



The role of natural capital accounting

Paper prepared for 5<sup>th</sup> Policy Forum on Natural Capital Accounting for Better Decision Making

15-09-2021 | Paul Lucas and Michael Vardon



# Overview of the presentation

- Green recovery
- > Natural Capital Accounting
- How NCA supports a Green recovery
- Next steps for NCA and green recovery
- > Survey results



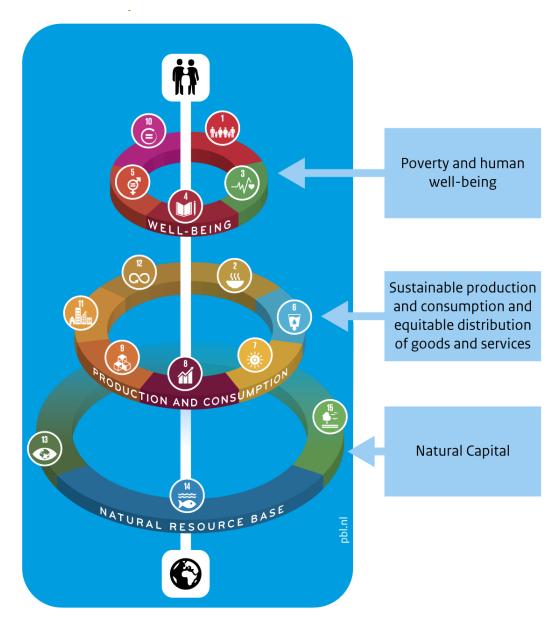
Green recovery





# Human well-being is critically dependent on natural capital





### Natural capital is increasingly under pressure

- World is not on track to achieve globally agreed goals
  - Environmental degradation continues
  - SDG achievement facing increased constraints
- Sustainability transitions required to bend the trend and reduce pressure
  - Valuing and embedding natural capital in decision-making





COP21-CMP11





Current recovery plans ignore the value of

natural capital

 Around 17.000 billion of stimulus package announced

- Many stimulus packages reinforce negative environmental trends
- Few investments in natural capital
- Risk of increased social costs and reduced ability to repay debt





# Recovery stimulus is unique opportunity to put the world on a sustainable development pathway

### A 'green' recovery embraces benefits in terms of both

- Short-term jobs and economic growth
- Addressing long-standing human and environmental challenges

### To

Improve the environment, decrease inequality and increase resilience

Co-benefit

 Recovery has synergies with sustainability transitions

Necessary condition

 Recovery should not get in the way of sustainability transitions (do no harm)

Opportunity

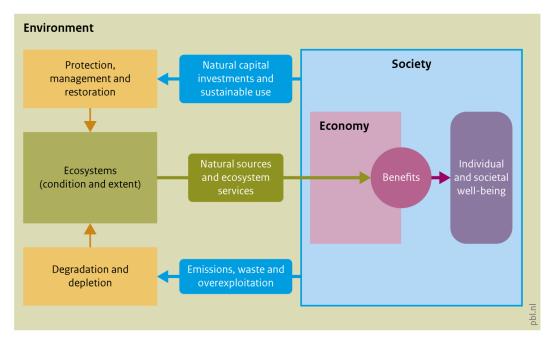
 Recovery is used to further sustainability transitions (investments and reform)



# Investing in natural capital is part of a green recovery

- Short- and long-term benefits
  - employment and economic growth
  - Social and environmental benefits
  - Improved ecosystem resilience and help to avoid future pandemics
- Need for integrated economic and environmental data and thinking

#### Relationships between environment, society and economy



Source: PBL

Natural capital accounting





### The standard for NCA: System of Environmental-Economic Accounting (SEEA)



Monetary

Asset and

measures

production

economics

Production

gain

boundaries set by

defined as being

capable of being

sold in markets

Assets defined as

being owned and

capable of being

used for economic



# **Central Framework**

- Physical quantity measures added to monetary measures
- Asset boundary expanded
- Assets no longer have to be owned or capable of being used for economic gain

March 2021 adopted by the **United Nations** 

Can now move on with certainty

# SEEA

# **Ecosystem Accounting** EA

Ш

- Physical quality (or condition) measures added
- Production boundary extended
- Production from ecosystems recognized and does not need to be sold in markets

# National Accounts System of



### A system of accounts

### **Stocks and flows**

- Stock at a point in time
- Flows between two points in time



Physical and monetary measures

## Physical and monetary

- Hectares, litres, gigagrams, etc.
- US\$, EU€, CN¥, etc.



Stocks and flows

Benefits beneficiaries

### **Benefits and beneficiaries**

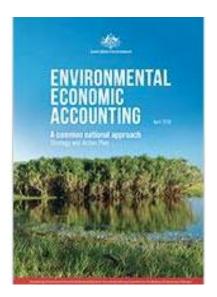
People, industries and sectors

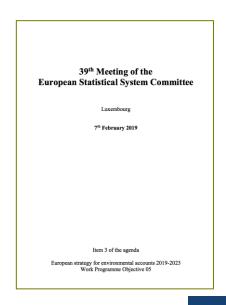


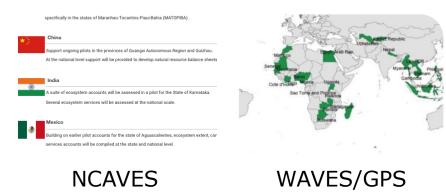


### Countries are implementing SEEA

- NCA production underway in nearly 100 countries
- Plans, strategies and road maps for putting NCA are in place or being developed









South Africa's strategy



Accounts mandated in EU

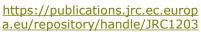
### PBL Netherlands Environmental Assessment Agency

### What took years, can now takes months

- Increasing NCA knowledge, online tools and growing expertise
- With cooperation and goodwill much can be achieved
- Accounts do not have to be perfect to be useful

How can I estimate and record the emissions from landfill in the greenhouse gas accounts. . .



















http://www.fao.org/economic/ess/environment/methodology/en/

World Bank WAVES Knowledge Centre

https://www.wavespartnership.org/kno

OECD i-Library environment

Green Growth Knowledge Platform

https://www.greengrowthknowledge.org

wledge-center



Introduction to Environmental Accounting <a href="https://cce.anu.edu.au/all-subjects/introduction-to-environmental-accounting.gov/">https://cce.anu.edu.au/all-subjects/introduction-to-environmental-accounting.gov/</a>



How NCA supports green recovery





# NCA is already used to support decision-making

The major components of green recover have already been examined using NCA

We have the experience

NCA mentioned in some recovery packages or strategies. E.g.

- Rwanda
- Uganda
- African Union

Importance of natural capital more generally recognised

Dasgupta Review

#### Components of green recovery and related NCA-examples Climate change Indonesia and US **Biodiversity** Well-being conservation the Netherlands Peru and Uganda and Indonesia **Natural** capital accounting **Integrated Land** Liveable cities **Management** US, Canada, Australia and Norway, UK South Africa **Tourism** Uganda and Rwanda The countries represent

Source: PBL

case studies discussed or

cited in this report

# NCA and the policy cycle

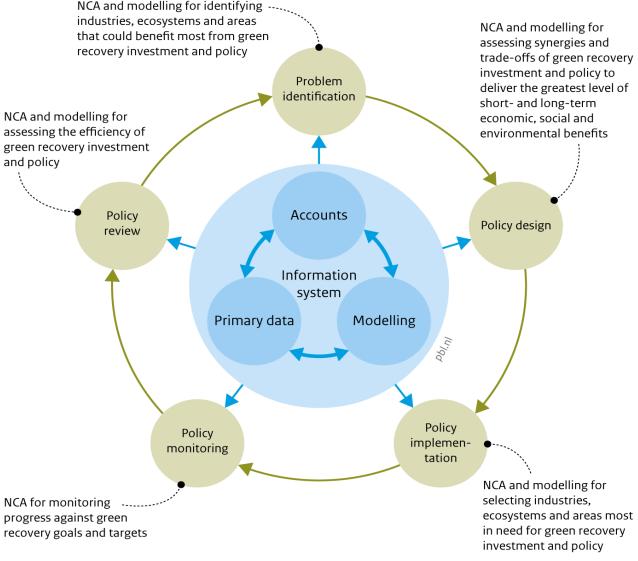
An information system that supports the full policy cycle

### From experimental to main stream

- Moving from the "accounting push" to the "policy pull"
- Made possible by the work of many people, spanning countries, disciplines and agencies and sectors



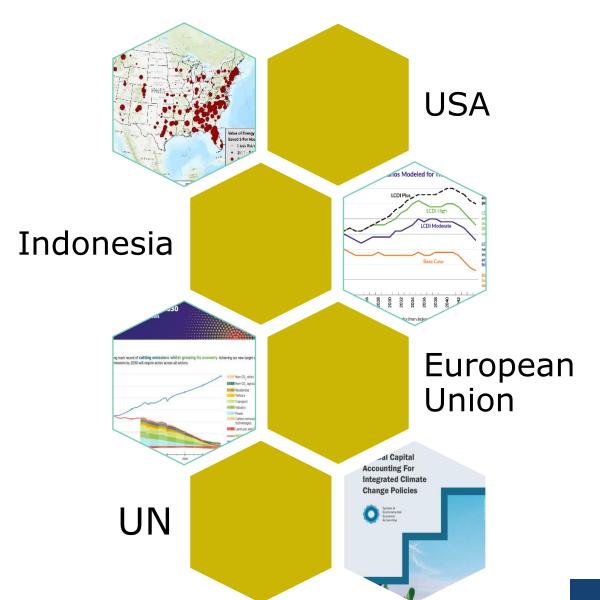
#### Use of natural capital accounting for green recovery across the policy cycle



Source: Adapted from Vardon et al. 2016

# Examples of NCA and climate change





Most green recovery spending in on climate change

Accounts and modelling

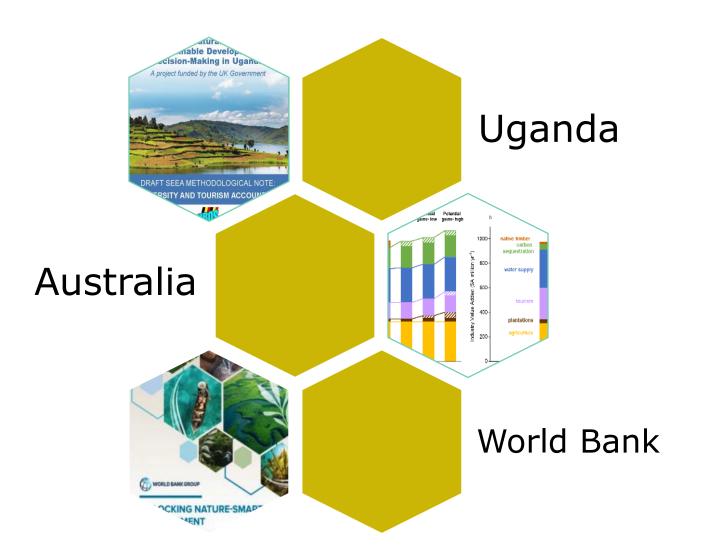
There are co-benefits with biodiversity conservation

 Conservation and restoration of forests stores and sequesters carbon and also provides habitat for species



# Examples of NCA and biodiversity conservation





Examples from around the world

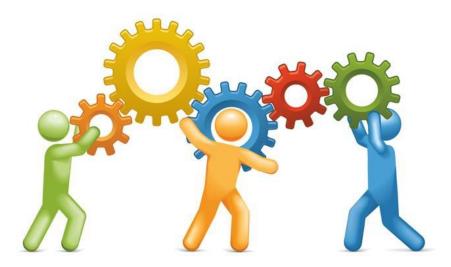
Accounts and modelling

Governments using accounts to assess trade-offs and make decisions

- Payments for ecosystem services
- Sector planning



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## NCA can help create an enabling environment

- Reform incentives: reveal how policies, taxes and subsidies are influencing the economy and the environment
- Mobilise finance: provide insights in costs, as well as economic, social and environmental benefits of investments and policies
- > Integrate and mainstream policies: assess synergies and trade-off of investments and policies across issues, time, sectors and space
- Ensure equity and inclusiveness: Assess implication of investments and policies on ecosystem services and different groups that depend on them
- Provide for policy adaptation: Monitor progress and assess the effectiveness and efficiency of investments and policies in terms of costs and benefits for the economy, environment and society

Next steps for NCA and Green Recovery





### From the general to the specific

### Living principles of NCA that is 'fit for policy purpose'

### **Comprehensive**

1. Inclusive, 2. Collaborative, 3. Holistic

### **Purposeful**

4. Decision-centred, 5.Demand-led

### **Trustworthy**

6. Transparent and open, 7. Credible

#### **Mainstreamed**

8. Enduring, 9. Continuously improving, 10. Embedded

### We have a base

- The Policy Forum is consolidating and sharing experience
- Community is getting bigger
- We have the "living principles"

How can we we use these to mainstream NCA across government

Source: Ruijs et al., 2019



# Capitalising on the opportunities

UNFCCC meeting in Glasgow in November 2021

CBD meeting in Kunming in October 2021 and April 2022

SDG "Decade of Action"

Investment in NCA is part of Green Recovery

Others?

How can this community make it happen?

- This is ultimate objective of the 5<sup>th</sup> Policy Forum
- Session 4 builds to this

### Thank you

To the people helped us with the report, including

- Interviewees
- Expert workshop participants
- > The 5<sup>th</sup> Policy Forum Steering Committee

To the Government of the Netherlands for sponsoring the report

To the many, many people that have brought the green recovery and natural capital accounting to point where is on the brink of breaking into the mainstream



