

Market Statement 2016

SWEDEN

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1 General Economic Trends

After seven years operating below capacity, Sweden will this year return to a positive output gap. Expansionary economic policy is a key factor behind the recovery. The low interest rate policy has stimulated domestic demand while also keeping down the value of the krona, which has boosted exports.

The global economic recovery and relatively weak krona mean that exports will continue to grow this year and next, but domestic demand will remain a key growth driver. Government consumption will increase significantly this year, mainly as a result of high refugee reception costs. Although the influx of refugees has slowed, government consumption expenditure will continue to rise comparatively quickly next year, due partly to a relatively rapid rise in the proportion of young and elderly in the population.

Demographic developments will also exacerbate the need for government investment and investment in housing. Despite the surge in housing investment over the past two years, it is still too low to assuage the housing shortage. Action will be needed both to boost the production of new housing and to make more efficient use of the existing housing stock. The ever stronger economy means that investment in the rest of the business sector will also rise rapidly, making investment an important growth driver this year. The same goes for household consumption, with further strong progress in the labour market and low interest rates prompting households to ramp up spending.

All in all, this means that GDP will grow by 3.3 per cent this year (see Table 5.a). Next year, the output gap will become slightly more positive still despite slower growth. Government spending on refugee reception will not rise as rapidly, and household consumption will decelerate as real income growth slows. A growing shortage of skilled labour in the construction sector will also hamper growth in housing investment.

Low inflation and low inflation expectations mean that the Riksbank will leave the repo rate at -0.50 per cent until summer 2017 despite the booming economy. Low global interest rates are a crucial factor in this respect. If the repo rate were to be raised earlier and faster, the krona would strengthen further. In the short term, inflation would then be lower, which could lead to inflation expectations falling and confidence in the inflation target being further eroded.

Employment has increased rapidly in recent years, and indicators suggest that it will do so again in 2016. Demand for labour will continue to grow relatively quickly in 2017 and 2018, but an increasing shortage of labour with the necessary skills will then begin to put a damper on employment growth. Unemployment will fall to 6.3 per cent in 2017 and hold at that level in 2018. Resource utilisation in the labour market will then be higher than normal, and unemployment will rise somewhat in subsequent years as the economic boom ebbs. There are major challenges in the labour market. Despite the strong economy, unemployment among the unskilled and immigrants is still very high. It also takes a very long time on average for refugees to become established in the labour market. Equilibrium unemployment will

therefore rise as more and more refugees enter the labour force. To counter this, structural measures will be needed to make it easier for groups with a weak position in the labour market to find work.

The outcome of the Brexit vote will impact negatively on growth in the UK but in general have limited effects on Sweden. There is, however, a risk that the British decision to leave will erode confidence in the EU as an institution, which could have far more serious consequences.

Governments Budget Bill for 2016¹

The Swedish Forestry Act

A legal review of the Swedish Forest Act has been started in 2016 and the assignment will be reported no later than 31 March 2017. The forestry act is analysed in order to ensure an effective and clear legislation and the review may possible, if needed, suggest some changes or clarifications.

National Forest Programme

In 2017, the Government intends to discuss to parliament regarding the national forest program and then develop action plan for implementation. Synergies between the national forest program and the government's other strategic projects will be developed, especially with the collaboration program on circular and bio-based economy.

One of the world's first fossil-free countries

Sweden will be one of the world's first fossil-free welfare nations. The Government has started 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. This is the largest climate and environment budget in Sweden's history; SEK 12.9 billion will be invested in reforms to reduce emissions and strengthen climate action. Among other measures, 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.

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 in order to meet demand for renewable bio-based products. It is also important that the increased removals does 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.

¹ The proposed budget bill for 2016 is [subject to parliamentary approval](#).

Environment

Interest from forest owners for protection of forest land with high environmental values remains very high. From 2016, the government has enhanced the possibilities for protection through an increase in the level of the Forest Agency's appropriations by SEK 107 million.

Construction

The government announced in the Budget 2016 a housing policy package containing subsidies for investment in rental apartments, student housing and housing for the elderly, to municipalities for increased construction, property owners to improve energy efficiency and renovation of apartment buildings. This package is now being completed and will take effect in the coming years.

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, in order to be able to reduce the construction sector's climate impact.

Transport/Machinery

Today there is a reduced carbon tax on diesel fuel used in harvester and forwarder in commercial agricultural, forestry or aquaculture. As of January 1, 2016 the reduction is SEK 1.70 / litre which is an increase from previous SEK 0.90 / litre.

Recent policy measures

National Forest Programme (NFP)

In 2013 the Swedish government decided that a national forest program (NFP) process should be started in Sweden. The NFP will build on the principles agreed within the Forest Europe process (previously the Ministerial Conference for the Protection of Forests in Europe, MCPFE) and cover the whole value chain.

The Government considers that Sweden needs a long-term forest strategy – a national forest programme – that optimises forestry opportunities to contribute to the sustainable development of Swedish society.

The Government is working in broad dialogue with government agencies and civil society organisations to produce a national forest programme. The programme's vision is: "Forests – our 'green gold' – creates jobs and sustainable growth throughout the country, and contribute to the development of a growing bioeconomy." The national forest programme is intended to be a long-term process across electoral periods and with broad support across political party lines. It should also foster synergies with several other strategic initiatives and policy areas, such as climate and environmental objectives, rural development, reindustrialisation, development of exports and tourism, to name a few.

Sven-Erik Bucht, Minister for Rural Affairs, will lead the work, guided by a programme council composed of representatives from around twenty different organisations and

government agencies with an interest in forestry. In September 2016 the four working groups, presented their proposals for action to the government. The action covers the following areas:

1. growth, multiple-use and value creation potential of forests as a resource;
2. timber production, other ecosystem services and nature's boundaries;
3. promotion of biobased products and energy, smart transport, a world-class forest industry and increased exports;
4. international forestry issues.
- 5.

The proposals are currently subject to a national consultation process which will be completed in November 2016. The government is expected to introduce a bill on the implementation of a national forest programme to the parliament in May 2017.

National strategy for bioeconomy

On 8 September 2011 the Government commissioned The Swedish Research Council (Formas), in consultation with VINNOVA (Sweden's Innovation Agency) and the Swedish Energy Agency to submit a proposal (D.no. L2011/2399) for a national strategy for the development of a bio-based economy (bioeconomy) and to propose a Swedish definition of the term.

The research and innovation strategy emphasises on the following needs:

- The replacement of fossil-based raw materials with biobased raw materials (bio-based raw materials, nutrient and fertilizer optimization systems, new and improved biomass properties, utilisation of ecosystems other than fields and forests for biomass production and more).
- Smarter products and smarter use of raw materials (refinement of biomass products, by-products and waste as raw materials, bio refineries and more).
- Change in consumption habits and attitudes (increase product lifetimes and recycling, more efficient transport, improved distribution and storage, behaviours and more).
- Prioritisation and choice of measures (addressing simultaneously environmental and socio-economic consequences and conflict of objectives in governing policies).

The strategy emphasise on the following innovation efforts and opportunities:

- Growing cross-industry collaboration in research and development, including by engaging also with public actors and civil society.
- Developing strong research and innovation environments that contribute with relevant knowledge and create preconditions for innovation within the area.
- Accelerating development, verification and commercialisation of new bio-based solutions, including through support for the demonstration of products and services.
- Collaboration between large companies and SMEs has great opportunity to increase the pace of commercialisation of new technologies and innovations.

VINNOVA, the Swedish innovation agency granted the Swedish Forest Industry Federation (SFIF) 500 000 SEK for a new project on the future of bio-based products. The project aim is to better match users' and consumers' needs with research advances that are constantly being made. This includes developing new materials and products based on renewable raw materials to meet Sweden's transition to a bio-based economy. The SFIF vision to double the value added in 2035.

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.
- An energy-efficiency target for the period 2020 to 2030 will be produced and adopted no later than 2017.

The Energy Commission continue working and will go into more depth in some areas.

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.

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 19.9 billion in 2015 for tax reduction for ROT. This was 18 percent more compared to 2014. In 2016 ROT is expected to decline. 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 of all 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 80 checks on operators importing timber products have been conducted in total. 10 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 'Forest Kingdom' and lately the national forest programme, central government advice to the forestry on active sustainable management has been stepped up, with a view to promoting higher removals in order 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. Existing legislation also indirectly affects trends in carbon removals in various ways, in particular through provisions on forest management in the Forestry Act, the land drainage provisions of the Environmental Code, site protection and nature conservation agreements. Furthermore, as a result 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 as regards 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 intends to provide 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 programme addressing societal challenges, 6) improved prioritisation 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.

Government increased its support for research and innovation by 4 billion SEK, coming into full effect by 2016. 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 creates 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 opens up 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 decrease slightly in 2016 to 35.5 million m³ (solid volumes under bark). The forecast for 2017 shows a decline by 0.1 million m³ to 35.4 million m³ compared to 2016. The higher demand for sawlogs in 2015 was driven likely by improved markets for sawn softwood due to both strong domestic construction and increasing demand outside Europe mainly in Asia, Middle East and North Africa.

Average price of sawlogs (only statistics for delivery timber is available which represents some 15 percent of total sales) increased by 6 percent in 2015 compared to 2014. In 2015 prices increased in all regions, both for pine and spruce. In the first and second quarter of 2016 prices has dropped somewhat There are no signs of higher prices of sawlogs in the coming year.

Pulpwood

In 2016 removals of pulpwood is estimated to remain nearly at the same level as 2015. A small increase is forecasted for 2017 to 31.8 million m³ (solid volumes under bark) compared to 2016.

Pulpwood prices slightly increased in Sweden by 2 percent in 2015 compared to 2014. Price trends were geographically mixed with higher price increase in the region North compared to region South. In the first and second quarters of 2016 average pulpwood prices has remained unchanged compared to the quarters before.

The pulpwood market have at the moment 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.

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 bio-energy. Bio-mass, 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 2013, the use of biomass has increased to 129 TWh, which is equivalent to 23 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 2013, these respectively constituted 38 and 35 per cent of industry's final energy use

Several different fuels can be used for district heating production, and a major transition towards renewable fuels has taken place since the 1970s. In 2013, biomass accounted for 60 per cent and waste heat for 8 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.

District heating demand is anticipated to decrease as a consequence 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. The two largest segments for the use of biomass by fuel type in 2013 consisted of undensified wood fuel (41 %) and black liquor (33 %)

The residential and services sector has nearly doubled its use of wood fuels in 10 years. The use of refined wood fuels has decreased rapidly in electricity and heat production and also in the residential and services sector as a result of warmer winters and low price on electricity making heat pumps more attractive... Biofuels have mainly replaced oil used for heating purposes in the residential and services sector because of, amongst other things, the increasing oil price, taxes and grants for converting boilers from heating oil to biofuels

The increased use of biomass for electricity and heat production has led to an increased demand for wood fuels in particular. Throughout the 1980s and 90s, the prices of wood fuels for thermal power plants remained more or less unchanged. Good availability of cheap and easily accessible biomass is the result of a long period involving a surplus of waste production from the forestry industry.

Certified forest products

In 2015 total certified forest land according to PEFC standard was 11,549,732 hectares productive forest land, which is nearly 50 percent of total productive forest land. The number of agreements amounted to 43,138 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 520 companies with 4,239 employees, of which 104 companies has more than five employees in 2014. Production value was SEK 11.9 billion. Total exports of prefabricated wooden houses declined by 10 % and amounted to SEK 727 million in 2015 compared to 2014 while there was a large increase of imports by 91 %. Swedish exports were mainly to Norway, Japan, Finland, Germany and Denmark. Swedish imports were mainly from Estonia, Norway and Finland.

The Furniture industry comprises 2,319 companies, of which 1,394 are companies with null employees. Total number of employees were 12,681. In 2014 the total production value of furniture amounted to SEK 23.8 billion. Total exports of furniture rose by six percent to SEK 15.8 billion in 2015 compared to 2014. Norway is the main market of export with a share of 34 %. Other important markets are EU countries. Total imports of furniture increased by 11 percent to SEK 16.1 SEK billion in 2015 compared to 2014. Swedish imports were from China, Norway and from EU countries.

Sawn softwood

Sawmills market situation has stabilized since last winter The production in 2015 reached 18.1 million cubic metre, highest level since 2007, but are now leveling off. During the first seven months of 2016 the sawn softwood production was one per cent lower than the same period last year. The total production is expected to be approximately 17.9 million m³ in 2016. The production is forecast to increase only slightly in 2017 and reach about 18 million m³.

Since 2013 the production has increased 12 per cent or by two million cubic metre, this is a quite substantial increase. From this higher level the production has now started to level out. The slightly lower pace of production coupled with overall rather healthy demand has pressed down the stocks of finished goods, in particularly for construction related products.

The availability of sawlogs could be described as rather normal. About 97 per cent of the raw material is domestic. The home market Sweden is by far the largest market for the first time since 2008 exceeded total deliveries of five million cubic metre.

In recent years the imports of sawlogs has increased again, after having been marginal at most during a period of about ten years. The reason for the increase is almost entirely increased imports of Norwegian logs to southern Sweden.

Export volumes during a period also was favored by the relatively weak Swedish krona. This effect has slowed in 2016 as the Swedish krona has strengthened. Since last autumn the Swedish Krona has appreciated with about 4 per cent against the most important currencies for Swedish wood exports.

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.

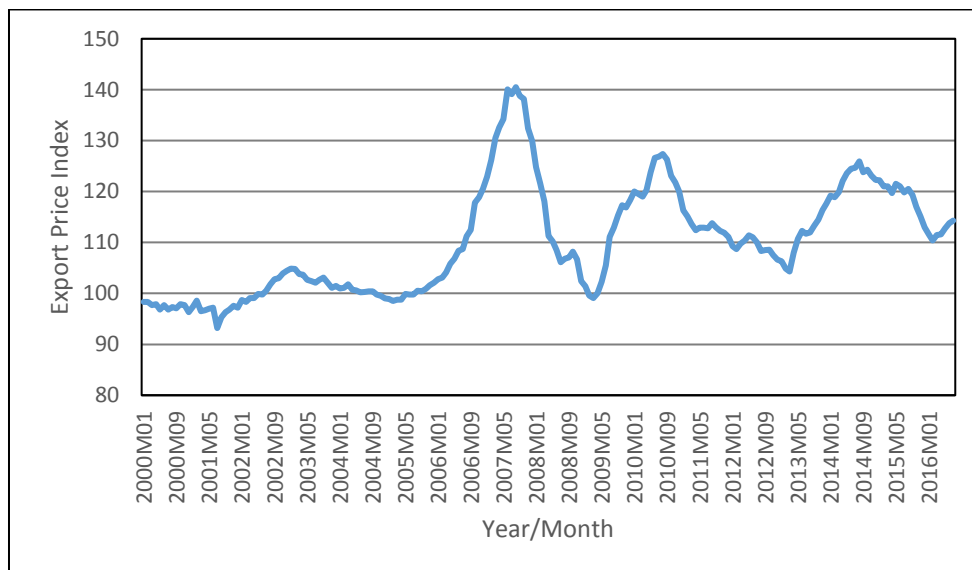
The Swedish export market varies between countries. In the first half of 2016 the export volumes have increased on major European markets such as United Kingdom by 2 %, Denmark by 12 % and Poland by 31 %. The German and Norwegian markets have shown a more modest development with unchanged or slightly lower volumes. Total export volumes to European markets increased by 4%.

China is an increasingly important market for Swedish sawmills and exports have increased with about 40 per cent to 435.000 m3 during the first half of 2016. China is currently the seventh largest export market for Swedish sawmills. Exports to Egypt which the largest redwood export market, declined by 22 %.

Low interest rates, immigration and after a decade of very low building activities - a pent up demand are driving building activities in many markets for Swedish wood. In addition wood as a building material is increasingly popular. This makes a good ground for production-related wood products, not least in Europe. At the same time the demand of Swedish wood is increasing from non-European markets as China and USA. About 40 per cent of the Swedish exports are today shipped outside Europe.

The domestic market is healthy with increasing volumes this year. 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 cross laminated timber (CLT) -production sites are coming up to meet the increasing demand.

Figure 1. Export price index for sawn & planed wood, 2000- July 2016.
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 as a result 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 2015 but has declined since then.

Wood-based panels incl. Parquet industry

According to Statistics Sweden the wood-based industry and parquet industry consists of 78 companies with some 1 700 employees in 2014 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 decline in overall production of wood based panels by 7 percent to 587 000 m³ in 2014 compared to 2013. Exports of wood-based panels increased while imports decreased in 2014.

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 2015 and the production ended at 10.2 million tons, a decrease by 2.4 %. The production of graphic papers continued to decline in 2015 by 6 % to 4.1 million tons. All segments showed a retrogression, newsprint fell by 5 % while

printing and writing paper fell by 6.6 %. The manufacture of hygiene paper remained positive during 2015 and rose nearly 1.7 % to 356 000 tons.

The combined production of packaging materials were unchanged last year and production ended at 5.9 million tons. The changes for the different product groups varies, production of packaging paper has fallen by 4 % while both case materials and cardboard packaging shows a rise of 1.4 and 0.4 %.

The total production of paper and paperboard in 2016 is estimated to be nearly at the level as 2015. The forecast for 2017 is projected to rise by 1.3 % to 10.3 million tons compared to 2016.

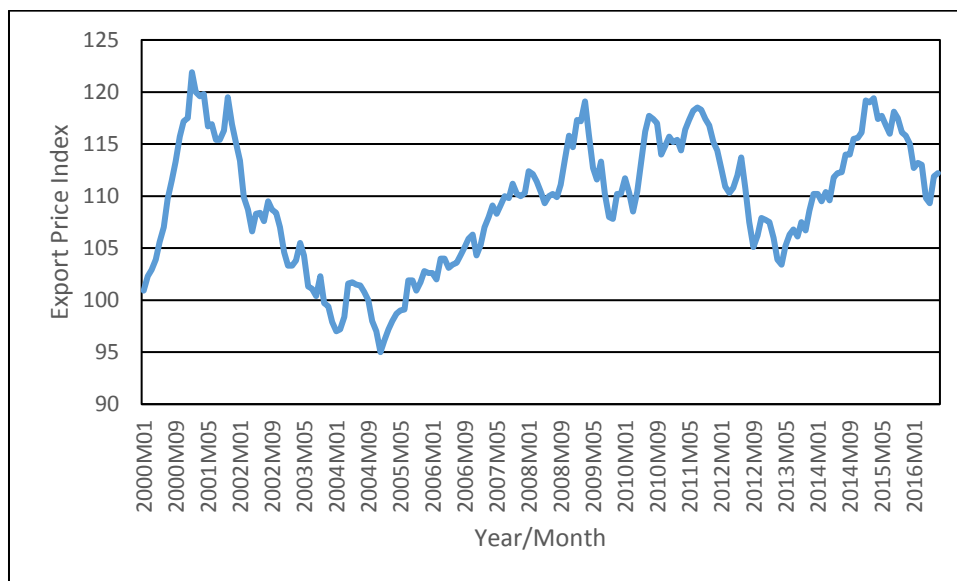
The total exports of paper and paperboard rose by 2.3 % to 9.8 million tons in 2015 compared to 2014. Both graphic paper and packaging materials product segment most of which is exported, both product segments has an export share of over 90 percent for 2015. The total exports of paper and paperboard is estimated to small increase in 2016 and forecasted in 2017 to rise slightly

The production of wood pulp slightly increased by 0.7 % to 11.6 million tons in 2015 compared to 2014. Chemical pulp has the highest share of some 70 percent of the total pulp production. Bleached softwood sulphate increased by 2 % while production of combined mechanical pulp and semi chemical pulp increased by 1.3 %. The changes of wood pulp production is 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 0.8 % in 2016 and forecasted to rise by 0.7 % in 2017 compared to 2016.

Exports of wood pulp rose by 0.5 percent to 3.5 million tons in 2015 compared to 2014. Exports of bleached softwood sulphate was 2.4 million tons, a decrease of 1.2 % compared to 2014. 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 2. Export price index for pulp and paper and paperboard, 2000- July 2016. Price Index 2005=100



Source: Statistics Sweden

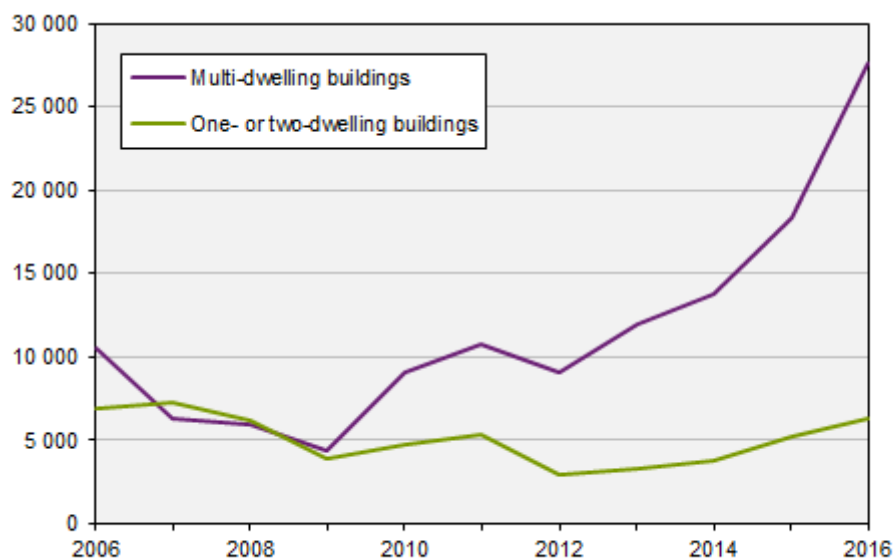
Housing and construction

Construction in housing has increased sharply in recent years. According to preliminary figures, roughly 33 950 dwellings were started in new buildings during the first half of 2016. This is an increase of 44 percent compared to same period in 2015, when construction of 23 620 dwellings was started

In multi-dwelling buildings 27 600 dwellings were started; this is an increase of 50 percent compared to same period in 2015. In one- or two-dwelling buildings 6 350 dwellings were started; this is an increase of 21 percent or 1100 dwellings compared to same period in 2015.

The main reason for increased construction on the housing market is higher prices and employment, low interest rates and faster planning processes.

Figure 3. Number of started dwellings 1st half 2006-2016

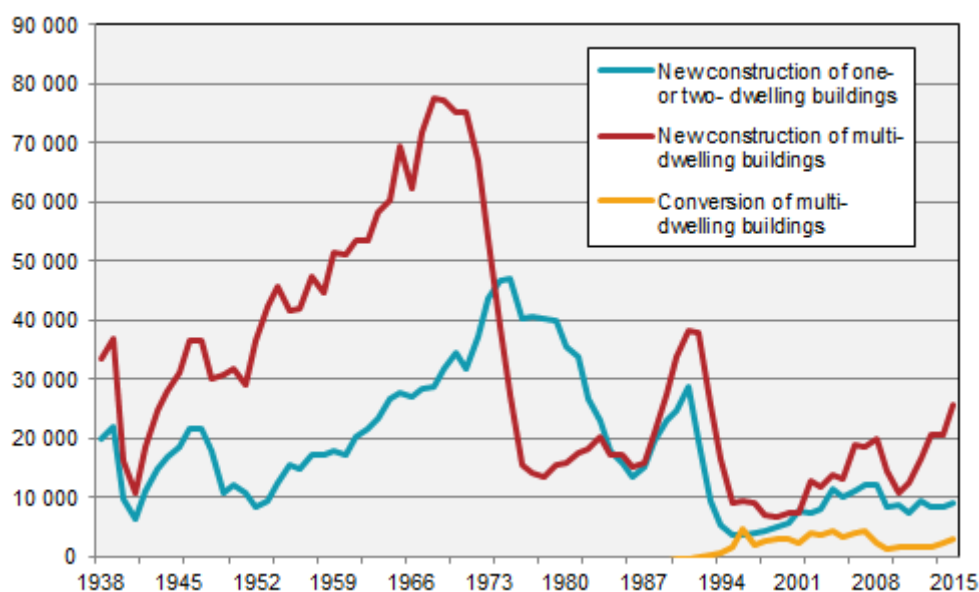


Source: Statistics Sweden

Last year a total of 34 603 newly built dwellings were completed. These completed dwellings comprised 9 038 dwellings in one- or two-dwelling buildings and 25 565 dwellings in multi-dwelling buildings. In addition, 2 946 dwellings were completed through conversion of existing multi-dwelling buildings. As a result, the total number of new and converted dwellings was 37 549 in 2015.

Of the completed dwellings in multi-dwelling buildings through new construction, 14 964 or 59 percent were in one of the three metropolitan areas (Stockholm, Gothenburg and Malmö). More than one out of three of the completed dwellings were in Greater Stockholm. However, the majority (57 percent) of the completed dwellings in one- or two-dwelling buildings were situated outside of the metropolitan areas.

Figure 4. Number of completed dwellings in new construction 1938-2015, Conversion of multi-dwelling buildings 1989-2015



Source: Statistics Sweden

The national Board of Housing, Building and Planning has adjusted its forecast regarding construction in the future. The need for new housing for the next ten years, until 2025, is estimated to be 710,000. A major part of these, 440,000, is required meet to 2020, which means an average annual rate of 88,000 new dwellings per year. The construction has increased in recent years, but at a slower rate.

The reason for a revised forecast is that Statistics Sweden published a new population projection in April 2016. Over the next ten years, the population is expected to increase by more than 1.2 million people. The increase occurs in all age groups. In the working population aged 20-64 years, the population is expected to increase by just over half a million, while the young are expected to be just over 400,000, and the older more than 300,000 more in 2025 than they were in 2015

Number of new constructed multi-dwellings buildings with a wooden frame was 1,691 of a total share of 8.8 percent in year 2014. Concrete dominate with 17,019.

5.a Table on selected Economic indicators

Macro-Economic indicators (Annual percentage change and percent, respectively)	2014	2015	2016	2017
GDP at market prices	2.3	4.2	3.3	2.0
Current account ¹	4.2	4.8	4.4	4.7
Employment	1.4	1.4	1.8	1.3
CPI	-0.2	0.0	1.0	1.4
Unemployment ²	7.9	7.4	6.9	6.3
Repo rate ³	0.00	-0.35	-0.50	0.25
Productivity in construction sector ⁴	11.1	7.0	2.3	1.3

Housing investment, new construction ⁵				
- Multi-dwelling buildings	37.6	24.8	14.4	5.7
- One- or two-dwelling buildings	25.0	26.0	19.6	3.5
SEK per Euro	9.1	9.4	9.3	9.2
SEK per USD	6.9	8.4	8.5	8.5
SEK per GBP	11.3	12.9	11.4	10.7

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