Strategy for the Conservation of the Lynx (*Lynx lynx carpathicus*) in the Carpathians 2027–2036



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This *Strategy* was developed under the CMS Concerted Action 14.4 for the Eurasian Lynx (*Lynx lynx*) as proposed by the IUCN/SSC Cat Specialist Group and the Secretariat of the Carpathian Convention (administrated by the United Nations Environment Programme, UNEP Vienna Office) to the 14th Meeting of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS).

This *Strategy* is the product of an extensive collaborative review process, informed by the contributions and expertise of numerous individuals and institutions. Its quality and comprehensiveness owe much to all those who generously contributed their time, knowledge, and experience throughout its development.

The *Strategy* was developed under the auspices of the Secretariat of the Carpathian Convention/UNEP Vienna Programme Office through a series of online workshops convened by the Carpathian Lynx Expert Group (Appendix III) in spring and summer 2026. Its development follows the IUCN SSC Guidelines for Species Conservation Planning (IUCN SSC Species Conservation Planning Sub-Committee, 2017) and the Cat Conservation Compendium (Mattenklodt *et al*., 2025) and was facilitated by the IUCN SSC Centre for Species Survival Cats (CSS Cats) and the IUCN SSC Cat Specialist Group.

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Table of Contents

Glossary ... 3
Acronyms and Abbreviations ... 6
1. Introduction ... 7
2. Status of the autochthonous population of the Lynx in the Carpathians ... 11
2.1. IUCN Red List Assessment for *Lynx lynx carpathicus* ... 11
2.2. IUCN Green Status Assessment for *Lynx lynx carpathicus* ... 12
2.3. Conservation status of *Lynx lynx carpathicus* according to EU Habitats Directive ... 13
3. Range-Wide Conservation Strategy ... 17
3.1 Threat Analysis and Problem Tree ... 17
3.2 Vision, Goal and Objectives ... 20
3.3 Results per Objective ... 22
4. Logical Framework (LogFrame) for the Strategy ... 27
5. Implementation and Revision of the Strategy ... 58
5.1. Implementation of the Strategy and transboundary activities ... 58
5.2 Priority Results per Range States ... 59
5.3. National Action Plans ... 65
6. References ... 67
Appendix I – Global Biodiversity Targets (GBF 2030) relevant to the conservation of the Carpathian Lynx (*Lynx lynx carpathicus*) ... 71
Appendix II – EU Financing Instruments used to date (2021–2027) ... 78
Appendix III – Members of the Expert Group for the planning workshops ... 80

Glossary

Action	LogFrame-element: Operation with a defined actor, method, and timeline to reach a Result.
Carpathian Convention	Framework Convention on the Protection and Sustainable Development of the Carpathians (2003), providing a platform for cooperation to protect the Carpathians' natural and cultural heritage and promote sustainable development.
Cat Specialist Group	Global network of leading scientists and conservationists focused on the conservation of wild cat species and their habitats. It is part of the Species Survival Commission of the IUCN.
Convention on Biological Diversity	International treaty that focuses on the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising from genetic resources.
Climate Change Vulnerability Assessment	Assessments of a species' vulnerability to climate change based on three key factors (exposure, sensitivity and adaptive capacity) using a range of different methods.
Carpathian Lynx Strategy Implementation Group	Proposed Expert Group ensuring the implementation of this *Strategy* once it is endorsed by the Range States and Conventions.
Bern Convention	Convention on the Conservation of European Wildlife and Natural Habitats - International agreement that aims to conserve wild flora and fauna and their natural habitats and promote cooperation between countries.
Convention on the Conservation of Migratory Species of Wild Animals	Also known as the Bonn Convention; International agreement that aims to conserve migratory species throughout their ranges.
Constraint	Part of the Threat Analysis: Gap or shortcoming without direct impacts on the population but allows Threats to have such impacts.
Direct Threat	Part of the Threat Analysis: Any factor presently threatening the survival of the species with a direct impact on the population.
Driver	Part of the Threat Analysis: Cause of Direct Threat.
Goal	LogFrame element: A feasible, realistic and measurable long-term aim for the conservation of the species.
Indicator	LogFrame element: Parameter used to measure the achievement of a Result by implementing Actions.
INTERREG	EU funding programme for cross-border and transnational cooperation projects.

International Union for Conservation of Nature	Global organisation composed of both government and civil society organisations working to conserve nature and ensure the sustainable use of natural resources.
IUCN Green Status of Species Assessment	Assessment estimating the recovery status of species' populations and the impact of past and future conservation.
IUCN Red List Assessment	Assessment estimating the extinction risk of a species. Based on five quantitative Criteria, species are classified into one of nine IUCN Red List Categories.
Kunming-Montreal Global Biodiversity Framework	Global framework adopted in 2022 at the UN Biodiversity conference, setting targets and goals to halt and reverse biodiversity loss by 2050.
LIFE project	Project funded under the EU LIFE Programme (for environment and climate action.
Logical Framework (LogFrame)	Table summarising all elements of the ZOPP pyramid, developed using the Logical Framework approach.
Metapopulation	A group of separated, but more or less interconnected populations of a taxon (here *Lynx lynx carpathicus*) through occasional movements (e.g. dispersal) of individuals between them. The term "metapopulation" is used for the ensemble of populations across the "Realm" (see definition below), hence including the autochthonous and reintroduced populations, but can be applied at different spatial levels. As the autochthonous population in the Carpathians is increasingly fragmented through linear infrastructure, the Carpathian population itself has increasingly the character of a metapopulation.
National Action Plan	Strategic document outlining in detail the Results and Actions needed within a country. Operationalises the overarching Strategy according to national needs and prerequisites.
Objective	LogFrame element: A specific outcome to be achieved to address and overcome the Threats to achieve the Goal.
Opportunity	LogFrame element: Socio-political, economic, or cultural factors that favor the implementation of the Result.
Problem Tree	Presents all factors negatively affecting the species (Direct Threats, Drivers, and Constraints) in the past, present and future and how they are interlinked.
Range State	All countries where the Lynx currently exists or historically existed in the Carpathians and neighbouring areas.
Realm	Encompasses both the autochthonous population in the Carpathian Mountains and the reintroduced populations in West-Central continental Europe.
Result	LogFrame element: Measurable step that describes what needs to be accomplished to meet the Goal or Objective.

Risk	LogFrame element: Negative factor, beyond the control of the Strategy that can hinder the achievement of a Result.
S.M.A.R.T.	Criteria for the formulation of Results: Specific, Measurable, Achievable, Relevant and Time-bound
Stakeholder	Any individual, group, or institution that is concerned, has expertise and/or power in the process of conserving the target species.
Strategy	Strategic document developed using the Logical Framework approach, outlining the Vision, Goal, and Objectives, and defining the Results and Actions required at the level of the entire Conservation Unit.
United Nations Environment Programme	The United Nations' primary environmental authority, driving global efforts to address the triple planetary crisis i.e. climate change, biodiversity and ecosystem loss, and pollution.
Vision	LogFrame element: A "futuristic dream" describing the ideal situation (desired future state of the species) on a very long term.
ZOPP Pyramid	Project design methodology, widely used for project planning, monitoring and evaluation. It helps develop strategic elements in a logical hierarchy, summarised in the ZOPP pyramid.

Acronyms and Abbreviations

AOO	Area of Occupancy (a term from the IUCN Red List of Threatened Species)
CC	Carpathian Convention
CCVA	Climate Change Vulnerability Assessment
CL-SIG	Carpathian Lynx Strategy Implementation Group
Cat SG	IUCN SSC Cat Specialist Group
CBP	Capacity-building programmes
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
CMR	Capture-Mark-Recapture (methodology for estimating population size)
COP	Conference of the Parties
EAFRD	European Agricultural Fund for Rural Development
EEA	European Environment Agency
EEC	European Economic Community
EIA	Environmental Impact Assessment
EOO	Extent of Occurrence
ERDF	European Regional Development Fund
ESRS	European Sustainability Reporting Standards
EU	European Union
FCS	Favourable Conservation Status (a term from the EU Habitats Directive)
GBF	Global Biodiversity Framework
GIS	Geographic Information System
IUCN	International Union for Conservation of Nature
IUCN SSC	IUCN Species Survival Commission
LL	Linking Lynx
LogFrame	Logical Framework
MEA	Multilateral Environmental Agreements
MFF	Multiannual Financial Framework
MI	Mature Individuals
MoU	Memorandum of Understanding
NAP	National Action Plan
NGO	Non-governmental organization
NRPP	National and Regional Partnership Plan
RS	Range States
SEA	Strategic Environmental Assessment
SCC	Secretariat of the Carpathian Convention
SCR	Spatial Capture-Recapture (methodology for estimating population size)
ToR	Terms of Reference
UNEP	United Nations Environment Programme
WG	Working Group
WGBD	Carpathian Convention’s Working Group on Biodiversity
WWF CEE	WWF Central and Eastern Europe
ZOPP	Zielorientierte Projektplanung

1. Introduction

The Eurasian Lynx inhabiting the Carpathian Range in Central and Southeastern Europe has been described as a distinct subspecies *Lynx lynx carpathicus* (Štollmann, 1963; see also Kitchener *et al.*, 2017) and is hence considered a distinct conservation unit by the International Union for Conservation of Nature (IUCN). While the subspecies[1] is not explicitly listed in any of the international treaties or Conventions, the Eurasian Lynx (*Lynx lynx*) is listed under several annexes, including Appendix III[2] of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention), Appendix II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS)[3], as well as Annex II[4] and Annex IV[5] in the European Union (EU) Habitats Directive (Council Directive 92/43/EEC). Trade in Carpathian Lynx is controlled through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), where *Lynx lynx* is listed in Appendix III[6]. Although there is no commercial use of Carpathian Lynx at present, CITES regulations are important for all international transfer of live specimens or derivatives, namely between EU and non-EU countries.

The Framework Convention on the Protection and Sustainable Development of the Carpathians (hereinafter: Carpathian Convention) – a multinational environmental agreement – was established in 2003 by seven countries in the region – Czechia, Hungary, Poland, Romania, Serbia, Slovakia, and Ukraine – to protect the natural and cultural heritage of the area while promoting sustainable development in the Carpathians. The Carpathian Convention brings together these countries in a unique partnership, providing a platform for cooperation and policy integration across multiple sectors. By prioritising biodiversity as the key underlying element for sustainable development, the Carpathian Convention serves as a model for mainstreaming biodiversity into other sectors. Moving forward, the Carpathian Convention has developed its separate Carpathian Biodiversity Framework for alignment with the corresponding actions and targets under the Global Biodiversity Framework. As such, it further strengthens the global biodiversity movement by serving as a role model for other regions facing similar challenges, particularly in mountainous areas. Specific actions are being taken to further implement the *International Action Plan on Conservation of Large Carnivores and Ensuring Ecological Connectivity in the Carpathians* (Papp *et al.,* 2020), through standardised monitoring, human-carnivore coexistence and enhanced ecological connectivity across the seven

[1] This Strategy refers to the subspecies *L. l. carpathicus* in its indigenous range, the Carpathians. Two range countries, Poland and the Ukraine, also host populations of the Northern Lynx (*Lynx lynx lynx*), which are not considered here. The EU Habitat Directives reporting does not distinguish between subspecies, but by ecoregion. The Carpathian lynx in Poland occupies the alpine ecoregions, but extends into the continental ecoregion along the northern edge of the Carpathian range, so that the Habitats Directive reporting referred to in chapter 2.3 below cannot be strictly applied to the subspecies. This has however no effect on the implementation of the *Strategy*, as the populations of the two subspecies in Poland (as well as in the Ukraine) are spatially clearly separated.

[2] Bern Convention Appendix III – Lists protected wild fauna species whose exploitation, harvesting, or hunting is permitted under regulated conditions to keep populations out of danger.

[3] CMS Appendix II - Lists migratory species that have an unfavourable conservation status and require, or would significantly benefit from, international cooperation and specialised management

[4] European Union Habitats Directive Annex II - Species whose conservation requires the designation of Special Areas of Conservation

[5] European Union Habitats Directive Annex IV - Species in need of strict protection

[6] CITES Appendix II - International trade in specimens is allowed only on presentation of the appropriate permits or certificates

Carpathian Range States. These topics are also operationalised in this *Strategy for the Conservation of the Lynx (Lynx lynx carpathicus) in the Carpathians 2027−2036*, hereafter referred to as the *Strategy*.

Moreover, this *Strategy* is also in line with the Vision and the Strategic Plan of the Bern Convention for the period up to 2030, as well as the CMS Samarkand Strategic Plan for Migratory Species 2024-2032. According to that Vision, by 2030, declines in biodiversity are to be halted, leading to recovery of wildlife and habitats, improving the lives of people and contributing to the health of the planet. Specifically, Goal 2 of the Strategic Plan refers to improving the conservation status of threatened species, increasing the abundance of native species, and halting human-induced extinctions.

The impetus for developing this *Strategy* was the listing of the Eurasian Lynx (*Lynx lynx*) under the Convention on the Conservation of Migratory Species of Wild Animals (CMS) at the 14th Conference of the Parties (COP14), held in Samarkand, Uzbekistan, in February 2024 (UNEP/CMS/COP14/Doc.31.4.1/Rev.1; addendum Doc.31.4.1/Add.1). Together with the listing proposal, the IUCN SSC Cat Specialist Group and the Secretariat of the Carpathian Convention (represented by the United Nations Environment Programme (UNEP) Vienna) submitted a Concerted Action proposal to the COP14, calling for specific conservation actions for the four southern subspecies of the Eurasian Lynx, including the Carpathian Lynx. For *L. l. carpathicus*, two specific activities were proposed: (1) the development of a Conservation Strategy for the autochthonous population in the Carpathians, and (2) the development of Guidelines for the recovery of Carpathian Lynx in West and Central Europe.

A particular feature of the Carpathian Lynx is that the subspecies has been used for reintroduction and reinforcement projects in mountainous regions of continental Europe since the early 1970s, including regions in West- and Central Europe which are outside of the subspecies' confirmed historical range (→ Chapter 2.2, Kubala *et al.,* in preparation b). These reintroduced populations – although still relatively small and fragmented – now account for a substantial share of the overall distribution and total population within the "*Realm* of the Carpathian Lynx" (e.g. von Arx *et al.,* 2021; Kubala *et al.*, in preparation a). According to IUCN Red List guidelines (IUCN Standards and Petitions Committee, 2024), these reintroduced populations are today considered part of the range of the Carpathian Lynx.

Although for ecological and genetic reasons, it is recommended that the autochthonous and reintroduced populations are conserved and managed as a single, large metapopulation of the Carpathian Lynx in Western-Central Europe (Bonn Lynx Expert Group, 2021), the original autochthonous population in the Carpathians deserves special attention (Kubala *et al*., 2021). On the one hand, the Lynx population in the Carpathians has not only an ecological, but also cultural value, and on the other hand, the autochthonous population is still the largest and most important source population for the subspecies. However, the Carpathian Lynx population underwent a historical bottleneck in the first decades of the 20th century, when the species was eradicated in several of the Carpathian Range States, with remnant populations estimated as low as 40-50 Lynx in Slovakia, less than 100 in Ukraine, and 100-120 in Romania (Breitenmoser & Breitenmoser-Würsten, 2008). Although the population has recovered (see Chapter 2.1), this historic decline and fragmentation has inevitably affected the genetic status of the Carpathian population, underscoring the need for a coherent, range-wide and transboundary conservation approach.

Today, the population risks further fragmentation from both large- and small-scale infrastructure and land-use developments, which reduce connectivity between local populations (see Fig. 1 in Chapter 2.1), as well as from linear infrastructure and border fences (Kubala *et al*., 2020, 2025; see also Chapter 3.1). Hence, the autochthonous population has increasingly the character of a metapopulation, also it is generally referred to as the "Carpathian population" in this *Strategy*. Important is to recognise that the increasing fragmentation needs to be mitigated through improved transboundary conservation efforts.

Such a cooperative, range-wide approach for the conservation of the Carpathian Lynx is consistent with the recommendations of the international treaties and has repeatedly been supported by the Carpathian Range States that are Parties to these Conventions. Namely, the Standing Committee of the Bern Convention has issued several Recommendations concerning the Lynx in the Carpathians since the 1980s. The most relevant, in the context of developing this *Strategy,* is Recommendation No. 204 (2019), in which the Standing Committee identified the Carpathian population as a key source population, and called for the conservation of this autochthonous population through concerted conservation actions to create and maintain a viable metapopulation across the *Realm*, hence the entire range of the subspecies.

Like all large carnivores, Lynx live at low densities and need very large areas to uphold viable populations. The "conservative" social system of Lynx, characterised by strongly philopatric females (Herrero, Heikkinen and Holmala, 2020; Holmala *et al.,* 2018; Krojerová-Prokešová *et al.*, 2019), makes this species especially vulnerable to fragmentation, population decline, and genetic impoverishment. Large-scale approaches and transboundary cooperation are therefore essential. This *Strategy*, developed under the auspice of the Carpathian Convention, the Bern Convention, and CMS, serves as a key instrument for organising the Carpathian-wide cooperation. Furthermore, the implementation of this *Strategy* contributes to the EU's Biodiversity Strategy for 2030 – a long-term plan to protect nature and put Europe's biodiversity on a path to recovery – and supports the Kunming-Montreal Global Biodiversity Framework targets (GBF 2030) (Convention on Biological Diversity, 2022). In doing so, it contributes to the implementation of the Convention on Biological Diversity (CBD) and its Protocols, including alignment with other multilateral environmental agreements (MEAs). Further details are provided in Appendix I.

As an apex predator, the Lynx is also a flagship species for a more holistic approach to conservation (Krofel *et al*., 2025). Accordingly, this *Strategy* addresses not only the preservation of the Lynx, but also of its prey species, their habitats, and the co-existence of wildlife and people. The saving of the Lynx in the Carpathians in the 20th century and the subsequent reintroductions in West- and Central Europe is one of the most spectacular recoveries of a wild felid species. The history of the Carpathian Lynx has shown that it is possible to conserve the species even in a human-dominated landscape such as continental Europe. However, the early reintroduction projects were all based on local initiatives rather than coordinated and large-scale approaches. The long-term conservation of carnivores such as the Carpathian Lynx in the modern European landscape requires an international approach, and this *Strategy* should, above all, guide such range-wide cooperation.

The involvement of several Conventions does not only strengthen international awareness and political support, but it should also enhance the effectiveness and efficiency of the implementation of the *Strategy*. Nevertheless, operationalising the *Strategy* requires some practical arrangements and detailed planning. The range-wide *Strategy* should be adapted to national

legislation, traditions, and needs by means of National Action Plans (NAPs) (→ Chapter 5.2, 5.3), and many of the Results (→ Chapter 3.3 and Logical Framework (LogFrame) in Chapter 4) will have to be planned and funded as stand-alone projects. Mastering these tasks implies coordination and planning through a responsible institution. Of the three Conventions involved, the Carpathian Convention is the one that that has the most capacity to support implementation by the Range States on the ground and the bodies and instruments to oversee the implementation of the *Strategy*. Thus, advancing the *Strategy* will be coordinated by the *Carpathian Lynx Strategy Implementation Group* (CL-SIG), in cooperation with the Carpathian Convention's Working Group on Biodiversity (WGBD).

The CL-SIG would act as the principal coordinating body for the implementation of this *Strategy*, with responsibility for supporting, initiating and monitoring the delivery of the activities set out herein, ensuring that actions are progressed in a coherent, timely and collaborative manner. A representative from each Range State would be identified to serve as a national focal point, supporting in-country coordination, contributing to reporting and monitoring processes, and facilitating communication between national stakeholders and the CL-SIG.

2. Status of the autochthonous population of the Lynx in the Carpathians

There are two concepts to evaluate the conservation status of the Carpathian Lynx that are valid for most of the Range States: the IUCN Red List of Threatened Species™ (including the "Red" and the "Green" assessments), and the assessment of conservation status under the European Union's Habitats Directive.

2.1. IUCN Red List Assessment for *Lynx lynx carpathicus*

The Carpathian Lynx (*Lynx lynx carpathicus*) was assessed for the IUCN Red List by Kubala *et al.* (in preparation a) and classified as **Near Threatened (NT)**, with Criterion C (population size) nearly met. This first ever formal IUCN Red List Assessment for the subspecies covers the entire "*Realm*", referring to the global range of *L. l. carpathicus*, which encompasses both the autochthonous population in the Carpathian Mountains and the reintroduced populations in West-Central continental Europe.

Autochthonous Carpathian population. The autochthonous population inhabits the Carpathian arc across Czechia, Hungary, Poland, Romania, Serbia, Slovakia, and Ukraine (Fig. 1, A and B). Based on the most recent population assessment period (2017–2023; Kaczensky *et al.,* 2024), the total estimated population size is approximately 2,687 individuals, broadly consistent with earlier assessments of 2,400–2,800 (von Arx *et al.,* 2004) and 2,100–2,400 individuals (Kaczensky *et al.,* 2013), suggesting overall population stability, though regional fluctuations have been documented. However, these total population figures include all age classes; applying a standardised estimation approach to derive the number of mature individuals (MI) yields a range of 727 (CMR-based) to 908 ± 91 MI (SCR-based). In the case where the autochthonous Carpathian population was assessed as a standalone unit, it would qualify as **Vulnerable (VU)** under Criterion D (250 ≤ MI ≤ 1,000). The extent of occurrence (EOO) of the autochthonous population, calculated as the minimum convex polygon of extant permanent range, is 334,000 km², and the area of occupancy (AOO), estimated using a standardised 10 × 10 km grid, is 141,449 km².

Reintroduced populations. Using Carpathian Lynx individuals predominantly from Slovakia (1970–1990s) and Romania as source stock, several reintroduced populations were established across continental Europe (Fig. 1, c-h). These populations together encompass an estimated 590 MI and show overall positive population trends, though most remain geographically isolated with limited connectivity, and some show a high inbreeding coefficient. Their combined EOO amounts to 716,700 km² and AOO to 98,400 km².

Metapopulation ("Realm"). By combining autochthonous and reintroduced populations, the total estimated number of MI for *L. l. carpathicus* ranges from 1,317 to 1,498 ± 91, the aggregated EOO of the "*Realm*" metapopulation is approximately 1,183,350 km², and the AOO is 239,849 km² — the latter reflecting the full geographic expanse of the combined distribution rather than occupied habitat alone. The current population trend of the metapopulation is assessed as stable, with no significant overall decline in the number of MI recorded.

The assessment underscores persistent threats including illegal killing, habitat fragmentation, reduced connectivity — exacerbated since 2025 by border fences in the Ukrainian Carpathians — and the absence of robust, standardised range-wide monitoring. These factors,

combined with a historical genetic bottleneck (Gugolz *et al.,* 2008; Mueller *et al.,* 2022), highlight the urgency of this coordinated, transboundary conservation *Strategy*.



Fig. 1. Distribution of the Eurasian Lynx (*Lynx lynx*) in continental Europe according to the IUCN Red List assessment (Kubala *et al*., in preparation a). The designated area for the Carpathian Lynx (*L. l. carpathicus*) is within the dashed line (Bonn Lynx Expert Group, 2021). It contains the western (A) and the eastern (B) autochthonous populations in the Carpathian Range (the subject of this *Strategy*) but also the reintroduced populations within the "*Realm*" (c, Alpine; d, Bohemian-Bavarian-Austrian; e, Dinaric; f, Harz; g, Jura; h, Palatinian-Vosges population). The Harz population represents the northern-most mountainous habitat in Central Europe and is considered part of the "*Realm*", although it is presently a mixture of several subspecies (Mueller *et al.,* 2022) released from zoos. The populations in the north-continental lowlands belong to the subspecies *L. l. lynx*, those in the southern Balkan peninsula to *L. l. balcanicus*. Brown shows "Extant", orange "Possibly Extant" range.

2.2. IUCN Green Status Assessment for *Lynx lynx carpathicus*

While the IUCN Red List Assessment evaluates the *extinction risk*, the IUCN Green Status of Species Assessment estimates the *recovery potential*. The IUCN Green Status has two main aims: (1) to assess recovery status (considering viability, spatial representation, and ecological functionality) and (2) to measure and incentivise conservation impact (IUCN Green Status of Species Working Group, 2024).

A preliminary Green Status Assessment of the current recovery status of the Carpathian Lynx found the subspecies to be **Largely Depleted** (Kubala *et al*., in preparation b), highlighting the

regionally threatened status of both the autochthonous population in the Carpathians and the reintroduced populations in the "*Realm*" (in line with the Red List Assessment; → Chapter 2.1). Significant uncertainty in the status of the Lynx in the Carpathians is highlighted, with the opportunity for systematic monitoring to reduce knowledge gaps. The preliminary assessment also considers the past, expected, and potential future impact of conservation. The assessment highlights that, although there have not been significant improvements in the status of the Lynx in the Carpathians in recent years, past conservation efforts have likely prevented the Lynx population in the Carpathians from reaching Endangered status under regional Red List criteria (Kubala *et al*., in preparation b). The next 10 years will be an important period for conservation of the Lynx in the Carpathians. Without continued conservation efforts, even small increases in threats could result in rapid population declines, extirpation of peripheral populations, and the Lynx in the Carpathians being considered regionally Endangered (Kubala *et al*., in preparation b). Continued conservation (i.e. business-as-usual) is expected to continue preventing these declines and maintain stability or even lead to some minor improvements. However, if conservation efforts are intensified (e.g. the establishment of habitat corridors and improved human-Lynx coexistence) there is already an opportunity for more significant recovery in the next 10 years through increased connectivity, population size, and distribution. In the long term, with continued and intensified conservation efforts, there is significant potential for Lynx recovery in the Carpathians. In the next 100 years, if conservation efforts are intensified, notably with increased connectivity (e.g. through the establishment of habitat corridors) and improved human perceptions of the Carpathian Lynx (e.g. through greater collaboration of conservationists with stakeholders), the population could increase in both size and distribution – with carrying capacity reached across much of the range and healthy population dynamics restored. Lynx survival and recovery in the Carpathians and the *Realm* is strongly dependent on successful conservation, highlighting the importance of effective strategic conservation planning and subsequent implementation of conservation actions.

2.3. Conservation status of *Lynx lynx carpathicus* according to EU Habitats Directive

Lynx lynx is listed under **Annexes II and IV** of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive; European Council, 1992). The species is strictly protected under Annex II (requiring the designation of Special Areas of Conservation) and Annex IV (requiring strict protection across the entire natural range within the EU, both within and outside Natura 2000 sites). Pursuant to Article 17, Member States must submit reports every six years on conservation status using a standardised four-parameter framework – range, population, habitat of the species, and future prospects – yielding one of four outcomes: **Favourable (FV)**, **Unfavourable–Inadequate (U1)**, **Unfavourable–Bad (U2)**, or **Unknown (XX)** (European Environment Agency, 2020).

The most recent completed reporting cycle covers the period 2013–2018, published in 2020 (EEA, 2020). The subsequent reporting cycle covers the period 2019–2024. Country-level assessments under this cycle were submitted to the European Commission in 2025 and can be consulted via Reportnet (European Environment Agency, 2025), however, a consolidated EU-wide biogeographical assessment equivalent to the 2020 State of Nature report has not yet been published (as of July 2026).

Within the EU part of the Carpathian range, the Eurasian Lynx is reported under Article 17 in Romania (Alpine and Continental regions), Slovakia (Alpine and Pannonian), Poland and Czechia (Alpine and Continental), and Hungary (Pannonian). Because Article 17 assessments concern *Lynx lynx* at the species level, some national regional assessments also include non-autochthonous or non-Carpathian populations, particularly the Czech Continental and Polish Continental populations. Sporadic records in Bulgaria are not currently treated as a resident population under Article 17 reporting.

The reporting rhythm is six years (Table 1). The following country-level assessments are drawn from national reports submitted to the European Commission for the 2019–2024 period and accessible via Reportnet (European Environment Agency, 2025), supplemented for historical comparison by the EEA/European Commission State of Nature report covering 2013–2018 (EEA, 2020) and the European Parliament Research Service briefing (Vinci, 2023):

Romania — *Reported in the Alpine and Continental biogeographical regions*[7]. The Eurasian Lynx has consistently been assessed as Favourable (FV) in both regions across the 2013-2018, and current 2019–2024 Article 17 reporting cycles (Vinci, 2023; national report, 2025). The national Article 17 report estimates the population at approximately 2,000–2,200 individuals with a stable trend – the most robust core population in the Realm, with data quality reportedly improved through more unified tracking. Hunting is prohibited except under strictly regulated derogations, while the principal threats identified include habitat fragmentation associated with infrastructure development and illegal killing.

Slovakia — *The species is reported in the Alpine and Pannonian biogeographical regions.* The conservation status has remained Unfavourable–Inadequate (U1) since the 2013–2018 reporting cycle and continues unchanged in the 2019–2024 national Article 17 assessment (Vinci 2023; national report 2025). The national Article 17 report indicates a population of approximately 300–400 individuals. However, independent spatial capture–recapture studies have consistently produced considerably lower abundance estimates (Kubala *et al*., 2019; Dul'a *et al*., 2021), highlighting differences between official reporting approaches and standardized science-based monitoring methods. The principal threats to the population's long-term persistence are traffic collisions, illegal killing, and low genetic diversity.

Poland — *Reported in the Alpine and Continental biogeographical regions.* Poland's Lynx population is split between both regions, and its conservation status differs accordingly over the two reporting cycles: Unfavourable–Inadequate (U1) in the Alpine region and Unfavourable–Bad (U2) in the Continental region during the 2013–2018 reporting cycle, and Unfavourable–Bad (U2) in the Alpine region and Unfavourable–Bad (U2) in the Continental region during the 2019–2024 reporting cycle (Vinci, 2023; EEA, no date). According to Poland's national submissions, 56–100 Lynx were reported in the Alpine region and 156 in the Continental region for 2019–2024 (G. Szuba, pers. comm.), compared with a minimum of 56 Alpine and 67 Continental individuals reported for 2013–2018. The reported trend is increasing in the Continental region. In contrast, the population in the Alpine region, corresponding to the Polish Carpathians, remains stable; heavy habitat fragmentation and isolated gene pools are of ongoing concern. The species is strictly protected, with no legal hunting permitted[8].

[7] https://www.eea.europa.eu/en/analysis/maps-and-charts/biogeographical-regions-in-europe-2

[8] Under Polish law, individual derogations may be issued on a case-by-case basis, allowing a specific animal to be killed under certain conditions (M. Degulis, MKIŚ-DOP, pers. comm.)

Czechia — *Reported in the Alpine (Beskydy) and Continental (Šumava) biogeographical regions.* The Continental population – centred on the Bohemian–Bavarian–Austrian border area (Šumava), a reintroduced population – is assessed as Unfavourable–Bad (U2) for 2019–2024, with a stable trend, and comprises an estimated 80–100 individuals. The smaller, autochthonous Beskydy population in Moravia, reported under the Alpine region, is assessed as Unfavourable–Inadequate (U1) with a decreasing trend, and numbers only around 10–15 individuals. The national total is therefore estimated at 90–120 individuals. Hunting is prohibited, but the species is frequently threatened by poaching and by major highway barriers fragmenting both populations.

Hungary — *Reported in the Pannonian biogeographical region* (not Continental, as stated in earlier drafts of this chapter; see Vinci, 2023). Hungary hosts only a very marginal, sporadic Lynx presence in the northern mountain ranges bordering Slovakia, assessed as Unfavourable–Bad (U2) for 2019–2024 (Bad also in 2013–2018, per Vinci, 2023), with no confirmed permanent breeding pairs. Population estimates remain at approximately 10–12 individuals, essentially unchanged since 2013–2018. However, this estimate remains highly uncertain because it has not been supported by systematic monitoring. The population is considered stable only at very low density and remains highly dependent on transient individuals dispersing from Slovakia, with severe migration barriers and small, isolated patches of suitable habitat in the Northern Hungarian Mountains.

Bulgaria — Although Bulgaria submits Article 17 reports under the EU Habitats Directive, no resident Carpathian Lynx population is currently recognised for Article 17 assessment. Occasional records of Eurasian Lynx continue to be reported, but these do not constitute an established population. However, this verdict is based on opportunistic findings, anecdotal data or short-term surveys rather than a robust monitoring, and the real status of the species would have to be assessed by means of a systematic survey (D. Zlatanova, pers. comm.).

The Article 17 assessments indicate that **Favourable Conservation Status (FCS)** has been achieved only in Romania, whereas the remaining Carpathian EU Member States continue to report **Unfavourable Conservation Status** (U1 or U2) in one or more biogeographical regions. Although conservation status differs among countries and biogeographical regions, the principal pressures affecting the species are broadly consistent across the Carpathian range. These include illegal killing, habitat loss and fragmentation associated with transport and other infrastructure development, reduced ecological connectivity, traffic mortality, insufficient implementation of coordinated conservation and wildlife management measures, and, in some populations, limited connectivity for genetic exchange. Collectively, these findings closely correspond with the threats identified in the present IUCN Red List Assessment (*Kubala et al.*, in preparation a) and highlight the need for coordinated transboundary conservation to improve the conservation status of the Carpathian Lynx.

A major cross-cutting challenge identified across the Carpathian range is the reliability and comparability of population estimates. In several countries, official population estimates are derived from monitoring approaches that differ substantially from standardised scientifically validated methods. For example, independent spatial capture–recapture studies have demonstrated considerably lower abundance estimates than official reports in parts of the Western Carpathians (Kubala *et al*., 2019; Duľa *et al*., 2021), illustrating the influence of monitoring methodology on population estimates and, consequently, conservation assessments. The implementation of harmonised, scientifically robust monitoring based on standardised

methodologies therefore remains a key prerequisite for reliable conservation assessment, international reporting under both the EU Habitats Directive and the IUCN Red List framework, and evidence-based adaptive management across the Carpathian range.

Table 1. Comparison of the reported conservation status and population trend of the Eurasian Lynx (*Lynx lynx*) between the 2013–2018 and 2019–2024 EU Habitats Directive Article 17 reporting periods, by country and biogeographical region.

Country	Biogeographical Region	2013–2018 Status & Trend	2019–2024 Status & Trend	Key Changes & Developments
Romania	Alpine / Continental	**Favourable (FV)** Stable →	**Favourable (FV)** Stable →	Remains the most robust core population (approx. 2,000-2,200 individuals); data quality reportedly improved through more unified tracking.
Slovakia	Alpine	**Unfavourable – Inadequate (U1)** Stable →	**Unfavourable – Inadequate (U1)** Stable →	No change in official status. Nationally reported population estimate revised to 300–400 individuals; genetic isolation and traffic mortality remain key concerns.
Poland	Alpine (ALP) Continental (CON)	**Unfavourable – Inadequate (U1)** Stable → **Unfavourable – Bad (U2)** Stable →	**Unfavourable – Bad (U2)** Stable → **Unfavourable – Bad (U2)** Increasing ↑	PL hosts two subspecies: *L. l. carpathicus* in the Alpine ecoregion (with 56-100 lynx reported), which has changed from U1 to U2 due to changes in the assessment method. 156 individuals *(L. l. carpathicus* and *L. l. lynx*) were reported for the Continental region.
Czechia	Alpine / Beskydy Continental / Šumava	**Unfavourable – Inadequate (U1)** Stable → **Unfavourable – Inadequate (U1)** Stable →	**Unfavourable – Inadequate (U1)** Decreasing ↓ **Unfavourable – Bad (U2)** Stable →	Continental status apparently downgraded to Bad; Beskydy Alpine population showing declining trend associated primarily with habitat fragmentation and illegal killing. Note: CZ hosts autochthonous and reintroduced populations (Continental -estimated 80–100 individuals and Beskydy population in Moravia – estimated 10-15 individuals).
Hungary	Pannonian *(corrected from "Continental")*	**Unfavourable – Bad (U2)** Unknown Trend	**Unfavourable – Bad (U2)** Stable → *(at low density)*	No significant population recovery; remains dependent on transient Slovakian individuals (estimates approx. 10-12 individuals).

3. Range-Wide Conservation Strategy

This chapter sets out the *Strategy* using the ZOPP Pyramid as its organising framework. It presents a clear hierarchy of planning elements, moving from an aspirational **Vision** through the overarching **Goal** and **Objectives**, and down to tangible **Results** delivered through defined **Actions** - linking long-term ambition with practical, implementable steps (see Cat Conservation Compendium: Mattenklodt *et al.,* 2025).

3.1 Threat Analysis and Problem Tree

A thorough understanding of the factors driving the decline and constraining the recovery of the Lynx in the Carpathians is fundamental to developing a targeted and effective Conservation Strategy. The principal Threats, Constraints and Drivers acting upon the population have therefore been analysed and visualised in a Problem Tree (Fig. 2). This structured analysis provides the evidence base for defining the *Strategy's* Objectives (→ Chapter 3.2), ensuring that all sub-goals and priority actions are directly rooted in identified problems and their underlying causes.

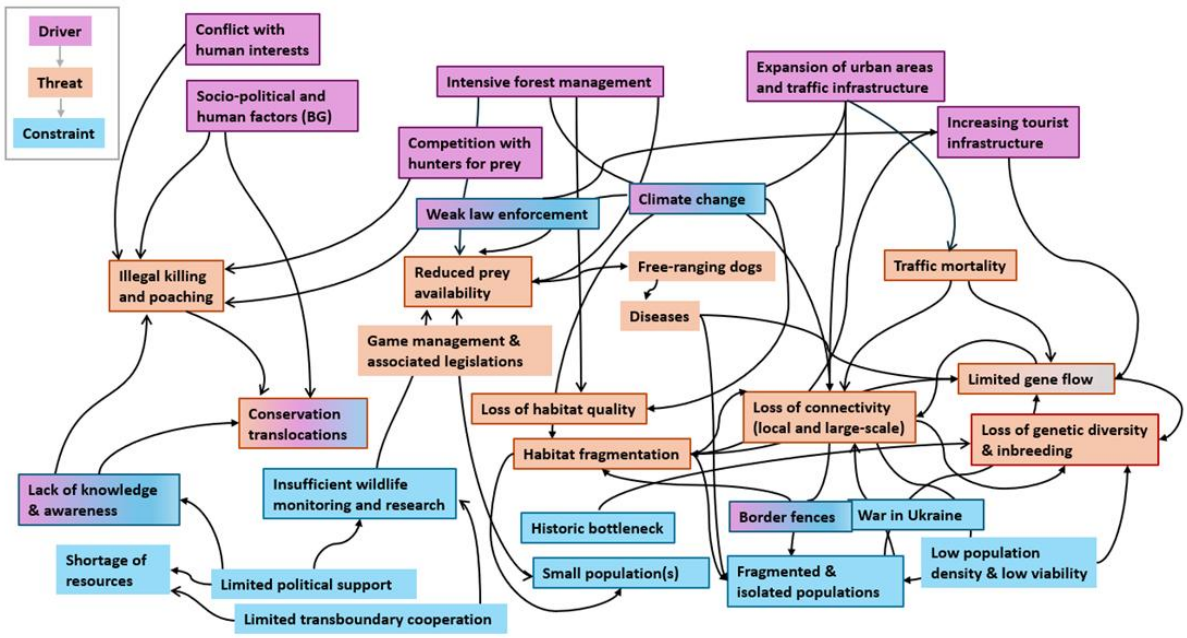


Fig. 2. Problem Tree summarising the direct Drivers, Threats and Constraints taken from the IUCN Red List Assessment draft (Kubala *et al.*, in preparation a) limiting the impact of conservation interventions for the Lynx in the Carpathians. For more detailed explanations see text below.

This Threat Analysis illustrates that challenges facing the Lynx in the Carpathians stem from a combination of interacting ecological pressures and structural governance constraints. Direct threats such as illegal killing, habitat degradation, reduced prey availability, disease, and traffic mortality are closely linked to broader drivers including land-use change, infrastructure expansion, forest and wildlife management practices, and climate change. At the same time, limited resources, weak enforcement, insufficient monitoring, and gaps in transboundary

coordination constrain effective responses. Together, these interacting pathways underline that safeguarding the Carpathian Lynx requires integrated, range-wide action that addresses both immediate pressures and the underlying socio-institutional and ecological drivers shaping population decline.

To facilitate addressing all adverse factors to the conservation of the Lynx in the Carpathians, it is helpful to differentiate between **Constraints**, underlying **Drivers**, and direct **Threats** impacting the Lynx population:

Constraints are indirect shortcomings that do not immediately affect the population but facilitate the emergence or severity of threats. For the Lynx in the Carpathians, key Constraints include:

- Lack of knowledge and awareness weakens support for Lynx-friendly decisions and coexistence.
- Shortage of resources constrains long-term monitoring, enforcement, conflict prevention, and implementation of coordinated actions at scale.
- Limited political support reduces the prioritisation of large carnivore conservation and leads to inconsistent implementation.
- Limited transboundary cooperation prevents coordinated management across borders.
- Insufficient wildlife monitoring and research creates uncertainty around population size, trends and mortality drivers.
- A historical bottleneck reduced genetic diversity and resilience.
- Fragmented and isolated populations restrict dispersal and gene flow.

Drivers are root causes that lead to the emergence of direct threats to the Lynx population in the Carpathians:

- Conflict with human interests' drive intolerance and retaliatory killing and can hinder habitat and prey management measures needed for recovery.
- Socio-political and human factors drive shifting priorities and uneven governance, reducing continuity of conservation action and cross-border coordination.
- Intensive forest management degrades habitat quality and corridor function.
- Competition with hunters for prey contributes to prey depletion and increases "Lynx as rival" narratives.
- Weak law enforcement enables poaching and habitat offences.
- Climate change amplifies ecosystem stress, altering habitat conditions, prey and pathogens dynamics, and disturbance regimes.
- Expansion of urban areas and traffic infrastructures fragments habitat, raises barrier effects, and increases mortality risk.
- Increasing tourist infrastructure intensifies disturbance and access, increasing pressure on core areas and corridors.

Together, these Drivers and Constraints give rise to concrete **Threats** that have direct impacts on the Lynx population in the Carpathians and its viability.

- Illegal killing, including poaching, persecution, and traffic collisions, remain a major source of avoidable mortality and directly undermine population viability.

● Habitat degradation, loss, and fragmentation, driven by logging, infrastructure development, poor land-use planning, and inadequate mitigation.
● Loss of functional connectivity and restricted dispersal, resulting from fragmented landscapes and linear infrastructure
● Reduced prey availability and inappropriate game management, resulting from overhunting, poaching of prey species, and conflicting legislation.
● Disease risks and interactions with domestic animals, particularly livestock and free-ranging dogs, represent an emerging and poorly understood threat.
● Genetic erosion due to small and isolated local populations, including limited gene flow, loss of genetic diversity, and inbreeding, reduces adaptive potential and long-term resilience of the population.
● Management interventions with unintended risks, such as poorly planned translocations or uncoordinated population management actions, may exacerbate genetic, demographic, or disease pressures.

The Threats affecting the Carpathian Lynx do not act in isolation, but arise from a combination of underlying Drivers and are reinforced by a range of ecological, institutional, and socio-political Constraints. These interacting factors can be grouped into a set of overarching Themes that help structure the Problem Tree below and illustrate how human activities, landscape change, governance limitations, and biological vulnerabilities jointly shape the pressures on the population.

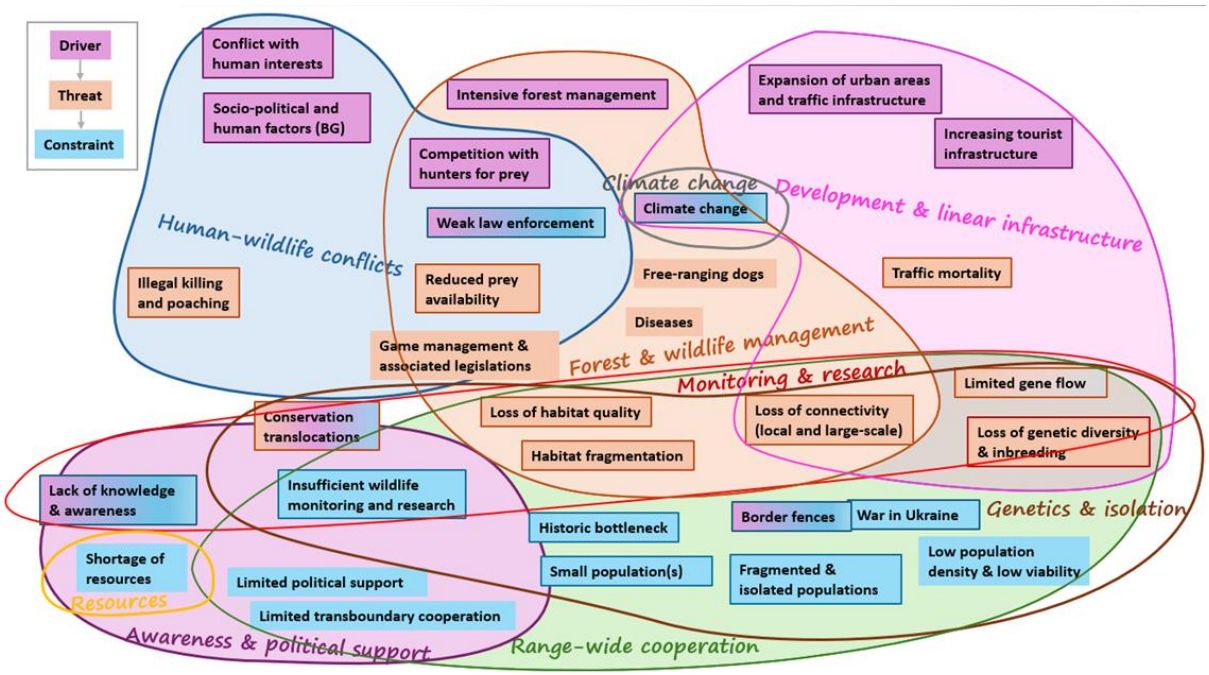


Fig. 3. Themes derived from the interconnecting Constraints, Drivers and Threats as identified in the Problem Tree presented in Chapter 3.1. These Themes are translated into Objectives to structure the efforts to conserve the Lynx in the Carpathians (see Chapter 3.2).

3.2 Vision, Goal and Objectives

Drawing on the outcomes of the Threat Analysis and Problem Tree, the Strategy for the Conservation of the Lynx (*Lynx lynx carpathicus*) in the Carpathians 2027–2036 defines a shared Vision, overarching Goal, and strategic Objectives to guide responses to the key challenges facing the Lynx in the Carpathians.

The **Vision** for the conservation of the Lynx in the Carpathians is:

The long-term persistence of a viable and ecologically functional Carpathian Lynx population thriving at natural densities, with effective connectivity, gene flow, suitable habitats and healthy population dynamics maintained across the Carpathians and neighbouring regions, in harmony with local communities and supported by key stakeholders, grounded in shared stewardship.

Which is approached through a more realistic, concrete **Goal**:

By 2040, the Carpathian Lynx population shows measurable progress towards Near Threatened under regional IUCN Red List criteria, with improved connectivity and gene flow, increasing population trend and expanding range, and coordinated transboundary conservation across the Carpathians.

Nine Objectives to reach the Goal for this *Strategy* have been formulated from the Themes as outlined in the Problem Tree (Fig. 3):

Objective 1: To promote and adopt forest, wildlife, and land management practices that maintain the suitability and connectivity of Lynx habitat in the Carpathians and beyond[9] – within natural and human landscapes –, sustain viable prey populations, and support human-Lynx coexistence, addressing conflicts with game management and other relevant stakeholder groups including farmers and livestock owners.

Objective 2: To maintain or restore sufficient gene flow across the Lynx population in the Carpathians and beyond, prioritising connectivity between peripheral and core populations, in order to prevent loss of genetic diversity and minimise the risk of inbreeding depression – while recognising the broader role of the Carpathian source population in Lynx recovery across the *Realm*.

Objective 3: To minimise the impact of development and linear infrastructure on the ecological functionality, connectivity, and long-term viability of the Lynx population in the Carpathians by identifying, mitigating, and preventing barrier effects and integrating connectivity requirements into spatial planning and infrastructure development processes.

[9] Carpathian lynx have been used for reintroduction projects in Central and West Europe, and IUCN considers these reintroduced populations to be part of the global population of the subspecies. The autochthonous and reintroduced populations together form the "*Realm* of the Carpathian Lynx" (→ Glossary).

Objective 4: To review existing evidence on the potential impacts of climate change on the Carpathian Lynx – with a focus on habitat change, prey availability and general impacts on Lynx viability – identify key knowledge gaps and initiate targeted studies to build the evidence base needed to inform adaptive management of the Lynx population across the *Realm* in the longer term.

Objective 5: To establish and maintain a harmonised, long-term, and scientifically rigorous monitoring and research framework that generates robust, standardised, and policy-relevant data on population status, distribution, connectivity, genetic viability, health, and human dimensions of the Lynx population in the Carpathians.

Objective 6: To increase awareness of and support for the conservation of Lynx in the Carpathians among the general public, local communities, and key stakeholder groups.

Objective 7: To reduce the frequency and severity of human–Lynx conflicts and associated anthropogenic mortality across the Carpathian Range, and to increase social tolerance for Lynx through the implementation of evidence-based mitigation measures, systematic stakeholder engagement, and integration of human-dimension data into adaptive management frameworks.

Objective 8: To strengthen the national political commitments and transboundary cooperation, through Multilateral Environmental Agreements (MEA) such as the Carpathian Convention, the Bern Convention, the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and others, to provide the institutional foundation for the long-term viability of the Lynx population in the Carpathians.

Objective 9: To secure long-term human and financial resources for the implementation of this *Strategy* and related National Action Plans (NAPs) from institutional, public and private funding sources, ensuring the continuity and coordination of conservation actions across the Carpathian Range and beyond.

3.3 Results per Objective

Each Objective is attained by means of a number of concrete S.M.A.R.T. Results, which are tangible outcomes of targeted activities and can be considered as stand-alone, but interconnected projects.

Objective 1. To promote and adopt forest, wildlife, and land management practices that maintain the suitability and connectivity of Lynx habitat in the Carpathians and beyond – within natural and human landscapes –, sustain viable prey populations, and support human-Lynx coexistence, addressing conflicts with game management and other relevant stakeholder groups including farmers and livestock owners.

Result 1.1. By 2028, formal communication channels between wildlife conservation authorities and game management practitioners are established or strengthened in all Range States, with the aim of addressing real and perceived conflicts between Lynx conservation and game management.

Result 1.2. By 2031, priority habitat patches and key corridors for the Lynx population in the Carpathians and adjacent areas are mapped, validated through movement/connectivity data, and formally recognised as priority conservation areas within planning frameworks (→ Objective 3).

Result 1.3. By 2032, the status and trends of key prey species – most importantly Roe Deer (*Capreolus capreolus)* – and relevant competitors are monitored in relation to Lynx presence across at least [2] Range States, and sustainable prey and wildlife management recommendations are developed and shared.

Result 1.4. By 2036, Lynx habitat requirements – at minimum corridor specifications and core habitat area characteristics – are incorporated into national forest management guidelines and land-use planning frameworks in at least [2] Range States, with at least one Range State serving as a pilot model for broader adoption.

Objective 2. To maintain or restore sufficient gene flow across the Lynx population in the Carpathians and beyond, prioritising connectivity between peripheral and core populations, in order to prevent loss of genetic diversity and minimise the risk of inbreeding depression – while recognising the broader role of the Carpathian source population in Lynx recovery across the *Realm*.

Result 2.1. By 2031, comparable genetic monitoring – including the development of a standardised set of common genetic markers, and a range-wide genetic study that includes samples from across the range – of the Lynx population in the Carpathians and beyond is operational across all Range States and integrated with the monitoring framework under Objective 5.

Result 2.2. Genetic indicators following Genetic Essential Biodiversity Variables (EBVs) metrics – including genetic diversity, effective population size, inbreeding levels, genetic differentiation and structure, and gene flow rates – are assessed and reported for the Lynx population in the Carpathians every 6 years throughout the timeline of this *Strategy*.

Result 2.3. By 2036, a population management plan for the Lynx in the Carpathians – including criteria and protocols for assisted dispersal or translocation as management tools of last resort between local population in the Carpathians – is developed and endorsed by competent authorities in at least [2] Range States, with consideration given to the role of the Carpathian population as a source population within the broader *Realm* where relevant.

Objective 3. To minimise the impact of development and linear infrastructure on the ecological functionality, connectivity, and long-term viability of the Lynx population in the Carpathians by identifying, mitigating, and preventing barrier effects and integrating connectivity requirements into spatial planning and infrastructure development processes.

Result 3.1. By 2030, a spatially explicit, range-wide assessment of Lynx habitat connectivity, movement patterns, and infrastructure-related risks in the Carpathians is completed and integrated into spatial planning, Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) processes.

Result 3.2. By 2036, targeted mitigation measures are implemented at priority infrastructure sites, resulting in measurable reductions in mortality and improved permeability of key corridors[10].

Result 3.3. By 2035, the ecological impact of border fences on Lynx movement and connectivity across the Carpathians is quantified, and mitigation measures are agreed and implemented where feasible.

Result 3.4. By 2036, functional connectivity across the Carpathian range is improved, as evidenced by increased dispersal events, recolonisation of suitable habitats, and gene flow between separated parts of the population.

Objective 4. To review existing evidence on the potential impacts of climate change on the Carpathian Lynx – with a focus on habitat change, prey availability and general impacts on Lynx viability –, identify key knowledge gaps, and initiate targeted studies to build the evidence base needed to inform adaptive management of the Lynx population across the *Realm* in the longer term.

Result 4.1. – By 2028, a regional Climate Change Vulnerability Assessment (CCVA) is completed to evaluate the possible risk of climate change on the Lynx population in the Carpathians, its prey and their habitats.

[10] While it is difficult to implement species-specific mitigation measures for linear traffic lines or ecological corridors, reducing lynx mortality should be considered in related strategic documents of the Carpathian Convention, such as the Joint Strategic Action Plan 2021 – 2026 for the Implementation of the Protocol on Sustainable Transport, the International Action Plan on Conservation of Large Carnivores and Ensuring Ecological Connectivity in the Carpathians, or the handbook Wildlife and Traffic in the Carpathians. Guidelines how to minimize the impact of transport infrastructure development on nature in the Carpathian countries. See also Wiegele et al. (2026) for a broader integrative approach on enhancing connectivity.

Result 4.2. By 2030, a study on the impacts of climate change on the Lynx population in the Carpathians, its prey and their habitats is initiated in at least one representative area across the Carpathian range.

Result 4.3. From 2030 onwards, the findings from the CCVA and climate-change research are continuously integrated into the overall monitoring programme (→ Objective 5) to ensure that the appropriate parameters needed for an adaptive response to climate change are collected.

Result 4.4. By 2032, a set of adaptive management recommendations, based on the outcome of Results 4.1-4.3, are compiled and shared, and an adaptive management scheme is implemented in at least one region of the Carpathians.

Objective 5. To establish and maintain a harmonised, long-term, and scientifically rigorous monitoring and research framework that generates robust, standardised, and policy-relevant data on population status, distribution, connectivity, genetic viability, health, and human dimensions of the Lynx population in the Carpathians.

Result 5.1. By 2030, a standardised, multi-method monitoring system is implemented across all Range States, ensuring consistent and comparable data collection.

Result 5.2. By 2030, a shared, interoperable data management system is established and operational, enabling real-time data sharing and coordinated analysis.

Result 5.3. At regular intervals aligned with international reporting cycles, coordinated range-wide population assessments are conducted using standardised methodologies.

Result 5.4. By 2036, research capacity and collaboration are strengthened across Range States, enabling interdisciplinary and transboundary research on Lynx ecology, genetics, health, and human dimensions.

Result 5.5. Human-dimension data are systematically integrated into adaptive management frameworks, ensuring that conservation actions are informed by socio-ecological context.

Objective 6. To increase awareness of and support for the conservation of the Lynx population in the Carpathians among the general public, local communities, and key stakeholder groups.

Result 6.1. By 2036, range-wide and national public communication campaigns are developed and implemented.

Result 6.2. Educational materials on ecology, conservation status and coexistence of the Lynx population in the Carpathians are developed and disseminated in all Carpathian languages throughout the duration of this *Strategy*.

Result 6.3. By 2036, capacity building programmes tailored to specific stakeholder groups (hunters, foresters, wildlife management authorities, livestock owners, decision makers, journalists, tourism sector) are developed, shared and operational in all range countries.

Objective 7. To reduce the frequency and severity of human–Lynx conflict incidents and associated anthropogenic mortality across the Carpathian Range, and to increase social tolerance for Lynx through the implementation of evidence-based mitigation measures, systematic stakeholder engagement, and integration of human-dimension data into adaptive management frameworks.

Result 7.1. By 2030, a harmonised, standardised, and quality-controlled monitoring system for human–Lynx conflict incidents is established, operational and shared across all Range States, enabling consistent classification, verification, and reporting of conflict types and drivers.

Result 7.2. By 2035, evidence-based conflict mitigation measures are implemented in priority conflict areas, resulting in a statistically measurable reduction in conflict incidents and associated mortality rates.

Result 7.3. By 2031, a robust, standardised dataset on human attitudes, perceptions, and tolerance toward the Lynx population in the Carpathians is established across all Range States and incorporated into decision-making processes.

Result 7.4. By 2035, structured, multi-level stakeholder engagement mechanisms are established in all priority conflict areas, facilitating co-management, knowledge exchange, and conflict resolution.

Objective 8. To strengthen the national political commitments and transboundary cooperation, through Multilateral Environmental Agreements (MEA) such as the Carpathian Convention, the Bern Convention, the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and others, to provide the institutional foundation for the long-term viability of the Lynx population in the Carpathians.

Result 8.1. By 2036, Carpathian Range States strengthen the integration of Carpathian Lynx conservation into their national biodiversity strategies, the reporting cycles under the EU Habitats Directive and other relevant multilateral agreements (such as CBD, Bern, CMS), and relevant funding opportunities.

Result 8.2. By 2036, bilateral or multilateral environmental agreements (MEAs) or memoranda of understanding (MoU) on transboundary Lynx monitoring, population management, and anti-poaching cooperation are concluded or renewed between at least [2] pairs of neighbouring Range States.

Result 8.3. By 2036, existing National Action Plans (NAPs) for the conservation of the Lynx population in the Carpathians and beyond are updated in Range States, and new NAPs are developed in Range States currently lacking them, explicitly aligned with the Goal, Objectives, and Results of this *Strategy*.

Objective 9. To secure long-term human and financial resources for the implementation of this *Strategy* and related National Action Plans (NAPs) from institutional, public and private funding sources, ensuring the continuity and coordination of conservation actions across the Carpathian Range and beyond.

Result 9.1. Within the first year of this *Strategy*, a financial sustainability analysis identifying core budget needs and funding gaps is conducted and presented to the Parties to the Carpathian Convention and other relevant bodies.

Result 9.2. At least [2] transboundary or range-wide conservation projects with secured multi-year funding are active at any given time during the timeline of this *Strategy*.

Result 9.3. Throughout the timeline of this *Strategy*, the Carpathian Lynx Strategy Implementation Group (CL-SIG) is established and operational under the coordination of the Carpathian Convention Secretariat and in cooperation with the Carpathian Convention's Working Group on Biodiversity, with clearly defined responsibilities to support implementation across all Range States and reporting to the relevant Carpathian Convention bodies.

Result 9.4. Throughout the timeline of this *Strategy*, the mobilisation of EU funding sources[11] for the conservation of the Lynx population in the Carpathians is actively pursued, with at least [2] successful funding applications submitted or secured by relevant Range State authorities or conservation organisations.

[11] A number of EU funding instruments are available from the European Union to support wildlife conservation, implementation of Natura 2000, or transboundary cooperation, and have been used in the past. At present, the Multiannual Financial Framework (MFF) is in preparation, and the financial instruments are likely to change substantially. The implementation of this Result will highly depend on the new MFF and will need to be readdressed once the MFF is adopted.

4. Logical Framework (LogFrame) for the Strategy

The Logical Framework (LogFrame) presented below provides an integrated overview of the *Strategy's* implementation framework. It brings together the Objectives, Results, Actions, Indicators, Risks and Opportunities, Timelines, and responsible Actors within a single, coherent structure. This approach is intended to clarify the logical relationships between strategic elements, support coordinated implementation across scales and sectors, and facilitate monitoring, evaluation, and adaptive management over the lifetime of this *Strategy*.

Current discussions on the revision of EU financing mechanisms, including the ongoing development of the next Multiannual Financial Framework (MFF), which is expected to be adopted in 2027, may lead to significant changes in the availability and structure of conservation funding (Appendix II).

Table 2. LogFrame presenting an integrated overview of the *Strategy's* implementation framework. Risks and Opportunities are separated by a "//".

Objective/Result/Action	**Actor**	**Indicator**	**Timeline**
Objective 1 To promote and adopt forest, wildlife, and land management practices that maintain the suitability and connectivity of Lynx habitat in the Carpathians and beyond – within natural and human landscapes –, sustain viable prey populations, and support human-Lynx coexistence, addressing conflicts with game management and other relevant stakeholder groups including farmers and livestock owners			
Result 1.1 By 2028, formal communication channels between wildlife conservation authorities and game management practitioners are established or strengthened in all Range States, with the aim of addressing real and perceived conflicts between Lynx conservation and game management.			
Indicator/Output – Dialogue between and among conservation and wildlife management authorities of all RS is established, facilitated by the CC, including the SCC, WGBD and the CL-SIG ***Risks and Opportunities*** – Lack of interest of national authorities // Well-established operational structure of the CC			

Objective/Result/Action	Actor	Indicator	Timeline
Action 1.1.1 The "CL-SIG" and its partners, through the Carpathian Convention, inform the relevant authorities and organisations across the Carpathian range about the implementation of the *Strategy* and invite them to engage in continuous dialogue.	CL-SIG, CC, SCC	CL-SIG-facilitated dialogue channels operational	Immediately
Action 1.1.2 In each country, define, organise, and establish regular exchange between the partners. The "CL-SIG" also assures that range-wide relevant information is shared with the partners across all Range States.	CL-SIG, CC, SCC, NGOs, national and local partners	Regular exchange of information between GOs functional	2028
Result 1.2 By 2031, priority habitat patches and key corridors for the Lynx population in the Carpathians and adjacent areas are mapped, validated through movement/connectivity data, and formally recognised as priority conservation areas within planning frameworks (→ Objective 3).			
Indicator/Output – GIS project established and report/peer-reviewed publication on corridors produced and shared with the relevant RS institutions and validated in the field ***Risks and Opportunities –*** Lack of engagement of RS planning institutions // Implementation of Result supports fulfilment of national biodiversity obligations			
Action 1.2.1 The "CL-SIG" initiates, in cooperation with interested scientific institutions and relevant national institutions, a spatially explicit modelling project to map Lynx habitat and key corridors in the Carpathians and adjacent areas, including the management status of identified priority habitat patches.	CL-SIG as initiator and one/several scientific partners as executors	GIS project and related report/peer-reviewed publication available	2028
Action 1.2.2 The actors from Action 1.2.1, for example through the Carpathian Convention, inform all relevant national authorities about the findings of Action 1.2.1 and discuss ways of integrating the relevant conclusions into National Action Plans (NAPs), Biodiversity Strategies, and other carnivore conservation plans.	CL-SIG, scientific partners, CC	Dialogue with relevant RS planning authorities established	2029

Objective/Result/Action	Actor	Indicator	Timeline
Action 1.2.3 Integrate the findings from Action 1.2.1 into at least one (regional) conservation or management plan, which is then implemented in subsequent years.	CL-SIG, scientific partners, CC, all national authorities in charge	Habitat connectivity integrated in national land management plans	2031
Result 1.3 By 2032, the status and trends of key prey species – most importantly Roe Deer (*Capreolus capreolus)* – and relevant competitors are monitored in relation to Lynx presence across at least [2] Range States, and sustainable prey and wildlife management recommendations are developed and shared.			
Indicator/Output – Practicable monitoring programmes for key prey and co-predators are operational and results regularly reported in all RS ***Risks and Opportunities –*** Lack of capacity and/or funding in the RS // Synergistic approach with other wildlife management and conservation tasks			
Action 1.3.1 Integrate all monitoring requirements identified in Result 1.2 into the national biodiversity monitoring programmes. (→ Objective 5)	CL-SIG, scientific partners, CC, all national authorities in charge	Regular monitoring reports produced and shared	2032
Result 1.4 By 2036, Lynx habitat requirements – at minimum corridor specifications and core habitat area characteristics – are incorporated into national forest management guidelines and land-use planning frameworks in at least [2] Range States, with at least one Range State serving as a pilot model for broader adoption.			
Indicator/Output – Standards for wildlife-friendly forest management are defined and shared with relevant authorities, and a model project is established and used to test best-practice forest management guidelines ***Risks and Opportunities*** – Lack of capacity and/or funding in the RS // Synergistic approach with other wildlife management and biodiversity conservation tasks			
Action 1.4.1 Communicate the findings from Result 1.2 and Result 1.3 with national wildlife authorities (→ Result 1.1), in order to define ways of integrating the recommendations regarding habitat conservation and corridor maintenance into all relevant national planning tools.	CL-SIG, scientific partners, CC	Regular reports produced and shared	2032

Objective/Result/Action	Actor	Indicator	Timeline
Action 1.4.2 Incorporate the recommendations, according to the conclusions from Action 1.4.1, into the planning framework of at least [2] Range States.	CL-SIG, scientific partners, CC, all national authorities in charge	Best-practice recommendations integrated into national landscape/forest management plans	2036
Objective 2 To maintain or restore sufficient gene flow across the Lynx population in the Carpathians and beyond, prioritising connectivity between peripheral and core populations, in order to prevent loss of genetic diversity and minimise the risk of inbreeding depression – while recognising the broader role of the Carpathian source population in Lynx recovery across the *Realm*.			
Result 2.1 By 2031, comparable genetic monitoring – including the development of a standardised set of common genetic markers, and a range-wide genetic study that includes samples from across the range – of the Lynx population in the Carpathians and beyond is operational across all Range States and integrated with the monitoring framework under Objective 5.			
Indicator/Output – Continuous genetic monitoring established, based on a standardised approach and a baseline study including all RS ***Risks and Opportunities*** – Representative sampling across all RS not possible // Cooperation with Genetic WG of LL (Linking Lynx) network			
Action 2.1.1 Develop, agree and apply a standardised set of common genetic markers and genomic approaches.	Geneticists, scientific institutions, relevant partners in monitoring	Genetic protocol developed and applied	1-3 years
Action 2.1.2 Develop and publish a range-wide study on the genetics of the Lynx population in the Carpathians, and issue recommendations for genetic monitoring of the Carpathian Lynx.	Geneticists, scientific institutions, NGOs, anyone able to provide samples	Report(s)/Peer-reviewed publication(s) available	5-10 years

Objective/Result/Action	Actor	Indicator	Timeline
Action 2.1.3 Integrate the genetic monitoring into the general monitoring system (→ Objective 5) across all Range states.	CL-SIG, geneticists, scientific institutions, national authorities	Continuous genetic monitoring assured	5-10 years
Result 2.2 Genetic indicators following Genetic Essential Biodiversity Variables (EBVs) metrics – including genetic diversity, effective population size, inbreeding levels, genetic differentiation and structure, and gene flow rates – are assessed and reported for the Lynx population in the Carpathians every 6 years throughout the timeline of this *Strategy*.			
Indicator/Output – Genetic baseline report and one follow-up report produced and shared ***Risks and Opportunities*** – Lack of capacity, funding, and time // Cooperation with Genetic WG of LL (Linking Lynx) network			
Action 2.2.1 Develop and publish an assessment of relevant genetic indicators.	Geneticists, scientific institutions, Governmental organisations	Genetic protocols published	Until 2032, and updated until 2036
Action 2.2.2 – Communicate the findings and the possible management consequences to the Carpathian Convention and all relevant national authorities through the channels established under Result 1.1.	CL-SIG, geneticists, scientific institutions	Practical application discussed with RS authorities	Until 2032, and updated until 2036
Result 2.3 By 2036, a population management plan for the Lynx in the Carpathians – including criteria and protocols for assisted dispersal or translocation as management tools of last resort between local population in the Carpathians – is developed and endorsed by competent authorities in at least [2] Range States, with consideration given to the role of the Carpathian population as a source population within the broader *Realm* where relevant.			
Indicator/Output – Lynx population management based on (genetic) monitoring results developed, discussed with the RS and endorsed ***Risks and Opportunities*** – Lack of interest, funding and time // CC offers adequate platform for discussion with RS			

Objective/Result/Action	Actor	Indicator	Timeline
Action 2.3.1 Prepare a range-wide demographic/genetic population management plan for the Lynx in the Carpathians and present this to the relevant authorities.	CL-SIG, scientific institutions, universities, NGOs, relevant national authorities	Lynx management plan shared and adopted	3-5 years
Action 2.3.2 Prepare and/or revise national population management/action plans (NAPs) in line with this *Strategy* (→ Results 2.2 and 2.3).	National conservation authorities, scientific institutions, NGOs, stakeholders	Lynx management plan integrated into NAPs	5-10 years
Objective 3 To minimise the impact of development and linear infrastructure on the ecological functionality, connectivity, and long-term viability of the Lynx population in the Carpathians by identifying, mitigating, and preventing barrier effects and integrating connectivity requirements into spatial planning and infrastructure development processes.			
Result 3.1 By 2030, a spatially explicit, range-wide assessment of Lynx habitat connectivity, movement patterns, and infrastructure-related risks in the Carpathians is completed and integrated into spatial planning, Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) processes.			
Indicator/Output – Report/Peer-reviewed scientific publication(s) on critical corridors and barriers available and adopted by the RS (see also R 1.4) ***Risks and Opportunities*** – Lack of engagement of RS planning institutions // Synergy to obligations from overarching biodiversity strategies			
Action 3.1.1 Compile and harmonise spatial data on Lynx occurrence, movement, habitat suitability, and infrastructure, ensuring compatibility in scale and format.	CL-SIG and interested scientific institutions, in cooperation with the national authorities	Range-wide GIS project and database established	2027–2029

Objective/Result/Action	Actor	Indicator	Timeline
Action 3.1.2 Analyse habitat connectivity and movement pathways using established spatial modelling approaches.	Scientific institutions	Project operational	2027–2029
Action 3.1.3 Identify and map key connectivity bottlenecks and areas of high infrastructure-related risk.	CL-SIG and interested scientific institutions	Spatial analyses performed	2029
Action 3.1.4 Provide spatial outputs and recommendations to responsible authorities for integration into EIA/ Strategic Environmental Assessment (SEA) procedures and spatial planning frameworks.	CL-SIG and national authorities (environment, planning) in cooperation with the infrastructure agencies	Spatially explicit report/peer-reviewed publication produced and discussed with RS	2029–2030
Result 3.2 By 2036, targeted mitigation measures are implemented at priority infrastructure sites, resulting in measurable reductions in mortality and improved permeability of key corridors.			
Indicator/Output – Dangerous infrastructure mitigation measures implemented and demonstrated to be effective ***Risks and Opportunities*** – Lack of cooperation of authorities in charge // Supports fulfilment of overarching biodiversity conservation obligations			
Action 3.2.1 Identify priority sites for mitigation based on combined analysis of connectivity and mortality data (→ Action 3.1.3 and Objective 7).	CL-SIG and interested scientific institutions, in cooperation with the national authorities	Critical sites identified (GIS project)	2030

Objective/Result/Action	Actor	Indicator	Timeline
Action 3.2.2 Develop technically appropriate mitigation measures (e.g. wildlife crossings, fencing adaptations) based on site-specific conditions and species requirements.	CL-SIG and national authorities, in cooperation with the infrastructure agencies, engineers and scientific institutions	Site-specific measures proposed and discussed	2030–2032
Action 3.2.3 Implement mitigation measures in cooperation with infrastructure authorities and project developers.	National authorities, in cooperation with the infrastructure agencies and engineers	Site-specific measures implemented	2032–2035
Action 3.2.4 Monitor the effectiveness of mitigation measures using standardised methods (e.g. camera trapping, mortality monitoring).	CL-SIG and interested scientific institutions, in cooperation with the relevant GOs/NGOs	Evaluation project (monitoring) established	2033–2036
Action 3.2.5 Refine and optimise mitigation measures based on monitoring results, including evaluation of their effectiveness in reducing mortality and maintaining functional connectivity.	National authorities in cooperation with the CL-SIG and interested scientific institutions	Evaluation done and best-practice recommendations issued	2034–2036
Result 3.3 By 2035, the ecological impact of border fences on Lynx movement and connectivity across the Carpathians is quantified, and mitigation measures are agreed and implemented where feasible.			
Indicator/Output – Impact assessed, mitigation measures proposed and discussed with authorities in charge ***Risks and Opportunities*** – Political situation not favourable to mitigate fences // CC set up to improve transboundary conservation			

Objective/Result/Action	Actor	Indicator	Timeline
Action 3.3.1 Establish a specific transboundary working group to coordinate assessment of border fence impacts.	CL-SIG and national authorities in cooperation with border authorities	Contact group UK, SK, RO and CL-SIG established	2027–2028
Action 3.3.2 Assess barrier effects of fences using available data on Lynx movement and distribution.	CL-SIG, "Border fence WG", and interested scientific institutions in cooperation with the national authorities	Impact of fences monitored and understood	2028–2029
Action 3.3.3 Identify and evaluate feasible mitigation options (e.g. modifications, crossing points).	CL-SIG, "Border fence WG", and national authorities in cooperation with border authorities	Mitigation measures proposed and discussed	2029–2030
Action 3.3.4 Engage relevant authorities to agree on and implement mitigation measures where feasible.	National authorities in cooperation with border authorities	Agreement with RS on mitigation measures	2030–2035
Result 3.4 By 2036, functional connectivity across the Carpathian range is improved, as evidenced by increased dispersal events, recolonisation of suitable habitats, and gene flow between separated parts of the population.			
Indicator/Output – Improved connectivity evaluated by means of adequate monitoring efforts, reported and discussed ***Risks and Opportunities*** – Lack of support through relevant RS authorities // CC set up to improve transboundary conservation			

Objective/Result/Action	Actor	Indicator	Timeline
Action 3.4.1 Monitor dispersal and connectivity using coordinated approaches (e.g. camera trapping, genetic sampling, telemetry where available) – as part of broader monitoring (→ Objective 5).	Scientific institutions in cooperation with NGOs and local communities	Monitoring established and operational across borders	Continuous (from 2030)
Action 3.4.2 At 5-year intervals, analyse and publish information on the trends in connectivity, dispersal, and recolonisation across the Carpathian range.	CL-SIG in cooperation with the interested scientific institutions	Monitoring and status reports published	2032–2036
Action 3.4.3 Use results to inform spatial planning, corridor management, and conservation measures.	National authorities, in cooperation with the CL-SIG, interested scientific institutions and infrastructure agencies	Reports shared and discussed with RS authorities	Continuous (from 2033)
Objective 4 To review existing evidence on the potential impacts of climate change on the Carpathian Lynx – with a focus on habitat change, prey availability and general impacts on Lynx viability – identify key knowledge gaps and initiate targeted studies to build the evidence base needed to inform adaptive management of the Lynx population across the *Realm* in the longer term.			
Result 4.1 By 2028, a regional Climate Change Vulnerability Assessment (CCVA) is completed to evaluate the possible risk of climate change on the Lynx population in the Carpathians, its prey and their habitats.			
Indicator/Output – CCVA performed and released according to IUCN standards ***Risks and Opportunities*** – First CCVA not indicative/not considered // Preliminary assessment will help to guide subsequent activities			
Action 4.1.1 Perform the CCVA according to the selected methodology and produce and disseminate a comprehensive report on climate change vulnerability risks.	CL-SIG and interested scientific institutions, in cooperation with the IUCN	CCVA done and distributed	2028

Objective/Result/Action	Actor	Indicator	Timeline
	SSC Cat Specialist Group		
Result 4.2 By 2030, a study on the impacts of climate change on the Lynx population in the Carpathians, its prey and their habitats is initiated in at least one representative area across the Carpathian range.			
Indicator/Output – Pilot study operational and regularly reported ***Risks and Opportunities*** – Lack of capacity and funding // Pilot study will guide further CCV studies and enhance understanding			
Action 4.2.1 Launch, based on the findings from Result 4.1, a targeted research project in at least one representative study area across the Carpathian range.	CL-SIG and interested scientific institutions	Pilot study operational	2029
Action 4.2.2 Use the findings from the research project to inform the monitoring (→ Result 4.2.1) and adaptive management (→ Result 4.4), and the general scientific conservation community.	CL-SIG, scientific partners, CC and all relevant national authorities	Report on CCV monitoring and adaptive management	2030
Result 4.3 From 2030 onwards, the findings from the CCVA and climate-change research are continuously integrated into the overall monitoring programme (→ Objective 5) to ensure that the appropriate parameters needed for an adaptive response to climate change are collected.			
Indicator/Output – Monitoring parameters to perform CCVA are integrated into range-wide monitoring programme ***Risks and Opportunities*** – Lack of cooperation, capacity and funding // Project will support wider CC mitigation understanding and mitigation			
Action 4.3.1 Design, based on the findings from Result 4.1 and Result 4.2, a programme to specifically and continuously monitor the impact of climate change on the Lynx population in the Carpathians, its prey and their habitats.	CL-SIG, scientific institutions, CC and all relevant national authorities	Relevant monitoring parameters identified	2030

Objective/Result/Action	Actor	Indicator	Timeline
Action 4.3.2 Ensure that the parameters required for climate-change monitoring are integrated in the overall monitoring programme (→ Objective 5).	CL-SIG, scientific institutions, CC and all relevant national authorities, local partners and NGOs	CCV monitoring integrated into range-wide monitoring programme	2030
Result 4.4 By 2032, a set of adaptive management recommendations, based on the outcome of Results 4.1-4.3, are compiled and shared, and an adaptive management scheme is implemented in at least one region of the Carpathians.			
Indicator/Output – Adaptive management recommendations discussed with RS authorities and implemented in pilot area ***Risks and Opportunities*** – Adaptive measures not accepted or not practical // Implementation helps to fulfil general biodiversity conservation obligations			
Action 4.4.1 Develop, based on the findings from Results 4.1-4.3, a set of recommendations for adaptive management interventions to mitigate the impact of climate change on the Lynx population in the Carpathians, its prey and their habitats.	CL-SIG, scientific institutions, CC	Recommendation on the attention of CC and RS produced	2031
Action 4.4.2 Identify one or several representative areas (or administrative units) in the Carpathians, initiate and test the application of the adaptive management recommendations (→ Action 4.4.1).	CL-SIG, scientific institutions, CC and all relevant national authorities, local partners and NGOs	Recommendations applied in pilot area(s)	2032
Objective 5 To establish and maintain a harmonised, long-term, and scientifically rigorous monitoring and research framework that generates robust, standardised, and policy-relevant data on population status, distribution, connectivity, genetic viability, health, and human dimensions of the Lynx population in the Carpathians.			
Result 5.1 By 2030, a standardised, multi-method monitoring system is implemented across all Range States, ensuring consistent and comparable data collection.			

Objective/Result/Action	Actor	Indicator	Timeline
Indicator/Output – Harmonised monitoring protocols adopted and implemented in all RS; first comparable, range-wide dataset produced and shared ***Risks and Opportunities*** – Insufficient institutional capacity or funding in RS; inconsistency between national monitoring traditions // Existing platforms (Linking Lynx, LECA project) provide methodological basis and facilitate harmonisation			
Action 5.1.1 Review existing monitoring approaches across Range States and identify key gaps and inconsistencies.	CL-SIG and interested scientific institutions, in cooperation with relevant national authorities and the NGOs	Gap analysis report produced and shared with all RS	2027–2028
Action 5.1.2 Develop harmonised monitoring protocols (considering outputs from the LECA project and Linking Lynx Monitoring Working Group), including minimum requirements for sampling effort, spatial coverage, and data quality.	CL-SIG and interested scientific institutions, in cooperation with the NGOs	Harmonised monitoring protocol document endorsed by CL-SIG	2027–2028
Action 5.1.3 Implement protocols across Range States through coordinated training and institutional adoption.	National authorities in cooperation with the CL-SIG, interested scientific institutions, NGOs and hunting associations	Protocols implemented in all RS; training completed in all RS	2028–2030
Result 5.2 By 2030, a shared, interoperable data management system is established and operational, enabling real-time data sharing and coordinated analysis.			
Indicator/Output – Shared database operational with active data contributions from all RS; data-sharing agreements signed ***Risks and Opportunities*** – Data sovereignty concerns and unwillingness to share nationally collected data; IT maintenance capacity // Existing data infrastructures (e.g. Linking Lynx database, Carpathian biodiversity database) and open-source platforms can accelerate development			

Objective/Result/Action	Actor	Indicator	Timeline
Action 5.2.1 Develop a shared database with standardised data formats, metadata requirements, and quality control procedures.	CL-SIG and interested scientific institutions, in cooperation with the IT specialists and national authorities	Database system operational and documented	2028–2029
Action 5.2.2 Establish data-sharing agreements and governance arrangements among Range States.	CL-SIG and interested scientific institutions, in cooperation with the IT specialists and national authorities	Data-sharing agreements signed by all participating RS	2029–2030
Action 5.2.3 Integrate national datasets into the shared system and ensure regular updates and maintenance.	CL-SIG and national authorities in cooperation with interested scientific institutions and NGOs	All RS contributing data; regular update cycles documented	Continuous (from 2030)
Result 5.3 At regular intervals aligned with international reporting cycles, coordinated range-wide population assessments are conducted using standardised methodologies.			
Indicator/Output – Range-wide population assessment reports published at agreed intervals; results used in Habitats Directive and other reporting cycles ***Risks and Opportunities*** – Incomplete data from (peri RS; delays in national reporting // Alignment with EU Habitats Directive and Bern Convention reporting cycles provides strong political incentive for participation			

Objective/Result/Action	Actor	Indicator	Timeline
Action 5.3.1 Conduct coordinated population assessments at regular intervals using agreed methodologies.	CL-SIG and interested scientific institutions, in cooperation with the national authorities, NGOs and hunting associations	Assessment conducted; number of RS participating	Cyclical (every 6 years)
Action 5.3.2 Produce and publish range-wide assessment reports, including population size, trends, and distribution.	CL-SIG, relevant national authorities and interested scientific institutions	Assessment report published and distributed to RS, CC, Bern Convention, CMS	Following each assessment
Result 5.4 By 2036, research capacity and collaboration are strengthened across Range States, enabling interdisciplinary and transboundary research on Lynx ecology, genetics, health, and human dimensions.			
Indicator/Output – Coordinated research network established; number of joint peer-reviewed publications and transboundary projects completed ***Risks and Opportunities*** – Unequal research capacity across RS; competition for funding // EU research programmes (→ Appendix-II) provide platforms for collaborative project development			
Action 5.4.1 Establish a coordinated research network across Range States to support collaboration and data sharing.	CL-SIG and interested scientific institutions, in cooperation with the national authorities, NGOs and hunting associations	Research network established; member-ship list and ToR agreed	2027–2029

Objective/Result/Action	Actor	Indicator	Timeline
Action 5.4.2 Develop joint research projects addressing key ecological, genetic, and social knowledge gaps	CL-SIG and interested scientific institutions, in cooperation with the national authorities and NGOs	Number of joint research proposals sub-mitted and funded	2028–2036
Action 5.4.3 Facilitate joint analyses, publications, and knowledge exchange among partners.	CL-SIG and interested scientific institutions	Number of joint peer-reviewed publications and conference presentations	Continuous
Result 5.5 Human-dimension data are systematically integrated into adaptive management frameworks, ensuring that conservation actions are informed by socio-ecological context.			
Indicator/Output – Human-dimension data integrated into CL-SIG management reports; adaptive management decisions demonstrably informed by social data ***Risks and Opportunities*** – Resistance from wildlife managers unfamiliar with social science approaches; risk of data misuse // Growing international recognition of human dimensions in large carnivore conservation facilitates uptake			
Action 5.5.1 Integrate social data (→ Objective 7) into monitoring systems and decision-making processes.	CL-SIG and interested scientific institutions, in cooperation with the national authorities, NGOs and hunting associations	Social data module integrated into range-wide monitoring system	2030–2035

Objective/Result/Action	Actor	Indicator	Timeline
Action 5.5.2 Develop practical tools and guidelines for incorporating social data into management decisions.	CL-SIG and interested scientific institutions, in cooperation with the national authorities, NGOs and hunting associations	Guidelines document produced and disseminated to all RS	2031–2035
Action 5.5.3 Ensure regular feedback between monitoring, research, and management to support adaptive approaches.	CL-SIG in cooperation with the national authorities	Annual management review reports include social data component	Continuous (from 2032)
Objective 6 To increase awareness of and support for the conservation of the Lynx population in the Carpathians among the general public, local communities, and key stakeholder groups.			
Result 6.1 By 2036, range-wide and national public communication campaigns are developed and implemented.			
Indicator/Output – Human-dimension baseline survey completed; range-wide communication plan adopted and implemented; repeat survey demonstrating measurable increase in public awareness and positive attitudes ***Risks and Opportunities*** – Heterogeneous public perception across RS; political or media environment unfavourable to large carnivore conservation // Lynx as a flagship species with strong visual appeal; existing public communication platforms (CC, NGO networks) can be mobilised rapidly			
Action 6.1.1 Compile an inventory of existing knowledge and information materials on the Lynx population in the Carpathians.	Experts and scientific institutions, local partners, NGOs, national authorities (with inputs from WGBD/CL-SIG)	Inventory report produced and shared	By 2028

Objective/Result/Action	Actor	Indicator	Timeline
Action 6.1.2 Conduct a human-dimension survey to assess public awareness and perceptions of the Lynx population in the Carpathians, as well as to identify the needs and attitudes of local stakeholders. Based on the results, develop a range-wide communication plan/strategy.	Experts and scientific institutions, local partners, NGOs, national authorities	Survey report and communication plan/strategy finalised and endorsed	By 2028
Action 6.1.3 Implement specific actions to raise awareness of the Lynx population in the Carpathians, its values and conservation in close cooperation with different stakeholder groups.	Experts and scientific institutions, local partners, NGOs, national authorities (with inputs from WGBD/CL-SIG)	Number of awareness events and outreach activities implemented per RS per year	Continuously and beyond this *Strategy*
Action 6.1.4 Every five years following the adoption of the plan/communication strategy, assess/measure the increase in awareness among the general public and different stakeholder groups.	Experts and research institutions, NGOs, local partners	Repeat survey completed; change in awareness indicators documented	Continuously every 5 years
Action 6.1.5 Develop and release media information packages (including adaptations for children).	Experts, NGOs through dedicated projects, WGBD/CL-SIG, national authorities	Number of media packages released; media coverage metrics	Continuously and beyond this *Strategy*
Result 6.2 Educational materials on ecology, conservation status and coexistence of the Lynx population in the Carpathians are developed and disseminated in all Carpathian languages throughout the duration of this *Strategy*.			

Objective/Result/Action	Actor	Indicator	Timeline
Indicator/Output – Educational materials and teaching curriculum available in all Carpathian languages; number of educational institutions integrating curriculum; effectiveness evaluation completed ***Risks and Opportunities*** – Political and institutional resistance to integrating wildlife content into formal curricula; lack of dedicated funding // Lynx as a charismatic flagship species well-suited to environmental education; cross-curricular links to sustainability and biodiversity offer entry points			
Action 6.2.1 Develop educational materials and draft a teaching curriculum integrating knowledge about the Lynx population in the Carpathians.	Experts, NGOs, educational authorities	Curriculum and materials finalised and available in all Carpathian languages	By 2028
Action 6.2.2 Conduct capacity-building training for educational staff (teachers/professors) at all educational levels on introducing and implementing the teaching curriculum.	Experts, national authorities, with involvement of WGBD/CL-SIG/NGOs through ongoing initiatives	Number of educators trained per RS	Following Action 6.2.1 and continuously
Action 6.2.3 Implement the teaching curriculum through supported activities.	Experts and research institutions, local partners, NGOs, dedicated projects	Number of educational institutions implementing curriculum per RS	Continuously after Actions 6.2.1 – 6.2.2
Action 6.2.4 Monitor and evaluate the effectiveness of the curriculum implementation.	Experts and research institutions, local partners, NGOs	Evaluation report produced; curriculum updated based on findings	Continuously
Result 6.3 By 2036, capacity building programmes (CBP) tailored to specific stakeholder groups (hunters, foresters, wildlife management authorities, livestock owners, decision makers, journalists, tourism sector) are developed, shared and operational in all range countries.			

Objective/Result/Action	Actor	Indicator	Timeline
Indicator/Output – Capacity building programmes operational in all RS; number of stakeholder participants per programme and RS; pre/post assessments demonstrating knowledge gain ***Risks and Opportunities*** – Heterogeneous stakeholder attitudes and varying levels of openness to conservation-oriented capacity building; staff turnover undermining continuity // Integration with hunting associations and forestry agencies provides institutional anchoring and outreach multiplier effects			
Action 6.3.1 Develop capacity building programmes for specific stakeholder groups (hunters, foresters, wildlife management authorities, livestock owners, decision makers, journalists, tourism sector).	Experts and research institutions, local partners, NGOs, national authorities	Number of stakeholder-specific CBP modules developed and available	By 2029
Action 6.3.2 Implement the capacity building programmes.	Experts and research institutions, local partners, NGOs, national authorities (with support from CL-SIG/WGBD through ongoing or new initiatives)	Number of training events and participants per RS per year	Continuously
Action 6.3.3 Develop joint monitoring and reporting protocols with hunters to improve data collection on prey species and Carpathian Lynx sightings.	Experts, national authorities, NGOs, hunting associations	Joint monitoring protocol endorsed by hunting associations in at least [2] RS	By 2030
Objective 7 To reduce the frequency and severity of human–Lynx conflict incidents and associated anthropogenic mortality across the Carpathian Range, and to increase social tolerance for Lynx through the implementation of evidence-based mitigation measures, systematic stakeholder engagement, and integration of human-dimension data into adaptive management frameworks.			

Objective/Result/Action	Actor	Indicator	Timeline
Result 7.1 By 2030, a harmonised, standardised, and quality-controlled monitoring system for human–Lynx conflict incidents is established, operational and shared across all Range States, enabling consistent classification, verification, and reporting of conflict types and drivers.[12]			
Indicator/Output – Harmonised conflict monitoring protocol adopted in all RS; range-wide conflict incident database operational; first comparable range-wide conflict report produced and shared ***Risks and Opportunities*** – Reluctance of national authorities to share conflict data; differing legal definitions of damage and compensation across RS // Carpathian Convention and existing large carnivore platforms (LECA, EU LIFE projects) provide tested methodologies and institutional entry points			
Action 7.1.1 Compile and review existing national protocols and datasets on human–Lynx conflict, including methods for incident verification, classification, and reporting, as well as relevant outputs from the LECA project and other large carnivore projects/programmes.	CL-SIG and interested scientific institutions, in cooperation with the NGOs and national authorities	Review report produced and shared with all RS	2027–2028
Action 7.1.2 Develop and test a Carpathian-wide protocol defining standardised categories of conflict (e.g. depredation, illegal killing, traffic mortality), verification procedures, and minimum data requirements (location, time, confidence level).	CL-SIG and interested scientific institutions, in cooperation with the national authorities	Harmonised conflict monitoring protocol finalised and tested in at least [2] RS	2027–2029
Action 7.1.3 Adjust the protocol to the national legislations and implement it across all Range States through training of relevant institutions and integration into national monitoring and reporting systems.	CL-SIG and interested scientific institutions, in cooperation with the NGOs and national authorities	Protocol implemented in all RS; training completed; national reporting systems updated	2029–2030

[12] Monitoring, mitigation, and attitudes are all interlinked with stakeholder engagement and information. Results 7.1 to 7.4 should hence be considered regarding synergistic approaches.

Objective/Result/Action	Actor	Indicator	Timeline
Action 7.1.4 Integrate the information on conflict incidents into an existing range-wide database or create such a database if needed, and grant access to the information for all Range States and partner institutions.	CL-SIG in cooperation with the Range States institutions and database experts	Range-wide conflict database operational with contributions from all RS	2029-2030
Result 7.2 By 2035, evidence-based conflict mitigation measures are implemented in priority conflict areas, resulting in a statistically measurable reduction in conflict incidents and associated mortality rates.			
Indicator/Output – Mitigation measures implemented in at least [2] priority conflict areas; statistically documented reduction in conflict incidents and/or associated anthropogenic mortality relative to baseline ***Risks and Opportunities*** – High socio-economic heterogeneity across RS makes transferability of measures uncertain; inadequate compensation mechanisms may undermine stakeholder cooperation // EU LIFE and INTERREG programmes offer co-financing for large carnivore conflict mitigation; positive precedents from wolf and bear management in the region can be adapted			
Action 7.2.1 Conduct a structured inventory and comparative assessment of existing mitigation measures and compensation schemes, including their effectiveness, costs, and levels of stakeholder acceptance.	CL-SIG and interested scientific institutions, in cooperation with the NGOs and national authorities	Comparative assessment report produced and shared	2027–2028
Action 7.2.2 Identify and prioritise mitigation measures based on available evidence, including international best practice (as well as relevant outputs from the LECA project and other large carnivore projects/programmes) and relevance to local socio-ecological conditions.	CL-SIG and interested scientific institutions, in cooperation with the NGOs and national authorities	Prioritised list of mitigation measures per RS/region, with cost–benefit estimates	2028–2029

Objective/Result/Action	Actor	Indicator	Timeline
Action 7.2.3 Implement pilot mitigation measures in selected conflict hotspots, ensuring consistent documentation of interventions and outcomes.	National authorities in cooperation with the NGOs, hunters, foresters, livestock owners, farmers and local communities	Number of pilot areas with active mitigation measures; documentation of interventions	2028–2029
Action 7.2.4 Evaluate the effectiveness of mitigation measures using agreed indicators (e.g. changes in depredation rates, frequency of incidents, or reported losses).	CL-SIG and interested scientific institutions, in cooperation with NGOs	Evaluation report with statistical analysis of pre/post conflict rates	2031–2033
Action 7.2.5 Scale up effective measures and integrate them into national policies, compensation systems, and management frameworks.	National authorities in cooperation with the CL-SIG and interested scientific institutions, NGOs, hunters, foresters, livestock owners, farmers and local communities	Number of RS integrating evidence-based measures into national management frameworks	2033–2035
Result 7.3 By 2031, a robust, standardised dataset on human attitudes, perceptions, and tolerance toward the Lynx population in the Carpathians is established across all Range States and incorporated into decision-making processes.			
Indicator/Output – Baseline human-dimension survey completed in all RS; standardised tolerance dataset published; survey findings formally communicated to and considered by relevant national authorities ***Risks and Opportunities*** – Sensitive socio-political context in some RS may affect willingness to express views openly; translation and cultural adaptation of survey instruments requires expertise // Growing body of comparable large carnivore human-dimension research in Europe provides methodologies and standards			

Objective/Result/Action	Actor	Indicator	Timeline
Action 7.3.1 Design and implement standardised surveys to assess public attitudes – including those of key stakeholders – tolerance levels, and perceptions of Carpathian Lynx and related conflicts.	CL-SIG and interested scientific institutions, in cooperation with the national authorities, NGOs and local communities	Surveys implemented in all RS; dataset compiled and quality-controlled	2028–2029
Action 7.3.2 Analyse survey results to identify spatial, socio-economic, and cultural factors influencing conflict and tolerance.	Scientific institutions, in cooperation with the NGOs and local communities	Peer-reviewed publication or technical report on tolerance drivers produced	2029–2030
Action 7.3.3 Translate findings into recommendations for improving conflict mitigation, communication strategies, and policy development.	CL-SIG and interested scientific institutions, in cooperation with the national authorities	Recommendations report disseminated to CC and relevant national authorities	2030–2031
Result 7.4 By 2035, structured, multi-level stakeholder engagement mechanisms are established in all priority conflict areas, facilitating co-management, knowledge exchange, and conflict resolution.			
Indicator/Output – Multi-stakeholder platforms established in at least [2] priority conflict areas; documented evidence of co-developed management decisions; best-practice case studies shared across RS ***Risks and Opportunities*** – Power imbalances between stakeholder groups may hamper co-management // Leader/Lag frameworks and existing co-management models from other European large carnivore initiatives provide tested approaches			
Action 7.4.1 Review and adapt stakeholder engagement approaches from the LECA project and other relevant initiatives, including an assessment of their effectiveness.	CL-SIG in cooperation with the NGOs and local communities	Review report with recommendations for Carpathians produced	2027–2028

Objective/Result/Action	Actor	Indicator	Timeline
Action 7.4.2 Establish multi-stakeholder platforms in priority conflict areas, ensuring representation of key groups (e.g. hunters, farmers, authorities).	National authorities in cooperation with hunter associations, farmers, local communities and NGOs	Number of multi-stakeholder platforms established, active, and documented	2027–2030
Action 7.4.3 Facilitate regular dialogue and joint development of locally appropriate mitigation measures.	National authorities in cooperation with hunter associations, farmers, local communities and NGOs	Number of platform meetings held per year; number of jointly developed management measures	2030–2035
Action 7.4.4 Document and share best practices in stakeholder engagement and conflict resolution across Range States.	CL-SIG in cooperation with the NGOs	Best-practice report produced and shared with RS	Continuous (from 2030)
Objective 8 To strengthen the national political commitments and transboundary cooperation, through Multilateral Environmental Agreements (MEA) such as the Carpathian Convention, the Bern Convention, the Convention on Migratory Species and others, to provide the institutional foundation for the long-term viability of the Lynx population in the Carpathians.			
Result 8.1 By 2036, Carpathian Range States strengthen the integration of Carpathian Lynx conservation into their national biodiversity strategies, Habitats Directive reporting cycles (for the EU Member states), and relevant funding opportunities.			
Indicator/Output – Number of RS having integrated Carpathian Lynx conservation into updated NAP or biodiversity strategies; improved reporting scores under Article 17 of the Habitats Directive for Lynx in EU member states; number of funding opportunities identified and applied for ***Risks and Opportunities*** – Slow national legislative and policy cycles; limited administrative capacity in RS to simultaneously fulfil multiple MEA reporting obligations // EU accession processes of non-EU RS create strong incentives for alignment with EU biodiversity obligations; CC, CL-SIG provides coordination platform			

Objective/Result/Action	Actor	Indicator	Timeline
Action 8.1.1 Complete an analysis of the existing national biodiversity strategies, other planning documents and relevant legislation for all EU Member States and non-EU range countries[13] within the Carpathian range to identify the conservation status and needs of the Carpathian Lynx. (→ Appendix I)	National authorities, supported by experts and NGOs	Analysis report produced and shared with all RS and CC	By 2029
Action 8.1.2 Prepare draft recommendations for amendments to the relevant legislation, national biodiversity strategies and other planning documents for integration of conservation criteria and needs for the Lynx population in the Carpathians.	National authorities of the Carpathian Lynx range countries, supported by experts and NGOs	Draft recommendations submitted to relevant national authorities in each RS	By 2030
Action 8.1.3 By 2032, improve national reporting to the European Commission under the EU Habitats Directives[14], based on the Results from the range-wide monitoring (→ Objective 5) as well as reporting commitments towards other relevant conventions (e.g. Carpathian Convention, Bern Convention, CMS and CBD, etc.).	National authorities of the Carpathian Lynx range countries, supported by experts, local partners, scientific institutions and NGOs	Improved Lynx conservation status reports submitted in next EU HD Article 17 reporting cycle	Starting from the first reporting cycle onwards

[13] The two non-EU range countries are Serbia and Ukraine. While Serbia has a tiny share of the Carpathian population in the west, Ukraine hosts the central part of the population of high importance for the connectivity of the entire Carpathian range. As an EU candidate country, Ukraine is progressively aligning its legislation and conservation practices with the principles of the EU Habitats Directive and has developed a National Action Plan for the Eurasian Lynx (Ministry of Environmental Protection and Natural Resources of Ukraine, 2021), which also covers the Carpathian population.

[14] Ukraine, as an EU candidate country and a key range state for the Carpathian lynx population, is gradually developing its monitoring and reporting approaches in line with EU Habitats Directive methodologies, although full implementation of EU reporting standards has not yet been achieved.

Objective/Result/Action	Actor	Indicator	Timeline
Action 8.1.4 Identify funding opportunities and mechanisms, as well as existing transboundary initiatives and potentials for enhanced transboundary cooperation. (→ Appendix II)	National authorities of the Carpathian Lynx range countries, supported by experts, local partners and NGOs, CL-SIG/WGBD	Funding opportunity inventory produced (→ A-II) and updated annually; number of applications submitted	Continuously, by 2036
Result 8.2 By 2036, bilateral or multilateral environmental agreements (MEAs) or memoranda of understanding (MoU) on transboundary Lynx monitoring, population management, and anti-poaching cooperation are concluded or renewed between at least [2] pairs of neighbouring Range States.			
Indicator/Output – Number of new or renewed bilateral/multilateral MEAs or MoUs on Lynx conservation concluded; operationalisation of agreements documented (e.g. joint monitoring activities, shared anti-poaching protocols) ***Risks and Opportunities*** – Disaccording (political) opinions between neighbouring RS may impede conclusion of formal agreements; bureaucratic complexity of MEA negotiation processes // Carpathian Convention framework provides a ready multilateral platform; existing MoUs (e.g. under Bern Convention) can serve as templates			
Action 8.2.1 Complete an analysis of existing bilateral or MEAs, or MoU on transboundary Carpathian Lynx monitoring, population management, and anti-poaching for the range countries, and identify opportunities for their renewal/upgrading, as well as opportunities for the conclusion of new agreements between at least two pairs of neighbouring Range States.	National authorities, expert and scientific institutions, moderated by CL-SIG		By 2036
Result 8.3 By 2036, existing National Action Plans (NAPs) for the conservation of the Lynx population in the Carpathians and beyond are updated in Range States, and new NAPs are developed in Range States currently lacking them, explicitly aligned with the Goal, Objectives, and Results of this *Strategy*.			

Objective/Result/Action	Actor	Indicator	Timeline
Indicator/Output – Number of RS with updated or newly adopted NAPs explicitly aligned with this *Strategy*; NAPs formally endorsed by relevant national authorities; implementation mechanisms defined ***Risks and Opportunities*** – Slow national legislative and policy adoption processes; insufficient capacity for NAP development and implementation // CC COP adoption of this *Strategy* creates formal mandate for RS to develop NAPs; EU Habitats Directive reporting obligations incentivise alignment			
Action 8.3.1 Through the CL-SIG, identify key national authorities (line ministries and other relevant institutions) for developing/updating and coordinating the implementation of the NAPs.	National authorities, experts and local partners, NGOs, guided by CC bodies	Expert groups established in all RS; national coordinating authorities identified	2028-2029
Action 8.3.2 Suggest updates of existing NAPs or draft new NAPs (where non-existent), including expert and wider public consultations.	National authorities, experts and local partners, NGOs	Updated/new NAPs finalised in all RS	By 2029-2030
Action 8.3.3 Support the implementation of NAPs (through related projects and initiatives) and promote their uptake through awareness-raising among key stakeholder groups and concerned parties.	National authorities, experts and local partners, NGOs, through related projects and initiatives	Number of ongoing NAP implementation projects per RS	By 2036
Objective 9 To secure long-term human and financial resources for the implementation of this *Strategy* and related National Action Plans (NAPs) from institutional, public and private funding sources, ensuring the continuity and coordination of conservation actions across the Carpathian Range and beyond.			
Result 9.1 Within the first year of this *Strategy*, a financial sustainability analysis identifying core budget needs and funding gaps is conducted and presented to the Carpathian Convention relevant bodies.			

Objective/Result/Action	Actor	Indicator	Timeline
Indicator/Output – Financial sustainability analysis report finalised, presented to and acknowledged by CC bodies; funding gap clearly quantified and communicated to relevant bodies ***Risks and Opportunities*** – Underestimation of true budget needs; difficulty in obtaining financial data from all RS // First year of *Strategy* implementation provides strong political moment to present resource needs; CC bodies provide formal presentation platform			
Action 9.1.1 Conduct a financial sustainability analysis identifying core budget needs and funding gaps and present this to the relevant Carpathian Convention bodies.	CL-SIG, NGOs (e.g. WWF CEE), CC national authorities	Number of project proposals submitted; number of projects successfully funded	By 2027
Result 9.2 At least [2] transboundary or range-wide conservation projects with secured multi-year funding are active at any given time during the timeline of *this Strategy*.			
Indicator/Output – Number of active transboundary or range-wide conservation projects with secured multi-year funding at any given time; total budget mobilised for Carpathian Lynx conservation ***Risks and Opportunities*** – Competitive funding requests and high proposal development costs; political agendas may affect national co-funding commitments // EU LIFE, INTERREG, Horizon, and national or private programmes offer substantial co-financing opportunities for transboundary large carnivore conservation			
Action 9.2.1 Identify at least [2] priority conservation or research projects from the Results in this *Strategy* and develop and submit the project proposals to identified funding sources or donors.	CL-SIG, NGOs, scientific institutions, local partners	Number of project proposals submitted and successfully funded	2030
Result 9.3 Throughout the timeline of this *Strategy*, the Carpathian Lynx Strategy Implementation Group (CL-SIG) is established and operational under the coordination of the Carpathian Convention Secretariat and in cooperation with the Carpathian Convention's Working Group on Biodiversity, with clearly defined responsibilities to support implementation across all Range States and reporting to the relevant Carpathian Convention bodies.			

Objective/Result/Action	Actor	Indicator	Timeline
Indicator/Output – CL-SIG operational with core funding secured; annual workplans and progress reports produced ***Risks and Opportunities*** – Dependence on project-based funding creates continuity risk; voluntary participation may reduce coordination effectiveness (Insufficient political will of some RS to actively participate in or resource the CL-SIG) // Formal anchoring under CC provides institutional legitimacy and reduces dependence on individual project cycles			
Action 9.3.1 Establish the Carpathian Lynx Strategy Implementation Group (CL-SIG) as a subgroup of the CC WG Biodiversity and define its Terms of References.	CC bodies	CL-SIG ToR endorsed by CC bodies; members confirmed	Immediately
Action 9.3.2 Define an operational budget for the CL-SIG and secure the proper funding for the group.	Designated CL-SIG, CC bodies and advisors	Operational budget defined and funding secured	Short-term
Action 9.3.3 Organize annual meetings (or if necessary, every six months) of the CL-SIG to review the progress made	Designated CL-SIG, CC bodies and advisors	Annual meeting reports produced and distributed to the CC bodies and all RS	Annually (or every six months)
Result 9.4 Throughout the timeline of *this Strategy*, the mobilisation of EU funding sources for the conservation of the Lynx population in the Carpathians is actively pursued, with at least [2] successful funding applications submitted or secured by relevant Range State authorities or conservation organisations.			
Indicator/Output – Number of EU funding applications submitted and secured by RS authorities or conservation organisations; total EU funding mobilised for Carpathian Lynx conservation ***Risks and Opportunities*** – Complexity of EU funding procedures and co-financing requirements pose barriers; changes in EU funding priorities (e.g. LIFE) // EU accession processes and Habitats Directive implementation obligations create strong political incentives; established consortia and LIFE/Interreg programme experience within the RS can be leveraged			

Objective/Result/Action	Actor	Indicator	Timeline
Action 9.4.1 The CL-SIG, in cooperation with the Carpathian Convention's Working Group on Biodiversity, and relevant national partners, continuously reviews and updates on EU funding opportunities (→ Appendix II), and informs all partners for the implementation of this *Strategy*.	CL-SIG	Annual funding landscape update produced and distributed to all partners	Until 2027 and every year after
Action 9.4.2 The CL-SIG, at its own behalf or in cooperation with potential project holders, initiates research or conservation projects identified as relevant in the Results of this *Strategy*, and the submission of the proposals to identified adequate funding institutions or donors.	CL-SIG and partners	Number of funding proposals initiated or co-developed by CL-SIG per year	Continuously, starting in 2027

5. Implementation and Revision of the Strategy

5.1. Implementation of the Strategy and transboundary activities

The *Strategy for the Conservation of the Lynx (Lynx lynx carpathicus) in the Carpathians 2027-2036* has a lifespan of ten years. For the practical work required to operationalise the *Strategy*, a specific working group, Carpathian Lynx Strategy Implementation Group (CL-SIG) is established. The CL-SIG is operating under the coordination of the Carpathian Convention Secretariat and in cooperation with the Carpathian Convention's Working Group on Biodiversity. The CL-SIG's main tasks are to (1) support the Range States in developing or updating their National Action Plans (see below), (2) initiate steps and projects to implement the *Strategy*, (3) to monitor the progress and report to the Conventions and the Range States, and (4) to propose adaptations to the *Strategy* based on the monitoring of its implementation.

The CL-SIG should produce annual reports on the progress of the implementation of the *Strategy* for the attention of the Conventions[15] and the Range States. The revision and update of the *Strategy* is foreseen for 2036, but it is recommended to do a mid-term evaluation (in 2031) to assess the progress, availability of funding, effectiveness and efficiency (e.g. reviewing the Indicators to the Results) of the *Strategy* and to identify relevant shortcomings in its implementation. At the national level, the instruments for the implementation of the range-wide *Strategy* are National Action Plans (NAPs). Several countries have implicit or explicit plans addressing Lynx conservation or are in the process of developing such plans (see Chapter 5.3. for an overview). It is recommended to develop or update NAPs based on this *Strategy*. The development of a NAP is important to involve stakeholder groups and local communities. A range-wide *Strategy* covering seven countries and many different cultures and languages, developed under the auspices of overarching agreements (in this case, the Conventions), inevitably lacks the "bottom-up perspective". It is therefore important to transpose this *Strategy* into national plans that allow the consideration of regional, national, and local circumstances, based on a participatory process held in the local languages and in face-to-face meetings. The *Strategy* will provide overarching guidance, especially with regard to transboundary activities and harmonised range-wide protocols.

The *Strategy* emphasises the importance of a range-wide metapopulation concept for the long-term conservation of the Carpathian Lynx across its range. This requires transboundary cooperation, coordination, and synchronisation. The CL-SIG must pay specific attention to all range-wide and transboundary Results and Actions and must inform the relevant bodies of the Carpathian Convention to ensure that related agreements or projects are set on the agenda of the respective meetings of the Carpathian Convention or its institutions. The CL-SIG, should also develop a workplan for these overarching activities, allowing to identify financial needs and to initiate specific projects in collaboration with the Carpathian Convention, the Range States, NGOs, and scientific institutions. Indeed, some of these projects could be organised beyond the Carpathian range, covering the entire *Realm* of the Carpathian Lynx, e.g. based on the findings of the LECA Interreg Project or on the protocols developed under the Linking Lynx network.

[15] For CMS, reporting would need to be done through National Reports by each country prior to each COP.

5.2 Priority Results per Range States

To support effective and realistic implementation of the Joint Conservation Strategy for the Carpathian Lynx, members of the Expert Group from each Range State assigned a country-specific priority level to each Result, with priorities indicated as: HIGH (to be initiated within two years of endorsement), MEDIUM (within five years), LOW (within ten years), or n.r. where an action is not relevant for a particular country.

Table 2. Country-Specific Prioritisation of Results. CZ = Czech Republic, BG = Bulgaria, HU = Hungary, PL = Poland, RO = Romania, RS = Serbia, SK = Slovakia, UA = Ukraine.

Objective/Result	CZ	BG	HU	PL	RO	RS	SK	UA
Objective 1 To promote and adopt forest, wildlife, and land management practices that maintain the suitability and connectivity of Lynx habitat in the Carpathians and beyond – within natural and human landscapes –, sustain viable prey populations, and support human-Lynx coexistence, addressing conflicts with game management and other relevant stakeholder groups including farmers and livestock owners.								
Result 1.1 By 2028, formal communication channels between wildlife conservation authorities and game management practitioners are established or strengthened in all Range States, with the aim of addressing real and perceived conflicts between Lynx conservation and game management.	H	H	H	H	H	H	H	H
Result 1.2 By 2031, priority habitat patches and key corridors for the Lynx population in the Carpathians and adjacent areas are mapped, validated through movement/connectivity data, and formally recognised as priority conservation areas within planning frameworks (→ Objective 3).	H	H	H	H	M	H	H	M
Result 1.3 By 2032, the status and trends of key prey species – most importantly Roe Deer (*Capreolus capreolus)* – and relevant competitors are monitored in relation to Lynx presence across at least [2] Range States, and sustainable prey and wildlife management recommendations are developed and shared.	M	H	L	M	H	H	H	M
Result 1.4 By 2036, Lynx habitat requirements – at minimum corridor specifications and core habitat area characteristics – are incorporated into national forest management guidelines and land-use planning frameworks in at least [2] Range States, with at least one Range State serving as a pilot model for broader adoption.	H	H	H	M	M	H	H	L

Objective/Result	CZ	BG	HU	PL	RO	RS	SK	UA
Objective 2 To maintain or restore sufficient gene flow across the Lynx population in the Carpathians and beyond, prioritising connectivity between peripheral and core populations, in order to prevent loss of genetic diversity and minimise the risk of inbreeding depression – while recognising the broader role of the Carpathian source population in Lynx recovery across the *Realm*.								
Result 2.1 By 2031, comparable genetic monitoring – including the development of a standardised set of common genetic markers, and a range-wide genetic study that includes samples from across the range – of the Lynx population in the Carpathians and beyond is operational across all Range States and integrated with the monitoring framework under Objective 5.	H	H	H	L	H	H	M	L
Result 2.2 Genetic indicators following Genetic Essential Biodiversity Variables (EBVs) metrics – including genetic diversity, effective population size, inbreeding levels, genetic differentiation and structure, and gene flow rates – are assessed and reported for the Lynx population in the Carpathians every 6 years throughout the timeline of this *Strategy.*	H	H	H	M	H	H	M	L
Result 2.3 By 2036, a population management plan for the Lynx in the Carpathians – including criteria and protocols for assisted dispersal or translocation as management tools of last resort between local population in the Carpathians – is developed and endorsed by competent authorities in at least [2] Range States, with consideration given to the role of the Carpathian population as a source population within the broader *Realm* where relevant.	M	M	M	M	M	M	M	L
Objective 3 To minimise the impact of development and linear infrastructure on the ecological functionality, connectivity, and long-term viability of the Lynx population in the Carpathians by identifying, mitigating, and preventing barrier effects and integrating connectivity requirements into spatial planning and infrastructure development processes.								
Result 3.1 By 2030, a spatially explicit, range-wide assessment of Lynx habitat connectivity, movement patterns, and infrastructure-related risks in the Carpathians is completed and integrated into spatial planning, Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) processes.	H	H	H	H	H	H	H	H
Result 3.2 By 2036, targeted mitigation measures are implemented at priority infrastructure sites, resulting in measurable reductions in mortality and improved permeability of key corridors.	H	H	H	H	H	H	H	L

Objective/Result	CZ	BG	HU	PL	RO	RS	SK	UA
Result 3.3 By 2035, the ecological impact of border fences on Lynx movement and connectivity across the Carpathians is quantified, and mitigation measures are agreed and implemented where feasible.	n.r.	H	n.r.	n.r.	M	n.r.	H	H
Result 3.4 By 2036, functional connectivity across the Carpathian range is improved, as evidenced by increased dispersal events, recolonisation of suitable habitats, and gene flow between separated parts of the population.	H	H	H	H	H	H	H	L
Objective 4 To review existing evidence on the potential impacts of climate change on the Carpathian lynx – with a focus on habitat change and prey availability – identify key knowledge gaps, and initiate targeted studies to build the evidence base needed to inform adaptive management of the Lynx population across the *Realm* in the longer term.								
Result 4.1 By 2028, a regional Climate Change Vulnerability Assessment (CCVA) is completed to evaluate the possible risk of climate change on the Lynx population in the Carpathians, its prey and their habitats.	L	M	M	L	M	M	L	M
Result 4.2 By 2030, a study on the impacts of climate change on the Lynx population in the Carpathians, its prey and their habitats is initiated in at least one representative area across the Carpathian range	M	L	M	M	M	M	M	M
Result 4.3 From 2030 onwards, the findings from the CCVA and climate-change research are continuously integrated into the overall monitoring programme (→ Objective 5) to ensure that the appropriate parameters needed for an adaptive response to climate change are collected.	L	L	L	L	M	L	L	M
Result 4.4 By 2032, a set of adaptive management recommendations, based on the outcome of Results 4.1-4.3, are compiled and shared, and an adaptive management scheme is implemented in at least one region of the Carpathians.	L	L	M	M	M	M	M	M
Objective 5 To establish and maintain a harmonised, long-term, and scientifically rigorous monitoring and research framework that generates robust, standardised, and policy-relevant data on population status, distribution, connectivity, genetic viability, health, and human dimensions of the Lynx population in the Carpathians.								

Objective/Result	CZ	BG	HU	PL	RO	RS	SK	UA
Result 5.1 By 2030, a standardised, multi-method monitoring system is implemented across all Range States, ensuring consistent and comparable data collection.	H	H	H	M	H	H	H	H
Result 5.2 By 2030, a shared, interoperable data management system is established and operational, enabling real-time data sharing and coordinated analysis.	H	H	H	M	H	H	H	H
Result 5.3 At regular intervals aligned with international reporting cycles, coordinated range-wide population assessments are conducted using standardised methodologies.	M	M	M	M	M	M	M	M
Result 5.4 By 2036, research capacity and collaboration are strengthened across Range States, enabling interdisciplinary and transboundary research on Lynx ecology, genetics, health, and human dimensions.	M	M	M	M	M	M	M	M
Result 5.5 Human-dimension data are systematically integrated into adaptive management frameworks, ensuring that conservation actions are informed by socio-ecological context.	M	H	M	M	M	M	M	M
Objective 6 To increase awareness of and support for the conservation of the Lynx population in the Carpathians among the general public, local communities, and key stakeholder groups.								
Result 6.1. By 2036, range-wide and national public communication campaigns are developed and implemented.	L	H	L	M	L	M	M	L
Result 6.2. Educational materials on ecology, conservation status and coexistence of the Lynx population in the Carpathians are developed and disseminated in all Carpathian languages throughout the duration of this *Strategy*.	M	H	M	M	M	M	H	M
Result 6.3. By 2036, capacity building programmes tailored to specific stakeholder groups (hunters, foresters, wildlife management authorities, livestock owners, decision makers, journalists, tourism sector) are developed, shared and operational in all range countries.	H	H	H	H	H	H	H	M

Objective/Result	CZ	BG	HU	PL	RO	RS	SK	UA
Objective 7 To reduce the frequency and severity of human–Lynx conflict incidents and associated anthropogenic mortality across the Carpathian Range, and to increase social tolerance for Lynx through the implementation of evidence-based mitigation measures, systematic stakeholder engagement, and integration of human-dimension data into adaptive management frameworks.								
Result 7.1. By 2030, a harmonised, standardised, and quality-controlled monitoring system for human–Lynx conflict incidents is established, operational and shared across all Range States, enabling consistent classification, verification, and reporting of conflict types and drivers.	M	L	M	M	M	M	M	M
Result 7.2. By 2035, evidence-based conflict mitigation measures are implemented in priority conflict areas, resulting in a statistically measurable reduction in conflict incidents and associated mortality rates.	M	L	M	M	M	M	M	M
Result 7.3. By 2031, a robust, standardised dataset on human attitudes, perceptions, and tolerance toward the Lynx population in the Carpathians is established across all Range States and incorporated into decision-making processes**.**	M	H	M	L	M	M	M	L
Result 7.4. By 2035, structured, multi-level stakeholder engagement mechanisms are established in all priority conflict areas, facilitating co-management, knowledge exchange, and conflict resolution.	M	M	M	M	H	M	M	L
Objective 8 To strengthen the national political commitments and transboundary cooperation, through Multilateral Environmental Agreements (MEA) such as the Carpathian Convention, the Bern Convention, the Convention on Migratory Species and others, to provide the institutional foundation for the long-term viability of the Lynx population in the Carpathians.								
Result 8.1 By 2036, Carpathian Range States strengthen the integration of Carpathian Lynx conservation into their national biodiversity strategies, Habitats Directive reporting cycles (for the EU Member states), and relevant funding opportunities.	M	H	M	M	M	M	M	L
Result 8.2 By 2036, bilateral or multilateral environmental agreements (MEAs) or memoranda of understanding (MoU) on transboundary Lynx monitoring, population management, and anti-poaching cooperation are concluded or renewed between at least [2] pairs of neighbouring Range States.	M	H	H	H	H	H	H	M

Objective/Result	CZ	BG	HU	PL	RO	RS	SK	UA
Result 8.3 By 2036, existing National Action Plans (NAPs) for the conservation of the Lynx population in the Carpathians and beyond are updated in Range States, and new NAPs are developed in Range States currently lacking them, explicitly aligned with the Goal, Objectives, and Results of this *Strategy*.	H	H	H	M	H	H	M	M
Objective 9 To secure long-term human and financial resources for the implementation of this *Strategy* and related National Action Plans (NAPs) from institutional, public and private funding sources, ensuring the continuity and coordination of conservation actions across the Carpathian Range and beyond.								
Result 9.1 Within the first year of this *Strategy*, a financial sustainability analysis identifying core budget needs and funding gaps is conducted and presented to the Parties to the Carpathian Convention and other relevant bodies.	H	H	H	H	H	H	H	H
Result 9.2 At least [2] transboundary or range-wide conservation projects with secured multi-year funding are active at any given time during the timeline of this *Strategy*.	H	H	H	H	H	H	H	H
Result 9.3 Throughout the timeline of this *Strategy*, the Carpathian Lynx Strategy Implementation Group (CL-SIG) is established and operational under the coordination of the Carpathian Convention Secretariat and in cooperation with the Carpathian Convention's Working Group on Biodiversity, with clearly defined responsibilities to support implementation across all Range States and reporting to the relevant Carpathian Convention bodies.	H	H	H	H	H	H	H	H
Result 9.4 Throughout the timeline of this *Strategy*, the mobilisation of EU funding sources for the conservation of the Lynx population in the Carpathians is actively pursued, with at least [2] successful funding applications submitted or secured by relevant Range State authorities or conservation organisations.	H	H	H	H	H	H	H	H

5.3. National Action Plans

In all Carpathian Range States comprising the autochthonous population, the Eurasian Lynx is legally strictly protected under national legislation, although the degree of implementation and existence of management frameworks varies among countries.

Bulgaria: The Lynx is protected under the Bulgarian Biodiversity Act, although presently considered extinct in the country. It falls under the centralised authority of the Ministry of Environment and Water (MOEW), with local implementation carried out by Regional Inspectorates of Environment and Water (RIEW) and National Park administrations.

Czechia: Classified as Endangered (EN) under national legislation, the species is strictly protected under Act No. 114/1992 Coll. and Decree No. 395/1992 Coll. Although listed as a game species under Act No. 449/2001 Coll., hunting is prohibited. The species is also protected within the Natura 2000 network, and compensation mechanisms are provided under Act No. 115/2000 Coll. A national management plan is currently under development (expected by 2026).

Hungary: The Lynx is strictly protected under Decree No. 13/2001 (9.V.) on protected and strictly protected species, which prohibits killing and disturbance. A national conservation/management plan was developed in 2004 (Szemethy *et al.,* 2004); however, it is now outdated and has not been revised nor fully implemented.

Poland: The Lynx has been strictly protected since 1995, with current provisions under the Regulation of the Minister of the Environment (2016). Among others, killing is prohibited. No dedicated national management plan or targeted conservation programme is currently implemented for the Carpathian population.

Romania: The species is listed as a game species under Law No. 407/2006; however, hunting is prohibited in practice. Strict protection was introduced following the transposition of the EU Habitats Directive through Emergency Ordinance No. 57/2007. No culling derogations have been granted since 2012, with exceptions limited to translocations. Conservation measures are implemented mainly within protected areas (including Natura 2000 sites), but no national management plan is currently available.

Serbia: The Lynx is classified as strictly protected under national legislation (Official Gazette of the Republic of Serbia No. 5/10, 47/11, 32/16 and 98/16), prohibiting killing, disturbance and habitat destruction.

Slovakia: The species is strictly protected year-round under the Nature and Landscape Protection Act (No. 543/2002 Coll.) and the Hunting Act (No. 274/2009 Coll.), both prohibiting hunting and harmful activities. A national management plan was adopted in 2016 (Antal *et al*., 2017), in line with the EU Habitats Directive; however, its implementation remains limited and revision is planned from 2026.

Ukraine: The Lynx has been listed in the Red Data Book since 1993 and classified as Vulnerable since 2021. It is protected under the Bern Convention (Appendix III) and CITES (Appendix

II). A National Action Plan was adopted in 2021[16], aligned with EU and Bern Convention objectives, but its implementation up to date remains insufficient.

National Action Plans[17] should be developed or updated, respectively, based on this *Strategy*, to enable consistent monitoring and conservation approaches throughout the Carpathian Range (see respective Results and Actions in → Chapter 3 and 4).

[16] Ministry of Environmental Protection and Natural Resources of Ukraine - Action Plan for the Conservation of the Eurasian Lynx (*Lynx lynx* L.) in Ukraine (Order No. 595, 16 September 2021).

[17] For guidance on how to translate range-wide conservation strategy into National Action Plans, see the Cat Conservation Compendium (Mattenklodt et al., 2025).

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Appendix I – Global Biodiversity Targets (GBF 2030) relevant to the conservation of the Carpathian Lynx (*Lynx lynx carpathicus*)

The Convention on Biological Diversity's Kunming-Montreal Global Biodiversity Framework (GBF) was adopted during the fifteenth meeting of the Conference of the Parties (CBD COP 15) following a four-year consultation and negotiation process. This historic Framework, which supports the achievement of the Sustainable Development Goals and builds on the Convention's previous Strategic Plans, sets out an ambitious pathway to reach the global vision of a world living in harmony with nature by 2050.

In adopting the Kunming-Montreal Global Biodiversity Framework, all Parties committed to setting national targets to implement it, while all other actors have been invited to develop and communicate their own commitments. The Framework has 23 action-oriented Global Targets for urgent action over the decade to 2030. Together, the results will enable achievement towards the outcome-oriented goals for 2050.

The European Union implements the GBF 2030 through the EU Biodiversity Strategy for 2030 (European Commission, COM 2020, 380 final), which sets legally binding nature restoration targets and protected-area commitments across all EU Member States. At the regional scale, the Carpathian Biodiversity Framework (CBF), adopted on 12 October 2023 at the seventh Conference of the Parties (CC COP7) to the Carpathian Convention in Belgrade, constitutes the first regional biodiversity framework worldwide to translate the GBF's 2030 Global Targets into concrete policy actions and activities for the Carpathian region. Together, these three instruments – GBF, EU Biodiversity Strategy 2030, and CBF – form the normative cascade within which the present Strategy for the Conservation of the Lynx (*Lynx lynx carpathicus*) in the Carpathians 2027–2036 is embedded.

Several of the 23 Targets of the GBF 2030 are directly or indirectly relevant to the Carpathian Lynx range-wide conservation *Strategy*, or, conversely, the implementation of the *Strategy* and related National Action Plans will contribute to reaching these Targets. Table AI-1 presents the relevant GBF 2030 Targets with corresponding commitments under the EU Biodiversity Strategy 2030 and the CBF, demonstrating the multi-level policy coherence underpinning this *Strategy*.

Table AI-1. Comparison between the three biodiversity strategies relevant for the Lynx in the Carpathians. CBF = Carpathian Biodiversity Framework (Carpathian Convention COP7 2023). EU BS = EU Biodiversity Strategy for 2030 (EU COM 2020, 380 final). GBF = Kunming-Montreal Global Biodiversity Framework (CBD COP15 2022).

TARGET 1: Plan and manage all areas to reduce biodiversity loss			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	By 2030, ensure that all areas are under integrated biodiversity-inclusive spatial planning and/or effective management processes, addressing land- and sea-use change, to bring the loss of areas of high biodiversity importance close to zero, and maintain the connectivity of natural landscapes and seascapes.	The EU BS commits Member States to legally protect a minimum of 30% of land and 30% of sea by 2030, within a Trans-European Nature Network integrated with ecological corridors (Section 2.1). Spatial planning must incorporate ecological connectivity requirements. Member States are called upon to develop Urban Greening Plans and to integrate green and blue infrastructure into spatial planning instruments (Section 2.2.8), directly relevant to Lynx dispersal corridors in peri-urban Carpathian zones.	CBF Strategic Objective 1 mandates enhanced, harmonised and transboundary conservation of habitats and ecological connectivity across all Carpathian Parties. CBF Target 1 actions include: (a) training on ecological connectivity and sustainable spatial planning; (b) development of a Carpathian Code of Good Practice for spatial planning authorities; (c) transboundary spatial planning pilot projects for border communities; and (d) mainstreaming ecological connectivity into transport, energy and river basin management planning. The CBF explicitly references the methodology for the Identification of Ecological Corridors in the Carpathian countries by using large carnivores as umbrella species, which assigns the Eurasian Lynx a central role as a focal species for corridor delineation.

TARGET 3: Conserve 30% of land, waters and seas			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	Ensure and enable that by 2030 at least 30% of terrestrial, inland water, and coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-	The EU BS sets a commitment for at least 30% of EU land and 30% of EU sea to be protected by 2030, of which one third (10% of total area) must receive strict protection (Section 2.1). This directly encompasses the majority of remaining Lynx range in the Carpathian EU Member States (Slovakia,	CBF Target 3 actions call on Carpathian Parties to include the Carpathians in national pledges for the 30% target, contribute to building the Trans-European Nature Network (NaturaConnect project), strengthen management of existing protected areas and OECMs, and support designation of additional protected

	connected, and equitably governed systems of protected areas and OECMs.	Poland, Czech Republic, Hungary, Romania). The benefits of the Natura 2000 network are estimated at €200–300 billion per year (Nature Fitness Check, SWD (2016) 472), with investment needs supporting up to 500,000 jobs – a co-benefit argument applicable to Carpathian Lynx range countries. Primary and old-growth forests, which constitute core Lynx habitat in the Carpathians, are to be strictly protected under the EU BS (Section 2.1).	areas to bridge gaps in the regional ecological corridor system. The Carpathian Network of Protected Areas (CNPA) is explicitly tasked with expanding transboundary protected areas, directly relevant to Lynx conservation across national borders. The CBF supports mapping of large, coherent landscapes with wilderness features and terrestrial ecological corridors between Natura 2000 sites, which function as Lynx source populations.

TARGET 4: Halt species extinction, protect genetic diversity, and manage human-wildlife conflicts			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	By 2030: (a) halt human-induced extinction of known threatened species and recover populations of wild species, reducing extinction risk; (b) maintain and restore genetic diversity within and between populations of native, wild and domesticated species; and (c) manage human-wildlife interactions to minimise human-wildlife conflict for sustainable coexistence.	The EU BS requires that at least 30% of species and habitats not currently in favourable status show a strong positive trend by 2030 (Section 2.2.1). The Carpathian Lynx, listed in Annex II and IV of the Habitats Directive (92/43/EEC), falls explicitly within this commitment. The EU BS commits to eliminating or reducing to minimum the by-catch of species threatened with extinction (Section 2.2.6) and to zero tolerance for illegal wildlife practices (Section 2.2.6), directly applicable to Lynx poaching. The EU BS Invasive Alien Species provisions (Section 2.2.10) and pesticide reduction targets (Section 2.2.9) are indirectly relevant via prey base integrity (wild ungulates, hares).	This is the single most directly relevant GBF Target for *Lynx lynx carpathicus*. Sub-target (a) requires active management to reduce extinction risk of threatened species; for the Carpathian Lynx this encompasses anti-poaching enforcement, prey base management, and reintroduction/reinforcement in depleted sub-populations. Sub-target (b) requires maintenance and restoration of genetic diversity; the Carpathian Lynx population is characterised by low genetic diversity and evidence of inbreeding depression due to small effective population sizes and disrupted gene flow across fragmented national sub-populations. Sub-target (c) requires management of human-wildlife interactions;

			livestock depredation by Lynx, and resultant retaliatory killing, constitutes one of the primary mortality sources for the Carpathian Lynx population.

TARGET 5: Ensure sustainable, safe and legal harvesting and trade of wild species			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	Ensure that the use, harvesting, trade and management of wild species is sustainable, legal, and safe, preventing overexploitation, reducing the spread of pathogens, and eliminating unsustainable and illegal wildlife trade.	The EU BS commits to zero tolerance for illegal, unreported and unregulated wildlife practices (Section 4.2.1), revision of the EU Action Plan against Wildlife Trafficking (2021), and exploration of a revised Environmental Crime Directive with expanded scope and sanctions (Section 4.2.2). The EU BS specifically addresses illegal wildlife trade as one of the world's most lucrative black markets and a risk factor for zoonotic disease emergence (Section 4.2.2).	Illegal killing (poaching) and traffic in Lynx parts represent a significant mortality pressure on the small Carpathian Lynx population. GBF Target 5 provides the normative mandate for enhanced enforcement against illegal offtake. Lynx body parts have commercial value in certain markets; elimination of illegal wildlife trade is therefore directly relevant to population viability.

TARGET 8: Minimize the impacts of climate change on biodiversity and build resilience			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	Minimise the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solutions and ecosystem-based approaches.	The EU BS identifies biodiversity and the climate crisis as intrinsically linked (Section 1), with nature-based solutions – including protection and restoration of forests and wetlands – as essential for climate adaptation (Section 1). Forest resilience improvements under the EU Forest Strategy directly benefit Lynx habitat quality. The EU BS targets planting of at least 3 billion additional	Climate change alters prey abundance, snow conditions critical for Lynx hunting efficiency, and forest structure (core Lynx habitat). It may also force range shifts that bring Lynx into conflict with human infrastructure. Building ecological resilience at the landscape scale is therefore directly relevant to *Lynx lynx carpathicus* long-term viability. Under GBF Target 8, nature-based solutions (NbS) and

		trees by 2030 (Section 2.2.4) and promotes close-to-nature forestry, which increases structural complexity and prey availability in Carpathian Lynx habitat.	ecosystem-based approaches must be prioritised, consistent with the Lynx's functional role as a keystone predator maintaining trophic balance in Carpathian forest ecosystems.

TARGET 9: Manage wild species sustainably to benefit people			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	Ensure the sustainable management, harvesting and trade of wild species through a rights-based approach, and support the recovery of wild species populations, recognising the role of wild species in supporting livelihoods, food security, and cultural values.	The EU BS Section 2.2.6 addresses sustainable harvesting of species and elimination of practices that endanger conservation status, applicable to ungulate management as the ecological basis of Lynx prey availability. No specific EU BS commitments address wild ungulate management directly; national hunting frameworks and Common Agricultural Policy (CAP) instruments govern this area.	Regulated hunting of wild ungulates (red deer, roe deer, wild boar) – the primary prey of *Lynx lynx carpathicus* – directly determines prey abundance and thus Lynx carrying capacity across the Carpathians. Sustainable ungulate management is therefore an indirect but critical determinant of Lynx population viability. Livestock depredation compensation schemes and pastoral coexistence measures also fall under this Target.

TARGET 10: Enhance biodiversity and sustainability in agriculture, aquaculture, fisheries, and forestry			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	Ensure that areas under agriculture, aquaculture, fisheries, and forestry are managed sustainably, contributing to biodiversity conservation and the progressive restoration of biodiversity in these landscapes and seascapes.	The EU BS requires at least 25% of EU agricultural land under organic farming by 2030 and promotes agroforestry and agro-ecology (Section 2.2.2), which maintain landscape heterogeneity and buffer habitats adjacent to Lynx range. The EU Forest Strategy (to be proposed in 2021 under EU BS Section 2.2.4) includes biodiversity-friendly forestry guidelines and promotion of close-to-nature forestry, directly applicable to Lynx habitat management in Carpathian Forest enterprises.	Sustainable forestry practices – including avoidance of large-scale clear-cutting, maintenance of structural diversity, and preservation of deadwood and old-growth elements – directly determine the quality of *Lynx lynx carpathicus* habitat. Carpathian forests managed under close-to-nature principles provide the cover structure and prey habitat essential for Lynx territorial requirements. Extensive livestock farming practices (pastoralism) maintain semi-natural grasslands

		A reduction of 50% in chemical pesticide use by 2030 (EU BS Section 2.2.9) supports prey-base integrity through invertebrate and small mammal communities, indirectly benefiting Lynx through trophic cascades.	that support prey species (roe deer, chamois) and reduce depredation pressure when co-existence measures are in place.

TARGET 14: Integrate biodiversity in decision-making at every level			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, and accounts, within and across all levels of government and across all sectors.	The EU BS calls for a new European biodiversity governance framework, including monitoring, review mechanisms and corrective action capacity (Section 3.1), which provides the accountability architecture within which national Lynx conservation plans must be embedded. The EU BS mandates full implementation and enforcement of the Habitats Directive (92/43/EEC) and Environmental Impact Assessment Directive (2014/52/EU), directly applicable to project-level impacts on Lynx and its habitat (Section 3.2).	Effective conservation of *Lynx lynx carpathicus* requires mainstreaming Lynx range requirements into spatial planning, environmental impact assessment (EIA), strategic environmental assessment (SEA), forestry planning, and hunting management frameworks across seven Carpathian Range States. Cross-sectoral integration is a prerequisite for addressing the cumulative impact of infrastructure development, forest fragmentation, and agricultural intensification on Lynx habitat connectivity.

TARGET 20: Strengthen capacity-building, technology transfer, and scientific and technical cooperation for biodiversity			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	Strengthen capacity building and development, access to technology transfer, and technical and scientific cooperation, in accordance with national needs and priorities, to support implementation of the Framework.	The EU BS commits to establishing a Knowledge Centre for Biodiversity (2020) and increasing support to IPBES (Section 3.3.4). Horizon Europe's Biodiversity Partnership and long-term strategic research agenda (Section 3.3.4) provide funding mechanisms for transnational Lynx research. The EU BS promotes a Council Recommendation on cooperation in education for environmental sustainability (Section 3.3.4),	Implementation of the *Carpathian Lynx Conservation Strategy* requires transnational scientific and technical cooperation in monitoring (camera trapping, genetic non-invasive sampling, telemetry), population modelling, and adaptive management. Range States currently have heterogeneous technical capacities for Lynx monitoring. Capacity building in wildlife crime investigation and

		supporting training of wildlife managers and law enforcement across Carpathian Member States.	enforcement is also directly relevant to countering the illegal killing threat.

TARGET 21: Ensure that knowledge is available and accessible to guide biodiversity action			
Dimension	**GBF 2030 – Target Text**	**EU Biodiversity Strategy 2030**	**Carpathian Biodiversity Framework (CBF 2023)**
Relevance for *Lynx lynx carpathicus*	Ensure that the best available data, information and knowledge are accessible to decision makers, practitioners and the public to guide effective and equitable governance, management, integrated reporting, monitoring and evaluation.	The EU BS mandates the development of a monitoring and review mechanism for biodiversity commitments, including agreed indicators and regular progress assessments (Section 3.1), which provides the normative basis for national-level Lynx population reporting. The EU BS promotes further development of the Forest Information System for Europe (Section 2.2.4), which can provide habitat quality and forest structure data relevant to Lynx range assessment.	Effective conservation of *Lynx lynx carpathicus* depends on range-wide, harmonised population monitoring data – including standardised camera trapping protocols, genetic non-invasive sampling, and prey index monitoring – to inform adaptive management and to underpin progress reporting under the present *Strategy*.

Appendix II – EU Financing Instruments

Instruments used to date (2021–2027)

Of the seven range countries of the Carpathian Convention, five are European Union Member States. Consequently, EU funding instruments constitute the principal, though not exclusive, source of conservation finance for the Carpathian lynx, alongside private funding from foundations, donations and sponsorship. Under the 2021-2027 Multiannual Financial Framework (MFF), several EU funding instruments were supporting conservation projects relevant to the Carpathian region. For example, the LIFE Programme has been the main dedicated instrument for species-level conservation actions; the European Agricultural Fund for Rural Development (EAFRD) has supported agri-environmental measures, including livestock-protection and other coexistence measures, while the European Regional Development Fund (ERDF) has financed regional investment; Interreg programmes – including Central Europe, Danube Transnational, and bilateral cooperation programmes such as Poland–Slovakia, Slovakia-Czech Republic, and Slovakia–Hungary – have funded transboundary connectivity and monitoring work, including LECA and the TransGREEN/ConnectGREEN/SaveGREEN series; and Horizon Europe has supported research on genetics, connectivity and human–carnivore coexistence.

Outlook: the 2028–2034 Multiannual Financial Framework

This funding architecture is now under substantial revision. On 16 July 2025, the European Commission tabled its proposal for the 2028-2034 MFF, envisaging an overall budget of about EUR 1.8 trillion and consolidating more than 50 spending programmes into roughly 16 (European Commission, 2025a, 2025b). Central to the reform is the proposed dissolution of the EAFRD and ERDF as standalone funds, to be merged together with cohesion, fisheries, migration and social-climate funding into a single National and Regional Partnership Plan (NRPP) per Member State. LIFE would likewise cease to exist as an independent line, its activities being absorbed into a broader spending heading (European Commission, 2025a).

The Commission proposal foresees a minimum share of NRPP funding (reported at approximately 43%) for climate- and environment-related objectives, but no dedicated, ring-fenced biodiversity sub-target has so far been agreed; conservation organisations note that comparable earlier arrangements (the Recovery and Resilience Facility) delivered only a small proportion of comparable spending to genuine biodiversity outcomes (WWF, 2026; BirdLife International, 2026).

Negotiations remain in progress (situation July 2026), and their outcome is not yet predictable. The Council has so far reached only partial positions, notably on Horizon Europe, the NRPP regulation and a performance-monitoring framework (Council of the European Union, 2026a, 2026b), while the European Parliament adopted an interim negotiating mandate on 28 April 2026 calling for a more ambitious budget (European Parliament, 2026). Political agreement is targeted around the European Council meeting of October–December 2026 under the Irish Presidency, with sectoral legislation to follow in 2027 and entry into force foreseen for 1 January 2028; substantial changes before final adoption remain likely.

Two further, still-emerging instruments may complement public funding. The revised Corporate Sustainability Reporting Directive (Directive (EU) 2026/470) retains biodiversity-related disclosure requirements (ESRS E4) for a considerably reduced pool of large companies, which may create demand for credible conservation partnerships. The Commission's Roadmap towards Nature Credits (European Commission, 2025c) envisages a certification methodology by mid-2026, a legislative proposal in 2026–2027, and market launch, at the earliest, in 2027–2028.

Given this fluidity, the *Strategy* considers the post-2027 EU funding architecture potentially as a significant, but still unsettled opportunity. Programme names, percentages and timelines given above should be understood as provisional and cannot be used to anchor detailed implementation budgets, and this Appendix should be revisited once the MFF Regulation and its sectoral legislation are adopted and the *Strategy* and related National Action Plans are entering the implementation phase.

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