

GREEN SKILLS FOR CITIES

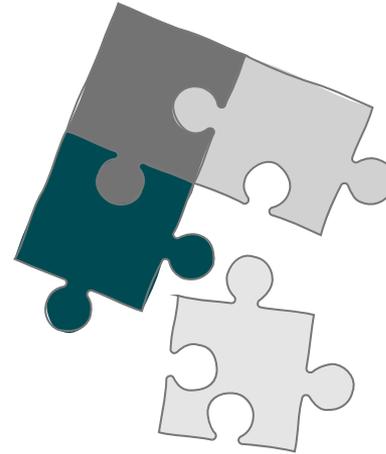
STP
Shared Lessons
Business
Sustainability &
Financing NbS

Vienna University of Economics
and Business (WU)



Content of this Lesson

1. An Introduction to Business Sustainability
2. Business Model Canvas
3. Financing NbS
4. An Introduction to Pitching



SECTION
ONE

An Introduction to Business Sustainability

Glossary

Business Sustainability: The “Business Sustainability Typology” used in these slides was developed by Dyllick and Muff (2015). They cluster sustainable business performance in four stages, enabling a practical distinction between early, intermediate and advanced stages of business sustainability in practice. They herein determine three different shifts away from 'business as usual' towards Business Sustainability 1.0, 2.0 and 3.0.

Consumer/user: is the **person/organization** who has the rights to consume a good or service. A consumer/user may or may not be the actual buyer of a product or service.

Corporate Social Responsibility (CSR): the responsibility of enterprises for their impact on society (...). Companies can become socially responsible by integrating social, environmental, ethical, consumer, and human rights concerns into their business strategy and operations (EC, no date). The downsides of this idea will be explained in the presentation.

Degrowth: is a political and economic theory which emphasizes changing priorities of society from economic growth and production to a society based on sustainability, well-being, concern for environment and co-operation.

Economic Growth: an increase in the production of goods and services in an economy.

Entrepreneur: a person who launches a new enterprise and shoulders most of the risks while obtaining the majority of the benefits.

Glossary

Lean management: is an approach within an organization/business that supports continuous improvement and systematically seeks to achieve small, incremental changes in processes to improve quality and efficiency.

Limits to Growth: are limits of the ecosystem to absorb waste and replenish raw materials in order to sustain the economy.

Pivoting: describes the process a company intentionally takes to shift or turn into a new direction and try out something new (e.g. learning from small failures). A business pivot is a key strategic move.

Shareholder: An owner of shares in a limited company or limited partnership. A shareholder is a member of the company.

Stakeholder: All those with interests in an organization; for example, as shareholders, employees, suppliers, customers, or members of the wider community (who could be affected by environmental consequences of an organization's activities).

Triple-Bottom-Line: The TBL consists of three elements: profit, people, and the planet. Companies with a TBL focus as much on financial as on social and ecological concerns.

Unlimited Growth // Limits to Growth // Degrowth

The current economic behavior is primarily influenced by GDP and its' growth as a key indicator for a nation's wealth (Rubio-Mozos et al., 2019).

But:

There is an unmistakable **correlation between economic growth since the industrial revolution and the over-usage of finite resources, polluting land, air and water** - causing our earth's climate to change (IPCC, 2022; Meadows et al., 1972)

Unlimited Growth // Limits to Growth // Degrowth

Why a paradigm shift is needed

- resource scarcity
- environmental pressures
- climate change
- globalization
- demographic changes
- persistent poverty
- social injustice
- urbanization
- ...

A light article on criticism on growth can be read [here](#).



“The Business of Business is Business”

by Milton Friedman

- Profit orientation of companies entail a **social function**
- By generating profit, businesses act responsibly to the labour market, and contribute to the growth of GDP of a nation.
- Hence the **only responsibility businesses have is to create as much profit as possible.**



Photo by Markus Spiske, 2020

BUT you cannot do business on a dead planet. Excluding any responsibility from businesses is now more and more contested. Even within **neoliberal economic streams**.

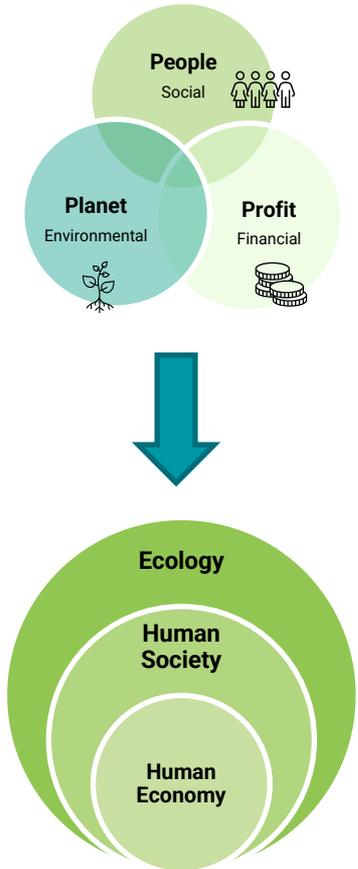
Climate crisis+resource extraction+pollution+social injustice+exploitation of environment and people → Are challenges no business can avoid!

The New Way of Doing Business

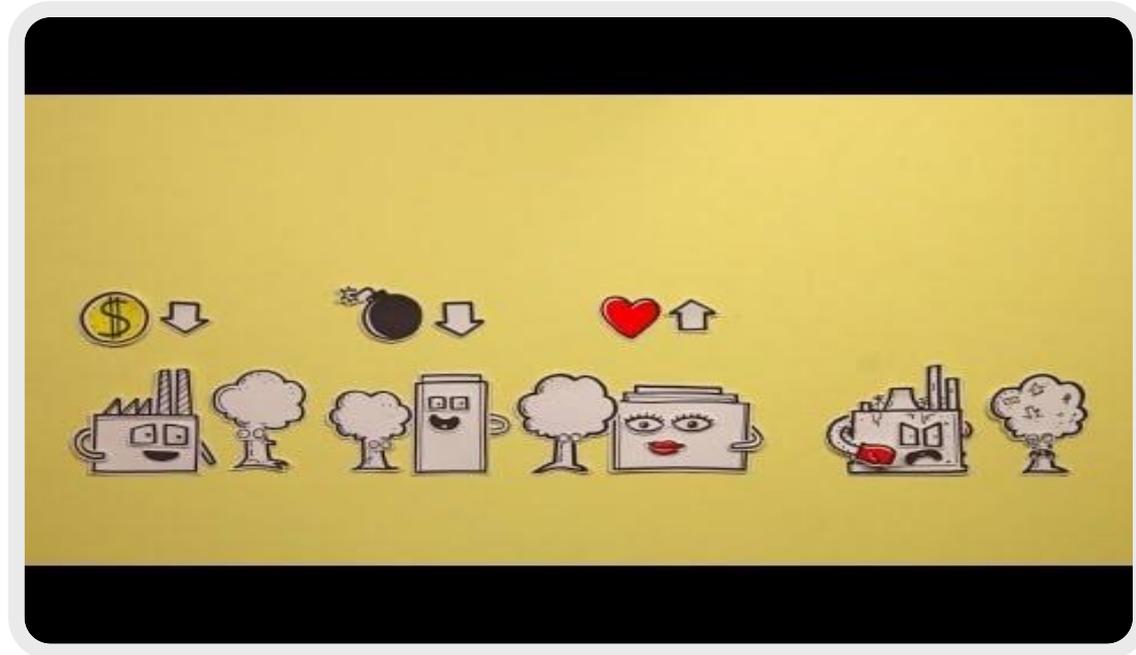
- The **Triple Bottom Line paradigm** of planet, people and profit being treated equally and having overlapping goals, has gained prominence
- **BUT** we need to shift towards a more accurate understanding of how business is embedded → This is where **NbS** can and should play an important role to understand it, as:
 - the economy **cannot** be disconnected from natural capital, i.e. from the natural resources.

The commonly used **Triple Bottom Line** model is something we have to move away from. Instead, the model should be shown as concentric circles, with the Planet (ecology) underpinning the other two.

- **Nature is the most underestimated solution and one of our best chances to fight the challenges of the 21st century and beyond.**



Let's watch this video about Business Typology by Dyllick & Muff (2016):



<https://www.youtube.com/watch?v=AEFqUh4PMml>

Business Sustainability Typology

They cluster sustainable business performance in four stages, enabling a practical distinction between early, intermediate and advanced stages of business sustainability in practice. They herein determine three different shifts away from 'business as usual' (0.0) towards Business Sustainability 1.0, 2.0 and 3.0.

Business Sustainability 0.0 - business as usual, based on purely economic interest. This is the understanding of Milton Friedman.

Business Sustainability 1.0 - mostly CSR activities, where businesses recognize and embrace challenges and opportunities that occur from societal and environmental concerns and incorporate them into given practices and processes “without changing the basic business premise and outlook” (Dyllick and Muff 2016, p. 163). In this stage, creating economic value remains the main target while addressing sustainability issues results in benefits for the business itself.

Source: Dyllick and Muff, 2015

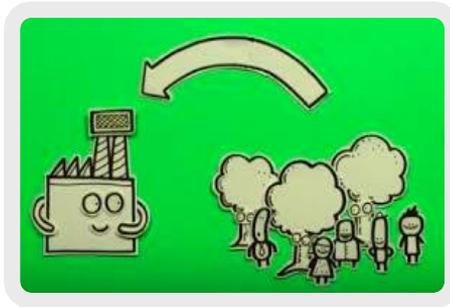


Source: Greenpeace, no date

Business Sustainability 2.0 and 3.0

Business Sustainability 2.0 - following the triple bottom line approach, hence balancing the social, environmental and economic impact of the business activities. In practice, this means to broaden the value of shareholder value by the addition of social and environmental values and by implementing particular programmes and actions to reach intended set-up sustainability goals.

Business sustainability 3.0 - considered as truly sustainable business performance. Characterized by its outside-in perspective, where businesses start by looking at the external world and related challenges first, before developing the actual business idea. Emphasis is not on minimizing or outbalancing negative business performance but rather on creating positive impact for the greater good.



Source: Dyllick and Muff, 2016

From Business as usual to Business as unusual

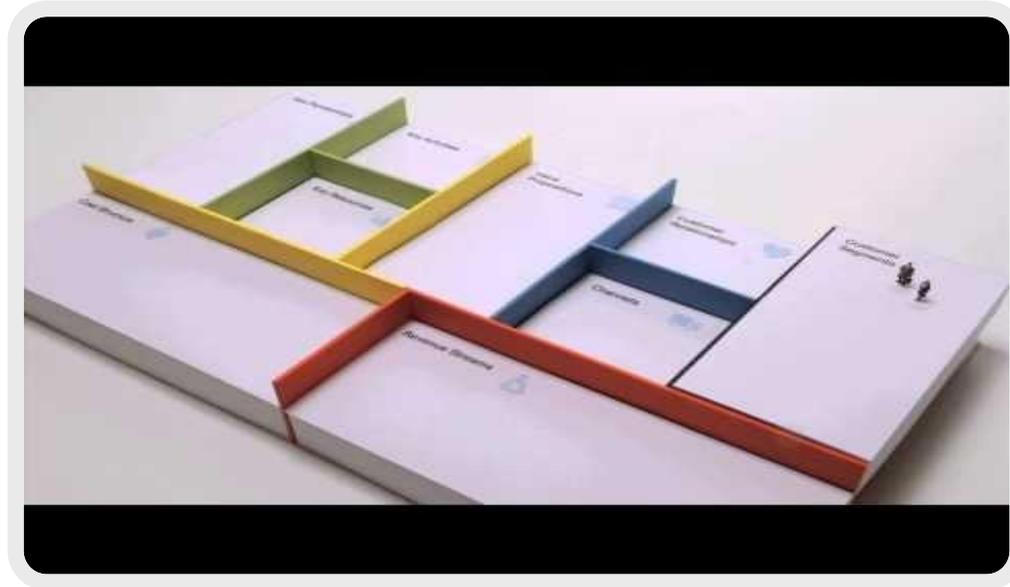
BUSINESS SUSTAINABILITY TYPOLOGY (BST)	Concerns (What?)	Values Created (What for?)	Organizational Perspective (How?)
Business-as-Usual	Economic concerns	Shareholder value	Inside-out
Business Sustainability 1.0	Three-dimensional concerns	Refined shareholder value	Inside-out
Business Sustainability 2.0	Three-dimensional concerns	Triple bottom line	Inside-out
Business Sustainability 3.0	Three-dimensional concerns	Creating value for the common good	Outside-in
The key shifts involved:	1 st shift: broadening the business concern	2 nd shift: expanding the value created	3 rd shift: changing the perspective

Source: Dyllick and Muff, 2016, p. 168

SECTION
TWO

Business Model Canvas

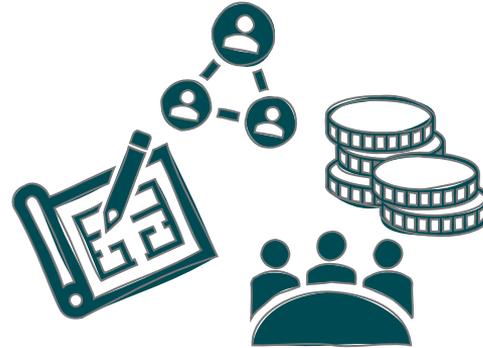
Watch this video on „Business Model Canvas Explained“



<https://www.youtube.com/watch?v=QoAOzMTLP5s>

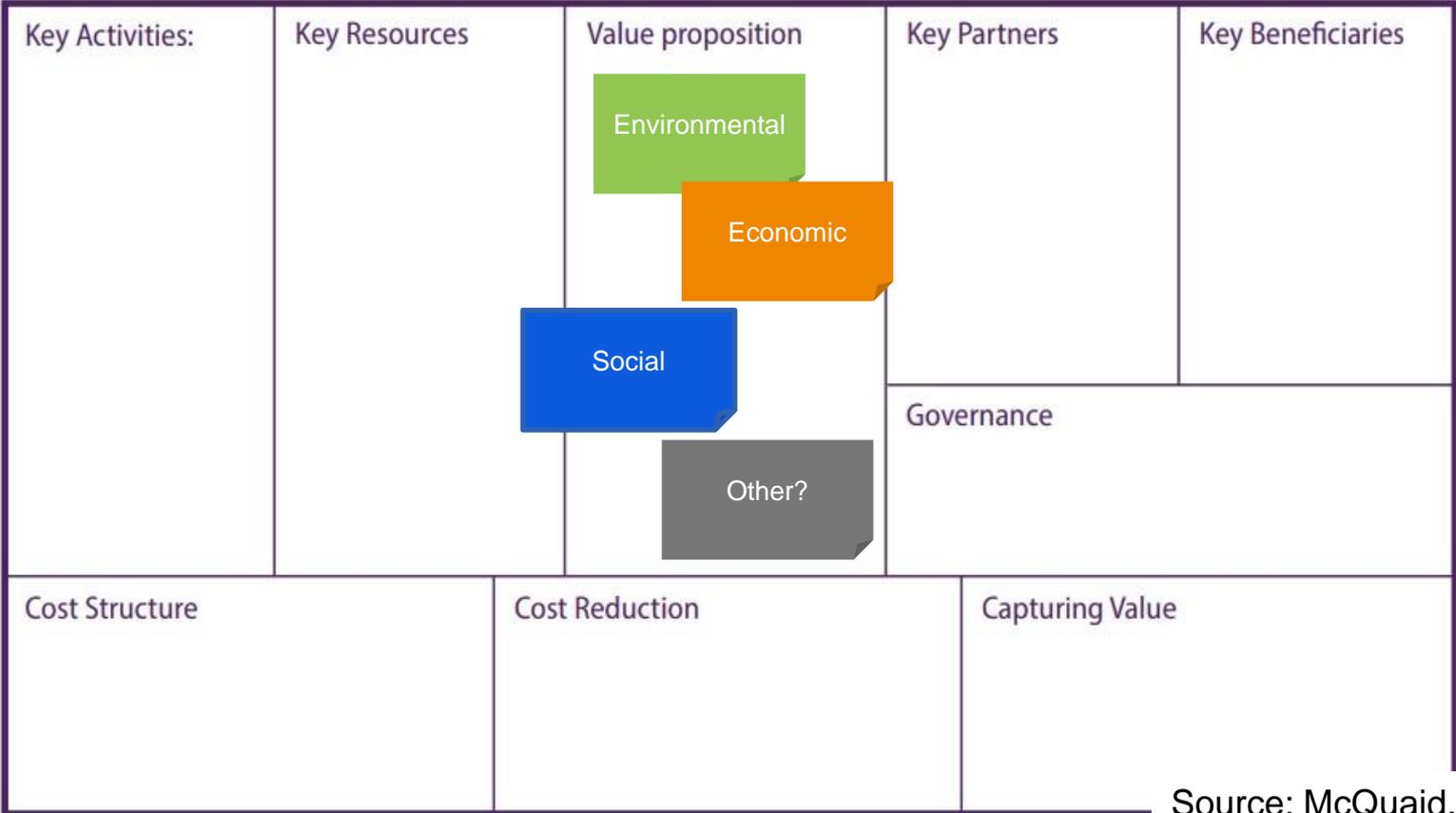
Why do we need a Business Model Canvas for NbS?

- To communicate the benefits of an NbS and engage with relevant partners
- Plan
- Identify partners
- Explore resources of finance



But we need to adapt the Business Model Canvas in order to be useful for NbS

Business Model Canvas for NbS



How is it different to a “normal” Business Model?

- **Value proposition** remains at the centre but is expanded to consider **environmental, social and economic** value propositions.
- **Key Beneficiaries** is used instead of **Customer Segments**: to broaden the consideration of possible ‘customers’.
- **Key Partners** and **Key Beneficiaries** have been positioned side-by-side: This reflects the overlap that often exists between partners and beneficiaries involved with NbS. E.g. the community is often a key beneficiary but is also usually an important partner.
- **Governance**: Reflects the importance of how the NbS will be managed on an operational basis. E.g. how different stakeholders will be engaged in ongoing management and operations, and what governance structures are needed to facilitate this.
- **Cost Reduction**: This reflects the specific characteristics of NbS which sometimes allow for different ways to reduce direct costs.

Source: McQuaid, 2019, p. 5

SECTION
THREE

Financing NbS

Glossary

Blended financing: strategic use of development finance for the mobilization of additional finance towards sustainable development in developing countries. Blended finance attracts commercial capital towards projects that contribute to sustainable development, while providing financial returns to investors. (OECD, no date)

Co-production: Co-production is a way of working where people come together in an equal partnership to create something new, or make changes to an existing situation.

Concessional finance: concessional finance is below market rate finance provided by major financial institutions, such as development banks and multilateral funds, to developing countries to accelerate development objectives. The term concessional finance does not represent a single mechanism or type of financial support but comprises a range of below market rate products used to accelerate a climate or development objective. (EIB, 2019)

Debt finance: Loans from a bank or other financial intermediary that is repaid by the borrower over time, usually with interest. It works similarly to a mortgage or a car loan. The interest margin and potential level of security (also called collateral) required depend on factors such as the type of capital expenditure ('project riskiness'), tenor (length of loan) and the financial strength of the borrower. (EIB, 2019)

Equity financing: Monetary contribution from investors (shareholders) who are looking to support the company and eventually sell their stake (ideally at a premium). The investors are exposed to more risk than debt providers (ranking 'subordinate' – e.g. lenders get their money first in case a company is liquidated). (EIB, 2019)

Governance: The system of values, policies and institutions by which a society manages its economic, political and social affairs through interactions within and among the state, civil society and private sector. It is the way a society organizes itself to make and implement decisions—achieving mutual understanding, agreement and action. (UNDP, 2021)

Glossary

Green Bonds: differentiated from a regular bond by this label, which signifies a commitment to exclusively use the funds raised to finance or re-finance “green” projects, assets or business activities. (OECD, no date)

Hybrid financing: Refers to financing from different sources of concessional finance. They combine debt and equity feature.

Incentives: Rewards or penalties offered by government or management to induce an economic sector, company or group of workers to act in such a way as to produce results that plan objectives or policy goals.

Official development assistance (ODA): defined as government aid that promotes and specifically targets the economic development and welfare of developing countries. (OECD, no date)

Payments for Ecosystem Services (PES): an innovative approach to nature conservation. PES is the name given to a variety of arrangements through which the beneficiaries of environmental services, from watershed protection and forest conservation to carbon sequestration and landscape beauty, reward those whose lands provide these services with subsidies or market payments. (WWF, 2020)

Stewardship: The stewardship of a nature-based solution describes the ongoing participatory management and maintenance of the nature-based solution. Stewardship includes the monitoring and evaluation of the nature-based solutions, which enables the making of adaptations that ensure long-term sustainability and resilience. (McQuaid and Fletcher, 2019)

Tradeable environmental permits: An economic policy instrument under which rights to discharge pollution or exploit resources can be exchanged through either a free or a controlled permit-market. Examples include individual transferable quotas in fisheries, tradable depletion rights to mineral concessions and marketable discharge permits for water-borne effluents. (EEA, 2021)

What do we mean by ‚financing‘ NbS?

- NbS are largely a cost-effective way of addressing climate change and biodiversity challenges that result in **economic, social** and **environmental** benefits.
- Financing refers to **sourcing funds to create and maintain** a NbS project.



Public Financing

- **EU funding:** e.g. European Structural and Investment Funds (ESIF), Horizon2020, Programme for the Environment and Climate Action (LIFE), etc.
- **National Governments:** funds and budgets established by national or sub-national governments with the aim to financially or technically support adaptation action.
 - Innovative use of public budgets (e.g. making use of untapped resources such as public health budget)

Source: EEA, 2017; Trinomics and IUCN, 2019

Private Financing

- **Capital Market:** Bonds (e.g. Green Bonds, Natural Capital Financing Facility (NCFF), etc.)
- **Investment and Commercial Banks:** Some public financial institutions offer low-interest loans for projects delivering environmental and/or social benefits.
- **Foundations:** e.g. Royal Parks Foundation (UK)
- **Innovative Funding:** e.g. Crowd Funding
- **Others:** Residents, communities, private companies

Source: EEA, 2017; Trinomics and IUCN, 2019

Examples of Private Investment Sources

Private-sector finance for NbS includes a wide range of investment categories:

- **Sustainable supply chain:** sustainable forest, agricultural, fisheries and seafood products
- **Biodiversity offsets:** conservation measures to achieve no net loss/gain in biodiversity at the project level.
- **Private equity impact investments:** investments in conservation and biodiversity through thematic private equity funds, incubators, venture capital firms and exchange-traded funds (ETFs).
- **Conservation NGOs:** actively engaged in activities related to NbS
- **Philanthropy:** family and corporate foundations.
- **Voluntary carbon markets:** decarbonization through natural carbon solutions
- **Private finance:** development finance institutions, development banks and other development agencies, and climate funds such as the Global Environment Facility and the Green Climate Fund.
- **Payments for Ecosystem Services (PES):** Market-based solutions

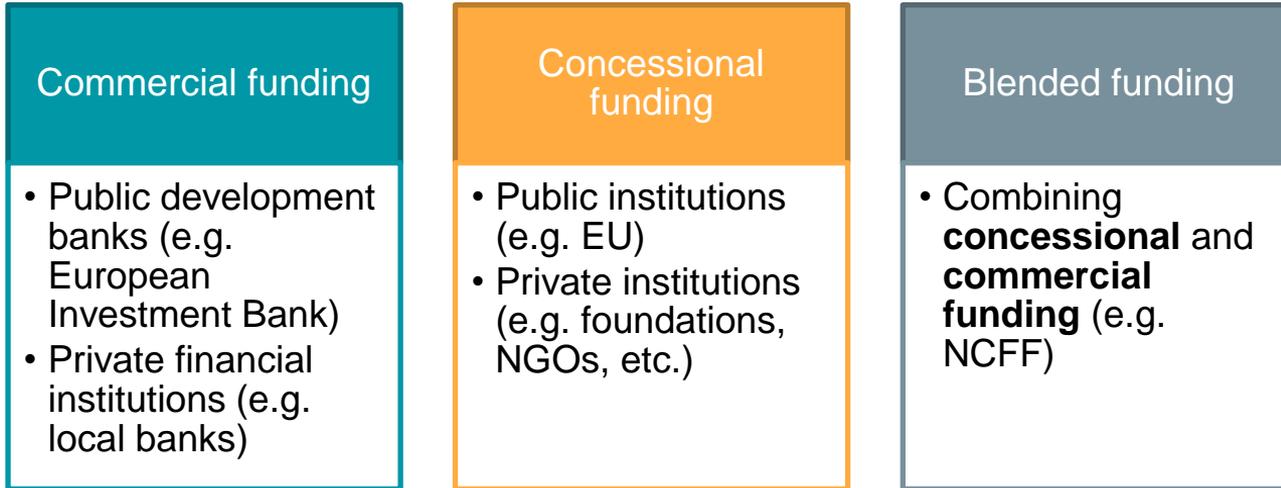
Source: UNEP, 2021

Other Economic and Financial instruments

- Several economic and financial instruments have been developed to stimulate environmental conservation. These are commonly embedded across EU environmental law in the form of:
 - **incentives** (e.g. subsidies and payments) and **disincentives** (e.g. taxes or charges)
- **Insurance related instruments:** e.g. Risk transfer schemes
- **Tradeable environmental permits**

Source: EEA, 2021

Sources of financing

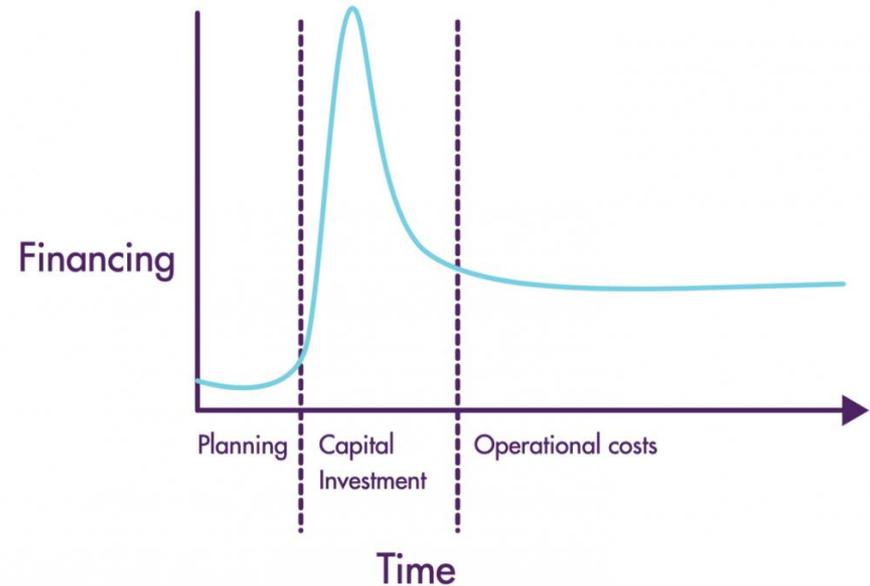


Source: Adapted from EIB, 2019

Three major phases of financing NbS

- 1. Planning:** The planning and design of NbS, takes a long time and usually involves several organizations and can thereby be very expensive. These costs are often covered by the public sector.
- 2. Capital investment:** The highest costs are usually the capital costs associated with initial implementation of NbS. These costs are usually incurred over a short period of time.
- 3. Ongoing operational costs:** The maintenance and operating costs of NbS (stewardship phase) are often high and can occur over a long period of time. These ongoing costs should be considered in planning NbS projects.

These three phases can reoccur multiple times over the lifetime of NbS.



The phases of nature-based solutions financing (McQuaid and Fletcher, 2019)

Challenges of financing NbS

- **Unclear return of investment:** Benefits are often shared by multiple users (e.g. public park or flood management system) and individual use is difficult to identify.
- **Quantifying benefits:** financing decisions are often based on cost-benefit analysis, but the monetary and non-monetary benefits of NbS is difficult to quantify (e.g. monetary value of well-being)
- **Scale of NbS:** Individual NbS projects are often considered too small for direct financing by large financial institutions, whereas for large-scale projects, cities cannot take on large-scale debt financing or the knowledge to make a business case is missing.
- **Collaboration for hybrid or blended financing:** the dependency on public sector financing or grant financing make projects vulnerable, so multiple funding partners would be preferable.

Source: McQuaid and Fletcher, 2019

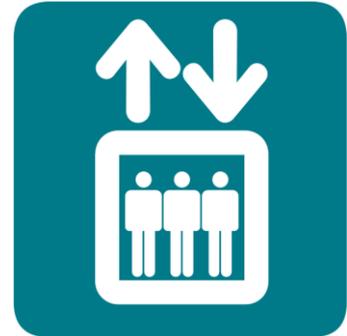
SECTION
FOUR

An Introduction to Pitching

Pitching - Tips

Ever heard of ELEVATOR PITCH?

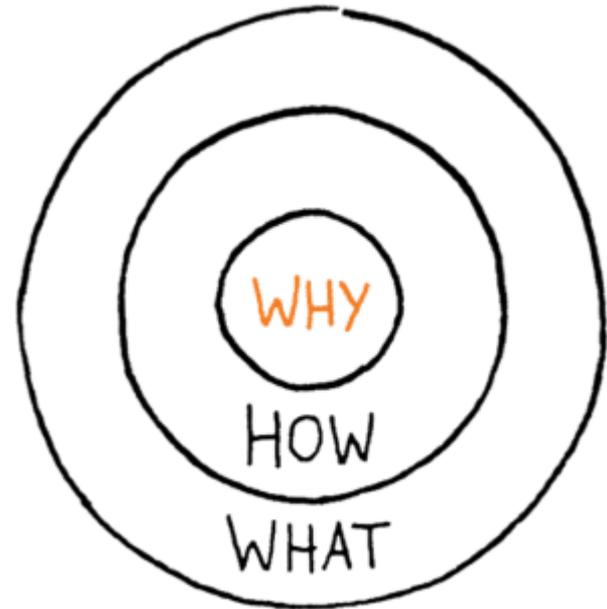
- Pitches should be kept short, while containing the most IMPORTANT aspects to grab the attention of the audience
- The first 30 seconds are the most critical
- **Keep in mind K.I.S.S. principles when pitching –**
"keep it short and simple"



Pitching - Tips

START WITH WHY?

- Watch the TED Talk by Simon Sinek – Start with why



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Pitching - Tips

USE STORYTELLING

Simple story arch:

I
experienced
the problem

There are
many like
me

So we have
a solution

Here's how
the NbS
functions

Pain and Response: The Gain

Pitching - Tips

FOCUS ON YOUR USERS



Pitching - Tips

KNOW YOUR AUDIENCE

- A private investor
- An audience with little/no knowledge on NbS
- A city representative
- An expert on NbS
- ...



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Pitching - Tips

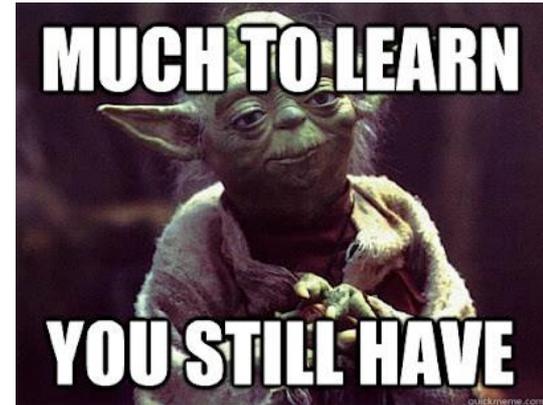
KNOW YOUR IMPACT



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Summary of key take-aways

- 3 Min presentation with Powerpoint (or similar)
- Start with a catchy line → Start with WHY
- Minimize text, use figures/pictures
- Use storytelling to show your understanding of the end user (This makes your pitch more exciting and relatable)
- Don't forget a call to action (depending on your audience and status quo: collaboration, feedback, contacts in network, funding, meeting to discuss next steps)
- Remember body language and modulation of speech, stand confident, no pointing fingers, no looking at the screen.
- Practice the time limit, repeat key message at least twice!
- Who is the audience? Tailor your pitch to it (Investors, Academia, Who is the Jury?)
- Practice practice practice...



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SECTION
FIVE

Further Reading



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**GREEN SKILLS
FOR CITIES**

Videos & TED Talks

Start with why - how great leaders inspire action

Simon Sinek

https://www.youtube.com/watch?v=u4ZoJKF_VuA

2022 UCL Three Minute Thesis Winner

Maria Caluianu

<https://www.youtube.com/watch?v=DE9x4rX5qmM>

Your body language may shape who you are

Amy Cuddy

<https://www.youtube.com/watch?v=Ks- Mh1QhMc>

Note: Some of the scientific data of this video has been debated by other scientists, however there are studies that show how body language can shape the way you feel about yourself and consequently how others perceive you.

Papers

Understanding the value and limits of nature-based solutions to climate change and other global challenges

Nathalie Seddon, Alexandre Chaussou, Pam Berry, Cécile A. J. Girardin, Alison Smith and Beth Turner <https://royalsocietypublishing.org/doi/10.1098/rstb.2019.0120>

State of the Art and Latest Advances in Exploring Business Models for Nature-Based Solutions

Beatriz Mayor, Helen Toxopeus, Siobhan McQuaid, Edoardo Croci, Benedetta Lucchitta, Suhana E. Reddy, Aitziber Egusquiza, Monica A. Altamirano, Tamara Trumbic, Andreas Tuerk, Gemma García, Efrén Feliu, Cosima Malandrino, Joanne Schante, Anne Jensen and Elena López Gunn
<https://www.mdpi.com/2071-1050/13/13/7413>

Approaches to financing nature-based solutions in cities

Laura Baroni, Graeme Nicholls, Kym Whiteoak
[Working-Document_Financing-NBS-in-cities.pdf \(growgreenproject.eu\)](#)

Helpful (but not mandatory):

Assessing the Benefits and Costs of Nature-Based Solutions for Climate Resilience: A Guideline for Project Developers

Boris van Zanten, Gonzalo Gutiérrez Goizueta, Luke Brander, Borja Gonzalez Reguero, Robert Griffin, Kavita Kapur Macleod, Alida Alves, Amelia Midgley, Luis Diego Herrera, Brenden Jongman
<https://openknowledge.worldbank.org/entities/publication/9ed5cb4b-78dc-42a4-b914-23d71cef24a2>

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GREEN SKILLS FOR CITIES



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