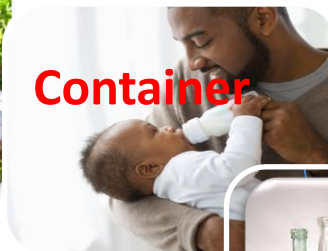




Container



**Building, Solar,
Transport**



Domestic



Special



Fibres



FEBRUARY 2017

Newsletter N°338

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COMMUNITY NEWS

A. EU NEW LEGISLATION

Commission Directive

N° 2017/164 of 31 January 2017

Chemical Agents Directive Update

The Commission has published a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU, on the chemical agents at work.

In practice, the new text introduces 25 new maximum limits and updates six value limits already defined in European legislation. These limits apply over an exposure reference period (8 hours, 15 minutes).

The Commission explains that these involve “reference points” for maximum exposure levels to these products authorised in the workplace. On this basis, the member states will have to adopt their respective national limits for which they have a certain margin for manoeuvre.

The indicative limits were set out with the assistance of 21 experts from the Scientific Committee on Occupational Exposure Limits (SCOEL), after consultation with the advisory committee for health and safety in the workplace (CCSS) made up of representatives from the member states and social partners.

Member States shall establish national occupational exposure limit values for the chemical agents listed in the Annex, taking into account the Union limit values.

The references to acetic acid, calcium dihydroxide, lithium hydride and nitrogen monoxide, 1,4-dichlorobenzene, bisphenol A are deleted with effect from 21 August 2018, subject to Article 6(2)(a).

In underground mining and tunnelling, Member States may benefit from a transitional period ending at the latest on 21 August 2023, as regards the limit values for nitrogen monoxide, nitrogen dioxide and carbon monoxide. During the transitional period, Member States may continue to apply the existing limit values or national values in force on 1 February 2017.

Article 7

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 21 August 2018 at the latest.

All details and annex in the Official Journal L27 as from page 115 at:

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:027:TOC>

B. TRADE POLICY**European Parliament Ratifies CETA (Provisional Implementation from 1 April)**

Without the backing of the Greens and nearly half of the Social Democrats, the European Parliament gave its consent, with 408 votes in favour, 254 against and 33 abstentions, to the provisional implementation of the free-trade agreement between the EU and Canada (CETA), which is held by its proponents to be the most progressive ever free-trade agreement.

The majority of the text - its trade provisions - will apply provisionally from the first day of the month following the date on which the EU and Canada have notified each other that they have completed all necessary internal procedures, whilst implementation of the provisions on investment protection will remain on ice, until all of the national and regional parliaments of the EU have also ratified it.

The new Canadian Trade Minister, Philippe Champagne, who was present in Strasbourg, told the press that for his part that CETA had secured the support, the day before, of the House of Commons of Canada and that it would now be referred to the Canadian Senate. If the latter votes in favour by the end of March, CETA will therefore be able to enter into force on 1 April.

The European Commissioner for Trade, Cecilia Malmström, stressed that CETA was "a progressive agreement with a progressive partner". "There is nothing in this agreement that will affect the safety of the food we eat or the products we buy, or bring about the privatisation of public services", she reiterated.

In the opposite corner, those not in favour of CETA, including certain members of the European Parliament and thousands of civil society activists demonstrating around the Parliament buildings, reiterated their arguments against CETA: a threat to democracy, dangers related to cooperation in matters of regulation, with the risk that corporate lobbies will be able to get in on the decision-making process by the back door, an agreement too much in favour of multinationals (in particular through its investment dispute settlement mechanism), gaps in the protection of workers' rights and the environment, a threat to agriculture and public services, etc.

The ratification of CETA was finally supported by all members of the two conservative groups (the EPP and ECR) and of the Liberal group (ALDE). However, just over half of the Socialist and Democrat group (S&D) voted for Parliament to give its blessing to the implementation of CETA.

The S&D has been deeply divided over this agreement, which the group's chair, Gianni Pittella of Italy, praised on Thursday as the "start of a change of European trade policy, if not a template". Beyond figures that speak for themselves (95 votes in favour, 67 votes against and 13 abstentions within the group and 25 MEPs who did not vote), an analysis of the results of the roll-call vote confirms the dividing lines in almost all of the national delegations of the S&D. All French, Belgian and Austrian members voted against CETA, as did many German, Italian, Bulgarian, Romanian members, but also British ones. It is also worth noting that the

President of the Party of European Socialists, Bulgaria's Sergueï Stanishev, who voted in favour, subsequently asked for his vote to be changed to a negative one.

The extreme left-wing group (GUE/NGL) without exception, all but four members of the ecologist group (Greens/EFA), all but five members of the EFDD (made up of British UKIP members and the Italian the Five Star Movement), all of the extreme right wing group (ENF) and the majority of the unaffiliated MEPs voted against the CETA.

20302/Press Release – 2017.02.15

18-Month Extension in Anti-Dumping Duties and Gradual Phase-Out to Tackle Chinese Solar Panels

The European Commission decided to propose an 18-month extension of anti-dumping duties to tackle imports of Chinese solar panels. According to the European Commission Vice president, Frans Timmermans, this initiative would begin with a gradual phasing out.

"There is no doubt that we have the right to protect our industry from unfair competition, from dumped or subsidised imports. At the same time, we need to take into consideration other companies that rely on these imports to develop their final products and employ thousands of people in the whole Europe. And there is also no doubt that solar energy is essential for our environmental and climate goals".

He also announced, "That is why the College took the time for a careful and thorough weighing of the options, taking into account the different interests at stake, including member states opinion". Mr Timmermans said that "The College proposed to prolong the measures we have in place since 2013 for a further period of 18 months with a gradual phase out", which would help European solar panel producers to adapt to the new situation.

This proposal now has to be examined by the member states, a majority of which opposed in January the Commission's initial proposal to extend these anti-dumping duties by a further 24 months.

20303/Press Release – 2017.02.18

Beijing to Offer Foreign Companies More Investment Opportunities

The spokesperson for China's ministry of foreign affairs, Lu Kang, gave assurances that China is committed to opening up to the world more and to providing more investment opportunities to foreign companies, following European Trade Commissioner Cecilia Malmström's call the previous day for greater opening of the Chinese market and effective reforms.

"China will create a more favourable and orderly investment environment, and fair chances for foreign investors", Lu said at a regular press conference, according to Chinese news agency Xinhua. *"China still supports trade and investment facilitation, and is opposed to any sort of protectionism",* he added, saying that he hoped *"the EU sees the opening up of China with a historic and long-term perspective"*.

Hailing Chinese President Xi Jinping's commitment to free trade at the Davos World Economic Forum at the end of January, Malmström called on China to turn his words into action by accelerating the reforms and by opening up the Chinese market, especially for foreign investments – an area where the situation became worse in 2016.

Malmström said she hoped *"to see fresh impetus in 2017"* in the negotiations for a bilateral agreement on trade, which would enable correction of a glaring imbalance in China's favour. Chinese investment in the EU was nearly five times that of the EU in China. The EU's investment in China fell to a level below €8 billion in ten years when Chinese investment in the EU stood at *"a record level"* of nearly €40 billion in 2016.

China is the second most popular destination for investment in the world, Lu assured, quoting a report on global investment published by the USA in 2016. According to statistics from the Chinese ministry of trade, investment in China from the 28 EU member states recorded 41.3% growth in a year in 2016, *Xinhua* reports.

20304/Press Release – 2017.02.08

WTO Trade Facilitation Agreement Enters Into Force

The multilateral trade system reached a major milestone on 22 February, with the entry into force of the WTO trade facilitation agreement (TFA) – which was concluded at the WTO ministerial conference in Bali in 2013. The TFA contains a package of rules to simplify and ease customs procedures, and to increase the participation of developing countries in world trade. When fully implemented, it could cut trade costs by 14.3% and increase the volume of world trade in goods by \$1 trillion per year.

Rwanda, Oman, Chad and Jordan deposited their TFA ratification instrument with the WTO, bringing the number of member countries that have now ratified this agreement to 112 – in other words, two ratifications more than the number required (110, or at least two thirds of the 164 member countries) to ensure the agreement's effective entry into force.

Comprising 12 articles, the TFA prescribes a number of measures to increase the transparency and predictability of cross-border trade and to ensure a less discriminatory economic environment. Its provisions are aimed at improving the availability and publication of information on procedures and cross-border practices, and at strengthening traders' rights of appeal, reducing charges and formalities relating to the import and export of goods, accelerating clearance procedures and improving conditions on the freedom of transit of goods. The TFA also provides for measures to ensure effective cooperation between customs and other authorities on trade facilitation and respect for customs requirements.

The TFA allows developing countries and the least developed countries (LDCs) to set their own timetable for implementation, according to their capacities. A mechanism for the TFA has been created so that they can receive the necessary help for taking full advantage of the agreement and contributing to its full implementation by all the WTO member countries.

According to a study carried out by the WTO in 2015, full implementation of the TFA is expected to lead to an average fall in trade costs of 14.3%, largely to the benefit of developing countries. The TFA is also expected to cut the time for importing goods by over a day and a half (-47% in relation to the current average time) and by nearly two days for exporting goods (-91% in relation to the current average time). Implementation of the TFA is also expected to help new companies export for the first time, enabling a 20% increase in the number of new products exported by developing countries (+35% for LDCs).

The TFA "would boost global trade by up to 1 trillion dollars each year, with the biggest gains being felt in the poorest countries. The impact will be bigger than the elimination of all existing tariffs around the world", says WTO director-general, Roberto Azevêdo.

"Better border procedures and faster, smoother trade flows will revitalise global trade to the benefit of citizens and businesses in all parts of the world. Small companies, that have a hard time navigating daily bureaucracy and complicated rules, will be major winners", says European Commissioner for Trade Cecilia Malmström.

The TFA will enable transparency to be strengthened, SME participation in global value chains to be stimulated, and risks of corruption to be reduced, the Commission states.

The EU has mobilised €400 million to help developing countries implement the necessary reforms to come into line with the TFA rules, and to ensure their increased participation in world value chains, the Commission concludes.

20305/Press Release – 2017.02.22

IFO Institute Underlines Benefits of Free Trade Deal Between EU and Russian-led Eurasian Economic Community

According to calculations based on models from the German economic research institute IFO, a free trade area between the EU on one side, and Russia and the other countries of the Eurasian Economic Community on the other (Belarus, Kazakhstan, Kyrgyzstan and Tajikistan, with Uzbekistan being a self-suspended member and Armenia, Moldova and Ukraine being observers) could have economic benefits for all stakeholders.

Such an agreement could generate a 0.2% increase in real income per inhabitant in the EU (or an annual increase in income of €91 per inhabitant), and a 3% increase in real income in Russia (or an annual increase in income of €235 per inhabitant).

The potential gains result from the complementarity of all these countries' economic structures, says IFO director for the international economy Gabriel Felbermayr, who presented this study at a conference on the common economic space from Lisbon to Vladivostok. A free trade agreement is hardly conceivable as long as the conflict in Ukraine remains uncertain, but it could form an integral part of a new EU-Russia strategic partnership, Felbermayr states.

For Germany, a free trade agreement with Russia and the other countries in the Eurasian Economic Community could boost export growth by €31 billion. This growth would have to be offset against negative trade diversion effects amounting to €9 billion. These negative effects would be due to higher Russian exports to the EU in sectors like metal products, which would hamper Germany's exports of such products.

IFO's calculations show that this free trade area would strengthen exports from Russia to the EU by around €71 billion. Russian exports to the rest of the world could also increase, due to the availability of cheaper machinery and intermediary products from the EU, which would strengthen Russia's global competitiveness and would give it advantages on third country markets. On a global level, Russian exports would increase by around €77 billion. Other countries from the Eurasian Economic Community would also benefit from this agreement.

20306/Press Release – 2017.02.22

C. ENVIRONMENT & ENERGY**European Parliament Votes for Post-2020 ETS Reform**

In an effort to reform the post-2020 carbons market and make the ETS more efficient in the fourth trading period (2021-2030), the European Parliament stated on 15 February in Strasbourg that it was in favour of a higher target than the one set out by the European Commission but that it should be quite below that advocated by Parliament's environment committee.

Unsurprisingly, the Conservative EPP group and Polish MEPs at the assembly succeeded in wrecking the compromise agreed last December between all the political groups at the environment committee. This compromise sought to make the ETS more robust, whilst protecting the competitiveness of industry, which is a large energy consumer and is exposed to international competition and the risk of carbon leakage.

This involves annual greenhouse gas emission reductions. **Parliament re-established the linear reduction factor to 2.2%** as planned by the European Commission but refused to follow its environment committee's demand for 2.4%. It also rejected the idea of withdrawing the **allocation of free credits from the cement sector** and introducing a carbon border tax on cement imported into the EU. This was very well received by European cement producers but the Greens and environmental NGOs were very disappointed.

It did, however, maintain the current compromise **on doubling the capacity of the market stability reserve** for mopping up some of the surplus credits responsible for falling carbon prices, the provisions to strengthening the Innovation Fund, as well as those for introducing a fund for a "just transition" through the pooling of revenues generated by emissions trading. This should help promote training and the workers affected by the employment transition in an economy undergoing decarbonisation.

MEPs also left intact the compromise requesting a **contribution from the maritime transport and international aviation sectors in the fight against climate change**. According to MEPs, the aviation sector should receive 10% fewer allowances than its 2014-2016 average, in order to bring its efforts in line with other sectors. Revenues from auctioning allowances in the aviation sector would be used for climate action in the EU and third countries.

MEPs say that, in the absence of a comparable system operating under the International Maritime Organisation (IMO), CO₂ emissions in EU ports and during voyages to and from them should be accounted for. They propose setting up a "maritime climate fund" to compensate for maritime emissions, improve energy efficiency, facilitate investment in innovative technologies and reduce CO₂ emissions from the sector.

The text was approved by a small majority (379 votes to 263, with 57 abstentions), with geometric lines of division between the ECR and S&D groups, which is always the case with climate subjects. The EPP, ECR (except for Polish MEPs), the ALDE and just over half of the S&D group all voted in favour.

Those that voted against included the Greens/EFA, less than half of the S&D group (including the French Socialists) and the GUE.NGL group, due to a level of ambition judged insufficient, with three Polish EPP MEPs voting for the opposite reason and the ENF voting against for

because it was afraid that reform would damage the interests of the steel industry that is under threat from Chinese competition.

Rapporteur Ian Duncan (ECR, United Kingdom) was delighted and said that this was a major step for attaining ambitious climate targets. The European Commissioner for Climate Action and Energy, Miguel Arias Cañete, congratulated Parliament on this result, which is expected to open up negotiations with the Maltese Presidency of the Council of the EU. The latter has not yet given its view but it is expected to make progress on this subject during the Environment Council on 28 February in Brussels.

20307/Press Release – 2017.02.15

Final Warning for Five Countries on Air Pollution (NO₂ Limit Values)

The European Commission sent “final warnings” on 15 February to five countries –Germany, France, Spain, Italy and United Kingdom – for failing to address emissions of nitrogen dioxide (NO₂), an air pollutant some 40% of which comes from road traffic and, in particular, diesel engines.

EU legislation on ambient air quality (Directive 2008/50/EC) sets limit values for air pollutants, including nitrogen dioxide. Should these limit values be exceeded, member states are required to implement air quality plans that set out appropriate measures to bring this situation to an end as soon as possible, such as, for example, reducing the overall volume of traffic, using clean fuels, making the transition to electric vehicles, and changing driver behaviour.

The reasoned opinion concerns persistent breaches of NO₂ limit values in:

- Germany (28 air quality zones, including Berlin, Munich, Hamburg and Köln);
- France (19 air quality zones, among them Paris, Marseilles and Lyons);
- United Kingdom (16 air quality zones, among them London, Birmingham, Leeds, and Glasgow);
- Italy (12 air quality zones, including Rome, Milan and Turin);
- Spain (three air quality zones, one being Madrid and two covering Barcelona).

If the member states fail to take action within two months, the Commission may decide to take the matter to the Court of Justice of the EU. To date, 12 member states – Austria, Belgium, the Czech Republic, Denmark, France, Germany, Hungary, Italy, Poland, Portugal, Spain and United Kingdom – have been subject to legal action over breaches of NO₂ limits.

20308/Press Release – 2017.02.15

D. SOCIAL ISSUES

Unemployment Rates

The **euro area** seasonally-adjusted unemployment rate was **9.6%** in December 2016, down from 9.7% in November 2016. This is the lowest rate recorded in the euro area since May 2009. The **EU-28** unemployment rate was stable in December, compared to November 2016, at **8.2%**. This is also the lowest rate recorded in the EU28 since February 2009.

Eurostat estimates that 20.065 million people in the EU28 were unemployed in December 2016, a decrease by 159,000 in the EU28 and by 121,000 in the euro area compared with October 2016.September.

Czechia	3.5%	Ireland	7.2%
Germany	3.9%	Slovenia	7.5%
Hungary (Nov.)	4.5%	Belgium	7.6%
Malta	4.5%	Lithuania	8.1%
UK (Oct.)	4.8%	Finland	8.7%
Netherlands	5.4%	Slovakia	8.8%
Romania	5.5%	France	9.6%
Austria	5.7%	Latvia	9.8%
Poland	5.9%	Portugal	10.2%
Luxembourg	6.3%	Croatia	11.4%
Denmark	6.2%	Italy	12.0%
Estonia (Nov.)	6.7%	Cyprus	14.3%
Sweden	6.9%	Spain	18.4%
Bulgaria	7.1%	Greece (Oct.)	23.0%

Elsewhere

USA	4.8%	Russia	5.3%
Canada	6.8%	Brazil	12.0%
Japan	3.1%	Australia	5.7%
Switzerland	3.7%	India	4.9%
Turkey	12.1%	China	4.02%

E. GENERAL ISSUES

Industrial Competitiveness Council: More than 100 Industrial Sectors Ask the Commission to Fulfil Promise for a EU Industry Strategy

During a working dinner on the subject of **industrial competitiveness on 20 February** in Brussels, the French Secretary of State for Industry, Christophe Sirugue, said that several member states had expressed their wish to move more quickly and have more solid elements sooner with regard to support for industrial competitiveness at the next Competitiveness Council on 29 and 30 May next.

The Commissioner for the Internal Market and Industry, Elżbieta Bieńkowska, confirmed during a press conference, the request for member states to put forward a holistic document for supporting European industry but did not yet confirm any date in this respect. She fully supports this request but could not set any date yet because the College of Commissioners has not yet debated the issue.

The question of reindustrialising the European economy was once again openly mooted in 2014 by the Commissioner for Industry, Antonio Tajani, before falling into limbo again when the new European Commission took shape.

Following the closure of many emblematic industrial centres in the EU, several states called on the Commission to get a grip of the dossier this year. This request was only very partially heeded by the Commission, however, judging by the definitive version of its 2017 work programme.

French initiative. In January 2017, the Secretary of State for Industry, Christophe Sirugue and the Secretary of State for External Trade, Matthias Fekl, wrote a column in *Libération* calling for a European approach to promote a “*made in Europe*” policy to counter the “*increasing competition from the emerging economies*”.

The industrial sector was on offensive ahead of the Competitiveness Council of 20 February and in a joint statement (http://www.glassallianceeurope.eu/images/cont/joint-declaration-on-eu-industrial-strategy-2017_file.pdf) urged the European Commission to present a “*realistic and ambitious*” timetable for industry to account for a 20% share of EU GDP.

See also: **#INDUSTRY4EUROPE**

20310/Press Release – 2017.02.20



European Commission

Commission Proposes More Transparency and Accountability in Comitology Procedure

The European Commission adopted on 14 February a proposal aiming to modify Regulation 182/2011 on 'comitology' in order, it explains, to increase “*transparency and accountability in the procedures for implementation of EU legislation*”. In particular, it suggests changes to the voting rules in the committee of appeal responsible for re-examining draft texts or making changes to them, if necessary.

The comitology system works well for the vast majority of decisions. In recent years, however, in many sensitive dossiers, member states have been unable to achieve the required majorities to vote for or against certain draft texts (a no-opinion scenario). In such cases, the responsibility to make the final decision falls upon the Commission, requiring it to make this decision without clear political backing from the member states.

In 2015 and 2016, the Commission was legally obliged to adopt 17 acts concerning the authorisation of sensitive products and substances such as glyphosate or genetically modified organisms (GMO), even though the member states were unable to take position either in favour of or against the proposals.

The raft of four targeted amendments will reinforce transparency as regards the positions adopted by the member state, help to ensure greater political guidance and build more accountability into the decision-making process.

Changes to the voting rules for the last stage in the procedure (appeal committee). The aim is that only votes for or against a text will be counted, which will reduce the number of abstentions and the number of situations in which, as the committee is unable to take position, the Commission is obliged to act with no clear mandate from the member states. The Commission's text proposes changing the voting rules of the appeal committee to reduce the risk of a no-opinion scenario and clarify the positions of the member states by providing that those not in attendance or abstaining are deemed 'non-participating' countries when calculating the qualified majority. This means that the double majority (55% of numbers states representing 65% of the population) will be calculated "*based only on member states taking part in the vote, thus vote either in favour or against*" (in accordance with article 238(3) (a) of the Treaty, the Commission's text explains. Blocking minorities will be calculated in accordance with that Treaty provision as well.

Under the current rules, a qualified majority is reached if the majority: - includes at least 55% of the member states (which means that a qualified majority has to comprise at least 16 member states); - the member states voting in favour represent at least 65% of the population of the Union.

Involvement of the national ministers. This involvement will be obtained by authorising the Commission to refer a text to the appeal committee a second time, at ministerial level, if the national experts do not take position (or in the event that the vote at the first meeting has been postponed), which will help to ensure that sensitive decisions are examined at the appropriate political level.

Greater transparency in the vote at appeal committee level will be achieved by publishing the votes cast by the representatives of member states. Currently, the votes of the representatives of the member state at the appeal committee are covered by the confidentiality rules provided for in the rules of procedure of the appeal committee (as is the case for the examination and advisory committees). The Commission takes the view that greater transparency is needed over the positions adopted by the member states' representatives at the appeal committee. The proposal aims to publish these votes to increase the clarity of their position, the Commission explains.

A guarantee of political input. This will be achieved by allowing the Commission to refer a matter to the Council of Ministers for an opinion if the appeal committee is unable to take position. In line with article 291(1) of the Treaty, it is the member states that are responsible for implementing Union acts and controlling the Commission if implementing powers are conferred upon it. In the event that the member states do not reach an opinion in this control procedure, it should be possible to put the matter to the Council, as this is the only political body at EU level that is made up of the member states.

It is proposed that the Commission be given the right to bring specific cases to the Council following a 'no-opinion' outcome in the appeal committee. The aim, the Commission explains, is to secure political guidance on the implications of the no-opinion outcome, "including the institutional, legal, political and international implications". The Commission should take account of any position expressed by the Council within three months after the referral. In duly justified cases, the Commission may indicate a shorter deadline in the referral.

The text has been put to the Council and Parliament for scrutiny.

20311/Press release – 2017.02.14

EU INDUSTRY DAY on 28 February 2017



European Commission

The European Commission organised on 28 February the European Industry Day to take stock of existing actions and stimulate debate on a joint vision for the long-term future of European industry.

Key notes included debates on industrial revolution, on industrial competitiveness, on new technologies and evolutions, and the digital transformation for the future of European industry.

- What has been achieved by mainstreaming industrial competitiveness into EU policy?
- How will people find their place in the new industrial revolution?
- What is the role of regional ecosystems for industrial transformation?
- What are the key technologies for the future of industry?

400 participants, key industrial players, global trend shapers and high-level policymakers took part in the debate on the future of European industry, with EC participation from President of the European Commission Jean-Claude Juncker, Commission Vice-President Jyrki Katainen, and Commissioners Elżbieta Bieńkowska (Internal Market, Industry, SMEs and Entrepreneurship) and Carlos Moedas (Research and Innovation).

20312/Press release – 2017.02.28

UNITED KINGDOM: Government White Paper on Its strategy for Leaving EU

The British government published on 2nd February a White Paper on Brexit – a 72-page document which sets out London's 12 priorities for its future negotiations with the EU. As British Prime Minister Theresa May had announced on 17 January, the United Kingdom will leave the single market, but will try to negotiate a free trade agreement with the EU. And in the White Paper, the government also says that it will not close the country to EU nationals.

The White Paper states that the time needed for implementing the new arrangements with the Europeans will depend on the areas concerned – for example, immigration control or the customs system.

The Paper sets out the basis of the discussions for the 12 priorities – bringing clarity, taking control on national laws, strengthening the Union (cohesion between the different nations of the UK), protecting the strong links with Northern Ireland and maintaining the common area of movement, but also controlling immigration and securing the rights of UK nationals like those of the British in the EU. Cooperation on counter-terrorism and organised crime is also a priority.

As regards migration, the White Paper states that migrants have been valuable to the UK and have benefited the country. The country will therefore stay open to migrants, including those from EU countries – but more specifically, to highly qualified migrants. The country will also remain open to migrants coming to the UK legally, but the last decade has seen migration rates rise too greatly, with an impact on public services, the document states.

The government reiterates in its White Paper that it does not want to adopt an already-existing relationship model and will make it its priority to obtain as free a trade relationship with the EU as possible.

20313/Press release – 2017.02.02

Improved EU Gas Security Situation

A workshop took place on 6 February on the question of energy autonomy, security and diversification of the EU's gas supply. It was organised by the European Parliament's industry, research and energy committee and highlighted the need to improve the situation in Europe through new gas infrastructure, particularly in the area of LNG.



The director-general of the European Network of Transmissions System Operators for Gas (ENTSO-G), Jan Ingwersen, said “The situation is improving, even in the most vulnerable regions”. He also provided assurances that “There are more zones where it is necessary to strengthen infrastructure but as a whole, we are progressing well”. He explained that the majority of investment focused on Central and Eastern Europe and that in the future there would be less investment in western Europe.

He added that the gas infrastructure network is “particularly robust” and the LNG terminals and storage capacity are “fully used”. He highlighted ENTSO-G's efforts to elaborate network codes to ensure uninterrupted cross-border flows.

Katja Yafimava, a researcher at the Oxford Institute Energy Studies, said that they needed to make further progress by implementing the provisions from the third package (for the liberalisation of the internal energy market, Ed).

Claude Turmes (Greens/EFA, Luxembourg) welcomed the inversed gas flows as “one of the best European investments” and also welcomed the creation of a LNG terminal in Lithuania that helps to break the monopoly of Russian gas companies in the Baltic countries.

The Vice President of the Council of European Energy Regulators (CEER) and president of the Croatian regulatory authority, Tomislav Jurekovic, highlighted the fact that LNG was a significant source in terms of diversification of supply and called for more information and transparency to be guaranteed on the market. Mr Jurekovic called for action to reabsorb the regulatory shortcomings affecting LNG terminals.

Ms Coby Van der Linde, director of the Clingendael International Energy Program stressed that “We need to believe in the internal market”. She also said that they also had a tendency to reduce everything to a question of geopolitics. She added that, “The European gas market will be well supplied until 2023-2024. There is no supply problem. The question involves the security of supply beyond then. We have already done a lot to have interconnections and inverse flows”.

In reply to a question from Cypriot MEP, Neoklis Sylikiotis (GUE/NGL), regarding the role of Eastern Mediterranean gas reserves helping energy security, particularly off the Cypriot coast, Ms Yafimava admitted that these were important but pointed out that the challenge involved building infrastructure for transporting this gas to the mainland.

20314/Press release 2016.02.06

Inflation Rate

Latest Eurostat figures show that the annual inflation rate was **1.8% in January 2017 in the Euro area**, up from 1.1% in December. **The EU28** annual inflation was **1.7%**, up from 1.2% in December 2016.

The largest upward impacts to euro area annual inflation came from fuels and transport (+ 0.5%), heating oil & vegetables (+ 0.14%), while telecommunications (- 0.09%), gas (-0.08%), and bread & cereals (- 0.05%) had the biggest downward impacts.

Ireland	0.2%	Sweden	1.5%
Romania	0.3%	France	1.6%
Bulgaria	0.4%	Netherlands	1.6%
Denmark	0.7%	UK	1.8%
Cyprus	0.7%	Germany	1.9%
Croatia	0.9%	Austria	2.1%
Slovakia	0.9%	Czech Republic	2.3%
Finland	0.9%	Hungary	2.4%
Italy	1.0%	Lithuania	2.5%
Portugal	1.3%	Luxembourg	2.5%
Malta	1.4%	Estonia	2.8%
Poland	1.4%	Spain	2.9%
Greece	1.5%	Latvia	2.9%
Slovenia	1.5%	Belgium	3.1%

Elsewhere

USA	2.5%	Russia	5.0%
Canada	1.5%	Brazil	5.35%
Japan	0.3%	Australia	1.5%
Switzerland	0.3%	India	3.17%
Turkey	9.22%	China	2.5%

GLASS NEWS

A. *FLAT GLASS*

Glass Companies

AGC

1. AGC Asahi Glass to Exhibit “Touch” Glass Installation at Milan Design Week



The exhibit—titled “Touch” places a focus on “The Feel of Glass”, inspired by the human sense of touch. The collaboration between AGC’s glass processing technologies and the innovative ideas of its creative partners will completely overturn the conventional image of glass.

AGC is happy to welcome its new creative partners Jin Kuramoto, whose designs express the essence of the object or item through clear, form-based expression, and London-based design studio Raw-Edges, known for its witty and humorous world-view, and works that incorporate colour and movement. As exemplified by smartphones and tablet PCs, an increasing variety of glass used in everyday life is now becoming something that people “touch” to do things. AGC is developing a wide range of technologies to respond to such market needs.

At Milan Design Week 2017, AGC aims to show glass as a material that is designed for people to “touch” instead of its conventional uses for partitioning, protecting, and decorating. AGC’s glass installation will stimulate the curiosity of visitors and make them feel like “touching” the works to experience the diverse range of textures and feel of glass.

20316/Press Release – 2017.02.06

2. AGC sees upward trend: 2016 financial results

During the fiscal year under review (from January 1, 2016 to December 31, 2016), the global economic environment surrounding the Company and its consolidated subsidiaries remained on a gradual recovery track on the whole.

In Japan, the economy showed a gradual upward trend thanks to factors such as economic measures taken by the government although some sections were lagging behind the recovery trend.

The European economy made a gradual recovery and the United States continued its economic recovery along with increased consumer spending and other factors. The economy was picking up in China and other emerging countries.

Under such a business environment, the AGC Group posted net sales of 1,282.6 billion yen for the period under review, down 43.7 billion yen or a 3.3% decrease from the previous year, due to such reasons as the strong yen. Operating profit increased by 25.1 billion yen or up 35.3 % year-on-year to 96.3 billion yen, owing to positive factors including increased shipments of automotive glass and chemical products, the price hike of architectural glass and the cost decrease mainly from the decline of raw materials and fuel prices.

Profit before tax was 67.6 billion yen, down 17.0 billion yen or a 20.1% decrease on a year-on-year basis mainly due to the impact of the income from revision of the defined benefit corporate pension plan posted during the six months ended June 30, 2015. Profit for the year attributable to owners of the parent was 47.4 billion yen, up 4.5 billion yen or a 10.6% increase on a year-on-year basis primarily because of a decrease income tax expenses.

Glass Shipments of architectural glass remained robust in Europe and North America and stayed at the same level as the same period of the previous year in Japan and other Asian countries. Sales decreased on a year-on-year basis, mainly affected by the strong yen, although selling prices increased mainly in Europe and North America.

In the automotive glass business, both shipments and sales increased from the same period of the previous year owing to increased auto production in Europe, China and North America. Consequently, AGC Group's sales increased on a year-on-year basis. As a result, net sales from the Glass Operations for the fiscal year were 680.0 billion yen, down 12.9 billion yen or a 1.9% decrease from the previous fiscal year. Operating profit was 31.8 billion yen, up 18.8 billion yen or a 143.9% increase mainly due to the strong shipments of automotive glass, the increased selling prices of architectural glass products, and the decline of raw materials and fuel prices.

Electronics: Regarding LCD glass substrates, the selling prices decreased but shipments increased year on year. Shipments of specialty glass for display applications decreased in the field of electric device applications on a year-on-year basis while the shipments of cover glass for car-mounted displays increased. Shipments of glass for solar power systems decreased from the previous year. Regarding electronic materials, shipments of optoelectronics materials decreased on a year-on-year basis despite a recovery in the second half of the year. As a result, net sales from the Electronics Operations for the fiscal year, were 258.1 billion yen, down 30.4 billion yen or a 10.5% decrease, and operating profit was 25.0 billion yen, down 4.1 billion yen or a 14.0% decrease from the previous fiscal year.

Net sales of the AGC Group for **the fiscal year ending December 31, 2017** are forecasted to be 1,350.0 billion yen, up 67.4 billion yen or a 5.3% increase from a year earlier, and operating profit is forecasted to be 105.0 billion yen, up 8.7 billion yen or a 9.0% increase year on year. Profit before tax will be 93.0 billion yen, up 25.4 billion yen or a 37.6% increase from the previous fiscal year and profit for the year attributable to owners of the parent is estimated to be 66.0 billion yen, up 18.6 billion yen or a 39.1% increase from the previous fiscal year.

Forecast of financial conditions for FY2017 of the cash flows from operating activities, profit before tax is expected to increase by 25.4 billion yen to 93.0 billion yen as compared with that for the fiscal year ended December 31, 2016. Depreciation expenses are expected to be 130.0 billion yen, up 8.2 billion yen from the previous fiscal year. Of the cash flows from investing activities, capital expenditures are expected to increase 34.0 billion yen year-on-year to 160.0 billion yen. As for financing activities, the AGC Group will repay interest-bearing debts and increase borrowings, in addition to dividend payments in accordance with the Group's dividend policy.

Full information is available on the company website at
http://www.agc.com/english/news/20170207e_1.pdf

20317/Press Release – 2017.02.14

Saint-Gobain

1. **Saint-Gobain and Greentown Labs, the largest clean technology incubator in the United States**, announce the extension of their partnership through 2019 to support Clean Technology Innovation.



The partnership includes Saint-Gobain providing product donations to support the construction of Greentown Labs' expansion site, the Global Centre for Cleantech Innovation, which will nearly triple the incubator's current footprint in Somerville, Mass., and secure its position as the largest clean technology incubator in the world.

"Over the past three years, Saint-Gobain has been an exemplary partner and member of the Greentown Labs community," said Emily Reichert, CEO of Greentown Labs. "Our entrepreneurs are fortunate to work alongside Saint-Gobain's team of experts not only because of the insight they glean, but also because of the unique testing facilities Saint-Gobain provides as a shared resource in our lab. We're eager to continue our partnership that's focused on pushing the boundaries of clean technology innovation, and we can't wait to see our Global Centre come to fruition with Saint-Gobain's essential support."

The primary goal of the Global Centre for Cleantech Innovation is to support start-ups growth, but also to provide an innovation space for global corporations to form corporate strategic partnerships where they can explore new ventures through collaborative R&D projects.

Saint-Gobain will maintain its existing test facilities and, through the expanded partnership, increase on-site prototyping capabilities to evaluate new building materials, technology and assemblies. This Saint-Gobain-sponsored workspace will be available to Greentown members as well as Saint-Gobain-CertainTeed employees.

Construction on the 55,000-square-foot Global Centre for Cleantech Innovation began in October 2016 and is anticipated to be completed in fall 2017. Greentown Labs is delivering on its promise that the Centre, located directly across the street from its current facility, will be a showcase of innovation in its construction through the use of products from Saint-Gobain's family of companies. Through the partnership agreement, Saint-Gobain is providing building science expertise and in-kind building materials from two of its subsidiaries, SageGlass and CertainTeed.

"The heart of this partnership has and always will be the opportunity to share knowledge, culture and community," said Minas Apelian, Vice President, Research & Development, at Saint-Gobain and CertainTeed Corporations. "We are honoured to be able to share our building science knowledge and our materials that have the power to improve the daily life of Greentown Labs' members and spur future innovation."

"Partnerships like this one with Greentown Labs are core to Saint-Gobain's innovation strategy. We strongly believe that in order to solve the challenges of tomorrow, it is essential we collaborate with the smartest minds in the industry, whether that's inside or outside of Saint-Gobain's family of companies," said Apelian. "Through our partnership with Greentown Labs, we gain unparalleled access to the cleantech ecosystem in support of this strategy."

SageGlass, the world's smartest electrochromic glass, will be installed on the third floor of the Centre. The members occupying the office space will participate in occupant comfort and acceptance studies. Member feedback will allow building scientists to measure the impact SageGlass has on occupant comfort. The data collected and subsequent analysis will directly impact future product and business development.

Saint-Gobain's North American construction materials subsidiary, CertainTeed, will showcase a suite of its products in the Centre, including a 33,000-square-foot Flintlastic® SA Self-Adhered Roof System and an array of acoustical ceiling and wall solutions that will create an environment that is quiet, comfortable and conserves energy and resources.

20318/Press Release – 2017.01.31

2. Saint-Gobain acquires Augustdorf insulated glass manufacturing plant

On January 20, 2017, Saint-Gobain signed the contracts for the acquisition of the North Rhine-Westphalian plant in Augustdorf (Germany) from Teuto-Glasveredelung GmbH & Co.KG.

This facility produces high-quality insulating glasses. The purchase is planned to be completed in March of this year, subject to approval by the responsible authorities.

The acquisition of the modern production site for thermal insulation glasses, sound-insulation glasses, safety glasses, sun protection glasses and decorative glasses in the Lippe district, will allow Saint-Gobain to consolidate its capability to supply the German window makers for the next years.



The transaction is consistent with the Group's strategy of expanding its range of downstream products towards high value-added solutions.

20319/Press Release – 2017.02.22

3. Saint-Gobain named Top Employer in North America for exceptional workplace, employee benefits

Saint-Gobain has received the Top Employers Institute's Top Employer North America Certification for the second consecutive year for its exceptional employee offerings.

The Top Employers Institute is an independent organization that certifies employers around the world for excellence in the work environments they create for their employees and honoured Saint-Gobain at an award ceremony in Dallas, Texas.

The annual international research undertaken by the Top Employers Institute recognizes leading employers around the world that provide excellent employee conditions, nurture and develop talent throughout all levels of the organization and strive to continuously optimize employment practices.

"Creating an inclusive and optimal work environment for all employees is central to our company's culture and values," said Susan Nutson, Senior Vice President of Human Resources at Saint-Gobain Corporation. "At Saint-Gobain, we aim to foster an environment that promotes employee growth and well-being, and it's exciting to see that our continued efforts are being recognized by such a high-calibre organization."

The Top Employers Institute assessed Saint-Gobain's employee offerings on the criteria of talent strategy, workforce planning, on-boarding, learning and development, performance management, leadership development, career and succession management, compensation and benefits, and company culture.

Crucial to the Top Employer Certification is the completion of a stringent validation and audit process in which performance scores are rated against an international standard. Only those employers that meet the required standards of excellence receive Certification.

The Top Employers Institute is recognizing Saint-Gobain for the unique employee offerings it provides its employees including: personal health coaching, weight management and nutrition programs, company book clubs and athletic leagues, networking opportunities, a mentoring system and digital learning courses.

"Optimal employee offerings and HR best practices ensure that people develop themselves personally and professionally," said Top Employers Institute CEO David Plink. "This, in turn, enables companies to grow and develop, maximize organizational performance and attract and retain the best talent. Our comprehensive research concluded that Saint-Gobain provides an outstanding employee environment and offers a wide range of creative

initiatives – from benefits and learning and development opportunities to well-thought-out career management programs – that are truly aligned with the company’s culture.”

20320/Press Release – 2017.02.10

NSG



1. The NSG Group has announced it will restart a float glass furnace in Europe in FY2018.

The Group plans to restart a suspended architectural glass float line at the site of its wholly-owned subsidiary in Venice, Italy (“Venice Line”), in the third quarter of FY2018.

With process modifications associated with the restart, the Venice Line will become capable of producing VA (value-added) products. By restarting the Venice Line, the NSG Group intends to ensure the stable supply of architectural glass in response to a robust market demand in Europe, in view of the planned cold repairs of the Group’s operating float glass lines in Europe in the coming years, as well as to drive the Group’s shift to a higher VA sales ratio.

20321/Press Release – 2017.02.16

2. Pilkington North America Inc. plans to invest \$7.5 million in technology and manufacturing upgrades at its Versailles facility.

Pilkington will buy new equipment to meet current and future customer demands. Using the most modern Advanced Press Bend process for laminated windshields, the company’s newly developed proprietary technology will support production of its formed glass pieces.

Pilkington North America established its Versailles operation in 1987, where it employs about 300 people.

“This investment will help strengthen NSG Group’s market leadership in the value-added product segment,” said Rick Frampton, regional director automotive, North America.

Sen. Julian Carroll, of Frankfort, said the investment will positively impact the region.

“Congratulations to Pilkington on updating the technology at its Versailles facility to better meet its manufacturing needs,” he said. “Versailles, Woodford County and the surrounding region welcome the growth that will be generated and stand ready with a skilled workforce to meet any future needs.”

To encourage the investment and job retention in the community, the Kentucky Economic Development Finance Authority preliminarily approved the company for tax incentives up to \$700,000 through the Kentucky Reinvestment Act. The performance-based incentive allows the company to keep a portion of its investment over the agreement term through corporate income tax credits by meeting job retention and investment targets.

In addition, Pilkington can receive resources from the Kentucky Skills Network. Through the Kentucky Skills Network, companies can receive no-cost recruitment and job placement services, reduced-cost customized training and job training incentives. In fiscal 2016, the Kentucky Skills Network provided training for nearly 95,000 Kentuckians and 5,000 companies from a variety of industry sectors.

20322/Press Release – 2017.02.03

3. NSG Group and visualplanet™ integrated smart mirror

NSG Group's generation 2 Pilkington MirroView™, a non-metallic mirror suitable for projected capacitive touch-screen applications, is an interactive mirror using the recently launched multi-user visualplanet™ touchfoil™, a class-leading touch resolution and a state-of-the-art controller. Combined, the two features offer pinpoint touch accuracy and unrivalled versatility in fulfilling the bespoke needs of OEM integrators, worldwide.



The multi-user touchfoil™ delivers lightning fast 6 ms touch performance through glass of up to 10 mm, with the precision to drive mouse-designed operating systems with a finger. It offers real-time movement and programmable palm rejection through up to 40 independent touch points, across a range of sizes from 15-55 inches. Its durability, speed, transparency, clarity, accuracy and overall performance are the most advanced in the 14-year history of visualplanet™.

The combination of the generation 2 Pilkington MirroView™ and touchfoil™ offers versatility for an extensive range of public-facing terminals, including smart mirrors in retail and bathroom applications, self-service ticketing, vending, gaming, way finding, multiuser tables and kiosks.

20323/Press Release – 2017.02.07

4. NSG Group's 'double bubble' rear window glass selected for Toyota's new Prius PHV

NSG Group rear window glass has been selected by Toyota Motor Corporation for the new PRIUS PHV (plug-in hybrid) which was launched on February 15, 2017.



Made possible by NSG Group's mould design utilizing the simulation technology and proprietary rear glass press equipment, the "double bubble" rear window, with two curves and a groove in between, helps reduce drag by drawing cabin side airstream toward the rear glass.

The unique design concept of the new PRIUS PHV is aimed at generating an intuitive understanding of its advanced functionalities and the double bubble window creates an instantly recognizable rear view.

20324/Press Release – 2017.02.20

Guardian



1. Guardian Glass names **Darijo Babic as Director of Key Commercial Projects, North America**. He will work with Guardian's channel partners, fabricators, project glaziers and architects to grow Guardian SunGuard® architectural glass business on commercial building projects.



"Darijo is well-known and respected in our industry and having him on our team will help boost Guardian SunGuard sales to the next level," says Andy Russo, Director of Sales, U.S. and Canada, Guardian Glass.

"The commercial segment is extremely important to Guardian and with our commitment to innovation, including our upcoming Jumbo Coater. We look forward to Darijo developing and executing a strategy to pursue and win key projects in close collaboration with our North America sales team and channel partners."

Darijo comes to Guardian from the prominent glazing contractor Enclos Corp., where he was Pre-Construction Manager for the Eastern U.S. ; prior to that, he held a variety of roles with PPG Industries, including National Manager, Construction Market Team (U.S., Canada and Mexico).

20325/Press Release – 2017.02.03

2. Guardian's Venezuela facility will be run by State-owned business

The Guardian Industries glass factory in Venezuela, which was seized by the country's socialist government in July 2016, will now be operated by **Venvidrio**, a state-run company that was created from the takeover of US-based Owens-Illinois.

Venvidrio has the responsibility for restarting operations at the plant in Monagas state. They will "refloat" Guardian's operations. It's unclear if it will carry out needed repairs to the plant's glass furnace.

Guardian Industries said in a statement issued in September 2016 that Venezuela had used a routine maintenance shutdown of the plant's float glass furnace as a pretext to seize it.

Guardian also said it warned the government that it could be creating a dangerous situation at the facility for employees and the community if it continued making glass there without completing the maintenance work.

“Float glass plants operate at extremely high temperatures, continuously, 24 hours a day, 365 days a year, throughout their operational life,” Guardian said in its statement. “All float glass plants must be temporarily shut down at the end of their operational life in order to undergo major repairs requiring specialized and technical expertise.”

20326/Press Release – 2017.02.08

Clayton Glass

Clayton Glass has recently launched SMARTGLASS® Dynamic, the industry’s first automatically self-tinting, glass technology for conservatories, orangeries and other glazing elements.



This new glass technology represents an era of dynamic conservatory living, but importantly for installers, can be handled in the same way as any other glass unit, is simple to install and will be manufactured in any shape within 10-14 days.

In the middle of summer SMARTGLASS® Dynamic will change from a clear state in the morning to a deep blue during the day where solar control and light shading is needed most, yet as the unit cools will go back to clear at the end of the day and into the night. At all other times of day and season, this glass innovation will offer various semi-tinted states, depending upon surface temperature of the glass. In it’s clear state, this glass technology offers a similar light transmission to a standard clear glass unit.

From a technical perspective the solar factor (G-value) of SMARTGLASS® Dynamic varies from 10-34%, boasting light transmission of 6-60% and offers a U-value of 1.2 W/m²K. From a solar control standpoint, it offers the best performance of any conservatory roof glass in the UK and with many standard roof glass offerings only able to achieve a G-value of 40%, outperforms these even in a clear state, with the considerable added benefit of acting dynamically from 10-34%, 365 days a year.

Further product information is at www.smart-glass.co.uk.

20327/Press Release – 2017.01.31

Bangkok Glass



One of the largest container glass producers in South East Asia, Thailand based Bangkok Glass is diversifying into the flat glass industry.

The 5 billion Baht new float glass plant at Prachin Puri is currently under construction and likely to be completed by third quarter of the year. The 600 tons per day plant will produce high quality float, printed and speciality glass. Slowdown and intense competition in domestic and regional container glass industry has prompted Bangkok Glass to invest in flat glass segment.

According to the President of Bangkok Glass Pavin Bhirombhakdi, “We expect that in five years from now, we will generate 40% of the total revenue in our glass business from the float glass division. In contrast, the container glass division will generate around 50% from the current 85%.” “Packaged products may no longer be the focus of our business. Glass containers are facing stiff competition in the country from alternate forms of packaging.”

Bangkok Glass partnered with Europe based Glass Trösch Holding AG, a specialist in value-added float glass for technology transfer to set up the float glass plant. Glas Trösch Group operates about 70 glass processing plants across Europe, including four float glass lines.

Bangkok Glass contributes about 8% of the revenue for its parent company, Boon Rawd Brewery. With the commissioning of float glass, Bangkok Glass expects to contribute to 13% of the revenue for Boon Rawd Brewery. Bangkok Glass and Boon Rawd Brewery have an off take agreement for about 50% production of Bangkok Glass. Container glass sales volume of Bangkok Glass dropped to 890,000 tons in 2016 from 980,000 tons in 2014.

20328/Press Release – 2017.02.07

Vitro Architectural Glass (formerly PPG Glass)



Vitro Architectural Glass (formerly PPG Glass) has selected its Wichita Falls plant to be the site of a new jumbo magnetron sputtered vacuum deposition (MSVD) glass coater, expected to be the largest of its kind in North America. Groundbreaking is slated for April.

The \$55 million investment, which Vitro Glass first announced when it acquired PPG's former flat glass business last fall, will enable the Monterrey, Mexico-based manufacturer to produce high-performing, energy-efficient low-emissivity (low-e) glasses in the larger sizes desired by today's building designers.

Sand and raw materials are melted to create glass at Vitro Architectural Glass's Wichita Falls, Texas plant, which is to be the site of the company's new jumbo magnetron sputtered vacuum deposition (MSVD) glass coater. The \$55 million investment, which Vitro Glass first announced when it acquired PPG's former flat glass business last fall, includes construction of a new 200,000-square-foot building and several ancillary projects.

The jumbo coater will enable Vitro Glass to produce high-performing, energy-efficient low-emissivity (low-e) glasses in the larger sizes desired (over 12 feet).

Dick Beuke, president, Vitro Architectural Glass, said the coater will strengthen Vitro Glass's position as an industry leader, innovator and architect resource. "As building codes become more stringent and building designs more complex, architects and building designers are driving glass manufacturers to provide higher-performing products, greater cost efficiencies and increased technical support. This new machinery, along with our expanded sales and service staff, positions us to meet those demands."

In addition to the MSVD coater, which applies ultra-thin layers of metal to glass to help it deflect heat without reducing transparency, the \$55 million price tag includes construction of a new 200,000-square-foot building and several ancillary projects.

The Wichita Falls Economic Development Corp. approved a \$3 million incentive package in mid-January to provide local support for the project. The coater will expand the number of jobs for one of the city's largest employers and create new work for local contractors when the building is constructed.

Vitro Glass considered all four of its U.S. manufacturing facilities as sites for the new coater before selecting Wichita Falls. The company also has operations in Carlisle, Pennsylvania; Fresno, California and Salem, Oregon.

20329/Press Release – 2017.02.17

Miscellaneous

Glass for Europe Praises European Parliament's Reform Vote

Glass for Europe welcomes the European Parliament's vote gathered in plenary in Strasbourg on the reform of the EU ETS on 15 February. This vote paves the way for a reformed EU ETS which would reconcile cost-effective CO₂ emission reductions with industrial realities and competitiveness.

The structural problems of the EU ETS system have been known for some time now, in particular the lack of adequate protection against the risk of carbon leakage induced by mechanisms such as the CSCF, but also, the excess in allowances resulting from the combination of an overly rigid allocation system with the industrial downturn of the last years, and the historically low price of EUAs.

Bertrand Cazes, Secretary General of Glass for Europe, said "All the well-known deficiencies of the EU ETS are addressed with the Commission proposal as amended today by the European Parliament. The European Parliament must be praised for its major contribution to equipping the European Union with a robust ETS tool to deliver industrial GHG emissions reduction, in line with the COP21 Paris agreement".

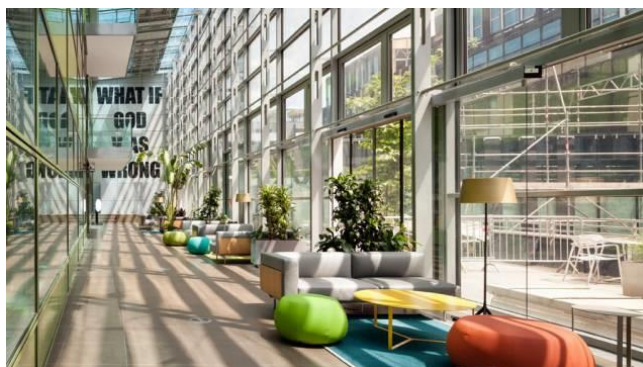
Industries and investors need regulatory predictability to plan the low-carbon transition and citizens expect robust actions to fight climate change. With today's mandate given to the EP rapporteur Ian Duncan to start negotiations with other institutions, it is high time for the Council of the European Union to define a general approach.

Glass for Europe hopes that the main acquis of the European Parliament report will be safeguarded during the negotiation process. "Far-reaching compromises found in the European Parliament need to be preserved, in particular those which secure a fair assessment of sectors at risks of carbon leakage, reduce the risks of a CSCF and of over- or under-allocation. These features are essential for Europe's flat glass industry to remain competitive and leader in low-carbon glass manufacturing" concludes Bertrand Cazes.

20330/Press Release – 2017.02.17

EControl Dimmable Glass Gives Improved Energy Usage for Research Institute's Renovation

The dimmable solar control glass from EControl-Glas (Plauen, Germany) provides shading without stopping all the daylight from entering the building. And with solar factors of below 10 percent it also effectively protects against overheating in summer. It is equally suitable for new buildings and for (energetic) building renovation.



In 2015 the time had come for the research institute "IMBA" in Vienna to exchange the single-pane glazing of the south façade for the dimmable glass ECONTROL (insulation glass type 45/8). Large window fronts and all-glass façades are not just attractive from the outside. From inside they also offer impressive views and light-flooded spaces, thus increasing their occupants' feeling of well-being. The disadvantage of large areas of glass: the solar energy input is often so high that, despite standard solar control glass, additional mechanical shades are needed to prevent the rooms overheating. But then external or venetian blinds block the view.

The disadvantages of summer overheating were familiar to employees of the Vienna-based institute for molecular biotechnology, known as IMBA. Behind the single-pane glass frontage of the building's south façade the rooms became so hot in summer that concentrating on work became impossible. There was no way of shading the area, and in winter the single glazing offered little insulation. So in 2015, around 10 years after the building was constructed, it was time for the façade to undergo energy efficiency renovation. The goal here was to retain the glass atrium and thus the view of the outside. The planning for the renovations was done by architects from ATP Vienna.

The chosen design was for 770 square metres of the dimmable glass ECONTROL smart, which can either admit warming solar energy to the inside or block it out depending on requirements and weather conditions.

Its triple-glazed construction allows variation of daylight transmission between 45 (undimmed) and 9 percent (dimmed), so that adequate daylight is admitted to the building at all times. In winter the very good solar factor (0.5 W/m²K in triple-glazed construction) prevents loss of heat, so ensuring pleasant indoor conditions all year round.

20331/Press Release – 2017.02.10

Markets & Trends

Global Automotive Glass Industry Trends and Opportunities

A new report from Orbis Research, '*Global Automotive Glass Market: Trends & Opportunities (2015-2020)*', provides an in-depth analysis of global Automotive Glass market (OEM and ARG) with detailed analysis of market sizing and growth, market share and economic impact of the industry.



The report also assesses the key opportunities in the global market as well as the markets of China, United States of America, India, Russia and Rest of the World. Growth of the overall Automotive Glass has also been forecasted for the period 2015-20, taking into consideration the previous growth patterns, the growth drivers and the current and future trends. Further, key players of the industry like Asahi Glass, Fuayo, Xinyi, NSG, and Saint Gobain are profiled.

The automotive glass market can be divided into two segments: OEM (Original Equipment Manufacturers), manufacturers for glass products sold to automobile manufacturers principally for installations on new vehicles, and the Aftersales Replacement Glass (ARG) market for glass products sold to aftermarket suppliers for replacement purposes.

Market prices for automotive glass depend on factors such as raw material costs and supply and demand in market. The average price for automotive glass decreased from US\$35.60 per square meter in 2009 to US\$33.5 per square meter in 2010 due to global financial crisis that occurred during 2008. After 2010, the average price for automotive glass has stabilized due to recovery of global automobile sector.

With recovery in global automobile sector and increasing global GDP, this industry is expected to flourish in coming years. It is expected that the global automotive glass market will grow at higher pace from 2015 to 2020.

The global automotive glass market is set to grow in the coming years with increase in global automotive production, growth in GDP of various economies and increasing urbanization.

Possible copy of Global Automotive Glass Market at:

<http://www.orbisresearch.com/contact/purchase/185265>

20332/Press Release – 2017.02.10

Energy-efficient Window Market to Grow to 25 Billion by 2026

Research and Markets added the "Energy-efficient Windows Market by Glazing Type, Application, End-use Sector, and Region - Global Forecast to 2026" report to their offering.



It is projected that the energy-efficient windows market size will grow from USD 10.12 Billion in 2015 to USD 25.31 Billion by 2026, at an estimated CAGR of 8.6% between 2016 and 2026.

The energy-efficient windows market is expected to witness high growth as a result of increase in adoption of green building standards, trend toward improving energy efficiency, and rise in popularity of heating, ventilation and air conditioning (HVAC) applications. The growth in trend of sustainable construction techniques such as zero energy building, energy-efficient building, and others, growth in construction industry, rapid urbanization and commercialization, and stringent government regulations are some of the other factors influencing the growth of energy-efficient windows market.

For more information about this report, visit:

<http://www.researchandmarkets.com/research/rhk56f/energyefficient>

20333/Press Release – 2017.02.06

Shop Windows Get Smarter With Panasonic Visual Solutions

Panasonic Corporation will begin sales of its high image contrast transparent screen that enables the use of glass, such as shop windows, as digital signage on March 22, 2017.



This product will include XC-CSG01G, a unique glass comprised of a high contrast light control film placed in between 2 sheets of glass, which when voltage is applied changes from the screen mode to the transparent mode, as well as XC-CSC01G-A1, a control box. Images are projected (from the rear) onto the glass during the screen mode. The control box will synchronously operate the projector and the screen per the image content, and change the screen from transparent mode to screen mode. During the transparent mode, it will serve as a shop window showcasing products and exhibits, and during the screen mode it can reproduce high resolution images on the glass to introduce information about new products or about various campaigns during the sale season, helping transform the show window into an even more captivating environment. Moreover, multiple screens may be combined to create one large screen.

Panasonic will provide new visual solutions to mainly the distribution industry, public institutions, and public facilities, such as commercial facilities, retail stores, hotels, airports, and museums.

Key features

1. Reproduces high contrast images onto a large transparent glass
2. Serves as a show window displaying products and exhibits clearly
3. Numerous screens may be combined and controlled as a single large screen system

The demand among stores, shopping malls, museums, hotels, airports, and tourist information centres for a captivating exhibition service using digital signage is on the rise. Panasonic has received many requests for a system that would be capable of displaying high resolution images as digital signage and blend into the exhibition environment when not in use to create an alluring environment.

Panasonic applied the wealth of high resolution technologies it has fostered in the development of TVs and displays to create a transparent screen that could use the glass window as high resolution signage and provide a clear view of products and exhibits behind the glass when not in use as a screen.

B. CONTAINER GLASS

Glass Companies

O-I

1. O-I Reports Full Year 2016 Results

CEO Andres Lopez stated, "Our multi-year transformation is off to a strong start - we achieved the key financial targets that we outlined at investor day in early 2016. Margins expanded more than 100 basis points, due to the benefits of our strategic initiatives and the acquired business. We are executing on our strategy, overcoming visible external challenges from Brazil macros, the Brexit vote and the strengthening U.S. dollar.

"Looking ahead, we expect continued improvement in our top-line and bottom-line results as we advance to the next stage in our transformational journey - from stability to agility. We will augment our ability to adapt to market changes and invest in new capabilities. In all, we are one enterprise solely executing on one plan with focus, rigor and discipline everywhere to further enhance shareholder value."

Full year net sales were \$6.7 billion, up \$546 million from 2015. The acquired business contributed \$608 million in incremental sales (excluding organic growth from September through December 2016) which was partially offset by \$108 million in adverse currency translation. Prices were 1 percent higher on a global basis, mainly due to price adjustments resulting from cost inflation. Global shipments increased 9 percent in 2016. Key contributors to growth were the acquired business, Europe, legacy North America, as well as Australia and New Zealand.

Shipments in Europe increased nearly 2 percent, primarily due to favourable beer and wine volumes. In North America, sales volumes improved nearly 7 percent compared to the prior year period, mainly due to the acquired business, and higher shipments in all major end uses except beer, which was on par with the prior year. Full year shipments for Latin America rose 41 percent, primarily due to the acquired business and growth in Colombia and Peru which was partially offset by the negative impact of economic weakness in Brazil and Ecuador. Overall, Asia Pacific shipments declined low single digits. In mature markets in Asia Pacific, sales volumes increased approximately 3 percent, primarily due to beer and wine. Sales volumes in China declined as domestic production was exported to support sales elsewhere in the region.

Segment operating profit was \$882 million in 2016, compared with \$740 million in the prior year, an improvement of 19 percent.

In Europe, segment operating profit was \$237 million, an improvement of \$28 million over the prior year period, or 13 percent. The region profited from higher sales volumes and improvements in operating performance. These benefits were partially offset by lower average selling prices that were not fully offset by energy deflation. Europe received an energy credit in the fourth quarter that had been delayed for legislative reasons since 2015, which essentially offsets the adverse impact of the Brexit vote for the year.



North America's segment operating profit increased \$34 million, or 13 percent. Approximately 80 percent of the increase was due to the acquired business. The legacy business also benefited from contributions from strategic initiatives and from higher sales shipments.

Segment operating profit in Latin America rose \$86 million compared to prior year, an increase of 47 percent. The acquired business provided an incremental \$94 million of segment operating profit for the region. Unfavourable currency translation and lower sales volumes in Brazil and Ecuador negatively impacted Latin America's segment operating profit. Asia Pacific reported segment operating profit of \$77 million which was \$6 million below the prior year. The favourable impact from currency was more than offset by the costs for higher intra-regional shipments and lower production volume resulting from planned engineering activity, similar to the situation noted in the fourth quarter.

Outlook

The Company expects earnings from continuing operations, and adjusted earnings, for the full year 2017 to be in the range of \$2.40 to \$2.50 per share. The midpoint of this range represents a 10 percent compounded annual growth rate in adjusted earnings per share since 2015. The Company expects cash provided by continuing operating activities for 2017 to be approximately \$730 million and adjusted free cash flow to be approximately \$365 million.

20335/Press Release – 2017.02.03

2. O-I's Schiedam Plant to Close

O-I's container glass manufacturing plant in Schiedam, The Netherlands, is set to close in August this year. Approximately 230 jobs will be lost.

The company said that the plant is no longer profitable, due to overcapacity in the glass market, relatively high production costs and outdated furnaces. The closure is part of the O-I's strategy to increase its competitiveness in Europe and to better serve the long-term needs of its customers.

Some of the affected staff will be offered positions at other O-I sites at Maastricht and Leerdam, according to HR director Rob Daamen. The company says the planned closure is subject to consultation with employees representatives.

The company will invest €155m in its European facilities in 2017. This includes the continued modernisation of plants in France, Italy, Germany, UK, the Czech Republic and Poland, across all of the company's business segments.

20336/Press Release – 2017.02.07

3. O-I Glass Bottles Chosen for John Barr Whisky

Whyte and Mackay recently launched John Barr Reserve Blend Scotch whisky onto the US market, in a glass packaging range developed by Owens Illinois, from a design by Cue.

John Barr Reserve Blend was awarded the title of 'Extraordinary Ultimate Recommendation', achieving the highest score in its category and price tier at the Ultimate Spirits Challenge 2016.



The launch is the result of a distribution deal with E & J Gallo, who will act as distributor and who had an input into the design.

The range comprises 75cl, 1 litre and 1.75 litre bottles, all of which had to launch together. O-I's production expertise at its specialist spirits facility in Alloa (Scotland) overcame the significant timescale and technical challenges, particularly to achieve panel control on the complex 1.75 litre container.

The square design features a recessed 360° label panel. The front face is embossed with the establishment date 1881 and is labelled with the logo and monogram in gold on a black, showcasing both the brand's premium quality and heritage.

Scott Gibb, commercial lead for O-I in the UK, said "We all knew it was vital the pack carried a premium look to cut through the competitive offerings at John Barr's price point. Once the design was approved, Alloa's expertise in producing the bottles ensured the customer is delighted with the result."

20337/Press Release – 2017.02.17

Verallia



For the eleven months ended November 30, 2016, and based on Verallia management accounts, the evolution of Revenue and EBITDA confirms the trend observed at the end of the nine months ended September 30, 2016.

Highlights in Verallia interim statement indicate Revenue at €2,170.5 million, an increase by +3.0% at constant exchange rate (-1.1% at current exchange rate) compared to the eleven months ended November 30, 2015, as a result of an overall growth in volumes and of increasing prices in South America, in a highly inflationary environment.

EBITDA, at €397.4 million, increases by +12.7% at constant exchange rate (+5.5% at current exchange rate) compared to the eleven months ended November 30, 2015, positively impacted by the favourable price and cost evolution, as well as an improved manufacturing performance.

Verallia also announced that IVN, its Brazilian joint-venture (27% owned by subsidiary SG Vidros S.A.) defaulted on loans. The total exposure of SG Vidros S.A. under its guarantees of the IVN Loans was €44.1 million as of 31.12.2016. SG Vidros S.A. also had a total of €16 million in shareholder loans to IVN as of December 31, 2016, due to be written off if recapitalization with local partner fails.

20338/Press Release – 2017.02.06

Allied Glass

Allied has created a stunning new bottle for Deanston Limited Edition release. Deanston Distillery has recently launched a limited edition 40-Year-Old Highland Single Malt whisky in a superb new glass bottle from Allied.



The inspiration for this authentic looking pack is the distillery's community roots and handcrafted identity, the stunning extra white flint bottle utilising a beautifully curved neck, rounded shoulders and intricate embossing on the heel to echo the traditional quality of the spirit and the rich history of Deanston. The whisky bottle is decorated with textured metal labels and secured by a wooden cork which features a recessed Deanston coin, which also harks back to the days of the cotton mill, when it was used as actual currency. Jonathan Culley, Allied's Sales Director, said

"We are particularly proud to have assisted in the development of this stunning new glass bottle for Deanston as it gives this hugely exciting brand a pack which reflects its provenance and also creates unique stand out."

The whisky itself is light amber in colour with Deanston's distinctive notes of rich honey, tropical fruit, rich oak, sweet malt, vanilla fudge and a delicate hint of dried fruit.

Less than 500 bottles of the single malt are being made available in whisky outlets worldwide.

20339/Press Release – 2017.02.07

Vetropack Group

1. Vetropack Holding has appointed Johann Reiter as CEO of Vetropack Group with effect from January 1, 2018.

Claude R. Cornaz, who will continue to lead Vetropack Group as CEO until the end of 2017, is stepping back from operational business and will be proposed as the new Chairman of the Board of Directors at the Annual General Assembly in 2018.

Hans Rüegg, Chairman of the Board of Directors of Vetropack Group, will stand for election for one more year at the Annual General Assembly on 10 May 2017, but will leave the Board at the Annual General Assembly in 2018, having reached the age of retirement.

The CEO designate of Vetropack Group, Johann Reiter, has been successfully in charge of the Business Division Switzerland/Austria since 1 November 2010. This division consists of the Swiss company Vetropack Ltd and Vetropack Austria GmbH.



As a member of the Group Management team, he is not only very familiar with the situation in both countries, but also knows all about the international challenges facing the glass industry, especially in those countries in which Vetropack Group has a presence. The search for a successor for Johann Reiter in his present role will start immediately.

“In Johann Reiter, we have chosen a very experienced manager and someone with extensive knowledge of our industry to succeed Claude R. Cornaz,” says Chairman of the Vetropack Board of Directors Hans Rüegg. “We deliberately opted for an internal appointment, because Johann Reiter, as head of our biggest business division, has excellent contacts in the industry and within our group. He is familiar not only with our managers and staff but also with the needs of the markets and our customers.”

Claude R. Cornaz is to step back from operational business at the end of 2017 and will be proposed as the Chairman of the Board of Directors at the Vetropack Group Annual General Assembly in 2018. In that role, he will concentrate mainly on the company’s long-term strategic development.

“I am very pleased to be able to hand over to Johann Reiter a financially sound Vetropack Group that is in a strategically good place and is led by a strong team,” declares Claude R. Cornaz, who has been CEO for 18 years and has steadily built up Vetropack Group over that time.



Caption: Claude R. Cornaz, CEO (left), and Johann Reiter, General Manager of the Business Division, Switzerland/Austria.

20340/Press Release – 2017.02.09

2. JSC Vetropack Gostomel

Pavel A. Prinko took over as head of Vetropack subsidiary JSC Vetropack Gostomel in Ukraine on 24 February 2017. He is succeeding Andriy Girnyk, who has managed the company for over 13 years and is now taking well-deserved retirement.

Andriy Girnyk was already in charge at the Ukrainian glassworks in the days before it was acquired by Vetropack in 2006 and played a significant role in its successful integration into Vetropack Group. A qualified chemist, he has guided Vetropack Gostomel through challenging financial periods and turned the subsidiary into Ukraine’s largest, most modern glassworks. It currently has 630 employees and generates net revenues of UAH 1,345.5 million (valid as at end of 2015).

“Andriy Girnyk has built strong bridges between Ukrainian and Swiss corporate culture, without which we couldn’t have achieved our common goals,” explains Claude R. Cornaz, CEO of Vetropack Group. “We would like to thank him for his many years of excellent cooperation and wish him all the best for the next phase of his life.”

In appointing Pavel A. Prinko as the new General Manager, the Board of Directors of Vetropack Group is pursuing its strategy of local management.

Pavel A. Prinko is a Ukrainian native and brings many years' experience in the U.S. packaging and glass industry as well as sound knowledge of the Ukrainian market. To prepare for his new role, he has been familiarising himself closely with Vetropack Group and Vetropack Gostomel over the past year.

Claude R. Cornaz is in no doubt: "In Pavel A. Prinko, we have found a successor to Andriy Girnyk who will work together with his management team to build on the solid foundations of the Business Division Ukraine."

20341/Press Release – 2017.01.30

Croxsons

Croxsons, a family owned glass packaging and closure business, have been accepted as a Gold Patron of the UKVA (UK Vineyard Association) from January 2017. Involvement with the UKVA is a sign of Croxsons' commitment to continue their support of the ever-growing UK wine industry.

Having supplied glass packaging and closure solutions for nearly 145 years, Croxsons has long-established relationships within the wine industry. Croxsons' Tim Croxson said "Being the sole glass bottle manufacturer to be accepted as a Gold Patron of the UKVA is in itself a great honour and we are delighted to be associated with such a key industry organisation. We are dedicated to supporting our customers and their industries and look forward to what the future holds."

The company prides itself on its customer relationships - 'A Family of Packaging', a statement recently included in their revamped logo design, which conveys the importance they place in nurturing their business relationships. A good example of this is Croxsons' ongoing association with Devon based Lyme Bay Winery, the majority of whose glass range is filled into bottles sourced by Croxsons. Whilst the Lyme Bay range includes some standard varieties like the 750ml and 375ml Bordeaux wines with BVS closures, it also has some rarities that Croxsons have provided through a tailored solution, such as the 350ml Avenir and 350ml Lyrica.

James Lambert, Lyme Bay's managing director said "We have worked with Croxsons for many years and they form a core part of our supply chain. They provide us with a wide range of glass bottles and are always able to adapt to our ever-changing needs. Their flexibility is excellent and we work well with their experienced team. They are also members of the UKVA which clearly indicates Croxsons commitment to the industry."

UKVA: www.ukva.org.uk - Croxsons : www.croxsons.com .

20342/Press Release – 2017.02.23

Siam Glass

Horn Glass Industries AG has recently received its latest order from the Osotspa Group, Siam Glass Plant in Thailand, for the rebuild of a 250 tonne per day - end fired furnace with 3 production lines.

The furnace will produce 250 tonnes of amber bottles for energy drinks per day.

Siam Glass Industries was established in 1977 and produces narrow and wide-necked bottles in flint and amber colour.



The current furnace rebuild is the AY 102 furnace in the Ayutthaya factory, located in Ayutthaya Province. The total plant production capacity is approximately 600 tpd. The main focus of the design for the new end port furnace is low energy consumption, glass quality and low environmental emissions. The Glass conditioning will be specially designed and equipped for modern NNPB lightweight production.

20343/Press Release – 2017.02.20

Saverglass

The Saverglass Group has decided to settle in Central America, in order to respond to a growing local market. Employees from the French site in Arques will be required to go on-site to train the Mexican employees. A factory and a decoration workshop will be opened. "Our objective is that they be operational in June 2018," announced Saverglass CEO Loïc Quentin de Gromard.

20344/Press Release – 2017.02.20

Gerresheimer

Gerresheimer optimizes cold-end operations at pharma glass production plants with state-of-the-art packing robots. Every year Gerresheimer's customers order several hundreds of millions of glass pharmaceutical packaging products manufactured at the company's plants in Essen and Lohr.



Packing robots were recently introduced to improve the efficiency and reliability of packing operations before the pharmaceutical glass products are delivered to customers.

"Innovative automated processes are safeguarding the future of our plants and improving the quality of our products," commented Dr. Jürgen Unruh, General Manager at Gerresheimer Essen. He added that the installation of packing robots at the Essen facility serves as an example for the other production plants in the Gerresheimer Group.

Pharmaceutical packaging products, such as the glass bottles manufactured by Gerresheimer, have to satisfy stringent requirements and be low in germs and particles. The extremely high temperatures in the glass moulding process initially kill all the germs. To prevent re-contamination, the bottles go straight from the annealing oven to the clean room, where various mechanical and optical inspection systems are used to identify and sort out defective bottles.



After the final inspection, the bottles in the clean room are shrink wrapped in the required pack size with safe pack technology to ensure that they are hermetically sealed in a germ-free environment.

The shrink wrapped packs then have to be packaged and palletized to prevent transportation damage. In the past, production plant personnel working in shifts loaded the transport pallets. This kind of work involves a great deal of effort and concentration because it takes place at high speeds. Gerresheimer decided to automate the process in order to eliminate the resulting pallet packing errors.

All the necessary information for the palletization process is contained in the order number. The products are shrink wrapped with safe pack technology in a clean room environment according to the customer's specifications on packing format. There are currently around 1500 different packing formats, 1000 of which can be implemented by the safe pack machine. In the future, a 100% reliable camera system will perform continuous visual inspections to ensure that the packing formats, stability and quality are correct.

The shrink wrapped packs are transported by conveyor belt from the clean room to the packing robots. At the removal station a robot takes a pack off the conveyor belt and places it on the pallet as per the packing instruction. An operator can use a touch screen to adjust the position of the packs. When one pallet layer is finished, and before the next layer is placed on top, the packing robot adds a protective interim layer. When the pallet is ready it is taken to the holding area in front of the turntable, and the next pallet is loaded. The pallet labels are affixed manually by an operator, who also releases the pallets for delivery. The final stage of the process is the shrink wrapping of the pallets.

20345/Press Release – 2017.01.31

Pochet Group



Sustainable development: Pochet engages and invests in the future

The Pochet Group, which will celebrate the 400th anniversary of the Pochet du Courval glassworks in 2023, has begun deploying the Social & Environmental Responsibility (SER) component of its "Ambition 2023" modernization and transformation program. First step is the publication of a "SER Manifesto" formalizing a series of objectives and how the group intends to achieve them.

And to continue racing in the lead, Pochet has set itself the ambition to become by 2023 the world's best premium packaging company for perfume and beauty, preferred by its customers for its inventiveness, the excellence of its multi-material know-how, the commitment of its teams and its Social and Environmental Responsibility.

As an integral part of the Group's strategy, SER has become an important element of competitiveness for suppliers of the major brands. "Sustainability issues have gained ground in the luxury sector. There is a real demand from consumers," says Pierre Dehé, SER Director. The brands set themselves concrete targets that are sometimes ambitious and therefore require significant commitments throughout the value chain. "Today, some customers may have to interrupt their relationships with suppliers who do not make enough progress in SER. For us, it is an asset, especially compared to competitors in low cost countries", explains Tristan Farabet, Managing Director.



From left to right : Tristan Farabet, Managing Director, and Pierre Dehé, SER Director.

In the environmental field, the Pochet Group intends to focus on two areas: products and processes. "The first step obviously involves measuring our impact," explains Pierre Dehé. Once the criteria are established, quantified and measured commitments for each site are established, with annual roadmaps. The group aims to reduce its water consumption by 70%, CO2 emissions by 20% and Volatile Organic Compound (VOC) emissions by 50%.

Of course, respect for the environment would not make sense if it were not doubled by consideration for men. The group has therefore committed itself to a zero-accident objective on all its production sites and the disposal of CMR products.

Another key element of this SER strategy is the preservation and transfer of know-how. Half of the Group's French sites will be classified as a Living Heritage Company. "We are on the border of crafts and industry, we produce industrial quantities, but for products of very high quality and prestigious brands," explains Tristan Farabet. In fact, 70% of the group's production lines undergo at least one adjustment change every day, which requires a lot of human intervention.

The suppliers of the group are obviously associated with this strategy, the main ones even having to commit themselves to respecting a responsible purchasing charter. More generally, Pochet wishes to work with all its partners to advance on these subjects. Once a year, the group will conduct working sessions with clients, suppliers and NGOs to identify new points of progress. The first session is scheduled for the end of 2017.

Miscellaneous

Wine Packaging Market Key Players and Forecast 2021

According to this report from Market Research Future, the wine packaging market has seen growth over a period of time. This growth is attributed to the changing lifestyles, increasing purchasing power which leads to change in preferences.

There has been a change in the beverage preference by the younger customers which fuels the market for wine packaging.

The increased demand for locally produced wines has gone up due to the change in such preferences which guides the market for packaging. There is also a change in the traditional form of packaging of wines which has resulted in investment in the packaging industries to bring about better and attractive packaging solutions.

Major Key Players: Ardagh Group, Global Package LLC, Ball Corporation, Owens-Illinois, Inc., Verallia France, Amcor Ltd., Haldyn Glass Ltd., Smurfit Kappa Group, Gerresheimer Moulded Glass GmbH.

The Global Wine Packaging market is segmented on the basis of Container, Bulk packaging type, Closure, Accessories and Region.

- On the basis of 'Container' the segments include Glass bottles, plastic bottles, bag in box containers and others.
- On the basis of 'Bulk Packaging type' it is segmented as IBCs, Flexitanks, Drums others.
- On the basis of 'Closure' it is segmented as Natural corks, aluminum screw caps, synthetic corks, and others.
- On the basis of 'Accessories' it is segmented as Boxes & carriers, labels, and others.
- Additionally on the basis of 'Region', it is segmented as North America, Europe, APAC and Rest of the World.

The report for Global Wine Packaging Market of Market Research Future comprises of extensive primary research along with the detailed analysis of qualitative as well as quantitative aspects by various industry experts, key opinion leaders to gain the deeper insight of the market and industry performance.

The report gives the clear picture of current market scenario which includes historical and projected market size in terms of value and volume, technological advancement, macro economical and governing factors in the market. The report provides details information and strategies of the top key players in the industry. The report also gives a broad study of the different market segments and regions.

<https://www.marketresearchfuture.com/reports/wine-packaging-market>

Wine Drinkers Choose Glass Packaging for Taste & Quality



A new survey has found that 95% of wine drinkers in the US prefer drinking wine that comes in a glass bottle, with taste (80%) and quality (81%) leading as the top reasons consumers prefer wine packaged in glass.

Additionally, 61% of Millennial wine drinkers, and 55% of all wine drinkers, say glass wine bottles are the most sustainable, compared to 11% of all wine drinkers saying that about boxes, 4% for pouches, and 3% who say that about cans.

The October 2016 SurveyUSA poll interviewed 2,000 adults age 21+ from all 50 states about their wine purchasing habits and wine consumption preferences.

Glass doesn't require a plastic or chemical liner, so there's no interaction between the container and product inside. This offers wine brands that choose to package in glass a clear advantage when it comes to product protection, taste and shelf life.

"A recent EcoFocus Trend Study confirms why consumers will increasingly look to glass as a packaging choice in 2017," says Lynn Bragg, Glass Packaging Institute president. "Millennial consumers strongly believe that glass containers are one of the most likely packaging choices to protect them from chemicals leaching into beverages, and a best packaging option to lock-in freshness without using preservatives."

Additional key survey findings show:

- 80% of wine drinkers, and 78% of Millennials, say wine tastes better from a glass bottle, while 3% of wine drinkers say this about boxes, 1% about pouches and 0% for cans.
- 81% of wine drinkers believe that glass bottles contain the highest quality wine, while 3% of wine drinkers say this about boxes, 1% about pouches and 1% for cans.
- 55% of wine drinkers say that single-serve glass containers are just the right size, while 9% of wine drinkers say this about pouches, 6% about boxes and 13% for cans.

Visit Upgradetoglass.com to learn more.

20348/Press Release – 2017.02.01

Momentum Recycling First Bottle-to-bottle Glass Recycling Plant in Colorado

This new facility marks the first bottle-to-bottle recycling plant in Colorado and is located near Northwest Parkway in unincorporated Boulder. The new Colorado facility will be the Salt Lake City-based company's first facility outside of Utah, and will drive the glass recycling rate in Colorado to over three times its current level.

"We're excited to be opening this truly innovative facility, especially in Colorado, a state that has put such a significant focus on strong recycling practices," said John Lair, President and CEO of Momentum Recycling. "This facility will produce high-quality recycled glass for use by local bottle manufacturers, and help the state of Colorado move towards a goal of zero waste."

Momentum Recycling currently recycles glass from communities all around Colorado including Boulder County, Larimer County and Denver County. In addition, Momentum Recycling has partnered with companies such as Waste Management, Eco Cycle, Alpine Disposal, Bestway Recycling, Iron Woman Construction, Owens Illinois and CDPHE — Solid Waste Division, to help move Colorado towards a goal of better recycling practices and zero waste.

In 2013, in the United States, 34% of all glass containers were recycled, equivalent to taking 210,000 cars off the road each year. However, these numbers are skewed by the high glass recycling rates in states with container deposit laws. States with container deposit legislation have an average glass container recycling rate of just over 63%, while non-deposit states (like Colorado) only reach about 24%.

In Colorado, over 320,000 tons of glass bottles and jars were thrown away in 2015, with only 20,000 tons recycled, which means only 6.25% of glass bottles and jars were being recycled in Colorado. Momentum Recycling's Colorado facility will recycle an additional 49,000 tons of bottle glass each year, thus increasing the glass recycling rate in Colorado from 6.25% to 21.65%.

20349/Press Release – 2017.02.20

Pharmaceutical Packaging Market 2020 Outlook

The global pharmaceutical packaging market is set to grow at a CAGR of around 6% during the forecast period.

The rapid demand for pre-fillable syringes is the primary growth driver for this market. These syringes offer several advantages such as minimization of drug waste, increasing useful product life, and convenience in drug administration and are integrated with advanced delivery systems such as pens and auto-injectors. Glass is the most popular packaging material for these syringes with the significant demand arising from the US and Europe.

According to studies by the WHO, the counterfeiting rate among prescriptions sold through suspicious websites is nearly 50%. Stringent regulations are being implemented by governments globally, to counter these risks. For instance, in Europe, under the new Anti-Falsification Directive, as of 2017, drugs that have been prescribed by doctors will have to be provided with a particular and unique code number, a feature that will represent that the packaging of the drug is new and authentic. However, the growing number of counterfeit products in the market is anticipated to deter the market growth during the forecast period.

The global pharmaceutical packaging market is highly fragmented with several multinational, regional, and local vendors. The local players have been offering innovative solutions at a lower price compared to the international players, leading to price wars. The small and local vendors compete on the basis of cost, as it is difficult for them to compete with international vendors in terms of quality, features, and range of offerings. The report predicts international players to grow inorganically during the forecast period by acquiring regional or local players.

The leading vendors in the market are: Bemis Healthcare Packaging, Gerresheimer, Owens-Illinois, West Pharmaceutical, Westrock.

The plastic pharmaceutical packaging accounted for a market share of around 61% during 2015. Plastic is the most preferred packaging material as it is available in a variety of grades, has significant barrier properties, is chemically inert, and can be used to create attractive packages with esthetic appeal, which helps in the marketing and promotional activities for the drug. The grades of plastic used for packaging include PE, PP, polyolefin, PET, and PVC.

North America dominated the market during 2015, accounting for a market share of around 35%. The pharmaceutical packaging market in North America is dominated by the US, which is a highly competitive market. The demand for innovative forms of packaging in the country is propelled by stringent regulations by agencies such as the FDA.

In the end, the report makes some important proposals for a new project of Pharmaceutical Packaging Industry before evaluating its feasibility. Overall, the report provides an in-depth insight of Global Pharmaceutical Packaging Market 2016-2020 industry covering all important parameters.

A sample copy of the Pharmaceutical Packaging Industry Report is available at <http://www.absolutereports.com/enquiry/request-sample/10350898>

20350/Press Release – 2017.02.21

C. REINFORCEMENT GLASS FIBRES

Companies

Owens Corning



Owens Corning has reported consolidated net sales of \$5.7 billion in 2016, compared with net sales of \$5.4 billion in 2015, an increase of 6%.

“Owens Corning had a great year. The company delivered revenue growth of six percent and achieved record levels of both adjusted EBIT and free cash flow,” said Chairman and Chief Executive Officer Mike Thaman. “Our 2016 results reflect the continued improvements we have made to our portfolio of businesses. In 2017, we expect to sustain our momentum and deliver another year of strong performance.”

- Full-year 2016 net earnings were \$393 million, or \$3.41 per diluted share, compared with net earnings of \$330 million, or \$2.79 per diluted share, during 2015. Adjusted earnings in 2016 were \$419 million, or \$3.63 per diluted share, compared with \$304 million, or \$2.57 per diluted share, during 2015.
- Owens Corning performed at a very high level of safety in 2016, with a recordable incident rate of 0.50, compared to 0.52 in 2015.
- Reported EBIT for full-year 2016 was \$699 million, compared with \$548 million during 2015. Adjusted EBIT in 2016 was \$746 million, up from \$550 million in 2015.
- Operating cash flow and free cash flow improved by more than \$200 million each in 2016. The company delivered record free cash flow of \$570 million as a result of improved earnings, strong working capital performance, and an advantaged tax position.

2017 Outlook

The company expects an environment consistent with consensus expectations for U.S. housing starts and moderate global industrial production growth.

In Composites, the company expects continued growth in the glass fibre market, driven by moderate global industrial production growth. In 2017, the company expects a third consecutive year of record EBIT, with growth of about \$25 million primarily from improved operating performance.

20351/Press Release – 2017.02.09

Şişecam Group



The Şişecam Group will invest around 100 million Euros to build a glass fibre production plant in Turkey with a capacity of 70 thousand tons/year. The company is continuing to build its investments at a rapid pace.

Noting that the glass fibre is the main component of many leading industries and primarily automotive and textile industries in Turkey, Prof. Dr. Ahmet Kirman, Vice Chairman and CEO of Şişecam Group, said that the investment is a strategic decision to support the growth strategy and that the Group will continue to grow through new investments, new partnerships and acquisitions.

Stating that they have made a strategic investment decision in the field of glass fibre, the main component of Turkey's leading industries which mainly include the automotive and textile industries, Prof. Ahmet Kirman continued: "Kaolinite and boron are among Turkey's main raw materials and this investment will help turning domestic resources into value added products".

Şişecam has assumed a leading position in the development of the composite industry. The Group has been operating in the field of glass fibre since 1974 and has now a leading position in starting and developing the Turkish composite industry, which has reached a volume of 1.2 billion Euros. It has recently gained further importance for the wind power, electronics, aviation, space and defence industries.

The new plant, which is to be commissioned in the second half of 2018, will have an initial annual production capacity of 70,000 tons and will reinforce the group's glass solutions and services with further value added products for all the industries they serve.

20352/Press Release – 2017.02.06

D. SPECIAL GLASS

Glass Companies

CORNING

1. Quarterly Dividend Increase

Corning Incorporated's Board of Directors recently declared a quarterly dividend of \$0.155 per share, a 14.8% increase in the company's quarterly common stock dividend. The 2017 first-quarter dividend is payable on March 31, 2017, to shareholders of record on Feb. 28, 2017.

In October 2015, Corning's management announced a Strategy and Capital Allocation Framework which outlines the company's 2016-2019 leadership priorities. Since the Framework was announced, the company has achieved key milestones, including the return of \$6 billion to shareholders by increasing the dividend 12.5% and repurchasing 22% of its outstanding shares; and completing the realignment of Dow Corning Corporation, which unlocked tremendous value for shareholders.

Wendell P. Weeks, chairman, chief executive officer and president, said, "Today's action is another significant step toward meeting our goal of distributing more than \$12.5 billion to shareholders through a combination of share repurchases and dividend increases of at least 10% annually through 2019."

20353/Press Release – 2017.02.06

2. Corning works with Micromax to deliver Corning® Gorilla® Glass on new Vdeo Smartphones

The recently launched devices are among the first across India's mobile phone entry segment to incorporate Corning® Gorilla® Glass to help protect against damage.



"Value-segment smartphone customers typically spend a significant portion of their income buying a device," said John Bayne, vice president and general manager, Corning Gorilla Glass. "Many of these first-time smartphone users simply cannot afford to repair or to replace a damaged device. That's why it's essential to protect these devices with a material such as tough, damage-resistant Corning Gorilla Glass."

A recent consumer poll conducted in India, which is the second largest smartphone market in the world, highlights the needs of India's critical value-segment smartphone category predominantly serviced by devices ranging in price from Rs 5,000 to Rs 10,000 (\$75 to \$150). The study focuses on the participants' expectations and performance of devices they currently own.

The Vdeo range of smartphones are designed keeping in mind the basic needs that Indian consumers demand from their smartphones and are fully loaded with best-in-class features for an entry level Smartphone – including 4G VoLTE, Android Marshmallow, great battery performance, HD display and housed in a premium and stylish metal body.

Leveraging its strengths in glass science and fusion manufacturing, Corning leads the cover glass industry it created nearly 10 years ago. Corning Gorilla Glass has been used on nearly 5 billion devices worldwide, including more than 1,800 product models across 40 major brands.

20354/Press Release – 2017.02.21

Holophane



Lighting glass manufacturer Holophane has implemented AMETEK Land's new Near Infrared Borescope (NIR-B) Glass thermal imager at its Les Andelys plant in France.

Holophane has produced and transformed glass for technical applications since 1921, specifically glass optical components for automotive lighting.

When it rebuilt the 33m², 85-ton, end-fired regenerative furnace in 2014 at its plant in Northern France, Holophane looked to replace its existing visual camera system with thermal imaging technology to provide continuous 'on line' temperature measurement.

Ametek Land recommended its Near Infrared Borescope (NIR-B) Glass with an auto retraction system, which can operate effectively at the extremely high ambient temperatures adjacent to the glass melt tank, while providing real-time, high-quality thermal images and temperature data from inside the tank.

Developed specifically to operate in the demanding environment of a glass melt furnace, the NIR-B Glass is designed to withstand the high ambient temperatures.

It features an integral cooling system plus a specially designed air purge that keeps the 90° lens clear of contaminants to provide 24/7 data to the plant.

Even at very high furnace temperatures, it delivers high-definition (656 x 494 pixel) thermal images to generate highly accurate traceable temperature measurements in the 1000 to 1800°C (1832 to 3272°F) range.

The solution is suitable for float, container, borosilicate, fibre glass and speciality glass furnaces that also made it ideal for Holophane's plant requirements.

Emmanuel Declerck, Industrial Director at Holophane, said: "The borescope helps greatly to maintain the right quality flames with good turbulence and shape, therefore optimising the quality of our end products along with our energy usage. The images provided by the instrument are particularly important at the exit, near the throat, where temperature profiles are routinely monitored by operators."

20355/Press Release – 2017.02.13

Miscellaneous

Smart Glass Market 2016 to 2021

Research and Markets announced the addition of the "Smart Glass Market - Forecasts from 2016 to 2021" report to their offering.



Global Smart Glass Market is projected to reach a total market size of US\$4.953 billion by 2021, from US\$1.953 billion in 2015 at a CAGR of 16.77% over the forecast period.

Rising global adoption of green buildings and eco-friendly technologies is the major factor in driving the demand for smart glasses.

This growth is further fuelled by financial support and tax benefits from different governments provided to smart glass manufacturers. Growing automotive industry is also escalating the demand for smart glasses as they help to control heat inside the vehicle while saving energy.

The growth of the smart glass market is hampered due to high costs in R&D activities, lack of consumer awareness about benefits of these glasses, and difficulty in maintaining exact glass colour balance. Moreover, smart glasses are expensive than their alternatives, which is also a challenge to its higher adoption.

Key industry player profiles as part of this section are Saint-Gobain, DuPont, Corning Inc., Asahi Glass Co., and AGC Ltd. among other companies.

Companies mentioned: Saint-Gobain, DuPont, Corning Inc., Hitachi Chemical Co., Domoticware, Asahi Glass Co., Gentex Corporation, RavenBrick LLC, AGC Ltd., SAGE Electrochromics, Inc.

More information at http://www.researchandmarkets.com/research/9h97l7/smart_glass.

20356/Press Release – 2017.02.17

Smartphone Cover Glass Emerging Trends to 2021

The competition in the smartphone market is on the verge of saturation. The smartphone makers are tapping the new opportunities in the smartphone field to maintain a continual pace of the competition and survive in the long run. The smartphone appearance is one such avenue which is being increasingly explored and innovated by the smartphone manufacturers. Therefore, innovations in the smartphone cover glass and smartphone casing is an emerging fundamental to keep driving the consumer demand for smartphones.



The smartphone casing is the back cover of the smartphone, which is predominantly manufactured using metals. However, glass and ceramic are the emerging elements that are increasingly invading the smartphone manufacturers' experimental platform.

The smartphone cover glass and glass casing could be segmented into 2D, 2.5D and 3D. The 3D cover glass and glass casing is increasingly used in virtual reality (VR), smartphones, wearable devices, etc. The global smartphone cover glass market and glass casing market is expected to increase at a significant CAGR during 2015-2021. The smartphone cover glass and smartphone glass casing market is expected to increase due to growing usage of smartphones, increased mobile payments, increased adoption of NFC, etc. Yet the market faces some challenges, such as lack of experimentation with glass elements because of its fragile nature and strenuous processing of 3D glass.

Company Coverage: Lens Technology Co. Ltd., Zheijang Firstar Panel Co. Ltd., Biel Crystal Manufactory Ltd., G-Tech Optoelectronics Corporation.

For more information about this report visit:

http://www.researchandmarkets.com/research/hg9gdq/global_smartphone.

20357/Press Release – 2017.02.20

Designing Glass as Easy as Baking Cookies

Glass is everywhere. Over the centuries it has been prized for its high transparency and extreme resistance to heat and acids. Until today however, using glass in microstructures was difficult and expensive. Now the **Karlsruhe Institute for Technology's Liquid Glass** offers an alternative.



Glass is a fascinating material. Outstanding optical, chemical and thermal properties make it an ideal substance for parts that measure only a few micrometres. Think miniscule optical lenses, tubules with extremely small bores, or complex microsystems such as chip-size laboratories that analyse that smallest volumes of liquid.

Until now, creating such small structures from glass required the use of dangerous chemicals and a clean room, which is very difficult and expensive.

Under the lead of Dr. Bastian E. Rapp, scientists at the Karlsruhe Institute of Technology (KIT) present an alternative: The “Liquid Glass” they developed is viscous at room temperature and can be shaped to any desired form, precured under light and hardened in an oven. Structuring glass parts is now as easy as baking cookies.

The procedure is not only straightforward and economical, but also offers numerous creative advantages. “With Liquid Glass we can realize all conceivable forms, stack several components on top of each other, and duplicate each part by casting,” said Rapp, who leads the junior-scientist group “Neptunlab” at KIT. The base material for the procedure is a nanocomposite, a mixture of pulverized glass and synthetics, that can be processed like synthetics. To impart the desired form, the Karlsruhe researchers create a precise silicon mask of the original part or 3-D printout. They then add the glass-plastic mix and let it cure under UV-light irradiation. When the silicon mask is removed, the part retains its assumed shape. Several such parts can now be assembled into complex systems. A kiln is used to burn the material into pure glass, fusing the components.

Parts and systems manufactured with this procedure have the same chemical and physical properties as products made from conventional glass – the same transparency and an equally smooth surface. Liquid Glass also enables the creation of complex structures in the micrometre range, such as closed cavities or channels. Prototypes of glass microsystems can be produced cost-effectively, for example, microfluidic chips that currently cost .50 euros per piece.

A video about the Liquid Glass procedure is available at
<https://www.youtube.com/watch?v=XsZL7zajgr0>.

20358/Press Release – 2017.02.31

Transparent Ceramics Market: Global Forecast & Analysis to 2022

Transparent ceramics, which are included under the optical transparent category of ceramics, are crystalline and glassy in nature. They are produced through a crystallization process from silica based glass and are used as optically transparent materials in different forms.

Globally, development of efficient and advanced technology, rising demand from numerous application industries as a substitute for conventional glass technologies, growing focus on deployment of laser and cutting tools, and increasing defence expenditure on advance material and technologies are the prime growth drivers of the transparent ceramics market.

In addition, advancements in nanotechnology, and increase in adoption of transparent ceramics for application in new industrial verticals, and emerging economies such as China, India and others, will create new opportunities for the transparent ceramics market. However, higher cost of transparent ceramics as compared to conventional materials are the key restraints for the transparent ceramics market.

Geographically, Asia Pacific dominated the transparent ceramics market, followed by North America. Asia Pacific is projected to have the fastest growth, owing to a rapidly increasing industrial sector, rise in defence expenditure to implement superior technology and materials, lower raw material prices, and presence of major transparent ceramics suppliers in developing nations such as China, and India in this region.

Companies Mentioned: Murata Manufacturing Co. Ltd., Konoshima Chemicals Co., Ltd., Brightcrystals Technology Inc., II-VI Optical Systems, IBD Deisenroth Engineering, Surmet Corporation, Ceranova, Koito Manufacturing, ETEC, Schott AG.

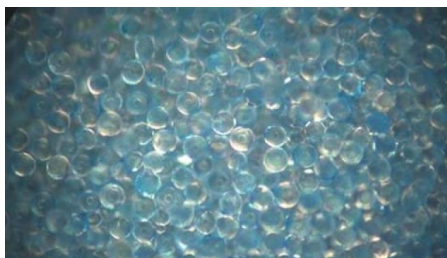
For more information about this report visit:

<http://www.researchandmarkets.com/research/rvh4zv/transparent>

20359/Press Release – 2017.02.08

Growth Opportunities in Global Microsphere Market

The future of the microsphere market looks promising with opportunities in the medical technology, composites, and life sciences and biotechnology industries, according to a new report from The Market Reports. The global microsphere market is expected to reach an estimated \$3.8 billion by 2021 and is forecast to grow at a CAGR of 6.8% from 2016 to 2021.



The major drivers of growth for this market are the growing demand for higher efficiency and lightweight materials and superior structural and enhanced properties of microsphere over conventional fillers.

Emerging trends, which have a direct impact on the dynamics of the industry, include continuous improvements in existing products to intensify the penetration level and long-term sustainability, biodegradable microspheres, and increasing focus on growing markets by expansion and alliances (Mergers and Acquisitions).

Trends, opportunities and forecast in this market to 2021 by applications (composites, medical technology, life sciences and biotechnology, cosmetics and personal care, paints and coatings, and others), by material (glass microspheres, polymer microspheres, ceramic microspheres, fly ash (cenosphere) microspheres, metallic microspheres, and others), by product type (solid microspheres and hollow microspheres), by region (North America, Europe, Asia Pacific, Rest of the World)

The 3M Company, Cospheric LLC, Potters Industries, Trelleborg Offshore & Construction, and AkzoNobel Expancel are among the major suppliers of the microsphere.

On the basis of comprehensive research, Lucintel predicts that hollow microsphere is expected to show above average growth during the forecast period supported by growing demand for low density and superior quality in high-end applications.

Within the microsphere market, glass microsphere is expected to remain the largest market. Glass microspheres provide lower viscosity, high melting point, and higher chemical resistance than other types of microspheres, which is expected to spur growth for this segment over the forecast period.

North America is expected to remain the largest region due to the growing use of microspheres in R&D activities for discovery of effective medicines and demand for lightweight materials in composite applications.

Read the full report: <http://www.reportlinker.com/p04700429-summary/view-report.html>

20360/Press Release – 2017.02.22

Egis Technology: Under Glass Fingerprint Sensor

Egis Technology Inc., a leading fingerprint sensor provider, debuted its brand new under glass fingerprint sensor that can be used with a cover glass of over 1000um at MWC Barcelona 2017 (February 27th to March 2nd).



Fingerprint sensors which can be placed under the cover glass of mobile devices are the next step in the evolution of fingerprint sensor technology. In the past, some lesser technologies have attempted to do this, but at a cost of system level reliability - a certain area of the cover glass needs to be etched so that the signal can get through. The new under cover glass sensor from Egis requires no etching, and will be able to penetrate over 1000 micrometres of glass, allowing the user to have a seamless fingerprint authentication experience without having to reduce the quality and durability of the phone.

20361/Press Release – 2017.02.27

E. DOMESTIC TABLEWARE AND CRYSTAL GLASS

Glass Company

Arc France

Arc announced the appointment of a new director for Arc France, its European site which employs 5,400 employees. **Tristan Borne**, 51, the current CEO of the chocolate group Cémoi, will make the Arquois site "an industrial tool that will generate profitable growth".



20362/Press Release – 2017.02.10

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IN BRIEF

GLASS & SUPPLIERS

Insulation Industry Stresses Key Role of Renovation of Buildings in Climate Protection and Social Well-Being

In view of the clean energy package presented by the Commission at the end of 2016 and the proposal for a revised directive on the energy performance of buildings, a study sponsored by **Eurima, the European Insulation Manufacturers Association**, highlights the crucial importance of an energy efficient envelope on buildings to achieving the EU's energy and climate targets while at the same time improving the individual comfort and well-being of citizens.

The study, carried out by engineering firms Transsolar and Tribuenergie, which specialise in sustainable development, highlights the potential improvement in the energy performance of buildings and in thermal comfort-levels for the building occupants of both a good and an excellent level renovation, looking at the interaction between existing active and passive technologies.

Results show that the renovation of the envelope is the only measure which can cut the energy demand of the building by more than 60%, making it “a key enabler” for future energy grids, facilitating the decarbonisation of the energy supply and lower the energy consumption and CO₂ emissions by 60-70%) independently of other action taken.

The study also shows a “clear and strong inter-linkage” between these impacts and other important ancillary societal benefits: an envelope that performs well can provide twice the comfort hours in a year compared to a low performing one (respectively, 97% and 49% of yearly hours, in a range of 21-26 degrees or 355 versus 179 days).

In addition, it shows that a combination of renovation of the envelope and replacement of the technical equipment can achieve a reduction in the energy demand of buildings of between 80-86% and a cut in CO₂ emissions of 80-91%, while preserving the additional ancillary social benefits.

The thermal comfort dimension needs to be better accounted for in renovation strategies and programmes, not least because the benefits are huge considering the rising energy poverty and health costs associated with poor buildings throughout Europe, Eurima says.

Similarly, at an individual building level, all EU citizens should be offered guidance throughout a renovation in order to benefit from both energy savings and increased comfort and be able to decide which renovation path to take in full awareness of the benefits associated with the various measures, Eurima notes.

The association advocates EU-wide renovation strategies “as a social project”, highlighting the “direct positive effect” on the individual comfort, health and well-being of EU citizens.

More info on:

http://www.eurima.org/uploads/ModuleXtender/Publications/163/Ref_House_Summary_final_08_02_2017.pdf

20363/Press Release – 2017.02.09

US: NGA and GANA Appoint Joint Task Force

The National Glass Association (NGA), Vienna (Virginia), and the Glass Association of North America (GANA), Topeka (Kansas), have together appointed a joint task force with the aim of working more collaboratively and explore combining the two organizations.

The plan is to optimize service to members of both organizations, and to coordinate advocacy and technical support along with education and training initiatives for the glass and glazing industry. This includes exploring a combination of the two organizations. The task force is charged with making a joint recommendation to the NGA and GANA boards within 90 days.

Photovoltaic Glass: Bystronic and Fraunhofer Develop Edge Sealed Solar PV Modules

Bystronic Glass has cooperated with scientists from the Fraunhofer Institute for Solar Energy Systems (Fraunhofer ISE) in Freiburg, within the scope of the TPedge project, to develop a process for the industrial production of innovative PV modules based on a Fraunhofer patent. Numerous prototypes of these TPedge modules have been subjected to comprehensive tests which confirm the high reliability of the module concept.

The Fraunhofer ISE mounted 70 TPedge modules on the façade of a laboratory building and subsequently put these to successful use for over three years. The modules were produced using Bystronic glass machines and systems.

TPedge modules are edge sealed, double glass PV modules that have a great similarity to insulating glass windows. The solar cells are fixed in gas-filled spaces using adhesive pins between the glass panes. TPedge eliminates the need for traditional encapsulation foils and the module frames so that both material costs and time consuming lamination processes are removed.

Within the scope of the project »TPedge – Development of a Technology for Edge Sealed Solar PV Modules«, the Fraunhofer ISE has cooperated with Bystronic glass in the technological development that is incorporated into the the industrial production of innovative solar module concepts.

“We have successfully taken the leap from a laboratory prototype to the standard industrial size (with 60 solar cells),” said Max Mittag, Project Manager at the Fraunhofer ISE and Tobias Neff, Solar Product Manager at Bystronic glass, explained that “With the TPedge technology, the costs for the module production can be lowered considerably – with an envisaged cycle time of 45 seconds per module line.”

The Fraunhofer ISE was able to take automated production systems for TPedge modules into operation in its »Module Technology Center« and use them to manufacture various prototypes in different setups. The industrial manufacturing processes have been developed further and optimized. The weight of the TPedge modules have been reduced by 30 percent by utilising 2 mm thin glass. The prototypes that were manufactured together with Bystronic glass were subjected to comprehensive module tests in accordance with IEC 61730/61215. The results confirm the high resistance and the technical maturity of the module concept. Many different TPedge design setups were tested, using the conventional glass-foil-laminate and glass-glass-laminate modules as a reference. The resistance to hail and surface load were also tested.

3D Glass Solutions Highest Efficiency 5G IPD RF Filters

3D Glass Solutions, Inc. (3DGS), a world-class expert on the fabrication of electronic packages and devices using photo-definable glass-ceramics, has announced the development and production of the highest efficiency 5G integrated passive devices (IPD) for radio frequency (RF) filters.



These RF filters have been designed to operate as bandpass filters for frequencies at 5GHz and 28GHz with less than 1.0 dB of insertion loss.

"5G technology is expected to dramatically improve the performance of mobile networks and wireless systems in addition to enabling new products and applications in the Internet of Things (IoT), Augmented Reality (AR), and Virtual Reality (VR) markets," said Jeb Flemming, Chief Executive Officer of 3DGS. "3DGS has developed low-cost solutions for these rapidly expanding RF markets. 3DGS' technology overcomes the limitations that exist with traditional RF filters. The combination of smallest size, lowest insertion loss, and lowest power consumption provides a significant product differentiation for our customers."

3DGS' 5G RF filters are manufactured using APEX® Glass, a material which has significant benefits over legacy PCB materials, such as:

- up to 70% reduced chip size
- up to 50% power reduction
- up to 50% increase in wireless bandwidth
- broadband applications ranging from DC to over 100GHz

3DGS is actively looking to expand its strategic business relationships to accelerate the deployment of its high performance and high frequency RF filter technology. Our Key Industrial Partners receive prioritized product development and manufacturing support. 3DGS' RF technology provides our customers with the ultimate in enhanced performance and reduced cost through the integration of RF IPD components (filters, antenna, and other passive devices) directly into a custom APEX® Glass-based System-in-Package (SiP).

SEMINARS / CONFERENCES / WORKSHOPS

Glass Focus Awards 2017



Royal Armouries
Leeds
15.06.2017

British Glass is delighted to announce that their Glass Focus Awards 2017 – supported by Glass Worldwide – will take place on **Thursday 15 June 2017**. The awards showcase the innovation and excellence in glass that underpin our industry's contribution to the economy, to society and to customers, staff and stakeholders.

This year the award ceremony and dinner will be held at the Royal Armouries in Leeds – at the centre of our country's great east-west glass manufacturing corridor, where nine out of ten of the UK's largest glass manufacturers have production sites.

Everyone with a stake in glass is invited to be part of the Glass Focus Awards 2017. The awards themselves will cover areas including product design, sustainability, health and safety, workforce development and more.

The awards are open to everyone in the glass industry – whether you're a British Glass member or not. However, British Glass members entering any category will also be put forward for the title of British Glass Company of the Year.

The categories for the Glass Focus Awards 2017 are:

- Design of the year
- Innovative solution
- Health and safety
- Sustainable practice
- Apprentice of the year

The deadline for entries is Wednesday 26 April 2017. Entries should focus on initiatives taking place since last year's awards closed – so between April 2016 and April 2017. You can submit more than one entry in any category, and may enter the same initiative for more than one category.

All info at:

http://www.britglass.org.uk/enter?utm_source=BG&utm_medium=Email&utm_content=savedate&utm_campaign=GFA2017

GPD: Face-Lift for 25th Anniversary



At the beginning of this year Glass Performance Days (GPD) announced significant changes and new initiatives for its upcoming **25th year Anniversary Conference 28-30 June, 2017**.



Plans are still being finalised, but it is already clear that the venue will be new, the format upgraded and the interactive mode fitted to our times. In this way the organizers aim at honouring traditions, facilitating a generation change and making use of today's advanced conference technologies. The number of confirmed speakers is around 140, and 800 attendants are expected come together at a new venue with exciting prospects. Special attention is also devoted to attracting the interest of start-up organizations that represent entirely new ideas for a traditional business.

Jorma Vitkala, Chairman of the Organizing Committee, says: "We are moving the Conference from its previous venue Tampere Hall to a new facility, Tähtiareena. The new venue utilizes the connection to the Tampere Trade Fair Complex. This enables us to stage the Conference in one open 5,000 square meter space divided into six seminar sections with their own respective presentation and audio units and yet in visual contact for all. This makes moving between sessions and presentations easy and efficient and the same is true for participant networking. At the centre of the open space we will construct a special Expo Area accessible from all directions. The scheme is ambitious but the technology as such is proven i.e. at information industry assemblies. Gone is the need to navigate between floors, corridors and closed doors."

Two new Special Programs for a world-leading Conference

The conference program includes entirely new features compared with previous events. Two special conference modules are introduced:

1. The Step Change Program aims at introducing new ideas and services from start-up companies or universities that have emerging ideas but are not yet established in the market. The main purpose of the Step Concept is to provide investors and mentors and decision makers with focused opportunities to meet glass industry start-ups. Face-to-face-meetings can be arranged before or during the event through the Meeting Management Tool. A pitching contest for start-ups will be extended to all attendants at the GPD. This contest will showcase the start-ups to conference attendants, mentors, investors and the media.

2. The Mentoring and Ambassador Program focuses on linking talents within the industry. Solid connections between seasoned, perhaps retired professionals and the new generation of glass specialists are vital for the development of the industry and the building of sustainable networks. Special benefits and discounted prices are offered to experienced professional who register for the Ambassadorial Program. Investors and Mentors from the glass industry are especially welcome to sign up for new opportunities to learn about emerging technologies and potential partnering. An important goal for the GPD Mentor and Ambassadorial Program is to find, inform and finally to invite start-ups as well as emerging technology scouts to the GPD.

20368/British Glass Press Release – 2017.02.27

Vitrum Announces Innovations for 2017



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



Expectations are on the rise for Vitrum 2017, the international exhibition that will open its doors on **October 3rd**, attracting the world of glass processing to Fiera Milano Rho.

This year the show will focus specifically on the close connection between all the industry's players – foreign and Italian businesses, domestic and international glass industry associations, institutional stakeholders, research centres and trade press from around the world. Vitrum stakes its claim as the “**House of Glass**”, the ideal setting for machinery manufacturers and operators, researchers, technicians, industry professionals and institutional stakeholders to meet and share ideas that drive product innovation and optimization, and stimulate growth of the industry.

Detailed information about all the promotional tools for exhibitors is now available on the Vitrum website at:

http://www.vitrum-milano.com/sito/wp-content/uploads/2017/01/PresentazioneServiziVitrum_GB.pdf

20369/British Glass Press Release – 2017.02.10



Şişecam Glass Symposium, Istanbul: Call for papers

The 2017 ICG Annual Meeting will be held in conjunction with 32nd Şişecam Glass Symposium in **Istanbul, Turkey on October 22-25, 2017**.

Şişecam and ICG proudly invite visitors to Istanbul, the city which connects two continents, to share, discuss and connect knowledge about the latest developments on glass science and manufacturing technology.

Contributions are welcome on the topics given below, in technical program and students are especially encouraged to attend.

Abstracts (about 300 words) should be written in English, which is the official language of the event. Please find the instructions for abstract preparation at the web page: <http://www.icgistanbul2017.com>

Post-docs and students at national and international level, are especially encouraged to attend the ICG 2017 Istanbul, the registration fee for them will be half of the regular fee. Registration fee will include one set of conference materials, entrance to all conference sessions (lectures, posters), the welcome reception on Sunday evening, lunches, morning and afternoon refreshments.

All presenters must be registered to attend the 2017 ICG Annual Meeting. All abstracts must be submitted via the online system. Please note that abstracts sent by mail, fax or e-mail will not be accepted. All abstracts will be published on the Book of Abstracts. The papers and presentations will be uploaded on the web site upon the authorization of the author, after the conference.

Topics will include:

- Glass formation, transition, relaxation and modelling
- Glass properties
- Crystallization and glass ceramics
- Chemical durability and leaching
- Nuclear waste vitrification
- Surface properties and coatings
- Bioactive and sol-gel glasses
- Glass melting, forming
- Energy and environment
- Raw materials
- Refractories

Abstract Submission Deadline March 31, 2017

Abstract Evaluation Deadline May 1, 2017

Early Bird Registration July 31, 2017

INFO at: SCIENTIFIC SECRETARIAT: Şişecam STC

Tel: +90 850 206 0488

ORGANISING SECRETARIAT: Serenas Group

Tel: +90 312 440 50 11

E-mail: info@icgistanbul2017.com

For more information visit www.icgistanbul2017.com

GlassPrint 2017 – Solutions For Glass Decoration

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



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

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

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