



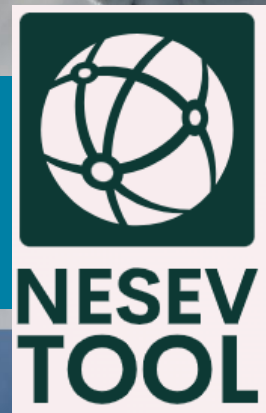
# WABESCO

## Wheel of Assessment for Blue Ecosystem Services of a Company – WABESCO

- April 2022 – March 2024
- Development of the MESAT tool for qualitatively assessing the ES performance of marine zoning, projects and blue growth companies
- **Linkage** with SDG's & with EU Taxonomy , providing management framework
- Development of the NESEV advanced numerical dynamic network model for quantitatively valuing changes in the ES of a project, area or company
- Joint case studies focussing on marine sectors
- Permits to **estimate and/or measure** the eco-societal **impact** of any product/project/business activity.

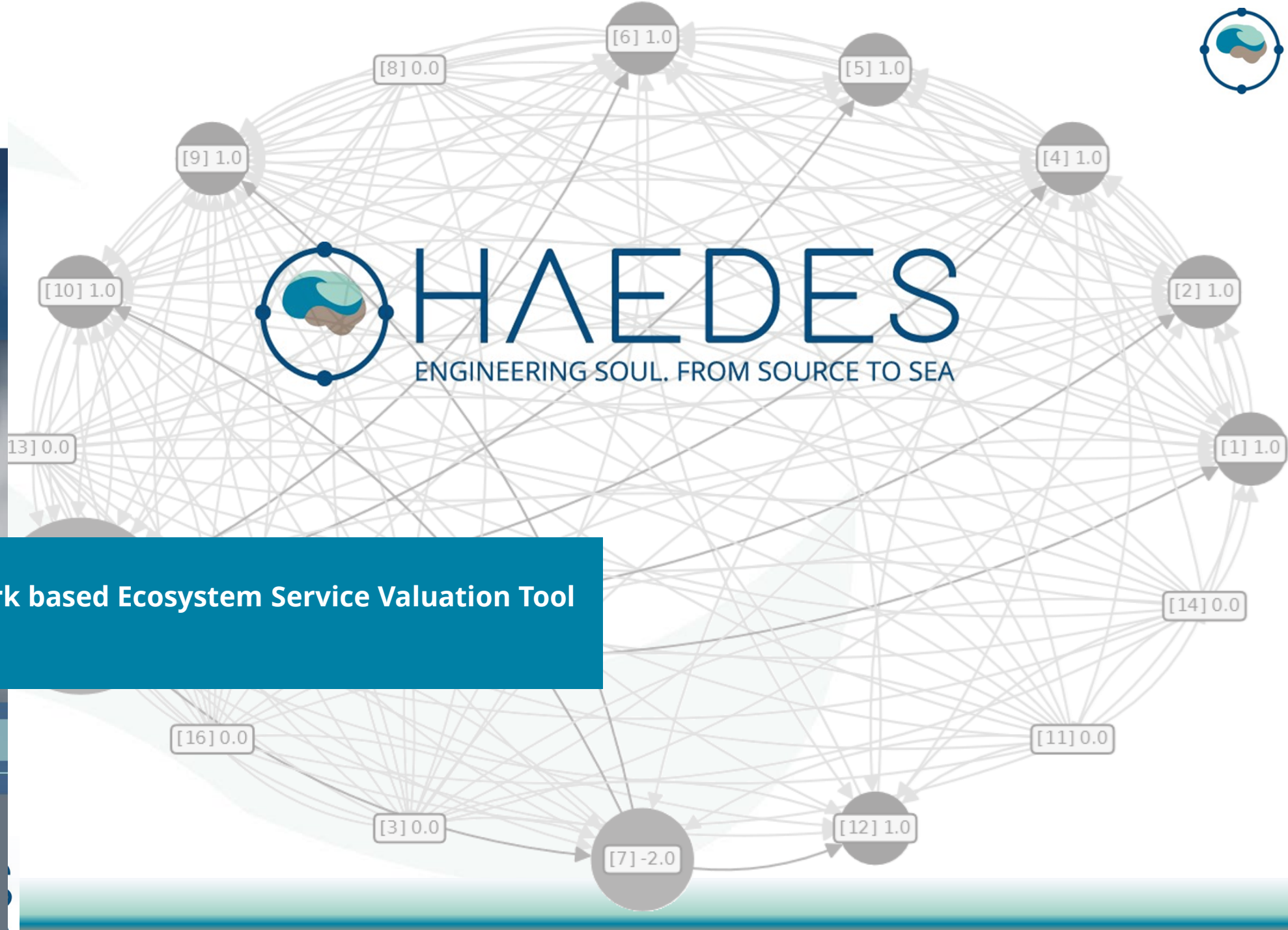


Engineering,  
talent & soul  
for your marine &  
river challenge



[www.haedes.be](http://www.haedes.be)

## The Network based Ecosystem Service Valuation Tool



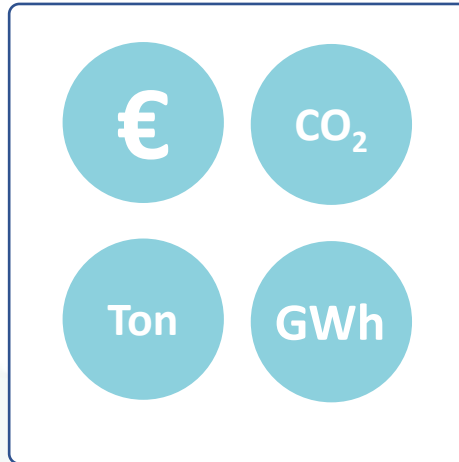


# Introducing: NESEVtool

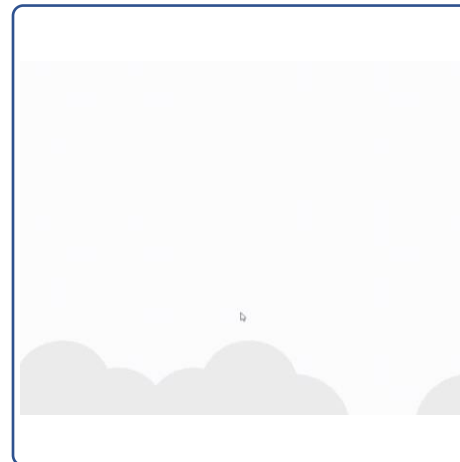
## HIGHLIGHTS



**SUPPORTS  
VALUATION OF  
ECOSYSTEM  
SERVICES**



**ACCOUNTS FOR  
MULTIPLE  
CURRENCIES**



**VISUALIZES  
VALUE  
NETWORKS**

## PLATFORM



**Open source / client tool**



**No-code solution**  
Ease of use



**Open API**  
Better interoperability

## USERS

**Business users**  
*(non-technical professionals)*

**Project developers**

**Decision-makers**

**Researchers**



# What NESEV helps you to do

## CAPTURE VALUE CREATION

Helping to articulate **how value flows** across beneficiaries and sectors in the ecosystem

## ASSESS TOTAL BENEFITS

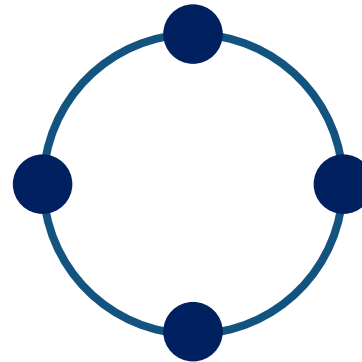
By supporting the **valuation of ALL** (social, economic and ecologic) outcomes of projects and businesses activities

## COMMUNICATE IMPACT

Enabling organizations to **demonstrate accountability** for impacts on the environment, economy and people

## SUPPORT DECISION-MAKING

**Integrating** socio/eco/enviro considerations (risks, opportunities, dependencies) into decision-making processes





NESEV Tool

File Valuate Log In

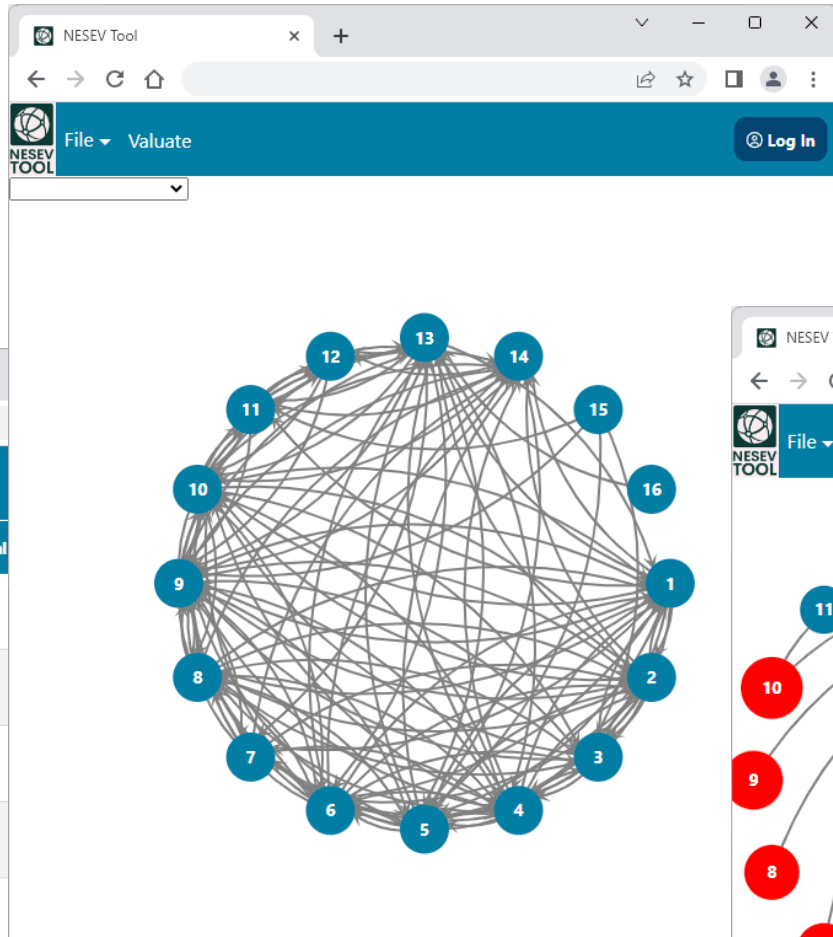
| Node | Description                         |
|------|-------------------------------------|
| 1    | Inland shipping                     |
| 2    | Local business                      |
| 3    | Real estate and construction sector |
| 4    | Energy industry                     |
| 5    | Agriculture & Aquaculture           |
| 6    | Industries                          |
| 7    | Drink water production              |
| 8    | Road transport                      |
| 9    | Local community                     |
| 10   | Tourism                             |
| 11   | River bank                          |
| 12   | Valley                              |
| 13   | Water column                        |
| 14   | Air                                 |
| 15   | Land use                            |
| 16   | Sewage water tretament              |

NESEV Tool

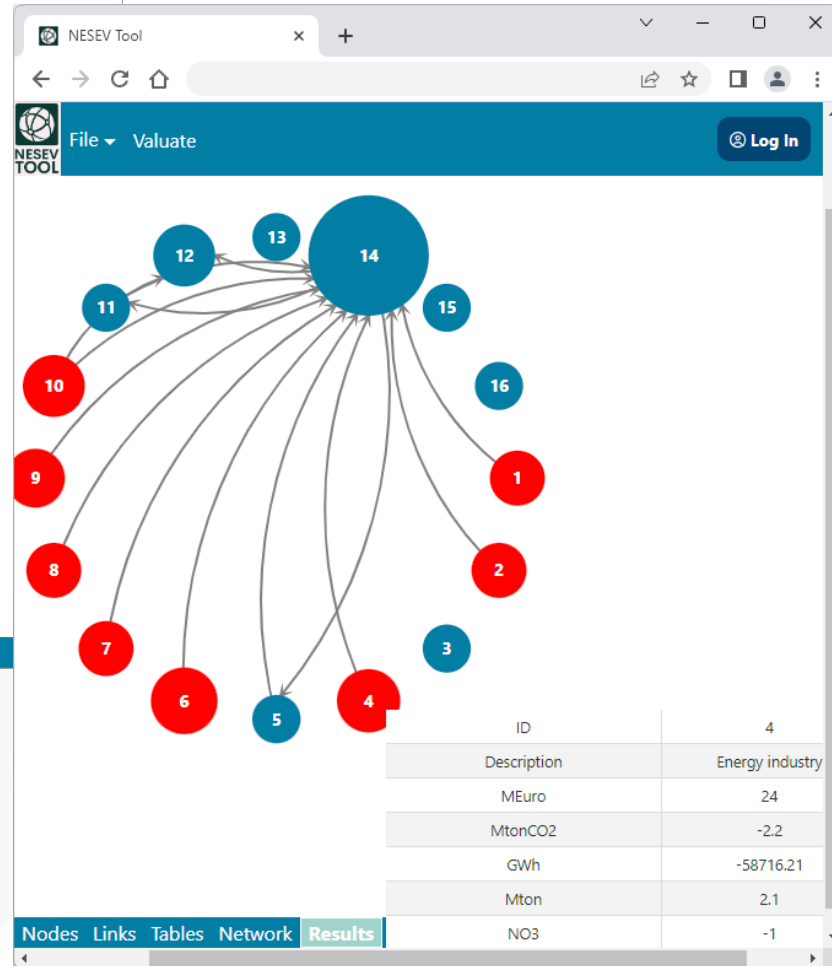
File Valuate

| nr. | source                    | target                    | Virtual |
|-----|---------------------------|---------------------------|---------|
| 0   | Agriculture & Aquaculture | Air                       |         |
| 1   | Agriculture & Aquaculture | Energy industry           |         |
| 2   | Agriculture & Aquaculture | Industries                |         |
| 3   | Agriculture & Aquaculture | Inland shipping           |         |
| 4   | Agriculture & Aquaculture | Local business            |         |
| 5   | Agriculture & Aquaculture | Local community           |         |
| 6   | Agriculture & Aquaculture | Road transport            |         |
| 7   | Agriculture & Aquaculture | Water column              |         |
| 8   | Air                       | Agriculture & Aquaculture |         |

Nodes Links Tables Network Results

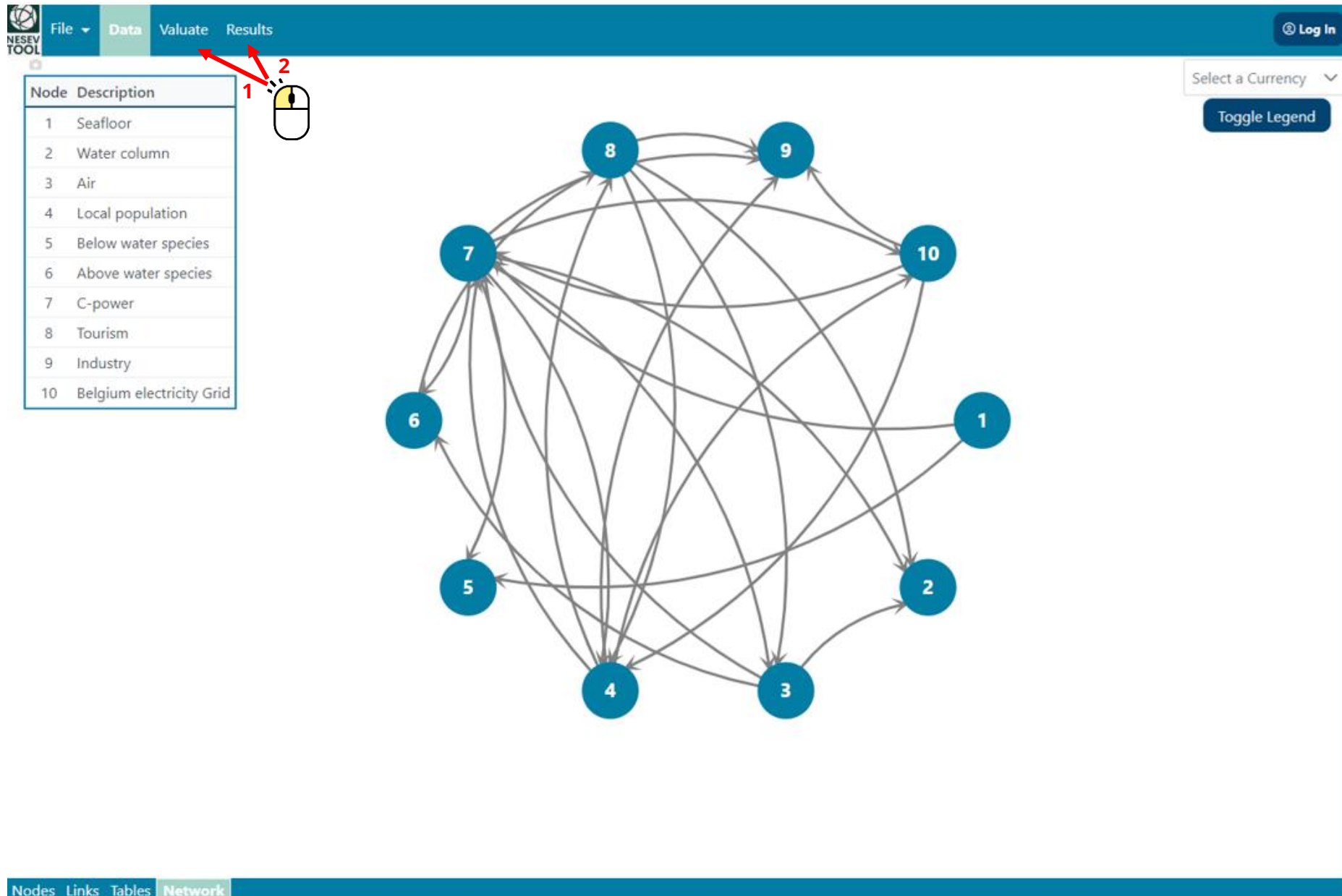


| Nodes | Links | Tables | Network | Results |
|-------|-------|--------|---------|---------|
| 0     | 0     | 0      | 0       | 1.65    |
| 1     | 0     | 0      | 0       | 0       |
| 2     | 0     | 0      | 0       | 0       |
| 3     | 0     | 0      | 0       | 1       |
| 4     | 0     | 0      | 0       | 0       |
| 5     | 0     | 0      | 0       | 0       |
| 6     | 1     | 0      | 0       | 0       |
| 7     | 0     | 0      | 0       | 1       |
| 8     | 0     | 1      | 0       | 0       |

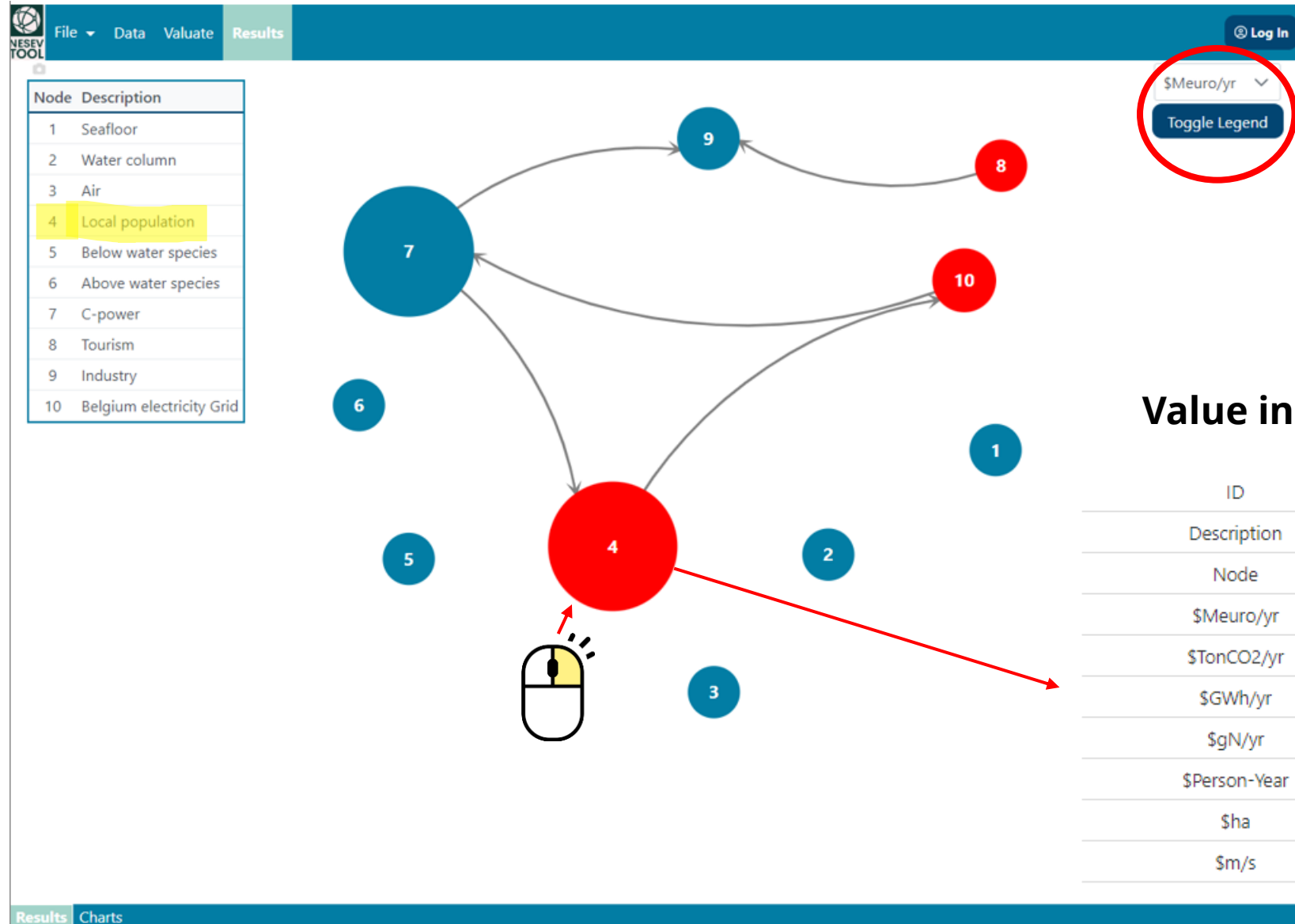


| ID          | 4               |
|-------------|-----------------|
| Description | Energy industry |
| MEuro       | 24              |
| MtonCO2     | -2.2            |
| GWh         | -58716.21       |
| Mton        | 2.1             |
| NO3         | -1              |

# Example network offshore wind energy



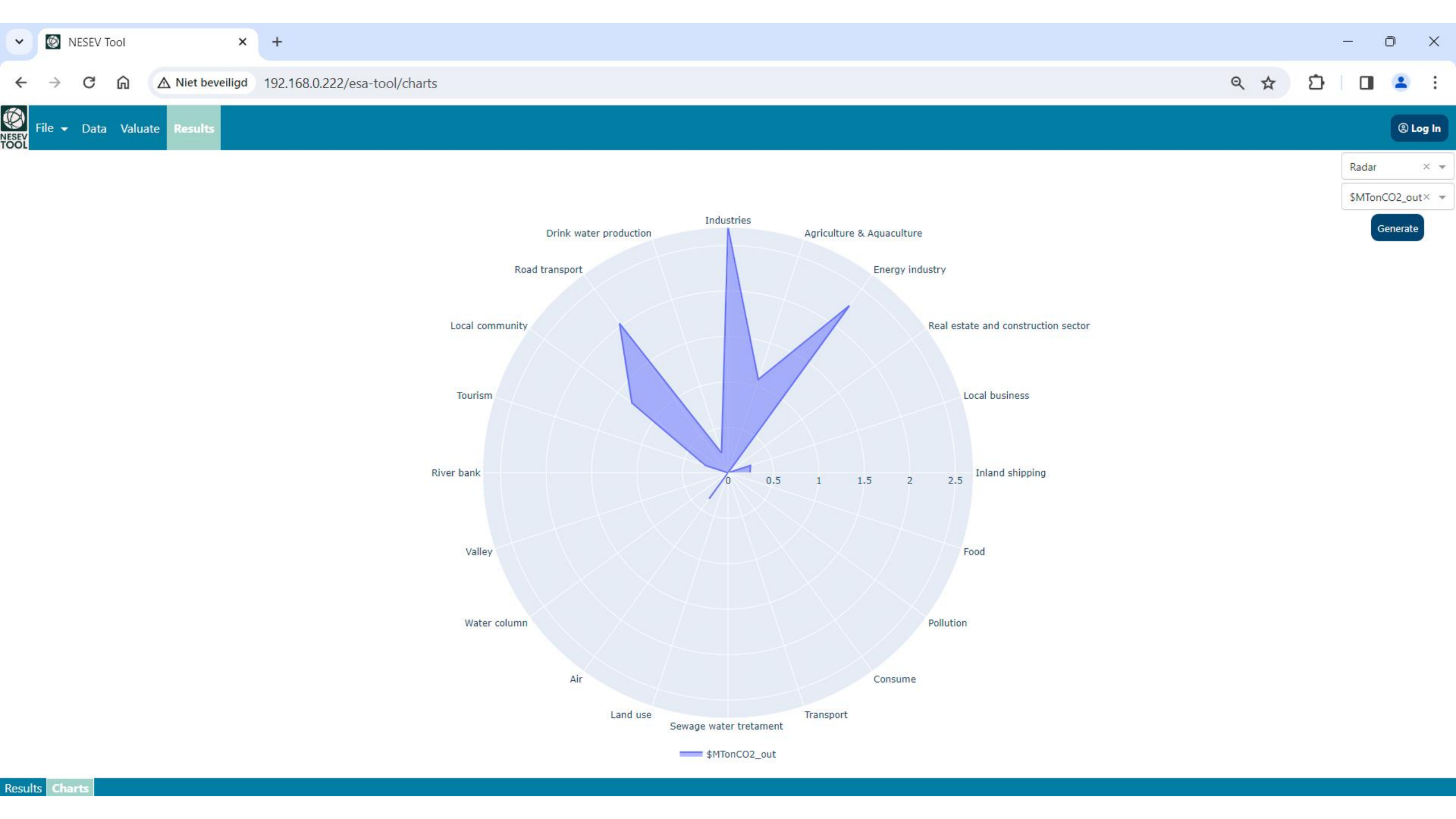
# Actor “local population”

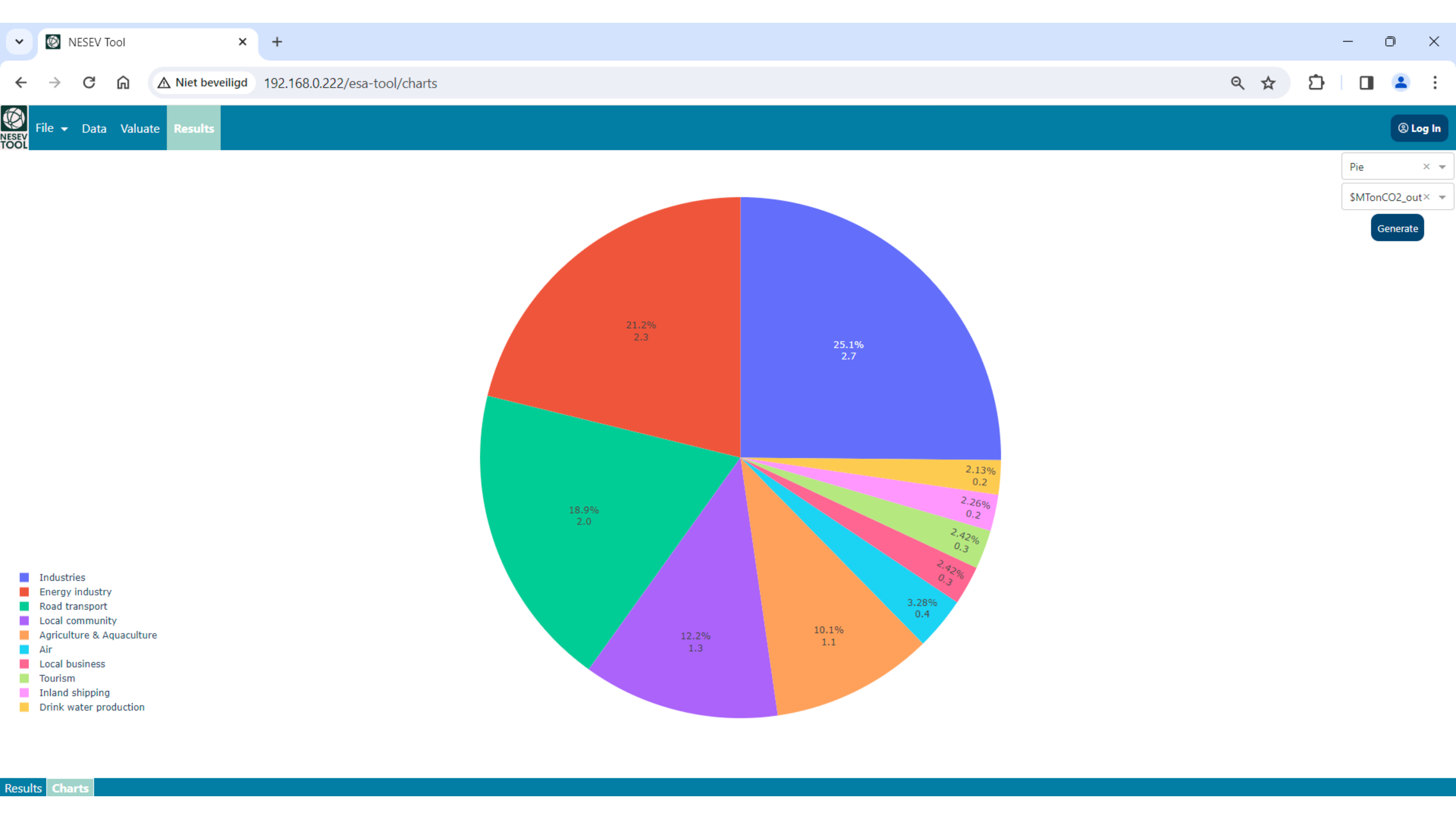


## Value in different currencies

| ID            | 4                |
|---------------|------------------|
| Description   | Local population |
| Node          | 4                |
| \$Meuro/yr    | -71,4            |
| \$TonCO2/yr   | 0                |
| \$GWh/yr      | 198              |
| \$gN/yr       | 0                |
| \$Person-Year | -999             |
| \$ha          | 0                |
| \$m/s         | 0                |









# Current (inter)national use cases

- Offshore energy & nature protection
- Offshore aquaculture & nature protection
- Inland waterways & ports
- Estuarine mangroves
- Natural flood plains (flooding, drought, nature)
- Peatland areas (agriculture, nature, floods)

# THANK YOU

## Contacts

**Ivan.rocabado@haedes.eu**

**Renaat.desutter@haedes.eu**

HAEDES B.V.  
Kortewagenstraat 53B  
9070 Wetteren-ten-Ede  
Belgium

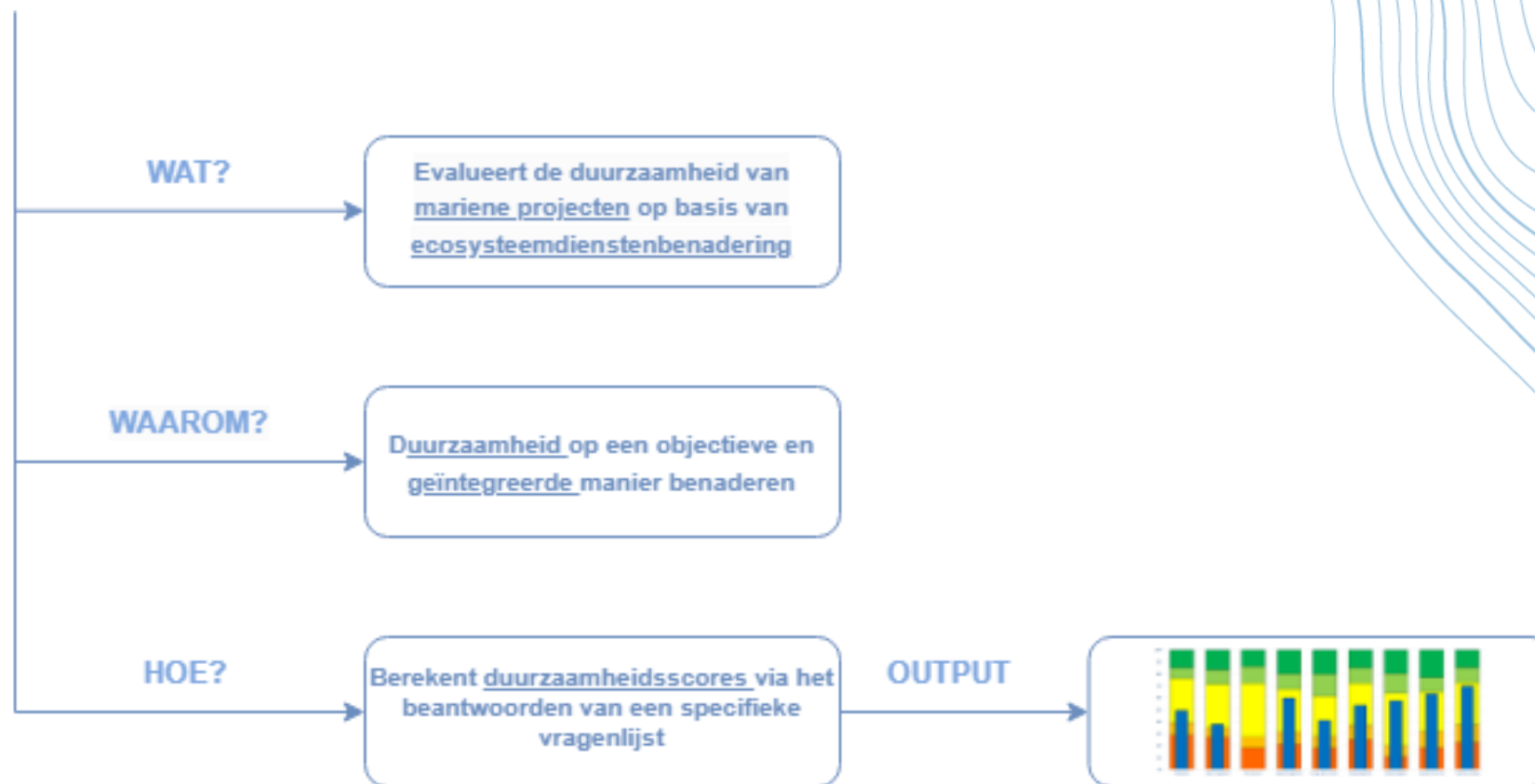
HAEDES Portugal  
p.a. Casais do Arrocho  
2025-452 Azoia de Cima  
Portugal

[www.haedes.eu](http://www.haedes.eu)

# MESAT

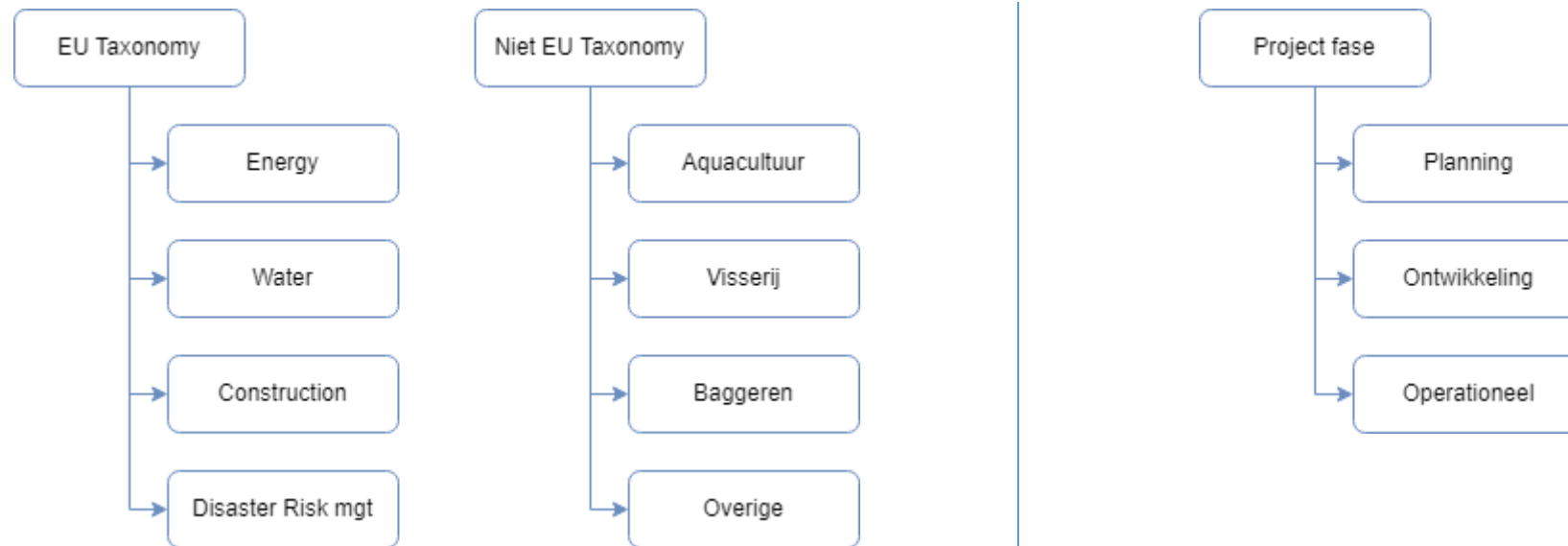
Marine Ecosystem & Sustainability Assessment Tool

# MESAT



# Huidige scope

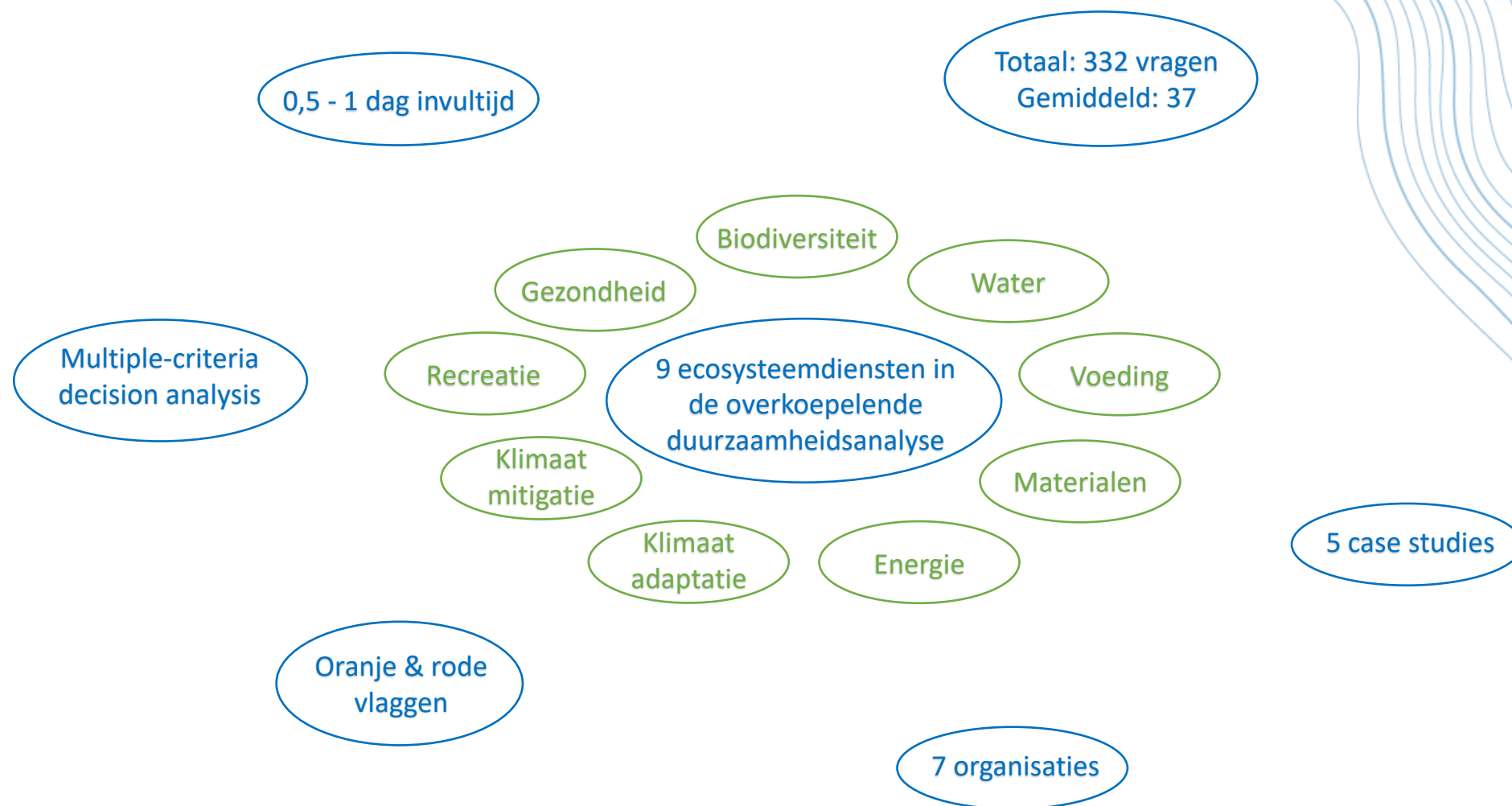
- Mariene projecten
- Geografische scope → tot aan de kustlijn
- 4 EU Taxonomy sectoren → 10 activiteiten
- ≠ projectfasen



# Methodiek



# MESAT in 7 weetjes



# Resultaat

## Zand suppletie

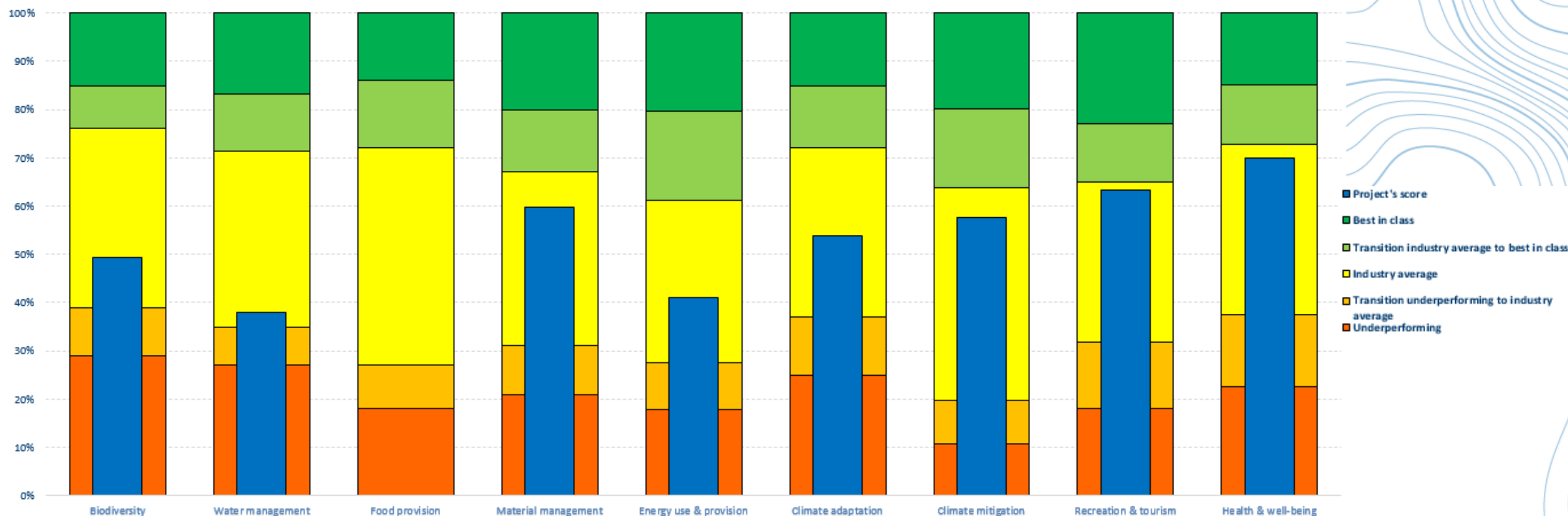


## Natuur gebaseerde kustverdediging



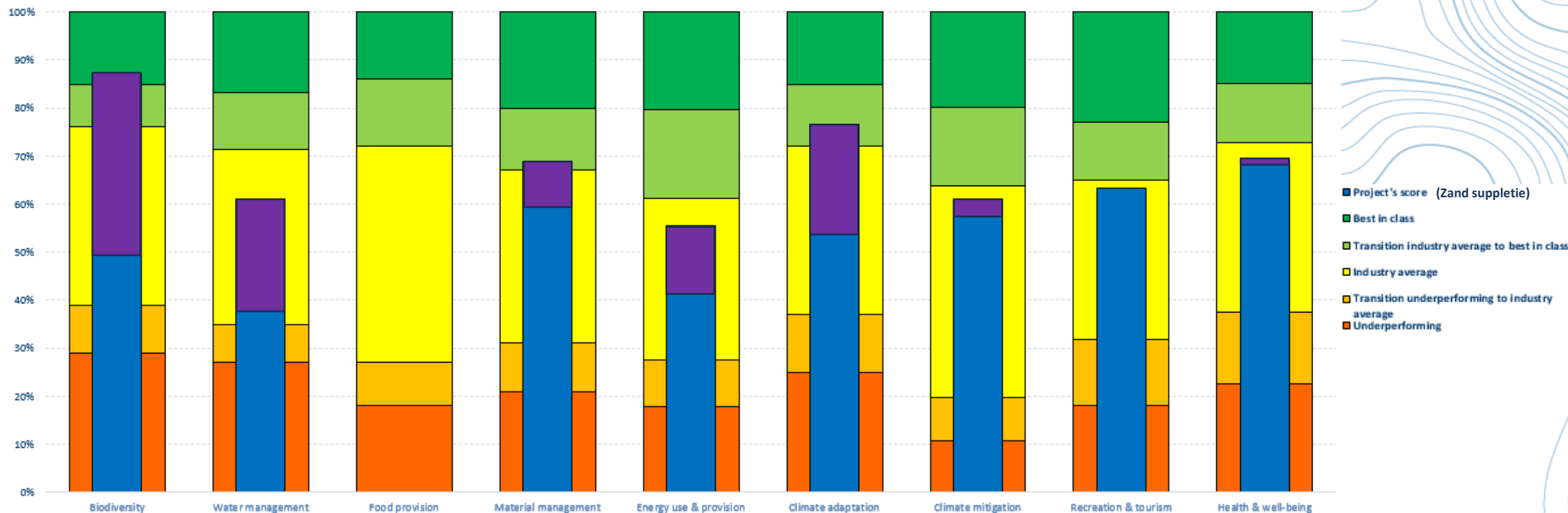
# Resultaat

## Zand suppletie



# Resultaat

## Natuur gebaseerde kustverdediging



Scoreverschil (score Coastbusters)

# Een blik op de toekomst

- MESAT is een levende tool in volle ontwikkeling
  - Uitbreiding naar alle sectoren binnen blauwe economie
  - Optie diepgaande projectscenario vergelijking
  - Stelselmatige uitbreiding naar land
- Getriggerd om de duurzaamheidsscore van uw project te weten?

*“Er is een nood aan tools binnen de mariene economie die de duurzaamheid van groene projecten op een objectieve manier kunnen vatten. MESAT kan de meerwaarde van een nature-based solution project kwantificeren en overzichtelijk weergeven. Zo kan het verbeterpunten aanreiken, greenwashing vermijden en stakeholders informeren.”*

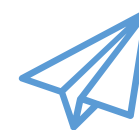
# Bedankt!



Is er nog iets  
onduidelijk?



Heeft u nog een  
vraag?



Stuur ons  
gerust een mail.

[sacha.declercq@bovaenviroplus.be](mailto:sacha.declercq@bovaenviroplus.be)

[renaat.desutter@haedes.eu](mailto:renaat.desutter@haedes.eu)

[emile@mantisconsulting.be](mailto:emile@mantisconsulting.be)

