December 7, 2023

MULTI-SECTORAL INFRASTRUCTURE

Investment Planning for a Regenerative Economy: Balancing COOPERATION & PRIORITIZATION

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This project has received funding from the European Union's Horizon Europe research and innovation programme under project NetworkNaturePLUS 101082213. The work was funded by UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee [grant number 10064784]



Planetary emergency

- □ Nature our real license to operate
- □SDG agenda not on track
 - Water & Adaptation: 70-80% finance gaps
 - USD \$15 trillion infrastructure finance gap
- Mechanistic view:
 - Focus on growth
 - Siloed planning
- Erosion of ecosystems & social tissue

How do we reverse trends and deal with multiple interlocking challenges in a context of diminishing public resources?

3 revolutions:

UNDERSTANDING, PLANNING, FINANCING

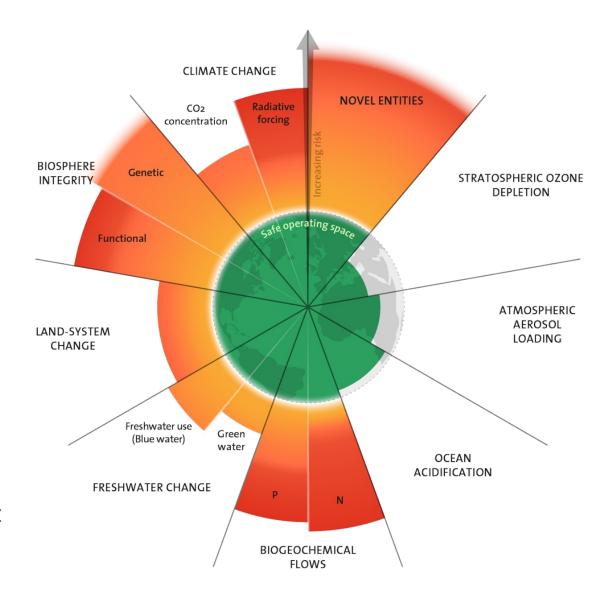


Figure 2. 2023 update to the Planetary boundaries. <u>Licensed under CC BY-NC-ND 3.0</u>. Credit: "Azote for Stockholm Resilience Centre, based on analysis in Richardson et al 2023".

Financing opportunities

"When business and cities incorporate science-based targets to tackle both nature loss and climate change into their strategies they create immense opportunities and become more resilient"

Financial Regulations & Standards

- ESG & impact investing
- TCFD & TNFD
- **EU Taxonomy**
- Science-based Targets Network **SBTN**

Emerging keywords:

- Nature positive
- Water Positive
- Net-zero
- Regeneration

Impact investing trends:

- Resilience = business continuity
- Private sector interest on "regeneration"
- Higher scrutiny on impact (ESG)
- Science –based targets and pledges

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Mosaic projects are the future



swaps) Watershed Services Mitigation Banking Pay for Success (PBC Corporate contract) Finance Rhino bonds Blue bonds Adaptation Municipal bonds Climate bonds Mechanism Green bonds **Project Finance** Resilience (PPPs) CAT bonds Environmental **Parametric** Debt-forimpact bonds Insurance **Nature Swaps**

Payment for

Obras por Impuestos (Tax

level of maturity

Innovative financing instruments for adaptation and ecosystem-based DRR Image Source: Altamirano 2021, page 100.

Source: Leveraging Private Sector Investments in Adaptation: The Evolving Role of Climate Finance in Enabling a Paradigm Shift. Climate Markets and Investors Association (Altamirano 2021)

Challenges investment planning

Chile

Service gaps – most expensive to solve

- Rural areas
- Informal settlements
- Intensified by drougths

Increasing uncertainty

- · Climate Change
- Social volatility

New expectations from population

- Resistance to infrastructure for single purpose
- Increasing pressure to limit environmental impact- NbS
- Increasing pressure for social justice just climate transition

Source: New challenges requiring innovation and management of uncertainties. IADB 2022. Chile Water Infrastructure Plan (PIIH 2050) REPORT IV. Public-Private Cooperation and Management Model for Innovative Initiatives.

Economic # Financial

Eco-engineers

- Risk reduction potential
- Scale: watershed & society
- Stock: natural capital
- Multiple functions =
 - Cost reductions
 - co-benefits &
 - co-funding

Financers & Project developers

- New technology → risk increase
- Scale: project contractual boundaries
- Stock: cash balance debt servicing capacity
- Multiple functions =
 - multiple principals = (+)contractual risks
 - (+) Construction & Operation risk

The Investment Case

Financing Framework for Water Security (FFWS)

MANAGEMENT

How will the proposal be successfully delivered?

STRATEGIC

Is there a compelling case for change?

ECONOMIC

Does the selected option optimize public value?

- 1. **Transaction** –technical and financial
- 2. Level of service over lifecycle
- 3. **Institutional setting** insurance role, (dis)incentives and expertise and implementation strenghts public, private, communities

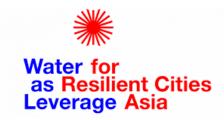
FINANCIAL

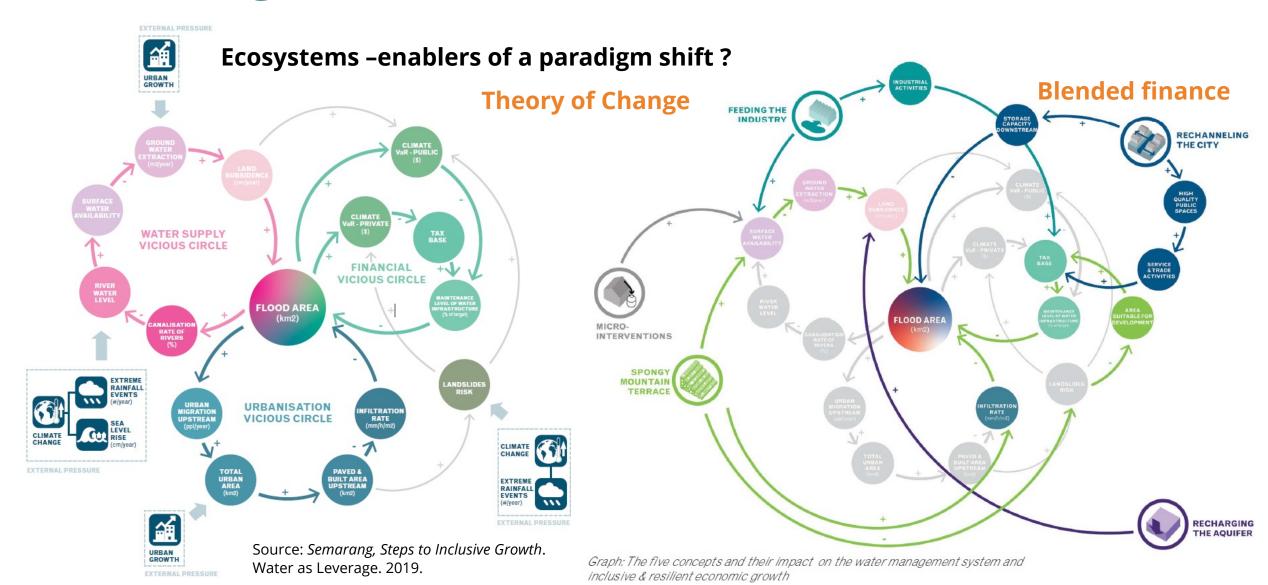
Is the spending proposal affordable?

COMMERCIAL

Is the deal achievable & attractive for the market?

Phase 1: Zoom out Strategic and economic BC's





Phase 2: Zoom in

Cashflow + Risk profile

- Hierarchy of functions and services
- Level of Service
- Risk to functionality throughout LCC
- ☐ Life Cycle Costs

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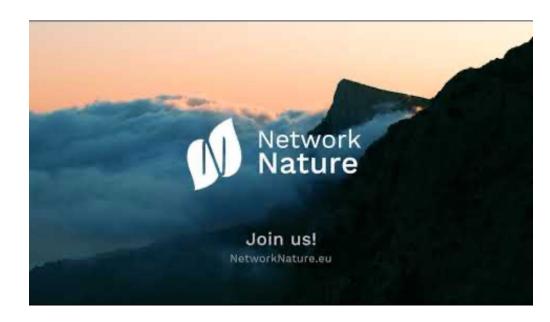
Commercial, Financial & Management Business Cases

is strategie, cascade	e measure, function, and l	evels of service		CHEK HISTI	uctions here
Measure	Functions	Service	Level of Service		
		Service	KPI	BaU	Solution
Measure 1 (infra-NBS)		Service 1	SMART	#	#
	Function 1	Service 2	SMART	#	#
Measure 2 (infra-trad)		Service 3	SMART	#	#
	Function 2	Service 4	SMART	#	#
Measure 3 (soft-measure)		Service 5	SMART	#	#
	Function 3	→ Service 6	SMART	#	#
Representation (map) of the BaU Repre		Representation (maj	sentation (map) of the solution		

Source: Financing Framework for Water Security. Handbook for the Implementation of Nature-based Solutions for Water Security (Altamirano et. Al 2021)

NetworkNature Plus

- Accelerate upscaling NBS in science, business, policy and practice in line with the EUs' ambitions to address biodiversity loss, ecosystem degradation and climate change by 2030
 - Private sector participation
 - Blended finance
 - Justice and social inclusion
- ☐ EU Roadmap to 2030 for R&I NbS
- Design training programme: transformational pipeline of NBS investments
- □ Transdisciplinary, mission-driven planning of investments and collaborative design of a new generation of NBS projects along publicprivate partnership contracts
- Bootcamps



NetworkNature is a resource for the NbS community, creating opportunities for local, regional and international cooperation to maximise the impact and spread of NbS

Consortium: ICLEI Europe, IUCN E, Steinbeis, Oppla, Biodiversa+

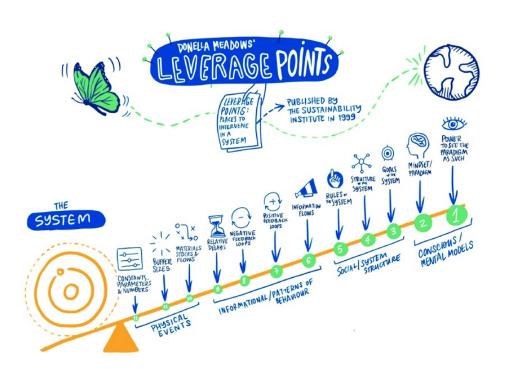
+ 6 new partners:

Altamira, Horizon Nua, IEEP, TNOC, Trinity College Dublin, UNEP-WCMC

Building blocks



Local capacity to prepare transformational NEXUS projects with a clear CLIMATE rationale



- Accelerated process of capacity development that break silos: zoom out & zoom in
- Safe spaces for Public-Private interaction and co-creation of blended finance structures
- System analysis techniques to build capability and evidence
- Institutional Economics + Finance



Thank you for your attention

Questions?

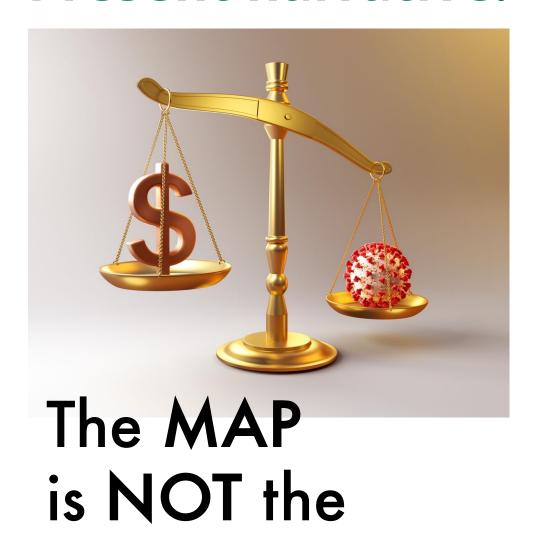
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Present narrative: One OR the other



TERRITORY.

- Is this true?
- What do these narratives ignore?
- Is what we call capitalism real capitalism?

- Finding yourself in a double bind?
 - Solution: Add Complexity!
 - A new dimension new insights and ways out