

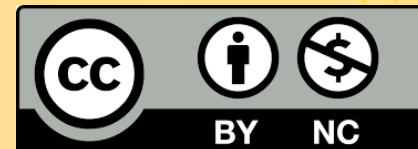
# MEASURING IMPACT FOR NATURE-BASED ENTERPRISES

## PART I: TERMINOLOGY AND STRATEGY

**Lecture – online / in-person**

Credit: Horizon Nua

*Content created in 2024*



**Funded by**  
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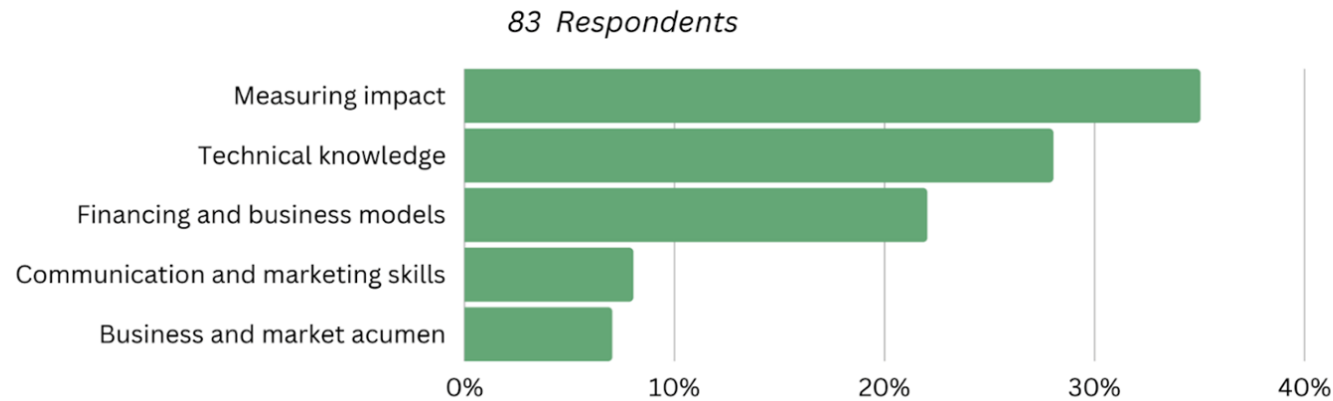
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# Learning Outcomes for this Learning Unit

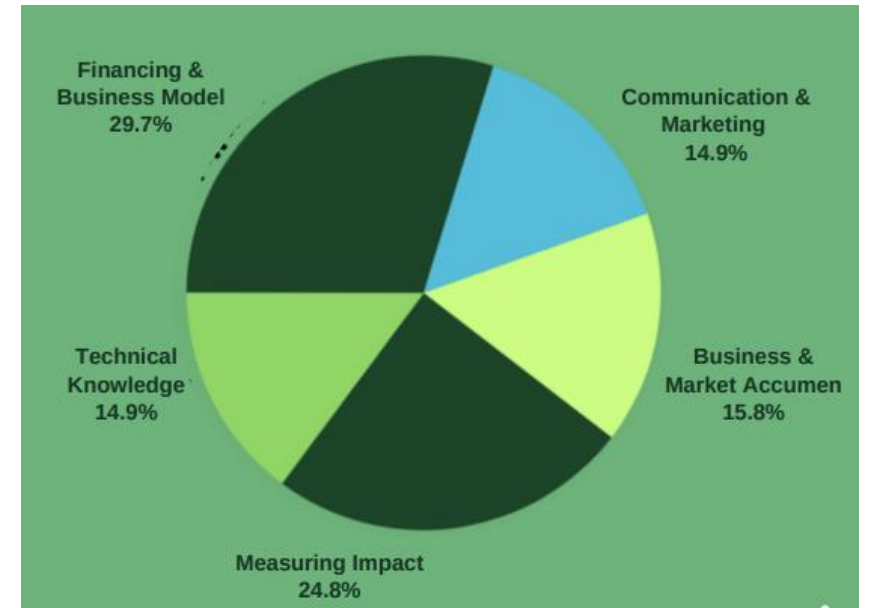
- Understand the importance of measuring impact for NbEs, the challenges faced and the underlying terminology.
- Explore the different steps of a framework for measuring impact, learn about different impact indicators related to different measurement objectives and stakeholder needs.
- Analyse and apply the learning to develop an impact measurement strategy for your business.

# Measuring impact is a priority for NbEs

Where you would like to see more support in terms of **capacity building and skills development** for NBE?



Source: Nature Futures Online Survey 2023



Source: I4N Survey 2024 (n=124)

## Why is measuring impact so important for NbEs?

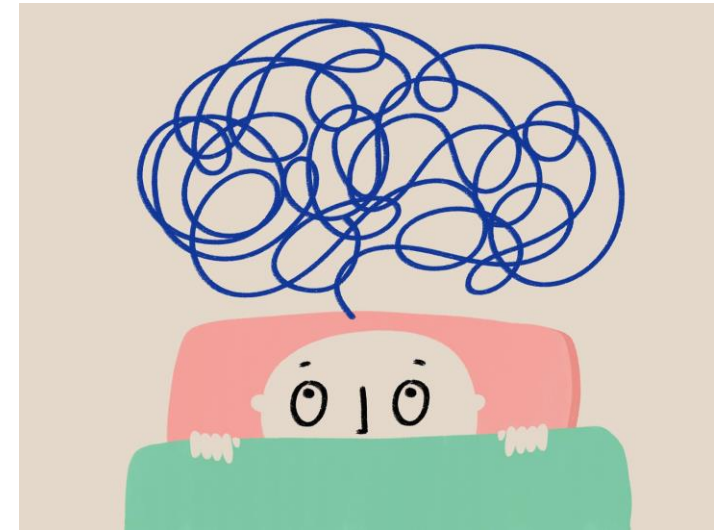
- Measurement of impact may be required to **secure financing**  
e.g. subscription revenue related to impact
- **Clients** may require impact information to make investment decisions e.g. verifiable outcomes
- Credible impact measurement may be important for **stakeholders and staff** to show the achievement of company mission e.g. demonstrable impact from activities on nature and biodiversity such as increase in species, wetlands etc;
- Reporting on impact is an increasing **regulatory requirement** e.g. new EC requirements on ESG reporting (CSRD)

### Online Poll

- How important is measuring impact for your business?  
*Scale 1-10 with 10 being highest*
- Why is measuring impact so important?  
*Open response....*
- How would you rate your current mechanism for measuring impact?  
*Scale 1-10 with being Excellent*
- What are the challenges you face in measuring impact?  
*Open response...*

## NbE face specific challenges to measuring impact:

1. Difficult: Measuring nature and biodiversity can be time-consuming and expensive;
2. Confusing: Many different approaches to measuring impact – creates confusion for companies, clients and financing institutions;
3. Lack of knowledge: Lack of in-house skill-set and/or resources to deliver credible impact measurement.



# Back to basics



## What is impact?

“the action of one object coming forcibly into contact with another”

Oxford English Dictionary



“Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended”

OECD-DAC (2002)

*‘a marked effect or influence’*  
Oxford English Dictionary

“Impact is defined as the difference in the indicator of interest ( $Y$ ) with the intervention ( $Y_1$ ) and without the intervention ( $Y_0$ ). That is,  $\text{impact} = Y_1 - Y_0$ ”



# Measuring impact isn't always easy...understanding key terms

- Outputs - outcomes - impact
- Monetary and non-monetary benefits
- Measuring tangibles and intangibles
- Considering trade-offs and unintended consequences





# Impact Indicators (KPIs)

## Monetary Indicators e.g. revenue generated

Pros: easy to understand, easy to compare

Cons: difficult to monetise some indicators

▼

## Non-monetary e.g. increase in biodiversity

Pros: more accurate and related to mission of most NbEs

Cons: lack of consistency, difficulty comparing 'like with like'



# Impact Indicators (KPIs) should be SMART

**Monetary Indicators** pretty straightforward e.g. annual financial reporting.

**Non-monetary Indicators** more tricky.

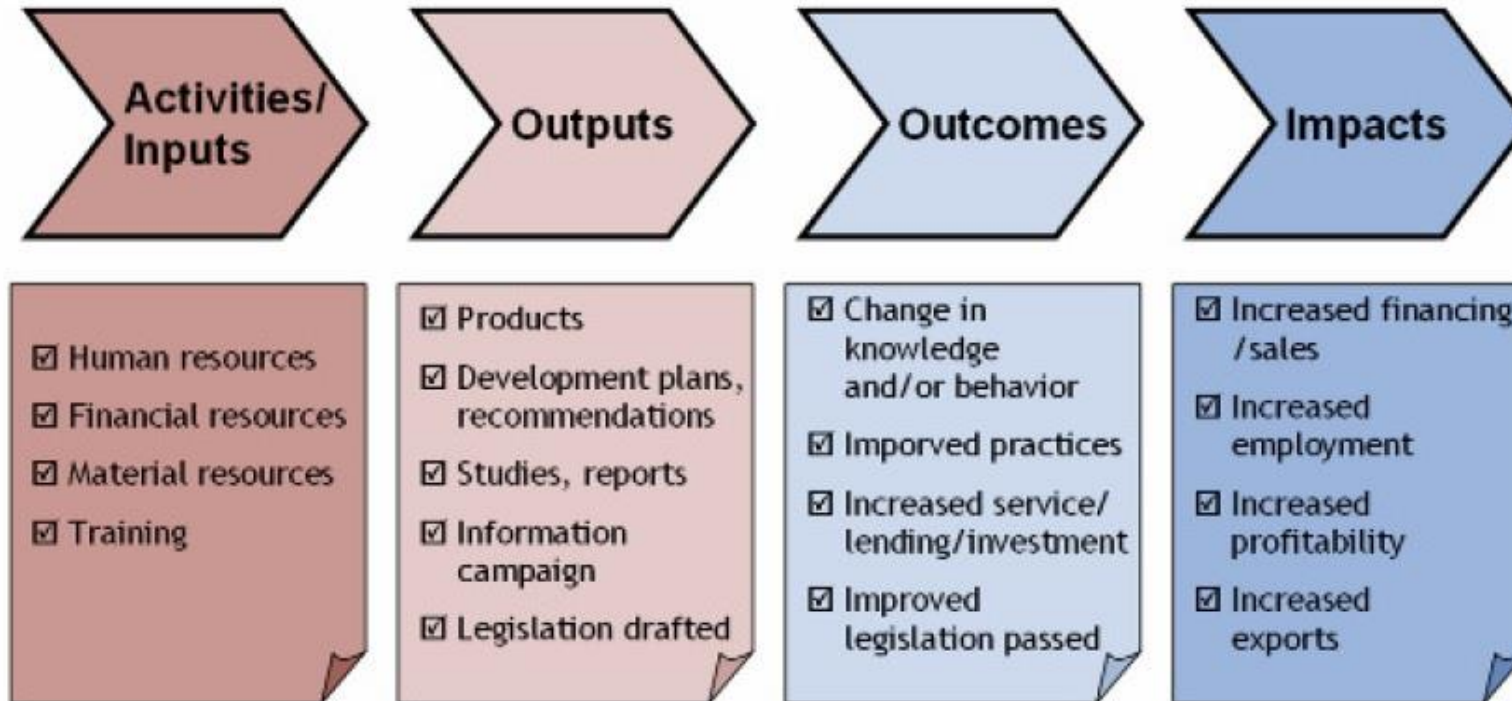
E.g. environmental benefits for an airport:

- Reduction in water usage per passenger from 26.3 to 15.3 in 2019 (SMART indicator)
- 20% Improvement in Air Quality indicators
- 40% Increase in biodiversity (species) in airport grounds



# Common confusion between Outputs v Outcomes v Impact

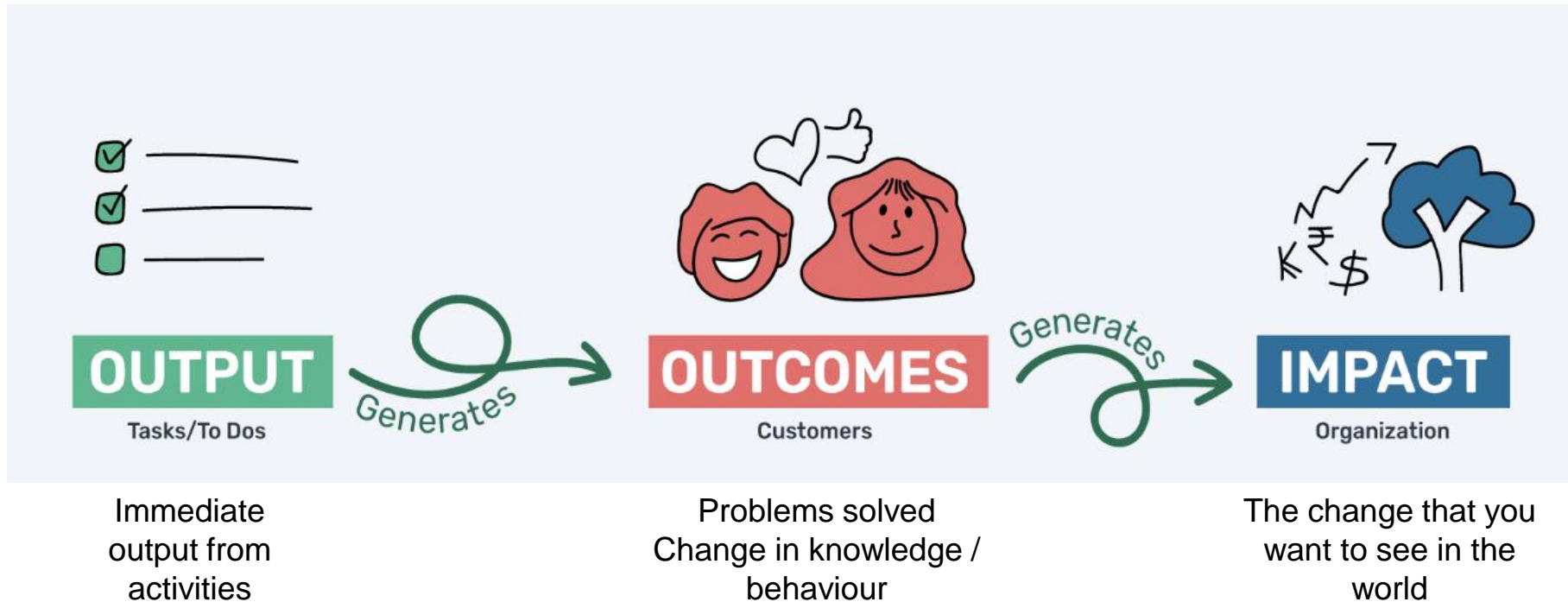
Logical framework for evaluation



Source:

<https://ppd.cipe.org/tools/ppd-handbook/d-monitoring-and-evaluation-framework-for-ppd/d-6-evaluation-of-regulatory-and-economic-outcomes-and-impact-of-ppds/>

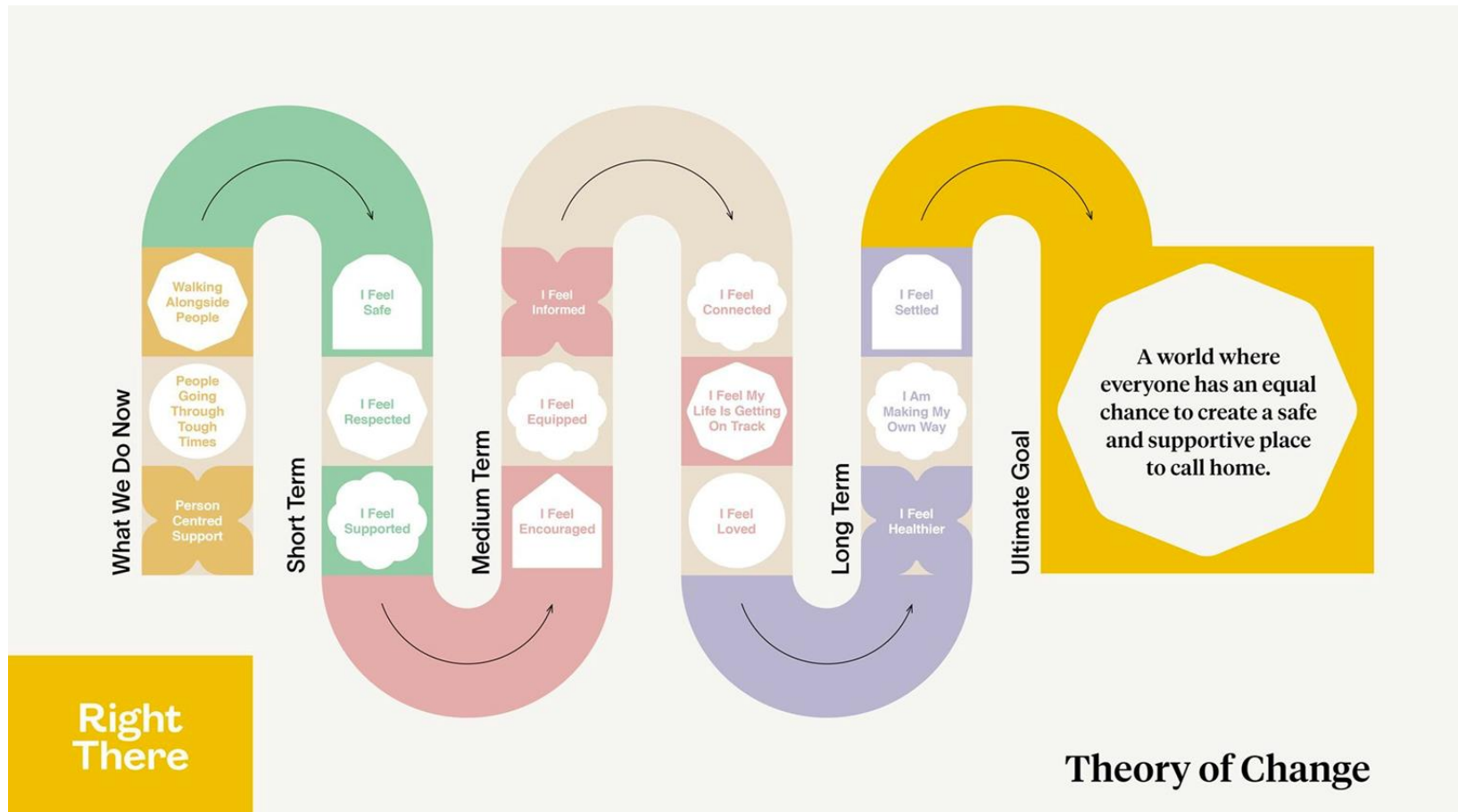
## Impact comes last!



### Discussion point:

What is the key impact from your business?

## Useful tool: Theory of Change...start with the end goal and work back



# Theory of Change

## **Step 1 Clarify end goal**

- Unlike other approaches, with a Theory of Change we want to start at the vision we would like to see. We take the distant goal and we work from there to where we are currently. When setting this end goal, try and use numbers and targets where possible.
- A good way to think about this end goal is to imagine what the newspaper headline might read like after you have reached that goal.

## **Step 2 Stakeholder Map**

- Be clear on who needs to be on the journey, who is affected by your organisation and who might have an interest in the organisation succeeding. Try and write them out and identify all parties.

## **Step 3 Backwards Map**

- As we are starting at the end and work to where we are now, you will start to map backwards all of the changes that need to happen. e.g. for this to happen, what needs to happen before that. This will look much like a critical path in reverse.

# Theory of Change (cont.)

## ***Step 4 Reflect on assumptions***

- Don't take anything for granted! Make sure you are being realistic and open with your assumptions. Try and find evidence for your position rather than from your hopes or beliefs. Read widely and don't be afraid to change if a better solution is found.

## ***Step 5 Clarify actions***

- Now that you have started to identify the path that you should take, who is going to do what to make things happen. Put names and times and dates on your programme to begin to action the plan.

## ***Step 6 Clarify outcome measures***

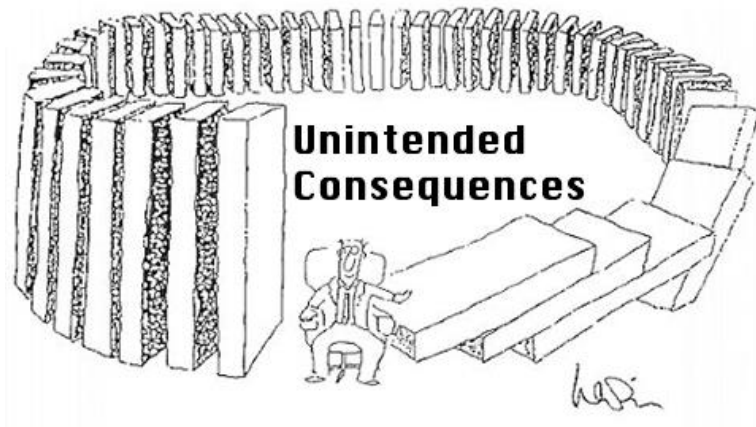
- Start to concisely phrase your theory of change. What are your inputs, processes, outputs, outcomes and impact as a result of your mapping? For example, by using the best staff with the resources you need, you can deliver a service, that service can help a specific number of people with a particular need and those people are changed as a result of your service.

## ***Outcomes***

- Once you have thought about your outcomes, you can start to identify short, medium and long term outcomes. It would be helpful to use time periods as a way to easier identify the impact your organisation will have.



## Consider - trade-offs and unintended consequences



*"Are you sure about this? I know you want to make all employees happy, but we'll probably have to replace carpets on all floors."*



**NBS  
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# Developing your own Impact Measurement Strategy



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## 5 step framework for impact measurement

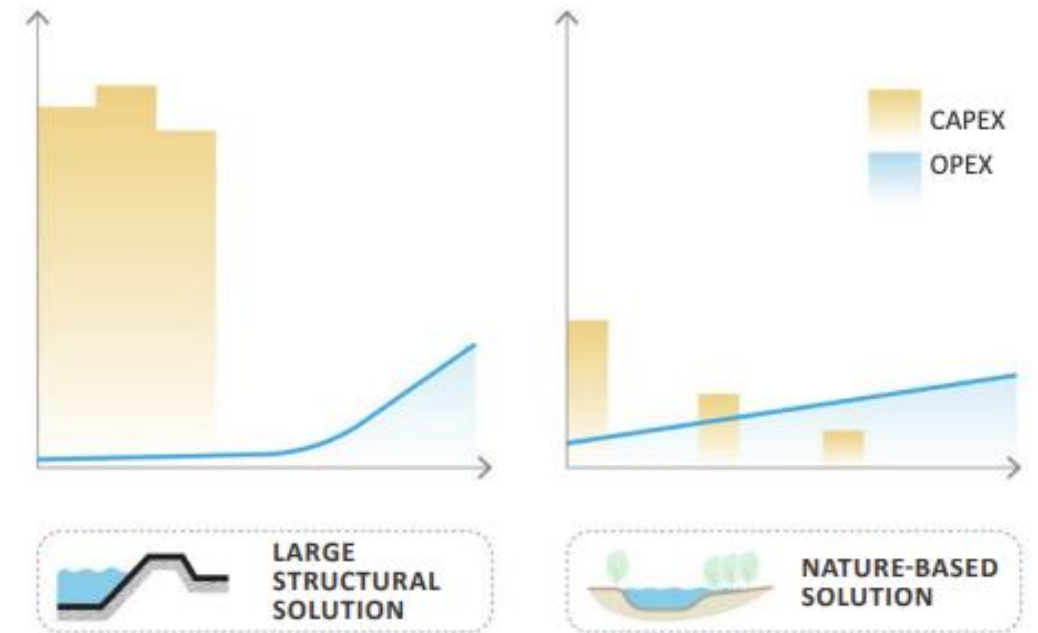


- 1. Set objectives:** what is your rationale for measuring impact? In the short term and long term.
- 2. Analyse stakeholders:** what impact information do different stakeholders need? Consider both internal and external stakeholders.
- 3. Measuring results:** what are the best ways to measure the impact you want? Keep it simple!
- 4. Verifying and valuing impact:** are you capturing meaningful impact information? Are you capturing real value? Double-check against your objectives. Update as relevant.
- 5. Monitoring and reporting:** Put in place a timely and transparent process of feedback back to stakeholders. Consider regulatory requirements e.g. CSRD

# Objective for Measuring Impact

## Example 1: Securing New Business

- In Europe, more than 80% of NbS are funded by the public sector e.g. Sustainable Urban Drainage Systems, Nature Restoration etc
- Stakeholder needs & measurement data required: In the public sector (and sometimes in the private sector), cost-benefit analysis (CBA) is a common tool used to make investment decisions. CBAs compare the capital expenditure (CAPEX) and operating expenses (OPEX) of different solutions with the potential benefits. E.g. investment in NbS v conventional ‘grey’ infrastructure solutions.
- Nature-based enterprises delivering nature-based solutions need to be able to provide data on capital and operating expenses over time as well as data on impacts (benefits over time). Benefits may be social as well as environmental.
- New EU reporting (CSRD) means most large companies now have to report on social and environmental impact. They may request NbEs to provide input into this reporting (see Impact Part II).



Source: Wishart et al. 2021, cited in <https://openknowledge.worldbank.org/entities/publication/9ed5cb4b-78dc-42a4-b914-23d71cef24a2>

# NBS Cost Benefit Tool



INITIAL DATA	
Zone	Default ▾
Max. precipitation	daily <input type="text" value="300"/> mm/day
Roof	Extensive ▾
Expected lifespan	<input type="text" value="10"/> years
Calculate with	Investment ▾
Initial investment	<input type="text" value="150000"/> €

Advanced settings

CALCULATE

Air quality		
Data	Average value	Unit
NO <sub>2</sub>	<input type="text" value="0.14"/>	g/m <sup>2</sup>
SO <sub>2</sub>	<input type="text" value="0.27"/>	g/m <sup>2</sup>
PM10	<input type="text" value="1.135"/>	g/m <sup>2</sup>

Data	Extensive	Intensive
Total Air Quality Improvement	<input type="text" value="0.14"/> €	<input type="text" value="0.44"/> €

Carbon		
Data	Average value	Unit
CO <sub>2</sub> emission maintenance	<input type="text" value="0.33"/>	kg/(year* m <sup>2</sup> )
CO <sub>2</sub> emission production	<input type="text" value="25.2"/>	kg/m <sup>2</sup>
CO <sub>2</sub> saved due to energy reduction	<input type="text" value="1.796"/>	kg/(year* m <sup>2</sup> )
CO <sub>2</sub> stored in green roofs	<input type="text" value="2.5"/>	kg/(year* m <sup>2</sup> )

Advanced settings

CALCULATE

<https://growgreenproject.eu/nbs-benefit-calculator/#:~:text=This%20prototype%20tool%20attempts%20to,quantified%20automatically%20by%20the%20calculator.>

**Can you capture this level of impact data for your business activities?**

# Objective for Measuring Impact

## Example 2: Secure Financing

- Stakeholder needs and measurement requirements: Investors in your business, including public sector funding agencies and/or grant awarding bodies, want to know what return on investment they will see.
- Private sector investors, including impact investors, often want to see monetary return on investment (RoI). Non-monetary impact indicators may be of varying levels of importance.
- In Europe, the EU Sustainable Finance Taxonomy may influence investment decisions in particular by financial institutions and banks.
- Public sector investors, including grant awarding bodies, may be interested in monetary RoI but they may also be interested in Social Return on Investment (SRoI).
- While most large companies in the EU have reporting requirements (CSRD).



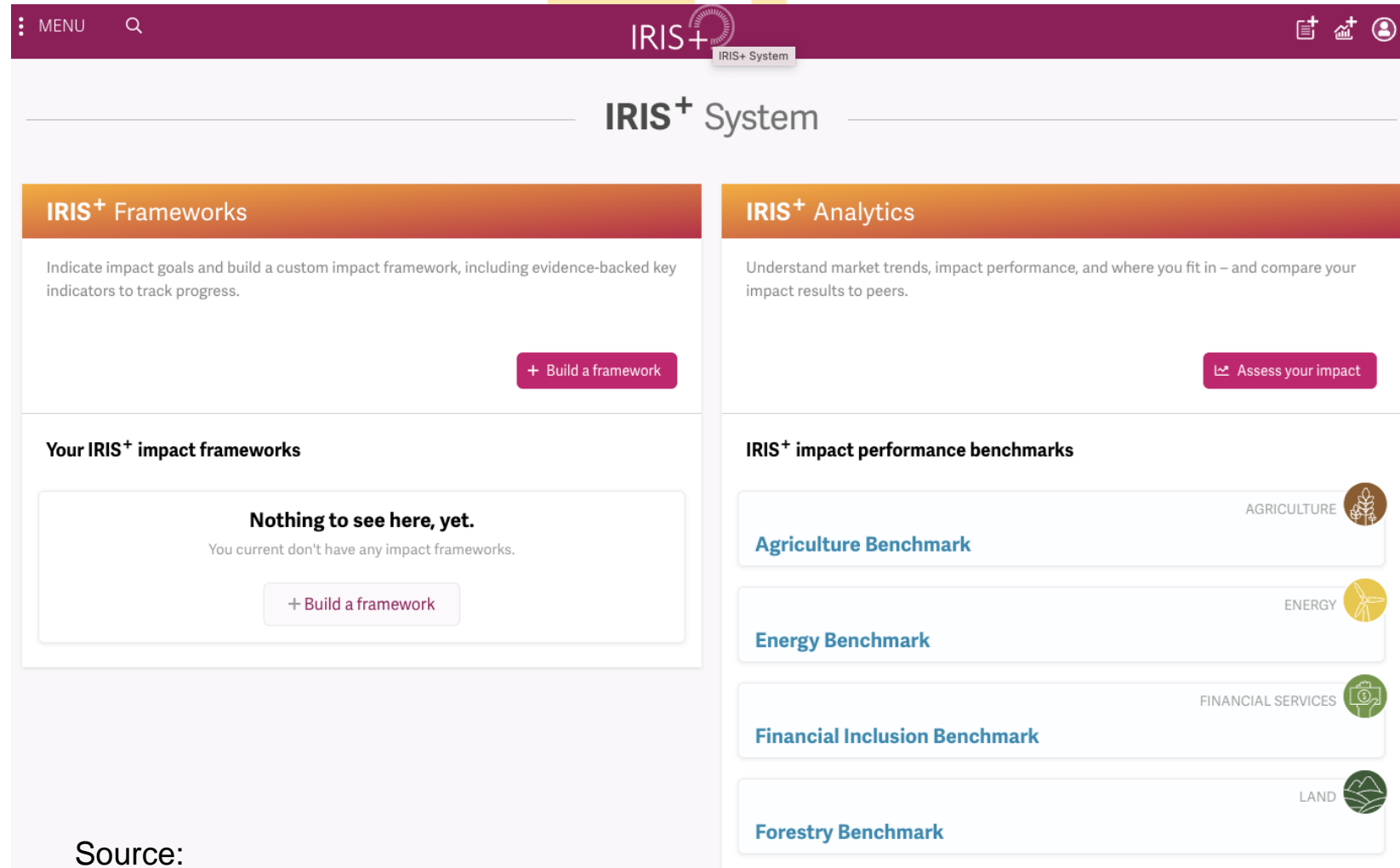
- 1. What is it?** The EU Taxonomy helps to reduce green-washing by directing investments toward activities that are aligned with the EU goal for just transition to a net zero, nature positive economy by 2050.
- 2. How does it work?** It is a classification system that defines criteria for economic activities that are aligned with EU sustainability goals. Protection and restoration of biodiversity and ecosystems is one of the six objectives of the Taxonomy. Conservation including restoration of habitats, ecosystems and species is an economic activity aligned with the Taxonomy. Investment in any other activity aligned with the Taxonomy, for example in circular economy, must show they Do No Significant Harm (DNSH) to Biodiversity and Ecosystems.
- 3. How is it operationalised in investment decisions?**
  - Since 2023, large companies have to report on how their investments are aligned with the taxonomy. While investments meeting the Taxonomy criteria are still low (only 20% of investments were aligned in 2023), reporting shows an increase in taxonomy related investments each year. The highest investments are by utility companies.
  - Financial institutions are using the Taxonomy. In 2023, 90% of green bonds issued by EU public actors referenced the EU Taxonomy to illustrate their commitment of using the raised funds for green projects.
  - Banks are also using the EU Taxonomy in their lending strategies and to assess companies' investment plans.
- 4. What does this mean for investment in Nature-Based Enterprises?** Nature-based enterprises are well placed to secure investment from banks and financial institutions if they can show their activities and outcomes (impact) are aligned with the EU Taxonomy criteria.



# Useful tool: IRIS+

IRIS+ is a widely accepted impact accounting system that impact investors use to measure, manage, and optimize their impact. With over 40,000 registered users, half of all impact investors and the majority of fund managers, banks use IRIS metrics.

You can develop your own framework for impact assessment or look at the performance benchmarks investors use for your sector.



The screenshot shows the IRIS+ System dashboard. At the top, there is a purple navigation bar with a 'MENU' icon, a search icon, the 'IRIS+ System' logo, and user profile icons. Below the navigation bar, the main content area is divided into two columns. The left column is titled 'IRIS+ Frameworks' and contains a sub-section 'Your IRIS+ impact frameworks' which currently shows 'Nothing to see here, yet.' with a '+ Build a framework' button. The right column is titled 'IRIS+ Analytics' and contains a sub-section 'IRIS+ impact performance benchmarks' with four categories: 'Agriculture Benchmark', 'Energy Benchmark', 'Financial Inclusion Benchmark', and 'Forestry Benchmark'. Each benchmark category has a corresponding icon and a '+ Assess your impact' button.

Source:  
<https://iris.thegiin.org/plus/home/>

# Useful tool: Social Return on Investment (SROI)

Social Return on Investment (SROI) is another commonly known framework “for measuring and accounting for (a) broader concept of value; it seeks to reduce inequality and environmental degradation and improve wellbeing by incorporating social, environmental and economic costs and benefits” [Guide to SROI](#) (2012) pp.8.

Multiple useful tools and guidelines are available on the [Institute for Social Value](#) website.

SROI Value Map					
This sheet is designed to help you develop your SROI analysis. If your analysis does not use monetary valuation of outcomes, please use the "Value Map (non-SROI)" tab. For further information please see the "Guidance" tab.					
Stage 1		Stage 2			
Who and how many?		At what cost?		Outputs	What changes?
Stakeholders		Inputs			Outcomes
					Outcome description
Who do we have an effect on?	How many in group?	What will/did they invest and how much (money, time)?	Financial value (for the total population for the accounting period)	Summary of activity in numbers.	What is the change experienced by stakeholders?
Who has an effect on us?					

Source: <https://socialvalueuk.org/resources/sroi-value-map/>



# Objective for measuring impact

## Example 3: Measuring progress towards achieving Mission

- Many NbEs are mission driven organisations. Achieving this mission is the raison d'être of the organisation and therefore measuring progress or contribution towards the mission is an intrinsic, motivational requirement for owners, staff and partners.
- Stakeholder needs and measurement requirements: If mission achievement is the primary rationale for measuring impact, then an organisation has more freedom to identify which elements of the mission are most important and what indicators should be used to measure progress. These may be similar to previous financial or social indicators or related to more environmental indicators such as Biodiversity Net Gain (BNG).
- A Theory of Change is a useful tool for identifying how goals related to the organisational mission can be translated into impact indicators relating to outcomes and activities.



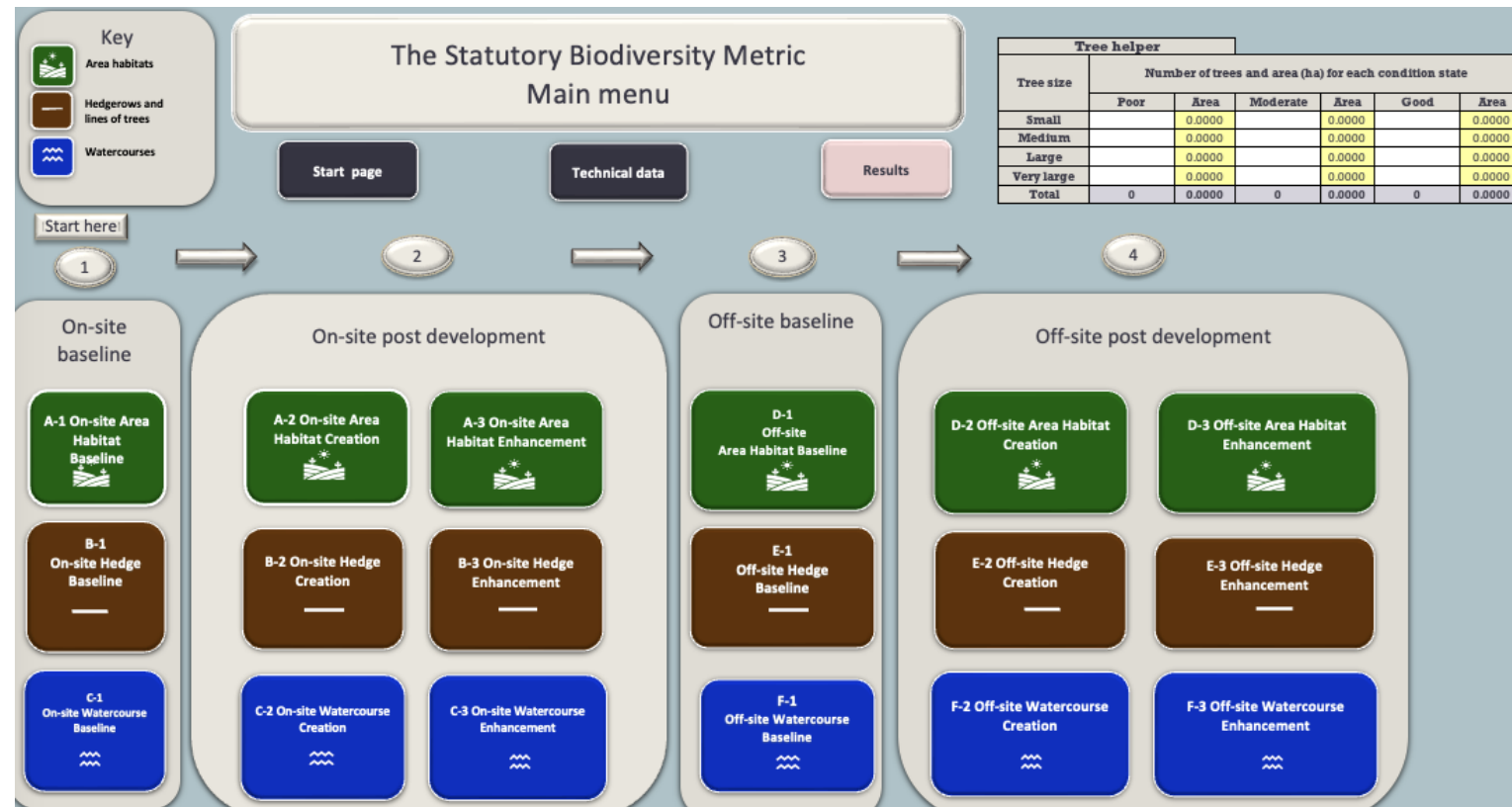
# Broad range of NbS Indicators relating to economic, environmental, social and health objectives.

For an exhaustive overview of NBS indicators, see European Commission: Directorate-General for Research and Innovation, *Evaluating the impact of nature-based solutions – A handbook for practitioners*, Publications Office of the European Union, 2021, <https://data.europa.eu/doi/10.2777/244577>

	Description	Classification and Examples
<b>Outcome Indicators</b>	<p>They are used to measure the expected nature-based solutions results. Based on the scientific and grey literature review, as well as through workshops with cities, the Connecting Nature project has identified four categories of outcome indicators.</p> <p>Each of the four categories presents an exhaustive list of indicators, which would provide sufficient information to assess the broad range of possible outcomes from nature-based solutions.</p>	<ul style="list-style-type: none"> <li>• Health and Wellbeing (i.e. General Wellbeing and Happiness)</li> <li>• Social Cohesion and Justice (i.e. Empowerment)</li> <li>• Environmental (i.e. Air Temperature Reduction)</li> <li>• Economic (i.e., New Businesses 'attracted' or started and additional rates received)</li> </ul>
<b>Primary Indicators</b>	<p>NBS uses are measured by these indicators, which allow defining their intervention's area of influence, by knowing the communities directly involved in it, and those that may be influenced by indirect effects</p> <p>This analysis can be done through NBS mapping, using GIS or remote devices strategies.</p>	<ul style="list-style-type: none"> <li>• Type, frequency and duration of interaction with nature-based solutions</li> <li>• Perceived quality of nature-based solutions</li> </ul>
<b>Participatory Planning and Governance Indicators</b>	<p>These indicators measure the outputs and outcomes from the nature-based solutions design and implementation process.</p> <p>These indicators are not intended to evaluate the final results of the interventions. However, they are considered fundamental to understand the underlying drivers of success or failure of the nature-based solutions.</p>	<ul style="list-style-type: none"> <li>• Co-production (i.e. openness or inclusivity)</li> <li>• Governance capacities (i.e. skills or resources)</li> <li>• Actionable knowledge (i.e. policy learning)</li> <li>• Organisational development (i.e. leadership skills)</li> </ul>

# Tool: Biodiversity Net Gain (BNG)

- Measuring Biodiversity Net Gain (BNG) is mandatory for new developments in the UK.
- Developers must deliver a BNG of 10% more or better quality natural habitat than there was before development.
- The UK Government provides many useful guidelines and tools for measuring BNG. These tools have provided inspiration and guidance for many other countries



Source <https://www.gov.uk/government/collections/biodiversity-net-gain>



## Case study:



### Purpose

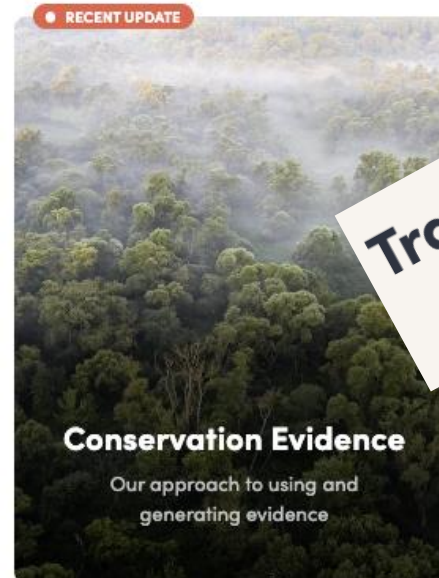
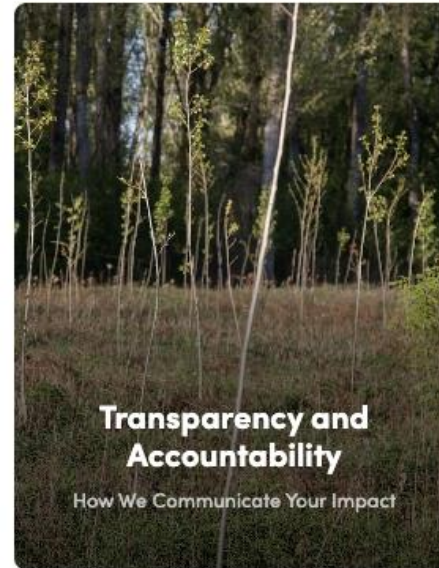
To restore wild ecosystems, support wildlife and biodiversity and help fight climate change.

### Approach to impact

Impact on the ground is funded through paying members. In order to be as transparent as possible Mossy Earth openly publish their methodologies for measuring impact and their results on their website.

### Source:

<https://www.mossy.earth/methodologies/trust-transparency>



**Transparency dashboard**

We want to be as transparent as possible, so on this page you can break down the total impact we've had, the specific actions we've taken, and the costs associated with projects, over the life of Mossy Earth

# Summary:

For impact measurement to be effective, it must be:

1. **Relevant:** related to, and arise from the outcomes it is measuring;
2. **Helpful:** in meeting the needs of stakeholders', both internal and external;
3. **Simple:** both in how the measurement is made, and in how it is presented;
4. **Natural:** arising from the normal flow of activity to outcome;
5. **Certain:** both in how it is derived, and in how it is presented;
6. **Understood and accepted:** by all relevant stakeholders;
7. **Transparent and well-explained:** so that the method by which the measurement is made, and how that relates to the services and outcomes concerned are clear;
8. **Founded on evidence:** so that it can be tested, validated, and form the grounds for continuous improvement



### Pair and Share / Group activity:

Why are you measuring impact – what is your objective / driving rationale?

Who are the most important stakeholders?

What kind of measurement data do your stakeholders need?

## ACTIVITY



Source: Adapted from [Impact Europe](#) (2024)

## Final Reflection: Rationale and Factors to Consider

*Reflect on your learning:*

- What is your key takeaway from this lesson?
- What new information will you share with others?

## Sources of Further Reading

- [CIPE \(n.d.\). \*Logical framework for evaluation\*. Accessed from: <https://ppd.cipe.org/tools/ppd-handbook/d-monitoring-and-evaluation-framework-for-ppd/d-6-evaluation-of-regulatory-and-economic-outcomes-and-impact-of-ppds/>](https://ppd.cipe.org/tools/ppd-handbook/d-monitoring-and-evaluation-framework-for-ppd/d-6-evaluation-of-regulatory-and-economic-outcomes-and-impact-of-ppds/)
- [Amani Institute \(2022\). \*Setting your social impact monitoring and evaluation for success\*. Accessed from: <https://amaniinstitute.org/setting-social-impact-monitoring-evaluation-success/>](https://amaniinstitute.org/setting-social-impact-monitoring-evaluation-success/)
- [Right There \(n.d.\). Accessed from: <https://rightthere.org/about-our-theory-of-change/#>](https://rightthere.org/about-our-theory-of-change/#)
- [Social enterprise toolkit \(n.d.\). \*Chapter 8 Social Impact\*. Accessed from: <https://socialenterprisetoolkit.ie/chapter-8-social-impact/>](https://socialenterprisetoolkit.ie/chapter-8-social-impact/)
- [Impact Europe \(2024\). \*How to do impact measurement and management\*. Accessed from: <https://www.impacteurope.net/sites/www.evpa.ngo/files/publications/how-to-do-impact-measurement-and-management-2024.pdf>](https://www.impacteurope.net/sites/www.evpa.ngo/files/publications/how-to-do-impact-measurement-and-management-2024.pdf)
- [Institute for Social Value \(n.d.\). \*SROI Value Map\*. Accessed from: <https://socialvalueuk.org/resources/sroi-value-map>](https://socialvalueuk.org/resources/sroi-value-map)
- [European Commission: Directorate-General for Research and Innovation, \*Evaluating the impact of nature-based solutions – A handbook for practitioners\*, Publications Office of the European Union, 2021, <https://data.europa.eu/doi/10.2777/244577>](https://data.europa.eu/doi/10.2777/244577)
- [Gov.uk \(n.d.\). \*Biodiversity Net Gain\*. Accessed from: <https://www.gov.uk/government/collections/biodiversity-net-gain>](https://www.gov.uk/government/collections/biodiversity-net-gain)
- [European Commission \(2014\). \*Proposed Approaches to Social Impact Measurement\*. Accessed from: \[https://social-economy-gateway.ec.europa.eu/document/download/c1bd2c6d-f51c-43d8-b74b-b02ead31b01b\\\_en?filename=proposed%20approaches%20to%20social%20impact%20measurement%20in-KE0414665ENN\\\_0.pdf\]\(https://social-economy-gateway.ec.europa.eu/document/download/c1bd2c6d-f51c-43d8-b74b-b02ead31b01b\_en?filename=proposed%20approaches%20to%20social%20impact%20measurement%20in-KE0414665ENN\_0.pdf\)](https://social-economy-gateway.ec.europa.eu/document/download/c1bd2c6d-f51c-43d8-b74b-b02ead31b01b_en?filename=proposed%20approaches%20to%20social%20impact%20measurement%20in-KE0414665ENN_0.pdf)



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