



The Marker Wadden from a nature financing perspective

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Kennis- en Innovatieprogramma
Marker Wadden

Our speakers...

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In a nutshell...

1. Background

2. The case

3. Zooming in

4. Reflection

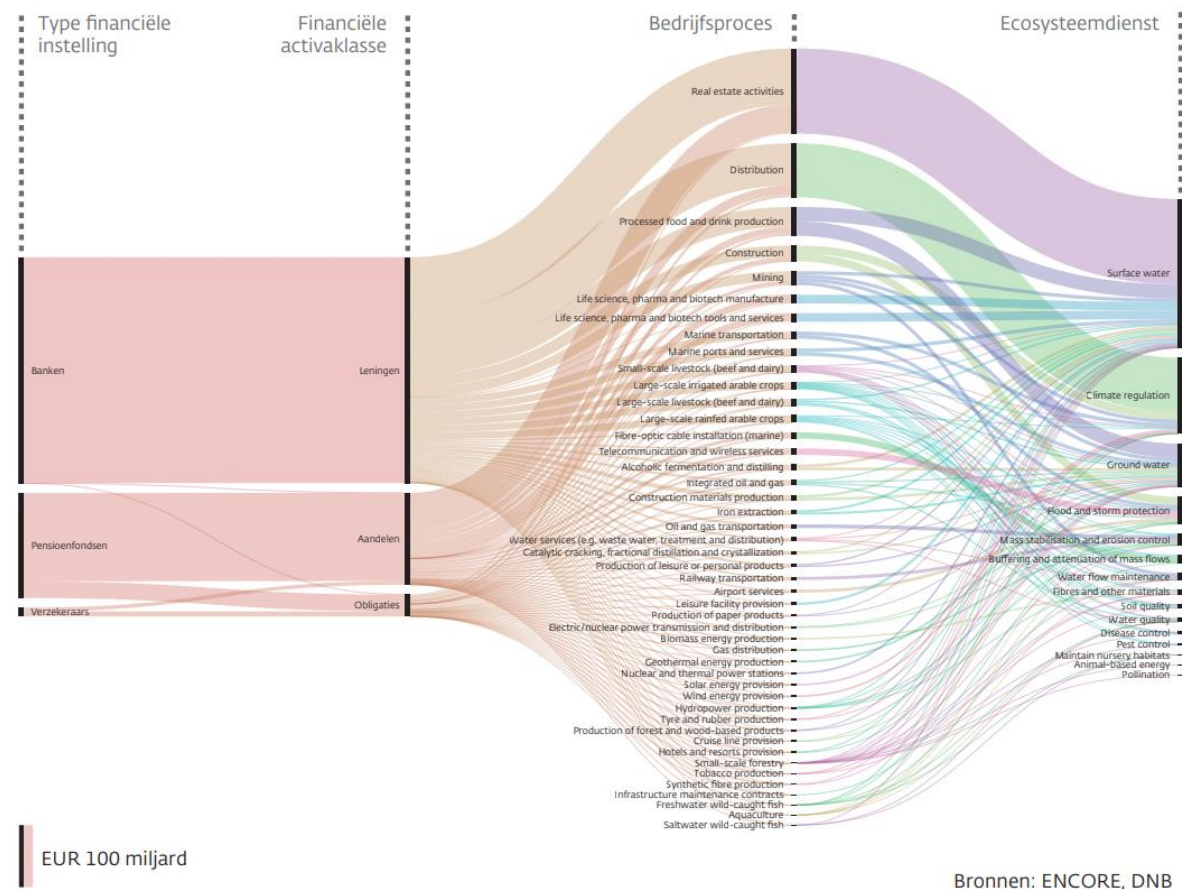


Please ask your questions

1. Background



Why finance nature (restoration)?



Source: De Nederlandse Bank en Planbureau voor de Leefomgeving 2020 - Biodiversiteit en de financiële sector: een kruisbestuiving?

Why finance nature (restoration)?



- Our economies, livelihoods and well-being all depend on our most precious asset: Nature.
- We have collectively failed to engage with Nature sustainably, to the extent that our demands far exceed its capacity to supply us with the goods and services we all rely on.
- 1992 – 2014:
produced capital per person doubled,
human capital per person increased by about 13% globally
the stock of natural capital per person declined by nearly 40%.
- Our unsustainable engagement with Nature is endangering the prosperity of current and future generations

Why finance nature (restoration)?

Market failure

Aspects of nature are invisible & silent

- Hard to trace
- Remain unaccounted for

True value of goods and services not reflected in market prices

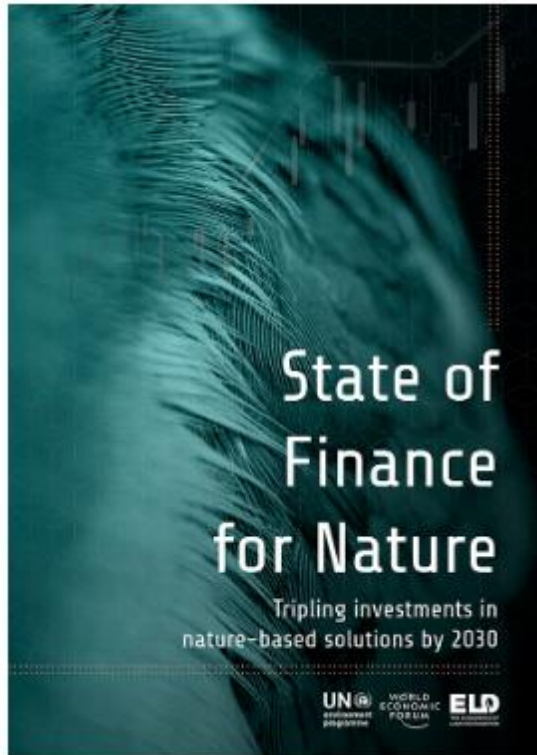
- Open to all and free of charge
- Underinvestment in our natural assets

Institutional failure

Institutions unfit to manage the externalities

- Governments exacerbate the problem by paying people more to exploit nature than to protect it
- Estimate of the total cost globally of subsidies that damage Nature is around US\$4 to 6 trillion per year
- lack the institutional arrangements needed to protect global public goods, such as the ocean or the world's rainforests.

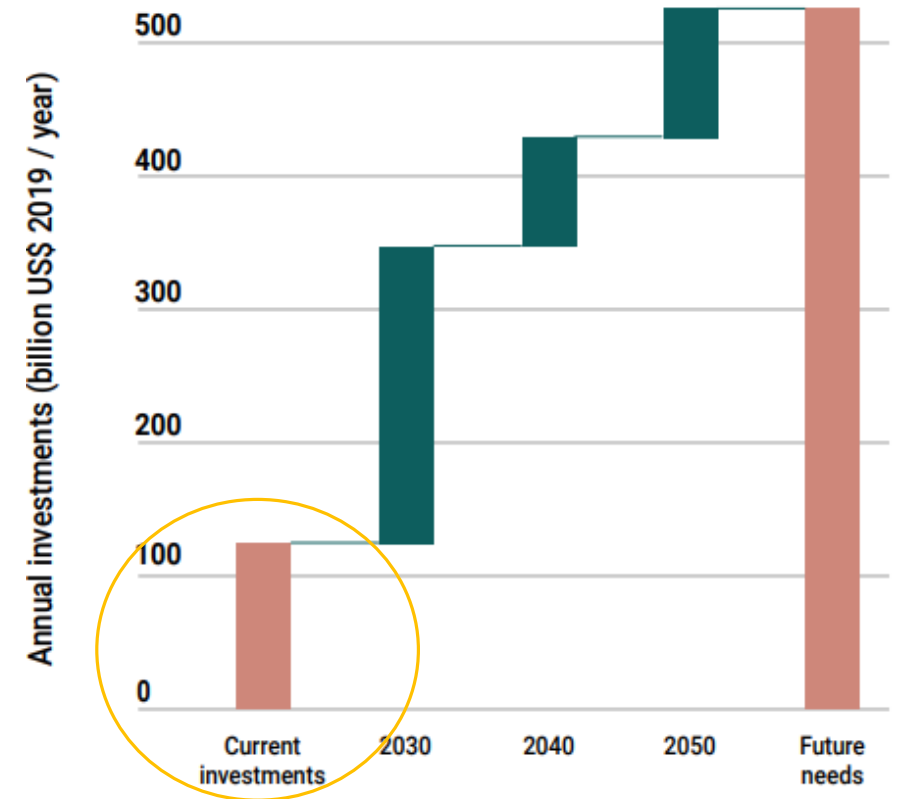
Why finance nature (restoration)?



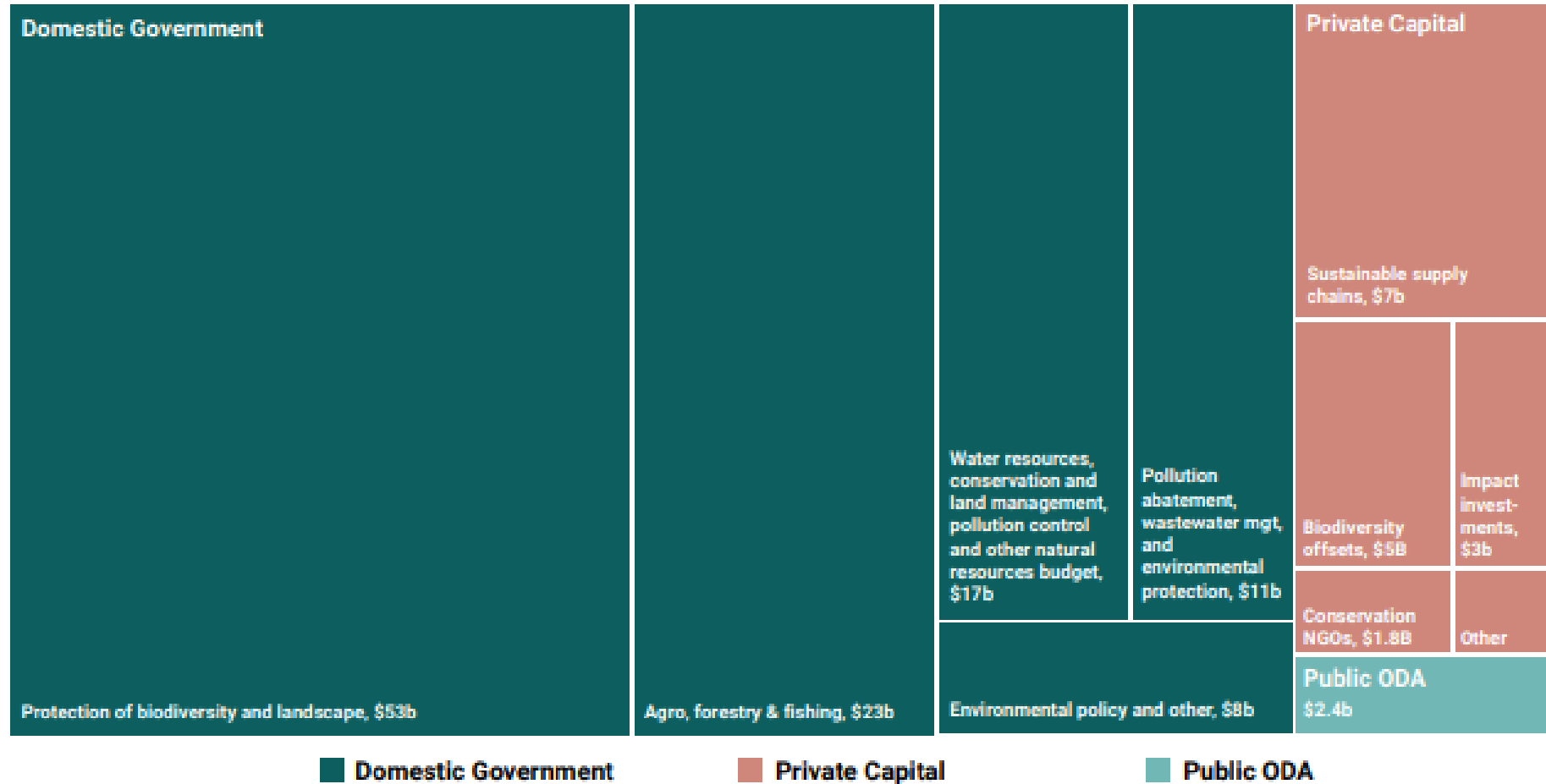
“In order to meet future climate, biodiversity and land degradation targets, public and private actors will need to scale up their annual investments by at least four times over the next three decades”

United Nations Environment Programme (2021)

Future investment needs charting an accelerating rate over time



Why finance nature (restoration)?

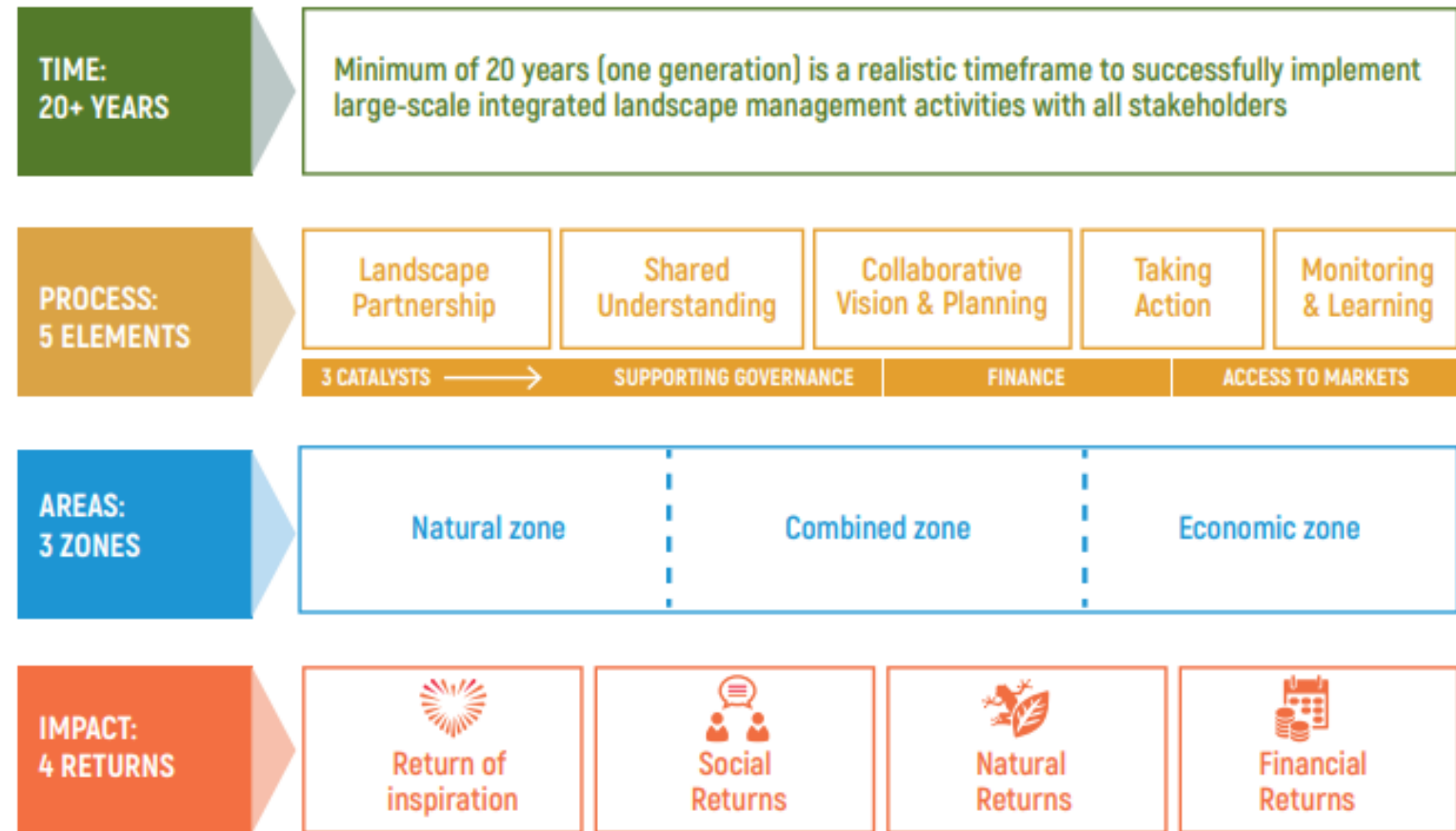


*Classification of NbS finance
These figures are the midpoint between the lower and upper bounds of global annual investment.*

Starting points for the Marker Wadden

The four returns model

<https://www.commonland.com/4-returns/>



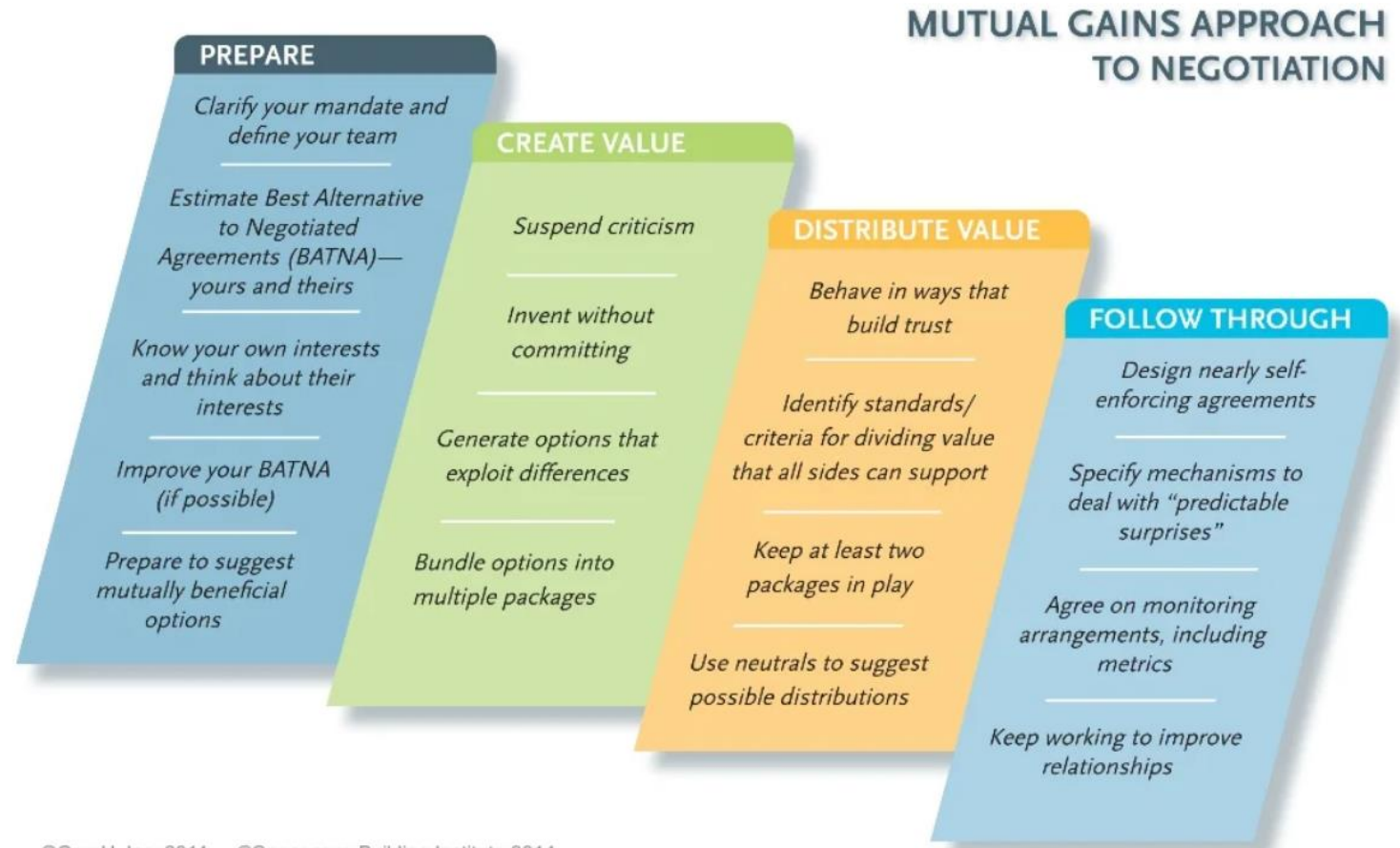
Source:

- The Little Sustainable Landscape Book, GCP, WWF, IDH, EcoAgriculture Partners, TNC (2015);
- 4 Returns, 3 Zones, 20 Years, IUCN CEM, RSM (2015)

Starting points for the Marker Wadden

The Mutual Gains Approach

- Prepare
 - Mandate
 - BATNA
- Create value
 - 4 objectives
 - Generate options
- Distribute value
 - Trust
 - Divide prominent roles
- Follow through
 - Monitoring



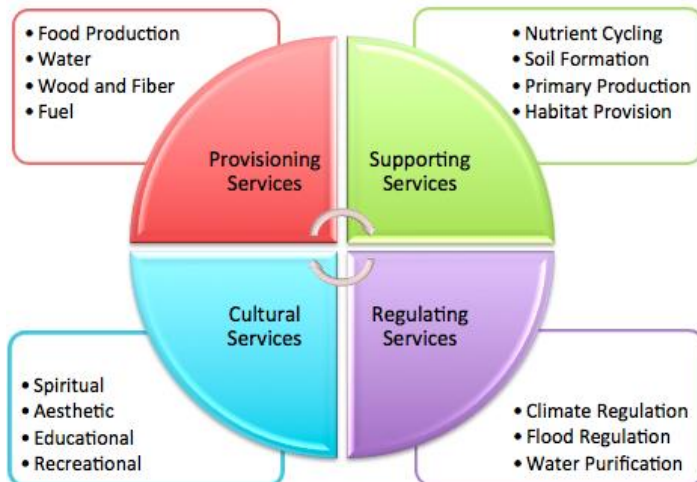
Starting points for the Marker Wadden

TEEB: The economics of ecosystem services



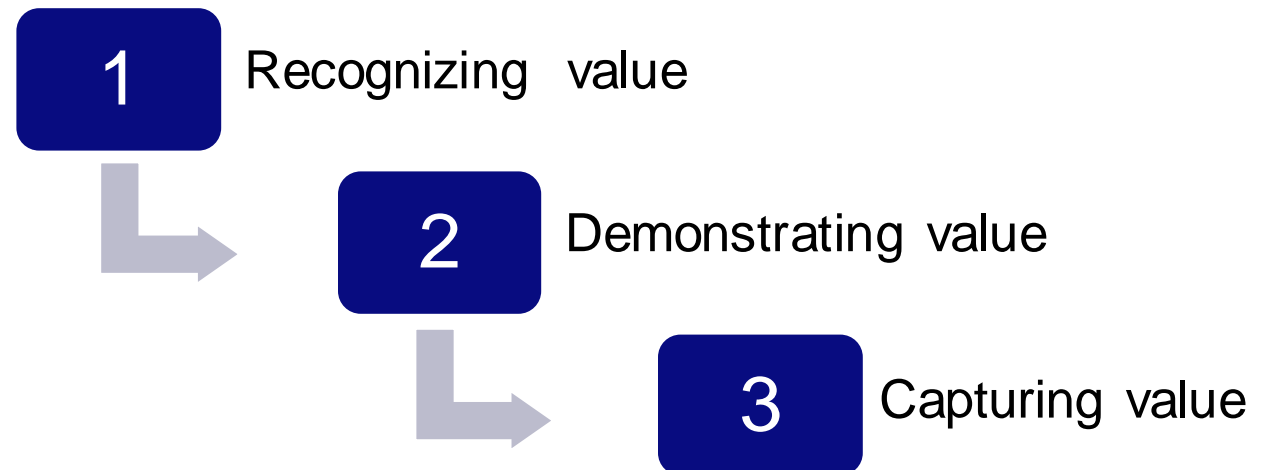
The invisibility of nature in the economic choices we make across the domains of international, national, and local policy-making, public administration, and business.

Ecosystem services:



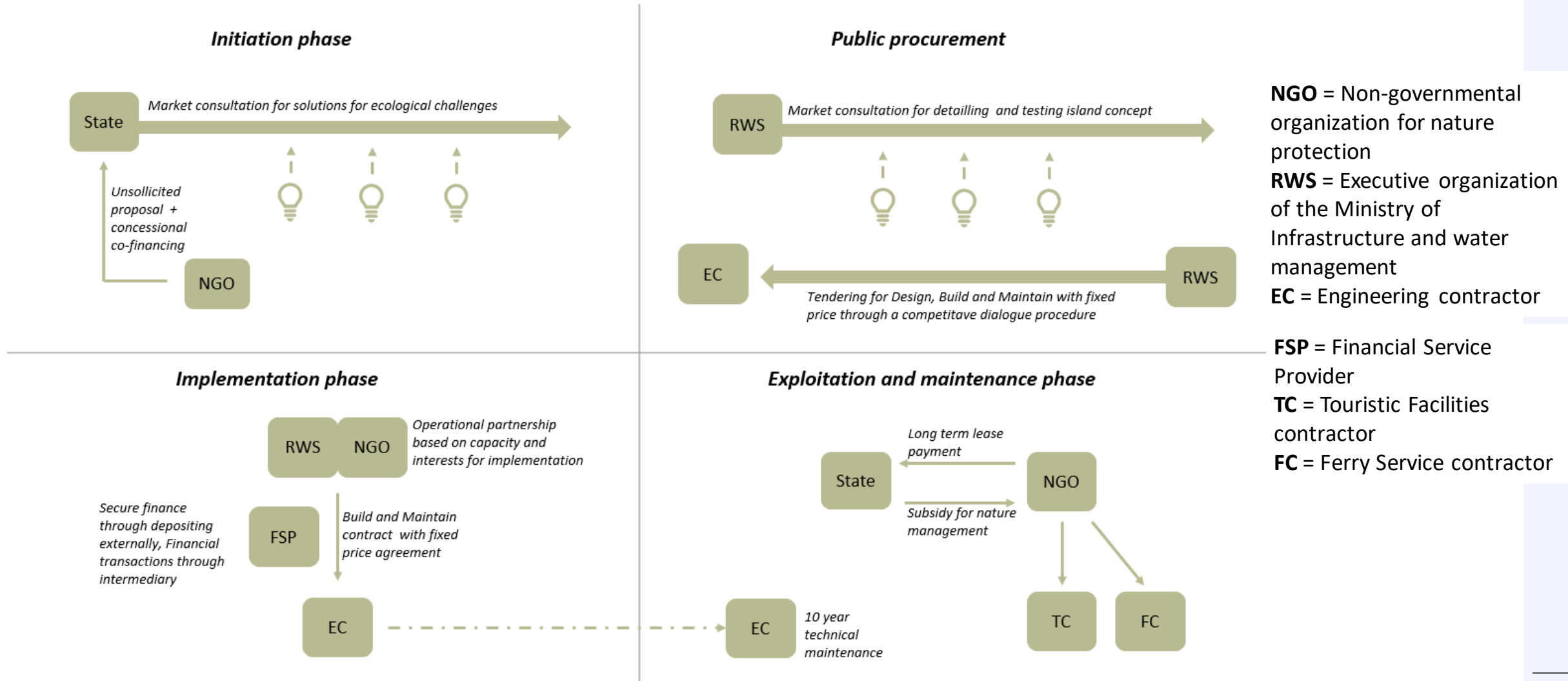
Source: Millenium Ecosystem Assessment, 2005.

TEEB three-step approach:





Procurement and governance mode(s)



Interests & Finance for implementation



Main interests

Ecological urgency

Compliance to N2000 & Bird and habitat directives

Administrative agreement RAAM (2009)

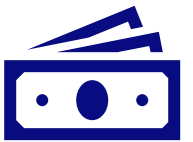
Scaling-up urbanization, infrastructure and ecology

TBES future-proof ecological system

Knowledge export

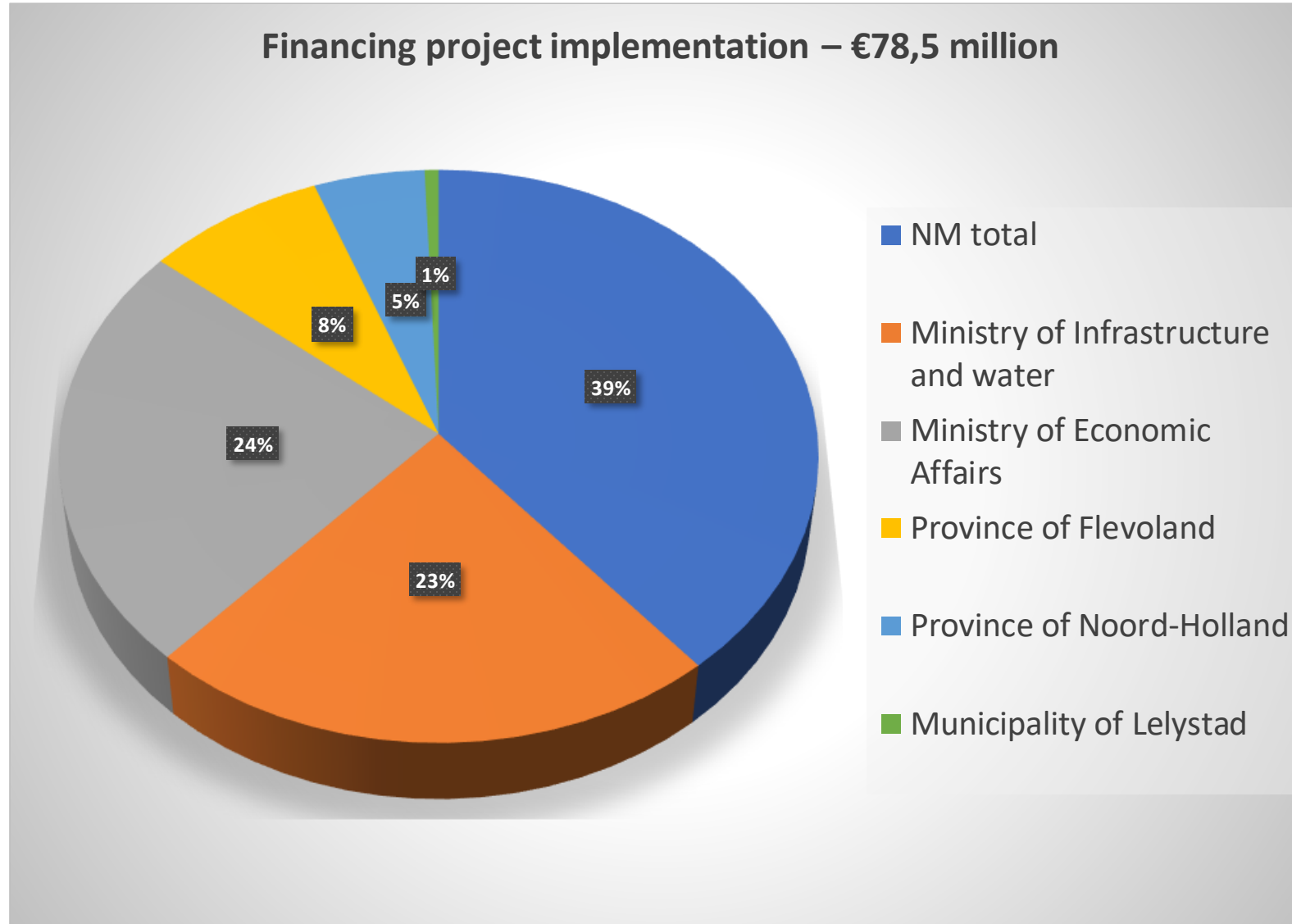
Waterquality & (re) using sludge

Actor	2012-2014	2016 - 2018	Total
Natuurmonumenten			
- The "Dream fund"	15	7	22
- Own resources	1,5	7	8,5
Ministry of Infrastructure and water	15	3	18
Ministry of Economic Affairs	15	4	19
Province of Flevoland	3,5	3	6,5
Province of Noord-Holland		4	4
Municipality of Lelystad		0,5	0,5
	50	28,5	78,5



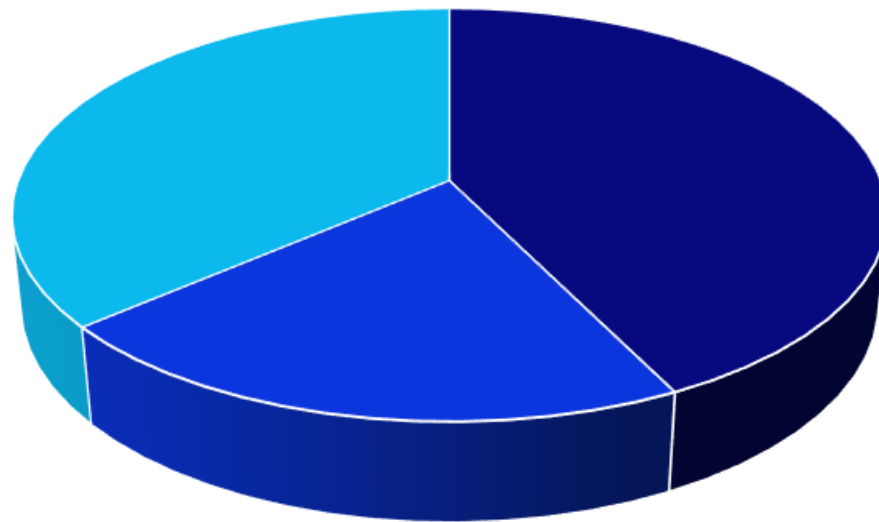
Millions (€)

Project finance – Implementation



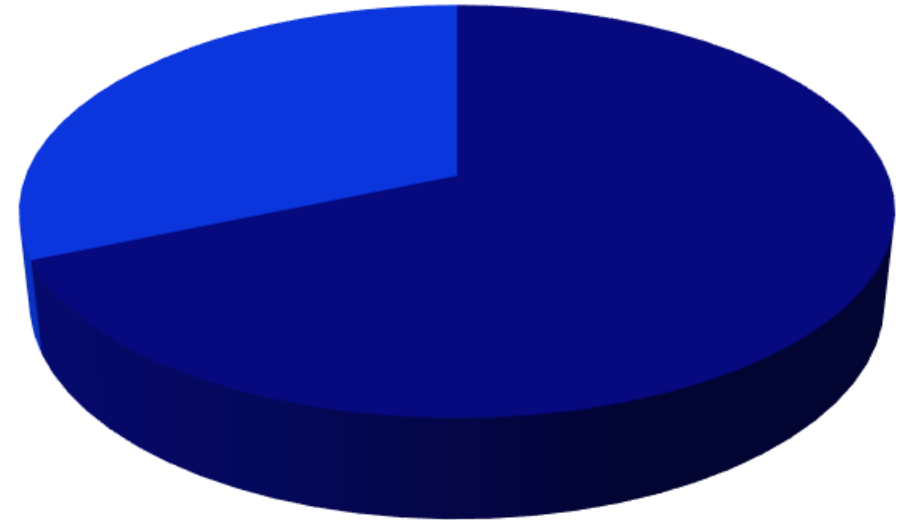
Project finance – Implementation

Anticipated



- Domestic public (ministries/provinces/municipality)
- Natuurmonumenten
- Other

Actual



- Domestic public (ministries/provinces/municipality)
- Natuurmonumenten
- Other

Project finance – exploitation & maintenance phase

Activities	Responsible	Finance	Costs
Technical (hard) maintenance year 0-10	Engineering contractor	Through DBM contract (10 years) – <i>300.000 available</i>	?
Technical (hard) maintenance > year 10	State	?	<i>Ongoing research</i>
Surface (soft) maintenance 0 - 30 years	Natuurmonumenten	Through “SNL” subsidies and generated revenue	1.100.000 (2021)

Cost-recovery surface maintenance

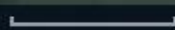
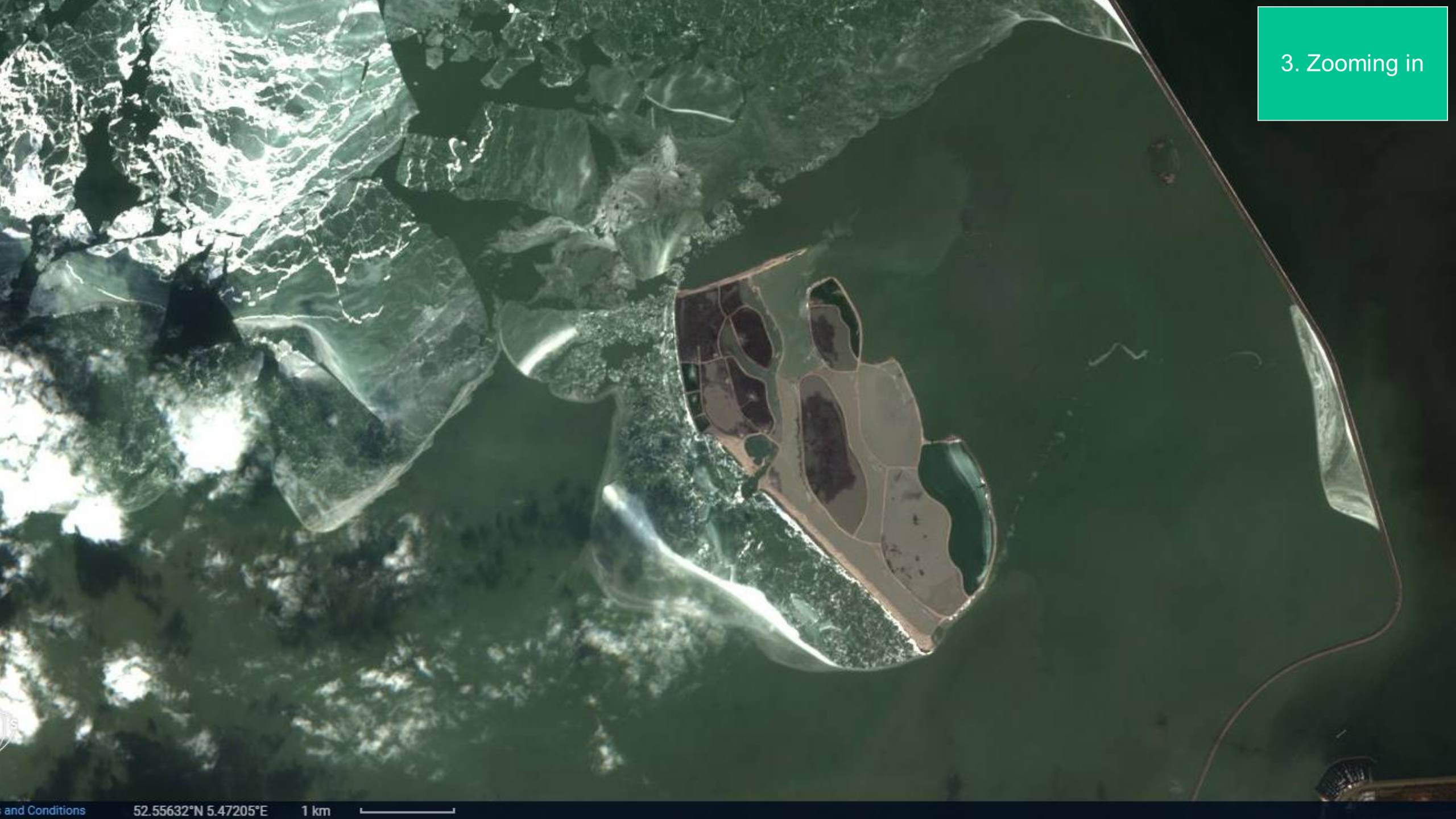
Revenues (2021)	Expenses (2021)
Harbour 4 holiday rentals Ferry service Hospitality	Ferry service Salaries Equipment Outsourced works
850.000	1.100.000



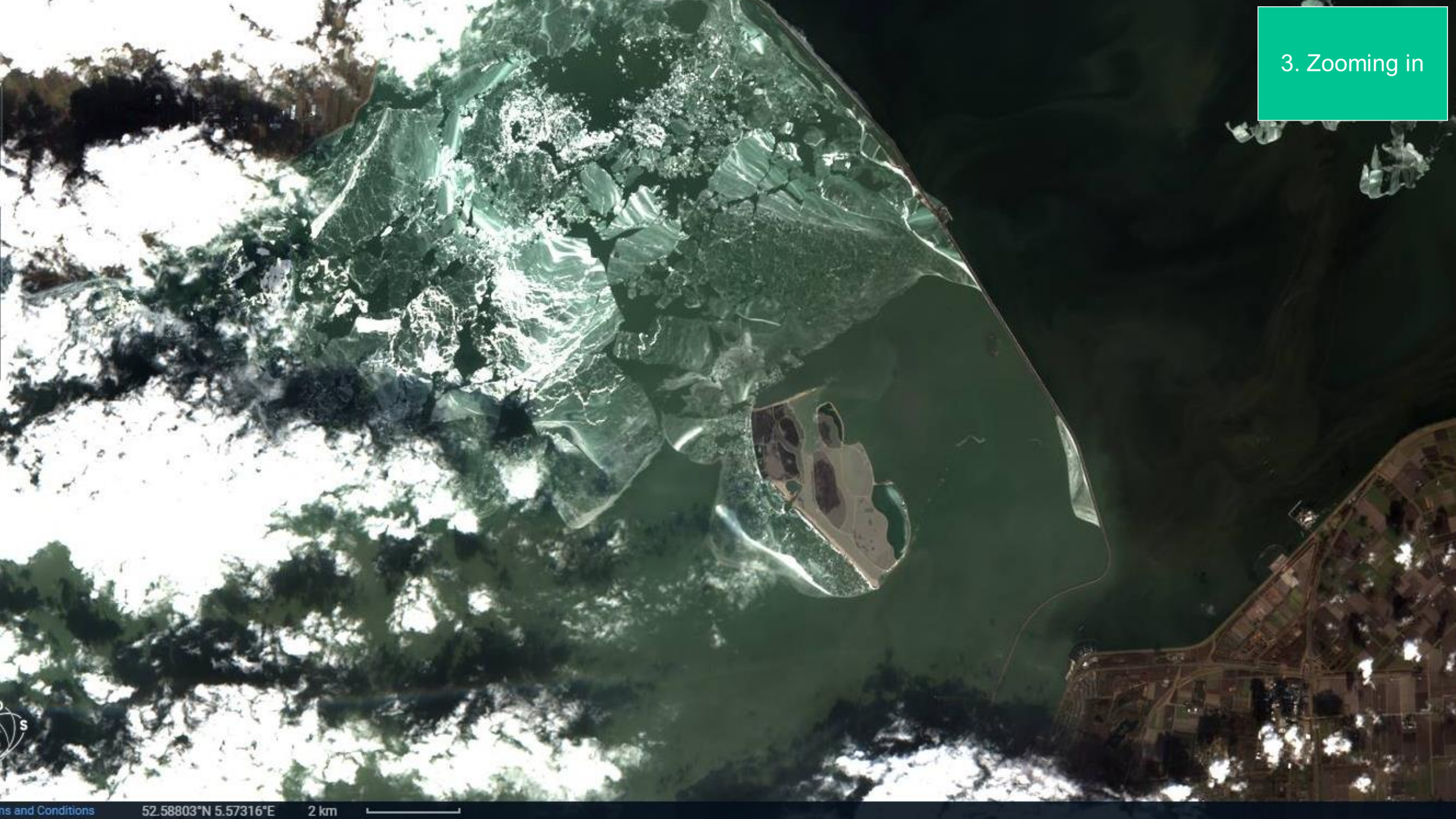
3. Zooming in



3. Zooming in



3. Zooming in



Opportunities for financing?

<p><u>Productie diensten</u></p> <p>Grondstoffen: bouwmaterialen <i>fijn sediment vangen en als bouw materiaal gebruiken.</i></p> <p>Voedsel: <i>toename vis populaties</i></p> <p>Zoetwater voorziening <i>Verbeterde kwaliteit van grote zoetwatervoorraad.</i></p>	<p><u>Regulerende diensten</u></p> <p>Matigen van extreme gebeurtenissen <i>natuurlijke barrière voor golven voor b.v. de Houtribdijk</i></p> <p>Water zuivering <i>lokale waterkwaliteit verbetering door invangen van slib (lokaal).</i></p> <p>"Zelf-bescherming" <i>tegen weersomstandigheden</i></p> <p>Nutriënten cycli en bodemecologie</p> <p>Biologische controle</p> <p>Luchtzuivering en koolstofvastlegging</p>
<p><u>Habitat diensten</u></p> <p>Nursery service (kraamkamer) <i>verbetering flora en fauna boven en onderwater, specifiek vogelpopulaties</i></p> <p>Gene pool protection <i>habitat voor verschillende soorten: behoud van biodiversiteit</i></p> <p>Logistieke uitvalsbasis <i>voor (vervolg) bouw en onderhoud-activiteiten in het gebied</i></p>	<p><u>Culturele diensten</u></p> <p>Recreatie en toerisme <i>vanaf water, land, mogelijkheid overnachting, (vogelaars)expedities</i></p> <p>"Esthetisch" <i>gewaardeerd landschap en natuur</i></p> <p>Inspiratie/iconisch <i>"Nederland Waterland", internationale showcase, ook voor (natuur) fotografie</i></p> <p>Cognitieve ontwikkeling</p> <ul style="list-style-type: none"> • Wetenschappelijke en praktijk kennis: Ecologie, Civiel technisch, Management • Leerervaring d.m.v. recreatie en (social) media

- Extension of lifespan?
- Reduction in maintenance costs?

- Calculating the effect of the islands on floodrisk reduction?
- How should we value this?

- Public organisations' monofunctional objectives
- Subject to political preference and issues of legality

Opportunities for financing?

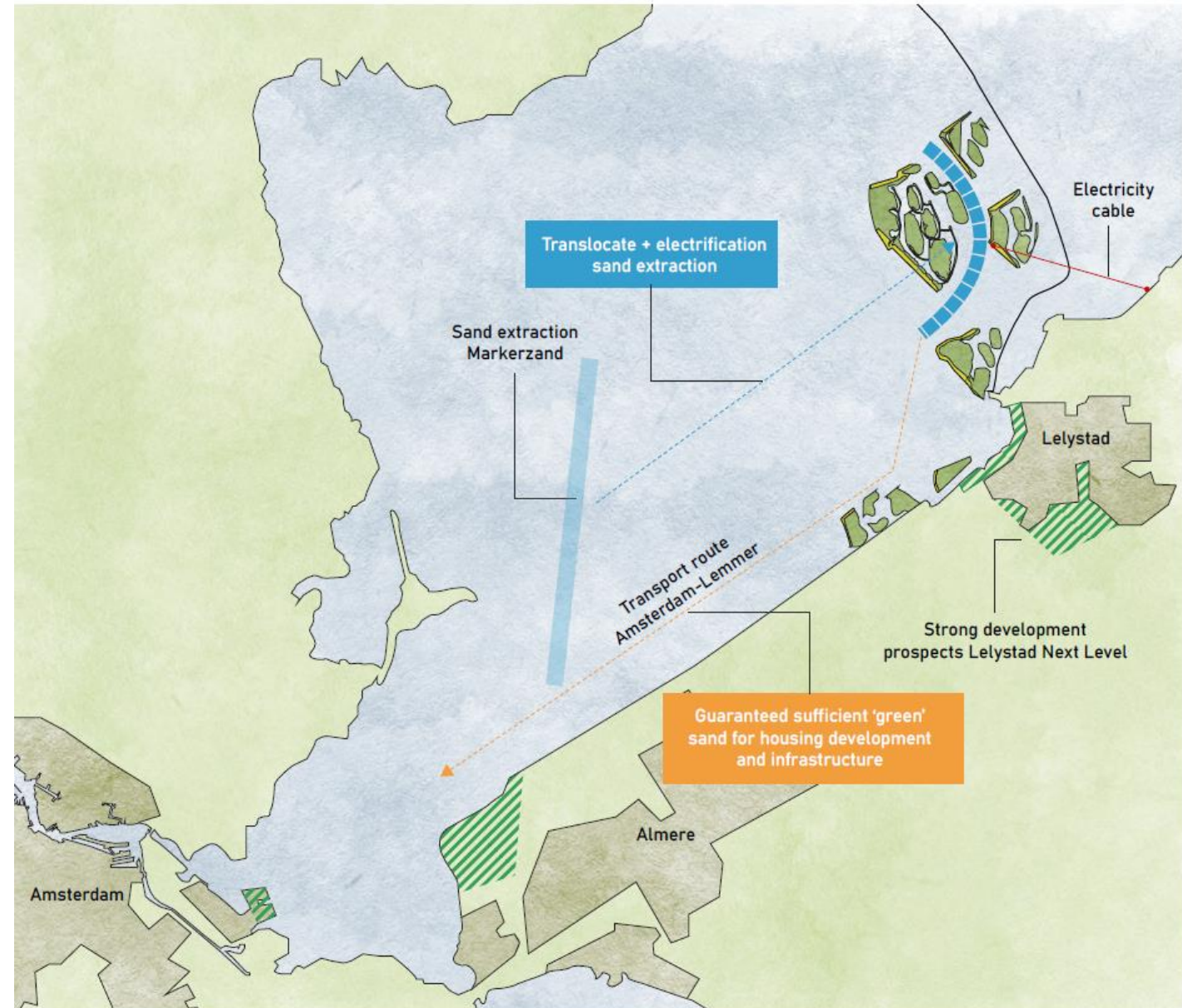
Marker Wadden phase II

Potential arrangement

More sustainable + quicker + cheaper

Translocate + electrification of sand extraction

- no emissions CO₂/Nox
- Cost reduction sand extraction available for ecological restoration
- 50% private funding
- No tender process ?!



Opportunities for financing?



- Is this a realistic opportunity?
- What challenges do you see?
- Do you see any conflicting interests?
- How could it be organized?



Contact



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