Grupo Brisa

Biodiversity Report 2024

2025.04.14

This report presents the Brisa Group’s current approach to their biodiversity and ecosystems management, in particular the interactions of BCR - Brisa Concessão Rodoviária (BCR) activities with biodiversity and the actions of its Action Plan in terms of protection, conservation and restoration, awareness and training of key stakeholders and participation in interest groups to promote biodiversity. The Brisa Group publishes this Biodiversity Report in order to transparently inform its stakeholders of the Group's actions in relation to biodiversity, in line with the ambition set out in the Vision28 Strategic Plan, as translated into its Environmental Policy, and is commitments within the act4nature Portugal initiative.

About this report

Since 2020, Brisa has integrated its sustainability report with the annual financial report into a single report, which includes information on biodiversity management and performance.

Following the development of its Biodiversity Strategy during the 2022-2023 period, this report is published with the aim of disclosing specific biodiversity information. It is the first biodiversity report of the Brisa Group and presents its current strategic approach for management with a positive impact on biodiversity and ecosystems, focusing on the interaction of BCR - Brisa Concessão Rodoviária (BCR) activities with biodiversity, its strategic and action ambition, realized through its action plan in terms of protection, conservation, and restoration, awareness-raising and training of key stakeholders, and participation in interest groups promoting biodiversity.

The Brisa Group publishes this Biodiversity Report to transparently inform its stakeholders about the Group's actions regarding biodiversity, in line with the ambition set out in the Vision28 strategic plan, translated into its Environmental Policy and commitments under the act4nature Portugal initiative.

Although it does not follow a specific reporting framework, the Biodiversity Report has taken into account the requirements of the main recognized frameworks for disclosing biodiversity information: the European Sustainability Reporting Standard on Biodiversity and Ecosystems from the European Sustainability Reporting Directive, the Taskforce on Nature-related Financial Disclosures (TNFD) Disclosure Recommendations, the GRI 304: Biodiversity 2016 and GRI 101: Biodiversity 2024 standards, and the Corporate Manual for Setting Science-based Targets for Nature, from the Science Based Targets Network initiative.

Brisa will annually report on the progress of performance indicators related to this topic in its Integrated Report. The frequency of the Biodiversity Report will be annual, but it may be advanced if a strategic change justifies it.

Contacts

Further information or clarification can be requested at: contato@brisa.pt

01

Introduction to biodiversity in Brisa

General Context

Brisa and biodiversity

General indicators

General Context

The biodiversity crisis in the spotlight

In recent decades, human activities have led to unprecedented changes in ecosystems to meet growing demands for food, water, raw materials and energy. As a result, the loss of biodiversity and the degradation of ecosystems have accelerated, making them an increasingly urgent global concern.

According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), around one million species of animals and plants are currently at risk of extinction - an unprecedented number in human history - as a result of the growing impact of human activities. The main causes of biodiversity loss are identified as:

- Changes in land use, freshwater and marine ecosystems
- Use of natural resources
- Pollution
- Invasive alien species and other disturbances

In addition, climate change is expected to play an even more critical role as a direct driver of ecosystem degradation.

Biodiversity loss is a serious sign of the planet's loss of habitability, as all living beings, including humans, depend on the natural resources and the services that ecosystems provide. In addition to the loss of the intrinsic value of nature, there is a decline in essential goods and services, with profound social and economic impacts.

Biodiversity guarantees food security, human health, the supply of clean air and drinking water, and plays a protective role in reducing the spread of pathogens and diseases. It also contributes to the livelihoods of local communities and to sustainable economic development.

Despite its critical importance and international efforts to protect and conserve it, biodiversity continues to decline at an unprecedented rate, requiring an urgent and effective response.

According to the World Economic Forum's Global Risks Report 2025, biodiversity loss is the second most serious risk facing the planet over the next decade, after extreme weather events and ahead of critical changes in Earth systems and natural resource scarcity.

General Context

As a result, the role of nature is increasingly recognized by the business and financial sectors, influencing decisions on operations, value chains and investments. If companies effectively manage biodiversity-related risks in their business management, they can benefit from a competitive advantage in access to markets, capital and resources.

The TNFD, based on the current Climate Change Framework (TCFD), has published a framework for the disclosure of nature-related risks and opportunities. This framework is aligned with the target 15 of the QGBKM and seeks to promote transparency in the business and financial sector in relation to the impacts and dependencies they have on nature.

Action for biodiversity on the international agenda

Over the last three years, benchmarks, strategies, regulations and initiatives to accelerate action against biodiversity loss and nature's decline have increased. The Kunming-Montreal Global Biodiversity Framework (QGBKM), the European Biodiversity Strategy 2030, the European Green Deal, the Sustainable Finance Action Plan and the Corporate Sustainability Reporting Directive (CSRD) are examples.

Other initiatives, such as Science-Based Targets for Nature (SBTN) or the Task Force on Nature-related Financial Disclosures (TNFD), are also creating benchmarks to help companies and financial institutions integrate nature into their decision-making processes.

Brisa and biodiversity

Towards a positive future for nature

Road infrastructures play an essential role in the economy, however, like all economic activities, it is known that they impact and, simultaneously, depend on and benefit from nature.

Recognizing its importance, the protection of biodiversity and the territory is a priority topic for the Brisa Group. The sustainable management of highways is essential to reconcile mobility needs with environmental preservation and community well-being. In a context of growing concern about climate change and biodiversity loss, it is crucial to adopt an integrated approach that promotes innovative and sustainable solutions.

Brisa Group's vision for nature involves a road network that not only meets the demands of modern transportation but also reduces environmental impacts, contributing to a more resilient and biodiverse environment. To achieve this, key commitments include the progressive reduction of carbon emissions, the implementation of measures for the protection, restoration, and conservation of ecosystems, and the development and operation of infrastructure that incorporates nature-based solutions.

Aware of the location of its infrastructure and its interactions with the surrounding territory, in the 2022-2023 period, Brisa Group developed its Biodiversity Strategy, named the **Brisa Nature Positive Strategy 2030.**

This strategy focuses on the construction, operation, and maintenance activities of highways carried out by BCR, with the aim of supporting the company in managing its natural capital, aligned with a vision that generates a positive impact on biodiversity and ecosystems, and promotes a transformative effect on nature and the territory in which it operates.

Brisa's highway network extends across the country, connecting different regions and playing a fundamental role in ensuring mobility. Beyond the road infrastructure itself, this network also encompasses extensive areas of natural and semi-natural landscapes that host a wide variety of habitats and species. Its impact goes beyond transportation, influencing both the quality of life of communities and the health of ecosystems.

Brisa acknowledges the proximity of the road infrastructure can pose challenges but also presents opportunities for a more sustainable management. Therefore, committees to minimize the environmental impacts and promote a more sustainable road model, creating values for both people and nature.

To bring this vision to life, Brisa is investing in habitat restoration, biodiversity promotion, and the adaptation of infrastructure to climate change.

With this strategy, the aim is not only to improve the quality of life for current generations, but also to contribute to a positive environmental legacy for the future.

Brisa and biodiversity

Towards a positive future for nature

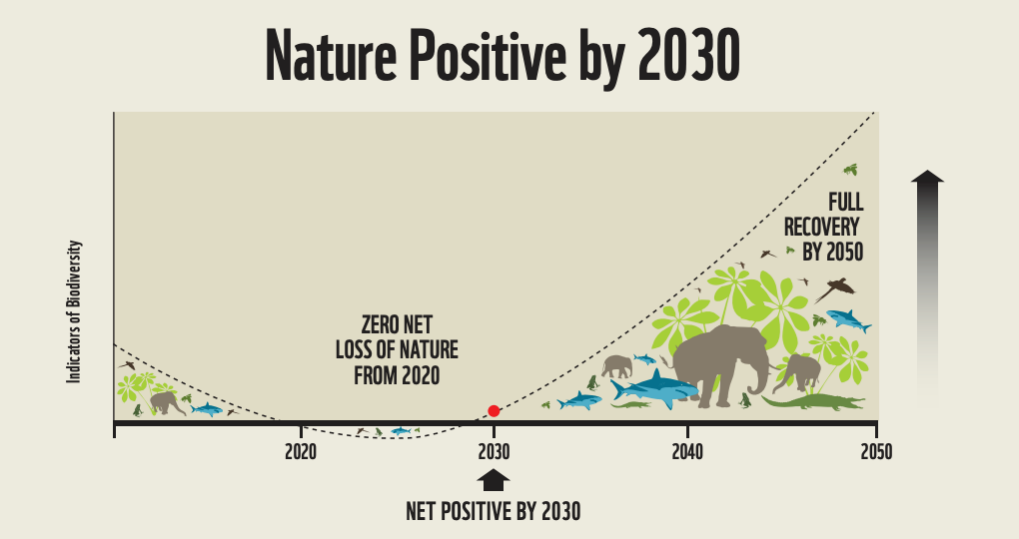
Nature Positive Approach

Nature Positive is a global societal goal defined as "Halting and reversing nature loss by 2030, relative to the 2020 baseline, and achieving full recovery by 2050". In other words, it aims to ensure that there is more nature in the world by 2030 than in 2020, followed by continued recovery beyond that (Nature Positive Initiative, 2023).

The achievement of this goal requires measurable positive net results in terms of biodiversity through the improvement of abundance, diversity, integrity, and resilience of species, ecosystems, and natural processes. It is designed to lead society towards a measurable absolute improvement in the state of nature relative to a defined baseline, which in turn will enhance nature's ability to contribute to human well-being.

For Brisa, acting in alignment with the Nature Positive concept means:

- aligning with emerging European legislation and the Kunming-Montreal Global Biodiversity Framework;
- understanding and assessing its impacts, dependencies, risks, and opportunities related to nature;
- integrating natural capital into its business model and value chain;
- implementing practices and behaviours **aligned with the biodiversity mitigation hierarchy**, which generate positive results for biodiversity and the overall health of ecosystems.



"Nature Positive trajectory by 2030 – Recognizes that, given the current trends, some loss of biodiversity in the short term is inevitable. However, it sets as a goal a net improvement towards a positive state of nature by 2030, with 2020 as baseline, and full recovery by 2050." (Nature Positive Initiative, 2023)

Brisa and biodiversity

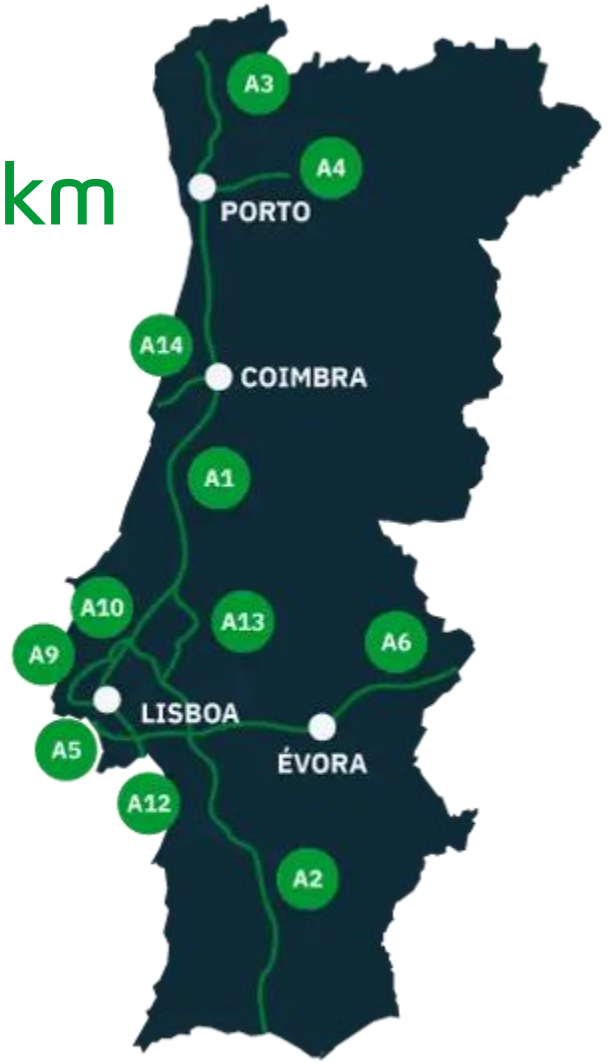
General indicators

8 018.7 ha	**Total area** occupied by the highways managed by BCR
4 030.7 ha	Approximately 50% of the total area occupied by the highways corresponds to **natural or semi-natural areas**
6%	The natural and semi-natural areas on the highways managed by BCR **are part of the National System of Protected Areas**
17%	The natural and semi-natural areas on the BCR highways are **High Natural Value Areas**
34	**Potential natural habitats** present in the natural/semi-natural areas along the BCR highways. **26% are considered priority**
62%	**The 5 km segments** of the BCR highways have **3 or more crossings per km, which allow for fauna permeability**
26	**Wildlife species road-killed in 2024*** in the BCR highways with conservation status and legal protection in Portugal
68%	**Of the 5 km segments of** the highways in BCR with the presence of invasive plant species

*See Annex II

1 100 km

Conceded to BCR



02

Strategy, action plan and commitments

Strategic goal on nature

Strategy for the biodiversity

Action plan and commitments

Strategic goal regarding nature

In 2023, the Brisa Group approved its strategic plan Vision28, within which its ambition in the environmental, social and governance (ESG) domains was strengthened. In the environmental domain, the commitment to contribute to the United Nations' Sustainable Development Goals (SDGs) and to the European Union's targets, with a special focus on the climate transition and the **positive impact of its operations on nature**, is central to the Group's sustainability strategy.

In the context of its Environmental Policy, the Brisa Group adopts as a guiding principle to play an **active role in the protection of ecosystems and biodiversity and in promoting their valorisation**, through the Group's ongoing processes and by promoting and managing natural heritage, based on partnerships.

In the context of the Vision28 strategic plan this commitment is materializes through the **Brisa Nature Positive Strategy 2030**, developed during the 2022-2023 period and published in 2024.

Strategy for the biodiversity

Brisa Nature Positive Strategy 2030 applies to the construction, operation, and maintenance activities of highways developed by BCR and aims to support the company in managing its natural capital, in line with a nature-positive vision and a transformative effect on nature and the territory where it is integrated.

The Strategy consists of the **characterization of the baseline**, established in 2022 based on the implementation of the first two stages, "locating the interface with nature" and "estimating dependencies and impacts", of the LEAP approach (1 - Locate the interface with nature; 2 - Evaluate dependencies and impacts; 3 - Assess risks and opportunities; 4 - Prepare to respond and report) suggested by the Taskforce on Nature-related Financial Disclosures (TNFD), and an **Action Plan to Biodiversity**, including its **monitorization.**

The baseline characterization, developed with the support of Geographic Information System (GIS), allowed the identification and location of areas where highways overlap with nationally designated areas for nature conservation and with other **High Natural Value Areas (HNVA)**, identified from biodiversity indicators (fauna and flora), landscape, and ecosystem services. Additionally, it also involved the definition and evaluation of an **Impact KPI**[1] that incorporates indicators for fauna, flora, habitats, fauna permeability, and natural risk, as well as allowing the measurement of performance and the evolution of natural capital resulting from management actions and measures included in the action plan and implemented in the natural and semi-natural areas along the highways.

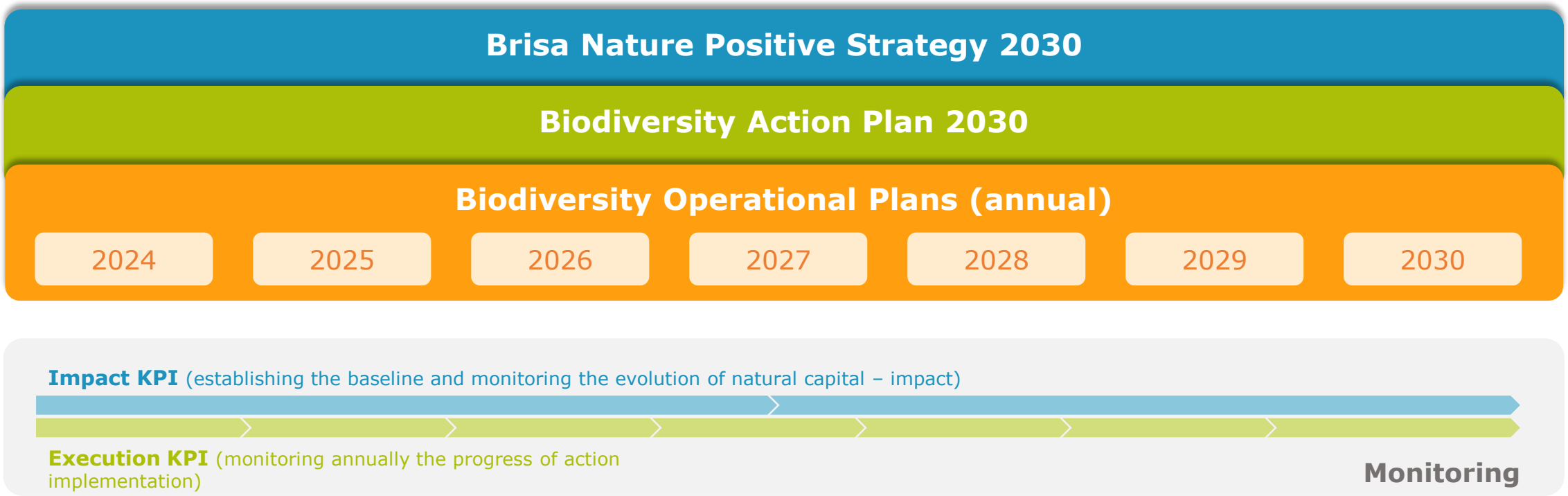
The **Action Plan** establishes a set of biodiversity and ecosystem management measures for the highways under BCR's responsibility. It focuses on the company's direct operations and on the implementation of an **Execution KPI**[1], which is centred on actions to avoid and reduce impacts, to restore, and to help reverse biodiversity loss and ecosystem decline.

The actions included in the Action Plan and the Execution KPI are implemented through the **annual Biodiversity Operational Plans**, between 2024 and 2030.

[1] To ensure better understanding and alignment with the concepts used by act4nature Portugal, the designation of the Biodiversity KPI and the Action KPI has been changed to Impact KPI and Execution KPI, respectively.

Strategy for the biodiversity

Key components of the strategy



Note: To ensure better understanding and alignment with the concepts used by act4nature Portugal, the designation of the Biodiversity KPI and the Action KPI has been changed to Impact KPI and Execution KPI, respectively.

Strategy for the biodiversity

Strategic action priorities

The Brisa Nature Positive Strategy 2030 establishes four strategic action priorities which, in line with the hierarchy of mitigating impacts on biodiversity and with an approach that integrates the entire value chain, prioritises the implementation of measures with a direct impact on nature.

1. Evaluate and monitor actions and performance

- Deepen knowledge of biodiversity, the state and condition of habitats and ecosystems and associated risks:
  - Validation of land use and areas with invasive species
  - Characterisation of fauna passages
- Assessing the condition and state of the habitat areas to be intervened
- Tracking and monitoring progress and impact after restoration and regeneration actions have been carried out

2. Evaluate and monitor actions and performance

- Establishing requirements and procedures to prevent negative impacts on biodiversity:
  - in the services of highways construction and maintenance activities
  - in the purchase of construction and other materials

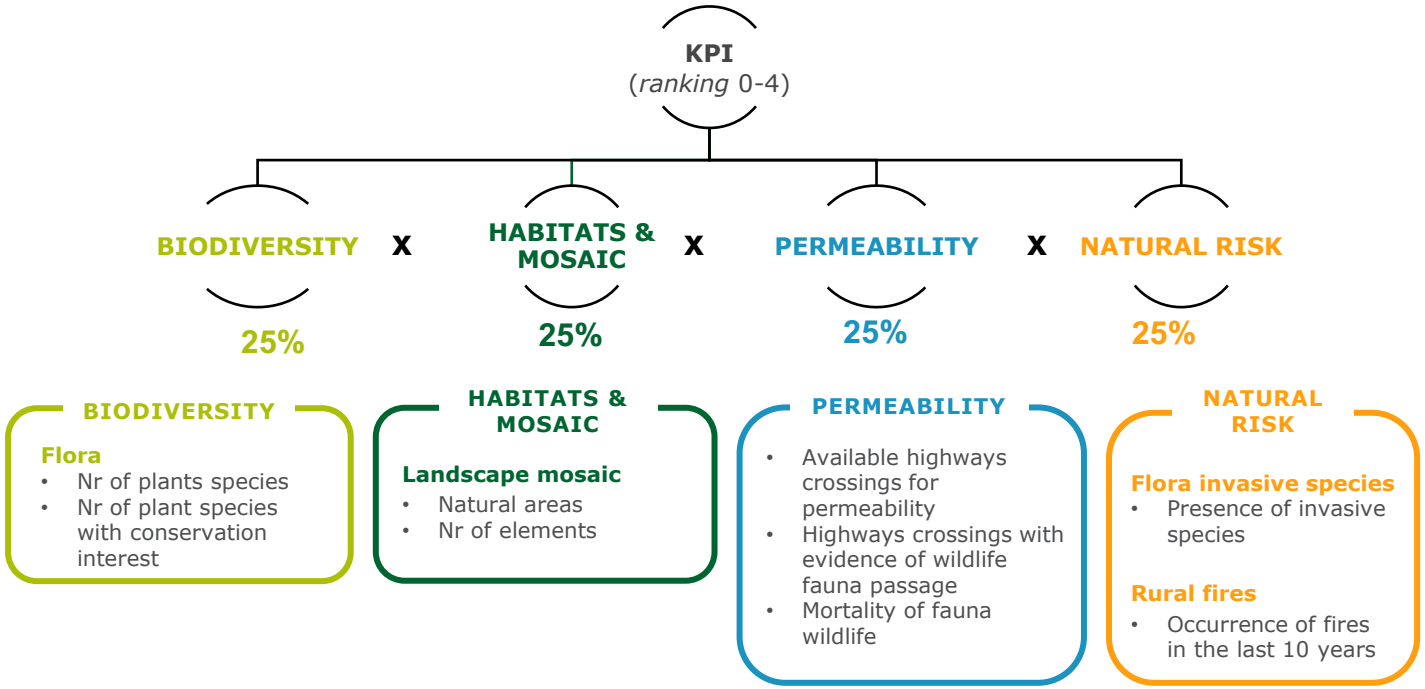
3. Restore and regenerate

- Implement actions to restore and regenerate habitats and ecosystems, as a priority in the HNVA identified (in accordance with good practices) and in classified nature conservation areas
- Implementing good management practices for biodiversity and ecosystem services in areas other than HNVA

4. Transform for change in the company and its sphere of influence

- Training employees involved in implementing the Biodiversity Management Plan
- Training service providers in plant maintenance
- Draw up a manual of good practices for managing biodiversity and ecosystems
- Develop a specific action plan to sensitize and influence stakeholders

Impact KPI



The Impact KPI, developed to characterise the baseline and measure performance or impact on biodiversity, assigns a ranking value from 0 (low) to 4 (high) to each 5 km segment, as well as each of the indicators that make it up.

To facilitate the management of biodiversity and ecosystems on BCR highways, 5 km highways segments were defined as management units.

In this way, the Impact KPI indicators and other biodiversity and ecosystem indicators assessed within the scope of the Brisa Nature Positive Strategy 2030, namely for the identification of HNVA, were calculated for each 5 km segment.

Action plan for biodiversity 2030

The Biodiversity Action Plan, which is part of the Brisa Nature Positive Strategy 2030, aims to establish a set of measures to manage biodiversity and the ecosystems present on its highways.

It focuses on the company's direct operations and the achievement of an **Execution KPI**, which includes actions on flora, fauna/permeability, habitats (habitat restoration and the promotion of ecosystem services, e.g. carbon sequestration) and risks minimisation (occurrence of invasive species and fire danger).

In order to monitor the impact generated by the actions to be implemented, the intervention areas of the Execution KPI (biodiversity, fauna/permeability, habitats and natural risks) are aligned with the indicators of the Impact KPI, also based on a ranking between 0 (low) and 4 (high).

The results of the Execution KPI depend on the implementation of the actions established for the 2020-2030 period.

Monitoring

The monitoring of the biodiversity and ecosystems management actions implemented and the impact they generated is designed following a theory of change approach, based on situations/problems identified in the baseline characterisation, and should be implemented from the start of the execution of the (annual) biodiversity operation plans.

The Impact KPI is evaluated at the baseline and after the actions to assess the impact generated.

Monitoring stages

1. **Starting point/baseline.** Characterisation of the area in need of intervention.
2. **Action.** Description of the action(s) to be implemented, including the area of implementation of the different measures.
3. **Results.** Description of the first results obtained, around 12 months after implementation of the actions.
4. **Effect.** Description of the effect or benefits obtained from implementing the actions, around 18 months after their implementation.
5. **Impact.** Description of the impact generated, with the evaluation of the defined indicators, around three years after the actions have been implemented.
6. **Impact.** Description of the impact generated, with evaluation of the indicators defined, around five years after the actions have been implemented.

Execution KPI

		Flora	Fauna/ Permeability	Habitats	Natural Risk
	Level 0	• **No actions** under the Brisa Nature Positive Strategy	• **No actions** under the Brisa Nature Positive Strategy	• **No actions** under the Brisa Nature Positive Strategy	• **No actions** under the Brisa Nature Positive Strategy
Non-HNVA nor CA 2028	**Level 1**	• **1% to 10% of 5 km segments** have more than 50% native plants and selective vegetation control • Annual plan of the selective vegetation control (including GIS) • Teams training • Manual of good practices	• **1-5% of 5 km segments** with actions to increase permeability • Annual plan for actions to increase permeability and collect evidence • Annual plan for systematic data collection and annual report of the wildlife fauna mortality • Teams training	• **1 service area** with eco-landscaping • **0.1% to 1% of the access nodes area** with restored habitats • **>1% to 3% of the restored areas** with classified habitats present • Annual plan of eco-landscaping • Suppliers training • Eco-landscaping manual	• **1% to 10% of the 5 km segments** with control of invasive plants • **0.1% to 1% of natural areas** with restoration actions for prevention against rural fires • Annual plan for invasive plants control (including GIS mapping) • Teams training
	Level 2	• **10% to 25% of 5 km segments** have more than 50% native plants and selective vegetation control	• **5-10% of 5 km segments** with actions for permeability	• **2 service areas** with eco-landscaping • **>1% to 2% of the access nodes areas** with restored habitats • **>3% to 6% of the restored areas** with classified habitats present	• **>10% to 25% of the 5 km segments** with control of invasive plants • **>1% to 2% of natural areas** with restoration actions for prevention against rural fires
HNVA or CA 2028	**Level 3**	• **25% to 50% of 5 km segments** have more than 50% native plants and selective vegetation control	• **10-25% of 5 km segments** with actions for permeability	• **3 areas of service** with eco-landscaping • **>2% to 5% of the access nodes area** with restored habitats • **>6% a 10% of the restored areas** with classified habitats present	• **>25% to 50% of the 5 km segments** with control of invasive plants • **>2% to 5% of natural areas** with restoration actions for prevention against rural fires
	Level 4	• **>50% of 5 km segments** have more than 50% native plants and selective vegetation control	• **>25% of the 5 km segments** with actions for permeability	• **50% of service areas** with eco-landscaping • **>5% of the access nodes area** with restored habitats • **>10% of the restored areas** with classified habitats present	• **>50% of the 5 km segments** with control of invasive plants • **>5% of natural areas** with restoration actions for prevention against rural fires

Legend: CA – Classified Areas | GIS – Geographic Information System | HNVA – High Natural Value Areas

What is it for?

To set the ambition for 2030 and to monitor the annual implementation of actions.

What are the defined targets?

Achieve Level 3 in HNVA or Classified Areas, and Level 1 in the remaining natural/semi-natural areas along the highways by 2028.

How often is it monitored?

Before the actions, and after 12 and 18 months to assess implementation, and again 3 to 5 years later to evaluate the impact on biodiversity.

At what level is the Brisa Group?

Level 1 (in implementation).

Brisa's commitments 2023-2028

Brisa Group Strategic Ambition until 2030

Goal

Increase biodiversity, improve habitats, reduce wildlife mortality, and reduce natural risks in High Natural Value Areas (HNVA) and/or Classified Areas by 2030, in comparison with the 2022 situation (based on the estimated potential baseline)

Target

- Achieve level 3 of the Execution KPI for Biodiversity in HNVA or Classified Areas for Nature Conservation by 2028 (compared to 2022)
- Achieve level 1 of the Execution KPI for Biodiversity in other natural/semi-natural areas of highways (not HNVA and not classified areas) by 2028 (compared to 2022)

Brisa's commitments 2023-2028

act4nature
Empresas pela Biodiversidade

At the end of 2023, the **Brisa Group joined the act4nature Portugal commitment**, an initiative of BCSD Portugal, in which companies commit to protecting, promoting and restoring biodiversity.

By joining act4nature Portugal, the Brisa Group has committed itself to integrating nature into its strategy and business model, putting in place measures for the conservation of biological diversity, its restoration, the sustainable use of natural resources and a fair and equitable distribution of the benefits which result from this use.

Information on the Brisa Group's membership of act4nature Portugal can be found at the following link:

www.brisa.pt/pt/sustentabilidade/compromisso/act4nature-portugal/

Brisa Group's act4nature Portugal Commitments

1. Public dissemination in 2024 of the Brisa Group's Nature Positive strategy, through the website, the Integrated Report and sector seminars.
2. By December 2024, communicate the Brisa Group's Nature Positive strategy to 100% of employees and material service providers (with a material impact on action for nature within the scope of the Brisa Group's activity).
3. By January 2025, update and make available online the Brisa Group's Procurement Policy, which now includes requirements for preventing and minimizing impacts on biodiversity, defined with the help of consultants.
4. Implement the measures set out in the Nature Positive Action Plan 2030 in the 2023-2028 period, with the aim of 2028 (a specific Action Plan will be drawn up annually):
   i. achieve level 3 of the internal execution KPI (0 to 4), in the High Nature Value Areas (HNVA) located in the semi-natural areas covered by BCR highways;
   ii. apply good biodiversity and ecosystem management practices to linear infrastructures in the remaining areas (not HVNA) located in the semi-natural areas covered by BCR highways.
5. Monitoring the implementation of the Nature Positive Action Plan for the period 2023-2028, including indicators of:
   i. initial characterization of the intervention areas and validation of the potential baseline (2022) (assessed for 100% of the 5 km segments of BCR highways);
   ii. implementation of actions carried out in relation to the plan;
   iii. results (after ca. 12 months), effects (after ca. 18 months) and impacts (after ca. 3 and 5 years) in terms of biodiversity (fauna and flora), habitats (habitats, landscape mosaic and permeability), risk (invasives and fire) and ecosystem services (e.g. carbon storage and sequestration, water regulation and prevention of soil erosion - assessment on a macro scale (total area).
6. By December 2024, train 100% of plant maintenance service providers to implement the measures proposed in the Nature Positive Action Plan in accordance with good biodiversity and ecosystem management practices in linear infrastructures, helping 100% of trainees to acquire new knowledge.
7. By December 2024, train 100% of the workers involved in monitoring the implementation of the Nature Positive Action Plan (in areas such as selective control of vegetation, management and control of invasive flora, promotion of native flora and monitoring the mortality of fauna by trampling), helping 100% of trainees to acquire new knowledge.
8. Disclose annually, from 2024 onwards, the actions implemented by the Brisa Group to manage biodiversity and ecosystems, and the respective results, as established in the Nature Positive Strategy 2030 and the respective Action and Monitoring Plans, as well as the annual implementation of act4nature Portugal commitments. This will be disclosed through the website, the Integrated Report and sectoral seminars.

03

Risk and impact management

Identification of impacts and dependencies on nature

Risks and opportunities management

Identification of impacts and dependencies on nature

In its activities of construction, operation, and maintenance of highways, the Brisa Group interacts with various ecosystems, the landscapes they integrate, as well as with habitats and species across an extensive geographical area.

The **identification of potential impacts factors** about nature and biodiversity is crucial for BCR, since it enables the definition of the most effective strategies to avoid, minimise, remediate, or compensate for the associated effects, in accordance with the mitigation hierarchy included in its Biodiversity Strategy. Similarly, **identifying dependencies on natural capital and biodiversity** allows us to pinpoint the most suitable strategies to reduce risks to the company that may arise from these dependencies.

In this regard, in 2022, the Brisa Group conducted a preliminary sectoral materiality analysis of potential impacts and dependencies related to nature, focusing mainly on its **direct operations**, not yet covering the entire value chain, and on the key activities associated with the construction, operation, and maintenance of highways.

In 2025, the Brisa Group will deepen the process of assessing dependencies, impacts, risks, and opportunities related to nature, with the materiality classification of some potential impact factors and dependencies identified as material possibly undergoing changes.

Identification of impacts and dependencies on nature

Potential impact factors

Impact factors

The main potential impact factors (or pressures) that may be exerted on nature are systematised by the categories proposed by the Science Based Targets Network (SBTN) based on the global assessment of biodiversity and ecosystem services by IPBES:

1. Land use and changes in land use (terrestrial, freshwater, marine ecosystems);
2. Resource use (water and other resources);
3. Greenhouse gas (GHG) emissions;
4. Pollutants (non-GHG air pollutants, water and soil pollutants (toxics and nutrients), solid waste);
5. Disturbances (noise, vibrations, artificial lighting) and introduction of invasive species.

The following table reflects the results of the preliminary materiality analysis of the potential impact factors on nature conducted for BCR's direct operations. In this case, the assessment approach recommended by SBTN and TNFD was used, and the initial version of the Materiality Analysis Tool provided by SBTN was applied (SBTN, 2020).

Impact factors on nature	Pressure category	Activities	
		Highway construction	Infrastructure maintenance contracts
Land/water use changes	Use of terrestrial ecosystems	M	
	Use of freshwater ecosystems	M	
Use of natural resources	Water use	M	
Climate change	Greenhouse Gas (GHG) Emissions	M	M
Pollution	Water pollutants	M	
	Soil pollutants	M	M
Invasive species and other disturbances	Disturbances	M	
	Biological changes	M	

(M: Potentially material)

Identification of impacts and dependencies on nature

Potential impact factors

Potential impacts

Based on the analysis of the potentially material impact factors and pressure categories on biodiversity and ecosystem services for BCR's direct operations, the main potential impacts are identified.

Impact factors on nature		Potential impacts
Land/ water use changes	Terrestrial ecosystems	**Loss and disturbance of habitats:** the construction of highways results in the direct loss of habitats, with disturbances also occurring during operation and maintenance activities.
		Habitat fragmentation and barrier effect: the construction of highways results in the fragmentation of natural and semi-natural habitats, disrupting connectivity and affecting the life cycles of species. It can also lead to the loss of biodiversity.
		Wildlife fauna mortality: roadkill of wildlife fauna and the consequent potential reduction of the affected species' populations.
	Freshwater ecosystems	**Changes in the hydrological cycle:** the impermeabilization of the soil reduces water infiltration into the soil, increasing surface runoff.
Pollution		**Water pollution:** contamination of water resources resulting from the runoff of chemicals, oils, and sediments from highways.
		Soil pollution: contamination of the soil resulting from oil spills, fuels, and chemicals from vehicles and highway infrastructure.
Invasive species and other disturbances		**Other disturbances - Noise and lighting:** disturbance of wildlife, affecting their routines (feeding, reproduction, and migration).
		Biological changes - Introduction of invasive species: spread of invasive species, particularly plants, both through transportation in vehicles and through infrastructure, adjacent areas, and intensive vegetation management..

Identification of impacts and dependencies on nature

Potential dependencies

Dependencies

Dependencies are aspects of ecosystem services that an organization relies on to function, including provisioning services such as water or food supply, and regulatory and maintenance services such as hazard mitigation, such as fires and floods, and carbon sequestration. The risks associated with dependencies are highly relevant when a company's operations cannot continue in a financially viable way without ecosystem services.

The results of the preliminary materiality analysis of potential nature dependencies conducted for the main activities of BCR are presented in the following table. In this case, the guidelines of SBTN and TNFD were also followed, and the ENCORE tool (2023) was used.

In addition, taking into account the context in Portugal regarding the rural fire hazard, exacerbated by the climate change context, the ecosystem service 'protection against rural fires' is also recognised by the BCR as a potentially material dependency, although ENCORE does not specify this ecosystem service.

Type of ecosystem services	Dependencies (ecosystem services)	Activities	
		Highway construction	Infrastructure maintenance contracts
Provision	Water availability	M	M
Regulation	Regulation of the precipitation pattern	M	M
	Climate regulation	M	M
	Air putification		M
	Water purification	M	M
	Soil quality		M
	Soil stabilization and sediment erosion control	M	M
	Flood and storm protection	M	M
	Mediation of sensory impacts		M
	Protection against rural fires		M

(M: Potentially material)

Identification of impacts and dependencies on nature

Potential dependencies

Potential dependencies

Based on the analysis conducted, a brief description of the potential ecosystem services considered most significant for BCR activities is presented.

Type of ecosystem services	Dependências (serviços dos ecossistemas)	
Provision	Water availability	Combination of ecosystem services for regulating water flow, water purification, and other ecosystem services for the regular supply of water of adequate quality to users for various uses.
Regulation	Protection against rural fires	Provided by the diversity of the landscape mosaic that prevents or protects the spread of fire across the territory.
	Climate regulation	Contribution of natural ecosystems to the long-term storage of CO2 in soils, plant biomass, and oceans. The degradation of natural ecosystems can increase the frequency and severity of extreme weather events, such as storms, heatwaves, droughts, and wildfires, directly affecting the operation of highways in Portugal.
	Soil stabilization and sediment erosion control	Ecosystems, particularly the stabilizing effects of vegetation, contribute to reducing soil (and sediment) loss and support the use of the environment (e.g., agricultural activity, water supply).
	Flood and storm protection	Contribution of riparian vegetation ecosystems that provide structure and a physical barrier to high water levels, thus minimizing the impacts of flooding on infrastructure and local communities.
	Mediation of sensory impacts	Barrier effect (natural) provided by vegetation, used to reduce light pollution and other sensory impacts, limiting the impact it may have on human health and the environment.

Risks and opportunities management

The Group Brisa Integrated Risk Management System includes the management of risks related to biodiversity and ecosystems. The Brisa Nature Positive Strategy 2030, along with its components, in addition to the control and mitigation measures outlined, particularly those implemented within the Environmental Management System (certified by NP EN ISO 14001), constitute the main means of managing and controlling these risks, contributing to an effective response to identified risks, reducing the existing level of exposure.

Following the initial high-level materiality analysis conducted to identify the respective potential impacts and material dependencies related to biodiversity and ecosystems, in line with TNFD guidelines, BCR also carried out an initial general identification of potential sectoral risks and opportunities related to nature, also focused on its direct operations, with further characterization and in-depth assessment planned for the company during 2025.

Risks and opportunities

Main risks

Physical risks

- **Acute**
  - Extreme weather events, which can cause damage to transportation infrastructure (e.g., due to storms, flooding, etc.).
  - Occurrence of wildfires.
  - Loss of flood defence capacity and erosion control (variable depending on the local context).
  - Increase in costs associated with natural risks.
- **Chronic**
  - Loss of biodiversity and degradation of ecosystem services due to operations.
  - Increase in costs related to biodiversity and ecosystem management.

Transition risks

- **Regulatory/Market/Reputational**
  - Increase in requirements for the assessment and disclosure of information on impacts, dependencies, and risks related to nature and their mitigation.
  - Increase in performance requirements regarding biodiversity and ecosystem management.
  - Greater awareness and demand from society regarding biodiversity.
  - Increase in regulations on the use of construction materials, construction requirements, and infrastructure location limitations.
  - Increase in regulations on the use of construction materials, construction requirements, and infrastructure location limitations.

Main opportunities

Resources efficiency

- Transition to more efficient processes and services that require fewer natural resources or have less impact on nature.

Operational

- Nature-based solutions in response to climate change and for ecosystem restoration.
- Inclusion of classified habitats in the design of new constructions.
- Eco-ducts and eco-bridges can be included in the design phase of new infrastructure.
- Cost reduction.

Market

- Access to new markets.

Financial

- Access to nature-related and/or green funds, bonds, or loans.
- Advantages in accessing financing.

Reputational

- Strengthening of ESG performance.

04

Action for biodiversity

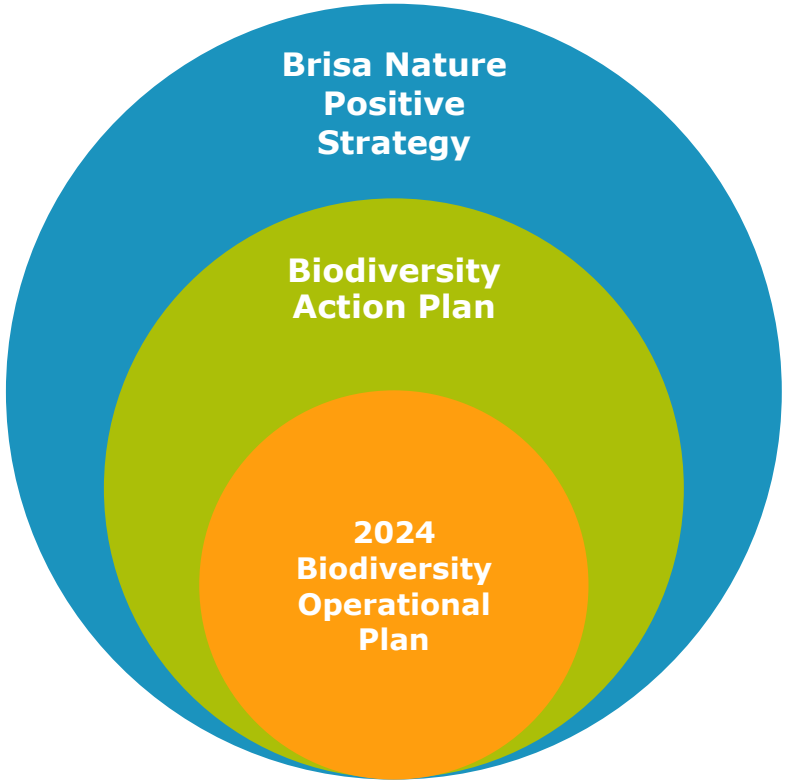
Action in 2024

Action in 2024

The **year 2024** was the first year of application of the actions outlined in the Biodiversity Action Plan that is part of the Brisa Nature Positive Strategy 2030. It was an experimental year, which allowed for the adjustment of information collection methodologies for the validation of the baseline, namely ground truthing flora, habitats and fauna, the acquirement of services by BCR with the integration of requirements compatible with biodiversity, for the implementation of flora and habitats' management actions, the control of natural risks and the prevention and reduction of impacts on fauna.

In this context, the **2024 Biodiversity Operational Plan** involved the implementation of the following activities:

- Validation of the biodiversity baseline of the intervention area on the ground, by assessing the indicators that make up the Impact KPI (flora, fauna, habitats and natural risks);
- Definition of intervention projects for flora, habitats, fauna/permeability and natural risks;
- Training course for 100% of service providers on good vegetation management practices compatible with biodiversity and presentation of the Biodiversity Action Plan;
- Definition of terms for contracting services for vegetation management, restoration actions and invasive species control,



Action in 2024

implementation of actions for the permeability of fauna and respective monitoring;

- Implementation of actions in the field:
  - Pilot Project of the Ecologic Restauration of the Nó da Pontinha (A9-CREL);
  - Maintenance of vegetation, integrating good biodiversity and ecosystem management practices;
  - Monitoring of fauna road accidents.

The **2024 Biodiversity Operational Plan** focused on a total of **8 segments of 5 km of highway** (totalling 40 km), located on the A2, A6 and A14 highways.

The implementation of intervention projects in the field defined in the operational plan for the segments indicated on the A2, A6, A14 will be carried out during 2025, during the seasons that best suited their execution, in synergy with the 2025 Biodiversity Operational Plan.

The planned monitorisation of the implementation Action Plan will also begin in 2025.

Highway segments of 5 km covered by the the Biodiversity Operational Plan

Highway	Segment of 5km (nº)	Area (ha)	Overlap with Classified Area for Nature Conservation and HNVA
A2	14	10,4	Special Area of Conservation (SAC) - Cabrela (PTCON0033) and HNVA
	81	10,3	
	12	10,3	n.a.
	83	10,3	n.a.
A6	2	6,7	n.a.
	3	6,2	HNVA
A14	2	4,9	HNVA
	15	4,8	HNVA

Some indicators evaluated in 2024

The data collected in the 8 segments of 5 km indicated and the highway crossings that integrate them, **emphasise the biodiversity potential of the green spaces that integrate the highways**:

Flora & Habitats

- Were identified **13 different habitats, 3 of which are classified as priority under the Habitats Directive** (in Annex B-I of Decree-Law no. 140/99, of 24 April, as amended by Decree-Law no. 49/2005, of 24 February)
- **407 flora species** observed on highway roadsides*
- **82 flora species (20%) are of conservation interest*.** Are highlighted the *Halimium umbellatum* var. *verticillatum*, the *Thymus capitellatus*, the *Ulex australis welwitschianus* and the *Juncus valvatus*.
- By comparing with the floristic records of the WebSIG Portal flora.on, it was found that the survey significantly increased the floristic knowledge of these regions, with 346 species observed across 7 UTM squares of 10x10 km, where no prior records existed.

Fauna/Permeability

- **The majority of evidence of the fauna connectivity were observed in underpasses (agricultural and hydraulic passages)**. The mammals' group was the most observed, mainly due to the observation tracking evidence used, being the faeces the most observed evidence.
- A pilot environmental DNA (eDNA) study recorded 75% of mammal's species (non-flying) that occurred potentially in the sampled area of the A2 highway, using data from just a single sampled hydraulic passage. **Of particular note is the identification of the Cabrera Rat (*Microtus cabrerae*)**, which is classified as 'Near Threatened' (NT) according to the International Union for Conservation of Nature (IUCN) Red List.

***Juncus valvatus* on the margin of the segment nº 15 of the A14. This endemic species is protected and classified as Near Threatened. This newly identified location represents a new boundary of its global distribution.**

Agricultural passage and hydraulic passage on the A2 (from left to right).

* See Annex II.

Pilot Project of the Ecologic Restauration of the Nó da Pontinha (A9-CREL)

At the end of the 2023, began the development of the pilot project focused on the ecological restoration – Nó da Pontinha (A9-CREL), with a total area of 8,6 ha, classified as HNVA, located in the municipality of Amadora, in the district of Lisbon.

The Nó da Pontinha consists of several ecological units, being primarily composed by meadows (29%), slopes (18,5%), scrublands (18,7%) and forest areas (8,4% of native forest and 17,5% with Eucalipts areas). Were identified 14 naturals habitats, of which 4 are priority habitats, and the presence of some RELAPE flora species classified as rare, such as the *Foeniculum sanguinium*.

During the year 2024, took place the implementation of the pilot project of ecologic restauration, in which the management measures for the different ecological units were grouped according the group habitats: rocky, herbaceous, aquatic, shrubland, and forest. In this sense, for each habitat type, areas with different management typologies were selected:

- Tipology 1 – Invasive species control and ecological restoration
- Tipology 2 – Protection and planting
- Tipology 3 – Conservation and management of vegetation control

Operations carried out by management typology

- **Selective control of vegetation**, including the protection of elements and areas with RELAPE (Rare, Endemic, Local, Threatened or Endangered) species, through the identification and prior marking of species, and the identification, marking and improvement of tree and shrub species
- **Control of invasive flora species**
- **Ecological restoration**, including population reinforcement of native flora species, through tree and shrub planting and seeding, and identification, marking and improvement of tree and shrub species
- **Monitoring and population reinforcement of native flora species**, trough the plantation of trees and shrubs and sowing seeds

Area of the Nó da Pontinha

Field visit to the Nó da Pontinha as part of the training course for service providers of vegetation maintenance

Examples of RELAPE species on site: *Foeniculum sanguinium*, *Iris xiphium* var. *lusitânica*, and seeds of both species collected on site to reinforce their populations (from left to right).

Pilot Project of the Ecologic Restauration of the Nó da Pontinha (A9-CREL)

Area of intervention in progress : 4.9 ha

Selective control of vegetation (1.1 ha)

Control of invasive flora species (0.5 ha)

Ecological restoration (0.2 ha)

Monitoring and population reinforcement (3.1 ha)

Plantations with native species, trees (e.g. *Quercus suber*) and shrubs (e.g. *Quercus coccifera*, *Rosmarinus officinalis*, *Arbutus unedo* and *Myrtus communis*), for ecological restoration and population reinforcement.

Action in 2024

Other nature positive interventions in 2024

In addition, BCR annually carries out Vegetation Management actions along its highway network.

In 2024, this work included guidelines for good practices in biodiversity and ecosystem management, encompassing, among others: 1) the control of invasive species; 2) the cutting and removal of burned vegetation in fire zones; and 3) the maintenance of fuel management lanes, allowing the reduction of plant and woody material present.

Regarding Fauna, following the analyses of the results of fauna monitoring in some subsections of the A2 - South Highway, measures were implemented to mitigate impacts on biodiversity in two locations, which were considered the most critical. These measures consisted of reinforcing the fence, through the installation of an additional fine mesh fence, folded in an "L" shape close to the ground, which was additionally covered with soil, in order to prevent the passage of animals.

Regarding the animal mortality monitoring system, it is carried out by road assistance and maintenance workers, who identify the species of animals affected (Annex II), whenever possible, and report it to the Operational Coordination Centre (CCO), registering the observation in an application.

Selective control actions of the vegetation

To support this system of registration of animal mortality, a Fauna Identification Manual was made available.

This roadkill monitoring system has made it possible to estimate roadkill mortality and determine the species most affected, contribute to the assessment of the environmental impacts of highways on wildlife, provide action lines to minimise impacts, provide indications on the effectiveness of hydraulic and subways for wildlife, make it possible to detect ‘critical sections’ that need some kind of intervention and contribute to drawing up the distribution map of species in Portugal.

Action in 2024

Partnership initiatives

Protocol for the requalification of Pateira de Fermentelos

In August 2024, the Brisa Group signed a Protocol with Quercus - National Association for Nature Conservation, committing to support, until 2025, on a patronage basis, the development of the "Entre Margens" project. This project focuses on the requalification and promotion of Pateira de Fermentelos, the largest natural lake in the Iberian Peninsula, located next to the A1 Highway, which is a Wetland with vast biological diversity and natural potential.

Miyawaki forest plantation in the Oeiras Service Area

In October 2024, the Brisa Group participated in a volunteering action, in partnership with Capgemini, which involved the participation of employees from both companies, as well as students from Colégio da Torre. With this action, it was possible to reinforce the company's commitment to biodiversity, as well as to promote the relationship between companies and also with the community.

The action consisted of planting a Miyawaki forest in the Oeiras Service Area. These fast-growing urban forests play a key role in balancing ecosystems, helping to preserve native species, promoting biodiversity and attracting pollinators.

05

Anexxes

I. Glossary

II. List of species observed and potentially impacted

III. Implementation of act4nature Portugal commitments

Annex I - Glossary

Biodiversity – The variability among living organisms from all sources, including all ecosystems and the ecological complexes of which they are part, this includes diversity within species, between species, and of ecosystems.

Conservation – The protection, improvement and sustainable use of natural resources for present and future generations.

Dependencies – Aspects of nature's contributions to people, that the company relies on to function. Examples of dependencies are: the ecosystems' ability to regulate water flow and water quality, the ecosystems' ability to regulate hazards, such as fires and floods, the ecosystems' ability to provide a suitable habitat for pollinators, and the ecosystems' ability to sequester carbon.

Direct operations – All activities, sites (e.g. buildings, forests, roads, farms), and vehicles over which the company has operational or financial control. This includes majority owned subsidiaries.

Ecosystem – A dynamic complex of plant, animal and microorganism communities and their non-living environment interacting as a functional unit.

Ecosystem services – The benefits people obtain from ecosystems. These include services such as food, water, timber and fibre; regulating services that affect climate, floods, disease, wastes and water quality; cultural services that provide recreational, aesthetic and spiritual benefits; and supporting services such as soil formation, photosynthesis and nutrient cycling.

Fauna – The animal species of a particular region or habitat.

Flora – The plant species of a particular region or habitat.

Habitat – The area or type of environment in which an organism or population occurs, defined by the sum of the abiotic and biotic factors of the environment, whether natural or modified, which are essential to the life and reproduction of the species. Also used to mean the environmental attributes required by a particular species or its ecological niche. Also used as a synonym for 'ecosystem type'.

High Natural Value Areas (HNVA) – Areas not subject to legal protection but recognised for important features of habitat, biodiversity and ecosystem services by scientific experts. Areas of high natural value include: a) habitats that are likely to present high biodiversity, rare species and/or species of conservation interest; b) areas that are biodiversity hotspots and/or have confirmed records of rare species and species of conservation interest and c) areas that present valuable ecosystem services.

Impacts – Negative or positive effects on environmental

Annex I - Glossary

resources resulting from environmental change. Also, the changes in the capacity of the environment to provide social and economic functions.

Indicator – Quantitative or qualitative descriptor generated with a well-defined method which reflects a phenomenon of interest. Indicators are frequently used to set environmental goals and evaluate their fulfilment.

Invasive alien species – Organisms (plants, animals, microorganisms, etc.) that are non-native to an ecosystem, which may cause economic or environmental harm or adversely affect human health and the health of the ecosystem. They have adverse impacts upon biodiversity, including decline or elimination of native species, through competition, predation or transmission of pathogens, and the disruption of local ecosystems and ecosystem functions. In the context of this report, the focus is on invasive plant species.

Mitigation hierarchy – Methodology hierarchy defined as:

a) Avoidance – measures taken to avoid creating impacts from the outset, such as careful spatial or temporal placement of elements of infrastructure, in order to completely avoid impacts on certain components of biodiversity;

b) Minimisation – measures taken to reduce the duration, intensity and/or extent of direct, indirect and cumulative impacts, that cannot be completely avoided, as far as is practically feasible;

c) Rehabilitation/restoration – measures taken to rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimised;

d) Offset – measures taken to compensate for any adverse impacts that cannot be avoided, minimised and/or rehabilitated or restored, in order to achieve no net loss or a net gain of biodiversity.

Natural capital – The elements of nature that directly or indirectly produce value for people, including ecosystems, species, freshwater, land, minerals, air and oceans, as well as natural processes and functions.

Nature-based solutions – Living solutions inspired by, continuously supported by and using nature, which are designed to address various societal challenges in a resource-efficient and adaptable manner and to provide simultaneously economic, social, and environmental benefits.

Annex I - Glossary

Nature-positive – According to the Nature Positive Initiative (2023) is a global societal goal defined as "Halting and reversing nature loss by 2030, relative to the 2020 baseline, and achieving full recovery by 2050".

Permeability – Landscape permeability can be defined as the quality of a heterogeneous land area to provide for the passage of animals. Landscape permeability is a measure of the resistance to animal movement and the potential for animal passage across landscapes (Singleton et al., 2002). In the context of this report, permeability refers to the degree to which the highway inhibits or allows animal movement.

RELAPE species – Portuguese acronym used for rare, endemic, localized, threatened or endangered species.

Risk – The product of the probability of an occurrence and the magnitude of the damage.

Science-based targets for nature – Measurable, actionable, and time-bound goals, based on the best available science, that allow actors to align with Earth's limits and societal sustainability goals.

Value chain – The range of activities carried out by the company and by entities upstream and downstream from it, to bring the company's products or services from their conception to their end use. Entities upstream (e.g. suppliers) provide products or services that are used in the development of the company's own products or services. Entities downstream (e.g. distributors, customers) receive products or services from the company. The value chain includes the supply chain.

Annex II - Observed and potentially impacted species

The list of species observed and potentially impacted by Brisa's activities is updated annually based on biodiversity characterization information, based on data collected in the field at operation sites. The species recorded during the monitoring of highway passages and roadkill monitoring are presented with their conservation status at regional (Portugal's Red Lists[1]) and global (IUCN Red List) levels, when evaluated, and all species of flora and species of the following groups of fauna are considered: birds, mammals, reptiles, amphibians and invertebrates observed and/or identified by Environmental DNA. For each species, information on the highways where they were recorded and information on the impact is also presented:

1. Impact: direct or indirect
2. Classification: positive or negative impact
3. Impacted area: size in km^2 of the impacted area
4. Impact duration: short, medium or long
5. Reversible impact: yes, no or potentially

Red List Categories:

Not Evaluated	Data Deficient	Least Concern	Near Threatened	Vulnerable	Endangered	Critically Endangered	Regionally Extinct	Extinct in the Wild
NA	DD	LC	NT	VU	EN	CR	RE	EW

[1]Red List of Vertebrates of Portugal, Red List of Mammals of Mainland Portugal, Red List of Birds of Mainland Portugal, Red List of Invertebrates of Mainland Portugal, Red List of Vascular Flora of Mainland Portugal

Note: Road killed species on highways are underlined in the list below.

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Amphibians	*Epidalea calamita*	LC	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Amphibians	*Pelobates cultripes*	LC	VU	VU	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Accipiter nisus*	LC	LC	LC	LC	A2	Direct	Negative	No information available	Long	No
Birds	*Alectoris rufa*	LC	NT	NT	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Anas platyrhynchos*	LC	LC	LC	NA	A1; A2; A3; A5; A6; A12; A14	Direct	Negative	No information available	Long	No
Birds	*Apus apus*	LC	LC	NT	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Ardea alba*	NT	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Athene noctua*	LC	LC	LC	LC	A1; A4	Direct	Negative	No information available	Long	No
Birds	*Bubo bubo*	NT	LC	LC	LC	A6	Direct	Negative	No information available	Long	No
Birds	*Buteo buteo*	LC	LC	LC	LC	A1; A2; A13	Direct	Negative	No information available	Long	No
Birds	*Carduelis carduelis*	LC	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Cecropis daurica*	LC	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Ciconia ciconia*	LC	LC	LC	NA	A1; A2; A3; A12	Direct	Negative	No information available	Long	No
Birds	*Columba palumbus*	LC	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Fringilla coelebs*	LC	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Gallus gallus*	NA	LC	NA	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Garrulus glandarius*	LC	LC	LC	NA	A1; A3; A6; A12	Direct	Negative	No information available	Long	No
Birds	*Milvus migrans*	LC	LC	LC	LC	A1	Direct	Negative	No information available	Long	No
Birds	*Milvus milvus*	CR	LC	LC	LC	A1; A2; A3	Direct	Negative	No information available	Long	No
Birds	*Parus major*	LC	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Passer domesticus*	LC	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Saxicola rubicola*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Birds	*Strix aluco*	LC	LC	LC	LC	A1; A3; A12; A14	Direct	Negative	No information available	Long	No
Birds	*Tyto alba*	NT	LC	LC	LC	A1; A2; A5; A6; A10; A12; A14	Direct	Negative	No information available	Long	No
Invertebrates	*Aconurella prolixa*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Acrobasis bithynella*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Acronicta rumicis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Acyrthosiphon pisum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Invertebrates	*Agrilus laticornis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Akis genei*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Amphimallon solstitiale*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Anacampsis scintillella*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Anacridium aegyptium*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Aphis craccivora*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Aphis nasturtii*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Aphis spiraecola*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Aphrodes bicincta*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Apis mellifera*	NA	NA	DD	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Autographa gamma*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Bemisia tabaci*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Berberomeloe castuo*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Bourletiella arvalis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Bradysia trivittata*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Cacoecimorpha pronubana*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Calamobius filum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Calliphora vicina*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Calliptamus barbarus*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Chorthippus vagans*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Coenosia tigrina*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Colaspidema barbarum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Colaspidema dufouri*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Cricotopus bicinctus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Cryptocephalus rugicollis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Cyclophora puppillaria*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Delia platura*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Dicladispa testacea*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Invertebrates	*Diplazon laetatorius*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Dociostaurus jagoi*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Dolichosoma lineare*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Dorcus parallelipipedus*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Dysgonia algira*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Ectobius panzeri*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Ethmia bipunctella*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Euserica lucipeta*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Euserica mutata*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Euspilapteryx auroguttella*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Graphopsocus cruciatus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Gryllus bimaculatus*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Helina evecta*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Heterotoma meriopterum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Hoplocallis picta*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Hydrophorus praecox*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Hypera arator*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Infurcitinea atrifasciella*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Lampyris iberica*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Laodelphax striatellus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Licinus punctulatus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Liposcelis bostrychophila*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Lispe nana*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Loboptera decipiens*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Lymantria dispar*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Mantis religiosa*	NA	LC	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Melanophthalma fuscipennis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Micromus angulatus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Invertebrates	*Microtendipes pedellus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Musca domestica*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Muscina levida*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Muscina pascuorum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Mythimna unipuncta*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Neomyia cornicina*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Neriene clathrata*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Oedipoda caerulescens*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Omocestus raymondi*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Papilio machaon*	NA	NA	LC	LC	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Paraceras melis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Pezotettix giornae*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Phalangium opilio*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Physomeloe corallifer*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Phytoseiulus persimilis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Pimelia chrysomeloides*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Pimelia evorensis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Plodia interpunctella*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Psilogaster loti*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Psychoda alternata*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Pulex irritans*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Rhagonycha fulva*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Scolopendra cingulata*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Sepedophilus immaculatus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Sitona lineatus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Stenarella domator*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Stevenia deceptoria*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Sympetrum fonscolombii*	NA	LC	LC	NA	A2	Direct	Negative	No information available	Long	No

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Invertebrates	*Tapinoma ibericum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Tebenna micalis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Tettigonia viridissima*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Thaumatomyia notata*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Therioaphis trifolii*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Thrips tabaci*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Thysanoplusia orichalcea*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Tinagma balteolella*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Tingissus guadarramense*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Tortricodes alternella*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Toya propinqua*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Trichodectes canis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Trichoplusia ni*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Trichopsocus dalii*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	No
Invertebrates	*Tylopsis lilifolia*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	No
Mammals	*Apodemus sylvaticus*	LC	LC	LC	LC	A2	Direct	Negative	No information available	Long	No
Mammals	*Cervus elaphus*	LC	LC	NA	NA	A1	Direct	Negative	No information available	Long	No
Mammals	*Crocidura russula*	LC	LC	LC	LC	A2	Direct	Negative	No information available	Long	No
Mammals	*Erinaceus europaeus*	LC	NT	NT	LC	A1; A2; A5; A9; A12Lag	Direct	Negative	No information available	Long	No
Mammals	*Felis silvestris*	EN	LC	NA	NA	A1; A2	Direct	Negative	No information available	Long	No
Mammals	*Genetta genetta*	LC	LC	LC	LC	A1; A2; A3; A4; A6	Direct	Negative	No information available	Long	No
Mammals	*Herpestes ichneumon*	LC	LC	LC	LC	A1; A2; A5; A6; A12	Direct	Negative	No information available	Long	No
Mammals	*Lepus granatensis*	VU	LC	LC	LC	A2; A5; A6; A12	Direct	Negative	No information available	Long	No
Mammals	*Lutra lutra*	LC	NT	NT	NT	A2; A6	Direct	Negative	No information available	Long	No
Mammals	*Martes foina*	LC	LC	LC	LC	A2; A3; A6	Direct	Negative	No information available	Long	No
Mammals	*Martes martes*	VU	LC	LC	LC	A2	Direct	Negative	No information available	Long	No
Mammals	*Meles meles*	LC	LC	LC	LC	A1; A2; A3; A6; A10	Direct	Negative	No information available	Long	No

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Mammals	*Microtus cabrerae*	VU	NT	NT	NT	A2	Direct	Negative	No information available	Long	No
Mammals	*Mus spretus*	LC	LC	LC	LC	A2	Direct	Negative	No information available	Long	No
Mammals	*Mustela nivalis*	LC	LC	LC	LC	A1; A3; A6	Direct	Negative	No information available	Long	No
Mammals	*Mustela putorius*	EN	LC	LC	LC	A1; A2; A6	Direct	Negative	No information available	Long	No
Mammals	*Myotis myotis*	VU	LC	LC	LC	A2	Direct	Negative	No information available	Long	No
Mammals	*Neovison vison*	NA	LC	NA	NA	A1	Direct	Negative	No information available	Long	No
Mammals	*Oryctolagus cuniculus*	VU	EN	NT	NA	A1; A2; A3; A4; A5; A6; A9; A12	Direct	Negative	No information available	Long	No
Mammals	*Plecotus austriacus*	NT	NT	NT	NA	A2	Direct	Negative	No information available	Long	No
Mammals	*Sciurus vulgaris*	LC	LC	LC	NA	A1; A2	Direct	Negative	No information available	Long	No
Mammals	*Suncus etruscus*	LC	LC	LC	NA	A2	Direct	Negative	No information available	Long	No
Mammals	*Sus scrofa*	LC	LC	LC	LC	A1; A2; A3; A4; A6; A9	Direct	Negative	No information available	Long	No
Mammals	*Talpa occidentalis*	LC	LC	LC	LC	A2	Direct	Negative	No information available	Long	No
Mammals	*Vulpes vulpes*	LC	LC	LC	LC	A1; A2; A3; A4; A5; A6; A9; A10; A12	Direct	Negative	No information available	Long	No
Reptiles	*Podarcis virescens*	LC	LC	LC	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Acacia dealbata*	NA	LC	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Acacia longifolia*	NA	LC	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Achillea ageratum*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Aegilops triuncialis*	NA	LC	LC	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Agrimonia eupatoria*	NA	NA	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Agrostis curtisii*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Aira caryophyllea*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Aira cupaniana*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Allium ampeloprasum*	NA	LC	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Allium pruinatum*	NA	DD	DD	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Allium vineale*	NA	NA	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Alnus cordata*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially

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Flora	*Amaranthus deflexus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Anacamptis pyramidalis*	NA	NA	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Anagallis arvensis*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Anagallis monelli*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Anarrhinum bellidifolium*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Anchusa azurea*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Andryala integrifolia*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Aquilegia vulgaris*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Arbutus unedo*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Arrhenatherum album*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Arrhenatherum elatius*	NA	NA	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Arum italicum*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Arundo donax*	NA	LC	LC	LC	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Asparagus acutifolius*	NA	LC	LC	LC	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Asparagus aphyllus*	NA	LC	LC	LC	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Asphodelus fistulosus*	NA	LC	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Asphodelus serotinus*	NA	NA	NA	LC	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Asteriscus spinosus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Asterolinon linum-stellatum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Avena barbata*	NA	NA	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Bartsia trixago*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Beta maritima*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Bituminaria bituminosa*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Blackstonia acuminata*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Blackstonia perfoliata*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Brachypodium distachyon*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Brachypodium phoenicoides*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Brachypodium sylvaticum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially

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Flora	*Briza maxima*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Briza minor*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Bromus diandrus*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Bromus hordeaceus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Bromus madritensis*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Bromus racemosus*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Bryonia dioica*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Calamintha nepeta*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Calendula arvensis*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Calluna vulgaris*	NA	NA	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Calystegia silvatica*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Campanula erinus*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Campanula rapunculus*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cardamine hirsuta*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Carduncellus caeruleus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Carduus tenuiflorus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Carex cuprina*	NA	NA	NA	LC	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Carex divulsa*	NA	NA	NA	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Carex flacca*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Carex hallerana*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Carex pendula*	NA	NA	NA	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Carex riparia*	NA	LC	LC	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Carlina corymbosa*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Carlina gummifera*	NA	LC	NA	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Carlina racemosa*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Carthamus lanatus*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Catapodium rigidum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Centaurea calcitrapa*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially

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Flora	*Centaurea melitensis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Centaurea pullata*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Centaurium erythraea*	NA	LC	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Centaurium majus*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Centaurium pulchellum*	NA	LC	NA	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Centaurium tenuiflorum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Centranthus calcitrapae*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cephalanthera longifolia*	NA	NA	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Chaetonychia cymosa*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Chamaemelum fuscatum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Chamaesyce maculata*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Chenopodium album*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Chondrilla juncea*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cichorium intybus*	NA	NA	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cirsium vulgare*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cistus albidus*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cistus crispus*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cistus ladanifer ladanifer*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cistus monspeliensis*	NA	LC	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cistus psilosepalus*	LC	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cistus salviifolius*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cladanthus mixtus*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Clinopodium vulgare*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Coleostephus myconis*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Conopodium subcarneum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Convolvulus althaeoides*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Convolvulus arvensis*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Conyza bonariensis*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially

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Flora	*Conyza canadensis*	NA	NA	NA	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Coronilla glauca*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cortaderia selloana*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Corynephorus canescens*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Crataegus monogyna*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Crepis capillaris*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Crepis taraxacifolia*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Crucianella angustifolia*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cupressus lusitanica*	NA	LC	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cupressus sempervirens*	NA	LC	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Cydonia oblonga*	NA	LC	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cynara humilis*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cynodon dactylon*	LC	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cynoglossum creticum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Cynosurus echinatus*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Cyperus eragrostis*	NA	LC	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cyperus longus*	NA	LC	LC	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Cytisus scoparius*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Cytisus striatus*	NA	LC	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Dactylis glomerata*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Daphne gnidium*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Daucus carota carota*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Daucus crinitus*	NA	LC	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Dipsacus comosus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Dittrichia viscosa viscosa*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Dorycnium rectum*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Echium plantagineum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Echium rosulatum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Flora	*Echium tuberculatum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Elatine macropoda*	NA	LC	DD	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Epilobium parviflorum*	NA	LC	NA	LC	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Equisetum arvense*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Erica arborea*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Erica australis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Erica ciliaris*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Erica cinerea*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Erica scoparia*	NA	NA	NA	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Erica umbellata*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Erodium cicutarium*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Erodium malacoides*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Eryngium campestre*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Eryngium pandanifolium*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Eucalyptus globulus*	NA	LC	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Eupatorium cannabinum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Euphorbia characias*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Euphorbia helioscopia*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Euphorbia lathyris*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Euphorbia segetalis*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Festuca rubra*	NA	NA	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Ficus carica*	NA	LC	LC	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Filago pyramidata*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Foeniculum vulgare*	NA	NA	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Frangula alnus*	NA	LC	LC	LC	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Fraxinus angustifolia*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Galactites tomentosus*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Gastridium ventricosum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Flora	*Gaudinia fragilis*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Genista tournefortii*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Genista triacanthos*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Geropogon hybridus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Gladiolus illyricus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Glandora prostrata*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Halimium calycinum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Halimium halimifolium*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Halimium lasianthum*	NA	NA	NA	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Halimium ocymoides*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Halimium umbellatum verticillatum*	LC	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Hedera maderensis*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Hedypnois rhagadioloides*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Helianthemum ledifolium*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Helichrysum luteoalbum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Helichrysum stoechas*	NA	NA	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Heliotropium europaeum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Helminthotheca echioides*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Helminthotheca spinifera*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Himantoglossum robertianum*	NA	NA	LC	LC	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Hirschfeldia incana*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Holcus lanatus*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Holcus mollis*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Hordeum murinum*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Hyacinthoides vicentina*	LC	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Hyparrhenia hirta*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Hyparrhenia sinaica*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Hypericum perforatum*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially

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Flora	*Hypericum tomentosum*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Hypochaeris glabra*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Hypochaeris radicata*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Iris subbiflora*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Jasione montana*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Juncus acutiflorus*	NA	NA	LC	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Juncus articulatus*	NA	LC	LC	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Juncus bufonius*	NA	LC	LC	LC	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Juncus capitatus*	NA	NA	NA	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Juncus effusus*	NA	LC	LC	LC	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Juncus valvatus*	NT	DD	VU	DD	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Kickxia lanigera*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Klasea integrifolia monardii*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Lactuca serriola*	NA	NA	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Lactuca virosa*	NA	NA	DD	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Lagurus ovatus*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lathyrus hirsutus*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lathyrus sylvestris*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Laurus nobilis*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lavandula pedunculata*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lavandula stoechas*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Lavatera cretica*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Linum bienne*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Linum strictum*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Linum trigynum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Linum trigynum tenue*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Linum trigynum trigynum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Logfia gallica*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially

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Flora	*Lolium rigidum*	NA	NA	LC	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Lomelosia simplex*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Lonicera etrusca*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lonicera implexa*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Lonicera periclymenum*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lotus castellanus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Lotus pedunculatus*	NA	NA	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lysimachia vulgaris*	NA	LC	LC	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Lythrum hyssopifolia*	NA	LC	LC	LC	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lythrum junceum*	NA	LC	LC	LC	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lythrum salicaria*	NA	LC	LC	LC	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Lythrum thymifolia*	NA	LC	LC	LC	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Malva hispanica*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Margotia gummifera*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Medicago polymorpha*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Medicago sativa*	NA	LC	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Melica ciliata*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Melilotus indicus*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Melilotus officinalis*	NA	NA	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Mentha pulegium*	NA	LC	LC	LC	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Mentha suaveolens*	NA	LC	NA	LC	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Mercurialis ambigua*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Micromeria graeca*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Micropyrum patens*	NA	NA	NA	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Milium vernale*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Misopates calycinum*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Misopates orontium*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Molinia caerulea*	NA	NA	NA	LC	A2; A14	Direct	Negative	No information available	Long	Potentially

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Flora	*Myrtus communis*	NA	LC	LC	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Nerium oleander*	NA	LC	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Oenanthe crocata*	NA	NA	LC	LC	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Oenothera glazioviana*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Oenothera rosea*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Oenothera stricta*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Olea europaea sylvestris*	NA	NA	DD	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Ononis ramosissima*	NA	LC	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Ononis spinosa*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Ophrys apifera*	NA	NA	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Orchis italica*	NA	NA	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Origanum vulgare virens*	NA	NA	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Orlaya daucoides*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Ornithopus compressus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Ornithopus pinnatus*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Orobanche minor*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Osyris alba*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pallenis spinosa*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Panicum repens*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Parentucellia latifolia*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Parentucellia viscosa*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Parietaria judaica*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Paronychia argentea*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Paspalum distichum*	NA	LC	NA	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Petrorhagia nanteuilii*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Phagnalon saxatile*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Phalaris aquatica*	NA	NA	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Phalaris coerulescens*	NA	NA	NA	LC	A2; A6	Direct	Negative	No information available	Long	Potentially

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Flora	*Phillyrea angustifolia*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Phragmites australis*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Phytolacca heterotepala*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pimpinella villosa*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Pinus halepensis*	NA	LC	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pinus pinaster*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pinus pinea*	NA	LC	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Piptatherum miliaceum*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pistacia lentiscus*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pittosporum tobira*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Plantago afra*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Plantago bellardii*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Plantago coronopus*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Plantago lagopus*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Plantago lanceolata*	NA	NA	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Platanus hispanica*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Poa annua*	NA	LC	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Polycarpon tetraphyllum*	NA	NA	NA	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Polygonum aviculare*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Polypogon monspeliensis*	NA	LC	NA	LC	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Populus nigra*	NA	DD	DD	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Prunella vulgaris*	NA	LC	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Prunus domestica*	NA	DD	DD	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Psilurus incurvus*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Pteridium aquilinum*	NA	NA	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Pterocephalidium diandrum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Pterospartum tridentatum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Pulicaria arabica hispanica*	NA	LC	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially

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Flora	*Pulicaria dysenterica*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pulicaria odora*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pyracantha coccinea*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Pyrus bourgaeana*	NA	LC	LC	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Quercus coccifera*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Quercus faginea broteroi*	NA	LC	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Quercus robur*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Quercus rotundifolia*	NA	LC	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Quercus suber*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Ranunculus repens*	NA	NA	LC	LC	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Raphanus raphanistrum*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Rapistrum rugosum*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Reichardia intermedia*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Retama sphaerocarpa*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Rhamnus alaternus*	NA	LC	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Rorippa nasturtium-aquaticum*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Rosa canina*	NA	NA	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Rosa sempervirens*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Rosmarinus officinalis*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Rubia peregrina*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Rubus ulmifolius*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Rumex acetosa*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Rumex bucephalophorus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Rumex conglomeratus*	NA	NA	NA	LC	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Rumex crispus*	NA	NA	LC	LC	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Rumex obtusifolius*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Rumex pulcher*	NA	NA	NA	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Ruscus aculeatus*	LC	NA	LC	NA	A14	Direct	Negative	No information available	Long	Potentially

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Flora	*Salix alba*	NA	LC	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Salix atrocinerea*	NA	LC	LC	LC	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Salix salviifolia australis*	NA	LC	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Salvia verbenaca*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Sanguisorba hybrida*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Sanguisorba verrucosa*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Saxifraga granulata*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Scabiosa atropurpurea*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Scilla monophyllos*	NA	NA	NA	LC	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Scirpoides holoschoenus*	NA	LC	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Scolymus hispanicus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Scorpiurus muricatus*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Scorpiurus sulcatus*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Scorzonera angustifolia*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Scrophularia auriculata*	NA	NA	NA	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Sedum album*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Sedum forsterianum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Selaginella denticulata*	NA	LC	LC	LC	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Senecio jacobaea*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Serapias lingua*	NA	NA	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Serapias strictiflora*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Sesamoides purpurascens*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Setaria adhaerens*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Setaria pumila*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Sherardia arvensis*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Sideritis hirsuta*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Sideritis romana*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Silene colorata*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Flora	*Silene gallica*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Silene inaperta*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Silene latifolia*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Silene portensis*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Silybum marianum*	NA	LC	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Sisymbrium officinale*	NA	NA	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Smilax aspera*	NA	NA	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Smyrnium olusatrum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Solanum nigrum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Sonchus oleraceus*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Sporobolus indicus*	NA	LC	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Stachys arvensis*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Stauracanthus genistoides*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Stipa capensis*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Stipa gigantea*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Symphyotrichum squamatum*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Tamarix africana*	NA	LC	LC	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Tamus communis*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Thapsia minor*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Thapsia villosa*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Thrincia hispida*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Thrincia tuberosa*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Thymus capitellatus*	LC	NT	NT	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Tolpis barbata*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Tolpis umbellata*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Torilis arvensis*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Torilis nodosa*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium angustifolium*	NA	LC	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km²)	Impact Duration	Reversible Impact
Flora	*Trifolium arvense*	NA	NA	LC	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium campestre*	LC	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium cherleri*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium fragiferum*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium glomeratum*	NA	NA	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium lappaceum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium michelianum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium resupinatum*	NA	NA	LC	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium scabrum*	NA	LC	NA	NA	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium stellatum*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Trifolium tomentosum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Triticum aestivum*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Tuberaria guttata*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Tuberaria lignosa*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Tulipa sylvestris australis*	NA	NA	NA	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Typha domingensis*	NA	LC	LC	LC	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Ulex australis welwitschianus*	LC	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Ulex europaeus latebracteatus*	LC	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Ulex jussiaei*	LC	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Ulex micranthus*	NA	LC	LC	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Ulex minor*	NA	LC	LC	NA	A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Urginea maritima*	NA	NA	NA	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Urospermum picroides*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Verbascum sinuatum*	NA	NA	NA	NA	A2; A6; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Verbascum thapsus*	NA	NA	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Verbascum virgatum*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Verbena officinalis*	NA	NA	LC	LC	A2	Direct	Negative	No information available	Long	Potentially
Flora	*Viburnum tinus*	NA	LC	LC	NA	A2; A6	Direct	Negative	No information available	Long	Potentially

Group	Species	Portugal Red List Status	IUCN Red List Global Status	IUCN Red List European Status	IUCN Red List Mediterranean Status	Highway	Impact	Classification	Impacted Area (km^2)	Impact Duration	Reversible Impact
Flora	*Vicia sativa*	NA	LC	LC	NA	A2; A14	Direct	Negative	No information available	Long	Potentially
Flora	*Vinca difformis*	NA	NA	NA	NA	A14	Direct	Negative	No information available	Long	Potentially
Flora	*Vulpia alopecuros*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially
Flora	*Vulpia geniculata*	NA	NA	NA	NA	A6	Direct	Negative	No information available	Long	Potentially
Flora	*Vulpia myuros*	NA	NA	NA	NA	A2; A6	Direct	Negative	No information available	Long	Potentially

Annex III – Implementation of act4nature Portugal commitments

Brisa Group's act4nature Portugal Commitments		Implementation	Source/Page
1.	Public dissemination in 2024 of the Brisa Group's Nature Positive strategy, through the website, the Integrated Report and sector seminars.	Implemented	Employees - Integrated Report 2024: 118-123 Current report: 10-18
2.	By December 2024, communicate the Brisa Group's Nature Positive strategy to 100% of employees and material service providers (with a material impact on action for nature within the scope of the Brisa Group's activity).	Implemented	Employees - Integrated Report 2024: 122 Service providers - Current report: 29
3.	By January 2025, update and make available online the Brisa Group's Procurement Policy, which now includes requirements for preventing and minimizing impacts on biodiversity, defined with the help of consultants.	Ongoing	Implemented through the Brisa Group Supplier Code of Conduct (page 8) and through the Good Practices Manual for Biodiversity and Ecosystem Management (to be implemented in 2025).
4.	Implement the measures set out in the Nature Positive Action Plan 2030 in the 2023-2028 period, with the aim of 2028 (a specific Action Plan will be drawn up annually): **i.** achieve level 3 of the internal execution KPI (0 to 4), in the High Natural Value Areas (HNVA) located in the semi-natural areas covered by BCR highways; **ii.** apply good biodiversity and ecosystem management practices to linear infrastructures in the remaining areas (not HVNA) located in the semi-natural areas covered by BCR highways.	Ongoing	Current report: 17; 28-35
5.	Monitoring the implementation of the Nature Positive Action Plan for the period 2023-2028, including indicators of: **i.** initial characterization of the intervention areas and validation of the potential baseline (2022) (assessed for 100% of the 5 km segments of BCR highways); **ii.** implementation of actions carried out in relation to the plan; **iii.** results (after ca. 12 months), effects (after ca. 18 months) and impacts (after ca. 3 and 5 years) in terms of biodiversity (fauna and flora), habitats (habitats, landscape mosaic and permeability), risk (invasives and fire) and ecosystem services (e.g. carbon storage and sequestration, water regulation and prevention of soil erosion - assessment on a macro scale (total area).	Implemented annually	Current report: 28-35
6.	By December 2024, train 100% of plant maintenance service providers to implement the measures proposed in the Nature Positive Action Plan in accordance with good biodiversity and ecosystem management practices in linear infrastructures, helping 100% of trainees to acquire new knowledge.	Implemented	Current report: 29
7.	By December 2024, train 100% of the workers involved in monitoring the implementation of the Nature Positive Action Plan (in areas such as selective control of vegetation, management and control of invasive flora, promotion of native flora and monitoring the mortality of fauna by trampling), helping 100% of trainees to acquire new knowledge.	Implemented	Employees - Integrated Report 2024: 122
8.	Disclose annually, from 2024 onwards, the actions implemented by the Brisa Group to manage biodiversity and ecosystems, and the respective results, as established in the Nature Positive Strategy 2030 and the respective Action and Monitoring Plans, as well as the annual implementation of act4nature Portugal commitments. This will be disclosed through the website, the Integrated Report and sectoral seminars.	Implemented annually	Integrated Report 2024: 122 Current report: 28-35

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