

Assessment of the risk of unsustainable production of forest biomass

- REPUBLIC of AUSTRIA -



Table of Contents

		page
1.	Introduction	3
1.1.	Background and objective	3
1.2.	Information on the author of the risk assessment	3
2.	Geographic scope of the risk assessment	4
3.	Structure of the forest based sector in Austria	5
3.1.	Forestry	5
3.2.	Wood volume and wood use	10
3.3.	Wood processing industry	13
3.4.	Sources of information	19
4.	Evaluation of the sustainability criteria for forest biomass	21
4.1.	Legality of harvesting operations	21
4.2.	Forest regeneration	29
4.3.	Maintenance of biodiversity	33
4.4.	Maintenance of soil quality	40
4.5.	Regulations for protected areas	44
4.6.	Maintenance of the long-term production capacity of the forest	53
4.7.	Guarantee of carbon sequestration parity	58
5.	Results	61
6.	Evaluation of the risik assessment	61
Annex 1	Documentation of the stakeholder dialogue	63
Annex 2	Selbsterklärung zur Nachhaltigkeit von forstwirtschaftlicher Biomasse ('Self-declaration on the sustainability of forest biomass')	



1. Introduction

1.1. Background and objective

<u>Directive (EU) 2018/2001</u> on the promotion of the use of energy from renewable sources (RED II) sets out sustainability criteria for forest biomass used in energy production that shall be met in order for it to count towards European targets and national contributions and to be included in the renewable energy obligations set out in Articles 23 and 25 leg cit and to be eligible for public support.

Forest biomass is considered sustainable in this context if the sustainability criteria set out in Article 29 (6) and (7) of Directive (EU) 2018/2001 with regard to the harvesting of biomass in forests and emissions from land use, land use change and forestry (LULUCF) are met.

Following the risk-based approach enabled by RED II, the <u>Austrian Research Centre for Forests (BFW)</u> carried out an assessment on behalf of the <u>Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML)</u> regarding the risk of unsustainable production of forest biomass in Austria. The assessment contains information on whether the required sustainability criteria for forest biomass are sufficiently implemented through existing national and/or sub-national legislation and whether the relevant laws are enforced and monitored reliably and without significant deficiencies (ensuring 'Level A compliance' of forest biomass harvested in Austria).

The information compiled in the present risk assessment follows the requirements of <u>Directive (EU) 2018/2001</u> and <u>Implementing Regulation (EU) 2022/2448</u> (harvesting criteria and LULUCF criteria) and takes into account the requirements and recommended indicators of the '<u>Technical guidance for the assessment of the risk of unsustainable production of forest biomass</u>' of the SURE-EU system.

1.2. Information on the author of the risk assessment

This risk assessment was compiled by Dietmar Jäger, employee of the Austrian Research Centre for Forests / Federal Forest Office (BFW) in Vienna, Austria.

Dietmar Jäger studied forestry at BOKU University in Vienna. He then worked for several years as a project assistant at the Institute of Silviculture, BOKU University in the field of modelling long-term forest development under climate change scenarios.

Subsequently, he worked for about 6 years as an employee of an Austria-wide active interest group for private forest holdings, where he was responsible for the subject area 'Forest and Environment'.

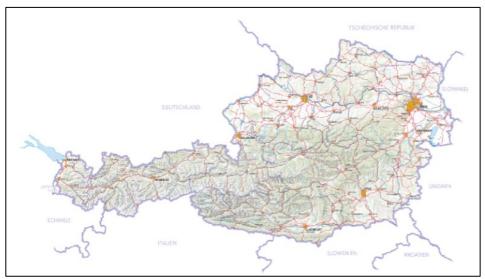
Since 2012, Dietmar Jäger, as a contract employee of the Austrian Research Centre for Forests / Federal Forest Office (BFW) has been

- commissioned with the evaluation of forestry funding programmes (EU CAP Rural Development Programme, EU CAP Strategic Plan, Austrian Forest Fund)
- active in the framework of international projects (ERA-NET, Twinning)
- Officer for the control and validation of licences for the import of timber products from EU partner countries (Indonesia) in accordance with the EU FLEGT Regulation
- Officer in charge of the enforcement of national regulations for the implementation of the EU Renewable Energy Directive (RED) regarding forest biomass



2. Geographic scope of the risk assessment

The present risk assessment regarding the unsustainable production of forest biomass was prepared for the national territory of the Republic of Austria and applies to forests within the meaning of the Forest Act 1975 as amended within the political boundaries of the Republic of Austria. The risk assessment is therefore only applicable to forest biomass whose production area lies within these borders.



Republic of Austria (Source: BEV – Austrian Map).



Forest map of Austria (Source: BFW – Austrian National Forest Inventory).

Sources

- Federal Office of Metrology and Surveying (BEV). Austrian Map. https://maps.bev.gv.at/ (last accessed in February 2024)
- Austrian Research Centre for Forests (BFW). Austrian National Forest Inventory. https://www.waldinventur.at/#/en (last accessed in February 2024)



Structure of the forest based sector in Austria 3.

3.1. **Forestry**

Total forest area

According to the results of the National Forest Inventory carried out by the Austrian Research Centre for Forests (BFW), the forest area in Austria totals 4.018 million hectares, which corresponds to 47.9% of the state area. In relation to the respective province area, the most densely forested federal province is Styria (62%), followed by Carinthia (61%), Salzburg (52%), as well as Upper Austria and Tyrol (42% of the province area each) [1], [2].

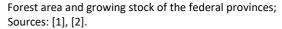
	Total for- ests ²⁾ in 1,000 ha	Percent- age of forest cover	Forest in yield in 1,000 ha	Growing stock ³⁾ in 1,000 m ³ o.b.	Growing stock ³⁾ per ha in m ³ o.b.
Burgenland	135	34	130	36,048	276
Carinthia	585	61	499	182,774	366
Lower Austria	774	40	737	233,660	317
Upper Austria	502	42	444	163,265	368
Salzburg	374	52	272	100,314	368
Styria	1,014	62	861	314,519	365
Tyrol	528	42	347	117,045	338
Vorarlberg	98	38	62	26,119	419
Vienna	9	22	9	3,363	373
Austria	4,018	48	3,359	1,176,456	350

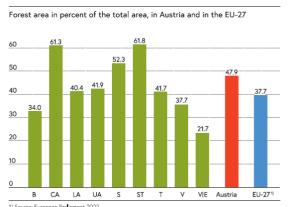
¹⁾ In the form of samples, the Austrian Forest Inventory systematically covers the entire federal territory. Therefore, the determined forest area is the forest-area reference value. The results are based on the interim evaluation of the surveying period 2016/21.

2) Incl. protection forest without yield and forest land without yield.

3) The data on growing stock relate to the forests in yield.

Source: Federal Research and Training Centre for Forests, Natural Hazards and Landscape 2023, Austrian Forest Inventory 2017/22.

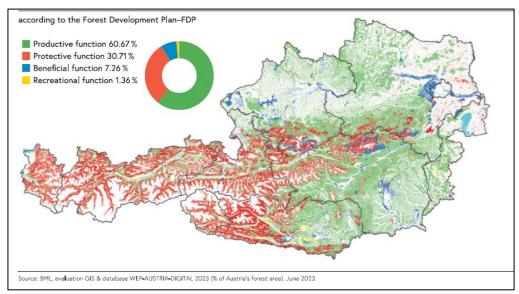




Source: European Parliament 2022.
 Source: Federal Research and Training Centre for Forests, Natural Hazards and Landscape 2023, Austrian Forest Inventory 2017/22.

Percentage of forest area in the total area of the federal provinces, Austria and EU-27; Sources: [1], [2].

According to the Forest Development Plan (FDP) the key function is the forest function that is of primary public interest for a specific forest area (see: II. sect of the Forest Act 1975, and Ordinance on the Forest Development Plan). Accordingly, 60.7% of the Austrian forest area is allocated to the productive function (sustainable production of wood as a raw material), 30.7% to the protective function (in particular protection against natural hazards, which is particularly important in the mountainous regions of Austria), 7.3% to the beneficial function (favourable influence on the environment, e.g. air purification, provision of drinking water) and 1.3% to the recreational function (forest as a recreational area for forest visitors) [1], [3].

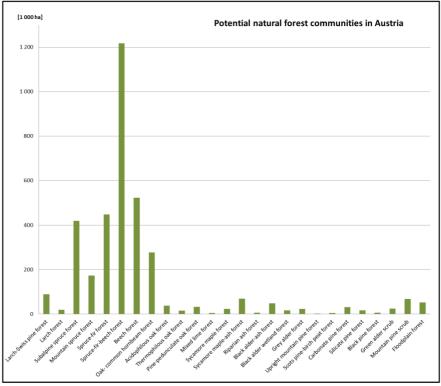


Key functions of Austrian forests according to the Forest Development Plan (FDP); Sources: [1], [3].



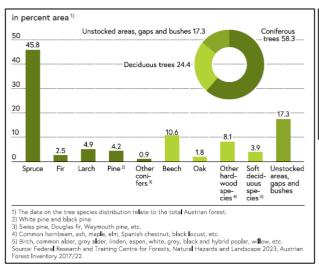
Predominant forest types and tree species, percentage of deciduous and coniferous tree species

Due to its location in the Eastern Alps and the resulting heterogeneous topographical and natural conditions, climatic zones, altitudes and soil types, Austria has a broad spectrum of forest communities with different tree species compositions totalling approx. 70 tree and shrub species. The predominant potential natural forest communities (PNWG) are spruce-fir-beech forest communities (33.5% of the forest area), beech forest communities (14.4%), spruce-fir forest communities (12.3%), mountainous spruce forest communities (4.8%) and subalpine spruce forest communities (11.5%), as well as oak-hornbeam forest communities (7.6%) [2].

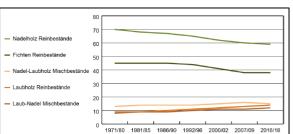


Potential natural forest communities in Austria; Source: [2].

With an imaginary area share of 45.8%, spruce is the most common and economically most important tree species in Austria, followed by beech (10.6%). The tree species composition in the productive forests has changed steadily in favour of hardwood species in the last three forest inventory periods. Overall, the proportion of conifers shows a decreasing trend (currently 58.3%), whereas the proportion of hardwoods has steadily increased (currently 24.4%). The proportion of spruce and pure conifer stands is also decreasing in favour of mixed stands and hardwood stands. Due to climate change, spruce in particular is losing parts of its previous natural range between 600 and 800 metres above sea level [1], [2], [4].



Distribution of tree species in Austria; Sources: [1], [2].



Development of the proportion of forest area by species mixture type in the productive forest (in percent area); Sources: [2], [4].



• Forest ownership structure

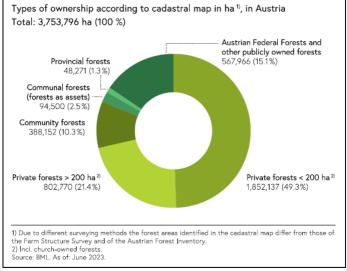
In Austria, the forest is predominantly privately owned. According to the Agricultural Structure Survey 2020, 81% of the forest area is owned by around 137,000 owners. The private forest consists predominantly of small-structured farm or family forests with forest areas of less than 200 hectares ('small forest'). Around 59,000 people own forest areas of less than 5 hectares. They mostly manage the forest to cover their own needs (e.g. firewood) or farmers also use it to finance business investments (e.g. building stables, purchasing machinery).

Around 30% of forest owners are female and they own a quarter of Austria's forest area.

Around 1% of private forest enterprises (including church forests) are larger than 200 hectares ('large forests'), which manage a total of 21% of the Austrian forest area. A further 10% of the forest area are community forests (joint management and utilisation) owned by agricultural communities, landowning communities or cooperatives.

Due to the ongoing structural change - between 1960 and 2020, the number of agricultural and forestry businesses fell from 400,000 to 137,000 - the importance of so-called 'off-farm', 'new' or 'urban' forest ownership (forest ownership through inheritance or purchase without traditional ties to an agricultural business) is steadily increasing. Around 1/3 of forest owners can now be assigned to this group, which can be characterised by the fact that they generally have no professional connection to agriculture and forestry and only a subordinate economic interest in their own forest, which is much more a leisure activity, nature conservation and pride of ownership.

19% of the Austrian forest area is 'public forest', managed by municipalities (3%), federal provinces (1%) and the Austrian Federal Forests ÖBf AG (15% or 600,000 hectares; Federal Forests Act 1996) [1], [5].



Forest areas and ownership structure 2022; Source: [1].

• Protected areas that protect forests, portion of forest under protection

The categories of protected areas in Austria include national parks, "Europaschutzgebiete" (enacted Natura 2000 sites according to Birds Directive and/or Habitats Directive), nature conservation areas, wilderness areas (IUCN category 1b), landscape conservation areas, nature parks and biosphere parks, protected landscape features, other protected areas, as well as natural monuments and protected natural formations, among others:

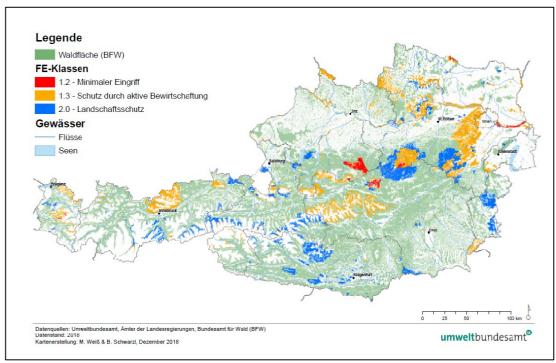
- 6 national parks with a total area of approx. 2,400 km² (including 5 with large forest areas)
- the wilderness area Dürrenstein-Lassingtal with 7,000 ha
- 350 Natura 2000 areas, 284 of which have been enacted as "Europaschutzgebiet"
- 193 natural forest reserves with a total area of 8,666 ha

The total area of IUCN and Natura 2000 protected areas is 24,092 km², which corresponds to approx. 29% of the Austrian national territory.



31% of the Austrian forest area (12,512 km²) is protected under international and European directives. 42% of the Natura 2000 areas are forests, or 13% of the Austrian forest area is located in Natura 2000 areas (approx. 530,000 ha) [5], [6].

More than 878,000 ha of the Austrian forest area in the protected areas designated under nature conservation law (or 22.1% of the total forest area) can be assigned to classes 1.2, 1.3 and 2 according to FOREST EUROPE/MCPFE criteria [4]. (For further information see chapter 4.5 Regulations for protected areas.)



Allocation of forest area in protected areas designated under nature conservation law to the criteria of FOREST EUROPE (formerly MCPFE); Source: Environment Agency Austria (UBA) Study on protected forests in Austria, update 2018; taken from [4].

• CITES-listed wood species

There are no tree species in Austria that are listed under the Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) [7].

Damaging events in the forest

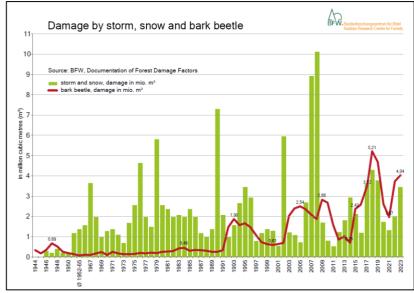
In recent years, climate change-induced, above-average warm weather conditions and periods of drought on the one hand and storm events on the other have led to large amounts of damaged timber and widespread collapse of forest stands. Bark beetle outbreaks (mainly spruce bark beetles), which has been ongoing since 2015, caused 5.21 million cubic metres of damaged timber nationwide in 2018, an unprecedented record in a long-term comparison. The most severely affected areas were Lower Austria (especially Waldviertel region) and Upper Austria. In addition, there were foehn storms and the storm 'Vaia' at the end of October 2018, which particularly affected Carinthia (1.6 million cubic metres of damaged timber), Styria (930,000 cubic metres) and Tyrol (630,000 cubic metres). Since then, the amount of damaged timber caused by bark beetles and extreme weather events (storms, wet snow) has remained at a high level, currently with a focus on upper Carinthia, East- and North-Tyrol.

The proportion of damaged timber in Austrian total felling in recent years was 1/3 to over 60%.

In 2023, 115 forest fires, mostly low-intensity surface fires, were documented in the Austrian Forest Fire Database, in which a total of 51 hectares of forest area were damaged (217 forest fires with a total of 550 hectares damaged in 2022). The most forest fires in the last 20 years were recorded in 2015 (276) and 2017 (272). Due to climate change, forest fires are expected to become an increasing problem in Central Europe, including Austria [8]. In 2018, a gypsy moth mass proliferation was observed on approx. 4,000 ha of oak forest in Weinviertel region

In 2018, a gypsy moth mass proliferation was observed on approx. 4,000 ha of oak forest in Weinviertel region (Lower Austria), and ash dieback has been increasing in intensity since 2020 [9].







Causes of damaged wood in 2022; Source: [11].

Damaged timber due to storm, snow and bark beetle infestation; Source: [10].

Forest regeneration

Forest regeneration in Austria is carried out both by natural regeneration and by planting (reforestation), as well as by combined methods (supplementing existing natural regeneration with afforested plants). Regeneration by sowing, on the other hand, does not play a significant role.

There are around 79,000 ha of coppice forests, which are rejuvenated by means of coppicing or root suckering (mainly traditional coppice and middle forest management in Lower Austria and Burgenland).

According to the Austrian National Forest Inventory (ANFI 2016/21), regeneration would be necessary on 800,000 ha of forest (i.e. desirable in terms of the ideal of natural forest regeneration), but does not exist. In addition, the existing regeneration is damaged by browsing on an area of 420,000 ha. Such regeneration deficits, caused among other things by inadequate hoofed game populations, are particularly problematic in protective forests [2], [5].

• Long-term forest development programmes

The following programmes for long-term forest development, including the development of the forest-based sector, are to be mentioned:

- Austrian Forest Dialogue (ÖWAD; established since 2003) [12]
- Austrian Forest Strategy 2020+ including work programme [13]
- Protective Forest Action Programme [14]
- Forest Fire Action Programme [15]
- CAP-Strategic Plan Austria 2023-2027 [16]
- Austrian Forest Fund [17]
- Austrian Strategy for Adaptation to Climate Change Forestry field of activity [18]
- Biodiversity Strategy Austria [19]
- Biodiversity Fund [20]
- Forestry & Hunting Dialogue [21]
- Austrian Wood Initiative (as part of the Forest Fund) [22]
- Bioeconomy Strategy f
 ür Austria (including Bioeconomy Action Plan) [23]
- National Energy and Climate Plan (NECP) [24]
- Climate- und Energy Fund [25]

Certified forests

The forest area certified according to PEFC criteria on the basis of a PEFC declaration of participation amounts to 3.28 million hectares, which corresponds to 84.1% of the Austrian forest area [26].

The FSC-certified forest area adds up to 587 hectares (2 certificates) [27].



3.2. Wood volume and wood use

· Growing stock and increment

According to the results of the National Forest Inventory (ANFI), the growing stock in the Austrian productive forest (commercial forest and protective forest with timber utilisation) amounts to 1,180 million cubic metres o.b. (ANFI period 2016/21), of which 79% is coniferous wood (the share of spruce in the coniferous growing stock is 76%) and 21% is hardwood. The average stock per hectare of Austrian productive forest is 351 cubic metres o.b. per hectare. This means that the growing stock has increased by 50% since the 1960s, although its structure has also changed. Compared to the early 1980s, a clear shift towards larger diameter classes can be observed. In addition, there has been a shift in favour of the hardwood stock. While the coniferous stock has increased by 20% since the 1981/85 inventory period, the hardwood stock has increased by around 50% in the same period. In terms of ownership types, the growing stock has increased particularly in 'small forests' (holdings < 200 ha) [2], [28].

The average annual increment was calculated on the basis of the forest inventory data for the period 2007-2021 at 29.23 million cubic metres o.b. per year, which represents a slight decline in growth compared to the previous period (30.4 million cubic metres o.b. per year in the period 2000-2009). At the same time, wood utilisation increased slightly in the same period from 25.9 million cubic metres o.b. per year to 26.02 million cubic metres o.b. per year, which is still well below the increment. The harvest percentage (ratio of utilisation to increment) is 89% overall and has risen by 3% since the previous forest inventory. Different utilisation intensities can be observed depending on the type of ownership: In 'small forests' of up to 200 hectares, wood utilisation has increased from 14.3 million cubic metres o.b. to 15.9 million cubic metres o.b. and accounts for 87% of the increment. In 'large forests' enterprises (forest area of over 200 ha), the harvest percentage remains at around 100%. At the Austrian Federal Forests (Österreichische Bundesforste AG) logging was reduced after an utilisation-intensive phase and currently amounts to around 72% of the increment [2], [28].

Increment, utilisation	and harvest percent	by ownership type 2007	' – 2021: Source: [2].

	increment	utilisation	harvest
ownership type	million m ³ c	percent	
'small forests' (up to 200 ha)	18.3	15.9	87%
'large forests' (over 200 ha)	7.7	7.8	101%
Austrian Federal Forests (ÖBf AG)	3.2	2.3	72%
productive forest in total	29.2	26.0	89%

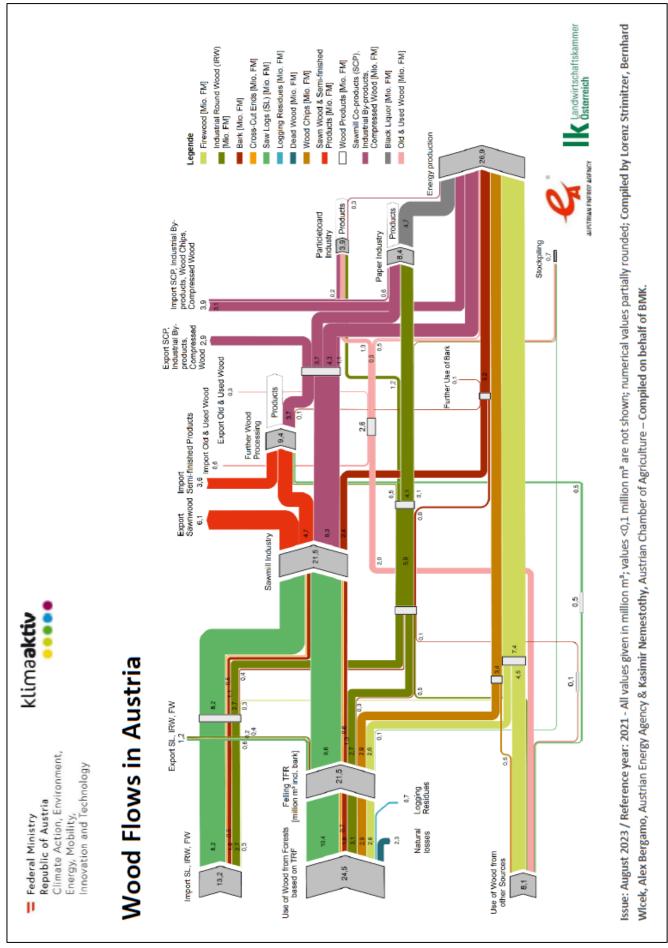
Total wood volume and utilisation

The total wood volume in Austria in 2021 amounts to 45.8 million cubic metres of timber harvested without bark, which is made up of wood utilisation from Austrian forests (including natural waste, harvest residues, bark) amounting to 24.5 million cubic metres, as well as wood imports (saw logs, industrial wood, firewood, wood chips) totalling 13.2 million cubic metres and other wood volumes of 8.1 million cubic metres (copses, micro forests, recycled wood, etc.) [29], [30].

Wood utilisation can be divided into three paths: Utilisation pathway one describes the processing of round wood by sawmills into sawn timber and the subsequent further processing into high-quality wood products. Utilisation path two comprises the material use of industrial round wood and sawmill by-products in the paper, pulp and panel industries. A large proportion of the products from these two utilisation paths are exported. The third utilisation path is the direct use of wood for energy.

The sawmill industry is the largest consumer of round wood in terms of volume and is therefore also essential for the production of sawmill by-products (chips, slabs, splinters) and their further processing (paper and pulp industry, panel industry, energy utilisation).





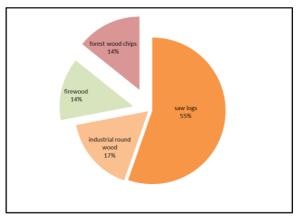
Wood Flows in Austria, Issue August 2023, Reference year 2021; Source: [29].



In 2022, logging in the Austrian forest totalled 19.36 million cubic metres timber harvested without bark, of which 4.54 million cubic metres came from intermediate felling. Total utilisation was therefore 5.1% above the 2021 figures (18.42 million cubic metres of timber harvested without bark), 4.45% above the five-year average (18.53 million cubic metres) and 8.1% above the ten-year average (17.91 million cubic metres).

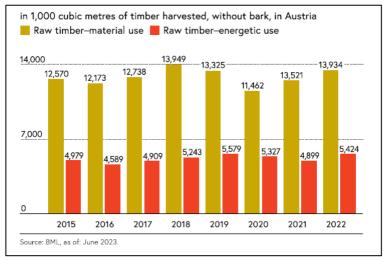
Of the total felling, the following quantities are attributed to [1], [11]

- 9.65 million cubic metres saw logs ≥ 20 cm (49.85%),
- 1.06 million cubic metres saw logs < 20 cm (5.48%),
- 3.22 million cubic metres industrial round wood (16.65%),
- 5.42 million cubic metres raw wood for energetic use (28.02%).



Proportion of wood assortments in the Austrian total felling in 2022; Source: [11].

This means that around 13.92 million cubic metres of the timber harvested without bark in 2022 was used for material purposes (e.g. as building and construction material) and 5.42 million cubic metres was used for heat and energy generation. In the past 7 years, significantly more than twice as much was utilised for material purposes than for energy [1].



Harvest volume – raw timber by material and energetic use 2015 to 2022; Source: [1].

• Illegal logging

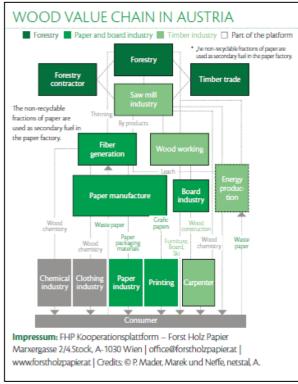
Illegal logging occurs when timber is harvested in violation of the applicable legal provisions. In Austria, the number of complaints (presumtive cases) of violations of the Forest Act is recorded by the district administrative authorities, e.g. regarding deforestation ('Rodung'), logging notification, large-scale clear-cutting and logging in immature stands. Over the last 10 years, the number of complaints has been around 250 cases per year (see also the explanations in Chapter 4.1 Legality of harvesting operations) [4].



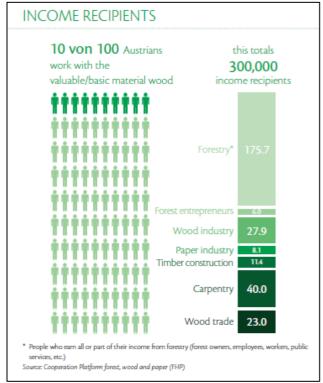
3.3. Wood processing industry

Forestry and wood cluster: number of companies, employees, value added

The forestry and wood cluster ('wood value chain') in Austria comprises around 172,000 companies (137,000 of which are forestry companies) and 300,000 people who earn their income from it, whether self-employed or employed. As a forest-rich country, Austria traditionally has a significant wood-processing industry. This essentially comprises companies in the sawmill, paper and pulp and board industry, companies in the furniture and timber construction industry, as well as other industries such as the ski industry, wooden pallet production and others.





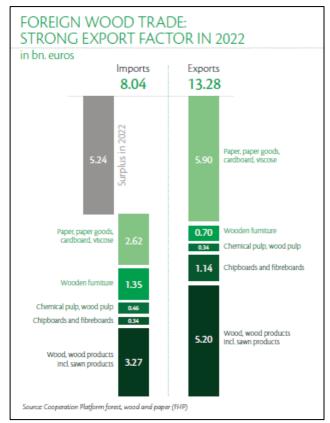


Wood value chain - Income recipients; Source: [31].

According to the Forestry Accounts (FGR), the gross value added of the forestry sector at basic prices amounted to EUR 1,330 million in 2022 (EUR 987 million in 2021) [34].

The annual production value of the entire value chain is around EUR 12 billion. The Austrian wood processing industry is strongly export-orientated and an important factor in foreign trade statistics. In 2021, the Austrian wood industry produced products worth over EUR 10.4 billion, with exports accounting for around EUR 7.3 billion, giving an export share of around 70%. An average export surplus of EUR 4.5 billion was generated over several years (EUR 5.24 billion in 2022). The majority of exports are to member states of the European Union (shipments within the EU internal market), in particular Germany and Italy.



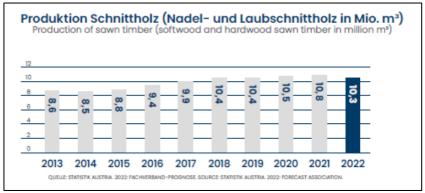


Foreign trade balance of the Austrian forestry and wood cluster in 2022; Source: [31].

Employment levels have remained relatively stable in recent years. In many districts of Austria, more than 10% of all employees can be attributed to the forestry and wood industry cluster, while the average share for all districts is 4.0%. The various branches of the wood processing industry therefore represent a relevant employer, especially for rural areas. In 2022, 28,123 people are employed in 1,291 wood processing companies (figures exclude the paper and pulp industry). Another economically significant factor is regional value creation. The companies are small to medium-sized and generate a large part of the value added in rural areas [31], [32], [33].

• Structure of the sawmill industry

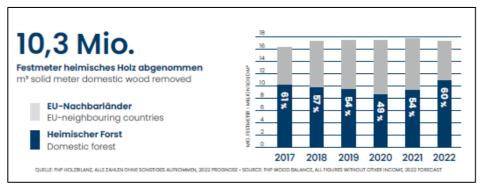
The Austrian sawmill industry comprises around 1,000 mills with 6,000 employees and an output of 10.5 million cubic metres of sawn timber. Due to strong competition, there has been a strong market concentration in the sawmill industry in recent decades, so that today the eight largest companies are responsible for more than half of total production. The majority of sawmills are still small and medium-sized family businesses and as such are embedded in the regional economy in a mostly rural environment (furniture, window and door industry) [32].



Production of sawn timber (softwood and hardwood timber) in million m³; Source: [35].

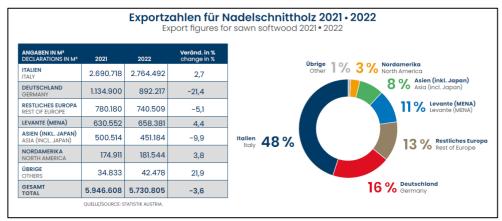


In recent years, 49% to 61% of the round wood used by the Austrian sawmill industry sites (sawn timber production) was covered by domestic forests, with the remaining quantities coming mainly from neighbouring EU countries, in particular Germany and Czech Republic, as well as Slovakia, Hungary and Slovenia [35], [36].



Round wood uses by the Austrian sawmill industry 2017 to 2022; Source: [35].

In an international comparison, Austria is one of the most important sawn timber producers. In 2021, around 56% of domestic sawn timber production was exported, with the main focus of export activity being on the major European sales markets of Italy and Germany, with further shares going to other European countries, as well as to the Levant, Asia and North America [33], [35], [36].



Export figures for sawn softwood 2021 and 2022; Source: [35].

• Structure of the wood-based materials industry

In 2022, the panel industry processed around 2.2 million cubic metres of wood into materials for the construction and furniture industry. 1.7 million cubic metres were sourced domestically (76%), while a further 0.5 million cubic metres (24%) were imported.



Timber consumption of the Austrian panel industry 2017 to 2022; Source: [35].

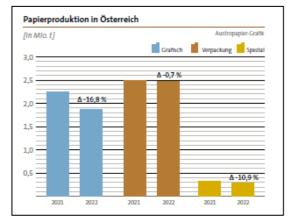


The production value of the timber construction sector totalled EUR 3.94 billion in 2022, which corresponds to an increase of 8.3% compared to 2021, with large increases in the areas of windows, doors and prefabricated wooden buildings in particular. The furniture industry also recorded an increase in production value of 10.0% to EUR 2.87 billion in 2022. The ski production sector, in which Austria is one of the global market leaders, exports around 80% of its products (Alpine region, North America, China, South Korea, Japan). The other sectors of the wood processing industry include around 140 companies, including manufacturers of wooden pallets, wooden picture frames, coffins, etc. In 2022, the production value of pallet manufacturing amounted to EUR 152.8 million, which corresponds to an increase of 25.9% compared to 2021 [32], [35].

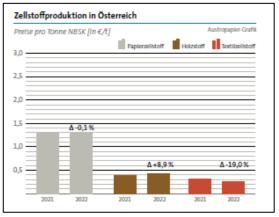
• Structure of the paper and pulp industry

In 2022, there are 21 companies in the paper and pulp industry in Austria at 23 locations, mainly in Upper Austria, Lower Austria and Styria, with a total of around 7,700 employees. Many companies have international branches, especially in Central and Eastern Europe. With a domestic production volume of 4.63 million tonnes of paper and cardboard (2021: 5.07 million tonnes), the share of total European production (EU-27) of around 90.2 million tonnes (2021) is considerable. Important target markets are the packaging industry, printing companies and the textile industry.

The industry turnover in 2022 amounts to EUR 5.5 billion (export ratio 81.7%), which is 34% higher than in 2021. The most important export countries for paper and cardboard as well as pulp are located in Europe (especially Germany, Italy, Poland, Slovenia, etc.) [32], [37].



Paper production in Austria 2021 and 2022; Source: [37].



Pulp production in Austria 2021 and 2022; Source: [37].

The use of raw materials in the Austrian pulp and paper industry is broken down as follows:



Wood & waste paper

Use of wood: 8.4 million cubic metres, of which 71.4% from domestic forests

100% wood from verifiably sustainable forestry PEFC/FSC certified (2022)

Assortments: 4.3 million cubic metres of industrial round timber, 4.1 million cubic metres of sawmill by-products

Import share: 28.6%, the majority from regions close to the border

Waste paper use: 2.3 million tonnes, of which 0.8 million tonnes from Germany, 65% import share

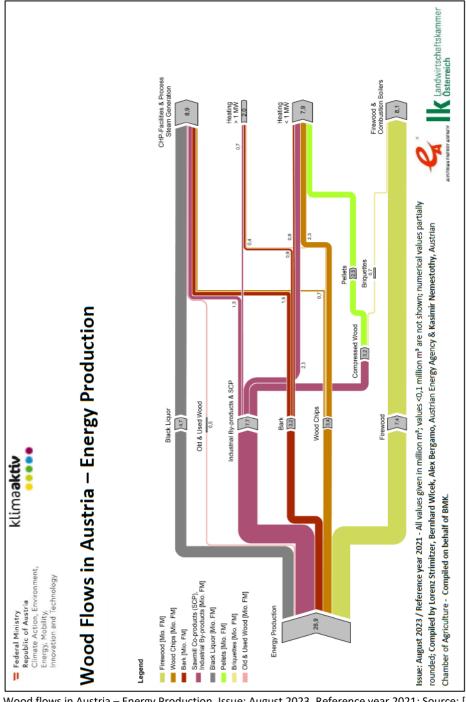
Recycling rate: 79.0% (2022)

Use of raw materials in the Austrian pulp and paper industry 2022; Source: [37].



Structure of wood use for energy purposes

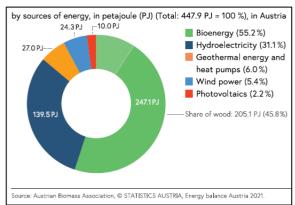
According to the energy balance (reference year 2021), the total use of wood for energy purposes amounts to around 26.9 million solid cubic metres equivalent. In addition to split logs, pellets and wood chips, this volume also includes all other wood assortments and raw material sources, such as recycled wood, garden cuttings, road maintenance material, vines, grinding dust and black liquor from the paper industry. The by-products from the wood-processing industry (7.7 million solid cubic metres equivalent of sawmill by-products and waste wood, 4.7 million solid cubic metres equivalent of black liquor from the paper industry) are mainly used in CHP plants (combined heat and power) to produce heat and electrical energy. A small proportion of the by-products are further processed into pellets and briquettes; in 2021, this proportion amounts to 3.2 million solid cubic metres equivalent. Forest wood chips are also an important fuel for local and district heating systems, accounting for 3.4 million cubic metres equivalent. A large proportion of this assortment consists of lower-value types of wood and wood assortments such as branches, crown pieces and damaged wood. With 7.4 million solid cubic metres equivalent, split logs ('firewood') is one of the most important assortments of energy wood and is used exclusively to supply heat in log boilers, cookers, ovens and tiled stoves.

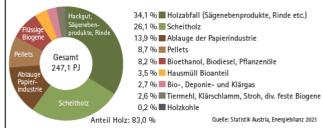


Wood flows in Austria - Energy Production, Issue: August 2023, Reference year 2021; Source: [29].



In 2021, 447.9 PJ of the total gross domestic energy consumption of 1,423 PJ in Austria is accounted for by renewable energy sources (31%), of which 247.1 PJ is biomass-based energy (17% of total domestic energy consumption, or 55% of renewables). More than 80% of the biomass used for energy is wood fuel (including black liquor from the paper industry). Sawmill by-products, bark and wood chips represent the largest fraction with a good third of the total. With a share of over a quarter of bioenergy, classic split logs ('firewood'), which is mostly used to heat private households, follows in second place. Wood chips, sawmill by-products and bark are mainly used in the wood industry as well as in combined heat and power (CHP) plants and district heating systems, while pellets are mainly used in individual house heating systems. Black liquor is used in the pulp and paper industry to generate electrical energy and process heat.



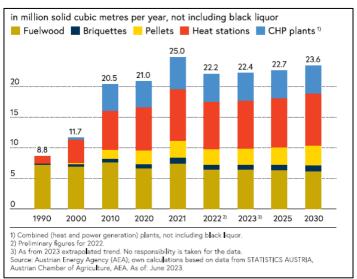


Gross domestic consumption of bioenergy in 2021; Source: [39].

Gross domestic consumption of renewable sources of energy in 2021; Source: [1]

The use of wood to generate energy has developed very dynamically over the past 15 years, which is primarily due to the increase in the use of wood in heating plants and CHP plants. There are around 2,450 biomass heating plants and 160 biomass CHP plants nationwide (in addition to a further 270 biogas plants and 20 biofuel plants). In 2022, wood fuels avoided a total of 9.9 million tonnes of CO2 equivalent, mainly in the heating sector, where they were responsible for 84% of the savings [39].

In addition to the increased output of large-scale wood firing systems, the use of pellets for energy generation also picked up speed from the turn of the millennium, particularly in the space heating sector.



Use of wood for energy in Austria; from 2023 trend extrapolation; Source: [1]

Austria offers around 44,300 full-time jobs in the renewable energy sector, of which around 24,000 jobs can be attributed to the biomass sector. The majority of these jobs are in turn attributable to the provision of fuels (logs, wood chips, pellets, sawmill by-products).

The biomass sector has a total turnover of EUR 3.1 billion and makes the largest contribution to total turnover with 38% of renewable energy sources [1], [38], [39].



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4. Evaluation of the sustainability criteria for forest biomass

4.1. Legality of harvesting operations

Identification of applicable laws

- 1. Basic Law on the General Rights of Nationals: Staatsgrundgesetz (StGG) vom 21. December 1867, Artikel 5
- 2. European Convention on Human Rights (ECHR) and its Protocol No. 1 are endowed with constitutional status according to Bundesverfassungsgesetz B-VG (*Federal Constitutional Law*) BGBI. No. 59/1964
- 3. General Civil Code: Allgemeines bürgerliches Gesetzbuch (ABGB), date of entry into force: 01.01.1812, § 353ff
- Vermessungsgesetz 1968 (VermG), BGBI. No. 306/1968, date of entry into force: 01.01.1969, last amended by BGBI. I No. 51/2016
- 5. Vermessungsverordnung 2016 (VermV 2016), BGBI. II No. 307/2016, last amended by BGBI II No. 235/2018
- 6. Allgemeines Grundbuchsgesetz 1955 (GBG. 1955), BGBl. No. 39/1955, date of entry into force: 11.06.1955, last amended by BGBl. I No. 81/2020
- 7. Grundbuchsumstellungsgesetz 1980 (GUG 1980), BGBl. No. 550/1980, date of entry into force: 01.01.1981, last amended by BGBl. I No. 81/2020
- 8. (Federal) Forest Act: Forstgesetz 1975 ForstG (BGBI. No. 440/1975), date of entry into force: 01.01.1976, last amended by BGBI. I No. 144/2023: § 1, §§ 17-19, §§ 21ff, § 25, § 26 para 1, § 32, VI. sect (§§ 80-97), §§ 170-172, § 174, § 177 and Forest Act Implementation Laws of the 9 Federal Provinces:
 - 8.1 Burgenland: Burgenländisches Forstausführungsgesetz 1987, LGBl. No. 56/1987, last amended by LGBl. No. 79/2013
 - 8.2 Carinthia: Kärntner Landes-Forstgesetz 1979 K-LFG, LGBI. No. 77/1979, last amended by LGBI. No. 20/2020
 - 8.3 Lower Austria: NÖ Forstausführungsgesetz, LGBl. 6851-0, last amended by LGBl. No. 12/2018
 - 8.4 *Upper Austria*: Oö Waldteilungsgesetz, LGBI. No. 28/1978, last amended by LGBI. No. 90/2001
 - 8.5 Upper Austria: Oö Waldbrandbekämpfungsgesetz, LGBl. No. 68/1980, last amended by LGBl. No. 90/2013
 - 8.6 Salzburg: Salzburger Forstgesetz-Ausführungsgesetz 1977, LGBl. No. 80/1977, last amended by LGBl. No. 106/2013
 - 8.7 Styria: Steiermärkisches Waldschutzgesetz, LGBI. No. 21/1982, last amended by LGBI. No. 87/2013
 - 8.8 Tyrol: Tiroler Waldordnung 2005, LGBI. No. 55/2005, last amended by LGBI. No. 85/2023
 - 8.9 Vorarlberg: Vorarlberger Landesforstgesetz, LGBl. No. 13/2007, last amended by LGBl. No. 4/2022
 - 8.10 Vienna: Gesetz, mit dem Ausführungsbestimmungen zum Forstgesetz 1975 erlassen werden, LGBl. No. 9/1979, last amended by LGBl. No. 11/2001 (Wiener Forstausführungsgesetz)
- 9. Ordinance on Protective Forests: Verordnung des Bundesministers für Land- und Forstwirtschaft vom 12. Juli 1977 über die Behandlung und Nutzung der Schutzwälder (SchutzwaldV) (BGBI. No. 398/1977), date of entry into force: 29.07.1977
- 10. Basic law regarding forest and pasture servitudes: Grundsatzgesetz 1951 über die Behandlung der Wald- und Weidenutzungsrechte, BGBl. No. 103/1951 (out of force since 01.01.2020) and 7 forest and pasture servitude laws of the Federal Provinces (in force):
 - 10.1 Carinthia: Kärntner Wald- und Weidenutzungsrechte-Landesgesetz K-WWLG, LGBI. No. 15/2003, last amended by LGBI. No. 106/2020
 - 10.2 Lower Austria: Wald- und Weideservituten-Landesgesetz 1980, LGBI. 6610-0, last amended by LGBI. No. 26/2018
 - 10.3 Upper Austria: Oö. Einforstungsrechtegesetz, LGBl. No. 51/2007, last amended by LGBl. No. 8/2020
 - $10.4 \ \textit{Salzburg} : \textbf{Salzburger Einforstungsrechtegesetz}, \textbf{LGBI}. \ \textbf{No.} \ \textbf{74/1986}, \textbf{last amended by LGBI}. \ \textbf{No.} \ \textbf{33/2021}$
 - 10.5 Styria: Steiermärkisches Einforstungs-Landesgesetz 1983, LGBI. No. 1/1983, last amended by LGBI. No. 139/2013
 - 10.6 Tyrol: Wald- und Weideservitutengesetz, LGBl. No. 21/1952, last amended by LGBl. No. 138/2019
 - 10.7 Vorarlberg: Servituten-Ablösungsgesetz, LGBl. No. 120/1921, last amended by LGBl. No. 4/2022
- 11. Agricultural Labour Act: Bundesgesetz über das Arbeitsrecht in der Land- und Forstwirtschaft (Landarbeitsgesetz 2021 LAG), BGBI. I No. 78/2021, date of entry into force: 01.07.2021, last amended by BGBI. I. No. 115/2023
- 12. *Timber Trade Surveillance Act*: Bundesgesetz über die Überwachung des Handels mit Holz (Holzhandelsüberwachungsgesetz HolzHÜG), BGBI. I No. 178/2013, date of entry into force: 07.08.2013, last amended by BGBI. I No. 167/2021



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 - 3.1 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrBgld&Gesetzesnummer=10000196 (last accessed in January 2024)
 - 8.2 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrK&Gesetzesnummer=10000071 (last accessed in January 2024)
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Were applicable laws identified?		⊠ Yes	☐ No (audit required)

Description of the legal framework and law enforcement

In the democratic Republic of Austria, the general fundamental rights and freedoms (protection of property, freedom to acquire real estate, freedom of movement of persons and property, principle of equality, freedom of gainful employment), and thus also the relevant property rights to land in connection with forests, are enshrined in the constitution. In exhausting the reservation of law, the Austrian legal system contains regulations on the social and ecological responsibility of the owner when exercising the right of ownership ('social and environmental obligations of ownership'). Both constitutional law (art 5 StGG and art 1 Protocol no 1 ECHR) and private law (§ 364 para 1 and § 365 ABGB) authorise restrictions and obligations of ownership based on laws in the interest of the common good.

Property rights and third-party rights of use, etc. (such as encumbrances, easements, and servitudes) are clearly defined and documented in the land register ('Grundbuch'). The land register is a public property register created and maintained ex officio by the district court, which shows the legal relationships (rights and encumbrances of the properties). Anyone may inspect it and request copies (GBG. 1955, GUG 1980).

The boundary cadastre ('Grenzkataster') serves as binding proof of the property boundaries (VermG 1968, VermV 2016).

§ 1 Federal Forest Act 1975 as amended sets out the objectives and principles relating to the maintenance of forests and their effects. Accordingly, sustainable management, care and protection of the forest form the basis for ensuring its multifunctional effects in terms of utilisation, protection, welfare and recreation in an altering environment due to climate change. In particular, when utilising the forest, care shall be taken to ensure that uses are reserved for future generations in accordance with forestry objectives.

According to art 10 para 2 Federal Constitutional Law (B-VG) several provisions of the Federal Forest Act 1975 authorise the provincial legislature to enact implementing provisions for the Forest Act. These are essentially regulations concerning felling in the 'forest margin zone' ('Kampfzone des Waldes'), utilisation of forests, logging in immature stands, forest supervision, etc.

Tables (a) and (b) in the annex to chapter 4.1 provide a summary of selected forestry legislation provisions relating to sustainability.

The prohibition of deforestation ('Rodungsverbot') set in §§ 17 to 19 Forest Act represents a concretisation of the objective and basic principle of maintaining the forest and its effects laid down in § 1 Forest Act. Accordingly, the use of forest land for purposes other than forest cultivation is prohibited. Use for purposes other than forest cultivation may be authorised if there is no public interest in the maintenance of this area as forest (§ 17 para 2 Forest Act) or if a public interest in another use of the forest area applied for deforestation outweighs the public interest in the maintenance of this area as forest (§ 17 para 3 Forest Act).

In protective forests (§§ 21ff Forest Act, Ordinance on Protective Forests), official authorisation is required for felling from an area of 0.2 ha.

The management provisions applicable to the protective forest shall also be observed in the 'forest margin zone' (§ 25 Forest Act; 'Kampfzone des Waldes'); felling proceeds shall be used for the maintenance of the 'forest margin zone' in the same way as in the site protective forest. In addition, felling requires authorisation from the authorities if local conditions so require. According to § 25 para 1 Forest Act, felling in this case is subject to official authorisation. However, the authority may also prohibit felling altogether. Only the processing of damaged timber after disasters such as wind, storms, avalanches and snow pressure may be carried out without official authorisation. An official authorisation is also required for the non-temporary reduction of vegetation. The authority only has to grant this authorisation if and insofar as the vegetation does not have a high protective function.



According to § 32 Forest Act (servient forests, 'Einforstungswälder'), forest owners whose forests are subject to third-party utilisation rights (servitudes, e.g. the right of persons other than the owner to obtain timber, firewood or spring water from a forest; see also servitude laws of the federal provinces) are obliged to manage them in such a way that the exercise of these third-party beneficial interests is guaranteed.

The central provisions on the utilisation of forests can be found in VIth Section of the Forest Act 1975, (Utilisation of Forests, 'Nutzung der Wälder' §§ 80-97 Forest Act). Accordingly, in immature high forest stands (age of non-fast-growing tree species less than 60 years, less than 50 years in the case of spruce), clear-cutting and individual stem removals in excess of the maintenance level (less than 6/10 of the full canopy cover, in protective forests 8/10 of the full canopy cover) are prohibited. According to § 95 para 1 Forest Act (authorisation of provincial legislation), the upper limit of immaturity may be reduced to 50 years or increased to 80 years for certain areas of the province.

Clear-cutting permanently impairing the production capacity and the water balance of the forest soil, causing more severe erosion or jeopardizing the effect of protective forests (*'Schutzwald'*) and preserved forests (*'Bannwald'*) is prohibited. Large-scale clear-cutting in high forests (up to 50 m wide and over 600 m long or: over 50 m wide and more than 2 ha in area) is prohibited. Exceptions may be approved by the forestry authority under certain conditions.

Free felling may be carried out without the authorisation of the forestry authority: (i) felling after which an assured regeneration remains (final felling, 'Räumung'), (ii) felling due to force majeure (processing of damaged timber), etc. If free felling covers half a hectare or more, the forestry authority shall be notified at least one week before felling begins. Depending on the provisions of provincial law (Upper Austria, Salzburg, Tyrol, Vorarlberg), the extent of free felling may also be reduced.

Felling requiring authorisation may only be carried out with the approval of the forestry authority: (i) clear-cutting and equivalent single stem removals on a contiguous area of 0.5 ha or more (0.2 ha or more in protective forests), (ii) clear-cutting and equivalent single stem removals if the felling area is adjacent to clear-cut areas or unassured regeneration areas and the resulting clear-cut area or unassured regeneration area would be 0.5 ha or more, (iii) felling in forests that are subject to special official supervision due to offences committed by the forest owner (e.g. forest devastation, etc.).

For felling requiring authorisation, the forest owner shall submit a felling application to the forestry authority, stating the felling location, the felling area and the felling period. Authorisation may also be granted subject to conditions and requirements. Logging/forestry contractors, like the forest owner, are responsible for complying with the provisions on felling and timber hauling ('Bringung'). The felling permission generally expires after 5 years; it may be reduced to 1 year by the respective provincial legislation.

In addition, the stricter provisions of the Ordinance on Protective Forests ('SchutzwaldV') apply to timber harvesting in protective forests.

The Forest Act is enforced in accordance with §§ 170 to 172 Forest Act in indirect federal administration by the provincial governor and the authorities subordinate to him/her. Unless the Forest Act provides otherwise, the respective district administrative authority is the forest authority of first instance (§ 170 para 1 Forest Act). Appeals against their decisions may be lodged with the respective provincial administrative court (art 131 (1) Federal Constitutional Law).

All forests are subject to official supervision ('Forstaufsicht', forest supervision) in accordance with § 172 Forest Act. The bodies of forest supervision have the necessary sovereign rights (right of access and right to information) and are authorised to determine all factual and legal circumstances of the individual forest property. For this purpose, the bodies of the authority may also carry out measurements in the forest or take test material. In the event of violations of forestry regulations, the authority, in accordance with § 172 para 6 Forest Act, has to prescribe the necessary precautions and safety measures for the immediate restoration of a state that complies with the regulations, irrespective of the possible initiation of criminal proceedings, by means of a decision or, in the event of imminent danger, by means of direct orders (acts of direct administrative command and coercive power), such as, in particular, the timely and proper reforestation, the prevention of forest devastation, the clearing of damaged timber, the removal of damage to forest soil caused by felling or timber hauling, or the cessation of illegal felling, etc.

Finally, compliance with the aforementioned provisions of the Forest Act 1975 is ensured by a catalogue of administrative penalties (penal provisions of § 174 Forest Act). The administrative penalty proceedings are initiated by notification - usually by the district forest inspectorate.

In connection with the legality of timber harvesting, § 177 Forest Act should also be mentioned, according to which contracts with forest owners for 'lock, stock, and barrel' purchase of timber (so-called 'Überhappsverträge') are prohibited in the high forest. Contracts concluded contrary to this prohibition are legally invalid.



The Agricultural Labour Act (LAG), which came into force in 2021, replaced nine previously existing federal state-specific provincial regulations. The LAG regulates the labour and social law concerns of employees in agriculture and forestry (rights and obligations in the employment relationship) and contains provisions on employment contracts, working hours, holiday and pay entitlements, hiring out workers, measures to protect employees and the establishment of works councils, among other things.

The EU Timber Regulation (EUTR) (Regulation (EU) No 995/2010; largely replaced by Regulation (EU) No 2023/1115 from 30 Dec 2024 on) as part of the EU FLEGT Action Plan to curb illegal logging and related trade is implemented in Austria by the Timber Trade Surveillance Act (HolzHÜG). The competent authorities (CA) are the Federal Forest Office (timber and timber products that are brought into Austria from a third country or an EU member state) and the district administrative authorities (timber and timber products within Austria).

Sources	Austrian digital public services: Land register – Up-to-date information on land register, land register entries, land register inspection, land register extracts, land register inquiries: https://www.oesterreich.gv.at/en/themen/bauen und wohnen/grundstueckskauf und grundbuch/grundbuch.html (last accessed in January 2024)				
	Brawenz/Kind/Wieser 2015. Forstgesetz 1975. Kommentierte Ausgabe mit Judikatur in Leitsätzen. Manz´sche Verlags- und Universitätsbuchhandlung, Wien, 898 Seiten.				
	European Commission, Directorate-General for Energy. Technical assistance for the preparation of guidance for the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive – REDIIBIO – Final report, Publications Office 2021. Download: https://data.europa.eu/doi/10.2833/592471 (last accessed in January 2024)				
	European Commission, Directorate-General for Environment. Illegal logging – EU rules to fight global illegal logging and associated trade. https://environment.ec.europa.eu/topics/forests/deforestation/illegal-logging_en?prefLang=de (last accessed in January 2024)				
	Federal Forest Office. Timber Trade. https://www.bundesamt-wald.at/en/timber-trade.html (last accessed in January 2024)				
	Food and Agriculture Organization of the United Nations (FAO), FAOLEX Database. Country Profiles – Austria. https://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=AUT (last accessed in January 2024)				
	Holzer, G. 2023. Agrarrecht. 5. Auflage, Verlag Österreich, 676 Seiten.				
	Lienbacher, N. 2012. Waldeigentum und seine Beschränkungen. Neuer Wissenschaftlicher Verlag, 276 Seiten.				
	Norer; R. & Reinl, A. (Hrsg.) 2004. Land- und forstwirtschaftliches Eigentum. Aktuelle Rechtsfragen. Schriftenreihe der Österreichischen Gesellschaft für Agrar- und Umweltrecht, Band 5, 78 Seiten.				
	Österreichischer Einforstungsverband, Rechtsgrundlagen – Rechtlicher Charakter der Einforstungsrechte: https://www.einforstungsverband.at/einforstungsrechte/rechtsgrundlagen/ (last accessed in January 2024)				
	Österreichischer Landarbeiterkammertag, Landarbeitsgesetz 2021: https://www.landarbeiterkammer.at/aktuelles/berichte/news/landarbeitsgesetz-2021-aufbruch-in-ein-neues-zeitalter (last accessed in January 2024)				
	Posch, N. 2021. Rechtskunde für den Landwirt. 11. Auflage, Leopold Stocker Verlag, 320 Seiten.				
Are enforcen for the identi	nent and monitoring ensured ified laws?				

☐ Requirements not fulfilled

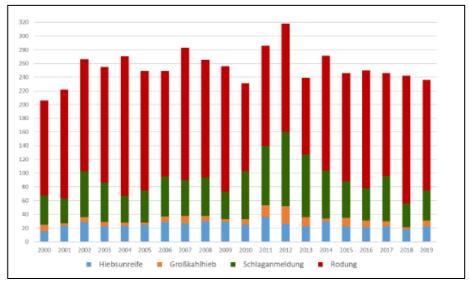
Degree of compliance of the criterion "Legality of harvesting operations"

□ Requirements fulfilled



Monitoring and evaluation of the effectiveness of the legal framework on the legality of harvesting operations

The Austrian forestry statistics do not directly collect data on the amount of illegally harvested timber (logging in violation of applicable legislation), but instead record the reports of presumtive cases of violations of the Forest Act submitted to the criminal departments of the district administrative authorities, which include presumptive cases that may have been associated with illegal logging, such as deforestation, logging notification, large-scale clear-cutting and felling in immature stands. The most frequently reported suspected offence is deforestation (161 presumtive cases in 2019), followed by logging notification (44 presumtive cases in 2019). In 2019, a total of 31 cases of felling in immature stands and large-scale clear-cutting were reported.



Number of reported presumtive cases of violaton of the Forest Act (Indicator 3.8 Illegal logging, BML, 2020)

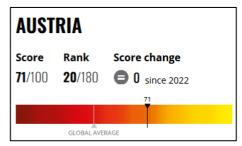
The two indicators on the Rule of Law and Control of Corruption from the World Bank's Worldwide Governance Indicators (WGI indicator set) are summarised in the following table for selected years (2012, 2017, and 2022). Both indicators show positive values for Austria.

Values for Austria of the two indicators relating to the Rule of Law and Control of Corruption from the World Bank's Worldwide Governance Indicators set (WGI).

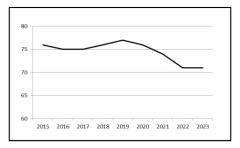
Indicator	Country	Year	Number of Sources	Governance (-2.5 to +2.5)	Percentile Rank	Standard Error
Rule of Law	Austria	2012	13	1,86	97,65	0,15
		2017	11	1,80	97,14	0,16
		2022	10	1,71	95,75	0,16
Control of Corruption	Austria	2012	11	1,43	89,57	0,14
		2017	10	1,50	90,48	0,13
		2022	10	1,26	84,91	0,16



Transparency International's Corruption Perceptions Index (CPI) shows a score of 71 (maximum 100) for Austria in 2023, putting Austria in 20th place out of 180 countries. In previous years, scores of between 74 and 77 were achieved.



Values of the Corruption Perceptions Index (CPI) by Transparency International for Austria for the year 2023.



Development of the CPI (score; maximum = 100) of Transparency International for Austria 2015 to 2023.

There are no entries for Austria in the Chatham House Illegal Logging Portal.

Conclusions:

The relatively low level of between 200 and 300 presumptive cases of forest law violations reported annually since 2000 (with a slight downward trend over the last 10 years) indicates that illegal logging does not play a significant role in Austria

Similarly, the values of the indicators of the World Bank (WGI) and Transparency International (CPI) used to assess the sustainability criterion 'Legality of harvesting operations' indicate both a given rule of law and functioning law enforcement in Austria.

The degree of fulfilment of the harvesting criterion according to Art 29 para 6 i) of Directive (EU) 2018/2001 can therefore be assessed as 'Requirements fulfilled', the effectiveness of the legal framework for the legality of timber harvesting operations is classified in category A.

Sources	Chatham House. Illegal Logging Portal: https://forestgovernance.chathamhouse.org/ (last accessed in January 2024)
	Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML) 2020. Indikatorenbericht für nachhaltige Waldbewirtschaftung des Österreichischen Walddialoges. Aktualisierung und Bewertung 2020. Wien, 287 Seiten. Download: https://info.bml.gv.at/themen/wald/walddialog/dokumente/indikatorenbericht-2020.html (last accessed in January 2024)
	Kaufmann, D. & Kraay, A. 2023. Worldwide Governance Indicators, 2023 Update: www.govindicators.org (last accessed in January 2024)
	Transparency International. Corruption Perceptions Index (CPI): https://www.transparency.org/en/countries/austria (last accessed in February 2024)

Effectiveness	□ Category A	☐ Category B	☐ Category C
(points):	(20 points)	(10 points)	(0 points)



Annex to chapter 4.1

Selected provisions of the Forest Act 1975 as amended with reference to sustainability, categorised by regulations, prohibitions and obligations for the forest owner (Source: Lienbacher, N. 2015, pages 71f).

(a)

Management regulations	Management prohibitions	Obligations to tolerate
§ 13 Reforestation		
		§ 14 Forest treatment along property boundaries
	§ 15 Division of forest properties	
	§ 16 Forest devastation	
§ 17 Deforestation	§ 17 Deforestation	
§ 22 Protective forest § 24 Remediation of protective forest		
§ 27 Preserved forest		§ 27 Preserved forest
§32 Servient forests		
§ 32a Forests with special habitats (Biotope protection forests)		
		§ 33 Utilisation of forest for recreational purposes
		§ 36 Recreational forest
§ 37 Forest pasture	§ 37 Forest pasture	
§ 38 Litter extraction	§ 38 Litter extraction	
		§ 41 para 4 Forest fire control
§ 44 Forest pest control		
§ 45 Forest pest prevention		§ 49 Air pollution harmful to forests - Authorisation of installations § 51 Specific measures
§ 58 Timber hauling		
§ 60 Hauling facilities		
		§ 66, § 66a, § 69 Hauling over third-party ground, Hauling cooperatives
§ 80 Protection of immature stands	§ 80, § 82 Prohibition of clear cutting	
§ 100, § 101 Forest treatment in catchment areas of torrents and avalanches, Preventive measures		
§ 113 Obligation to appoint forestry bodies		
§ 172 para 6 Forest supervision		§ 172 Forest supervision

(b)

Obligations to obtain authorisation	Notification obligations	Planning measures
	§ 3 para 5 Boundary and property tax cadastre	
§ 4 New afforestation		
	§ 5 Forest assessment	
		§ 6, § 7, § 8, § 9 Forest spatial planning
§ 15 Division of forest properties		
§ 17 Deforestation	§ 17a Deforestation	
§ 25 Forest margin zone		
§ 27 Preserved forest	§ 29 Preserve forest in the interest of transport facilities	
§ 34 Restrictions on utilisation	§ 34 Restrictions on utilisation	
	§ 40 para 4 Lighting fire in the forest	
	§ 43 Forest pests	
§62 Hauling facilities	§ 62 para 4 Hauling facilities § 64 Forest roads subject to notification	
§ 81 Exceptions from the prohibition of clear cutting	§ 86 Free fellings	
§ 85 Felling requiring authorisation		
§ 87 Felling application		
	§ 115, § 116 Procedure for the appointment of forestry bodies	



4.2. Forest regeneration

Identification of applicable laws

- 1. (Federal) Forest Act: Forstgesetz 1975 ForstG (BGBI. No. 440/1975), date of entry into force: 01.01.1976; last amended by BGBI. I No. 144/2023: § 13, § 16 para 2 lit c, § 17a para 4, § 18 para 4, § 32a para 2 no 1, § 65 para 2, § 89, §§ 170-172, § 174
- 2. Ordinance on Protective Forests: Verordnung des Bundesministers für Land- und Forstwirtschaft vom 12. Juli 1977 über die Behandlung und Nutzung der Schutzwälder (SchutzwaldV) (BGBI. No. 398/1977): § 2

Sources	Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010371 Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010385 (last accessed in January 2024)		
Were applicable laws identified?	⊠ Yes	☐ No (audit required)	

Description of the legal framework and law enforcement

Forest regeneration on harvested areas is addressed by several provisions of the Forest Act 1975. Central to this is § 13 Forest Act ('Wiederbewaldung', reforestation), which stipulates that the forest owner shall reforest unstocked areas ('Kahlfläche', forest floor without forest vegetation) and open/gappy stands ('Räumde', canopy cover of less than three tenths) in good time with forest reproductive material suitable for the site ('Wiederbewaldungspflicht', obligation to reforestation). Reforestation is deemed to have been carried out in good time if the necessary measures (sowing or planting) have been duly carried out by the end of the fifth calendar year at the latest following the creation of the clear-cut or clearing area. With the 2002 amendment to the Forest Act, both afforestation and unconditional natural regeneration are considered possible for reforestation. Natural regeneration is to be prioritised if full stocking can be expected within a maximum time frame of 10 years. At high altitudes, this period may be extended by a further five years if natural regeneration offers advantages over afforestation, although there must be no concerns with regard to § 82 para 1 lit a Forest Act (permanent reduction in the productive capacity of the forest soil).

There are exceptions to the reforestation deadlines in the event of a temporary emergency situation of the forest owner due to illness, catastrophic situations or large-scale damage situations (such as extensive windthrow). In these cases, the forest owner shall apply to the competent district administrative authority for an exception and prove that the conditions for an extension of the reforestation period are met. In the case of large-scale damage situations, the forest owner shall submit a reforestation plan within one year.

The regeneration (afforestation or natural regeneration) is to be supplemented until it can be considered an 'assured regeneration' ('gesicherte Verjüngung') within the meaning of the Forest Act: (i) the regeneration has grown for at least three growing seasons, (ii) the regeneration has a sufficient number of plants according to forestry requirements, (iii) there is no recognisable threat to further development of the regeneration.

§ 16 para 2 lit c Forest Act prohibits forest devastation that makes timely reforestation impossible. § 17a para 4 Forest Act provides for a reforestation period of five years for a notified temporary deforestation, while § 18 para 4 Forest Act stipulates that if a permit for a temporary deforestation is granted, the deforestation decision has to stipulate the reforestation of such an area within a certain period of time.



§ 65 para 2 Forest Act obliges the forest owner to reforest forest areas occupied by timber hauling systems ('Bringungsanlage') in good time if the construction of such a system is definitively discontinued or an existing hauling system is abandoned.

According to § 89 Forest Act, in the event of justified doubts about the fulfilment of the reforestation obligation, the forest owner may be required to provide a security (e.g. bank guarantee) in order to secure the fulfilment of this obligation.

The specific provisions of the Ordinance on Protective Forests ('SchutzwaldV') apply to reforestation in protective forests. If necessary and insofar as costs are covered from the proceeds of felling in the protective forest, the authority may, among others, prescribe the type and manner of reforestation by decision (determination of the type of regeneration, the reproductive material, the type of woody plants, the number of plants, the planting method, necessary accompanying measures).

§ 32a para 2 subpara 1 Forest Act allows exceptions to the reforestation requirement in forests with special habitats ('Biotopschutzwald', biotope protection forest) under certain conditions.

In connection with the provisions on reforestation, reference is made to the supervision by the authorities in accordance with §§ 170 to 172 Forest Act, whereby § 172 para 6 lit a Forest Act explicitly provides for the possibility of a forestry authority order for the purpose of timely and proper reforestation.

The individual offences (commission of an administrative offence) relating to the aforementioned substantive provisions are set in § 174 Forest Act ('Strafbestimmungen', Penal provisions).

If the necessary reforestation measures are not properly carried out by the end of the legally defined deadlines, this constitutes a breach of the reforestation obligation (§ 13 (1) and (2) Forest Act). Failure to comply with the reforestation obligation contrary to § 13 constitutes an offence of omission in the form of a permanent offence. The reforestation obligation may be enforced against the forest owner by means of the Administrative Enforcement Act ('Verwaltungsvollstreckungsgesetz', VVG 1991), if necessary also by means of an execution by substitution.

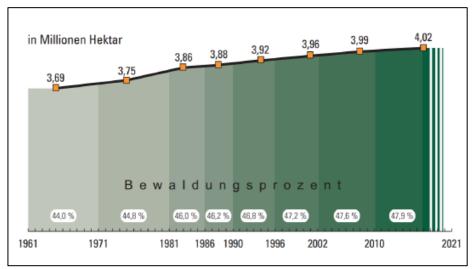
Sources	Brawenz/Kind/Wieser 2015. Forstgesetz 1975. Kommentierte Ausgabe mit Judikatur in Leitsätzen. Manz´sche Verlags- und Universitätsbuchhandlung, Wien, 898 Seiten. European Commission, Directorate-General for Energy, Technical assistance for the preparation of guidance for the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive – REDIIBIO – Final report, Publications Office 2021. Download: https://data.europa.eu/doi/10.2833/592471 (last accessed in January 2024) Lienbacher, N. 2012. Waldeigentum und seine Beschränkungen. Neuer Wissenschaftlicher Verlag, 276 Seiten.				
Are enforcement and monitoring ensured for the identified laws? □ No (audit required)					
Degree of compliance of the criterion "Forest regeneration"					
	☑ Requirements fulfilled ☐ Requirements not fulfilled				



Monitoring and evaluation of the effectiveness of the legal framework on forest regeneration

Over the last few decades (4 survey periods since 1992/96), the data from the Austrian National Forest Inventory (ANFI) show a consistently low proportion of unstocked areas (clear-cut areas) of between 1.1% and 2.3% of the harvested forest area. Accordingly, it can be assumed that the Austrian forest owners generally fulfil their obligation to reforest the harvested areas.

In addition, the ANFI data show a continuous net increase in Austrian forest area totalling 330,000 ha since the first inventory period in 1961/70 (mainly due to natural return of the forest after the abandonment of former alpine pastures), whereby even districts with low forest cover (forest share below 20% of the district area) show at least a slight increase in forest area.



Development of the Austrian forest area according to data from the Austrian National Forest Inventory (Figures in million hectares; Source: BML, 2021).

This is also reflected in the information on the 'Annual Forest area net change [Area (1000 ha/year)]' in the FAO-FRA 2020 Report for Austria, which is based on ANFI data (see FRA 2020 Report, Austria, pages 20-21):

RA 2020 report, Austria					
FRA categories	Area (1000 ha/year)				
FHA categories	1990-2000	2000-2010	2010-2015	2015-2020	
Forest expansion (a)	9.70	10.30	9.40	9.40	
of which afforestation	1.70	0.70	0.30	0.30	
of which natural expansion	8.00	9.60	9.10	9.10	
Deforestation (b)	3.45	7.79	5.80	5.81	
Forest area net change (a-b)	6.25	2.51	3.60	3.59	

Source: FAO, Global Forest Resources Assessment 2020. Report Austria.

The positive trend in the increase in Austrian forest area is also reflected in the Forest Europe indicator 1.1 'Forest area annual net change rate':

Indicator		Unit	1990	2000	2010	2020
1.1	Forest area annual net change rate	%	n/a	0.16	0.06	0.09

Source: Forest Europe, State of Europe's Forests 2020, Annexes to Part II, Annex 9, Austria, p.354.



The ANFI data as well as the evaluation results of the Game Impact Monitoring ('Wildeinflussmonitoring', WEM) show that in some regions the quality of forest regeneration is impaired by hoofed game impact (especially browsing) (for more details, see criterion 'Maintenance of biodiversity').

Conclusions:

In particular, the consistently low proportion of unstocked areas in the productive forest area (see ANFI), as well as the long-term trend of the net increase in Austrian forest area (ANFI; FAO, 2020; Forest Europe, 2020) can be used as an indication that forest regeneration is taking place on the harvested areas.

The Austrian Federal Forest Act ensures compliance with the harvesting criterion pursuant to Art. 29 para 6 ii) of Directive (EU) 2018/2001 by setting an obligation to reforestation that applies regardless of whether the unstocked area/clearing was created by timber harvesting or by a damaging event such as windthrow or pest infestation. The creation of a new forest on the harvested areas may take place by means of afforestation (artificial regeneration) or preferably by utilising the natural regeneration potential (priority of natural regeneration), whereby the regeneration shall be supplemented until it is considered an assured regeneration within the meaning of the Forest Act.

Practical decision support systems and advisory tools, such as the 'tree signal light' ('Baumartenampel)', or 'FORSITE - Dynamic Modelling of Forest Types in Styria', are available for the selection of suitable and site-adapted tree species under the aspect of climate change.

The degree of fulfilment of the criterion 'Forest regeneration on harvested areas' can therefore be rated as 'Requirements fulfilled', and the effectiveness of the legal framework for forest regeneration is classified as category A.

Sources Austrian Research Centre for Forests (BFW). Klimafitter Wald. Baumartenampel. https://www.klimafitterwald.at/baumarten/ (last accessed in January 2024) Austrian Research Centre for Forests (BFW). Austrian National Forest Inventory. https://www.waldinventur.at/#/en (last accessed in January 2024) Austrian Research Centre for Forests (BFW). Wildeinflussmonitoring – WEM. http://www.wildeinflussmonitoring.at/ (last accessed in January 2024) Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML) 2021. Nachhaltige Waldbewirtschaftung in Österreich. Leitindikatoren 2021. Wien, 27 Seiten. Download: $\underline{https://info.bml.gv.at/themen/wald/walddialog/dokumente/nachhaltige-waldbewirtschaftung-leitindikatoren-berger (ab. 2016). A state of the following the$ 2021.html (last accessed in January 2024) Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML) 2023. Austrian Forest Report 2023. We Take Care Of The Forest. Vienna, 64 pages. Download: https://info.bml.gv.at/themen/wald/wald-inoesterreich/oesterreichischer-waldbericht-2023.html (last accessed in January 2024) Federal Province of Styria. Forstwirtschaft. Dynamische Waldtypisierung. https://www.agrar.steiermark.at/cms/ziel/151504582/DE/ (last accessed in January 2024) Food and Agriculture Organization of the United Nations (FAO) 2020. Global Forest Resources Assessment 2020. Report Austria. Rome, 73pp. Download: https://www.fao.org/3/ca9967en/ca9967en.pdf (last accessed in January 2024) Forest Europe 2020: State of Europe's Forests 2020. 392pp. Download: https://foresteurope.org/state-of-europesforests/ (last accessed in January 2024)

Effectiveness (points):	⊠ Category A	☐ Category B	☐ Category C
	(20 points)	(10 points)	(0 points)
(points).	(20 points)	(10 points)	(o points)



4.3. Maintenance of biodiversity

Identification of applicable laws

- 1. International agreements:
 - 1.1 Convention on Biological Diversity, BGBl. No. 213/1995, last amended by BGBl. III No. 142/2023
 - 1.2 Alpine Convention, BGBI. No. 477/1995 last amended by BGBI. III No. 183/2013 and its Protocols (notably "Mountain forests" Protocol, "Nature protection and landscape conservation" Protocol, and "Soil conservation" Protocol)
- 2. (Federal) Forest Act: Forstgesetz 1975 ForstG (BGBl. No. 440/1975), date of entry into force: 01.01.1976; last amended by BGBl. I No. 144/2023: § 1 para 3, § 32a, §§ 170-172, § 174
- 3. Nature conservation laws and ordinances of the Federal Provinces (listing see chapter 4.5 Regulations for protected areas)
- 4. Forest Fund Act: Waldfondsgesetz WaldfondsG (BGBl. I No. 91/2020), date of entry into force: 25.07.2020, last amended by BGBl. I No. 152/2023

Sources	1. Legal Information System of the Republic of Austria (RIS):		
	1.1 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010897		
	(last accessed in January 2024) 1.2 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010876		
	(last accessed in January 2024)		
	2. Legal Information System of the Republic of Austria (RIS):		
	https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010371 (last accessed in January 2024)		
	Legal Information System of the Republic of Austria (RIS):		
	see chapter 4.5 Regulations for protected areas		
	Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20011241		
	(last accessed in January 2024)		
Were applicable			
laws identified?	oxtimes Yes $oxtimes$ No (audit required)		

Description of the legal framework and law enforcement

The permanent conservation of biological diversity is mentioned in § 1 para 3 Forest Act as an essential element of sustainable forest management and is therefore the underlying objective of the entire Forest Act, including the provisions relating to utilisation and harvesting. Also of ecological relevance are, in particular, the extension of the definition of the beneficial effect with regard to the conservation of biological diversity, the provisions of § 32a ('Biotopschutzwälder', biotope protection forests) and the forest vegetation that also includes wild fruit trees and shrub species suitable for forest edge and biotope structuring.

In addition, the conservation of biodiversity is essentially regulated by the nature conservation laws of the federal provinces. While in Austria the Forest Act is a federal matter, nature conservation is the responsibility of the federal provinces in terms of legislation and enforcement in accordance with Article 15 of the Federal Constitutional Law (B-VG). When exercising these competences, the so-called 'principle of consideration' ('Berücksichtigungsprinzip') applies, according to which the legislative body of an administrative unit is obliged to consider the interests it has to represent against the interests represented by the legislator of another administrative unit in order to achieve an appropriate, objectively justified balance of interests. The federation and the federal provinces may not behave in such a way that this results in an objectively unjustified obstruction of the exercise of competences by the opposing party (VfGH G81/84; G82/84 v 03.12.1984).

Further details can be found in Chapter 4.5 Regulations for protected areas (agricultural clause, biotope protection forests pursuant to § 32a Forest Act 1975).



In 2020, the Austrian Forest Fund was adopted on the basis of the Forest Fund Act. The objective of the fund, which is endowed with federal funds, is to overcome the challenges associated with the reestablishment of forest areas after bark beetle mass propagation and the adaptation of forests to climate change. The central objective of one of the 10 measures of the Forest Fund is the promotion of biodiversity in forests by (i) supporting projects for the conservation, improvement and restoration of forest areas of nature conservation value and (ii) the creation of scientific and practice-orientated foundations in connection with biodiversity-related topics.

Sources	Brawenz/Kind/Wieser 2015. Forstgesetz 1975. Kommentierte Ausgabe mit Judikatur in Leitsätzen. Manz´sche Verlags- und Universitätsbuchhandlung, Wien, 898 Seiten.					
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	Holzer, G. 2017. Waldbewirtschaftung im 03.02.2017.	Spannungsfeld des Naturschutzre	echts. Vortrag beim Vorarlberger Forsttag			
	Holzer, G. 2023. Agrarrecht. 5. Auflage, Vo	erlag Österreich, 676 Seiten.				
	Lienbacher, N. 2012. Waldeigentum und	seine Beschränkungen. Neuer Wis	ssenschaftlicher Verlag, 276 Seiten.			
	Are enforcement and monitoring ensured for the identified laws? □ No (audit required)					
Degree of compliance of the criterion "Maintenance of biodiversity"						
	oxtimes Requirements fulfilled $oxtimes$ Requirements not fulfilled					

Monitoring and evaluation of the effectiveness of the legal framework on the maintenance of biodiversity

Based on the results of the 1998 Hemeroby Study 'Naturnähe österreichischer Wälder' (based on data from the Austrian National Forest Inventory (ANFI); no repeat surveys are available to date), the degree of naturalness of the Austrian forests can be categorised as follows (see also FAO, 2020, GFRA Report Austria, 1c Primary forest):

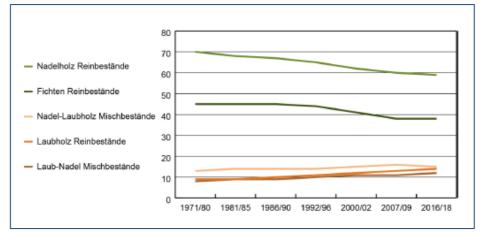
National class (forest + OWL)	%	FRA 2020 Categories (only forest)
Natural	3	Primary forest
Seminatural	22	
Moderately altered	41	
Altered	27	
Artificial	7	
Total forest area (forest + OWL)	100	

Source: FAO, 2020, GFRA Report Austria, 1c Primary forest.

According to this, 2/3 of the forest area can be described as near-natural to moderately altered, 1/3 as altered to artificial ('far from natural').

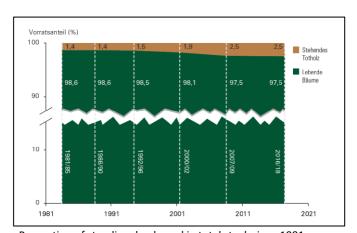
The ANFI data show a steadily increasing proportion of hardwoods and shrubs, a decline in the proportion of pure spruce and conifer stands in the forest area and a trend towards mixed stands. In the last decade, pure conifer stands have decreased by 6%, while mixed hardwood stands have increased by 6%, and the proportion of pure hardwood stands has also increased by 8%. This reflects the trend towards more natural forest management that has been ongoing for several decades.





Forest area shares (in %) by mixture types in the Austrian productive forest; Source: BFW, Austrian National Forest Inventory (ANFI).

Compared to the 2007/09 forest inventory, the proportion of standing deadwood in the stock has increased by 18% to 32.7 million cubic metres o.b. This corresponds to 2.5% of the total stock. Deadwood with larger diameters is particularly ecologically valuable, with the stock of standing deadwood larger than 20 cm DBH in commercial forests amounting to 4.3 cubic metres o.b./ha.



Proportion of standing deadwood in total stock since 1981 (green: living trees; brown: standing deadwood); Source: BFW, Austrian National Forest Inventory (ANFI).

There has also been an increase in the average stock per hectare of lying deadwood, which has been recorded using a standardised method since the 2007/09 inventory period:

Lying deadwood [cubic metres o.b./ha].

Betriebsarten im Ertragswald, Bund	ÖWI 2007/09	ÖWI 2016/18
Wirtschaftswald	10,1	10,5
Schutzwald im Ertrag	28,3	30,9
Ausschlagwald	4,3	9,3
Gesamt	11,7	12,5

Source: BML, 2021, after BFW, Austrian National Forest Inventory (ANFI).

The Forest Biodiversity Index FBI (GEBUREK et al. 2015) makes it possible to visualise the status, development and spatial differences in biodiversity. It is made up of 13 individual indicators and is measured on a scale of 0 to 100, whereby the value of 100 for commercial forests represents an idealised, unattainable optimum value.



Analyses of individual indicators collected as part of the National Forest Inventory (ANFI) show overall positive trends between the two survey periods: (i) comparison of current and potential natural forest community, (ii) occurrence of neophytic tree species, (iii) amount of deadwood, (iv) veteran trees.

Change in indicator values in comparison of the ANFI survey periods 2007/09 and 2016/18 (interim evaluation):

Einzelindikator	2007/09	2016/18	Veränderung
Baumarten	54	56	+2
Neophyten	95	95	0
Totholz	57	59	+2
Veteranenbäume	51	59	+8
Gesamt	62	65	+3

Source: BFW, 2019

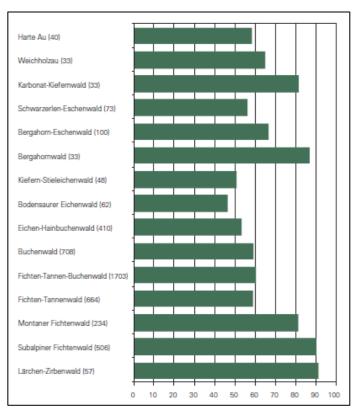
The analyses for the individual ecoregions also show positive developments overall.

Change in indicator values in individual ecoregions in comparison of the ANFI survey periods 2007/09 und 2016/18 (interim evaluation):

Naturraum	2007/09	2016/18	Veränderung
Innen- und Zwischenalpen	72	74	+2
Randalpen	64	67	+3
Nördliches Alpenvorland	47	50	+3
Sommerwarmer Osten	50	57	+7
Mühl- und Waldviertel	42	41	-1
Gesamt	62	65	+3

Source: BFW, 2019

The analysis of individual forest communities shows that the larch–Swiss pine forest, the mountain and subalpine spruce forest, the sycamore maple forest and the carbonate pine forest achieve the highest indicator values, while the values for the oak forests show the lowest biodiversity. The main reason for the poor performance of the oak forests is the below-average occurrence of deadwood compared to other forest communities. In addition, greater deviations from the natural tree species composition can be observed in the oak forests. For example, secondary coniferous forests often can be found on oak forest sites.



Biodiversity index points of the 15 most common forest communities in Austria; Source: BFW, 2019.



The evaluation results of the Game Impact Monitoring ('Wildeinflussmonitoring', WEM) indicate that, particularly in regions with predominantly mixed forests, forest regeneration is made considerably more difficult in some cases by the negative impact of game (browsing). The data from the National Forest Inventory (ANFI 2016/21) also show no clear downward trend in browsing damage. On an area of 420,000 hectares of forest, the existing regeneration is damaged by browsing (see also the Game Damage Report, 'Wildschadensbericht' 2022; BML 2023). In addition, there are a further 800,000 hectares of forest area where regeneration would be necessary (desirable) but is not present, partly due to excessive hoofed game populations. In general, this is increasingly problematic with regard to (i) the maintenance and improvement of biodiversity in forests and (ii) the adaptation of forests to climate change, especially in protective forests (lagging height development or loss of ecologically valuable mixed tree species, existence of regeneration deficits and jeopardising the protective effect of the stand). However, numerous measures are already being taken to sustainably improve the situation.

Detailed information on the indicator 'protected forest areas' can be found in Chapter 4.5 Regulations for protected areas.

Several political instruments, strategies and programmes for the maintenance of biodiversity are implemented in Austria, including in particular:

- Biodiversity Strategy Austria 2020+
- Biodiversity Strategy Austria 2030+
- Moor Strategy Austria 2030+
- Biodiversity Fund
- · Austrian Forest Dialogue (AFD; established since 2003)
- Austrian Forest Strategy 2020+ field of action No. 4 (Biological diversity in Austrian forests)
- Austrian Forest Fund
- CAP-Strategic Plan Austria 2023-2027

Conclusions:

The values of the indicators used and the previous evaluation results for the Forest Biodiversity Index (FBI) suggest that the Austrian legal framework is fundamentally effective in ensuring compliance with the harvesting criterion laid down in Art 29 para 6 iv of Directive (EU) 2018/2001 with regard to the maintenance of biological diversity. Ensuring sustainability in general and protecting biodiversity is based on various legal regulations at both federal and provincial level. The central legal norm for harvesting activities/utilisation/management of forests is the Forest Act 1975, while the relevant provisions of the Nature Protection Laws and the Water Rights Act shall also be observed in accordance with the 'principle of consideration'.

Monitoring systems for the long-term observation of the development of biodiversity in forests are used and continuously developed. Examples include the Austrian National Forest Inventory (ANFI), the Forest Biodiversity Index (FBI) and the Game Impact Monitoring (WEM).

There are political instruments and programmes that effectively contribute to the maintenance and improvement of biodiversity in Austrian forests and wetlands through explicitly formulated fields of action, strategic objectives and measures, as well as through the provision of financial resources within the framework of contractual nature conservation and educational projects (e.g. Forest Ecology Platform, Stepping Stone Biotopes Project, Biodiversity Monitoring Education Project, Austrian Natural Forest Reserve Programme, etc.).

In some areas, the negative impact of game (inadequate, excessive populations of hoofed game) jeopardises or prevents the quality and development of forest regeneration (tree species mixture). The existing natural regeneration potential in terms of improving biodiversity and adapting forests to climate change cannot be utilised or can only be utilised at great expense. Defined goals regarding a trend reversal towards a sustainable reduction in game browsing have not yet been achieved. In the framework of the Forestry & Hunting Dialogue ('Forst & Jagd Dialog'), concepts and strategies are being developed to achieve a sustainable improvement in the forest-game situation through cooperation between forest management and hunting.

The degree of fulfilment of the criterion 'Maintenance of biodiversity' can therefore be assessed as 'Requirements fulfilled', and the effectiveness of the corresponding legal framework is classified as category B.



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Effectiveness	☐ Category A	⊠ Category B	☐ Category C
(points):	(20 points)	(10 points)	(0 points)



4.4. Maintenance of soil quality

Identification of applicable laws

(Federal) Forest Act: Forstgesetz 1975 – ForstG (BGBI. No. 440/1975), date of entry into force: 01.01.1976; last amended by BGBI. I No. 144/2023: § 1, § 16 para 2 lit a and lit b, §§ 21 ff., § 38, § 58 para 3 and 4, § 60, § 82 para 1 lit a no 1 to 3, §§ 170-172, § 174

Sources	Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010371 (last accessed in January 2024)	
Were applicable laws identified?	⊠ Yes	☐ No (audit required)

Description of the legal framework and law enforcement

In the Forest Act 1975, the term 'forest' also includes forest soil; forest soil is not defined separately. It refers to the soil of the land areas defined as forest pursuant to § 1a, § 3 para 1, § 4 and § 65 para 1 Forest Act. The protection of forest soil is therefore regulated on national level in a uniform manner by the Forest Act, both in terms of quantity and quality.

Several provisions of the Forest Act are aimed at preserving and minimising the impairment of soil quality during harvesting. § 1 Forest Act lays down the maintenance of the forest soil and the assurance of forest management that maintains the productive capacity of the forest soil as a sustainability objective.

Pursuant to § 16 para 2 Forest Act, such actions or omissions of forest devastation ('Waldverwüstung', extensive damage to or endangerment of the forest) are prohibited which significantly weaken or completely destroy the productive capacity of the forest soil (lit a) or expose the forest soil to an obvious risk of slipping or erosion (lit b). If forest devastation has been determined, the authority shall take the necessary measures to stop it and eliminate its consequences. For example, it may issue an official decision prescribing a certain type of utilisation or make any felling subject to official authorisation.

§§ 21 et seq contain provisions on protective forests (site and object protective forests) and their special treatment and utilisation to protect the soil and vegetation and to ensure reforestation.

§ 38 Forest Act stipulates that litter (deciduous or coniferous litter, etc.) may only be extracted while protecting the forest soil and that its use may also be completely prohibited under certain conditions, for example in forests whose soils tend to be impoverished, in protective forests and on forest areas where the use of litter would jeopardise reforestation.

Closely related to the harvest is the extraction of timber (hauling of the timber from the felling site to the public transport facility using various methods, e.g. cable transport, tractor with winch, ...), which shall be carried out in such a way that the forest soil is damaged as little as possible, new gullies or watercourses are not created and the water flow in existing gullies and watercourses is not impaired (§ 58 para 3 Forest Act). Damage is only permitted to the extent that it is unavoidable and can be remedied; the forest owner - but also the logging contractor and the authorised user - shall repair any damage caused by logging immediately after the logging operation has been completed (§ 58 para 4 Forest Act).

Hauling facilities required for harvesting shall be set up in such a way that the forest soil and vegetation suffer as little damage as possible, taking technical and economic aspects into account (§ 60 para 1 Forest Act). In particular, the forest may only be encroached upon to the extent necessary for its development.

Finally, within the framework of the felling regulations, clear-cutting is prohibited if it permanently reduces the productive capacity of the forest soil, significantly or permanently impairs the water balance of the forest soil, or results in increased washing away or drifting of forest soil (§ 82 para 1 lit a no 1 to 3 Forest Act).



In connection with the provisions on the preservation of soil quality, reference is made to the supervision by the authorities pursuant to §§ 170 to 172 Forest Act, whereby, among others, § 172 para 6 lit b Forest Act explicitly provides for the possibility of a forestry authority order for the purpose of preventing and refraining from forest devastation.

The individual offences relating to the aforementioned substantive provisions are set in § 174 Forest Act (Penal Provisions) (committing an administrative offence).

Sources

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Are enforcement and monitoring ensured for the identified laws?

⊠ Yes

☐ No (audit required)

Degree of compliance of the criterion "Maintenance of soil quality"

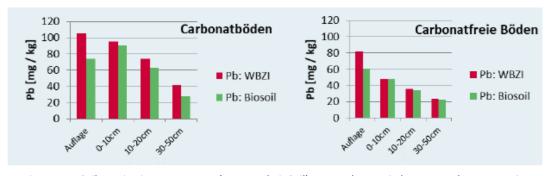
□ Requirements fulfilled

☐ Requirements not fulfilled

Monitoring and evaluation of the effectiveness of the legal framework on the maintenance of soil quality

In Austria the European forest soil monitoring in the framework of ICP Forests is the most important data basis providing information on forest soils at regional level. The first Austrian-wide survey for the Austrian Forest Soil Survey ('Waldbodenzustandsinventur', WBZI) with the collection of key soil chemical parameters (pH, C_{org}, N_{tot}, CEC, BS) and heavy metals (Pb, Cd) took place from 1987 to 1989 on 511 plots of the National Forest Inventory (ANFI) grid. A first repeat survey on a selection of 139 plots followed between 2006 and 2007 as part of the EU 'BioSoil' project (MUTSCH et al. 2013).

A comparison of the WBZI and BioSoil data revealed a clear downward trend in heavy metal contamination as a result of environmental policy measures (improved air pollution control) (see figure).



Austrian Forest Soil Monitoring Programme (WBZI und BioSoil): Mean changes in heavy metal concentrations in forest soil using the example of lead (Pb). (Source: BFW, 2020, taken from BML, 2020).



On the other hand, it was found that changes in soil nutrient parameters (pH, CEC, BS) are difficult to detect and do not show a clear trend due to the superposition of differently caused processes (stand dynamics, N input, consequences of historical forest utilisation, e.g. litter extraction). Moreover, soil chemical changes are usually slow and are masked by small-scale variability and stand dynamics (JANDL et al. 2022).

Carbon stocks in the forest soil were calculated at 463 Mt C (WBZI: 50 cm soil depth) and 585 Mt C (BioSoil: 80 cm soil depth), whereby the values of the two survey periods are not comparable due to the sampling of different soil depths.

WEISS et al. 2000 use modelled estimates to suggest that the Austrian forest soil represented a net carbon sink in the period 1961 to 1996, as did the forest biomass (WBZI data basis). BAUMGARTEN et al. 2021 give the mean carbon stocks in the Austrian forest soil as 128.2 tonnes C/ha (22.2 tonnes C/ha in the topsoil humus, 106.0 tonnes C/ha in the top 30 cm of the mineral soil). Compared to other forms of land use (arable land, grassland, settlement areas), the forest soil thus represents the largest carbon pool with a total of 515.4 Mt C (around 48% of the Austrian land area is covered by forest). In contrast, although peatlands have the highest density of organic carbon at 220 tonnes C/ha, they only cover around 2% of the country's surface area (see also HASLMAYR et al. 2018).

The problem of nutrient extraction in the utilisation of forest biomass (consequences of a full tree harvest including needle/leaf and brushwood mass on nutrient stocks) was addressed in an Austrian-wide 'Wood and Biomass Volume Study' ('Holz- und Biomassenaufkommensstudie', HOBI) and recommendations for practice were formulated (ENGLISCH 2007; ENGLISCH & REITER 2009).

In 2018, a standard and quality label with explicit requirements for maintaining soil quality was created for service providers in timber harvesting and forest tending (Certification of Austrian Forestry Contractors; ZÖFU):

- The forest floor is frequented exclusively on (preferably permanent) hauling tracks specified by the client (forest owner). If such tracks are not specified, they shall be created with a minimum distance of 20 metres. (In the case of special topographical and site-specific conditions, other hauling systems with an average distance of at least 20 metres between tracks are permitted in deviation from a schematically laid out hauling tracks system)
- In the case of timber harvesting using the tree method ('Baumverfahren'), depending on the site conditions, a method is used in which the necessary amount of biomass remains on the felling area (e.g. pollarding the top of the trees). (If the forest owner expressly orders the removal of the entire green biomass, this shall be recorded in writing with reference to the fact that the complete removal of green biomass violates the PEFC guidelines under the site conditions in question)

Litter extraction (§ 38 Forest Act) has largely lost its former significance for livestock farming. For still existing litter servitudes ('Streubezugsrechte'), which are in fact only rarely exercised in practice, there is the possibility of converting them into timber servitudes ('Holzbezugsrechte').

The removal of rootstocks and stumps is not a common forestry utilisation practice in Austria.

Conclusions:

The Austrian Forest Act ensures compliance with the harvesting criterion pursuant to Art. 29 para 6 iv) of Directive (EU) 2018/2001 with regard to the maintenance of soil quality during harvesting by explicitly containing provisions for the protection of the soil and its productive capacity (forest devastation, litter extraction, timber hauling, prohibition of clear-cutting). The target provisions of § 1 Forest Act apply to the entire regulatory area of the Forest Act, and the prohibition of forest devastation applies not only to timber harvesting operations, but in general and to everyone.

The two previous surveys of the Austrian Forest Soil Monitoring Programme (WBZI and BioSoil) form a harmonised and profound database, which (i) is able to depict the diversity and potential threats of Austrian forest sites and (ii) provides the basis for the parameterisation of models, which are used both for forest soil monitoring (soil chemistry, nutrient balance, carbon pool, structure of the forest soil) and for the design of decision support systems for the selection of suitable tree species taking climate change into account ('FORSITE - Dynamic Modelling of Forest Types in Styria; the conception and development of this system is currently also in progress for the federal states of Lower Austria, Upper Austria and Burgenland).



There are recommendations regarding site-specific nutrient sustainability in connection with forest biomass utilisation (HOBI study), and standards have been developed for the training and further education of forestry workers and contractors, which attach great importance to the topic of driving on the forest floor and soil-conserving harvesting methods (ZÖFU).

The generally high level of training of the Austrian forestry workers and forestry contractors, as well as the use of soil-conserving harvesting methods, such as (skyline) cable-crane technology in steep terrain, generally means that damage to the soil (compaction of forest soil, destruction of soil structure) and the impairment of soil quality in the course of harvesting activities are reduced to an unavoidable extent and thus the provisions of the Forest Act are complied with.

The degree of fulfilment of the criterion 'Maintenance of soil quality' can therefore be assessed as 'Requirements fulfilled', and the effectiveness of the legal framework for the maintenance of soil quality is classified as category A.

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Effectiveness	⊠ Catagony A	□ Catagory P	□ Catagony C
Effectiveness	⊠ Category A	☐ Category B	☐ Category C
(points):	(20 points)	(10 points)	(0 points)
	, ,	, , ,	, , ,



4.5. Regulations for protected areas

Identification of applicable laws

- 1. European law and international agreements:
 - 1.1. Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Codified version), (Birds Directive)
 - 1.2. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive)
 - 1.3. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (Water Framework Directive WFD)
 - 1.4. Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention on Wetlands), BGBI. No. 225/1983)
 - 1.5. Bern Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention), BGBI. No. 372/1983, last amended by BGBI. III No. 165/2023
 - 1.6. Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), BGBI. III No. 88/2005, zuletzt geändert durch BGBI. III No. 58/2023
- 2. Nature conservation legislation of the Federal Provinces:
 - 2.1. Burgenland: Burgenländisches Naturschutz- und Landschaftspflegegesetz NG 1990, LGBI. No. 27/1991, last amended by LGBI. No. 70/2020
 - 2.2. Carinthia: Kärntner Naturschutzgesetz 2002 K-NSG 2002, LGBl. No. 79/2002, last amended by LGBl. No. 36/2022
 - 2.3. Lower Austria: NÖ Naturschutzgesetz 2000 NÖ NSchG 2000, LGBI. 5500-0, last amended by LGBI. No. 41/2023
 - 2.4. Upper Austria: Oö. Natur- und Landschaftsschutzgesetz 2001 Oö. NSchG 2001, LGBI. No. 129/2001, last amended by LGBI. No. 64/2022
 - 2.5. Salzburg: Salzburger Naturschutzgesetz 1999 NSchG, LGBl. No. 73/1999, last amended by LGBl. No. 41/2022
 - 2.6. Styria: Steiermärkisches Naturschutzgesetz 2017 StNSchG 2017, LGBI. No. 71/2017, last amended by LGBI. No. 70/2022
 - 2.7. *Tyrol:* Kundmachung der Landesregierung vom 12. April 2005 über die Wiederverlautbarung des Tiroler Naturschutzgesetzes 1997 TNSchG 2005, LGBI. No. 26/2005, last amended by LGBI. No. 85/2023
 - 2.8. Vorarlberg: Gesetz über Naturschutz und Landschaftsentwicklung, LGBl. No. 22/1997
 - 2.9. Vienna: Gesetz mit dem das Wiener Naturschutzgesetz erlassen wird (Wiener Naturschutzgesetz), last amended by LGBI. No. 27/2021

3. National park legislation:

- 3.1. Burgenland: Gesetz vom 12. November 1992, mit dem der Nationalpark Neusiedler See Seewinkel errichtet wird (Gesetz über den Nationalpark Neusiedler See Seewinkel NPG 1992), LGBI. No. 28/1993, last amended by LGBI. No. 83/2020
- 3.2. Carinthia: Kärntner Nationalpark- und Biosphärenparkgesetz 2019 (K-NBG 2019), LGBI. No. 21/2019, last amended by LGBI. No.36/2022
- 3.3. Lower Austria: NÖ Nationalparkgesetz, LGBI. 5505-0, last amended by LGBI. No. 14/2018
- 3.4. *Upper Austria*: Landesgesetz vom 5. Dezember 1996 über die Errichtung und den Betrieb des Nationalparks "Oö. Kalkalpen" (Oö. Nationalparkgesetz Oö. NPG), LGBI. No. 20/1997, last amended by LGBI. No. 54/2019
- 3.5. Salzburg: Gesetz vom 29. Oktober 2014 über den Nationalpark Hohe Tauern im Land Salzburg (Salzburger Nationalparkgesetz 2014 S.NPG), LGBL. No. 3/2015, last amended by LGBl. No. 94/2022
- 3.6. Styria: Gesetz vom 12. März 2002 über den Nationalpark Gesäuse, LGBI. No. 61/2002, last amended by LGBI. No. 71/2017
- 3.7. *Tyrol:* Gesetz vom 9. Oktober 1991 über die Errichtung des Nationalparks Hohe Tauern in Tirol (Tiroler Nationalparkgesetz Hohe Tauern), LGBI. No. 103/1991, last amended by LGBI. No. 85/2023
- 3.8. Vienna: Gesetz über den Nationalpark Donau-Auen (Wiener Nationalparkgesetz), LGBI. No. 37/1996, last amended by LGBI. No. 27/2021
- 4. Biosphere park legislation (acts and ordinances):
 - 4.1. *Carinthia:* Gesetz mit dem der Biosphärenpark Nockberge errichtet wird (Biosphärenpark-Nockberge-Gesetz K-BPNG), LGBI. No. 124/2012, last amended by LGBI. No. 74/2013
 - 4.2. Lower Austria: NÖ Biosphärenpark Wienerwald Gesetz, LGBl. 5760-0
 - 4.3. Salzburg: UNESCO Biosphärenpark Lungau-Verordnung, LGBl. No. 48/2019
 - 4.4. Vorarlberg: Verordnung der Landesregierung über den "Biosphärenpark Großes Walsertal", LGBI. No. 33/2000, last amended by LGBI. No. 46/2005
 - 4.5. Vienna: Kundmachung des Landeshauptmannes von Wien betreffend die Vereinbarung gemäß Artikel 15a B-VG zwischen den Ländern Niederösterreich und Wien zur Errichtung und zum Betrieb eines Biosphärenparks Wienerwald
- 5. Water Rights Act: Wasserrechtsgesetz 1959 (WRG 1959), BGBl. No. 215/1959, last amended by BGBl. I No. 73/2018: § 30 para 1 no 3, § 55 para 1 no 1a, §§ 98 to 101, § 137, and § 138
- 6. (Federal) Forest Act: Forstgesetz 1975 ForstG (BGBl. No. 440/1975), date of entry into force: 01.01.1976; last amended by BGBl. I No. 144/2023: § 1, § 32a



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- 1. European law and international agreements
- 1.1 FUR-Lex:

https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32009L0147 (last accessed in January 2024)

- 1.2 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31992L0043 (last accessed in January 2024)
- 1.3 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32000L0060 (last accessed in January 2024)
- 1.4 Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010446 (last accessed in January 2024)
- 1.5 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010447 (last accessed in January 2024)
- 1.6 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20004171 (last accessed in January 2024)
- 2. Legal Information System of the Republic of Austria (RIS):
 - 2.1 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrBgld&Gesetzesnummer=10000254 (last accessed in January 2024)
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 - 2.3 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrNO&Gesetzesnummer=20000814 (last accessed in January 2024)
 - 2.4 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LROO&Gesetzesnummer=20000147 (last accessed in January 2024)
 - 2.5 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrSbg&Gesetzesnummer=20000003 (last accessed in January 2024)
 - 2.6 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrStmk&Gesetzesnummer=20001381 (last accessed in January 2024)
 - 2.7 https://www.ris.bka.gv.at/geltendefassung.wxe?abfrage=lrt&gesetzesnummer=20000252 (last accessed in January 2024)
 - 2.8 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrVbg&Gesetzesnummer=20000466 (last accessed in January 2024)
 - 2.9 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrW&Gesetzesnummer=20000454 (last accessed in January 2024)
- 3. Legal Information System of the Republic of Austria (RIS):
 - 3.1 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrBgld&Gesetzesnummer=10000344 (last accessed in January 2024)
 - 3.2 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrK&Gesetzesnummer=20000339 (last accessed in January 2024)
 - 3.3 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrNO&Gesetzesnummer=20000675 (last accessed in January 2024)
 - 3.4 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrOO&Gesetzesnummer=10000527 (last accessed in January 2024)
 - 3.5 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrSbg&Gesetzesnummer=20000928 (last accessed in January 2024)
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 - 3.8 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrW&Gesetzesnummer=20000420 (last accessed in January 2024)
- 4. Legal Information System of the Republic of Austria (RIS):
- 4.1 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Lrk&Gesetzesnummer=20000250 (last accessed in January 2024)
- 4.2 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrNO&Gesetzesnummer=20000679 (last accessed in January 2024)
- 4.3 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrSbg&Gesetzesnummer=20001213 (last accessed in January 2024)
- 4.4 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrVbg&Gesetzesnummer=20000492 (last accessed in January 2024)



	4.5 https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrW&Gesetzesnummer=20000398 (last accessed in January 2024)	
	Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010290 (last accessed in January 2024)	
	6. Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010371 (last accessed in January 2024)	
Were applicable laws identified?		

Description of the legal framework and law enforcement

While in Austria the Forest Act is a federal matter, nature conservation is the responsibility of the federal provinces in terms of legislation and enforcement in accordance with Article 15 of the Federal Constitutional Law (B-VG). The national implementation of Directive 79/409/EEC on the conservation of wild birds (Birds Directive) and Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) also takes place in the provincial nature conservation laws. The nature conservation laws of the federal provinces aim to preserve nature, including the cultural landscape, in all its manifestations. In order to specify the general objectives, landscape framework plans ('Landschaftsrahmenpläne') and nature conservation concepts ('Naturschutzkonzepte') are drawn up for the entire provincial territory or for regions. These plans are based on biotope mapping ('Biotopkartierung'), which has also to be taken into account by spatial planning (e.g. floodplain inventory, peatland protection catalogue).

The nature conservation laws contain, among others, restrictions or prohibitions on utilisation and authorisation requirements for certain measures. They include enforcement and monitoring systems by the nature conservation authorities (district administrative authorities or provincial government in accordance with the respective provincial nature conservation act, plus the appointment of nature conservation officers ('Naturschutzbeauftragte') in some provinces) as well as a system of administrative penalties. Particularly serious misconduct against the environment is penalised under environmental criminal law on the basis of the Criminal Code (StGB, BGBl. No. 60/1974 as amended).

With regard to provisions on species and habitat protection, the nature conservation laws of the federal provinces contain a so-called 'agricultural clause' ('Agrarklausel'), i.e. 'contemporary'/'customary'/'sustainable' agricultural and forestry utilisation is generally permitted; restrictions may only be imposed to the extent necessary to properly achieve the conservation objectives. This exception clause does not apply if protected plants, animals or habitats are intentionally impaired or if the reproduction and resting places of protected animal species are damaged or destroyed. The 'agricultural clause' also does not apply if plants and animals threatened with extinction are affected by agricultural and/or forestry utilisation measures.

The nature conservation laws of the federal provinces and other laws (national park laws, biosphere park laws and ordinances) form the basis for the designation of various categories of protected areas. These are generally issued by ordinance, with the offices of the respective provincial government being competent authorities. Natural monuments are declared as such by the district administrative authorities.

The main categories of protected areas in Austria are:

National park

According to IUCN guidelines, on which the Austrian regulations are based, national parks are natural areas with at least one intact ecosystem. They are protected by measures under public law and divided into core and peripheral zones. In core zones (natural zones), any intervention is generally prohibited, while in peripheral zones (conservation zones), management is permitted within the framework of defined management plans. Exceptions to the ban on intervention require official authorisation. For example, forestry measures such as selective felling ('Plenterung'), single stem removal and the processing of damaged timber are permitted.

• Nature conservation area

Nature conservation areas are characterised by complete or extensive naturalness or are important as a habitat for endangered animal or plant species. In nature conservation areas - if no maintenance of the protected assets is necessary - there is generally a fundamental ban on intervention.



Landscape conservation area

Landscape conservation areas are areas that have a special beauty or character. As a rule, these areas are subject to additional authorisation requirements under nature conservation law.

• Natura 2000 site ('Europaschutzgebiet')

Natura 2000 protected areas have been or are designated by the federal provinces by legal ordinance as part of the European nature conservation network Natura 2000 either as bird reserves (in accordance with Directive 79/409/EEC on the conservation of wild birds) and/or as FFH areas (in accordance with Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). Certain animal and plant species or habitat types are specially protected in these areas. At the heart of the protection is the obligation that plans and projects that could significantly affect such a site shall be subject to a nature impact assessment and that there shall be no deterioration in the state of preservation (prohibition of deterioration). Necessary conservation measures are defined within the framework of contractual nature conservation (priority) or in the form of management plans issued by official decision or ordinance.

• Biosphere park

Biosphere parks correspond to the UNESCO protected area designation 'biosphere reserve'. They encompass large-scale ecosystems of outstanding importance for the conservation of biodiversity. Similar to national parks, biosphere parks are divided into zones; the difference lies in the additional involvement of the population. The biosphere reserve concept thus represents a comprehensive protection and development instrument for the sustainable development of an area. The legal restrictions in the zones are usually implemented with the help of other protection categories (landscape conservation area, nature conservation area, contractual nature conservation).

Other protected area categories in Austria include nature parks, natural monuments, biogenetic reserves, plant conservation areas, rest areas, protected habitats and protected landscape features. With regard to forests, wilderness areas (IUCN category 1b) and natural forest reserves ('Naturwaldreservate') should also be mentioned in particular. The latter go back to Resolution H2 at the second Ministerial Conference on the Protection of Forests in Europe MCPFE, Helsinki 1993, with the signing of which Austria committed itself to establishing a representative network of forest reserves.

Biotope protection forests (*'Biotopschutzwälder'*) in accordance with § 32a Forest Act 1975 form the 'interface' between forest law and nature conservation law. The comprehensive view of sustainability in § 1 Forest Act is thus concretised in § 32a Forest Act. Biotope protection forests include natural forest reserves, forest areas in national parks and forest areas located in nature conservation areas or Natura 2000 protected areas (Habitats Directive, Birds Directive).

In biotope protection forests, forest management measures are restricted or omitted altogether. In some cases, this takes place on the basis of private-law agreements between the forest owners and the Republic of Austria (in the case of natural forest reserves), in other cases on the basis of obligations under provincial law (national parks, nature conservation areas). Provided that public interests in forest conservation do not conflict with this, the authority may issue an official decision (upon application or with the consent of the forest owner) ordering exceptions to the application of individual provisions of the Forest Act (§ 13 reforestation, § 16 forest devastation, § 22 treatment and utilisation of the protective forest, §§ 44 and 45 pest infestation or propagation and § 80 para 1 protection of immature stands) in accordance with § 32a para 2 Forest Act.

In Austria protected areas in wetland and in peatland are designated in accordance with the Ramsar Convention, BGBl. No. 283/1993 as amended, on the one hand, and as Natura 2000 protected areas on the other, and are therefore also subject to the provisions of nature conservation legislation. In addition, the Water Rights Act (WRG 1959, BGBl. No. 215/1959 as amended), also sets the protection of wetland as an element of the objective of sustainable water management (§ 30 para 1 no 3 WRG) and as a measure of water management planning (§ 55 para 1 no 1a WRG) and in this respect provides for a prohibition of deterioration and the obligation to protect and improve the condition of wetlands with regard to the water balance. Here, too, reference is made to the official surveillance system (§§ 98 to 101 WRG) and corresponding sanctions (§§ 137 and 138 WRG).

In certain sensitive locations, such as on the banks of bodies of water, on wetlands, peat bogs and in alpine regions, there are additional restrictions and prohibitions in some provincial nature conservation laws, even without the designation of specific areas.



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	European Commission, Directorate-General https://environment.ec.europa.eu/law-ar			
	Holzer, G. 2017. Waldbewirtschaftung im Spannungsfeld des Naturschutzrechts. Vortrag beim Vorarlberger Forsttag 03.02.2017.			
	Holzer, G. 2023. Agrarrecht. 5. Auflage, Verlag Österreich, 676 Seiten.			
	Lienbacher, N. 2012. Waldeigentum und seine Beschränkungen. Neuer Wissenschaftlicher Verlag, 276 Seiten.			
	Ökobüro, 2023. Informationstext zum Naturschutzrecht, Stand: Juli 2023, 25 Seiten. Download: https://www.oekobuero.at/de/publikationen/ (last accessed in January 2024)			
Are enforcement and monitoring ensured for the identified laws? □ No (audit required)				
Degree of c	ompliance of the criterion "R	Regulations for protect	ed areas"	
	□ Requirements fulfilled	☐ Requirement	s not fulfilled	



Monitoring and evaluation of the effectiveness of the legal framework on the regulations for protected areas

Protected areas under nature conservation law cover a total of around 25% of the Austrian national territory. The following table provides an overview as of January 2023:

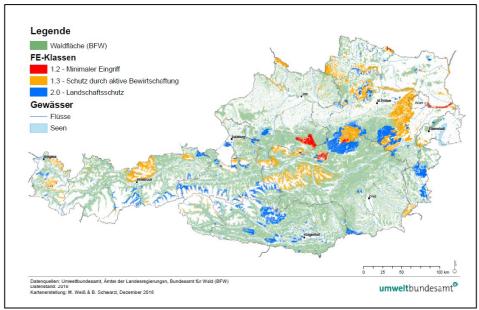
Protected area category	Number	Area [km²]	Percentage of the federal area [%]
National parks	6	2.382	2,8
Natura 2000 sites (designated by ordinance) (*)	284	13.124	15,6
Nature conservation areas	487	3.033	3,6
Wilderness areas (IUCN category 1b)	2	137	0,2
Landscape conservation areas	250	12.963	15,5
Nature parks	50	4.390	5,2
Protected landscape features	326	86	0,1
Biosphere parks (**)	4	2.874	3,4
Other protected areas (excluding natural monuments and natural formations)	59	1.496	1,8

Source: Environment Agency Austria (UBA). Note: Protected areas of different categories can partially or completely overlap, the individual values of the protected area categories can therefore not be added up to a total area/number. (*) in addition to the designated Natura 2000 areas, further Natura 2000 sites have been nominated (350 Natura 2000 sites in total); (**) including 1 biosphere park that has not yet been declared under nature conservation law.

In 2018, 878,398 hectares of forest in the protected areas designated under nature conservation law could be assigned to classes 1 and 2 ('forests protected for biodiversity') according to the criteria of FOREST EUROPE (formerly MCPFE). This corresponds to 22.1% of the total Austrian forest area:

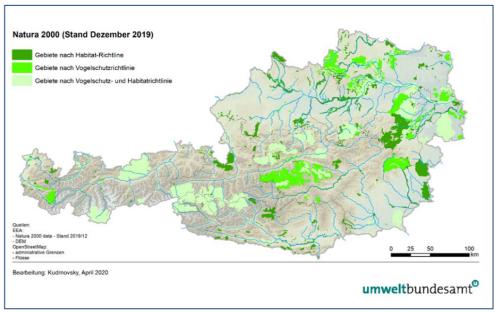
FOREST EUROPE (MCPFE)-classes	Main management objective	Activities	Forest area [ha]	Percentage of the total forest area [%]
1.1	Biodiversity	No active intervention	0	0
1.2	Biodiversity	Minimum intervention	33.479	0,8
1.3	Biodiversity	Conservation through active management	487.559	12,3
2	Protection of landscapes and specific natural elements	Interventions to achieve the management goals landscape diversity, cultural, aesthetic, spiritual and historical values, recreation, specific natural ements	357.360	9,0
sum			878.398	22,1

Sources: Environment Agency Austria (UBA) in BML 2020. Study on protected forests in Austria, update 2018; after FOREST EUROPE Guidelines on protected areas (see also: FAO 2020, p.42; Forest Europe 2020, p.354, Annex 9 – Austria, Indicator 4.9).



Classification of the forest area in protected areas designated under nature conservation law to the criteria of FOREST EUROPE (formerly MCPFE). Source: Environment Agency Austria (UBA) Study on protected forests in Austria, update 2018.

As of January 2023, the Natura 2000 network in Austria comprises 350 areas (15.1% of the national territory), 284 of which have been legally designated as 'Europaschutzgebiet'. These are national parks, nature conservation areas, landscape conservation areas and protected landscape features, as well as areas that have not yet been categorised for protection. 42% of the Natura 2000 areas are forests, and vice versa, approx. 13% of the Austrian forest area is located in Natura 2000 areas (approx. 530,000 hectares).



Natura 2000 areas in Austria as of December 2019, Source: Environment Agency Austria, 2020.

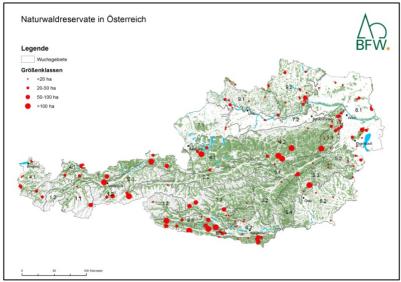
The implementation of the Birds Directive and the Habitats Directive by the responsible federal provinces was initially hesitant; an infringement procedure initiated against Austria by the European Commission in 2013 due to inadequate Natura 2000 site designations (INFR(2013)4077) was discontinued in 2019, as further sites were nominated.

Currently four infringement proceedings under Art. 258 TFEU are pending, concerning the improvement of the transposition of EU nature conservation legislation into national law or the proper implementation of the Habitats Directive or the Birds Directive (INFR(2014)4095; INFR(2014)4111; INFR(2022)2056; INFR(2023)2045). The Commission has not yet referred any of these cases to the Court of Justice of the European Union.



The Austrian Natural Forest Reserves Programme ('Naturwaldreservate - NWR'), established in 1995, was prompted by the Helsinki Resolution of the Ministerial Conference on the Protection of Forests in Europe (formerly MCPFE, now Forest Europe) and the Mountain Forest Protocol of the Alpine Convention. It provides for the establishment of a representative network of protected forest areas in which all 118 potential natural forest communities ('PNWG') of Austria relevant to the ANFR programme should be represented, differentiated according to the 22 forest ecoregions ('Wuchsgebiete'). The individual reserve areas should represent the tree species composition, stand structure, vegetation and natural development of the respective PNWG.

As of February 2023, the network comprises 193 natural forest reserves with a total area of 8,666 hectares. The individual areas are taken out of utilisation on the basis of private-law contracts between the forest owners and the Republic of Austria ('contractual nature conservation'), i.e. no timber is harvested, no other forest utilisation is made and no anthropogenic influence is exerted (with the exception of hunting). The areas are used for monitoring and research and are also used for teaching and knowledge transfer as part of excursions.



Natural forest reserves in Austria. Source: www.naturwaldreservate.at.

Conclusions:

The explications mentioned above show that numerous protected areas of different categories have been designated in Austria, based on international and European law, as well as national or provincial (subnational) regulations and private law agreements.

The designated protected areas can be clearly demarcated; for example, the ordinances on the declaration of an area as Natura 2000 protected area are accompanied by maps showing the precise demarcation of the area concerned.

Reporting obligations under Article 12 of the Birds Directive and Article 17 of the Habitats Directive, as well as conservation measures taken and the conservation status of habitat types (Annex I of the Habitats Directive) and species (Annexes II, IV, V of the Habitats Directive) are regularly fulfilled. Monitoring is carried out on the protected areas, and methods for assessing the conservation status of Natura 2000 protected assets (criteria, indicators, threshold values) have been developed and are being further improved.

Prohibited and authorised interventions, forms of utilisation and management measures in the protected areas are regulated by legal or contractual provisions and management plans (e.g. 'Europaschutzgebiete' in Styria), and there are also guidelines and recommendations, for example on near-natural forest management and best practice (Natura 2000 handbook for forests; guidelines for improving the practicability of management plans).

As part of the European Commission's infringement proceedings against Austria under Article 258 TFEU, any shortcomings with regard to the proper implementation of EU nature conservation legislation are being clarified and, if necessary, national laws are being adapted to the obligations under EU law. The Commission has not yet referred the matter to the Court of Justice of the European Union; accordingly, there have been no decisions by the Court of Justice against Austria for breaches of EU legislation (nor have there been any infringement proceedings under Article 260 TFEU).

The degree of fulfilment of harvest criterion iii) Art. 29 para 6 of Directive (EU) 2018/2001 'Regulations for protected areas' can therefore be assessed as 'Requirements fulfilled', and the effectiveness of the applicable legal framework in this regard is classified as category A.



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Effectiveness	□ Category A	☐ Category B	☐ Category C
(points):	(20 points)	(10 points)	(0 points)



4.6. Maintenance of the long-term production capacity of the forest

Identification of applicable laws

- 1. (Federal) Forest Act: Forstgesetz 1975 ForstG (BGBI. No. 440/1975) date of entry into force: 01.01.1976; last amended by BGBI. I No. 144/2023: § 1 para 2 no 3 and para 3, II. sect (§§ 6-11), § 13, § 16 para 2 lit a, §§ 80 ff, §§ 170-172, § 174
- 2. Ordinance on the Forest Development Plan: Verordnung vom 18. November 1977 über den Waldentwicklungsplan WEP-V (BGBI. No. 582/1977), date of entry into force: 01.01.1978
- 3. Ordinance on the Hazard Zone Plan: Forstgesetz-Gefahrenzonenplanverordnung ForstG-GZPV (BGBI. II No. 132/2021)
- 4. Ordinance on Protective Forests: Verordnung des Bundesministers für Land- und Forstwirtschaft vom 12. Juli 1977 über die Behandlung und Nutzung der Schutzwälder (SchutzwaldV) (BGBI. No. 398/1977), date of entry into force: 29.07.1977
- 5. Forest Fund Act: Waldfondsgesetz WaldfondsG (BGBI. I No. 91/2020) date of entry into force: 25.07.2020, last amended by BGBI. I No. 152/2023

Sources Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010371 (last accessed in January 2024) Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010384 (last accessed in January 2024) Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20011506 (last accessed in January 2024) Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10010385 (last accessed in January 2024) Legal Information System of the Republic of Austria (RIS): https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20011241 (last accessed in January 2024)

Description of the legal framework and law enforcement

The requirements with regard to maintaining or improving the long-term production capacity of the forest are addressed in particular by the following provisions of the Forest Act 1975: § 1 para 2 no 3 and para 3 Forest Act sets sustainable forest management as one of the main objectives of the Forest Act, which should be carried out in such a way and to such an extent that the biological diversity of the forests, their productivity, regenerative capacity, carbon absorption and storage capacity, vitality and potential are permanently maintained and utilisation should also be possible for future generations.

The spatial planning for the forest habitat (forest spatial planning) laid down in II. Section of the Forest Act (§§ 6 to 11) and the enacted ordinances (WEP-V, ForstG-GZPV) has the task of depicting and planning the forest conditions of the federal territory or parts thereof with foresight. The presence of forests is to be strived for in such an extent and in such a condition that their public welfare-oriented forest effects (productive effect, protective effect, beneficial effect and recreational effect) can be optimally realised and ensured. Forest spatial planning (forest development plan, hazard zone plan) primarily serves to inform and coordinate all public interests relevant to forestry and represents a guideline for the implementation of forest legislation.



The principle of sustainable forest management laid down in § 1 Forest Act is specifically expressed in the obligation to reforest in good time (§ 13 Forest Act), as well as in § 16 para 2 lit a Forest Act, which prohibits actions and omissions that significantly weaken or completely destroy the productive capacity of the forest soil. Of central importance are §§ 80 ff Forest Act on the utilisation of forests. These provisions provide for the protection of immature stands and, in addition to the prohibition of certain types of utilisation (certain clear-cutting, large-scale clear-cutting in the high forest), provide in particular for a system of registration and authorisation procedures for various types of utilisation. The stricter special provisions of the Ordinance on Protective Forests ('SchutzwaldV') apply to utilisation in protective forests.

With regard to forestry supervision and penal provisions, reference is made to §§ 170 to 172 and § 174 Forest Act.

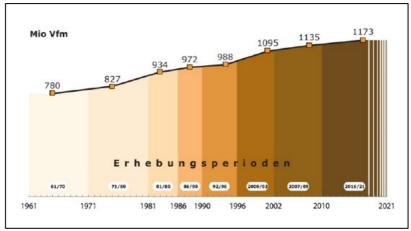
Storms, snow pressure and, in particular, regionally occurring bark beetle mass propagation (especially in the north-east and south of Austria) have caused extensive forest damage in recent years and, in a long-term comparison (time series since 1944), new record levels of damaged timber. The Austrian Forest Fund was set up in 2020 to tackle the associated challenges and the increasingly noticeable effects of climate change on the forest ecosystem (administrative fund from federal resources; Forest Fund Act).

Sources	Brawenz/Kind/Wieser 2015. Forstgesetz 1975. Kommentierte Ausgabe mit Judikatur in Leitsätzen. Manz´sche Verlags- und Universitätsbuchhandlung, Wien, 898 Seiten.			
	European Commission, Directorate-General for Energy, Technical assistance for the preparation of guidance for the implementation of the new bioenergy sustainability criteria set out in the revised Renewable Energy Directive – REDIIBIO – Final report, Publications Office 2021. Download: https://data.europa.eu/doi/10.2833/592471 (last accessed in January 2024)			
	Federal Ministry of Agriculture, Forestry, unsere Wälder. https://www.waldfond (last accessed in January 2024)	9 , ,). Der Waldfonds – Das Zukunftspaket für	
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	Food and Agriculture Organization of the United Nations (FAO), FAOLEX Database. Country Profiles – Austria. https://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=AUT (last accessed in January 2024) Lienbacher, N. 2012. Waldeigentum und seine Beschränkungen. Neuer Wissenschaftlicher Verlag, 276 Seiten.			
Are enforcen	nent and monitoring ensured ified laws?	⊠ Yes	☐ No (audit required)	
Degree of co	mpliance of the criterion "Mair	ntenance of the long-term pr	roduction capacity of the forest"	
	⊠ Requirements fulfilled	☐ Requirements no	ot fulfilled	

Monitoring and evaluation of the effectiveness of the legal framework on the maintenance of the long-term production capacity of the forest

The results of the Austrian National Forest Inventory (ANFI) show that the timber stock in the productive forest has increased continuously since the start of the surveys in 1961 and has currently (inventory period 2016/21) reached a new high with a total timber stock of 1,180 million cubic metres o.b. in the productive forest. The average stock amounts to 351 cubic metres o.b. per hectare (ANFI period 2016/21), which represents an increase of 13.9 cubic metres o.b. per hectare since the last ANFI period in 2007/09.





Development of the growing timber stock in the Austrian productive forest according to the Austrian National Forest Inventry data (ANFI) (Source: BML, 2021).

This is also reflected in the figures on the 'Forest growing stock [1000 m³ o.b.]' of the FAO-FRA 2020 Report for Austria, which are based on the ANFI data (see FRA 2020 Report, Austria, pages 26ff.):

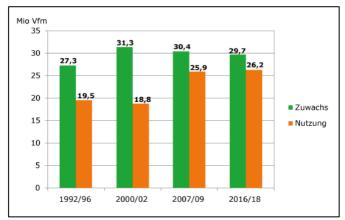
Growing stock forest:

NFI	1992/96	2000/02	2007/09	2016/18
	1000 m³ o. b.			
Growing stock Forests in yield (Ertragswald)	965 855	1 070 276	1 112 201	1 153 243
Dead wood trees	13 301	18 311	25 617	27 070
Living trees	952 554	1 051 965	1 086 584	1 126 173
Growing stock Protective forests without yield (Schutzwald außer Ertrag (SaE))	30 511	28 463	31 362	27 668

Growing timber stock of the Austrian forest

(Source: FAO, Global Forest Resources Assessment 2020; Report Austria).

The forest inventory results also show an increase in utilisation intensity, but with a current utilisation of 89 % of the increment, the 'utilisation/increment ratio' is still below 1, i.e. less wood is harvested than is growing (see also Forest Europe indicator 3.1).



Increment and utilisation in the Austrian productive forest according to the Austrian National Forest Inventory data (ANFI) (Source: BML, 2021).



Development of the utilisation intensity based on the Forest Europe indicator 3.1 "Fellings as % of net annual increment on forest available for wood supply":

		Unit	1990	2000	2010	2020
3.1	Fellings as % of net annual increment on forest available for wood supply	%	68.3	58.0	87.1	87.1

Source: Forest Europe, State of Europe's Forests 2020, Annexes to Part II, Annex 9, Austria, p.354.

The Austrian Forest Fund, which was set up in response to widespread forest damage in recent years and the increasingly noticeable effects of climate change on forests, pursues the key objectives of reforestation and maintenance of forest areas after damage events, the development of 'climate resilient' forests (including the necessary scientific research), the promotion of biodiversity in forests and the increased use of wood as a raw material as an active contribution to climate protection. The implementation of the ten forest fund measures thus contributes directly to maintaining the long-term production capacity of the forest.

In addition, a number of other forest policy instruments, strategies and programmes have been implemented in Austria that contribute in a comprehensive sense to ensuring the sustainable, multifunctional management and conservation of the forest. These include in particular:

- Austrian Forest Dialogue (ÖWAD; established since 2003)
- Austrian Forest Strategy 2020+
- Protective Forest Action Programme
- Forest Fire Action Programme
- Austrian Strategy for Adaptation to Climate Change Forestry field of activity
- CAP-Strategic Plan Austria 2023-2027

At individual holding level, forest enterprises in 'large forests' ('Großwald') have management plans for sustainable timber utilisation/felling planning based on inventories of the holding's own forest stands. For small, predominantly peasant forest owners ('Kleinwald') programmes and tools for operational planning and management are offered (e.g. practical forest management plan, forest management records, silviculture consultants, etc.).

Conclusions:

With the respective assessment as 'Requirements fulfilled' of the three sustainability criteria (i) 'Forest regeneration', (ii) 'Maintenance of biodiversity' and (iii) 'Maintenance of soil quality' (see explanations in the relevant chapters 4.2, 4.3 and 4.4), the precondition for a positive assessment of the sustainability criterion 'Maintenance of the long-term production capacity of the forest' is fulfilled.

Likewise, the values of the two additional indicators 'total timber stock' and 'utilisation/increment ratio' refer to the effectiveness of the Austrian legal framework for ensuring compliance with harvesting criterion v) Art 29 (6) of Directive (EU) 2018/2001 (maintaining or improving the long-term production capacity of the forest).

There exist political instruments and programmes that effectively contribute to the preservation of the Austrian forests and their production capacity through explicitly formulated fields of action, strategic goals and measures, as well as the provision of financial resources in a comprehensive sense. The central challenge here is the adaptation of forest stands to climate change.

The forest enterprises have planning and management tools at their disposal for the sustainable management of their forest properties.

The degree of fulfilment of the sustainability criterion 'Maintenance the long-term production capacity of the forest' can therefore be assessed as 'Requirements fulfilled', and the effectiveness of the applicable legal framework in this regard is classified as category A.



	FOR FORESTS
Sources	Austrian Chamber of Agriculture and Forestry (LKÖ). Sieben auf einen Streich – Die Forstprogramme. https://www.lko.at/forstprogramme+2400++2370894 (last accessed in January 2024)
	Austrian Research Centre for Forests (BFW). Austrian National Forest Inventory. https://waldinventur.at/#/en (last accessed in February 2024)
	Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML). Der Walddialog. https://www.walddialog.at/ (last accessed in January 2024)
	Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML) 2018. Österreichische Waldstrategie 2020+. Wien, 113 Seiten. Download: https://info.bml.gv.at/themen/wald/walddialog/waldstrategie-2020.html (last accessed in January 2024)
	Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML). Forests protect us! Protective Forest Action Programme: New challenges – strong responses. Download: https://www.schutzwald.at/aktionsprogramm.html (last accessed in February 2024)
	Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML) 2020. Indikatorenbericht für nachhaltige Waldbewirtschaftung des Österreichischen Walddialoges. Aktualisierung und Bewertung 2020. Wien, 287 Seiten. Download: https://info.bml.gv.at/themen/wald/walddialog/dokumente/indikatorenbericht-2020.html (last accessed in January 2024)
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Effectiveness	□ Category A	☐ Category B	☐ Category C
(points):	(20 points)	(10 points)	(0 points)

Forest Europe 2020: State of Europe's Forests 2020. 392pp. Download: https://foresteurope.org/state-of-europes-forests/ (last accessed in January 2024)



4.7. Guarantee of carbon sequestration parity

Ratification of the Paris Agreement		⊠ Yes	□ No	
Submission of a relevant NDC			⊠ Yes	□ No
Sources 1. United Nations Treaty Collection:				
	United Nations Climate Change, Nationally Determined Contributions Registry: https://unfccc (last accessed in January 2024)		termined Contributions Registry. https://uniccc.int/NDCREG	
		ommen von Paris, BGBI. III No. 197/2016, last amended by BGBI. III No. 153/2023:		

Brief description of how agriculture, forestry and land use are accounted for in NDC

(last accessed in January 2024)

Austria signed the Paris Agreement on 22 April 2016 and ratified it on 5 October 2016 (BGBI. III Nr. 197/2016). As an EU member state, Austria does not submit its own NDC (Nationally Determined Contribution), but does so as part of the NDC submission of the EU and its member states. Currently version 3 of the NDC of the European Union and its Member States is available (submission date 19 October 2023).

The 2014 EU framework for climate and energy policy up to 2030 provided for a reduction in emissions of at least 40% compared to 1990. In order to meet the reduction requirements of the Paris Agreement (limiting the temperature increase to well below 2°C), this reduction target was extended to at least 55% net (compared to 1990) as part of the 'Green Deal' with Regulation (EU) 2021/1119 (European Climate Law). The EU's goal of being climate-neutral by 2050 is also legally enshrined in the EU Climate Law. In order to achieve these targets, in 2021 the EU Commission presented the 'Fit for 55' legislative package to adapt the existing legal framework, which was adopted by the Council and Parliament in 2023:

- Directive (EU) 2023/959 amending Directive 2003/87/EG and Decision (EU) 2015/1814 (ETS Directive)
- Regulation (EU) 2023/857 amending Regulation (EU) 2018/842 and Regulation (EU) 2018/1999 (Effort Sharing Regulation)
- Regulation (EU) 2023/839 amending Regulation (EU) 2018/841 and Regulation (EU) 2018/1999 (LULUCF Regulation)
- et al.

The updated EU LULUCF policy framework builds on the IPCC guidelines, the TACCC principles and existing greenhouse gas (GHG) accounting rules. Regulation (EU) 2023/839 provides for substantial changes for the period 2026-2030, while the accounting rules for the current period 2021-2025 remain essentially unchanged:

- Member States may, in the period 2021 to 2025, use a provision for natural disturbances on afforested land and managed forest land ('background level') as set out in Art 10 and Annex VI of Regulation (EU) 2018/841, amended by Regulation (EU) 2023/839. From 2026 this provision is no longer applied.
- The Production Approach, as defined in the IPCC Guidelines, is used to account for GHG emissions and removals from harvested wood products (HWP) (see Art 9 and Annex V of Regulation (EU) 2018/841, as amended by Regulation (EU) 2023/839).
- Up to 2025, projected reference levels for managed forest land (forest land remaining forest land) take into consideration
 age-class structure of forest so that changes in management practices are accounted. From 2026 onwards, reference
 levels are no longer applied (see also Art 8 and Annex IV of Regulation (EU) 2018/841 (amended by
 Regulation (EU) 2023/839).
- LULUCF land reporting categories or sectors, including land use change between these categories: a) forest land, b) cropland, c) grassland, d) wetlands, e) settlements, f) other land, g) harvested wood products, h) other, i) atmospheric deposition, j) nitrogen leaching and run-off.
- LULUCF pools: a) living biomass, b) litter, c) deadwood, d) dead organic matter, e) organic carbon in mineral soils, f) organic carbon in organic soils, g) harvested wood products
- LULUCF gases: Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O)



The EU has set itself the target of achieving a 15% higher sink in the LULUCF sector in 2030 than the average value for the years 2016-2018 (target value: -310 million tonnes of CO_2 equivalent). Each country receives a corresponding target for the entire LULUCF sector for 2030, which is made up of the mean value of the LULUCF results for the years 2016-2018 plus a supplement of around 15%.

The surcharge for Austria is -0.879 million tonnes of CO_2 equivalent. This results in a provisional LULUCF target for Austria of -5.65 million tonnes of CO_2 equivalent. The final target level for 2030 will only be calculated when the greenhouse gas inventory is submitted in 2032 on the basis of its LULUCF results for the years 2016-2018.

In addition, there is a linear LULUCF target pathway for the years 2026-2029, which results in a budget that has to be met cumulatively by the actual LULUCF results for the years 2026-2029.

The new LULUCF Regulation also provides for compensation mechanisms (or flexibilities) and an interface to effort sharing (UBA, 2023).

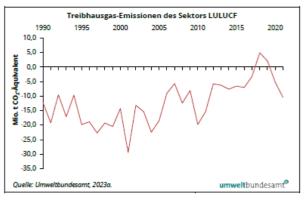
With regard to the accounting for managed forest land pursuant to Article 8(3) of Regulation (EU) 2018/841, Austria submitted its draft National Forestry Accounting Plan at the end of 2018 (including reference level values for the two periods 2021-2025 and 2026-2030), which was subjected to an independent review in 2019. The final plan was submitted to the European Commission at the end of 2019.

The LULUCF Sector in Austria:

The land use sector (LULUCF) represents a significant CO_2 sink in Austria. On average, this net sink amounted to -12.4 million tonnes of CO_2 equivalent per year between 1990 and 2021 and fluctuated massively between 4.9 million tonnes and -29.4 million tonnes of CO_2 equivalent during this period.

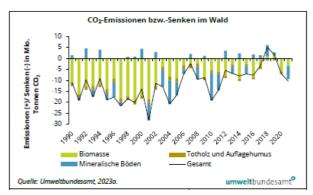


Proportion of areas in the land use categories in 2021. Source: UBA ,2023.

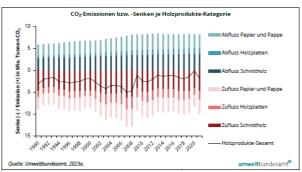


Greenhouse gas sinks from the LULUCF sector 1990-2021. Source: UBA, 2023.

The forest, including harvested wood products, contributes the most to this sink, with the net biomass increase in the forest accounting for the largest share of this sink. A decline in the sink performance of the LULUCF sector can be observed over the entire time series (trend line), primarily due to increased wood utilisation in the forest (partly due to calamities) and a decline in increment. In 2018 and 2019, the forest was a source of greenhouse gases due to increased wood utilisation (partly due to calamity) on the one hand, and lower growth due to dry weather conditions and increased emissions from the soil on the other. The warming of the climate with associated calamities (forest damage caused by storms, pests, etc.) may continue to have a massive impact on sink performance in the future (UBA, 2023).



Annual CO_2 emissions/sinks on forest land per carbon pool 1990-2021. Source: UBA, 2023.



Annual CO_2 emissions/sinks per wood products category 1990-2021. Source: UBA, 2023.



The Austrian National Long-Term Strategy (LTS) and the National Energy and Climate Plan (NECP) as a detailed plan of measures for the transformation are currently being adapted to the new objectives of the European Green Deal and national climate neutrality by 2040 and have to be submitted to the European Commission by June 2024.

Conclusions:

Austria ratified the Paris Agreement on 5 October 2016 and submitted an NDC as part of the NDC submission of the EU and it's Member States (19 October 2023; version 3). The criterion 'Guarantee of carbon sequestration parity' in the country of origin of the forest biomass (Article 29 (7) of Directive (EU) 2018/2001) can therefore be assessed as effectively implemented.

Sources

- Environment Agency Austria (UBA) 2023. Klimaschutzbericht 2023. REP-0871, Wien, 2023, 265 Seiten. Download: https://www.umweltbundesamt.at/studien-reports/publikationsdetail?pub_id=2485&cHash=d40157f547cb06f523410f72beec62f9 (last accessed in January 2024)
- UNFCCC. Update of the NDC of the European Union and its Member States. Download: https://unfccc.int/NDCREG (last accessed in January 2024)

OR ^(*) (*) This option should be selected if no NDC has been submitted. If the answer is yes for both options, these fields can be skipped.					
Identification of applicable laws					
Sources					
Were applicable laws identified?		☐ Yes	☐ No (audit required)		
Description of enforce	Description of enforcement and monitoring				
Sources					
Are enforcement and monitoring ensured for the identified laws?		□ Yes	☐ No (audit required)		
Degree of compliance of the criterion "Guarantee of carbon sequestration parity"					
⊠ Requirem		ents fulfilled	☐ Requirements not fu	ılfilled	
Monitoring and evaluation of the effectiveness of the legal framework on the guarantee of carbon sequestration parity					
Sources					
Effectiveness (points):		□ Category A (20 points)	☐ Category B ☐ Category C (10 points) ☐ (0 points)		



5. Results

	Degree of	f compliance	Number of points	
Criterion	Requirements fulfilled	Requirements not fulfilled	(effectiveness)	
Legality of harvesting operations	\boxtimes		20	
Forest regeneration	\boxtimes		20	
Maintenance of biodiversity	\boxtimes		10	
Maintenance of soil quality	\boxtimes		20	
Regulations for protected areas	\boxtimes		20	
Maintenance of the long-term production capacity of the forest	\boxtimes		20	
Guarantee of carbon sequestration parity	\boxtimes		20	

6. Evaluation of the risk assessment

Risk status:	The sustainability criteria were fulfilled 7 [seven] times. The sustainability criteria were not met 0 [zero] times.		
Risk level: (total points)	130 points of a maximum of 140 points were awarded.		

Summary of the results

In accordance with Implementing Regulation (EU) 2022/2448 laying down operational guidelines for demonstrating compliance with the sustainability criteria for forest biomass set out in Article 29 of Directive (EU) 2018/2001, the demonstration of compliance with the sustainability requirements for forest biomass can be carried out using a risk-based approach in which the risk of unsustainable production of forest biomass is assessed. To this end, economic operators should use, among others, legal assessments and reports from national governmental organisations. Among others, economic operators have to take into account such documents from national governmental organisations regarding the enforcement of the relevant legal and administrative provisions (Article 3 (2) of Implementing Regulation (EU) 2022/2448).

The analyses carried out for the present risk assessment for Austria identified the legislation in force at national and sub-national level that already enshrines the sustainability requirements for the production of forest biomass



in national law in accordance with Article 29 (6) (harvesting criteria) and Article 29 (7) (LULUCF criteria) of Directive (EU) 2018/2001.

The monitoring and enforcement of this legislation is clearly regulated and verifiable. There are also numerous strategies, programmes and measures to support the long-term maintenance of the production capacity of Austrian forests. A key challenge here is their adaptation to climate change.

The risk assessment concludes that the risk of unsustainable production of forest biomass in Austria is low and negligible, as the sustainability criteria pursuant to Article 29 (6) and Article 29 (7) of Directive (EU) 2018/2001 are regulated by law, controlled by the authorities and violations are sanctioned.

The national territory of the Republic of Austria is therefore categorised as a 'low-risk' area with regard to the production of forest biomass.

An assessment of compliance with the sustainability criteria at forest sourcing area level (Article 29 (6) (b) of Directive (EU) 2018/2001) for producers of forest biomass whose forest areas are located in the territory of the Republic of Austria is therefore not required.



Annex 1: Documentation of the stakeholder dialogue

Author of the risk assessment

Dietmar JÄGER, Austrian Research Centre for Forests (BFW)

Date of the stakeholder dialogue

14 May 2024 to 05 June 2024

Participating institutions

Authorities:

- Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie (BMK) / Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology
- Bundesministerium für Land- und Forstwirtschaft, Regionen und Wasserwirtschaft (BML) / Federal Ministry of Agriculture, Forestry, Regions and Water Management
- AgrarMarkt Austria (AMA)
- Umweltbundesamt (UBA) / Environment Agency Austria
- Bundesamt für Wald / Federal Forest Office
- Landesforstdirektorenkonferenz (B, K, NÖ, OÖ, S, ST, T, V, W) / Conference of the directors of the provincial forest authorities

Special interest groups (chambers, associations, environmental NGOs):

- Landwirtschaftskammer Österreich (LKÖ) Abteilung Forst- und Holzwirtschaft /
 Austrian Chamber of Agriculture and Forestry –Forestry and Timber Industry Department
- Landwirtschaftskammer Österreich (LKÖ) Referat Energie / Austrian Chamber of Agriculture and Forestry – Energy Unit
- Wirtschaftskammer Österreich (WKÖ) Bundessparte Industrie / Austrian Economic Chambers Industry Section
- Wirtschaftskammer Österreich (WKÖ) FV Holzindustrie / Austrian Economic Chambers – Association of the Austrian Wood Industry
- Wirtschaftskammer Österreich (WKÖ) FV Papierindustrie (Austropapier) / Austrian Economic Chambers – Association of the Austrian Paper Industry
- Wirtschaftskammer Österreich (WKÖ) Baustoff-, Eisen- und Holzhandel, Bundesgremium / Austrian Economic Chambers – Association of Construction Materials, Hardware and Timbertrade
- Österreichischer Biomasse-Verband (ÖBMV) / Austrian Biomass Association
- IG Holzkraft
- Erneuerbare Energie Österreich (EEÖ)
- Kompost & Biogas Verband
- Oesterreichs Energie
- Umweltdachverband
- Forst Holz Papier (FHP) / Cooperation Platform Forest | Wood | Paper
- Vereinigung Lohnunternehmer Österreich (VLÖ)
- Österreichischer Forstunternehmerverband (ÖFUV)
- Maschinenring Österreich (MR)
- Waldverband Österreich (WV) / Austrian Forest Cooperatives
- Land&Forst Betriebe Österreich (LFBÖ) / Austrian Land and Forest Owners Association
- Österreichischer Forstverein (ÖFV)

Economic operators

- Österreichische Bundesforste AG (ÖBf AG) / Austrian Federal Forests
- Papierholz Austria GmbH
- FVN AG
- Energie AG Oberösterreich Erzeugung GmbH
- KELAG-Kärntner Elektrizitäts-Aktiengesellschaft
- IIN7 AG
- RWA Raiffeisen Ware Austria Aktiengesellschaft
- FRITZ EGGER GmbH & Co. OG



Result of the stakeholder dialogue

The draft of the present risk assessment was sent by email on 14 May 2024 to the above-mentioned institutions involved (6 authorities/conference of authorities, 19 legal and private interest groups, i.e. chambers, associations, environmental NGOs and 8 economic operators; a total of 84 contact addresses) and comments and statements were requested by 5 June 2024.

By the end of the 3-week participation period, 2 written responses (Umweltdachverband, ÖBf AG) had been sent to the author of the risk assessment. The submitted draft assessment was generally attested as 'comprehensive and complete' and that the assessment was carried out 'with the necessary care'. The statement was also made that the risk assessment proves that the national legal situation promotes sustainable forest management and accordingly leads to a positive risk assessment.

The feedback was incorporated into the risk assessment, with the consideration/non-consideration of the comments, suggestions for additions and corrections being justified on the basis of the 'Stakeholder Dialogue Matrix' of the SURE certification system. Compared to the draft of the risk assessment sent out for comments, there were no overall changes with regard to the degree of fulfilment of the requirements of the individual criteria, nor changes with regard to the risk status and risk level.



Selbsterklärung zur Nachhaltigkeit von forstwirtschaftlicher Biomasse

Der/die Verkäufer/Verkäuferin ("Erzeuger" gemäß § 2 Z 12 de "Nachhaltige forstwirtschaftliche Biomasse Verordnung – NFBioV" (Umsetzung de Richtlinie (EU) 2018/2001) erklärt/erklären entsprechend dieser Verordnung, dass da Holz in Österreich geemtet wurde und sein/ihr Einverständnis zu allfälligen Kontrolle durch eine Zertifizierungsstelle des anerkannte Zertifizierungssystems
Hinweis zur Berechnung der Treibhausgaseinsparung der forstwirtschaftliche Biomasse: Nach § 4 NFBioV sind die Kriterien bzw. Unterkriterien gemäß Art. 31 Abs. 1 i Verbindung mit Anhang VI der Richtlinie (EU) 2018/2001 maßgeblich.
Verkäufer
Vor- und Nachname/Firmenname:
Straße:
PLZ, Ort:
Käufer
Vor- und Nachname/Firmenname:
Straße:
PLZ, Ort:
Datum: Unterschrift: