Directive Agreement on 32.5% Target for 2030**

Negotiators from the Bulgarian Presidency of the Council of the EU and the European Parliament, headed by Miroslav Poche (S&D, Czech Republic), reached political agreement at the trialogue meeting on Tuesday 19 June on the draft revised energy efficiency directive, that was proposed by the Commission in November 2016.

Under the terms of the provisional agreement, the new EU regulatory framework for energy efficiency will contain an overall target of 32.5% energy savings by 2030, with an upwards revision clause by 2023 to take into account significant cost reductions resulting from economic or technological changes.

The overall target is higher than the 30% initially proposed by the European Commission and supported by the Council but falls short of Parliament’s desired 35%.

The annual requirement of 0.8% energy savings by end users has been extended for the 2021-2030 period. This measure is intended to boost renovation of buildings and the use of more efficient technologies for heating and cooling.

The agreement contains provisions that will deliver real energy savings in the next period 2021-2030 and beyond, coming from new energy efficiency renovations or other energy efficiency measures undertaken.

The revised directive strengthens the rules on the way consumers – especially those in multi-apartment buildings with collective heating systems – are informed of their energy consumption.

Member states will have to put in place transparent, publicly available national rules on the allocation of the costs of heating, cooling and hot water consumption in multi-apartment and multi-purpose buildings with collective systems for such services.

There are also provisions to tackle existing market, behavioural and regulatory barriers and address energy poverty.

The provisional agreement must now be approved by the Parliamentary energy committee and will then be put to a vote in Parliament, probably in October.

After receiving the go-ahead from the Council of Ministers of the EU, the revised directive will be published in the Official Journal of the EU and member states will have 18 months to incorporate it into national law.

21263/Press Release – 2018.06.20

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***Impatience has led negotiators to agree a loose EED, which provides mere signals only, deplores Glass for Europe***

In the last few months, the EU Commission has successfully revised the Energy Performance of Buildings Directive and made a trilogue agreement on the revision of the Renewables Energy Directive on 13 June.

On 20 June, an agreement was struck between EU institutions on the Energy Efficiency Directive (EED). Glass for Europe, the trade association of Europe's flat glass sector, is disappointed by this agreement, which seems to have been mostly guided by the will to close the file under the Bulgarian Presidency of the Council. *'Impatience has led negotiators to agree a loose EED, which provides only mere signals and pushes back all energy efficiency measures and decisions to Member States'* declared Bertrand Cazes, Secretary General of Glass for Europe.

Glass for Europe specifically regrets that the 2030 energy-efficiency target is neither set at a level closer to the 40% cost-effective potential – last night's agreement fixes the target at 32.5% - nor it is made binding. Equally, it is regrettable that the directive does not specify that the target should be expressed in both primary and final energy, while such an option would have helped quantifying the level of efforts needed in energy savings measures such as building renovation. The fact that national energy efficiency obligation schemes foreseen in article 7 are maintained is positive but it is **a drop in the ocean of missed energy-efficiency opportunities.**

The flat glass sector will continue to deliver massive energy savings to Europe by providing highly insulating glazing to new and renovated buildings, high-performance glazing to cars and vehicles and by supporting the deployment of energy-saving electronics, appliances and digital devices. Because in these sectors regulation can play a decisive role in guiding markets towards most efficient solutions, **Glass for Europe calls on national authorities to go beyond the directive in their implementing measures.**

Bertrand Cazes concluded that *'greater energy efficiency is crucially needed if Europe is to deliver on its decarbonisation commitment under the Paris agreement. I hope national authorities will realize all the unique benefits of energy-efficiency that are there to be grasped in terms of sustainable growth, jobs, decreased energy bills, lower dependence on imports and improved health and living conditions for Europeans.'*

21264/GfE Press Release – 2018.06.20

**Circular Economy: EU Council Calls for Integrated Products Policy Framework**

European environment ministers fully support the 2015 action plan to speed up the EU's transition to the circular economy and are urging the Commission to present measures contained in the action plan that respect the planned time frame and mobilise all the different actors. This is the main message of the conclusions adopted by the Environment Council on 25 June in Luxembourg on one of the outgoing Bulgarian Presidency's priorities.

Neno Dimov, the Bulgarian Minister for the Environment and Water, who chaired the session, informed the press that *“The circular economy could be one of the greatest achievements of our time because we will move to something completely new in our economic development, using waste as material to replace raw materials. It is a new way of thinking and creating a new perspective for our economy”*

In its conclusions, **the Council welcomes the EU's strategy on plastics proposed by the Commission and the related communications on the interface between legislation on chemical substances, products, waste and follow-up.** It considers that the approach retained is appropriate. This will consist of putting product life cycles at the core of all the efforts made and politics required to facilitate the transition to the circular economy. The Council emphasises, however, the need to substantiate the question on the management and consumption of plastics whose use has a negative environmental impact.

The Council considers that the market in recycled materials and products should be further developed and that only an increase in demand for secondary raw materials can guarantee the profitability of the recycling process and facilitate investment. To this end, **it is encouraging the eco-design of plastic and plastic products, which take into account reuse and recycling requirements in the conceptualisation phase.** On this basis, the Council is expecting to revise and strengthen the essential requirements applicable to the packaging market. It is calling on the Commission to provide a **framework** as soon as possible **for an integrated products policy** as announced in its action plan and **to extend the eco-design principle to all kinds of products, together with appropriate regulation for them.**

21265/ Press Release – 2018.06.25

### **Draft Legislation to Reduce Single-Use Plastic Products**

The proposal for a directive presented on 28 May by the European Commission to **reduce the use of single use plastic products in order to protect the oceans and to encourage European innovation** was applauded unanimously. This, however, does not prevent hopes of improvement expressed by environmental NGOs, industry and political groups in their response to the Parliament.

The NGO Oceana immediately welcomed the “major move to tackle the ocean litter crisis”, saying that the ban proposed for ten products (cotton buds, straws, plastic cutlery, balloon sticks, etc;) represent, with fishing gear, 70% of plastic waste found on beaches and will reduce production. “The only way to stop plastics pouring into our oceans is to turn off the flow at its source: production”, said Oceana Europe Chief Executive Lasse Gustavsson.

In a press release, the WWF “applauded” the proposal as “an essential step in the right direction”, while stressing the need, at national level, to adopt ambitious reductions targets for items for which the Commission does not explicitly propose a member state ban. The NGO considers stricter measures should have been taken for fishing gear. Measures as simple as clear labelling on such gear could have a significant impact

to reduce the amount of gear abandoned and could prevent illegal fishing, the NGO states. It considers, however, that the Commission is sending a good signal to fishing gear producers by indicating that they will have to bear the cost of collecting old nets in port reception facilities.

On behalf of the ALDE Group in Parliament, Frédérique Ries of Belgium, who is to be the rapporteur on this issue, said: “The European Commission has clearly committed itself to a very broad and ambitious policy of protecting the environment, the seas and the oceans, which I strongly welcome”. She also invited the member states to address the matter and said she will be working “with all relevant industrial sectors, NGOs, fellow MEPs and EU governments to enhance these proposals”. In a joint press release, ministers Nicolas Hulot and Brune Poirson of France said it hailed the “Commission’s ambitious proposals”.

The S&D group commented the proposal as a crucial pillar in efforts to reduce waste in the move towards the circular economy, but would like “clear objectives for reducing specific single-use plastic products”, said Kathleen Van Brempt.

Ska Keller and Martin Haüsling said on behalf of the Greens/EFA that their group reiterated its wish to look at what is contained in plastic products in order to ban hazardous chemical substances.

PlasticsEurope, the European plastics industry, supports the general aim of the directive to reduce the impact of certain plastic products on the environment. Nonetheless, it urged the Commission to “avoid shortcuts and to focus on improving waste management”, which requires appropriate structures. PlasticsEurope is also in favour of supporting innovation for “mindful” product design and public awareness raising campaigns leading to responsible consumption and an understanding that waste is a resource.

21266/Press Release – 2018.05.29

### **REACH: 10-Year Registration Period on 31 May 2018**

The 10-year registration period for existing chemicals is now complete following the last REACH registration deadline on 31 May 2018. 13 620 European companies have submitted information to ECHA in nearly 90 000 registrations for chemicals manufactured in or imported to the EU and EEA at above one tonne a year.

Today we know more about the chemicals used in Europe than ever before. This knowledge, generated by industry, is stored and published by ECHA in the world’s largest public regulatory database on chemicals and forms the basis for protecting citizens and the environment from the risks posed by chemicals. ECHA, the EU Member States and the European Commission will use the increased knowledge to take action where necessary, for example, by restricting or authorising certain uses of chemicals. 21 551 chemicals on EU market are now registered.

Over the first 10 years of the REACH Regulation, the EU has established a fair and transparent internal market for chemicals with strict safety rules. This promotes innovation towards safer substances and strengthens EU competitiveness.

It is not only Europe that benefits from the knowledge collected under REACH: the EU has become a global role model for chemicals safety. Legislators outside of Europe are inspired by REACH and benefit from the data that is publicly available.

While the 31 May 2018 deadline marks the end of the journey of closing the data gap for existing chemicals, registration is just the start. As always, science evolves, new chemicals are developed and products change. Companies need to follow these developments closely and keep the information on their chemicals up to date.

21267/Press Release ECHA/PR/18/10 – 2018.06.01

### **Towards Global Agreement in 2020 on Chemical Products and Waste**

Sweden is investing in getting together an alliance of the most ambitious countries for worldwide promotion of an agreement on the safe management of chemical products and waste. The agreement would protect human health and be part of the international initiative known as ***The Strategic Approach to International Chemicals Management (SAICM)***.

To this end, the Swedish delegation, backed by the Luxembourg delegation, presented the initiative, under “miscellaneous”, to the Council of European environment ministers in Luxembourg on 25 June. The initiative provides a political framework for promoting the safety of chemical products throughout the world.

SAICM’s aim is to place emphasis on the safety of chemical products as a key question of sustainable development in order to achieve an ambitious 2020 target. The initiative is based on multi-player and multi-sector participation and aims to gain assent from decision-makers at the highest political level.

The alliance that Sweden seeks to launch will aim to heighten awareness of the public and decision-makers at the highest level regarding the urgent need to act on chemical products and waste, at both national and international levels. Sweden pointed out that many chemical products are highly dangerous and that pollution – the first environmental cause of illness and death – was responsible for some 9 million premature deaths worldwide in 2015.

Sweden stressed that sound management of chemicals and waste is at the core of the global agenda for sustainable development by 2030 and that the process for establishing a programme beyond 2020 as part of the SAICM initiative provides an opportunity that should be seized to conclude an ambitious global agreement on chemical products and waste.

The European Commission has still not presented the long-awaited European strategy for the good management of chemical products for a non-toxic environment, in line with the objectives established in the 7th action programme for the environment (EAP).

21268/Press Release – 2018.06.27

## SOCIAL ISSUES

### Parliament & Council Validate European Rules on Posted Workers

On 29 May, the European Parliament plenary passed by a much stronger majority than expected to adopt (456 votes for, 147 votes against and 49 abstentions) the inter-institutional agreement on the posted workers directive.

Relief was expressed by the Commissioner for Employment and Social Affairs, Marianne Thyssen. In a press release, she soberly highlighted the fact that, *“Today's vote by the European Parliament marks an important step in the process of building a fairer single market”*.

The text has also been formally adopted by the member states during the Employment and Social Policy Council (EPSCO) on 21 June. The Directive can now be sent to publication in the Official Journal.

#### **Contents**

The agreement reached in March ratifies the cardinal principle introduced by the Commission to guarantee *“equal pay for equal work in the same place”*. The agreement particularly stipulates: a maximum posting period of 12 months that can be extended for six months; - application of the directive in its non-revised version (directive 96/71/EC) for international road transport whilst awaiting the *Lex Specialis*; - reimbursement of allowances (accommodation, food and transport) according to the conditions of the host member state; - directive cover of the posted workers directive for non-genuine posted workers. The directive covers non-universal collective agreements, in addition to universal agreements. The transposition period has been set at two years. The extension of the legal base to article 153 of the TFEU requested by Parliament was not retained in the framework of the inter-institutional negotiations.

21269/Press Release– 2018.05.29 & 06.21

### Unemployment Rates

The euro area seasonally-adjusted unemployment rate was **8.5%** in **April 2018**, down from 8.6% in March 2018. This is the lowest rate recorded in the euro area since December 2008. The EU-28 unemployment rate was **7.1%** in April 2018, stable compared with March 2018. This is also the lowest rate recorded in the EU28 since September 2008.

Eurostat estimates that 17.462 million people in the EU28 were unemployed in April 2018, a decrease by 53,000 in the EU28 and by 56,000 in the euro area compared with March 2018.

Czechia	2.2%	Ireland	5.9%
Malta	3.0%	Sweden	6.2%
Germany	3.4%	Belgium	6.3%
Hungary (March)	3.7%	Lithuania	6.9%
Poland	3.8%	Latvia	7.4%
Netherlands	3.9%	Portugal	7.4%
UK (Feb.)	4.1%	Slovakia	7.4%
Romania	4.6%	Finland	8.1%
Austria	4.9%	Cyprus	8.6%
Bulgaria	5.1%	Croatia	9.1%
Denmark	5.2%	France	9.2%
Slovenia	5.2%	Italy	11.2%
Luxembourg	5.3%	Spain	15.9%
Estonia (March)	5.6%	Greece (Feb.)	20.8%

#### Elsewhere

USA	3.8%	Russia	4.7%
Canada	5.8%	Brazil	12.9%
Japan	2.7%	Australia	5.4%
Switzerland	2.4%	India	3.52%
Turkey	10.1%	China	3.89%

21270/Eurostat Press Release – 2018.05.31

## GENERAL ISSUES

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### Austrian Presidency of the Council for Second Half of 2018

‘A Europe that protects’ – Priorities of the Austrian Presidency of the Council of the European Union

**The Austrian Presidency of the Council of the European Union will focus on security and the fight against illegal migration, securing prosperity and competitiveness through digitalisation, and stability in the European neighbourhood.**

The motto of the Austrian Presidency is ‘A Europe that protects’. In order to achieve this objective, Austria’s approach will be based on enhancing the principle of subsidiarity. The European Union should focus on big issues which require a joint solution and take a step back when it comes to smaller issues where member states or regions are in a better position to take decisions. This approach aims at taking seriously the motto of the European Union, ‘United in Diversity’.



To that effect, the Austrian Presidency will prioritise the protective role of the European Union, in particular concerning three priority areas:

- Security and the fight against illegal migration
- Securing prosperity and competitiveness through digitalisation
- Stability in the European neighbourhood – EU perspective of the Western Balkans/South Eastern Europe

Austria views its role during the forthcoming Council Presidency as that of a neutral broker. Given its geographic location in the heart of the EU, its obligation of neutrality and in line with its traditional role as bridge builder, Austria will endeavour to contribute to the unity within the EU during its Council Presidency.

Programme can be downloaded at:

<https://www.eu2018.at/agenda-priorities/programme.html>

21271/Press Release– 2018.06.22

## Future of the European Union

### EP 2019 - Minima Reform of EU Electoral Law



European Council

On 7 June, the Council of the EU unanimously endorsed reform of the EU's election law for the European elections of May 2019 after Italy, which now has a government, lifted its reserve.

Upon request from Germany, the draft legislation foresees the introduction at EU level of a **minimum voting threshold (between 2% and 5%) in order to be elected as a member of the European Parliament** in countries of a single constituency or which have consistencies of at least 35 seats.

The reform will also allow member states to take measures to allow their nationals registered in third countries to vote in Europe elections, a measure demanded by Hungary.

The list of candidates for European elections must be known at least three weeks ahead of the elections. Jo Leinen (S&D, Germany) said this timing was *'too short'* for leading a serious campaign.

The member states, however, can, if they wish, promote electronic voting and ask national parties to put the logo for the European party they belong to on the ballot papers.

Reform of the electoral law does not foresee the creation of a European constituency to enable voting for candidates from transnational lists.

The European Parliament now needs to put the final full stop to the reform by consenting to it.

21272/Press Release – 2018.06.08

### **Number of MEPs Reduced to 705 for 2019-2024 Legislature**

On 13 June the European Parliament approved by a very large majority (566 votes for, 94 against, 31 abstentions), the reduction of the number of MEPs from 751 to 705 during the 2019-2024 legislature, in favour of a reallocation of the seats left vacant by the United Kingdom when it leaves the European Union.

These seats will be reallocated in the following way when the 27 seats out of 73 become vacant when the United Kingdom formally leaves the EU: 5 seats each will go to France (79) and Spain (59), 3 seats each for Italy (76) and the Netherlands (29), 2 for Ireland (13) and 1 extra seat each for Poland (52), Romania (33), Sweden (21), Austria (19), Denmark (14), Finland (14), Slovakia (14), Croatia (12) and Estonia (7).

The number of MEPs for the other member states remains unchanged. The figure of 751 MEPs was stipulated in the treaties, with a reserve 46 seats that can in part or in totality be allocated to countries that subsequently join the EU.

The reform has also been formally ratified at the end of June by the European Council. The latter already approved the reform at the end of last February.

21273/Press Release – 2018.06.13

### **BREXIT Developments**

#### **1. Conditions for Post-Brexit Transition Period**

##### **Brexit talks hit crisis point**

The EU is gearing up for another Brexit crisis as talks enter the final stretch. But this time it's not just a deal on the Irish border but the withdrawal treaty itself that is in danger. Frustration in Brussels is growing. The EU side is still waiting for a worked-up proposal for the Irish backstop, the controversial annex to the withdrawal treaty that, as currently drafted, keeps Northern Ireland in the customs union and bits of the single market (for agriculture, electricity, and selected other areas).

It was reported in *The Sun* newspaper this week that Brexit secretary David Davis is preparing an alternative scenario that would see Northern Ireland apply both EU and UK regulations, and create a new border "buffer zone" for local farmers and businesses where no trade barriers would apply.

*"Proposals on paper - that's the thing everybody is expecting,"* said an EU official. *"I don't see how we can take a quantum leap for the future if we are nowhere on Ireland."*

The EU has also warned the UK that it will not get what it wants out of future cooperation on internal security, particularly a UK demand to continue accessing encrypted information from the Galileo satellite and remaining part of the European Arrest Warrant.

So far, all that is on the table is a free trade agreement, which will take years to negotiate, particularly as EU countries will be looking for strong safeguards that the UK will not use Brexit to undercut EU tax, health and safety or climate rules - the so-called "level playing field".

21274/Press Release – 2018.06.02



The UK could still be negotiating its future trade deal with the EU right up until the moment the Brexit transition period ends, Guy Verhofstadt said today, the **Brexit coordinator for the European Parliament**. For him the so-called 'political declaration' could take months longer to hammer out than claimed by Exiting the EU Secretary David Davis. He also reiterated the Brussels position that the Irish border 'backstop' proposed by May was "not acceptable" and rejected her preferred post-Brexit customs model. Verhofstadt also denounced the 'backstop' option proposed by the UK to keep the Irish border open in the event a new system for customs ties with Brussels is not finalised in time. The Prime Minister was criticised by Brussels for putting an expected end date of December 2021 on the emergency measure, which would see the UK remain in a close customs arrangement with the bloc. Verhofstadt stated: "What is on the table was not acceptable for a number of reasons. First, the backstop was not a backstop because it was only temporary. Secondly there was no regulatory alignment. It was therefore lacking the two main elements to be acceptable."

He also rejected the so-called 'customs partnership' proposal preferred by the Prime Minister for after Brexit, which would see the UK collecting tariffs on behalf of Brussels. "We are not going to outsource the EU's customs competences to the UK," he told the MPs. He further said that staying in the EU single market for goods only - a proposal apparently under consideration by Downing Street - would be "very difficult if not impossible" because goods were so wrapped up with services.

21275/Press Release – 2018.06.20

### **May avoids Commons defeat as MPs accept last-minute compromise**

Prime Minister Theresa May has survived the latest showdown with her own backbenchers after Conservative rebels accepted a last-minute compromise on the Government's flagship EU Withdrawal Bill. In a dramatic move, Brexit Secretary David Davis tabled a written ministerial statement pledging that MPs will get a meaningful vote if the UK leaves the European Union without a deal. He said the Commons Speaker would be able to rule whether any Government motion on the deal was amendable, thereby allowing MPs to potentially defeat ministers.

That was enough to satisfy chief rebel Dominic Grieve, who had tabled an amendment to the EU Withdrawal Bill seeking to give Parliament the power to block a no deal Brexit.

21276/Press Release – 2018.06.20

### **Security – Fundamental Rights and Data Protection Standards**

In a speech at the EU Agency for Fundamental Rights on June 19, EU negotiator Barnier underlined that the UK's data protection standards will need to remain in line with the EU's standards. Barnier outlined that the future internal security partnership with the UK should be based on an effective exchange of information, operational cooperation between law enforcement authorities, judicial cooperation in criminal matters and measures against money laundering and terrorist financing.

The head of GCHQ (Intelligence and Security Government Communications Headquarters) has ramped up calls for UK-EU security ties to be defended after Brexit as he revealed British intelligence thwarted four terror plots on the continent last year.

Jeremy Fleming said his organisation's ability to work with European partners "saves lives" as a row over Britain's access to major security information rumbled on. Fleming said it was important that there are mechanisms that allow both sides "to share insight and expertise". "We're leaving the EU but not Europe. And after Brexit the UK will continue to work with the EU and the EU member states," he said after a meeting with officials at NATO in Brussels. "We have excellent relationships with intelligence and security agencies right across the continent. For example, in the last year we've played a critical role in the disruption of terrorist operations in at least four European countries. Those relationships, and our ability to work together, save lives. That will continue after Brexit, for the benefit of the UK and for Europe." He also cited the need to join together in tackling online activity from the Islamic State group and criminal gangs.

21277/Press Release – 2018.06.20

### **Brexit Enters Stormy Waters**

The leaders of the EU27 came together on 29 June to discuss the progress made on Brexit. Whilst the statement welcomes the further progress made on parts of the legal text of the Withdrawal Agreement, it then goes on to lament the fact that "no substantial progress has yet been achieved on agreeing a backstop solution for Ireland/Northern Ireland", noting the commitments already made by the UK on this question.

The EU27 leaders then criticise the lack of clarity from the UK as regards its position on the future relationship and call for "realistic and workable proposals from the UK", before noting that as already stated, the UK will not be allowed to cherry pick from the single market. In terms of more positive news for the UK, the EU27 allow that should the UK change its own red lines for the future relationship, "the Union will be prepared to reconsider its offer in accordance with the principles stated in the guidelines of 29 April and 15 December 2017 as well as of 23 March 2018". It concludes by calling upon all "Member States, Union institutions and all stakeholders to step up their work on preparedness at all levels and for all outcomes".

This solid position was also stressed by the EU Chief Negotiator, Michel Barnier, as he arrived at the European Summit to update the EU27 leaders on the state of the talks. He explained that a huge and serious divergence remains, in particular on Ireland and Northern Ireland. Explaining that the EU wants an ambitious partnership, on trade as well as on security, he noted that the integrity of the single market, indivisibility of the four freedoms, autonomy of the decision making of the EU, and protection and respect of the fundamental rights of EU citizens cannot be undermined. He also called for the UK to come forward with workable and realistic proposals and explained that he is ready to invite the UK delegation to come back and present their proposals soon.

As an example among many of the Irish issue, the European Commission's Directorate-General for Mobility and Transport (DG MOVE) published a roadmap on the Realignment of the North Sea – Mediterranean Core Network Corridor (NSM Corridor), of which the UK is part, to account for Brexit. The NSM Corridor includes links between Belfast, Dublin and Cork on the island of Ireland and links in Great Britain from Glasgow and Edinburgh in the north to Folkestone and Dover in the south, continuing further south through the Netherlands, Belgium and Luxembourg, before reaching the French port of Marseille.

As of March 30 2019, the UK will no longer be a member of the NSM Corridor. Given the degree of integration between the Irish and UK economies and Ireland's location on the geographical edge of the EU, Ireland will be significantly affected by UK's withdrawal from the EU. As such, the roadmap highlights the importance of revising the alignment of the NSM Corridor to avoid cutting it into two distinct parts and that Ireland is no longer linked with the continental EU. The initiative also aims to ensure clarity and continuity regarding future priorities for infrastructure development and investments by *inter alia* creating new maritime links between the Irish core ports of Dublin and Cork and the ports on the continent.

21278/Press Release – 2018.06.29

### **Negotiations with WTO on Brexit**

On June 26, the Council of the EU authorised the European Commission to open negotiations with the WTO on how to divide up existing EU tariff quotas (TRQ) between the EU27 and the UK post-Brexit as the EU's WTO schedule will no longer apply to the UK. The authorisation follows the joint EU-UK letter of October 2017 to WTO members on their approach for portioning up existing EU tariff quotas. The TRQs relate in particular to the EU's quantitative commitments for agricultural, fish and industrial products. The EU's scheduled commitments for goods are not subject to change. In order to modify the TRQs, both the EU and the UK will separately need to negotiate with relevant WTO members on the apportionment of the TRQs. The UK will also need to launch WTO procedures to set out its own schedule of concessions and commitments before it ceases to be an EU member state. The European Commission has also proposed a legislative act to take account of a situation with relevant WTO members have not been concluded in time to allow the EU to proceed unilaterally with the apportionment of the TRQs and to amend the relevant EU provisions accordingly.

21279/Press Release – 2018.06.29

### **Inflation Rate**

Latest Eurostat figures show that the annual inflation rate was **1.9% in May 2018 in the Euro area**, up from 1.3% in April. **The EU28** annual inflation was **2.0% in May**, up from 1.5% in April.

The largest upward impacts to euro area annual inflation came from services (+ 0.72%), followed by energy (+ 0.58%), food, alcohol & tobacco (+0.50%) and non-energy industrial goods (+0.08%).

Ireland	0.7%	Luxembourg	2.1%
Greece	0.8%	Austria	2.1%
Denmark	1.0%	Germany	2.2%
Italy	1.0%	Slovenia	2.2%
Cyprus	1.0%	Belgium	2.3%
Finland	1.0%	Bulgaria	2.3%
Poland	1.2%	France	2.3%
Portugal	1.4%	Latvia	2.4%
Malta	1.7%	UK	2.4%
Croatia	1.8%	Slovakia	2.7%
Netherlands	1.9%	Lithuania	2.9%
Czech Republic	2.0%	Hungary	2.9%
Sweden	2.0%	Estonia	3.1%
Spain	2.1%	Romania	4.6%

Elsewhere

USA	2.8%	Russia	2.4%
Canada	2.2%	Brazil	2.8%
Japan	0.7%	Australia	1.9%
Switzerland	1.0%	India	4.87%
Turkey	12.2%	China	1.8%

21280/Eurostat News Release – 2018.06.15

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## GLASS NEWS

### FLAT GLASS

#### Glass Companies

##### AGC



#### 1. AGC Decorative Glass used in Extensive Refurbishment

One of Dublin's prime business locations has seen an extensive internal refurbishment of Block 5, a four-storey office building at the Irish Life Centre complex in Abbey Road, using AGC decorative glass.



The 37,000 sq.ft. open plan accommodation has been finished to an exceptionally high standard, which included the specification of AGC decorative glass wall cladding for the lift lobby fit out on each floor. A total of 200 m<sup>2</sup> of painted glass was used featuring an exciting combination of matt and glossy finishes for maximum impact. The contrast of Matelac in Silver Grey, acid etched on one side for a matt effect, blends seamlessly with the glossy look of Lacobel in Rich Yellow to create a striking colour combination that is echoed in other parts of the building.

Supplied by AGC customer Carlen Glass Merchants in Dublin, special care was taken prior to processing to calculate the geometry of the shaped pieces of glass that produce the eye-catching wall cladding design. Originally built in a number of large blocks in the 1970s and 1980s, the objective is to create an inviting environment for staff and visitors to the complex with new amenities and enhancement of public areas.

Architects for the project were Fitzgerald Kavanagh & Partners, Dublin.

21281/News Release – 2018.05.30

## **2. AGC Celebrates 120<sup>th</sup> Anniversary of Boussois Float Plant**

AGC Glass Europe celebrated the 120th anniversary of its Boussois float glass plant in northern France. The ceremony took place on Friday, 1st June. Delegates included the District Sub-Prefect Alexander Grimaud, politicians, press and glass specialists. A 180 x 40 cm float line cake was baked to mark the occasion.

The float glass plant is now the largest producer of flat glass in France, with two float lines and a total capacity of more than 1,300 tonnes per day. It consists of 230 employees and specialises in clear glass production (Planibel Clearlite) and glass with a high light transmission (Planibel Clearvision) for the construction and indoor furnishings industries.

It has also recently started to produce XXL glass sheets with an outsize length of 16 metres (compared with the industry standard of 6 metres) for prestige architectural projects.

Boussois has previously demonstrated its innovative capabilities in 2008 when it was the first in the world to introduce oxy-combustion into its process, with the combustion gas pre-heated by heat recovered from the flue gases. This system led to a reduction in energy consumption by around 25% along with significant reductions in atmospheric emissions: 15% less carbon dioxide (CO<sub>2</sub>), 38% less sulphur dioxide (SO<sub>2</sub>) and 83% less nitrogen oxides (NO<sub>x</sub>), making it one of the most ecological in the world.



Instead of being fed with ordinary air, the furnace operates with 100% pure oxygen. Since ordinary air contains only 20% oxygen and 80% nitrogen, oxy-combustion prevents burning nitrogen, which only wastes energy and does not contribute to the process.

21282/Press Release – 2018.06.05



### 3. World Cup 2018: AGC glass at over 30 Sites

The 2018 World Cup is in full swing. For host country Russia, as well as for AGC Glass Europe, this represents a great achievement: eight years of extensive preparations; 12 stadiums, of which 11 are glazed with AGC products; and various other facilities featuring AGC glass.

Any large-scale sporting event involves thousands of people and hundreds of major construction and manufacturing companies. As part of the World Cup preparations in Russia, AGC supplied glass for over 30 sites that were built or remodelled specifically for the event. AGC supplied glass for the construction of 11 stadiums that are hosting the World Cup games. All these sites have been upgraded to comply with applicable standards and sporting event regulations introduced by FIFA. At the same time, the stadiums preserved their unique local character and atmosphere and the selected AGC glazing solutions helped in doing so.

Both the opening ceremony and the final game take place at the national Luzhniki Stadium in Moscow. In total, AGC delivered 6,000 m<sup>2</sup> of glass for the exterior façade and 2000 m<sup>2</sup> for interior walls and lounges.

Over 100,000 m<sup>2</sup> of AGC glass has been produced for other sites involved in this global event, including hotels, airports and other sports facilities across the country. The glass solutions selected include solar control, energy saving, laminated and decorative glass products.

21283/Press Release – 2018.06.27

### Şişecam

1. Siseecam Group has acquired its **second flat glass plant in Italy**. Trakya Cam Sanayii completed the acquisition of **Sangalli Vetro Manfredonia plant in Monte Sant'Angelo**, Italy-based flat glass producer of Sangalli Group.



Trakya Cam Sanayii has invested EUR 15.7 million in a second facility in Italy and doubled its production capacity in the country. In a statement about the acquisition, Siseecam Group Vice President and CEO Prof. Ahmet Kirman said, "Operating in 13 countries, Siseecam Group continues to grow by creating value for its operating countries through investments and employment. With this acquisition, our Group has become one of Italy's largest flat glass producers and has strengthened its leadership in Europe."

Sangalli Vetro Manfredonia flat glass production facility, located in the southern part of Italy, has a capacity of 190 thousand tons/year, along with a laminating line with 4 million square meters/year capacity, a coating line with 4 million square meters/year capacity, and a satin coating line with 1.5 million square meters/year capacity. In 2016, Siseecam Group also acquired the Sangalli Porto Nogaro plant of Sangalli Group located in northern Italy.

Prof. Ahmet Kirman, said "In order to reach our global strategic goals, we are assessing both organic and inorganic growth opportunities. We are continuously working to assess all potential opportunities, including acquisitions, joint ventures and other collaboration opportunities, in line with our investment policy based on sustainable growth and high performance. The acquisition of the Sangalli Vetro Manfredonia plant in Italy is also a result of our long-term and value-creating sustainable growth approach and our work in this scope."

With the acquisition of Sangalli Porto Nogaro in 2016, Siseecam Group also started flat glass production in Italy. That acquisition has created synergy with their flat glass operations in Bulgaria and made a significant contribution to their competition capacity in Europe. Both with its geographical location and its production capacity of 190 thousand tons/year, the Sangalli Vetro Manfredonia plant will provide strategic advantage in terms of flat glass manufacturing activities in Europe.

"Sangalli Vetro Manfredonia plant has also both laminating and coating lines. Our competence and capacity in flat glass operation in Italy will continue to increase with the acquisition of the Manfredonia plant. We aim to expand our product range further by the help of those production lines, and we aim to be the largest manufacturer of architectural glass in Italy. With the completion of the acquisition of the Sangalli Vetro Manfredonia plant, we have doubled our flat glass production capacity in Italy. Thus, we have further strengthened our flat glass leadership in Europe" Kirman stated.

21284/Press Release – 2018.06.20

## **2. Şişecam acquires remaining half of Indian glassmaker**

Siseecam Group has acquired a 49.8% of its Indian subsidiary HNG Float Glass Limited (HNGFL). The Indian group had owned the remaining half of HNGFL and has been a partner with the company since 2013. Siseecam now owns 99.99% of the Indian company.

21285/Press Release – 2018.06.25

## **Guardian**

The global flat glass manufacturer based in Michigan, United States, has invested more than €50 million in the last five years to equip all of its float facilities with the best available technology and mission control systems.



Kevin Baird, President and CEO of Guardian Glass (pictured) said: “There has been very



strong demand in the last several years, which is still increasing, for low iron glass. The difference between UltraClear low-iron glass and glass with more or an ordinary amount of iron is pretty remarkable when they are side by side, this demand being mostly for interiors, for textured and patterned glass.”

2018 will be the biggest investment year in Guardian history, mostly in R&D.

Some of the investments include

- a new jumbo-coater that will launch in the US in a couple of months
- cold tank repairs throughout the world (Brazil, Poland, US)
- new research centre opened in 2017 in Luxembourg

The investment in Poland includes a thousand-tonne tank for 16 million m<sup>2</sup>. The plant will start up in the third quarter of 2019 and will create around 50 new jobs.

Guardian Glass believes that over the next five years glass will continue to grow by 4% a year.

21286/Press Release – 2018.06.05



### Pilkington

Pilkington products help building win A rate energy certification. Advanced glass coating helps deliver BREEAM Excellent for all-glazed Glasgow HQ building.

The newly completed 122 Waterloo Street development in the centre of Glasgow offers its occupants floor-to-ceiling glazing throughout, with almost uninterrupted views thanks to the latest Schüco curtain-walling system designed, manufactured and installed by Edinburgh-based façade specialist Charles Henshaw & Sons Ltd. But, impressively, the landmark building – which will be the Glasgow headquarters of global financial services firm Morgan Stanley – will also be one of the most energy efficient buildings in Scotland, thanks in part to high-performance glass coatings from Pilkington United Kingdom Limited.

The scheme has been certified BREEAM Excellent and achieved an ‘A’ rated Energy Performance Certificate (EPC), the latter based on a detailed assessment of the building’s energy performance. The glazing helps to minimise this by reducing energy emitted from the building, as well as the heating effect of the sun, both of which can make maintaining a comfortable interior climate more energy-intensive.



### ***A glass for all seasons***

The scale of the building and the large area of glass used means that excessive radiation of heat from the building could lead to rapid heat loss during colder conditions, requiring an increase in heating to keep the interior warm. To mitigate this effect, the glazing features a Pilkington Optitherm™ S1 Plus low-emissivity coating which reflects radiated heat back into the building.

The second issue that can affect buildings where most of the envelope is glazed is excessive heat build-up when the sun is shining directly into the interior. This can present a challenge for building managers, often requiring high levels of energy-intensive air conditioning.

To combat this, a solar-control coating has been used, reducing the amount of heat energy that is able to enter the building while maintaining high levels of transparency. Michael Metcalfe, commercial sales manager at Pilkington UK, said, “The Pilkington Suncool™ 70/35 T coating selected by the design team offers high visible light transmittance, reduced solar transmittance and excellent low-emissivity all in one product. “This means the floor space will be brightly lit by sunlight but won’t suffer from overheating on warmer days.”

### ***Clear views***

The coatings are not the only innovative part of the glazing used in the project, as the glass is held in place by the latest structurally bonded curtain wall system from manufacturer Schüco. Each unit contains a large pane of clear glass and a smaller pane of opaque, coloured spandrel glass, creating horizontal lines across the façade between each floor of the building.

Michael Metcalfe continued, “The metal carrier frames in which the glass sits are extremely low profile, so the edges of the panes of glass are very close to one another. This removes the mullions normally associated with unit-based glazing systems, creating a flush glass surface with almost uninterrupted views.”

The clarity of the glazing was further improved by the use of Pilkington Optiwhite™ true low-iron glazing throughout, which significantly reduces the slight green tint that is inherent in standard float glass.

On the ground floor, Pilkington Optilam™ laminated glazing was used to provide protection against manual attack and increase the security of the building.

21287/Press Release – 2018.06.08

### Lahti Glass Technology Oy



A new name has entered the glass sector thanks to the acquisition of Lahti Precision's glass unit by Zippe Industrieanlagen, which will create new opportunities in the development of new technologies.



Zippe Industrieanlagen has announced that it has acquired Lahti Precision's glass unit, which will continue operations under the new company name Lahti Glass Technology, with Jarmo Näppi as the new Managing Director. Mr. Näppi remains the contact person for customers, along with his team of professionals.

Zippe CEO, Dr. Philipp Zippe, said: "We are extremely happy about this acquisition, as it will create new opportunities in the development of new technologies, combined with the ability to serve our customers even better through increased service capabilities and an expanded geography for our national and international clients. Lahti will bring in further competencies e.g. in the field of raw material weighing, while we will also collaborate in the field of Research & Development in order to create outstanding technological solutions for which the potential has now become mutually bigger."

Lahti Glass Technology will continue to serve its existent customers in the same way while now having the additional back-up of Zippe's specialists from its headquarters in Wertheim, Germany. "The enlarged engineering workforce and experience will perfectly complement and strengthen Zippe's own portfolio of highly-qualified specialists from which all customers will benefit at the end."

21288/Press Release – 2018.05.31

### Gujarat Borosil

Solar glass manufacturer, Gujarat Borosil, plans to invest around INR 4.35 billion plans to more than double its manufacturing capacity of tempered solar glass from 180 tonnes per day to 400 tonnes by 2020. Currently, it meets 30% of India's demand for solar glass. With the expansion, it aims to become the market leader by catering to about 60-70%. The company manufactures 2 mm tempered solar glass at its Bharuch facility, which has a capacity of 180 tonnes per day. With the investment, it plans to increase this capacity to up to 400 tonnes per day by 2020. Tempered solar glass is used on existing glass modules to improve efficiency.

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“In India, the demand for solar glass is about 375-380 tonnes a day, of which we contribute about 105 tonnes a day. Thus we meet 30% of the Indian demand. With the expansion, we will be able to cater about 60-70% of the demand,” Pradeep Kheruka, vice chairman at Borosil Glass Works said.

Claimed to be the world’s first 2mm tempered solar glass facility, the Bharuch facility was opened in October last year. The 2mm solar glass is said to be not only lighter than the world standard of 3.2mm, but also absorbs less solar energy while allowing higher irradiance to reach the solar cell, which helps in harnessing solar energy more efficiently.

Gujarat Borosil’s key domestic customers for solar glass include Waaree, Emmvee, Tata Power Solar, PV Power Tech, MicroSun, TopSun, BHEL, Lanco, Vikram Solar, Goldi Green and HHV. Other than these, it also has international customer base.

The company expects strong growth prospects in solar glass with the Indian government’s strong impetus to solar power and encouraging policy initiatives.

21289/Press Release – 2018.06.22

### Carlex Glass America



Carlex Glass America LLC has exclusively licensed optically clear, superhydrophobic coating technology from the Department of Energy's Oak Ridge National Laboratory (ORNL) aimed initially at advancing glass products for the automotive sector.

A highly durable, thin coating technology is to help improve driver visibility and safety, especially during inclement weather.



ORNL'S Tolga Aytug

ORNL's development of a water-repellent, transparent coating that carries away dust and dirt, reduces light reflection and resists fingerprints and smudges resulted from more than three years of research on superhydrophobic glass-based coatings.

Nashville, Tenn.-based Carlex manufactures automotive glass products including windshields, sideglass and rear glass components for top tier automakers, original equipment manufacturers and aftermarket industries.

To be superhydrophobic, a surface must achieve a water droplet contact angle exceeding 150 degrees. ORNL's coating enables a contact angle ranging between 155 and 165 degrees, so water literally bounces off, taking away dust particles.

The ORNL research team developed the superhydrophobic technology by depositing a thin glass film on a glass surface and heating the coated glass to transform the surface into two material compositions. A selective etching process produces a porous three-dimensional network of high-silica content glass that resembles microscopic coral and enables water-repellent and antireflective properties.

"The thin nanostructured layer of porous glass film enables these combined properties, making it suitable for commercial applications, particularly for automotive glass," said ORNL's Tolga Aytug, coinventor of the technology.

Aytug led the technology's development and collaborated with Jeff Cornett, ORNL's industrial and economic development manager, and Eugene Cochran, ORNL senior commercialization manager on the licensing agreement with Carlex.

Other superhydrophobic technology coinventors were David Christen and John Simpson. The technology was recognized with a Federal Laboratory Consortium for Technology Transfer Award in 2017 and an R&D 100 Award in 2015. The research was originally supported by ORNL's Technology Innovation Program, and the work with Carlex was recently funded by ORNL's technology transfer royalty funds.

21290/Press Release – 2018.06.18

### **AGP Group / Soliver NV**

AGP, a high-tech speciality glass designer and manufacturer, has announced the acquisition of Soliver NV, a European automotive glazing manufacturer with over 65 years of solid product and brand reputation. Located in Belgium, Soliver offers high-quality tempered and laminated glazing for high-end automobiles, as well as windshield solutions for trucks.

Through its acquisition of Soliver NV, AGP will pave the way to expand its eGlass value proposition into Europe, leveraging Soliver's European heritage and long-term customer relationships in the region. This move also represents a key step towards becoming the premier global leader in designing and manufacturing high-tech automotive glazing.



AGP's glazing heritage started in Berlin, with the Mannheim family's first glass company. After 100 years and a clear vision to become a leader in speciality glass, AGP's core eGlass technologies have responded to the rising demand in electrification, connectivity, shared mobility and autonomous driving, acting as an enabler of future mobility trends. The integration of Soliver into the AGP Group will strengthen the AGP eGlass value proposition and will be a game changer in a fast-evolving industry.

"We are very excited to build upon Soliver's great experience and track-record to take high-tech glazing to the next level, enabling our customer's product development with

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innovation, agility and flexibility. We believe both companies' customers will immediately benefit from our new investments aligned with mobility trends," said Arturo Mannheim, CEO of AGP Group.

As part of the Group's expansion plan and following a minority investment by Goldman Sachs Private Capital Investing, AGP is also launching a Tech & Innovation Centre in the district of Aachen, Germany in 2018. With both the Belgium plant and German Tech Centre only a few hours away from major customers in the region, AGP will consolidate its footprint in Europe.

"I am extremely proud of Soliver's 65+ years of successful customer programs and the solid relationships we have been able to nurture in the European markets, with a strong focus on product quality and reliability. AGP's vision and commitment to the future of mobility drove our interest to share with them our solid heritage in automotive glazing. Our customers, partners and employees will greatly benefit from this integration," said Stefaan Bouckaert, former Soliver CEO who will remain as Managing Director of the Belgium plant.

AGP is a high-tech speciality glass designer and manufacturer with a large portfolio of products for the automotive, security, naval, transportation and defence markets worldwide. AGP serves approximately 650 customers globally, with local service offerings in more than 20 countries supported by 1,800 employees.

Soliver is a European automotive glazing manufacturer with over 65 years of experience and 300 employees. Soliver offers high-quality tempered and laminated glazing for high-end automobiles, as well as windshield solutions for trucks and has long-term relationships with many premier OEMs such as Audi, BMW, Daimler, Porsche, Renault and Volvo Trucks, among others.

21291/Press Release – 2018.06.19

### **Nigeria New Float Glass Plant**

A float glass plant sponsored by China Glass Holdings Ltd. (CGHL) in Nigeria has gained guarantees amounting to USD 71.9m from MIGA, a member of the World Bank Group. It will support the construction, operation and maintenance of a float glass plant in Nigeria.

The guarantees cover a loan by China Development Bank, and an equity investment and non-shareholder loan by CNG (Nigeria) Investment Ltd., respectively. MIGA is providing guarantees for up to 10 years against Transfer Restriction, Expropriation, and War and Civil Disturbance. The guarantees cover 90% (USD 38.7m) cover on equity, and 95% (USD 32.2m) on debt.

"This project helps Nigeria diversify away from the oil and gas sector," said Keiko Honda, CEO and Executive Vice President of MIGA. "It will also help integrate domestic and regional markets, and stimulate entrepreneurship, consequently contributing to growth and job creation."



When completed, the plant will have a capacity of 500 tons per day, producing tinted glass and solar control coated glass. The factory will contribute to the development of the local glass supply chain, sourcing 80% of its raw materials domestically, and further supporting the development of the local network of glass distributors and traders downstream.

The project sponsor, China Glass Holdings Ltd. (CGHL), will transfer proprietary energy efficient technology from China to Nigeria, and provide technical training to local staff. CGHL is a leading flat glass producer worldwide, and the largest coated glass producer in the People's Republic of China.

Some 80% of production is expected to be sold locally to meet rapidly rising domestic demand, while the balance will be exported to other countries in West Africa. Nigeria's infrastructure development has led to high demand for float glass, however, most supply at present is through imports, and is insufficient to meet domestic needs.

"MIGA's political risk insurance cover is a critical component of our overall risk management framework within Nigeria," said Cui Xiangdong, CEO of China Glass Holdings Ltd.

21292/Press Release – 2018.06.01

## Miscellaneous

### Glass Bead RR Materials Applied to Building Facades

In a new study published by Science Direct, several glass bead retro-reflective (RR) materials with different refractive indices and different colour reflective layers were developed. The long-term change in solar reflectivity and angular distribution of reflection intensity for these glass bead RR materials was evaluated for purpose of durability verification.



Glass bead RR materials applied to building facades

According to the study reports, heat from buildings contributes about half of the city's anthropogenic heat to the urban heat island (UHI). The ratio of heat emitted from building external walls occupies about one third of the anthropogenic waste heat total in Japan. Retro-reflective (RR) materials applied to building facades instead of highly reflective (HR) materials for UHI mitigation are being studied.

The result showed that both the solar reflectivity and angular distribution of reflection intensity for these developed glass bead RR materials almost have no significant change after 368 days of exposure in the outdoor environment. Additionally, the study found that the glass bead RR material with a refractive index of 1.9 has much better RR performance, compared to that with a refractive index of 1.5.

The study can be found online at:

<https://www.sciencedirect.com/science/article/pii/S0300944017307312>.

21293/Press Release – 2018.06.08

### **Trosifol™**

Trosifol™ has announced the launch of a global design competition for projects and structures that incorporate laminated glass. Winners of the competition will be recognized at glasstec 2018 in October.



The World of Innovative Glass Laminating Solutions Design Competition will run from 11 June to 7 September.

Kuraray's Trosifol™ business announces the launch of a global design competition for projects and structures that incorporate laminated glass. The World of Innovative Glass Laminating Solutions Design Competition will run from 11 June to 7 September.

Architects, engineers, façade consultants and fabricators are invited to submit projects for consideration. An international jury of experts will select winners in Trosifol® PVB and SentryGlas® categories. The winners will be recognized at glasstec 2018 International Trade Fair in October.

For more information on entering the competition, visit <https://innovationaward.trosifol.com>

21294/Press Release – 2018.06.19

### **Bystronic Glass: the World's Biggest IG Production Line**

Bystronic glass is addressing the future of insulating glass technology in an innovative way that is also opening up completely new opportunities in the field of façade design. The B'JUMBO XXL is able to produce insulating glass or façade glass in new dimensions: With maximum dimensions of 3.30 metres in height and 18 metres in length and a maximum processable glass weight of up to 10 tonnes, the B'JUMBO XXL is the ideal solution for the current trend and demand for ever-larger architectural glass.



Because we care

Equipped with an edge deletion robot, a glass plate washing machine, a turning station, six inspection and frame positioning stations, five assembly, gas-filling and press robots, a sealing robot and numerous conveyor belts, the B'JUMBO XXL is an imposing complete line.

Obviously, the B'JUMBO XXL can also be used to produce up to 4-sided stepped double or triple insulating glass units. In doing so, the maximum frame setback on the 4th step is 250mm, measures up to 1,000mm on the 1st step on the front edge of the glass and there are no dimension limits whatsoever on the 2nd and 3rd step.

"However, sustainability is also extremely important to us," explains Stephan Kammerer, Product Engineering Manager responsible for the design and construction of this machine. "Despite all over-dimensions, extreme importance was attached to energy efficiency and sustainable production during the design of the line."

"Green Production" consists of comprehensive and optimised energy efficiency and energy recovery mechanisms: For instance, kinetic energy generated during braking processes is transformed into electrical energy. This recovered energy is fed back into the system and is distributed to the axles that currently require energy via a motor-management module. In this way, production on the B'JUMBO XXL enables a resource-efficient and sustainable production of the insulating glass or facade units.

21295/Press Release – 2018.06.28

## CONTAINER GLASS

### Glass Companies

#### O-I



#### **Nadir Resign from Merging with O-I Unit in Brazil**

Nadir Figueiredo's proposed acquisition of O-I's hollow glass unit in Brazil has been discouraged by the authorities. The companies Nadir Figueiredo and Owens-Illinois (O-I) have given up merging.

Owner of brands such as Marinex and Duralex, Nadir Figueiredo is a leader in the domestic glassware market. The company announced the purchase of O-I in May 2017. By January, Cade's superintendence had already recommended a rebate. The Brazilian superintendency argued that the domestic market for domestic glass utilities has already reached a high level of concentration, even before this operation, which would further worsen this scenario. Unable to reach an agreement with the board, the two companies preferred to give up the operation.

21296/Press Release – 2018.06.19



### Ardagh

Ardagh Earns ENERGY STAR® Certification. The Group was awarded three ENERGY STAR® plant certifications for superior energy performance from the Environmental Protection Agency (EPA) – the only U.S. glass container manufacturer to earn this recognition.

The three Ardagh Group manufacturing facilities, located in Bridgeton, N.J.; Dunkirk, Ind.; and Madera, Calif.; have demonstrated best-in-class energy performance and perform within the top 25 percent nationwide for energy efficiency when compared to similar plants across the country. This is the fourth consecutive year for Bridgeton, the fifth consecutive year for Madera, and the sixth consecutive year for Dunkirk to be awarded ENERGY STAR plant certifications, reflecting a legacy of continued energy savings.

“Ardagh Group is honoured to remain the only U.S. glass container manufacturer to earn the ENERGY STAR plant certifications,” said Bertrand Paulet, President & CEO of Ardagh Group, Glass – North America. “With this achievement, we have demonstrated our commitment to environmental stewardship by optimizing our manufacturing operations while also lowering our energy consumption.” Since 2010, nine Ardagh Group, Glass – North America facilities have received 33 ENERGY STAR plant certifications.

Meeting strict energy efficiency performance levels set by the EPA, Ardagh Group’s three recognized glass facilities have improved energy performance by upgrading and optimizing furnaces, utilizing recycled glass, installing energy-efficient lighting fixtures and repairing air compressor leaks.

21297/Press Release – 2018.06.08

### Verallia Group

#### **1. Verallia Two Spanish Designs Recognized**

Two bottles manufactured by Verallia have been recognized for their design in the recent Inspirational Packaging Awards.



MG gin and Zoco Patxaran won awards at the latest edition of the Inspirational Packaging Awards (IPA) for the design of their bottles, both manufactured by Verallia in Spain.

MG wanted to give its high-end gin a totally new image. Engravings have been added to the body of this sober and stocky-shaped bottle. The result is a retro look which underlines the product's authenticity.

Zoco wild sloe liqueur has redefined its image with a more streamlined bottle. Its shoulders are pronounced, textured side engravings have been added and its founding date - 1956 – engraved on the lower body.

21298/Press Release – 2018.06.04

## **2. Verallia invests 28 million EUR to modernize Vauxrot plant**

Surrounded by several customers, Michel Giannuzzi, Verallia group chairman and CEO, celebrated the restart of the Vauxrot plant's furnace and the construction of a fourth line. 28 million EUR has been invested to modernize the production equipment and increase the capacity of the site.



With this investment, Verallia continues to roll-out its operating excellence strategy and support a dynamic French and European market. The plant's furnace has been totally rebuilt and extended to supply a fourth production line. The site can now make up to 700,000 bottles a day for the wines and spirits market, and for the beer segment, supporting in particular the boom in micro-breweries. With Saint-Romain-le-Puy (Loire), Vauxrot is one of just two group plants in France to produce yellow and dark amber bottles.

Equipped with the best available "end-port regenerative" technology, the new furnace meets the most stringent energy consumption and air emission norms and standards. It can now run on gas, contrary to the previous 100 percent fuel installation. An exemplary contributor to the circular economy, Vauxrot recycles significant quantities of cullet processed by Verallia's subsidiary, Everglass, in Rozet-Saint-Albin, around thirty kilometres from the site.

21299/Press Release – 2018.06.06

### 3. Verallia's Cognac plant celebrates 55th anniversary

On 9 June, Verallia's Cognac facility celebrated its 55th anniversary with an open day for the families of the site's 500 employees and subcontractors.



The day, organized with the active participation of all the site's teams, gathered over 300 visitors.

"Our ambition is to be a benchmark glass plant and we have all the trump cards in our hands to get there: the love of the glassmaking profession, the attachment to our plant, solidarity, strong human relations and a positioning at the hearts of our markets. I would like to thank all the plant's teams for their involvement and our customers whose trust is binding on all of us" commented Christian Garnaud, the plant manager, during the event.

In 1878, Claude Boucher, a 36-year old inventor and self-made man, originally from Cognac, founded the Faubourg Saint-Martin glass plant in Cognac. He installed his invention there: a mechanized glass-blowing machine. His idea in fact was to put an end to the harsh working conditions of the operators who were blowing down rods with their mouths to produce bottles. Many French and foreign firms bought the patent to make Claude Boucher's machine (Great-Britain, Spain, Portugal, Hungary, Chile, Cuba, Argentina, etc.). In the 1930s, the Boucher machine was replaced by the more competitive IS machine (named after its inventors Ingle and Smith).

In 1919, the Claude Boucher glass factory was acquired by Saint-Gobain. In 1960, the business decided to combine three of the group's glass plants - Arlac (33), Angers (49) and Cognac (16) – on a single site at Châteaubernard, close to Cognac. The Verrerie de l'Ouest started in 1963.

In 2015, Saint-Gobain sold its packaging division – called Verallia since 2011 – to Apollo et Bpifrance. Today, with its three furnaces which produce up to two million bottles a day, the Cognac site mainly serves three markets:

- Still wines: green colour, South-West regions (Bordelais, Anjou, etc.),
- Some sparkling wines: ciders in particular,
- Cognacs and spirits: extra-flint colour, required by most Cognac houses, regardless of their size and their positioning.

Verallia, a manufacturing group entirely dedicated to glass packaging, is solidly anchored in Charente where it employs around 430 people on four manufacturing sites (glass plant, household glass treatment facility Everglass, René Salomon facilities, Société Charentaise de Décor acquired in April 2017).

21300/Press Release – 2018.06.12

**4. Verallia to invest €80 million in Italian site**

Verallia is to invest €80 million into its Villa Poma site in Italy. The works will include the renovation of its current furnace and the construction of a new one. Marco Ravasi, the Managing Director of Verallia Italia, said: "Italian food and beverage companies continue to grow, thanks to the export of Made in Italy excellences.

"The most advanced technologies of the glass industry, which will be installed on the site of Villa Poma, will allow us to produce an ever-increasing number of containers, with the highest quality standards in the sector."

The decision to invest in Villa Poma (Mantova) comes a few years after the construction of the Forno 73 in Gazzo Veronese (Verona), confirming the centrality of Italy in the global strategy of the Verallia Group. The company has invested €250 million in Italy in the past five years.

The start of works is expected by 2018 and the furnace, which once fully employed will directly employ about 50 new employees, will start operating in the second half of 2019.

21301/Press Release – 2018.06.19

**Vidrala Logistics**

Vidrala Logistics is the new brand created by Vidrala that provides priority service to Vidrala’s customers, thus further improving the quality of the service it provides.



With the creation in 2016 of the Vidrala Logistics brand, the Vidrala group ratified its commitment to optimize the logistics service to clients.

The benefits of this effort have become evident through the supply and satisfaction quality feedback received from customers. Only during the last year, the transport fleet of Vidrala Logistics, giving priority service to Vidrala’s customers, made more than 4,700 deliveries, with an occupancy rate of 98% and having travelled enough kilometres to go around the world 83 times.

As a sign of a non-negotiable strategic approach towards clients and supported by the satisfaction with the results accomplished, Vidrala will redouble its efforts in Vidrala Logistics as of this year 2018.

An expansion plan is launched to increase the fleet by 50%. The vehicles will be renewed with a special focus on sustainability, by incorporating trucks certified by the latest EURO6 standards, which foresee a significant reduction in polluting emissions.

Vidrala is involved in making investments to further improve the quality of the service it provides.

21302/Press Release – 2018.06.21

**Encirc**



Encirc has opened its £40 million furnace at its glassmaking site in Elton, UK. The 206m<sup>2</sup> sized furnace will increase the container glassmaker's capacity by 100 tonnes a day and was opened by UK secretary of state for business, Greg Clark.

Encirc Managing Director, Adrian Curry, said: "At a time when some are uncertain about the outlook of UK manufacturing, the investment in our new furnace represents a very strong commitment to our future by our Spanish-based parent company.

"We pride ourselves on using the latest technology which not only minimises our impact on the environment, but also helps increase efficiency in our supply chain.

"This new furnace will significantly increase our capacity to manufacture sustainable packaging, while our new railhead is reducing our road transport needs by one million kilometres per year, helping us cut annual carbon emissions by 245,000 kg."



Encirc said the container furnace was the largest in the world and built in record time. The company is celebrating its 20th year of operation and was acquired by Spanish-based glass company, Vidrala, in 2015.

It has two facilities in the UK: the other is in Derrylin, Northern Ireland. It produces around a third of all glass containers in Britain.

The company said it uses up to 90% recycled cullet in the manufacturing process. The business employs more than 1,200 people.

Glass Futures, a non-for-profit organisation, which supports excellence, innovation and training in the glass industry facilitated the visit to Encirc's plant.

Richard Katz, Director of Glass Futures, said: "We were really pleased by the Secretary of State's visit and we're sure he was impressed by Encirc's investment which demonstrates the positive future for the glass industry in the UK.

"By bringing the best research and industry brains together, Glass Futures, with Government support, will substantially contribute to achieving the UK's environmental targets."



### **Beatson Clark**

Welcome to the Dark side! The company has unveiled new decorative options for brewers.



Glass manufacturer Beatson Clark has introduced a new decoration service for brewers looking for an innovative and creative way to make their bottles stand out on the shelf. Glass beer bottles made by the long-established South Yorkshire company can now be spray coated black to give them an unusual and luxurious appeal.

Beatson Clark showcased the black beer bottles at BeerX in Liverpool and they were extremely popular among delegates attending from the brewing industry. Black spray coating is perfect for the crowded craft beer market, where the choice for consumers is so varied that breweries are constantly looking for new packaging ideas that will catch the eye. The water-based spray coating is cured at around 195 Celsius, which produces a very durable finish resistant to scratches and scuffs.

Beatson Clark offers the spray coating decoration from only 50,000 units from its extensive range of stock beer bottles. Decorating beer bottles using this process can be much more cost-effective than creating an entirely new bottle made from black glass.

Not only are they good to look at, but Charlotte Taylor, Marketing Manager at Beatson Clark, explains that the black spray coated glass is also excellent at protecting the beer inside the bottle. "Our amber glass already protects the product inside from a minimum of 90 percent of UV rays on average, but the additional black coating would enhance this protection by up to 100 percent."

21304/Press Release – 2018.06.11

### **Bastürk Cam**



Turkish container glassmaker Bastürk Cam is using Heye International's manufacturing expertise to meet its customers' high-quality demands.

Bastürk Cam container glassmaker is located at the heart of the Malatya agricultural region of Eastern Anatolia. It was established to meet growing local glass packaging demand.

The first phase of the recently commissioned glassworks features a 300 tonnes/day glass melting furnace, serving three Heye International 12-section SpeedLine IS machines.

The machines have been designed for 6 1/4in double gob operations and 4 1/4in triple gob operations installation, with short conversion times. Even a single gob production has been realised. All three lines have been set up to make flint bottles and food jars.



At the cold end, Heye International has co-operated with Iris Inspection machines to deliver a combination of Heye SmartLine and Iris Evolution 12 and Evolution 5 quality control equipment solutions.

The Bastürk glassworks brings valuable jobs to the town of Malatya, the 300 new recruits have been trained by Heye experts locally and in Germany.

“We have combined the best engineering and manufacturing features to meet our customers’ highest quality needs,” Bastürk Cam confirms.

“Focusing on harmonising with international standards and continuous improvement in all of our activities, the glassworks project aims to capture the success achieved by the Bastürkler Sirketler Group elsewhere around the world.”

21305/Press Release – 2018.06.27

### Stölzle



Stölzle Glass Group has introduced smart software solutions for its Austrian and Czech Republic production facilities.

The digitalisation project took one year to complete and allows users to access all relevant production parameters or machinery calibration data in real time through various mobile devices.

The company said it means employees and engineers no longer have to get the data from a desktop PC and save time. Also, production and efficiency analysis material can be generated effortlessly in order to identify potentials for improvement.

The software was installed at its Stölzle-Oberglas in Köflach, Austria and its Stölzle-Union site in the Czech Republic.

Stölzle-Oberglas manufactures 3.25 billion units of glass a year for the pharmaceutical, perfumery and cosmetics, spirits and tableware sectors.

21306/Press Release – 2018.06.26

### Steklarna Hrastnik



Slovenian packaging glass manufacturer Steklarna Hrastnik is to make investments of €12.7 million in 2018. The company has completed the first of these investments of €4.2 million to increase its production by 20%.

It bought a new IS machine with a higher capacity for its Special production unit and moved an existing IS machines from its Special to its Vitrum unit.

The investment had not only increased its capacities but also improved the working conditions. It had strengthened its position as a manufacturer of special glass packaging in the super premium quality segment.

Since the start of the year, it had seen an increase in demand for products with special shapes in the spirits and perfumes segment.

"Our capacities are sold out until the end of October this year. With this €4.2 million investment, we have increased our production capacities by over 20%, which will enable us to keep up with the global market demands in our niche segment of super premium quality products," said Peter Čas, General Director of Steklarna Hrastnik.

"The company's remaining investments will be aimed at further automating, robotising and digitising production. This will improve our competitive position and contribute significantly to better working conditions for our employees."

The company noticed the potential of the special glass packaging segment last year. To make the most of it, they transformed a lighting glass unit into a packaging glass unit (Special).

This gave them room to expand the packaging glass unit and bring in the employees from the discontinued programme. The Special unit was upgraded with an up-to-date machine with a higher capacity.

The investment work also included space for an extra packaging glass line in the Vitrum unit (tableware), making it possible to bring in the six-section IS machine from the Special unit. Today, the Vitrum unit processes up to 80 and the Special unit 160 tons of glass respectively.

21307/Press Release – 2018.06.19

### Waltersperger

French semi-automatic glassmaker Waltersperger has been taken over. The Blangy-sur-Bresle glassmaker has changed ownership and is in the hands of Stéphanie and Adrien **Tourres** who own 100% of the business.

The takeover offer was validated by the Commercial Court of Dieppe, which had placed the company in judicial liquidation at the end of December 2017.

The Tourres name is well known in glassmaking. The Tourres family founded glassmaker Tourres & Cie Verreries de Graille, in Le Havre, France before selling it to the Saverglass group.



The new president of Verreries & Cristalleries Waltersperger is Stéphanie Tourres, who said the company will continue to serve the major perfume houses and develop in the spirits market because demand is high in these two sectors.

The 100-year-old company, which generated €2.5 million in sales in 2017 with 30 employees, specialises in small-batch production of a few hundred pieces and complex, off-the-shelf bottles for perfumery and cosmetics, and spirits.

21308/Press Release – 2018.06.26

## Miscellaneous



### Friends of Glass partners with Surfrider Foundation Europe for cleaner and healthier oceans

An additional 300,000m<sup>2</sup> of beach will be preserved in 2018 thanks to a partnership between Friends of Glass partners with Surfrider Foundation Europe supporting activities to protect the ocean for future generations.



According to a recent Europe-wide survey carried out with the Friends of Glass community, 78% of Europeans have noticed a change in their own behaviour and pay more attention on the environmental impact of their daily life and actions.

This is having an impact on how European consumers are choosing to shop. The survey reveals that 73% of Europeans rate glass as the most ocean-friendly packaging, and 78% rank it amongst top packaging choices when buying their food and beverage products. Because of its infinite recycling potential, glass is regarded as one of the most sustainable and eco-friendly forms of packaging on the shelves. Crucially, glass is made from recycled glass, sand, soda ash and limestone, all raw materials which are found in nature. Even if a glass container were to end up in the ocean, it does not leach harmful chemicals or end up as micro particles that may pollute the ocean and harm our marine systems.

“With almost 6,300 responses to our Consumer Barometer in the space of just four weeks, it’s clear that this is an issue close to people’s hearts,” commented Adeline Farrelly – Secretary General of FEVE, the European Container Glass Federation – on behalf of the Friends of Glass Community.

“Whether it’s fond memories of childhood holidays at the beach or summertime strolls along the coastline, we all love the ocean. We’re very proud to be donating to Surfrider Foundation Europe, and thrilled that our partnership can play a part in these efforts to protect our seas.”

“People are realising that our oceans are in a bad state: we simply aren’t giving enough consideration to the packaging we’re buying, and 8 million tonnes of waste ends up in the sea each year. It’s not too late to do something about it,” said Florent Marcoux, Surfrider Foundation’s Executive Director. “We’re looking forward to working with Friends of Glass, and to scaling up our efforts to keep pollution out of the water, ensuring that our oceans will be healthy for many years to come.”

The donation will see an extra 6,000 kilograms of marine litter collected on Europe’s shorelines in the coming months, resulting in the preservation of 300,000 m<sup>2</sup> of beach. It will also support Surfrider Foundation Europe’s efforts to raise awareness of the impact of plastic pollution, allowing them to reach an additional 5,000 citizens across Europe.



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OF GLASS**

[www.friendsofglass.com](http://www.friendsofglass.com)

21309/Press Release – 2018.05.31

### **Parliament Bans Plastic Bottles Under its Roof**

On 11 June, the Bureau of the European Parliament decided to cease using plastic bottles in the institution after 2019. “The European Parliament will lead, not only in policies, but also by example towards curbing our plastic problem”, said Heidi Hautala, Green MEP and Vice-President of the European Parliament, in a press release. Plastic bottles will be replaced with a water fountain system. More generally, Parliament plans to reduce the usage of single-use plastic as much as possible.

21310/Press Release – 2018.06.12

## DOMESTIC TABLEWARE AND CRYSTAL GLASS

### Glass Companies

#### Libbey

Libbey toasts to 200 years with new take on classic glassware design. Libbey's passion – and 200 years of history and experience – in craftsmanship and innovation delivers an exquisite presentation of super-premium spirits.



**Libbey®**



Since 1818, Libbey® has been America's Glassmaker™ and remains the leading brand name in glassware. This year, Libbey is celebrating two centuries of innovation. The glassware company that developed the first machine-blown glass has evolved into a full-spectrum tabletop provider delivering insights-driven solutions for the foodservice industry. Libbey continues to set new standards in craftsmanship to help chefs, mixologists and operators create one-of-a-kind experiences for guests. With a nod to the past, Libbey brings a new perspective to timeless glassware design. Circa™ Cocktails, part of the Master's Reserve® Contempo collection, includes five luxury cocktail stemware patterns featuring a vintage design reminiscent of the 1930s. The collection includes an 8 oz. Coupe, 6 oz. Flute, 5½ oz. Nick & Nora, 5 oz. Cocktail Glass and 3 oz. Liqueur.

"Mixologists around the country are looking to the past for inspiration when it comes to reimagining signature cocktails. Circa Cocktails provides an enduring, classic look for time-honoured drinks," said Susan J. Dountas, senior director of foodservice marketing for Libbey Inc.

Each pattern in the Master's Reserve collection is crafted with ClearFire® glass, which ensures a purely radiant shine without potentially harmful metals. The collection also features a whisper thin, beadless edge with exclusive HD2 rim and foot.

21311/Press Release – 2018.05.31

#### Cristalleries de Saint-Louis



The Hermès group will inject 1.5 million euros to renew the composition tower and the polishing effluent neutralization system of its crystal factory in Saint-Louis-Lès-Bitche (Moselle), the oldest crystal factory in France. This project completes the modernization of the industrial tool started three years ago.

Its commissioning is scheduled for September 2019. "This will be the last major investment we plan to make in the next five years, and we will begin the interim refurbishment of our pond furnace," says Jérôme de Lavernolle, CEO of the Compagnie des cristalleries de Saint-Louis.

21312/Press Release – 2018.06.06

### **Baccarat**

A brand new digital showcase unveils the crystal manufacturer, symbol of the French lifestyle: a new online store deployed internationally, where the customer experience is at the heart of the design.

Table of wonders, bar on the rocks, symphony of lights ... Here are some of the sections that make up the new commercial site of Baccarat. For its 250 years, the prestigious brand has indeed wanted to put the dishes in the big and have a new site that highlights the depth of its range, its history and expertise.

Service first and foremost. This is the trademark of Baccarat must be found on the site: hence the simplification of the purchase tunnel, the product sheet and the integration of a chat module for access to online advice. Autonomous, the Baccarat teams now have their hands on the site and manage their administration live. The strategy seems to be paying off: the site has doubled its audience since its launch.

Final objective is also to generate additional sales with a target of 20% increase in internet sales.

21313/Press Release – 2018.06.06

### **Lalique**



LALIQUE

The luxury group Lalique took its first steps on the Swiss Stock Exchange on 25 June. The introduction to the Swiss Stock Exchange was accompanied by a capital increase. With the issue of one million new shares with a nominal value of CHF 0.20, the group's share capital increased to 1.2 million Swiss francs, divided into 6 million shares.

Silvio Denz, chairman of the board of directors and largest shareholder of the group, holds about 72% of the capital, while the float is around 28%. According to previous statements, Mr. Denz does not exclude to reduce his participation in the future, in particular acquisitions, which can support the development of the company.

The gross proceeds of the capital increase - 8.5 million Swiss francs excluding the conversion of shareholder loans - will "allow the group's liquidity to increase and consequently increase its investment capacity".

After investing some 23 million Swiss francs in the last five years to develop the industrial apparatus, Lalique intends to reduce the wing. Future investments will now focus on marketing and distribution, said Managing Director Roger von der Weid.

21314/Press Release – 2018.06.25

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## REINFORCEMENT GLASS FIBRES

### Glass Company

#### Owens Corning



Owens Corning has entered into a Strategic Cooperation and Supply Agreement with Chongqing Polycomp International Corp. (CPIC) for joint investment in technology, and construction and operation by CPIC of a new facility dedicated to the manufacture of high-modulus glass fibre products in China.

“This agreement positions two leading players in the wind industry to deliver the most advanced glass fiber technologies to serve growing industry demand for high-modulus glass,” said Marcio Sandri, President of Owens Corning’s Composites business. “The combination of innovative glass technology, enhanced quality and efficiency, and large-scale volumes will be beneficial to our respective customers. Wind energy is a key strategic market for Owens Corning representing a major platform for our growth in China – and globally.”

Global demand for high-modulus glass fibre products is expected to grow in the coming years. This high-performance glass fibre product enables the construction of longer, stronger, and lighter wind blades, which is critical to enhancing the competitiveness of wind energy and proliferating the use of composites in supporting alternative energy applications.

The new facility will be located in Chongqing, China. Expected to be operational by mid-2019, the facility will include a glass furnace with annual production capacity of 110,000 metric tons. The agreement is focused within China, which represents the world’s largest market for wind energy and is particularly well-suited for this large-scale capacity investment. While Owens Corning and CPIC will work together to enhance quality and efficiency at the manufacturing operation, the companies will maintain independent commercial operations and continue to provide their respective product offerings to customers through separate commercial channels.

The agreement with CPIC is consistent with Owens Corning’s strategy to meet market growth with competitive products and reduced capital investments. The company is selectively leveraging its technology and internal capacity while also taking advantage of external assets to deliver Owens Corning products – tested using the company’s quality systems and meeting the same specifications as its owned operations.

21315/Press Release – 2018.06.26



## SPECIAL GLASS

### Glass Companies

#### SCHOTT

1. The properties of Schott's borosilicate glass make it ideally suited for constructing neutron guides. **SwissNeutronics uses SCHOTT BOROFLOAT® glass in China's first Spallation Neutron Source.** Commissioning has been completed at the China Spallation Neutron Source (CSNS), the country's first pulsed spallation neutron source, and the fourth in the world.

The facility, which has up to 600 metres of guide tubes in 20 beam lines, will provide scientists with a world-leading platform for studies in fields such as materials science and technology, life sciences, new energy and more. The announcement of completion was made at the CSNS Technology Assessment and Acceptance Meeting, held at the Dongguan Branch of the Institute of High Energy Physics, Chinese Academy of Sciences (IHEP) in the Guangdong Province.

Swiss company SwissNeutronics supplied the research institute with important components made from the special float glass BOROFLOAT® by Schott. The deal is an important milestone for the company, giving them a 60 percent share of the neutron guides market. This is significant, as there are only around 20 research institutes in the world that can even be considered customers.

Building neutron guides requires extreme precision. The BOROFLOAT® supermirror coating only reflects neutrons at very low angles, so if a wall is slanted or not smooth enough the neutrons will penetrate the material, which must be avoided. SwissNeutronics coats the glass with up to 10,000 nano-thin layers. This is where BOROFLOAT® provides the best extremely flat surface. In addition to the extremely low roughness, the even thickness and high homogeneity are properties that predestine BOROFLOAT® for high-tech applications. Additionally, it offers high chemical and thermal resistance and high mechanical strength. Even abrupt temperature fluctuations do not affect the glass, and it stays true to size even after many work steps. The high boron ratio, which has a shielding effect, is also extremely important, especially for building neutron guides; it practically 'catches' neutrons. The low net weight makes BOROFLOAT® excellent to use.

The microfloat process, a special manufacturing method, is key for the unique properties of BOROFLOAT®. Glass ribbons float over of a bath of molten tin to then cool down. This patented process guarantees perfect homogeneity, extreme flatness and a mirror-like surface. The high optical quality comes from a special "secret recipe" and is still unrivalled in the field of flat glass.

21316/Press Release – 2018.06.05



SCHOTT

## **2. SCHOTT's ZERODUR® glass-ceramic to be used in European Southern Observatory telescope.**

ZERODUR® has been the company's material answer for high-tech and astronomy applications for 50 years.



Half a century ago, materials specialists from Schott used an ingenious process technology to develop ZERODUR®, a special glass-ceramic with a coefficient of expansion of nearly zero. This property makes the material ideal for applications requiring the highest precision in fields such as astronomy, IC lithography, the semiconductor industry, metrology and flat panel display production.

While most materials expand with heat and contract with cold, this isn't the case with ZERODUR® glass-ceramic. It remains highly dimensionally stable in response to temperature fluctuations precisely because the positive thermal expansion of the glassy portion is almost completely offset by the negative thermal expansion of the crystalline content.

ZERODUR® glass-ceramic consists of a crystalline and a residual glass phase, which together enable extremely low coefficients of thermal expansion nearing zero. The thermal expansion is also highly homogeneous. Even with large material components, fluctuations in mechanical and thermal properties are hardly detectable, making ZERODUR® ideal for optic applications with special demands on precision and temperature stability. The material's optical transparency also enables optimal inspection of internal quality. Bubbles, streaks, and inclusions can be eliminated in all but the most exceptional cases. ZERODUR® also has high chemical resistance and can be polished to an extremely smooth surface. These properties are stable for both small and large components.

"Its secret lies in the balanced mixture of 30 to 50-nanometer crystallites embedded in a glass matrix of lithium, aluminium, and silicon oxides," explained Dr. Thomas Westerhoff, Director for Strategic Marketing ZERODUR® at Schott Advanced Optics.

In the material's most recent milestone, the European Southern Observatory (ESO) selected ZERODUR® for the Extremely Large Telescope (ELT) project. Schott will supply the ELT with ZERODUR® blanks including spares to form its primary mirror out of 798 hexagonal tiles and will create its monolithic mirrors with ZERODUR® as well. Telescope mirrors in astronomy have used glass-ceramics as a substrate material since the early 1970s. In 1968, Schott produced its first mirror substrate on behalf of the Max Planck Institute for Astronomy.

Today, the main components of many of the major optical telescopes worldwide are made of ZERODUR® glass-ceramic. That includes the over 8-meter diameter primary mirrors of the ESO's Very Large Telescope, the segmented primary mirrors of the Gran Telescopio Canarias on La Palma, the two 10-meter Keck telescopes on Hawaii, the Big Bear Solar telescope in California, the GREGOR solar telescope on Tenerife, the 4-meter DKIST solar telescope on the Heleakala volcano on Hawaii, and the flying observatory SOFIA on board a jumbo jet.

ZERODUR® is particularly in demand in the aerospace industry because it is very easy to grind. Schott produces very light and extremely stable mirrors by shaping the material on the backs of mirror substrates into a honeycomb or isogrid structure.

All in all, Schott has produced several hundred mirror substrates in the form of monoliths or hexagons for many astronomy applications over the past 50 years. Whether in Chile's Atacama Desert, atop the Mauna Kea volcano on Hawaii, or in the high Himalayas of India, the world's telescopes rely on ZERODUR. The material's presence will grow exponentially in the coming years, and by 2024, Schott will supply more than 900 blanks for the M1 segments of the ELT.

ZERODUR® glass-ceramic is ideal for more than just seeing into space. It also enables commercial high-tech applications with high-precision requirements in the fields of metrology and aviation and in semiconductor and FPD technology. For instance, the material is used as a substrate for measuring standards in instruments; in ring laser gyroscopes, ZERODUR® is used as a carrier structure for lasers in aircraft and submarine navigation; in IC lithography, it enables precise positioning of wafers. ZERODUR® is also used in FPD production as an optical mirror material for precise light guidance.

Schott is currently investing heavily in its glass-ceramic competence centre in Mainz Germany. With new melting capacities and post-processing options for a wide range of technical applications, the company is ideally positioned for the future.

21317/Press Release – 2018.06.07

### 3. SCHOTT LED cabin lighting system receives German Innovation Award

SCHOTT's LED cabin lighting system HelioJet® SpectrumCC has received the German Innovation Award for its unique concept and extraordinary performance.



*Dr. Armin Plichta receives the German Innovation Gold Award for HelioJet® SpectrumCC from Andrej Kupetz, General Manager of the German Design Council.*

Out of over 650 entries, the jury of the German Design Council recognized SCHOTT's LED cabin lighting system HelioJet® SpectrumCC as the ultimate winner in the Lighting Solutions category for its unique concept and extraordinary performance.

"This LED lighting system, which was specially developed for aircraft cabins, provides maximum homogenous lighting and colour stability for a broad range of lighting scenarios, including exact brand colours," stated the German Design Council in its laudation. "This groundbreaking system also uses considerably fewer LEDs, thus cutting costs."

Dr. Armin Plichta, Director Aviation & Automotive Business, accepted the award at a ceremony in Berlin on 6 June. "We have a LED lighting system that is very different from the rest. And we are very excited that the jury awarded our unique product layout and extraordinary performance" explains Plichta.

HelioJet® technology feeds in light from both sides into an optical light converter. A unique sensor system measures and regulates each LED, ensuring even light distribution and colour stability throughout the entire cabin over the entire lifetime. HelioJet® is the only system worldwide that allows replacing lamps after years, and no difference is visible comparing old and new LEDs.

HelioJet® SpectrumCC is flying with Lufthansa and SAS integrated into the NICE cabin management system. HelioJet® supports wireless control via tablet, smartphone or smartwatch. The system is easy to install and is ecologically friendly.

21318/Press Release – 2018.06.19

### **Motorola**

Motorola has recently unveiled the Moto Z3 play, a smartphone with the capability for upgrades via Mods, a range of products that include cover, backup batteries and video game controllers. This feature has been part of the Z3 line for three generations, and the Z3 Play will likely be the last model to work with this generation of Mods..



*Moto Z3 is wrapped front and rear in Corning's durable third generation protective glass*

But what makes the new model unique is the case, an aluminium body wrapped front and back by Corning's Gorilla Glass 3. Despite the added protective glass, the phone is reported as being lightweight.

Under the front glass is a massive 6 inch AMOLED display with 1080p resolution and an 18:9 aspect ratio. In changing the front design to feature a larger screen with significantly less bezel space, Motorola has moved the fingerprint sensor to the side of the phone under the volume buttons.

Corning's Gorilla Glass 3 was originally introduced in 2013, and according to the company the material is up to three times more scratch resistant than the second generation. During its manufacture, the glass is toughened by ion exchange. The material is immersed in a molten alkaline potassium salt at a temperature of approximately 400 degrees Celsius, wherein smaller sodium ions in the glass are replaced by larger potassium ions from the salt bath. The larger ions occupy more volume and thereby create a surface layer of high residual compressive stress at the surface, giving the glass surface increased strength, ability to contain flaws, and overall crack-resistance, making it resistant to damage from everyday use.

21319/Press Release – 2018.06.08

### **AGC Glass Europe**

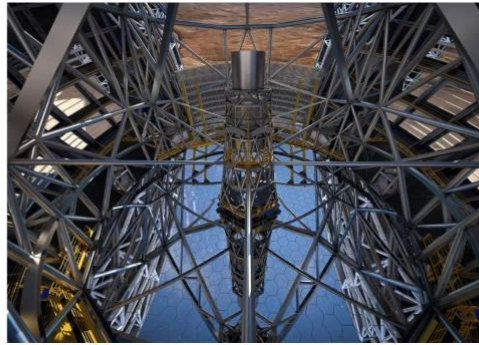
AGC Plasma Technology Solutions, a new unit of AGC Glass Europe, will supply the magnetron sputtering coating plant to produce the mirror for the Extremely Large Telescope (ELT).

Through its newly created unit AGC Plasma Technology Solutions<sup>(1)</sup>, AGC Glass Europe has been awarded a contract by the European Southern Observatory (ESO) to supply the magnetron sputtering coating<sup>(2)</sup> plant aimed at producing the mirror for the world's largest optical telescope, the Extremely Large Telescope (ELT). This telescope manufactured by ESO will be installed at Cerro Armazones (3,046m) in the Atacama desert (Chilean Andes).

CORNING

AGC

It will be equipped with a gigantic 39-meter segmented primary mirror<sup>(3)</sup> to collect the light from the cosmos and allow astronomers discover unexplored galaxies, study exoplanets and investigate other objects and phenomena across the universe.



The plant will perform the initial coating and subsequent re-coating with a protected silver layer stack on the mirror segments. These coating operations are required by the harsh climate conditions such as sandstorms that are liable to affect the silver layers of the primary mirror. AGC will do the design, manufacture, on-site assembly and commissioning of the mirror segment coating plant at the ELT Technical Facility located at Paranal Observatory in Chile. Patrick Van Bortel, Vice-President, New Business & Industrial Glass of AGC Glass Europe, concludes: “The selection of the proposed coater solution comes in recognition of our expertise and knowhow in building custom-designed plasma coating equipment by our teams in Gosselies, Belgium and Lauenförde, Germany.”

1: Specialised in developing and industrialising innovative vacuum plasma coating technologies.

2: Magnetron sputtering is a plasma-based coating technique for depositing very thin layers of materials, including metals, onto substrate materials such as glass. As a result, coated materials gain specific properties in terms of thermal insulation, solar control, reflection, etc.

3: The primary mirror consists of 798 segments, each 1.4 metres wide but only 50 mm thick.

21320/Press Release – 2018.06.20

### Luxottica / Barberini



Luxottica has bought sun lens maker Barberini for EUR 140 million, consolidating its strategy of focusing on excellent production facilities and “made in Italy” quality.



Ray-Ban owner Luxottica has announced that it has bought the world’s top manufacturer of optical glass sun lenses Barberini in a EUR 140-million deal. With this transaction, that is valued at approximately EUR 140 million, Luxottica consolidates its strategy of focusing on excellent production facilities and “made in Italy” quality.

The transaction allows the Group to strengthen its know-how in glass sun and prescription lenses, which is considered the most valuable among optical materials. Barberini is in fact synonymous with world excellence in glass lenses, key to the success over time of the iconic models of Ray-Ban and Persol and an essential component for many luxury eyewear collections.

Founded by Pietro Barberini in 1963, Barberini is a key manufacturer of high quality optical glass lenses for the most prestigious eyewear brands around the world, with exclusive and sophisticated technical features. For more than 50 years, the company has developed new technologies and patents designed to expand applications of this material, which is unique for purity and clarity, in sun and ophthalmic lenses. Advancements have been made to characteristics such as thickness, weight, resistance and transparency while enhancing vivid and saturated colours, also thanks to the application in the glass melting processes of special oxides (“Terre Rare”). With annual net sales of approximately EUR 85 million, Barberini controls its entire manufacturing chain, from raw material to finished lenses, with cutting-edge industrial sites in Abruzzo (Italy), a plant in Germany for glass melting, and advanced technologies for the production of polarizing films for sun lenses.

“Luxottica welcomes to its industrial system worldwide excellence in the production of optical glass lenses. With the acquisition of Barberini we add another gem to our brands, a name that is well known throughout the industry and synonymous with top quality, innovation and ‘made in Italy’. Barberini will allow us to strengthen our technological leadership in sun and ophthalmic lenses and opens great development opportunities for the future,” commented Leonardo Del Vecchio, Executive Chairman of Luxottica. The transaction is subject to customary closing conditions and is expected to be finalized by the third quarter of 2018.

21321/Press Release – 2018.06.26

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## DIVERSE

### GLASS & SUPPLIERS

#### Saint-Gobain



Saint-Gobain will build a new glass wool production line at its Isover branded plant at Chemillé near Angers (France), expected to start production in mid-2019.

It is being built to meet rising demand in the French market for roof insulation products. In addition, Saint-Gobain is planning to open new production lines at its plants in Azuqueca near Madrid in Spain and Vidalengo near Milan in Italy. These lines will open in spring and autumn 2018 respectively. Altogether Saint-Gobain has invested EUR 45m in the upgrades with the majority placed in Chemillé.

21322/Press Release – 2018.06.01

#### New Materials Institute: New Invention in the Field of Nanotechnology - Liquid Glass



German scientists from the New Materials Institute (Saarbrücken) recently invented liquid glass, which is a unique non-toxic glass-liquid that is sprayed on any surface and 100% protects it from dirt and bacteria.



Liquid glass is a new invention in the field of nanotechnology, made by German scientists from the New Materials Institute (Saarbrücken). This is a unique non-toxic glass-liquid that is sprayed on any surface and 100% protects it from dirt and bacteria.

The use of liquid glass for cars opens fantastic prospects, because it is absolutely harmless from the ecological point of view and can be applied in the widest range - from protecting agricultural crops from bacteria and covering medical implants.

The composition of liquid glass includes silicon dioxide, obtained from quartz sand, in conjunction with molecules of water or alcohol, which forms on any surface an ultrathin film of 15-30 molecules thick - this is a millionth of a millimetre. The barrier formed by it has the ability to repel water, dirt and bacteria, is resistant to heat, acids and UV radiation and at the same time allows the surface to be protected to "breathe".



No adhesive components are used, but liquid glass is retained on the surface due to electrostatic effect.

Silicon dioxide is an inert and absolutely harmless substance that will greatly reduce the negative human impact on the ecological state of the planet. It will be possible to abandon the potentially toxic detergents that are used everywhere and save a lot of money and time for any kind of cleaning, since a surface covered with liquid glass simply wipe with clean water.

Liquid glass proved to be very effective for use in agriculture. Experiments have shown that the seeds treated by them are immune to bacteria and microbes and also germinate faster. And wood after treatment with liquid glass proved to be stable even against termites. The liquid glass has yet to be tested, this time to protect architectural monuments in Turkey, which are being negotiated.

Moreover, surfaces treated with a spray with a liquid glass, remain sterile clean after washing with ordinary hot water.

21323/Press Release – 2018.06.22

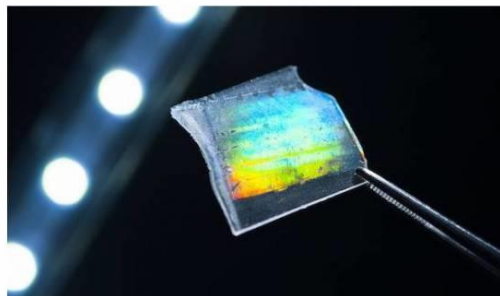
### Karlsruhe Institute of Technology: Glassomer for Small Glass Structures



After demonstrating the possibility of 3-D printing of glass components, using stereolithography with silica nanocomposite ink, KIT scientists have now developed a process for fabricating pure quartz glass that opens up possibilities for industrial use. Earlier this year, researchers from Lawrence Livermore National Laboratory printed small glass pieces made from silica and silica-titania inks.

Now, KIT scientists have taken their glass research a step further. Head of the NeptunLab interdisciplinary research group of KIT's Institute of Microstructure Technology Bastian Rapp and his research team have developed a process for fabricating pure quartz glass that opens up possibilities for industrial use.

Rapp and his research team actually created a hybrid of sorts, by mixing glass with a polymer to fabricate a solid silica nanocomposite. Called (what else?) "Glassomer," the new material offers the strength of glass while behaving like a polymer.



*Glassomer can be milled, turned, lasered or processed in CNC machines – just like a conventional polymer*

The researchers mixed quartz glass particles 40 nm in size with a liquid polymer, forming a consistency similar to sponge cake, according to the release. Next, they solidified it using heat and light exposure, resulting in a 60/40 ratio of glass and polymer.

The polymers bond the glass to maintain its shape – which makes it a perfect consistency to form highly-detailed objects.

Glassomer can be processed in machines “just like a conventional polymer” the release states, enabling smaller, more intricate and detailed structures to be produced. Rapp’s team fabricated small nuts, bolts, and diffractive optical elements.

For highly pure quartz glass structures, the researchers have to remove the polymer by heating it to between 500–600°C (932–1,112°F) and then sintering at 1,300°C (2,372°F). The researchers state that Glassomer can be “milled, turned, laser-machined, or processed in CNC machines just like a conventional polymer.”

The researchers’ technology makes pure glass material suitable for applications in the optical, biotech, microelectronics, and medical engineering industries.

The process is suited for mass production. Production and use of quartz glass are much cheaper, more sustainable, and more energy-efficient than those of a special polymer.

*This paper was published in Advanced Materials, is “Glassomer—Processing Fused Silica Glass Like a Polymer” (DOI: 10.1002/adma.201707100).*

21324/Press Release – 2018.07.02

### **Europe Confirms its Trust in Glass**

Glass is used more and more by Europeans in their choice for food and beverage packaging, considering glass as the most eco-compatible material.

European consumers have confirmed that glass is their preferred packaging material (source: *InSites Consulting 2016*). Problems regarding environmental, food and conservation safety, are behind this growing preference for glass packaging over all other materials, with 85% of consumers preferring glass.

One out of two consumers say they use glass more and more, and 53% believes that glass is the safest packaging material for food and medicines. This percentage is even higher when speaking about beverages, with 73% saying that glass is the highest quality packaging material. Moreover, for 76% of today’s consumers, glass is the most eco-compatible material, compared to 50% in 2008, thus showing that more and more consumers consider glass as an excellent eco-compatible material, a significant signal of preference for glass over other recyclable materials.

In Europe, 74% of all glass bottles are collected and recycled, with more than eight Europeans out of ten preferring wine in glass bottles, and three young people out of four (74%) preferring glass as packaging material.

Glass is, in fact, 100% recyclable time after time, becoming new containers in just one month. Each time that a ton of glass is recycled, about 580 kg of CO<sub>2</sub> are saved along the entire supply chain, while more than a ton of virgin raw materials are saved for every ton of recycled glass. The production of glass using recycled material reduced atmospheric pollution by 20% and water pollution by 50%.

Glass is considered the ideal packaging for consumer health; glass has no taste or smell, and does not change the taste of the food, beverages and medicine it contains, as well as being an important electric insulating material.

More important data is that the European glass industry contributes EUR 9.5 billion to the annual EU GDP. More than 50% of glass bottles are delivered to clients within a distance of 300 km, which means having production sites that are also within this range. Overall, the European glass industry provides 125,000 jobs a year across Europe. This data can be considered valid – in the correct proportions – for all continents, bearing in mind the differences in sensitivity of each area towards environmental problems, recycling, and the preference for glass as safer and more ecological packaging material.

These statistical sources highlight a countertrend that has been going on for some years, giving hope for the future of the whole sector, also in those specific production areas that have undergone the most difficulties, such as that of domestic glass. The belief of the vast majority of consumers that glass is the safest material, suitable and eco-compatible, will certainly have positive returns on all types of glass products.

21325/Press Release – 2018.06.18

### **Friends of Glass Urges Public to ‘Toast the Health of Seas’**



Friends of Glass has called for the public to ‘raise their glass’ to the health of our seas with the launch of the ‘Endless Ocean’ campaign.

According to a recent survey carried out by the Friends of Glass community, three out of four Britons rate glass as the most ocean-friendly packaging choice, while 72% of Europeans consider their impact on the ocean as a lifestyle priority, starting with the products they buy and how they are packaged.

According to the survey, 83% of Britons have reported a change in their behaviour and are now paying more attention to the environmental impact of their everyday decisions with 78% rating glass among their top choices for food and drink packaging.

For the new Endless Ocean campaign video, Danish band The Bottle Boys and Spanish pro-surfer Aritz Aranburu joined members of the Friends of Glass community from all over Europe to sing along to Charles Trenet’s ‘La Mer’ – the iconic love song to the sea – culminating in a sunset toast to the ocean.

“As concerns about the state of our seas are at an all-time high, there’s never been a better time to reconnect with what we love about the ocean and do whatever we can to protect it. Choosing glass and always recycling it is one simple action we can all take that will help us on that journey” commented Brook Hayes, communications manager at British Glass, which runs the Friends of Glass UK activity.

Glass bottles and jars are made from recycled glass, sand, soda ash and limestone. If a glass container were to end up in the ocean or landfill, rather than being recycled, it will not release any harmful chemicals that may pollute and harm marine systems.

Friends of Glass invited the public to join the movement on **World Oceans Day** by sharing tributes using the hashtag *#CheersToTheOcean*.

21326/Press Release – 2018.06.15

## SEMINARS / CONFERENCES / WORKSHOPS

### Guardian Vacuum IG™ to Debut at AIA

The first application of Guardian Vacuum IG™ is a retrofit at Sherzer Hall at Eastern Michigan University, where the planning and design team reported the installation had an immediate impact.



Guardian’s new vacuum insulating product delivers 10 times the R-value of single-pane glass

Guardian Vacuum IG™ debuted at the American Institute of Architects Convention in New York City 21-23 June, where it was on show to give visitors an idea of how this new insulating product uses a vacuum between two panes of glass that prevents heat from escaping to the outside, and thus insulating like a wall. The product provides transformative thermal insulation with an R-value of up to 12 for 8-mm thickness, compared to single pane glass at R-1. Because Guardian Vacuum IG uses tempered glass, the product is suitable for use in commercial buildings.

VIG performance is enhanced by pairing Guardian Vacuum IG with Guardian SunGuard® coated glass to create a hybrid, low-E VIG glass product that delivers the light transmission, reflectivity and colour they need for new construction or retrofits. All this with noise reduction that exceeds that of a typical insulating glass unit.

According to the National Fenestration Rating Council, about one third of a building's heating and cooling passes through fenestration.

21327/Press Release – 2018.06.15

### **ICG Annual Meeting 2018**

**The ICG Annual Meeting 2018 will be taking place 23-26 September in Japan, and is organized by the Ceramics Society of Japan (CerSJ).**

The 2018 annual meeting of the International Commission on Glass (ICG) will be held in Yokohama, Japan, 23-26 September 2018. ICG 2018 is organized by the Ceramics Society of Japan (CerSJ), in strong collaboration with the Glass Industry Conference of Japan (GIC).

Preparations are underway regarding the meeting to welcome many glass researchers, engineers and related professionals from all over the world.

A list of topics of papers can be found at:

<http://www.icg2018yokohama.com/program/index.html>

For abstract submission guidelines go to:

<http://www.icg2018yokohama.com/abstract/index.html>

For more information, visit the ICG website at [www.icg2018yokohama.com](http://www.icg2018yokohama.com) .

21328/Press Release – 2018.01.08 & 18

### **Italian Glass Day 2018**

A.T.I.V. presents their annual event, which will be held in Parma on November 23, 2018 at Santa Elisabetta Congress Centre. The 33<sup>rd</sup> Conference under the title “The Italian Glass Day” will focus on technological development in flat and hollow glass furnaces and will deal with the main topics concerning furnaces, such as the use of refractories for various types of glass and for various types of furnace; the design of furnaces intended also as control, sustainability, consumption, energy saving in furnace operation, filtration systems and treatment solutions and pertaining regulations.

The day before the conference, on November 22<sup>nd</sup> there will be a professional development course on the use of fused cast refractories for the various types of glass and furnaces, held by two experts from A.T.I.V. Board of Directors, with the presentation and support by two of the most well-known companies producing refractories.

This year for the first time since the creation of Associazione dei Tecnici Italiani del Vetro (Association of Italian Glass Technologists), A.T.I.V. have set up an award for the best research presentation in the glass sector by a young technologist or researcher under



35 years of age. To this end, the association is also accepting topics that lie outside the main focus of the conference.

Fee reductions are being offered when more than two participants from the same company are registered.

For more information visit: <http://www.ativ-online.it/>

21329/Press Release – 2018.06.11

### **Call for Abstracts for the 79<sup>th</sup> Conference on Glass Problems**



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

Broad topics of interest include:

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

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

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

The conference is the largest glass manufacturing conference in North America, and attracts glass manufacturers and suppliers worldwide to exchange innovations and problem solutions.

Co-organized by the Glass Manufacturing Industry Council and Alfred University, the conference provides expert lectures, panel discussions and focused courses and symposia, along with exhibiting and networking opportunities. True to its tagline, GPC is the conference where glass manufacturers meet. Submit your abstract today to become a part of the technical program.

More info on <http://glassproblemsconference.org>.

21330/Press Release – 2017.09.05

### **GPD Finland 2019**



Next year's edition of GPD Finland will be taking place 25-28 June 2019, with the first two days dedicated to workshops, followed by the Conference, Exhibition and Step-Change.



This is the first call for papers for GPD Finland 2019. This time, we take a smarter look on the challenges the industry faces today regarding the ever-changing demands on planning of cities, building design, energy-efficiency and suitability in the environment. The buzzword out there now is smart cities and our eyes will be on how of smart glass will fit in the smart city environment.

There will be three parts – workshops, conference and exhibition.

- 25-26 June 2019 - Workshops.
- 26-28 June 2019 - The Conference, Exhibition and Step-Change (for start-ups)

For more information regarding the different sessions, please refer to the following links:

- All info about the 2019 call for papers: <https://gpd.fi/call-for-papers/>
- Speaking Fees: <https://gpd.fi/call-for-papers/#fees>
- Proposed Conference Sessions: <https://gpd.fi/call-for-papers/#sessions>
- Abstract review process: <https://gpd.fi/call-for-papers/#reviewprocess>
- Workshops: <https://gpd.fi/call-for-papers/#workshops>
- Exhibition: <https://gpd.fi/call-for-papers/#exhibition>

The first deadline for submitting abstracts is 21 October 2018. Abstracts received by this date will be reviewed in November. If selected, the early submission fee charged will be EUR 950. For abstracts submitted and selected after 21 October, the fee charged will be EUR 1,150.

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

21331/Press Release – 2018.07.02