

Market Statement 2017

SWEDEN

UNECE Timber Committee Market Discussion October 2017 Warsaw, Poland

1 General Economic Trends

GDP growth in Sweden will not be as high this year as in the past two years, but the output gap will continue to widen. Growth is being driven largely by exports and investment, while government consumption is rising more slowly. Demand for labour is strong in both the business sector and the public sector. Substantial matching problems in the labour market mean that unemployment rate will nevertheless level off at 6.4 per cent next year.

The continued economic boom means that demand for labour will be high in 2017 and 2018. Firms' recruitment plans indicate a major need for more personnel, but the growing scarcity of labour with the right skills will curb employment growth in 2018. The strong labour market has not brought higher wage growth, with low pay increases in the euro area being believed to have had a restraining effect on Swedish wage formation. Due partly to this low wage growth, inflation will not reach 2 per cent until 2020. This presents a challenge for the Riksbank, which is unlikely to raise the repo rate until autumn 2018.

The investment-led recovery in the OECD countries is good news for Swedish exports, which include a high proportion of capital and intermediate goods. Exports will therefore make a larger contribution to GDP growth in the coming years than in 2016. On the other hand, growth in domestic demand is more subdued, having been fuelled last year by rapidly rising spending on refugee settlements. This year and next, this spending will be much lower, and government consumption will grow more slowly. Housing investment, which has risen rapidly in recent years, is expected to slow down, further depressing growth in domestic demand. The lower growth in homebuilding is due partly to mounting shortages of labour in the sector.

Unexpectedly high tax revenue in 2016 meant that structural net lending was above the proposed new surplus target. This year, fiscal policy will be somewhat expansionary, and structural net lending will decrease slightly. At the same time, changes in the age structure of the population mean that demand for health care, education and elderly care, is growing relatively fast. To keep personnel density in the provision of welfare services and replacement rates for transfers to households unchanged from 2017 levels, limited tax or other funding increases in central and local government will be required in 2018. After that, the public-sector welfare commitment can be met with unchanged tax rates through to 2021 while still meeting the new surplus target during the period.

The Economic Tendency Indicator fell from 112.3 in July to 110.7 in August, but remains above 110 and so still points to much stronger sentiment than normal in the Swedish economy. The main reason for the decrease was a fall in the manufacturing indicator. The manufacturing indicator was nevertheless the strongest of the business sector indicators for a fifth successive month and continues to paint the picture of an unusually strong situation in the industry. The retail trade also contributed to the drop in the overall confidence indicator, as did consumers, whose optimism fell back to the historical average.

Governments Budget Bill for 2018¹

Largest ever Green investment in all sectors and protection of valuable forests

On 21 September 2017, the Government submitted its bill for the central government budget for 2018 to the Parliament. The Budget Bill for 2018 is based on an agreement between the Government and the Left Party. The Government presented the "greatest commitment to climate and the environment ever" in 2018 budget bill. Government has announced plans to invest SEK5bn towards boosting the green economy and tackling climate change in Sweden and around the world to reduce emissions and create jobs and economic development in Sweden.

The Government will increase the annual appropriations to SEK 250 million until the end of 2027 for the protection of valuable forests. The Government considers annual appropriations of SEK 135 million during the period 2018-2020 to create green jobs for green industries. Furthermore, the Government considers annual appropriation of SEK 20 million during period 2018-2027 for a nationwide inventory of key biotopes, partly to apply developed and improved methodology in northwestern Sweden and partly to update the key biotopes survey conducted in other parts of the country. For updating the development of forestry basic data using laser scanning considers the government annual appropriations of SEK 12 million for an unspecified period. SEK 50 million in 2018 for nature conservation of protected forests. and enhanced funding of SEK 6 million per year on the method development and advice on non-profit making forestry. Environmental consideration must increase in managed forests and additional measures that promote the varied and sustainable management of forest landscapes must be carried out to achieve the environmental quality objectives and the outdoor recreation objectives. The Government considers that the area devoted to continuous cover forestry should increase, and is therefore increasing support to continuous cover forestry by SEK 6 million per year.

The Swedish Forestry Act

In 2016 the Government commissioned partial review of the Swedish Forest Act. The assignment will be completed by 16 October 2017. The forestry act is analysed to ensure an effective and clear legislation and the review may possible, if needed, suggest some changes or clarifications.

National Forest Programme

The dialogue process is continuous and the Government will present a national forest programme in spring 2018. An action plan will also be released regarding the national forest programme. Synergies exist with other government-driven processes such as the Innovation partnership programme Circular and bio-based economy.

One of the world's first fossil-free countries

The Government has announced that Sweden will be one of the world's first fossil-free welfare nations. To this end the Government has launched an initiative that brings together stakeholders from industry, municipalities, regions and organizations from across the country. They have also taken several measures to reduce emissions, speed up the transition to a sustainable society and achieve the environmental quality objectives. Among other measures,

¹ The proposed budget bill for 2018 is [subject to parliamentary approval](#).

the Government proposes increased support to climate investments and urban environment agreements that strengthen public transport and promote cycling. The Government is also raising its level of ambition in the climate area by buying and cancelling emissions allowances and pushing for EU policies striving for greater reductions of fossil fuels.

Eco-tourism on the rise

The tourism sector is one of the fastest growing economic sectors in Sweden. Since the millennium the turnover has increased with some 90-100%. In 2016 the number of employed increased with 7% (in a single year). This should be compared to the total increase of employment of 1.7%. The sector is expected to continue to grow at a rate of about 3% per year until 2030. Even though nature-tourism only represent a minor part of the total tourism sector (6%) it has big untapped potentials and is an important contributor to regional development and community employment. Several operators report on a steady increase. One barrier has been the increasing conflict between tourism operators and landowners. This is spurred by increasing pressure from tourism entrepreneurs to use private land for their activities. This goes beyond what is recognized in the ancient Swedish right of public access which entitles people to pick berries, gather mushrooms, camp and pursue outdoor recreational activities regardless of forest ownership. To overcome this barrier, a national project including both tourism entrepreneurs and landowners has recently been established. The aim is to developing guidelines and contractual models that can be used when settling agreements between entrepreneurs and landowners. The contract could include provisions for compensating damage, sharing profits or combining both entrepreneur and landowners' businesses, e.g. catering, lodging etc.

Climate

The Swedish government are active in the international climate negotiations and in the EU to produce regulations that benefit the forest's long-term role in climate efforts. Using forest raw materials used for wood products as well as bioenergy (incl. biofuels) while uptake of carbon in growing forests can be complementary with a sustainable active forest management as e.g. in Sweden.

A long-term growth in the forest is a prerequisite for higher removals to meet demand for renewable bio-based products. It is also important that the increased removals do not cause negative effects on biodiversity and that further acidification of forest land are avoided. It is more likely that biodiversity will be affected if we do not manage to reduce, mitigate and adapt to climate change effects.

Housing and Construction

The government announced in the Budget 2018 appropriation of 400 million SEK in the years 2019-2021 for energy efficiency and renovation of multi-family houses and outdoor environments SEK 75 million for 2018, SEK 100 million in 2019 and SEK 100 million in 2020 in support of innovative and sustainable housing construction with reduced climate impact. The construction industry needs 50,000 new employees over a five-year term, only because of aging and Governments investment in education is more than welcome for the branch. Today's newly built dwellings are mostly high quality in terms of energy efficiency. The Government will therefore mainly focus on minimizing climate and environmental impact of building materials and the actual construction process, as well as on the energy efficiency of the older housing stock. One method to study the environmental impact of

buildings is to make it through Life Cycle Analysis (LCA). The Government believes that it is important to improve the knowledge regarding climate impact of buildings in a lifecycle perspective, to be able to reduce the construction sector's climate impact.

Recent policy measures

Agreement on Swedish energy policy

The government (the Social Democrats Party and the Green Party) and three more parties (the Moderate Party, the Centre Party and the Liberal Party) made an agreement in June 2016 that consists of a common road map for a controlled transition to an entirely renewable electricity system, with a target of 100 per cent renewable electricity production by 2040. This creates a long-term perspective and clarity for actors in the market and helps generate new jobs and investment in Sweden.

The functioning of the Swedish society is conditional on access to energy. This means that there are great demands placed on the reliability of the energy systems. The Swedish energy policy therefore aims to combine ecological sustainability with competitiveness and security of supply. Major components of the agreement include:

- By 2045, Sweden is to have no net emissions of greenhouse gases into the atmosphere and should thereafter achieve negative emissions.
- By 2040 Sweden is to have 100 per cent renewable electricity production. This is a target, not a deadline for banning nuclear power, nor does mean closing nuclear power plants through political decisions.
- By 2030 Sweden is to achieve the goal of 50 per cent more efficient energy use.

Government making broad investments in energy

Sweden has ambitious goals for energy and climate adaptation. The budget bill 2018 contains several major investments that will bring closer to the goals. Energy efficiency measures are key to Sweden achieving its energy policy objectives. The Government is now investing SEK 850 million in more renewable energy, more efficient energy use and more energy and climate advisory services in 2018 be followed by SEK 920 million in 2019 and SEK 1.5 billion in 2020. The main areas of investments are- energy efficiency in industry; increased support for solar electricity; municipal energy and climate advisory services important for adaptation; more resources to local and regional energy and climate adaptation; new support to municipalities for more wind power; energy supply as part of the total defense agreement and export promotion.

Climate and clean air policy proposal

Energy used in the transport sector are handled by an All Party Committee on Environmental Objectives (miljömålsberedningen) and here also other energy use are discussed as the committee just proposed a climate and clean-air strategy for Sweden. The proposal is currently subject to a national consultation process which will be completed in October 2016. Here the 2050 target, Sweden a country with no net emissions of greenhouse gases, is expressed into a goal for reduced greenhouse gases outside the EU Emission Trading System until 2045 with 85 percent compared to 1990.

In the budget for 2018, the Government proposes total investments in climate and environmental efforts. Investments need to be made in homes, municipalities and the business sector, not least in Swedish industry. To reach the climate goals, comprehensive adaptation measures will be necessary. The Governments total new investments in 2018 SEK 5 billion, in 2019 SEK 7.4 billion and in 2020 SEK 9.7 billion. The main areas of investments are - investments in adaptation throughout Sweden; a fossil- free Sweden; dynamic cities; clean seas and environment and International leadership.

Taxes and emission allowances – important policy measures

Together with EU ETS – the EU Emissions Trading System – energy and carbon taxes are the most important policy measures for the industrial sector. All industries have an energy tax imposed of 30 per cent of the general energy tax level. The industries that are included in the EU ETS have been exempted from carbon tax. The carbon tax for industry not participating in the EU ETS has been increased so that, as of 1 January 2015, they pay 60 per cent of the general carbon tax.

The EU ETS includes major facilities within areas such as the pulp and paper industry, iron and steel industry, non-metallic mineral products industry and aluminium industry. In addition, all combustion facilities that have a power output of over 20 MW are included, regardless of which industry they belong to. For the trade period between 2013 and 2020, the principles for allocation of emission allowances have been changed.

Government stimulus: ROT

New regulation for ROT from January 1 2016

The tax deduction on labour work repair, renovation, extension and maintenance on houses (ROT) is still applying. Though the government passed a new regulation which reduced the possibility to deduct of labour cost (30 percent as opposed to 50 percent which was the earlier upper limit).

The ROT deduction also serves to reduce energy use through covering a number of measures for saving energy in households. The measures have mitigated the effects of the economic crisis and improved the conditions for a gradual recovery of construction sector. The ROT deduction measure is also a part of the government's efforts to enhance labour market policies, reduce illegal employment and improving demand in the construction sector. ROT payments have increased steadily each year since their introduction in 2009. The ROT payments, increased last year, much higher than previous years, which is assumed to be due to the deduction of the ROT was reduced from 50 to 30 percent at year-end.

Swedish Tax Agency office paid SEK 11.2 billion in 2016 for tax reduction for ROT. This was a large decline by more than 40 percent compared to 2015 due to ROT reduction from 50 to 30 percent in 2016. ROT has had a positive effect on the domestic demand of sawn wood.

Rural Development Programme (RDP) 2014-2020

The European Commission has adopted a "Partnership Agreement" with Sweden setting down the strategy for the optimal use of European Structural and Investment Funds throughout the country. Today's agreement paves the way for investing €2.1 billion in total Cohesion Policy funding (from the European Social Fund and the European Regional Development Fund) over

2014-2020 (current prices, including European Territorial Cooperation funding and the allocation for the Youth Employment Initiative). Sweden also receives close to €1,763 million for rural development and €120 million for fisheries and the maritime sector. The EU investments will help tackle unemployment, boost competitiveness and economic growth through support to innovation, training and education in cities, towns, rural and coastal areas. They will also promote entrepreneurship, fight social exclusion and help to develop an environmentally friendly and a resource-efficient economy.

The total budget for the forestry in RDP for the period 2014 - 2020 is some SEK 280 million. The three-forestry support is included; i) skills development, ii) forest environmental values and iii) way of cooperation. Support for training and advice has a budget of some SEK 100 million and focuses on efforts that contribute to sustainable forest management, including forest's impact on water, prevent the effects of climate change and reducing the environmental impact of the forest. In support of the environmental values of forests the budget amounts to some SEK100 million and include measures to thinning for broadleaved and deciduous forests, management of natural and cultural values in management-intensive stands and clearing around paths and trails. Within collaborative support with a budget of SEK 80 million for example, planned collaboration on forest roads, border issues within forest, wildlife management and adaptive forest management. In addition, there is a further support, "Prevention and restoration of damage to forests" without a set budget. It's a "backup support" that can be activated on special occasions, such as forest fires and natural disasters.

Wood products in green buildings

Modern building regulations have contributed to the increase in construction of multi-storey timber buildings. The dramatic increase can be attributed to several important factors. First, the new law (from 1994) that made it possible. Another factor is the lower cost of building with wood compared to constructions using other materials. Wood has shown itself to be the best raw material for use within industrial building methods, enabling costs to be reduced. Another factor is growing environmental awareness, where the choice is motivated by the fact that wood is a renewable material and that its use reduces CO₂ emissions, provided that the wood is harvested in forests from sustainable managed forests, where e.g. replanting is practiced. Wood is also the only structural building material with third-party certification systems in place to verify that products have come from a sustainably managed resource.

Lifecycle analyses show an advantage for wood-framed houses compared to other materials. The Swedish Green Building Council programmes and code development include Leadership in Energy and Environmental Design (LEED) green building standard and Building Research Establishment's Environmental Assessment Method (BREEAM). More and more companies and organisations are demanding information on the quantities of fossil carbon created by different products, their "carbon footprints" and this contributes to building with wood.

Trade policy issues affecting forest products markets

European Union Timber regulation

The European Union Timber Regulation (EUTR), which became effective on 3 March 2013, is intended to prevent the entry of illegally logged wood into the 27 EU Member States. The Regulation prohibits placing on the EU market wood and wood products illegally harvested and obligate operators to exercise due diligence and use a due diligence system. Operators can

develop their own system or use one developed by a monitoring organization. The Member States are responsible for laying down effective and dissuasive penalties applicable to infringements. Competent authority shall carry out checks on operators and monitoring organisations to verify compliance with the requirements in EUTR.

The Swedish Forest Agency (SFA) is assigned to be the competent authority for EUTR implementation in Sweden. Since the first of August 2014 Sweden has a national legislation laying down rules concerning infringements of the provisions of the regulation and rules on carrying out checks on operators by the competent authority.

So far 120 checks on operators importing timber products have been conducted in total. 15 checks on operators placing harvested timber from Swedish forests has been conducted and are integrated and coordinated with ordinary supervision to Swedish forest owners.

Corporate Social Responsibility (CSR)

The Swedish Government has a policy for CSR. The objective of Sweden's industrial policy is to strengthen competitiveness and create more jobs and growing companies. CSR is a self-evident part of a modern industrial policy. In line with this, the Swedish Government has drawn up a more ambitious CSR policy.

CSR has been strong driving force within the forest sector for several years. The interest is primarily demonstrated through the involvement in FSC and PEFC forest certification schemes. The involvement appears stable over time. Swedish global pulp, paper, and packaging producers often include sustainable forestry among the CSR activities are also mentioned in financial and sustainability reports.

Renewable energy policies and their impacts on forest products markets

Most important for the on-going replacement of fossil fuels with bioenergy are the carbon tax and the renewable electricity certificate system. Energy policies will have an impact on biomass demand and its competition in different energy sectors. Renewable technologies are being used in Sweden across all sectors, and there is a strong correlation between economic growth and reductions in waste and greenhouse gases

Policies promoting Swedish forests role in climate change mitigation

Swedish forest policy has two overarching objectives, a production objective and an environmental one. According to the latter biological diversity in the forests must be preserved. At the same time, the cultural heritage must be safeguarded and social aspects must also be taken into consideration. Though government initiatives such as the national forest programme a process for dialogue regarding forest matters have been created. One many question raised in the dialogue concern sustainable forest management and how to meet the growing demand for renewable bio-based products from the forest. It is also important that the increased removals do not cause negative effects on biodiversity and that further acidification of forest land are avoided. Existing legislation also indirectly affects trends in carbon removals in various ways, through provisions on forest management in the Forestry Act, the land drainage provisions of the Environmental Code, site protection and nature conservation agreements. Furthermore, because of the sectoral responsibility that applies in Sweden, most of the country's forest owners have joined voluntary certification schemes, which are designed to raise the level of ambition about the ecological, economic and social aspects of

forestry. This has also led to a higher production and more land being set aside, resulting in increased carbon storage in forest.

Green Climate Fund

Sweden has committed (SEK 4 billion) to the Green Climate Fund (making it the largest per capita donor): Sweden plays a key role in channeling resources to the developing countries and catalyzing climate finance at the international and national levels.

In 2016, Sweden provided a grant of SEK 100 million to the least developed countries fund.

Research and Development

Sweden has strategically aligned energy-related RD&D policies with its energy and climate objectives. These are strongly geared towards market deployment and build on the country's comparative strength, including smart grids and biofuels. Innovation and business sector commitment are a key factor for the success of the Swedish energy RD&D policy.

The 2016 Sweden Review of Innovation Policy deepens the 2012 Review by focusing on six policy initiatives central to the 2008 and 2012 Swedish Research and Innovation Bills, notably: 1) the increase in funding for university research, 2) the establishment of Strategic Research Areas, 3) actions designed to enhance the role of research institutes in Sweden's innovation system, 4) the definition and funding of Strategic Innovation Areas in collaboration with industrial, academic and research institute actors, 5) the initiation of a Challenge-Driven Innovation programmed addressing societal challenges, 6) improved prioritization and support for Swedish participation in European research and innovation activities.

This lays the foundations for new, long-term and in-depth collaboration between universities, research institutes, the business sector, the public sector, civil society and other actors.

In the autumn budget, the government announced an increase of research and innovation funding of more than SEK 3 billion by 2020. Specially, the increase in resources will focus on four strategic areas. A common theme is to prioritize research/innovations leading to new products and services. Forestry interest/commitment focus is in four main areas

- Energy
- Sustainable use of natural resources
- Effects on natural resources, ecosystem services and biodiversity
- Climate models

The research council Formas will fund 75 million SEK (25 million SEK per year for three years, 2015-2017) for research and development projects within sustainable primary production of forest raw materials and biomass, where the biomass may come from forestry, agriculture or aquaculture.

The overall aim of the initiative is to produce new knowledge that will contribute to the development of sustainable production of renewable biomass. The initiative is also intended to strengthen Swedish research in the area and increase the collaboration between academia, industry and society.

The Swedish Energy Agency is the third largest state sponsor of research in Sweden. Every year, the Swedish Energy Agency distributes just over SEK 1 billion to research, development, demonstration, commercialisation and innovation initiatives. This contributes to meeting Sweden's energy and climate goals, implementing its long-term energy and climate policy and achieving a number of energy-related environmental policy goals. Significant funding is being channeled via the Energy Agency.

The Swedish Energy Agency is currently pursuing a strategy that is valid up to the end of 2016 via five priority research fields, all of which are steeped in a system perspective that is extremely important for Sweden:

- a vehicle fleet independent of fossil fuels
- an energy system compatible with renewable electricity generation
- enhancement of the energy efficiency of buildings
- increased use of bioenergy
- enhancement of the energy efficiency of industry

Program Strategic Energy Research for the period 2014-2018 representing a major cohesive focus on research in the field of "energy studies". In the field of "energy studies" encompasses many of the interdisciplinary and multidisciplinary efforts made by the Energy Authority. The program covers the period 2014-2018, with a total budget of about SEK 130 million.

In addition, the program has the vision through knowledge building, scenarios and perspectives contribute to the achievement of the 2050 target - a Sweden with no net emissions of greenhouse gases - and the objectives and targets contained therein e.g. generation goal for environment, environmental quality objectives, and the Energy Policy Objectives for 2020 and by 2030.

2 Market drivers

Sweden is a small and export-oriented and export-dependent country. More than 90 % of pulp, paper and paper production is exported and almost 70 % of sawn softwood is exported. Hence, Sweden is depending on demand from export markets, both in EU and globally. Of total export of pulp, paper and paper products 30 % were exported outside EU and for sawn softwood 45 % were exported outside EU. As an export-dependent country maintaining free trade is crucial. In times of weaker economic performance protectionism tends to increase.

Increased migration, urbanization, rising prosperity and higher fertility rates means growing urban areas and increased demand for new housing, renovation of existing buildings and reconstruction after natural disasters and in addition maintenance of the existing housing stock. At the same time, there is greater demands on recycling, climate-friendly materials and increased sustainability, both during the construction and living phase.

An increased need for resources globally, driven by population growth and increased prosperity, makes resource efficiency increasingly important. At the same time, the climate threat demands limited use of fossil raw materials. The fossil raw materials are used globally today 90-95% directly as energy, especially in transport. Fossil fuels represent 81% of the world energy. The forest provides a double benefit to the climate, the growth of trees capture carbon from the air and forest-based products can substitute fossil based products. These drivers create more needs for and new possibilities for products based on the forest resources

The bioeconomy is becoming increasingly important as a driver and requires a strong transformation of the society. This development is primarily driven by a need to reduce the use of fossil raw materials and the fact that the earth has limited natural resources. The main driver for development is the incentives created to increase the cost of fossil-based CO₂ emissions and which creates opportunities for bio-based alternative to be economically competitive.

New needs and demand among customers', globalized trade and technology sharpens competition and change markets. Competition concerns customer utility, raw material, energy, human capital, logistics and transport, financing and rules. Substitution may be both positive (from fossils to renewables) as short-term negative for some companies (from paper to digital media) in the forestry sector. Sweden's access to a sustainable, efficiently managed forest raw material that contributes with a high-quality wood in value chains should be seen in this perspective.

Digitization and automation are universal trends that will affect the forest industry's opportunities for value creation and competitiveness, thus increased customer utility. Rapid technological developments open new opportunities in the forest industry. Technology to convert forest biomass and its components to various new products in areas such as energy and chemistry, is underway with great intensity. Nano-technology and 3D - printing are two materials related areas undergoing rapid development which provides opportunities for new processes and products.

Through globalization, digitalization and increasingly interdependent the world becomes increasingly fast changing and complex. The need to build capacity for change and quickly be able to renew activities and products, is growing in pace with the changing of outside worlds requirements and conditions. To keep up with these changes companies and organizations becomes increasingly more specialized and focused in their value creation. In the industry, there is a trend that companies must choose between low cost and high volume or high price and small volumes.

In a fast-moving and complex world where both individuals and companies become more specialized, but also more interdependent, there is a growing importance of cooperation and strategic collaboration with other stakeholders, both within the forest sector as well as actors in other industries, such as in the textile and petrochemical industries. Both in business and in the public, private and non-profit organisations, this becomes increasingly crucial for success.

3 Development in the forest products markets sectors

Wood raw materials

Sawlogs

Sawlogs removals is estimated to increase in 2017 to 35.6 million m³ (solid volumes under bark). The forecast for 2017 shows a further rise by 0.3 million m³ to 35.9 million m³ compared to 2016. The demand for softwood sawlogs is high and expected to remain high in 2017 and 2018. This is mainly due to improved markets for sawn softwood due to both strong domestic construction and increasing demand globally

Average price of sawlogs (only statistics for delivery timber is available which represents some 15 percent of total sales) increased by 2 percent in 2016 compared to 2015. There are regional price variations. In the Central and South regions, the prices fell by 4 respective 1 percent while the prices increased in the region North by 2 percent.

Prices of sawlogs is expected to rise during the autumn of 2017 due to increasing demand in sawmills

Pulpwood

In 2017 removals of pulpwood is estimated to increase in 2017 to 31 million m³ (solid volumes under bark). A small increase is forecasted for 2018 to 31.3 million m³ (solid volumes under bark) compared to 2017.

Pulpwood prices remained unchanged in 2016 compared to 2015. In total prices of pulpwood rose slightly in regions North and Central and remained unchanged in region South during the second quarter 2017 compared to previous quarter. Pulpwood prices remained unchanged in the second quarter of 2017 compared to 2016.

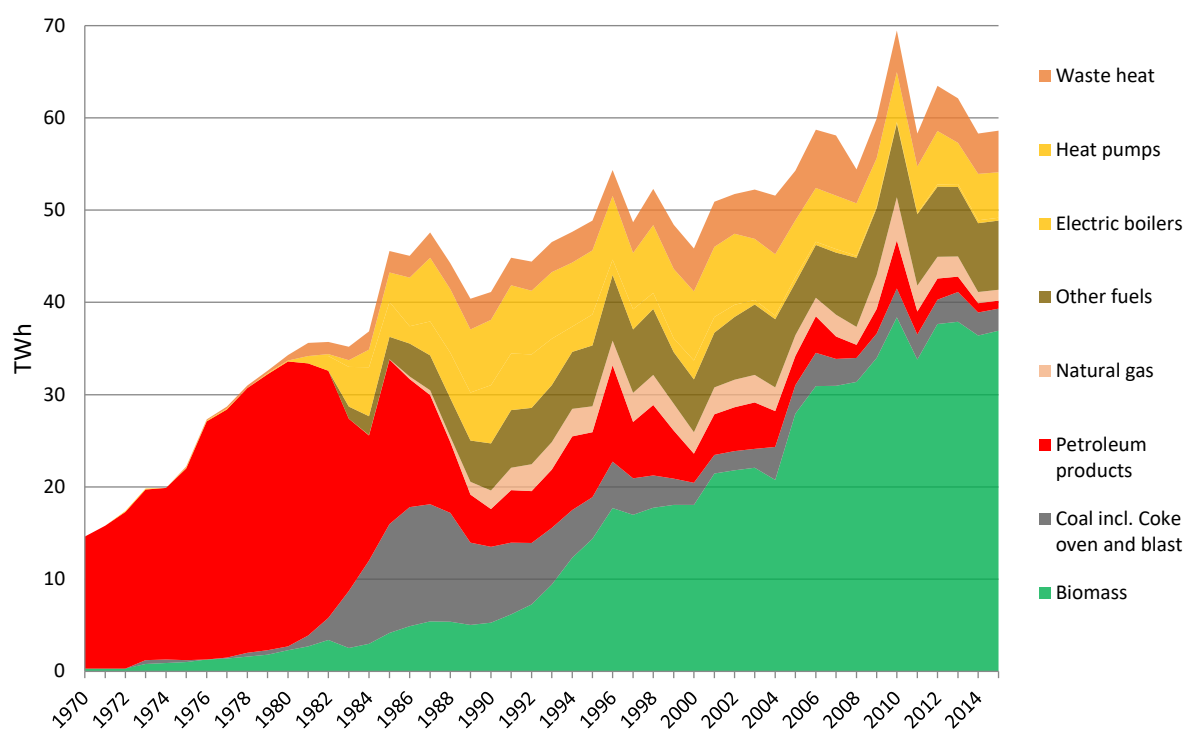
The pulpwood market has now sufficient pulpwood in stock which explained the low-price fluctuations. In the short run, this situation will remain stagnant but with large investments in pulp and paperboard industry prices is expected to increase. Pulp capacity in Sweden is expected to increase by around 1 million tonnes per year within the coming four years, an increase by 9 percent compared to today. Pulpwood prices are likely to increase in the end of 2017.

In recent years the structural changes and shutdown of the Norwegian forest industry has resulted in rising imports of pulpwood to Sweden.

Wood fuels

The supply of renewable energy in the energy system has increased steadily since the 1970: s mainly through use of bioenergy. Renewable energy accounts for half of the domestic energy consumption (excl. transformation losses). By far the greatest contributor to Sweden's renewable revolution has been bioenergy. Biomass, such as firewood, wood chips, pellets, briquettes, ethanol, methanol, biodiesel, bio-oil, bio-gas, dimethyl ether and biomethane accounts for most of Sweden's renewable energy. The use of biomass in the Swedish energy system has increased over the years. Biomass accounted for 11 per cent or 52 TWh of the total energy supply in 1983. In 2015, the use of biomass has increased to 134 TWh, which is equivalent to 25 per cent of the total supply. The district heating sector and the industrial sector are the major users of biomass, but a certain portion is also used as transport fuel. The use of biomass has grown steadily over the last 40 years. Swedish industry primarily uses biomass and electricity as energy carriers. In 2015, these respectively constituted 40 and 35 per cent of industry's final energy use

Figure 1 Input energy used in the production of district heating 1970-2015

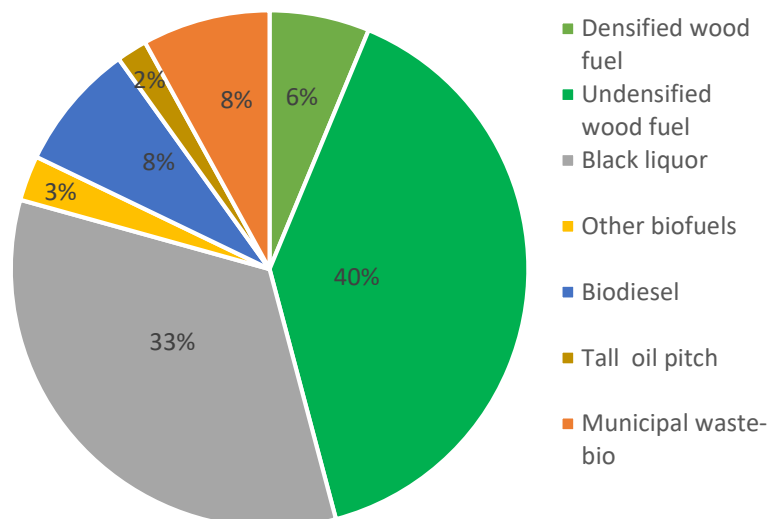


Several different fuels can be used for district heating production, and a major transition towards renewable fuels has taken place since the 1970s. In 2015, biomass accounted for 60 per cent and waste heat for 10 per cent of the input energy in district heating production. The use of heat pumps has decreased in the district heating system in recent years and the use of electric boilers has almost completely disappeared since the early 2000s. The use of waste has increased in the past decade. The heat from incinerating waste is used as the basis for district heating in several Swedish cities. The increase is due to the ban in EU on dumping combustible waste in effect from 2002 and the ban against dumping organic waste in effect from 2005. Import of waste has rapidly increased from Norway and United Kingdom.

District heating demand is anticipated to decrease because of energy efficiency improvement measures and global warming. At the same time, the market share for district heating will increase and a large proportion of the future cooling demand is produced by district heating by absorption cooling. It is vital that the district heating sector can contribute to recover the surplus heat from industry and future biofuel production.

Figure 2 shows the use of biomass by fuel type in 2015. The two largest segments consist of undensified wood fuel and black liquor (black liquor is a by-product of the pulp and paper industry which formed when boiling wood chips into pulp)

Figure 2 Use of biomass per fuel category 2015



The residential and services sector has nearly doubled its use of wood fuels in 10 years. In 2015, the use of biomass accounted for 10 per cent of the total use in the residential and service sector.

Certified forest products

In 2016 total certified forest land according to PEFC standard was 11,658,111 hectares productive forest land, which is nearly 50 percent of total productive forest land. The number of agreements amounted to 45,078 at the same period.

Forest land certified according to FSC standard covers half of the productive forest land, 12,235,456 hectares, in September 2016. Some 334 companies are certified as according to chain of custody (CoC).

A lot of forest companies, mostly large ones, are double-certified which makes it difficult to produce certified areas share by system of total forest land.

Value-added wood products

Sweden's prefabricated wooden houses industry comprises 515 companies with 5,300 employees, of which 110 companies has more than five employees in 2016. Production value was SEK 14.9 billion. Total exports of prefabricated wooden houses declined by 21 % and amounted to SEK 575 million in 2016 compared to 2015 while there was an increase of imports by 11 %. Swedish exports were mainly to Norway, Japan, Finland, Germany and Denmark. Swedish imports were mainly from Estonia, Norway and Finland.

The Furniture industry in 2016 comprises 2,290 companies, of which 1,445 are companies with null employees. Total number of employees were 13,376. In 2015 the total production value of furniture amounted to SEK 24.5 billion. Exports of furniture rose by one percent to SEK 15.9 billion in 2016 compared to 2015. Norway is the main market of export. Other important markets are EU countries. Total imports of furniture increased by 3 percent to SEK 16.6 SEK billion in 2016 compared to 2015. Swedish imports were mainly Poland, Norway and EU countries.

Sawn softwood

The Swedish market for sawn softwood is strong. Low interest rates, immigration and - after a decade of very low building activities - a pent up demand is driving building activities in many markets for Swedish wood. The high housing construction activity in Sweden and many other countries produces greater demand for wood products. The production in 2017 is estimated to reach 18.3 million cubic metres and according to the forecast production is expected to increase slightly in 2018.

Swedish sawmills are to 97 per cent relying on domestically supplied sawlogs. High consumption of logs relative to the availability is a limiting factor on the production in many regions. During the last year, a few mills were shut down, mainly in the southern part of the country where the production level today is lower than a few years ago.

The domestic market is healthy, even though the increase in wood demand seems to be levelling out on a level almost one million cubic metres (more than 20%) higher than five years ago. The strong demand is underpinned by building activities on a 25-year record high level. Building with wood is more often preferred. Today, the capacity in wood construction is a limiting factor but new projects such as new CLT-production sites are coming up to meet the increasing demand.

The sawmills stocks of finished products are lower than last year. Even though there is a larger consumption of wood in the construction sector and ROT -work repair, renovation, extension and maintenance on houses, the consumption in the rest of the segments like packaging and furniture is likely to decline.

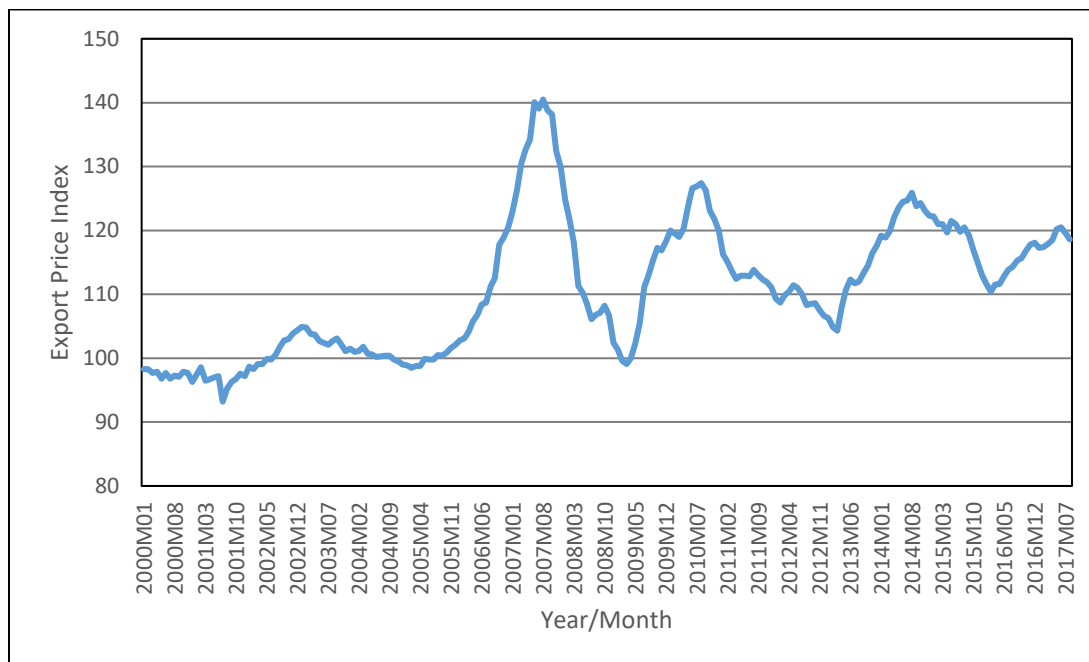
The export volume in 2015 was second highest ever, only in 2006 Sweden exported more sawn softwood. The total export of sawn and planed softwood declined slightly by one percent during the first half of 2016 compared with the same period last year. The average export price has started to rise again since the second quarter but was nevertheless in June almost eight per cent lower than the same month last year.

The Swedish export market varies between countries. In the first half of 2017 the export volumes have increased on major European markets such as Norway by 8 %, The Netherlands by 5 % and Poland by 23 %. The German and Danish markets have shown a more modest development with slightly lower volumes. Exports to UK, Sweden's largest export market the volumes decreased by 2 % during the first half year of 2017 compared to the same period last year. Total export volumes to European markets declined by 1 %.

China is an increasingly important market for Swedish sawmills and exports have this year increased with about 40 % to 503.000 m³ during the first half of 2017. China is currently the fourth largest export market for Swedish sawmills. Exports to Egypt which the largest redwood export market, declined by 4 %. Exports to USA was high on percentage but with smaller volumes. About 40 per cent of the Swedish exports are today shipped outside Europe.

Since January this year the Swedish Krona has appreciated against all relevant currencies of Swedish softwood markets. The appreciation against the Euro has been only marginal, but other important currencies such as USD and GBP have fallen substantially during the last couple of months

Figure 3. Export price index for sawn & planed wood, 2000- August 2017.
Price Index 2005=100



Source: Statistics Sweden

After a peak in average export prices in 2007 prices fell during 2008 and reached bottom in the second quarter of 2009. The average prices then peaked up again in late 2010 because of very low supply during the years after 2007. The prices have declined throughout 2011 and 2012. The downward trend changed in March 2013 and the prices have steadily increased in 2014 up to October. The prices have declined in 2015 and recovered in April 2016 and slow increase in 2017.

Wood-based panels incl. Parquet industry

According to Statistics Sweden the wood-based industry and parquet industry consists of 74 companies with some 1, 530 employees in 2015 and output accounted for approximately SEK 3.9 billion and value added amounted to SEK 1.1 billion. Most are inputs in the furniture and joinery industries and the construction industry. Although manufacturing of packaging and packaging are significant uses. There was a rise in overall production of wood based panels by 8 percent to 626,000 m³ in 2015 compared to 2014. Exports of wood-based panels declined while imports increased in 2015.

In recent years the cost of wood raw material, energy and chemicals has affected wood based panel industry negatively. The industry will continue to face growing competition for wood from renewable energy sector.

Paper, paperboard and wood pulp

The decline in paper production continued in 2016 and the production ended at 10.1 million tons, fell by 1,6 %. The production of graphic papers continued to decline in 2016 by 11 % to 3.6 million tons. All segments showed a retrogression, newsprint fell by 15 % while printing and writing paper fell by 6.6 %.

The combined production of packaging materials grades was stronger last year and production increased by 7 % to 6.1 million tons. The various subdivisions have risen by 4 to 10 %.

The trend continues in 2017 with weaker growth of graphic papers and strong growth for packaging material grades. The total production of paper and paperboard in 2017 is estimated to rise to 10.3 million tons. The forecast for 2018 is projected to rise by 1 % to 10.4 million tons compared to 2017.

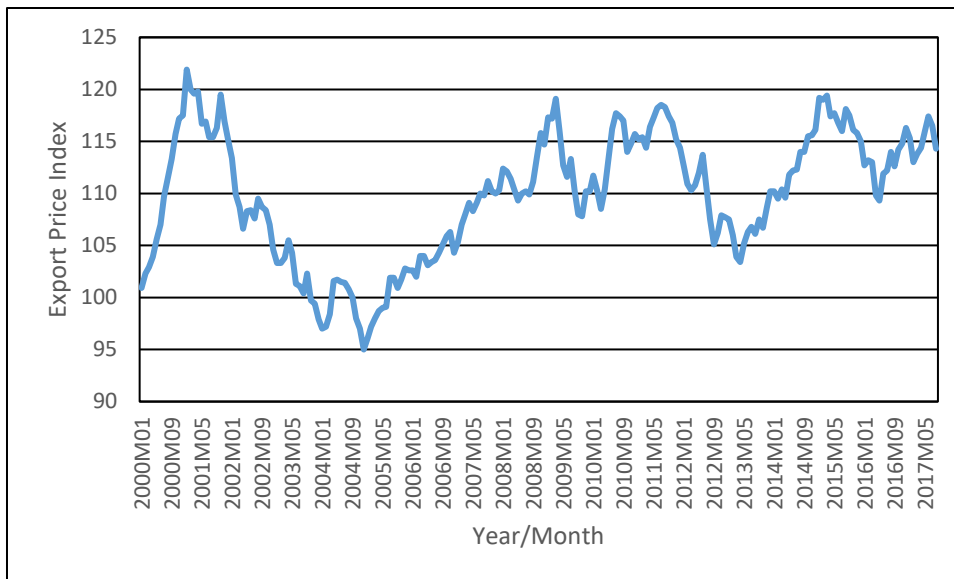
Exports in 2016 of paper and paperboard amounted to 9.1 million tons. Exports of newsprint and wood free printing paper declined by 15 respective 26 per cent, while exports of packaging material grades increased compared to 2015. Europe is the largest market with export of 80 % and exports to Asia with 13 %. The export ratio in 2016 was 90 per cent. The total exports of paper and paperboard is estimated to small increase in 2017 and forecasted in 2018 to rise slightly.

The production of wood pulp slightly decreased by 0.4 % to 11.6 million tons in 2016 compared to 2015. Chemical pulp has the highest share of some 70 percent of the total pulp production. Bleached softwood sulphate decreased by 1.7 % while production of combined mechanical pulp and semi chemical pulp decreased by 0.2 %. The changes of wood pulp production are partly that within paper production there have been changes in quality, the production of graphic paper and printing paper is decreasing while packaging is increasing. The total production of wood pulp is estimated to rise by 2 % in 2017 and forecasted to rise by 1 % in 2018 compared to 2017.

Exports of wood pulp remained unchanged in 2016 compared to 2015 and reached 3.4 million tons. Exports of bleached softwood sulphate amounted 2.4 million tons, a decrease of 1.2 % compared to 2015. The main export markets in 2016 were Germany, China, Italy and France. The total export ratio in 2016 was 30 %. Modest change is foreseen in the forecasts of pulp exports volumes in 2016 and 2017.

Price fluctuations are closely tied to global stocks and changes in balance between supply and demand. Export prices remain dependent on the exchange rate of USD and SEK.

Figure 4. Export price index for pulp and paper and paperboard, 2000- August 2017. Price Index 2005=100



Source: Statistics Sweden

Housing and construction

Much of Sweden is facing a housing shortage, primarily in its metropolitan regions. Sweden has one of the highest levels of urbanization in the EU. Housing construction has continued to increase, but remains well below new construction needs.

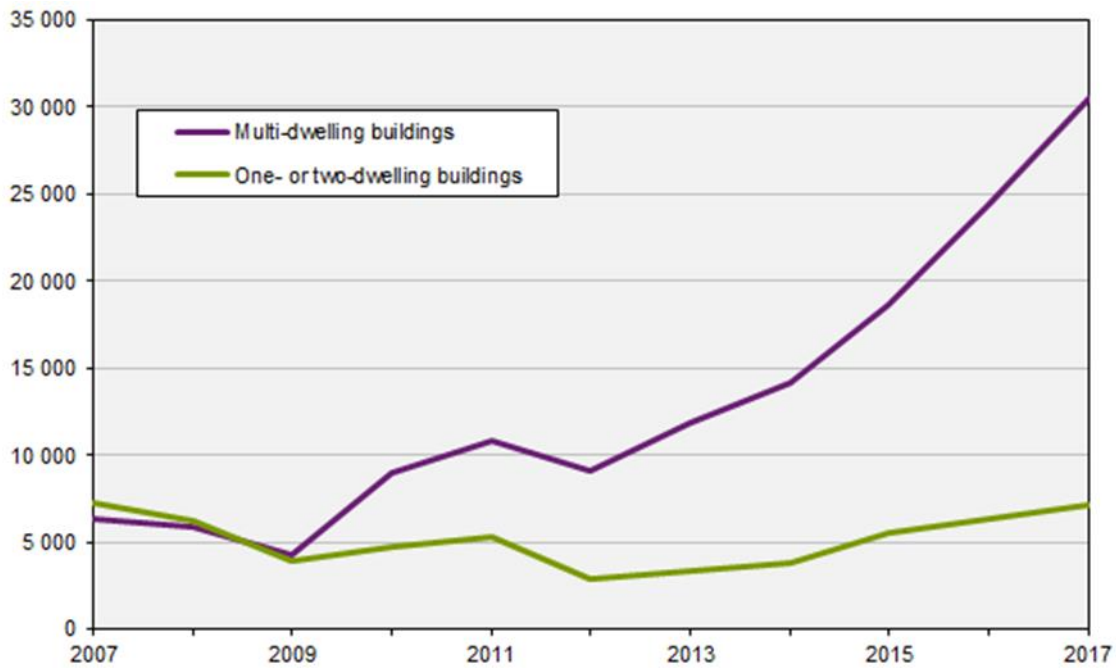
Construction in housing has increased sharply in recent years. According to preliminary figures, the construction of roughly 37 600 dwellings began in the first six months of 2017. This is an increase of 22 percent compared with the same period in 2016, when the construction of 30 776 dwellings started.

First and foremost, apartment construction is on the rise, which will most likely lead to a reduction in started-up construction of new homes next year. Total building construction investments are, however, expected to develop sideways this year and next due in part to the high volumes last year and in part to because of capacity limitations in labor and material supplies

Dwellings in multi-dwelling buildings provided the largest contribution to the significant increase; the construction of 30 450 dwellings started in the first six months of the year, which is an increase of 24 percent compared with same period in 2016. In one- or two-dwelling buildings, the construction of 7 150 dwellings started; this is an increase of 13 percent or 800 dwellings compared with the same period in 2016.

Despite risks and warnings for a possible real estate bubble and the high level of household loans housing construction will probably remain strong. The main reason for increased construction on the housing market is higher prices and employment, low interest rates and faster planning processes.

Figure 5. Number of started dwellings 1st half 2006-2017



Source: Statistics Sweden

Last year a total of 42 441 newly built dwellings were completed. This is the highest number of dwellings completed in new construction since 1992, when 57 319 were completed.

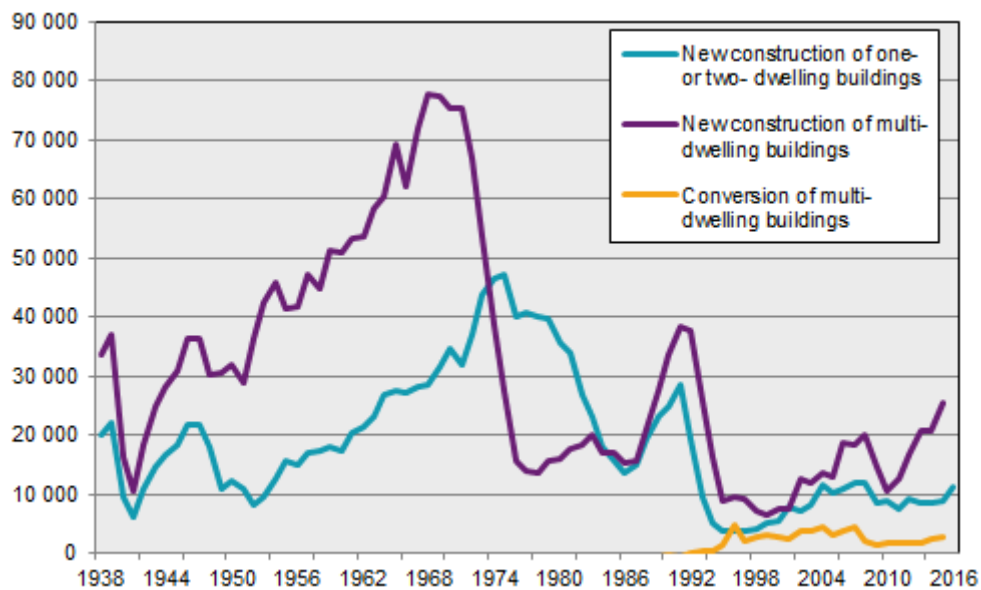
The completed dwellings comprised 11 411 dwellings in one-or two-dwelling buildings, and 31 030 dwellings in multi-dwelling buildings. In addition, 3 399 dwellings were completed through conversion of existing multi-dwelling buildings. As a result, there was an increase of 45 840 dwellings in total in 2016

In 18 out of 21 counties in Sweden, more dwellings were completed in 2016 than in the previous year. The most dwellings were completed in Stockholm County, where one out of three of the completed dwellings could be found.

Most of the completed dwellings in multi-dwelling buildings were rented dwellings (54 percent). However, the distribution varies in different regions. In Greater Stockholm and Greater Gothenburg, most dwellings were tenant-owned, while in Greater Malmö, 72 percent were rented dwellings.

In addition to the 42 441 dwellings completed through new construction, 3 399 dwellings were completed through conversion of existing multi-dwelling buildings. About 80 percent of those dwellings came from premises that have been converted into dwellings, and about 10 percent from attics converted to dwellings.

Figure 6. Number of completed dwellings in new construction 1938-2016, Conversion of multi-dwelling buildings 1989-2015



Source: Statistics Sweden

The national Board of Housing, Building and Planning has in July 2017 adjusted its forecast regarding construction in the future. The need for new housing for the next nine years, until 2025, is estimated to be 600 000. A major part of these, 320 000, is necessary up to 2020, which means an average annual rate of 80 000 new dwellings per year. The construction has increased in recent years, but not at a rate needed.

The new revision, however, means a reduced need for new dwellings until 2025 compared with the forecast from June 2016. The calculation then indicated a need for 710 000 dwellings, i.e. 110 000 more than the new forecast. The reason for this is that it was completed 46 000 dwellings in 2016 and that Statistics Sweden in its new population forecast from April 2017 adjusted down the population by 2025 with 135,000 people. Both These circumstances imply a lower need for new dwellings by 2025 compared with last year's forecast.

There are two different subsidies for investments in building rented and student dwellings. The subsidy amount to 11.3 billion SEK for the period 2016-2019.

5.a Table on selected Economic indicators

Macro-Economic indicators	2015	2016	2017	2018
(Annual percentage change and percent, respectively)				
GDP at market prices	4.1	3.2	2.5	2.4
Current account ¹	4.7	5.1	5.2	5.1
Employment	1.4	1.5	2.4	1.0
CPI	0.0	1.0	1.7	1.6
Unemployment ²	7.4	6.9	6.6	6.4
Repo rate ³	-0.35	-0.50	-0.50	-0.25
Productivity in construction sector ⁴	6.9	2.7	2.4	1.1
Housing investment, new construction ⁵				
- Multi-dwelling buildings	21.7	34.0	27.1	4.0
- One- or two-dwelling buildings	29.3	37.9	17.1	-1.8
SEK per Euro	9.4	9.5	9.6	9.6
SEK per USD	8.4	8.6	8.8	8.7
SEK per GBP	12.9	11.6	11.1	10.9

1. Percent of GDP
2. Percent of labour force
3. Percent at year-end
4. Constant prices, basic prices, percentage change
5. Constant prices, percentage change