UN Economic Commission for Europe Committee on Forests and the Forest Industry Eighty-first session San Marino, 20-23 November 2023

#### **MARKET STATEMENT OF THE CZECH REPUBLIC 2023**

1. General economic trends affecting forests and the sector of forest industries Global economic growth is slowing down. While the supply chains are no longer functioning without significant problems, inflation remains high in many countries despite a gradual decline and continues to reduce household purchasing power significantly. Previous monetary tightening by central banks has also dampened economic activities.

According to the preliminary estimate of the Czech Statistical Office, real gross domestic product of the Czech Republic, which has been adjusted for seasonal and calendar effects, increased by 0.1% quarter-on-quarter, and declined by 0.6% year-on-year in Q2 2023. In Q1 2023, for which detailed data on the structure of growth are available, GDP fell by 0.2% year-on-year (unadjusted).

In Q1, household consumption fell by 5.8% year-on-year. Consumer spending was negatively affected not only by the fall in real disposable income, caused by very high inflation, but also by the increased savings rate. General government consumption rose by 2.8% due to increased public sector employment and purchases of goods and services.

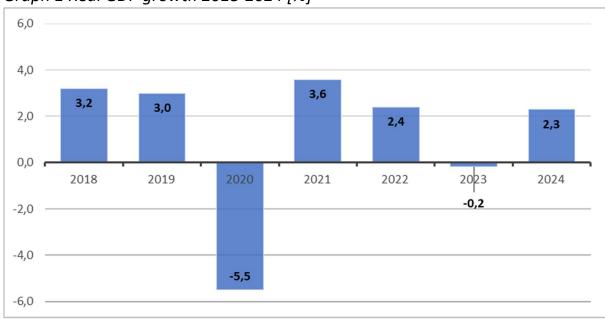
The decline in gross fixed capital formation deepened to 2.3%. Investment activities were stimulated by investment in machinery and equipment, but other categories showed a decline, most notably investment in dwellings. From a sectoral perspective, the decline in investment by households and firms was cushioned by higher investment spending by government institutions.

The change in stocks and valuables subtracted 0.5 pp from economic growth. Thus, while firms continued to increase their stocks of production inputs sharply in order to avoid losses arising from high inflation and possible shortfalls in the supply of components, inventory accumulation declined on the year-on-year basis.

The foreign trade balance supported economic growth to the extent of 3.0 pp. While exports of goods and services increased by 7.6%, imports increased by

only 3.9%. Improvements in supply chains allowed firms to complete work-inprogress production which was subsequently exported. Imports were also dampened by weak domestic demand.

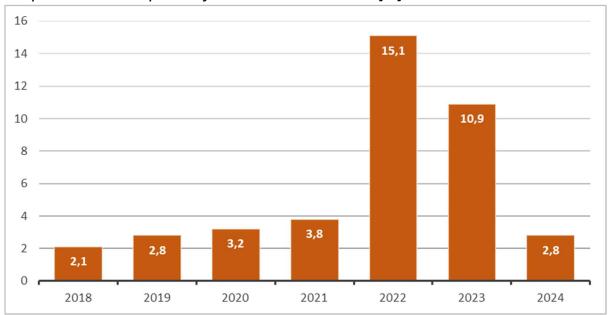
For the whole year 2023, GDP could fall by 0.2% (after adjusting for calendar effects, it should be flat). Households continue to face the impact of high inflation this year, and their real consumption should be falling further. Government institutions consumption and gross fixed capital formation will be pro-growth, but weaker year-on-year stocks accumulation will slow the economy noticeably. The impact of generally weak domestic demand will be largely offset by the external trade balance. In 2024, the economy's performance could increase by 2.3%, mainly thanks to renewed growth in household consumption. However, economic activity will be slightly dampened due to the consolidation package, which will also contribute to reduce inflationary pressures.



Graph 1 Real GDP growth 2018-2024 [%]

High inflation slows economic growth and decreases living standards. Not only food, electricity, and natural gas, but also other categories of goods and services are contributing significantly to the exceptionally strong rise in consumer prices. Strong domestic demand pressures are already being dampened by higher monetary policy rates. The strengthening of the CZK is also having an anti-inflationary effect. Annual inflation declined at a fast pace during the first half of this year and should remain in high single digits in the second half of the year. The base effect of the energy saving tariff will have a year-on-year effect towards the end of the year. The average inflation rate could thus reach 10.9% this year.

Throughout 2024, year-on-year consumer price inflation could already be within the tolerance band of the Czech National Bank's inflation target. In annual terms, we expect a decline to 2.8%.



Graph 2 Consumer price inflation rate 2018-2024 [%]

# 2. Policy measures which might have a bearing on forest management or production and trade of forest products

## The concept of state forestry policy until 2035

At the level of forestry policy, the Concept of State Forestry Policy until 2035 which was approved by the Government in 2020 is in force. The aim of this policy is to achieve the following: "Forests for society": sustainable multifunctional forests and forest management that reflects the current and expected needs of society. Forests contribute to a better quality of life, provide habitat, recreational opportunities, health benefits, while maintaining and improving environment quality and delivering ecological values. Sustainable forest management provides ecosystem services which are environmental, economic, social, and cultural benefits for society. They also provide a renewable raw material whose production and use are environment friendly and play an important role in economic development, employment, and prosperity, especially in rural areas.

The long-term objectives of the concept, for which measures and instruments for their achievement are defined, are as follows:

A. To ensure balanced and full performance of all forest functions for future generations.

- B. To increase biodiversity and ecological stability of forest ecosystems while maintaining production functions in the face of ongoing climate change.
- C. To ensure competitiveness of forestry and forest-based industries and their importance for regional development.
- D. To strengthen importance of consultancy, education, research, and innovation in forestry.

The concept is accompanied by an application document which further specifies the individual measures into specific sub-tasks, for which the responsible institutions, deadlines, and indicators for implementation, expected costs and economic instruments are defined.

# The policy of wood raw material

In the area of forestry, the Czech government has set by itself a task to develop the policy of wood raw material and promote wood as a renewable material in the construction sector, at least in public procurements. Its preparation started in 2022 and all major stakeholders in the forestry sector in the Czech Republic are involved in the preparatory team of the policy. As part of the preparation, projections of removals possible up to 2050 were prepared. The outlook of potential wood supply, based on the database of forest management plans and taking into account the realistic development of calamity up to 2021, shows possible average annual removals around 15 million m³ by 2050. This volume corresponds to the volume of removals in the pre-calamity years 2011-2014 and assumes that the current bark beetle calamity will cease. Coniferous wood removals are then expected to be around 14 million m³ (2024-2033), 12 million m³ (2034-2043) and 11 million m³ (2044-2053).

### Wood energy

No new policy or strategy has been adopted on wood energy use. As part of the government's forthcoming austerity package, the VAT rate on fuel woods is set to increase from 15% to 21%. This will result in increased prices of fuelwood, wood pellets and wood briquettes.

# The Czech Republic's concept of bioeconomy from the perspective of the Ministry of Agriculture for the period 2019-2024

In the field of bioeconomy, the Concept of Bioeconomy in the Czech Republic from the perspective of the Ministry of Agriculture for 2019-2024 is in force, which was approved in 2019. The aim of the Concept is to promote the development of bioeconomy, the main idea of which is to ensure sustainable management of natural resources; sustainable agriculture, forestry, water management and aquaculture; sustainable production of food and feed; and to strengthen the role of primary producers and their integration into the bioeconomy value chain and, on the forestry side, the involvement of the entire value chain of associated sectors.

## The Strategic Framework for Circular Economy of the Czech Republic 2040

The Strategic Framework for Circular Economy of the Czech Republic 2040 (Circular Czechia 2040) was approved by the Government in December 2021. It reflects the necessity of promoting the principles of circular economy in the Czech Republic and includes the circular economy among its priorities. It focuses 10 areas: products and design; consumption and consumers; waste management; industry, raw materials, construction, energy; bioeconomy and food; circular cities and infrastructure; water; research, development, and innovation; education and knowledge; and economic instruments. It then defines objectives, principles, and actions in these areas. Circular Czechia aims to maintain the value of products, materials, and resources for as long as possible in the economic cycle and return them to the production cycle at the end of their use, while minimising waste. The strategy primarily intends to minimise the production of waste itself, to improve waste management by emphasising recycling (by promoting the recycling technologies) and reuse, particularly in the areas of bio-waste, textile, construction and food waste, packaging, and e-waste.

Forests and wood products are listed under Bioeconomy and food area. The main points are listed below:

- Wood is a natural, renewable, reusable, and recyclable raw material. If it
  is harvested from sustainably managed forests, converted and used in a
  way that minimises negative impacts on the climate and the environment,
  while ensuring livelihoods, its role can be sustainable.
- Forests, forestry, and forest-based sectors form the basis of Europe's bioeconomy. New opportunities are emerging for the forestry sector to

replace unsustainable raw materials in the construction and packaging sectors with bio-based materials and to provide sustainable innovations in the sectors such as forest-based textiles, furniture, and chemicals, as well as new business models based on the valuation of forest ecosystem services.

- The 2018 revised legislative proposals on waste also include a mandatory EU-level recycling target for wood packaging waste.
- In order to develop the bioeconomy, it is important to promote the highest possible use of wood as a renewable raw material. There is a need to increase the primary processing capacity of wood, including other related industries in the Czech Republic, and to include wood in the strategic commodities of the state and to develop strategic materials in the field of increased use of wood, wood research and bioeconomy.
- To increase the processing capacity of wood raw material in the Czech Republic and to process wood with a higher added value, the wood processing industry should be further developed, including a greater use of wood in construction. This should be ensured by methodologies or recommendations that directly promote the use of wood and wood-based materials in public construction procurements and identify appropriate types of buildings for their use.

### Public procurements

In 2020, an amendment to the Public Procurement Act was adopted, which introduces a requirement to give preference to environmental procurement. The Ministry of Agriculture prepared a methodology "Guide to the use of wood in public procurements", which contains 11 sheets and is designed as a brief introduction to the possibilities and reasons for using wood in public procurements, including examples of good practice, a brief indication of the ways of application in the project documentation or in the tender documentation of public procurement. The examples focus on the office and other buildings, infrastructure, and furnishings.

#### Biotic and abiotic agents

With effect from 1 January 2023, a general action containing extraordinary measures of a positive nature was terminated, which purposely simplified the existing rules. This general action is giving to forest owners more flexibility to make the most efficient use of limited working capacities to improve the fight against bark beetle and the gradual reforestation of calamity areas. Among other things, this measure allowed the owners to postpone the harvesting of sterile

dead trees. The Ministry of Agriculture recommends forest owners to proceed with the reforestation of remaining stands with standing dead trees without undue delay.

#### 3. Market drivers

#### Construction sector

According to the Czech Statistical Office (CSO), the year-on-year construction output fell by 2.2% in January-July 2023, mainly due to civil engineering which declined by 6.1%. The year-on-year output of civil engineering was rather stagnant.

The year-on-year volume of new construction contracts which the CSO monitors for construction companies with 50 and more employees fell by 15.8% in the first half of 2023. Similarly, as with the construction industry outputs, the decline in the value of construction contracts was driven by civil engineering, where the comparative base was very high, especially in Q2, and the quarter-point decline is not a big surprise. In civil engineering, new construction contracts fell by 3.5% year-on-year due to the Q1 result.

Building authorities issued 45.5 thousand building permits from January to July 2023, representing a year-on-year decline of 10.7%. Residential construction moved into the completion phase in 2023. While the started housing construction fell by nearly a fifth in the period from January to July 2023, completions were strong. 20,825 dwellings were completed, and the number increased by 3.2% as compared with the previous year.

In 2023, construction companies expect the market to decline by -1.5% and for 2024 a slight downward trend to market stagnation at -0.5% is expected.

The share of realized wooden houses shows the maintenance of a long-term share in the construction market. Thus, the share of wooden houses in the total number of family houses reached an average of 14.1% in 2022, which means that every seventh house was constructed as a wooden house.

## 4. Developments in forests and forest products market sectors

## Weather development

In the Czech Republic, 2022 was the fifth warmest year in the history of temperature measurements (since 1961). The average temperature reached 9.2 °C, which is by 0.9 °C higher than the 1991-2020 normal. The beginning of the year, June and October 2022, were particularly warm. In terms of rainfall, 2022 was normal, with significantly lower than normal rainfall recorded in March and October. In terms of the development of forest stands and the impact of weather on the progress of the bark beetle calamity, 2022 can be assessed as a favourable year, mainly because the most significant dry periods occurred outside the main part of the growing season - in March and autumn. High temperatures in the summer period were offset by relatively abundant rainfall, particularly during June and August. Locally, however, droughts did occur. There were also several episodes of strong winds during the year, which resulted in damage to forests.

## Development of bark beetle calamity

The favourable weather in 2022 led to a slowdown in the development of bark beetles and the spread of infestation in the first half of the growing season and at the end of 2022.

The total volume of salvage removals decreased by 6.5 million m<sup>3</sup> year-on-year. There was a year-on-year increase of 1 million m<sup>3</sup> in the case of abiotic salvage removals and a decrease of 6.7 million m<sup>3</sup> in the case of removals due to insects.

million m³
40 
35 
25 
20 
15 
10 
5 
10 
5 
10 
5 
10 
5 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 
10 -

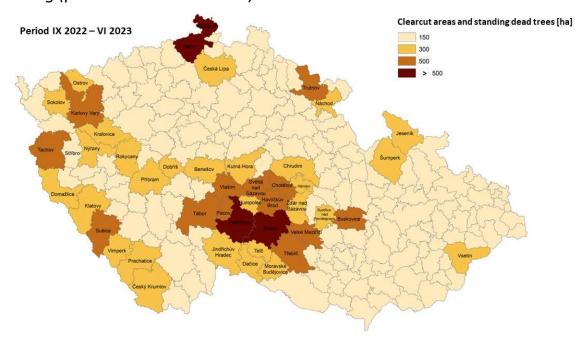
Graph 3 Development of intentional and salvage removals [mill.m<sup>3</sup>]

During the winter and spring of 2023, warm weather alternated with cold weather, with plenty of snow and rain. As a result, there was a repeated year-on-year decline in the volume of infested timber. Neither the fall in prices in the first half of 2023 nor localised sales restrictions have increased the stock of bark-beetle-wood yet.

1965

In addition to terrestrial measurements, remote sensing tools are also used to monitor the progress of the bark beetle calamity. The parameters detected are clear-cut areas and standing dead trees (unprocessed, new). Clear-cut areas are detected from orthophoto and satellite images (Planet, Sentinel). Standing dead trees are detected only from satellite images. Both parameters are always evaluated as a difference between the periods when the source images were made. When comparing the area of standing dead trees with the previous assessment from September 2022, the total area of approximately 4,400 ha was reduced, which means a reduction by 33%.

Pict 1 Detection of new clearcut areas and standing dead trees from remote sensing (period IX 2022 – VI 2023)



#### Wood removals development

The state enterprise (Lesy České republiky, s.p.) which has under management 45% of the forest area in the Czech Republic expects total removals decreased to 8.5 million m<sup>3</sup> in 2023. This means a year-on-year decrease by more than 20%. The other state enterprise (Vojenské lesy a statky, s.p.) which manages almost 5% of the forest area, also expects a year-on-year decline by about 12% in total removals.

Compared to 2022, when total wood removals for the Czech Republic reached 25.1 million m³, a decrease to around 19.5 million m³ can be expected in 2023. For coniferous sawlogs, this means a year-on-year decline in supply of 4 million m³ (- 28%) and for coniferous pulpwood of 1.1 million m³ (- 20%). Year-on-year decreases of 0.1 million m³ (-20%) are also predicted for non-coniferous sawlogs and 0.1 million m³ (-15%) for non-coniferous pulpwood. The decrease in fuelwood supply could be around 10%, as most households using fuelwood were stocked-up in 2022.

The situation in 2024 will depend mainly on weather and timely processed salvage felling. If the situation is favourable, a further slight decline or stagnation can be expected. In the meantime, total wood removals are assumed to fall by 3%.

## Wood-processing industries

Within the wood processing industry (NACE Sawmilling and impregnation of wood), total assets increased by CZK 9.849 billion over the period 2017-2021, for which data are available, with the largest increases recorded in 2020 and 2021. Fixed assets also increased by almost CZK 10 billion to CZK 26.249 billion, of which an increase in tangible fixed assets of CZK 4.4 billion and current assets of CZK 5.25 billion. Based on these figures, it can be stated that companies invested in technology and repairs of existing assets, while at the same time there was a large increase in the value of stocks, receivables, but also short-term financial assets. The sector invested heavily in tangible fixed assets, with the value of tangible fixed assets increasing from CZK 7.3 billion to CZK 11.7 billion over the five years under review, especially in 2020 and 2021, when large investments in these assets were made. On the positive side, these assets were largely financed from generated profits and partly from long-term sources.

In 2020, a new large-capacity sawmill was opened in Štětí with an annual sawing capacity of 1 million m³ of coniferous sawlogs. Stora Enso invested approximately EUR 79 million in a new production line for CLT panels in Ždírec nad Doubravou. Construction was completed in Q3 2022, when the first panel was also produced. The planned annual production capacity will be approximately 120,000 m³ once fully operational, generating annual sales of approximately EUR 70 million.

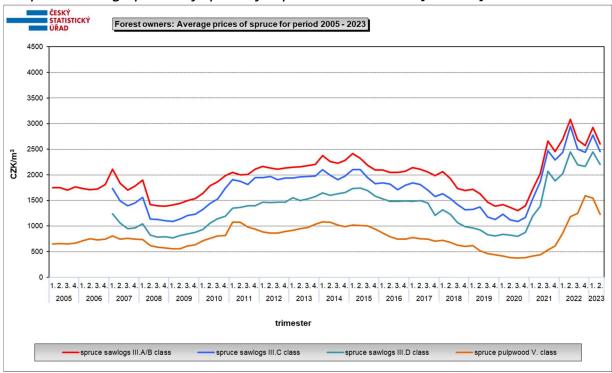
Revenues in 2017-2020 were around CZK 25 billion, with a significant increase by 46% in 2021 to CZK 36.26 billion. Value added per employee also grew throughout the period and a significant increase was recorded in 2021.

The year 2022 was marked by significant fluctuations in sawlog and sawn wood prices for sawmills. Especially in the case of spruce sawlogs, the price of which, after the previous rise in the first half of the year, began to gradually fall from June, as did the prices of construction timber produced from it, which often approached the break-even point. On the other hand, due to the energy crisis, all sawmill by-products suitable for burning in boiler houses and households, such as sawlogs edgings, wood chips, sawdust and bark, experienced a positive development.

The year 2023 continues to be marked by significant fluctuations in sawlog and sawn wood prices, as well as by the effects of inflation and rising costs on the one hand and the marketing crisis on the other. The first quarter recorded increased sawlog prices compared to the end of 2022, followed by an 11% price

decline in the second quarter. Reasons for the fall in sawlog prices are not only very poor sales of sawn wood and other sawn wood products, but also their prices which have fallen by 35-50 % year-on-year, depending on the product range. In the second half of the year, sawlog prices are no longer falling significantly, but are rather stagnating. In some segments of the construction industry, the sharp drop in demand is continuing. Overall, the development in the Czech Republic is very similar to that in neighbouring countries and, because of the sales crisis, overall sawmill production has fallen by 20-30 %.

For coniferous sawn wood, which is dominant in the Czech Republic, we expect a 20% decrease in production to 3.8 million m<sup>3</sup> and for non-coniferous sawn wood a decrease by 25% is expected to 0.17 million m<sup>3</sup>. In 2024, no significant improvement is expected yet, so we only assume a 7% year-on-year increase in production and 5% in consumption.



Graph 4 Average prices of spruce for period 2005-2023 [mill.m<sup>3</sup>]

The reduced production in the sawmill sector has also had a significant impact on the production of wood pellets of which 182 000 t were produced in the first half of 2023, reducing the production by 15% year-on-year. The same decline can be expected for the whole year 2023. In 2024, we expect the production to increase by 5%.

After stagnating at the end of 2022 and in the first quarter of 2023, the price of pulpwood fell by 20% in the second quarter of 2023, more than the price of sawlogs.

Compared to the first half of 2022, the decline in the production of paper and paperboard in the Czech Republic in the first half of 2023 was 18%. The same trend applies to pulp production. Meanwhile, no significant improvement is expected in 2024, which is why we assume a 2% year-on-year increase in production and consumption.

## Foreign trade (January-August 2023)

In the area of foreign trade, the January-August 2023 period recorded a 44% year-on-year decline in exports of coniferous industrial round wood as compared to the same period in 2022 and a slight 15% increase in imports. Imports of spruce sawlogs increased the most, by 57%. In the case of non-coniferous industrial round wood, imports fell slightly by 17% and exports by 14%.

Over the same period, there was also a 29% year-on-year decline in coniferous sawn wood exports and a 21% decline in imports. A similar decline was also recorded for non-coniferous sawn wood, with imports falling by 28% and exports by 24%.

A year-on-year decline in imports and exports was also recorded for woodchips, where imports and exports both fell by 30%. In the case of wood pellets, only exports decreased by 18 %.

Wood-based panels also showed a decline in imports and exports. For particleboards, imports and exports fell by 9% and 18% respectively, and for OSB, imports and exports fell by 10%. A larger drop in foreign trade was observed for MDF, where imports fell by 26% and exports by 16%.

Wood pulp recorded a year-on-year decline of 20% in imports and 18% in exports, mirroring the decline in its production. A similar decline was recorded for paper and paperboard, where imports fell by 16% and exports by 18%.

# 5. Gender and human rights issues related to the forest market sector

Promotion of gender equality is one of long-term priorities of the Government of the Czech Republic. The first document at the level of the Government of the Czech Republic used to coordinate activities in promoting gender equality was adopted in 1998 - Priorities and Government Procedures for Promoting Equal Opportunities for Women and Men. These priorities and procedures were

subsequently adopted annually by the Government of the Czech Republic and set the framework for the implementation of gender equality policy. Progress in achieving gender equality has been monitored since 1998 through regular reports on gender equality.

In 2001, the Government Council for Gender Equality (the Council) was established as an advisory body to the Government specifically in this area. Since 2001, the Council has adopted several recommendations and suggestions addressed to the Government of the Czech Republic. A key moment for the effective promotion of gender equality was the adoption of the Government Strategy for Gender Equality in the Czech Republic for 2014-2020.

Strategy 2021+ (2021-2030) is the second framework government document for the implementation of gender equality policy in the Czech Republic. The aim of Strategy 2021+ is to formulate a framework for government measures that will contribute to achieve gender equality in the Czech Republic. The purpose of these measures is to build on positive changes that have been achieved in some areas of gender equality and to reverse negative trends where they persist or intensify. Most state institutions, not only in the forestry sector, build on this strategy and develop and promote their own gender equality strategies.

The number of female students at secondary and higher education institutions with a forestry focus is steadily increasing and a gradual increase in the number of women working in the forestry sector in the Czech Republic can be expected.