



ASOCIACE SKLÁŘSKÉHO
A KERAMICKÉHO PRŮMYSLU ČR

Association of the Glass and Ceramic Industry of the Czech Republic

ANNUAL REPORT

GLASS AND CERAMIC INDUSTRY
OF THE CZECH REPUBLIC 2014



AUGUST 2015

Dear friends,

several hundred years ago our ancestors discovered the amazing properties of glass and ceramics. When they started processing clays and later the naturally occurring silicon and metal oxides a never ending era of glass and ceramics began. Contemporary Czech glass and ceramic industry has a strong, healthy roots and traditions. Glass, ceramics and china are important, modern and ecological materials which are irreplaceable for consumers. Thanks to the development of technology, these products have new applications.

Glass and ceramic industry is very sensitive to changes in economic and political development not only for its export orientation, but also for dependence on a number of related industries, for which it delivers its products. The Association of Glass and Ceramic Industry of the Czech Republic publishes the "Annual Report - Glass and Ceramic Industry of the Czech Republic - 2014" and informs the public on main economic indicators of the glass and ceramic industry in the Czech Republic in 2014 and trends in its development in the period from 2009 till 2014. The Annual Report is supplemented with information on activities of the Association.

The entire industry lives and works in accordance with sustainable development, where the products are contributing particularly to protect the environment. The high energy consumption of our industry is repeatedly exceeded by energy savings when using our products. The domestic market is small for installed production facilities, and so the export is very important. In past years, the situation in companies manufacturing glass, ceramics and china stabilized. Companies make innovations, increase the added value of their products and gain new markets. They work on the improvement of production and processing technologies. Just investments in new technologies, constant searches and strengthening their position on foreign markets caused growth of revenues in companies last year. And if you have Czech product in adequate quality, nothing will stand in your way.

So, happy journey, and I hope that you will find interesting and useful information for you in our Annual Report.



A handwritten signature in blue ink, appearing to read 'P. Mazzolini', written over a faint, light blue circular watermark.

Mr Petr Mazzolini

The President of the Association of the Glass and
Ceramic Industry of the Czech Republic



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Association of the Glass and Ceramic Industry of the Czech Republic

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INTRODUCTION

The Annual Report gives in its introduction part an overview on the position of the glass and ceramic industry within the processing industry of the Czech Republic, its structure and development in the period from 2009 till 2014. A survey of export and import according to individual production branches creates a part of this Report. Further on, an evaluation of the activities of the Association of the Glass and Ceramic Industry of the Czech Republic in the past period is given, as well.

Data processed in the Annual Report are based on data of the Czech Statistical Office (valid at the date of June 30, 2015). These data are completed with information gained from annual reports of the Association members.

Classification and terminology of the processing industry used in the Chapter “Position of the glass and ceramic industry in the Czech Republic” are taken from the Czech Statistical Office.

Time development lines compared in the Chapter “Development of the glass and ceramic industry” are given for the period from 2009 till 2014.

The glass and ceramic industry is in the submitted Annual Report mostly investigated and described separately, i.e. in seven so-called groups. These groups are created by related glass and ceramic production activities as far as technology and marketing. This methodology corresponds to a method of the statistical statement in the Czech Republic.

- **Flat glass** (unfinished and finished flat glass)
- **Container glass** (bottles, preserve glass jars, other glass containers)
- **Glass fibres** (reinforcing/textile fibres, insulating glass fibres)
- **Other glass** (special glasses - laboratory and laboratory apparatus glass, tubing, glass TV components, technical spheres, glass industrial apparatuses, protective welding glass, optical glass, glass blocks, fashion jewellery glass, etc.) **and lighting glass**
- **Utility glass** (drinking glass, glass for household, decorative glass, art glass, etc.)
- **Household china and ceramics** (china ware for household and decorative china, ceramic ware for household, decorative ceramics)
- **Technical ceramics and sanitary ware** (insulators, laboratory china, ceramic products for sanitary purposes, products for technical purposes)

The development in the rest groups created by the production of machinery, equipment and services for the glass and ceramic industry, is not investigated in the Annual Report as the whole. From the point of view of the statistical statement the activities connected with this group are investigated in a number of other subsections of the processing industry, and so it is not possible to process and compare them, especially numerical data, reliably.



THE ASSOCIATION OF THE GLASS AND CERAMIC INDUSTRY OF THE CZECH REPUBLIC

The Association of the Glass and Ceramic Industry of the Czech Republic

The Association of the Glass and Ceramic Industry of the Czech Republic is a member of the Confederation of Industry of the Czech Republic and a member of the Glass Alliance Europe.

The Association of the Glass and Ceramic Industry of the Czech Republic (Association) was established in 1990 as an interest group of producers of flat, container, technical, utility and lighting glass, glass and mineral fibres, household china, household ceramics and sanitary ware, trade companies, suppliers of machinery, machine and technological equipments and services, specialized schools, research institutes and publishers of specialized journals. Also the Czech Glass Society is a member of the Association. A separate part of this chapter is devoted to the Czech Glass Society.

The Association had 45 members at the date of December 31, 2014. BestOn CZ s.r.o., became a new member in 2014. AGC Stod s.r.o. finished its membership, because it became a part of the member subject of the Association AGC Fenestra a.s. thanks to the reorganization within the AGC Group.

The activities of the Association are focused, especially on the promotion, assertion and defence of interests and demands in relation to the bodies of the state administration, on organizing a mutual cooperation of members in solution of common problems, on rational utilization of local raw materials, on environmental problems solution, on ensuring collective negotiations with respective trade union and making collective bargains, on ensuring a database for strategic decisions of its members, on assistance in search of foreign partners, on coordination of research and development in the glass and ceramic industry in cooperation with specialized schools and workplaces, on expert and financial support in publishing specialized literature and journals, and also on solution of specialized education problems.

Activities of the Association in 2014

The Association collaborated on national level on fulfilling the policy statement of the Confederation of Industry of the Czech Republic (Confederation) and on the promotion of interests directly connected with the glass and ceramic industry with the Czech Glass Society, the Silicate Union and the Czech Union of Fashion Jewellery Producers and the Association of Great Energy Consumers. Within the European Union the Association worked on promotion of interests of the glass industry with the Glass Alliance Europe (GAE) and with the CERAME UNIE, respectively.

The plan suggestion for 2014 followed the activities in 2013. The activities in 2014 were divided to the following themes: Support of competitiveness of the glass and ceramic industry, Collective negotiations of higher degree, Education (apprenticeship, secondary and university), Environment, and Services and information. Lobbying for interests of the glass and ceramic industry and activities promoting the Association and its members were an important part of activities of the Association.

Support of competitiveness of the glass and ceramic industry

The aim was to support competitiveness of glass and ceramic industry products on inland and also on international markets.

Within the membership in the Glass Alliance Europe and also on national level, the Association collaborated actively on energy and climatic goals of the European Union till 2030 and against changes and eliminating the glass and ceramic industry from the list of sectors endangered by carbon leakage. (Definition: Carbon leakage is a term often describing a situation, which can appear when tradesmen, due to high expenses on climate protection, transfer their production to other countries with free access to greenhouse gases and emissions.) The Association collaborated in the Czech Republic with unions of cement and lime producers.

The Association in cooperation with member companies prepared a document reacting to problems of REACH and authorization process of incorporating substances used as glass raw materials (semi-finished products).

Collective negotiations of higher degree

In 2014 the negotiation between the Association and the Trade Union of Employees of Glass and Ceramic Industry and China (Trade Union) on the Collective agreement of higher degree to the period from 2015 to 2016 proceeded.

After very complicated negotiations, when both parties had to go back from their visions, the Collective agreement of higher degree to the period from 2015 to 2016 was signed on January 28, 2015. The agreement was signed by Mr. Petr Mazzolini, the President of the Association and by Dr. Vladimír Kubinec, the Chairman of the Trade Union.

The Collective agreement of higher degree was sent to the Association members, delivered to the Ministry of Labour and Social Affairs and put on the web site of the Association.

Education (apprenticeship, secondary and university)

The Association collaborated with the consortium of the Confederation, the Chamber of Commerce and TREXIMA, s.r.o. on the second stage of the National Qualification System. The representatives of the Association are members of the Sector council for glass, ceramics and minerals processing. In 2014 questions of retraining possibilities of craft activities in glass, china and ceramics production were mostly solved. For retraining possibilities there were suggested partial profession qualifications.

Further on, a suggestion for elaboration of profession qualifications in qualification level 4 (complete secondary specialized education) was processed.

The Association addressed specialized schools in the glass, jewellery and ceramic industry and presented their offer of education on the web site www.skloakeramika.cz.

Environment

Solution of problems connected with waste flat glass from demolition, reconstructions and car wrecks for recycling was a priority in the area of environment in 2014.

The representative of the Association is a member of the Environmental group in the Confederation and a member of the working group for preparation of the law on wastes and the working group for preparation of the law on products with finished life. The Association succeeded to continue in negotiations on problems of waste flat glass from demolition, reconstructions and car wrecks during negotiations in the Environmental group of the Confederation and with their support during negotiations of the Association with representatives of the Department of Waste of the Ministry of Environment.

The Association in cooperation with members and ETC Consulting Prague s.r.o. elaborated a Study of the system of flat glass collection feasibility.

Services and information

An information bulletin giving reports and news on activities of the Association and its members was published. The members of the Association receive regularly the bulletin of the Glass Alliance

Europe (GAE) and other information coming from the secretary of the GAE. The Information bulletin was published every two weeks.

For gaining information and giving information to state authorities and further institutions the Association cooperated with the Confederation on a possibility of gaining sector statistics from the Czech Statistical Office. The negotiation with the Czech Statistical Office on sector statistics processing was not successful.

The Secretary of the Association has a database of export and import of glass and ceramic products according to HS/CN codes, according to individual countries. Also a database of employees number, revenues and export development since 1990 is available. Further on, the Association has the study Trends in the glass industry available.

The Association informs its members and public on actual events in the glass and ceramic industry through its actualized web site www.skloakeramika.cz.

Promotion of the Association and its members

The Association continued in medial promotion of the glass and ceramic industry. The aim was to introduce public with the production and the level of the branch and to contribute to gain new qualified workers to companies and young people to schools of all levels of education.

There were published press reports dealing with expected events in 2013 and 2014 and expectations to 2015 and given to the Czech Press Agency. In Sklář a keramik journal a preliminary evaluation of 2013 in the glass and ceramic industry was published.

The Meeting of glassmakers and ceramists, the aim of which is to renew and develop relations among representatives of glass and ceramic industry in the Czech Republic was organized. Also a meeting of the representatives of the Association with journalists was on programme. The theme was the development of the glass and ceramic industry, facts of the year 2013 and expectations. The web site www.skloakeramika.cz was introduced within the Meeting.

The Annual Report - Glass and Ceramic Industry of the Czech Republic - 2013 was published.

The Czech Glass Society

The Czech Glass Society is a member of the International Commission on Glass (ICG) and the European Society of Glass Science and Technology (ESG).

The Czech Glass Society was originally established in 1946 as a glass section of the Czechoslovak Glass and Ceramic Society. In present form it exists after division of the Czech and Slovak Federal Republic in 1993 as the Czech Glass Society (CGS).

The CGS is a voluntary organization associating individual and collective members from the production of glass, fashion jewellery and related branches.

ACTIVITIES OF THE CGS IN 2013

At the date of December 31, 2014 the CGS had 213 individual members and 34 members of art section, i.e. 247 members, 2 subsidiaries (VETROPACK MORAVIA GLASS, a.s., KAVALIERGLASS, a.s.) with 40 members, and 16 collective members.

In 2014 there were organized two dominant events by the CGS - the 8th International Conference on Borate and Phosphate Glasses with participation of 154 scientists from 22 countries of the world, and the Czech and Slovak Conference on Glass. The aim of this conference was to arrange meeting of members of glass societies from the Czech Republic and Slovakia, and academy glass specialists and glassmakers - practitioners.

The CGS has its representatives in the council of the ICG.

An important activity of the CGS in the international field is a participation in Technical Committees of the International Commission on Glass (ICG): TC 2 - Chemical Durability & Analysis, TC 3 - Basic Glass Science, TC 7 – Nucleation, Crystallisation & Glass-Ceramics, TC 13 - Environment, TC 14 - Gases in Glass, TC 19 - Glass Surface Diagnostics, TC 20 - Glasses for Optoelectronics, TC 21 - Modelling of Melting Processes, TC 23 - Education & Training in Glass Science & Engineering, and TC 25 – Modelling of Glass Forming Processes.

The CGS is a publisher of Sklář a keramik journal. The year 2014 was an anniversary year for this journal. In 2014 it was 90 years from publishing the first number of the specialized glass journal Sklářské rozhledy, published by the Glass Institute in Hradec Králové. The other anniversary is 60 years from the change of the original journal name to Sklář a keramik and 20 years from the change of the publisher to the CGS.

The CGS is a supporter of scientific journal Ceramics – Silikáty.

The CGS listens to young glassmakers and also supports the competition for young designers Mistr křišťálu (Master of Crystal). Also the Glass Club continues in its activities.

The CGS is an official partner of the Centre of the Glass Art in the František glassworks. The CGS supported in 2014 the 6th International symposium of engraved glass in Kamenický Šenov.



STRUCTURE OF THE GLASS AND CERAMIC INDUSTRY IN THE CZECH REPUBLIC

The structure of the glass and ceramic industry of the Czech Republic is described below according to the division of individual production branches, as it is used in the following parts of this Annual Report. Companies profiling the branch through their economic importance and prestige are given in individual groups. Further on, also basic information on Czech producers of machinery and equipment and on companies providing services for the glass and ceramic industry and suppliers of basic raw materials, is given.

The number of companies in the Czech Republic with more than 20 employees at the date of June 30, 2014:

- | | |
|---------|--|
| CZ-NACE | 23.1 - Production of glass and glass products – 108 companies are included. According to the investigated production branches there are 32 producers of flat glass, 38 producers of hollow glass (from which 4 producers of container glass, other companies produce utility glass), 6 producers of glass fibres and products made of, and 32 producers of the other glass (see the following text). |
| CZ-NACE | 23.41 - Production of ceramic and china products, mostly for household and decorative products – 19 companies are included, from which 7 producers of china. |
| CZ-NACE | 23.42 - Production of ceramic sanitary ware – 2 companies are included. |

Flat glass

AGC Flat Glass Czech, a.s.: the key player in the area of flat glass production and processing

The only producer of large-dimension flat glass in the Czech Republic is AGC Flat Glass Czech, a.s., a member of the AGC Group with the seat in Teplice. This company is at present the greatest producer of flat glass and its applications in Central and Eastern Europe. The 100 % owner of the company is Asahi Glass Co. Ltd., Japan.

The activities of AGC Flat Glass Czech, a.s. include the production of basic flat float glass, clear or with defined green tint. It is finished by further transformation to the so-called low-emission glasses controlling the light and energy flow, safety (laminated or toughened) glass, sound insulating glass, matt or painted glasses for exterior and interior applications and mirrors. By further treatment double or triplex insulating glass, bent building glass, furniture glass, glass for solar technique and fire

resistant glass, are produced. Beside float glass the company produces dozens of ornamental patterns of cast glass. The trade policy of the company is based on export to the countries of Central and Eastern Europe. The company production is applied also in world distribution channels of the AGC Group.

The activities of AGC Flat Glass Czech, a.s. are supported by distribution channels in the Czech Republic, Slovakia and Poland created by subsidiary companies for distribution of glass for architecture and the building industry. Through them the company is a supplier of important volumes of unfinished flat glass to other independent processing companies.

Great volumes of flat glass are processed in the Czech Republic in the automotive division of the AGC Group, in this case AGC Automotive Czech, a.s. Chudeřice u Bíliny. This company produces toughened and laminated safety glasses, especially for private cars, lorries, buses and coaches, including the additional operations like application of encapsulated or extruded plastic profiles and application of required additional components (strips, pins, connectors, holders, etc.). AGC Automotive Czech produces and sells approx. 25 mill. of automotive glasses/windshields per year and so, it is one of the greatest and the most complex producers in Europe.

The company is a part of European group of producing, development and trade subjects of the AGC Automotive Europe Ltd. group. Its activities are concentrated in Belgium, Czech Republic, France, Italy, Hungary, Germany, Russia, Spain, Turkey and Great Britain. The company is a producer of more than 70 mill. of windshields, rear windows, sidescreens and skylights made of safety automotive glass per year.

AGC Automotive Europe Ltd. is a part of the worldwide Automotive Glass Company, Asahi Glass Co. Ltd., Japan. The main vision is to be the most respected world supplier of all types of safety glass for the automotive industry.

In the Czech Republic there are many other companies processing flat glass for various specialized products. It is for instance Saint-Gobain Sekurit ČR, spol. s r.o. Hořovice - production of glass for private cars; Pilkington Czech, spol. s r.o. Noviny pod Ralskem - production of glass for the building industry; Amirro, s.r.o. Čelákovice - production of mirrors and furniture glass; ERTL GLAS, s.r.o. Říčany - production of laminated safety glass, heat protective glass; WMA-Glass, s.r.o. Chrástava - production of insulation glass; Bepof, spol. s r.o. Hranice u Aše - processing of flat glass and mirrors, etc.

Beside the above mentioned companies there are also many wholesale companies trading with products and services regarding finished flat glass.

Container glass

The production of container glass includes beverage bottles and preserve glass jars made for the food industry (beer, wine, liquors, non-alcoholic drinks, mineral waters, fruit, etc.), and further on, glass containers for products of the chemical, pharmaceutical and cosmetic industries.

Dominant producers of container glass in the Czech Republic are O-I Manufacturing Czech Republic, a.s. with trading company O-I Sales and Distribution Czech Republic, s.r.o. Dubí u Teplic, members of the transnational group of companies Owens-Illinois, USA, and VETROPACK MORAVIA GLASS, a.s. Kyjov, a member of the transnational group Vetropack Holding AG, Switzerland. Both these

companies have about 80 % of a market share of container glass in the Czech Republic and they have also important export shares in neighbouring countries within their transnational ownership and trade bonds.

Further on, there are producers of container glass, e.g. SKLÁRNY MORAVIA, a.s. Úsobrno and STÖLZLE UNION, s.r.o. Heřmanova Huť (the owner is Stölzle - Oberglas GmbH) in the Czech Republic.

Glass fibres and products made of

The only producer of glass textile fibres and products made of in the Czech Republic is SAINT-GOBAIN ADFORS CZ, s.r.o. Litomyšl, which is organizationally included to the sector of innovative materials of the Saint-Gobain group. As far as products it includes activities: “Vertex” and “ADFORS CONSTRUCTION PRODUCTS EUROPE”. The term “CONSTRUCTION PRODUCTS” reflects the final utilization of company products.

The only Czech producer of thermal and sound insulation made of glass fibres in the form of mats and slabs (ROTAFLEX SUPER® trade mark) is Union Lesní Brána, a.s. Dubí u Teplic.

Insulation material based on glass wool in the form of slabs and rolls is produced by KNAUF INSULATION, spol. s r.o. Krupka u Teplic. The plant in Krupka is one of the most up-to-date production plants for the production of mineral insulation made of glass wool in Europe.

Utility glass

There are about thirty companies with more than 20 employees with the main production of utility glass. Crystalex CZ, s.r.o. Nový Bor (machine made utility soda potassium glass), Crystal BOHEMIA, a.s. Poděbrady (lead crystal) and CRYSTALITE BOHEMIA, a.s. Světlá nad Sázavou belongs to the greatest. Further on, there are many smaller companies with various assortments, e.g. art glass, cut lead crystal, utility glass decorated with painting, pen-and-ink drawing, staining, high enamel and engraving, handmade utility glass, historical replicas, off-hand glass, etc. For example: Ajeto, spol. s r.o. Czech Glass Craft Lindava, Blažek Glass, s.r.o. Poděbrady, CAESAR CRYSTAL BOHEMIAE, a.s. Světlá nad Sázavou, SKLÁRNA SLAVIA, s.r.o. Nový Bor, Královská Huť, s.r.o. Doksy, EGERMANN, s.r.o. Nový Bor, BOHEMIA MACHINE, s.r.o. Světlá nad Sázavou, and a number of other companies.

Luxury handmade utility glass is produced by MOSER, a.s. Karlovy Vary.

KAVALIERGLASS, a.s. Sázava nad Sázavou is a producer of household cooking glass.

Other glass

Products included into this group of the glass industry are often (especially in abroad) called special glasses. It is a wide range of glass products with specifically defined properties having their customers mostly in other processing branches of industrial market. The assortment of this group is very wide in the Czech Republic. It includes technical, laboratory and laboratory apparatus glass, technical spheres, glass industrial apparatuses, protective welding glass, optical glass. Also the production of glass blocks, fashion jewellery semiproductions and lighting glass are included.

A dominant Czech producer of technical and laboratory glass, tubing and apparatus glass made of borosilicate glass is KAVALIERRGLASS, a.s. Sázava. Technical and laboratory glass is also produced by TECHNOSKLO, s.r.o. Držkov, EXATHERM, s.r.o. Železný Brod (glass thermometers and densimeters), Detesk, s.r.o. Železný Brod (technical borosilicate glass) and other smaller companies.

From the producers of optical glass ECOGLASS, s.r.o. Jablonec nad Nisou, the producer of exactly pressed components of optical glass for electro-optical apparatuses can be stated.

VITRABLOK, s.r.o. Duchcov is a producer of glass blocks for the building industry.

Frits and glazes are made in MEFRIT spol. s r.o. Mělník and Glazura, spol. s r.o. Roudnice.

Production of fashion jewellery semiproducts is a subject of activities of many companies mostly in the north part of the Czech Republic in Jablonec region (Preciosa, a.s., LIGLASS, a.s., PAS Jablonec, a.s.).

Lighting glass is produced by Sklárna Janštejn, s.r.o. and it is a supplementary assortment of several smaller producers of utility and technical glass. A number of companies are engaged in the production of components for chandeliers and also in individual production of chandeliers, the most significant are, e.g. Preciosa, a.s., LIGLASS, a.s.

Household china and ceramics

The assortment of household china includes not only products intended for daily use but also luxury products, e.g. luxury household china, household and decorative china, for instance rose and onion pattern, and figural china.

Among significant china producers belong Thun 1794, a.s. Nová Role, Český porcelán, a.s. Dubí u Teplic, G. Benedikt Karlovy Vary, s.r.o., Rudolf Kämpf, s.r.o. Nové Sedlo, König-Porzellan Sokolov, spol. s r.o. Sokolov.

A great number of more specialized smaller companies produce household ceramics. The greatest are KERAMO Kožlany, v.d., and Keramika Krumvíř, spol. s r.o. Krumvíř. Ceramic tiles are made in KERAMIA, s.r.o. Znojmo.

Technical ceramics and sanitary ware

There are two dominant Czech producers of sanitary ware – LAUFEN CZ, s.r.o. (with producing facilities in Bechyně and Znojmo), a member of the Roca and Ideal Standard, s.r.o. Teplice. Both companies are strongly oriented to export and their market success is dependent in a great extent on the building industry boom in Europe.

The producers of technical china are Elektroporcelán, a.s. Louny with the assortment of insulators for the energy industry, Jizerská porcelánka, s.r.o. Desná v Jizerských horách producing laboratory chinaware and china tubing, and ELPOR-Rauschert, s.r.o. Krupka Bohosudov.

From the producers of technical ceramics can be stated: KERAMTECH, spol. s r.o. Žacléř - production of foundry ceramics and technical china, BRISK TÁBOR, a.s. - production of spark and glow plugs for internal combustion engines and technical ceramics, HOFMANN CERAMIC CZ, s.r.o. Bělá nad Radbuzou - production of technical ceramics for foundries, ESTCOM CZ-oxidová keramika, a.s. Louny

- production of refractory ceramics and ceramic tubes, and Diamorph Hob Certec, s.r.o. Horní Bříza - production of technical ceramics, etc.

Other mineral products

Aluminosilicate fibres resistant to high temperatures and insulating fibre products (wool, mats, shaped pieces, slabs) with SIBRAL trade mark used mainly in the construction of heat appliances are produced by UNIFRAX, s.r.o. Dubí u Teplic.

Fused basalt products (abrasion resistant and refractory materials with EUROR trade mark), abrasion resistant piping, and tiles for industry and interiors are produced in EUTIT, s.r.o., Stará Voda. This company is the only world producer of interior floor basalt tiles.

Furnaces/kilns, glass machinery and equipment, and special services for glass and ceramic industry

Nowadays, about forty or fifty independent companies produce and deliver glass furnaces, kilns, machinery and equipment, glass moulds and apparatuses for the glass and ceramic production, or carry out service, design and various specialized and consultancy work for this industry. These companies are of a different size and they have, of course, various ranges of their activities.

Among the companies with individual production and trade activities exceeding significantly the territory of the Czech Republic belong some producers of machinery and equipment, e.g. Sklostroj Turnov CZ, s.r.o. producing machines and equipment for automatic production of container glass. Further on, SKLOPAN LIBEREC, a.s. is a supplier of machinery for processing of flat glass, SKLÁŘSKÉ STROJE ZNOJMO, s.r.o. delivers various glass machinery equipments, and TRIMA, s.r.o. Turnov delivers machinery and equipment for the production and processing of glass fibres.

Heat appliances and kilns for china and ceramics firing, as a complex and in greater amount, are designed and delivered by REALISTIC, a.s. Karlovy Vary, BVD PECE, s.r.o. Karlovy Vary, and LAC, s.r.o. Rajhrad. The company Elsklo, s.r.o. Desná v Jizerských horách designs and delivers equipment for small-scale electric melting of glass. Glass melting aggregates are designed and delivered by Teplotechna - Prima, s.r.o. Teplice. Companies GLASS SERVICE, s.r.o. Vsetín and DITES, s.r.o. Teplice (automatized control systems for technological processes) have important activities in abroad in the area of design and control systems for glass melting aggregates. Gas-fired melting furnaces and auxiliary furnaces for hand production of glass are produced by EGT servis, s.r.o. Hradec Králové.

Producer and supplier of cast iron and steel moulds for container glass SKLOFORM, a.s. Suchdol nad Lužnicí - works predominantly on the level of services and deliveries for Czech producers. Further on, Desko, a.s. Desná v Jizerských horách delivers machinery and moulds for fashion jewellery production. Other producers of machinery for the production of glass are, e.g. FOR G, s.r.o. Teplice, and BOHEMIA MACHINE, s.r.o. Světlá nad Sázavou.

Quite a great group of companies and also a number of independent individuals are dealing with design of procedures and construction of machinery for mechanical working of glass (engraving, cutting, polishing), e.g. DIAS TURNOV, s.r.o. and POLPUR, s.r.o. Turnov.

Raw materials for the glass and ceramic industry

A long tradition and the development of glass, china and ceramic production were determined, beside other factors, by an abundance of basic raw materials, i.e. sand, kaolin, feldspar and quartz.

High quality glass sands with extremely high content of SiO_2 are outstanding for the glass industry and also for various utilizations in other branches. Sands are delivered in a moistened or dried form. Companies Provoďínské písky, a.s. Provoďín and Sklopísek Střeleč, a.s. Mladějov v Čechách mine and deliver these sands in the Czech Republic.

Mining and processing of kaolin is carried out by LB MINERALS, s.r.o. Horní Bříza, Sedlecký kaolin, a.s. Božičany, and Kaolin Hlubany, a.s. Podbořany. LB MINERALS, s.r.o. is a supplier of ceramic kaolins intended for wall and floor tiles and sanitary ware, mixed kaolins for sanitary ware, paper mills kaolins and kaolins for glass fibres. Floated kaolin delivered by Sedlecký kaolin, a.s. is used, especially for china and ceramics. Kaolin Hlubany, a.s. delivers floated kaolins for ceramics.

Beside mining and processing of kaolins also mining and processing of feldspar is a part of the production of the LB MINERALS, s.r.o. Potassium feldspars are suitable for production of container and flat glass, glazes and china; soda-lime feldspars are suitable for the production of frits and enamels. Soda-potassium and potassium-sodium feldspars are delivered by K M K GRANIT, a.s. Krásno. Feldspars are applied as flux.



POSITION OF THE GLASS AND CERAMIC INDUSTRY IN THE CZECH REPUBLIC

The glass and ceramic industry is a traditional part of the processing industry in the Czech Republic.

The glass and ceramic industry is included in the subcategory Production of other non-metallic mineral products according to the Classification of Economic Activities (NACE) used by the European Union.

The CZ-NACE 23 Production of other non-metallic mineral products put together productions of glass, ceramics and building materials of various types and utilization. Production of these commodities has a long tradition and a high level in the Czech Republic.

Classification of CZ-NACE activities is the following:

- 23.1 Production of glass and glass products
- 23.2 Production of refractory products
- 23.3 Production of building materials from clay materials

- 23.4 Production of other china and ceramic products
- 23.5 Production of cement, lime and plaster
- 23.6 Production of concrete, cement and plaster products
- 23.7 Cutting, shaping and finishing of stones
- 23.9 Production of abrasive materials and other non-metallic mineral products not stated elsewhere

Sections 23.1 and 23.4 from which:

- 23.41 Production of ceramic and china products, mostly for household and decorative products
- 23.42 Production of ceramic sanitary ware
- 23.43 Production of ceramic insulators and insulation accessories
- 23.44 Production of other technical ceramic products

represent the production of glass, glass products and production of other china and ceramic products which are a subject of evaluation of this Annual Report.

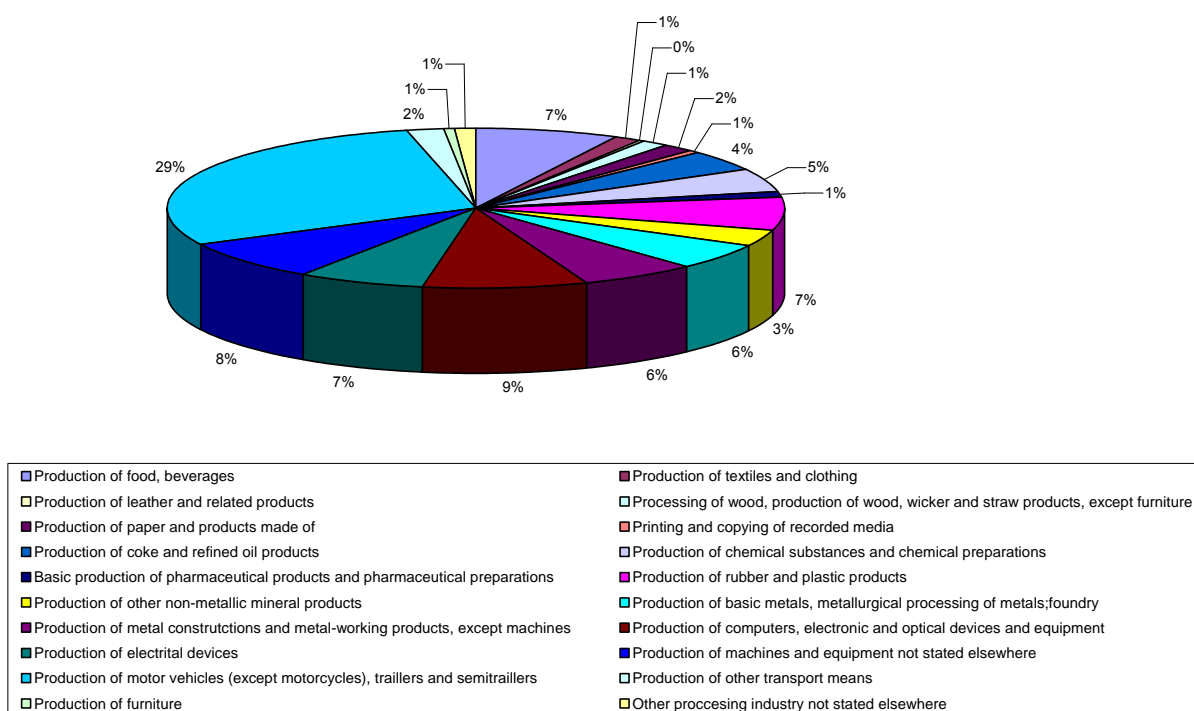
In the following tables the revenues without the value added tax (VAT) from sale of own products and services of industrial character (hereinafter revenues) and revenues without the VAT from the direct export (hereinafter direct export) of individual subcategories of the processing industry. Revenues and direct export are given in current prices. Revenues and direct export are given without the CZ_NACE 33 Repair and installation of machines and equipment.

The revenues of the processing industry in the Czech Republic reached a value of 3188.55 bill. CZK in 2014 (in 2013 it was 2856.29 bill. CZK). In comparison with the previous year the revenues of the processing industry increased by 11.63 %. The revenues in amount of 100.85 bill. CZK in the category Production of other non-metallic mineral products mean an increase by 7.14 % in comparison with 2013. The Production of other non-metallic mineral products shared on revenues of the processing industry with 3.2 % in 2014.

Revenues of the processing industry in 2014

	Revenues (bill. CZK)	Share (%)
Production of food, beverages and tobacco products	237.99	7.5
Production of textiles and clothing	47.06	1.5
Production of leather and related products	3.77	0.1
Processing of wood, production of wood, wicker and straw products, except furniture	45.74	1.4
Production of paper and products made of	57.04	1.8
Printing and copying of recorded media	18.30	0.6
Production of coke and refined oil products	131.25	4.1
Production of chemical substances and chemical preparations	153.58	4.8
Basic production of pharmaceutical products and pharmaceutical preparations	27.49	0.9
Production of rubber and plastic products	217.67	6.8
Production of other non-metallic mineral products	100.85	3.2
Production of basic metals, metallurgical processing of metals; foundry	176.29	5.5
Production of metal constructions and metal-working products, except machines and equipment	189.79	6.0
Production of computers, electronic and optical devices and equipment	280.09	8.8
Production of electrical devices	210.92	6.6
Production of machines and equipment not stated elsewhere	254.72	8.0
Production of motor vehicles (except motorcycles), trailers and semitrailers	924.80	29.0
Production of other transport means	53.64	1.7
Production of furniture	18.34	0.6
Other processing industry not stated elsewhere	39.22	1.2
Processing industry	3 188.55	100.0

Structure of revenues of the processing industry in 2014



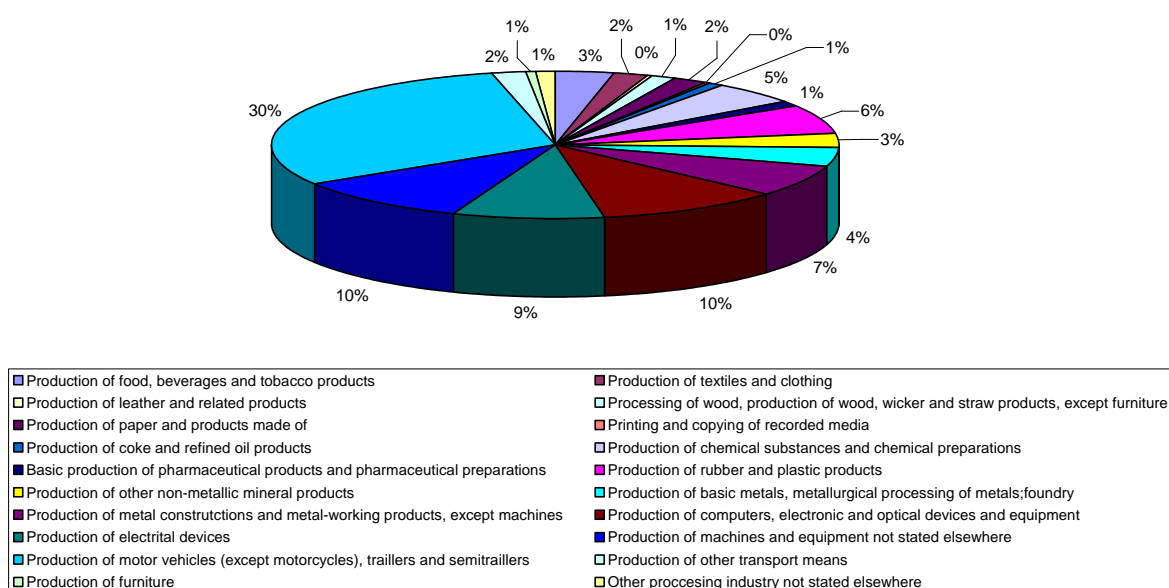
The direct export of the processing industry was 2035.40 bill. CZK, i.e. by 18 % more than in 2013 (1725.47 bill. CZK).

Direct export of the processing industry in 2014

	Revenues (bill. CZK)	Share (%)
Production of food, beverages and tobacco products	58,09	2,9
Production of textiles and clothing	35,09	1,7
Production of leather and related products	3,12	0,2
Processing of wood, production of wood, wicker and straw products, except furniture	28,97	1,4
Production of paper and products made of	35,38	1,7
Printing and copying of recorded media	6,98	0,3
Production of coke and refined oil products	17,54	0,9
Production of chemical substances and chemical preparations	94,70	4,7

Basic production of pharmaceutical products and pharmaceutical preparations	22,69	1,1
Production of rubber and plastic products	126,16	6,2
Production of other non-metallic mineral products	53,45	2,6
Production of basic metals, metallurgical processing of metals; foundry	84,11	4,1
Production of metal constructions and metal-working products, except machines and equipment	132,28	6,5
Production of computers, electronic and optical devices and equipment	210,27	10,3
Production of electrical devices	165,58	8,1
Production of machines and equipment not stated elsewhere	191,91	9,4
Production of motor vehicles (except motorcycles), trailers and semitrailers	695,10	34,2
Production of other transport means	38,86	1,9
Production of furniture	12,12	0,6
Other processing industry not stated elsewhere	23,00	1,1
Processing industry	2 035,40	100.0

Structure of direct export of the processing industry in 2014



In the following table the individual processing industry subcategories are arranged according to the level of the inter-year change of revenues reached within years 2014 and 2013. These inter-year changes are used here as indicators of growth dynamism of individual branches.

Dynamism of sale according to the individual processing industry subcategories

	Revenues 2013 (bill. CZK)	Revenues 2014 (bill. CZK)	Index 14/13 (%)
Production of leather and related products	3,48	3,77	108,3
Other processing industry not stated elsewhere	35,14	39,22	111,6
Production of computers, electronic and optical devices and equipment	239,75	280,09	116,8
Production of other transport means	51,80	53,64	103,6
Production of metal constructions and metal-working products, except machines and equipment	175,71	189,79	108,0
Processing of wood, production of wood, wicker and straw products, except furniture	41,62	45,74	109,9
Production of machines and equipment not stated elsewhere	237,72	254,72	107,2
Production of electrical devices	192,14	210,92	109,8
Production of paper and products made of	51,43	57,04	110,9
Production of textiles and clothing	41,65	47,06	113,0
Processing industry	2 856,29	3 188,55	111,6
Production of food, beverages and tobacco products	243,57	237,99	97,7
Production of other non-metallic mineral products	94,13	100,85	107,1
Production of rubber and plastic products	195,90	217,67	111,1
Basic production of pharmaceutical products and pharmaceutical preparations	27,01	27,49	101,8
Production of furniture	15,37	18,34	119,3
Production of motor vehicles (except motorcycles), trailers and semitrailers	768,10	924,80	120,4
Production of chemical substances and chemical preparations	139,36	153,58	110,2
Production of basic metals, metallurgical processing of metals; foundry	164,42	176,29	107,2
Production of coke and refined oil products	120,33	131,25	109,1
Printing and copying of recorded media	17,66	18,30	103,6

The most significant growth was in the category Production of motor vehicles (except motorcycles), trailers and semitrailers, followed by the Production of furniture and the Production of computers, electronic and optical devices and equipment.

The revenues of the category Production of other non-metallic mineral products, to which also the industry of glass and ceramics belongs, increased by 7.1 % in comparison with 2013 what means a significant improvement in comparison with increase by 1.3 % between 2013 and 2012.

Glass and ceramic industry

In the following chapter “Development of the glass and ceramic industry in the period from 2009 till 2014”, the glass and ceramic industry as a part of the Czech processing industry, which corresponds to the characteristic orientation of organizations activities included in the Association, is studied and described in more details, i.e. in group division. For understanding the relations among the processing industry, production of other non-metallic mineral products and the glass and ceramic industry an informative table is given further on.

Glass and ceramic industry in the processing industry in 2014

	Revenues	Direct export
Glass and ceramic industry		
Indicators in bill. CZK (current prices)	41,46	33,04
Share in the Other non-metallic mineral products (%)	0,41	0,62
Share in the processing industry (%)	1,30	1,62
Production of the other non-metallic mineral products		
Indicators in bill. CZK (current prices)	100,85	53,45
Share in the processing industry (%)	3,16	2,63
Processing industry		
Indicators in bill. CZK (current prices)	3 188,55	2 035,40

The revenues of the glass and ceramic industry in 2014 in comparison with 2013 increased by 1.64 bill. CZK, i.e. by 4.4 %, from which the direct export increased by 3.28 bill. CZK, i.e. by 12.0 %. Both indicators grew more rapidly than in the whole category Production of other non-metallic mineral products, i.e. revenues grew by 3.1 percentual point and direct export by 1 percentual point.



Development of the glass and ceramic industry in the period from 2009 till 2014

In this part of the Annual Report characteristic values of the main production indices of the glass and ceramic industry of the Czech Republic in 2014 and in the period from 2009 till 2014 are recorded. In the context of real outer and inner background of the Czech Republic, based on these data, the aim is to analyze and describe the main trends of the development of economic indices of the glass and ceramic industry in above-mentioned years.

In the introduction of the glass and ceramic industry development analysis a survey of basic macroeconomic indices for the Czech Republic in the investigated period from 2009 till 2014 is given for understanding wide relations.

TABLE: MAIN MACROECONOMIC INDICES IN THE CZECH REPUBLIC IN THE PERIOD FROM 2009 TILL 2014

(SOURCE: CZECH STATISTICAL OFFICE, JULY 2015)

		2009	2010	2011	2012	2013	2014
Gross domestic product	growth in %, actually	-4,8	2,3	2,0	-0,9	-0,5	2,0
Average inflation rate	growth in %, actually	1,0	1,5	1,9	3,3	1,4	0,4
General unemployment rate	average in %	6,7	7,3	6,7	7,0	7,0	6,1
Average real wage growth	in %	2,3	0,7	0,6	-0,8	-1,5	1,9
Balance of trade	bill. CZK	67,8	124,5	191,4	310,8	350,8	154,1
CZK / EUR	average per year	26,44	25,29	24,59	25,14	25,97	27,53
CZK / USD	average per year	19,06	19,11	17,69	19,58	19,56	20,75

After two years of decline the Czech economy increased in 2014 actually by 2 %. The reason of this growth was continually increasing home demand. Optimistic expectations of consumers and business sector influenced further economical development. The results of the industry which are documented by the growth of gross value added are the main factors of the domestic economy growth. This gross value added increased more distinctively (by 2.6 %) than the total performance measured by gross domestic product. Industrial production in 2014 returned to the growth after two years of recession. During the whole 2014 the production of the Czech industry increased by 4.9 % in comparison with previous year and production in the processing industry increased by 6.4 %. The growing industrial production and the increase of total revenues (by 10 %) at lower growth of employment (average registration number of employees increased by 1.8 %) projected to the growth of productivity of labour (by 8 %) which significantly surpassed the growth of real wages.

(Source: Ministry of Industry and Trade, Analýza vývoje ekonomiky České republiky za rok 2014, July 2015)

The glass and ceramic industry included in the branch Production of other mineral products is incorporated to the competence of the Ministry of Industry and Trade, which expects continuation of industrial production growth in further years, as well.

A stimulation of economy of the Czech Republic – starting according to the inter-year dynamics in the last quarter of 2013 and in the inter-quarter comparison even in the 2nd quarter of 2013 – continued in 2014, too. In total for the whole year 2014 gross domestic product of the Czech Republic increased by 2 %, gross value added increased by 2.6 %. The greatest contribution had the processing industry oriented strongly to foreign demand. The volume of industrial production and retail revenues surpassed for the first time the peak of the boom in 2008. Also confidence of consumers was higher than in 2008. From four largest economies of the European Union only Germany grew in the 4th quarter of 2014, in comparison with previous quarter, more than the Czech Republic. Germany had, according to available data, after de facto stagnation of two previous quarters, the fifth highest contribution of gross domestic product from all European Union countries. The total performance of the Czech economy, measured by gross value added increased by 2.6 % in 2014. All branches in the Czech economy produced jointly goods and services in volume exceeded the level of 2008 for the first time. It was higher by 0.5 %. Performance of industry (measured by industrial production index in real terms) during the whole year 2014 added almost 5 % (after stagnation in the previous year). The growth was caused by stimulation of foreign demand, at first especially for vehicles, which transferred gradually by direct subcontracting to the most of other processing branches, even in case of home demand. Export of goods from the Czech Republic was very successful again. In spite of renewal of the Czech economy growth with higher home demand and thus with demand for imports, the export increased faster in comparison with 2013 (+ 13.1 %) than import (+ 11.8 %). Six key export commodities of engineering character (cars, metals and metalworking products, computers and electronics, together with electrical equipment and other machinery) created 63 % of total export from the Czech Republic and their dynamics was in total double-digit (+ 13.8 %), slightly above the average rate for the entire export. The weight of the European Union as a destination for exports from the Czech Republic increased (+ 1.3 of percentual point to 83 %). The export to Germany increased above average (+ 15.8 %), increasing the share of the main partner in total exports (+ 0.7 of

percentual point to 32.1 %). Policy of sanctions restricts exports to Russia (- 4.6 %), what dropped its share on total exports from the Czech Republic from 3.7 % to 3.1 %.

(Source: Czech Statistical Office, *Vývoj ekonomiky České republiky v roce 2014, March 2015*)

Data and analyses given below were gathered and processed for the glass and ceramic industry as the area of the Czech processing industry corresponding to the characteristic orientation of companies associated in the Association. The selected method of the industrial development description comes out from investigation of data arranged in individual branches of the glass and ceramic industry. For the analysis of 2014 available statistical data of companies with more than 50 employees relevant to 30 June 2015, have been used.

Price indices for the group of products of the glass and ceramic industry

Table: Inter-year price indices

REPR*		2009	2010	2011	2012	2013	2014
CG 23	Other non-metallic mineral products	98	97,3	99,6	100,2	99,6	99,8
CG 231	Glass and glass products	93,6	97,9	101,5	99,4	99,7	98,7
CG 232	Refractory products	102,9	97,7	101,2	102,1	101,1	100,1
CG 234	Other china and ceramic products**						

* The Czech Statistical Office has not published price indices for CG 234

Inter-year price indices (same period of previous year = 100 %)

The total average price index of the Other non-metallic mineral products has not changed in comparison with previous year.

Table: Cumulative price indices

REPR		2009	2010	2011	2012	2013	2014
CG 23	Other non-metallic mineral products	100,0	97,3	96,9	97,1	96,7	96,5
CG 231	Glass and glass products	100,0	97,9	99,3	98,8	98,4	97,1
CG 232	Refractory products	100,0	97,7	98,9	101,0	102,1	102,2
CG 234	Other china and ceramic products*						

* The Czech Statistical Office has not published price indices for CG 234.

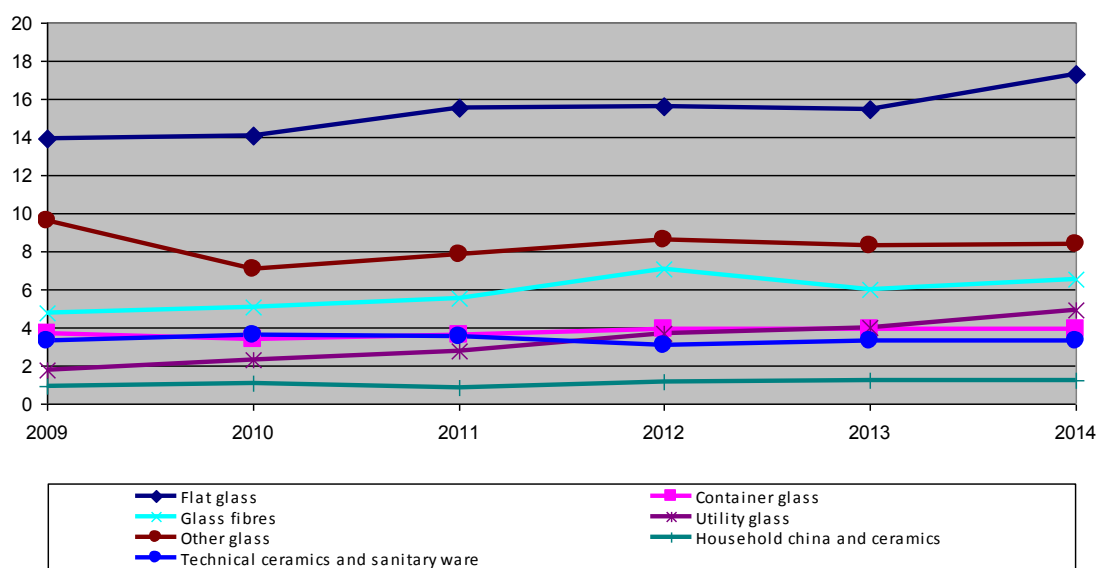
Cumulative price indices (2009 = 100 %)

Revenues for sale of own products and services

Table: Revenues for sale of own products and services (bill. CZK)

	2009	2010	2011	2012	2013	2014	index 14/13 (%)
Flat glass	13,96	14,09	15,56	15,64	15,46	17,34	112,2
Container glass	3,71	3,42	3,61	3,96	3,90	3,90	100,0
Glass fibres	4,74	5,11	5,52	7,06	6,02	6,56	109,0
Utility glass	1,78	2,34	2,77	3,66	4,03	4,92	122,1
Other glass	9,63	7,05	7,86	8,63	8,28	8,36	100,9
Glass, total	33,82	32,01	35,32	38,95	37,69	41,08	109,0
Household china and ceramics	0,93	1,06	0,84	1,19	1,22	1,25	102,1
Technical ceramics and sanitary ware	3,32	3,65	3,55	3,07	3,31	3,32	100,2
Ceramics, total	4,25	4,71	4,39	4,26	4,53	4,56	100,8
Glass and ceramics, total	38,07	36,72	39,71	43,21	42,22	45,65	108,1

Graph: Development of revenues for sale of own products and services (bill. CZK)



In 2014 the revenues for sales of own products and services (hereinafter revenues) reached in investigated branches 45.65 bill. CZK, i.e. by 8.12 % (3.43 bill. CZK) more than in 2013.

The revenues of the glass industry reached 41.08 bill. CZK, what is by 9 % (3.39 bill. CZK) more than in 2013. The revenues increased in all glass industry branches. The share of flat glass was 43.0 %, other glass 20.0 %, glass fibres and products made of 16.0 %, container glass 9.0 %, and utility glass 12.0 %.

The revenues of investigated branches of china and ceramics reached 4.56 bill. CZK, what is by 0.67 % (0.03 bill. CZK) more than in 2013. The share of household china and ceramics was 27 %, the share of technical ceramics and sanitary ware was 73 %.

The development of revenues in 2014 in individual branches was the following.

The revenues for flat glass in 2014 were 17.34 bill. CZK. In comparison with 2013 it increased by 12.16 %. The flat glass production is dependent on the development of the building and automotive industry.

The volume of industrial production and retail revenues surpassed the peak of its prosperity in 2008. Also the confidence of consumers was higher in comparison with 2008. The building production increased after last five years. In spite of the growth of the number of new constructed flats, which appeared for the first time after seven years, their number reached however roughly one half of that number in 2007. After five years also supply of labor of building companies in public orders increased. The Czech building industry performance improved after several years of decline according to statistical data. The building production in 2014 increased in comparison with the previous year by 4.3 %. The inter-year growth in 2014 took place not only in the engineering but also in building construction. The building production recorded an inter-year growth by 3.4 % and the civil engineering grew by 6.4 %. The building production during 2014 declined in comparison with the boom year 2008 by 20.5 %.

(Source: Czech Statistical Office, České stavebnictví v číslech - 2014, 28. 8. 2015)

The Czech Republic confirmed in 2014, that it is a world power in the production of cars and coaches. Thanks to the last year record production 1.245 mill. cars it stands on the 13th place in the world and on the 2nd place in the number of produced cars per number of inhabitants. In 2014 the revenues of member companies of the Automotive Industry Association increased in comparison with 2013 by 14.9 % to record 852.6 bill CZK (in 2013 it was 741.9 bill CZK).

(Source: Automotive Industry Association)

The development of flat glass in following years will be influenced mainly by further development of the building industry in Central Europe and by the production of automotive industry.

The revenues for container glass reached amount of 3.90 bill. CZK in 2014, i.e. they did not changed in comparison with 2013.

The revenues for glass fibres and products made of increased by 8.97 % (0.54 bill. CZK) in comparison with previous year. The growth in the building industry in the Czech Republic and the growth of export of this assortment to foreign countries, especially to the European Union and Russia, projected positively to the revenues.

Since 2011 the revenues for utility glass have been increasing. In comparison with 2013 the revenues of utility glass increased by 22.1 % (0.89 bill. CZK). The export is decisive for the amount of revenues. In this branch there is a very hard competition and Czech companies face it by a high quality, design and originality of products. It is possible to say that companies and their products in the world since 2011 have been strengthening their position.

The revenues for other glass increased in comparison with 2013 by 0.97 % (0.08 bill. CZK). This group includes a wide assortment of products (technical and laboratory glass, glass tiles and bricks, glass semiproducts for fashion jewellery, etc.). The revenues development of individual assortment groups is very unbalanced.

The revenues for household china and ceramics increased by 2.5 % (0.03 bill. CZK) in comparison with the previous year. The china producers succeeded to conclude necessary amount of trade contracts thanks to a consistent trade policy.

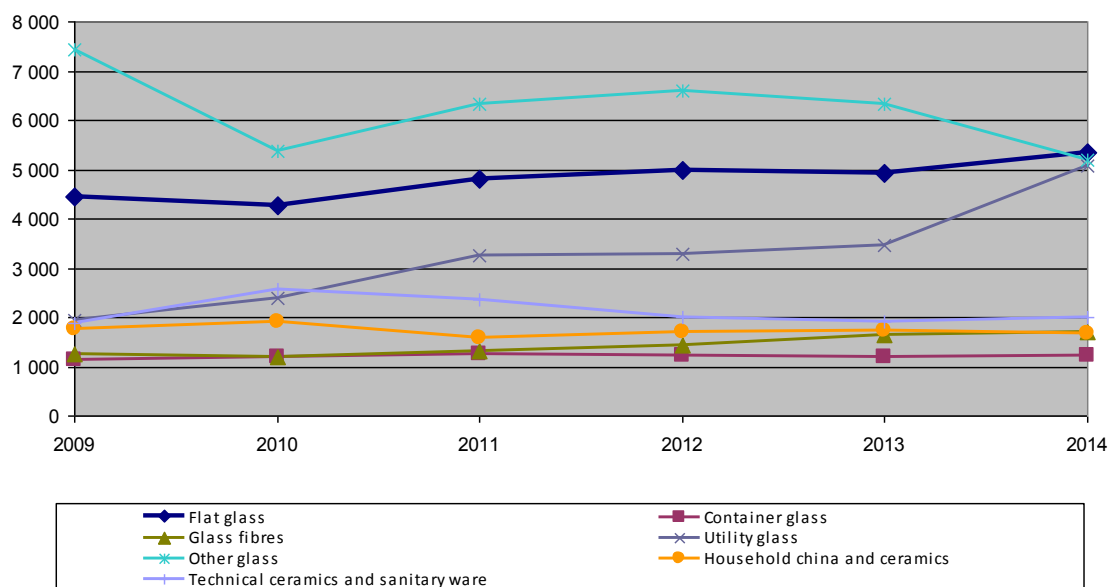
The revenues for technical ceramics and sanitary ware increased by 0.3 % (0.01 bill. CZK), from which the revenues for sanitary ware increased by 12.2 % (0.47 bill. CZK).

Workers

Table: Average accounting number of workers (persons)

	2009	2010	2011	2012	2013	2014	index 14/13 (%)
Flat glass	4 453	4 256	4 817	4 975	4 911	5 338	108,7
Container glass	1 143	1 202	1 247	1 221	1 208	1 219	100,9
Glass fibres	1 259	1 188	1 319	1 432	1 656	1 698	102,5
Utility glass	1 931	2 402	3 254	3 276	3 472	5 079	146,3
Other glass	7 447	5 361	6 340	6 598	6 320	5 198	82,2
Glass, total	16 233	14 409	16 977	17 502	17 567	18 532	105,5
Household china and ceramics	1 751	1 900	1 571	1 702	1 725	1 676	97,2
Technical ceramics and sanitary ware	1 885	2 576	2 351	1 988	1 915	2 000	104,4
Ceramics, total	3 636	4 476	3 922	3 690	3 640	3 676	101,0
Glass and ceramics, total	19 869	18 885	20 899	21 192	21 207	22 208	104,7

Graph: Development of average accounting number of workers (persons)



Total workers number in the glass and ceramic industry stated in 2014 in comparison with 2013 increased by 4.7 %, from which the glass industry showed a growth by 5.5 % (965 persons) and the ceramic industry increased by 1.0 % (27 persons). The inter-year development of workers number differs in individual branches.

The workers number increase in flat glass production is dependent on an increased demand of the automotive industry and the building industry. The workers number increased by 427 persons.

The workers number in container glass stayed almost on the same level (increase by 0.9 %) and in the production of glass fibres and products made of the workers number increased by 2.5 %.

The increase of demand for the assortment of utility glass projected to the workers number increase in utility glass production (by 46.3 %).

The workers number decreased by 17.8 % in other glass production. The decrease of workers number is influenced by permanent decline of demand for glass semiproducts for fashion jewellery and reduction the assortment with prevailing share of manual work.

The decrease of demand for the assortment of household china and ceramics production projected in the decrease of the workers number (by 2.8 %) of this branch.

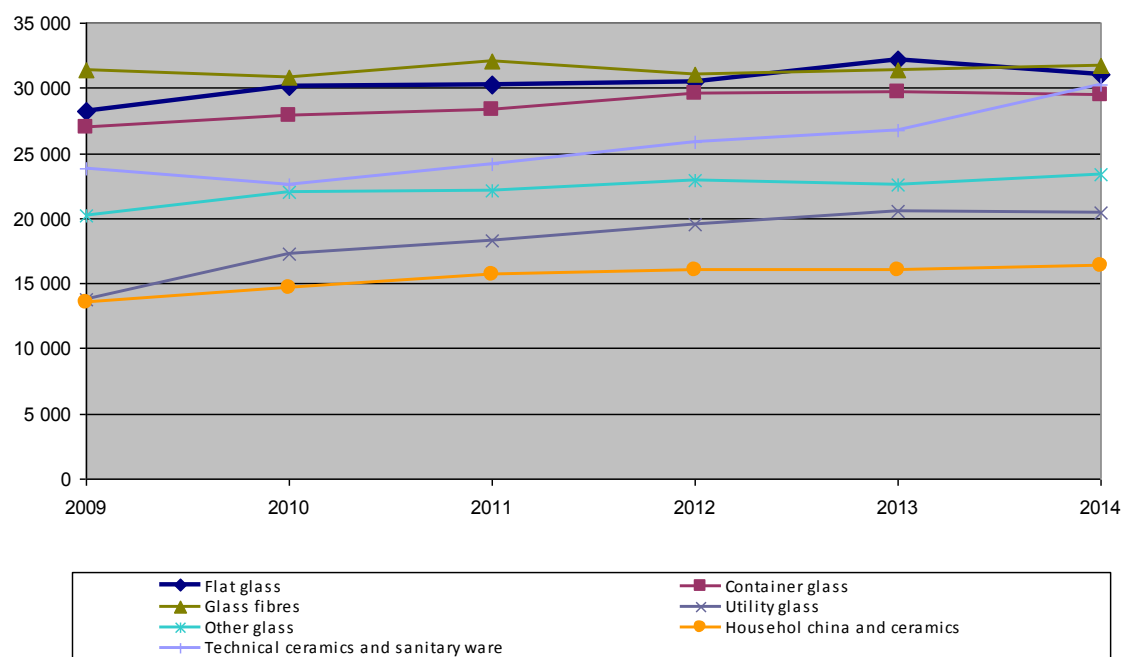
The workers number in technical ceramics and sanitary ware increased by 4.4 %, from which the workers number in sanitary ware increased a little and in technical ceramics production it decreased.

Average month-wages

Table: Average month-wages (CZK)

	2009	2010	2011	2012	2013	2014	index 14/13 (%)
Flat glass	28 172	30 113	30 214	30 537	32 164	31 056	96,6
Container glass	27 007	27 896	28 332	29 561	29 645	29 418	99,2
Glass fibres	31 351	30 783	32 104	31 033	31 355	31 702	101,1
Utility glass	13 828	17 300	18 333	19 499	20 498	20 442	99,7
Other glass	20 223	21 979	22 175	22 971	22 527	23 354	103,7
Household china and ceramics	13 602	14 698	15 680	16 018	16 066	16 365	101,9
Technical ceramics and sanitary ware	23 863	22 566	24 207	25 910	26 802	30 230	112,8
Glass and ceramics, total	22 364	23 495	24 160	24 857	25 382	25 382	100,0

Graph: Development of average month-wages (CZK)



The inter-year development of average month-wages within 2014 and 2013 documents the economic situation of glass and ceramic industry companies.

The average wages increased only in the group of technical ceramics and sanitary ware. In remaining investigated production branches the wages either stagnated, or decreased slightly.

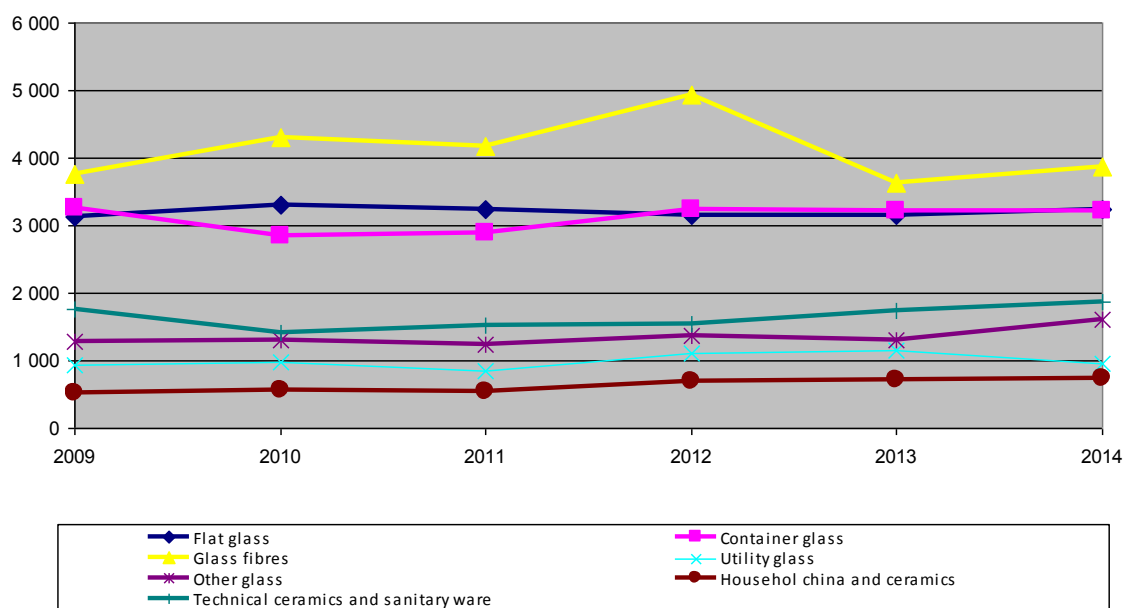
More and more noticeable tendency in differentiation of wages in branches, the production of which is mass and practically full-automatized, continues. It means production of flat glass and its processing (31,056 CZK), glass fibres and products made of and container glass. Further on, it applies to branches with more often changes (shorter production series) in the regime of automatized production lines and also a certain share of manual production. Significantly above the average wage in the Czech Republic (25,686 CZK; *Source: Czech Statistical Office*) there are average wages reached in the branches of glass fibres and products made of, flat glass and container glass. The average wages reached in the technical ceramics and sanitary ware (30,230 CZK), from which the average wages in the sanitary ware (30,450 CZK) is above the average of the average wage in the Czech Republic. The level of the average wage in other glass is influenced on one side by strengthening the share of more qualified work (a group of production of technical glass), and low wages in the production of glass semiproducts for fashion jewellery on the other side. Average wages in utility glass and, especially, in household china stay deeply below the average wage in the Czech Republic.

Productivity of labour

Table: Productivity of labour from sales in current prices (ths. CZK/worker)

	2009	2010	2011	2012	2013	2014	index 14/13 (%)
Flat glass	3 135	3 312	3 231	3 145	3 148	3 249	103,2
Container glass	3 251	2 845	2 895	3 242	3 223	3 226	100,1
Glass fibres	3 762	4 304	4 183	4 931	3 634	3 866	106,4
Utility glass	925	974	852	1 117	1 160	967	83,4
Other glass	1 293	1 315	1 240	1 380	1 310	1 608	122,7
Household china and ceramics	527	555	536	701	708	743	104,9
Technical ceramics and sanitary ware	1 759	1 417	1 511	1 547	1 730	1 860	107,5
Glass and ceramics, total	1 915	1 945	1 900	2 040	1 991	2 074	104,2

Graph: Development of productivity of labour from sales in current prices (ths. CZK/worker)



The above-mentioned information (development of revenues, workers number and production character) is projected in more complex index of the productivity of labour from sales. The productivity of labour of the glass and ceramic industry as the whole increased by 4.2 % in comparison with previous year.

The productivity of labour in flat glass increased by 3.2 %, in container glass it stagnated. In comparison with previous year the productivity of labour in glass fibres and products made of increased (by 6.4 %). The productivity of labour increased slightly (by 1.0 %) in household china and ceramics. The productivity of labour decreased in utility glass. The productivity of labour in comparison with previous year drew by 7.5 % in technical ceramics and sanitary ware.

Export

THE EXPORT IS STATED FURTHER ON IN REVENUES FROM DIRECT EXPORT IN CURRENT PRICES (HEREINAFTER DIRECT EXPORT) AND TOTAL EXPORT (I.E. DIRECT EXPORT, INDIRECT EXPORT).

THE DEVELOPMENT OF DIRECT EXPORT IS GIVEN IN THE FOLLOWING TABLE. THE HOLLOW GLASS PRODUCTION INCLUDES UTILITY AND CONTAINER GLASS. DUE TO THE STATISTICAL INVESTIGATION IT IS NOT POSSIBLE TO DIVIDE HOLLOW GLASS TO ABOVE MENTIONED PRODUCTION BRANCHES.

TABLE: DIRECT EXPORT (BILL. CZK)

	2009	2010	2011	2012	2013	2014	index 14/13 (%)
Flat glass	8,39	8,86	9,70	11,07	11,44	12,83	112,2
Hollow glass	3,41	3,75	4,82	5,11	5,32	5,42	101,9
Glass fibres	1,69	1,88	1,97	1,99	4,92	5,47	111,2
Other glass	6,62	6,14	6,48	7,10	6,74	6,81	101,0
Glass, total	20,11	20,63	22,97	25,27	28,42	30,53	107,4
Household china and ceramics	0,43	0,36	0,37	0,47	0,51	0,55	107,8
Technical ceramics and sanitary ware	1,88	2,26	2,13	1,65	1,74	1,92	110,3
Ceramics, total	2,31	2,62	2,50	2,12	2,25	2,47	109,8
Glass and ceramics, total	22,42	23,25	25,47	27,39	30,67	33,00	107,6

Graph: Development of direct export (bill. CZK)

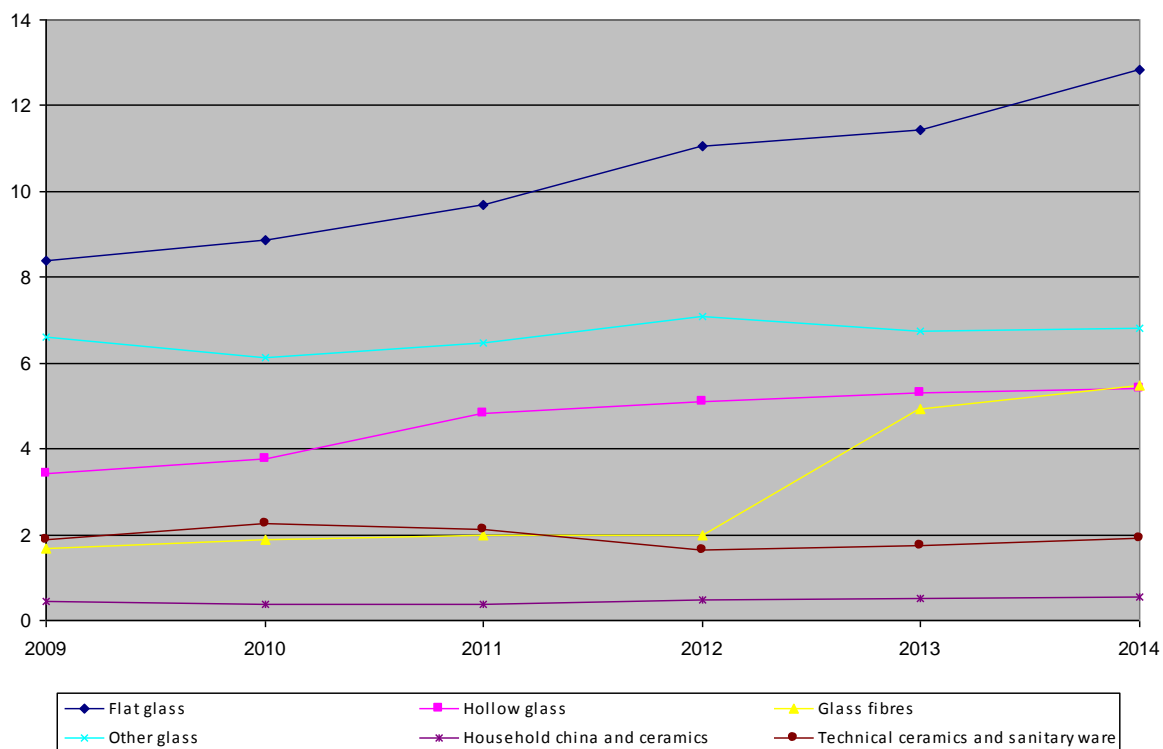
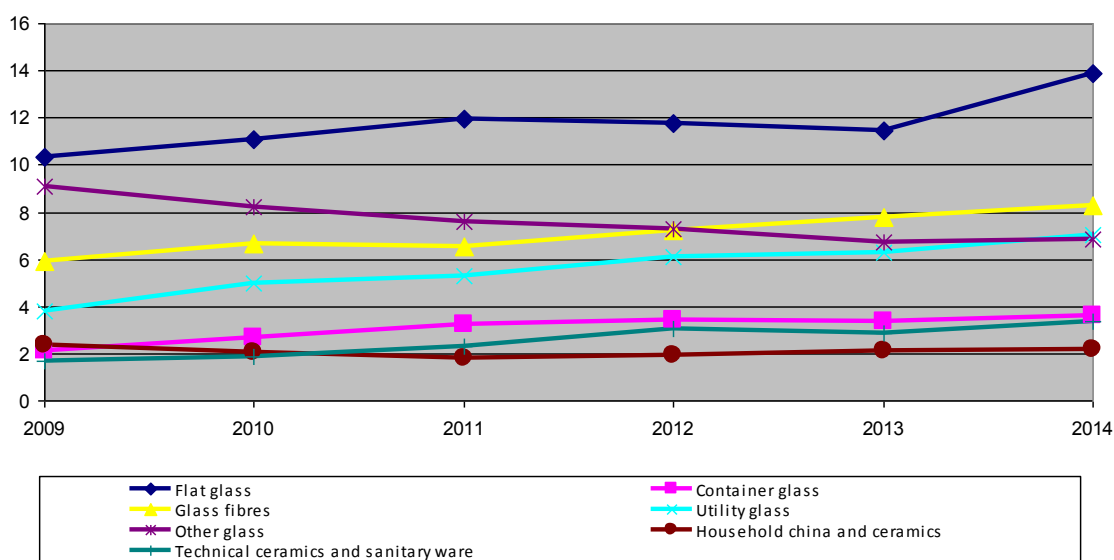


TABLE: EXPORT (BILL. CZK)

	2009	2010	2011	2012	2013	2014	index 14/13 (%)
Flat glass	10,325	11,112	11,923	11,757	11,450	13,866	121,1
Container glass	2,128	2,701	3,214	3,393	3,391	3,613	106,5
Glass fibres	5,904	6,665	6,568	7,240	7,786	8,266	106,2
Utility glass	3,805	5,010	5,291	6,112	6,298	7,065	112,2
Other glass	9,061	8,187	7,577	7,292	6,730	6,851	101,8
Glass, total	31,223	33,675	34,573	35,794	35,655	39,661	111,2
Household china and ceramics	2,395	2,065	1,789	1,921	2,137	2,209	103,4
Technical ceramics and sanitary ware	1,676	1,883	2,306	3,067	2,882	3,364	116,7
Ceramics, total	4,071	3,948	4,095	4,988	5,019	5,573	111,0
Glass and ceramics, total	35,294	37,623	38,668	40,782	40,674	45,234	111,2

Graph: Development of export (bill. CZK)



The glass and ceramic industry of the Czech Republic is oriented to export, i.e. it is directly influenced by economic changes in the world, especially in the European Union where 70.0 % of export of investigated production branches are directed.

After the decline of this branch export within years 2008 and 2009, the export has been increasing since 2010. In comparison with 2013, the direct export in 2014 increased by 7.6 % in comparison with the previous year. The total export increased by 11.2 %. The direct export of investigated branches in 2014 was 33 bill. CZK, total export was 45.234 bill. CZK.

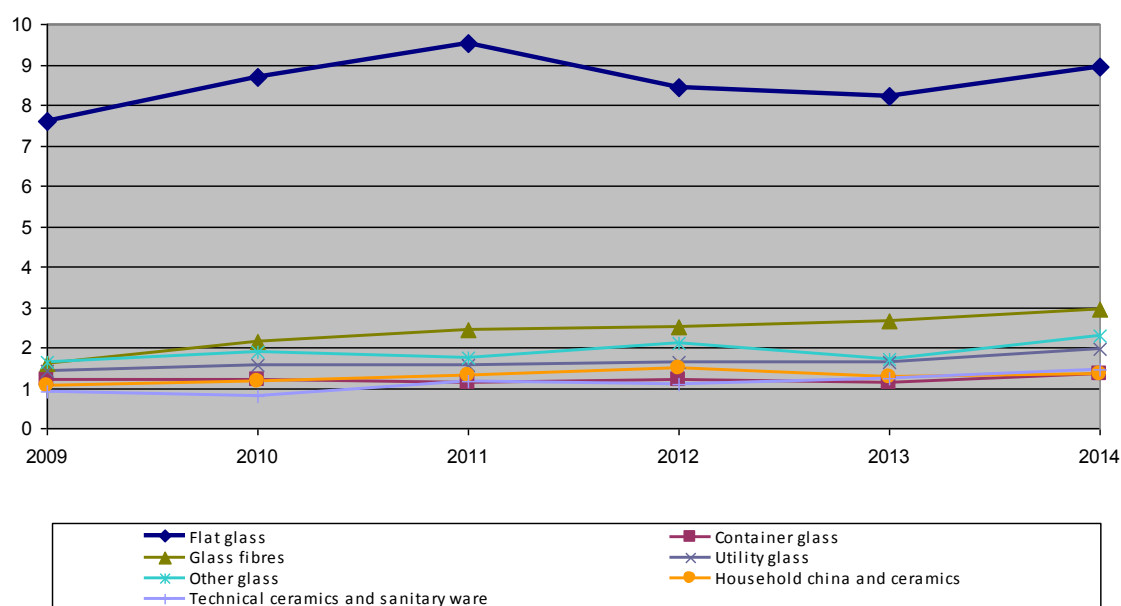
The export development in 2014 in individual branches is given in more details in Chapter 5 The analysis of export and import.

Import

Table: Import (bill. CZK)

	2009	2010	2011	2012	2013	2014	index 14/13 (%)
Flat glass	7,583	8,697	9,521	8,433	8,212	8,937	108,8
Container glass	1,186	1,184	1,125	1,203	1,129	1,334	118,2
Glass fibres	1,615	2,133	2,448	2,520	2,646	2,960	111,9
Utility glass	1,407	1,553	1,552	1,651	1,624	1,953	120,3
Other glass	1,637	1,905	1,747	2,123	1,693	2,295	135,6
Glass, total	13,428	15,472	16,393	15,930	15,304	17,479	114,2
Household china and ceramics	1,045	1,166	1,323	1,474	1,270	1,33	104,7
Technical ceramics and sanitary ware	0,895	0,801	1,163	1,076	1,245	1,47	118,1
Ceramics, total	1,940	1,967	2,486	2,550	2,515	2,800	111,3
Glass and ceramics, total	15,368	17,439	18,879	18,480	17,819	20,279	113,8

Graph: Import development (bill. CZK)



The total import of the glass and ceramic industry products has been decreasing since 2011. In 2014 it increased in comparison with previous year by 13.8 % (2.46 bill. CZK).

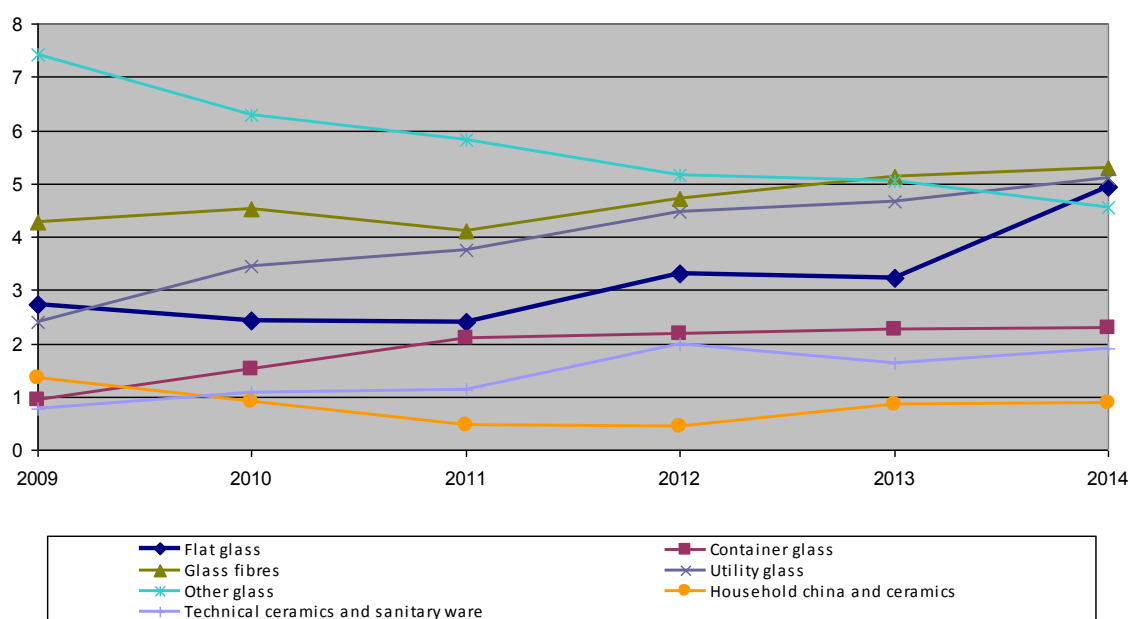
The import development in individual production branches in 2014 is given in more details in Chapter 5 The analysis of export and import.

Balance of foreign trade

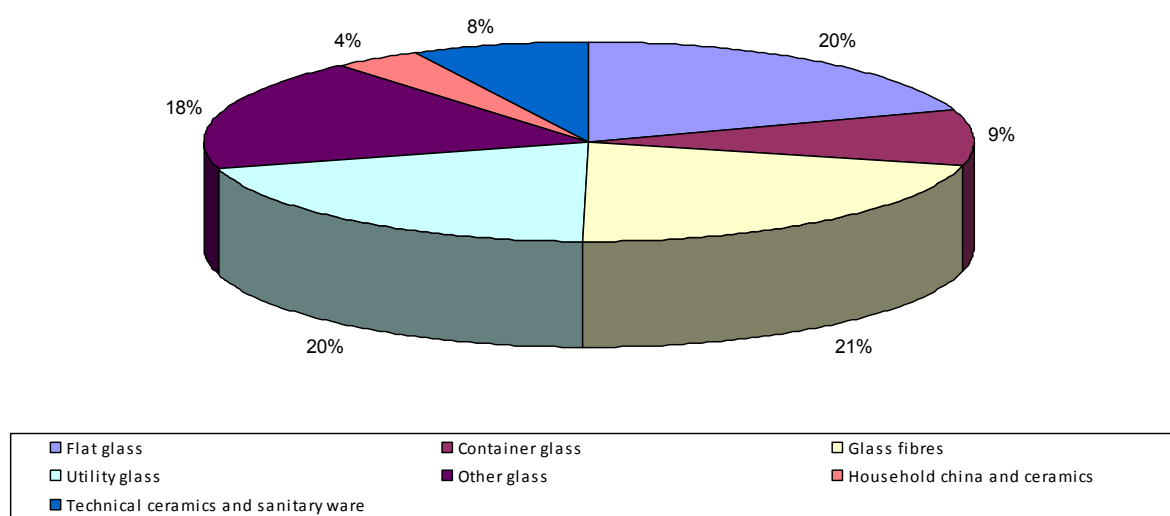
Table: Balance of foreign trade (bill. CZK)

	2009	2010	2011	2012	2013	2014	index 14/13 (%)
Flat glass	2,742	2,415	2,402	3,324	3,238	4,929	152,2
Container glass	0,942	1,517	2,089	2,190	2,262	2,279	100,8
Glass fibres	4,289	4,532	4,120	4,720	5,140	5,306	103,2
Utility glass	2,398	3,457	3,739	4,461	4,674	5,112	109,4
Other glass	7,424	6,282	5,830	5,169	5,037	4,556	90,5
Glass, total	17,795	18,203	18,180	19,864	20,351	22,182	109,0
Household china and ceramics	1,350	0,899	0,466	0,447	0,867	0,879	101,4
Technical ceramics and sanitary ware	0,781	1,082	1,143	1,991	1,637	1,894	115,7
Ceramics, total	2,131	1,981	1,609	2,438	2,504	2,773	110,7
Glass and ceramics, total	19,926	20,184	19,789	22,302	22,855	24,955	109,2

Graph: Development of balance of foreign trade (bill. CZK)



Graph: Structure of balance of foreign trade



The branches of the glass and ceramic industry in the investigated period from 2009 till 2014 notably contributed to the active balance of foreign trade of the whole processing industry of the Czech Republic. The values of the balance of foreign trade confirm significantly important export orientation of this industry. The balance of foreign trade was 24.955 bill. CZK in 2014, it increased by 9.2 % in comparison with 2013.

Effective home demand

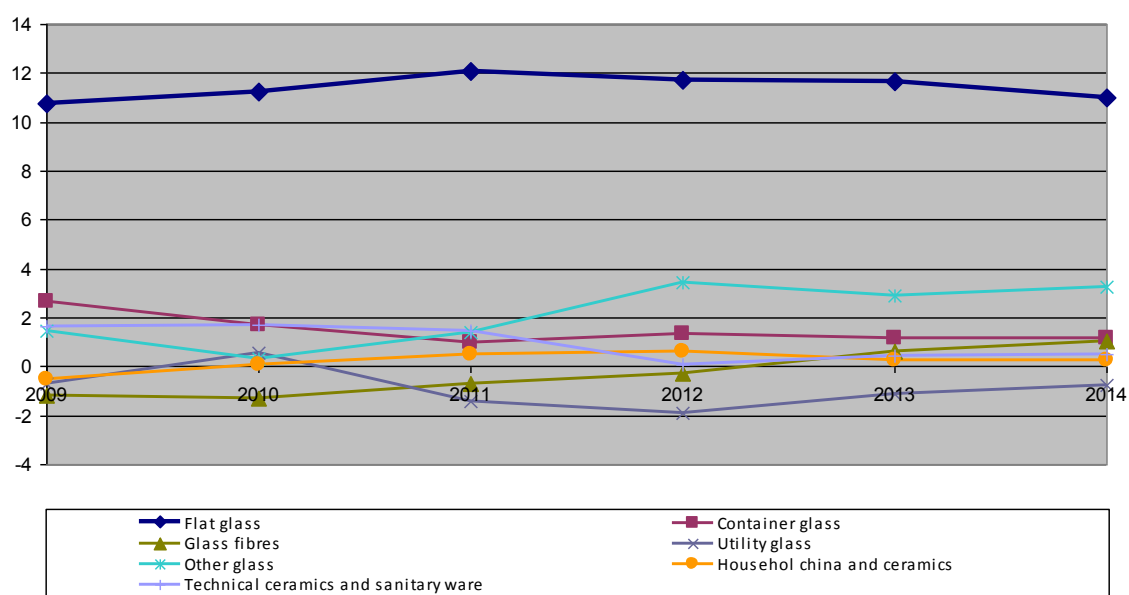
The effective home demand index is defined by the formula:

(The revenues from industrial activities + Import – Export)

Table: Effective home demand (bill. CZK)

	2009	2010	2011	2012	2013	2014
Flat glass	10,74	11,22	12,11	11,72	11,67	11,01
Container glass	2,63	1,68	0,96	1,32	1,19	1,18
Glass fibres	-1,20	-1,30	-0,69	-0,30	0,64	1,02
Utility glass	-0,68	0,56	-1,40	-1,92	-1,10	-0,75
Other glass	1,46	0,31	1,38	3,44	2,92	3,25
Household china and ceramics	-0,52	0,07	0,49	0,64	0,25	0,26
Technical ceramics and sanitary ware	1,61	1,70	1,47	0,07	0,47	0,52

Graph: Development of effective home demand (bill. CZK)



The development of the effective home demand in individual groups of the glass and ceramic industry is differentiated and specific.

Conclusions

In 2014 there was succeeded to keep the growth of revenues from years 2011 and 2012 and overcome their decline in 2013. The main reason was the increase of demand for products intended to the building industry and automotive industry in the Czech Republic. The revenues for sale of the own products and services in comparison with 2013 increased (by 9.0 %). And, as a result of this, the productivity of labour from sales increased by 4.2 %. The revenues for the direct export increased by 7.6 %. The total export increased by 11.2 %, as well. Both values reached the values of the fault year 2008. The balance of foreign trade increased by 9.2 %.

The results in 2015 and the development in 2016 will be dependent on the development of economy of the Czech Republic and on the development on foreign markets.

In the summary of prediction of the Ministry of Finance from July 2015 there is stated:

The Czech economy is growing dynamically. Real gross domestic product experienced an extreme inter-quarter increase by 2.5 %. As in the 4th quarter of 2014 (when gross domestic product acted counterproductively), it was influenced by legislative restriction of the time of sale of tobacco products with old labels. Taking into account the volatility of gross domestic product due to legislative changes, gross value added is much more appropriate indicator for assessing economic development.

Real gross value added in the 1st quarter of 2015 increased by 1.3 % in comparison with previous quarter, what means the largest growth since the 4th quarter of 2007. Gross value added increased in almost all sectors of the economy, but mostly in the processing industry, i.e. by 2.6 % (as in the previous quarter).

In 2015, the economy is stimulated by several one-off factors. In the first place it is a positive supply shock in the form of low oil prices – the average crown price of Brent oil in 2015 would be about a quarter lower than in 2014. The other positive factor is the fiscal stimulus, the extent of which is estimated about 0.4 % of gross domestic product. The effect of expansionary fiscal policy is further deepened by drawing on European Union funds from the Programming period 2007-2013, which can be used by the end of 2015.

Especially unexpectedly strong economic growth in the 1st quarter leads to a drastic revision of the forecast of real gross domestic product growth in 2015 from 2.7 % to 3.9 %.

The above-mentioned favourable estimates are projected in the expected improvement in the labor market and the expected growth of wages and salaries. The forecast assumes the positive development of the foreign trade balance.

Table: Prediction of the development of main macroeconomic indices*(Source: Ministry of Finance, July 2015)*

		2014	2015	2016
Gross domestic product	growth in %, fixed prices	2,0	3,9	2,5
Average inflation rate	%	0,4	0,5	1,5
Unemployment rate *	average in %	6,1	5,7	5,5
Volume of wages and salaries	growth in %, current prices	1,9	4,2	4,1
CZK / EUR	average per year	27,5	27,5	27,5

* (Selection of labour force investigation)

For a favourable development of the glass and ceramic industry the above mentioned facts are good news, however, it cannot be overestimated. The export orientation and dependence on a great number of related industrial branches, for which it delivers its products, make the glass and ceramic industry very vulnerable. Not only development of home demand but also economical development, especially in Europe, which is the greatest export territory of the Czech glass and ceramic industry, will be important. However, exporters will have to face up loosing markets in regions stricken with war conflicts. The increasing competition of countries of the Third World, and mainly from the Far East, is permanently a great problem. This competition impinges without exceptions all branches of the glass and ceramic industry investigated in this Annual Report.

Glass and ceramic industry is a traditional branch of the processing industry of the Czech Republic. During its long-term existence this branch went through periods of prosperity and also recessions. It is possible to say, that it has never face up to such uncertainty and unpredictability of development on markets like in last years. For companies' owners and managers it is necessary not only to predict at least development on markets but also to search new markets and strengthen their marketing activities. Also a consistent orientation to the production with high added value must be carried out. At the same time the product innovations and related services must be strengthen as much as possible.



EXPORT AND IMPORT DEVELOPMENT ACCORDING TO PRODUCTION BRANCHES IN THE PERIOD FROM 2009 TILL 2014

Export

The export of the assortment of the glass and ceramic industry is investigated according to the codes of the Customs Tariff, i.e. not only the direct export, but the total export from the Czech Republic.

Flat glass

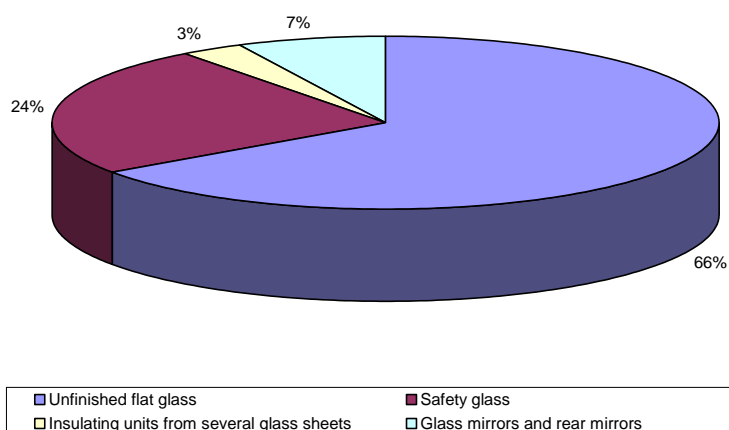
The export of flat glass in 2014 reached an amount of 13,865.6 mill. CZK. In comparison with 2013 the export increased by 21.1 % (2416 mill. CZK).

Table: Export of flat glass according to the assortment

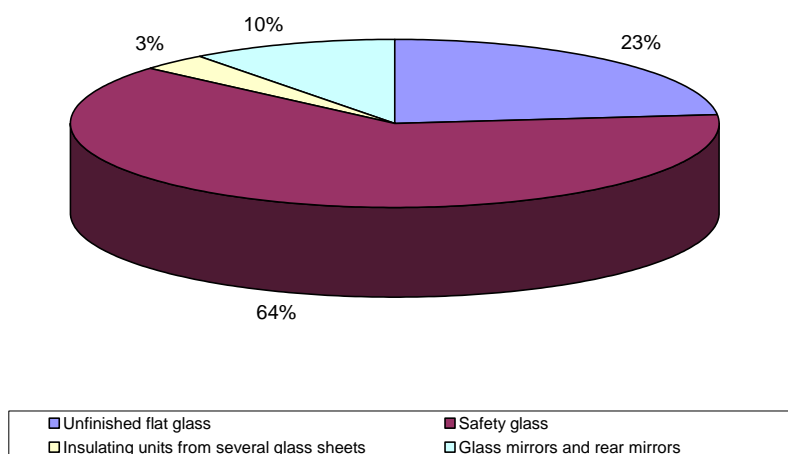
	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill. CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Unfinished flat glass	249 787,3	3 098,8	30,0	268 406,5	3 263,5	29,4	287 196,5	3 625,1	30,4
Toughened laminated safety glass	84 657,3	5 623,1	54,5	90 966,1	6 071,2	54,6	94 186,0	6 558,1	55,0
Insulating units from several glass sheets	7 593,9	341,7	3,3	10 377,2	361,4	3,3	7 997,2	326,9	2,7
Glass mirrors and rear mirrors	42 624,4	1 262,2	12,2	37 508,1	1 415,9	12,7	39 496,3	1 413,2	11,9
Totally	384 662,9	10 325,8	100,0	407 257,9	11 112,0	100,0	428 876,0	11 923,3	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill. CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Unfinished flat glass	286 672,4	3 545,5	30,2	274 751,1	3 103,5	27,1	294 228,3	3 228,5	23,3
Toughened laminated safety glass	88 121,5	6 400,1	54,4	101 128,6	6 694,0	58,5	109 563,2	8 743,2	63,1
Insulating units from several glass sheets	8 033,6	321,6	2,7	8 717,7	318,0	2,8	13 727,3	474,6	3,4
Glass mirrors and rear mirrors	35 635,8	1 490,0	12,7	30 233,5	1 334,1	11,7	32 984,8	1 419,3	10,2
Totally	418 463,3	11 757,2	100,0	414 830,9	11 449,6	100,0	450 503,6	13 865,6	100,0

Graph: Structure of export of flat glass according to the assortment in 2014 (t)



Graph: Structure of export of flat glass according to the assortment in 2014 (CZK)



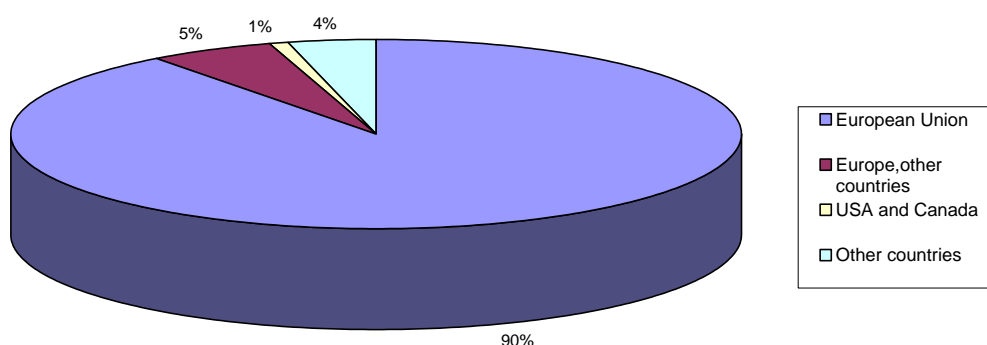
The greatest share of export in weight units had the unfinished flat glass in 2014 with 65.3 % (73.5 % was created by float glass), followed by the safety glass export with 24.3 %. As far as the export in CZK, the situation was contrary. The greatest share had the export of safety glass with 63.1 %. The share of the unfinished flat glass export was 23.3 %.

Table: Export of flat glass according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill. CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	349 526,0	9 454,5	91,6	377 649,3	10 172,7	91,5	394 528,8	10 785,7	90,5
Europe, other countries	30 662,8	613,1	5,9	22 175,7	557,0	5,0	27 111,3	801,8	6,7
USA and Canada	945,9	120,9	1,2	1 344,3	41,3	0,4	1 988,8	40,8	0,3
Other countries	3 528,2	137,3	1,3	6 086,6	341,0	3,1	5 247,1	295,0	2,5
Totally	384 662,9	10 325,8	100,0	407 255,9	11 112,0	100,0	428 876,0	11 923,3	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill. CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	387 173,4	10 491,8	89,2	379 311,4	9 967,2	87,1	401 568,6	12 449,3	89,8
Europe, other countries	24 073,2	783,0	6,7	20 395,2	800,4	7,0	17 517,6	749,0	5,4
USA and Canada	2 306,9	56,5	0,5	1 341,1	51,9	0,5	2 647,5	128,2	0,9
Other countries	4 909,8	425,9	3,6	13 783,2	630,1	5,5	28 769,9	539,1	3,9
Totally	418 463,3	11 757,2	100,0	414 830,9	11 449,6	100,0	450 503,6	13 865,6	100,0

Graph: Structure of export of flat glass according to territories in 2014 (CZK)



A substantial part of flat glass export was directed to the European Union countries. In 2014 the share on export was 89.8 %. The greatest customers were Germany, Austria, Poland, Belgium, France, Hungary and Slovakia. The greatest customers out of the European Union were Serbia, Bosnia and Herzegovina and Russia.

The structure of export corresponds to the final use of the assortment of flat glass (mostly utilized in the building and automotive industries) and to the production and trade strategy of companies.

Container glass

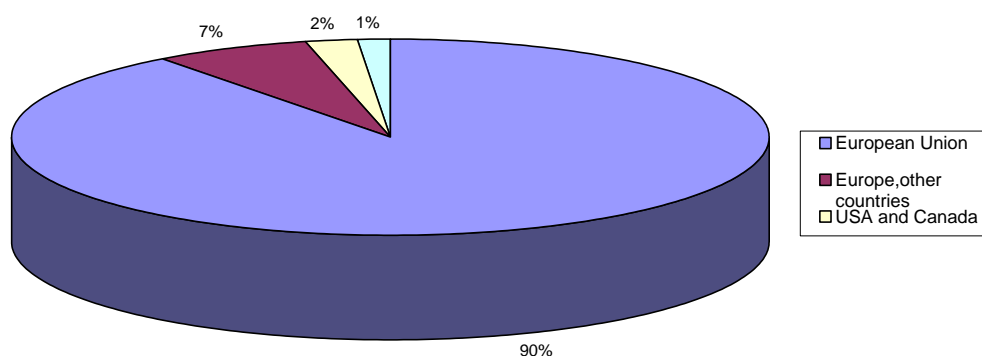
Container glass export in 2014 was 3612.9 mill. CZK. In comparison with 2013 the export slightly increased.

Table: Export of container glass according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	153 244,9	1 744,4	82,0	258 449,2	2 358,9	87,3	288 752,6	2 797,0	87,0
Europe, other countries	31 581,1	340,3	16,0	27 600,9	300,1	11,1	31 980,9	354,7	11,0
USA and Canada	808,7	17,0	0,8	725,5	14,3	0,5	1 253,8	24,3	0,8
Other countries	1 191,1	26,2	1,2	1 307,3	27,7	1,0	1 856,3	38,3	1,2
Totally	186 825,8	2 127,9	100,0	288 082,9	2 701,0	100,0	323 843,6	3 214,3	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	293 835,3	2 992,9	88,2	280 335,3	2 993,9	88,3	286 545,4	3 244,0	89,8
Europe, other countries	28 423,2	335,2	9,9	23 225,2	286,4	8,4	17 468,5	236,0	6,5
USA and Canada	1 848,2	36,2	1,1	1 430,8	30,8	0,9	3 809,5	85,0	2,4
Other countries	1 334,1	28,4	0,8	4 302,6	80,0	2,4	2 129,6	48,0	1,3
Totally	325 440,8	3 392,7	100,0	309 293,9	3 391,1	100,0	309 953,0	3 612,9	100,0

Graph: Structure of export of container glass according to territories in 2014 (CZK)



The export is determined by the character of use of a substantial part of container glass assortment. It is not economical to deliver bottles and preserve jars to long distances. In 2014 89.8 % of export was intended to the European Union countries. The greatest customers were Germany, Poland, Slovakia, Austria, Italy, Hungary and the Netherlands. The 6.5 % of export was directed to other European countries. From these countries the greatest customers were Switzerland and Russia.

Glass fibres and products made of

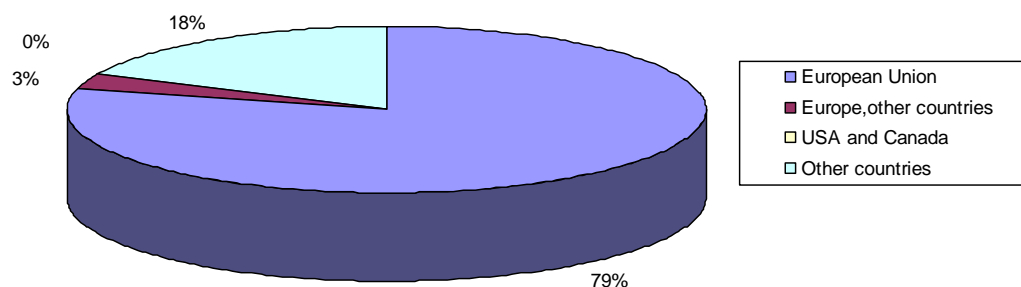
The export of glass fibres and products made of in 2014 was 8266.3 mill. CZK. In comparison with 2013 it increased by 6.16 % (479.8 mill. CZK).

Table: Export of glass fibres and products made of according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	127 780,5	5 387,2	91,2	152 659,9	6 065,9	91,0	142 284,1	5 953,7	89,4
Europe, other countries	5 141,6	224,9	3,8	6 681,7	240,5	3,6	5 358,6	234,4	3,5
USA and Canada	1 935,9	79,2	1,3	1 816,1	88,9	1,3	1 247,0	68,3	1,0
Other countries	4 079,6	212,6	3,6	5 281,3	269,9	4,0	5 265,7	401,3	6,0
Totally	138 937,6	5 903,9	100,0	166 439,0	6 665,2	100,0	154 155,4	6 657,7	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	144 169,5	6 530,9	90,2	134 110,3	6 785,8	87,1	131 985,5	6 544,6	79,2
Europe, other countries	8 275,7	279,5	3,9	8 404,4	252,0	3,2	4 546,7	231,7	2,8
USA and Canada	1 228,2	74,8	1,0	1 163,9	75,2	1,0	1 870,1	5,3	0,1
Other countries	6 112,4	354,4	4,9	15 697,0	673,5	8,6	14 273,1	1 484,7	18,0
Totally	159 785,8	7 239,6	100,0	159 375,6	7 786,5	100,0	152 675,4	8 266,3	100,0

Graph: Structure of export of glass fibres and products made of according to territories in 2014 (CZK)



A substantial part of export (79.2 %) was realized in the European Union countries. The greatest customers in 2014 were Germany, Poland, France, Italy, Austria, Great Britain and Slovakia. As far as countries out of the European Union it was Bosnia and Herzegovina and Serbia.

Utility glass

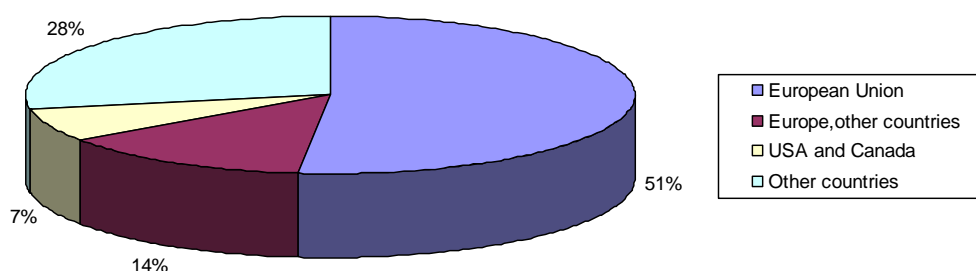
The export of utility glass belongs to the traditional export branches of the Czech processing industry. In 2014 the export was in amount of 7064.5 mill. CZK. In comparison with 2013 it increased by 12.2 % (766.2 mill. CZK). Even in 2014 the demand for utility glass products increased.

Table: Export of utility glass according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	24 609,6	1 404,3	36,9	33 857,1	2 095,9	41,8	42 794,7	2 389,7	45,2
Europe, other countries	6 478,4	521,5	13,7	8 869,6	776,7	15,5	9 435,6	840,2	15,9
USA and Canada	1 195,7	405,4	10,7	2 275,8	454,1	9,1	2 902,3	394,3	7,5
Other countries	7 771,0	1 474,2	38,7	10 671,6	1 683,7	33,6	12 126,0	1 666,7	31,5
Totally	40 054,7	3 805,4	100,0	55 674,1	5 010,4	100,0	67 258,6	5 290,9	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	41 483,4	2 878,3	47,1	46 550,5	3 044,2	48,3	53 136,5	3 651,4	51,7
Europe, other countries	9 670,8	928,1	15,2	9 418,2	978,2	15,5	8 921,2	962,5	13,6
USA and Canada	2 702,0	443,2	7,3	2 485,6	420,3	6,7	2 898,4	489,7	6,9
Other countries	12 403,4	1 862,8	30,5	12 470,9	1 855,5	29,5	13 749,4	1 961,0	27,8
Totally	66 259,6	6 112,4	100,0	70 925,2	6 298,2	100,0	78 705,5	7 064,5	100,0

Graph: Structure of export of utility glass according to territories in 2014 (CZK)



It is possible to say that the utility glass assortment is exported to the whole world. The share of export in 2014 to the European countries was 65.3 %. The greatest customers were Germany, Russia, France, Slovakia, Austria, Italy, Hungary, Poland and Ukraine. The share on export directed to the Other countries (export to 80 countries) and to the USA and Canada was in amount of 34.7 %. The greatest customers were the USA, Japan, Azerbaijan, Egypt, Iran, the United Arab Emirates, China, Brazil and Kazakhstan.

Other glass

The assortment of the other glass export is very wide. It includes technical, laboratory and laboratory apparatus glass, technical spheres, glass industrial apparatuses, protective welding glass, optical glass, and also the production of glass blocks, glass fashion jewellery semiproducts and production of lighting glass, is incorporated.

The other glass export in 2014 reached amount of 6851.0 mill. CZK, what is by 1.8 % more than in 2013 (120.7 mill. CZK).

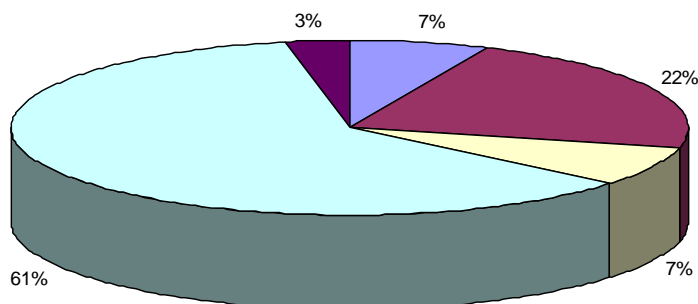
In 2014 lighting glass which is not stated in codes for the export and import of glass (Products for electrical lighting devices, made of glass, except reflectors and facet glass etc. glass decorations for electrical chandeliers, approx. 300 mill. CZK) was not included to the export.

Table: Export of other glass according to assortment

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Technical glass	9 275,5	982,3	10,8	7 174,8	633,0	7,7	7 041,0	616,1	8,1
Glass tiles, plates and blocks	63 918,3	1 307,0	14,4	64 350,6	1 422,3	17,4	68 584,5	1 405,7	18,6
Laboratory glass	2 535,4	350,5	3,9	3 680,3	435,9	5,3	4 070,9	522,1	6,9
Glass semiproducts for fashion jewellery	3 849,7	5 078,8	56,1	4 508,1	4 974,5	60,8	4 640,8	4 581,1	60,5
Other glass	26 991,1	1 342,4	14,8	12 034,1	721,5	8,8	13 726,2	452,3	6,0
Totally	106 570,0	9 061,0	100,0	91 747,9	8 187,2	100,0	98 063,4	7 577,3	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Technical glass	4 674,7	498,1	6,8	3 813,5	405,6	6,0	3 936,5	464,2	6,8
Glass tiles, plates and blocks	70 446,9	1 348,1	18,5	71 226,7	1 422,2	21,1	58 463,5	1 497,5	21,9
Laboratory glass	3 800,2	541,6	7,4	3 012,4	442,3	6,6	3 095,1	508,9	7,4
Glass semiproducts for fashion jewellery	4 936,5	4 462,0	61,2	5 075,4	4 293,7	63,8	4 889,6	4 168,8	60,8
Other glass	22 212,4	441,9	6,1	10 235,6	166,5	2,5	16 434,0	211,6	3,1
Totally	106 070,7	7 291,7	100,0	93 363,6	6 730,3	100,0	86 818,7	6 851,0	100,0

Graph: Structure of other glass export according to assortment in 2014 (CZK)



■ Technical glass
■ Glass tiles, plates and blocks
■ Laboratory glass
■ Glass semiproducts for fashion jewellery
■ Other glass

The greatest share with 60.8 % has the export of fashion jewellery and glass fashion jewellery semiproducts. The export of this assortment which is traditional in the Czech Republic has been facing up still stronger and substantially cheaper competition from the Far East. In comparison with 2013 the share of glass tiles, plates and bricks (21.9 %) increased, on the contrary the share of glass fashion jewellery semiproducts decreased.

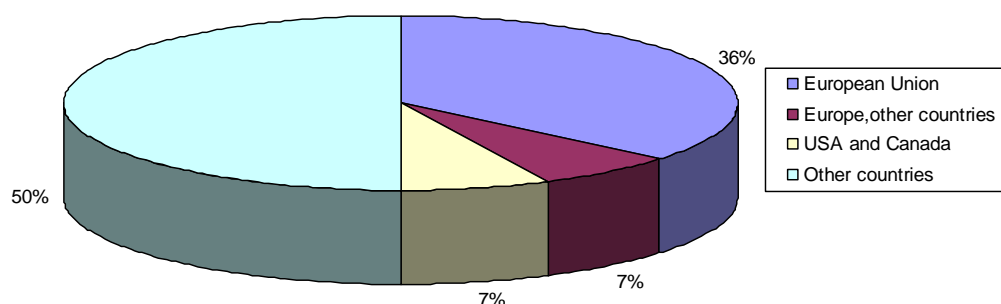
In the following table the export of other glass according to territories is given.

Table: Export of other glass according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	67 557,4	3 322,7	36,7	54 630,7	2 738,0	33,4	53 911,4	2 781,4	34,0
Europe, other countries	1 960,6	141,7	1,6	3 783,1	259,5	3,2	3 646,0	244,1	3,0
USA and Canada	1 752,4	412,0	4,5	5 213,1	701,7	8,6	6 584,4	466,9	5,7
Other countries	35 299,7	5 184,6	57,2	28 121,0	4 488,0	54,8	33 921,6	4 084,9	49,9
Totally	106 570,1	9 061,0	100,0	91 747,9	8 187,2	100,0	98 063,4	8 187,2	92,6

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	59 141,6	2 564,8	35,2	50 455,9	2 415,2	35,9	53 380,2	2 477,6	36,2
Europe, other countries	5 792,3	312,5	4,3	4 600,3	410,0	6,1	5 536,7	455,7	6,7
USA and Canada	7 504,3	475,2	6,5	7 106,4	466,1	6,9	6 314,0	490,5	7,2
Other countries	33 632,5	3 939,2	54,0	31 201,0	3 439,0	51,1	21 587,9	3 427,1	50,0
Totally	106 070,7	7 291,7	100,0	93 363,6	6 730,3	100,0	86 818,8	6 850,9	100,0

Graph: Structure of export of other glass according to territories in 2014 (CZK)



In contrast with flat, container and fibre glass export, the most of the other glass export (57.2 %) is oriented to the countries out of Europe. In each group of products there is a different situation and it can differ according to orders every year. In 2014 the share of export of glass tiles, plates and blocks assortment (70.4 %), laboratory glass (70.5 %) and technical glass (54.9 %) to the European Union prevailed. On the other side the export of glass semiproducts for fashion jewellery assortment (77.9 %) prevailed to the Other countries, including the USA and Canada.

The greatest customers in the European Union were Germany, Poland, Italy, France, Belgium, Austria and Romania, in the other European countries Russia, Ukraine, Switzerland and Norway. From the Other countries and the USA and Canada the greatest customers, mostly of fashion jewellery and glass semiproducts for fashion jewellery, were the United Arab Emirates, China, Hongkong, the USA, Japan and India.

Household china and ceramics

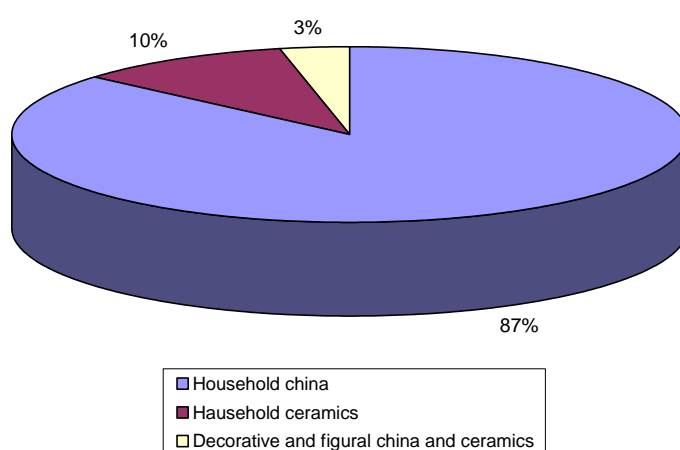
The household china export similarly as the utility glass export belongs to the traditional export branches of the Czech processing industry. In 2014 the export was 2209.2 mill. CZK. In comparison with 2013 the export increased by 3.4 % (72.6 mill. CZK).

Table: Export of household china and ceramics according to the assortment

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Household china	11 245,0	2 253,8	94,1	20 826,3	1 899,5	92,0	13 466,4	1 551,6	86,7
Household ceramics	1 488,8	82,8	3,5	1 387,6	107,2	5,2	1 514,4	188,2	10,5
Decorative and figural china and ceramics	399,3	58,7	2,5	391,4	58,7	2,8	316,7	49,5	2,8
Totally	13 133,1	2 395,3	100,0	22 605,3	2 065,4	100,0	15 297,5	1 789,3	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Household china	14 549,7	1 713,0	89,1	17 763,6	1 890,4	88,5	15 730,9	1 909,7	86,4
Household ceramics	1 377,1	127,1	6,6	1 637,8	154,3	7,2	1 967,2	225,0	10,2
Decorative and figural china and ceramics	381,0	81,7	4,3	369,7	91,9	4,3	323,7	74,5	3,4
Totally	16 307,8	1 921,8	100,0	19 771,1	2 136,6	100,0	18 021,8	2 209,2	100,0

Graph: Structure of export of household china and ceramics according to the assortment in 2014 (CZK)



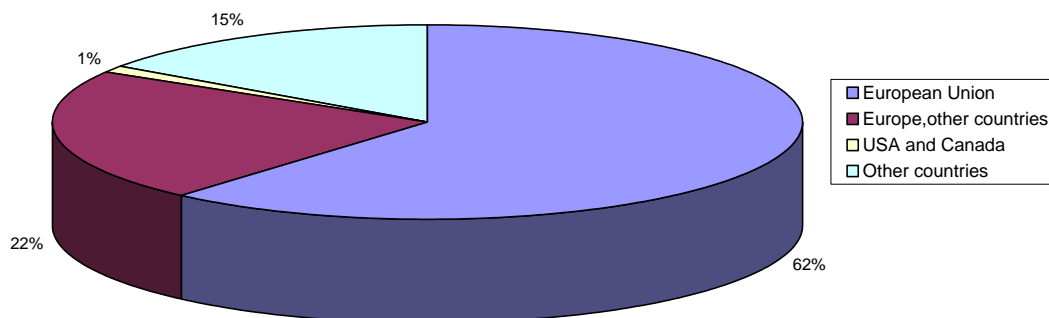
The share of household china in the branch household china and ceramics is 86.4 %.

Table: Export of household china and ceramics according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	8 127,5	742,0	31,0	17 812,2	887,4	43,0	10 668,7	898,1	50,2
Europe, other countries	2 970,6	387,9	16,2	3 406,7	438,6	21,2	3 298,7	457,7	25,6
USA and Canada	631,3	613,6	25,6	628,1	462,5	22,4	491,5	134,7	7,5
Other countries	1 404,1	651,8	27,2	758,3	276,9	13,4	838,6	298,8	16,7
Totally	13 133,5	2 395,3	100,0	22 605,3	2 065,4	100,0	15 297,5	1 789,3	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	12 040,1	1 079,8	56,2	15 499,8	1 277,8	59,8	14 201,3	1 353,2	61,3
Europe, other countries	3 052,5	496,9	25,9	3 054,4	539,0	25,2	2 473,0	492,2	22,3
USA and Canada	384,2	101,7	5,3	114,8	27,0	1,3	120,0	24,3	1,1
Other countries	831,8	243,4	12,7	1 102,1	292,8	13,7	1 227,5	339,6	15,4
Totally	16 308,6	1 921,8	100,0	19 771,1	2 136,6	100,0	18 021,8	2 209,3	100,0

Graph: Structure of export of household china and ceramics according to territories in 2014 (CZK)



As follows from the above given table and graph the export to all investigated territories is increasing since 2012, comparing with unpleasant period from 2007 till 2011.

The greatest customers in the European Union countries were Germany, Slovakia, France, Romania and Sweden. In the other European countries it was Russia (79.0 % of export volume) and Switzerland. In the group of Other countries, incl. the USA and Canada, the export was directed to 55 countries of the world. The greatest customers in 2014 were the USA, Azerbaijan and Korea.

The household china export has been very strongly influenced by substantially cheaper ware from the Far East like the export of utility glass and glass semiproducts for fashion jewellery.

Technical ceramics and sanitary ware

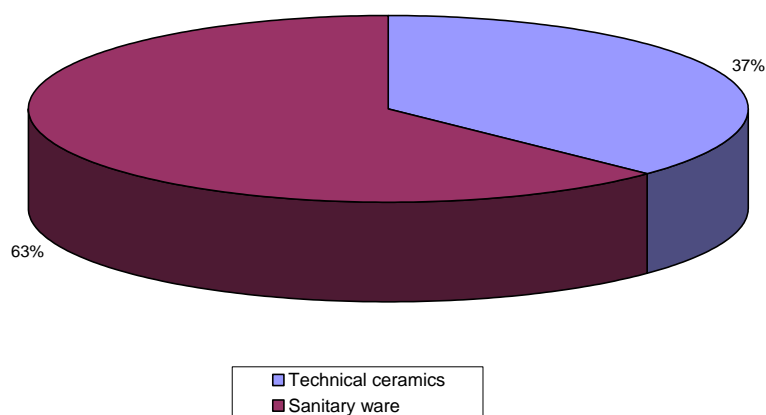
The technical ceramics and sanitary ware export was 3363.7 mill. CZK, in 2014. In comparison with 2013 the export increased by 16.7 % (480.8 mill. CZK).

Table: Export of technical ceramics and sanitary ware according to the assortment

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Technical ceramics	3 689,7	392,0	23,4	1 766,6	467,0	24,8	4 439,2	631,9	27,4
Sanitary ware	23 480,1	1 284,0	76,6	24 839,3	1 416,1	75,2	28 581,0	1 674,0	72,6
Totally	27 169,8	1 676,0	100,0	26 605,9	1 883,1	100,0	33 020,2	2 305,9	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Technical ceramics	4 598,7	1 165,0	38,0	7 524,0	1 014,5	35,2	6 582,5	1 251,5	37,2
Sanitary ware	32 584,5	1 902,3	62,0	31 904,4	1 868,4	64,8	33 045,4	2 112,2	62,8
Totally	37 183,2	3 067,3	100,0	39 428,4	2 882,9	100,0	39 627,9	3 363,7	100,0

Graph: Structure of export of technical ceramics and sanitary ware according to the assortment in 2014 (CZK)



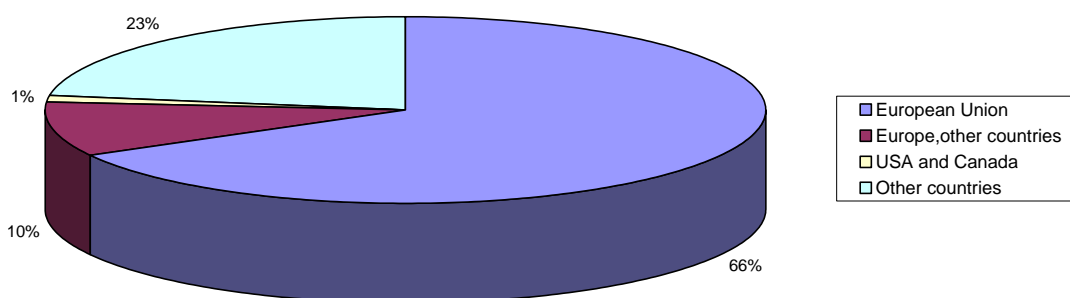
In 2014 the sanitary ware shared with 62.8 % and the technical ceramics with 37.2 % on export.

Table: Export of technical ceramics and sanitary ware according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	23 490,1	1 415,0	84,4	22 520,0	1 554,7	82,6	28 132,9	1 907,0	82,7
Europe, other countries	1 807,1	145,0	8,7	2 291,2	218,3	11,6	3 106,7	261,4	11,3
USA and Canada	38,6	9,1	0,5	49,0	10,2	0,5	33,8	6,5	0,3
Other countries	1 834,0	106,9	6,4	1 744,7	99,9	5,3	1 746,8	131,0	5,7
Totally	27 169,8	1 676,0	100,0	26 604,9	1 883,1	100,0	33 020,2	2 305,9	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	29 664,8	2 066,1	67,4	31 605,5	1 983,9	68,8	31 635,0	2 248,6	66,8
Europe, other countries	3 883,7	310,2	10,1	3 781,8	270,8	9,4	4 542,2	320,8	9,5
USA and Canada	113,1	20,2	0,7	119,7	20,7	0,7	212,2	34,6	1,0
Other countries	3 521,6	670,8	21,9	3 921,4	607,5	21,1	3 238,5	759,7	22,6
Totally	37 183,2	3 067,3	100,0	39 428,4	2 882,9	100,0	39 627,9	3 363,7	100,0

Graph: Structure of export of technical ceramics and sanitary ware according to territories in 2014 (CZK)



A substantial part of both assortments was exported to the countries of Europe. Sanitary ware shared on export to the European countries in 2014 with 88.0 % (75.1 % to the European Union), technical ceramics shared on the export with 56.8 % (52.9 % to the European Union). Germany, Austria and Great Britain belong to the greatest customers of sanitary ware in Europe.

Due to an unpleasant development in the building industry in the European Union, sanitary ware producers look for new markets in the countries out of Europe. Sanitary ware is exported e.g. to China, the Republic of South Africa, Tunis, Oman, Nigeria and Mongolia.

Import

Flat glass

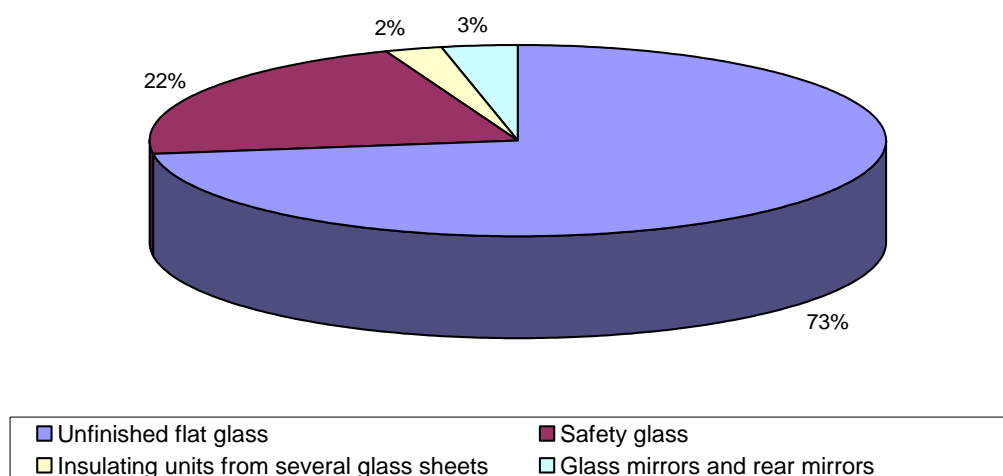
The import of flat glass assortment was in 2014 in amount of 8938.0 mill. CZK. In comparison with 2013 it increased by 8.84 % (725.7 mill. CZK).

Table: Import of flat glass according to the assortment

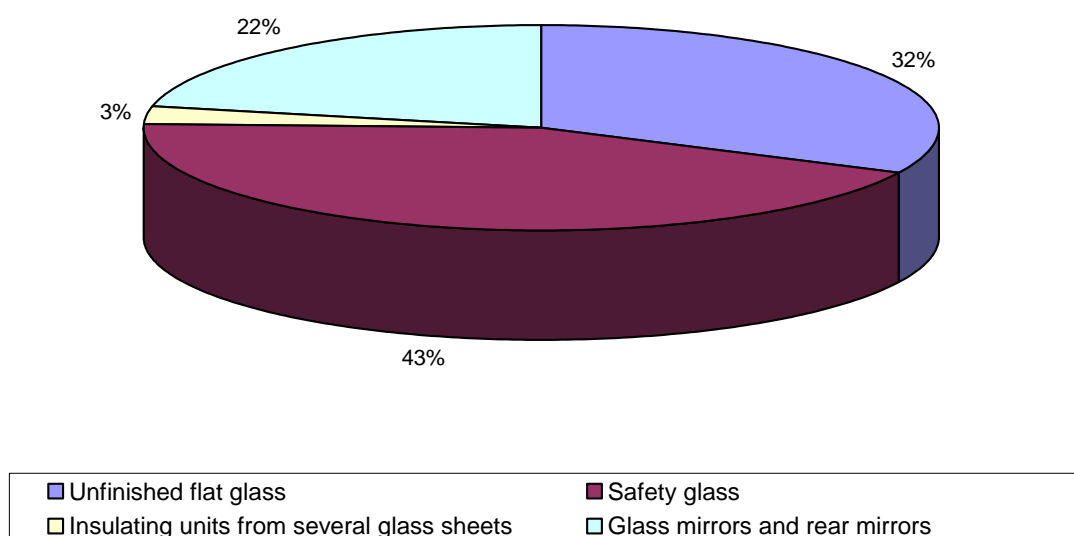
	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Unfinished flat glass	216 320,6	2 803,2	37,0	229 192,8	2 952,7	33,9	320 056,1	3 543,3	37,2
Toughened laminated safety glass	54 101,2	3 210,7	42,3	80 260,5	3 867,6	44,5	91 371,4	4 030,8	42,3
Insulating units from several glass sheets	5 725,4	255,8	3,4	7 266,3	282,9	3,3	5 990,5	200,4	2,1
Glass mirrors and rear mirrors	10 199,5	1 312,9	17,3	7 951,6	1 594,3	18,3	8 762,3	1 746,2	18,3
Totally	286 346,7	7 582,6	100,0	324 671,2	8 697,5	100,0	426 180,3	9 520,7	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Unfinished flat glass	210 393,8	2 925,9	34,7	192 847,3	2 639,1	32,1	210 097,9	2 877,1	32,2
Toughened laminated safety glass	72 876,8	3 487,7	41,4	64 210,2	3 588,2	43,7	62 329,1	3 887,7	43,5
Insulating units from several glass sheets	8 978,4	266,6	3,2	8 146,9	263,4	3,2	6 977,3	247,5	2,8
Glass mirrors and rear mirrors	9 544,2	1 753,1	20,8	9 447,0	1 721,6	21,0	9 756,6	1 925,7	21,5
Totally	301 793,2	8 433,3	100,0	274 651,4	8 212,3	100,0	289 160,9	8 938,0	100,0

Graph: Structure of import of flat glass according to the assortment in 2014 (t)



Graph: Structure of import of flat glass according to the assortment in 2014 (CZK)



As follows from the above stated table (expressed in CZK), the import of insulation units made from several glass sheets, glass mirrors and rear mirrors decreased.

The share on the flat glass import in mass had the import of unfinished flat glass with 72.7 %, from which float glass shows 93.3 %. The amount of import is given by the processing capacities in the Czech Republic.

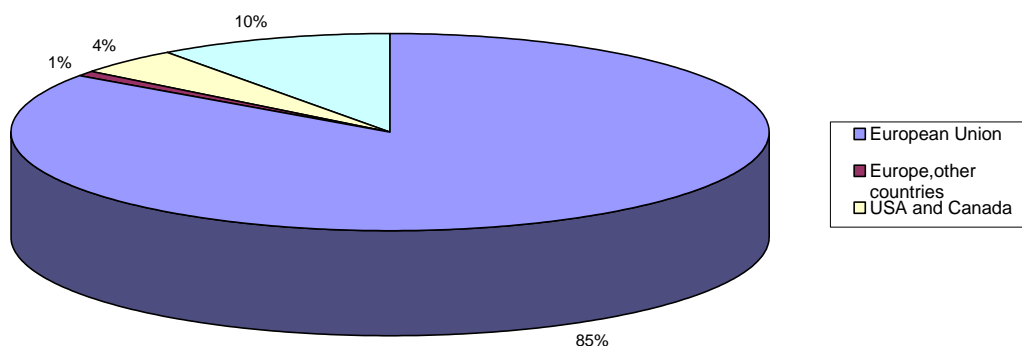
Toughened laminated safety glass shared with 43.5 % (expressed in CZK) on import. It is followed by unfinished flat glass with 32.2 %.

Table: Import of flat glass according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	275 802,6	6 989,2	92,2	297 369,5	7 637,2	87,8	395 053,0	8 556,2	89,9
Europe, other countries	533,1	137,5	1,8	5 697,2	99,6	1,1	362,4	48,1	0,5
USA and Canada	9 236,0	135,6	1,8	813,4	208,3	2,4	346,2	241,4	2,5
Other countries	9 236,0	320,3	4,2	20 791,1	752,4	8,7	30 418,7	675,0	7,1
Totally	294 807,7	7 582,6	100,0	324 671,2	8 697,5	100,0	426 180,3	9 520,7	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	273 871,8	7 215,9	85,6	252 951,3	7 023,5	85,5	264 369,8	7 578,3	84,8
Europe, other countries	318,4	46,5	0,6	166,6	59,2	0,7	156,9	59,3	0,7
USA and Canada	426,3	352,4	4,2	420,7	352,8	4,3	418,7	400,6	4,5
Other countries	27 176,7	818,5	9,7	21 112,8	776,8	9,5	24 214,5	899,8	10,1
Totally	301 793,2	8 433,3	100,0	274 651,4	8 212,3	100,0	289 159,9	8 938,0	100,0

Graph: Structure of import of flat glass according to territories in 2014 (CZK)



In 2014 84.8 % of flat glass (expressed in CZK) was imported to the Czech Republic from the European Union countries. The greatest importers were Belgium, Germany, France and Romania.

Container glass

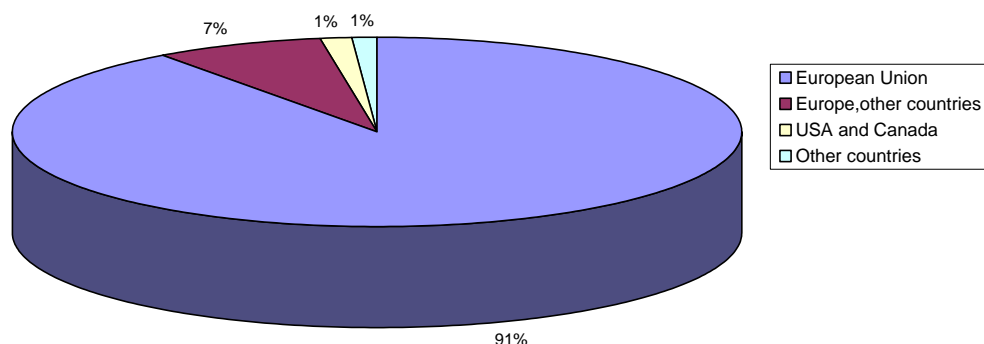
The container glass import in 2014 was in amount of 1334.1 mill. CZK, i.e. it was higher by 18.2 % than in 2013.

Table: Import of container glass according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	96 112,3	1 107,1	93,3	108 138,8	1 134,3	95,8	95 964,9	1 080,3	96,0
Europe, other countries	6 010,1	65,1	5,5	4 890,7	36,7	3,1	3 256,9	24,7	2,2
USA and Canada	1,7	0,8	0,1	58,5	3,2	0,3	1,1	0,8	0,1
Other countries	362,6	13,0	1,1	181,2	9,9	0,8	641,5	19,6	1,7
Totally	102 486,7	1 186,0	100,0	113 269,2	1 184,1	100,0	99 864,4	1 125,4	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	102 250,1	1 147,7	95,4	104 663,2	1 097,8	97,3	108 696,8	1 202,4	90,1
Europe, other countries	4 114,3	35,2	2,9	1 326,4	12,6	1,1	11 737,9	98,1	7,3
USA and Canada	4,4	1,7	0,1	14,5	3,7	0,3	69,4	17,8	1,3
Other countries	398,8	18,8	1,6	393,6	14,6	1,3	508,0	15,9	1,2
Totally	106 767,6	1 203,4	100,0	106 397,7	1 128,7	100,0	121 012,1	1 334,1	100,0

Graph: Structure of import of container glass according to territories in 2014 (CZK)



The import like the export is determined by the character of use of container glass assortment. In 2014 90.1 % of import was realized from the European Union countries. The greatest importers were Germany, Slovakia and Poland.

Glass fibres and products made of

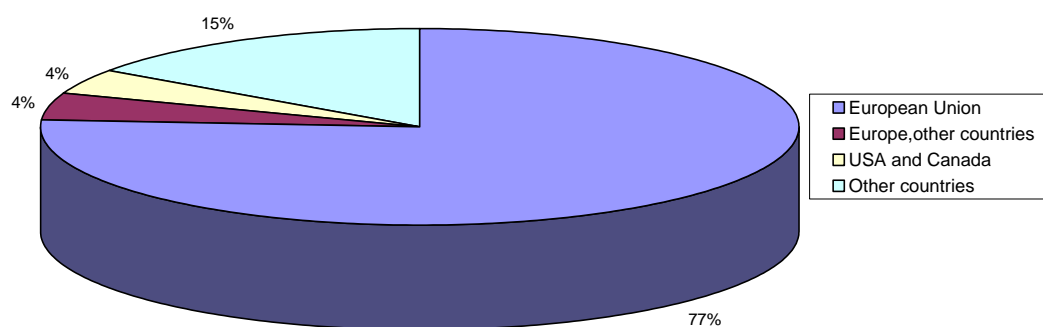
The import of glass fibres and products made of to the Czech Republic was 2959.9 mill. CZK in 2014, what is by 11.9 % (314.3 mill. CZK) more than in 2013.

Table: Import of glass fibres and products made of according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	29 377,8	1 201,5	74,4	35 831,1	1 467,3	68,8	44 036,3	1 534,8	62,7
Europe, other countries	3 679,0	118,9	7,4	6 513,2	192,6	9,0	1 163,5	53,4	2,2
USA and Canada	218,1	16,6	1,0	1 075,7	87,4	4,1	1 405,9	103,6	4,2
Other countries	7 270,1	278,2	17,2	10 638,4	386,0	18,1	19 906,1	756,5	30,9
Totally	40 545,0	1 615,2	100,0	54 058,4	2 133,3	100,0	66 511,8	2 448,3	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	48 275,6	1 832,8	72,7	41 449,5	2 054,6	77,7	46 610,1	2 253,6	76,1
Europe, other countries	1 512,2	102,4	4,1	1 426,1	94,7	3,6	1 786,6	129,0	4,4
USA and Canada	546,5	88,4	3,5	529,0	91,1	3,4	663,3	124,0	4,2
Other countries	13 705,3	496,1	19,7	9 936,8	405,2	15,3	10 272,2	453,3	15,3
Totally	64 039,6	2 519,7	100,0	53 341,4	2 645,6	100,0	59 332,2	2 959,9	100,0

Graph: Structure of import of glass fibres and products made of according to territories in 2014 (CZK)



The share of the European Union countries on import was 76.1 %. The greatest importers were Germany, Hungary, Poland, Slovakia, Italy and France. The importers from the other European countries were Russia and Belarus. The share of import of the Other countries, incl. the USA and Canada increased to 19.5 % in 2014. The greatest importers in 2014 were China, the USA and Taiwan.

Utility glass

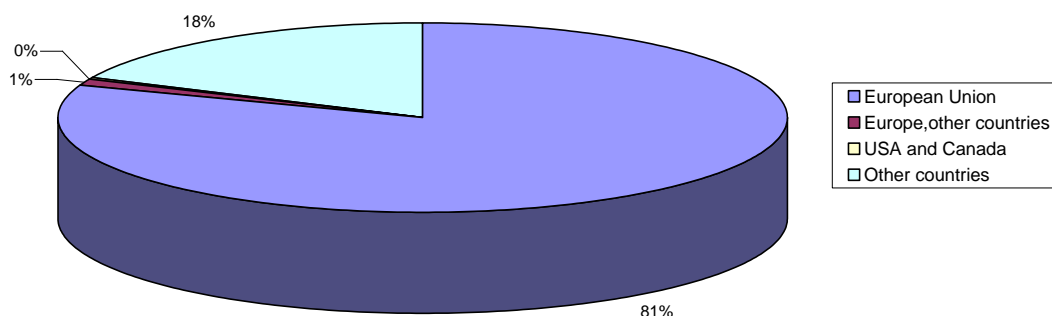
The utility glass import in 2014 was 1953.0 mill. CZK.

Table: Import of utility glass according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	20 017,5	1 081,8	76,9	24 038,6	1 071,7	69,0	42 883,0	1 150,7	74,2
Europe, other countries	1 485,4	31,0	2,2	1 142,9	28,0	1,8	1 107,6	26,9	1,7
USA and Canada	17,2	3,3	0,2	23,2	2,6	0,2	30,6	3,2	0,2
Other countries	7 996,4	291,0	20,7	11 656,9	450,4	29,0	10 358,1	370,7	23,9
Totally	29 516,5	1 407,1	100,0	36 861,6	1 552,7	100,0	54 379,3	1 551,5	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	39 905,1	1 286,9	78,0	32 899,1	1 229,6	75,7	33 839,4	1 572,3	80,5
Europe, other countries	565,3	14,2	0,9	793,0	26,5	1,6	781,1	24,8	1,3
USA and Canada	17,5	3,7	0,2	15,1	3,3	0,2	11,1	4,7	0,2
Other countries	5 581,2	345,9	21,0	9 093,1	364,9	22,5	9 446,8	351,1	18,0
Totally	46 069,1	1 650,7	100,0	42 800,3	1 624,3	100,0	44 078,4	1 953,0	100,0

Graph: Structure of import of utility glass according to territories in 2014 (CZK)



The greatest share of import (80.5 %) was realized from the European Union countries. The greatest importers were Germany, Bulgaria, Poland, Italy, Portugal and France. From the Other countries (18.0 % of total import) the greatest importers in 2014 were China (169.6 mill. CZK) and Turkey (143.9 mill. CZK). Both these countries totally created 89.3 % of import from the Other countries.

Other glass

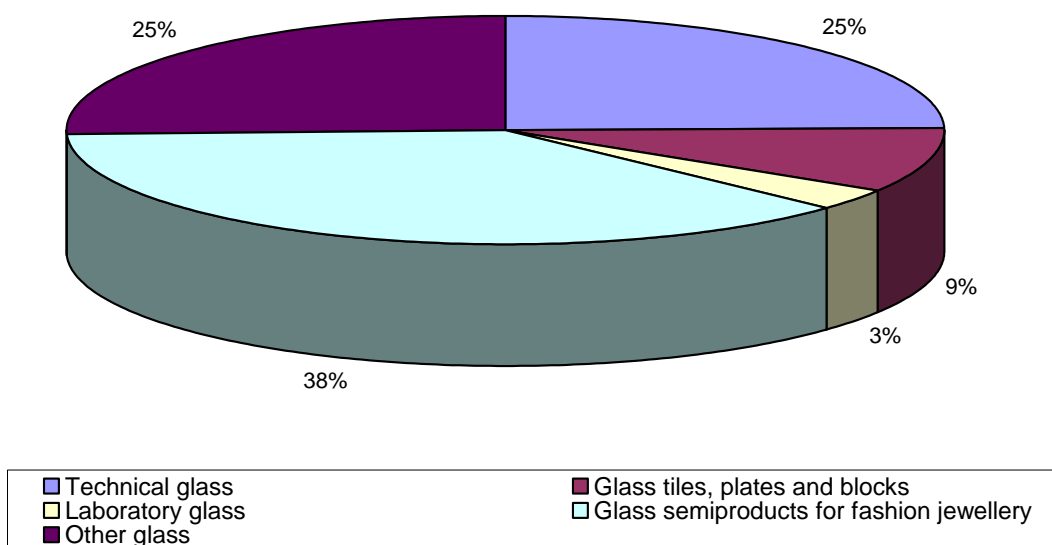
The import of other glass in 2014 was 2580.9 mill. CZK. The inter-year increase was by 52.4 % (887.9 mill. CZK).

Table: Import of other glass according to the assortment

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Technical glass	1 428,7	140,2	8,6	1 917,0	232,7	12,2	2 057,8	245,1	14,0
Glass tiles, plates and blocks	8 650,2	275,8	16,8	8 069,5	284,8	14,9	6 664,2	230,4	13,2
Laboratory glass	2 988,3	60,4	3,7	1 892,6	73,0	3,8	502,1	76,4	4,4
Glass semiproducts for fashion jewellery	1 822,6	327,1	20,0	2 525,0	464,1	24,4	3 226,2	346,9	19,9
Other glass	97 409,6	833,8	50,9	102 766,8	850,5	44,6	157 324,0	847,9	48,5
Totally	112 299,4	1 637,3	100,0	117 170,9	1 905,1	100,0	169 774,3	1 746,7	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Technical glass	1 967,6	240,3	11,3	2 466,3	259,8	15,3	4 174,3	635,9	24,6
Glass tiles, plates and blocks	5 550,0	213,4	10,0	5 130,4	226,1	13,4	7 117,2	239,9	9,3
Laboratory glass	473,2	80,0	3,8	320,0	67,0	4,0	253,1	79,9	3,1
Glass semiproducts for fashion jewellery	3 313,9	812,3	38,3	2 614,7	555,3	32,8	2 863,7	968,1	37,5
Other glass	136 098,9	777,5	36,6	136 408,7	584,8	34,5	171 069,4	657,1	25,5
Totally	147 403,6	2 123,5	100,0	146 940,1	1 693,0	100,0	185 477,7	2 580,9	100,0

Graph: Structure of import of other glass according to the assortment in 2014 (CZK)



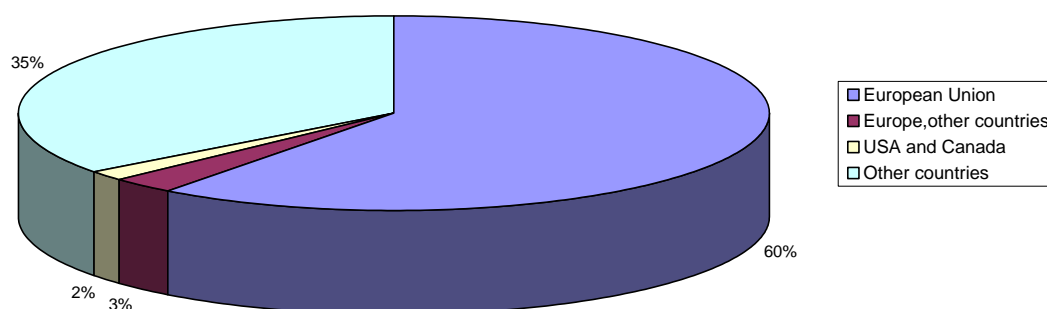
In the following table the other glass import according to territories is given.

Table: Import of other glass according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	107 923,4	1 298,3	79,3	106 632,9	1 487,9	78,1	138 606,8	1 221,9	70,0
Europe, other countries	81,0	15,3	0,9	2 730,4	24,0	1,3	24 218,6	52,7	3,0
USA and Canada	148,4	42,8	2,6	3 178,0	28,0	1,5	40,1	40,3	2,3
Other countries	4 146,6	280,9	17,2	4 629,6	365,2	19,2	6 908,8	431,8	24,7
Totally	112 299,4	1 637,3	100,0	117 170,9	1 905,1	100,0	169 774,3	1 746,7	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	138 018,4	1 702,8	80,2	127 864,7	1 285,3	75,9	160 150,8	1 557,0	60,3
Europe, other countries	6 101,1	37,9	1,8	108,2	58,6	3,5	82,9	69,9	2,7
USA and Canada	33,0	36,2	1,7	341,0	42,8	2,5	345,4	39,9	1,5
Other countries	3 251,1	346,0	16,3	18 626,2	306,3	18,1	3 146,6	913,9	35,4
Totally	147 403,6	2 122,9	100,0	146 940,1	1 693,0	100,0	163 725,7	2 580,7	100,0

Graph: Structure of import of other glass according to territories in 2014 (CZK)



In 2014 the import from the European Union countries was 60.3 % and 35.4 % from the Other countries. The import was realized from various countries according to the assortment. In 2014 the greatest importers of technical glass were Germany, France, China, Malaysia and Taiwan, laboratory glass Germany, Italy, the USA, Great Britain, India and China, glass tiles, plates and blocks Belgium,

Germany, the USA, Great Britain, India and China, glass semiproducts for fashion jewellery Austria, Germany, France, the USA, China, Hongkong and Japan.

Household china and ceramics

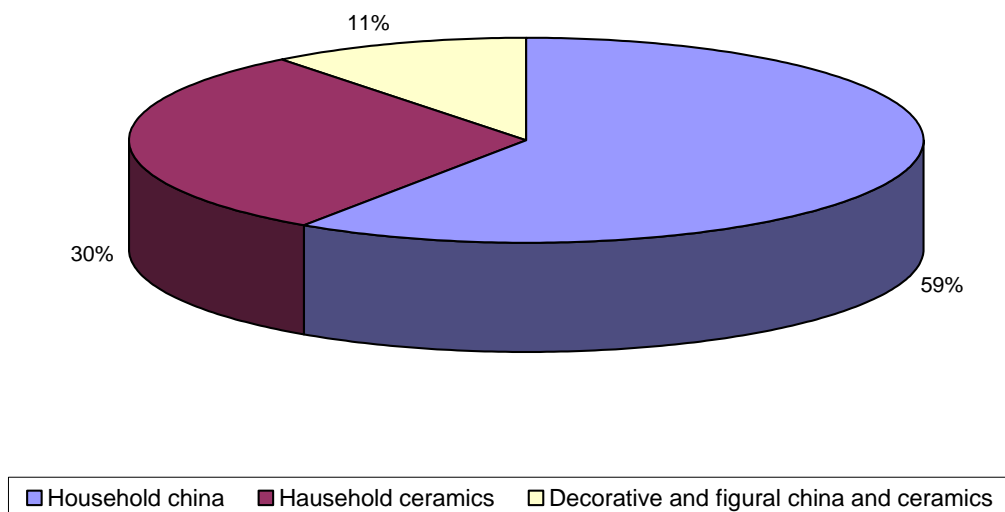
In 2014 the household china and ceramics were imported to the Czech Republic in a value of 1330.4 mill. CZK, i.e. by 4.7 % (60.2 mill. CZK) more than in 2013.

Table: Import of household china and ceramics according to the assortment

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Household china	8 302,5	542,5	51,9	9 264,1	594,5	51,0	10 625,6	728,7	55,1
Household ceramics	8 094,9	342,3	32,8	10 461,3	405,3	34,8	8 712,4	415,3	31,4
Decorative and figural china and ceramics	3 050,7	159,8	15,3	3 534,0	166,3	14,3	3 249,4	179,2	13,5
Totally	19 448,1	1 044,6	100,0	23 259,4	1 166,1	100,0	22 587,4	1 323,2	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
Household china	9 037,4	790,4	53,6	7 974,8	791,6	62,3	10 295,8	790,3	59,4
Household ceramics	7 820,3	522,5	35,4	5 429,8	304,5	24,0	6 805,2	398,5	30,0
Decorative and figural china and ceramics	2 750,2	161,1	10,9	3 095,9	174,1	13,7	2 226,7	141,7	10,6
Totally	19 607,9	1 474,0	100,0	16 500,5	1 270,2	100,0	19 327,7	1 330,4	100,0

Graph: Structure of import of household china and ceramics according to the assortment in 2014 (CZK)



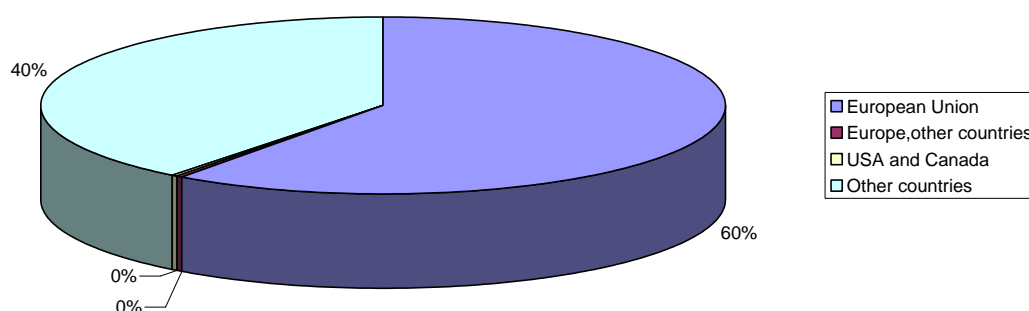
The household china shares with 59.4 %, household ceramics with 30.0 % and decorative and figural china and ceramics with 10.6 % on the import of this group assortment.

Table: Import of household china and ceramics according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	7 447,7	576,3	55,2	11 219,0	668,0	57,3	10 295,9	669,0	50,6
Europe, other countries	293,3	9,7	0,9	274,4	8,7	0,7	211,8	10,8	0,8
USA and Canada	12,7	1,7	0,2	1,2	0,4	0,0	5,3	0,9	0,1
Other countries	11 697,4	456,9	43,7	11 764,8	489,0	41,9	12 074,4	642,5	48,6
Totally	19 451,1	1 044,6	100,0	23 259,4	1 166,1	100,0	22 587,4	1 323,2	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	8 563,9	756,1	51,3	9 170,7	824,3	64,9	10 678,9	798,7	60,0
Europe, other countries	142,2	4,3	0,3	53,6	3,1	0,2	36,8	5,0	0,4
USA and Canada	5,8	0,9	0,1	1,9	0,6	0,0	2,6	0,4	0,0
Other countries	10 896,0	712,7	48,4	7 274,3	442,2	34,8	8 609,5	526,4	39,6
Totally	19 607,9	1 474,0	100,0	16 500,5	1 270,2	100,0	19 327,8	1 330,5	100,0

Graph: Structure of import of household china and ceramics according to territories in 2014 (CZK)



The import from the European Union countries shared on total import with 60.0 %. The greatest importer was Germany, sharing on import from the European Union with 66.2 % (529.1 mill. CZK).

The Other countries shared on import of household china and ceramics with 39.6 %. The greatest importer was China, sharing on import from the Other countries with 77.6 % (408.2 mill. CZK).

Technical ceramics and sanitary ware

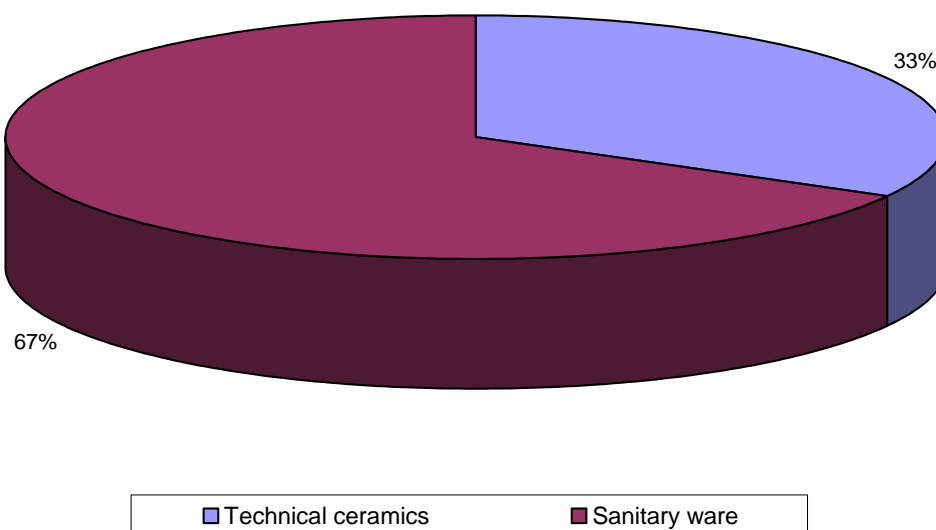
The technical ceramics and sanitary ware import was 1469.6 mill. CZK in 2014. The import of technical ceramics increased in comparison with 2013 by 18.0 % (224.6 mill. CZK).

Table: Import of technical ceramics and sanitary ware according to the assortment

	2009			2010			2011		
	Net	Mill.CZK	Share	Net	Mill.CZK	Share	Net	Mill.CZK	Share
	(t)		(%)	(t)		(%)	(t)		(%)
Technical ceramics	4 142,8	278,8	31,2	749,2	188,2	23,5	4 408,0	463,1	39,8
Sanitary ware	12 502,2	616,2	68,8	12 544,1	613,5	76,5	18 574,2	699,5	60,2
Totally	16 645,0	895,0	100,0	13 293,3	801,7	100,0	22 982,2	1 162,6	100,0

	2012			2013			2014		
	Net	Mill.CZK	Share	Net	Mill.CZK	Share	Net	Mill.CZK	Share
	(t))		(%)	(t)		(%)	(t)		(%)
Technical ceramics	4 360,6	296,7	27,6	3 616,7	339,5	27,3	3 670,6	487,1	33,1
Sanitary ware	14 559,2	779,4	72,4	13 457,2	905,5	72,7	13 981,6	982,5	66,9
Totally	18 919,8	1 076,1	100,0	17 073,9	1 245,0	100,0	17 652,2	1 469,6	100,0

Graph: Structure of import of technical ceramics and sanitary ware according to the assortment in 2014 (CZK)



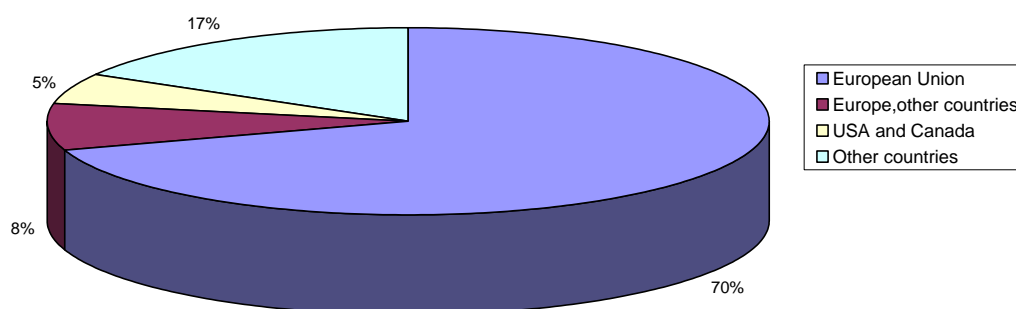
Sanitary ware and technical ceramics shared on the import with 66.9 % and 33.1 %, respectively, in 2014.

Table: Import of technical ceramics and sanitary ware according to territories

	2009			2010			2011		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	10 965,9	605,1	67,6	8 124,9	594,5	74,2	16 844,1	905,4	77,9
Europe, other countries	772,7	36,0	4,0	1 340,8	53,8	6,7	1 141,4	51,4	4,4
USA and Canada	1,9	22,2	2,5	2,5	18,0	2,2	22,2	38,8	3,3
Other countries	5 174,5	231,7	25,9	3 792,1	135,4	16,9	4 974,5	167,0	14,4
Totally	16 915,0	895,0	100,0	13 260,3	801,7	100,0	22 982,2	1 162,6	100,0

	2012			2013			2014		
	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)	Net (t)	Mill.CZK	Share (%)
European Union	13 248,2	805,8	74,9	11 663,7	877,6	70,5	11 517,8	1 029,7	70,1
Europe, other countries	1 179,4	63,9	5,9	1 179,7	62,4	5,0	1 759,3	116,4	7,9
USA and Canada	14,2	38,9	3,6	14,9	8,9	0,7	5,5	80,2	5,5
Other countries	4 478,0	167,5	15,6	4 215,6	296,1	23,8	4 369,7	243,2	16,5
Totally	18 919,8	1 076,1	100,0	17 073,9	1 245,0	100,0	17 652,3	1 469,5	100,0

Graph: Structure of import of technical ceramics and sanitary ware according to territories in 2014 (CZK)



In 2014 the import from the European Union countries shared on technical ceramics import with 70.2 %. The greatest importer was Germany. As far as sanitary ware the share of import from the European Union countries was 70.0 %. The greatest importers were Poland, Austria and Germany.

The Other countries had the share 18.6 % on total import of sanitary ware. The greatest importers from the Other countries were China and Turkey.