Policy use – national and international examples

London group on environmental accouting, 22nd meeting, Oslo, Norway



Main channels

www.statbank.dk



News from Statistics Denmark



"Green National Accounts" website



"Green National Accounts News" via e-mail to subscribers





Making the data relevant: StatDK Analysis

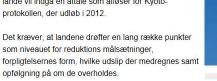


Emissions of greenhouse gases from the Danish economy 1990-2013

2013 I lyset af klimatopmødet COP21 om de internationale

Udslip af drivhusgasser fra dansk økonomi 1990-

I lyset af klimatopmødet COP21 om de internationale klimaforhandlinger, der finder sted i Paris i slutningen af november 2015, er der fokus på de seneste årtiers udvikling i ud-slippet af drivhusgasser. Der er store forventninger til COP21 og håb om, at de involverede lande vil indgå en aftale som afløser for Kyotoprotokollen, der udløb i 2012.





DSTAnalyse 25. november 2015

"Household consumption generates large amounts of industrial waste"

Vores forbrug skaber store mængder erhvervsaffald

Hver dag smider vi affald i skraldespanden, men det er nok de færreste, der tænker over, at vores forbrug også skaber affald, når varerne og tjenesteydelserne produceres. Med udgangspunkt i tal fra det grønne nationalregnskab sætter denne analyse tal på hvor meget affald, der skabes i virksomhederne i Danmark, allerede for vi køber en vare.

Men affald er ikke bare affald. Noget affald er klassificeret som farligt, men der er også meget affald som kan genanvendes. I denne analyse opgøres også, hvor meget erhvervsaffaldet knyttet til forskellige typer forbrug genanvendes.



Hent som pdf



Articles/interviews in news media

"Growth and development is measured much better by the green national accounts"



"Welfare is much more than growth in GDP"







- Presentations at three major national environmentaleconomic conferences during the last year
- "Road Show": Visiting ministries and organizations with presentations of the "Green National Accounts"



One major publication: "The Danish Green National Accounts"

Due spring 2017

Will be distributed to Parliament committees

(was successfull last time we did it)



Listening to and engaging the users:

New three year research project together with University of Copenhagen

- Title: Developing and implementing Environmental Economic Accounts and the Green GDP
- WP1: How can political-administrative practices related to the use of traditional economic measures like GDP be oriented towards using the Danish System of Green National Accounts (GNA) and a green GDP?
- WP2: Improving the foundations for the ongoing development of the GNAs focusing on the the calculation of a green GDP
- WP3: Outreach and engagement activities

including formation of a steering group with:

Ministry of Finance

The Danish Economic Council

The Ministry of Environment and Food

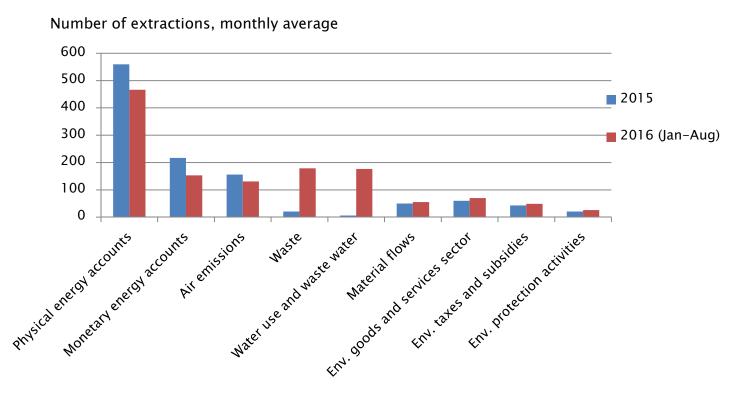
Politicians and others



There is an increasing interest in data from the Danish environmental-economic accounts

But some modules are more interesting than others!

Extraction of tables from www.statbank.dk







Policy uses of environmental accounts in Canada

London group on environmental accounting

Oslo, 28-30 September 2016,

Kevin Roberts

Statistics Canada





National-level environmental assessment of trade agreements

Purpose: To identify potential positive and negative impacts on the environment resulting from a proposed trade agreement.

Related legislation: Environmental Assessments are guided by the <u>Cabinet Directive on the Environmental</u>
<u>Assessment of Policy, Plan, and Program</u>
<u>Proposals</u> (updated in 2010) and the 2001 <u>Framework for Conducting Environmental Assessments of Trade</u>
<u>Negotiations</u>.

These documents are available on the Foreign Affairs, Trade and Development Canada's <u>Environmental Assessments</u> web site.

Objectives of the Framework

The 2001 Framework for Conducting Environmental Assessments of Trade Negotiations has two objectives:

First, it helps trade negotiators integrate environmental considerations into the negotiating process by calling for the identification of potential positive and negative environmental impacts of trade negotiations.

Second, it provides a means to address public concerns about the environmental effects of trade negotiations by documenting how the environment is considered during negotiations.

Overall, the environmental assessment contributes to ensuring greater coherence between trade and environment policies.

EA Methodology (1)

A four-step methodology is applied:

- 1. Identification of the economic effects of the negotiation (inputoutput based multiregional Computational General Equilibrium model)
- 2. Identification of the likely environmental impacts of such changes (via link to SEEA Physical Flow Accounts)
- 3. Assessment of the significance of the likely environmental impacts
- 4. Identification of enhancement/mitigation options to inform the negotiations

Sjoerd Schenau Statistics Neterlands

Policy use of the Seea in the netherlands

- A speech

Mark Lound Australian bureau of Statistics

Policy use of the Seea in australia

- A speech



Overview of Japan's SEEA-EEA application

Takashi Hayashi
Policy Research Institute, Ministry of
Agriculture, Forestry and Fisheries
(PRIMAFF)

th8841@affrc.go.jp

Nishiwaga, Iwate Pref. Photo: D.Sawauchi

Who is doing what?



- Statistics Bureau
 - Counterpart of UNSD
- Cabinet Office
 - Following SEEA-CS
- Ministry of the Environment
 - SEEA-EEA
 - A research project led by Kobe University and financially supported by the ministry
- Ministry of Agriculture, Forestry and Fisheries
 - SEEA-AFF...

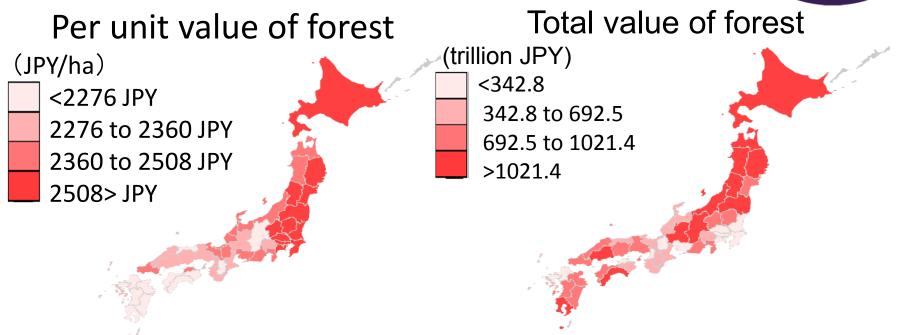
Japan's SEEA-EEA



- The research project
 - Started in 2015 will end in 2017
 - To develop a tool to disseminate the value of ecosystem services
- Meta analysis and benefit transfer
 - Japan has many research results of evaluating ESS as value of multifunctionality of forest and agricultural land
 - Using these results, we conducted meta analysis and apply benefit transfer to value ESS in Japan
 - Estimated the value of forest at prefectural level

Japan's SEEA EEA





- Very rough sketch of the value of forest
- Unable to integrate it into SNA figures
 - Inconsistency of value (exchange vs surplus)









SEEA DEVELOPMENT IN MALAYSIA: COLLABORATION WITH ACADEMIA

22nd London Group Meeting, Oslo, Norway 28-30 September 2016

Presented by:

Ms. Zaitun Mohd. Taha

Department of Statistics, Malaysia

22nd London Group Meeting, Oslo, Norway

CONTENTS:

- **1** A BRIEF JOURNEY
- **2** COLLABORATION WITH ACADEMIA
- **3** PUBLICITY ON SEEA
- 4 MOVING FORWARD

A BRIEF JOURNEY



22nd London Group Meeting, Oslo, Norway

COLLABORATION WITH ACADEMIA



1

PSUT- Energy Account (2014 – 2016)

- Technical collaboration with University Putra Malaysia
 - Concept and methodology, data estimation & analysis

2

Supporting Member States in Developing & Strengthening Environment Statistics & Integrated Environmental-Economic Accounting for Improved Monitoring of Sustainable Development (2016 – 2017)

- Lecturer from University Putra Malaysia has been appointed as a project consultant (July 2016 – November 2017)
- Prepare project outputs: National Plan SEEA Malaysia and one selected SEEA account

PUBLICITY ON SEEA BY ACADEMIA



SEEA DISCOURSE IN UNIVERSITY PUTRA MALAYSIA







Tentative Program Opening Address by Dr. Mohd Uzir Mahidin, Presentation by UPM-SEEA team leader (Advancing System of Environmental-Closing remarks by Associate Prof Dr. Shaufique Fahmi Sidique. Director of the Institute of Agricultural and Foo

robiatuladwyh90@gmail.com : 016-3156390

UPM-SEEA Research Team **SEEA** A Discourse with the United Nations Statistics Division





Dr. Mohd Yusof Saari (Leader)



DKEP 1. Faculty of Economics and Management, Universiti Putra Malaysia 3.001559, 101.706718



PUBLICITY ON SEEA BY ACADEMIA (cont'd)





PUBLICITY ON SEEA BY DEPARTMENT OF STATISTICS (DOSM)

Date	Programme
23 April 2015	Malaysia Green Growth Strategy Lessons Sharing Conference And Review Workshop, Kuala Lumpur
21 May 2015	Workshop on the First Draft Of Chapters On Constraints, Gaps And Needs For Biennial Update Report, Bangi
26 January 2016	Workshop with Data Providers for the Preparation of the National Greenhouse Gas Inventory for Energy and Industrial Processes & Product Use Sectors, Bangi
11 March 2016	Training Course on Introduction to the Environment Economic, Bangi
21 April 2016	Green House Gas Inventory Workshop, Port Dickson

MOVING FORWARD

Initiatives preparing
human
resources in
SEEA



SEEA awareness programme in public university



Establishing a centre of excellence for SEEA



Short course of Input-Output

• Include SEEA as part of syllabus

UPM's vision

Improve statistical skill in data analysis Collaborate with academia to produce journals related to SEEA

Promoting SEEA to public

In line with
Department of
Statistics,
Malaysia
Transformation
Plan
2016 - 2020

22nd London Group Meeting, Oslo, Norway

THANKYOU

22nd London Group Meeting, Oslo, Norway



Gabaronne Declaration for Sustainability in Africa Natural Capital Accounting Conservation International & World Bank Waves

22nd Meeting of the London Group on Environmental Accounting 28-30 September 2016, Statistics Norway, Oslo

GDSA



- It commits signatory countries to:
 - Incorporate the value of natural capital in public and private policies and decision-making;
 - Pursue sustainable production in agriculture, fisheries, and extractive industries while maintaining natural capital; and
 - Generate data and build capacity to support policy networks.
- The GDSA was endorsed as a vehicle for green development by the African Ministerial Conference on the Environment (AMCEN) in March 2015, thereby earmarking the GDSA for inclusion in the African Union (AU) structure of programs.
- Conservation International (CI) has been delegated the functions of the GDSA Secretariat by the Government of Botswana until 2018/19.



GDSA



 The GDSA provides a platform for using NCA to inform and encourage sustainable development. The overall objective of the Declaration is,

"to ensure that the contributions of natural capital to sustainable economic growth, maintenance and improvement of social capital and human well-being are quantified and integrated into development and business practice."



Community of Practice



- Pre-workshop scoping assessments and discussion at the workshop identified the need for:
 - Increasing co-ordination among agencies at country level
 - Increasing technical expertise in NCA
 - Understanding and demonstrating policy applications of NCA
 - Improving the sharing of existing data and resources to fill data gaps
- The NCA COP is intended to become an on-going platform to build capacity in NCA, to facilitate
 - the exchange of experiences between countries,
 - to develop common templates and methods for application at country level,
 - to provide a mechanism for efficient delivery of training and development, and to establish a clear reference point for NCA in the region.



Country		Agriculture	Biodiversity	Carbon	Ecosystem	Emission	Energy	Fisheries	Forest/Timber	Freshwater/ Aquatic/Lake	Land	Minerals	Soil	Waste	Water
South Africa	Desired		Χ	Χ	Χ						X		Χ	Χ	
	Demonstrated				Χ	X	X	X		Χ	Χ	Χ		Χ	
	Established						X	Χ				Χ			
Botswana	Desired				Χ	X					Χ				
	Demonstrated						Χ					Χ			Χ
	Established											Χ			Χ
Madagascar	Desired		Χ	Χ	Χ	Χ	Χ			Χ	Χ		Χ	Χ	
	Demonstrated								Χ			Χ			Χ
	Established														
Uganda	Desired	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X	Χ	Χ	X
	Demonstrated														
	Established														
Mauritius	Desired	Χ	Χ	X	Χ	Χ	Χ	X	Χ	X	Χ		Χ	Χ	X
	Demonstrated		Χ	X	Χ	Χ	X		Χ	X	Χ		Χ		X
	Established														
Ghana	Desired	X	X		Χ		Χ	Х	Χ	X	Χ	Χ	Χ	Х	X
	Demonstrated			Χ		Χ									
	Established			Χ		Χ									
Namibia ^a	Desired		Χ		Χ	Χ					Χ		Χ	Χ	
	Demonstrated	Χ		Χ			Χ	Χ	Χ			Χ			Χ
	Established							Χ							X



Key challenges



Country	Lack of statistics/da ta	Inter- institutional coordination	Lack of technical expertise	Absence of demand for NCA	Financial resource availability	Disarticulat ion between statistical registries and NCA					
	Ratings (1 = largest barrier)										
South Africa	3	5	1	4	2	6					
Botswana	4	3	1	2	6	5					
Madagascar	1	1	1	2	3	1					
Uganda	1	4	5	6	3	2					
Ghana	1	6	2	5	4	3					
Namibia	1	2	1	1	2	3					
Mauritius	3	1	2	5	4	6					
TOTAL *	14	22	13	25	24	26					

Policy relevance and timeliness!





Thank You

Mark Eigenraam: Director, IDEEA

mark.eigenraam@ideeagroup.com

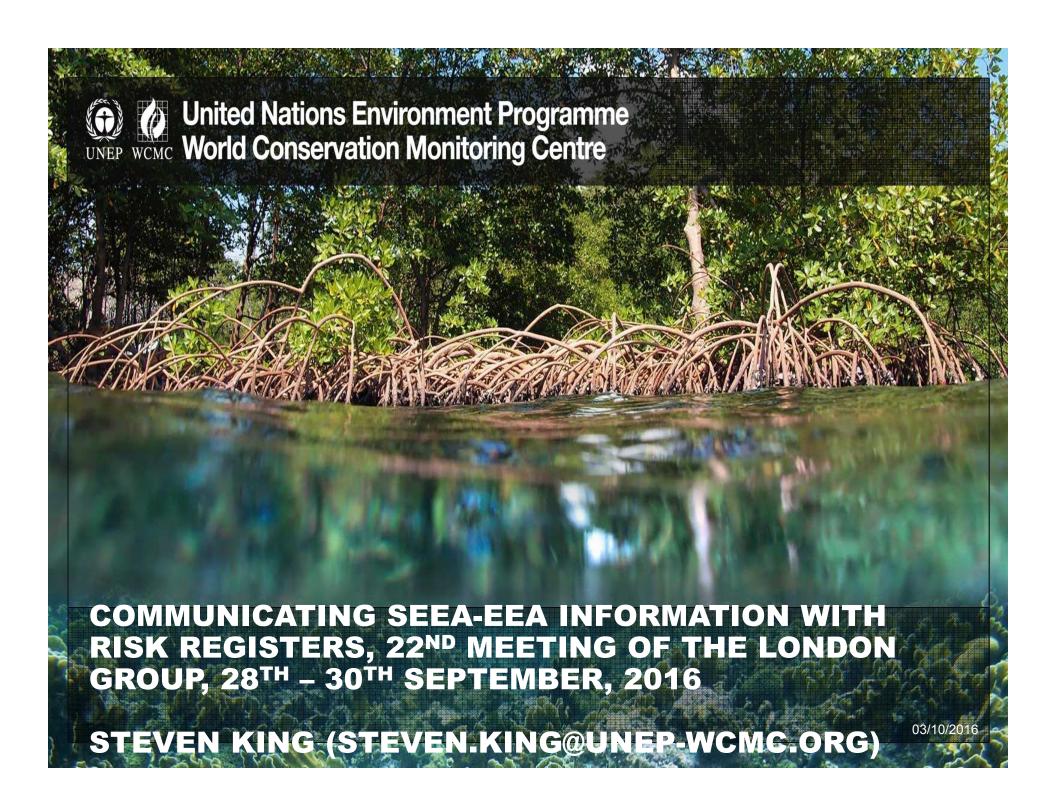


Ida björk Statistics sweden



Consumption based GHG emissions in Sweden, an example

- Each year Statistics Sweden calculates a consumption based GHG emission estimate, for the Swedish EPA (based on SEEA).
- A complement to the national inventory to UNFCC (to give a more complete picture).
- Details on domestic/import; final demand components; household consumption groups etc.
- Published on EPA:s website; seminars; reports;
- Emerging fields:
 - decomposition analyses
 - industry specific analyses





COMMUNICATION PROCESS



1. Identify target audiences.



2. Develop a set of key messages and supporting material.



3. Decide on a communication format for each target audience.

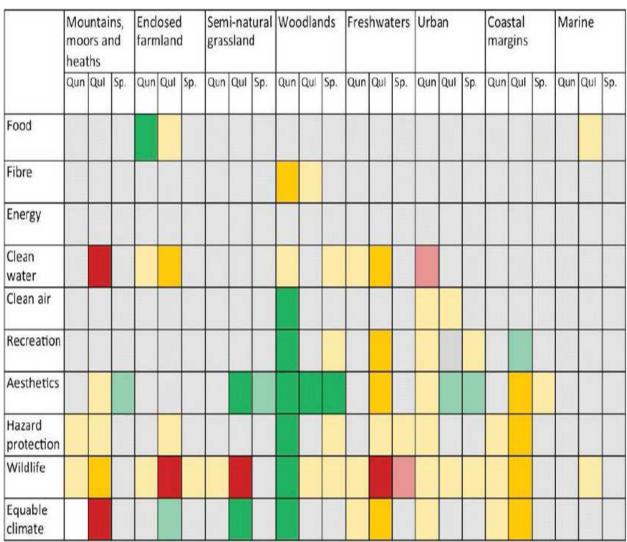


RISK REGISTER (ENGLAND, NCC)

		Status of benefit					
		Above, at, or just below target	Below target	Substantially below target (>50%)			
Trend in asset status	Positive or not discernible	Low	Medium	Medium			
	Negative	Medium	Medium	High High			
	Strongly	High	High				

Mace et al., (2015) http://onlinelibrary.wile y.com/doi/10.1111/136 5- 2664.12431/full

UNEP-WCMC (2016)
http://wcmc.io/Feasibility_SEEA-
EEA Uganda



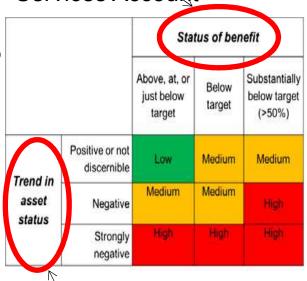
03/10/2016



HYPOTHETICAL RISK REGISTER (SEEA-EEA)

Ecosystem assets												
Ecosystem Service Benefits	Forests		Grasslands			Wetlands						
	Extent	Condition	Sp. Config.	Extent	Condition	Sp. Config.	Extent	Condition	Sp. Config.			
Food												
Materials for												
Construction												
Energy												
Clean water												
Clean air												
Recreation and												
Tourism												
Hazard protection												
Wildlife												
Equable climate												

Information from Ecosystem
Services Account



Information from Ecosystem Extent, Condition and Thematic Accounts (e.g.,

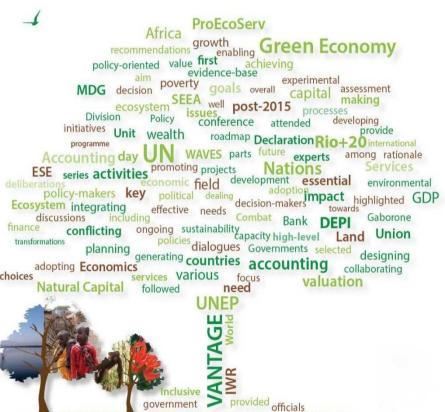


BENEFITS OF THE APPROACH

- 1) Can deal with data and knowledge gaps
- 2) Communicates principle risks readily
- 3) Communicate risk where thresholds a concern
- 4) communicate risk where resilience is a concern
- 5) Communicates where best to target further data collection

VANTAGE

(Valuation and Accounting of Natural Capital for Green Economy)





To contribute to a better <u>integration of the value</u> of ecosystem services <u>into</u> sustainable <u>macroeconomic policies</u> and <u>development planning</u>

Policy Driven SEEA EEA Implementation

- Morocco
- Kazakhastan
- Tanzania
- Vietnam
- Trinidad and Tobago



Also, Inclusive Wealth Index



- ☐ 140 Countries
- ☐ Man made, Natural and Human Capital

- ☐ Next Report IWR2017
- ☐ With 160 countries and richer dataset and
- ☐ Closer links with policy





TEEB for Agriculture & Food

■ Demonstrate that the economic environment in which farmers operate is distorted by significant externalities, both negative and positive, and a lack of awareness of dependency on natural and social capital

☐ SEEA AFF would be critical





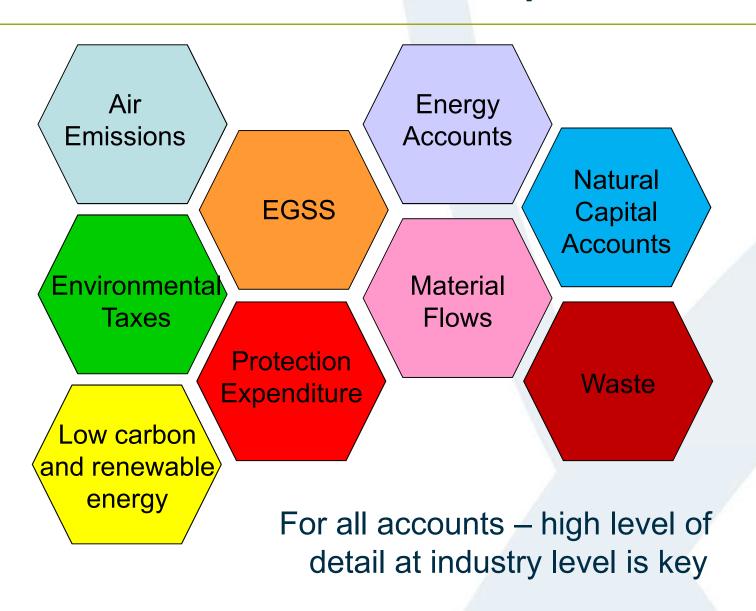
THANK YOU!

03/10/2016

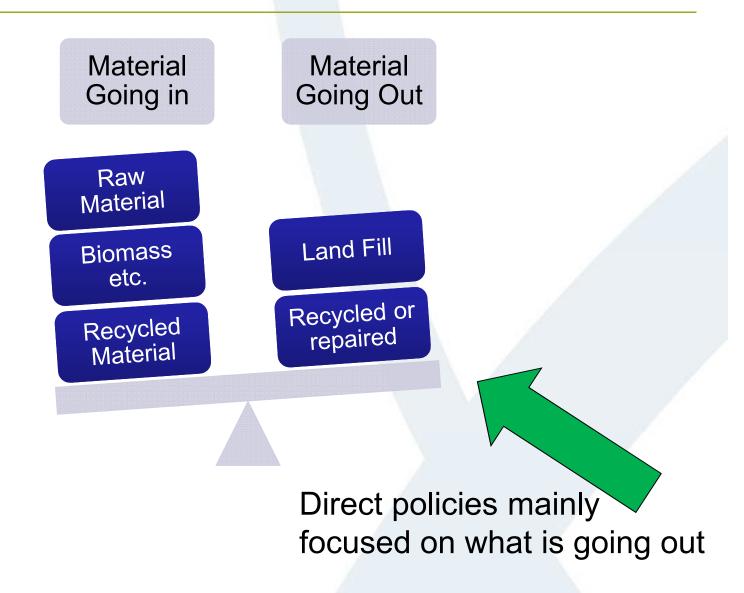
UK Policy Applications of the Environmental Accounts

Emily Connors, Office for National Statistics (UK)

What data do we have to base polices on?



Circular Economy



Circular Economy Examples

Develop and monitor progress against:

- Waste Framework Plan
- Waste Prevention Metrics
- Landfill Taxation
- Biodegradable Waste Reduction Targets



EU Targets

- Recycling 'waste from households' 50% by 2020
- Recycle or recover packaging waste 60% in 2013
- Recover non-hazardous construction and demolition waste 70% by 2020

Emissions and EPE Examples

Air emission accounts used by Committee on Climate Change (CCC)

Independent statutory body who advise UK government on emissions targets

CCC undertakes detailed sectoral analysis to make key recommendations regarding energy and climate policy

Environmental Protection Expenditure Accounts

Provides barometer for how much money companies are spending on protecting the environment and types of activities

Data painting a picture

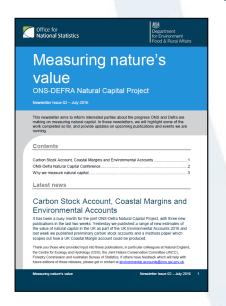
Data might not have a target use but still used to inform

Often it is about providing data which together provides a picture of what is changing in the environment

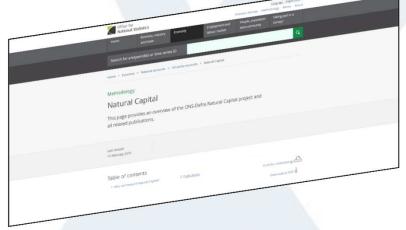
Our developmental measures are not robust enough for direct policy, but still informing—e.g. natural capital accounting

Getting the message across

Quarterly newsletter and annual engagement event



Dedicated web presence





Policy applications in the EU: the case of resource efficiency

Arturo de la Fuente deputy Head of Eurostat unit 'environmental statistics and accounts; sustainable development'

arturo.de-la-fuente@ec.europa.eu



Main policy demands of SEEA in the European Commission

- Natural capital accounting
- Circular economy
- Resource efficiency



Europe 2020

EU's growth strategy for the decade 2010-2020

Smart, sustainable and inclusive economy

Eurostat indicators to monitor progress





7 flagship initiatives New engines to boost growth and jobs

Smart growth

Digital agenda for Europe Innovation Union Youth on the move

Sustainable growth



Resource efficient Europe

An industrial policy for the globalisation era

Inclusive growth

An agenda for new skills and jobs European platform against poverty



Monitoring 'A resource efficient Europe': Resource efficiency scoreboard

- Published and maintained by Eurostat
- Structure:
 - 1. Lead indicator: resource productivity
 - 2. Dashboard indicators complement the lead indicator

Focus on 4 areas: materials, water, carbon and land

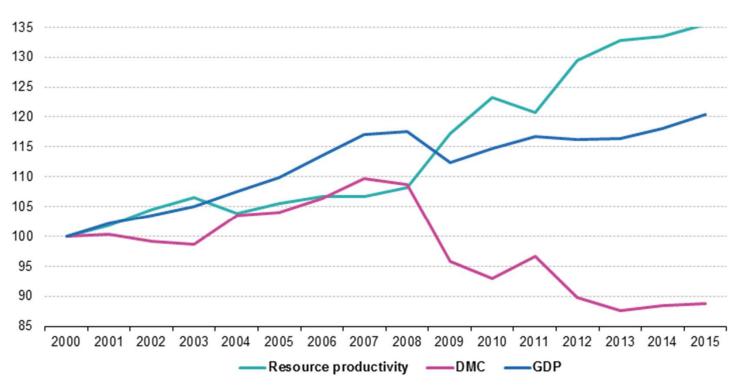
3. Thematic indicators to show progress in a range of key areas

Transforming the economy
Nature and ecosystems
Key areas (energy, food, buildings, transport)



Lead indicator: resource productivity indicator

 $Resource\ productivity = \frac{GDP}{Domestic\ material\ consumption}$





Conclusions

- Resource productivity important policy topic in EU
- SEEA data being used for lead indicator 'resource productivity'
- Push & pull with policymakers drove improvements in timeliness and methodology
- Some work still ahead of us
- All in all, a very successful experience

How you communicate with policy makers with SEEA data

Mexico's experiences

Presented by:

Raúl Figueroa Díaz



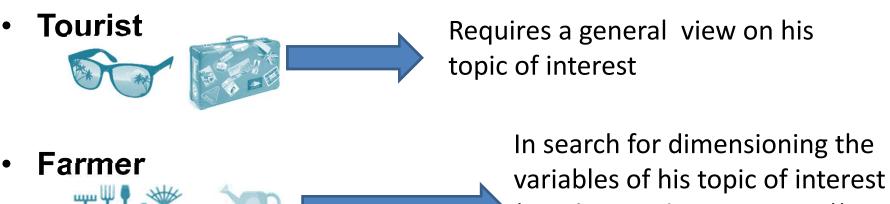
Content

- 1. Users profile
- 2. Use of data for national planning
- 3. Working groups
 - a) Ecosystems
 - b) Water accounts
 - c) Forest resources



1. Users profile

Users identification:

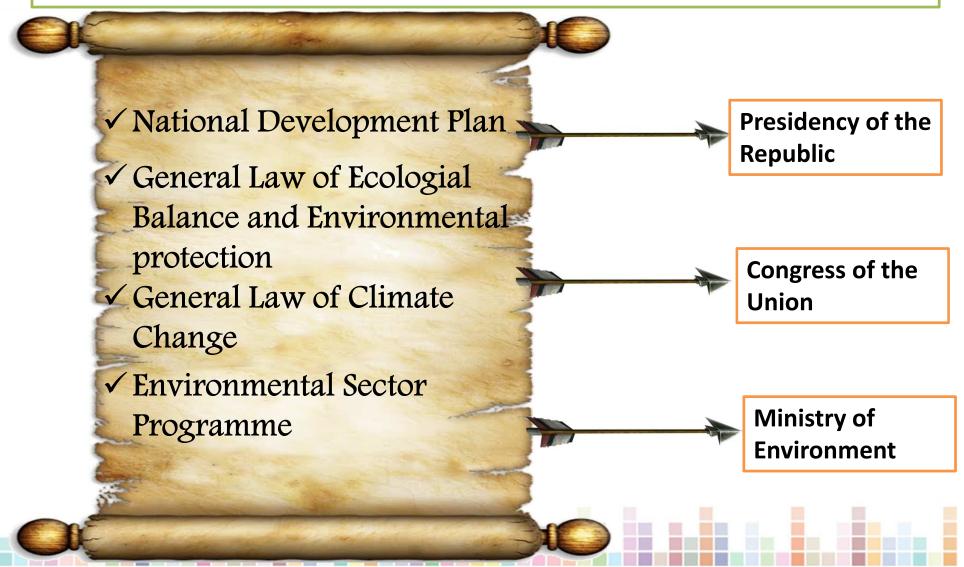


(graphics and comparisons))

In need for data classified and comparable in time, and knowing the methods or sources used intheir estimation, e.g. policy makers

2. National planning

Use of results of Environmental Accounts of Mexico in national policy instruments



3. Interinstitutional working groups

 Working groups with diverse sectors of the Mexican Ministry of Environment have been integrated

Ecosystem accounts

Ministry of Environment, National Commission of Natural Protected Areas, GIZ, among others.

Water accounts

National Water Commission

Forest accounts

National Forest Commission

INSTITUTO NACIONAL
DE ESTADÍSTICA Y GEOGRAFÍA

Conociendo México

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www.inegi.org.mx atencion.usuarios@inegi.org.mx









Michael Vardon

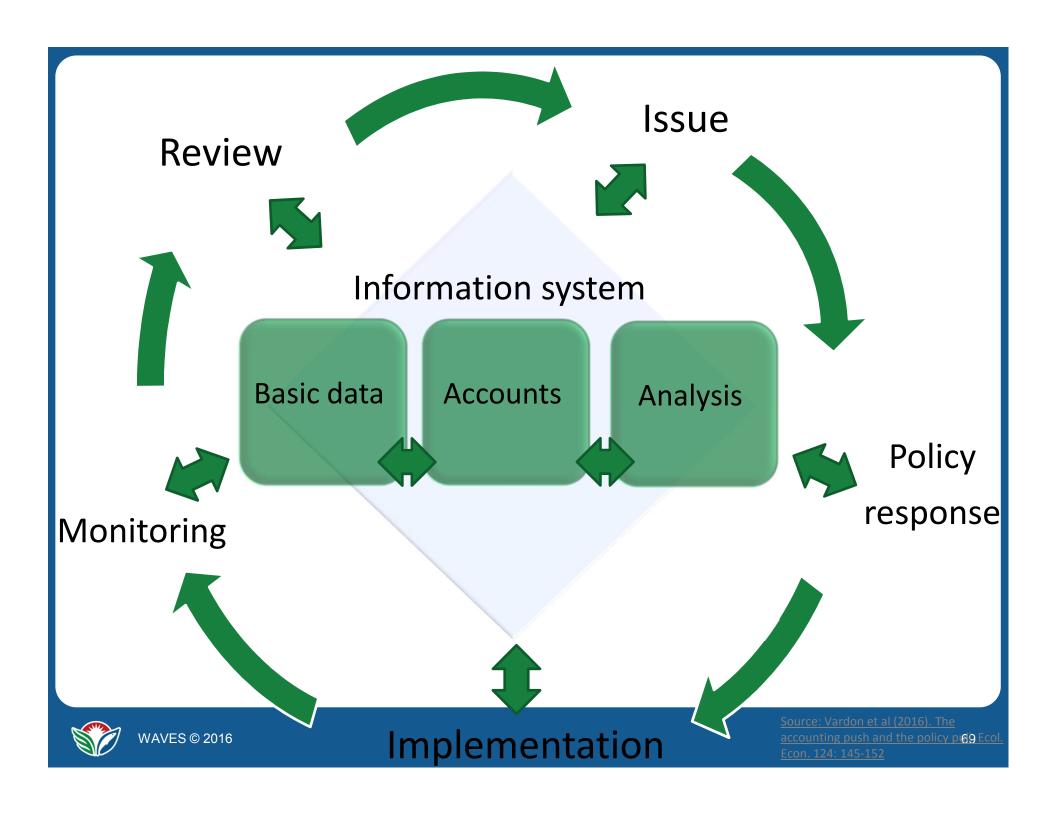
michael.vardon@anu.edu.au

London Group Meeting, 28-30 September 2016, Oslo Norway

Policy work and account applications







What do decision-makers think about?



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

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

Forum Natural Capital Accounting for Better Decision-making

The Haig, Netherlands 22-23 November 2016

Government of Netherlands and World Bank

Users and producers of accounts work together to identify the issues, policy options, analytical tools and decision-making processes that can use natural capital accounts



Case studies

- Netherlands
- Australia
 - ACT
 - Central Highlands
- Forest management
- SDGs
- CGE and I-O Modeling
- Water pricing
- EU Energy Agreement



Summary

The Sustainable
Dwelspinners Coals
Dwelspinners Coals
Dowerly and place all
Countries on a sustainabl
development path by
2030. This requires
better and more
integrated information
on how the economy,
environment and society
interact. Natural Egotial

interact. Natural capital accounting can help deliver the SDGs by making septicit the lish between the economy and the environment, enabling sustainable policy decisions and actions, and monitoring progress.

Background

Background

Prepared by Camille Bar

Consultant, International
Institute for Environment
and Development

Natural capital accounting and the Sustainable Development Goals

May 2016: This executive summary is an excerpt from an upcoming report by PBI. Netherlands Environmental Assessment Agency and is a draft version. The final version will be incorporated in the report and published soon at www.pbi.ni/ien

Applying environmental accounts to improve policy

LXLCOTIVE

Quality information on the vali improved political decision-ma idea behind the WAVES progre government of the Natherland Ecosystem Services'. This info (NCA), which many countries I

NCA means to integrate econo This is the method by which na data along international stands NCA in multiple countries. Now information can actually contril

The Netherlands has nearly 50 environmental statistics, and o satellite account to the system information has been used in a nature and spatial planning cat establish an NCA system. It co environmental statistics and a cherin nedes? In what ways is the on which statistics or accounts to mythich statistics or accounts on the nature of th

experiences in the Netherlands
This paper provides a start to an environmental statistics and a early 1970's. Its emphasis is o intermediaries, and their final

