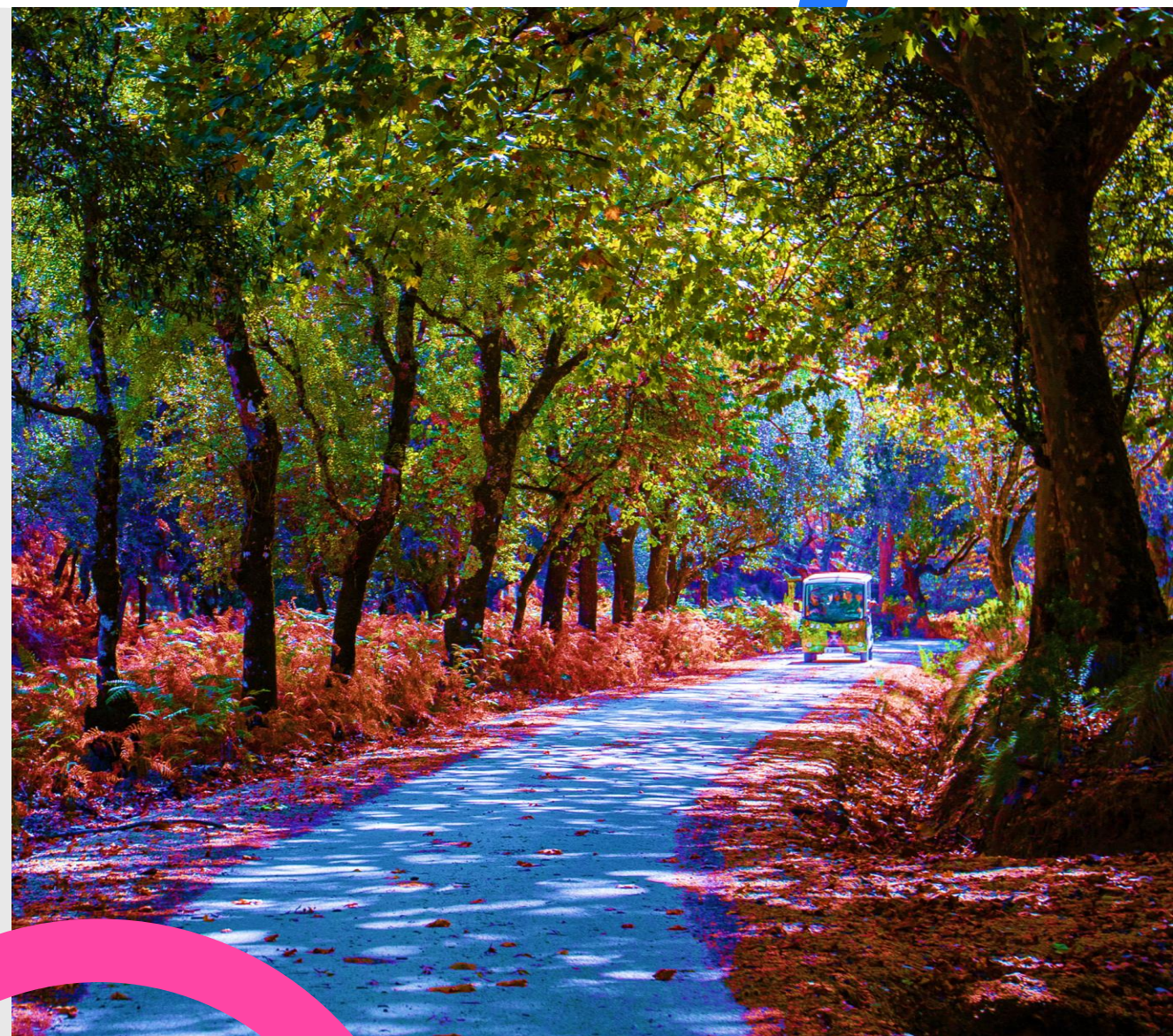


Catalysing transformation in spatial planning: Environmental Assessment for biodiversity valuation

Margarida B. Monteiro, Ana Soares, Maria Partidário, Sanne Vammen Larsen, Lone Kørnøv

Session: Pathways to biodiversity gain (II)
Thursday, 25 April



This work has been supported by national funds, FCT, in the framework of the project UIDB/05703/2020 from the research unit CiTUA;
This work is part of an IAIA Innovation Grant 2023

BioValue is a research project funded by the European Union's Horizon Europe Research and Innovation Programme under Grant Agreement No 101060790

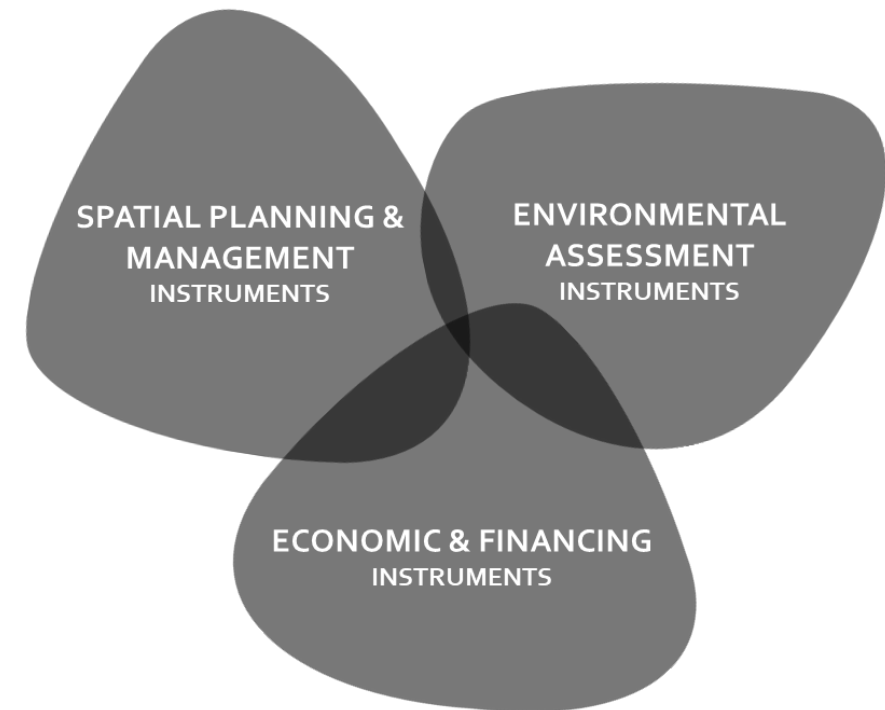
OBJECTIVE

.1 understand how closely actual EAI Portuguese practices adhere to best practices guidelines in incorporating biodiversity

The main goal of **BioValue** is to **safeguard and increase biodiversity through transformative change in spatial policymaking, planning practices and infrastructures development, upscaling opportunities for valuing biodiversity** in support of EU strategic actions on biodiversity, in particular the EU Biodiversity Strategy 2030.

OBJ2:

explore and improve the **transformative capacity** of three types of instruments, spatial planning and management, **environmental assessments**, and economic and financial [*for biodiversity valuation in SP*]



Kunming-Montreal Global Biodiversity Framework

Target 1: Ensure that all areas are **under participatory, integrated and biodiversity-inclusive spatial planning and/or effective management processes** (...)

Target 14: Ensure the **full integration of biodiversity and its multiple values into** policies, regulations, planning and development processes (...) **strategic environmental assessments, environmental impact assessments** and, (...) within and across all levels of government and across all sectors



To enable transformative change for European biodiversity, **it is imperative to commit, implement and enforce EU environmental legislation** (*EU Biodiversity Strategy 2030*)

Need for **spatial planning to integrate biodiversity** in all activities (*IPBES, 2021*)

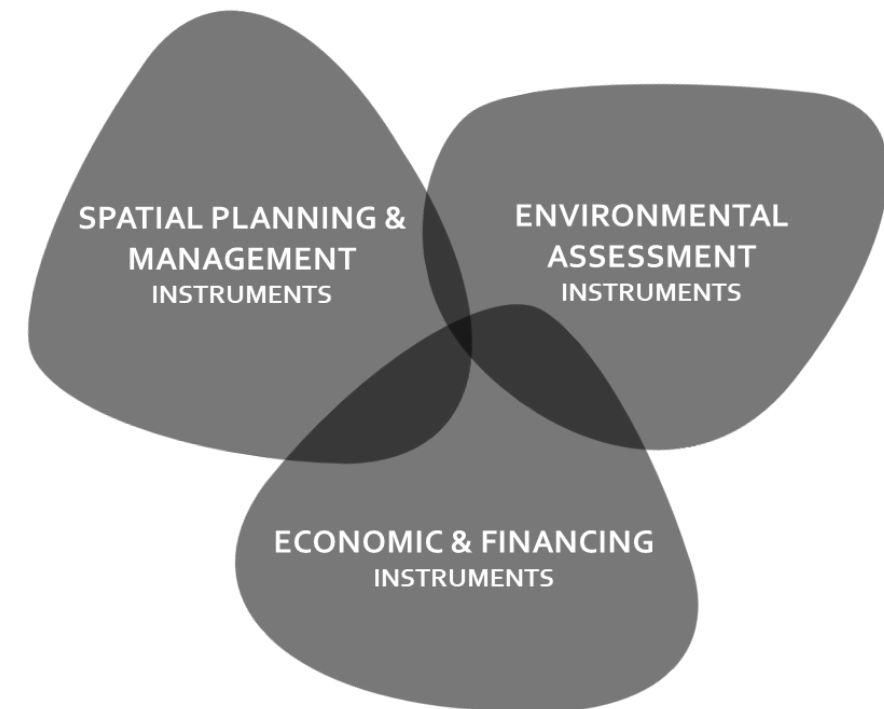
Relevancy of **comprehensive environmental assessments, as support instruments to mitigate the impacts of development activities on biodiversity and promote cross sectoral approaches** constructing pathways towards the SDGs (*IPBES, 2019*)

Ambition 1: spatial planning **safeguards**, restores, allows recovery and enhances **biodiversity**.

Ambition 2: spatial planning significantly contributes to **balanced and responsible consumption and production** (avoiding external social and environmental costs).

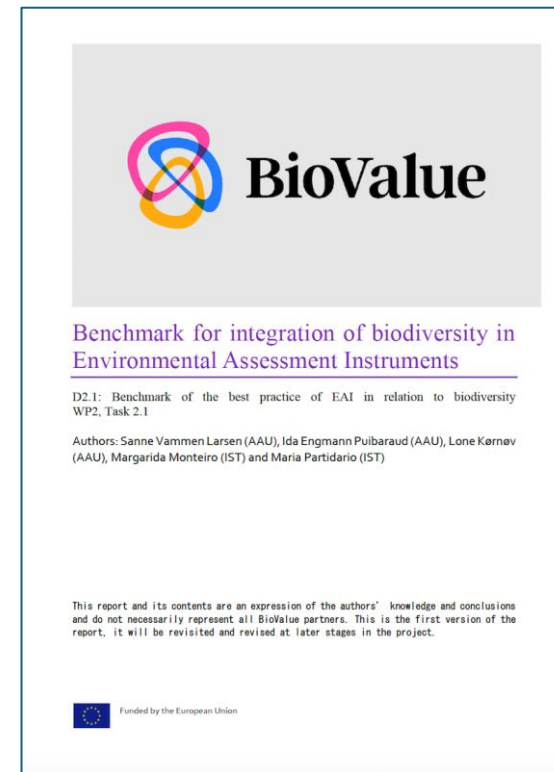
Ambition 3: spatial planning significantly contributes to **reducing socioeconomic inequalities**.

- "Population
- Human health
- **Biodiversity (incl. fauna/flora)**
- Land
- Soil
- Water
- Air
- Climate
- Material assets
- Cultural heritage
- Landscape
- **The interaction between the factors...."**
(EIA/SEA Directives)





Themes	Indicators
A – Role	<i>How is biodiversity integrated in the EA process? (A1)</i>
	<i>How is EA and resulting knowledge about biodiversity impacts integrated in the planning process? (A2)</i>
B - Significance	<i>What methodology is used to evaluate the significance of biodiversity impacts in the EA? (B1)</i>
	<i>Which types of parameters are relevant for evaluating significance of biodiversity impacts in the EA? (B2)</i>
C – Knowledge	<i>Which types of knowledge is used for working with biodiversity in the EA? (C1)</i>
D - Synergies and trade-offs	<i>How are synergies and trade-off between biodiversity and other sustainability aspects handled in the EA? (D1)</i>
E – Ecosystem service	<i>Which types of knowledge is used for working with biodiversity in the EA? (E1)</i>
F – Goals and Visions	<i>How should biodiversity goals and visions be integrated in EA? (F1)</i>
G – Uncertainty	<i>How should the EA process deal with ‘the unknown’/uncertainty concerning biodiversity? (G1)</i>
H – Involvement	<i>Who are involved in the integration of biodiversity in the EA? (H1)</i>
I – Mitigation and enhancement	<i>Who are involved in the integration of biodiversity in the EA? (I1)</i>
	<i>To what degree are biodiversity impacts mitigated in EA? (I2)</i>
	<i>How are financial instruments used in the EA? (I3)</i>
J – Monitoring and follow-up	<i>How does the EA specify monitoring of biodiversity impacts? (J1)</i>
	<i>What is the monitoring of biodiversity impacts specified in the EA aimed at? (J2)</i>
	<i>What does the EA specify that monitoring of biodiversity should be used for? (J3)</i>

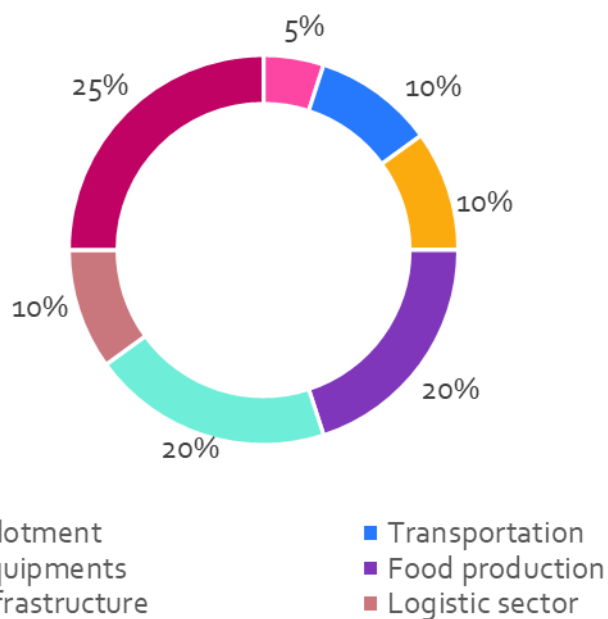


*“The essence of benchmarking is the process of identifying the **highest standards of excellence** for products, services, or processes, and then **making the improvements necessary to reach those standards** - commonly called ‘best practices’”*
 (Bhutta and Huq, 1999 p. 254).

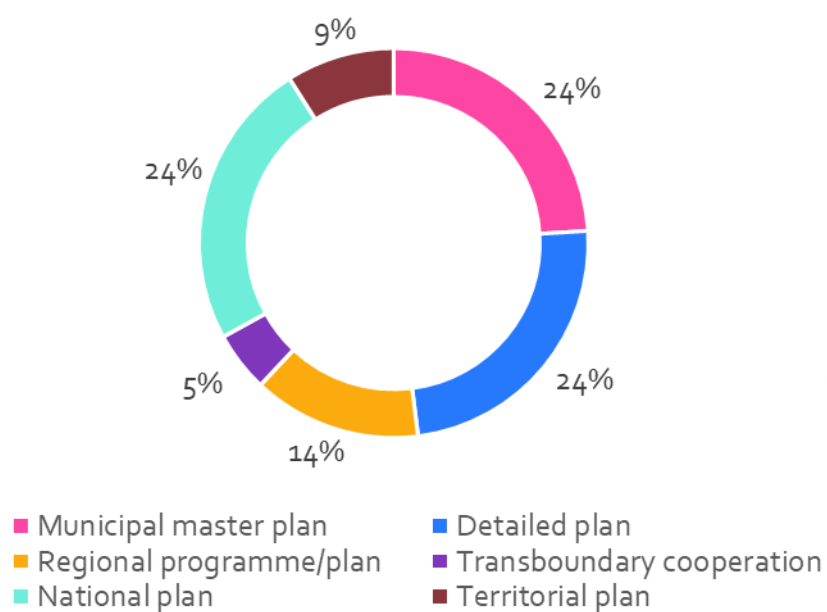
- 41 Portuguese cases – ER published between 2014 to 2023
 - 20 Environmental Impact Assessment Reports
 - 21 Strategic Environmental Assessment Reports
- Multi-level/sector
- Revision made between October and December 2023
- Reviewed against the ‘best practices’
- Approach for ‘best practices’ – *the more the better*

- 41 Portuguese cases – ER published between 2014 to 2023
 - 20 Environmental Impact Assessment Reports
 - 21 Strategic Environmental Assessment Reports
- Multi-level/sector
- Reviewed against the ‘best practices’
- Revision made between October and December 2023
- Approach for ‘best practice’ – *the more the better*

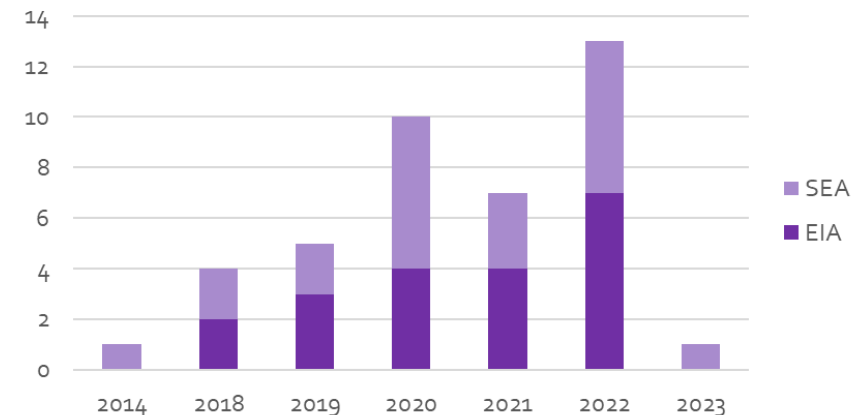
EIA - Type of project



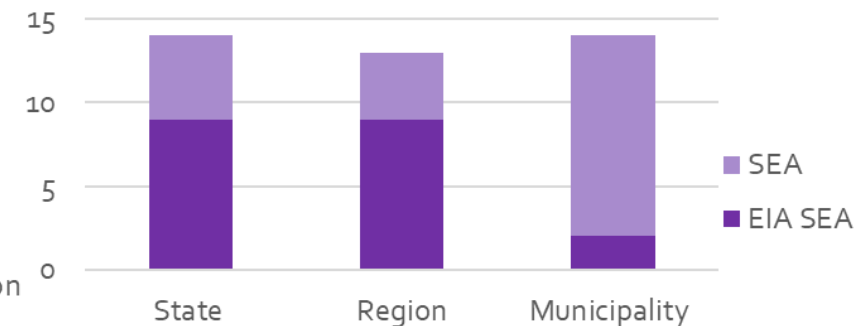
SEA - Type of plan



Year of publication

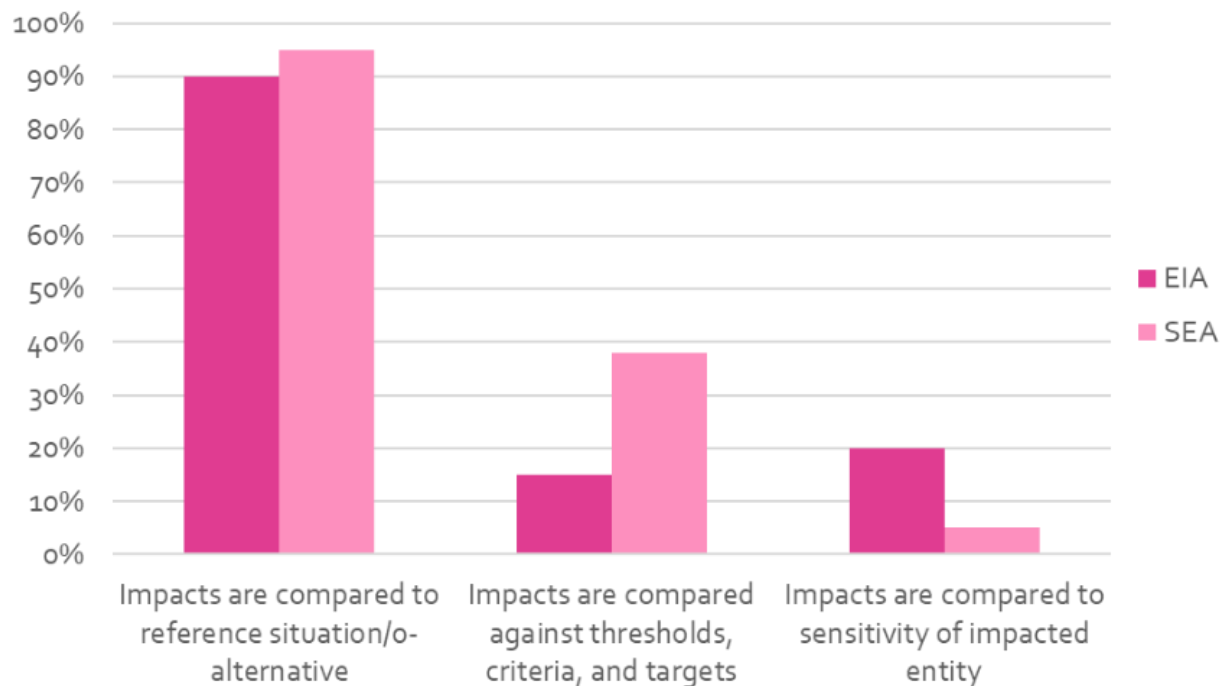


Level of authority




[B - SIGNIFICANCE]

What methodology is used to evaluate the significance of biodiversity impacts in the EA?



7 EIA documents had more than one methodology.

8 SEA documents had more than one methodology.

Vilamoura Lusotur, S.A.

 vilamoura
 LOTEAMENTO E OBRAS DE URBANIZAÇÃO DA CIDADE LACUSTRE (Zonas 8.1, 8.2 e 8.4 a 8.7 DO IPP8 DO PUV – 2ª FASE)



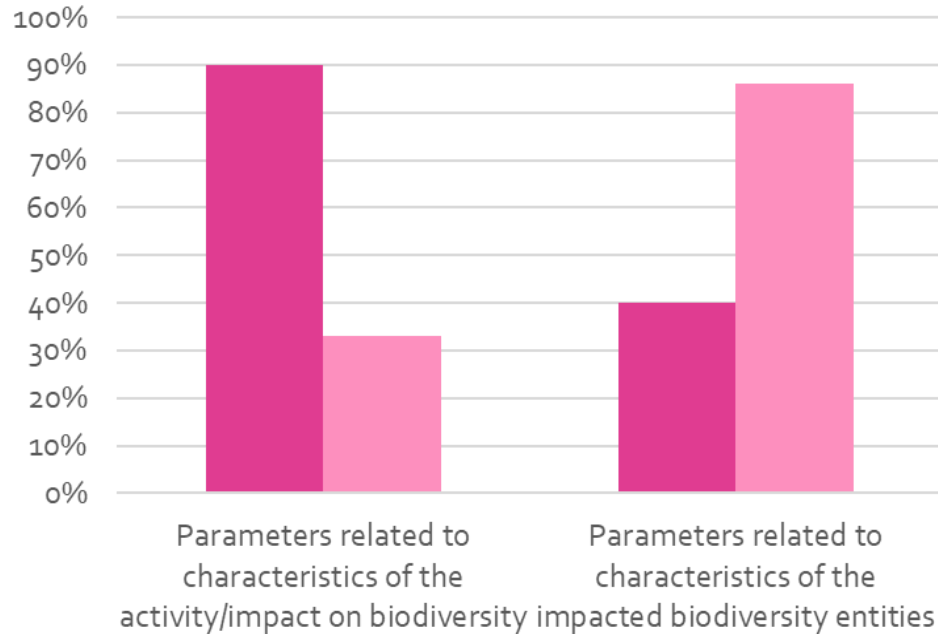
ESTUDO DE IMPACTE AMBIENTAL
 Fase de Projeto de Execução
 Vol. II – Relatório

“In order to determine their magnitude and significance, the diversity and rarity of the plant and animal species that occur in the area affected by the project were analysed, as well as other relevant information obtained from the characterisation of the current situation”

Allotment and urbanisation works in the town of Lacustre

[B - SIGNIFICANCE]

Which types of parameters are used for evaluating significance of biodiversity impacts in the EA?



■ EIA
■ SEA

8 EIA documents had more than one parameter.

4 SEA documents had more than one parameter.

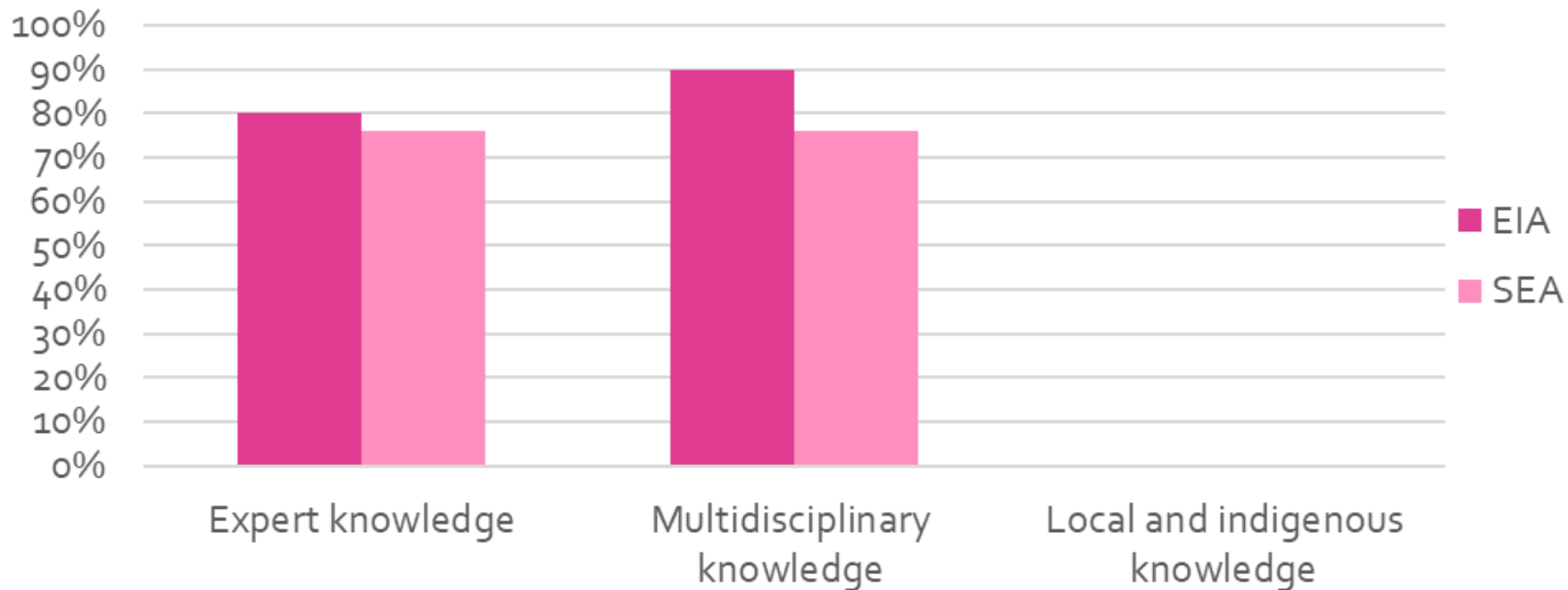


“The significance of each impact was obtained by calculating a weighted average score for each of the attributes (Sense, Ecological value of the impact receptor, Duration, Reversibility, Probability, Scope of influence, Magnitude)”

CarSol Fruits Portugal Agroforestry Project

[C - KNOWLEDGE]

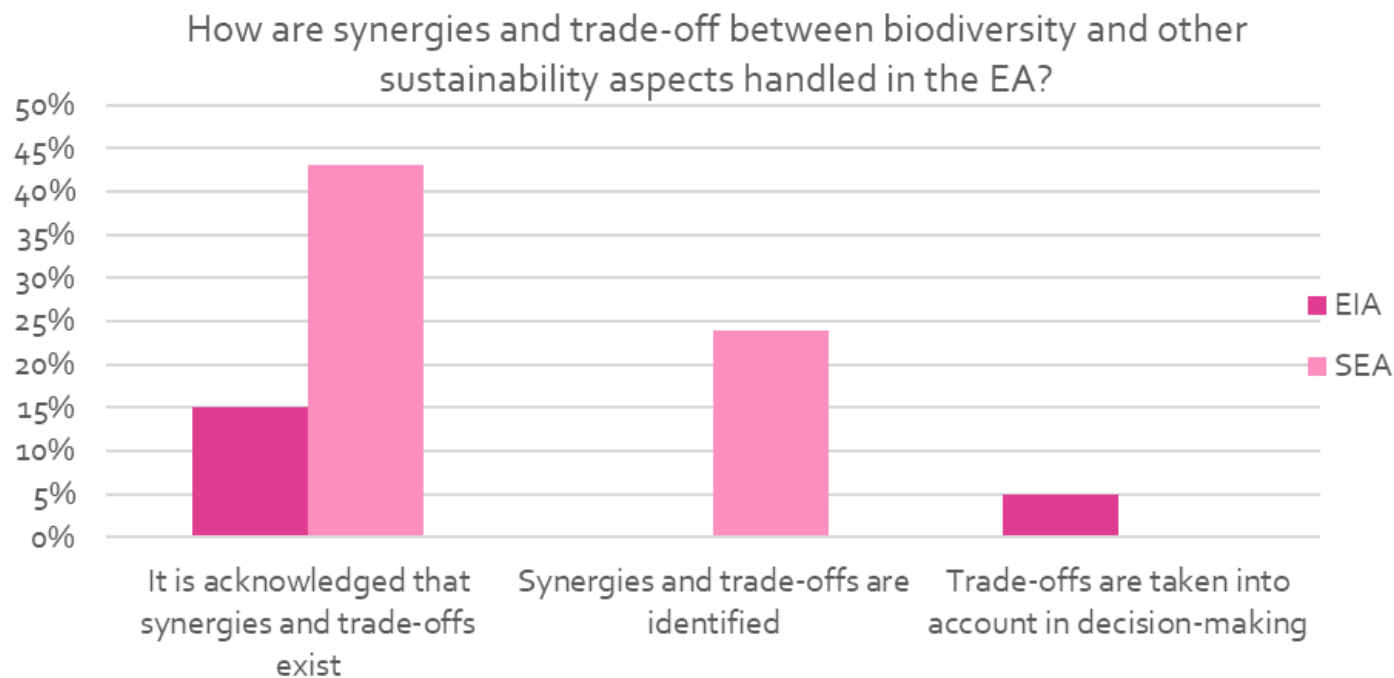
Which types of knowledge is used for working with biodiversity in the EA?



7 EIA documents incorporated more than one type of knowledge.

13 SEA documents incorporated more than one type of knowledge.

[D – SYNERGIES AND TRADE-OFFS]

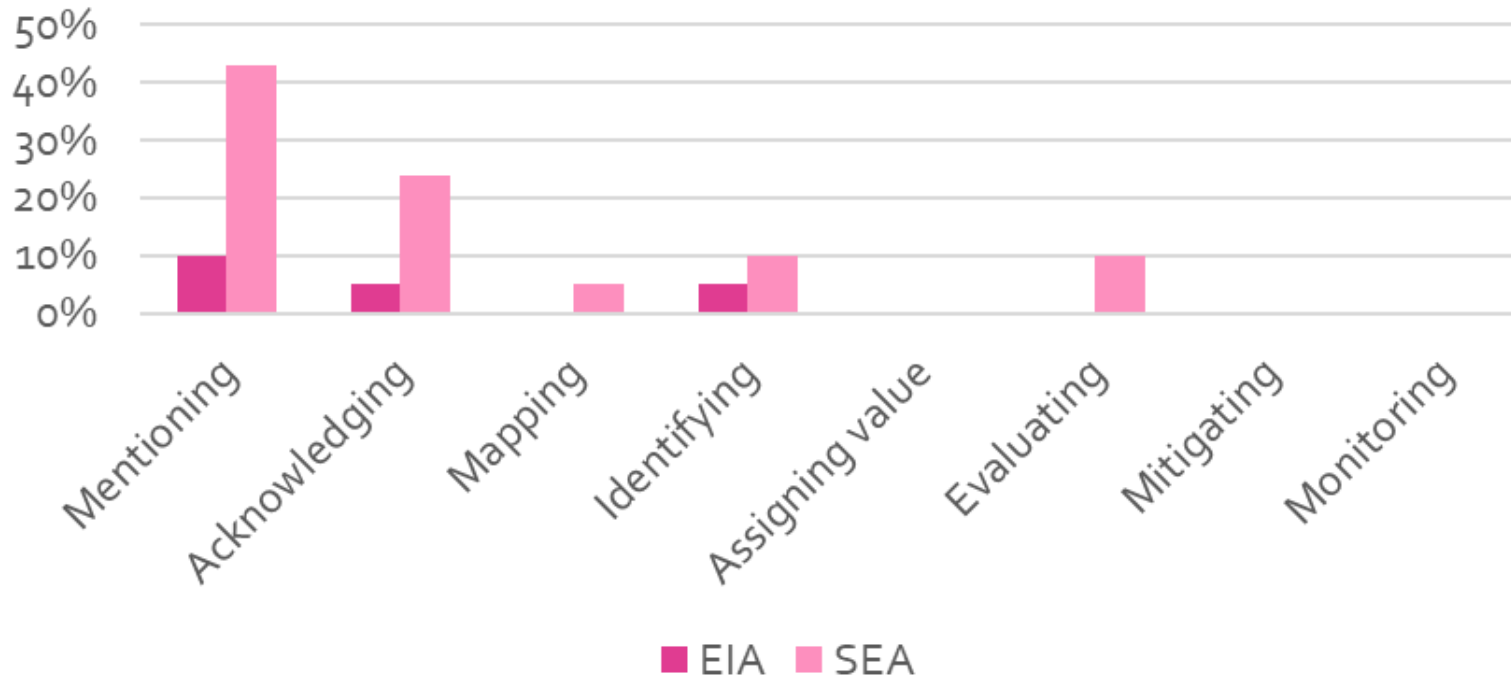


“Analysing situations of compatibility and conflict between the different lines of strategic guidelines allows us to identify potential opportunities resulting from synergies, as well as potential threats to the development of the municipality arising from conflict situations.”

Strategic Environmental Assessment of the Mafra Masterplan Revision

[E – ECOSYSTEM SERVICES]

How are ecosystem services used for working with biodiversity in the EA?

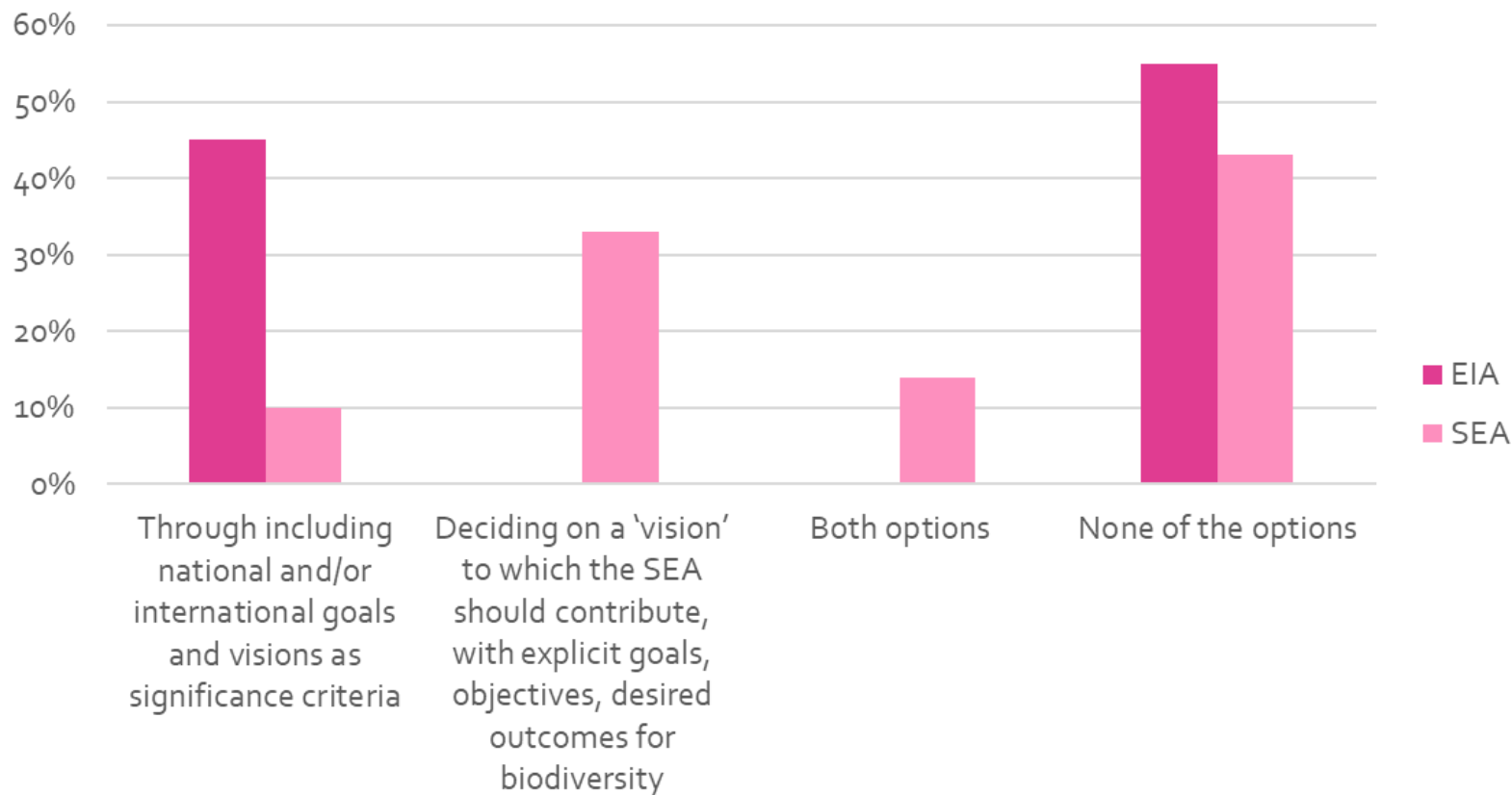


“Though limited to the nearest populations, the ecosystem services in the study area are diverse, resulting from the presence of the forested areas and water lines in the surroundings. However, the low ecological value significantly restricts the benefit of these services.”

Logistics platform in Almerim

[F – GOALS AND VISIONS]

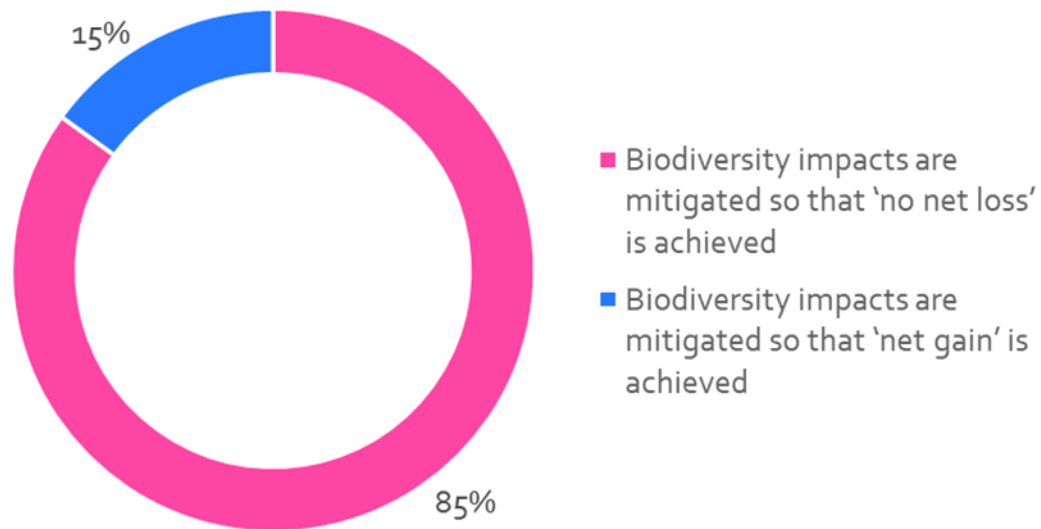
How are biodiversity goals and visions integrated in the EA?



@Catalysing transformation in spatial planning: EAs for biodiversity valuation

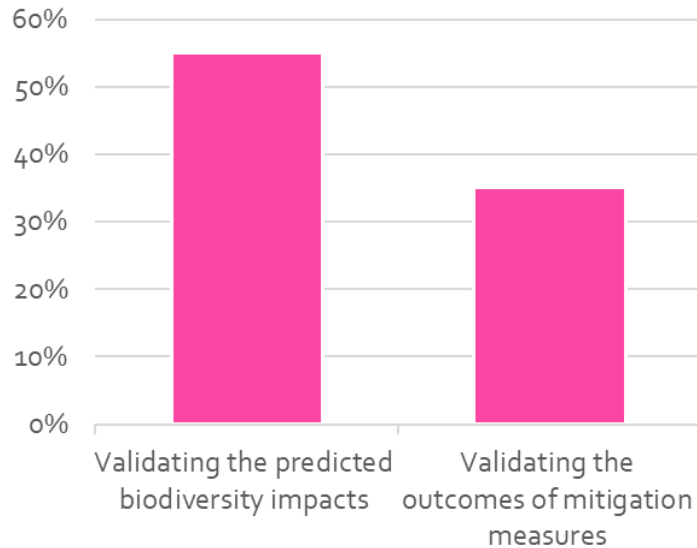
[I – MITIGATION AND ENHANCEMENT]

To what degree are biodiversity impacts mitigated in the EIA?

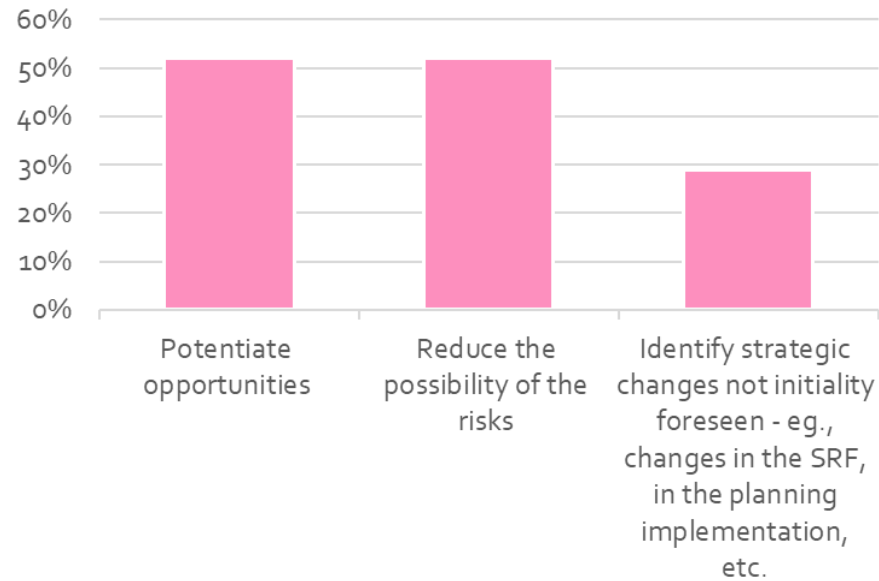


[J – MONITORING AND FOLLOW-UP]

What is the monitoring of biodiversity impacts specified in the EIA aimed at?



What is the monitoring of biodiversity impacts specified in the SEA aimed at?



“Given the high environmental sensitivity of the project area in terms of birdlife, this monitoring plan will focus on collecting detailed field information in order to be more effective in assessing the real environmental impacts associated with the project.”

Modification of the national transport network

Remarks and next steps

Not 'closely' adhering!

Remarks and next steps

Not 'closely' adhering!

- Update the benchmark, e.g., include new documents
- Understand 'lexicon' and literacy (e.g., LR)
- Open the analysis to all EU-MS (IAIA Innovation Grant) – e.g., positive cases valuing biodiversity in SP related developments
- Develop conclusions on what needs to be done to improve EAs practice in adding value to SP by incorporating biodiversity and natural assets
- Causality analysis

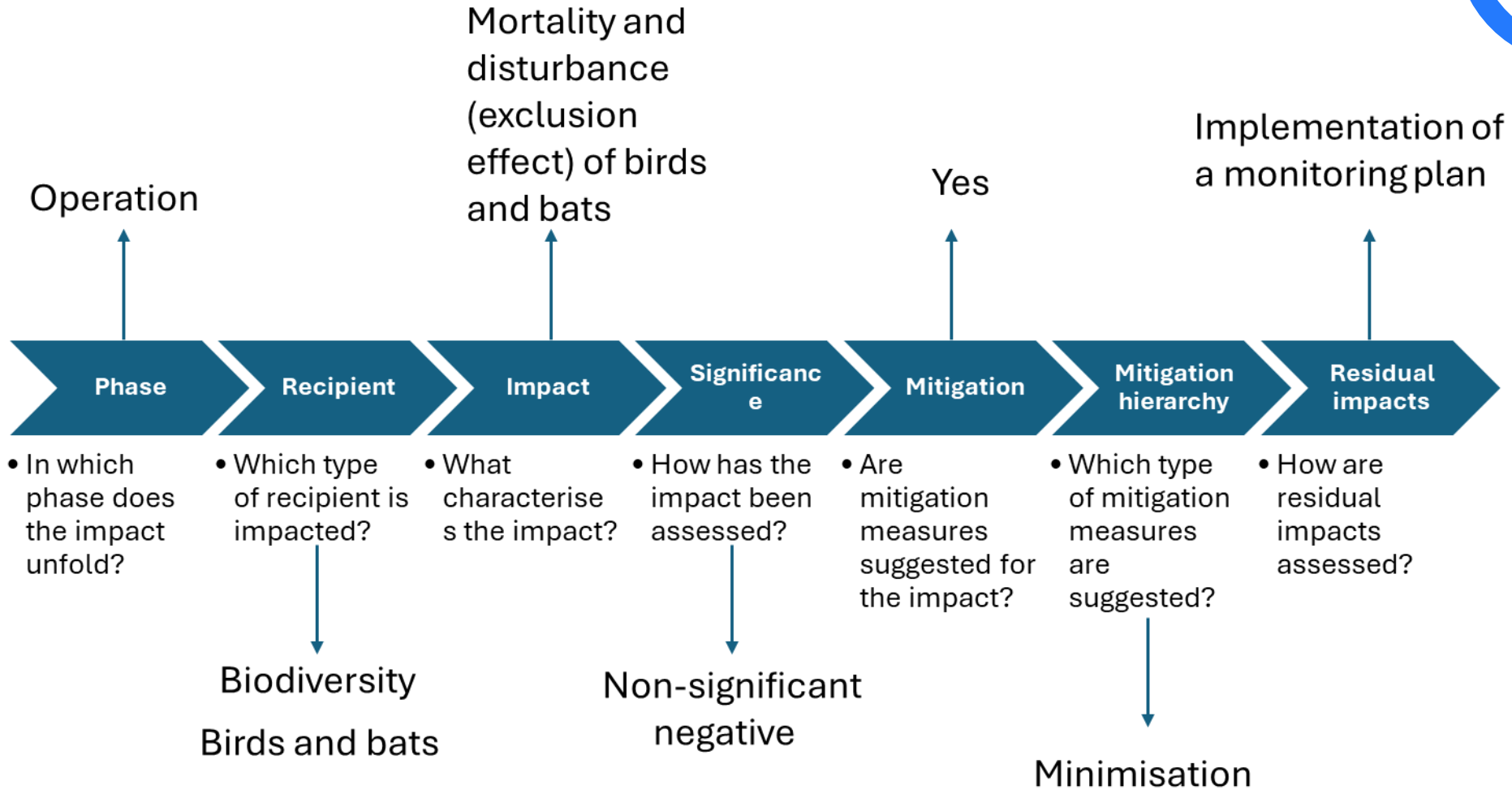
Remarks and next steps

GIBB
ENGINEERING

PARQUE EÓLICO DO CORREDIÇO E LIGAÇÃO ELÉTRICA À
SUBESTAÇÃO DE ANDRINOS, A 60kV

ESTUDO DE IMPACTE AMBIENTAL

Volume 1 - Relatório Síntese



@Catalysing transformation in spatial planning: EAs for biodiversity valuation

Thank you for your attention!
Any questions?



Margarida B. Monteiro
margarida.monteiro@tecnico.ulisboa.pt