



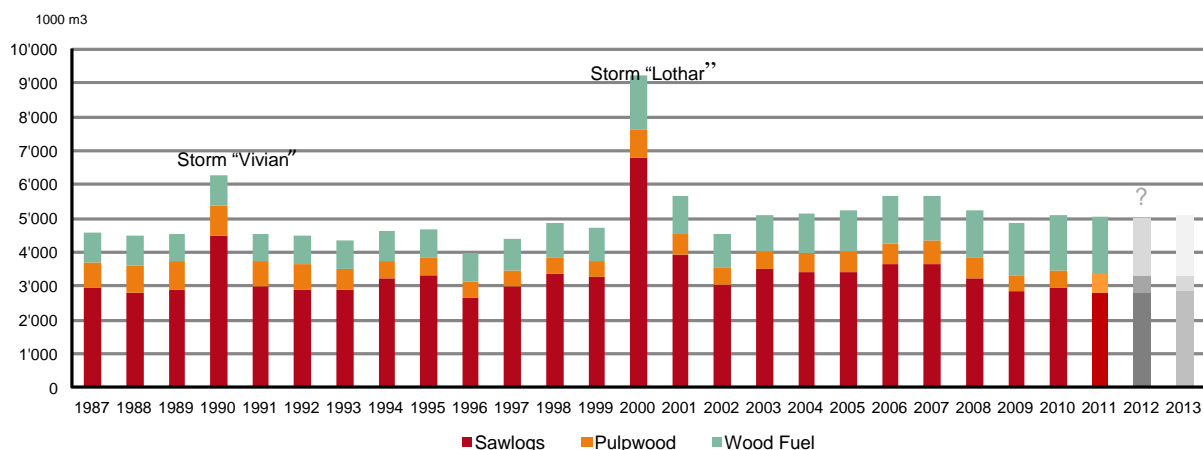
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Developments in Forest Product Markets and Policy Measures and Developments that may have a Bearing on these Markets

Country Report 2013 for Switzerland

WoodHarvestin Switzerland 1987- 2013



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Highlights

- The number one topic of economic interest in Switzerland remains the **high value of the Swiss franc**, which also influences events in the forestry and timber sector. (p. 5/15)
- The Swiss Forest Policy 2020, the political action programme for the Swiss forest, has been approved, and a subsequent Action Plan is being implemented from 2013. (p. 6)
- The Swiss Biodiversity Strategy aims to conserve the resilience of ecosystems through their variety. An Action Plan is currently being developed with stakeholder participation for implementation after 2014 (p. 6)
- The Federal Office for the Environment has developed fact sheets on how to place Swiss timber on the EU internal market under the EUTR (p. 14)
- The Wood Action Plan is being extended for an additional period up to 2016 (p. 7), and a national research programme is developing **strategies and technologies for the optimised use of the resource wood**. (p. **Error! Bookmark not defined.**)
- Prices for sought-after soft stemwood are increased in neighbouring countries; they showed a steady decline over the course of the year in Switzerland. (p. 15)

1 General economic trends

Developments up to mid-2013

For the reporting period 2012 to mid-2013 the Swiss export economy continued to be overshadowed by the difficult economic situation in key euro countries and the associated weakness of the euro in relation to the Swiss franc. However, demand for Swiss products, in particular outside the euro area, remained high, e.g. for watches and pharmaceutical products. The Swiss National Bank's stabilising currency policy from 2011 and the successful defence of a minimum exchange rate of 1.20 CHF/EUR played a major role in limiting the negative impact of the euro crisis on the Swiss economy.

Despite the difficulties in the sectors that export to the euro region, the situation of the Swiss economy was comparatively satisfactory in the first half of 2012. It was buoyed by the good domestic demand on the construction market, in particular the housing market, and by private consumption. The virtual lack of inflation, historically low interest rates, the immigration of well-qualified workers, particularly from the EU, the positive real wage development and robust labour market were contributory factors here.

The economy improved from around mid-2012. The growth in real GDP rose from 1 % in 2011 to 1.5% in 2012. At 2.9%, the unemployment rate in 2012 remained more or less the same as in 2011 (2.8%) and was far lower than the European average. This improvement in the economy was boosted not least by the surprisingly strong increase in the GDP of Switzerland's most important trading partner Germany.

Outlook

Uncertainties in relation to economic forecasts mainly concern the development of the euro area. The situation is aggravated by the fact that the continuing, albeit stabilised, low exchange rate between the euro and the Swiss franc reduces margins in the export sector, puts a strain on its reserves and reduces its scope for investment. The uncertainties in the eastern Mediterranean region could result in oil price rises and an increase in inflation.

Certain signs of saturation are emerging on the Swiss property market outside of central regions, moreover mortgage rates are increasing slightly. Stagnation in housing demand at a high level is expected for 2013/2014. This stabilisation in the area of residential construction contrasts, however, with lively activity in the area of building renovation, planned renovation projects and investments in infrastructure, e.g. the development of public transport.

Private consumption will also be a mainstay of the economy in 2013/2014. In 2012, investments were mainly made by large companies. Experts expect that smaller and medium-sized companies will increase their investments in 2013/2014.

Due to the contrast between lively domestic demand and muted foreign trade, expectations for 2013 and 2014 vary depending on the sector involved. However, in general, economic prospects are viewed as positive.

-> see also <http://www.seco.admin.ch/aktuell/00277/01164/01980/index.html?lang=en&msg-id=50300>

2 Policy Measures and Developments that have a Bearing on Forest Product Markets and Forest Management

2.1 Forest Policy 2020

The legal framework for Swiss forest policy is set down in the Swiss Federal Act on Forest¹ which is based on art. 77 of the Federal Constitution of the Swiss Confederation.² In addition to this, the Federal Council approved the Forest Policy 2020 (*FP2020*) on 31 August 2011.³ FP2020 represents the further development/evolution of the former *Swiss National Forest Programme (Swiss NFP)*. The updating of this basic concept for national forest policy became necessary in order to effectively address changing conditions within and outside the forestry sector, e.g. adaptation to climate change, invasive alien species, increased demand for wood, etc. The overarching objectives of FP2020 are the optimisation and improvement of forests in relation to the three dimensions of sustainability, i.e. the ecological, economic and social value of the forest.

As far as wood is concerned, FP2020 concentrates on the supply of wood and the efficiency of the forestry sector. Forest policy is complemented by the *Wood Resource Policy* (see chapter 2.3), which deals mainly with topics of relevance beyond the forest edge.

During the development of FP2020, efforts were made to ensure that it is consistent with the development of the *Swiss Biodiversity Strategy* (see chapter 2.2) and the *revision of the Federal CO₂ Act* (see chapter 2.5.1, page 11). With respect to the conservation of biodiversity, FP2020 adopts the *Aichi Biodiversity Targets* developed under the *Convention on Biological Diversity CBD* (see also chapter 2.2 *Swiss Biodiversity Strategy*).

The *NFP* was developed on the basis of a participative process. Representatives of the forestry sector and other relevant sectors were actively involved in the development of the FP2020.

Similarly, an Action Plan for the implementation of *Forest Policy 2020* was developed in 2012. This Action Plan was published in 2013 along with the *Forest Policy 2020* adopted by the Federal Council (also available in English, see link below). Based on this Action Plan, the Federal Council mandated the administration to prepare an amendment of the Swiss Federal Act on Forests. Although most of the measures contained in the action plan can be implemented without the adaptation of the national forest legislation, certain crucial measures require changes to the legislation. The Federal Council presented a draft of the amendment of the Swiss Federal Act on Forests for public consultation in summer 2013. The Swiss Parliament will discuss this complement in 2014.

-> <http://www.bafu.admin.ch/publikationen/publikation/01704/index.html?lang=en>

-> <http://www.bafu.admin.ch/dokumentation/medieninformation/00962/index.html?lang=fr&msg-id=48528>

2.2 Swiss Biodiversity Strategy 2020 and Action Plan

The national strategy for the conservation and promotion of biodiversity was approved by the Federal Council on 25 April 2012. In order to conserve and strengthen the diversity of ecosystem services, among other measures, sufficient areas for the protection and promotion of biodiversity will be designated by 2020. These areas also include forest areas. The biodiversity objectives shall be integrated into all relevant policy and economic sectors, including forestry. The next step, to be completed by 2014, involves the development of an action plan for the implementation of the strategy through concrete measures. All of the actors involved – mainly the cantons, communes and cities – as well as science, research and NGOs will be actively involved in the development of the action plan. The Action Plan for Biodiversity will be coordinated with the Action Plan for the *Forest Policy 2020* (see chapter 2.1) -> <http://www.bafu.admin.ch/aktionsplan-biodiversitaet/index.html?lang=fr>

¹ http://www.admin.ch/ch/e/rs/c921_0.html

² <http://www.admin.ch/ch/e/rs/c101.html>

³ <http://www.news.admin.ch/message/index.html?lang=fr&msg-id=40865>

2.3 Wood Resource Policy and Wood Promotion

It is the task of the Federal Office for the Environment (FOEN) to manage the access to Switzerland's natural resources. The main objectives for the resource wood in this regard are that it contributes to the sustainable⁴ use of wood from native forests and supports the resource-efficient use of wood. In order to implement these objectives in a targeted way, together with the cantons and the forestry and timber sector, the FOEN has formulated a Wood Resource Policy, which is coordinated with the other relevant sectoral policies (e.g. energy policy, regional development policy) and covers the period to 2020. This policy defines, among other things, the direction to be taken by federal policy in relation to wood promotion. Wood promotion activities are organised in the context of **the Wood Action Plan (Aktionsplan Holz, AP Holz)**.⁵ Six thematic focuses contribute to the implementation of the objectives of the Wood Resource Policy.⁶ Promotional and research projects that correspond to the following thematic focus areas are supported:

- 1 Data: support for knowledge transfer, economic data, utilisation strategies and the life-cycle of wood as a material and energy source (life-cycle assessment)
- 2 Mobilisation of Swiss raw wood reserves
- 3 Raising awareness of the general public and of institutional end users in relation to wood utilisation, timber structures and wood energy
- 4 Increasing the possibilities for the use of hard wood (both material and energetic)
- 5 Further development of energy-efficient and large-scale timber construction systems, use of wood in renovation projects
- 6 Design of general conditions and coordination with relevant partners on topics concerning wood

The *Wood Action Plan* was programmed to run for a period of four years (2009-2012). In May 2012, the Federal Office for the Environment (FOEN) decided to extend the programme to 2016. An evaluation showed that the measures carried out under the Wood Action Plan had generated positive stimulus for the timber sector, e.g. for timber construction through the development of fire protection and sound-proofing systems. The sector could not have achieved this under its own steam. A further CHF 4 million per year is being made available for the implementation of the Wood Action Plan.

2.3.1 NRP 66 Wood: Strategies and technologies for the optimised use of wood

New opportunities for research on wood are being created through the National Research Program **NRP 66 Holz "Strategien und Technologien zur wertoptimierten Nutzung der Ressource Holz" (NRP 66 Wood "Strategies and technologies for the optimised use of the resource wood")**. The NRP 66 "Wood" will run for four years (2012 – 2015) and has a budget of CHF 18 million. Its aim is to provide a scientific and materials-technology basis and application-oriented solutions for the increased use of wood. In the context of the holistic exploitation of the possible uses of wood, the focus of the research carried out as part of this NRP is on the optimisation of the forest-wood-chemistry-energy added-value chain. In particular, the insights gained will enable the exploitation of the possibilities offered by the cascaded use of wood ("first material then energetic use"). In order to make optimum use of the future wood potential, it is planned to use the research findings, first, to organise the traditional wood value chain more efficiently and, second, to establish an industrial base with higher added value.

For further information, see <http://www.nfp66.ch/E/Pages/home.aspx>

2.3.2 Life Cycle Assessment of biomass and wood products

Life Cycle Assessment (LCA) has proven to be a key method for the successful implementation and application of the principle of sustainable development. The concept of eco-balancing is gaining in significance against the background of climate problems and the increasing scarcity of energy, raw materials and land. Industry and the construction sector expect that ecological issues will become increasingly important factors in the context of competitiveness. Thus, it is possible to observe increas-

⁴ Sustainable: the economically efficient and socially and ecologically compatible harvesting and use of wood. This also includes the legally defined functions of the forest such as the protective function and biodiversity.

⁵ <http://www.bafu.admin.ch/aktionsplan-holz/index.html?lang=fr> – Publication of the revised version in Nov. 2013

⁶ <http://www.bafu.admin.ch/aktionsplan-holz/10300/index.html?lang=fr>

ing competition among industries that supply raw materials for the production of “ecological” construction materials or energy sources.

Establishing the life cycle inventory (LCI) of a product is not a straightforward task. Although guidelines for conducting a LCA are available, a variety of decisions remain during the setting up of the life cycle inventory that rely implicitly or explicitly on subjective elements. Consistent and coherent life cycle inventory (LCI) datasets are a prerequisite to the performance of sound LCA studies. Quality-controlled and transparently documented generic datasets increase the credibility and acceptance of LCA results. In particular, they support informed decision-making in the field of energy as well as in the field of buildings, construction components and materials.

2.3.3 Research on life-cycle analysis

- One focus area in the **National Research Programme NRP 66** (-> see chapter 2.3.1) is the life-cycle analysis of wood-based material flows; it is aimed to optimise the ecological use of wood resources in Switzerland using the results of these analyses.

-> <http://www.nfp66.ch/E/projects/life-cycle-wood-material-flows/Pages/default.aspx>

- It is impossible to carry out solid life-cycle analyses and transparent material comparisons in the absence of a quality-tested database. For this reason the Empa (the Swiss Federal Laboratories for Materials Testing and Research) developed the “**ecoinvent database**” with the aim of making the comparison of materials on the basis of their eco-balance understandable and transparent through the use of comparable methodologies.⁷ The Empa uses these data in the development of fact sheets and recommendations for sustainable building.

The authorities and Empa have been engaged in preparations for the updating of this database in the area of wood and harvested wood products since early 2008 as much of the data in this area originate from 1986, 1990 and 1999 and are therefore obsolete. At the same time, it is also intended to address methodological questions, for example that concerning the correct integration of the land use of a resource. This process is carried out with the involvement of the timber sector. The revision and updating of the ecoinvent data for wood and wood products is currently in preparation (including energy wood). Concrete results may be expected by late 2014.

One example of a comparative study carried out by the *EMPA* is its analysis of the different LCAs for the energy use of woody biomass and other biomass. One of the results indicates that there is no difference in energy efficiency between the use of wood for heating only or for combined heat and power. The total efficiency for the two uses is 60% to 95% (heat production) and 45% to 90% (combined heat and power).

2.3.4 Public procurement

The **KBOB** (*Koordinationskonferenz der Bau- und Liegenschaftsorgane der öffentlichen Bauherren*, coordination group for public construction projects) regularly publishes lists with updated data on the ecological characteristics of building materials, technologies, energy sources and transport process and additional information on the topic of sustainable building.

The KBOB recommendations contain information and suggestions for procurement bodies and model text modules for use in invitations to tender. These are aimed at the clients of construction projects, project managers and planners working at federal, cantonal and communal levels.

-> see also chapter 3.3.2 *Herkunftszeichen Schweizer Holz (label of origin)*

For further information, see: <http://www.empa.ch>;

- <http://www.bbl.admin.ch/kbob/00493/00495/index.html?lang=de> (KBOB, a coordination group for public construction projects)

- <http://www.eco-bau.ch> > *eco-bau* is a platform for public construction clients that provides recommendations for sustainable building.

- http://www.lignum.ch/fr/nouveautes/nouveautes/nouveautes/?tx_ttnews%5Btt_news%5D=1158

⁷ The Empa is an interdisciplinary research and services institution for material sciences and technology development within the ETH domain.

2.4 Policies for renewable energy and energy efficiency

2.4.1 The legal framework

The legal framework for the Swiss energy sector is mainly provided by two legislative acts: the Swiss Federal Energy Act (Energiegesetz, EnG) and the Swiss Federal Energy Supply Act (Stromversorgungsgesetz, StromVG). The measures, with which the targets defined by Swiss energy policy shall be achieved, are defined in two action plans. The measures comprise a mix of legally defined minimum standards and consumption specifications as well as incentive and promotional systems.

2.4.2 The Energy Strategy 2050

As a result of the devastating earthquake in Japan and the disaster at the Fukushima nuclear power plant, the Federal Council mandated the *DETEC (Department of the Environment, Transport, Energy and Communications)* to revise its energy strategy at the end of May 2011. The Federal Council decided to continue to safeguard Switzerland's high level of energy security – although **without nuclear energy in the medium term**. Existing nuclear power plants shall be decommissioned at the end of their operational lifespan and will not be replaced by new nuclear power plants. In order to ensure the security of supply, as part of its new Energy Strategy 2050, the Federal Council, is focusing on increased energy savings (energy efficiency), the expansion of renewable energies, and, if necessary, on fossil-fuel-based electricity production (cogeneration facilities, gas-fired combined-cycle power plants) and imports. Furthermore, Switzerland's power grid should be expanded without delay and energy research strengthened. The phasing out of nuclear power and the other strategic goals shall be achieved through a package of around 50 measures. The package will be incorporated into a bill and presented for consultation in autumn 2012. The strategy and bill will be presented for parliamentary consultation in mid-2013. If an optional referendum is not initiated, the bill could become law from 2014.

-> <http://www.bfe.admin.ch/themen/00526/00527/index.html?lang=en>

-> <http://www.bfe.admin.ch/energie/00588/00589/00644/index.html?lang=fr&msg-id=44187>

2.4.3 The cost-covering remuneration for feed-in to the electricity grid (CRF)

The Energy Act stipulates an increase in the production of electricity from renewable energy sources by 2030. One of the most significant measures concerns cost-covering remuneration for the input of electricity produced from renewable energy sources into the network. The **cost-covering remuneration for feed-in to the electricity grid**, CRF, is paid to offset the difference between total production cost (including investments) and market price. It came into force in January 2009. Electricity consumers pay a surcharge per kilowatt hour to finance the payments (and other measures introduced under the Energy Act). The tariffs for remuneration for electricity from renewable energy sources (green power) have been specified on the basis of reference facilities for each technology and output category. A gradual downward curve is foreseen for these tariffs in view of the anticipated technological progress.

In order to ensure that more forest wood, field shrubs and waste wood are used in energy generation, a price bonus is also paid for wood. The tax rate is regularly revised in accordance with the prevailing economic situation and price trends. Since 1.3.2012, small power plants (< 5MW) receive both higher remuneration and the bonus. To obtain remuneration, the producer must fulfil requirements in relation to efficiency. Thus, only electricity production from combined heat and power (CHP) qualifies for CRF. Switzerland has now nine operational CHP plants, which generate 4% of total energy production from wood energy.

For further information see: <http://www.bfe.admin.ch/themen/00612/02073/index.html?lang=en>

The CRF is a cornerstone of the promotion of renewable energies. It is complemented by the partial earmarking of revenues from the CO₂ tax for the financing of climate-related measures in buildings and by the promotional programmes carried out as part of the economic stabilisation measures and financed using special funding. The latter support, in particular, district heating systems based on renewable energy sources or waste heat. (See also chapter 3.2 *Wood energy*)

2.4.4 Biomass Strategy

In order to be able to approach the conflicts surrounding the use of biomass, a cross-sectoral strategy for the production and use of biomass was developed in 2011 and involved the cooperation of several federal authorities. The strategy is based on guidelines that specify how biomass should best be produced and used while taking societal, ethical, ecological and economic issues into account. Hence the **Swiss Biomass Strategy (*Biomassestrategie Schweiz*)** provides a basis for sectoral strategy, for example, in relation to the use of biomass for energy generation and nutrient management. Important principles include the efficiency of production and processing, the life-cycle perspective, cascaded use (food and material uses come first followed by energy use at the end of the life-cycle) and the consideration of species that are suited to the locations in which they are cultivated.

-> <http://www.bafu.admin.ch/biomasse/11126/index.html?lang=en>

2.4.5 Switzerland's binding ecological and minimum social requirements for biogenic fuels and the mineral oil tax

Amendments to the Swiss regulatory framework for mineral oil taxation were introduced in 2008 with the objective of reaching Switzerland's target on CO₂ emissions by promoting biofuels that satisfy minimum environmental and social standards. In order to benefit from tax relief, biofuels producers and importers must demonstrate that the fuels have a positive aggregate environmental impact and are produced under socially acceptable conditions. Three ecological minimum requirements must be met in order for the aggregate environmental impact to be positive: a reduction of at least 40% in greenhouse gas emissions compared to fossil fuel, no significantly greater harm to the environment than fossil fuel, and the cultivation of raw materials must not endanger tropical forest conservation and biological diversity. The burden of proof lies with the producer or importer to provide information on the type, description and quality of fuel, the entire process of fuel production, from cultivation of raw materials to the distribution of fuel to the consumers, and the impact on tropical forests and biodiversity. For example, the conservation of ecosystems of particular conservation value, such as forests, wetlands and grasslands of significant biological diversity, is prohibited. The details on how to provide proof of the positive aggregate environmental impact are regulated by the Ordinance on Proof of the Positive Aggregate Environmental Impact of Fuels from Renewable Feedstocks (Biofuels Life Cycle Assessment Ordinance, BLCAO), which came into force in 2009.

Biofuels obtained from residues or waste from agricultural or forestry production or processing are presumed to fulfil the ecological minimum requirements conditions if they were produced using the latest available technologies.

Based on the findings of a report, the Federal Council decided in mid-September 2012 that further incentives for biofuels were not necessary. The contribution of biofuels to the fulfilment of the objectives in Swiss energy and climate policy is low. These objectives can be achieved more effectively and efficiently with other instruments. Moreover, the domestic potential for the production of biofuels is limited.

-> <http://www.news.admin.ch/message/index.html?lang=fr&msg-id=45949>

2.4.6 Energy efficiency and sustainable building

Energy efficiency is a crucial parameter for all sustainable development strategies. The building stock, which accounts for half of Switzerland's energy consumption, is a particular point of focus in this context. Significant ecological and economic potential exists in the area of the construction of new buildings and renovation of old ones. Therefore, both promotional programmes and standards exist in this area at the different levels, i.e. national, cantonal, local.

- A **national building programme** for the reduction of CO₂ emissions commenced in 2010; it is financed in part by the income from the CO₂ tax (see chapter 2.5.1, page 11). The existing cantonal incentive systems are being harmonised. Only measures that outperform the legally defined minimum standards will be supported.
- The cantons make a considerable contribution to the Confederation's energy and CO₂ objectives with their cantonal promotion programmes. A large proportion of the direct subsidies are paid for im-

provements to the building envelope and for the promotion of automatic wood-fired heating systems and solar collectors.

- The Swiss cantons have implemented strict standards which have led to a marked reduction in energy consumption. The standards are based on a variety of instrument, such as fact sheets for architects and planners (SIA Merkblätter), the Minergie standard and energy certificates for old and new buildings. For a more detailed description of these instruments, see the 2011 report.

-> <http://www.unece.org/forests/market-statements-2011.html>.

2.5 Climate change and the forestry sector

Switzerland is implementing an active policy⁸ on reducing greenhouse gases. Through this policy, Switzerland is making its contribution to the international goal of limiting global warming to two degrees. The revised CO₂ Act, which took effect on 1 January 2013, is focused on reducing Switzerland's domestic emissions. **Switzerland's climate and energy policy are very closely linked.** Measures for greater energy efficiency and for the further development of renewable energy sources as a proportion of total energy consumption also impact positively on the fight against climate change.

2.5.1 CO₂ Act, incentive taxes and post-Kyoto

In the first commitment period of the Kyoto Protocol (2008 to 2012), Switzerland undertook to reduce its greenhouse gas emissions by 8% as compared with the 1990 level. The CO₂ Act passed in 1999 enshrined reduction targets for CO₂ emissions caused by heating and motor fuels for the same period. The **revised federal CO₂ Act** sets emission reduction targets **beyond 2012 (second commitment period)**. The government presented a draft revision of the act to parliament in August 2009 which proposed a reduction of Switzerland's greenhouse gas emissions of at least 20 % by 2020 (as compared with 1990 levels) and the option of increasing the target in line with international commitments beyond Kyoto. The revised act was accepted by the parliament on 23 December 2011 and entered into force on 1 January 2013 together with the 2nd commitment period under the Kyoto protocol as agreed at the UNFCCC Climate Conference in Durban in December 2011. The scope of the revised national legislation was extended from energy-related CO₂ emissions to all greenhouse gases, sinks and sources covered by the international agreement beyond Kyoto. The innovations incorporated into the legislation by the Swiss parliament include a fund for the promotion of new technologies and a passage providing for the accountability of wood products regardless of international regulations. This is in line with the Durban decisions which allow in the next commitment period to account for **harvested wood products (HWP)** as part of the Kyoto Protocol activity "forest management" (see Chapter 2.7.2).

The mix of instruments contained in the revised CO₂ Act is based on existing measures, such as the CO₂ levy on heating fuels, from which energy intensive industries can be exempted, and the building programme. However, the CO₂ tax on transport fuels, which was proposed as a subsidiary measure that would only be introduced if the targets are not reached, was dropped by the parliament. The private sector's "climate cent" is transformed into an obligation for importers of transport fuels to offset a certain percentage of CO₂ emissions. The main instrument for curbing emissions from the transport sector constitutes prescribed emission limits for passenger cars; the new car fleet shall not exceed an average target value of 130 grams per kilometre by 2015. Attempts will be made to link Switzerland's existing emissions-trading system with the European emission trading system.

A maximum of CHF 300 million from the **CO₂ tax is earmarked for subsidising CO₂-relevant measures in buildings** (i.e. a maximum of two thirds of the tax revenue). At least two third of this funding shall be dedicated to a nationally harmonised **buildings refurbishment programme** (insulation of roofs, walls, floors and ceilings and replacement of windows). A maximum of one third can be made available to the cantons by matching their budgets for the **promotion of renewable energies**, waste heat utilisation and building services engineering (see also chapter 2.4.6 *Energy efficiency and sustainable building*).

The precondition for the granting of such general subsidies by the Confederation is the existence of both a cantonal legal basis and a promotional programme. To some extent, the cantons are free to design their specific promotional programmes. With regard to renewable energies, the majority of can-

⁸ For more information visit <http://www.bafu.admin.ch/klima/12325/index.html?lang=en>

tons promote wood energy. The amount of subsidies granted by the Confederation varies based, among other things, the efficiency of the cantonal programme in the previous year.

2.5.2 Kyoto Protocol, forest management and CO2 balance of forest and wood

Switzerland chose to account for forest management as an activity under Article 3.4 of the Kyoto Protocol during the 1st Commitment period. In other words, changes in carbon stocks in Swiss forests due to forest management are taken into account in the calculations for Switzerland's compliance with its commitment under the Kyoto protocol. CO2 certificates obtained through CO2 sequestration arising from forest management, afforestation or revegetation (**Carbon Removal Units**, RMUs) will be held in the country's account. However, emissions generated through forest management and deforestation must also be accounted for through the cancellation of the corresponding amount of CO2 certificates (Assigned Amount Units, AAUs) for emissions due to forest management or deforestation the respective amount of CO2- certificates have to be cancelled. There is no legal basis for the transfer of RMUs to forest owners who are interested in participating in the CO2 market. Hence, one of the country's biggest forest companies initiated a process for the certification of its forest management to provide sink certificates for the voluntary market. Moreover, no legal basis exists for obliging forest owners to generate carbon sinks in their forests and, under current regulation, Switzerland is liable as a country if forest owners create net emissions due to forest management and must compensate for those emissions through other measures. According to current estimates, the Swiss forest is expected to provide a considerable carbon sink covering a significant proportion of the total greenhouse gas reduction obligations during the Kyoto commitment period of 2008 to 2012.

On the other hand, wood utilisation is expected to become more attractive in the years to come and this will promote the **substitution and carbon sequestration effect of wood**. The cascaded use of wood (first material use then as an energy source) replaces more CO2-intensive construction materials and fossil fuels. This substitution effect is implicitly accounted for in the greenhouse gas inventory because the consumption of fossil fuels is reduced. Swiss policy and the forestry and timber industry argue for the integration of this substitution effect to enhance the attractiveness of wood utilisation and to prevent a further increase in the already high growing stocks in the Swiss forests. A further advantage of the use of wood in construction and furniture-making is the resulting increase in the carbon stored in **harvested wood products (HWP)**. This, however, cannot be accounted for during the first Commitment Period of the Kyoto Protocol. The 2011 Durban Accords set new rules for the accounting of forest management activity in the 2nd Commitment Period under the Kyoto protocol. Accounting for forest management will be compulsory from January 2013 and HWP are an integral part of the Art. 3.4 activity *Forest Management*, provided they are domestically produced and processed. Emissions resulting from natural disturbances do not have to be accounted for if they were beyond control of the party and provided they were not anthropogenically triggered, not materially influenced by the party and the party took all possible measures to prevent and manage the event.

A study on the potential contribution of the Swiss forestry and timber sector to the reduction of CO2 emissions showed that the best long-term effect would be achieved by a scenario, in which growth increment is maximised by regular wood harvesting on a sustainable basis, thereby accounting for changes in total biomass in forests, substitution and carbon sequestration in HWPs.

2.5.3 Forest and climate change: effects and adaptation

The FOEN launched a research programme in conjunction with a number of research institutions in 2009, the aim of which is to estimate the effects of climate change on the Swiss forest, and the resulting risks for forest ecosystem services, like wood production, water protection, and biodiversity. In the first stage of the programme, up to the end of 2011, experiments were carried out along with basic research on the mechanisms and effects of climate change and their impact on trees and forests. The potential changes in tree species composition are being calculated. This will provide the basis for the scenario modelling of the effects of climate change on forest services.

The first phase of the research programme ended 2011 with a workshop and an intermediate report. The second phase started 2012 and will run up to 2015. Experiments will be continued and initial guidelines for the practice of silviculture in the context of climate change and adaptation will be devel-

oped. Forestry practitioners will be involved increasingly in the development of the implementation tools.

In 2012 the FOEN published the first part of the Swiss strategy “Adaptation to climate change”⁹. The forests with high priority in relation to adaptation measures are: critical protection forests, forests with high percentages of conifers and climate sensitive forest stands. It is the task of the research programme to define and identify measures to be taken in these categories.

2.6 Trade issues affecting the market

2.6.1 Market transparency: the Swiss duty of declaration for wood and harvested wood products

The Swiss *Ordinance on the Duty of Declaration for Wood and Harvested Wood Products* has been in force since October 2010. The implementation of its provisions has been mandatory since January 2012. The ordinance is based on the principle of market transparency. It does not contain any restrictions but obliges all traders who sell wood products **to declare the type of wood used and its country of origin, i.e. the country in which it was logged, to the end consumer**. The information provided by the declaration is intended to enable consumers to make an informed decision when purchasing wood products.

The duty of declaration is at the final point of sale. Hence, border controls do not need to be implemented.

As in the new EU regulation (see next chapter 2.6.2), the **scope** of the ordinance is based on the nomenclature of the internationally harmonised and binding customs tariff system.

Only raw wood and solid wood products must be declared during the first stage of the implementation of the ordinance. The latter also include gluelam beams (Leimbauhölzer) and solid wood furniture. Veneers, derived wood products, parquet and doors are still excluded. It is planned to record these and other wood products at a later stage when the content of the future EU regulation on wood and wood products has been clarified. The scope of the draft version of the EU wood regulation was used as a basis for the development of the scope of the Swiss regulation.

To alleviate the administrative burden on small and medium-sized companies, it is sufficient for companies to make a general declaration in the case of low-volume production.

A database is accessible on the internet (www.konsum.admin.ch), from which the following information can be obtained:

- The scientific names and trade names of the wood types required for the declaration
- The distribution areas of the wood types
- Information as to whether the type of wood in question originates from a protected species under the Convention on International trade in Endangered Species (SR 0.453).

The starting point for the further development of the Swiss regulation is set to change with the application and implementation of the EUTR on 3 March 2013 (see next chapter).

For further information, see <https://www.konsum.admin.ch/holzdeklaration/start/index.html?lang=fr>

2.6.2 European Timber Regulation, EUTR

The *European Timber Regulation, EUTR* is applicable in the EU Member states from 3 March 2013. This regulation prohibits the placing on the market of illegally logged wood and **obliges all traders who place wood products on the market for the first time to exercise due diligence**. The scope of the regulation covers almost all wood products from customs tariff chapters 44, 47, 48 and 94.

The key elements of the due diligence obligation are:

- Information and documentation on the timber type, timber origin, legality, traceability
- Risk assessment processes based on the above-specified information and a risk reduction process if a suspected risk is assessed as not negligible.

⁹ Anpassung an den Klimawandel in der Schweiz – Ziele, Herausforderungen und Handlungsfelder. Erster Teil der Strategie des Bundesrates. Bundesblatt Nr. 14 vom 03.04.2012, 6777-3858

-> If the timber originates from a country, in which a negligible risk of illegal logging exists, information need only be provided on the timber type and origin.

The application of the EUTR in the EU will have an impact on the Swiss timber sector as the EU is Switzerland's most important trading partner in the sectors affected by the regulation. Approximately 95% of timber products are exported to the EU or imported from there. All Swiss market actors who export into the EU will be indirectly obliged to provide the information to the EU traders required to fulfil their due diligence obligation.

→ Because Switzerland can be demonstrated to be a country without any risk of illegal logging, there will be no additional costs for the export of timber and timber products that can be proven to originate from Swiss timber (see also Chapter 3.3.2 *Herkunftszeichen Schweizer Holz – label of origin*).

→ Moreover, because 95% of Swiss timber imports originate from the EU and have, therefore, already been placed on the market in the EU, almost all Swiss exports may be considered as without risk and legal. Additional information will have to be provided for a small proportion of Swiss exports. This will give rise to additional costs.

<http://www.globalforestryregistry.org/> presents countries in accordance with their risk of illegal logging.

Thanks to its Forest Act – one of the strictest in the world – and its consistent implementation, Switzerland is assessed as risk-free.

For further information, see:

- http://ec.europa.eu/environment/forests/timber_regulation.htm;

- <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32010R0995:EN:NOT>;

- <http://www.globalforestryregistry.org/>

2.6.3 Swiss Timber and EUTR

The Federal Office for the Environment has developed fact sheets on how to place Swiss timber on the EU internal market under the EUTR¹⁰. The factsheet provides information on the legislation in Switzerland relating to wood harvesting and indicates its relevance in terms of the requirements of the European Timber Regulation EUTR (Regulation (EU) No 995/2010) for operators who place timber and timber products on the EU internal market for the first time. It may be used by EU operators in fulfilment of their documentation and due diligence requirements (in accordance with Art 6(1)(a) EUTR) in relation to the placement of Swiss timber on the EU internal market for the first time.

Thanks to the nationwide supervision and control by the forestry service, it is possible to guarantee that the legal provisions on sustainable forest management and timber harvesting are complied with and verified in Switzerland. This ensures that the risk of illegal timber harvesting in Switzerland is negligible.

¹⁰ <http://www.bafu.admin.ch/wald/01234/12676/index.html?lang=en>

3 Developments in Forest Product Markets

In the Swiss forestry and timber sector, the years 2011 to mid-2013 were marked by the weakening of the euro. The adjustment in the exchange rate has had obvious effects on the trade in timber products, which is strongly integrated into the global market. Approximately 95% of Swiss exports of timber products are exported to the EU or imported from the EU. The derived timber products and base paper industries, in particular, export a high proportion of their products to the EU. Due to the relative rise in the cost of their products, these industries are losing competitiveness.

As Chapter 1 shows, the Swiss economy is performing well compared to that of other European countries. The fact that this overall picture conceals an economy of two parts is demonstrated by the situation in the different branches of the forestry and timber sector:

- The strong construction sector, the increasing popularity of timber as an ecological construction material ensured a stable demand for timber and that wood-processing operations in some regions are working at a good capacity.
- The healthy domestic demand was counteracted, however, by the impeding effect of the strong Swiss franc. While the timber builders could benefit from the cheaper imports of semi-finished wood products, the margins and profits of domestic wood traders, sawmills and exporters came under pressure from the exchange rate.

In the residential construction sector, new building and extensions and property remodelling continue to operate at a high level. Timber construction is also gaining ground in multi-story construction and in industrial-commercial building. Capacities in the areas of timber construction, carpentry and interior construction are correspondingly well utilised. Their profits are mostly obtained in Swiss francs. At the same time they can purchase sawn timber, semi-finished wood products and above all glued laminated timber, derived timber products and other additional supplies in the euro zone and hence reduce their costs.

3.1 Roundwood: sawlogs, pulpwood and fuelwood

3.1.1 Developments up to mid-2013

From 2008 to mid-2013 the Swiss forestry sector was spared the effects of major storms and compulsory logging. The volumes of bark-beetle wood, which had remained high in 2007, also declined significantly and reached their lowest level for years in 2013.

A total of 4.7 million cubic metres (m³) of wood was logged in Switzerland in 2012, 8.3% less than in the previous year. Hence, wood harvesting was considerably below the average value for the past 20 years. 67% of the wood harvest, i.e. 3.1 million m³, originated from public forests and 1.6 million m³ from private forests.

The harvesting of softwood declined 2012 by 9.7% to 3.1 million m³ and hardwood harvesting declined by 5.1% to 1.58 million m³. The proportion of harvested wood accounted for by softwood has decreased from 80% to 66%, and the proportion of hardwood has increased from 20% to 34%. This reflects the trends in natural forest development: two thirds of the standing volume is softwood and declining while one third is hardwood and increasing.

3.1.2 Timber assortments and price trends

Of the 2.47 million m³ of sawlogs harvested in 2012, 2.24 million m³ or 91% were softwood and only 9% hardwood. The market for soft sawlogs in 2012/13 was influenced mainly by the pressure arising from the low euro-franc exchange rate:

Due to the changes in the exchange rate, the forestry sector had to make price reductions to be able to sell the timber abroad and also on the domestic market.

In 2012, Swiss sawmills only processed 1.86 million m³ of soft sawlogs, compared with 2.07 million m³ in 2011 and 2.40 million m³ in 2010. Whereas prices for soft sawlogs, for which demand is strong, increased abroad (Austria and Germany), over the course of 2012, they fell continuously on the do-

mestic market. As compared with the survey period September to December 2011, depending on the assortment, prices fell from 3.0 to 8.7 percent over the survey period September to December 2012. However, a slight reversal in this trend was observed in the survey period January to April 2013 in individual regions and for individual assortments.

Exports of soft sawlogs to Austria increased in 2012 whereas corresponding exports to Italy declined. Overall, exports decreased by 9.2% to 557,000 m³. In contrast, imports increased by 7.1% to 49,000 m³.

The market for beech sawlogs, the most important variety of hardwood in terms of volume, remains weak due to the lack of suitable processors. The majority of the traditional processing capacities for Swiss beechwood in northern Italy ceased operation in recent years. In the survey period January to April 2013, the price of the relatively high quality reference assortment of beech sawlogs declined by a further 4% and that of the lower quality reference assortment fell by 1%. Hence the decline in prices at the lower level decelerated considerably. The harvesting of hard sawlogs decreased again by 12% to approximately 227,000 m³, of which 143,000 m³ was exported. At around 31,000 m³ in 2012, imports of hard stemwood were also considerably lower than exports.

The harvesting of energy wood decreased by 1.5% to 1.67 million m³ and that of wood for the derived wood products and paper industries ("industrial wood") decreased slightly to 0.50 million m³.

Hence the supply of wood shifted further away from higher quality roundwood assortments to lower quality assortments for industrial processing and, above all, energy production.

Medium and lower quality beech roundwood, large volumes of which were exported to Italy or processed in Switzerland into the 1990s, now enter the expanding energy wood market.

3.1.3 Economic situation of the forestry sector

Public forestry operations manage approximately 70% of Switzerland's productive forest area. In 2012, lower sales and prices, particularly for soft roundwood, the most important assortment in terms of revenue and volumes, and higher wood harvesting costs prompted a deterioration in the economic situation of these operations. Whereas the cost of the wood harvest in the Central Plateau and Jura were covered by sales, without contributions from the public purse, it would scarcely be feasible any more in the Alpine region. Overall, at an average net yield of CHF 71 and wood harvesting cost of CHF 79, forest owners suffered a loss of CHF 8 per cubic metre of harvested wood.

As was the case in the previous year, in 2012 the state paid contributions of CHF 182 per hectare for forest management in general – in particular protective forest and young forest maintenance and for forest biodiversity services. Including operating costs for forest access, forest maintenance, welfare services, infrastructure and administration, the uncovered costs incurred by forest owners for the management of a hectare of forest total CHF 77 or CHF 17 for the harvesting of one m³ of wood.

-> see also: <http://www.bafu.admin.ch/wald/01256/12717/index.html?lang=fr&msg-id=49703>

3.1.4 Current developments

It may be assumed that the market trends observed from 2011 to 2013 will continue in 2013/14:

- The long-term buoyancy in building construction, in particular residential construction, shores up the demand for soft sawlogs.
- The high valuation of the Swiss franc against the euro generates strong pressure on imports and impacts on domestic prices in Swiss francs.
- The demand for hard sawlogs remains weak; and the market for energy wood grows.
- Demand for industrial wood may be expected to remain constant; here too the market is significantly influenced by the CHF/EUR exchange rate so that part of the demand should be covered by foreign wood.

3.2 Wood energy

At 883,000 TJ, Switzerland's total energy consumption in 2012 was nearly 3.8% higher than in the previous year. The rise in total energy consumption was due, in part, to weather conditions, however it was also partly due to increases in the size of the residential population, business services and traffic. Demand for energy wood in 2012 was 4.68 million m³ (44.9 PJ) and hence rose by 4.1% (1.8 PJ). The increase since 1990 was 13.2 PJ or 41.8%. This demonstrates the further increase in the importance of wood energy.

The total consumption of 4.68 million m³ includes combustion in waste incineration plants. The gross consumption of wood energy, excluding waste incineration plants, is 4.29 million m³ (41.2 PJ).

Of the 4.29 million m³ of fuelwood used

- 61 % originated from the forest (2.62 million m³);
- 20 % from wood processing (0.86 million m³);
- 11 % from used wood sources (0.47 million m³); and
- 8 % from wood pellets (0.34 million m³).

Although wood energy is the second most important native and renewable energy source in Switzerland after hydroelectric power, wood energy only accounts for around 4 % of the total final energy consumption, as in previous years. Due to the characteristics of this climate-neutral raw material and the subsidising of non-renewable energies, the importance of wood as an energy source continues to increase. The potential offered by energy wood (i.e. forest, slash, wood residues and used wood) will be exploited more extensively in the future. The cost-covering remuneration for feed-in to the electricity grid (CRF) for electricity generated from renewable sources affects the viability of wood-fired heating plants and, together with a desired gain in terms of image, increases the (economic) attractiveness of business with green electricity for the Swiss electricity companies.

Four large wood-fired power plants currently operate in Switzerland. A milestone in wood energy technology was reached in spring 2013 with the commencement of full operation of an innovative energy plant in Bern, the fourth largest of such plants in Switzerland, which combines a waste incineration plant, a wood-fired heat plant, a combined gas and steam power plant and a large photovoltaic power plant. It converts 112,000 tonnes of forest wood, sawnwood residues and contaminated waste wood into electricity and district heating power each year. Its operation will fully impact on the production of electricity from wood and waste from 2013.

Although the cold weather conditions prompted an increase in the demand for energy wood in 2012, the good availability of wood, partly due to the energy use of sawlogs and industrial wood, meant that this had little influence on the development of prices.

Foreign trade in fuelwood is relatively insignificant. In other words, the fuelwood harvested in Switzerland is also burned within the country.

For further information, see: Swiss Federal Office of Energy (SFOE): Schweizerische Holzenergiestatistik 2012 -> http://www.bfe.admin.ch/themen/00526/00541/00543/index.html?lang=de&dossier_id=00771

3.3 Certified forest and forest products

3.3.1 FSC and PEFC certification

Approximately 0.66 million ha of Swiss forest (i.e. 52 % of the total forest area) was certified in 2012. Of these certified areas, more than the half have both **FSC and PEFC certification**. Of the timber harvested in Switzerland in 2012, 69 % was certified.

At present, over 900 companies operating at all levels in the timber processing sector hold a certificate. In contrast to the situation in the forestry sector, the majority of these companies, only hold the FSC certificate. Thus, the Swiss wholesale distributors, which also hold a significant share of the market in the DIY sector, are FSC-certified. 30% hold both the FSC and PEFC certificate. At present there are no companies in Switzerland that are solely PEFC-certified.

In 2009 a **national certification standard**, which forms the basis of certification for FSC and PEFC in Switzerland, was introduced by both label organisations. However, this harmonisation is criticised today as the competition between the private labels is disappearing as a result of its introduction.

The main driving forces for certification in Switzerland are the DIY sector and the demand for certified paper products. However, the sellers of certified wood cannot demand a higher price (“green premium”). Thus the market does not compensate for the additional costs incurred in certification. For this reason, certification is a contentious issue in the forestry and timber sector.

3.3.2 “Herkunftszeichen Schweizer Holz” (label of origin)

The origin of the wood is not declared under the FSC and PEFC certification systems. In 2009 the forestry and timber industry introduced a new label (“*Herkunftszeichen Schweizer Holz*”, *HSH*). It is managed by LIGNUM, the Swiss timber sector umbrella organization. Its main purpose is to show and prove the Swiss origin of timber products. The intention here is to raise the awareness of end users about Swiss wood that is produced in accordance with the strict sustainability requirements of the Swiss forest legislation and has not caused environmental pollution as a result of being transported over long distances.

The HSH guarantees the traceability and documentation of a wood product from its origin to the end user. Products bearing the *Herkunftszeichen Schweizer Holz* label of origin may contain up to 20% of wood of foreign origin if it comes from a comparable production region (low risk origin) and has a sustainability certificate or declaration of origin.

Since September 2011, all wood originating from Swiss forest areas can be marked with the *Herkunftszeichen Schweizer Holz* label of origin. Use rights are assigned to forest owners if they are prepared to fulfil the conditions of the regulation. The cantonal forestry sector associations monitor compliance with the regulation requirements.

-> http://www.lignum.ch/fr/technique/certification_du_bois/

-> <http://www.wvs.ch/fr/taches-centrales/dossiers/certificat-dorigine-bois-suisse.html>



3.3.3 Public procurement

Recommendations exist for public procurement in Switzerland. The recommendation for the procurement of sustainably produced wood requires that 100% of the material originate from legal and sustainably managed sources. Previously, proof was provided by the sustainability certification based on the FSC and PEFC systems. The origin of the wood is now also applicable if a country’s legal provisions and reliable implementation guarantee the sustainable development of its forests. This is guaranteed in the case of Switzerland. The *Herkunftszeichen Schweizer Holz* is valid as proof of Swiss origin. -> http://www.lignum.ch/fr/nouveautes/nouveautes/nouveautes/?tx_ttnews%5Btt_news%5D=1158

3.4 Sawnwood

Swiss sawmills largely covered their sawlog requirements from domestic sources – at prices charged in Swiss francs. They also export sawnwood and sawnwood residues into the Euro zone. As a result **they face a double and correspondingly severe competitive disadvantage vis-à-vis their competitors from the EU**. Moreover, the Italian sawnwood market, a traditional sales channel, is declining, and, on the domestic market, traditional wood boards cut to the customer’s specifications for construction purposes, are being increasingly replaced by further processed semi-finished products such as glued construction timber. The prices of imported glued-laminated beams correspond approximately to those that Swiss laminated wood producers have to pay for domestic sawnwood.

Due to ongoing price pressure from imports, despite good domestic demand, domestic prices for almost all sawnwood assortments fell further from the January/February 2011 survey period to the May/June 2013 survey period. Gluelam slats for gluelam beam production (–8.4% and –9.6%) and palette boards (–11.5%) were particularly affected by this development.

The volume of soft sawlogs cut by Swiss sawmills decreased to 1.77 million m³ in 2012, which gave a production volume of 1.08 million m³ of soft sawn timber. Both imports and exports of soft sawlogs declined in 2012 by 5.9% to 385,000 m³ and 191,000 m³ respectively.

The Swiss sawmills generated 728,000 m³ of soft sawnwood residues, of which 18% were used to generate energy within the operations themselves and 23% by third parties; 49% went to the paper and wood-based panel industries and 10% was used in other ways as raw materials.

Whereas 33% of the wood that was harvested in 2012 in the Swiss forest was hardwood, only 5% of the wood cut in the sawmills is hardwood. This can be explained by the fact that the construction sector mainly uses softwood. Hence consumer and business demand is not quite in tune with the natural wood supply of the Swiss forest. This is problematic from an environmental economics perspective as cascaded use¹¹ is desired by politics and society and is supposed to be implemented consistently.

3.5 Pulpwood-processing sector

In 2012, 503,000 m³ of industrial wood was harvested, of which 56% was softwood. 77,000 m³ of industrial wood was imported and 101,000 m³ exported, giving a domestic consumption of industrial wood of 479,000 m³ for 2012. 350,000 m³ of sawnwood residues were supplied to industrial processors by the Swiss sawmills in 2012; 368,000 m³ were imported and 75,000 m³ exported which gives a calculated domestic consumption of 643,000 m³ of sawnwood residues. It may be calculated from this that the paper and paperboard industry acquired around 1.12 million m³ of industrial wood. Due to the strong concentration of the correspondingly low number of operations, it has become more difficult to obtain precise data.

Imports of industrial roundwood are subject to major fluctuations as the internationally oriented industrial wood processors take greater account of the prevailing supply situation and currency developments than the sawmills when purchasing raw wood.

3.5.1 Wood-based panels

The production of wood-based panels in Switzerland is shared by only two companies, one of which produces particleboard and the other various forms of fibreboard. Since early 2010, export figures are no longer published for data protection reasons and have to be estimated.

2012 was again a mixed year for the Swiss particle board and fibreboard industry. It benefited from the strong construction economy and from energy-based building renovation but is under pressure in the export sector. Particleboard production in 2012 is estimated at around 0.40 million m³ while that of fibreboard is estimated at 0.55 m³.

Soft fibreboard is preferred for the energy-based renovation of buildings and used for high-quality heat and noise insulation. Particleboard is mainly used in the production of furniture and in interior construction. Hard fibreboard is not produced in Switzerland.

3.5.2 Pulp and paper

Although the restructuring process in the European paper industry had further impacts on Switzerland in 2012, it did not give rise to any more plant closures. Raw material and energy prices, excess production capacity and currency difficulties remained the main challenges facing the sector in 2012.

At 1.24 million tonnes, the 11 remaining plants produced less paper and paperboard than in 2011 (1.38 million tonnes). Of the delivered products, 32% was newsprint, 28% other graphic papers, 6% sanitary and household paper and 26% packaging material.

In 2012, 0.98 million tonnes of paper and paperboard were exported and 0.86 million tonnes or 69% of Swiss production were exported.

Paper and paperboard consumption in 2012 was 1.37 million tonnes or 171 kg per capita; the corresponding figure for 2011 was 1.45 million tonnes/182 kg per capita.

Switzerland's main trading partner for paper and paperboard is Germany. In 2012, 37.5% of imports originated from there and 43% of exports were sent there. With a market share of 20%, Switzerland's second most important export partner was Italy.

¹¹ Cascaded use refers to the principle whereby particularly high quality wood is first used for long-lasting products and is only made available for energy use at the end of the lifecycle of these products.

The paper producers import their entire cellulose requirements as cellulose is no longer produced in Switzerland since 2008.

4 Tables

4.1 Economic Indicators for Switzerland

Economic Indicators for Switzerland

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 ^F	2014 ^F
Economic growth in %¹	2.4	2.7	3.8	3.8	2.2	-1.9	3	1.8	1	1.8	2.3
Inflation in %²	0.8	1.2	1.1	0.7	2.4	-0.5	0.7	0.2	-0.7	-0.1	0.2
Unemployment rate in %³	3.9	3.8	3.3	2.8	2.6	3.7	3.5	2.8	2.9	3	3
Interest yields in 10-year government bond in %⁴	2.7	2.1	2.5	2.9	2.9	2.2	1.6	1.5	0.7	1.1	1.2
Currency rate⁴											
EUR	1.54	1.55	1.57	1.64	1.59	1.51	1.38	1.23	1.21	1.2	1.2
USD	1.24	1.25	1.25	1.2	1.08	1.09	1.04	0.89	0.93	0.95	1


1) State Secretariat for Economic Affairs SECO, revised 2012 in accordance with NOGA 2008 (Nomenclature Générale des Activités économiques), statistical series retrospectively revised

2) Consumer Price Index, Swiss Federal Statistical Office BFS

3) State Secretariat for Economic Affairs SECO

4) Swiss National Bank SNB

4.2 Forest products production and trade in 2011–12; Estimations/Forecasts for 2013–14

Product Code		Product	Unit	Historical data		Revised	Estimate	Forecast
				2011	2012	2012	2013	2014
				Country: Switzerland		Date: 09/24/2013		
		TF1		Name of Official responsible for reply:				
		UNECE TIMBER FORECAST QUESTIONNAIRE		Official Address (in full):				
		Roundwood		Telephone:				
				Fax:				
				E-mail:				
1.2.1.C		SAWLOGS AND VENEER LOGS, CONIFEROUS						
		Removals	1000 m ³	2'568	2'131	2'241	2'300	2'400
		Imports	1000 m ³	46 #	45 #	49	50	50
		Exports	1000 m ³	613 #	600 #	537	500	500
		Apparent consumption	1000 m ³	2'001	1'576	1'753	1'850	1'950
1.2.1.NC		SAWLOGS AND VENEER LOGS, NON-CONIFEROUS						
		Removals	1000 m ³	259	276	227	200	175
		Imports	1000 m ³	50 #	30 #	31	35	40
		Exports	1000 m ³	204 #	190 #	143	120	100
		Apparent consumption	1000 m ³	105	116	115	115	115
1.2.1.NC.T		of which, tropical logs						
		Imports	1000 m ³	2 #	2 #	1	1	1
		Exports	1000 m ³	2 #	2 #	0	0	0
		Net Trade	1000 m ³	0	0	1	1	1
1.2.2.C		PULPWOOD (ROUND AND SPLIT), CONIFEROUS						
		Removals	1000 m ³	296	253	284	290	290
		Imports	1000 m ³	151 #	140 #	76	70	70
		Exports	1000 m ³	62 #	50 #	58	55	55
		Apparent consumption	1000 m ³	385	343	302	305	305
1.2.2.NC		PULPWOOD (ROUND AND SPLIT), NON-CONIFEROUS						
		Removals	1000 m ³	237	206	219	210	205
		Imports	1000 m ³	0 #	0 #	0	0	0
		Exports	1000 m ³	47 #	40 #	43	35	30
		Apparent consumption	1000 m ³	190	166	176	175	175
3		WOOD RESIDUES, CHIPS AND PARTICLES						
		Domestic supply	1000 m ³	846 C	846 C	728	750	775
		Imports	1000 m ³	557 C	489 C	489	500	500
		Exports	1000 m ³	1'127 C	995 C	995	1'000	1'000
		Apparent consumption	1000 m ³	276	340	222	250	275
1.2.3.C		OTHER INDUSTRIAL ROUNDWOOD, CONIFEROUS						
		Removals	1000 m ³	13	52	11	10	10
1.2.3.NC		OTHER INDUSTRIAL ROUNDWOOD, NON-CONIFEROUS						
		Removals	1000 m ³	4	29	4	3	3
1.1.C		WOOD FUEL, CONIFEROUS						
		Removals	1000 m ³	535	499	544	580	620
1.1.NC		WOOD FUEL, NON-CONIFEROUS						
		Removals	1000 m ³	1'163	1'000	1'129	1'150	1'250



TF2

UNECE TIMBER FORECAST QUESTIONNAIRE Forest products

Country: Switzerland	Date: 09/24/2013
Name of Official responsible for reply:	
Official Address (in full):	
Telephone:	
Fax:	
E-mail:	

Product Code	Product	Unit	Historical data		Revised	Estimate	Forecast
			2011	2012	2012	2013	2014
5.C	SAWNWOOD, CONIFEROUS						
	Production	1000 m ³	1'251	1'079		1'100	1'200
	Imports	1000 m ³	409	385		400	400
	Exports	1000 m ³	203	191		200	250
	Apparent consumption	1000 m ³	1'457	1'274		1'300	1'350
5.NC	SAWNWOOD, NON-CONIFEROUS						
	Production	1000 m ³	63	24	56	55	55
	Imports	1000 m ³	65	62	61	60	60
	Exports	1000 m ³	16	15	15	15	15
	Apparent consumption	1000 m ³	111	72	102	100	100
5.NC.T	of which, tropical sawnwood						
	Production	1000 m ³	3 R	3 R	3	3	3
	Imports	1000 m ³	23	21	21	20	20
	Exports	1000 m ³	2	1	1	1	1
	Apparent consumption	1000 m ³	24	23	23	22	22
6.1	VENEER SHEETS						
	Production	1000 m ³	5 C	5 C	5	5	5
	Imports	1000 m ³	5 C	5 C	5	5	5
	Exports	1000 m ³	3 C	3 C	3	3	3
	Apparent consumption	1000 m ³	6	6	7	7	7
6.1.NC.T	of which, tropical veneer sheets						
	Production	1000 m ³	0 N	0 N	0	0	0
	Imports	1000 m ³	0	0	0	0	0
	Exports	1000 m ³	0	0	0	0	0
	Apparent consumption	1000 m ³	0	0	0	0	0
6.2	PLYWOOD						
	Production	1000 m ³	8 C	7 C	7	7	7
	Imports	1000 m ³	74 C	86 C	50	50	50
	Exports	1000 m ³	3 C	3 C	3	3	3
	Apparent consumption	1000 m ³	79	90	54	54	54
6.2.NC.T	of which, tropical plywood						
	Production	1000 m ³	0 N	0 N	0	0	0
	Imports	1000 m ³	23	22	3	3	2
	Exports	1000 m ³	3	3	3	1	1
	Apparent consumption	1000 m ³	20	20	0	2	1
6.3	PARTICLE BOARD (including OSB)						
	Production	1000 m ³	400 E	545 E	405	410	420
	Imports	1000 m ³	258	255	251	250	250
	Exports	1000 m ³	249 E	253	253	250	250
	Apparent consumption	1000 m ³	409	547	403	410	420
6.3.1	of which, OSB						
	Production	1000 m ³	0	0	0	0	0
	Imports	1000 m ³	72	79	79	85	90
	Exports	1000 m ³	0	0	0	0	0
	Apparent consumption	1000 m ³	71	79	79	85	90
6.4	FIBREBOARD						
	Production	1000 m ³	553 C	553 C	544	550	560
	Imports	1000 m ³	189 C	205 C	205	210	210
	Exports	1000 m ³	418 C	419 C	419	420	420
	Apparent consumption	1000 m ³	324	340	330	340	350
6.4.1	Hardboard						
	Production	1000 m ³	0	0	0	0	0
	Imports	1000 m ³	37	32	32	32	32
	Exports	1000 m ³	1 R	1 R	1	1	1
	Apparent consumption	1000 m ³	36	32	31	31	31
6.4.2	MDF (Medium density)						
	Production	1000 m ³	220	220 R	200	210	215
	Imports	1000 m ³	80	82	82	80	80
	Exports	1000 m ³	203	203 R	197	200	200
	Apparent consumption	1000 m ³	97	99	85	90	95
6.4.3	Other fibreboard						
	Production	1000 m ³	333	333 R	344	330	320
	Imports	1000 m ³	73	91	91	110	125
	Exports	1000 m ³	215	215 R	215	215	215
	Apparent consumption	1000 m ³	191	209	220	225	230
7	WOOD PULP						
	Production	1000 m.t.	142 C	134 C	134	140	140
	Imports	1000 m.t.	295 C	202 C	202	205	210
	Exports	1000 m.t.	8 C	1 C	1	1	1
	Apparent consumption	1000 m.t.	429	336	335	344	349
10	PAPER & PAPERBOARD						
	Production	1000 m.t.	1'376 C	1'249 C	1'249	1'255	1'260
	Imports	1000 m.t.	866 C	810 C	981	985	990
	Exports	1000 m.t.	894 C	835 C	856	865	870
	Apparent consumption	1000 m.t.	1'347	1'224	1'374	1'375	1'380