



Sofia Ahlroth and Michael Vardon

## Natural capital accounting for policy – a global view of achievements, challenges and prospects

**WAVES Annual Partnership**  
**5-7 June 2017, Kigali, Rwanda**



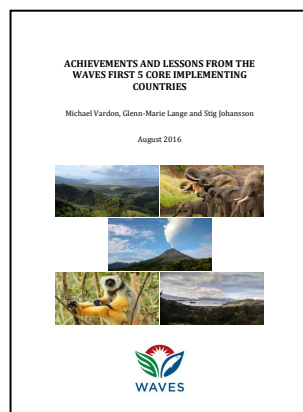
Wealth Accounting and the Valuation of Ecosystem Services  
[www.wavespartnership.org](http://www.wavespartnership.org)



# Forum on Natural Capital Accounting for Better Decision-making

22 – 23 November 2016, The Hague, Netherlands

- 2 days
- 45 participants
- 15 countries
- Back-to-back with “Natural Capital – Let’s do Business”
- We have accounts, now what?
- Why NCA?



The first WAVES policy forum took place in The Hague, Netherlands in November 2016, attended by participants from 15 countries.

*"What will it take for policymakers to use natural capital accounts (NCA) to inform development policy and planning that is sustainable?"*



# What do decision-makers think about?



Botswana President Ian Khama said “We will put natural capital at the heart of government decision-making”.

- **What is the problem?**
- **What can I do about it?**
- **Who wins?**
- **Who loses?**
- **How much will it cost?**



The Hon. Barry Gardiner, Member of Parliament, United Kingdom, Formerly an Assistant Minister of Environment



# Decisions and policy options

**What are the decisions and decision-making process that can use information?**

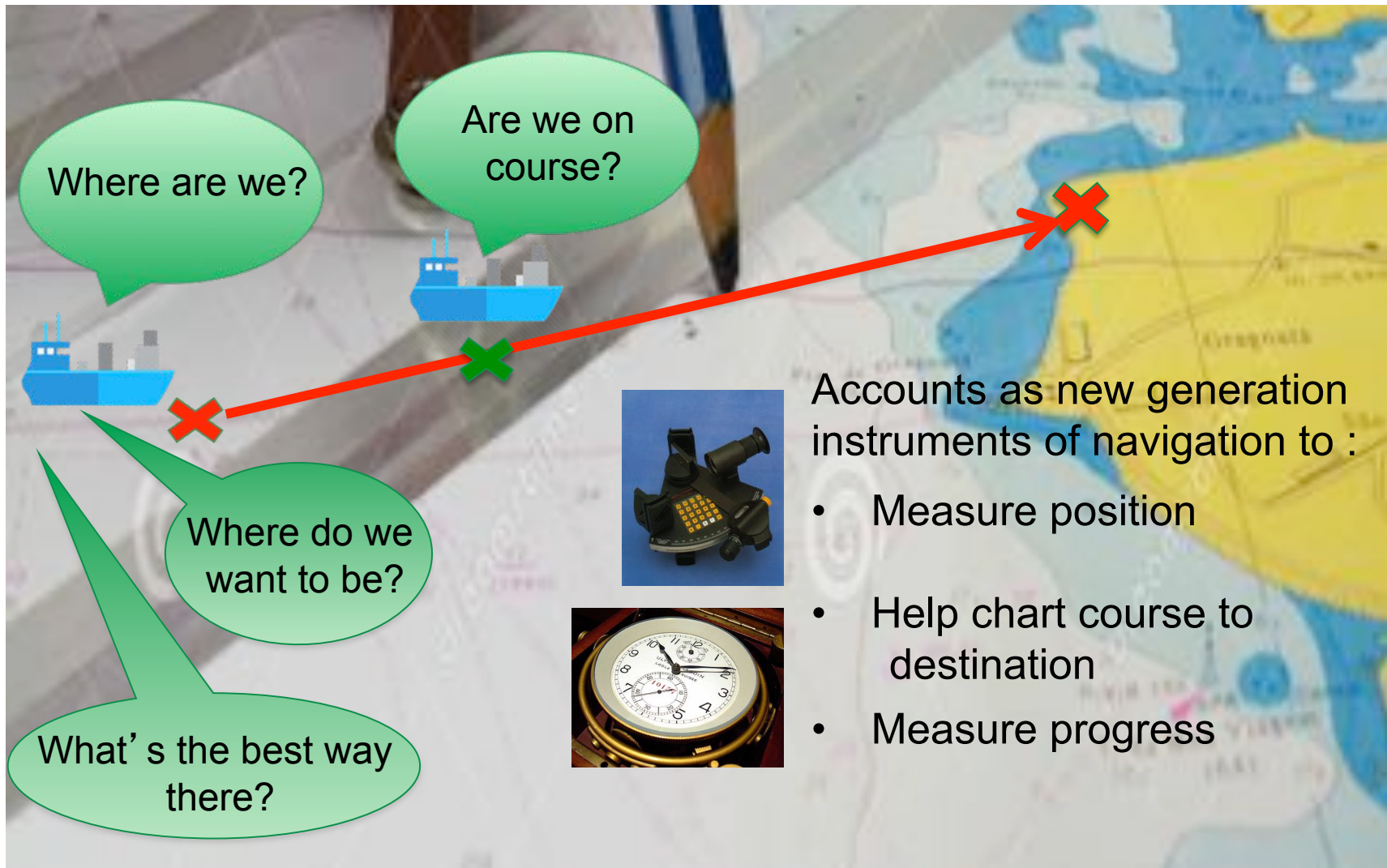
**What are the policy options available?**

- Carrots
- Sticks
- Sermons
- Do-it-yourself (state owned enterprises)





# Charting a course for ship of state with NCA



Where are we?

Are we on course?

Where do we want to be?

What's the best way there?

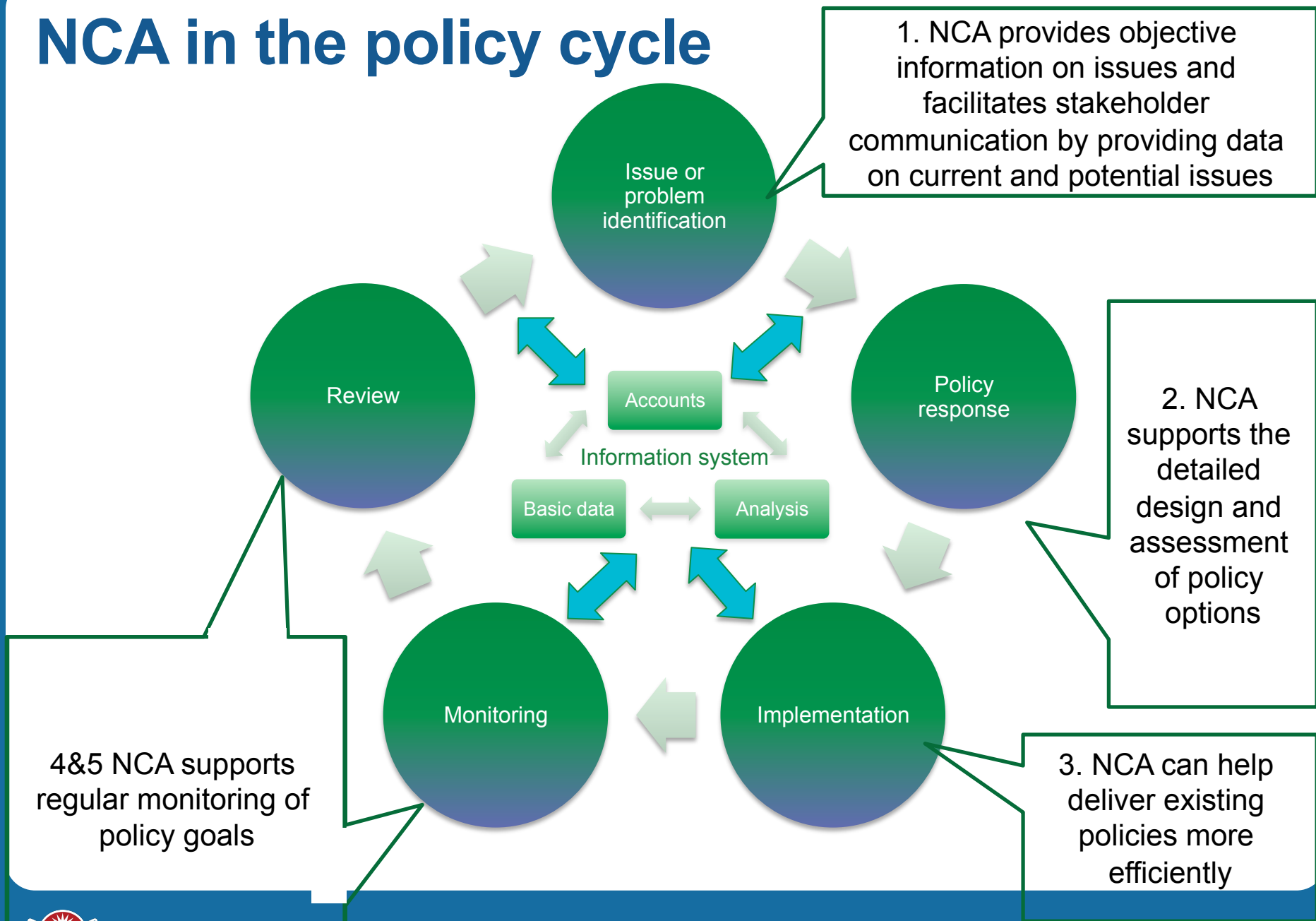
Accounts as new generation instruments of navigation to :

- Measure position
- Help chart course to destination
- Measure progress

Slide from Peter Burnett, ANU

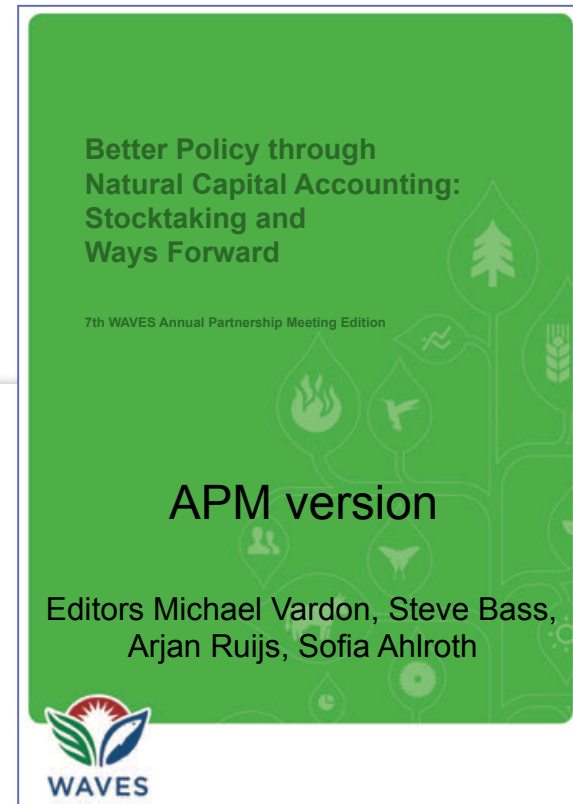
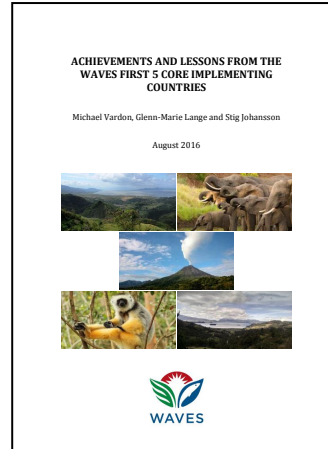


# NCA in the policy cycle





# NCA and policy: stocktake, lessons and achievements





# Stocktake of contributions

## Content

- 26 Chapters
- 46 Authors from a wide range of professions and agencies

## Spanning

- Account producers and users
- High and low income countries
- All stages of the policy cycle
- Thematic and cross-sector issues

	Identification	Response	Implementation	Monitoring	Analysis and Review
Energy	Ruijs (Ch. 17)	Ruijs (Ch. 17)	Ruijs (Ch. 17)	Ruijs (Ch. 17) Rivera et al. (Ch. 11)	Ruijs (Ch. 17) Rivera et al. (Ch. 11)
Water	Oosterhuis (Ch.16) Pule and Galegane (Ch. 7) Castaneda et al. (Ch.12)	Pule and Galegane (Ch. 7) Castaneda et al. (Ch.12)	Pule and Galegane (Ch. 7) Romero et al. (Ch. 9) Nagy et al. (Ch. 25) Uwera et al. (Ch. 19)	Oosterhuis (Ch.16) Pule and Galegane (Ch. 10) Romero et al. (Ch. 9) Uwera et al. (Ch. 19)	Romero et al. (Ch. 0) Uwera et al. (Ch. 19) Castaneda et al. (Ch. 12)
Forests and land	Castaneda et al. (Ch.12)	Uwera et al. (Ch. 19)  Castaneda et al. (Ch.12)	Uwera et al. (Ch. 19)  Romero et al. (Ch. 8)  Castaneda et al. (Ch.12)	Uwera et al. (Ch. 19)  Romero et al. (Ch. 8)	Uwera et al. (Ch. 19) Banerjee et al. (Ch. 13) Castaneda et al. (Ch. 12)
Minerals				Gervacio (Ch. 18) Uwera et al. (Ch. 19)	Gervacio (Ch. 18)
Biodiversity and ecosystems			Vardon et al. (Ch. 24)	Ledoux and Wejchert (Ch. 23) Vardon et al. (Ch. 24)	
SDGs and sustainability	Barter (Ch. 21)			Barter (Ch. 21) Steinbach (Ch. 20)	Banerjee et al. (Ch. 22) Barter (Ch. 21) Steinbach (Ch. 20) Castaneda et al. (Ch. 12)
Green growth/ economy	Castaneda et al. (Ch.15)			Schenau (Ch. 6) Romero et al. (Ch. 11) Steinbach (Ch. 20)	Castaneda et al. (Ch. 12)
Climate change		Medrilzam and Adinia (Ch. 14)	Medrilzam and Adinia (Ch. 14)	Medrilzam and Adinia (Ch. 14)	Romero et al. (Ch. 8) Castaneda et al. (Ch. 12)
State of Environment Reporting				Smith et al (Ch. 6)	Smith et al (Ch. 6)



# The Netherlands

- Well documented
- Long history of statistics and accounting
- Accounts used for monitoring as well as policy development and implementation
- Energy, water, green economy and SDGs
- Institutional roles and set-up



# Water

## Pricing and management

Australia

Botswana

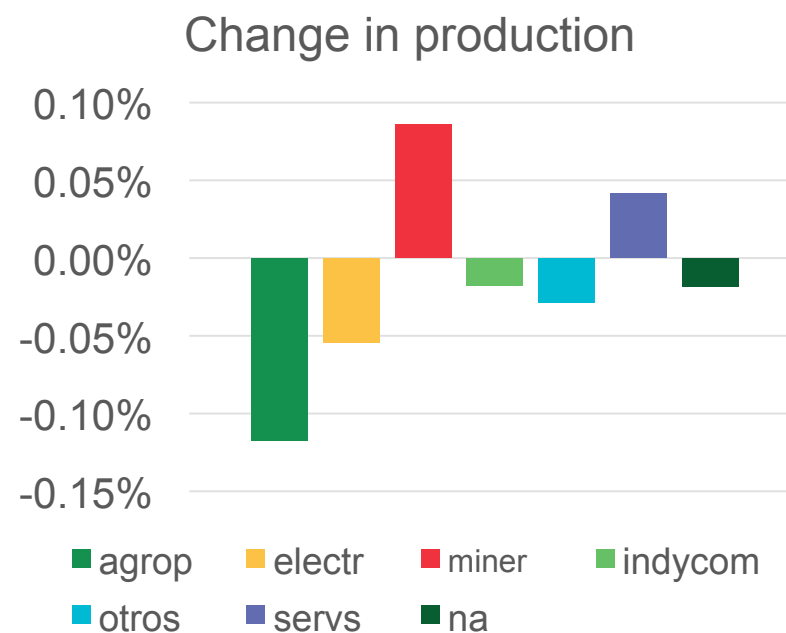
Colombia

Costa Rica

The Netherlands

The Philippines

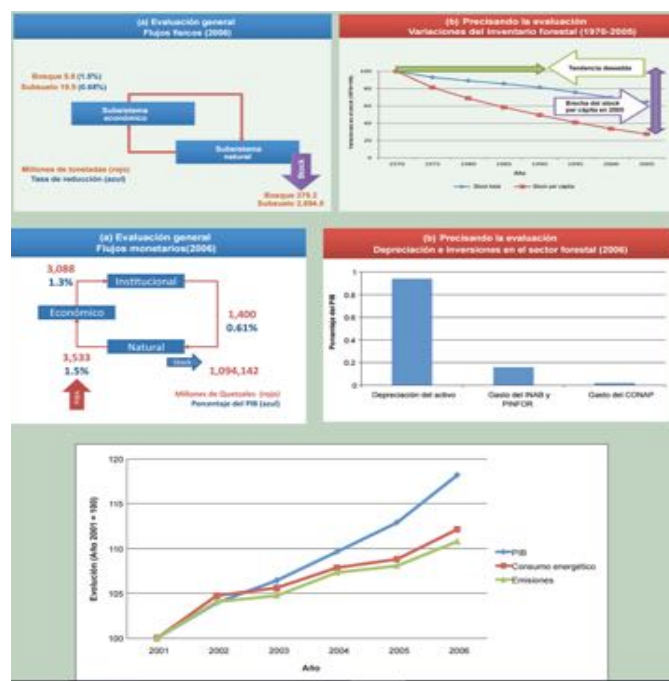
## Colombia – what would happen if charges rise?



# Green growth, SDGs and NCA

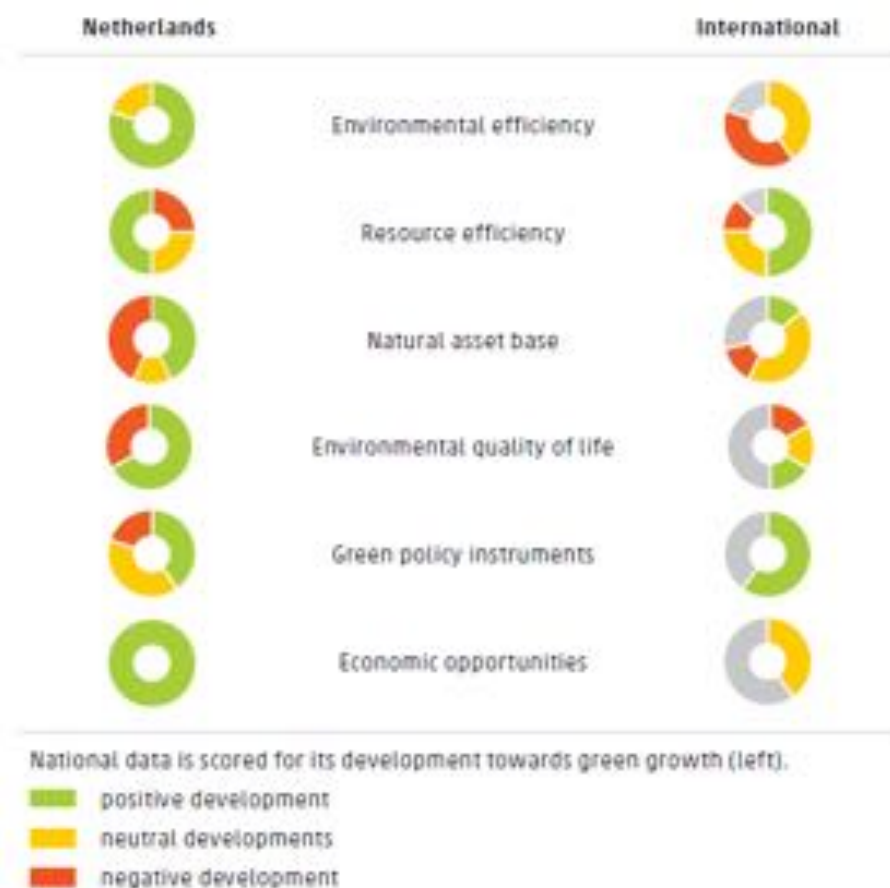
## Indicators and info-graphics

### Guatemala



- The Netherlands
- Guatemala
- Sweden
- UK

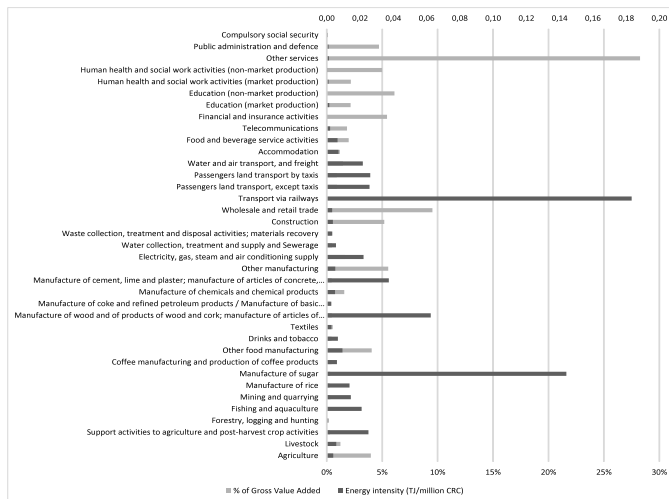
### The Netherlands



# Energy and climate change

## Energy

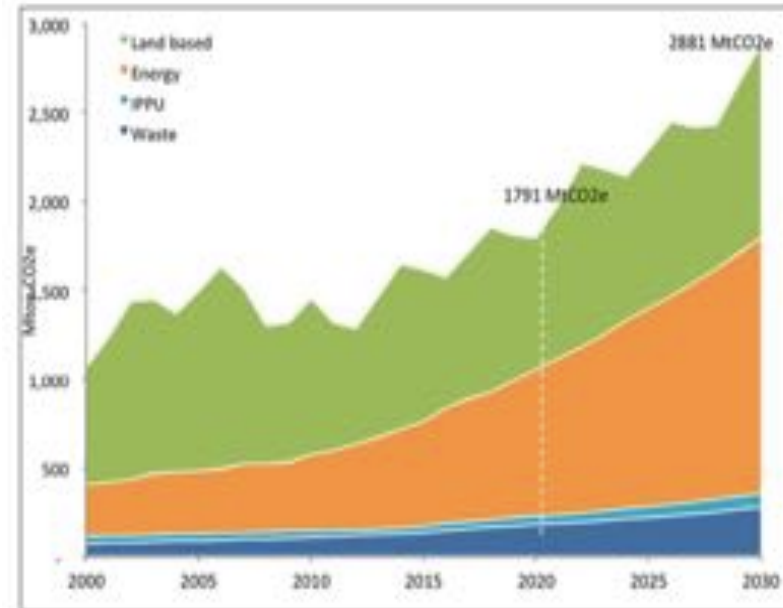
- Costa Rica
- Guatemala
- The Netherlands
- Guatemala (fire wood)



Costa Rica: Energy use by sector

## Climate change

- Indonesia and INDCs
- Colombia and impacts of El Niño



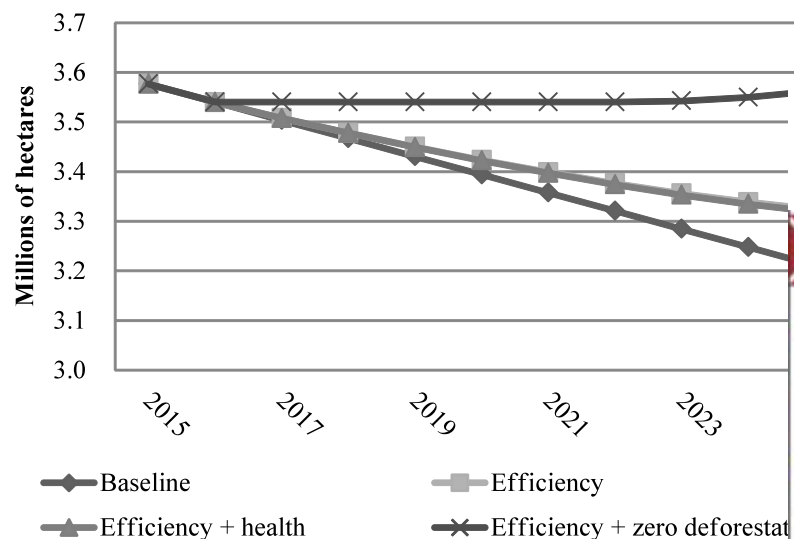
Indonesia: GHG emissions and emission projections





# Forests, poverty and peace dividend

## Guatemala scenario modeling



Colombia  
Costa Rica  
Guatemala  
Rwanda

## The Peace Dividend in Colombia

En un escenario donde la paz contribuye a reducir la deforestación neta en municipios de conflicto a tasas del resto del país



Tasa de deforestación neta se reduce de 6,5 a 2,6 ha/1.000ha

**\$1,2 billones por costos evitados en recuperación de hectáreas deforestadas\***  
**\$96 MM por pérdida evitada de bosque\*\***

Se reducen emisiones de 58 a 42MtCO<sub>2</sub> (1,6 veces las emisiones del parque automotor del país)

**\$262 MM por emisiones de CO<sub>2</sub> evitadas\*\*\***

\*DNP con base en Acción Verde. Costo promedio de recuperación por hectárea \$32 millones.

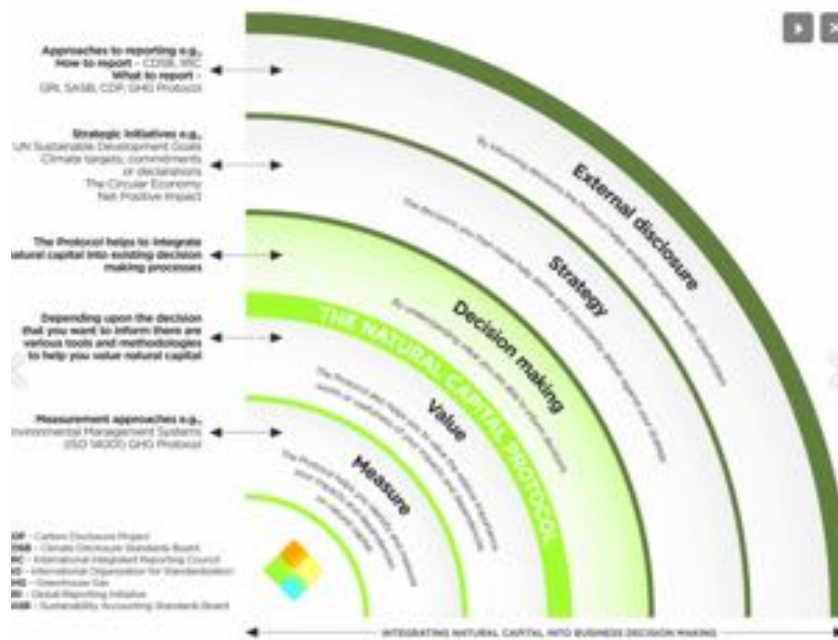
\*\*DNP con base en la pérdida por el costo comercial de la madera. SINCA, DANIE.

\*\*\*DNP. Con base en el valor de CO<sub>2</sub> en el ETS EU-USA/América.



# Opportunities

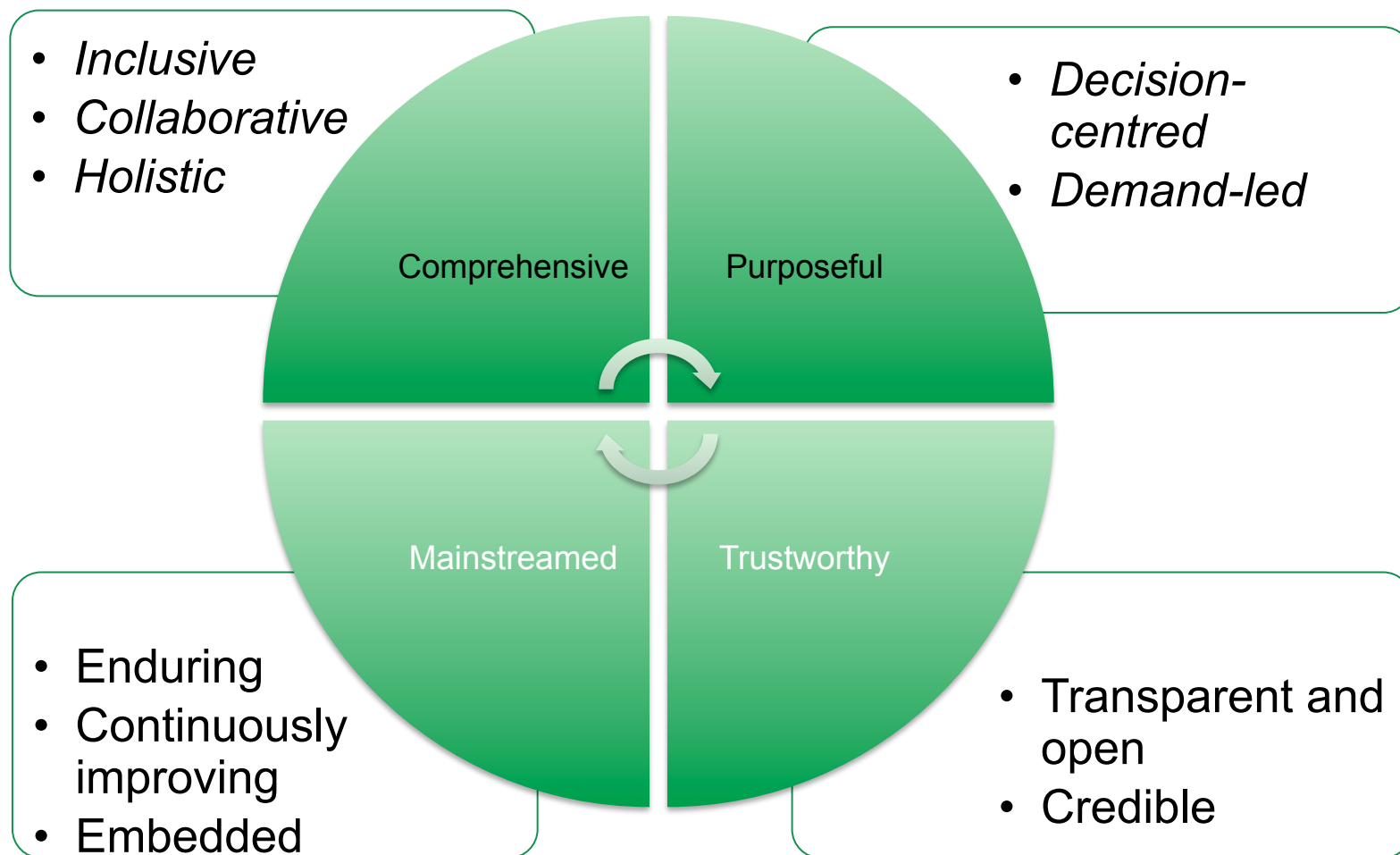
## Links with business



## Biodiversity conservation



# 10 living principles for making NCA fit for policy



**Thank you!**

