



**SUSTAINABLE RESOURCES**  
Verification Scheme GmbH

Risk assessment of  
unsustainable production  
forest biomass  
for the Czech Republic

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Date: 2025-10-14

## 1. Information about the author of the risk assessment

Version 3:

**CZ Biom and the collective of external experts in the bioenergy sector.**

Version 2:

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Version 1:

**Mr Jaroslav Tymrak**

Mr Jaroslav Tymrak is a graduate of the Mendel Agriculture and Forestry University in Brno (Czech Republic) with 25 years professional experience in forestry sector, processing and trade of forest-based products.

Mr Tymrak owns a consulting company Woodmotion Sarl registered in the Grand Duchy of Luxembourg and provides services in design for forest management standards, certification schemes, timber procurement, evaluation of sustainability criteria on forest land, corporate social responsibility and relating reporting in forestry sector, etc.

Mr Tymrak worked as a Technical Director of the PEFC Council International (Luxembourg and Geneva) and was cooperating with several international organisations, including EU, UN, FAO, ITTO, etc.

## 2. Scope of the risk assessment

The risk assessment relates for the geographical boundaries of the Czech Republic. This covers 2,923 million hectares of forests that represents 37.1 % of the total forest area<sup>1</sup>. The National Forest Inventory (“NFI”) in the Czech Republic is conducted in four-year cycles. The data presented here are based on third inventory cycle, covering the period 2016–2020.

The forest land is officially registered by the Czech cadastre office<sup>2</sup>.

<sup>1</sup> <https://nli.gov.cz/plocha-lesa-a-lesnatost-v-ceske-republice/>; accessed on 23. 8. 2025

<sup>2</sup> State Administration of Land Surveying and Cadastre, [www.cuzk.cz](http://www.cuzk.cz). The results from the fourth inventory cycle (for the period 2021–2024) are not yet available at the time of this risk analysis processing.

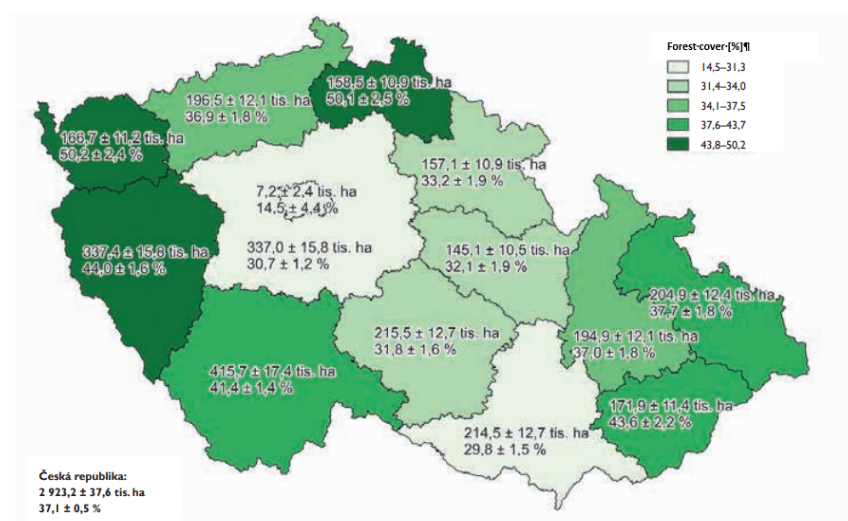
### 3. Structure of the forestry and wood processing industry in the Czech Republic

#### 3.1. Description of forest industry

##### A. State of the forests

###### Forest area

The forest area in the Czech Republic represents 2,923,200 hectares, 37.1 % of the total area and the Czech Republic. The forest area is continuously growing, during the period between 2000 and 2023 the area increased approximately 56 %. In comparison with the year 2020, the increase is due to intensified efforts to reforest clearings following extensive unplanned logging. Although conditions for natural regeneration on calamity-hit areas have substantially declined, the overall area of natural regeneration can still be viewed positively.



Source: <https://nli.gov.cz/plocha-lesa-a-lesnatost-v-ceske-republice/>

###### Forest ownership

State ownership accounts for more than half of forested areas (53.69 %), with public forests representing 70.86 % of the total forested area.

State	53.69 %
Legal persons	3.46 %
Municipalities	17.17 %
Religious organisations	5.41 %
Cooperatives	1.20 %
Private natural persons	19.06 %
Other classified forests	0.01 %

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

###### Forest categories

Following the Forest Act (No. 289/1995 Coll.), as amended, the forest in the Czech Republic is classified into three categories of production forests, protective forests and special purpose forests where the protective and special purpose forests represent 26 % of the total forest area.

Production forests	74.03 %
Protective forests	2.05 %
Special purpose forests	23.92 %

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

The protective and special purpose forests are forests with environmental, social and protection functions are the primary objectives and forest management and include forests in high elevation, special nature protection areas, with education and research functions or dedicated primarily to recreation. Between 2000 and 2023, 2.7 % of forest area reclassified from category of commercial forest to the category of special-purpose forest.

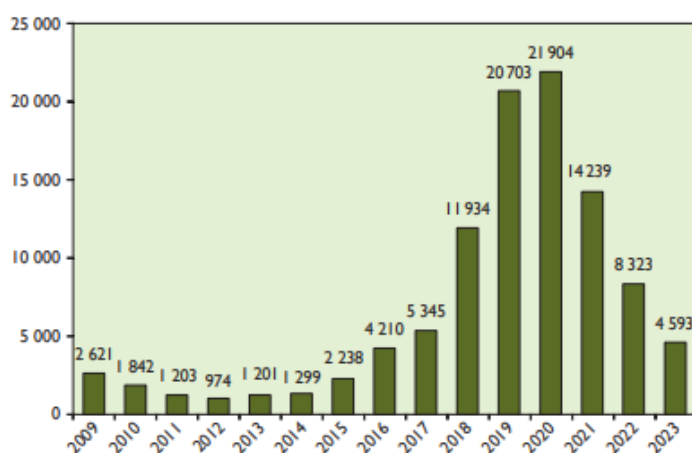
### Tree species composition

In terms of tree species composition, conifers dominate (67.7 %) — with spruce and pine being the most represented. However, the total area of coniferous species has been decreasing compared to 2020. In contrast, the share of deciduous tree species has been gradually increasing (by 1.2 % in 2023 compared to 2020), with a decline particularly in spruce, due to the management of bark beetle calamities that occurred in previous years in the Czech Republic.

Besides the overall representation of individual species, another important indicator for assessing forest biodiversity is the occurrence of species mixtures within forest management units. The proportion of species mixtures within these units has been steadily increasing, favoring mixed stands with a predominance of deciduous trees (more beech, oak, and maple appear). Achieving an optimal tree species composition in forests has long been supported by targeted state subsidy policies.

Species (%)	2000	2010	2020	2023
	Area of land in forests of the Czech Republic in %			
Spruce ( <i>Picea abies</i> )	54.1	51.9	48.8	46.0
Fir ( <i>Abies alba</i> )	0.9	1.0	1.2	1.3
Pine ( <i>Pinus silvestris</i> )	17.6	16.8	16.1	16.0
Larch ( <i>Larix decidua</i> )	3.8	3.9	3.9	4.0
Other conifers	0.2	0.2	0.4	0.5
Oak ( <i>Quercus Sp.</i> )	6.3	6.9	7.5	7.9
Beech ( <i>Fagus sylvatica</i> )	6.0	7.3	9.0	9.8
Birch ( <i>Tilia Sp.</i> )	2.9	2.8	2.8	2.9
Other broadleaves	7.1	8.1	8.9	9.3

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

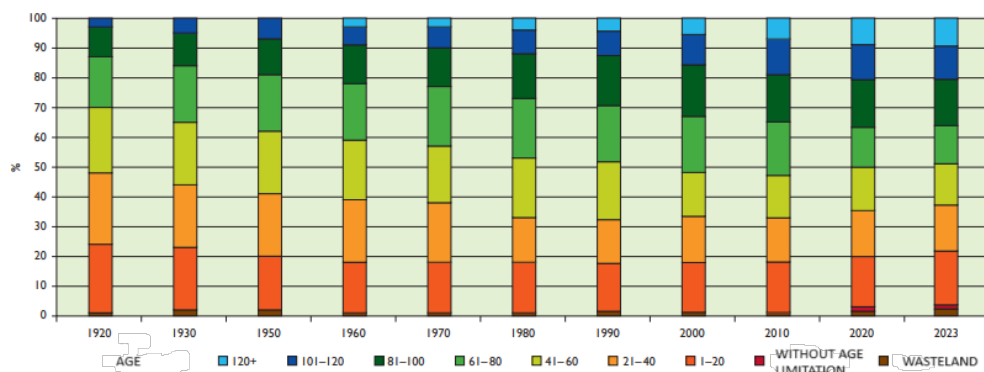


Source: Registered volume of spruce bark wood harvested between 2009 and 2023 (thousand m<sup>3</sup>)  
<https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Age of the forest

Average age of the Czech forests is growing and during the last decades is growing the proportion of older forest stands (above 120 years). This can be caused by changes in management of specially

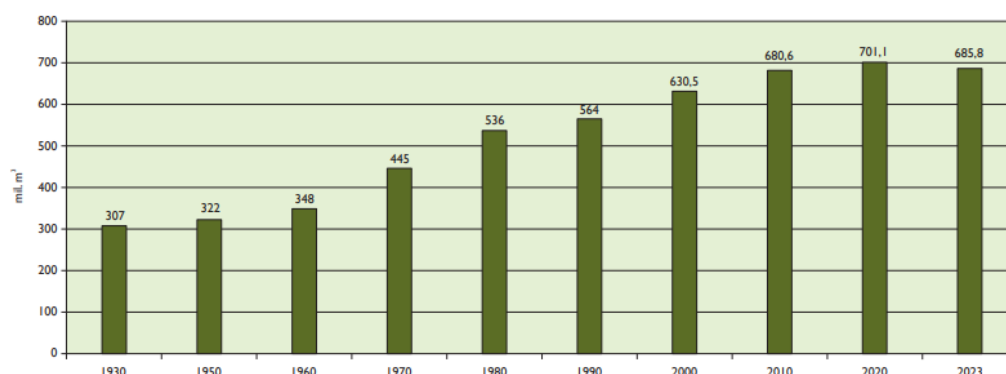
protected areas and protective forests and growth of the protected areas as well as postponed regeneration of old forest stands in areas that difficult accessibility.



Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Timber volume in forests

Compared to 1930, the volume of standing timber in forests has increased by more than 100 %. In the last decade, the values of timber stocks in forests have stagnated. The average volume per hectare of forest land is 262.56 m<sup>3</sup>.



Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Forest and nature protection

The system of the special protected areas in the Czech Republic, i.e. areas that are significant and unique from for its biological or esthetical purposes, is governed by Act **No. 114/1992 Coll. on Protection of Nature and Landscape**, as amended. The law defines specific categories of large-scale protected areas and the conditions for the protection of these areas specified in detail according to their categories (National parks – “NP” and Protected Landscape areas – “CHKO”) and small-scale protected areas (National nature reserves – “NPR”, National nature monuments – “NPP”, Nature Reserves – “PR”, Nature Monuments – “PP”).

Categories	NP	CHKO	NPR	NPP	PR	PP
Number of areas	4	26	110	126	818	1 594
Total areas (1 000 ha)	119	1 138	30	8.3	43.5	33.6
% of total area of the Czech Republic	1.51	14.42	0.38	0.1	0.55	0.43

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

The area of specially protected areas currently amounts to 1,326 thousand hectares, which represent 16.8 % of the total area of the Czech Republic.

According to Act **No. 114/1992 Coll.**, on the Protection of Nature and the Landscape, as amended, not only protected areas within the Czech Republic are designated, but also sites forming part of the Natura 2000 network. These are based on the requirements of Directive **2009/147/EC** of the European Parliament and of the Council and Council Directive **92/43/EEC**.

The Natura 2000 network consists of two types of protected areas: Special Protection Areas (“SPAs”) and Sites of Community Importance (“SCIs”). The Czech government designated all 41 SPAs by individual government regulations in the period 2004–2009. The 1,112 SCIs are included in the so-called “National list”, which was approved by the Government of the Czech Republic and published in the form of Government Regulation **No. 318/2013 Coll.**, on the Establishment of the National List of Sites of Community Importance, as amended.

The subject of protection in the Sites of Community Importance on the territory of the Czech Republic includes forest ecosystems, specifically 16 types of forest natural habitats. In total, 244,363.5 hectares of forest habitats are protected within the Sites of Community Importance, which represents approximately 32.5 % of the total area of these sites and about 10 % of the total forest area in the Czech Republic.

#### **Outbreak, damage, biotic and abiotic effects in forestry**

In 2023, the total volume of salvage logging caused by abiotic factors was approximately 3.7 million m<sup>3</sup>, representing a significant year-on-year decrease (2022 – approx. 6.6 million m<sup>3</sup>).

The largest share (about 62 %) of abiotic damage was caused by wind – windthrow and windbreaks – primarily affecting coniferous stands (dominated by spruce and pine). Other causes included drought (approx. 32 %), wet snow (approx. 3 %), and glaze ice (approx. 0.9 %).

From the perspective of biotic factors, a total of 4.6 million m<sup>3</sup> of spruce bark beetle-damaged timber was recorded in 2023. Compared to the previous period, this represents a significant decrease of more than two-fifths. This volume consisted almost exclusively of timber infested by the spruce bark beetle (*Ips typographus*). From a long-term perspective, the total volume of recorded bark beetle-damaged timber in 2023 corresponded closely to the situation in 2016.

The occurrence of defoliating insects was registered on a total area of approximately 1.1 thousand hectares (2022 – approx. 0.45 thousand hectares).

#### **Monitoring of Forest Health Status**

Forest health in the Czech Republic has been monitored since 1986 as part of the international cooperative programme of the United Nations Economic Commission for Europe (“UNECE”), abbreviated as ICP Forests. This programme represents one of the most important European forest ecosystem monitoring systems. Regular assessments of forest health are conducted through a systematic grid (known as Level I) under the ICP Forests programme, comprising 306 monitoring plots distributed across the entire territory of the Czech Republic according to forest cover. The plots are located within forest stands in such a way that they accurately represent specific site and stand conditions.

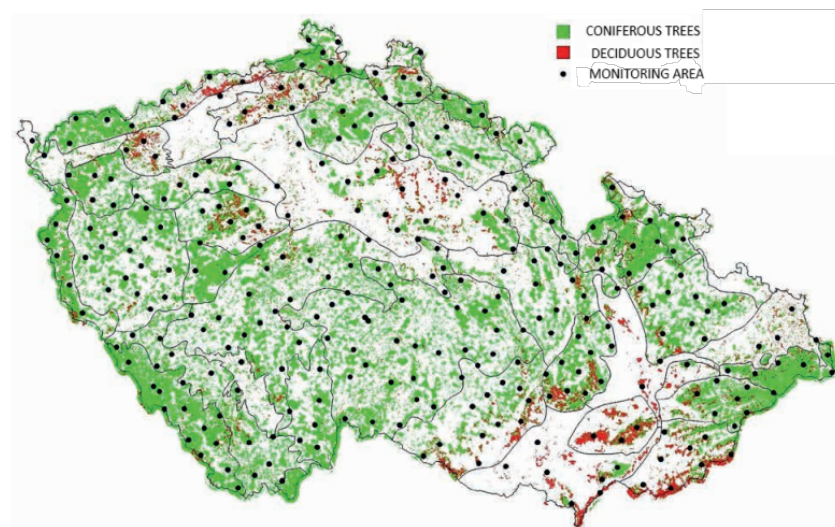
In 2023, approximately 8,600 trees were assessed on these monitoring plots, representing 28 different tree species across various age classes.

In parallel with ground-based monitoring, remote sensing methods using satellite imagery have been employed for many years in the Czech Republic. Forest health is evaluated using time-series analysis of satellite data from the Sentinel-2 satellites, acquired within the Copernicus Programme of the European Space Agency (“ESA”) since 2016.

To assess the development of forest health over time, a certified methodology developed by the Czech Forest Research Institute is used. This methodology is based on interannual comparison of

imagery acquired during the peak of the vegetation period (i.e., phenological summer, June to August).

The evaluated indicator is not the absolute Leaf Area Index (“LAI”) values but rather the trend of changes observed over biennial time intervals.



Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf> - Level I monitoring plots overlaid on a satellite image of forest cover in the Czech Republic

### Forest certification schemes

The Czech forests are certified by two dominating forest certification schemes – the **PEFC** (Programme for the Endorsement of Forest Certification schemes) and the **FSC** (Forest Stewardship Council) system.

**FSC CR** is the Czech representative of the international organization Forest Stewardship Council ([www.fsc.org](http://www.fsc.org)). The area of FSC-certified forests in the Czech Republic in 2023 amounted 133,240 hectares. In total, 8 forest management certificates were registered, representing 69 forest owners or managers. In the same year, 356 certificates were issued within the associated processing chain (Chain of Custody certification).

**PEFC** is a globally widespread forest and wood-processing industry certification system that supports sustainable forest management. PEFC Czech Republic is part of the most widely used global forest certification system, based in Geneva ([www.pefc.org](http://www.pefc.org)), and serves as the national governing body for PEFC in the Czech Republic. In the Czech Republic, 70 % of the forest area is certified under the PEFC system.

Ownership	PEFC	FSC*
	Area of certified forests (ha)	
State forests	1 338 226	-
Individuals	84 146	-
Legal entities	178 162	-
Municipal forests	181 748	-
<b>Total</b>	<b>1 782 282</b>	<b>133 240</b>

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

Note: Detailed data by type of ownership are not available for 2023.

## 3.2. Description of the timber volume and timber use

### Timber stock

The total stock of timber is 685.8 million m<sup>3</sup>. The average stock of timber per hectare is 262.56 m<sup>3</sup>.

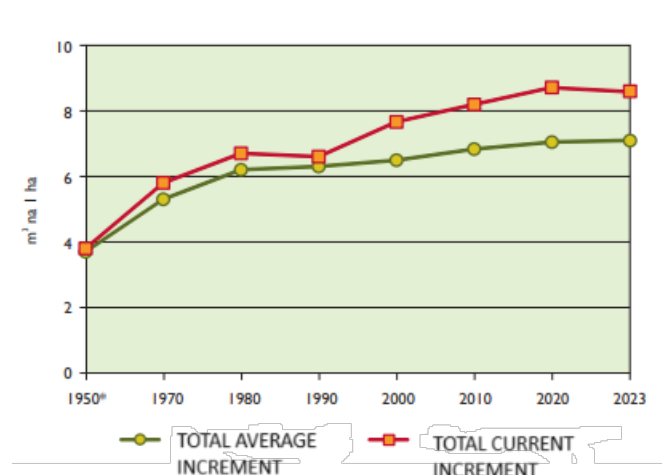
Although the total stock has been increasing in the long term, the occurrence of calamities reduces it in the short term. With more frequent calamities (windstorms, droughts, attacks by the spruce bark beetle (*Ips typographus*)), a longer-term stagnation or even decline in the stock is possible.

### Growth

For the assessment of the principles of balance and long-term sustainability of harvesting potential, the decisive factor is the total average increment, which reflects the productive capacity of forest sites. The total average annual growth rate in 2023 was 18.2 million m<sup>3</sup>, i.e. 7.1 m<sup>3</sup> per 1 ha of forest land. The average annual growth shows an increase for the last 70 years (1950 – 3.7 m<sup>3</sup>/ha). This also determines the production and harvesting potential for sustainable forest management.

In 2023, the area of regenerated forest stands amounted to 44,788 ha, thus showing – in comparison to previous years – a continued elevated level of regeneration area as a result of the forester's efforts to reforest clearings after intensive incidental logging.

As a result, since 2016, there has been a decrease in the total area of clearings. The area of natural regeneration can also be positively evaluated, although the conditions for natural regeneration are significantly worse in areas affected by calamities.



Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

Total annual growth resulting from national forest inventory between the inventory in 2011-2015 (NIL 2) and 2016-2020 (NIL 3) was 26.01 ± 0.82 mil. m<sup>3</sup>/year (without bark). Difference between the growth figures presented above are caused by different calculation and data collection methods.

### Rotation period

The average rotation period has reached 115.3 years in 2023 and has been growing since the last 100 years (in 1920 – the average rotation period: 93.4 years).

Year	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	2023
Rotation period	93.4	92.5	95.4	101.1	101.2	102.6	108.1	112.4	115.8	114.7	115.3	115.1

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Harvesting

In 2023 a total of 18.49 million m<sup>3</sup> of raw wood was harvested in the forests of the Czech Republic, which means a decrease of 6.617 million m<sup>3</sup> compared to the previous year. This volume was largely contributed by the processing of salvage logging in the amount of 11.03 million m<sup>3</sup> of wood. The

share of salvage logging was 59.7 % (95 % in 2020), and unfavourable initial conditions for planned forest management continue to exist.

In terms of the composition of the harvest level by tree species, the volume of softwood harvesting decreased by 6.45 million m<sup>3</sup> compared to 2020 to a total of 16.60 million m<sup>3</sup>. The share of softwood harvest in the total harvest was approximately 90 %. The proportion of hardwood and softwood harvests is mainly determined by the processing of salvage (bark beetle) harvests.

Harvesting	MU	2000	2010	2015	2020	2022	2023
Coniferous	mil.m <sup>3</sup>	12.85	15.07	14.38	34.49	23.05	16.60
Broadleaved		1.59	1.67	1.78	1.26	2.06	1.89
Total		14.44	16.74	16.16	35.75	25.11	18.49

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

The share of coniferous timber in the total volume of harvested wood reached approximately 90 %. The proportion between broadleaved and coniferous timber harvests is primarily determined by the extend of salvage logging, particularly the processing of wood damaged by bark beetle infestations.

With the exemptions of harvesting levels during the period 2019-2021, the harvesting does not exceed the level of average growth. Harvests during 2019-2021 were mainly influenced by the bark beetle outbreak in spruce forests.

### 3.3. Description of the wood processing industry

#### Import and export of rough timber

The export of raw wood (i.e. goods under codes 44011100, 44011200, 44031100 to 44039900, i.e. forestry products only) reached a volume of 5,143 thousand m<sup>3</sup> in 2023 — showing a year-on-year decrease in coniferous logs and pulpwood, broadleaved pulpwood, coniferous and broadleaved fuelwood, while an increase was recorded only in broadleaved logs.

The import of raw wood increased year-on-year to 1,570 thousand m<sup>3</sup> — showing a rise in coniferous logs and a decline in coniferous and broadleaved pulpwood, as well as in broadleaved logs and fuelwood.

The import of raw wood was carried out predominantly from EU-27 countries, accounting for 93.3 % of the total import value — mainly from Germany (31.3 %), Poland (26 %), and Slovakia (19.6 %).

Exports to EU-27 countries accounted for 93.1 % of the total export value — primarily to Austria (54 %), Germany (16.7 %), Slovakia (9.5 %), Poland (8.2 %), and Romania (3.3 %).

Outside the EU-27, the highest volume of raw wood was exported to the People's Republic of China.

Trade balance	2021			2022			2023		
	Export	Import	Balance	Export	Import	Balance	Export	Import	Balance
Total	24 332	2 493	21 839	23 075	4 036	19 039	12 176	4 024	8 152
of which EU-27	21 411	2 444	18 967	20 284	3 784	16 500	11 338	3 754	7 584

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

#### Sawmilling industry

The timber industry processes almost exclusively domestic renewable raw material – raw timber, mostly coniferous and deciduous logs, by cutting them into sawn timber. In total, 7.400 million m<sup>3</sup> of coniferous and broadleaved logs were processed domestically by sawing, of which 4.201 million m<sup>3</sup> of coniferous sawn timber and 0.220 million m<sup>3</sup> of broadleaved sawn timber were produced.

Compared to the previous year, the production of coniferous and broadleaved sawnwood decreased by 521 thousand m<sup>3</sup>. A total of 1,687 thousand m<sup>3</sup> was exported, while imports reached 498 thousand m<sup>3</sup>, resulting in a decline in domestic sawnwood consumption by 57 thousand m<sup>3</sup>.

The partial decrease in sawnwood consumption is due to reduced construction of timber buildings and a decline in the production of windows, floors, and stairs during home renovations. In the Czech Republic, timber construction — whether purely wooden or in combination with other materials — continues to stagnate.

### Pulp and paper industry

According to the Statistical Classification of Economic Activities (CZ – NACE 17.11–17.29), this includes the manufacture of paper and paper products, the production of pulp, paper, and paperboard.

The total wood consumption for the production of paper-grade and viscose pulp amounted to 4,204 thousand m<sup>3</sup> of coniferous roundwood (broken down into approximately 2,803 thousand m<sup>3</sup> of coniferous pulpwood and 1,401 thousand m<sup>3</sup> of coniferous wood chips and particles).

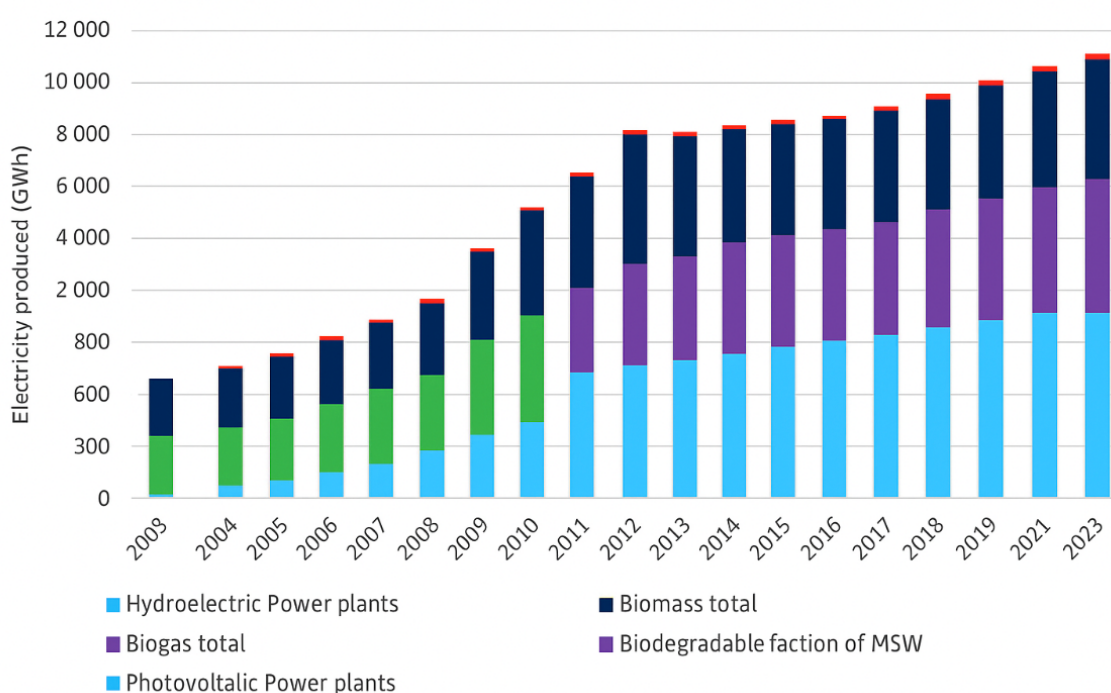
Of this total wood consumption, imports accounted for 574 thousand m<sup>3</sup> of coniferous pulpwood and 96 thousand m<sup>3</sup> of coniferous wood chips and particles.

In 2023, the pulp and paper industry produced 503 thousand tonnes of paper-grade pulp, of which 501 thousand tonnes were chemical pulp. The production of paper-grade pulp thus decreased year-on-year by 137 thousand tonnes. In addition, viscose pulp is also produced (approximately 285 thousand tonnes).

### Energy sector

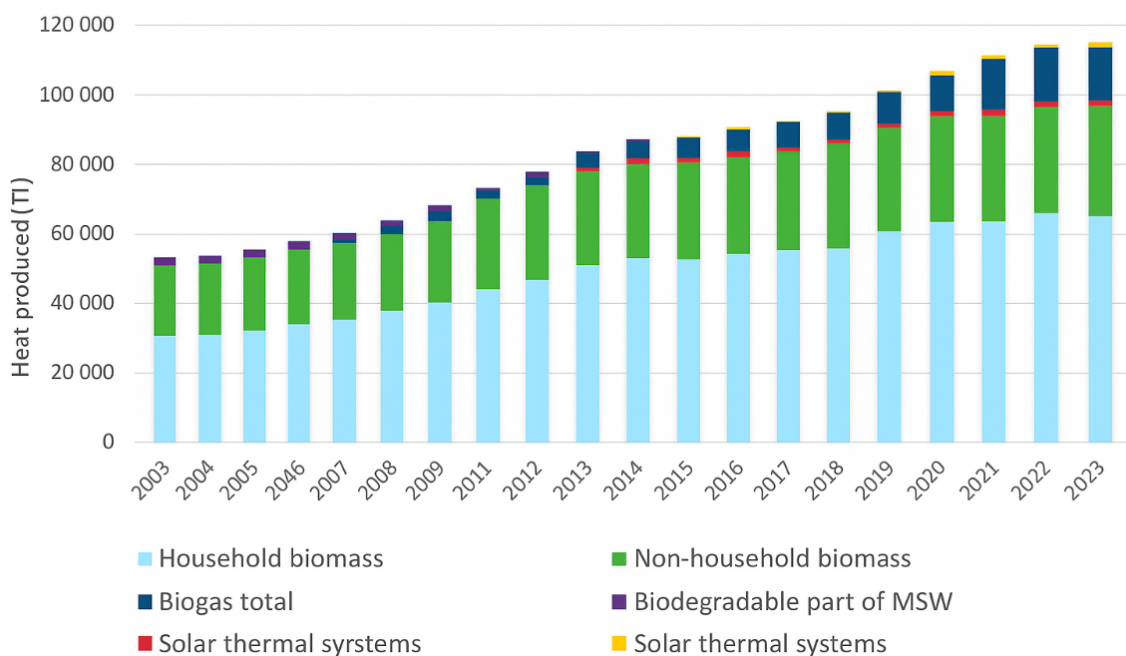
According to data from the Ministry of Industry and Trade, the energy sector produced 2,438,510 MWh of electricity in 2023 (21.88% share of electricity from RES, 3.17% share of gross electricity production). Of this, wood chips accounted for 1,332,803 MWh (12.52% share of electricity from RES, 1.73% share of gross electricity production), cellulose leachates accounted for 796,928 MWh (7.49% share of electricity from RES, share of gross electricity production 1.04%), and pellets and briquettes accounted for 212,610 MWh of electricity (share of electricity from RES 2.00%, share of gross electricity production 0.28%).

Gross electricity production from renewable sources - Time series



According to the same statistics, heat production in 2023 totaled 86,510,880 GJ. Of this, 26,138,325 GJ was biomass outside households and 60,372,555 GJ was biomass in households. Wood chips accounted for 14,462,488 GJ of heat from biomass outside households (12.74% share of heat from RES), cellulose extracts accounted for 10,084,956 GJ (8.88% share of heat from RES), and briquettes and pellets accounted for 841,146 GJ of heat (0.74% share of heat from RES).

### Gross Heat Production from Renewable Sources – Time series



The production of all fuelwood showed a decline of 31.4%, representing a production of 5,110 thousand m<sup>3</sup> in 2021 against 6,717 thousand m<sup>3</sup> in 2020.

The increase in production in the Czech Republic was recorded for production of wood pellets for energy purposes of about 500,000 tonnes (from a total of 40 pellet mills in the Czech Republic). This is 12.5% more ecological fuel than in 2019. At the same time, 94.5% of the pellets produced had international certification of the highest quality EN plus A1. The Czech Republic exported almost ¾ of the domestic production of pellets to Germany, Austria and Italy. Pellet production has been increasing every year as pellet plants take advantage of the surplus of bark beetle wood in forests and low wood prices. According to the Czech Pellet Cluster, the pellet production will continue to grow in the near future. The pellet market (or sales of pellets) exceeded CZK 2 billion in 2020.

#### Other wood-based products

The production and market for other wood-based products in the Czech Republic have remained broadly in line with the normal trend of recent years. This is a selection of wood-based products such as particleboard, OSB, fibreboard, plywood, wood chips and particles and wood residues, wood pellets and other agglomerates.

a) **Particleboard, including OSB.** The production reached 1.640 thousand m<sup>3</sup> in 2023 against 1.650 thousand m<sup>3</sup> in 2022. Domestic consumption was 1.009 thousand m<sup>3</sup>. The year-on-year decrease in domestic consumption was 14 %.

b) **Fibreboard.** The production was 40 thousand m<sup>3</sup> in 2023, compared to 40 thousand m<sup>3</sup> in 2022, an annual decrease of 65 %. Domestic consumption was 116 thousand m<sup>3</sup>.

c) **Plywood.** The production was 230 thousand m<sup>3</sup> in 2023 against 240 thousand m<sup>3</sup> in 2022, with an annual decrease of 4 %. Domestic consumption was recorded at 148 thousand m<sup>3</sup>.

d) **Wood chips, particles and residues.** The production totalled 1.460 thousand m<sup>3</sup> in 2023 against 1.699 thousand m<sup>3</sup> in 2022, an annual decrease of 15 %. Domestic consumption was 1.004 thousand m<sup>3</sup>.

#### **Wood consumption in the Czech Republic**

It remains the case that the structure of production in the Czech pulp and paper industry does not correspond to domestic demand. Paper consumption in the Czech Republic significantly exceeds the production capacity of domestic paper mills, and the bulk of paper products must be imported. In 2023, this amounted to 377 thousand tonnes of printing and writing papers, 28 thousand tonnes of hygiene papers, 895 thousand tonnes of packaging and wrapping papers, 67 thousand tonnes of paperboard and other paper types (specialty, industrial, etc.), and 567 thousand tonnes of other paper products (such as hygiene and healthcare products, household products, corrugated board, folding boxes and cartons, envelope products, and others).

According to an overall assessment by the Association of the Paper and Pulp Industry (ACPP), total consumption of paper, cardboard, paperboard, and other paper products amounted to 1.710 million tonnes (i.e. 178 thousand tonnes more than in 2022).

The annual per capita consumption in the Czech Republic was approximately 157 kg of paper. In 2023, a total of 930 thousand tonnes of recovered paper was recycled in the Czech Republic, which corresponds to 54.4% of domestic consumption of paper, cardboard, paperboard, and related products.

### **3.4. Sources**

<https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

<https://mpo.gov.cz/cz/energetika/statistika/obnovitelne-zdroje-energie/obnovitelne-zdroje-energie-v-letech-2022-a-2023--284989/>

## **4. Evaluation of sustainability criteria for forest biomass**

### **4.1. Legality of wood harvesting**

#### **Step 1: Identification of applicable legislation**

##### **The Constitution laws**

**Constitution** of the Czech Republic (Law No. 1/1993 Coll.), as amended and **Charter of fundamental rights and freedoms** (Law No. 2/1993 Coll.), as amended include fundamental principles of the ownership and land protection:

- Everyone has the right to own property. The property rights of all owners have the same legal content and protection (the Charter, Art 11).
- Ownership binds. It must not be misused to the detriment of the rights of others or in conflict with general interests protected by law. Its performance must not harm human health, nature and the environment beyond the level set by law. (The Charter, Art 11).
- The state takes care of the careful use of natural resources and the protection of natural wealth (Article 7 of the Constitution).

##### **Legislation on Forest Protection**

The basic legislation governing forest management is Act **No. 289/1995 Coll.**, on Forests

and on Amendments to Certain Acts (**Forest Act**), as amended. The purpose of this Act is to establish conditions for the conversation of forests requirements for their care and restoration, and to support sustainable forest management.

The **Forest Act** is a comprehensive legal regulation that governs the fundamental activities related to forests. It:

- Defines land designated for fulfilling forest functions.
- Sets conditions and requirements for the management of forests owned by the state.
- Establishes forest categories: production forests, protective forests, and forests with special purpose, including forests affected by pollution (forests under the influence of emissions are classified into four zones of threat) and defines specific requirements for forest management in each category.
- Specifies the fundamental obligations for forest conservation and the protection of forests designated for fulfilling forest functions.
- Sets requirements for the registration and documentation of forest lands, their boundaries, use restrictions, and requirements for the preparation and review of spatial planning documents.
- Defines conditions and requirements for forest use – including access rights – and sets limitations on certain activities in forests, including compensation for damages.
- Defines planning tools for forest management on state-owned and private forest lands – such as forest management plans, forest economic outlines, and other planning documents.
- Specifies requirements for forest management – including the use of reproductive material of forest tree species, forest regeneration (including the size of harvest – clear-cut areas must not exceed 1 ha).
- Requires forest protection against biotic and abiotic threats (it stipulates biological and technical measures aimed at protecting soil and hydrological conditions).
- Defines regulations for timber harvesting and forest transport (including limits on logging intensity, measures to minimize the impact of logging and transportation on ecosystems, species, soil, and water sources).
- Specifies requirements for authorized forest management personnel – including professional forest managers and forest rangers – as well as their obligations and requirements for private forest owners using such services.
- Establishes obligations for private forest owners (including the obligation to maintain forest records).
- Defines the framework for public financial support for forest management.
- Defines the state forest administration bodies, violations of the law, and related penalties.

Other regulations related to forest protection and implementing the **Forest Act**:

- Decree of the Ministry of Agriculture of CR **No. 77/1996** Coll. on terms of request of withdrawal or restriction and on details on conservation of property, which was designated to fulfil forest functions, as amended.
- Decree of the Ministry of Agriculture of CR **No. 78/1996** Coll. on assignment of zones of forests endangered due to air pollution, as amended.
- Decree of the Department of Agriculture of CR **No. 82/1996** of the Coll. on genetic classification, forest restoration, afforestation and on records when handling seeds and seedlings of forest tree species, as amended.

- Decree of the Ministry of Agriculture of CR **No. 83/1996** Coll. on formulation of local plans on forest development and on definition of management sets of stands, as amended.
- Decree of the Ministry of Agriculture of CR **No. 84/1996** Coll. which specifies details on forest conservation measures, and the design of badge and service card of forest guard, as amended.
- Decree of the Ministry of Agriculture of CR **No. 101/1996** Coll. laying down details of forest protection measures and a model of the service badge and model of the forest guard's card, as amended.
- Decree of the Ministry of Agriculture of CR **No. 202/2021** Coll. on Forest Management Records, as amended.
- Decree of the Ministry of Agriculture of CR **No. 298/2018** Coll. on the preparation of regional forest development plans and the definition of management units, as amended.
- Decree of the Ministry of Agriculture of CR **No. 456/2021** Coll. on the details of the transfer of reproductive material of forest tree species, on records of the origin of reproductive material and details of the renewal of forest stands and on the afforestation of land declared as land intended for the performance of forest functions, as amended.

#### **Legislation on the Protection of Agricultural Land Resources**

The basic legislation governing protection of agricultural land resources is Act of the Czech National Council **No. 334/1992** Coll., on the Protection of Agricultural Land Resources, as amended (**Agricultural Land Protection Act**).

The **Agricultural Land Protection Act** is a comprehensive legal regulation that regulates basic activities related to the protection of the land resources of the Czech Republic:

- Defines and classifies land, water areas, or non-agricultural land that fall under the agricultural land fund.
- Specifies the conditions for the change of use of agricultural land.
- Defines the principles of agricultural land protection.
- Sets conditions for the use of sediments on agricultural land.
- Establishes requirements for recording information on the quality of agricultural land.
- Specifies obligations for landowners to prevent pollution or threats to agricultural land from erosion and the measures to remedy such conditions.
- Establishes principles for the general protection of the agricultural land fund (in spatial planning activities, in the preparation of proposals for the designation of mining areas, in construction, mining, and industrial activities, land modifications, geological and hydrogeological surveys, in the preparation of documentation for project permitting under the Building Act, in the implementation of photovoltaics on agricultural land, in the construction of ponds for fish or waterfowl farming, or in the implementation of measures necessary to ensure agricultural production, and in the use of agricultural land for tree plantations).
- Sets conditions for the withdrawal of land from the agricultural land fund.
- Defines the authorities of the state administration of the agricultural land fund, violations of the law, and related sanctions.

The individual obligations arising from the **Agricultural Land Protection Act** are more precisely and thoroughly defined by number of regulations:

- Decree of the Ministry of the Environment of CR **No. 48/2001** Coll. on the determination of protection classes, as amended.
- Decree of the Ministry of the Environment of CR **No. 153/2016** Coll. on the determination of details of the protection of agricultural land quality, as amended.
- Decree of the Ministry of the Environment of CR **No. 271/2019** Coll. on the establishment of procedures for ensuring the protection of agricultural land, as amended.
- Decree of the Ministry of the Environment of CR **No. 240/2021** Coll. on the protection of agricultural land against erosion, as amended.

### Legislation on the marketing of forest tree reproductive material

The basic legislation governing the marketing of forest tree reproductive material is Act **No. 149/2003** Coll., on putting into circulation of reproduction material of forest tree species of species important for forestry and artificial crosses, intended for forest renewal and afforestation, and amending some related laws (**Act on Trade in Forest Reproductive Material**), as amended.

The **Act on Trade in Forest Reproductive Material** is a comprehensive legal regulation that regulates basic activities related to the marketing of forest tree reproductive material in the Czech Republic:

- Implements the requirements of Council Directive **1999/105/EC** of 22 December 1999 on the marketing of forest reproductive material.
- Introduces the National Programme and establishes the principles for the protection and reproduction of forest tree genetic resources within this programme.
- Sets the conditions for the inclusion, modification, and removal of forest tree genetic resources in the National Programme.
- Defines the requirements for documentation of forest tree genetic resources and the provision of samples.
- Establishes the requirements and conditions for marketing forest reproductive material (e.g. quality, collection and packaging, documentation).
- Defines the conditions for the import and registration of forest reproductive material.
- Defines the state administration bodies responsible for implementing the provisions of the Act, violations of the Act, and related sanctions.

The individual obligations arising from Act on Trade in Forest Reproductive Material are more precisely and thoroughly defined by number of regulations:

- Decree of the Ministry of t Agriculture of CR **No. 29/2004** Coll. implementing the Act on trade in forest reproductive material, as amended.
- Decree of the Ministry of t Agriculture of CR **No. 393/2013** Coll. on lists of forest tree species, as amended.
- Decree of the Ministry of t Agriculture of CR **No. 132/2014** Coll. on the protection and reproduction of the gene pool of forest tree species, as amended.

### Nature and environment protection legislation

The basic legislation for the protection of nature and landscape is Act of the Czech National Council **No. 114/1992** Coll., on Nature and Landscape Protection (**Act on Nature and Landscape Protection**), as amended.

The purpose of the **Act on Nature and Landscape Protection** is, with the participation of the relevant regions, municipalities, landowners, and land managers, to contribute to the maintenance and

restoration of the natural balance in the landscape, to the protection of biodiversity, natural values and beauty, and to the sustainable management of natural resources.

The individual obligations arising from **Act on Nature and Landscape Protection** are more precisely and thoroughly defined by number of regulations:

- Decree of the Ministry of the Environment of CR **No. 395/1992** Coll. implementing the Nature and Landscape Protection Act, as amended.
- Decree of the Ministry of the Environment of CR **No. 189/2013** Coll. on the protection of tree species and the authorization of their felling, as amended.
- Decree of the Ministry of the Environment of CR **No. 45/2018** Coll. on management plans, management principles and documents for the declaration, registration and marking of protected areas, as amended.
- Furthermore, number of regulations such as government decrees or ordinances define specific national natural monuments, nature reserves, and conservation zones within specific protected landscape areas.

Other laws whose requirements may be related to forest protection:

- Act **No. 100/2001** Coll. on **Environmental Impact Assessment**, as amended - in accordance with European Union law, the Act regulates environmental and public health impact assessment and sets out the procedures for natural persons, legal entities, administrative authorities, and territorial self-governing units (municipalities and regions) involved in such assessment.
- Act **No. 17/1992** Coll. on **the Environment**, as amended – defines basic terms and establishes fundamental principles of environmental protection, as well as the obligations of legal and natural persons in protecting and improving the state of the environment and in the use of natural resources, it is based on the principle of sustainable development.
- Act **No. 123/1998** Coll. on the **Right to Environmental information**, as amended - incorporates the relevant European Union regulations and governs the enforcement of the right of access to environmental information, the promotion of active disclosure of environmental information by obligated entities, the rules for the establishment and provision of spatial data through network services via the INSPIRE National Geoportal, and the requirements for education, training, and public awareness in the field of environmental protection.
- Act **No. 100/2004** Coll. on the Protection of Species of Wild Fauna and Flora by Regulating Trade and Other Measures to Protect These Species (**Act on Trade in Endangered Species**), as amended - regulates the protection of wild animals and wild-growing plants that are threatened with extinction, with the aim of their conservation by controlling trade in such species, in accordance with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the law of the European Communities governing the import and export of wild animals and wild plants. It sets the conditions for trade in endangered species of wild fauna and flora as further defined and establishes certain additional measures to ensure the protection and registration of these species within the territory of the Czech Republic.
- Act **No. 226/2013** Coll., on **Placing Timber and Timber Products on the Market**, as amended - imposes an obligation on economic operators (in the Czech Republic represented by owners of land and trees growing on it, if they are subject to harvesting and marketing, and importers from non-EU countries) to establish and maintain a so-called due diligence system.

- Act **No. 282/1991** Coll. on the **Czech Environmental Inspectorate and its Competence in Forest Protection**, as amended – establishes the Czech Environmental Inspectorate and defines its competence in individual components of the environment.

Further information on the main legal regulations related to nature and tree species protection is provided in the “biodiversity part” of this document.

#### Legislation related to monitoring biomass sustainability criteria

- Act **No. 201/2012** Coll. on the **Protection of Atmosphere**, as amended - among other things, also sets out the conditions and obligations of persons and sustainability criteria for biofuels
- Government Regulation **No. 395/1992** Coll. on Sustainability Criteria for Biofuels and Reducing Greenhouse Gas Emissions from Fuels, as amended.
- Act **No. 165/2012** Coll. on Supported Energy Sources, as amended - among other things, also sets out the conditions and obligations of persons and sustainability criteria for solid, liquid and gaseous fuels from biomass - transposes the requirements of the Renewable Energy Directive (EU) **2018/2001 (RED II)** and the Renewable Energy Directive (EU) **2023/2413 (RED III)** into Czech legislation.
- Decree of the Ministry of the Environment of CR **No. 110/2022** Coll. on the determination of types and parameters of supported renewable sources and sustainability criteria and greenhouse gas emission savings for bioliquids and biomass fuels, as amended - is currently undergoing amendment to reflect the revised requirements set out in the RED III.

#### Multilateral environmental agreements and ILO Conventions

- **Convention on International Trade in Endangered Species of Wild Fauna and Flora (“CITES”)** – [www.cites.org](http://www.cites.org)
- **International Labour Organization (“ILO”)** – [www.ilo.org/ilolex/english/convdisp1.htm](http://www.ilo.org/ilolex/english/convdisp1.htm)
- **International Tropical Timber Agreement (“ITTA”)** - [www.itta.com](http://www.itta.com)
- **Convention on Biological Diversity** - [www.biodiv.org/biosafety/protocol.asp](http://www.biodiv.org/biosafety/protocol.asp)
- **The Ramsar Convention** (“Convention on Wetlands of International Importance Especially as Waterfowl Habitat”) – transposed into Czech legislation through Communication from the Federal Ministry of Foreign Affairs on the conclusion of the Convention on Wetlands of International Importance, Especially as Waterfowl Habitat, and the Protocol to Amend It **No. 396/1990** Coll.
- **The Bern Convention** (“Berne Convention on the Conservation of European Wildlife and Natural Habitats”) - transposed into Czech legislation through Act **No. 114/1992** Coll., on Nature and Landscape Protection (Act on Nature and Landscape Protection), as amended.
- **The Bonn Convention** (“Convention on the Conservation of Migratory Species of Wild Animals” (CMS)) - transposed into Czech legislation through Communication from the Ministry of Foreign Affairs on the accession of the Czech Republic to the Convention on the Conservation of Migratory Species of Wild Animals **No. 127/1994** Coll., as amended.
- **The Convention on Biological Diversity (CBD)** - transposed into Czech legislation through Communication from the Ministry of Foreign Affairs on the negotiation of the Convention on Biological Diversity **No. 134/1999** Coll.
- **The Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)** - transposed into Czech legislation through Act **No. 100/2004** Coll. on the Protection of Wild Fauna and Flora Species by Regulating Trading in Them, as amended.

**Laws of European Communion (Legislation of the EU)**

- Council Directive on the conservation of natural habitats and of wild fauna and flora (**No. 92/43/EC**)
- Directive of the European Parliament and of the Council on the conservation of wild birds (**No. 2009/147/EC**)
- Directive of the European Parliament and of the Council on the deliberate release into the environment of genetically modified organisms (**No. 2001/18/EC**)
- Directive (EU) of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (**No. 2018/2001**)
- Directive (EU) of the European Parliament and of the Council amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 (**No. 2023/2413**)
- Regulation (EU) of the European Parliament and of the Council on transboundary movements of genetically modified organisms (**No. 1946/2003**)
- Regulation (EU) of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market (**No. 995/2010**) – “EUTR” - the Czech Republic implemented the “EUTR” through Act **No. 226/2013** Coll., on Placing Timber and Timber Products on the Market, as amended.
- Regulation (EU) of the European Parliament and of the Council on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No. 995/2010 (**No. 2023/1115**) “EUDR” - through Act **No. 226/2013** Coll., on Placing Timber and Timber Products on the Market, as amended.

<b>Sources</b>	EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a> Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a>
<b>Were applicable laws identified</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)

**Step 2: Description of enforcement and monitoring****Enforcement of the Forest Act**

The Forest Act establishes multiple law enforcement bodies at the central, regional as well as local levels and sets out the requirements for authorised professional foresters and forest guards, their responsibilities, and the obligations of forest owners to engage their services.

Individual tasks of those bodies and territorial competencies are defined directly by the Forest Act.

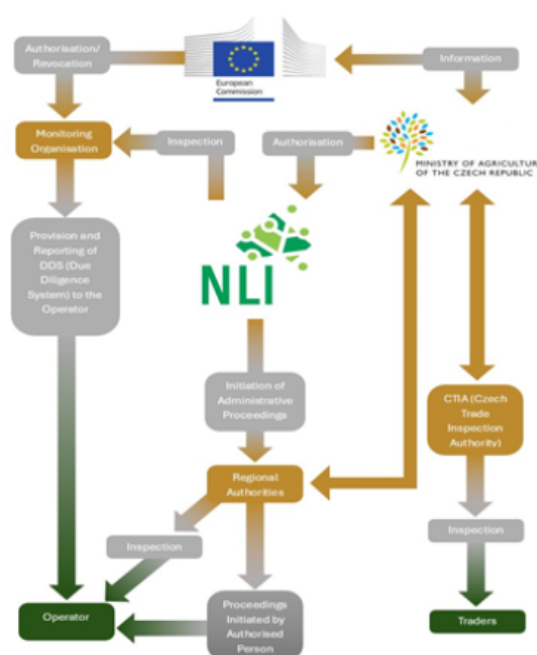
- **Forest guard** - is a natural person who provides protective services in forests in the context of general public access to forests. A forest guard is appointed by the forest authority for the relevant area of their jurisdiction, either upon the proposal of the forest owner or on its own initiative.
- **Professional forest manager** – is a professionally qualified person entrusted by the forest owner with the management of the forest.
- **Authorities of the State Forest Administration**
  - **Ministry of Agriculture** - is the central authority of the state forest administration – it oversees the execution of state forest administration (including in military forests), commissions and approves and provides opinions on regional development plans and principles of territorial development, issues binding opinions on proposals for the designation of mining areas affecting land designated

for fulfilling forest functions and determines the method of their reclamation, cooperates with the Ministry of the Environment in gathering information on invasive alien tree species and assessing their impacts on the condition and development of forest ecosystems, appoints and revokes forest guards, and supervises compliance with the **Forest Act** and related regulations by state authorities, natural persons, and legal entities.

- **Ministry of the Environment** - exercises supreme state supervision and, in the forests of national parks and their buffer zones, performs the functions of the regional authority and the Ministry of Agriculture, unless otherwise stipulated by the **Nature and Landscape Protection Act**.
- **Municipal authorities with extended scope of competence** (total number: 205) - among other responsibilities, decide on disputes regarding whether land qualifies as forest land intended to fulfil forest functions or whether a plot of land should be declared as such, on the division of forest land where one of the resulting parcels would be smaller than 1 hectare, on granting exceptions to certain prohibited activities in forests, on exemptions from the prohibition of final felling in forest stands younger than 80 years, on granting or revoking a license to perform the function of a professional forest manager, on offences under the **Forest Act**, on imposing measures to eliminate identified deficiencies, to improve the condition of forests and to ensure the fulfilment of their functions, on the suspension or restriction of production or other activities in forests in cases where damage is imminent, also keep records of leases and loans of forest land within their administrative area, ensure the preparation of forest management outlines, grant exemptions from the prescribed size or width of clear-cut areas or from legal deadlines for afforestation and the establishment of forest cultures, appoint and revoke forest guards within their administrative jurisdiction, collect data for forest management records concerning forests in their area and forward such data to the competent organizational unit of the state.
- **Regional authorities** (total number: 14) - among other responsibilities, decide on the classification of forests into the categories of protective forests and special-purpose forests, and on their declassification (with the exception of military forests), on the withdrawal of forest land from fulfilling forest functions or on the restriction of its use for such purposes, for areas of 1 hectare or more, on exemptions from the prohibition of final felling in forest stands younger than 80 years when approving management plans, on the imposition or implementation of amelioration and torrent control measures in forests, on measures to eliminate identified deficiencies and improve the condition and functions of forests, on the suspension or restriction of production or other activities in forests in cases where damage is imminent (if such cases exceed the jurisdiction of a municipality with extended powers), on permitting the use of reproductive material from identified sources of selected forest tree species for artificial forest regeneration and afforestation, on imposing fines on persons who fail to comply with obligations imposed by decisions of the regional authority; it issues opinions on land-use plans of municipalities with extended powers, it issues binding opinions in proceedings that affect forest land through the extraction of non-reserved minerals or that affect forest land of 1 hectare or more, appoint and revoke forest guards with jurisdiction over the region, and notify the competent person of any identified occurrence, spread, and impact of invasive alien tree species on forest management.

- **Other bodies responsible for monitoring compliance with legislative requirements**

- **The Forest Protection Service of the Forestry and Game Management Research Institute (FGMRI)** - a public research institution, was established in 1995 based on an authorization by the Ministry of Agriculture of the Czech Republic. Its main activities include providing consultancy in the field of forest protection, compiling and maintaining records on the occurrence of forest harmful agents, preparing expert opinions for the purpose of granting subsidy support in accordance with applicable legislation (particularly within selected interventions of the “Strategic Plan of the Common Agricultural Policy”), testing the biological effectiveness of products and other forest protection measures, organizing seminars and training sessions, publishing new findings in the field, engaging in international cooperation in forest protection (particularly with countries bordering the Czech Republic), and carrying out other expert activities related to forest protection.
- **Czech Environmental Protection Inspectorate** - carries out inspections of compliance with the conditions of approved forest management plans and outlines.
- **The National Forestry Institute (“NIL”)** - has been designated as the responsible authority for performing activities related to the implementation of obligations under the EUDR regulation and forest records management. In addition to the due diligence system, the forest owner must submit information on the results of its management pursuant to the requirements set out in the Decree No. **285/2013** Coll., as amended (under Section 40 of the Forest Act) to the Central Register of the due diligence system, which is also administered by the NIL.



Special case represents administration and enforcement of the **Forest Act** in areas of National Parks and military forests. The state forest administration in the territory of national parks is performed through the **National Park administrations** and the **Ministry of the Environment**. These include forests in four national parks with an approximate area of 90 000 ha. Concerning the military forests, a unique body of the state forest administration is the **Military Forest Office**, which performs state forest administration in the so-called military districts forest areas representing approximately 125 000 ha.

#### Enforcement of the EU Timber regulation

Act No. **226/2013** Coll., on placing timber and timber products on the market, as amended, relevant to Regulation No. **995/2010** and Regulation No. **2023/1115**, laying down the obligations of operators who place timber and timber products on the market.

The designated authorities responsible for monitoring compliance with the obligations arising from the regulation and the law are:

- **Ministry of Agriculture**
- **Regional authorities**
- **Czech Trade Inspection Authority (“CTIA”)**
- **General Directorate of Customs**
- **National Forestry Institute (“NIL”) - <https://nli.gov.cz/>**

These authorities check operators and control organisations to ensure that they maintain due diligence systems and that there is no trade in illegally harvested timber. They monitor trader's compliance with their obligations in relation to the EUTR/EUADR. They send information to the Central Due Diligence System Register (“CESNaP”). They exchange information with other EU Member States on EUTR/EUADR issues.

A special position in the application of the EUTR/EUADR rules is that of the "delegated person". This is an organisational unit of the state that has been authorised by the Ministry of Agriculture to carry out professional activities pursuant to Act No. **226/2013** Coll. on the marketing of timber and timber products, as amended. The authorised and responsible authority is the National Forestry Institute (“NIL”).

The Timber Regulation directly requires the competent authorities to check and verify that operators comply with the requirements set out, has a due diligence system in place; maintains and regularly evaluates the due diligence system and in particular to prevent illegally harvested timber from entering the EU internal market. If necessary, the inspection may also include the examination of samples of goods and supplies from operators. The Czech Trade Inspection Authority carries out inspections of traders as part of its inspection activities.

An administrative offence is committed repeatedly if one year has not elapsed since the decision imposing a fine for failure to comply with the same obligation became final. Administrative offences committed by an economic operator are dealt with by the regional authority. Fines imposed by the regional authority shall be collected and enforced by the regional authority; the revenue from fines shall be the revenue of the regional budget. Administrative offences of a trader are dealt with by the CTIA. Fines imposed by the CTIA are collected by the inspectorate and are revenue of the state budget. The fine is payable within 30 days of the date on which the decision to impose it becomes final.

The data of the forest management register (“LHE”) is submitted to the state forest administration authority of the municipality with extended competence in accordance with **Forest Act**.

#### **Monitoring of forest health and vitality**

The health condition of forests in the Czech Republic has been monitored since 1986 within the framework of the International Cooperative Programme on Assessment and Monitoring of Air Pollution Effects on Forests (**ICP Forests**) under the United Nations Economic Commission for Europe (**UNECE**). ICP Forests is one of the most important European forest ecosystem monitoring systems.

Regular forest health assessments under the systematic grid (Level I) of the ICP Forests programme are carried out on 306 monitoring plots evenly distributed across the entire territory of the Czech Republic based on forest cover. These plots are located within forest stands in such a way as to accurately represent the given site and stand conditions. In 2023, a total of 8.6 thousand trees were assessed on these plots, representing 28 tree species across various age classes.

In parallel with ground-based monitoring, remote sensing techniques—particularly satellite imagery—have long been used in the Czech Republic to monitor forest condition. Forest health is assessed using time series analysis of Sentinel-2 satellite data acquired under the European Space Agency's Copernicus programme since 2016.

To evaluate the development of forest health over time, the National Forestry Institute developed a certified methodology based on year-to-year comparison of images taken during the peak vegetation period (phenological summer, i.e., June to August). The assessment focuses not on absolute values of the Leaf Area Index (LAI), but rather on the trend of change over a two-year interval.

### Monitoring of forests - National Forest Inventory (NFI)

A primary aim of the National Forest Inventory (NFI) conducted by the National Forestry Institute is to provide objective and independent information regarding the state and changes of forests within the Czech Republic. A survey, based on sound sampling methodology, is a key principle of the Czech NFI.

The NFI is primarily based on forest related data such as species, growth growing stock but also includes data relating to biodiversity, tree species representation, mixture of forest stands, dead wood presence, etc. The National Forest Inventory has already been implemented in three rounds, NIL 1 in 2001-2005, NIL 2 in 2011-2015 and NIL3 in 2016-2020.

Each year, information on the state of forests is compiled from forest management plans and guidelines, presented in the form of a comprehensive set of forest management documents. These data include information on timber stock, tree species composition, forest area, and rotation periods by forest type and species.

More information can be found in the publication "*Information on Forestry and Game Management*" at [nli.gov.cz](http://nli.gov.cz).

### Forest certification schemes

Another tool for controlling compliance with applicable legislation in the field of logging is forest certification in the Czech Republic - the PEFC system (70 % of forests in the Czech Republic) and FSC (in 2023, the area of FSC-certified forests in the Czech Republic amounted to 133,240 hectares. A total of 8 forest management certificates were registered, representing 69 forest owners/managers. In the related processing chain, 356 chain of custody certificates were recorded in 2023.).

Sources	EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a> Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> <a href="https://jfs.agriculturejournals.cz/pdfs/jfs/2024/06/04.pdf">https://jfs.agriculturejournals.cz/pdfs/jfs/2024/06/04.pdf</a> <a href="https://jfs.agriculturejournals.cz/pdfs/jfs/2024/02/01.pdf">https://jfs.agriculturejournals.cz/pdfs/jfs/2024/02/01.pdf</a> <a href="#">Economic parameters of the natural forest regeneration in changing conditions - A case study</a> <a href="https://sciendo.com/pdf/10.2478/forj-2021-0020">https://sciendo.com/pdf/10.2478/forj-2021-0020</a>
Are enforcement and monitoring ensured for the identified laws?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)
<b>Degree of compliance with the criterion "Legality of timber harvesting"</b>	
<input checked="" type="checkbox"/> Requirements fulfilled <input type="checkbox"/> Requirements not fulfilled	

### Step 3: Evaluate the effectiveness of the legal framework on the legality of timber harvesting

#### Legislative Framework Governing Illegal Logging in the Czech Republic

The Czech Republic addresses illegal logging in a comprehensive manner through multiple laws, control mechanisms, and sanctions. Illegal logging is punishable both under administrative and criminal law. Legislation continues to evolve, particularly in relation to climate protection, management of state property, and the leakage of timber into the grey economy.

Act No. **289/1995** Coll., on Forests (**Forest Act**), as amended

- Establishes obligations for forest owners, conditions for timber harvesting, requirements for forest records and regeneration, etc.
- Prohibits logging without an approved forest management plan or outline.
- Defines administrative offenses, including unauthorized logging.

Act No. **114/1992** Coll., on **Nature and Landscape Protection**, as amended

- Protects trees growing outside forests and sets conditions for their felling.
- Establishes sanctions for unauthorized tree felling even outside forest land.

Act No. **40/2009** Coll., **Criminal Code**, as amended

- Section 228 – Damage to another’s property (e.g., logging in another’s forest without consent).
- Section 293 – Damage and endangerment to the environment.
- Section 205 – Theft (unauthorized removal of timber).

#### Prevention and Monitoring

- **Forest Management Plans (“LHP”)/Outlines (“LHO”)** – Every forest must have an approved plan determining logging limit.
- **Forest Management Information System (“ISLH”)** – A digital registry of planned and executed logging operations.
- **Drones, GPS tracking, and camera traps** – Increasing use of technology for monitoring illegal activities.

#### Control and Supervisory Authorities

- **Czech Environmental Inspectorate (“CEI”)** – supervises compliance with the **Forest Act**, **Nature and Landscape Protection Act**, etc. (Further information is provided below.)
- **Forest Administration Authorities** – primarily at the level of municipalities with extended powers.
- **Czech Police** – in cases of suspected criminal offenses (e.g., theft, property damage).
- **Forest owners** – have the right to report illegal activities and often employ private surveillance services.

#### Administrative Offenses and Fines

Sanctions defined by the above-mentioned laws include:

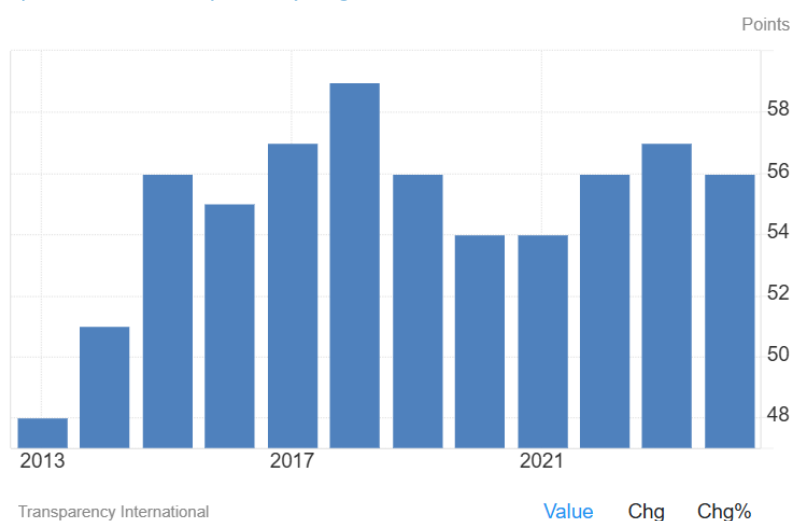
- Up to CZK 1,000,000 for individuals.
- Up to CZK 5,000,000 for legal entities.

### Criminal Liability

- Imprisonment for up to 5 years for theft or serious forest damage
- Liability for damages, possible confiscation of tools or equipment used (e.g., logging machinery)

### Perception corruption index of transparency international

In the 2024 Transparency International's Corruption Perceptions Index, the Czech Republic scored 56 out of 100, placing it at rank 46 out of 180 monitored countries. This score indicates a perceived level of public sector corruption, with 0 being highly corrupt and 100 being very clean, according to <https://www.transparency.org/en>.



Source: <https://tradingeconomics.com/czech-republic/corruption-index>

### Environmental Protection Index (“EPI”) (Yale University)

The 2024 EPI combines 58 indicators across 11 issue categories, ranging from climate change mitigation and air pollution to waste management, sustainability of fisheries and agriculture, deforestation, and biodiversity protection.

The Czech Republic reaches 65.5 points (2024) of the Environmental Protection Index and ranks as 17th country amongst 180 countries.

### Czech Environmental Inspectorate

As of 31<sup>st</sup> December 2023, the Forest Protection Department of the Regional Inspectorates employed a total of 42 inspectors. On average, each inspector was responsible for supervising approximately 64,000 hectares of forest, based on the forest stand area reported in the *Report on the State of Forests and Forestry in the Czech Republic for the Year 2022*.

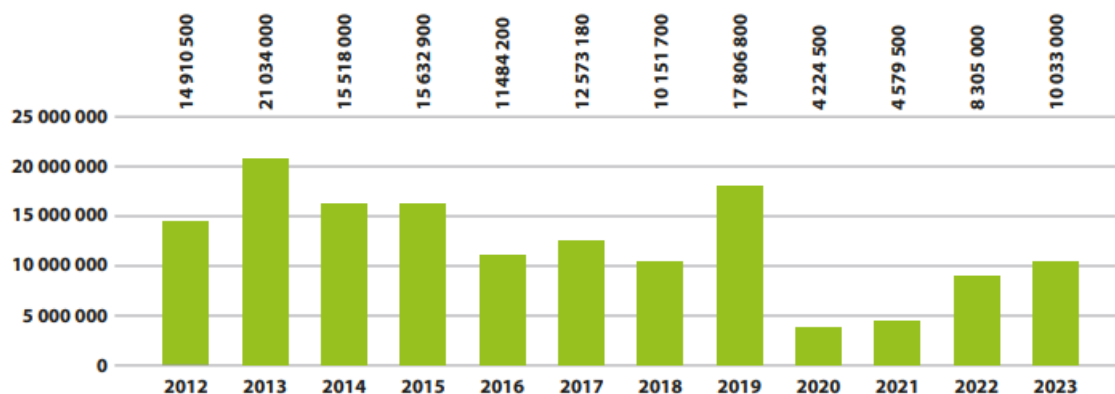
Inspection activities in forests were conducted in accordance with the following legislation:

- Act No. 282/1991 Coll., on the **Czech Environmental Inspectorate and its Competence in Forest Protection**, as amended,
- Act No. 289/1995 Coll., on Forests (the **Forest Act**), as amended,
- Act No. 149/2003 Coll., on the **Marketing of Reproductive Material of Forest Tree Species of Forestry Importance and Artificial Hybrids for Forest Regeneration and Afforestation**, as amended,
- Act No. 114/1992 Coll., on **Nature and Landscape Protection**, as amended,

- Act No. 255/2012 Coll., on **Inspection (Inspection Code)**, as amended,
- Act No. 500/2004 Coll., the **Administrative Procedure Code**, as amended.

During the reporting period (during 2023), inspectors carried out a total of 955 inspection activities. Out of this total, 370 were planned inspections, 173 were unplanned inspections, and 412 were other inspection-related activities. In addition, inspectors participated in 49 multi-agency inspections organized by other units of the Czech Environmental Inspectorate. A total of 174 complaints or reports were addressed during the evaluated period.

In 2023, the Czech Environmental inspection issued 65 penalties in total amount of over 400 000 EUR.



Source: Total amount of penalties in CZK - <https://www.cizp.gov.cz/sites/cizp.cz/files/2024-11/V%C3%BDro%C4%8Dn%C3%AD%20zpr%C3%A1va%202023.pdf>

Sources	Perception Corruption Index - <a href="https://tradingeconomics.com/czech-republic/corruption-index">https://tradingeconomics.com/czech-republic/corruption-index</a>		
	Environmental Protection Index (Yale University) - <a href="https://epi.yale.edu/measure/2024/EPI">https://epi.yale.edu/measure/2024/EPI</a>		
	Annual Report CZECH ENVIRONMENTAL INSPECTION, 2023 - <a href="https://www.cizp.gov.cz/sites/cizp.cz/files/2024-11/V%C3%BDro%C4%8Dn%C3%AD%20zpr%C3%A1va%202023.pdf">https://www.cizp.gov.cz/sites/cizp.cz/files/2024-11/V%C3%BDro%C4%8Dn%C3%AD%20zpr%C3%A1va%202023.pdf</a>		
Efficiency (points):	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)	<input type="checkbox"/> Category C (0 points)

## 4.2. Forest regeneration

### Step 1: Identification of applicable laws

#### Forest regeneration

According to the Forest Act No. 289/1995 Coll., as amended every forest owner is obliged to take proper care of the forest and to continuously regenerate forests with site suitable species to improve the state of forests, enhance their resilience and fulfilment of forest functions (Article 31(1)).

The clearcut shall not exceed 1 ha and maximum width of two average heights of the mature stand (on steep slopes on one height). Exceptionally, on defined site conditions, the clearcut limit can be 2 ha (Article 31(2)).

Any clearcut area shall be regenerated within 2 years from the harvest and the successful regeneration (the young stand has sufficient tree stand composition, quantity of trees and trees do not need further protection against biotic and abiotic factors) shall be achieved within 7 years of the harvest (Article 31(6)).

For artificial regeneration, only reproductive material from recognised sources and with a certificate of origin can be used (Article 29(1)).

Forest regeneration shall also comply with the minimum percentage of “melioration and forest enhancement species” that are defined specifically for each forest type and category of forests (the percentage and species are defined in the regional plans of forest development), (Article 24(1)).

On 3 November 2022, the Ministry of Agriculture issued a new measure of a general nature (**MZE-59640/2022-16222**) effective from 1. 1. 2023. This measure extending the time limits for afforestation of calamity clearings and relaxing the rules for the transfer of planting material throughout the Czech Republic. This measure sets a maximum deadline of 5 years for the reforestation of clearings caused by incidental logging, and a maximum of 10 years for the implementation of protective measures from the time the clearing occurred. It defines the areas where this measure is applicable (so-called “red zones”) – these are the most severely affected cadastral territories. The list of these areas is updated approximately three times a year based on satellite data and field surveys. This measure responds to the limited availability of regeneration material as well as it provides opportunity to use natural regeneration of pioneer species (such as birch and aspen on large scale bark beetle calamity areas).

#### Forest conversion

**Forest Act** requires that forests shall be managed so that all forest functions are maintained in continuous and sustainable manner (Art. 11 (2)). The forest land shall not be used for any other purposes then defined in the Forest Act (Art. 11 (3)).

Any conversion of forests to another use (fully or partially, temporarily or permanently) is only possible with authorisation of the state forest administration authority following the prescribed authorisation process and for a fee set up by the law.

<b>Sources</b>	Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> <a href="https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf">https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf</a>
<b>Were applicable laws identified</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)

#### Step 2: Description of enforcement and monitoring

Forest owners are required by the **Forest Act** to keep records on conducted forest regeneration for individual forest stands (Art 40 (1)) and provide the data to the state forest administration body for the last year.

The monitoring of the forest regeneration is covered by the work of state forest administration bodies defined by the **Forest Act**. See chapter 4.1 concerning the monitoring and enforcement of the requirements relating to the **Forest Act**.

- **Municipalities with extended competencies** are responsible for following activities relating to forest regeneration:
  - Decisions relating to the conversion of forest land to other use no bigger than 1 ha.
  - Decision relating to exceptions from the size and width of clearcuts and exceptions from the reforestation deadlines.

- Control of compliance with the **Forest Act** requirements and issuance of penalties.
- **Regional authorities** are responsible for following activities relating to forest regeneration:
  - Decisions relating to the conversion of forest land to other use bigger than 1 ha.
  - Submits an opinion to the land-use planning documentation that concerns forest land.
  - Approves as a part of the forest management plans approval, exemption from the minimum age for final felling and exemption from the size and width of clearcuts and exceptions from the reforestation deadlines.
- **Ministry of Agriculture** is the central body of the state forest administration and is responsible for following activities relating to forest regeneration:
  - Approval of exemptions from the use of reproduction material for artificial regeneration.
  - Controls activities and performance of lower-level state forest administration bodies.

The **Ministry of the Environment** has the right of supreme state supervision in areas with an impact on environment and nature protection. This is performed by the **Czech Environmental Inspectorate**, which focuses on forests and forest management as an environmental component of the environment.

Data on forest regeneration are also collected by the Czech statistical office and published by the Ministry of Agriculture as a part of an annual report of the state of forests in the Czech Republic.

<b>Sources</b>	Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a>	
<b>Are enforcement and monitoring ensured for the identified laws?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No (audit required)
<b>Degree of compliance of the criterion "forest regeneration"</b>		
	<input checked="" type="checkbox"/> Requirements fulfilled	<input type="checkbox"/> Requirements not fulfilled

### Step 3: Evaluate the effectiveness of the legal framework for forest restoration

#### **Assessment of the Legal Framework for Forest Restoration**

The legal framework for forest restoration in the Czech Republic provides a solid foundation for managed and sustainable forest management, both under normal conditions and during extraordinary calamities.

The legal framework for forest restoration in the Czech Republic is well-developed and provides a solid foundation for sustainable forest management. The key legislative act is Act **No. 289/1995** Coll., on Forests (the **Forest Act**), as amended, which clearly defines the responsibilities of forest owners, including reforestation after logging, deadlines for regeneration, and securing forest stands. It also includes specific measures for extraordinary situations (e.g., "red zones"), and sets conditions for support through subsidies and state-funded programs.

The legal framework is further complemented by additional regulations and tools (e.g., the Forest Management Information System – ISLH, forest management plans, and digital monitoring tools), which help ensure oversight and transparency.

Thanks to clearly defined obligations for forest owners, the existence of control mechanisms, and the availability of financial support through subsidy programs, this framework is capable of effectively managing key forest regeneration processes.

However, the practical effectiveness of this system is reduced by several factors.

The most significant include limited capacity to ensure high-quality and timely reforestation, the continued dominance of high-risk monocultures, and weaker enforcement of legal obligations, particularly among small private forest owners.

### Forest restoration

The area of regenerated forest cover in the Czech Republic in 2023 was 44,788 ha and shows a significant increase compared to previous years. Of this, artificial regeneration amounts to 35,222 ha and natural regeneration to 6,812 ha. The growth in naturally regenerated forest area by more than 10 % is positive, despite the fact that the conditions for natural regeneration in calamity areas are considerably worse.

Method of regeneration	2000	2010	2015	2020	2022	2023
Artificial	21 867	21 859	18 797	33 671	39 970	35 222
of which: Replanting	4 371	3 087	5 246	3 621	6 082	6 812
Natural	3 422	5 127	4 749	6 615	10 088	9 566
<b>Total</b>	<b>25 289</b>	<b>26 986</b>	<b>23 546</b>	<b>40 286</b>	<b>50 058</b>	<b>44 788</b>

Source: Forest regeneration (ha) - <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Forest nurseries

Forest nurseries represent a key element in the process of forest ecosystem restoration in the Czech Republic. They serve as specialized facilities for cultivating seedlings of forest tree species, which are subsequently used for forest regeneration following logging, calamities, or during the establishment of new forest stands.

In the context of increasing impacts of climate change and widespread bark beetle outbreaks, forest nurseries play a crucial role in ensuring a sufficient supply of high-quality planting material suited to local site conditions. They produce not only traditional species (such as Norway spruce, Scots pine, or European beech) but increasingly also deciduous and more resilient tree species with better adaptability to changing conditions.

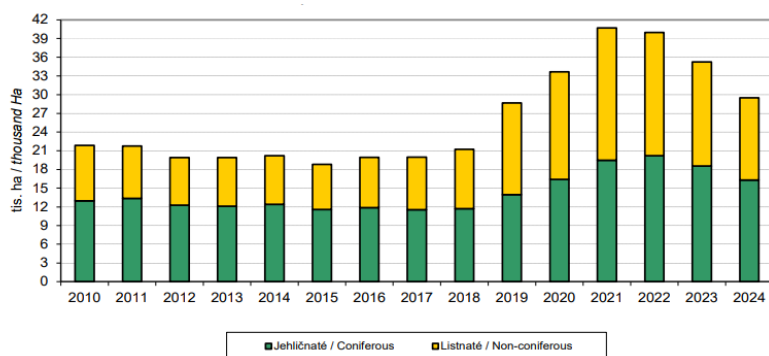
Forest nurseries in the Czech Republic are operated by both state enterprises (e.g. **Forests of the Czech Republic**, a state enterprise) and private entities. As of 31<sup>st</sup> December 2023, a total of 242 legal and natural persons (holders of licenses for seedling production and planting) were registered, operating on 283 nursery sites. These nurseries employ modern cultivation technologies, including greenhouses, irrigation systems, and containerized growing systems, which improve seedling quality and post-planting survival.

The importance of forest nurseries goes beyond tree production. They also serve as tools for preserving the genetic diversity of forests, promoting target tree species composition, and often function as educational and research bases for forestry.

Area type	ha
Polytunnels	23,99
Greenhouses	3,18
Cold frames	9,16
Open planting areas	1 111,05
<b>Total production areas</b>	<b>1 147,38</b>
Other areas	356,46
<b>Total nursery area</b>	<b>1 503,84</b>

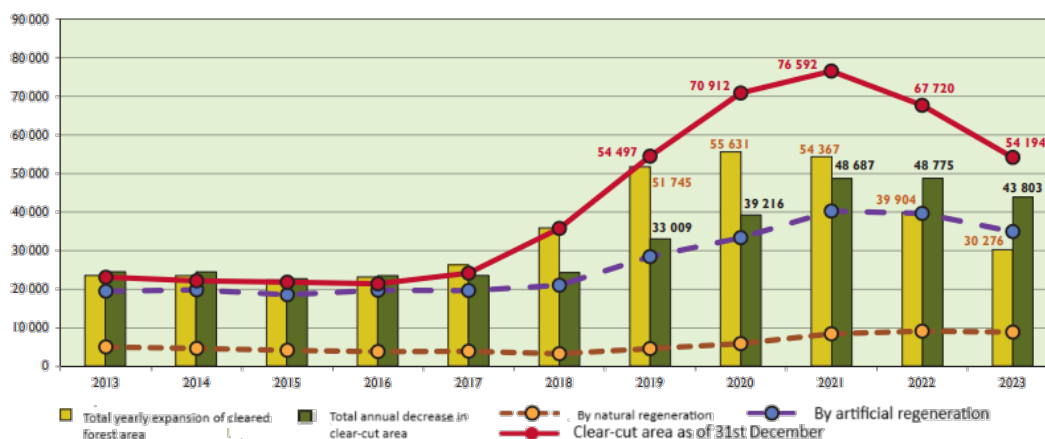
Source: Area of forest Nurseries - <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

The proportion of broadleaved tree species in total artificial forest regeneration reached similar relative values in comparison with the years 2020 and 2022, accounting for approximately 50 % (specifically, 47.3 % of the total regeneration). Conditions for the regeneration of broadleaved species - i.e. the so-called target species composition - are generally not very favorable on calamity-affected sites. Nevertheless, the achieved share of broadleaved species in regeneration can be assessed as positive overall.



Source: Afforestation/reforestation - <https://csu.gov.cz/docs/107508/82520ab6-ba2c-ea37-c706-4ff40e66c2c8/10000425q10.pdf?version=1.0>

Compared to previous years, the year 2023 shows a continued trend of increased regeneration area due to forest management practices to reforest clearings following large-scale incidental logging. As a result, there has been a decrease in the total area of clearings compared to 2016.



Source: Development of Clear-Cut Areas and Forest Regeneration in the Czech Republic (2013–2023) - <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Total area of forests

Compared to previous years, 2023 shows a continued trend of increased reforested area due to forest management practices to replant clearings after extensive salvage logging. As a result, the total area of clearings has decreased compared to 2016.

The **FRA report** (Global Forest Resources Assessment) is a regular global overview of the state of the world's forest resources, published by the Food and Agriculture Organization (FAO) of the United Nations approximately every five years. This report is one of the most important international documents on forests and serves as a reference framework for comparing data across countries and over time. The latest report from 2020 indicates an increase in forest area in the Czech

Republic. This information is confirmed by data from the Czech Statistical Office in its annual reports.

Year	2000	2005	2010	2015	2020	2022	2023	2024
Forest land area (ha)	2 637 290	2 647 416	2 657 376	2 668 392	2 677 329	2 680 372	2 681 764	2 683 138

Source: Forest land area - <https://csu.gov.cz/produkty/lesnictvi-2024>

Sources	<a href="https://csu.gov.cz/produkty/lesnictvi-2024">https://csu.gov.cz/produkty/lesnictvi-2024</a>		
	<a href="https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf">https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf</a>		
Efficiency (points):	FAO. 2020. Global Forest Resources Assessment 2020: Main report. Rome. - <a href="https://doi.org/10.4060/ca9825en">https://doi.org/10.4060/ca9825en</a>		
	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)	<input type="checkbox"/> Category C (0 points)

### 4.3. Biodiversity

#### Step 1: Identification of applicable laws

##### Legislation for the Protection and Promotion of Biodiversity

The fundamental legislative pillar for biodiversity protection in the Czech Republic is Act **No. 114/1992 Coll., on Nature and Landscape Protection**, as amended. The purpose of this Act is, with the participation of relevant regions, municipalities, landowners, and land managers, to contribute to the maintenance and restoration of the natural balance in the landscape, the protection of biodiversity, natural values and beauty, the sustainable management of natural resources, and to establish the Natura 2000 network in the Czech Republic in accordance with European Community law.

The **Act on Nature and Landscape Protection** is a comprehensive legal regulation that governs the fundamental activities related to biodiversity. It:

- Ensures the protection and establishment of the territorial system of ecological landscape stability.
- Provides general protection of wild-growing plant species and wild animals, as well as special protection of rare or endangered species, by positively influencing their development in nature and ensuring the conditions for their preservation, including, if necessary, the use of special cultivation and breeding facilities.
- Sets the conditions for the protection of trees growing outside forests and the conditions for issuing permits for their felling.
- Establishes networks of specially protected areas and sets conditions for their management.
- Ensures ecologically appropriate forest management and participates in the preparation and approval of forest management plans.
- Ensures the protection of soil resources, especially in land consolidation processes.
- Participates in the development of water management in the landscape to maintain natural conditions for aquatic and wetland ecosystems, while preserving the natural character and nature-friendly appearance of watercourses, water bodies, and wetlands.
- Ensures the restoration and creation of new ecologically valuable ecosystems, for example in the context of land reclamation and other major changes in landscape structure and use.

- Ensures landscape protection for ecologically appropriate forms of economic use, tourism, and recreation.
- Ensures the prevention and regulation of the introduction, planting, or spread of invasive alien plant and animal species (hereinafter referred to as “invasive alien species”) into the landscape in accordance with Regulation of the European Parliament and of the Council (EU) **No. 1143/2014** on the prevention and management of the introduction and spread of invasive alien species by setting conditions for the use of alien and locally absent species in aquaculture in accordance with Council Regulation (EC) **No. 708/2007** concerning the use of alien and locally absent species in aquaculture, as amended.

Other regulations related to forest protection and implementing the **Act on Nature and Landscape Protection**:

- A series of decrees and government regulations concerning the delineation of nature protection zones, Protected Landscape Areas, National Nature Monuments, and National Nature Reserves - each regulation for a specific area in the Czech Republic (more than 100).
- Decree of the Ministry of the Environment of CR **No. 11/2022** Coll. on the requirements and procedures for preparing an emergency plan concerning the regulation of alien and locally absent species in aquaculture and invasive alien species listed in the Union list, as amended.
- Government Regulation **No. 440/2021** Coll. on the establishment of the national list of Sites of Community Importance, as amended.
- Decree of the Ministry of the Environment of CR **No. 189/2013** Coll. on the protection of trees and conditions for authorizing their felling, as amended.
- Government Regulation **No. 187/2018** Coll. on the designation of Sites of Community Importance included in the European list, as amended.
- Decree of the Ministry of the Environment of CR **No. 142/2018** Coll. on the requirements for assessing the impact of plans and programs on Sites of Community Importance and bird areas, and on the requirements for impact evaluation, as amended.
- Decree of the Ministry of the Environment of CR **No. 45/2018** Coll. on management plans, care principles, and documentation for the designation, registration, and marking of protected areas, as amended.
- Decree of the Ministry of the Environment of CR **No. 189/2013** Coll. on the protection of trees and the authorization of tree felling, as amended.
- Decree of the Ministry of the Environment of CR **No. 395/1992** Coll. implementing the Nature and Landscape Protection Act, as amended.

Additional environmental legislation has cross-sectoral impact on use of forest resources aiming at the protection of environment, nature and their biodiversity:

- Act **No. 100/2001** Coll. on **Environmental Impact Assessment**, as amended - in accordance with European Union law, the Act regulates environmental and public health impact assessment and sets out the procedures for natural persons, legal entities, administrative authorities, and territorial self-governing units (municipalities and regions) involved in such assessment.
- Act **No. 93/2018** Coll., on the Conditions for the Utilisation of Genetic Resources under the Nagoya Protocol, as amended, - is a Czech legal regulation that implements the European legislation for the application of the Nagoya Protocol in the Czech Republic. It is primarily based on Regulation (EU) **No. 511/2014** of the European Parliament and of the Council and Commission Implementing Regulation (EU) **No. 2015/1866**. It sets out the rights and obligations of users of genetic resources – including a “due diligence” mechanism, i.e. the

obligation to demonstrate the legal origin of genetic material and compliance with the agreed terms with the provider of the resource.

- Act **No. 17/1992** Coll. on **the Environment**, as amended – defines basic terms and establishes fundamental principles of environmental protection, as well as the obligations of legal and natural persons in protecting and improving the state of the environment and in the use of natural resources, it is based on the principle of sustainable development.
- Act **No. 123/1998** Coll. on the **Right to Environmental information**, as amended - incorporates the relevant European Union regulations and governs the enforcement of the right of access to environmental information, the promotion of active disclosure of environmental information by obligated entities, the rules for the establishment and provision of spatial data through network services via the INSPIRE National Geoportal, and the requirements for education, training, and public awareness in the field of environmental protection.
- Act **No. 100/2004** Coll. on the Protection of Species of Wild Fauna and Flora by Regulating Trade and Other Measures to Protect These Species (**Act on Trade in Endangered Species**), as amended - regulates the protection of wild animals and wild-growing plants that are threatened with extinction, with the aim of their conservation by controlling trade in such species, in accordance with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the law of the European Communities governing the import and export of wild animals and wild plants. It sets the conditions for trade in endangered species of wild fauna and flora as further defined and establishes certain additional measures to ensure the protection and registration of these species within the territory of the Czech Republic.
- Act **No. 282/1991** Coll. on the **Czech Environmental Inspectorate and its Competence in Forest Protection**, as amended – establishes the Czech Environmental Inspectorate and defines its competence in individual components of the environment.
- Act **No. 149/2003** Coll., on the **Marketing of Reproductive Material of Forest Tree Species of Forestry Significance and Artificial Hybrids Intended for Forest Regeneration and Afforestation**, as amended - incorporates the relevant European Union legislation and establishes the principles for the protection and reproduction of the gene pool of forest tree species, as well as the conditions under which reproductive material of forest tree species of forestry significance and artificial hybrids intended for forest regeneration and afforestation may be marketed.

#### **Legislation related to monitoring biomass sustainability criteria**

- Act **No. 201/2012** Coll. on the **Protection of Atmosphere**, as amended - among other things, also sets out the conditions and obligations of persons and sustainability criteria for biofuels
- Government Regulation **No. 395/1992** Coll. on Sustainability Criteria for Biofuels and Reducing Greenhouse Gas Emissions from Fuels, as amended.
- Act **No. 165/2012** Coll. on Supported Energy Sources, as amended - among other things, also sets out the conditions and obligations of persons and sustainability criteria for solid, liquid and gaseous fuels from biomass - transposes the requirements of the Renewable Energy Directive (EU) **2018/2001 (RED II)** and the Renewable Energy Directive (EU) **2023/2413 (RED III)** into Czech legislation.
- Decree of the Ministry of the Environment of CR **No. 110/2022** Coll. on the determination of types and parameters of supported renewable sources and sustainability criteria and

greenhouse gas emission savings for bioliquids and biomass fuels, as amended - is currently undergoing amendment to reflect the revised requirements set out in the RED III.

#### Other international agreements and conventions

The Czech Republic is a signatory of several international agreements and conventions and ensures compliance with their objectives and requirements, for example:

- **Convention on International Trade in Endangered Species of Wild Fauna and Flora (“CITES”)** – [www.cites.org](http://www.cites.org)
- **International Labour Organization (“ILO”)** – [www.ilo.org/ilolex/english/convdisp1.htm](http://www.ilo.org/ilolex/english/convdisp1.htm)
- **International Tropical Timber Agreement (“ITTA”)** - [www.itta.com](http://www.itta.com)
- **Convention on Biological Diversity** - [www.biodiv.org/biosafety/protocol.asp](http://www.biodiv.org/biosafety/protocol.asp)
- **The Ramsar Convention** (“Convention on Wetlands of International Importance Especially as Waterfowl Habitat”) – transposed into Czech legislation through Communication from the Federal Ministry of Foreign Affairs on the conclusion of the Convention on Wetlands of International Importance, Especially as Waterfowl Habitat, and the Protocol to Amend It **No. 396/1990 Coll.**
- **The Bern Convention** (“Berne Convention on the Conservation of European Wildlife and Natural Habitats”) - transposed into Czech legislation through Act **No. 114/1992 Coll.**, on Nature and Landscape Protection (Act on Nature and Landscape Protection), as amended.
- **The Bonn Convention** (“Convention on the Conservation of Migratory Species of Wild Animals” (CMS)) - transposed into Czech legislation through Communication from the Ministry of Foreign Affairs on the accession of the Czech Republic to the Convention on the Conservation of Migratory Species of Wild Animals **No. 127/1994 Coll.**, as amended.
- **The Convention on Biological Diversity (CBD)** - transposed into Czech legislation through Communication from the Ministry of Foreign Affairs on the negotiation of the Convention on Biological Diversity **No. 134/1999 Coll.**
- **The Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)** - transposed into Czech legislation through Act **No. 100/2004 Coll.** on the Protection of Wild Fauna and Flora Species by Regulating Trading in Them, as amended.

#### Laws of European Communion (Legislation of the EU)

- Council Directive on the conservation of natural habitats and of wild fauna and flora (**No. 92/43/EC**)
- Directive of the European Parliament and of the Council on the conservation of wild birds (**No. 2009/147/EC**)
- Directive of the European Parliament and of the Council on the deliberate release into the environment of genetically modified organisms (**No. 2001/18/EC**)
- Directive (EU) of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (**No. 2018/2001**)
- Directive (EU) of the European Parliament and of the Council amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 (**No. 2023/2413**)
- Regulation (EU) of the European Parliament and of the Council on transboundary movements of genetically modified organisms (**No. 1946/2003**)

#### National Biodiversity Strategy of the Czech Republic 2016–2025

The National Biodiversity Strategy of the Czech Republic (“**Strategy**”) represents a fundamental conceptual document defining the priorities in the field of conservation, and the sustainable use of biodiversity within the territory of the Czech Republic. The document covers identification of threats and proposes specific measures for enhancement of biodiversity at several levels, genetic, species, habitats, landscape.

The document is divided into four priority areas and contains 20 framework objectives, 66 specific objectives, and 123 accompanying measures, which are complemented by indicators, deadlines, and responsible institutions, also defines strategic measures for use of forest resources with emphasis on sustainable forest management practices.

It sets out the priority areas:

- Public awareness of the value of natural resources.
- Long-term protection of biodiversity and natural processes.
- Sustainable use of natural resources.
- Provision of up-to-date data for nature conservation.

The Strategy is complemented by the State Programme for the Protection of Nature and the Landscape 2020–2025.

#### **State Programme for the Protection of Nature and the Landscape 2020-2025 (“SPOPK ČR 2020–2025”)**

**SPOPK ČR 2020–2025** serves as an action plan following up on the **Strategy** and was approved by the Government of the Czech Republic.

Its main objective is to halt the ongoing loss of biodiversity and to put into practice specific measures aimed at improving its status.

The programme defines 36 framework objectives and 120 specific measures and includes specific targets and legislator measures for enhancement of protection of protected and endangered species, genetic variability of species, protection of natural ecosystems including special protected areas and **Natura 2000** areas, protection at the landscape and ecosystem level.

The document also defines measures relating to forest ecosystems, support to selective management systems, species diversity of forest stands, support to deadwood remaining in forest stands, improvement of water retention of forest soils, restoration of water regimes in forests by supporting wetlands and small water streams and ponds.

#### **State Forest Policy Concept until 2035**

The Czech Republic, in accordance with its obligations arising from international law and from its membership in the European Union, strives to ensure sustainable forest management and to fulfil the positive non-productive functions of forests. This means managing and cultivating forests and forest land in such a way and to such an extent that their biodiversity, productive capacity, regenerative potential, vitality, and ability to fulfil appropriate protective, economic, and social functions—both now and in the future—are preserved, while not causing damage to other ecosystems. For understanding the development of nature, samples of forests representing our natural conditions, left to spontaneous development in specially protected areas, are also important.

State Forest Policy Concept until 2035 approved by the Government of the Czech Republic in 2020, including an accompanying **Implementation Document**, which specifies concrete measures for the realisation of the concept. The Implementation Document sets out short-term measures (until 2026) based on the four long-term objectives of the concept.

The Concept until 2035 defines clear strategic directions for Czech forestry, responding to climate challenges as well as biodiversity needs.

The four key objectives include the protection of ecosystems, enhancement of biodiversity, long-term competitiveness, and the promotion of education and innovation. This covers specific measures to promote species, age and structural diversity of forests, enhancement of biological diversity of forests, leaving share of dead wood, forest residues and habitat trees.

### **Natura 2000**

The **Natura 2000** network consists of two types of protected areas: Special Protection Areas (“SPAs”) and Sites of Community Importance (“SCIs”). The Czech government designated all 41 SPAs by individual government regulations in the period 2004–2009. The 1,112 SCIs are included in the so-called “National list”, which was approved by the Government of the Czech Republic and published in the form of Government Regulation No. **318/2013** Coll., on the Establishment of the National List of Sites of Community Importance, as amended.

The Natura 2000 network in the Czech Republic covers approximately 14 % of the country’s territory. This network of protected areas includes:

- Sites of Community Importance (SCI)/Special Areas of Conservation (commonly referred to as EVL in Czech): 1,112 sites covering about 10 % of the Czech Republic’s land area.
- Special Protection Areas for birds (SPAs), referred to as Ptačí oblasti (PO): 42 areas covering roughly 9 % of the country.

Because some of these areas overlap, the overall area encompassed by the Natura 2000 network is about 14 % of Czech territory. The list of Natura 2000 sites in the Czech Republic can be found at <https://natura2000.cz/Lokalita/Lokalita>.

### **Subsidies Programmes relating to biodiversity promotion in forests**

The Czech government uses to regulatory function in strengthening biodiversity. A financial support established by several subsidies programme complements the regulatory effort:

#### ▪ **Subsidy programmes under the Ministry of Agriculture**

The government provides financial compensations to forest owners for some requirements defined by the **Forest Act**. The implementing legal act for this law is the Government Regulation **No. 30/2014** Coll. on **establishing binding rules for providing financial contributions for forest management and selected hunting activities**, as amended. This regulation defines binding rules regarding:

- the provision of financial contributions for forest management under the Forest Act,
- financial contributions for selected hunting activities according to the Game Management Act,
- procedures for controlling the use of these contributions and the templates for applications requesting such financial contributions.

Financial contributions for forest management are divided into several categories:

- Contributions for ecological and environmentally friendly technologies in forest management.
- Contributions for the restoration, securing, and tending of forest stands up to 40 years of age, including: natural regeneration, artificial regeneration by sowing or planting, mechanical soil preparation prior to regeneration, and the piling of logging residues (slash) into heaps or windrows left for natural decomposition.
- Contributions to increase the share of meliorative and strengthening tree species.

- **Subsidy programmes under the Ministry of the Environment (relating to nature and environment protection and biodiversity)** - To protect the environment, the Ministry of the Environment provides financial support through a variety of programs, both national and

European. All programs derive from the objectives of international and national strategies for sustainable development and environmental protection.

A complete overview of all programs can be found here -

[https://mzp.gov.cz/cz/agenda/prehled-dotaci?utm\\_source=chatgpt.com](https://mzp.gov.cz/cz/agenda/prehled-dotaci?utm_source=chatgpt.com).

### **Geographical and Ecological Landscape Stability**

The **Territorial System of Ecological Stability** (“TSES”) supports ecological stability by interconnecting and reinforcing ecosystems across the landscape. It constitutes an important legal tool for landscape protection, firmly anchored in legislation.

TSES is mandated under Act **No. 114/1992** Coll., on Nature and Landscape Protection. Establishing and preserving TSES is considered a public interest, involving landowners, municipalities, regional authorities, and the state.

The overarching goal of TSES is to safeguard ecological stability: the ability of ecosystems to withstand external changes and maintain natural functions. This is achieved by:

- Preserving or restoring stable ecosystems and their interconnections.
- Protecting natural genetic diversity and habitats.
- Enhancing resilience of less stable landscape portions.

TSES functions as a form of green infrastructure, supporting biodiversity, mitigating environmental pressure, and integrating ecological needs into regional planning.

### **Biodiversa+ (European Biodiversity Partnership)**

The **Biodiversa+ Partnership** (also known as Partnership for Biodiversity) aligns member countries with the global vision of “Living in Harmony with Nature” adopted under the UN Convention on Biological Diversity, as well as the corresponding EU vision: by 2050, biodiversity and its benefits for humanity will be protected, valued, and restored as outlined in the EU Biodiversity Strategy for 2030, part of the European Green Deal.

For vision for 2050 are three General Objectives:

- No net ecosystem loss by 2030, reduced extinction risk, and increased species and genetic diversity.
- Large-scale deployment of nature-based solutions to address human needs.
- Full recognition of good biodiversity status as foundational to sustainable development and a green economy, reinforcing EU/associate country leadership

The Czech Nature Conservation Agency (“AOPK ČR”) participates in several Biodiversa+ initiatives alongside European partners, notably in:

- Data governance, interoperability, and adoption of standards.
- Innovative monitoring of invasive non-native species, including via automated insect monitoring traps (AMI traps) and CamAlien (a specialized camera system for mapping invasive plants along roads).
- Deployment of automated biodiversity monitoring stations.
- Mapping and monitoring open habitats (non-forested areas) using remote sensing techniques.

### **Sources**

EU legislation: <https://eur-lex.europa.eu/homepage.html>

Czech legislation: <https://www.zakonyprolidi.cz/>

	<p>SPOPK ČR 2020 – 2025: <a href="https://mzp.gov.cz/cz/pro-media-a-verejnost/aktuality/archiv-tiskovych-zprav/spopk-cr-2020-2025-prioritou-je-posilit">https://mzp.gov.cz/cz/pro-media-a-verejnost/aktuality/archiv-tiskovych-zprav/spopk-cr-2020-2025-prioritou-je-posilit</a></p> <p>Application Document for the State Forestry Policy Concept until 2035 - <a href="https://mze.gov.cz/public/portal/mze/-q321949---GqaUgNDi/aplikacni-dokument-ke-koncepci-statni?linka=a235677">https://mze.gov.cz/public/portal/mze/-q321949---GqaUgNDi/aplikacni-dokument-ke-koncepci-statni?linka=a235677</a></p> <p><a href="https://biodiversity.europa.eu/euleap.unep.org">biodiversity.europa.eu/euleap.unep.org</a></p> <p><a href="https://biodiversity.europa.eu/countries/czechia/green-infrastructure?utm_source=chatgpt.com">https://biodiversity.europa.eu/countries/czechia/green-infrastructure?utm_source=chatgpt.com</a></p> <p><a href="https://aopk.gov.cz/biodiversa">https://aopk.gov.cz/biodiversa</a></p> <p><a href="https://mze.gov.cz/public/portal/-q321885---f1OQNPK/koncepci-statni-lesnicke-politiky-do">https://mze.gov.cz/public/portal/-q321885---f1OQNPK/koncepci-statni-lesnicke-politiky-do</a></p>
<b>Were applicable laws identified</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)

<b>Step 2: Description of enforcement and monitoring</b>
<p>Biodiversity protection in the Czech Republic is enforced through a combination of legal, institutional, and practical tools derived from international commitments (e.g. the Convention on Biological Diversity, the Bern Convention), European Union law (notably the Habitats Directive and the Birds Directive), and national legislation, primarily Act No. <b>114/1992</b> Coll., on Nature and Landscape Protection, as amended.</p> <p>The biodiversity in forests and compliance with the legal requirements is monitored by multiple state administration bodies with authorities given by particular regulations as well as by monitoring programmes established by the government.</p> <p><b>Authorities of the State Biodiversity Protection Administration</b></p> <ul style="list-style-type: none"> <li>▪ <b>the Ministry of the Environment</b> - is the central authority of state administration for nature protection in the Czech Republic.</li> <li>▪ <b>Municipal authorities</b> - within their administrative district, except in the territories of national parks, national nature reserves, national nature monuments, nature reserves, nature monuments, and the protective zones of these specially protected areas <ul style="list-style-type: none"> <li>○ grant permits for the felling of woody plants within their administrative district (except in the territories of national parks, national nature reserves, national nature monuments, nature reserves, and nature monuments),</li> <li>○ impose compensatory planting (except in the territories of national parks, national nature reserves, national nature monuments, nature reserves, and nature monuments).</li> </ul> </li> <li>▪ <b>Municipal authorities with extended competencies (“MECs”)</b> - among other things, <ul style="list-style-type: none"> <li>○ issue consents for interventions that could result in damage to or destruction of a significant landscape element, or in endangering or weakening its ecological-stabilising function.</li> <li>○ order the execution of necessary measures, including the felling of woody plants.</li> </ul> </li> </ul>

- issue consents for the permitting of constructions and other activities that could reduce or alter the landscape character.
- set conditions for the protection of interests under this Act in land consolidation proceedings.
- **Regional authorities** - among other things,
  - in cooperation with the Ministry of the Environment prepare forecasts, concepts, and strategies for nature conservation within their territorial jurisdiction (excluding national parks, protected landscape areas, national nature reserves, national nature monuments, and the protective zones of these specially protected areas, as well as military training areas).
  - issue consents for the approval of forest management plans and forest management guidelines.
  - issue consents for activities and interventions requiring prior approval of the nature protection authority within the protective zones of nature reserves and nature monuments.
  - ensure the management of Sites of Community Importance, designate Sites of Community Importance, and issue consents for interventions that could result in damage to, or disturbance of the restoration of, Sites of Community Importance or their conservation objects.
- **the Agency** - is established as an administrative authority subordinate to the Ministry of the Environment. In the territory of protected landscape areas, national nature reserves, national nature monuments, and the protective zones of these specially protected areas (excluding military training areas), it performs state administration in nature and landscape protection to the extent of the competences of municipal authorities of municipalities with extended powers and of regional authorities, unless the administration of a national park or the Ministry of the Environment is competent under the law.
- **National Park administrations** (4) - in the territory of national parks and their protective zones perform state administration in nature and landscape protection to the extent of the competences of municipal authorities, MECs, regional authorities, and the Agency, unless the Ministry of the Environment is competent under the law.
- **the Czech Environmental Inspectorate** - monitors observance of rules by public administration bodies, with central authorities exempted, and by legal entities and self-employed natural persons, with the provisions of legal regulations, directly applicable European Union legislation, and decisions concerning nature and landscape protection. The Inspectorate identifies and records cases of endangerment and damage to nature and the landscape, their causes, and the persons responsible for their occurrence or persistence.
- **Military district offices and the Ministry of Defence** - perform state administration in nature and landscape protection in the territory of military training areas.
- **Nature Guard** – is appointed by regional authorities, the Agency, and National Park Administrations. Its task is to monitor compliance with regulations on nature and landscape protection.

Biodiversity monitoring in the Czech Republic is carried out through various complementary methods that cover different components of nature and different levels of protection.

#### **National programmes and systematic monitoring**

The Nature Conservation Agency of the Czech Republic (AOPK ČR) develops and publishes methodological materials to support the implementation of individual nature and landscape management activities, in particular standards for nature and landscape management and

guidelines with recommended procedures for other nature protection authorities, public administration, nature and landscape conservation contractors, land managers, and land users.

The guidelines cover the following areas: planning, nature and landscape management, tree care, species protection, monitoring, evaluation and valuation of nature, and protective measures for animals. All types of guidelines are available on the <https://aopk.gov.cz/metodiky>.

#### List of National programmes and systematic monitoring

- **The Nature and Landscape Monitoring Programme** – coordinated by the Nature Conservation Agency of the Czech Republic (AOPK ČR), includes monitoring of species and habitats, including those of European importance.
- **Monitoring under EU directives** – specifically under the Habitats Directive and the Birds Directive, within the **Natura 2000** network, with regular reporting to the European Commission.
- **Monitoring of specially protected areas** - national parks, protected landscape areas, and other reserves carry out regular field inspections and biological assessments. The status of habitats, species composition, and the impacts of human activities are monitored.
- **Species-specific programmes** for the conservation of specially protected species – monitoring of population numbers, reproduction, and migration (e.g. large carnivores, birds of prey, bats).
- **Monitoring of invasive alien species** – including their spread and impacts on ecosystems.
- **Forest and agricultural monitoring** – monitoring of tree health status, biodiversity of forest ecosystems, and recording of harmful agents.
- **Agri-environmental monitoring** – monitoring of grasslands, field habitats, and small landscape features.
- **Aquatic ecosystems** - monitoring of water quality and aquatic organisms (fish, macrozoobenthos, aquatic plants) in accordance with the **Water Framework Directive** and monitoring of wetlands and floodplains.

#### Prevention and Monitoring

- **Forest Management Plans (“LHP”)/Outlines (“LHO”)** – Every forest must have an approved plan determining logging limit.
- **Forest Management Information System (“ISLH”)** – A digital registry of planned and executed logging operations.
- **Drones, GPS tracking, and camera traps** – Increasing use of technology for monitoring illegal activities.

#### Collection and storage of monitoring data

Data are stored in the Nature Conservation Information System (ISOP). The Nature Conservation Information System (ISOP) portal provides expert information and data on the nature and landscape of the Czech Republic. It contains applications, map services, data, and outputs for selected thematic areas and presents them in their current form. The ISOP portal is operated by the Nature Conservation Agency of the Czech Republic.

Data on forest regeneration are also collected by the Czech statistical office and published by the Ministry of Agriculture as a part of an annual report of the state of forests in the Czech Republic.

Involvement of universities, research institutes, and citizen science (e.g. bird counts, species mapping).	
<b>Sources</b>	EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a> Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> <a href="https://aopk.gov.cz/monitoring-a-mapovani">https://aopk.gov.cz/monitoring-a-mapovani</a> <a href="https://aopk.gov.cz/metodiky">https://aopk.gov.cz/metodiky</a> <a href="https://portal.nature.cz/">https://portal.nature.cz/</a>
<b>Are enforcement and monitoring ensured for the identified laws?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)
<b>Degree of compliance with the criterion "biodiversity"</b>	
<input checked="" type="checkbox"/> Requirements fulfilled <input type="checkbox"/> Requirements not fulfilled	

<b>Step 3: Evaluation of the effectiveness of the legal framework for biodiversity</b>
<p><b>Assessment of the Legal Framework for Forest Restoration</b></p> <p>The legal framework for biodiversity protection in the Czech Republic is generally strong and in line with European and international standards.</p> <p>Biodiversity protection in the Czech Republic is primarily enshrined in Act No. <b>114/1992</b> Coll., on <b>Nature and Landscape Protection</b>, and in other legal regulations (the <b>Forest Act</b>, the <b>Water Act</b>, and the <b>Act on the Protection of Agricultural Land</b>). This framework is complemented by commitments arising from EU membership (in particular, the Habitats Directive and the Birds Directive – Natura 2000) and from international conventions (the Convention on Biological Diversity, the Ramsar Convention, the Bern Convention, etc.).</p> <p><b>Implementation and enforcement of legal requirements</b></p> <p>The assessment of the effectiveness of the Czech legal framework and the rule of law is provided in more detail in Chapter 4.1, Section 3.</p> <p>The implementation and enforcement of legal requirements relating to environmental legislation is primarily responsibility of two governmental organisations under the Ministry of Environment:</p> <ul style="list-style-type: none"> <li>▪ <b>Czech Environmental Inspection (CEI)</b></li> </ul> <p>In 2023, the Czech Environmental inspection issued 65 penalties in total amount of over 400 000 EUR. More information can be found in chapter 4.1, Section 3 and in the in the Annual Report CZECH ENVIRONMENTAL INSPECTION.</p> <ul style="list-style-type: none"> <li>▪ <b>Nature Conservation agency</b></li> </ul> <p>The Nature Conservation agency is one of the state conservation authorities responsible for implementation and enforcement of the <b>Act on Nature and Landscape Conservation</b>. The Nature Conservation Agency maintains and keeps up to date the <b>Central Nature Conservation Register ("ÚSOP")</b>. This register records:</p> <ul style="list-style-type: none"> <li>• small-scale specially protected areas,</li> <li>• large-scale specially protected areas,</li> <li>• bird areas,</li> <li>• sites of Community importance,</li> <li>• contractually protected areas and</li> <li>• memorable trees.</li> </ul> <p>For each type of area, map data and more detailed information are available.</p>

Details on the management of the **Central Nature Conservation Register** are set out in Decree No. **45/2018** Coll., on management plans, principles of care, and the documentation for the designation, registration, and marking of protected areas, as amended.



Source: For example - Graphic representation for Sites of Community Importance - <https://drusop.nature.cz/portal/>



Source: For example – Areas of Natura 2000 - <https://drusop.nature.cz/portal/>

### Categories of protected areas, their numbers, and sizes in the Czech Republic

The large-scale specially protected areas comprise two categories, the small-scale comprise four categories, and the Natura 2000 network comprises two categories of protected areas. An overview, including the total numbers and sizes in the Czech Republic, is provided in the following table, current as of 31<sup>st</sup> December 2023.

Type of area protection	Category of Protected Area (CPA)	Number in the Czech Republic	Area in the Czech Republic	Area Managed by the Nature Conservation Agency of the Czech Republic (ha; % of the total area of the given CPA category)
The large-scale specially protected areas	National Parks	4	119 016	0 (0 %)
	Protected Landscape Areas	26	1 138 174	1 014 392 (89,1 %)
The small-scale comprise four categories	National Nature Reserves	110	30 441	28 809 (94,6 %)
	National Nature Monuments	125	8 223	7 623 (92,7 %)
	Nature Reserves	818	43 075	16 838 (38,6 %)
	Nature Monuments	1 612	34 527	259 779 (36,9 %)
Natura 2000	Special Protection Areas	41	703 437	259 779 (36,9 %)
	Sites of Community Importance	1 112	795 640	296 617 (37,3 %)

Source: <https://drusop.nature.cz/portal/>

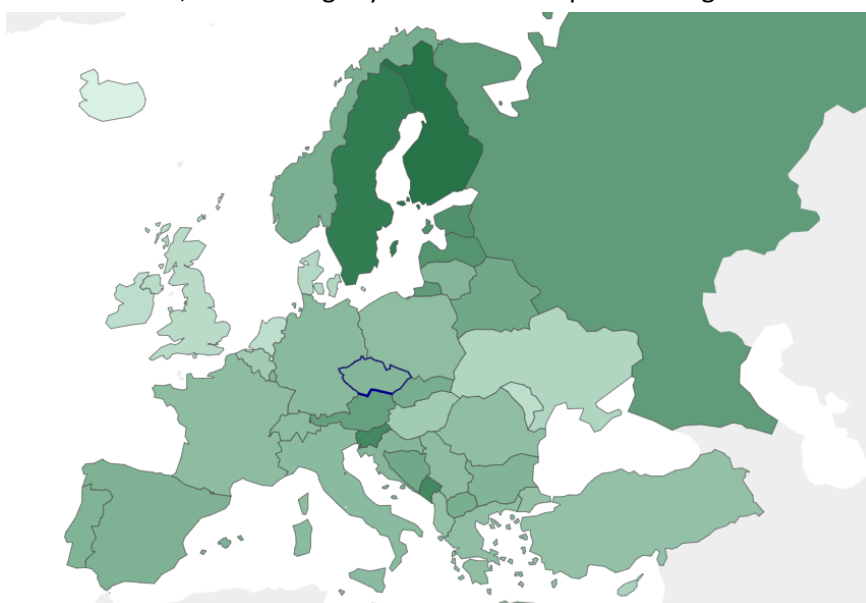
### Determination of the areas and changes in basic land-use categories as defined by the IPCC

The Czech Republic, as a Party to the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement, prepares an annual greenhouse gas emission inventory, which also includes a balance of emissions and removals from land use, land-use change, and forestry (LULUCF). The basis of the emission inventory, in accordance with the UNFCCC, is the determination of the areas and changes in six basic land-use categories as defined by the Intergovernmental Panel on Climate Change (IPCC). The quantification of land-use changes is carried out at the level of individual cadastral units.

Land-use categories (thousand ha)	1990	2021	2022
Forest land area	2 629.5	2 677.3	2 678.8
Permanent grassland – meadows and pastures	832.5	1 022.7	1 028.6
Cropland	3 455.0	3 177.5	3 170.1
Wetlands and Peatlands	157.5	167.4	168.7
Built-up areas	811.9	842.2	840.88

Source: <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

Forest cover (i.e., the proportion of forests in the total area of the country) in the Czech Republic is in 2023 37.1 %, which is slightly above the European average.



Source: <https://info.uhul.cz/Indicators/1>

### Tree species composition in forests

The tree species composition and structure of forest stands is a fundamental indicator for biodiversity of forest resources. The Czech forests have a significant proportion of conifers species (approximately 70 %) that is continuously decreasing towards broadleaved species (22.3 % in 2000 compared to 30.1 % in 2023). Lower percentage of conifers (67.7 %) and higher percentage of broadleaved species (36.1 %) in 2023 shows results of National Forest Inventory (NIL 3, 2016-2020).

Tree species composition (%)	1950	2000	2010	2020	2021	2022	2023
Scots pine ( <i>Pinus sylvestris</i> )	21.2	17.5	16.8	16.1	16	16	16
Norway spruce ( <i>Picea abies</i> )	60	54.1	51.9	48.8	48.1	46.8	46
Silver fir ( <i>Abies alba</i> )	2.9	0.9	1	1.2	1.2	1.3	1.3
European larch ( <i>Larix decidua</i> )	1.5	3.8	3.9	3.9	3.9	3.9	4
Other conifers	0.2	0.2	0.2	0.4	0.4	0.4	0.4
<b>Total conifers</b>	<b>85.8</b>	<b>76.5</b>	<b>73.8</b>	<b>70.4</b>	<b>69.6</b>	<b>68.4</b>	<b>67.7</b>
Birches ( <i>Betula</i> )	0	2.9	2.8	2.8	2.8	2.9	2.9
European beech ( <i>Fagus sylvatica</i> )	4.5	6	7.3	9	9.3	9.6	9.8
Oaks ( <i>Quercus spp.</i> )	3.6	6.3	6.9	7.5	7.6	7.8	7.9
Other broadleaved species	4.4	7.1	8.1	8.9	9	9.2	9.5
<b>Total broadleaved species</b>	<b>12.5</b>	<b>22.3</b>	<b>25.1</b>	<b>28.2</b>	<b>28.7</b>	<b>29.5</b>	<b>30.1</b>
Clearcut area	1.7	1.2	1.1	1.4	1.7	2.1	2.2

Source: <https://info.uhul.cz/Indicators/3>

### Structure of the forests

In addition to the overall representation of individual tree species, an important indicator for assessing the species biodiversity of Czech forests is the occurrence of species mixtures within forest management units.

In the Czech Republic, forest stands are classified as multi-species stands or monoculture stands based on the proportion of dominant tree species:

- **Multi-species stands** are generally defined as a stand where no single tree species exceeds a certain threshold (e.g., 80 %) of the total growing stock, and where several tree species occur in significant proportions.
- **Monoculture stands** consist predominantly of a single species, often Norway spruce, Scots pine, or another economically important tree species.

Multi-species stands prevail over monoculture stands in the Czech Republic (in 2023: mixed forests – 86.1 %, pure forests – 13.9 %). Historically, Czech forests were heavily transformed by forestry activities – particularly in the 19th and 20th centuries, when Norway spruce monocultures predominated (in lowlands and uplands often outside their natural range). The share of mixed forests is gradually increasing due to natural regeneration and targeted planting of broadleaved species and silver fir.

The total area of coniferous tree species continues to decline. Conversely, the share of broadleaved tree species has been steadily, though gradually, increasing (by 0.6 % in 2022), with spruce and pine continuing to recede - partly due to calamities in the Czech Republic - and beech, oak, and maple becoming more common.

The proportion of species mixing within these units has been steadily increasing in favor of mixed stands and stands dominated by broadleaved trees. This upward trend was also observed in 2023.

The target tree species composition (the proportion of individual tree species (in %) in a mature stand considered optimal for a given site) — essentially the “ideal” or “target” forest composition towards which a forest should gradually develop to be ecologically stable, resilient, and economically sustainable — is defined in the **Regional Forest Development Plan (“OPRL”)**.

The **OPRL** was introduced in the Czech Republic and its content defined by the **Forest Act**, and implementing Decree **No. 298/2018 Coll.**, on the preparation of regional forest development plans and the delineation of management groups, as amended.

Target tree species composition recommended in the OPRL	%
Norway spruce ( <i>Picea abies</i> )	28.3
Scots pine ( <i>Pinus sylvestris</i> )	13.2
Silver fir ( <i>Abies alba</i> )	7.6
European larch ( <i>Larix decidua</i> )	4.2
Coast Douglas-fir ( <i>Pseudotsuga menziesii</i> var. <i>menziesii</i> )	0.8
Other conifers	0.4
<b>Total coniferous tree species</b>	<b>54.4</b>
European beech ( <i>Fagus sylvatica</i> )	22.5
Pedunculate oak ( <i>Quercus robur</i> ) and Sessile oak ( <i>Quercus petraea</i> )	12.8
Maples ( <i>Acer</i> spp.)	1.9
Alders ( <i>Alnus</i> spp.)	1.5
Limes ( <i>Tilia</i> spp.)	1.5
European ash ( <i>Fraxinus excelsior</i> )	1.4
Birches ( <i>Betula</i> spp.)	1.3
Common hornbeam ( <i>Carpinus betulus</i> )	1.1
Elms ( <i>Ulmus</i> spp.)	0.3
Other broadleaved species	1.4
<b>Total coniferous tree species</b>	<b>45.6</b>

Source: <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Deadwood in forests

Deadwood is an important element of the forest ecosystems providing nutrition to forest soils but also habitats for numerous species. The total volume of deadwood in the Czech forests is estimated to 69.2 mil. m<sup>3</sup> that represents average of 24.8 m<sup>3</sup> per hectare.

During the NIL field survey, deadwood is recorded in the following forms:

- standing dead trees,
- stumps,
- lying wood with diameter > 7 cm,
- lying wood with diameter < 7 cm.

In the European context, the amount of deadwood in the Czech Republic is noteworthy: the European average (according to FAO and Forest Europe) is around 20 m<sup>3</sup>/ha, while the Czech Republic has a rather below-average level in managed forests (10–15 m<sup>3</sup>/ha). However, in non-

intervention zones, especially in national parks, the values are comparable to the most valuable European sites (100–200 m<sup>3</sup>/ha).

Period	Form of deadwood (coarse woody debris)	Total volume		Volume per hectar	
		[mil. m <sup>3</sup> with bark]	± [α = 0,05]	[m <sup>3</sup> /ha with bark]	± [α = 0,05]
NIL2 (2011-2015)	Standing deadwood	12.4	1.4	4.4	0.5
	Tree stumps	12.3	0.4	4.3	0.1
	Lying wood with diameter > 7 cm	24.0	1.4	8.5	0.5
	<b>Total</b>	<b>48.8</b>	<b>2.3</b>	<b>17.2</b>	<b>0.8</b>
NIL2 (2016-2020)	Standing deadwood	22.8	1.5	8.0	0.5
	Tree stumps	12.2	0.3	4.3	0.1
	Lying wood with diameter > 7 cm	22.1	1.0	7.8	0.3
	<b>Total</b>	<b>57.1</b>	<b>2.0</b>	<b>20.0</b>	<b>0.7</b>

Source: <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

<b>Sources</b>	Annual Report CZECH ENVIRONMENTAL INSPECTION, 2023 - <a href="https://www.cizp.gov.cz/sites/cizp.cz/files/2024-11/V%C3%BDro%C4%8Dn%C3%AD%20zpr%C3%A1va%202023.pdf">https://www.cizp.gov.cz/sites/cizp.cz/files/2024-11/V%C3%BDro%C4%8Dn%C3%AD%20zpr%C3%A1va%202023.pdf</a>		
	ÚSOP - <a href="https://drusop.nature.cz/portal/">https://drusop.nature.cz/portal/</a> <a href="https://info.uhul.cz/Indicators/3">https://info.uhul.cz/Indicators/3</a> <a href="https://info.uhul.cz/Indicators/1">https://info.uhul.cz/Indicators/1</a> <a href="https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf">https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf</a>		
<b>Efficiency (points):</b>	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)	<input type="checkbox"/> Category C (0 points)

#### 4.4. Maintenance of soil quality

##### Step 1: Identification of applicable laws

##### Legislation for the maintenance of soil quality

In the Czech Republic, the maintenance of soil quality is regulated by several legal provisions, which complement each other depending on the type of soil, its use, and the protective measures applied.

The soil protection in forests in the Czech Republic has its own legislative framework, which is closely linked to the Forest Act and related regulations, as forest soil is not part of the Agricultural Land Fund ("ALF") but is protected as part of the Forest Land Fund ("FLF").

The forest soil, its quality as well as necessary protection is regulated by the **Forest Act** and by **Act on Nature Conservation and Landscape**.

The obligations and requirements set out by these Acts are presented in Section 1 of the preceding chapters.

Other regulations related to the maintenance of soil quality:

- Act of the Czech National Council **No. 334/1992 Coll.**, on the **Protection of the Agricultural Land Fund**, as amended
  - Establishes the obligation to protect agricultural land against appropriation, erosion, pollution, and compaction.
  - Specifies the conditions for the withdrawal of land from the ALF and for implementing measures to protect its quality.
- **Act No. 17/1992 Coll.**, on the Environment, as amended (Environmental Protection Act) - defines the general obligation to protect environmental components, including soil, and to manage them sustainably.

<ul style="list-style-type: none"> <li>▪ Act No. 156/1998 Coll., on <b>Fertilizers</b>, as amended - regulates the use of fertilizers, treated sludge, and auxiliary soil substances so as to prevent damage to the soil (e.g., contamination by heavy metals).</li> <li>▪ Act No. 541/2020 Coll., on <b>Waste</b>, as amended- lays down the conditions for waste management to prevent soil contamination.</li> <li>▪ <b>Water Act No. 254/2001</b> Coll., as amended - indirectly protects soil through measures preventing pollution from surface and groundwater sources.</li> <li>▪ Decree of the Ministry of Agriculture No. 275/1998 Coll., on Agrochemical Testing of Agricultural Soils,</li> <li>▪ Decrees setting soil contamination limits (e.g., for heavy metals, persistent organic pollutants). - These decrees complement general legal regulations, such as the <b>Act on the Protection of the Agricultural Land Fund (ALF)</b>, <b>Act on Waste</b>, or <b>Act on Environmental Protection</b>, and provide specific maximum contamination values. The limits set in these decrees apply primarily to agricultural soils; for forest soils, clear legislative limits are not yet established.</li> </ul>	
<b>Sources</b>	EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a> Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a>
<b>Were applicable laws identified?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)

<b>Step 2: Description of enforcement and monitoring</b>
<p>The monitoring of the forest regeneration is covered by the work of state forest administration bodies defined by the <b>Forest Act</b> and by <b>Act on Nature Conservation and Landscape</b>. See chapter 4.1 – 4.3 concerning the monitoring and enforcement of the requirements relating to these Acts.</p> <p><b>The National Climate Change Adaptation Plan</b></p> <p>The National Climate Change Adaptation Action Plan (2021–2025) is an implementing document for the Climate Change Adaptation Strategy of the Czech Republic. It was approved by the RESOLUTION OF THE GOVERNMENT OF THE CZECH REPUBLIC of 13 September 2021 No. 785 on the update of the Climate Change Adaptation Strategy under the conditions of the Czech Republic and the National Climate Change Adaptation Action Plan. The document contains 108 adaptation measures elaborated into 322 specific tasks. Each task is assigned to the relevant ministry and includes a deadline, sources of funding, and estimated costs up to 2025.</p> <p>The <b>National Climate Change Adaptation Plan</b> sets out the following measures concerning forest soils:</p> <ul style="list-style-type: none"> <li>• Delimit areas where forest soils are threatened by acidification and nutrient degradation, water deficit, eutrophication, and erosion.</li> <li>• Develop a methodology for the inventory of carbon bound in forest soils and determine the effect of forest management practices on its quantity.</li> <li>• Prepare a project for monitoring soil properties, which will include tracking the amount and characteristics of humus, pH, base saturation, base/Al ratio, C/N ratio, physical properties, and also subsequent research and monitoring of the condition and relationships of the root system and mycorrhiza, as well as soil biota.</li> <li>• Evaluate the effects of chemical amelioration on the physical, chemical, and biological properties of the soil environment and on the health status of forest stands and establish recommendations for the use of chemical amelioration as part of adaptation measures.</li> </ul> <p><b>Monitoring of forest soils</b></p>

Current forest soil surveys in the Czech Republic are carried out by three institutions within various programs and projects: the Forestry and Game Management Research Institute – international monitoring of forest health under **ICP Forests**, the Forest Management Institute – typological survey and national forest inventory, and the Central Institute for Supervising and Testing in Agriculture – forest nutrition survey in areas affected by air pollution. The individual surveys differ to some extent in their sampling and analytical methods.

### **ICP Forests programme**

The Czech Republic joined the ICP Forests programme in 1986 with 61 monitoring plots in a 16×16 km grid. In the following year, the number of plots increased to 106. For this transnational network, the existing concept already applied in the Czech Republic since the 1950s was adopted, when the first monitoring plots were established to study the effects of SO<sub>2</sub> on forest stands. In 1991, an 8×8 km grid was established with an additional 334 plots. In addition, within the framework of regional studies, 1×1 km grids were set up in the forest areas of Šumava, Brdy, and Krkonoše. Data from these monitoring plots made it possible to obtain a detailed and representative picture of the situation in these forest areas and to compare the health condition of stands with the condition of soils and the nutritional status of stands.

In 1997–1998, a complete reconstruction of the national and transnational network plots was carried out with the aim of optimising the species and age composition of the monitoring plots so that they would better reflect the actual composition of the forests of the Czech Republic. At present, regular Level I assessments are carried out on plots of the basic 16×16 km network and on selected plots from the 8×8 km network, with a total of 306 plots evenly distributed according to forest cover across the entire territory of the Czech Republic.

Level II intensive monitoring plots in the Czech Republic have been gradually established since 1994; the latest network reconstruction took place in 2004 in connection with the implementation of the National Forestry Programme of the Czech Republic, so that the main tree species in their natural areas of occurrence would be covered proportionally to their representation in the forests of the country. Since then, the intensive monitoring network has consisted of 16 plots where a wide range of forest health and forest environment parameters are monitored. On seven monitoring plots, designated as so-called key plots, the full range of vitality parameters is evaluated, and nutrient cycles are monitored in detail.

The results from both levels of monitoring are regularly reported to the Programme Coordinating Centre in Eberswalde, which ensures their validation **at the European level**.

### **Monitoring of forest soils as a part of the National Forest Inventory**

Evaluation of soil characteristics is an integral part of the National Forest Inventory that was conducted in 2001-2004 (NIL I), 2011-2015 (NIL II) and 2016-2020 (NIL III).

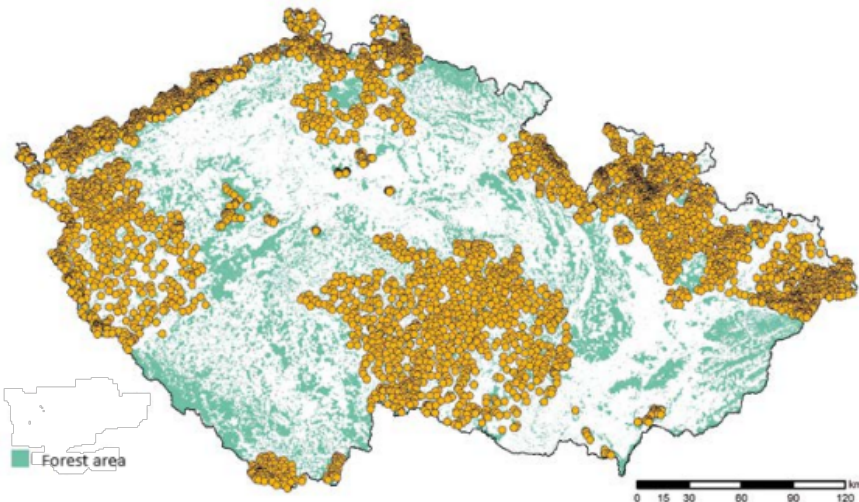
Samples of the soil are taken in a broken and unbroken form to conduct numerous analysis:

- Chemical analysis of soil properties in different soil horizons.
- Analysis of quantitative and qualitative properties of surface humus layer.
- Physical analysis of soil properties from various soil horizons.

The collected samples were submitted for laboratory testing for the following soil physical properties:

- Active soil acidity(pH/H<sub>2</sub>O), as well as exchange soil acidity (pH/KCl)
- Cation exchange capacity (“KVK”)
- The base saturation (“BS”)
- Content of oxidizable (organic) carbon (C<sub>ox</sub>)
- Total nitrogen content (N<sub>t</sub>)

	<ul style="list-style-type: none"> <li>• Content of available nutrients in the Mehlich III extract: phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg)</li> <li>• Content of total (pseudo-total) nutrients: phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), aluminium (Al), manganese (Mn)</li> <li>• Mass soil moisture (“W”).</li> </ul>
Sources	<a href="https://www.vulhm.cz/vlastnosti-lesnich-pud-predurcuji-rust-a-zdravotni-stav-budoucich-lesu/">https://www.vulhm.cz/vlastnosti-lesnich-pud-predurcuji-rust-a-zdravotni-stav-budoucich-lesu/</a> <a href="https://www.vulhm.cz/files/uploads/2024/02/LP_9_2023.pdf">https://www.vulhm.cz/files/uploads/2024/02/LP_9_2023.pdf</a> <a href="https://www.vulhm.cz/monitoring-stavu-lesa/icp-forests/?utm_source=chatgpt.com">https://www.vulhm.cz/monitoring-stavu-lesa/icp-forests/?utm_source=chatgpt.com</a>
Are enforcement and monitoring ensured for the identified laws?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)
<b>Degree of compliance of the criterion “maintenance of soil quality”</b>	
<input checked="" type="checkbox"/> Requirements fulfilled <input type="checkbox"/> Requirements not fulfilled	

<b>Step 3: Evaluate the effectiveness of the legal framework for the maintenance of soil quality</b>
<p>Czech legislation provides a solid and well-structured framework for the protection of forest soils, combining binding measures, effective control mechanisms, and clearly defined obligations for forest owners and managers. Thanks to regular updates, it can flexibly adapt to new challenges such as climate change or increasing pressure on soil resources.</p> <p>The system’s potential can be further enhanced by expanding long-term monitoring and research of soil properties, which would make it possible to evaluate the impacts of individual measures more precisely and better target protective interventions. In combination with the current legislative support, this could ensure not only a stable but also a long-term improving condition of forest soils in the Czech Republic.</p> <p>Soil analyses were carried out in areas where signs of growth disorders or deteriorated forest health have been detected, in regions affected by air pollution, and in stands designated for the conservation and reproduction of genetic resources within the Central Institute for Supervising and Testing in Agriculture (“ÚKZÚZ”) during survey in the Aggregated Database (period 2000–2019).</p>

<p>Source: Overview of sampling sites - <a href="https://www.vulhm.cz/files/uploads/2024/02/LP_9_2023.pdf">https://www.vulhm.cz/files/uploads/2024/02/LP_9_2023.pdf</a></p>

### Results of the forest soils monitoring

- according to the **“active soil acidity”**

Most forest soils in the Czech Republic are acidic to strongly acidic – the most common pH (H<sub>2</sub>O) in the surface mineral horizon ranges roughly between 3.5 and 5.0.

Acidity is natural in soils developed on acidic rocks (granites, gneisses, phyllites) and in cooler, higher elevations, but it was intensified by anthropogenic acidification (sulphur and nitrogen deposition) in the second half of the 20th century, which caused a significant drop in pH and base saturation, especially in mountain areas of northern and western Bohemia (Krušné hory, Jizerské hory, Krkonoše). After 1990, as the result of legislative requirements to reduce sulphur emissions and the introduction of flue-gas desulphurisation in industry, these emissions decreased sharply. This led to a slight increase in pH values, mainly in the organic horizon and the upper layer of the mineral soil, but the changes have been uneven, and deeper layers respond more slowly.

Coniferous stands (spruce, pine) generally have lower pH than broadleaved stands (beech, oak) due to their more acidic litter. The parent material plays a key role: soils on limestones and basic igneous rocks have higher pH (above 6), but such sites are relatively rare in Czech forests. The most acidic soils are typically found in mountainous areas with high precipitation and acidic parent material (e.g. Krkonoše, Šumava, parts of the Vysočina).

- according to the **“base saturation (“BS”)**

Most forest soils in the Czech Republic have low to very low base saturation, especially on acidic parent rocks and in mountainous areas. Base saturation (BS) has declined since the 1950s due to the significant impact of acid deposition (SO<sub>2</sub>, NO<sub>x</sub>), particularly in northern and western Bohemia. After 1990, as with pH, environmental measures led to a slight improvement in BS, especially in the surface layer.

In the Krušné hory, Jizerské hory, Krkonoše, and Šumava regions, extremely low BS values (< 10 % in the mineral horizon) are often recorded, resulting from acidic parent material and historical acidification. In the Vysočina region, BS is typically 10–25% (and can be even lower in waterlogged soils). Limestone and basic igneous or sedimentary rocks (Moravský kras, Pálava, some Carpathian flysch zones) often have BS > 60 % and pH above 6, but such sites make up only a small proportion of forests in the Czech Republic.

In most acidic areas, BS remains low, which limits the availability of Ca<sup>2+</sup>, Mg<sup>2+</sup>, and K<sup>+</sup> for forest trees.

- according to the **“content of oxidizable carbon (“C<sub>ox</sub>”)**

Stability of the content of oxidizable carbon in the mineral layer is relatively stable over time, whereas the organic horizon can respond more quickly to changes in management practices or climatic conditions. Forest management – clear-cutting or soil disturbance causes losses of C<sub>ox</sub> through erosion and mineralization.

Tree species composition – broadleaved stands often lead to faster litter decomposition and lower humus accumulation than conifers, but may improve humus quality and nutrient cycling.

Mountain areas and higher elevations (Šumava, Krkonoše, Jizerské hory, Beskydy) show high C<sub>ox</sub> in surface horizons due to slow litter decomposition and high precipitation. Waterlogged and peat soils show extremely high C<sub>ox</sub>, often exceeding 10 % in the mineral horizon. Dry lowlands show low C<sub>ox</sub>, often below 2 % in the surface mineral layer.

- according to the **“total nitrogen content (“N<sub>t</sub>”)**

Total nitrogen includes both organically and inorganically bound nitrogen in the soil. In forest soils of the Czech Republic, most nitrogen is organically bound (in humus, plant residues, and microbial biomass). The nitrogen content is closely linked to the amount of organic matter – and thus to  $C_{ox}$ .

The second half of the 20th century saw an increased nitrogen input from the atmosphere due to  $NO_x$  and  $NH_x$  deposition, particularly in northern and western Bohemia. After 1990, environmental measures led to a decrease in atmospheric nitrogen inputs; however, nitrogen content in the organic layer of the soil has remained relatively high.

Mountain areas and higher elevations (Šumava, Krkonoše, Jizerské hory, Beskydy) show higher nitrogen content in surface horizons due to slower decomposition of organic matter and higher oxidizable carbon. Waterlogged and peat soils exhibit extremely high nitrogen content in both organic and mineral horizons. Dry lowlands and sites on poor sandy substrates have low nitrogen content (< 0.2% in the surface mineral layer).

- according to the “**the content of accessible basic cations**”

In forest soils of the Czech Republic, their content is strongly influenced by geological bedrock, soil type, altitude, and tree species composition. On acidic rocks (granites, gneisses, phyllites, sandstones), the natural content of base cations ( $Ca^{2+}$ ,  $Mg^{2+}$ ,  $K^+$ ) is low, whereas on limestones, basic igneous rocks, or carbonate sediments it is high.

- **Phosphorus (P)** - Most phosphorus is bound in organic matter and minerals. Values are generally low to medium (0.02–0.08 %  $P_2O_5$ ), with the lowest values in acidic mountain soils and leached soils, and higher values in lowlands and on limestones.
- **Potassium (K)** - Potassium is mainly bound in feldspars and micas and is released slowly through weathering. On acidic rocks, potassium content is often low (<50 mg  $K^+$ /kg soil), while on loess and basic substrates it is higher (>100 mg  $K^+$ /kg soil). Low  $K^+$  content is more common in spruce monocultures in mountain areas.
- **Calcium (Ca)** - Calcium content in soil is highly sensitive to acidification and leaching. Exchangeable  $Ca^{2+}$  content is often very low in mountain areas with acidic bedrock (<50 mg/kg), which limits pH and base saturation (BS). On limestones and basic rocks, values exceed 1 000 mg  $Ca^{2+}$ /kg. After the reduction of  $SO_2$  emissions since the 1990s, there has been a slight improvement in  $Ca^{2+}$  reserves in surface horizons.
- **Magnesium (Mg)** - Magnesium is released from micas, pyroxenes, and olivines. Exchangeable  $Mg^{2+}$  content is often low in acidic soils (<10 mg/kg), which can lead to deficiencies, especially in spruce stands. High contents (>100 mg/kg) are recorded on dolomites, basic igneous rocks, and some flysch formations.

In the Krušné hory, Jizerské hory, Krkonoše, and Šumava regions, extremely low reserves of  $Ca^{2+}$ ,  $Mg^{2+}$ , and often also  $K^+$  are recorded, and P content is also limiting. In the Českomoravská vrchovina region, low to medium levels of all cations are observed, with very low levels in waterlogged soils. Lowland areas on loess and limestone (Moravian Karst, Pálava, southern Moravia) show high contents of all cations and higher pH.

<b>Sources</b>	<a href="https://www.vulhm.cz/files/uploads/2024/02/LP_9_2023.pdf">https://www.vulhm.cz/files/uploads/2024/02/LP_9_2023.pdf</a> <a href="http://icp-forests.net">icp-forests.net</a>		
<b>Efficiency (points):</b>	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)	<input type="checkbox"/> Category C (0 points)

## 4.5. Regulations for protected areas

### Step 1: Identification of applicable laws

The categorisation, proclamation and management of protected areas in the Czech Republic is one of the key elements of the environmental legislation and is also integrated in specific legislation relating to forest management.

#### Nature and environment protection legislation

The system of the special protected areas in the Czech Republic, i.e. areas that are significant and unique from for its biological or esthetical purposes, is governed by Act No. **114/1992 Coll.**, on **Nature and Landscape Protection**, as amended.

#### Act on Nature and Landscape Protection

- Establishes and defines the basic obligations for the general protection of nature, plants and animals.
- Sets the conditions for the registration of **significant landscape elements**.
- Sets the conditions for the care of woody plants and their protection against damage and destruction.
- Sets the requirements for obtaining a permit to cut down woody plants and defines the conditions for tree felling in areas where a permit may not be required (e.g., for the removal of woody plants within the protection zone of heat distribution facilities or the electricity grid, carried out during the operation of these systems). It also sets the requirements for adequate compensatory planting to offset the ecological damage caused by tree removal.
- Sets the conditions for the protection of the landscape character (the natural, cultural, and historical characteristics of a specific place or area). Interventions in the landscape character, particularly the placement and permitting of constructions, may only be carried out with regard to the preservation of significant landscape elements, specially protected areas, cultural landmarks of the landscape, and the harmonious scale and relationships within the landscape.
- Defines the conditions for declaring a **temporarily protected area**, i.e., a territory with a temporary or unforeseen occurrence of significant plant or animal species, minerals, or paleontological findings.
- Sets the conditions for granting or revoking permits for the use of invasive alien species included on the Union list, defines measures to be taken upon early detection of the occurrence of invasive alien species on the Union list, and also establishes principles for regulating widely spread invasive alien species on the Union list.
- Defines specific categories of **large-scale protected areas** and the conditions for the protection of these areas specified in detail according to their categories (National parks – “NP” and Protected Landscape areas – “CHKO”) and **small-scale protected areas** and the conditions for the protection of these areas specified in detail according to their categories (National nature reserves – “NPR”, National nature monuments – “NPP”, Nature Reserves – “PR”, Nature Monuments – “PP”).
- Declares **national parks** (which are explicitly listed in the Act) and directly sets out the protective conditions for these parks. It also defines the quiet zones of national parks and establishes the principles for their function and the delineation of their boundaries.

Furthermore, it restricts activities within national parks and sets the zoning regime for national parks. Establishes the principles of management for national parks.

- Sets out the obligations and principles for the **management of forests and agricultural land in national parks**.
- Defines **protected landscape areas**, sets out the basic protection conditions within them, and specifies the conditions for the division of territory in protected landscape areas.
- Defines **national nature reserves** and **nature reserves**, sets out the requirements for basic protection conditions within them, and specifies the requirements concerning hunting and fishing rights in these areas.
- Defines **national natural monuments** and **natural monuments** and sets out the principles for their protection.
- Defines **buffer zones of specially protected areas** and sets out the requirements for permissible activities within them to ensure the protection of specially protected areas.
- Sets out the conditions and requirements for **management plans for national nature reserves, nature reserves, national natural monuments, natural monuments, and protected landscape areas**, and defines the obligations related to their preparation.
- Sets out the conditions and principles for the protection of **sites of European importance** and defines the procedure for discussing proposals for the designation of specially protected areas.
- Establishes the obligation to create a national list of **sites of European importance**, defines the conditions for the designation of the respective **Special Protection Areas (“SPAs”)** and **Sites of Community Importance (“SCIs”)**, as well as the principles of their preliminary protection and protection, and sets out the obligations for monitoring the status of bird areas, sites of European importance, and species of European importance.
- Defines **national natural monuments** and **natural monuments** and sets out the principles for their protection.
- Defines **memorial trees** and their protective zones, as well as their registration and marking.
- Defines the conditions for classifying plants and animals into the category of **specially protected species** (according to the degree of threat: critically endangered, strongly endangered, and endangered), establishes the obligation to create their list, and sets out the basic conditions for the protection of specially protected plants and animals.
- Imposes obligations on state administration authorities to ensure the protection of nature and the landscape and to monitor compliance with the requirements of the Act and sets penalties for non-compliance with the conditions and requirements of the Act.

According to Act **No. 114/1992 Coll.**, on **Nature and Landscape Protection**, as amended, not only protected areas within the Czech Republic are designated, but also sites forming part of the Natura 2000 network. These are based on the requirements of Directive **2009/147/EC** of the European Parliament and of the Council and Council Directive **92/43/EEC**.

The **Natura 2000** network consists of two types of protected areas: **Special Protection Areas (“SPAs”)** and **Sites of Community Importance (“SCIs”)**. The Czech government designated all 41 SPAs by individual government regulations in the period 2004–2009. The 1,112 SCIs are included in the so-called “National list”, which was approved by the Government of the Czech Republic and published in the form of Government Regulation **No. 318/2013 Coll.**, on the Establishment of the National List of Sites of Community Importance, as amended.

The individual obligations arising from **Act on Nature and Landscape Protection** are more precisely and thoroughly defined by number of regulations:

- Decree of the Ministry of the Environment of CR **No. 395/1992** Coll. implementing the Nature and Landscape Protection Act, as amended.
- Decree of the Ministry of the Environment of CR **No. 189/2013** Coll. on the protection of tree species and the authorization of their felling, as amended.
- Decree of the Ministry of the Environment of CR **No. 45/2018** Coll. on management plans, management principles and documents for the declaration, registration and marking of protected areas, as amended.
- Furthermore, number of regulations such as government decrees or ordinances define specific national natural monuments, nature reserves, and conservation zones within specific protected landscape areas.

Other laws whose requirements may be related to forest protection:

- Act **No. 100/2001** Coll. on **Environmental Impact Assessment**, as amended - in accordance with European Union law, the Act regulates environmental and public health impact assessment and sets out the procedures for natural persons, legal entities, administrative authorities, and territorial self-governing units (municipalities and regions) involved in such assessment.
- Act **No. 17/1992** Coll. on **the Environment**, as amended – defines basic terms and establishes fundamental principles of environmental protection, as well as the obligations of legal and natural persons in protecting and improving the state of the environment and in the use of natural resources, it is based on the principle of sustainable development.
- Act **No. 123/1998** Coll. on the **Right to Environmental information**, as amended - incorporates the relevant European Union regulations and governs the enforcement of the right of access to environmental information, the promotion of active disclosure of environmental information by obligated entities, the rules for the establishment and provision of spatial data through network services via the INSPIRE National Geoportal, and the requirements for education, training, and public awareness in the field of environmental protection.
- Act **No. 100/2004** Coll. on the Protection of Species of Wild Fauna and Flora by Regulating Trade and Other Measures to Protect These Species (**Act on Trade in Endangered Species**), as amended - regulates the protection of wild animals and wild-growing plants that are threatened with extinction, with the aim of their conservation by controlling trade in such species, in accordance with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the law of the European Communities governing the import and export of wild animals and wild plants. It sets the conditions for trade in endangered species of wild fauna and flora as further defined and establishes certain additional measures to ensure the protection and registration of these species within the territory of the Czech Republic.
- Act **No. 226/2013** Coll., on **Placing Timber and Timber Products on the Market**, as amended - imposes an obligation on economic operators (in the Czech Republic represented by owners of land and trees growing on it, if they are subject to harvesting and marketing, and importers from non-EU countries) to establish and maintain a so-called due diligence system.
- Act **No. 282/1991** Coll. on the **Czech Environmental Inspectorate and its Competence in Forest Protection**, as amended – establishes the Czech Environmental Inspectorate and defines its competence in individual components of the environment.

<ul style="list-style-type: none"> <li>• Act <b>No. 289/1995</b> Coll., on <b>Forests</b>, as amended - defines three categories of forests (production forests, <b>protective forests</b> and <b>special purpose forests</b>). The categorisation of forests shall be included in the forest management plan and state conservation authorities shall provide an „binding opinion“ on the content of the plan as a precondition for the plan formal approval.</li> <li>• Government Regulation <b>No. 395/1992</b> Coll. on Sustainability Criteria for Biofuels and Reducing Greenhouse Gas Emissions from Fuels, as amended.</li> <li>• Act <b>No. 165/2012</b> Coll. on Supported Energy Sources, as amended - among other things, also sets out the conditions and obligations of persons and sustainability criteria for solid, liquid and gaseous fuels from biomass - transposes the requirements of the Renewable Energy Directive (EU) <b>2018/2001 (RED II)</b> and the Renewable Energy Directive (EU) <b>2023/2413 (RED III)</b> into Czech legislation.</li> <li>• Decree of the Ministry of the Environment of CR <b>No. 110/2022</b> Coll. on the determination of types and parameters of supported renewable sources and sustainability criteria and greenhouse gas emission savings for bioliquids and biomass fuels, as amended - is currently undergoing amendment to reflect the revised requirements set out in the RED III.</li> </ul>	
<b>Sources</b>	EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a> Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a>
<b>Were applicable laws identified?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)

Step 2: Description of enforcement and monitoring
<p>In the Czech Republic, the control and monitoring of the protection of Protected Landscape Areas (“CHKO”) is carried out in a relatively systematic manner and is directly anchored in: Act <b>No. 114/1992</b> Coll., on <b>Nature and Landscape Protection</b>, as amended, as well as in related acts, decrees and methodologies.</p> <p>The management of protected areas, as defined by <b>Act on Nature and Landscape Protection</b> and <b>Forest Act</b>, is overseen by several state administrative bodies authorized by specific regulations, as well as through monitoring programmes established by the government (see also section 4.3, steps 1 and 2).</p> <p><b>Enforcement of the compliance with regulations for protected areas</b></p> <p>The previously mentioned laws establish multiple law enforcement bodies at the central, regional as well as local levels.</p> <ul style="list-style-type: none"> <li>▪ <b>the Ministry of the Environment</b></li> <li>▪ <b>Municipal authorities</b></li> <li>▪ <b>Municipal authorities with extended competencies (“MECs”)</b></li> <li>▪ <b>Regional authorities</b></li> <li>▪ <b>the Agency = Nature Conservation Agency of the Czech Republic (“AOPK ČR”)</b></li> <li>▪ <b>National Park Administrations</b></li> <li>▪ <b>the Czech Environmental Inspectorate</b></li> <li>▪ <b>Military district offices and the Ministry of Defence</b></li> <li>▪ <b>Nature Guard</b></li> </ul>

For more information on the structure and work of the state forest administration bodies, please see step 2 and 3 of chapters 4.1 and 4.3.

#### Monitoring of the compliance with regulations for protected areas

- **Ministry of the Environment** – coordination and funding of monitoring programs.
- **Nature Conservation Agency of the Czech Republic** – the main institution responsible for monitoring natural processes, habitats, and species in Protected Landscape Areas.
- **Administrations of individual Protected Landscape Areas** – organizational units of **AOPK ČR** that directly carry out field monitoring.
- **Czech Environmental Inspectorate** – the control authority, monitoring compliance with legislation and the state of the environment.
- **Research institutes and universities** (e.g. Institute of Botany of the Czech Academy of Sciences, Silva Tarouca Research Institute, Czech University of Life Sciences, Mendel University) – involved in specialized monitoring (vegetation, soils, water, forests).
- **The National Forestry Institute (“NLI”)** - operates as a professional organization of the Ministry of Agriculture in the field of forestry and game management. The institute’s scope of activity covers the entire Czech Republic. One of the main activities of the organization has been the implementation of the National Forest Inventory since 2015 in the form of the project Monitoring the State and Development of Forest Ecosystems. NLI manages a central database containing information on the forests of the Czech Republic, forest management, and game management.

In addition to the role of the state conservation authority and implementation/enforcement of the environmental legislation in relation to the protected areas, the **Nature Conservation Agency of the Czech Republic** (established in 2015) has additional tasks relating to the protection and conservation of the protected areas:

- technical and expert support for State Administration, including methodological and expert activities,
- performing State Administration in nature conservation and landscape protection, especially within the Protected Landscape Areas, National Nature Reserves, and National Nature Monuments,
- implementation of practical measures to conserve nature and to protect landscape in **24 Protected Landscape Areas** and **226 National Nature Reserves** and **National Nature Monuments** on the entire territory of the Czech Republic,
- administration of the **Nature Conservancy Central Register** and central governmental documentation on nature conservation and landscape protection; operating a specialised library and administrative archives,
- design, development, and management of the **Nature Conservancy Information System**,
- administration of national subsidy programmes as well as some European Community funds serving to conserve nature and to protect landscape,
- payment of financial compensation for damage caused by specially protected animals, and
- managing state property in the Czech Republic’s specially protected areas,
- awareness raising, communication, and education in nature conservation and landscape protection.

#### Sources

Czech legislation: <https://www.zakonyprolidi.cz/>

NLI: <https://nli.gov.cz/o-uhul/>

AOPK ČR: <https://aopk.gov.cz/dokumentujeme-prirodu>

Are enforcement and monitoring ensured for the identified laws?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No (audit required)
Degree of compliance with the criterion "regulations for protected areas"		
<input checked="" type="checkbox"/> Requirements fulfilled		<input type="checkbox"/> Requirements not fulfilled

### Step 3: Evaluation of the effectiveness of the legal framework for the regulation of protected areas

The Czech Republic has an extensive network of protected areas, and their monitoring is in accordance with the requirements of the European Commission, which can be considered a strong point and a key tool for nature conservation.

The system of the special protected areas in the Czech Republic, i.e. areas that are significant and unique from for its biological or esthetical purposes, is governed by Act **No. 114/1992 Coll. on Protection of Nature and Landscape**, as amended. The law defines specific categories of large-scale protected areas and the conditions for the protection of these areas specified in detail according to their categories (**National Parks** – “NP” and **Protected Landscape areas** – “CHKO”) and small-scale protected areas (**National Nature Reserves** – “NPR”, **National Nature Monuments** – “NPP”, **Nature Reserves** – “PR”, **Nature Monuments** – “PP”).

Categories	NP	CHKO	NPR	NPP	PR	PP
Number of areas	4	26	110	126	818	1 594
Total areas (1 000 ha)	119	1 138	30	8.3	43.5	33.6
% of total area of the Czech Republic	1.51	14.42	0.38	0.1	0.55	0.43

Source: <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

Type of territorial protection	Category of protected area	Number in the Czech Republic	Area in the Czech Republic (ha)	Area managed by the Nature Conservation Agency of the Czech Republic (ha; % of the total area of the given protected area category)
Large-scale protected areas	National Parks	4	119 019	0 (0 %)
	Protected Landscape areas	26	1 138 174	1 014 392 (89.1 %)
Small-scale protected areas	National Nature Reserves	110	30 441	28 809 (94.6 %)
	National Nature Monuments	125	8 223	7 623 (92.7 %)
	Nature Reserves	818	43 705	16 838 (38.6 %)
	Nature Monuments	1 612	34 527	2 885 (8.4%)

Source: <https://aopk.gov.cz/ochrana-uzemi>

The area of specially protected areas currently amounts to 1,326 thousand hectares, which represent 16.8 % of the total area of the Czech Republic.

#### Care Plans for Protected Landscape Areas (“PLAs”)

Protected Landscape Areas (PLAs) have their own care plans, which serve as expert and conceptual documents for nature conservation. These plans, similar to those for National Parks, National Nature Reserves, Nature Reserves, National Natural Monuments, and Natural Monuments including their buffer zones, are based on data concerning the historical development and current condition of the respective area.

The primary objective of care plans is to propose measures for maintaining or improving the state of the protected subject and to ensure the protection of the area against adverse external influences. Care plans also serve as a basis for other types of planning documents and for decision-making by nature conservation authorities.

The preparation of care plans for Protected Landscape Areas is carried out by the Ministry of the Environment, while for other specially protected areas, they are prepared by the nature conservation authorities responsible for their designation.

### National Parks (“NP”)

National Parks defined by law are extensive areas with characteristic relief and geological structure, predominantly featuring natural or minimally human-altered ecosystems, which are unique and significant at the national or international level from an ecological, scientific, educational, or awareness-raising perspective.

There are four National Parks in the Czech Republic, which are established and defined by Act **No. 114/1992 Coll.**, as amended.

- **Krkonoše National Park (“KRNP”)** - established: 1963
- **Šumava National Park** - established: 1991
- **Podyjí National Park** - established: 1991
- **České Švýcarsko National Park** - established: 2000

The specification and overview of selected indicators from individual National Parks are presented in the table below.

National Park	Natural values	Date of designation	Area of the National Park (ha)	Forest area (ha)	Proportion of forests (%)
Krkonoše	The highest mountain range in the Czech Republic, exceeding the upper forest limit in elevation, with natural values of international significance – montane and submontane geobiocoenoses featuring endemics, glacial relics, and endangered species: arcto-alpine tundra with numerous glacial (glacial cirques, moraines, etc.) and periglacial features (frost wedges, stone seas, etc.), subarctic and forested peatlands and meadow wetlands, montane spruce forests, deciduous and mixed forest stands, and flowering montane and submontane meadows.	(17. 5. 1963) 20. 3. 1991	36 352	31 779	87.4
Šumava	From the most valuable original part of the Šumava Protected Landscape Area (1963), a national park was established. It represents the most valuable part of the ancient mountain range with glacial lakes, a continuously forested area with montane and waterlogged spruce forests; extensive peat bogs, so-called floodplain forests and mires. It is a key area for the occurrence of large carnivores in the Czech Republic (especially the lynx) and the only region in Central Europe with a viable population of the western capercaillie.	20. 3. 1991	68 460	54 730	79.9
Podyjí	A deep valley of the middle Dyje River, featuring a range of geomorphological phenomena, a high proportion of near-natural forests in the adjacent forest complex, and a mosaic of highly diverse natural habitats with a rich species diversity of plants and invertebrates, ranging from subalpine elements to xerothermic species.	20. 3. 1991	6 279	5 344	85.1
České Švýcarsko	A part of the original Labské pískovce Protected Landscape Area was separated to form the sandstone highlands on the right bank of the Elbe River in the Děčín region; this area features rock formations and associated communities with high biodiversity, extensive forest ecosystems with local ecotypes of forest tree species, and the presence of significant species (artificially reintroduced Atlantic salmon and peregrine falcon).	1. 1. 2000	7 928	7 621	96.1

Source: Overview of selected indicators from individual National Parks - <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

Throughout the entire territory of the National Parks, it is prohibited to:

- establish or authorize mining works, including related mining structures or facilities, except for securing and decommissioning existing mining works, and designate new industrial zones,
- define exploration areas and extract minerals, peat, or turf, except for the extraction of building stone and sand for construction within the national park,
- remove waste originating outside the national park,
- permit or carry out intentional spreading of non-native plant species,
- introduce intensive game breeding, such as enclosures or farmed game,
- alter the existing water regime of the land,

- release animals, except for the release of animals under approved rescue programs or animals rehabilitated by rescue stations at their place of discovery,
- install light sources outside enclosed structures that direct light above the horizontal plane passing through the center of the light source, and conduct fireworks or use recreational pyrotechnics, or
- fly contrary to the conditions established in a generally binding measure issued under another legal regulation, except for flights ensuring state security, protection of persons, property, or public order, and flights required by Nature Protection Authorities.

A substantial part of the territory of National parks in the Czech Republic is covered by forests (83.6 %). Forests within national parks are generally classified as forests of special purpose pursuant to § 8(1)(c) of Act No. 289/1995 Coll., on Forests, as amended.

The territories of National Parks are divided according to conservation objectives and the condition of ecosystems into four nature protection zones, namely:

- **Natural Zone** – designated in contiguous areas where natural ecosystems prevail, with the aim of preserving and allowing the undisturbed course of natural processes. The most strictly protected area, where only scientific activities and minimal human interference are allowed.
- **Near-Natural Zone** – designated in areas where partially human-altered ecosystems prevail, with the aim of achieving a state corresponding to natural ecosystems. Areas with limited human impact, allowing certain activities like grazing or collecting forest fruits.
- **Zone of Concentrated Nature Care** – designated in areas where significantly human-altered ecosystems prevail, with the aim of preserving or gradually improving the condition of ecosystems important for biodiversity, whose existence depends on ongoing human activity or the restoration of near-natural ecosystems.
- **Cultural Landscape Zone** – designated in built-up areas, developable land, or areas of municipalities intended for sustainable development, as well as in areas where human-altered ecosystems prevail and are intended for permanent human use.

The law also defines the **Quiet Zones of a National Park**, which are areas with restricted human access to allow the undisturbed development of ecosystems or their components, which are sensitive to excessive human presence and vulnerable to associated disruptive impacts. The Quiet Zones of a National Park are designated by the Ministry of the Environment through a generally binding regulation.

The objectives and methods of managing forest ecosystems within National Parks must be in accordance with the long-term goals of national park protection. This primarily involves allowing natural development in the affected ecosystems, their gradual restoration with the aim of achieving a natural state, and specific management practices carried out to support and preserve biodiversity.

**Forest management plans** prepared for National Parks, or for parts of their territories, take into consideration the conservation objectives and conditions of the area in the form of specific measures defined for individual forest stands.

National Parks	Annual allowable cut	Timber harvesting						Total
		Planned		Incidental				
		Regeneration	Tending	Bark beetle	Wind, snow, other	%		
Krkonoše	144 373	12 239	12 487	81 197	41 807	83	148 730	
Šumava	424 666	0	24 103	236 637	14 984	91.3	275 724	
Podyjí	16 463	1 664	4 213	222	3 875	41	9 974	
České Švýcarsko	57 200	1	0	36 248	22 112 (after the fire)	100	38 363	
<b>Total</b>	<b>642 702</b>	<b>13 904</b>	<b>40 803</b>	<b>354 304</b>	<b>62 780</b>		<b>472 791</b>	

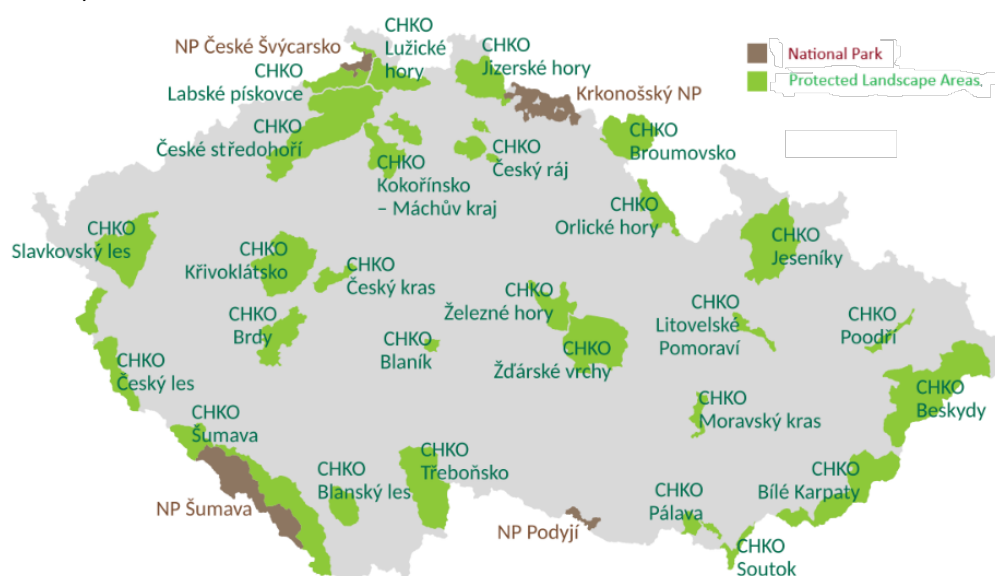
Source: Overview of Timber Harvesting in National Parks and Their Protective Zones (m<sup>3</sup>) - <https://nli.gov.cz/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Protected Landscape areas (“CHKO”)

Protected Landscape Area is an extensive territory with a harmoniously shaped landscape, characteristic landforms, a significant representation of natural ecosystems, and numerous natural, cultural, and historical values. They are designated under Act No. **114/1992** Coll., on Nature and Landscape Protection, as amended, and their mission is to safeguard biological diversity, ecological stability, and cultural heritage.

Protected Landscape Areas in the Czech Republic represent a unique tool for safeguarding extensive natural and cultural landscape complexes. Unlike national parks, they are not focused exclusively on the strict protection of natural processes, but rather on the harmonious coexistence of humans and nature, combining biodiversity conservation with traditional land management and recreational use of the landscape.

In the Czech Republic, there are **27 Protected Landscape areas**, with a total area of more than 10,800 km<sup>2</sup>, which represents approximately 14 % of the country’s territory. The largest Protected Landscape Area is the Beskydy CHKO (1,205 km<sup>2</sup>), the smallest is the Blaník CHKO (40 km<sup>2</sup>), the oldest is the Český ráj CHKO (designated in 1955), and the youngest is the Soutok CHKO (designated in 2025).



Source: <https://drusop.nature.cz/ost/chrobjekty/zchru/index.php?KATEGORIE=CHKO>

For a more precise determination of the manner of nature protection in Protected Landscape Areas, four zones of graded protection are usually designated, but at least three; the first zone is subject to the strictest protection regime. The detailed regime of the protection zones of Protected Landscape Areas is regulated by the legal regulation through which the Protected Landscape Area is designated.

Throughout the entire territory of Protected Landscape Areas, it is prohibited to:

- dispose of waste outside sites designated with the consent of the nature protection authority,
- camp and make fires outside built-up areas of municipalities and sites designated by the nature protection authority,
- enter and remain with motor vehicles and caravans outside roads and local communications and sites designated with the consent of the nature protection authority, except for the entry and stay of vehicles of state administration bodies, vehicles necessary for forestry and agricultural management, protection of state borders, fire protection, health and veterinary services, and to organize automobile and motorcycle competitions,

- permit or carry out the deliberate introduction of non-native plant and animal species, as well as alien and locally non-occurring species in aquaculture,
- use poisoned baits in hunting,
- build new motorways, settlements, and navigation canals, apply chemical de-icing on roads,
- alter preserved natural environments in contradiction with the specific protection conditions of the Protected Landscape Area.
- Within the first zone of a Protected Landscape Area, it is further prohibited to:
  - permit or carry out new construction and change land use,
  - alter the current composition and extent of cultures, unless the change results from the management plan of the Protected Landscape Area,
  - fertilize land, use slurry, silage juices, and other liquid waste,
  - extract minerals and humic deposits.
- Within the first and second zones of a Protected Landscape Area, it is further prohibited to:
  - manage land outside built-up areas of municipalities using intensive technologies, in particular means and activities that may cause substantial changes in biodiversity, structure, and ecosystem function, or irreversibly damage the soil surface, use biocides, alter the water regime, or carry out extensive land modifications,
  - introduce intensive game breeding, such as enclosures, farm breeding, or pheasantries,
  - organize bicycle races outside roads, local communications, and sites designated with the consent of the nature protection authority.

### Small-scale protected areas

Small-scale specially protected areas are designated for the protection of ecosystems, species habitats, and abiotic natural phenomena. They also serve scientific, educational, and, to some extent, recreational purposes. These are valuable areas of limited size that are scientifically or aesthetically highly significant or unique.

While nature reserves are primarily intended for the protection of ecosystems, natural monuments focus more on the protection of geological and geomorphological phenomena, as well as mineral sites or endangered species habitats within ecosystem fragments. The categories of National Nature Reserves and National Natural monuments are intended for areas of national or international significance, whereas Nature Reserves and Natural Monuments are designated for areas of regional significance. The precise definitions of small-scale specially protected area categories are specified in the Nature and Landscape Protection Act.

- **National Nature Reserves (“NPR”)**

These are smaller areas of exceptional natural value, where ecosystems of national or international significance and uniqueness are linked to the natural landforms with characteristic geological structure; such areas may be designated as national nature reserves by the nature protection authority, which also determines their specific protection conditions.

In the Czech Republic, there are **110 Protected National Nature Reserves**.

Forests within National Nature Reserves cannot be classified as commercial forests; the provisions of the law concerning pest control measures and cases of extraordinary circumstances and unforeseen damages may only be applied with the consent of, and to the extent specified by, the nature protection authority.

Throughout the entire territory of National Nature Reserves, it is prohibited to:

- manage land using intensive technologies, particularly means and activities that may cause changes in biodiversity, the structure and function of ecosystems, or irreversibly

damage the soil surface, as well as to carry out chemical treatments, alter the water regime, or perform large-scale terrain modifications,

- permit or carry out construction, change the type or use of land, alter the use of buildings, or designate developable areas of municipalities,
- extract minerals and humic deposits,
- enter or drive outside paths designated with the consent of the nature protection authority, except for landowners and tenants, persons engaged in forestry and agricultural management, state defense and border protection, fire protection, and health and veterinary services while performing such activities,
- permit or carry out the deliberate introduction of non-native plant and animal species, as well as alien and locally non-occurring species in aquaculture,
- practice rock climbing, paragliding, hang-gliding, or cycle outside roads, local communications, and sites designated by the nature protection authority,
- establish intensive game breeding such as enclosures, game farms, or pheasantries, and use poisoned baits in hunting,
  
- drive motor vehicles, except for vehicles of state administration authorities, vehicles necessary for forestry and agricultural management, state defense and border protection, fire protection, and health and veterinary services,
- collect or capture plants and animals, unless an exemption is provided by law,
- camp or make fires outside areas designated by the nature protection authority,
- alter preserved natural environments in contradiction with the specific protection conditions of the National Nature Reserve.

▪ **National Nature Monuments (“NPP”)**

National Natural Monuments include geological or geomorphological formations (caves, geological profiles), sites of rare minerals, or habitats of endangered fauna and flora within ecosystems, as well as formations shaped by human activity (e.g., historical landscaped parks). National natural monuments are designated by the Ministry of the Environment of the Czech Republic.

▪ **Nature Reserves (“PR”)**

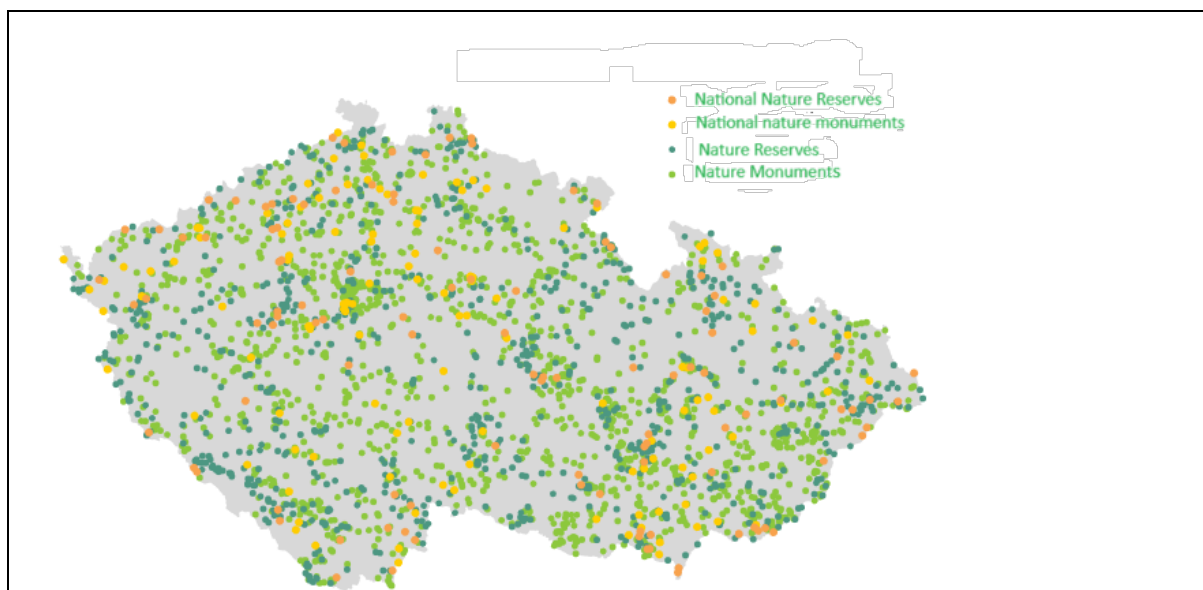
Smaller areas with concentrated natural values containing ecosystems that are typical and significant for the respective geographical region. A Nature Reserve may be designated by the nature protection authority, which also determines its specific protection conditions.

The use of a Nature Reserve is permitted only if it preserves or improves the existing state of the natural environment.

▪ **Nature Monuments (“PP”)**

A natural formation of smaller extent, particularly a geological or geomorphological feature, a site of rare minerals, or habitats of endangered species within ecosystem fragments, with regional ecological, scientific, or aesthetic significance, including those shaped partly by human activity. A natural monument is designated by the nature protection authority, which also determines its specific protection conditions.

The alteration or damage of a natural monument, as well as its economic use leading to its deterioration, are prohibited.



Source: Small-scale protected areas - <https://aopk.gov.cz/maloplosna-zvlaste-chronena-uzemi>

### Protective Zones of Specially Protected Areas

If it is necessary to safeguard specially protected areas, except for protected landscape areas, from disturbing external influences, a protective zone may be designated. Within such a zone, activities and interventions may be defined that are subject to the prior consent of the nature protection authority. A protective zone is designated by the authority that declared the specially protected area. If a protective zone is not designated for a national nature reserve, national natural monument, nature reserve, or natural monument, the area extending 50 meters from the boundary of the specially protected area shall be considered its protective zone. When declaring a specially protected area, the nature protection authority may stipulate that the area is designated without a protective zone.

According to the Nature and Landscape Protection Act, financial penalties may be imposed for certain offenses, with the amount depending on the seriousness of the violation. In the case of offenses listed in paragraph 1 of the Act (e.g., damage to a natural component within a specially protected area, damage to or destruction of a memorial tree, unauthorized damage to or destruction of individual trees or groups of trees growing outside forests, unlawful interference with the natural development of specially protected plant species, and others), fines may be imposed up to CZK 1,000,000.

For offenses specified in paragraph 2 (e.g., serious damage to or destruction of a significant landscape element, destruction of natural components within a specially protected area, destruction of facilities intended for the protection, marking, and management of specially protected areas, destruction of individuals of specially protected plant species either directly or through unlawful interference with their habitats, killing of specially protected animals directly or by causing their death through unlawful disturbance of their environment, and others), the Act allows fines of up to CZK 2,000,000.

The prosecution of these offenses falls within the competence of the nature protection authorities, which are authorized to decide both on culpability and on the amount of the penalty. In this way, violations of nature and landscape protection regulations are sanctioned in accordance with the legal system, with the aim of preventing further damage to protected areas and natural values.

<b>Sources</b>	Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> <a href="https://drusop.nature.cz/ost/chrobjekty/zchru/index.php?KATEGORIE=CHK">https://drusop.nature.cz/ost/chrobjekty/zchru/index.php?KATEGORIE=CHK</a> <a href="#">Q</a>
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<b>Efficiency (points):</b>	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)	<input type="checkbox"/> Category C (0 points)

#### 4.6. Regulations for particularly valuable landscapes, where forest biomass may not be grown

##### Step 1: Identification of applicable laws

##### Special protected areas in the Czech Republic

The system of the **special protected areas** in the Czech Republic, i.e. areas that are significant and unique from for its biological or esthetical purposes, is governed by Act No. **114/1992 Coll.**, on **Nature and Landscape Protection**, as amended. This legal regulation defines individual categories of areas that have a high biodiversity value, and due to their uniqueness, binding restrictions are set for such areas for possible human interventions in these areas, including prohibitions on logging or the use of forest biomass.

In the Protected Landscape Areas of the Czech Republic and other protected territories, intensive collection or harvesting of forest biomass is prohibited. Interventions are permitted only in accordance with the management plan and with the approval of the nature conservation authorities. A key principle is the retention of deadwood and biomass in the forest, as these represent an essential component of ecosystems.

Further details are provided in Chapters 4.1, 4.3, and 4.5.

##### Other types of protected areas in The Czech Republic

Other types of protected areas designated in the Czech Republic include **Natura 2000** sites and **UNESCO Biosphere Reserves**.

- **Natura 2000** is a network of protected areas of European significance, whose requirements and protective measures are established in the Czech Republic under Act No. **114/1992 Coll.**, on **Nature and Landscape Protection**, as amended, particularly through its fourth part, which implements the European directives on the protection of birds and habitats. These areas are intended to ensure the conservation of species and habitats that are considered most valuable or threatened from a European perspective, and their management requires specific interventions as well as restrictions on economic activities.
- **UNESCO Biosphere Reserves** are internationally recognized areas aimed at linking nature conservation with sustainable development and local land use. In the Czech Republic, biosphere reserves are designated based on nominations approved by UNESCO, and their management and protection follow recommended practices and principles of sustainable management that take into account ecological, social, and economic dimensions.

##### Restrictions for “no-go” areas

The **Renewable Energy Directive (EU) 2018/2001 (RED II)** and **Renewable Energy Directive (EU) 2023/2413 (RED III)** are the key legislative instruments of the European Union, aimed at promoting the use of renewable energy sources and reducing greenhouse gas emissions. In the Czech Republic, the requirements of the directives are implemented through the following regulation:

- Act No. **249/2025 Coll.**, on Accelerating the Use of Certain Renewable Energy Sources and on the Amendment of Related Acts (the “Act on Accelerating the Use of Renewable Energy Sources”), as amended - regulates the procedure for defining the necessary area and the

acceleration area ("no-go zones") and establishes special procedures concerning projects for the use of renewable energy sources, whether permitted within or outside the acceleration area

#### **Criteria for defining an Acceleration Area ("no-go zone")**

An acceleration area is defined as a plot or corridor in a spatial development plan, principles of territorial development, or a zoning plan (the definition of the acceleration area can be refined in subsequent spatial planning documentation, only if the superior authority does not exclude this in its opinion pursuant to § 101(2) of the Building Act).

The acceleration area is defined so that projects for the use of a renewable energy source, for which the area is designated, do not have a significant impact on land-use limits, particularly on the environment and the interests of state security.

The acceleration area cannot be defined within the territory of a European site, a bird area, a specially protected area, or in areas designated by the government by regulation concerning environmental protection, state heritage care, state protection, spa areas, aviation, or public meteorological services.

When defining an acceleration area, priority is given to artificial and built-up areas, such as transport infrastructure and its immediate surroundings, parking lots, agricultural buildings, industrial buildings including courtyards, landfills, areas disturbed by surface mining where reclamation has not yet begun, artificial water bodies, technical water management infrastructure, and degraded land that cannot be used for agriculture.

For each acceleration area, a territorial measure is issued specifying the conditions and mitigation measures. The territorial measure on conditions is reviewed by the Regional Authority as the body competent to issue a unified environmental statement for a renewable energy project in the acceleration area.

#### **Requirements for timber harvesting and sustainable forest management**

Requirements and regulations for the harvesting of timber, including rules for sustainable forest management, restrictions on logging in protected areas, and obligations to preserve biodiversity and forest ecosystems (the requirements of the directives RED II and RED III) in the Czech Republic are implemented through the following regulations:

- Act No. **165/2012** Coll. on Supported Energy Sources, as amended - among other things, also sets out the conditions and obligations of persons and sustainability criteria for solid, liquid and gaseous fuels from biomass - transposes the requirements of the Renewable Energy Directive (EU) **2018/2001** (RED II) and the Renewable Energy Directive (EU) **2023/2413** (RED III) into Czech legislation.
- Decree of the Ministry of the Environment of CR No. **110/2022** Coll. on the determination of types and parameters of supported renewable sources and sustainability criteria and greenhouse gas emission savings for bioliquids and biomass fuels, as amended - is currently undergoing amendment to reflect the revised requirements set out in the RED III.

Regulation of the European Parliament and of the Council (EU) **2023/1115** on the placing on the EU market and the export from the EU of certain commodities and products associated with deforestation and forest degradation is a binding legislative instrument of the European Union, directly applicable in all Member States. Its objective is to reduce the EU's contribution to global deforestation by establishing rules for the production of selected (relevant) commodities that have the greatest impact on worldwide deforestation. These commodities include timber, cattle, coffee, soy, palm oil, cocoa, and rubber. The Regulation also governs trade in specified (relevant) products derived from these commodities.

<p>“Trade” refers to placing these products on the EU market, supplying them within the EU, and exporting them from the EU. Such trade is only permitted if the products have been produced in compliance with applicable legislation and do not cause deforestation. Compliance with these requirements must be verified (“due diligence”), and conformity must be declared by submitting a standardized declaration (the so-called “Due Diligence Statement” – “DDS”) in the Information System managed by the European Commission.</p> <p>Deforestation is defined as the conversion of forested land to agricultural use, either deliberately or through changes in land management on areas where deforestation has occurred due to natural causes. The Regulation imposes obligations on economic operators and traders regarding the production and trade of these commodities and products, depending on their role in the supply chain and the size of their enterprise.</p> <ul style="list-style-type: none"> <li>▪ Act No. <b>226/2013</b> Coll., on the placing on the market and export of timber, timber products, and certain other commodities is a national legislative act specifying the implementation details of this directly applicable EU regulation, as amended (“Act for EUDR”)</li> </ul>	
<b>Sources</b>	<p>Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a>  EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a>  <a href="https://nli.gov.cz/portfolio/eudr/">https://nli.gov.cz/portfolio/eudr/</a></p>
<b>Were applicable laws identified?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)

### Step 2: Description of enforcement and monitoring

The management of protected areas, as defined by **Act on Nature and Landscape Protection** and **Forest Act**, is overseen by several state administrative bodies authorized by specific regulations, as well as through monitoring programmes established by the government (see also section 4.3, steps 1 and 2).

#### **Enforcement of the compliance with regulations**

The previously mentioned laws establish multiple law enforcement bodies at the central, regional as well as local levels.

- **the Ministry of the Environment**
- **Municipal authorities**
- **Municipal authorities with extended competencies (“MECs”)**
- **Regional authorities**
- **the Agency = Nature Conservation Agency of the Czech Republic (“AOPK ČR”)**
- **National Park Administrations**
- **the Czech Environmental Inspectorate**
- **Military district offices and the Ministry of Defence**
- **Nature Guard**

For more information on the structure and work of the state forest administration bodies, please see step 2 and 3 of chapters 4.1, 4.3 and 4.5.

#### **Monitoring of the compliance with regulations**

- **Ministry of the Environment** – coordination and funding of monitoring programs.
- **Nature Conservation Agency of the Czech Republic** – the main institution responsible for monitoring natural processes, habitats, and species in Protected Landscape Areas.

- **Administrations of individual Protected Landscape Areas** – organizational units of **AOPK ČR** that directly carry out field monitoring.
- **Czech Environmental Inspectorate** – the control authority, monitoring compliance with legislation and the state of the environment.
- **Research institutes and universities** (e.g. Institute of Botany of the Czech Academy of Sciences, Silva Tarouca Research Institute, Czech University of Life Sciences, Mendel University) – involved in specialized monitoring (vegetation, soils, water, forests).
- **The National Forestry Institute (“NLI”)** - operates as a professional organization of the Ministry of Agriculture in the field of forestry and game management. The institute’s scope of activity covers the entire Czech Republic. One of the main activities of the organization has been the implementation of the National Forest Inventory since 2015 in the form of the project Monitoring the State and Development of Forest Ecosystems. NLI manages a central database containing information on the forests of the Czech Republic, forest management, and game management.

For more information on the structure and work of the state forest administration bodies, please see step 2 and 3 of chapters 4.1, 4.3 and 4.5.

Other key entities responsible for monitoring compliance with the requirements of the RED II and RED III directives and for overseeing the sustainability criteria tracking system for biomass in the Czech Republic are independent **auditors of certification systems**. Specifically, audits are conducted within the ISCC (International Sustainability and Carbon Certification), SURE, and KZR INiG systems. These auditors verify that the procedures of biomass producers and suppliers comply with sustainability requirements, confirm the accuracy of records and documentation, and ensure that environmental criteria are genuinely met. Their work thus provides an independent and reliable mechanism that supports the transparent functioning of the biomass market and the safe compliance with legal requirements in the field of renewable energy.

The control of the source of wood, its legality, and sustainability is carried out through FSC and PEFC auditors, who do not act directly under EU legislation, but their certification often serves as evidence of the sustainability and legality of the wood. Auditors focus on verifying sustainable forest management and primarily do not apply their audits to EU deforestation obligations, but rather to certification standards. Specifically:

- **FSC auditors** - verify whether forest management meets the environmental, social, and economic criteria of FSC, for example: protection of biodiversity and ecosystems, ensuring the rights of local communities and workers, transparent forest governance and planning and check the traceability of wood throughout the supply chain (Chain of Custody – CoC) to ensure that the product truly comes from a certified forest.
- **PEFC auditors** - assess compliance with national and international standards for sustainable forest management recognized by PEFC, check the traceability of wood and wood products, using procedures analogous to FSC, and to ensure legality and sustainability, monitor adherence to standards for nature conservation, working conditions, and economically sustainable use of forest resources.

In the Czech Republic, the implementation of the EUDR has been coordinated by the Ministry of Agriculture in cooperation with the National Forestry Institute (NLI). The NLI provides methodological support and organizes training for forest owners and managers to ensure proper understanding and application of the regulation’s requirements – including the geolocation of logging and the submission of DDS.

**Custom authorities** play a key role in controlling the import and export of commodities – particularly timber – in the Czech Republic, as the EUDR regulates placing on the market and export from the EU. They verify whether imported commodities are accompanied by a valid Due Diligence Statement and whether they comply with the rules on deforestation-free sourcing.

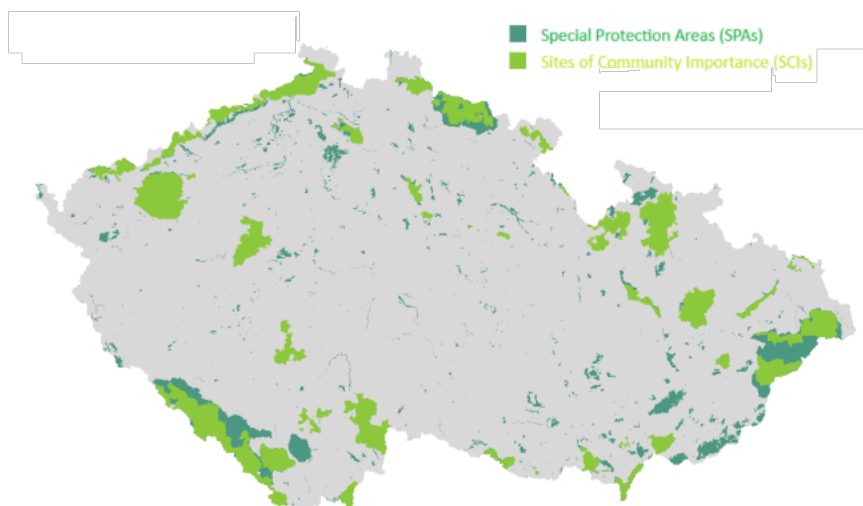
<b>Sources</b>	Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a> <a href="https://www.pefc.cz">https://www.pefc.cz</a> <a href="https://fsc.org">https://fsc.org</a>
<b>Are enforcement and monitoring ensured for the identified laws?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)
<b>Degree of compliance with the criterion "regulations for protected areas"</b>	
<input checked="" type="checkbox"/> Requirements fulfilled <input type="checkbox"/> Requirements not fulfilled	

<b>Step 3: Evaluation of the effectiveness of the legal framework for the regulation of particularly valuable landscapes, where forest biomass shall not be grown</b>
<p>In the Czech Republic, the protection of particularly valuable landscapes and areas where commercial forest use, including the cultivation and harvesting of forest biomass, is not permitted, is ensured primarily through several laws and related implementing regulations.</p> <p>Czech legislation clearly defines categories of protected areas (National parks, Protected Landscape areas, National Nature Reserves, Sites of Community Importance within the Natura 2000 network, etc.), where strict restrictions on economic activities apply. The prohibition or significant limitation of biomass harvesting and cultivation in these areas is firmly anchored in legal provisions and is monitored by nature protection authorities and the state forest administration. The Czech legal framework is harmonized with EU directives, including RED II and RED III, which emphasize the principle of so-called "no-go areas"</p> <p><b>NATURA 2000</b></p> <p>Natura 2000 represents a network of protected areas of European importance, established within the territory of the Member States of the European Union on the basis of <b>Directive of the European Parliament and of the Council 2009/147/EC</b> on the conservation of wild birds and <b>Council Directive 92/43/EEC</b> on the conservation of natural habitats and of wild fauna and flora. These requirements are incorporated into Czech national legislation through Part Four of Act <b>No. 114/1992 Coll.</b>, on Nature and Landscape Protection, as amended. The objective of this network is to ensure the protection of those animal and plant species, as well as natural habitat types, which are considered the most valuable, most endangered, rarest, or geographically restricted from a European perspective.</p> <p>The Natura 2000 network consists of two types of protected areas – <b>Special Protection Areas (SPAs)</b> and <b>Sites of Community Importance (SCIs)</b>. In the Czech Republic, there are 41 SPAs, designated by the Government of the Czech Republic through government decrees between 2004 and 2009. There are currently 1,112 SCIs, which are included in the so-called national list. This list was approved as a whole by the Government of the Czech Republic and published in Government Decree No. 318/2013 Coll., on the Establishment of the National List of Sites of Community Importance, as amended.</p> <p>Proposals for appropriate management measures for the habitat types and species for which these sites have been designated (aimed at maintaining or improving their conservation status) are included in summaries of recommended measures, the preparation of which is ensured by the Ministry of the Environment. Among the subjects of protection within the Sites of Community Importance in the Czech Republic are also forest ecosystems, specifically 16 types of forest natural habitats. In total, 244,363.5 hectares of forest habitats are protected within these sites, representing approximately 32.5 % of the total area of SCIs and about 10 % of the forest area in the Czech Republic. In addition to forest habitats, species of fauna and flora associated with forest ecosystems are also among the conservation objectives of Natura 2000 sites.</p>

Sites listed in Annexes No. 1 to 1075 of Government Decree **No. 318/2013** Coll., on the Establishment of the National List of Sites of Community Importance, as amended. are included in the national list of Sites of Community Importance.

The delineation of individual Sites of Community Importance includes:

- The name of the site, its geographic location, including a map showing the approximate boundaries of the site, and its area.
- Information on which types of European habitats and which species of European importance, requiring territorial protection, naturally occur at the site.
- Information on the category of specially protected area in which the site or part of it is proposed to be designated, in the case that the protection of the site or part of it is not yet secured by designation as a specially protected area, is not protected by contractual measures, or where such protection would not be sufficient to maintain or achieve a favorable conservation status of the conservation objectives in accordance with Section 45c(2) of the **Nature and Landscape Protection Act**.

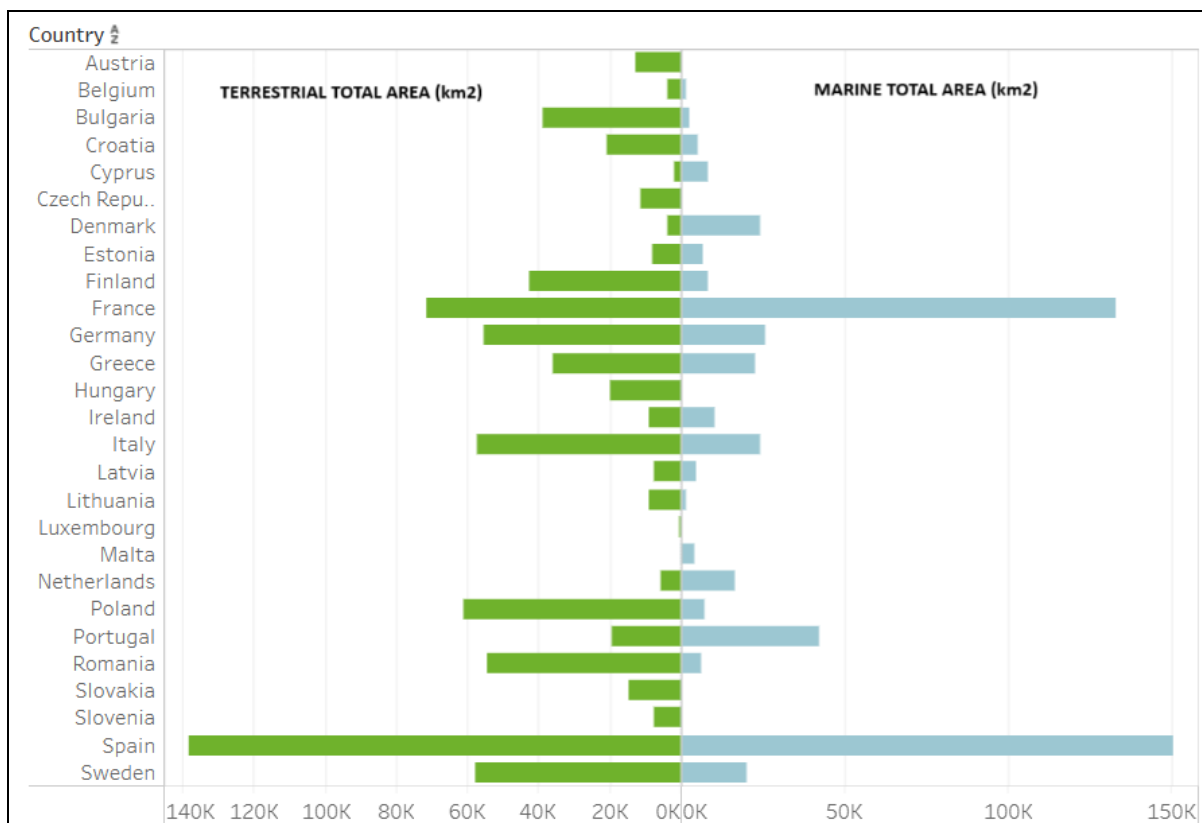


Source: <https://aopk.gov.cz/natura-2000>

In the Czech Republic, the Natura 2000 network covers a significant portion of the country's territory, encompassing over 1,100 Sites of Community Importance and 41 Special Protection Areas for birds. Overall, these sites protect approximately 12 - 13 % of the Czech Republic's land area, with forests, wetlands, and other natural habitats well represented.

Compared to other EU countries, the Czech Republic's Natura 2000 coverage is moderate. Countries such as Slovenia, Slovakia, and Bulgaria have higher proportions of their territory designated under Natura 2000, often exceeding 20–25 %, while larger countries like Germany, France, or Poland have a lower percentage of their total land area formally included in the network.

The Czech Natura 2000 network is notable for its diversity of habitats, including temperate broadleaf and mixed forests, mountain ecosystems, and numerous freshwater habitats. The network's management is guided by national conservation legislation, care plans, and EU directives, ensuring both habitat protection and sustainable land use.



Source: <https://www.eea.europa.eu/en/analysis/maps-and-charts/natura-2000-barometer-dashboards>

### UNESCO Biosphere Reserves

In 2025, six UNESCO Biosphere Reserves were recognized in the Czech Republic. These reserves represent areas where a harmonious relationship between people and nature exists and serve as examples of sustainable practices in the landscape.

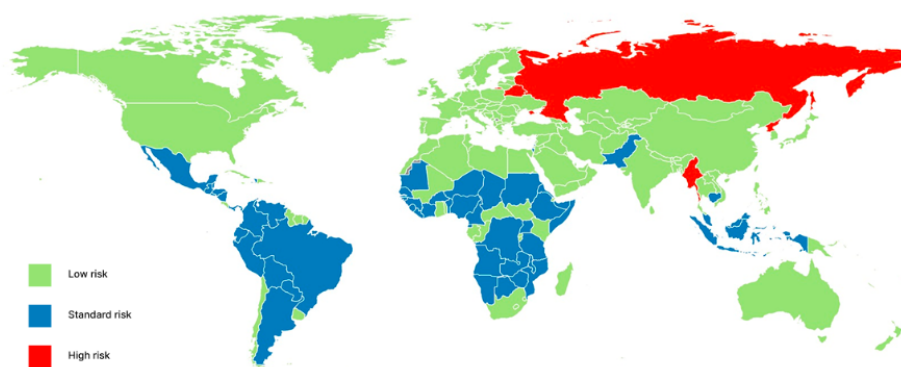


Source: <https://gis-aopkcr.opendata.arcgis.com/datasets/aopkcr::biosf%C3%A9rick%C3%A9-rezervace-unesco/explore?location=49.606174%2C15.453100%2C6.00>

The main function of the biosphere reserves is the protection of biological and cultural diversity. They serve as exemplary models of sustainable management and meeting human needs in accordance with the principles of sustainable development. Overview of the biosphere reserves:

- **Třeboňsko:** established in 1977, managed by the Třeboňsko Protected Landscape Area (CHKO Třeboňsko).
- **Křivoklátsko:** established in 1990, managed by the Křivoklátsko Protected Landscape Area (CHKO Křivoklátsko).
- **Šumava:** established in 1990, managed by the Šumava National Park and Protected Landscape Area (NP and CHKO Šumava).
- **Krkonoše/Karkonosze:** a bilateral Czech-Polish reserve, established in 1992, managed by Krkonoše National Park (NP Krkonoše).
- **Bílé Karpaty:** established in 1996, managed by the Bílé Karpaty Protected Landscape Area (CHKO Bílé Karpaty).
- **Dolní Morava:** established in 2003, currently managed by the Soutok Protected Landscape Area (CHKO Soutok), which ensures the necessary protection of the area.

The Czech Republic has been classified as a low deforestation-risk country, which allows for a simplified due diligence system.



Source: <https://www.nadar.earth/media/eudr-country-benchmarking>

<b>Sources</b>	<a href="https://aopk.gov.cz/natura-2000">https://aopk.gov.cz/natura-2000</a> <a href="https://www.eea.europa.eu/en/analysis/maps-and-charts/natura-2000-barometer-dashboards">https://www.eea.europa.eu/en/analysis/maps-and-charts/natura-2000-barometer-dashboards</a> <a href="https://gis-aopkcr.opendata.arcgis.com/datasets/aopkcr::biosf%C3%A9rick%C3%A9-rezervace-unesco/explore?location=49.606174%2C15.453100%2C6.00">https://gis-aopkcr.opendata.arcgis.com/datasets/aopkcr::biosf%C3%A9rick%C3%A9-rezervace-unesco/explore?location=49.606174%2C15.453100%2C6.00</a> <a href="https://www.nadar.earth/media/eudr-country-benchmarking">https://www.nadar.earth/media/eudr-country-benchmarking</a> <a href="https://green-forum.ec.europa.eu/nature-and-biodiversity/deforestation-regulation-implementation/eudr-cooperation-and-partnerships/country-classification-list_en">https://green-forum.ec.europa.eu/nature-and-biodiversity/deforestation-regulation-implementation/eudr-cooperation-and-partnerships/country-classification-list_en</a>		
	<b>Efficiency (points):</b>	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)

#### 4.7. Maintenance of the long-term production capacity of the forest

##### Step 1: Identification of applicable legislation

The principles of **sustainable forest management** (“TUHL”) refer to forest stewardship that preserves biodiversity, productivity, vitality, and the capacity of forests to provide ecological, economic, and social functions for both present and future generations, without causing damage to other ecosystems.

The long-term productivity of forests is regulated by the Forest Act (No. 289/1995 Coll.), as amended, every forest owner is obliged to take proper care of the forest and to continuously regenerate forests with site suitable species to improve the state of forests, enhance their resilience and fulfilment of forest functions.

Requirements of the Forest Act relating to harvesting level:

- A maximum total harvest level shall be defined by the Forest Management Plan and is mandatory. Forest management plan is mandatory for organisations managing state forests and for other forest owners above 50 ha.
- For forest owners smaller than 50 ha, a maximum total harvest level is defined by the Forest Management Guidelines. The maximum harvest level is than obligatory for the forest owner that formally accepts the forest management guidelines.
- A salvage harvest shall be included in the total maximum harvest. Where the harvest level exceeds the total maximum harvest given by the forest management plan (for example due to a salvage harvest), the forest management plan or guidelines shall be amended and approved by the state forest administration body.
- Forest owner smaller than 50 ha managing forests without a forest management plan or forest management guidelines can only conduct harvest with the permission of a professional forest manager. Where the harvest exceeds 3 m<sup>3</sup>/ha in a calendar year, a permission from the state forest administration body shall be applied for.
- It is not allowed to conduct final felling in stands younger than 80 years (20 years in case of a coppice forests). It is not allowed to decrease a stand density to 70 % of a full density, except where it is in favour of a next young stand or improving stability of the forest stand.

Requirements of the Forest Act relating to forest regeneration:

- The owner of the forest is obliged to restore the forest stands with trees suitable for the habitat and nurture them in a timely and consistent manner in order to improve their condition, increase their resistance and improve the performance of the functions of the forest. In suitable conditions, it is desirable to use natural regeneration; natural regeneration cannot be used in genetically unsuitable stands.
- Any clearcut area shall be regenerated within 2 years from the harvest and the successful regeneration (the young stand has sufficient tree species composition; quantity of trees and trees do no need further protection against biotic and abiotic factors) shall be achieved within 7 years of the harvest.
- During forest regeneration, it is prohibited, regardless of the ownership boundary, to assign additional clear-cuts to unsecured young stands on the entire area, if the total area of unsecured stands exceeds the size and width specified in paragraph 2. The smallest permissible distance of clear-cuts from clearings and young stands on the entire unsecured area must not be less than the average height of the regenerated stand.
- Forest regeneration shall also comply with the minimum percentage of “melioration and forest enhancement species” that are defined specifically for each forest type and category of forests (the percentage and species are defined in the Regional Plans of forest development).
- Forest owner shall keep forest management records on conducted harvest and forest regeneration activities and submit summary data to the state administration body.

**Program of Sustainable Forest Management (“TUHL”) – Czech Republic**

The program was issued by Lesy České republiky, s. p. (Forests of the Czech Republic, state enterprise) in 1997. It serves as a professional guideline for differentiated forest management adapted to site conditions, in line with the principles of sustainable development. The complete text was updated in an enhanced version in 2015. The program integrates international principles and is supported by certification systems such as PEFC. TUHL is consistent with international standards, particularly with the principles adopted at the Ministerial Conference in Helsinki (1993).

The program primarily targets the employees and forest managers of Lesy České republiky, s. p., where it provides guidance for day-to-day forest management. Thanks to its professional authority, it also significantly influences the broader forestry community and the management of forest stands.

The TUHL strategy emphasizes the creation of a stable, high-quality, species- and structurally mixed forest with age and stock diversity. Among other priorities, the program supports:

- forest cultivation with natural regeneration – preserving and expanding forest resources,
- biodiversity enhancement – strengthening the resilience and vitality of forest ecosystems,
- nature conservation and the protection of endangered species,
- management of watercourses as a non-productive forest function,
- implementation of forest management plans for balanced and sustainable resource use.

<b>Sources</b>	Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> <a href="https://lesycr.cz/wp-content/uploads/2016/12/lcr-tuh-2015.pdf">https://lesycr.cz/wp-content/uploads/2016/12/lcr-tuh-2015.pdf</a>
<b>They were usable identified laws?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)

## Step 2: Description of enforcement and monitoring

The main role in enforcement and monitoring is held by

- the **Ministry of Agriculture** as the central authority for state forest administration.
- the **regional authorities and municipal offices with extended powers** - on the regional level perform state forest administration within their jurisdictions.

These authorities supervise compliance with Act No. **289/1995** Coll., on Forests, as amended, in which the principle of maintaining long-term forest productivity is enshrined. More information is provided in previous chapters.

- **National Forestry Institute (NLI)**

The NLI conducts the national forest inventory, monitors forest resources, and verifies whether harvesting aligns with the forest's capacity. It collects and evaluates data used to monitor the long-term productive capacity of forests. More information is provided in previous chapters.

- **Czech Environmental Inspection**

Primarily oversees compliance with the Nature and Landscape Protection Act. In some cases, its supervision may overlap with forest management (e.g., logging, soil and water protection in forests). More information is provided in previous chapters.

### **Certification (FSC, PEFC)**

A voluntary mechanism – auditors monitor whether forest management adheres to the principles of sustainable forest management, including the maintenance of productive function. Further details are provided in previous chapters.

### **Forest management planning**

Sustainable forest management in the Czech Republic is based on long-term planning that ensures forests will maintain their productive, ecological, and social functions for both present and future generations. This approach is embedded in the legal framework, as laid out in Act No. **289/1995** Coll., on Forests, as amended and is practically implemented through several types of planning documents. These documents (plans) serve as strategic planning tools for sustainable forest management, with regard to natural conditions, ecological functions, and socio-economic needs.

- **Regional Forest Development Plans (“OPRL”) – Strategic level**
  - Address larger areas (e.g., a natural forest region, typically tens to hundreds of thousands of hectares).
  - Issued by the Ministry of Agriculture. Their preparation and scope are further specified by Decree No. **298/2018** Coll., on the Preparation of Regional Forest Development Plans and on the Definition of Management Units, as amended.
  - They are non-binding conceptual documents (they are not legally binding for forest owners).
  - Serve as a framework and recommendation for the preparation of specific Forest Management Plans (LHP and LHO).
  - They include in particular: long-term management objectives, principles of differentiated management according to site conditions, recommended species composition, target silvicultural systems, etc.



Source: <https://geoportal.nli.gov.cz/DsNli/Oprl/>

- **Forest Management Plan (“LHP”) – Mandatory level**
  - Prepared for a specific forest property larger than 50 hectares.
  - It is drawn up for a period of 10 years.
  - It is approved by the state forest administration authority.
  - It is legally binding for the forest owner.
  - It sets out, for example, the conditions for the maximum allowable volume of timber harvesting (the felling quota), plans for regeneration and reforestation, measures for forest and nature protection, as well as records of timber stocks and forest management units.
- **Forest Management Outline (LHO) – Mandatory level**

- Serves a similar function as the Forest Management Plan (LHP) but is intended for smaller forest owners (up to 50 ha).
- It is not legally binding in the same sense as an LHP – it has more of a guiding and advisory character.
- Nevertheless, it provides a basis for forest management (e.g., recommended harvesting, regeneration, and silvicultural measures).
- It is particularly useful for small owners who are not required to prepare a full LHP themselves.
- A digital version is available on <https://geoportal.nli.gov.cz/DsNli/Lho/>.

Compliance with the LHP/LHO is monitored by the state forest administration.

A digital version of the forest management is collected from the state administration bodies by the Forest Management Institute that prepares a summary data for the purposes of the state forest policy makers and state forest administration bodies.

### Timber Harvesting

According to the requirements of the Forest Act:

- A forest owner is obliged to give priority to incidental (salvage) felling in order to prevent the development, spread, and proliferation of harmful organisms. If incidental felling results in a continuous clear-cut area larger than 0.2 ha, the forest owner must notify the state forest administration authority at least 14 days in advance of carrying out such felling.
- Incidental felling is included in the total harvesting volume. If the processing of incidental felling would exceed the total harvesting volume set by the approved plan or adopted outline, the forest owner must request an amendment to the plan or outline from the state forest administration authority.
- To prevent the degradation of forest soil and to preserve the non-productive functions of the forest, the forest owner must leave in the forest an appropriate harvest volume residues as well as trees or parts of trees designated for natural aging and decay.
- In a forest where the owner manages without an approved plan or without an adopted outline confirmed by protocol, felling may only be carried out with the consent of a professional forest manager. If the felling is to exceed 3 m<sup>3</sup> per 1 ha of forest in a calendar year, the forest owner, as well as a buyer of standing forest stands or the person carrying out the felling, must notify the state forest administration authority in writing in advance and provide a statement from the relevant professional forest manager.
- Carrying out intentional final felling in high forest stands younger than 80 years or in coppice and medium forests younger than 20 years is prohibited. In justified cases, such as endangered stands or stands of preparatory or fast-growing tree species, the state forest administration authority may grant an exemption from this prohibition when approving a plan, preparing an outline, or upon request of the forest owner.
- Legal and natural persons carrying out logging operations are obliged to perform them in a way that minimizes negative impacts on the forest ecosystem in the given environment.

### Sources

Czech legislation: <https://www.zakonyprolidi.cz/>  
<https://geoportal.nli.gov.cz/DsNli/Oprl/>  
<https://geoportal.nli.gov.cz/DsNli/Lho/>  
[http://www.ckolh.cz/index.php?option%3Dcom\\_content%26view%3Darticle%26id%3D145:lhop](http://www.ckolh.cz/index.php?option%3Dcom_content%26view%3Darticle%26id%3D145:lhop)

<b>Is enforcement and monitoring of the designated laws ensured?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)
<b>Degree of fulfilment of the criterion "maintenance of the long-term productive capacity of the forest"</b>	
<input checked="" type="checkbox"/> Requirements met <input type="checkbox"/> Unfulfilled requirements	

### Step 3: Evaluate the effectiveness of the legal framework for maintaining the long-term productive capacity of the forest

Maintaining the long-term productive capacity of forests represents a key element of sustainable forest management, ensuring that forests can maintain their productive, ecological, and social functions for future generations. In the Czech Republic, this objective is primarily anchored in Act No. 289/1995 Coll., on Forests, and is further supported through planning instruments such as Regional Forest Development Plans (OPRL), Forest Management Plans (LHP), and Forest Management Outlines (LHO). These documents set conditions for harvesting, regeneration, and care of forest stands, thereby ensuring a balance between the use of forest resources and their protection.

The main advantages of the Czech legal framework include a clear delineation of responsibilities for forest owners and state forest administration, a system of monitoring and control carried out by state authorities and the National Forest Institute, and the option of voluntary certification according to international standards (e.g., FSC and PEFC). This framework allows for the integration of economic use with the protection of biodiversity, soil, and water, contributing to the sustainability of forest ecosystems.

#### Forest restoration

Detailed information on forest regeneration, including planting methods, the use of forest nurseries, and other measures to ensure the restoration of forest stands, can be found in Chapter 4.2.

The area of regenerated forest stands in 2023 amounted to 44,788 ha compared to previous years, a sustained level of increased regeneration area can still be observed, reflecting the continued efforts of foresters to reforest clearings after extensive incidental logging. As a result, from 2016 through 2022, there has been a decline in the total area of clearings.

The area of natural regeneration can also be positively assessed, despite significantly adverse conditions for natural regeneration on calamity-affected sites.

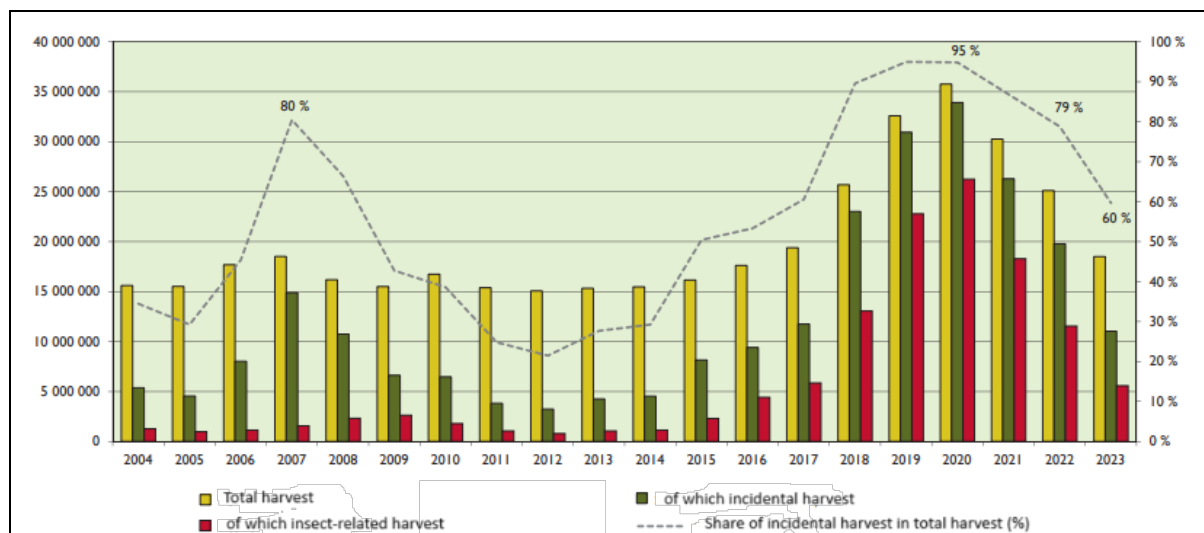
Forest regeneration		2000	2010	2015	2020	2022	2023
		ha/%					
Artificial total		21 867	21 859	18 797	33 671	39 970	35 222
of which	Planting stock	21 486	21 686	18 677	33 295	39 598	35 011
	Sowing	381	173	120	376	372	211
of which	Spruce ( <i>Picea</i> spp.)	9 479	9 171	8 101	10 327	12 676	11 200
		43.3	42.0	43.1	30.7	31.7	31.8
	Fir ( <i>Abies</i> spp.)	895	1 274	884	1 585	1 635	1 637
		4.1	5.8	4.7	4.7	4.1	4.6
	Pine ( <i>Pinus</i> spp.)	2 597	2 171	2 130	2 508	2 944	2 851
		11.9	9.9	11.3	7.4	7.4	8.1
	Larch ( <i>Larix</i> spp.)	739	206	222	1 057	1 985	1 761
		3.3	0.9	1.2	3.1	5.0	5.0
	Other conifers	200	145	214	931	966	1 107
		0.9	0.7	1.1	2.8	2.4	3.1
	Conifers total	13 910	12 967	11 551	16 408	20 206	18 556
		63.6	59.3	61.5	48.7	50.6	52.7
	Oak ( <i>Quercus</i> spp.)	2 428	2 607	2 293	5 536	6 029	5 490
		11.1	11.9	12.2	16.4	15.1	15.6
	Beech ( <i>Fagus</i> spp.)	3 386	4 899	3 678	8 030	7 976	6 386
		15.5	22.4	19.6	23.8	20.0	18.1
	Linden ( <i>Tilia</i> spp.)	397	264	295	480	601	677
		1.8	1.2	1.6	1.4	1.5	1.9
	Poplar and Aspen ( <i>Populus</i> spp.)	46	33	62	116	85	69
		0.2	0.2	0.3	0.3	0.2	0.2
Other broadleaves	1 700	1 089	918	3 102	5 071	4 044	
	7.8	5.0	4.9	9.2	12.7	11.5	
Broadleaves total	7 957	8 892	7 246	17 264	19 762	16 666	
	36.4	40.7	38.5	51.3	49.4	47.3	

Source: Artificial forest regeneration by tree species - <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Development of harvests

Compared to recent years, 2023 can be considered a relatively better year for forest protection, even though overall conditions remain highly adverse. The ranking of the main damaging factors was consistent with the previous year, with the negative impact of biotic agents still generating higher volumes of incidental logging than abiotic factors. The most severe problems continue to be caused by outbreaks of bark beetles in spruce and the long-term harmful effects of excessive populations of ungulates on forests. Among abiotic factors, windthrow events were the primary concern.

The weather in the Czech Republic in 2023, compared to long-term trends (baseline period 1991–2020), was exceptionally warm (temperature anomaly +1.4 °C) and slightly above average in precipitation (107 % of the norm).



Source: Development of total and incidental harvests - <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Monitoring of deadwood

Information on the amount of deadwood has over time become an integral part of international forest reporting (e.g., FAO FRA, FOREST EUROPE), which corresponds to the increasing requirements for its monitoring. Deadwood represents a significant reservoir of organic carbon, part of which is released back into the atmosphere as carbon dioxide during decomposition, while a considerable portion gradually transfers into the soil together with nutrients through the slow breakdown of woody material.

Within the National Forest Inventory (NFI) field survey, deadwood is recorded in the following forms:

- **Standing snags** – dead, still-standing tree stems with no living tissue. Such stems may also be broken (snag remnants) or partially uprooted (but not lying flat).
- **Stumps** – the above-ground parts of stems left after felling or incidental breakage that occurred below the breast height of the tree. In the NFI, stumps also include standing stems and basal parts of windthrows that were cut (but not broken) to half of the original stem height (including broken stems up to the breast height of 1.3 m).
- **Lying stemwood**
- **Lying non-stemwood**

Lying deadwood (both stemwood and non-stemwood) refers to lying stems and broken or cut pieces of wood that will no longer be used for economic purposes. Such wood typically lies freely on the ground, but may also be leaning (not standing), or may include branches extending from lying stems, etc. Fresh logging residues, broken stems, unprocessed felled trees, and cut windthrows are also included, provided there is no expectation of their further economic use.

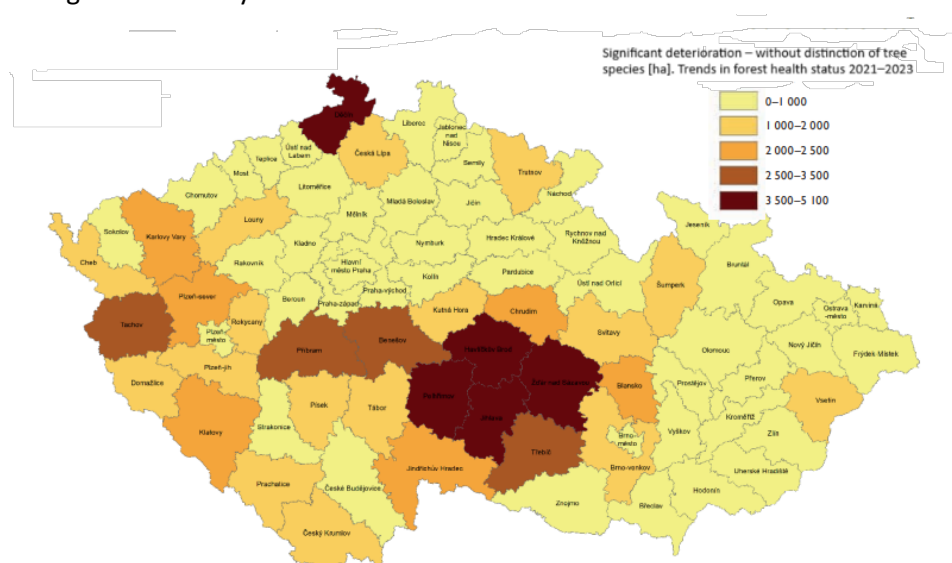
Period	Form of deadwood	Total volume		Volume per hectare	
		[mil. m <sup>3</sup> with bark]	± [α = 0,05]	m <sup>3</sup> /ha with bark]	± [α = 0,05]
NIL 2 (2011-2015)	Standing snags	12.4	1.4	4,4	0.5
	Stumps	12.3	0.4	4.3	0.1
	Lying stemwood	24.0	1.4	8,5	0.5
	<b>Total</b>	<b>48.7</b>	<b>2.3</b>	<b>17.2</b>	<b>0.8</b>
NIL 3 (2016-2020)	Standing snags	4.3	1.5	8.0	0.5
	Stumps	12.2	0.3	4.3	0.1
	Lying stemwood	22.1	1.0	7.8	0.3
	<b>Total</b>	<b>57.1</b>	<b>2.0</b>	<b>20.1</b>	<b>0.7</b>

Source: Total and per-hectare volume of individual forms of deadwood, NIL2 period (2011–2015) and NIL3 period (2016–2020) - [https://nli.gov.cz/wp-content/uploads/2024\\_10\\_01\\_8\\_mrtve\\_drevo.pdf](https://nli.gov.cz/wp-content/uploads/2024_10_01_8_mrtve_drevo.pdf)

### Monitoring of Forest Health

The health status of forests is assessed through time-series analysis of Sentinel-2 satellite data, collected since 2016 within the framework of the Copernicus program of the European Space Agency (ESA). For evaluating the development of forest health, the National Forest Inventory (NFI) has developed a certified methodology that utilizes year-to-year comparisons of imagery during the peak vegetation season, i.e., the phenological summer (June to August).

The evaluated factor is not the absolute values of the Leaf Area Index (LAI), but rather the trend of change over a two-year interval.



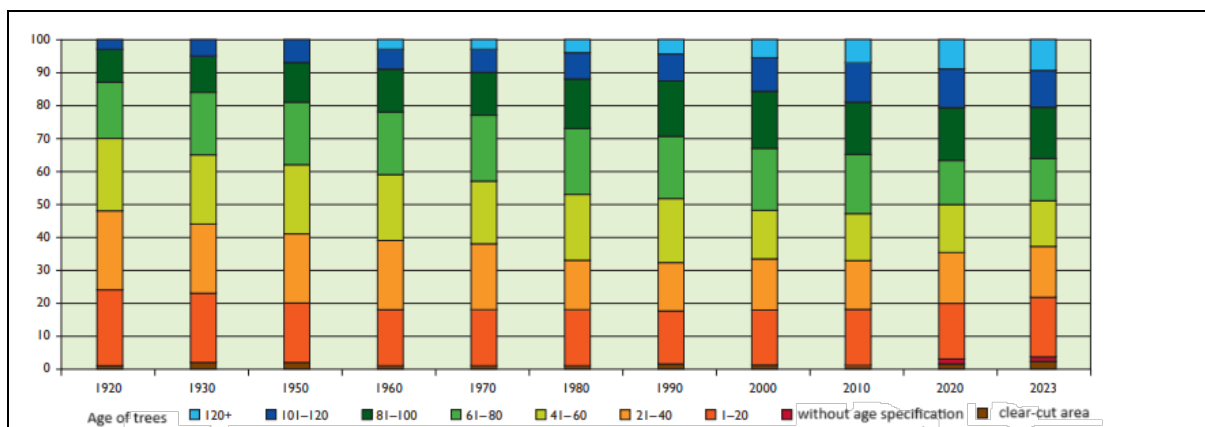
Source: <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

The health condition of forests has deteriorated significantly, particularly in the Vysočina region, in the municipalities with extended powers (ORP) of Jihlava, Pelhřimov, Třebíč, and Chotěboř, as well as in the ORP of Karlovy Vary. These results broadly correspond to the estimated area of bark beetle-affected and deadwood harvests. The assessment of changes in the health status of coniferous stands shows values comparable to the previous reference period of 2020–2022.

### Age structure of trees

The age structure of forest stands, alongside their species composition and spatial arrangement, is an important characteristic for assessing the condition and development of forests.

In the Czech Republic, the age structure of forests is uneven. In recent years, the area of overmature stands (over 120 years) has been increasing, which may be due to forest management practices in specially protected areas and protective forests, as well as the postponement of regeneration in economically less attractive, less accessible, or lower-quality stands in production forests. The area of stands younger than 60 years remains significantly below the normative level. The gradual increase in the average age of tree species has continued in recent years, associated with the expansion of overmature stands and the rising average rotation age.



Source: <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

<b>Sources</b>	<a href="https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf">https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf</a> <a href="https://nli.gov.cz/wp-content/uploads/2024_10_01_8_mrtve_drevo.pdf">https://nli.gov.cz/wp-content/uploads/2024_10_01_8_mrtve_drevo.pdf</a>		
<b>Efficiency (points):</b>	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)	<input type="checkbox"/> Category C (0 points)

**4.8. Statement of assurance by installations processing forest biomass**

**Step 1: Identification of applicable laws**

In the Czech Republic, the processing and placing on the market of biomass, including forest biomass, is primarily regulated through:

- Regulation of the European Parliament and of the Council (EU) **2023/1115** (“EUDR”) – establishes the obligation to comply with deforestation-free rules when trading selected commodities, including timber and timber products.
- Commission Implementing Regulation (EU) **2024/3084** on the operation of the information system pursuant to Regulation (EU) 2023/1115 of the European Parliament and of the Council on the placing on the Union market and export from the Union of certain commodities and products associated with deforestation and forest degradation.
- Act No. **226/2013** Coll., on the placing on the market and export of timber, timber products, and certain other commodities, as amended – national implementation of the EUDR obligations for the Czech Republic.
- The **Nature and Landscape Protection Act** (No. **114/1992** Coll.), as amended and related implementing decrees.
- The **Forest Act** (No. **289/1995** Coll.), as amended and related implementing decrees.

In connection with the use of forest biomass for energy purposes, all actors in the supply chain – from harvesting through processing and delivery to combustion – must comply with the sustainability criteria monitoring system set out by the RED II and RED III Directives. These requirements are defined by the relevant legal regulations:

- Act No. **165/2012** Coll. on Supported Energy Sources, as amended - among other things, also sets out the conditions and obligations of persons and sustainability criteria for solid, liquid and gaseous fuels from biomass - transposes the requirements of the Renewable Energy Directive (EU) 2018/2001 (RED II) and the Renewable Energy Directive (EU) 2023/2413 (RED III) into Czech legislation.
- Decree of the Ministry of the Environment of CR No. **110/2022** Coll. on the determination of types and parameters of supported renewable sources and sustainability criteria and greenhouse gas emission savings for bioliquids and biomass fuels, as amended

<p>The key framework for the "Statement of assurance by installations processing forest biomass" as defined by the Renewable Energy Directive (RED III) is, in particular, Decree of the Ministry of the Environment of the Czech Republic No. 110/2022 Coll., which is currently being amended. The latest version of the draft decree is available. In this draft, Section 6b, Criteria for the sustainability of forest biomass, specifically point (2), states: <i>“Operators of installations producing bioliquids and fuels from forest biomass and producers of forest biomass shall, on the basis of their own internal procedures, issue a declaration for the purposes of audits carried out in accordance with Article 30(3) of the Renewable Energy Directive, certifying that that forest biomass is not obtained from land referred to in point (f) or mixed with other biomass; the first collection point shall be determined in accordance with point 12 of Article 2 of the Commission Implementing Regulation on rules for verifying sustainability criteria and greenhouse gas emission savings and low risk of indirect land-use change criteria.”</i></p>	
<b>Sources</b>	<p>Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a>  EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a></p>
<b>Were applicable laws identified?</b>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)</p>

<b>Step 2: Description of enforcement and monitoring</b>
<p><b>Enforcement of the compliance with regulations</b></p> <p>The previously mentioned laws establish multiple law enforcement bodies at the central, regional as well as local levels.</p> <ul style="list-style-type: none"> <li>▪ <b>the Ministry of the Environment</b></li> <li>▪ <b>Municipal authorities</b></li> <li>▪ <b>Municipal authorities with extended competencies (“MECs”)</b></li> <li>▪ <b>Regional authorities</b></li> <li>▪ <b>the Agency = Nature Conservation Agency of the Czech Republic (“AOPK ČR”)</b></li> <li>▪ <b>National Park Administrations</b></li> <li>▪ <b>the Czech Environmental Inspectorate</b></li> <li>▪ <b>Military district offices and the Ministry of Defence</b></li> <li>▪ <b>Nature Guard</b></li> </ul> <p>For more information on the structure and work of the state forest administration bodies, please see step 2 and 3 of chapters 4.1, 4.3 and 4.5.</p> <p><b>Monitoring of the compliance with regulations</b></p> <ul style="list-style-type: none"> <li>▪ <b>Ministry of the Environment</b></li> <li>▪ <b>Nature Conservation Agency of the Czech Republic</b></li> <li>▪ <b>Administrations of individual Protected Landscape Areas</b></li> <li>▪ <b>Czech Environmental Inspectorate</b></li> <li>▪ <b>The National Forestry Institute (“NLI”)</b></li> <li>• <b>Auditors of certification systems</b> - specifically, audits are conducted within the ISCC, SURE, and KZR INiG systems.</li> <li>• <b>FSC auditors</b></li> </ul>

- **PEFC auditors**
- **Custom authorities**

For more information on the structure and work of the state forest administration bodies, please see step 2 of chapter 4.6.

- **Ministry of Industry and Trade (“MPO”)** – is responsible for implementing the requirements of the RED II and RED III Directives (Renewable Energy Directive) into Czech legislation, defining the requirements and conditions for ensuring a system for monitoring sustainability criteria for biomass used for energy purposes, and establishing rules for reducing greenhouse gas emissions.
- **State Energy Inspection (“SEI”)** – has several main functions, primarily regarding oversight and supervision of compliance with energy legislation. Specifically, it focuses on the inspection of energy facilities – verifying whether operators of power plants, heating plants, biogas plants, boilers, etc., comply with legal requirements; supervising the use of renewable energy sources – ensuring that obligations under the Act on Supported Energy Sources and the requirements of the RED II and RED III Directives are fulfilled, particularly regarding the energy use of biomass; and collecting data on energy production and consumption, including statistics on the use of biofuels and biomass.

For an offense related to the failure to comply with the requirements of the law on reporting energy from renewable sources and monitoring the sustainability criteria of biomass, a fine of up to CZK 50,000,000 may be imposed. If the offense is committed by an electricity or heat producer, or a biomethane producer, the fine may not exceed the annual entitlement of the electricity producer, heat producer, or heat producer from a non-renewable source to support.

<b>Sources</b>	Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a>
<b>Is enforcement and monitoring of the designated laws ensured?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)
<b>Degree of fulfilment of the criterion "maintenance of the long-term productive capacity of the forest"</b>	
<input checked="" type="checkbox"/> Requirements met <input type="checkbox"/> Unfulfilled requirements	

### Step 3: Evaluation of the effectiveness of the legal framework regarding the statement of assurance by installations processing forest biomass

The legal framework of the Czech Republic regarding the processing and energy use of forest biomass is relatively robust and comprehensive, covering all stages – from the origin of the raw material, through technological processing and energy utilization, to import and export. Obligations arising from the RED II and RED III Directives, together with national legislation, ensure the monitoring of sustainability criteria, reduction of greenhouse gas emissions, and market transparency through the due diligence system and certification schemes (FSC, PEFC).

The main advantages of this framework are clearly defined responsibilities for forest owners and facility operators, effective oversight and monitoring by state authorities and certification auditors, and the possibility to combine economic use of biomass with environmental protection.

On the other hand, the system imposes significant administrative burdens on businesses, additional costs associated with certifications and audits, potential delays in biomass trade flows if all requirements are not met, and the risk of inconsistent interpretation of rules, particularly for small and medium-sized enterprises.

Sources	<a href="https://nli.gov.cz/portfolio/eudr/">https://nli.gov.cz/portfolio/eudr/</a>		
Efficiency (points):	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)	<input type="checkbox"/> Category C (0 points)

4.9. Guarantee of carbon sequestration parity		
Ratification of the Paris Agreement?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The Paris Agreement (COP21) was adopted in 2015, and the Czech Republic ratified it on October 5, 2017. By doing so, the Czech Republic confirmed its commitment to contribute to global efforts to limit the rise in global temperature to well below 2 °C, ideally to 1.5 °C.
Submitted by relevant NDCs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	For the Czech Republic, the commitment is part of the joint NDC of the European Union, which sets the target of reducing greenhouse gas emissions by at least 55 % by 2030 compared to 1990 levels (within the EU “Fit for 55” package). The Czech Republic coordinates this contribution at the EU level and regularly reports progress through the LULUCF system and other reporting tools under the United Nations Framework Convention on Climate Change (UNFCCC).
Sources	<a href="https://faktaoklimatu.cz/explainery/klimaticke-zavazky-cr">https://faktaoklimatu.cz/explainery/klimaticke-zavazky-cr</a>	
Brief description of how agriculture, forestry and land use are taken into account in the NDC	<p>As part of the European Union’s NDC (Nationally Determined Contribution), the Czech Republic is also obliged to include the LULUCF sector (Land Use, Land-Use Change and Forestry) in its climate commitment.</p> <p>This means that in the period 2021–2025, and again in the period 2026–2030, the Czech Republic must ensure that greenhouse gas emissions from these activities do not exceed removals. In other words, Czech forests, land, and other land-use categories must function at least as a carbon-neutral sector (the so-called “no-debit rule”). Monitoring and reporting of this data is carried out through the National Inventory of Emissions and Removals, which the Czech Republic regularly submits within the UNFCCC framework and to the European Commission.</p>	

Step 1: Identification of applicable legislation
<ul style="list-style-type: none"> <li>▪ Regulation of the European Parliament and of the Council (EU) <b>2018/841</b> on the inclusion of greenhouse gas emissions and removals resulting from land use, land-use change and forestry in the 2030 climate and energy policy framework and amending Regulation (EU) No. 525/2013 and Decision No. 529/2013/EU - This regulation was implemented into Czech legislation through: <ul style="list-style-type: none"> <li>○ Act No. <b>201/2012</b> Coll., on Air Protection, as amended. This act establishes the framework for monitoring, reporting, and verifying greenhouse gas emissions and removals in the Land Use, Land-Use Change, and Forestry (LULUCF) sector.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Act No. <b>289/1995</b> Coll., on Forests, which regulates forest management and includes measures to ensure sustainable forestry and enhance greenhouse gas removals through forest ecosystems.</li> <li>▪ Regulation of the European Parliament and of the Council (EU) <b>2023/839</b> amending Regulation (EU) 2018/841 as regards the scope, simplifying the reporting and compliance rules, and setting out the targets of the Member States for 2030, and Regulation (EU) 2018/1999 as regards improvement in monitoring, reporting, tracking of progress and review - This regulation was implemented into Czech legislation through: <ul style="list-style-type: none"> <li>○ Act No. <b>201/2012</b> Coll., on Air Protection, as amended. This act implements EU targets regarding greenhouse gas emissions outside the EU ETS.</li> <li>○ Act No. <b>383/2012</b> Coll., on the Conditions for Trading Greenhouse Gas Emission Allowances, as amended. This act implements targets for emission reductions in sectors such as households and transport.</li> <li>○ Act No. <b>17/1992</b> Coll., on the Environment, as amended. This act serves as a framework for environmental protection and enables the government to adopt measures aimed at achieving emission reduction targets)</li> <li>○ <b>National Emission Reduction Program (“NPSE”)</b> - strategic document approved by the government. Serves as the specific national implementation of the obligations under Regulations 2023/839 and 2016/2284 and contains concrete targets, measures, and mechanisms for monitoring and reporting.</li> </ul> </li> <li>▪ Commission Implementing Regulation (EU) <b>2018/2066</b> on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No. 601/2012. - This regulation was implemented into Czech legislation through: <ul style="list-style-type: none"> <li>○ Act No. <b>383/2012</b> Coll., on the Conditions for Trading Greenhouse Gas Emission Allowances, as amended.</li> </ul> </li> <li>▪ Regulation of the European Parliament and of the Council (EU) <b>2023/1115</b> on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No. 995/2010 - This regulation was implemented into Czech legislation through: <ul style="list-style-type: none"> <li>○ Act No. <b>226/2013</b> Coll., on the placing on the market and export of timber, timber products, and certain other commodities, as amended – This act implemented EUDR obligations for the Czech Republic.</li> </ul> </li> <li>▪ Directive of the European Parliament and of the Council (EU) <b>2016/2284</b> on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC - This regulation was implemented into Czech legislation through: <ul style="list-style-type: none"> <li>○ Act No. <b>201/2012</b> Coll., on Air Protection, as amended.</li> <li>○ <b>National Emission Reduction Program (“NPSE”)</b></li> </ul> </li> </ul>
Sources	Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a> NPSE - <a href="https://www.databaze-strategie.cz/cz/mzp/strategie/narodni-program-snizovani-emisi-ceske-republiky">https://www.databaze-strategie.cz/cz/mzp/strategie/narodni-program-snizovani-emisi-ceske-republiky</a> NPSE - <a href="https://mzp.gov.cz/cz/agenda/ochrana-ovzdusi/kvalita-ovzdusi/strategicke-dokumenty/dokumenty-k-npse">https://mzp.gov.cz/cz/agenda/ochrana-ovzdusi/kvalita-ovzdusi/strategicke-dokumenty/dokumenty-k-npse</a> NPSE - <a href="https://mzp.gov.cz/system/files/2024-10/000-Aktualizace_NPSE_2023-20240118.pdf">https://mzp.gov.cz/system/files/2024-10/000-Aktualizace_NPSE_2023-20240118.pdf</a>
They were usable identified laws?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)

## Step 2: Description of enforcement and monitoring

### Enforcement of the compliance with regulations

The previously mentioned laws establish:

- **The Ministry of the Environment**
  - Responsible for overall reporting and validation of data to the EU and UNFCCC.
  - Ensures that the data meet the requirements of LULUCF, the EU ETS outside the system and the EU ETS system.
- **The Ministry of Agriculture through National Forest Inventory (NFI)**
  - Conduct internal data checks, ensure methodological accuracy, and audit calculations.
- **External audit and validation**
  - As part of reporting to the EU and UNFCCC, data are reviewed by independent experts (so-called UNFCCC reviewers).
  - Ensures objectivity and compliance with international IPCC standards.

### Monitoring of the compliance with regulations

- **The Ministry of the Environment**
- **Nature Conservation Agency of the Czech Republic**
- **The National Forestry Institute ("NLI")**
- **The Ministry of Industry and Trade ("MPO")**
- **The Ministry of Agriculture**
- **Czech Hydrometeorological Institute** – provides and evaluates data for the preparation of the National Inventory Report.

For more information on the structure and work of the state administration bodies, please see step 2 of previous chapters.

<b>Sources</b>	Czech legislation: <a href="https://www.zakonyprolidi.cz/">https://www.zakonyprolidi.cz/</a> EU legislation: <a href="https://eur-lex.europa.eu/homepage.html">https://eur-lex.europa.eu/homepage.html</a>
<b>Is enforcement and monitoring of the designated laws ensured?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (audit required)
<b>Degree of compliance with the criterion "guarantee of carbon sequestration parity"</b>	
<input checked="" type="checkbox"/> Requirements met <input type="checkbox"/> Unfulfilled requirements	

## Step 3: Assess the effectiveness of the legal framework for ensuring carbon sequestration parity

### Information on air pollution and air contamination

A wide range of data and information regarding air pollution and air contamination is publicly available, especially those managed and processed by the Czech Hydrometeorological Institute.

Data on the development of pollutant emissions are available from the annual emission inventories at: [https://cdr.eionet.europa.eu/cz/eu/nec\\_revised/](https://cdr.eionet.europa.eu/cz/eu/nec_revised/).

Information on air quality is comprehensively published annually in the publication “Air Pollution in the Territory of the Czech Republic”, available in electronic graphic format at: [http://portal.chmi.cz/files/portal/docs/uoco/isko/grafroc/grafroc\\_CZ.html](http://portal.chmi.cz/files/portal/docs/uoco/isko/grafroc/grafroc_CZ.html) or in tabular format at: [https://www.chmi.cz/files/portal/docs/uoco/isko/tab\\_roc/tab\\_roc\\_CZ.html](https://www.chmi.cz/files/portal/docs/uoco/isko/tab_roc/tab_roc_CZ.html).

Assessment of air quality in the Czech Republic according to five-year rolling averages, pursuant to §11, paragraphs 5 and 6 of the Air Protection Act: [http://portal.chmi.cz/files/portal/docs/uoco/isko/ozko/ozko\\_CZ.html](http://portal.chmi.cz/files/portal/docs/uoco/isko/ozko/ozko_CZ.html).

### 2030 Targets and Commitments of the Czech Republic

This section of the document includes only those commitments that relate directly to the Czech Republic.

<p><b>Reduction of total greenhouse gas emissions, including LULUCF and international aviation</b> The commitment is being updated.</p>	
<p><b>Emission reductions outside the EU ETS (Effort Sharing Regulation), buildings, transport (excluding aviation), agriculture, small industry and waste management</b></p>	
<p><b>Increasing the share of renewable energy sources in final energy consumption</b> The commitment is being updated.</p>	
<p><b>Increasing the absorption of greenhouse gases in the Land Use, Land-Use Change, and Forestry (LULUCF) sector</b></p>	

Source: <https://faktaoklimatu.cz/explainery/klimaticke-zavazky-cr>

### National Emission Reduction Program (“NPSE”)

The NPSE is a key strategic document of the Czech Republic focused on improving air quality and fulfilling national commitments to reduce emissions of pollutants. It is prepared by the Ministry of the Environment of the Czech Republic and regularly updated in accordance with Act No. **201/2012** Coll., on Air Protection, as amended.

The main goal of the NPSE is to reduce the overall level of air pollution in the Czech Republic and ensure compliance with national emission reduction commitments for 2025 and 2030, as set by European legislation. The document addresses a wide range of pollutants, including nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), ammonia (NH<sub>3</sub>), non-methane volatile organic compounds (NMVOC), particulate matter PM10 and PM2.5, polycyclic aromatic hydrocarbons (PAHs), benzo(a)pyrene, benzene, cadmium, lead, mercury, and arsenic.

The NPSE includes an analysis of the current state and trends in air quality in the Czech Republic, identification of pollution sources, an emission balance of various economic sectors, and scenarios for air pollution development. Furthermore, it sets out measures and tools to achieve the goals, including legislative changes, economic instruments, and specific measures for sectors such as energy, transport, industry, and agriculture.

The NPSE updates are typically conducted at four-year intervals. When preparing an update, national emission projections developed by the Czech Hydrometeorological Institute are used, which predict the development of pollutant emissions and compare them with national commitments. The 2023 national emission projection indicates that national emission reduction commitments will be met for all monitored pollutants except ammonia, where the predicted emission levels correspond to the national target.

### Forest and Climate Protection

As a Party to the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement, the Czech Republic annually prepares a greenhouse gas emission inventory, which also includes a balance of emissions and removals from land use, land-use change, and forestry (LULUCF).

Land categories	1990	2021	2022
	thousand ha		
Forest land	2 629.5	2 677.3	2 678.8
Permanent grasslands – meadows and pastures	832.5	1 022.7	1 028.6
Arable land	3 455.0	3 177.5	3 170.1
Wetlands and peatlands	157.5	167.4	168.7
Built-up area	811.9	842.2	840.9

Source: Land use changes according to the IPCC categorization in 1990, 2021, and 2022. - <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

Note: The emission balance for 2023 will be available only at the end of the year 2025.

The second step of the emission inventory is the quantification of greenhouse gas emissions and removals. The focus is mainly on carbon dioxide (CO<sub>2</sub>), which is either released or sequestered within ecosystems, i.e., in various carbon pools. For UNFCCC reporting, these pools include biomass, dead organic matter, and soils. In contrast, LULUCF reporting under the Kyoto Protocol requires information on changes in five carbon pools: above-ground biomass, below-ground biomass, dead

wood, litter, and soil. For the second commitment period of the Kyoto Protocol (2013–2020), it was additionally decided to report carbon stored in harvested wood products.

Besides CO<sub>2</sub> emissions and removals resulting from changes in carbon stocks, the LULUCF sector also quantifies other greenhouse gases, namely methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). These arise, for example, from biomass combustion, fertilization, or the drainage of wet soils.

Emissions (+) and removals (-) [t CO <sub>2</sub> ekv.]	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total
Land use, land-use change and forestry	3 444.05	20.50	13.51	3 478.06
Forest land	5 496.77	20.50	10.73	5 528.00
Arable land	43.01	-	2.27	45.28
Meadows and pastures	-500.87	-	-	-500.87
Wetlands and peatlands	56.53	-	-	56.53
Built-up area	194.87	-	-	194.87
Harvested wood products	-1 946.26	-	-	-1 946.26

Source: Emissions (+) and removals (-) from LULUCF in 2022 - <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

In accordance with Article 3.3 of the Kyoto Protocol, the Czech Republic is obliged to report a detailed emission balance of activities related to afforestation, reforestation, and deforestation. For the first commitment period, the country also opted to include forest management under Article 3.4, which represented the most significant contribution to the overall emission balance. In the second commitment period, the inclusion of this activity became mandatory.

Year	Activities under Article 3.3 KP		Activities under Article 3.4 KP
	Afforestation and reforestation	Deforestation	Forest management
2008	-261.6	155.8	-1 697.4
2009	-283.8	165.6	-3 776.2
2010	-309.6	201.7	-2 450.6
2011	-340.5	159.9	-4 487.3
2012	-356.3	169.4	-4 783.4
2013	-517.1	257.8	-6 241.5
2014	-551.2	256.1	-6 072.2
2015	-586.0	215.2	-5 844.6
2016	-608.9	244.1	-4 969.9
2017	-641.4	259.5	-3 298.7
2018	-664.0	198.2	2 403.2
2019	-699.2	201.9	9 282.3
2020	-712.0	247.8	13 827.4

Source: Supplementary information on emissions (+) and removals (-) from Kyoto Protocol (KP) activities in 2008–2020 [t CO<sub>2</sub> eq.] - <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

According to the rules of the Kyoto Protocol, the contribution of the LULUCF sector to the Czech Republic's emission reduction commitment was accounted for at the end of the first commitment period. In total, this contribution amounted to 6,584,129 so-called removal units, representing roughly 1 % of the country's total emissions over 2008–2012. During the second commitment period (2013–2020), the Czech Republic had to cover 40,245,978 t CO<sub>2</sub> eq. of emissions from the LULUCF sector using surplus reductions from other emission sectors. At the same time, it was allowed to count 4,979,890 removal units from afforestation and reforestation activities. The final accounting of all units for the second period was completed in 2023.

Year	Value
2002	- 9 449.74
2003	-8 949.53
2004	-8 663.74
2005	-8 721.87
2006	-7 664.75
2007	-7 430.88
2008	-8 682.74
2009	-8 437.25
2010	-7 711.58
2011	-8 333.45
2012	-8 555.77
2013	-7 909.55
2014	-7 851.57
2015	-7 853.71
2016	-6 945.91
2017	-5 338.06
2018	-11.71
2019	6 493.35
2020	9 699.69
2021	6 587.95
2022	3 378.06

Source: Net removals (-) and emissions (+) from LULUCF in 2002–2022 [t CO<sub>2</sub> eq.] - <https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf>

### Above-ground biomass and carbon stocks

The estimated total amount of above-ground biomass in accessible and walkable forests in the Czech Republic for the NIL3 period (2016–2020) is 625.1 ± 10.9 million tonnes, which corresponds to 219.4 ± 2.5 tonnes per hectare of forest land.

The total carbon stock stored in above-ground biomass for the NIL3 period was estimated at 314.3 ± 5.5 million tonnes, equivalent to 110.3 ± 1.3 tonnes per hectare of forest land.

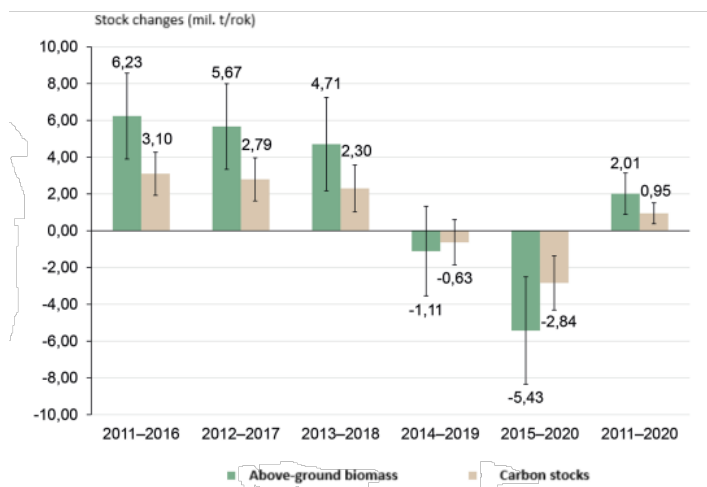
Among different forest types, broadleaved (deciduous) trees often demonstrate a higher capacity for carbon storage compared to coniferous (evergreen) species. This difference is primarily attributable to several physiological, structural, and ecological factors.

Broadleaved trees typically develop larger and denser woody biomass, which contributes to greater above-ground carbon stocks per unit area. Their leaves, though seasonally shed, support higher photosynthetic rates during the growing season, facilitating more efficient carbon assimilation. Additionally, many broadleaved species invest significant biomass below ground in extensive root systems, further enhancing carbon sequestration in soil.

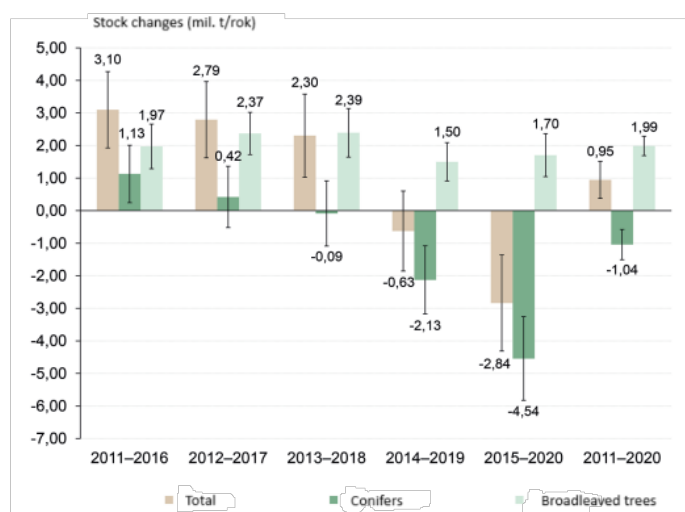
In contrast, coniferous trees generally exhibit slower growth rates and lower wood density in comparison to many broadleaved species. While conifers often dominate in nutrient-poor or colder environments, their lower overall biomass accumulation can result in reduced long-term carbon storage.

Recent empirical studies suggest that mixed and broadleaved-dominated forests not only store more carbon in both biomass and soil but also provide greater resilience to environmental stressors, enhancing the stability of carbon stocks over time. Therefore, the integration of broadleaved species

in reforestation and afforestation programs is increasingly recognized as a strategic measure for climate change mitigation and sustainable forest management.



Source: Average annual change in total above-ground biomass and carbon stock, sub-periods of change between NIL2 (2011–2015) and NIL3 (2016–2020) - [https://nli.gov.cz/wp-content/uploads/2024\\_03\\_01\\_7\\_nadzemni\\_biomasa\\_zasoba\\_uhliku.pdf](https://nli.gov.cz/wp-content/uploads/2024_03_01_7_nadzemni_biomasa_zasoba_uhliku.pdf)



Source: Average annual change in total carbon stock in the above-ground biomass of conifers and broadleaved trees, sub-periods of change between NIL2 (2011–2015) and NIL3 (2016–2020) - [https://nli.gov.cz/wp-content/uploads/2024\\_03\\_01\\_7\\_nadzemni\\_biomasa\\_zasoba\\_uhliku.pdf](https://nli.gov.cz/wp-content/uploads/2024_03_01_7_nadzemni_biomasa_zasoba_uhliku.pdf)

The development of removals continues to be influenced by the age structure of Czech forests. A temporary decline in removals will also result from the planned increase in the share of broadleaved tree species during forest regeneration after the bark beetle calamity. However, this measure is also an important adaptation step, intended to ensure the long-term stability of forest ecosystems and thus the sustained storage of carbon.

<b>Sources</b>	<a href="https://faktaoklimatu.cz/explainery/klimaticke-zavazky-cr">https://faktaoklimatu.cz/explainery/klimaticke-zavazky-cr</a>		
	<a href="https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf">https://nli.gov.cz/wp-content/uploads/zprava-o-stavu-lesa-a-lesniho-hospodarstvi-ceske-republiky-v-roce-2023.pdf</a>		
<b>Efficiency (points):</b>	<a href="https://nli.gov.cz/wp-content/uploads/2024_03_01_7_nadzemni_biomasa_zasoba_uhliku.pdf">https://nli.gov.cz/wp-content/uploads/2024_03_01_7_nadzemni_biomasa_zasoba_uhliku.pdf</a>		
	<input checked="" type="checkbox"/> Category A (20 points)	<input type="checkbox"/> Category B (10 points)	<input type="checkbox"/> Category C (0 points)

5. Results			
Criterion	Degree of compliance		Number of points (efficiency)
	Requirements met	Unfulfilled requirements	
Legality of logging	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20
Forest restoration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20
Maintenance of biodiversity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20
Maintenance of soil quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20
Regulations for protected areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20
Regulations for particularly valuable landscapes, where forest biomass shall not be grown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20
Maintenance of the long-term production capacity of the forest	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20
Statement of assurance by installations processing forest biomass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20
Guarantee of carbon sequestration parity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20

6. Evaluation of the risk assessment	
Risk status:	The sustainability criteria have been met <i>nine times</i> .
	The sustainability criteria have not been met <i>zero times</i> .
	<input checked="" type="checkbox"/> Low risk area <input type="checkbox"/> Area of specified risk
Risk level: (Total points)	180 out of a maximum of 180 points were awarded.
Written summary of results:	
<p>This risk assessment examines the legal framework and the requirements of Article 29(6) and (7) of Directive (EU) 2018/2001. All sustainability criteria established by the directive are fully considered within the defined scope of application and are met. Based on this assessment, the risk of unsustainable management in forest ecosystems in the Czech Republic is evaluated as low and statistically insignificant. Therefore, an additional audit of forest biomass produced within the Czech Republic is not deemed necessary, as the sustainability of forest management is ensured by legislation, actively monitored, and enforced, with positive trends observed in forest condition.</p> <p>The risk analysis concerning regulations for particularly valuable landscape areas, where forest biomass production is not recommended, and regarding statements of assurance by installations processing forest biomass, concluded that under the conditions in the Czech Republic, the risk of placing illegally harvested biomass from these areas on the market is low.</p>	

The Czech Republic possesses a robust legislative framework in the assessed area and sufficient publicly available information on protected and specially protected areas, including their protection conditions. Empirical practice corroborates the assessment's conclusions, indicating that the risk of illegal harvesting and placement of unsustainable forest biomass is negligible.

<b>Annex to the risk assessment: documentation of the stakeholder dialogue</b>
<b>Author of the risk assessment:</b>
<i>[Insert author's name here.]</i>
<b>Date of dialogue with stakeholders:</b>
<i>[Please indicate the date on which the stakeholder dialogue took place.]</i>
<b>A specific issue discussed in dialogue with stakeholders:</b>
<i>[Please indicate here the specific issue being discussed in the stakeholder dialogue.]</i>
<b>Participating institutions or individuals:</b>
<i>[Please specify the institutions or persons involved here.]</i>
<b>Result of stakeholder dialogue:</b>
<i>[Please indicate the outcome of the stakeholder dialogue here. ]</i>

**Information about the publication**

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