

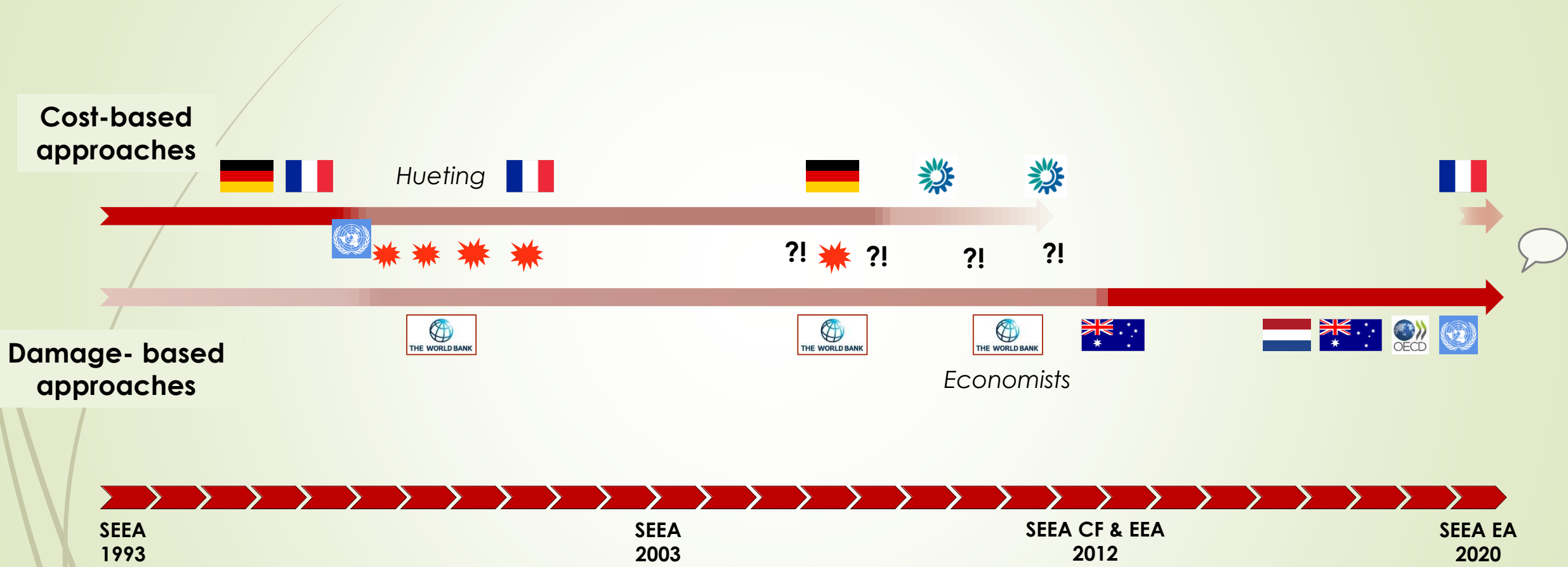
Toward the inclusion of ecological liabilities in the SNA: first proposals

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History of the valuation framing discussion



Overview : main design choices

Design choice		SEEA EA	Unpaid Ecological Costs (Vanoli 2017)	Natural liabilities
Unit		Φ & €	Φ & €	Φ & €
Valuation framing	Focus on	Impacts on the economy	Impacts on the environment	Impacts on the environment
	Degradation definition	Ecosystem services loss	Based on condition	Based on condition
	Valuation method	Net present value	Preservation costs	Preservation costs
Reality level of the figures		Modelling	Modelling	Modelling/Observation
Accounting structure	New institutional sector	« Ecosystem trustee »	« Nature »	« Ecosystem trustee »
	Main balance sheet account	Ecosystem assets	Ecological debt	Natural liabilities
	Conterpart	Financial assets	Imputed costs to final consumption	Natural assets

What's manageable with monetary accounts ?

What environmental result?

External view or economic fact?

Who publish the data?

Who to include in the governance?

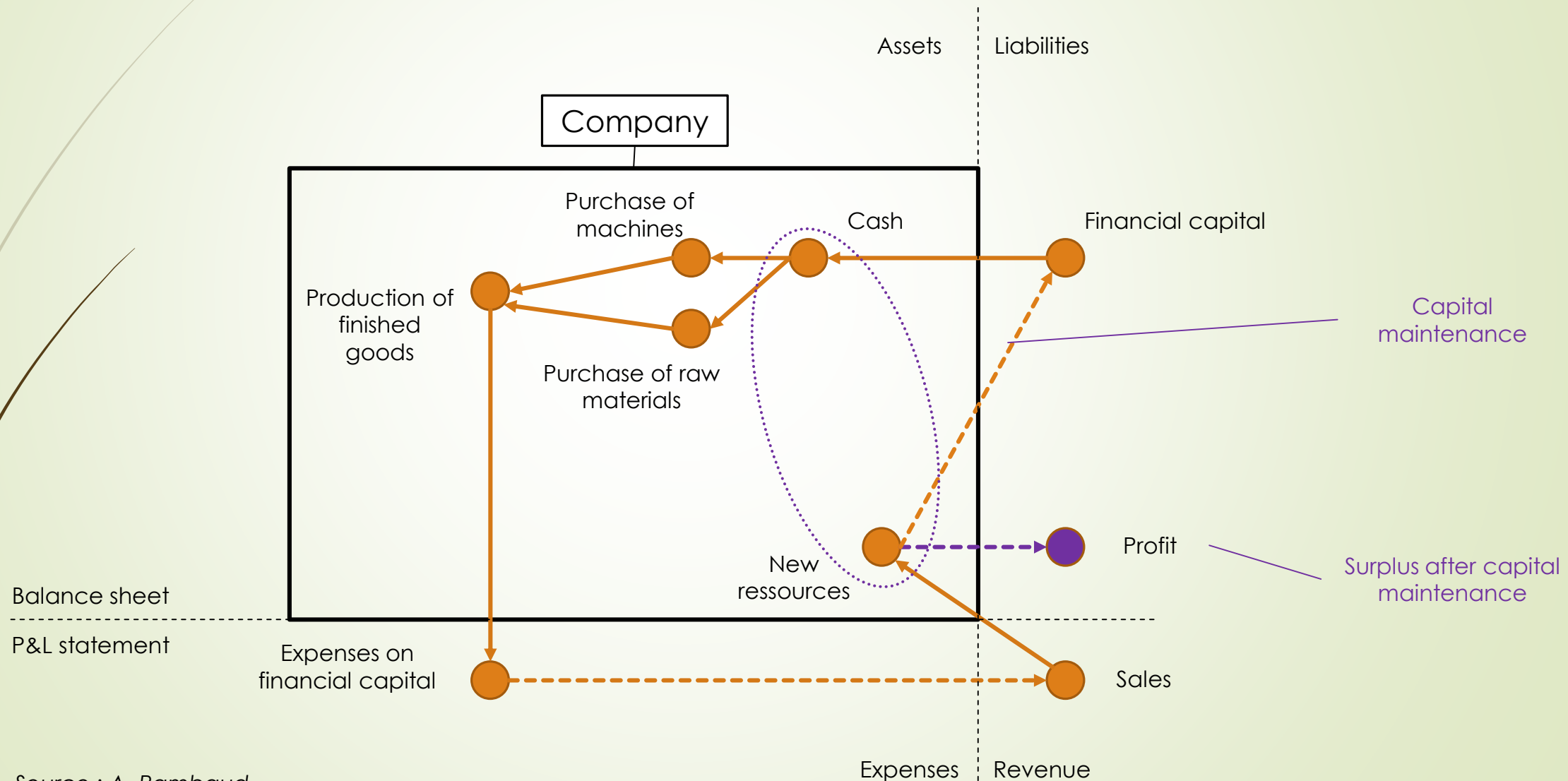
Purely instrumental vision or not?

4

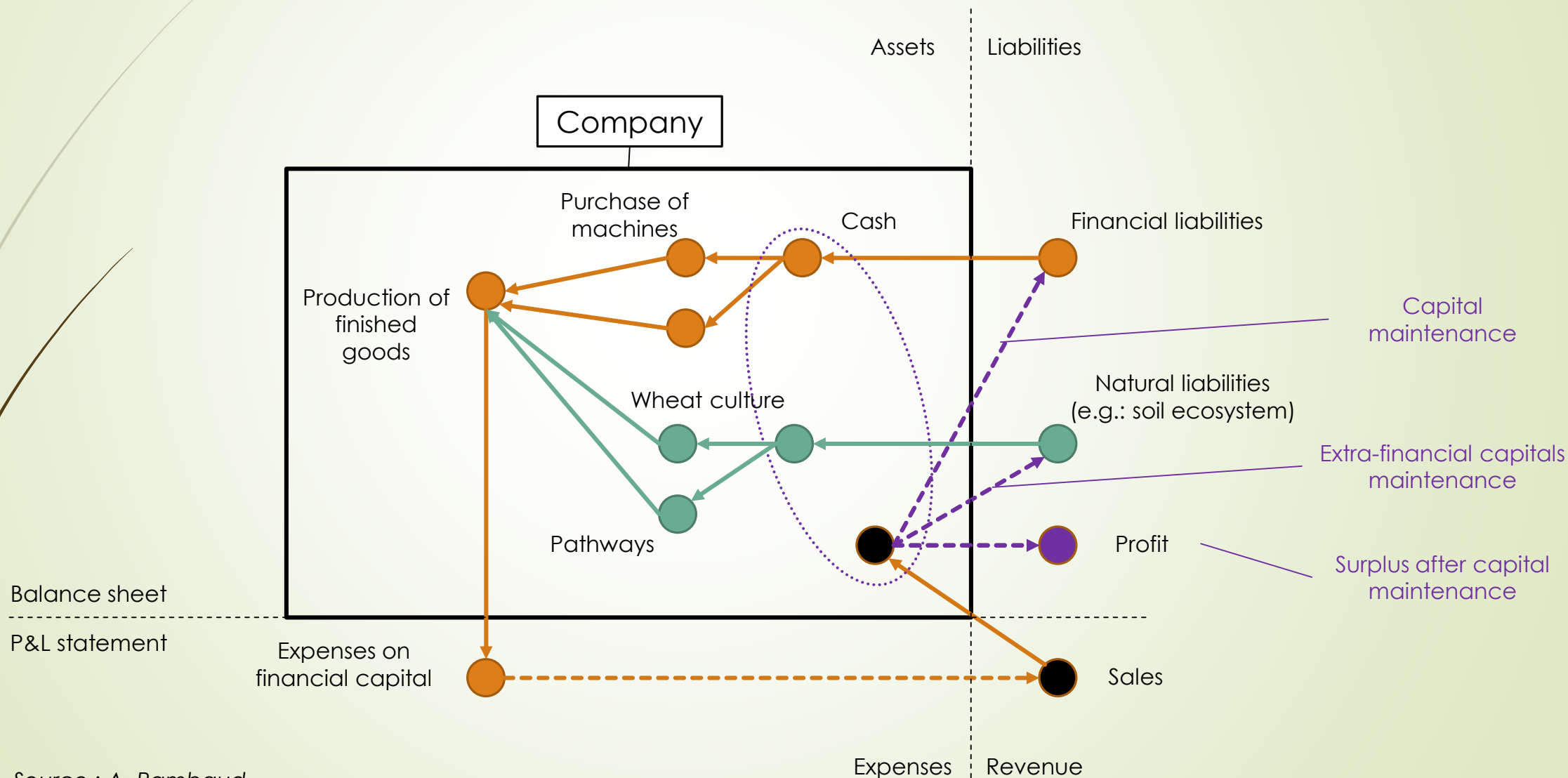
The underlying theory: the CARE model

Comprehensive Accounting in Respect of Ecology

The historical cost accounting system: monitoring of financial capital through its use and consumption



Extension of the HC accounting system: monitoring of several capitals through their use and consumption



7

Towards integrating ecological debts in national accounting?

What can CARE bring to the SEEA?

Defining the liabilities consistently with the SNA

SNA 2008 :

« 3.33. A liability is established when **one unit is obliged, under specific circumstances, to provide a payment** or series of payments to **another unit** (the creditor) »

Need for a legal contract/obligation



Ecosystem trustee



Valuation: budgeted preservation costs to reach (back) a given reference level.

Preservation costs ⇔ **exchange value/market price** only if external validation (contract / obligation)

What level of reality? Who make the disputable choices?

	Economic (modelling) approach	Accounting (observation) approach
Who produce the numbers?	Ministry services, researchers	Business accountants (-> row data for NSO)
What data?	- State of the environment - Global / mean preservation costs	- Real uses of the environment - Individual preservation budget
Disputable choices	Hypothesis in the model	Actual institutional arrangements
Status	External estimates -> abstract models to imputations	Economic facts -> accounts



Towards a **satellite account** of financing needs for the ecological transition?



Towards **extended NA** based on observations?

Defining the liabilities: examples



Liability's name	Preservation concern	Condition indicator	Reference level	Usual asset (degrading use)
Climat	Paris Agreement; French Energy Transition Law	Carbon budget	Carbon neutrality (2050)	CO2 warehousing
Soil	French Climate and resilience law <i>(EU directive on soil health?)</i>	Surface area of natural, agricultural and forestry areas	Net Zero Artificialisation (2050)	Activity area
Biodiversity	Nature directives, Restoration directive	Conservation status	Favourable conservation status / No net loss	
Fresh and marine waters	WFD, MSFD	Water bodies status	Good ecological and chemical status	Metal warehousing Organic pollution warehousing, ...

Defining the liabilities consistently with the SNA

Need for a legal contract / obligation



SNA 2008 :

« 3.33. A liability is established when **one unit is obliged, under specific circumstances, to provide a payment** or series of payments to **another unit** (the creditor) »



Ecosystem trustee

Valuation: budgeted preservation costs to ensure the long term preservation of the capital under consideration.

Preservation costs ⇔ **exchange value/market price only if** external validation / contract

Quite a big “if” ... unless...

- Mandatory rehabilitation costs already in the SNA
- **Impact studies** = **proto-CARE accounting implemented today**
- EU CSRD (double materiality)

Potential uses

- A new vocabulary (Desrosières, 2008) to identify economic-environmental imbalances and dependencies
- Analysing liabilities:
 - Ecological solvency ratios -> signals to investors and clients, new prudential rules
 - Balance between reduction, restoration + analysis of avoidance -> respect for the mitigation hierarchy
 - Transition risk
- Natural assets show environmental dependencies

Key messages

- Complementary monetary accounts to manage condition directly
- Accounted as ecological liabilities, preservation costs:
 - Are closer to the SNA than expected
 - Could be “observed” (not only modelled)
 - Are a link between public policies and an accounting that identifies levers for action

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16

Thank you for your attention

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