

**Interreg
Danube Region**



Co-funded by
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Regional Action Plan

Germany and Austria

Activity 1.3

Informations about Interreg Danube

Interreg Danube is a European Territorial Cooperation (ETC) program that aims to strengthen transnational cooperation in the Danube Region. It is co-financed by the European Regional Development Fund (ERDF), the Instrument for Pre-Accession Assistance (IPA), and the Neighbourhood Instrument (NDICI). Program Area: Covers 14 countries in the Danube Region, including EU and non-EU countries. Eligible Countries: Austria, Bulgaria, Croatia, Czech Republic, Germany (Baden-Württemberg and Bavaria), Hungary, Romania, Slovakia, Slovenia as well as Bosnia and Herzegovina, Moldova, Montenegro, Serbia, Ukraine. Objectives & Priorities (2021-2027 Program): A Smarter Danube Region: Support for innovation, digitization, and competitiveness. A Greener, Low-Carbon Danube Region: Environmental sustainability, renewable energy, climate adaptation. A More Connected Danube Region: Improving transport networks and digital connectivity. A More Social Danube Region: Education, social inclusion, healthcare. A Better Governance for Cooperation: Strengthening institutions and transnational collaboration.

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DANUBE WOOD(s)ROUTE

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INTRODUCTION

1 / Introduction

1.0 / General remarks

The situation in Germany and Austria as well as the function and position of Holz von Hier as project partner differs essentially from the situation in the other countries and the position of the project partners. That has influence on the development of the regional action plan and specific measures derived from that.

Holz von Hier is responsible for entire Germany respectively the German area covered by the program (Bavaria and Baden-Württemberg). In contrary in other participating countries the project partners are responsible for defined regions within the country.

Consequently the action plan for Germany and Austria has rather the character of a national action plan and do not directly refer to specific regions or potential sites or itineraries of the prospective cultural route. The strategic actions and reasonable measures described in the action plan comprises actions and measures commonly agreed among the project partners in the partner meeting in Sarajevo. However they are expanded by additional ones derived from the SWOT analysis conducted for Germany and Austria.

The strategic actions and reasonable measures are not developed in single workshops of limited duration but are the result of a continuous exchange with relevant stakeholders at national level, collecting and representing stakeholders opinions and feedback. This was provided by several formats and entities:

a) the stakeholder panel of the organisation Holz von Hier as decision making body. The stakeholder panel comprises various stakeholders at national level, like all federal associations of municipalities, the federal chamber of architects, environmental organisations, the forest sector, the timber industry sector and others.

b) the expert panel of Holz von Hier. In this panel scientific experts from different fields are combined to advise Holz von Hier in several fields and questions relevant to the project objective like carbon cycles, forest based biodiversity, architecture, governance and others.

c) the exchange and communication with a broad partner network of institutions and organisations of Holz von Hier, which are listed in Appendix 1.

In contrary to the other project partners Holz von Hier comprises stakeholders, relevant to the project objectives intrinsically.

1.1 / EU Regulations

The common strategy and the corresponding RAP actions should and must be implemented in accordance with the EU guidelines in the respective subject areas.

(1) EU regulations for Tourism

There are legal regulations for tourism in the EU but the EU in this field mainly supports and complements the policies of member states. The legal framework is based on various EU directives and regulations that indirectly affect tourism. Article 195 of the Treaty on the Functioning of the European Union (TFEU) assigns the EU the task of promoting the competitiveness of tourism and supporting cooperation between member states. However, the primary responsibility for regulating and promoting tourism lies within the member states. Key EU legal provisions affecting tourism are (1) consumer protection and travel law, (2) environmental and sustainability regulations and (3) safety and health in tourism.

Package Travel Directive (EU) 2015/2302: protects consumers booking package holidays and linked travel arrangements. It requires travel organizers to provide information, refunds, and insolvency protection. Air Passenger Rights Regulation (EC) 261/2004. It grants rights to air passengers in cases of delays, cancellations, and overbooking. Passenger rights for rail, bus, and ship (various regulations) rules on compensation, accessibility, and passenger rights.

EU taxonomy Regulation (2020/852) promotes sustainable investments, including in the tourism sector. EU Energy Efficiency Directives (e.g., 2012/27/EU) requires hotels and tourism facilities to improve energy efficiency. Natura 2000 & Birds Directive protects designated areas, regulating tourism activities.

EU Health Guidelines and COVID-19 temporary measures ensure the safe resumption of tourism. Food Hygiene Regulation (EC) 853/2004 applies to restaurants and hotels.

(2) EU regulations for Forests & Biodiversity

The EU Forest Strategy is one of the flagship initiatives of the Green Deal and incorporates the multiple functions of forests. It is designed to help achieve the EU's target of reducing greenhouse gas emissions by at least 55% by 2030, becoming climate neutral by 2050 and implementing the EU's commitment to increase the reduction of emissions by natural sinks.

The overarching goal of the EU Biodiversity Strategy is to halt the loss of biodiversity by enhancing protection and restoring nature. A key element is creation of protected areas covering at least 30% of terrestrial and marine areas and stricter protection of European forests. The biodiversity strategy contains a large number of points, most important are:

- EU wants to establish a coherent network of protected areas. A special focus is on identifying, recording, monitoring and strictly protecting all remaining primary forests in the EU and to contribute to protection of primary forests worldwide.
- EU wants to increase the forest cover in the EU and improve health and resilience of its forests.
- EU wants to restore ecosystems and biodiversity in general. By 2030, significant areas of damaged and carbon-rich ecosystems should be restored.
- The use of biomass for energy generation is to be aligned with the Renewable Energy Directive.
- "Business for Biodiversity" – corporate commitment to biodiversity is supported (remark HVH is already part).
- The EU taxonomy for sustainable finance is designed to make investments more environmentally friendly and sustainable (HVH has strong ESG factors for supporting the taxonomy).
- Measuring and accounting for the value of nature. The EU supports the approach of measuring and accounting for the value of nature, including ecological footprints of products, application of life cycle thinking and natural capital accounting (HVH supports this with the HVH/LCT-Environmental footprint, the European timber benchmarks and other tools).

(3) EU regulations for Forestry & Timber Industry

European Union Timber Regulation (EUTR) and FLEGT against illegal logging

The EUTR (European Union Timber Regulation) was adopted in 2010 and aims to prevent the trade in illegal timber and timber products in the EU. It applies the due diligence principle to ensure that only legal timber and timber products enter the EU market. The European Timber Regulation will now be replaced by the new EUDR at the end of 2025.

FLEGT stands for Forest Law Enforcement, Governance and Trade. The European Union's initiative aims to combat the illegal timber trade and promote sustainable forest management worldwide. In the European FLEGT scheme, so-called VPAs (Voluntary Partnership Agreements) have been signed with the countries that import timber into Europe. In essence, these are initially nothing more than declarations of intent by the countries to comply with EU requirements. However, VPA "agreements" are not legally binding contracts that would, for example, result in contractual penalties or other consequences. However, this does not mean that only countries with VPA "agreements" are allowed to import timber into the European Union. The intention of those countries that signed a VPA agreement was, of course, to be able to participate preferentially in trade with Europe. The actual control, including all the costs necessary for this, takes place in the EU itself, in the individual EU countries. These must implement the so-called Due Diligence Regulation.

VPAs have also been concluded with countries where the proportion of illegally harvested timber in products is known to be comparatively high (e.g. Congo, Vietnam, Ghana, and to some extent also Indonesia). On the other hand, there are countries with which no VPA agreements could be reached, but where massive deforestation is still taking place, such as Brazil. And there are countries with which there are no VPAs, but where no deforestation is taking place (e.g. Uruguay). FLEGT and its VPAs do not and have not prevented timber from primary forests or deforestation from entering the EU. They are only supposed to regulate that no illegally harvested timber enters Europe. 'Illegally harvested' in the VPA usually only means that no timber should come to Europe

for which no felling concessions have been granted by the state. However, in many countries, the state grants felling concessions in primeval forests, such as Malaysia, Indonesia, Congo, Brazil, Russia, etc. VPAs are primarily intended to facilitate access to the European market for countries that have VPA agreements with Europe. Access here is associated with significantly fewer requirements. However, VPA documents were and are anything but "all-OK documents"; without controls, they may sometimes even be the opposite.

The WCMC (World Conservation Monitoring Council) of the UNEP publishes EU Timber Regulation Checks every six months. Although these are only based on questionnaires, i.e. ultimately on self-declarations by the respective countries, the few results so far are nevertheless very revealing. According to the report "Overview of Competent Authority EU Timber Regulation checks, July - December 2018 by WCMC, a total of 805 importers from all EU states were checked by the more than 127,500 importers into the EU (!) during this reporting period. That is < 0.6% of all importers into the European Union. Of these only 805 importers that were checked, the majority did NOT have an adequate due diligence system. According to the WCMC report, in Belgium, Estonia, Finland, Latvia, Luxembourg, Sweden and England, 50-100% of importers did NOT have an adequate due diligence system. Many countries such as Bulgaria, Croatia, Greece, Hungary, Iceland, Liechtenstein, Lithuania, Portugal, Romania and Slovakia either did not report at all or examined importers but did not report the results. Germany, Italy and Romania took the highest sample sizes in Europe, but only Germany and Italy reported the results. Even in Germany, 47% of the importers examined had inadequate due diligence systems. This could mean that every second m3 of timber from imports from outside the EU could originate from unsafe sources.

The conclusion of the WCMC reports by UNEP was that due diligence has so far not been able to guarantee that no illegally harvested timber enters Europe.

EUDR: the EU Deforestation Regulation against illegal and deforestation-free supply chains

The EU Deforestation Regulation (EUDR) replaces the European Timber Regulation (EUTR). The EUTR came into force in 2013 and aimed to exclude illegally logged timber from the EU market. It required companies

to exercise due diligence to prove the legal origin of timber products. The EUDR, which is set to come into force at the end of 2025, goes further than the EUTR. It applies not only to timber but also to other commodities such as soy, palm oil, coffee, cocoa, rubber and beef. Companies must prove that their products have not contributed to deforestation and have not only been legally harvested. There are strict due diligence requirements for traders and importers, who must prove that their goods are deforestation-free and come from areas that have not been deforested after December 31, 2020.

The due diligence principle is also a central component of the EUDR, and companies must ensure that the products they import are not associated with illegal logging or land-use changes that lead to deforestation. This means that companies must carry out appropriate due diligence. This includes:

- Documentation and traceability: Companies must collect and store detailed information about the origin of their products to prove compliance with the regulation.
- Risk assessment: A risk assessment must be carried out to ensure that products do not come from regions where deforestation is taking place.
- Certificates and proof: Proof must be provided that the products are not associated with illegal deforestation or land-use changes.

The consequences for processors in the supply chain are therefore significantly more comprehensive and essential under the EUDR than under the EUTR. Due to the requirement to trace supply chains back to the geodata of the origin of each relevant raw material, companies are confronted with enormous amounts of data and complex procedures for carrying out due diligence. Detailed data specified by the EUDR must be available on the products and their supply chains, such as product details: type, quantity and description of the goods. Precise geographical coordinates of the cultivation or production areas must be available. Comprehensive documentation or corresponding certificates must confirm the accuracy of the information. Comprehensive information must be collected to assess the risk that the products are not associated with deforestation or forest degradation. If a risk is identified, appropriate risk-minimization measures must be taken at the sources and in the supply chains, for example, additional checks or audits at

suppliers, etc.

Possible consequences of non-compliance for the companies are:

- Heavy fines. Penalties must be at least 4% of the company's annual EU turnover. The exact amount varies from member state to member state, as they regulate enforcement.
- Confiscation. Non-compliant products can be withdrawn from the market or confiscated.
- Exclusion from the EU market. Companies can be temporarily or permanently excluded from trading in the EU.
- Reputational damage. Violations can be made public, which can significantly damage a company's reputation.
- Corrective action. Authorities can oblige companies to take action to comply with the regulations.

Differences between EUTR and EUDR

The following table shows an overview of important differences between EUTR and EUDR (Table 1).

Criterion	EUTR (Timber Trade Regulation, 2013–2024)	EUDR (Deforestation Regulation, from 2023)
Scope	only timber and timber products	timber, soy, palm oil, coffee, cocoa, beef, rubber
Objective	Prevention of trade in illegally harvested timber	Prevention of trade in deforestation-related products
Requirements	No requirements	Products must be deforestation-free
cut-off date regulation	non	No deforestation after December 31, 2020
Due diligence	Yes, but limited to legality	Stricter due diligence with geographical traceability
Geographical traceability	not required	required (exact location information for production)

Penalties for violations	<div> <div> fines and market ban </div> <div> High fines (at least 4% of EU turnover), market ban, confiscation </div> </div>
Period of validity	Originally, the EUDR was to apply from December 30, 2024. However, in October 2024, the Council of the European Union proposed postponing the start date by 12 months to December 30, 2025, to give companies and authorities more time to prepare.

Table 1) Differences between EUTR and EUDR.

1.2 / Best Practice

HVH/LCT controled supply chains for real climate and environment friendly products.

Timber that has been certified with HOLZ VON HIER (HVH) respective Low Carbon Timber (LCT) as a best practies exemple for climate and environment friendly supply chains have many advantages.

- Its supply chains cradle-to-gate and gate-to-customer-building are closed within climate- and environmentally friendly short distances, within regions in the European Union.
- The EUDR requirements are met.
- The roundwood entering the supply chain comes from verifiably sustainably managed forests with forest management certificates according to FM-FSC or FM-PEFC or comparable within the European Union.
- Wood from primary forests and endangered species according to CITES and IUCN are excluded.
- HVH/LCT certified products also have a European Timber certificate.

In order to simplify the EUDR reporting requirement for these supply chains, HVH/LCT has introduced the additional claim “European Timber” in the HVH/LCT supply chain control system as part of its adaptation to the requirements of the European EUDR. Timber under this claim proves the following aspects

- Its supply chains cradle-to-gate and gate-to-customer-building have been closed within the European Union.

- The requirements of the EUDR have been met.
- The roundwood entering the supply chain comes from verifiably sustainably managed forests within the European Union and a risk analysis of the origins is available.
- Timber from primary forests and endangered wood species according to CITES and IUCN are excluded.
- However products from these supply chains are not automatically certified as HVV/LCT if they cannot simultaneously demonstrate the short distances within the supply chain in accordance with the HVH/LCT requirements.

2 / ANALYSIS

2 / Analysis

In Activity 1.2, an Status Quo and SWOT analysis was carried out in the fields of "Tourism", "Forests & Biodiversity" and "Forestry & Timber Industry". The core results are summarized below. For more informations see report "StatusQuo and SWOT DE/AT (English)".

2.1 / Tourism

(1) Tourism worldwide

The global tourism industry has fully recovered from the COVID-19 pandemic and recorded record growth. With 1.4 billion international arrivals in 2024, global tourism reached the level of 2019 and even exceeded it in some regions (McKinsey & Company+5H). Digitalization is already having a major impact on the industry today, but 75% of total revenue in the travel & tourism market is expected to be generated online by 2029 (Statista).

The growing environmental awareness of travelers is reflected in the sharp rise in demand for sustainable accommodation and ecotourism offers. The market volume in the ecotourism sector is forecast to double to 334 billion US dollars by 2027 (Statista).

(2) Tourism Danube countries

The tourism industry along the Danube in the countries bordering the Danube has developed dynamically in recent years and offers a wide range of experiences for travelers. The Greater Region is characterized by a rich history, diverse cultures and impressive landscapes that attract millions of tourists every year.

River cruises on the Danube have become an important economic factor. Thanks to the Schengen enlargement, cruise ships can now sail from Prague to Budapest via the Vltava River without border controls, making the travel experience easier for international guests. The Danube region is also a paradise for cyclists and hikers. The Danube Cycle Path stretches across several countries and offers varied routes through picturesque landscapes. The region is also known for its excellent wine culture. The "Road of Emperors and Kings" connects these historic places in the Greater Region. The Greater Region is also increasingly focusing on sustainable tourism.

(3) Tourism DE/AT: SWOT and conclusions

Tourism is an important and well developed economic sector and 154.29 million overnight stays in Austria, 102.7 million in Bavaria and 58.9 million Baden-Württemberg in 2024 reflect this. More in-

formations on this, the selected location and about strengths, weaknesses, chances and risks of the tourism sector in Germany and Austria are shown in the report "StatusQuo and SWOT DE/AT (English)".

The strengths like diverse landscapes, cultural highlights and world-famous events, high-quality tourism infrastructure, high quality of tourism services and high safety standards and attractive all year round and a wide range of offers for different target groups are very well addressed and demonstrated by the tourism industry in DE and AT. Also the weaknesses are known, like high prices in popular tourist regions, seasonality and weather dependency, congestion and overtourism in some regions, lack of skilled workers in the hotel and restaurant industry, weak digitization and others. The risks are correlated with the weaknesses, but neither the identified weaknesses nor the risks can be changed or influenced by the project or the cultural route.

The project cannot support tourism in Germany and Austria in general. **The opportunities that the project can influence, at least indirectly, clearly lies in ecotourism, because ecotourists are looking for intact nature, beautiful forests and high biodiversity.**

Eco tourism is also seen by tourism associations in Germany and Austria as one of the most important areas of tourism in the future. "Tourism has a future only if it is sustainable. The travel industry takes the issue of climate protection and the responsibility that comes with it very seriously. This is a challenge for everyone – consumers and the travel industry alike." (Harald Zeiss, DRV, Chairman of the Sustainability Committee). 'More than 70 percent of Germans already pay attention to sustainable aspects when going on vacation or would like to do so.' (DRV).

2.2 / Forests and Biodiversity

For more informations see reports "StatusQuo and SWOT DE/AT (English)" and "Forests, Biodiversity and Timber Industry in the Danube region (English)".

(1) Forests & Biodiversity in a global perspective

These considerations are relevant to the project objectives as global timber markets are one of the major general drivers for exploitation of natural resources and loss of cultural traditions and heritages in wood usage linked to or based upon regional supply chains.

Significance of forests

When considering forests, we must make a fundamental distinction between (1) primary forests (primeval forests) and unmanaged valuable secondary forests, (2) managed forests, especially the "old sustainable forests" of the European Union, and (3) timber plantations. Forests are not only wood producers, but fulfill numerous other fundamentally important system functions and services for humans worldwide. The world's forests and their underlying soils are one of the most important CO2 sinks we have.

Hot Spots of deforestation

The last large contiguous tropical primary forests on earth in Central and South America, in Africa, especially in the Congo Basin, and in the large Asian region in particular are still under enormous pressure. In the European Union, on the other hand, forest areas have actually increased in recent decades. Hot spots of deforestation are located in the tropical primary forests of Asia, Africa and Latin America, as well as in some regions of the boreal primary forests (e.g. Siberia). More than 380 million hectares of forest have been lost worldwide over the last 20 years, mainly in the tropics (e.g. FAO 2020, WWF 2020).

Forest certification in the tropics is important, but does not solve the problem of primary forest loss on its own.

It is important to look for sustainable forestry labels (PEFC, FSC) when importing into the EU. However,

only 3% of the forests in Asia, 2% in Latin America and 0.5% in Africa are certified according to forest labels such as PEFC or FSC (I-Net pages PEFC and FSC). Since the destruction of primary forests is progressing rapidly in these regions in particular, certification of forestry alone cannot stop the destruction of tropical primary forests. Added to this is the problem of control. Asian countries such as China and Indonesia are among the largest tropical timber transshipment centers worldwide. According to many market experts, it is hardly possible, if at all, to control the origin of the timber, crossing these markets (see also the report "Green Carbon - Black Trade", UNEP and Interpol, 2012).

One problem with regard to forest certification is that, while it is likely that the forest as such and the biomass are preserved, any commercial use, even if certified, ultimately leads to a loss of biodiversity compared to a largely untouched primeval forest. However, since the criteria for sustainable forestry are also different under the certification systems in each country, the "sustainable management" of these forests in some areas can also lead to the removal of up to 100% of the biomass (clear cutting) and to the destruction of the organic soil layer (e.g. WWF and the University of Greifswald 2022).

Primary forests are biodiversity hot spots.

Only about 30% of the world's forest area is still primary forest. Protecting these forests is the most important contribution to protect international biodiversity. These forests are so important, that it would make more sense to pay countries with primary forests to preserve them, instead of having to bear the economic costs of climate impacts and biodiversity loss.

Tropical primary forests, with their wide variety of tree species per unit area, are among the most species-rich habitats on Earth. Around 50-70% of all species in the world live here (UNEP, 2002).

They are biodiversity hot spots. However, tropical forests are also among the most endangered habitats. Protecting them would make the greatest contribution to protecting global biodiversity. In its Red List, the International Union for Conservation of Nature (IUCN) concludes that more than a third of the 47,677 species examined worldwide are threatened with

extinction. It should be noted that so far, only about 3% of the world's species have been assessed in this regard at all. More than 70 species disappear from this planet every day. Another fundamental aspect of the loss of biological diversity, which is still going unnoticed, is the loss of genetic diversity within species. This is an essential prerequisite for the long-term survival of the species concerned and other aspects depend on it (e.g. new medicines).

In primary forests, biodiversity can only be maintained at its current level through non-management. Its preservation would therefore be the greatest contribution to biodiversity worldwide. Many scientific studies have concluded that biodiversity-friendly timber extraction in primary forests does not exist. Even single-stem extraction, which is often regarded as a gentle use of tropical primary forests, ultimately leads to severe species loss in these habitats (Asner et al, 2006). For example, for each tree harvested in the Amazon region, 27 other trees are damaged, 40 meters of new road are built, and a 600 m² gap is torn in the canopy (WWF, 2008).

The problem of the unregulated global spread of plantations in tropical forest regions.

However, a distinction must also be made between plantations. In Asia, South America and Africa, an extremely large number of plantations have been established in primary forest regions. To make way for these, primary forests were cleared, and this has increased since the introduction of the European CDM mechanism (Schulze et al.). The extent of the opaque material flows has increased enormously (see UNEP and Interpol report Green Carbon – Black Trade, WCMC reports, WWF reports, Greenpeace reports).

In addition, the timber industry generally rates plantation-grown tropical timber of lower quality (short growth cycles) as inferior to timber from primary forests. This also applies to young plantations with sustainability labels. For high-quality products, wood from primary forests is still used. So, in the end, plantations in the tropics cannot prevent the pressure on tropical primary forests. In connection with the illegal timber trade, another problem arises: in the last decade, the area of timber plantations in Indonesia has increased by about 80%. During the same period, however, the proportion of plantation roundwood on the market rose by 600%! Experts assume that a large proportion of illegally logged timber is being

smuggled into the market as “plantation wood” (Interpol environmental crime programme, 2012).

Many countries are still clearing primary forests to create plantations.

Particularly relevant here are: Angola, Argentina, Australia, Belize, Benin, Bolivia, Botswana, Brazil, Burkina Faso, Chad, China, Democratic Republic of Congo, Democratic People's Republic of Korea, Ecuador, French Guyana, Ghana, Guatemala, Guinea, Guinea-Bissau, Honduras, India, Indonesia, Cambodia, Cameroon, Kenya, Colombia, Laos, Liberia, Madagascar, Malawi, Malaysia, Mali, Mexico, Mongolia, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Nigeria, Panama, Papua New Guinea, Paraguay, Peru, Rep. Congo, Rep. Korea, Russian Federation, Senegal, Sierra Leone, Zimbabwe, Somalia, Sudan, Surinam, Tanzania, Thailand, Uganda, Venezuela, Zambia, Central African Republic.

In the European Union, monoculture plantations are rare and mostly limited to eucalyptus plantations (Portugal, Spain, Italy) or short-rotation coppice for fuelwood.

However, even these EU plantations cannot be compared with global plantations in tropical forest areas in terms of the area covered and the use of fertilizers and pesticides, as the latter are used in considerable quantities in some cases. Nevertheless, even European plantations such as eucalyptus plantations are not very species-rich and eucalyptus in particular consumes a lot of groundwater, which is why the plantations affect the water balance.

The consequences of global biodiversity loss range from massive humanitarian consequences and high economic costs to ecosystem loss.

Experts estimate that the value of goods and services provided by ecosystems amounts to €26,000,000 billion per year (Memo 04/27 EU, 2004). The loss of terrestrial biodiversity alone cost \$500 billion (between 2000 and 2008 (TEEB, 2008)). The economic loss due to the decline in bee populations alone is estimated at €15 billion per year in the EU and \$153 billion worldwide. The costs of biodiversity loss can hardly ever be recovered. Investing in the preservation of diversity is significantly cheaper and is the only sustainable

way forward. Scientific studies (Balmford et al., 2002) conclude that €45 billion per year would sustainably secure ecosystem services worldwide that are worth €5 trillion per year.

(2) Forests & Biodiversity in Germany and Austria

Germany and Romania have the largest forest areas in the Danube Region, followed by Austria and Bulgaria. Approximately 32.8% of land area in Germany and 46.9% in Austria is covered by forest.

Private forest ownership dominates in Germany and Austria. In Germany, 48% of forests are privately owned, while in Austria it is 81%. In Germany 15.2% are virgin forests, in Austria 19% (Table 2).

Germany and Austria have old-growth sustainably managed forests. In the these “old-growth sustainable forests” the carbon storage is comparable high. In terms of biodiversity and ecosystem diversity, such managed “old-growth sustainable forests” cannot be compared with sustainably managed plantations in the EU and worldwide. The biodiversity in managed forests can only be maintained if the tree species diversity and their woods find lucrative sales, because in the managed forests, mainly what can be marketed is grown again. Share of naturally regenerating forest areas predominates in Slovenia, Serbia, Romania, Montenegro and Croatia. In Hungary and the Czech Republic, planted forests predominate.

	DE	AT
Forest area total [Mio. ha]	11,419	3,869
Private Forest [Mio. ha]	5,477	3,128
State Forest [Mio. ha]	5,932	0,732
planted forests [Mio. ha]	5,295	1,692
natur. regener. forests [Mio. ha]	6,124	2,063
primary forests [Mio. ha]	0,0	0,114
Growing stock total [Mio. m3]	3.663	1.155
coniferous [Mio. m3]	2.242	927
non-coniferous [Mio. m3]	1.421	228
Growing stock [m3/ha]	321	299
Annual increment [m3/ha*a]	11,2	7,1
coniferous [m3/ha*a]	7,4	5,7
non-coniferous [m3/ha*a]	3,8	1,4
Forest carbon stock [Mio. t C]	2.180	398

above ground biomass [Mio. t C]	1.027	312
below ground biomass [Mio. t C]	162	79
dead wood and litter [Mio. t C]	226	7
soil [Mio. t C]	765	n.sp.

Table 2) Selected forest data for DE, AT (FRA, 2015).

There are significant OPPORTUNITIES for the Danube region in terms of forests by promoting sustainable forestry, natural forest management methods, and mixed forests, as well as protecting primary forests, valuable secondary forests, and monitoring compliance with regulations for the protection of nature parks, nature reserves, biosphere reserves, Natura 2000 sites, and others.

The EU Biodiversity Strategy target for protected terrestrial areas at EU level by 2030 is 30% overall. According to the European BISE database, this puts Germany above and Austria at this target (Table 3).

	DE	AT
Percentage of land covered by protected areas [%]	37,4	29,2
Species EU protected [number]	471	452
Habitats EU protected [number]	93	71
Terrestrial land area in total [km2]	358.000	84.000
Protectetd areas on land [km2]	133.708	24.510
Natura 2000 [number]	5.200	353

Table 3) Basic biodiversity data DE, AT analysed with BISE data.

In the countries of the Dabube region, various species are critically endangered, endangered and vulnerable at the country level, most of them in Austria, Croatia, Germany and Slovenia. Overall, however, far fewer species are endangered in the entire Danube region than in major timber-exporting countries such as Brazil, China, India, Indonesia or the USA. In Brazil, China, India, Indonesia, USA logging of primary forests and valuable secondary forests is still taking place. In comparison with the major global timber-exporting countries such as Brazil, China, India, Indonesia and the United States, far fewer species are endangered in all Danube countries due to logging.

In Germany 304 species und in Austria 268 species are endangered (critically endangered, endangered and vulnerable). From these in forests 129 species in Germany and 107 species in Austria are endangered.

The majority are animals (Table 4).

Threats [number]	DE	AT	DE	AT
where	total		in forests	
Sum (CE, E, V)	304	268	129	107
"Critically endang." (CE)	44	38	16	5
"Endangered" (E)	103	101	56	47
"Vulnerable" (V)	157	129	57	55
"Fungi" (CE/E/V)	58	54	34	35
"Plantae" (CE/E/V)	56	40	41	20
"Animalia" (CE/E/V)	190	174	54	52

Table 4) Number of threatend species in DE, AT analysed with IUCN data.

Risk of biodiversity loss by seletcted threats, that are influenceable by the Danube route, are shown in the following table (Table 5).

Threats [number of species] Influenceable by the project	DE	AT
Tourism & recreation areas	42	46
Recreation activities	37	41
Roads & railroads	36	32
Logging & wood harvesting	71	67
Wood & pulp plantations	32	31
Timber Productcs Production -total	2	2
Renewable energy	18	19

Table 5) Number of threatend species in DE, AT by different the-rats, analysed with IUCN data.

2.3 / Timber Industry

For more informations see reports "StatusQuo and SWOT DE/AT (English)" and "Forests, Biodiversity and Timber Industry in the Danube region (English)".

(1) Worlds Timber Industry

Timber Industry today operates in global supply chains, like in other industries. But hardly any other industry in the European Union could potentially shorten its supply chains as much as the timber industry with its wood processing. This would provide a major contribution to climate protection and the protection of global biodiversity and would mean increased value creation within the EU. It also supports the initiation of regional supply chains to strengthen identification.

(2) Timber Industry in the Danube region and especially Germany and Austria

Germany and Austria are big producers of roundwood used for saw/veneer logs und for energy use within the Danube countries (Table 6). Production data of Germany and Austria for roundwood used for Industrial use like panels, papers and others can not be extracted bei FAO data alone, but other data show that these are high amonts (Table 6).

Production	DE	DE	AT	AT
Roundwood for [Mio. m3]	Saw / Veneer Logs	Energy Use	Saw / Veneer Logs	Energy Use
coniferous	42,625	11,089	10,382	3,248
non-conifer.	3,036	15,265	0,330	2,176

Table 6) Production (PRO) of Roundwood for Saw/Veneer Logs and Energy Use in DE, AT, calculation based on FAO data (last 2022).

Danube countries like Germany are under the worlds "Big 25" in roundwood exports/imports.

There are strong and innovative wood crafters and timber industry in the Danube region. The Danube Region is potentially self-sufficient in many timber product groups.

The countries of the Danube Region, produce, consume, export and import significantly higher amounts in many product groups than necessary and large "timber countries" of the world such as Brazil, China, Canada or the USA. Therefore a lot of regional added value gets lost. And this despite the fact, that the Danube Region is a strong European region in the field of wood crafters and timber industry.

Data for production (PRO), calculated consumption (CON), exports (EXP) and imports (IMP) in Germany and Austria are shown in table 7.

Germany and Austria would be self-sufficient in most product groups used in construction, interior design, furniture manufacturing, and energy supply, as the demand could potentially be covered by joint production in both countries if supply chains and material flows were implemented in short supply chains (Table 7). At the same time, however, both countries also have considerable exports and imports in these product groups (report "Status Quo and SWOT analyses Germany and Austria").

[Mio. m3]	Production	Consumption
	DE + AT	DE + AT
Sawnwood con..	34,42 (24,31+10,11)	23,46 (17,30 + 6,16)
Sawnwood noncon.	1,27 (1,03 + 0,24)	1,04 (0,73 + 0,31)
Hardboard	0,06 (0,0 + 0,06)	0,21 (0,18 + 0,03)
MDF/HDF	4,21 (3,79 + 0,42)	2,21 (1,87 + 0,34)
OSB	1,17	1,52 (1,32 + 0,21)
particle board	7,81 (5,53 + 2,28)	6,50 (5,57 + 0,92)
plywood	0,22 (0,09 + 0,13)	1,09 (1,08 + 0,02)
veneer	1,21 (0,11 + 0,008)	0,22 (0,16 + 0,07)
fuel total	27,76 (22,34+ 5,43)	27,75 (22,23+5,52)
wood chips	15,31 (11,32+4,00)	14,52 (9,85+4,66)
wood pellets	5,26 (3,57 + 1,69)	4,65 (3,36 + 1,29)

Table 7) Germany plus Austria production (PRO) and consumption (CON) for selected product groups (with FAO data (last 2022).

Very good CHANCES for the countries of the Danube region could be opened by products from regional value chains.

The Danube region and the countries under consideration here, Germany and Austria, provide good conditions for climate-friendly and biodiversity-friendly short supply chains. European wood reduces dependency on imports and thus on fluctuating international wood prices. Furthermore, global supply chains are difficult or impossible to monitor (see WCMC re-

ports on EU timber trade regulations; report “Green Carbon Black Trade”, UNEP and Interpol 2012).

Supply chains that are verifiably entirely within the EU or regional supply chains are far less risky (see best practice examples HVH, LCT, EUT). However, they are also subject to the new EUDR, but many companies are not prepared for this. This also harbors enormous economic risks.

Therefore, there are significant opportunities for the Danube region in (1) political support for climate- and biodiversity-friendly short supply chains in the Danube region, which would bring win-win solutions for all stakeholders. (2) The tendering, planning, and design of products, objects, and buildings with climate-friendly, biodiversity-friendly, and short supply chains for wood building materials in the Danube region would bring win-win solutions for municipalities, processors, forests, and biodiversity in the Danube region.

Best practise Beispiel HOLZ VON HIER (HVH) respective LOW CARBON TIMBER (LCT)

A best practice example of third-party verified certification for short, climate-friendly and environmentally friendly supply chains is the HOLZ VON HIER (HV) label or Low Carbon Timber (LCT) in non-German-speaking EU countries.

HVH/LCT supply chains are closed from cradle to factory gate and from factory gate to customer building, covering climate-friendly and environmentally friendly short distances within the EU.

The requirements of the EUDR are met.

100% of the roundwood entering the HVH/LCT supply chain comes from forests that are certified as sustainably managed according to FM-FSC or FM-PEFC or comparable standards in EU countries.

Wood from primary forests and endangered species according to CITES and IUCN is excluded.

3 / STRATEGY & REGIONAL ACTION PLANS (RAP)

3 / Strategy & RAP

3.1 / Basic requirements

(1) Compliance with EU regulations

The strategy and the RAP actions should and must be implemented in accordance with the EU guidelines in the respective subject areas (see chapter 1,1).

In the sector of forestry and timber industry mainly this will be the EUDR, the EU Deforestation Regulation against illegal and deforestation-free supply chains. Possible consequences of non-compliance for the companies are heavy fines, Confiscation, Exclusion from the EU market, reputation damage and heavy corrective actions.

(2) Consideration of the objectives of the project proposal

The regional action plan is set in the context of the inherent aim and spirit of the project application and the specific strategic objectives defined in the common strategy. Title: " Joint Development of a common danube strategy for the sustainable use and va-

lorization of natural resources of Danubian forests and cultural heritage of wood application".

In the project application, the main priorities and overall objectives are a) the long-term sustainable use of natural resources (main objective), b) the better protection of the biodiversity of the forests in the region and c) raising awareness among target groups and stakeholders of the importance of the sustainable use of regional wood.

(3) Conclusions from Status Quo and SWOT

The following conclusion from Status Quo and SWOT analysis for the Danube countries Germany and Austria can be derived:

Tourism is an important and well developed economic sector in Germany and Austria. The project cannot contribute substantially and does not need to support tourism in general. The project must focus on measures and information transfer specifically regarding eco tourism. Eco tourism is seen also by tourism associations in Germany and Austria as one of the most important areas of action today and in the future. The better the sector "Forests & Biodiversity" is developed, the higher the development potential for ECO Tourism in the Danube region. The better the sector "Forestry and Timber industry" is developed, the better for the reputation of the Danube wood(s) route.

3.2 / General remarks

The Regional Action Plans (RAP) of the countries include strategic activities for the various strategic goals or “objectives” at the national level. These are mostly **strategic activities** of stakeholder groups with a medium to long-term perspective. These activities thus clearly go beyond the influence and scope of the project partners and the sphere of influence of a European Cultural Route. Within the framework of the project, **implementation activities** are therefore defined, two of which are selected and implemented in the project or can be influenced during the project period. The Regional Action Plan (RAP) for Germany and Austria within the framework of the “Danube Forests” Cultural Route translates the transnational strategy into the specific circumstances and challenges of these two countries.

One aim of the RAP is to strengthen the sustainable and biodiversity-friendly use of forests.

That needs to have the focus on protecting biodiversity in forests and on the promoting of use of wood in transparent, regional, climate-friendly, and environmentally friendly short supply chains. Only this also support regional value creation.

Recognize forests as cultural and ecological heritage

To recognize forests as cultural and ecological heritage means to accept, that forests have not only economic significance but also deep cultural and ecological importance. The RAP emphasizes protection and climate- and biodiversity-friendly use. Through near-natural forestry and targeted nature conservation measures in the forests, habitats for numerous endangered animal and plant species are preserved and biological diversity in the region is secured in the long term. What is possible here and what can be done, is primarily a question of information transfer to private forest owners, who make up the majority of forest owners in Germany and Austria.

Sustainable, climate-friendly, and biodiversity-friendly use of wood in regional and transnational supply chains that are as short as possible should be established as a strong signal and statement for the Danube regions.

Therefore a central component of the RAP form DE and AT is the promotion of regional supply chains for the timber industry along the entire value chain - from forest management and production to regional wood products. This not only supports local businesses in the areas of modern construction methods, interior design, and furniture making, as well as in traditional craftsmanship and the combination of modern and traditional design. This also lowers the carbon footprint of timber products and it is the only direct link between regional forests and buildings or consumers. For this, it is particularly important to implement transparent supply chains that are based on independently monitored certifications rather than self-declarations by companies in the supply chain. A best practice example of such certification is HOLZ VON HIER (HVH) and LOW CARBON TIMBER (LCT) certificates for corresponding products and building materials. This enables municipalities, developers, planners, and consumers to make informed decisions in favor of sustainable wood products that are climate-friendly and biodiversity-friendly. This also strengthens regional value chains in the Danube region.

Strengthening biodiversity through climate-friendly and environmentally friendly regional supply chains

The RAP promotes innovative approaches to preserving biodiversity. The aim is to achieve a balance between economic use and ecological responsibility in line with the “protection and use” concept.

Information exchange and regional and transnational cooperation

Another objective of the action plan is to raise public awareness of the importance of forests in the Danube region and their biodiversity, as well as of regional climate-friendly and environmentally friendly supply chains in the Danube region. This includes the establishment of regional and transnational networks and cooperation between forestry operations, wood processing, tourism, and nature conservation, as well as the introduction of appropriate certification (e.g., HVH, LCT), compliance with European requirements, for example within the framework of the EUDR, and others. The aim is to share knowledge and develop innovative solutions together.

3.3 / Objectives and strategic actions

3.3.1 / Objectives

In the common strategy, the overarching goals are concretized in form of 5 strategic objectives:

- 1

Objective 1: Protect and Restore Biodiversity and Natural Resources
- 2

Objective 2: Develop a Sustainable Forest-Based Economy and regional value haines.
- 3

Objective 3: Valorize Cultural Heritage Related to Wood.
- 4

Objective 4: Develop Sustainable Tourism and Create the Cultural Route.
- 5

Objective 5: Raise Awareness and Build Community Engagement.

The regional action plan is based on that subordinated objectives that are considered particularly relevant in the participating countries and by the stakeholders. This differs significantly from country to country, if only because of the extremely different structural conditions in the countries. In a partner meeting in Sarajevo five objectives within the general strategy for the Danube region were discussed in relation to tregional demands and the project overall goal (Table 8).

Objective	Goal
Objective 1: Preserve and/or Restore Biodiversity and Natural Resources	Goal: Ensure the conservation and sustainable management of the Danube forests, protecting biodiversity and natural ecosystems for long-term resilience.

Objective 2: Develop a Sustainable Forest-Based Economy based on regional value chains	Goal: Support the growth of a bio-economy rooted in sustainable forestry practices and regional value chains wood-based products.
Objective 3: Valorize Cultural Heritage Related to Wood	Goal: Preserve, promote, and celebrate the cultural traditions, craftsmanship, and heritage tied to wood usage in the Danube region.
Objective 4: Develop Sustainable Tourism	Goal: Leverage the natural and cultural heritage of the Danube region, particularly focused on wood and forests, to drive sustainable tourism initiatives that support local communities, enhance their economies, and protect the region’s environment.
Objective 5: Raise Awareness and Build Community Engagement	Goal: Foster environmental stewardship and community participation through education, outreach, and awareness campaigns.

Table 8) Objectives and specific goals

3.3.2 / Strategic actions

The following tables list the strategic actions and their relevance for the five project objectives in the context of German and Austrian frame conditions (Table 9 to Table 13). A first part show strategic actions drawn from a partner meeting in Sarajevo, added by considerations more specifically for Germany and Austria.

01 Objective 1: Preserve and / or restore Biodiversity and Natural Resources

Strategic action	Aspect
I) Strategic Action: partner meeting	
StA-1.1	Monitor Biodiversity.
StA-1.2	Strengthen Forest Governance.
StA-1.3	Promote Sustainable Forestry Practices.
StA-1.4	Foster Cross-Border Collaboration.
StA-1.5	Actions for the restoration of biodiversity and natural resources.
StA-1.6	Financial framework for assuring biodiversity payments (regional, national level).
II) Strategic Action: additional	
StA-1.7	Protection of national parks, nature reserves or valuable secondary forests.
StA-1.8	Preservation of forest management forms that promote biodiversity such as coppice forestry, coppice forestry
StA-1.9	Sustainable conversion of managed forests into climate-resilient and species-rich managed forests.
StA-1.10	Promote biodiversity conservation projects.
StA-1.11	Implement workshops that support the establishment of climate- and biodiversity-friendly supply chains..

StA-1.12	Support participants in the implementation of European requirements such as the EUDR.
StA-1.13	Visualize biodiversity in the region and its potential threats.

Table 9) Strategic actions in objective 1.

02 Objective 2: Develop a sustainable forest economy based on regional value chains

Strategic action	Aspect
I) Strategic Action: partner meeting	
StA-2.1	Enhancing and accessibility to forest resources mainly to local enterprises by raise awareness within target groups or/and stakeholders for the importance of regional value chains and regional added value
StA-2.2	Enhance market access for "regional" timber products.
StA-2.3	Valorisation of forest products and services other than timber.
StA-2.4	Encourage Local Entrepreneurship.
StA-2.5	Foster Innovation.
II) Strategic Action: additional	
StA-2.6	Initiating regional supply chains
StA-2.7	Conducting workshops and stakeholder discussions.
StA-2.8	Approaching and winning local authorities, planners and developers.
StA-2.9	Supporting of climate and biodiversity friendly regional timber products.
StA-2.10	Promotion of research and innovation in timber construction.
StA-2.11	Development of digital platforms.

Table 10) Strategic actions in objective 2.

03 Objective 3: Valorize Cultural Heritage Related to Wood

Strategic action	Aspect
I) Strategic Action: partner meeting	
StA-3.1	Promote traditional craftsmanship.
StA-3.2	Annual festivals and events.
StA-3.3	Cultural Tourism Initiatives.
StA-3.4	Establish strong regional networks among key stakeholders.
StA-3.5	Develop Heritage Centers.
II) Strategic Action: additional	
StA-3.6	Organise Design Boxes.
StA-3.7	Setting / participating in exhibitions.
StA-3.8	Promoting preservation of historical uses of wood and traditional crafts.
StA-3.9	Develop transnational partnerships.

Table 11) Strategic actions in objective 3.

04 Objective 4: Develop Sustainable Tourism

Strategic action	Aspect
I) Strategic Action: partner meeting	
StA-4.1	Cultural Tourism Products.
StA-4.2	Active Tourism Products
StA-4.3	Capacity building tourism stakeholders.
StA-4.4	Infrastructure Enhancement.
StA-4.5	Promotion.
II) Strategic Action: additional	
StA-4.6	Presentation of the project and discourse.
StA-4.7	Introduction of HVH/LCT CO2 certificates with tourism organizations.

StA-4.8	Cooperation with certain places/organizations.
StA-4.9	Conception of a CI and national implementation of the Danube Route.
StA-4.10	Development of a transnational on-line market place for regional timber products
StA-4.11	Creation of specialised tourism packages.
StA-4.12	Organization of cultural festivals and community events.

Table 12) Strategic actions in objective 4.

05 Objective 5: Raise Awareness and Build Community Engagement

Strategic action	Aspect
I) Strategic Action: partner meeting	
StA-5.1	Educational Campaigns
StA-5.2	Educational Programs.
StA-5.3	Digital Awareness Programs.
StA-5.4	Community Workshops.
StA-5.5	Public Information Platforms.
StA-5.6	Stakeholder Collaboration Forum
II) Strategic Action: additional	
StA-5.7	Information events, workshops for municipalities and planners.
StA-5.8	Addressing financial institutions, developers, municipalities and other decision makers
StA-5.9	Anchoring the topic of regional supply chains within the frame of national programs
StA-5.10	Cooperation with EU organisations.
StA-5.11	Addressing political decision makers
StA-5.12	Establishment of national and transnational networks.

Table 13) Strategic actions in objective 5.

3.3.3 / Specification of actions and impact potential of the project

1

Objective 1: Preserve and/or Restore Biodiversity and Natural Resources

Strategic Action 1.1) Monitor Biodiversity.

- **Specification.** Implement cross-border biodiversity monitoring systems to track ecosystem health and species conservation.
- **Project influence.** Although this is a very important aspect, this cannot be achieved within the project. This has to be provided by the state or local environmental organisations.

Strategic Action 1.2) Strengthen Forest Governance.

- **Specification.** Enforce anti-deforestation policies and strengthen regulations against illegal logging and unsustainable practices. For example implementing EUDR, EU Biodiversity Strategy.
- **Project influence.** Although this is a very important aspect, this cannot be achieved within the project. This has to be provided by the state laws or the EU regulations. The project can partly support this process by integrating this topic into trainings implemented.

Strategic Action 1.3) Promote Sustainable Forestry Practices.

- **Specification.** For example by more strict forest laws and implementing European programmes and guidelines like EUDR. In Germany and Austria, sustainable forest management is already enshrined in forestry laws. These are among the most consistent in the world. In addition, more than 75% of forests in Germany have been awarded forest management certificates (FM) in accordance with FM-PEFC and FM-FSC, and many areas have even been awarded both. In Austria, more than 90% of forests have been awarded

forest management certificates (FM), mostly in accordance with FM-PEFC.

- **Project influence.** The Chain-of-Custody (CoC) certificate from HVH and LCT begins with the logs lying on the forest road. However, HVH/LCT requires that 100% of the logs entering the CoC process at HVH/LCT have forest management certificates in accordance with FM-FSC, FM-PEFC, or comparable standards. HVH thus supports sustainable forestry as part of its system, but controls the supply chain according to HVH/LCT criteria. HVH is therefore recognized in Austria by the state and in Germany by local authorities in building assessments such as DGNB, Klimaaktiv, and others as alternative or equivalent proof of wood from sustainable forestry for wood products. In neighboring countries with low rates of forest management certification, HVH/LCT also supports forest certification but, unlike FSC and PEFC, applies separate criteria to the supply chain of wood products (CoC) for the first time. The project examines these connections in information transfer of the transnational network.

Strategic Action 1.4) Foster Cross-Border Collaboration.

- **Specification.** Develop joint conservation projects with transnational partners to align biodiversity goals. For example, connectivity, ecological corridors, access to cross-border programs, and reducing/limiting environmental crimes (illegal logging, poaching, etc.).
- **Project influence.** This is out of the range of the current project and would be part of new projects, e.g. in the LIFE program frame.

Strategic Action 1.5) Actions for the restoration of biodiversity and natural resources.

- **Specification.** For example by introduction of new species- see re-wilding programs of both fauna and flora, designation of strict protected zones (forests), dam removal, other water restoration: riparian habitat restoration, collaborate with Institutions for said actions, wetland restoration.
- **Project influence.** This is out of the range of the current project and would be part of new projects, e.g. in the LIFE program frame.

Strategic Action 1.6) Financial framework for assuring biodiversity payments (regional/national level).

- **Specification.** For example by PES-payment for ecosystem services, compensatory payments, fair transitions for local communities.
- **Project influence.** This is part of new projects, However, HVH will present its new CO2-certificates for the VCM market within the project time and test them at interesting locations with interested partners from the tourism sector.

Strategic Action 1.7) Sustainable protection of national parks, nature reserves, remaining primary forests or valuable secondary forests.

- **Specification.** For example by strict no-use of timber from these sources. In Germany and Austria, national parks and nature reserves are strictly protected. There are no primary forests in the sense of unmanaged virgin forests.
- **Project influence.** The national parks and nature reserves are extremely important for the cultural route. Their significance must be communicated effectively.

Strategic Action 1.8) Preservation of forest management forms that promote biodiversity such as coppice forestry, coppice forestry, etc.

- **Specification.** For example by information transfer to forest owners. The preservation of biodiversity-friendly or traditional forest management methods also depends on the market. For example, coppice forests produce good veneer wood. Low forests are typical forest types with deciduous trees that have been/are used for firewood.
- **Project influence.** HVH can provide information materials for forest owners as part of the project. Discussions will be held with interested project partners on how such materials can be made available to forest owners across national borders. The project provides information materials and tools from HVH for Germany and Austria, as well as partners in a transnational network.

Strategic Action 1.9) Sustainable conversion of managed forests into climate-resilient and species-rich managed forests.

- **Specification.** For example by governmental programmes. The sustainable conversion of managed forests into climate-resilient and species-rich managed forests is enshrined in law and politically desired in Germany and Austria. This is already happening in state forests, and the state provides subsidies for private forest owners.
- **Project influence.** HVH can provide information materials and a digital communication platform for forest biodiversity to forest owners as part of the project. HVH can also offer assistance to private forest owners to help them comply with EUDR requirements. Discussions are underway with interested project partners on how such materials and tools could be made available to forest owners on a transnational basis. The project provides information materials and tools from HVH for Germany and Austria, as well as interested partners in a transnational network.

Strategic Action 1.10) Promote of biodiversity conservation projects.

- **Specification.** For example by governmental programs. Projects promoting species conservation are diverse. They are based at European level (LIFE program), in Germany and Austria at national and regional level (national and regional biodiversity programs), at organisational level (environmental organizations worldwide, European, national, regional), at societal level (private conservation programs), and at economic level (programs such as Business for Biodiversity by IUCN and others).
- **Project influence.** HVH will present the results of a completed LIFE program in the Danube region and gradually implement them together with partners who support this initiative. In addition, stakeholders will be made aware of the importance of short regional supply chains for climate and biodiversity through information materials, tools, workshops, and information events. System-immanent topic for all information materials, tools and actions. Important topic for the transnational network. The project provides information materials and tools from HVH for DE and AT, as well as partners in a transnational network.

Strategic Action 1.11) Implement workshops that support the implementation of climate- and biodiversity-friendly supply chains.

- **Specification.** For example by using existing certificates, tools, workshops or creating tools and workshops.
- **Project influence.** The importance of climate-friendly and biodiversity-friendly supply chains and the possibilities for their implementation are being addressed in the project through workshops and information transfer measures aimed at stakeholder groups. The focus here is primarily on local authorities and planners.

Strategic Action 1.12) Support forest owners in the implementation of European requirements such as the EUDR.

- **Specification.** For example by using existing workshops of HVH/LCT for communities and planners. The EUDR clearly regulates what forest owners must do in this regard. The practical implementation of this regulation is still unclear given the large number of private forest owners in DT, AT:
- **Project influence.** See Action above. Information materials and transnational network tools.

Strategic Action 1.13) Visualize biodiversity in the region and its potential threats.

- **Specification.** For example by setting up digital platforms or introducing and transnationally coordinating a platform for a risk assessment of origins. There is currently no visualization of the region's biological diversity and the potential threats to it.
- **Project influence.** The project will present a GIS platform developed by HVH that could be adapted to the Danube region in a modular fashion and can and should be used jointly with interested project partners in a transnational network. This will allow the platform to be expanded iteratively on a permanent basis using the knowledge of the project partners, for example to identify biodiversity hot spots in the region as well as hot spots of threats. Information materials and tools for transnational networks.

2 Objective 2: Develop a Sustainable Forest-Based Economy based on regional value chains

Strategic Action 2.1) Enhancing and accessibility to forest resources mainly to local enterprises by raising awareness within target groups or/and stakeholders for the importance of regional value chains and regional added value.

- **Specification.** Awareness raising by introducing HVH certification for short supply chains. Especially for official and communal buildings and procurement "regional" is not defined by geographic or administrative borders. This is important regarding to the eligibility of building materials and wood products for tenders in accordance with the EU guidelines for green public procurement.
- **Project influence.** Information materials and tools are provided here by HVH in the project.

Strategic Action 2.2) Enhance market access for "regional" timber products

- **Specification.** This should be done on the basis of regional forest resources by supporting short "regional" and cross border value chains, and influencing the national policies which regulate access to forest resources and promote certified wood products at stakeholder groups. It must be ensured that the roundwood originates at least from legal and deforestation-free sources (cf. EUDR) and/or from verifiably sustainable forest management by strict forest laws, low risk of corruption in the country, forest management plans, no wood from no-go areas, etc. and/or forest management certificates according to FM-FSC and/or FM-PEFC forest certification schemes. However, it must also be explicitly ensured that the round timber does not come from primary forest logging, including single-stem extraction from such forests. It must also be ensured, that the roundwood does not originate from tree species, that are endangered according to CITES and IUCN.

It is important to distinguish between forest management (e.g., forest management certificates - FM certificates) and roundwood from such fo-

rests on the one hand, and supply chain documentation along the entire processing chain for wood products (e.g., chain-of-custody certificates - CoC certificates) on the other. For the implementation of "regional" supply chains, it is important to note and point out, that specifying sustainable forestry in tenders alone does not enable or even guarantee regional supply chains. This is particularly important in tenders and public procurement. If tenders only require sustainable forestry, the supply chains of the procured or manufactured products can be very long, and the roundwood can come from sources all over the world, as supply chains for wood products are often global today. It is also not sufficient to consider only the last step in the supply chain. Only if the entire supply chain is taken into account, from the forest, through all processing steps and nodes in the supply chain, to, for example, installation in a building (cradle-to-gate and gate-to-building), the product can be seen as 'regional' and only then the added value remains within "region."

Additionally it is important to have the respective regionality of supply chains externally proven or certified. For this purpose there is an acknowledged European certification scheme existing, called Holz von Hier® (HVH) resp. Low Carbon Timber® (LCT), that is third party controlled (TÜV) and usable in green public procurement. This certification scheme can immediately be used within the participating countries by partners and stakeholders (with interested partners, Holz von Hier offers, to jointly establish country representatives).

Self-declarations from actors in the supply chain are not sufficient in this regard. Experience shows that the actual regional nature of a supply chain only becomes apparent when it is subject to external monitoring. This is also important in order to avoid greenwashing.

To enhance market access creating platforms and networks to help local businesses access larger markets for regional wood products. This could take place by developing a concept of unique identifiers (e.g. wood stelae with QR codes).

- **Project influence.** Information materials and tools are provided here by HVH in the project.

Strategic Action 2.3) Valorisation of forest products and services other than timber.

- **Specification.** Aside from timber production, there are many products and services, forests provide to the society (e.g., recreation like: mountain biking, visitors, camping, hunting, etc. and environmental services as water protection, avalanche protection, air cleaning, biodiversity protection and others). Many of these services are currently not recognized and honoured and there is a lack of systematical valorisation. With regard to recreational use or the extraction of non timber products, it is important to ensure and communicate or monitor that the extraction of non-wood products from the forest is carried out in a sustainable manner or is regulated by law. In many cases, however, the definition of what constitutes "personal use" and what constitutes commercial use does not appear to be defined or regulated. The question of how much usage of this kind a forest can tolerate is also uncertain and probably depends on the type of forest, land, or region.
- **Project influence.** This is out of the range of the current project and would be part of new projects, e.g. in the LIFE program frame.

Strategic Action 2.4) Encourage Local Entrepreneurship.

- **Specification.** For example by developing of training and funding programs for local entrepreneurs in the forest, timber industry and regional value chains targets of the project. The trainings should take place together with regional partners, stakeholders, chambers und networks, regionally and cross borderly. Trainings should involve operators and stakeholders with regard to European, national und regional regulations. Within the project and beyond, regular internal workshops and/or working groups on specific topics will be held with interested partners.
- **Project influence.** This aspect will be part of measures from some project partners in other countries, however for Germany and Austria this aspect is not in focus.

Strategic Action 2.5) Foster Innovation.

- **Specification.** For example by development for innovative wood-based bio-economy solutions. This comprises different actions and levels. On the one hand this is a matter of governmental decisions to establish funding programs for scientific research. This is out of the reach of the Danube Wood(s) project. On the other hand there are potential micro scale activities to foster innovation, like e.g. Design and Innovation Boxes and other formats, to develop new products and market strategies. This should also take place by scaling up traditional practices and combining these with modern designs and processing techniques.
- **Project influence.** There are already a number of funding programs in this regard in Germany and Austria. Therefore there is no need to be active in the frame of the project.

Strategic Action 2.6) Initiating regional supply chains.

- **Specification.** For example by promoting best practice examples like Holz von Hier (HVH) respective Low Carbon Timber (LCT). This is a topic that has received little attention in the forestry and timber industry so far. Sustainable forestry is usually the only aspect required. However, municipalities and planners are often unaware that when they specify sustainable forestry or global labels for sustainable forestry (FSC, PEFC, and others), the wood products used in buildings may originate from global supply chains, which is often the case. Only a specific certification of short distance supply chains represents a lever to initiate and trigger regional supply chains.
- **Project influence.** Presentation of these interrelations using official data (FAO, Eurostat, etc.) and initiation of regional supply chains by promoting labels such as Holz von Hier (HVH) and Low Carbon Timber (LCT). HVH/LCT covers the entire cradle-to-gate and gate-to-building supply chain from the forest, along the entire supply chain from account point to account point, in real time for each individual supply chain. HVH/LCT is therefore a best practice example for establishing regional short supply chains, as reliable, EU-compliant, tenderable, and externally monitored (TÜV) genuine proof of climate- and biodiversity-friendly supply chains.

Strategic Action 2.7) Conducting workshops and stakeholder discussions.

- **Specification.** For example on deforestation-free supply chains with an explanation of the EUDR and presentation of the corresponding solutions.
- **Project influence.** Conducting workshops and stakeholder discussions on deforestation-free supply chains, explaining the EUDR and presenting appropriate solutions. Information materials and tools are provided here by HVH in the project.

Strategic Action 2.8) Approaching and winning local authorities, planners and developers.

- **Specification.** For example for the tendering and procurement of products, buildings made from regional timber for Green Public Procurement.
- **Project influence.** The project involves specifically targeting and recruiting municipal planners and developers for the tendering and procurement of products and buildings made from regional wood for Green Public Procurement (GPP). However, it is also expressly pointed out that this requires genuine third-party verified evidence (e.g., HVH, LCT) in order to be able to implement the tenders in accordance with EU regulations. Otherwise, the corresponding supply chains will not be implemented in practice but will remain nothing more than a wish. Information materials and tools are provided here by HVH in the project.

Strategic Action 2.9) Supporting of climate and biodiversity friendly regional timber products.

- **Specification.** For example by promoting trades, SMEs and industry producing climate- and biodiversity-friendly building materials and building elements for timber construction, interior fittings, furniture construction and outdoor areas, for example through digitalization in the timber supply chain. In Germany and Austria, this is achieved through a wide range of programs supported by chambers such as chambers of crafts, chambers of industry and commerce, and numerous associations, clubs, and organizations.
- **Project influence.** The non-profit organization Holz von Hier, with its climate and environmental

label HOLZ VON HIER (HVH, or Low Carbon Timber (LCT)), also supports this activity as part of its core mission. Information materials and tools are provided here by HVH in the project.

Strategic Action 2.10) Promotion of research and innovation in timber construction.

- **Specification.** For example by networking between science and the industry. Implemented in various ways in Germany and Austria.
- **Project influence.** HVH also implements projects with scientific institutions and universities. However this has a longer time perspective and will not directly implemented in the project.

Strategic Action 2.11) Development of digital platforms.

- **Specification.** For example platform that facilitate the use of regional timber and highlight its advantages, for example by explaining, presenting or calculating the climate and environmental impact. Regional forestry and timber organizations in particular have numerous digital platforms, for example, forest owner organizations, forest associations, regional forest and timber initiatives, clusters, business associations, co-operatives, etc. These primarily serve to present the respective organization and its goals.
- **Project influence.** To date, there have been very few calculations of the climate and environmental impacts of regional supply chains. The project aims to present such calculations to regional groups on a long-term basis. Information materials and tools are provided here by HVH.

3

Objective 3: Valorize cultural heritage related to wood

Strategic Action 3.1) Promote traditional craftsmanship.

- **Specification.** For example support artisans and craftspeople through workshops, events, and micro grants. For example: organizing workshops with young people, Summer schools and heritage camps with international participation, mentors-

hip programs (Master + Apprentice), providing micro grants for craftsman, development of the Origin/Authentic wood brand label or inclusion of wooden products in the existing regional brands.

- **Project influence.** Workshops for target groups will be organized by Holz von Hier together with partners in longer perspective.

Strategic Action 3.2) Annual Festivals and Events.

- **Specification.** For example organize annual cultural festivals focused on wood craftsmanship and heritage. For example, local Day of wood festival, and one common Day of cultural heritage of Wood (each year in different regions), Thematic events in cooperation with museums storytelling.
- **Project influence.** The project aims to communicate existing festivals thorough potential itineraries of the route. However there is no capacity to develop new events.

Strategic Action 3.3) Cultural Tourism Initiatives.

- **Specification.** For example develop cultural tourism products, including heritage trails, exhibitions, and guided tours. This could include participatory workshops, hackathons, challenges, including awarding the best proposals.
- **Project influence.** Workshops for target groups will be hold in the project in several countries, however this is not in primary focus in Germany and Austria.

Strategic Action 3.4) Establish strong regional networks among key stakeholders.

- **Specification.** For example craftsman, tourism stakeholders, education, cultural institutions, other relevant stakeholders, such as hubs, living labs, competence centres.
- **Project influence.** Workshops for target groups will probably implemented by some project partners, however this is not in primary focus in Germany and Austria.

Strategic Action 3.5) Develop Heritage Centers.

- **Specification.** For example create regional centers or museums dedicated to the history and art of wood-related crafts, or providing support for existing local museums through the integration of "wood heritage modules".
- **Project influence.** This is out of the range of the current project.

Strategic Action 3.6) Organizing Design Boxes.

- **Specification.** For example to develop new products and combine modern and traditional craftsmanship in products. Design boxes are a new format that is being implemented in projects.
- **Project influence.** Implementation of design boxes to develop new products and combine modern and traditional craftsmanship in products will be implemented in the project in Germany.

Strategic Action 3.7) Setting up new or participating in existing exhibitions.

- **Specification.** For example exhibitions in which traditional woodworking techniques and wood tools are also presented. There are various exhibitions on the subject of forests and wood.
- **Project influence.** The projects include participation in a touring exhibition showcasing traditional woodworking techniques and tools in Germany. HVH provides exhibits for this purpose. A flyer accompanying the exhibition provides information about the cultural route.

Strategic Action 3.8) Promoting the preservation of historical uses of wood and traditional crafts.

- **Specification.** For example by develop new exhibitions or being a part of existing exhibitions. Museums and open-air museums are responsible for promoting the preservation of historical uses of wood and traditional crafts in Germany and Austria.
- **Project influence.** The museums and open-air museums dedicated to this theme are to become network locations within the project. Certain traditional crafts may be taken up in the Design Box and combined with new processing techniques.

Strategic Action 3.9) Developing transnational partnerships.

- **Specification.** For example for joint projects for conservation of forests, biodiversity and cultural heritage in Danube region. Transnational projects for the preservation of forests, biodiversity, and cultural heritage in the Danube region. There are numerous such projects, but none with the specific goal of creating a cultural route.
- **Project influence.** Development of transnational partnerships for the cultural route are foreseen in activity 3.2.

4

Objective 4: Develop sustainable tourism

Strategic Action 4.1) Developing cultural tourism products.

- **Specification.** For example by (1) creation of the cultural part of the route, (2) strengthen "Living Heritage" interpretation, (3) unified branding and design, (4) support for museums and exhibitions, (5) promote local crafts.

Design and implement the Danube Wood Cultural Route, focusing on mapping key heritage sites, identifying important cultural and natural landmarks, and creating well-defined itineraries that showcase the uniqueness of the region. These itineraries should offer diverse experiences, ranging from historical woodcraft villages to ancient forests and key cultural monuments. Additionally, the creation of a clear and compelling brand identity will help distinguish the route as a premier sustainable tourism destination.

The concept of "Living Heritage" will be at the heart of the Danube Wood Cultural Route. Along the route, enhance the interpretation of traditional practices, using storytelling, reenactments, and interactive experiences to connect visitors with the region's deep cultural and ecological roots. This could involve collaborating with local communities to preserve and share traditional crafts, folklore, and forest-related customs. Immersive experiences like woodcraft workshops, live demonstrations, and guided tours will bring history to life, offering a deeper understanding of the cultural context behind wood and forest

traditions.

A joint branding strategy to be developed to create a strong, unified identity for the Danube Wood Cultural Route, integrating its cultural and environmental values. This branding should extend across all tourism materials, including signage, brochures, websites, and social media platforms, ensuring that the route is easily recognizable and appealing to both international and local visitors.

The support of and linkage to specialized museums and exhibitions focusing on the region's wood heritage will be a key component of the Danube Wood Cultural Route. This could include open-air museums, traditional woodcraft centers, and heritage parks that illustrate the historical role of wood in shaping local communities and economies. These museums should not only focus on the past but also highlight ongoing traditions, providing a space for artisans to showcase their work and engage visitors in hands-on experiences like wood carving or furniture making.

Woodcrafts and other local artisan products are central to the cultural identity of the Danube region. By elevating the visibility and importance of these crafts within the tourism offering, visitors will gain a deeper appreciation for the role of craftsmanship in the area's heritage. Opportunities for craft workshops, artisan markets, and demonstrations will be created to enable visitors to experience firsthand the skills involved in traditional woodworking and wood-based art forms. This will also contribute to supporting local artisans economically by offering them a platform to sell their products.

- **Project influence.** This issue is part of measures of several project partners. In Germany Holz von Hier will approach tourism organisations and associations to foster a linkage of the prospective route with existing services and infrastructure.

Strategic Action 4.2) Develop active tourism products.

- **Specification.** For example by (1) hiking and biking trails, (2) thematic guided tours, (3) interpretation and presentation tools, (4) eco-camping facilities, (5) sport and adventure tourism, (6) wildlife observation tourism, (7) quality Standards for rural tourism and gastronomy.

The Danube Wood Cultural Route will - in a long lasting perspective - feature a network of hiking and biking trails that traverse the region's diverse forests, national parks, and protected areas. These trails will be designed to accommodate various levels of difficulty, from leisurely forest walks to more challenging mountain routes, ensuring that a wide range of visitors can enjoy the natural landscapes. Sustainable trail-building practices will be employed to minimize environmental impact while maximizing the enjoyment of visitors.

Specialized guided tours could be developed, focusing on the natural and cultural significance of the forests, such as mushroom foraging, herb collecting, and learning about the flora and fauna of the region. These tours would provide visitors with an educational experience, deepening their understanding of how local communities have historically relied on forest resources. Additionally, local guides trained in environmental education and cultural heritage will offer personalized insights into the region's ecosystems, history, and traditions.

To further enhance the visitor experience, interpretation tools shall be strengthened across the route. This includes the development of information boards, interactive displays, and digital tools at visitor centers and key natural and cultural sites. These tools will provide additional context about the flora, fauna, and cultural significance of the area, making the experience more enriching and educational for visitors. Advanced technologies like augmented reality (AR) could also be used at certain sites to give visitors a more immersive understanding of the heritage and ecology of the region.

A network of eco-camping sites could be established along the route, offering visitors the opportunity to experience nature up close while minimizing their environmental footprint. These campsites will be designed with sustainability in mind, using renewable energy sources, waste management systems, and eco-friendly building materials. Eco-camping will appeal to environmentally conscious tourists and promote the values of sustainable tourism.

Support the growth of sport and adventure tourism, including mountaineering, orienteering, and other outdoor activities. These activities will

appeal to visitors seeking active, nature-based experiences while encouraging physical engagement with the landscape. Well-organized adventure tourism can contribute to both local economies and environmental education by fostering appreciation for the natural environment.

As part of the sustainable tourism offering, wildlife observation shall be developed as a core tourism product, with opportunities for birdwatching, wildlife photography, and nature walks. Protected areas along the route, such as forests and wetlands, will serve as key locations for these activities. Additionally, trained guides will lead wildlife tours, providing educational content about local species and ecosystems.

As part of enhancing the overall visitor experience, a focus will be placed on improving rural tourism services and gastronomy. Local accommodation providers and restaurants will be encouraged to adopt sustainable practices and to highlight regional flavors, particularly those linked to the forest and wood culture (e.g., forest mushrooms, wild herbs). Training will be offered to help rural tourism operators raise the standard of their offerings, ensuring that visitors enjoy high-quality, authentic experiences.

- **Project influence.** This is out of the range of the current project and would be part of new projects, e.g. in the LIFE program frame, for extension of the initialized prospective Danube Wood(s) route.

Strategic Action 4.3) Capacity building for tourism stakeholders.

- **Specification.** For example by (1) training programs for local stakeholders. To ensure that the benefits of tourism are widely shared, training and capacity-building programs will be provided for local guides, hospitality providers, and tourism entrepreneurs. These programs will focus on a range of topics, including product development, online marketing, heritage interpretation, and visitor management. Local operators will be encouraged to embrace green technologies and sustainable practices in their businesses, helping to create a tourism industry that supports both local communities and environmental conservation.

- **Project influence.** This issue is part of measures of several project partners. In Germany Holz von Hier will approach tourism organisations and associations to foster a linkage of the prospective route with existing services and infrastructure

Strategic Action 4.4) Infrastructure enhancement.

- **Specification.** For example by (1) tourism infrastructure improvements. Key tourism infrastructure, such as visitor centers, resting places, shelters, and signposting of trails, will be developed or enhanced along the route. This will ensure that visitors have access to the necessary amenities and services while traveling through the region. The infrastructure will be designed with a focus on environmental sustainability, using local materials and low-impact construction techniques.
- **Project influence.** This is out of the range of the current project and would be part of new projects, e.g. in the LIFE program frame, for extension of the initialized prospective Danube Wood(s) route.

Strategic Action 4.5) Promotion.

- **Specification.** For example by (1) International Promotion Campaign or (2) Integrated Tourism Packages.

A robust international marketing campaign should be created and delivered in order to increase visibility and attract visitors from around the world. This campaign will promote the Danube Wood Cultural Route as a unique, sustainable tourism destination that blends history, culture, and nature. Digital platforms, travel influencers, and international tourism fairs will be used to reach global audiences and showcase the region's exceptional offerings.

Integrated tourism packages will be developed, combining cultural heritage tours, forest-based activities, and traditional woodcraft demonstrations. These packages will offer visitors a holistic experience, enabling them to explore the region's rich traditions and natural beauty in an organized and accessible way. By implementing these strategic actions, the Danube Wood Cultural Route will not only become a premier sustainable tourism destination but will also ensure that local communities benefit economically while preserving

ving their natural and cultural heritage for future generations. Through thoughtful planning and collaboration, this initiative has the potential to create lasting positive impacts on both the local population and the environment.

- **Project influence.** This is out of the range of the current project and would be part of new projects, e.g. in the LIFE program frame, for extension of the initialized prospective Danube Wood(s) route.

Strategic Action 4.6) Presentation of the project and discourse.

- **Specification.** For example to national and/or regional tourism organizations. The presentation of forest and wood-related topics to target groups is comprehensive in Germany and Austria. Tourism organizations are also aware of the importance of key locations related to forests and wood (e.g., museums, rafting, wooden churches, etc.), but this information has not yet been compiled into a comprehensive overview of various locations in the form of a cultural route. This format would be an effective way to convey important information on this topic, which is significant for Europe and the world.
- **Project influence.** Presentation of the project and discussion with national and regional tourism organizations will be undertaken by Holz von Hier in Germany.

Strategic Action 4.7) Introduction of the HVH/LCT CO2 certificates together with the tourism organizations.

- **Specification.** For example to finance climate friendly actions at selected sites. CO2 certificates are widely issued today (e.g., planting trees in Africa, Asia, Latin America), but not yet in connection with CO2 certificates for domestic forests and buildings and products made from wood sourced locally, with tourism.
- **Project influence.** HVH/LCT has developed a VCM standard and CO2 certificates based on it and will introduce these opportunity within to stakeholders in the Danube region, where possible in cooperation with leading tourism associations. However, to ensure that the funds from the certificates can also be used comprehensi-

vely and in accordance with EU regulations for protection projects or route locations, the VCM standard is to be adapted to the requirements of the new EU directive CRCF. This will be part of additional projects.

Strategic Action 4.8) Cooperation with certain places/organizations as potential locations for the cultural route.

- **Specification.** Several places are already operating, offering a suitable link to the project objectives and the prospective route, like museums, parks, trails, zoological gardens and others. It is foreseen to seek synergies by integrating such places into the prospective route.
- **Project influence.** Cooperation with specific places/organizations as potential locations for the cultural route will be set up by Holz von Hier in the course of the project.

Strategic Action 4.9) Conception of a CI and national implementation of the Danube Forest Cultural Route.

- **Specification.** For example through information tools such as signs or steles, QR codes at POIs. Not available yet.
- **Project influence.** Design of a CI and national implementation of the Danube Forest Cultural Route, for example through information tools such as signs or steles, QR codes at POIs will be part of the prospective steering group of the cultural route host. The results will be part of the trainings of several partners in the project frame.

Strategic Action 4.10) Development of a transnational online market for regional timber products

- **Specification.** For example with regional timber products for the tourism sector from the different participating regions and promoting the online shop together with tourism organizations.
- **Project influence.** This activity is an option to be developed by some project partners, however probably rather in long term perspective and as part of additional projects.

Strategic Action 4.11) Creation of specialised tourism packages.

- **Specification.** For example by combining it with forest experiences, cultural visits and traditional wood processing workshops. Today, there are a few forest owner tours organized by associations and clusters for their members in Germany and Austria. Otherwise, there are few or no tourist offers for forest owners.
- **Project influence.** During the project period, it will not yet be possible to develop or implement such offers, as this would require extensive preparatory work, such as discussions and agreements with forest owner associations and forest owner organizations, analysis of interesting destinations for the specific clientele of forest owners, and other tasks. However, the project will generate numerous ideas and suggestions that tourism organizations can take up in order to develop such offers as economically viable products and packages. Information materials and tools are provided here by HVH in the project and workshops for target groups.

Strategic Action 4.12) Organization of cultural festivals and community events.

- **Specification.** For example on the theme of "Celebrating and experiencing regional wood. In regional communities, there are numerous events in Germany and Austria that include or address the topic of wood (rafting festivals, special museum days, etc.). Many forest owner organizations and regional initiatives also hold local events on the topic. These events are usually very local in nature and are primarily intended for local visitors rather than tourists.
- **Project influence.** In order to organize cultural festivals on this topic with a national reach, a clearly coordinated concept, sufficient personnel, and substantial financial resources are required. In the present project, a national or regional cultural festival is not feasible. However existing festivals are already targeted to be integrated into the prospective route in some countries. This can be extended in a second row of itineraries.

5

Objective 5: Raise Awareness and Build Community Engagement

Strategic Action 5.1) Educational Campaigns.

- **Specification.** For example integrate environmental and cultural education programs regarding the Danube Wood(s) route and the main messages in local schools and communities.
- **Project influence.** Information materials and tools are provided here by HVH in the project and workshops for target groups.

Strategic Action 5.2) Development or fostering educational programs.

- **Specification.** For example launch educational initiatives to teach traditional woodcraft techniques in schools and community hubs.
- **Project influence.** This is out of the range of the current project. However in a long term perspective Holz von Hier aims to collaborate with crafters schools (e.g. in Ebern) to develop such trainings and offer respective workshops.

Strategic Action 5.3) Digital awareness programs.

- **Specification.** For example launch multimedia campaigns highlighting the importance of sustainable forestry, biodiversity, heritage and regional value chains.
- **Project influence.** This is out of the range of the current project. However in a long term perspective Holz von Hier will develop such campaigns together with partner organisations in Germany and Austria.

Strategic Action 5.4) Community workshops.

- **Specification.** For example host community engagement workshops focusing on forest conservation and cultural heritage.
- **Project influence.** This is out of the range of the current project and would be part of new projects, e.g. in the LIFE program frame, for extension of the initialized prospective Danube Wood(s) route.

Strategic Action 5.5) Public information platforms.

- **Specification.** For example development, implement or use accessible resources, both online and offline, about sustainable practices, cultural values of wood and Danube timber value chains.
- **Project influence.** This is out of the range of the current project and would be part of new projects, e.g. in the LIFE program frame, for extension of the initialized prospective Danube Wood(s) route.
- **Strategic Action 5.6) Stakeholder collaboration Forum.**
- **Specification.** For example organize annual stakeholder forums for knowledge-sharing, collaboration, and progress review
- **Project influence.** Initiation of such activities will be part of project activity 3.2.

Strategic Action 5.7) Information events or organization of workshops for municipalities and planners.

- **Specification.** For example on the topic of regional value chains and their significance for forests and biodiversity, forestry and wood processing as well as climate protection and regional value creation. For HVH, the main target groups in the project are municipalities, planners, companies in the supply chain, and higher-level tourism organizations such as tourism associations.
- **Project influence.** Information events or organization of workshops for municipalities and planners on the topic of regional value chains and their significance for forests and biodiversity, forestry and wood processing, as well as climate protection and regional value creation will be organised by HVH in the project.

Strategic Action 5.8) Addressing financial institutions, developers and municipalities.

- **Specification.** For example in relation to the importance of regional forest and timber supply chains for the implementation of European requirements such as the taxonomy in the building sector and making them visible as part of the cultural route. For HVH, the main target groups

in the project are municipalities, planners, companies in the supply chain, and tourism organizations. Another target group that HVH intends to address in the project is financial institutions. These may also be potential sources of funding for the cultural route or individual locations along the cultural route.

- **Project influence.** Holz von Hier will address financial institutions, property developers, and local authorities on the importance of regional forest and timber supply chains for the implementation of European requirements such as taxonomy in the building sector and occasionally will make this visible within the framework of the Cultural Route.

Strategic Action 5.9) Anchoring the topic of regional supply chains within the framework of municipal, state or other funding programs.

- **Specification.** For example by addressing such stakeholders with special information transfer. For HVH, the main target groups in the project are municipalities and governmental institutions. These are often also potential sources of funding for the Danube route or individual locations along.
- **Project influence.** Anchoring the topic of regional supply chains in municipal, state, or other support programs is part of the communication activities of HVH in the project.

Strategic Action 5.10) Cooperation with European organizations.

- **Specification.** For example such as "New European Bauhaus", "Covenant of Mayors" with regard to importance of regional supply chains for forests and biodiversity. European umbrella organizations determine the "upcomings," i.e., the topics that are or will be heard politically in the EU. They are important for the development of the cultural route and its influence on political thinking on the subject of forests and wood.
- **Project influence.** Collaboration with leading European organizations such as the New European Bauhaus, Covenant of Mayors, and others on the topic of the importance of regional supply chains for forests and biodiversity is part of the communication activities of HVH in the project.

Strategic Action 5.11) Addressing political decision-makers.

- **Specification.** For example with regard to the cultural route and the importance of regional wood value chains for forests, wood crafts, the wood industry, climate protection and biodiversity for anchoring in regional and national strategies and programs. This aspect is very relevant in the individual countries but goes far beyond the project period and specific actions within the project. This is a long-term task for the cultural route.
- **Project influence.** HVH wants to and will comprehensively communicate the importance of regional wood value chains for forests, wood crafts, the wood industry, climate protection, and biodiversity to the target groups and strives to anchor this in regional and national strategies and programs. As this is one of the tasks of the non-profit initiative HVH, it is being continuously pursued in the project in Germany, Austria, and Slovenia (previous Danube partner countries of HVH). The aim of the project is to communicate this aspect across regions and countries. To this end, the project will work to establish a network of interested partners in the partner countries with whom these aspects of the cultural route can be implemented on a permanent basis within the framework of the project and beyond.

Strategic Action 5.12) Establishment of national and transnational networks.

- **Specification.** For example with regard to the exchange of knowledge between science, forestry, the timber industry, NGOs and consumer associations.
- **Project influence.** This applies to all aspects of networking. This is part of the networking activities planned for the project in activity 3.2.

4 / ACTIONABLE MEASURES

4 / Actionable measures

In this chapter two measures are described in more detail, which have been chosen to be primarily implemented.

4.1 / Initiating regional supply chains

4.1.1 / Goal and fundamentals

In Germany it is targeted to implement to implement Strategic Action StA-2.6 **“Initiating regional supply chains.”** during project lifetime. Two key aspects are involved here:

(1) Initiating and supporting regional supply chains of timber products. The target group here are mainly enterprises.

(2) Communicating the importance of regional supply chains for forests, climate protection, and biodiversity, as well as regional value creation, to the target groups of municipalities and planners.

Going along with that, the implementation of supply chains also affects a set of other strategic actions StA-1.12, StA-1.13, StA-1.14, StA-2.1, StA-2.2, StA-2.7, StA-2.8, StA-2.9, StA-3.6, StA-3.7, StA-4.7, StA-4.8, StA-4.9, StA-5.7, StA-5.8, StA-5.9, StA-5-10, StA-5.11, StA-5.12 to a greater or lesser extent (Table 14).

Obj	Strat. action	Aspect
01	StA-1.11	Implement workshops that support the implementation of climate-, biodivers friendly supply chains.
01	StA-1.12	Support participants in the implementation of European requirements such as the EUDR.
01	StA-1.13	Visualize biodiversity in the region and its potential threats.
02	StA-2.1	Enhancing and accessibility to forest resources mainly to local enterprises by raise awareness within target groups or/and stakeholders for the importance of regional value chains and regional value
02	StA-2.2	Enhance market access for “regional” timber products.

02	StA-2.7	Conducting workshops and stakeholder discussions.
02	StA-2.8	Approaching and winning local authorities, planners and developers.
02	StA-2.9	Supporting of climate and biodiversity friendly regional timber products.
02	StA-2.11	Development of digital platforms
03	StA-3.6	Organise Design Boxes.
03	StA-3.7	Setting / participating in exhibitions.
04	StTA-4.7	Introduction of HVH/LCT CO2 certificates with tourism organizations.
04	StA-4.8	Cooperation with certain places/organizations.
04	StA-4.9	Conception of a CI and national implementation of the Danube Route.
05	StA-5.7	Information events or organisation of workshops for municipalities and planners.
05	StA-5.8	Addressing financial institutions, developers and municipalities.
05	StA-5.9	Anchoring the topic of regional supply chains within the frame of national and subnational programs
05	StA-5.10	Cooperation with European organizations.
05	StA-5.11	Addressing political decision-makers.
05	StA-5.12	Establishment of national and transnational networks.

Table 14) Objectives and Strategic action that are affected by the aim "Initiating regional supply chains".

4.1.2 / Target groups

Target groups affected are

- Forestry operations: raw materials, start of value chain,
- Enterprises: supply chain,
- Planners: tenders, planning
- Local authorities: buildings, procurement
- Stakeholders: support
- Tourist destinations, for example in wooden buildings for tourist purposes, wood products sold to tourists, etc.

4.1.3 / Nature of the Action

This action aims to initiate regional supply chains in the programme area to establish an operational basis for the linkage between sustainably managed natural resources and the awareness of the meaning of regional supply chains for environment and regional added value as well as for an enhanced identification potential. That requires to trigger demand for products from regional supply chains, inform SME about the opportunities and support them with promoting instruments and communication of the message in general and at potential Danube Wood(s) route itineraries. This action has a broader impact and benefit which can serve different locations and itineraries instead of being focussed on a single one.

4.1.4 / Activities performed under the Action

This action comprises aspects like:

- awareness raising through webinars for stakeholders
- research for potential pilot objects to be realised with regional timber supply chains
- Realisation at selected suitable locations.
- Visualisation of the cultural route at the locations.
- Information transfer to target groups visiting.
- Presentation of further tools for the target groups of the location and the cultural route

Awareness raising through webinars for stakeholders

The experience shows, that the most effective trigger for evolution of regional supply chains is the specific demand especially from the side of public authorities, expressed through green public procurement. For that purpose a number of webinars shall be offered to decision makers of municipalities as well as to planners, which also influence the choice of materials and the supply chains behind them. The format of webinars is chosen, because the action is not bound or focussed on a certain region and thus allows and promises a broader audience.

Research for potential pilot objects to be realised with regional timber supply chains and selection of suitable timber buildings or locations.

This can be forest houses, forest huts, schools or any other public buildings. The prerequisite is that these buildings are demonstrably constructed from wood-based materials with certification of regional cradle-to-building supply chains or that decision makers commit themselves to realise the buildings (or other projects) with wood from certified supply chains. Research will be made among communities and professionals.

Realisation at selected locations

These pilot projects, either in the process of realisation or already established, can serve as beacons to transport the story of regional supply chains, ideally as a itinerary of the Danube Wood(s) route. If still in the process of realisation (e.g. in form of public tenders) such projects build a strong trigger for crystallisation of regional supply chains, if specifically demanded. Once such pilot sites are identified and defined, they can and should be integrated into the Danube Wood(s) route as itinerary.

Visualisation of the cultural route at the locations.

Communication and story telling at this site then shall comprise not only information about the location itself but also about the corporate identity and story of the route in total. Reference should be in addition made to the supply chain certification. Both can be done by means of information signs, boards,

steles with QR codes or other. For this purpose respective information material needs to be developed.

Information transfer to target groups visiting the location.

The information transfer should include: explaining the importance of forests, explaining the importance of biodiversity in different forest types, explaining the importance of sustainable management and, above all, explaining the importance of regional supply chains. It must be made clear to visitors, that only with proven and certified short supply chains wood from local forests will finally be used in local buildings. It must be made clear to visitors that without such genuine supply chain verification, supply chains today can be global. This information can be conveyed concisely on boards or information pillars. However, these media can also contain further information such as web addresses or QR codes with links to relevant pages, information portals, explanatory videos or similar. Additional information that goes beyond the location itself should include:

- Danube Wood(s) cultural Route website,
- EU website on all cultural routes,
- the HVH website

In addition, depending on the location and target group, websites and tools that may be of interest to the target group should be highlighted, such as:

- Websites of the tourism organisation.
- Information for forest owners such as the HVH page "Forest paths to diversity".
- Websites with product information such as the HVH/LCT product profiles.
- Websites with information about the building of concern, such as the relevant building database.
- Websites that highlight the importance of the origin of raw materials in products, such as 'Origin', etc.
- Offers of climate certificates to cancel negative climate effects of travelling and combine this with regional value chains and sustainable projects.

Presentation of further tools for the target groups of the location and the cultural route

Presentation of further location-based tools to visitors, which they can take home with them from the POI and locations and use in their private or professional everyday lives, such as

- Digital or physical information materials for forest owners, such as "Forest owner tools" planned by HVH with information on forest management issues and new legislative proposals such as the EUDR.
- Information on supply chains and simulations that are of interest to the target groups, implementable with the HVH 'supply chain simulation tool' and the new 'European Benchmark database' from HVH/LCT and its European partners.
- Information on possible climate protection measures, such as a CO2 comparison tool (HVH new).
- Purchasing guides at the selected locations and tourist points as well as POI.

4.1.5 / Potential Danube Woods Cultural Route points involved

So far potential Danube Woods Cultural Route points involved, related to regional value chains, are:

- Timber skyscraper 'Karla' in Karlsruhe
- Forest office building Neuhäusel
- Forest office building Meulenwaldhaus

4.1.6 / Stakeholders involved

As main stakeholders will be involved in the process of implementation:

- public authorities associations in Bavaria and Baden-Württemberg
- chambers of craft and other business representative organisations
- chambers of architects

4.1.7 / Timeframe

Preparation of webinars (content, organisation, promoting) and research for pilot objects: 2 months

Implementation and evaluation of webinars: 1 month

Implementation of information and story telling at pilot sites (material development, exchange with locations, coordination ...): 2 months

4.1.8 / Indicative Costs

The following costs are estimated for realisation:

Measures in information transfer

The following costs are estimated for the design and layout (outsourced) of signs, boards, flyers and information material: €5,000 in total as a lump sum.

The following costs are charged for printing:

- The costs for paperprints are based on the printing costs charged by printing companies such as 'Flyeralarm'.
- Boards and signs made from Aludibond, for example, are based on the prices generally quoted here, which are, for example, around 1,500 € for 10 pieces for 100 x 200 cm boards with 4/4 colour printing, matt UV varnish and a thickness of 6 mm (e.g. Flyeralarm). Costs for wooden stelae as a corporate identification beacon can be calculated with around 150 € per piece.

4.1.9 / Output

Output and result indicators are

- 2- 3 webinars held for stakeholders
- estimated 15 participants per webinar
- Selection of 5 locations with the relevant stakeholders from the respective target groups
- Measures for information transfer at the first 5 to 10 locations, such as 10 boards, 10 stelae, displays or provision of information material such as brochures, shopping guides or flyers, 1 to 3 printed materials per location, 1,000 to 5,000 copies each, as required.

- Where possible, site visits and training courses on the importance of regional supply chains for the forests and cultural heritage of the Danube region for selected target groups such as local authorities, planners and businesses.
- Calculations of environmental benefit of up to 10 objects using the HVH Tools supply chain simulation tool and the new European Benchmark database. These calculations must relate to selected cultural route locations and clearly demonstrate the importance of regional supply chains using specific objects or locations.

4.2 / Cooperation with certain places & organisations

4.2.1 / Goals & fundamentals

The project aims to implement Strategic Action StA-4.8 **“Cooperation with certain places/organisations”**. Two key aspects are involved here

(1) Measures at the places themselves ... and ...

(2) Communication with and about places in higher-level contexts.

According to that, also some other strategic actions are touched or affected to a greater or lesser extent: StA-3.7, StA-4.7, StA-4.8, and StA-4.9 (see table 15).

04	StA-4.8	Cooperation with certain places/organizations
03	StA-3.7	Setting / participating in exhibitions.
04	StA-4.7	Introduction of the HVH/LCT CO2 certificates together with the tourism organisations.
04	StA-4.9	Conception of a CI and national implementation of the Danube Forest Cultural Route.

Table 15) Objectives and Strategic action that are affected by the measure “Cooperation with certain places/organizations.”

4.2.2 / Targets / stakeholders involved

Target groups included are

- Tourist destinations
- Tourism associations
- Places along the Danube Route in DE/AT
- POIs such as museums, botanical gardens, zoos, open-air museums, exhibitions, traveling exhibitions, CI concept points.

4.2.3 / Nature of the Action

This measure mainly aims to generate Synergies with existing locations, initiatives or actors to integrate them into the prospective Danube Wood(s) route.

This comprises different activities:

- Discourse with umbrella organisations in the tourism sector
- Cooperation talks with individual potential locations
- Creation of information material (Flyer, short videos, boards a.o.)
- Participation at touring exhibitions and coordination with the prospective Danube Wood(s) route

4.2.4 / Activities performed

(1) Discourse with umbrella organisations in the tourism sector:

Discourse with the German National Tourist Board (GNTB) and the Austrian National Tourist Office (ANTO) which are the national marketing organization for tourism in Germany and Austria. In the project there will be a discourse with these organisations about the CI and the national implementation of the Danube route at the selected places. According to GNTB and ANTO a good climate and environmental performance of the touristic places today are very important. The associations also see CO2 certificates as playing an important role here. For this reason, the

question of how HVH's CO2 certificates could be helpful in this regard and could also be used for tourist destinations are part of the discussion.

Other major topics in general are: Presentation of the route, suggestions for places from the perspective of the associations, quality and environmental criteria from the perspective of the associations and others.

(2) Cooperation talks with individual potential locations:

Intensified bilateral exchange and discussion will be undertaken with several single locations and operators (see 4.2.5). With each individual location the overlapping topics and messages need to be elaborated to develop a communication and promotion concept for integration of the itinerary into the route.

(3) Creation of information material

For joint communication of the individual story of the location and the connection to the Danube Wood(s) route specific information material needs to be created.

For this purpose, among others, stelea with QR codes will be erected at the locations, which will link to the Danube website and the IT activities in the project as well as to HVH. Accompanying information material will be developed.

(4) Participation at touring exhibitions and coordination with the prospective Danube Wood(s) route

Holz von Hier is part of a well-known traveling exhibition "Wood make things", which is continuously touring around in southern Germany. The participation of Holz von Hier in the exhibition will be extended by the topic and story of the Danube Wood(s) route on the one hand. On the other hand it will be negotiated, whether and how the entire exhibition can be linked to the prospective route - contentwise and organizational. This can be done by linkage of the exhibition to the transborder weekends, foreseen in the project, by promoting the exhibition with its itineraries into the platform of the Danube Wood(s) route or other. If this is possible, information about the project and the route can be implemented under the traveling exhibition and by its partners. This includes flyers, social media, opportunities to get involved, and other things such as a stele with a screen and a short film.

4.2.5 / Potential Danube Woods Cultural Route points involved

Potential Danube Woods Cultural Route points involved could be:

- Tiergarten Nürnberg
- Insel Mainau - Wälder
- Tiergarten Stuttgart
- Botanischer Garten Bayreuth
- Holzmuseum Wettenberg
- Wildkatzenwälder Baden-Württemberg
- Meisterschule Ebern
- Forestry department Trier

4.2.6 / Timeframe

Discussion & exchange with umbrella organisations: 1 month

Negotiations with single points or actors: 2 months

coordination with touring exhibition 'Wood makes things': 1 month

Creation of information material and story telling: 1 month

4.2.7 / Indicative Costs

Design and layout (outsourced) of signs, boards, flyers and information material: € 5,000 in total as a lump sum.

Costs for paperprints are based on the printing costs charged by printing companies such as 'Flyeralarm'.

Special costs for CI products or handouts

Special costs for CI products or handouts cannot be specified here as they depend on the overall CI of the Danube route and how complex it is to implement products and handouts at individual locations or in the case of participation in travelling exhibitions, for example. For example, an image or demonstration film on specific topics or locations can range from €2,000 (PowerPoint-based) to €200,000 (professional film crew). That is why coordination with the POIs is so important, as high costs could not be covered by

the existing budget for individual locations in the present project anyway. Therefore, measures here will be limited to POIs such as steles, wooden benches, shelves with information flyers, etc. For the latter a lump sum of 2.000 € is estimated.

4.2.8 / Output and result indicators

Output and result indicators are

- uptake of information about the route into communication of tourism umbrella organisations.
- Cooperation with five locations.
- Participation in the travelling exhibition 'Wood makes things' with a module providing information about the cultural route (the costs for a suitable object will be borne by HVH).
- Concept for the CI of the cultural route in coordination with the partners and design for a figurehead for the route to be established at the locations (e.g. stele, chair).

5 / OTHER ASPECTS

IMPLEMENTATION, MONITORING, EVALUATION, ACTION INDICATORS, FUNDING POTENTIALS

5 / Other aspects

5.1 / Implementation, Monitoring and Evaluation

5.1.1 / Implementation

The implementation of the actions has already started in Germany and Austria and will take place until the finalisation of the project.

5.1.2 / Monitoring framework

The Monitoring follows different approaches:

- The monitoring of the implementation of the action points is taken over by HVH and its country partners.
- The external monitoring of the HVH System and the certified value chains is taken over by the TÜV Austria and the certifiers of the PS880 standard.
- The EUDR conformity of the HVH/LCT System is monitored externally by the TÜV and the responsible supervisory authorities of the involved countries. In Germany for example this is the BLE.

- There will be a regular and strong discourse with all stakeholder groups. In Germany by the German HVH destinations and its German partners will overtake this discourse. In Austria the Austrian HVH destination and its Austrian partners will overtake this discourse. In Slovenia the discourse will be overtaken by the HVH partners Wood Cluster Slovenia and BSC.
- HVH would like to implement the measures in other Danube countries if partners of the project or other partners in the project countries are interested (e.g. wood clusters, forest owner associations, environmental organisations, tourist organisations).

5.1.3 / Evaluation plan

The Evaluation Monitoring is a different approach

- The project will adhere to the specified time slots listed here.
- The evaluation plan will be drawn up at the end of the project with the project partners and should specify milestones that the project team intends to achieve even after the project has ended.

5.2 / Action Indicators

The actions will be implemented by HVH in Germany and Austria and where possible, across borders with partners in Slovenia, Czech Republic, Hungary and other partners of the grand region (Table 15).

Actions	Indicator	Who, Method
	Unit, Value	
1	Unit: Selection locations with the relevant stakeholders from the respective target groups Value: 5 - 10	HVH; locations stakeholders
1	Unit: measures for information transfer at the first locations, Measures at POI Value: information transfer for 5 locations; 5 boards; 5 stelae; 1 - 3 brochure printed with 1.000 to 5.000 copies	HVH; locations stakeholders measures at POI like boards, stelae, displays or information material such as brochures, shopping guides or flyers
1	Unit: Where possible, site visits and training courses on the importance of regional supply chains. Value: 1 event with 1-3 time slots of trainings;	HVH and Energie Agentur Karlsruhe in Karlsruhe,
1	Unit: supply chain calculations using the HVH Tools: supply chain simulation tool and the new European Benchmark database. Value: 5 calculations	HVH; These calculations are related to selected cultural route locations and clearly demonstrate the importance of regional supply chains using specific objects or locations.
2	Unit: Issuing of the first climate certificates at the locations or POIs, . Value: > 5 climate certificates	HVH; if possible together with partners such as tourism associations.
1	Unit: potential Danube Woods Cultural Route points involved, related to regional value chains Value: > = 3	HVH; HVH/LCT certification, information points of the route

7	Unit: brochure about the discussion with the stakeholders with a description of the measures. Value: 1	HVH;
2	Unit: Cooperation with locations. Value: 5	HVH; and location partners
9	Unit: participation in the travelling exhibition 'Wood makes things' with a module providing information about the cultural route. Value: 1	HVH; partnership; costs for a suitable object will be supported by HVH, the exhibition takes over the travelling and advertising .
10	Unit: Information about the cultural route and the topic 'regional value chains' at POI. Value: 1 - 3 POI	HVH; HVH will provide information material and flyers at POI (HVH expects that 20,000 flyers will be used here in one year).
11	Unit: Concept for the CI of the cultural route in coordination with the partners and design for a figurehead for the route to be established at the locations (e.g. stele, chair). Value: 1 CI	HVH; and project partners
12	Unit: workshops with the topic meaning of regional value chains for forest, biodiversity and timber product and buildings Value: > 3	HVH; for business, communities, planners
13	Unit: number of business, villages and planners involved within the project time frame Value: > 10 - 20	HVH
14	Unit: online platform and social media reach out Value: 500	HVH
15	Unit: number of products sold over the HVH regional value system in the project time frame Value: 10	HVH

Tab. 15) Action indicators.

5.3 / Potential funding opportunities

5.3.1 / Interreg Programm

The Interreg programme is part of the European Cohesion Policy and promotes cross-border, transnational and interregional cooperation within the EU. It is also relevant for projects in the fields of forestry, biodiversity and sustainable resource use including wood.

Interreg objectives in the field of forest:

Promoting cooperation between regions and countries, protecting natural resources and biodiversity, adapting to climate change, promoting sustainable economic sectors, including forestry and the timber industry.

Programme areas:

- A – Cross-border cooperation between regions on national borders (e.g. DE–AT, DE–CZ, AT–HU).
- B – Transnational. Larger cooperation areas (e.g. Danube region, Alpine region, Central Europe).
- C – Interregional. Knowledge exchange across the EU (e.g. Interreg Europe).
- D – Outermost regions.
- Interreg IPA / NDICI. Cooperation with non-EU neighbours (Balkans, Ukraine, etc.)

Topics for forests, biodiversity and others

- Climate change adaptation in forests
- Promotion of ecological corridors and biodiversity
- Sustainable timber management
- Forest protection and monitoring
- Education and awareness raising for forest conservation
- Green infrastructure, protected area management

Example projects from Interreg

Interreg Alpine Space – "Links4Soils"

Topic: Soil protection in the Alpine region, including forest soils. Partners: Austria, Slovenia, Germany, Italy. Objective: Sustainable soil management in forest and agricultural ecosystems.

Interreg Central Europe – "ROBINWOOD PLUS"

Focus: Promoting innovation in forestry. Objective: Regional value creation from sustainable timber use.

Interreg Danube Program Central Europe "D2C – Danube Forests for Climate"

Topic: Promoting climate-resilient forests along the Danube. Objective: Exchange on forest management and biodiversity. The DaRe to Connect (D2C) project was a transnational initiative under the Interreg Danube Transnational Programme (2014–2020). It aimed to strengthen ecological connectivity along the European Green Belt in the Danube region, in particular by connecting Natura 2000 sites. HVH will try to follow up on this project with partners in Germany and Austria.

Interreg Donau+6Keep.eu+6core-consult.de+6

Duration: June 2018 – November 2021. Participating countries: Germany, Austria, Hungary, Slovakia, Croatia, Serbia, Romania, Bulgaria. Lead partner: Bavarian State Ministry of the Environment and Consumer Protection. Other partners: national parks, NGOs, nature conservation authorities, among others.

Objectives and measures. Identify ecological corridors: Connect Natura 2000 sites by defining corridors at local, regional and transnational level. Develop a GIS tool: A user-friendly online GIS tool to identify natural structures and potential ecological corridors along the Green Belt. Strategic vision for 2030: Development of a transnational strategy to promote ecological connectivity in the Danube region. Practical measures in selected regions to improve ecological connectivity. Training courses and workshops for authorities and NGOs on the application of the tools. An online tool based on Sentinel-2 satellite data that enables habitat classification and the identification of ecosystem services. Strategic recommendations: Guidelines for the planning and establishment of

transnational ecological corridors. Political support: strategic vision has been supported by national political actors. Project description: DaRe to Connect – Supporting Danube Region's ecological Connectivity. GIS tool and project results: Interreg Danube – D2C project page (not available as of 11 May 2025). European Green Belt Initiative.

5.3.2 / Other EU Programs

LIFE-Program

Objective: Promotion of environmental and climate protection projects, including biodiversity, forest protection and sustainable land use. Example projects in the forestry sector: forest restoration, protection of endangered species, climate-resilient forests.

Project examples from LIFE

The project "LIFE climate value chains"- establishing climate friendly processing chains to reduce carbon emissions and support the new green deal. The project was successfully completed in 31. Dezember 2024. Several EU countries were involved. HVH had the project lead. An article from the project for european communities and procurement managers is shown in the following page (Abb. 1 page 1, 2).

EU agricultural policy- CAP

The aim of the EU's Common Agricultural Policy (CAP) is to support sustainable management of rural areas, including forest areas. Elements include eco-regulations, agri-environmental measures (AUM) and LEADER programmes. Forests can be promoted through measures for climate protection, biodiversity or sustainable forest management, for example.

Horizon Europe

The Horizon Europe programme focuses on research and innovation in areas such as biodiversity, forest ecology and the timber industry. Typical projects in the forestry sector include the development of new approaches to reforestation, resilient tree species and wood processing.

5.3.3 / Funding programs in Germany related to forests

"Waldklimafonds". The programme is run by the BMEL and BMUV. The aim is to adapt forests to climate change, promote sustainable timber use and biodiversity. Funding areas: research, practical projects, education.

Federal Biological Diversity Programme. Responsible body: BMUV. Funding priorities include protecting and restoring biodiversity, including in forests. Projects include forest wilderness and the protection of old beech forests.

In GAK Germany. In GAK Germany (Joint Task for Agricultural Structure and Coastal Protection), this involves supporting rural development, including forest conversion and forestry, as well as promoting reforestation, forest conversion, forest road construction.

5.3.4 / Funding programs in Austria related to forests

"Waldfonds Österreich". The programme is run by the BML (Ministry of Agriculture and Forestry). The aim is to achieve climate-resilient forests, protective forest management, wood utilisation and biodiversity. There are 13 funding areas, including reforestation after damaging events.

ÖPUL. Objective: Environmentally friendly management, including forest-related measures. Promotion of: Biodiversity areas, biotope protection, sustainable forestry.

Austrian LEADER-funding. Objective: Rural development with community participation. Application: Projects in forestry, wood processing and forest-related tourism.

DISSEMINATION

LIFE Climate Value Chains

Initiating short-distance regional supply chains of timber products

The current critical situation in Europe and the world makes the importance of European countries' own resources at all levels abundantly clear. Strong and reliable regional supply chains will play an essential role in the future of economic sovereignty, social security and stability in the countries of the EU. Short-distance supply chains are also critical for climate protection and resource efficiency, both now and in the future.

As some basic raw materials are unavailable in the EU, it is more challenging to establish short-distance supply chains for some materials. Wood products, however, offer the biggest potential for short-distance supply chains. It is important to remember that the European forest area has grown by about 5 per cent since 1990, reaching 277 million hectares—about 35 per cent of the total European region (FOREST EUROPE | Publications). Nevertheless, material flows and supply chains have now become global, even for wood products, with an upward trend. This not only results in massive climate impacts but also destroys established medium-sized structures and weakens value creation, especially in rural regions.

The LIFE Climate Value Chains project aims to change this and set the course in a different direction. The project raises awareness among key stakeholder groups about the importance of regional, short supply chains for climate and economy. By implementing and scaling the eco-label Holz von Hier® (HVH) as a best practice example and proving climate-optimised value chains in the field of construction, housing and bioenergy are established, demand is promoted, especially in the public sector. This contributes to the European climate goals and supports regional European value chains. In non-German-speaking EU countries, HVH is implemented as Low Carbon Timber® (LCT).

Climate-optimised supply chains for sustainable building and living

In the context of the New Green Deal, the building sector is a key pillar for CO₂ reduction targets, as this is where a large proportion of resources and energy are consumed. So far, however, the focus has been on energy consumption in the use phase of buildings. However, as buildings become more energy-efficient in the use phase through savings in red energy, the share of the grey energy of the upstream chains of the building materials and products becomes more significant. Here, the origin of the raw materials and climate-optimised supply chains with the

shortest possible routes play a key role. The project shows that truly sustainable construction cannot do without climate-optimised short supply chains. For example, transport-related emissions for a modern building can account for up to 25 per cent of the building's emissions over its entire life cycle, including 60 years of use, demolition and disposal. Typically, however, designers and builders have almost no influence on the supply chains of building materials. With the introduction of HVH/LCT for building products, planners and public authorities have, for the first time, an effective tool to actively manage the 'low carbon' footprint of products and buildings.

Climate-optimised supply chains for bioenergy

Especially under the pressure of the current fossil fuel supply situation, a climate-friendly energy supply is becoming a central issue today. In this context, the upstream chains of the fuels must not be overlooked. In the EU, arithmetically, about 20–50 per cent of the wood residues, wood chips and pellets on the market are imported, depending on the assortment. Especially for short-lived energy materials, origin and shortest possible supply chains are key issues for real climate protection. In the field of bioenergy, LCT/HVH should

therefore be established in the EU within the framework of the project as proof of sustainable biomass compliant with the RED regulation.

The climate- and environmental label Holz von Hier®/respective Low Carbon Timber® as a best practice example

The proved climate and environmental label Holz von Hier® (HVH), or Low Carbon Timber® (LCT) in non-German-speaking countries, identifies wood products from sustainable forestry that have also been produced in above-average climate-friendly supply chains. The eco-label is based on scientific principles, addresses a key environmental factor and is externally monitored by neutral third parties. It uses an innovative electronic controlling system with real-time monitoring and operates independently of and across borders. LCT/HVH complies with the principles of the GHG Protocol and recognised financial standards and is compliant with ISO 14004, ISO 28000, EN 15900, as well as the requirements of the RED III Regulation. It thus also represents a best practice demonstration for deforestation-free supply chains. Due to its conformity with the requirements of Directive 2014/24/

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EU, it can also be put out to tender. It offers public authorities an interesting perspective for the first time to combine climate protection and regional value creation and promote them via sustainable public procurement. By strictly tying the chain back to the forest, LCT/HVH strengthens the wood of domestic forest owners and European wood products against imports into the EU with sometimes significantly worse sustainability standards.

LCT/HVH environmental footprint and ECO footprint

The environmental impacts of the upstream chains of products used are currently recorded using classic life cycle assessment values, which are essentially based on the energy consumption of production. The quantitative and qualitative environmental impacts of raw material extraction have so far been insufficiently covered. In addition, transport in the entire 'cradle-to-gate' and 'gate-to-customer' supply chains has not yet been captured realistically in conventional life cycle assessment, which uses standard data sets for this purpose. Little can be said about climate and environmental balance at the construction site without proof of origin and supply chains. However, a system-generated environmental footprint of HVH/LCT certified products provides specific individual and product-related information on environmental impacts, including transport to the construction site.

In addition, an innovative ECO footprint is used for the first time to link quantitative environmental impacts, such as those specified in environmental product declarations, with important environmental impacts that can only be described qualitatively and to integrate them into the evaluation. Only in this way can a comprehensive picture of the environmental impact of specific products be created, which is also compatible with the requirements of the European PEF (product environmental footprint) initiative.

Share of transport at the carbon balance of buildings made with wood from Russia

Category	Share (%)
Material production	48%
Transport	22%
Construction	25%
Usage and maintenance	1%
Disposal	4%

New European Institute for Low Carbon Circular Economy

As part of the project, a European Institute for Low Carbon Circular Economy will be established that will carry on the project results and extend the topic of climate-optimised and circular supply chains to other material groups to enable fair material comparisons.

The Institute aims to strengthen and ensure climate-optimised supply chains in the internal market and to contribute with scalable and practical best practice examples to bring the already existing good legal framework of the European sustainability and climate goals even further into practical implementation.

Participation opportunity

We would like to thank the EU commission, its bodies, and the LIFE programme for enabling the first best practice examples to be implemented with the project EU-LIFE-Climate Value Chains. Since climate-optimised supply chains are good for the climate and support the economic sovereignty of the countries and regions in the EU, we ask all responsible persons in the Commission and its bodies for ongoing dialogue and support.

The project is not a closed circle and restricted to certain partners or regions but invites all relevant stakeholders to participate and use the instruments and results right from this moment. Policymakers could integrate the instruments in national or regional strategies for climate protection, public authorities may use the environmental label and the provided instruments for green public procurement, and SMEs can immediately join the network and benefit from their product marketing. Feel free and contact us!

PROJECT NAME

LIFE Climate Value Chains

PROJECT SUMMARY

The project aims to initiate short-distance regional supply chains of timber products in the business sector and raise the demand for such products in several European countries. This will be achieved by implementing and extending the eco-label Holz von Hier® (or Low Carbon Timber® in non-German speaking countries) in value chains and raising awareness of the meaning and usability of certified products among private and public customers and professionals.

PROJECT PARTNERS

The project will be carried out in Germany, Austria and Luxembourg by the lead partner, Holz von Hier non-profit Ltd. Additional partners are ENVipark in Italy, the Business Support Centre Kranj and the Wood Industry Cluster in Slovenia.

PROJECT LEAD PROFILE

The project is led by the organisation Holz von Hier, holder of the same-named eco-label. Holz von Hier is an expert in sustainable supply chains, establishing a new eco-label for sustainable timber products and climate-friendly cross-border value chains. It is currently present in six European countries with a network of more than 250 companies using the tools and more than 100 partners at regional, national and international levels.

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Abb. 1 / page 1 and page 2) An article from the LIFE project "LIFE climate value chains" for European communities and procurement managers.

Appendix 1 - Holz von Hier partner network

Forests

- State forests of Rhineland-Palatinate
- State forests of Saxonia
- State forests of Thuringia
- State forests of Berlin county
- Joined forestry committee of communities
- Insel Mainau forests
- German federal agency of renewable resources
- Thurn & Taxis forests
- Association of forest owners Regensburg

timber industry

- Association of saw mills and timber industry Baden-Wurttemberg
- Association of saw mills and timber industry Saxonia and Thuringia
- German association of saw mills
- Woodcluster Hesse
- Woodcluster Luxembourg
- Slovenian wood industry cluster
- Federal association ProHolzfenster
- HeRo – Hesse raw materials association
- Chamber of industry upper franconia

crafters

- Chamber of craft Chemnitz
- Chamber of craft upper franconia
- Association of chambers of craft Baden-Wurttemberg
- Association of carpenters Baden-Wurttemberg

municipalities

- German federal association of counties
- German federal association of cities
- German federal association of municipalities
- European metropol region Nuremberg
- European metropol region Munich
- Climate alliance association

environmental organisations

- IUCN - international union for conservation of nature
- UNEP - united nations environmental program
- GIP - green industry platform
- Business for biodiversity initiative
- German federal environmental foundation
- Friends of the earth Germany
- Nature conservation association of Germany

- Rainforest institute Freiburg
- German federal association of landscape conservation
- German association of nature parks

public places

- Zoological garden Nuremberg
- Zoological garden Stuttgart
- Zoological garden Leipzig
- Museum for natural history Bonn
- Open air museum Neusath
- Museum for wood technologies Wettenberg
- Bbotanical garden Bayreuth

networks

- German federal resource efficiency network
- Building Forum Climate Neutral
- C.A.R.M.E.N. association - Central agricultural commodity marketing and energy network
- Gemeinschaftswerk Nachhaltigkeit

science & education

- Univeristy of Munich - timber construction
- University of Stuttgart - architecture
- University of applied science Erfurt
- University of applied science Kaiserslautern
- University of applied science Rottenburg
- Masters school for crafters Ebern
- Masters school for crafters Garmisch-Partenkirchen

Architects

- New European Bauhaus initiative
- German federal chamber of Architects
- German federal association of interior architects
- Architects for future
- Concular
- Chamber of architects Hesse
- Chamber of architects Thuringia
- Chamber of architects Saxonia
- Chamber of architects Lower-Saxonia
- Chamber of architects Baden-Wurttemberg
- Chamber of architects Rhineland-Palatinate

Others / certification

- NaturePlus
- DGNB - German society for sustainable building
- Baubook Austria - platform for sustainable building
- Klimaaktiv - Austrian federal initiative for sustainable living and construction
- ÖZ - Austrian environmental label

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