

INTEGRATED DATA FOR INTEGRATED POLICIES

ENDING THE SILO APPROACH

In an increasingly interconnected world, we can no longer afford to construct siloed policies. To achieve sustainable development, policy and decision makers need to create integrated policies that account for the trade-offs and synergies between different policy domains.

Luckily, more and more policy makers at all levels are beginning to understand that economic growth cannot be pursued separately from a healthy environment or societal wellbeing. Today, we are seeing a clear need to go “beyond GDP” to pursue new growth models.

As a result, traditional economic models which do not take into account climate change, biodiversity loss, dwindling natural resources and their impact on society, are struggling to stay relevant.

To support integrated, transformative policies, policy and decision makers require information systems that produce consistent, comparable and comprehensive statistics and indicators that take into account interlinkages and dependencies between the environment and the economy.



PROVIDING ANSWERS TO NEW POLICY QUESTIONS

The System of Environmental-Economic Accounting (SEEA) is the international statistical standard for natural capital accounting (NCA). The SEEA is an integrated system that provides a framework for measuring the environment and ecosystems and their contribution to the economy and human wellbeing.

There are two parts to the SEEA: The SEEA-Central Framework and the complementary SEEA-Experimental Ecosystem Accounting. The SEEA-Central Framework provides information on the use of natural resources (e.g. water, energy, etc.) as well as the generation of pollutants and wastes by different economic sectors. The SEEA-Experimental Ecosystem Accounting complements the SEEA-Central Framework to account for the extent and condition of ecosystems and the critical ecosystem services they provide to society (e.g. pollination, carbon sequestration, recreation, etc.).

Crucially, the SEEA provides a framework to obtain consistent, internationally comparable statistics on the environment-economy nexus. Over 90 countries have compiled the SEEA, and the SEEA can be used to measure progress towards 40 of the Sustainable Development Goal indicators.



What industries are key for green growth and green jobs?

What is the contribution of our urban parks to society?

What does construction of a new road mean for flood mitigation and pollination?

Which industries can help us achieve a circular economy?

How effective are our expenditures on biodiversity protection?

Which industries are competing for scarce natural resources?

MEASURING WHAT MATTERS FOR A SUSTAINABLE FUTURE – WHY THE SEEA?

1 Complementing GDP
 GDP is often regarded as an indicator of the success of a country. However, it does not provide information on the sustainable use of resources or the future capacity of ecosystems to deliver important services our economies rely on. The SEEA provides information on natural capital needed to go 'beyond GDP'.

3 Defining policy goals
 Today's policy challenges are also reinvigorating the debate about what the overall goal of society should be. The SEEA provides an integrated view of environmental domains in the context of economic and social change and helps to define paths to a more sustainable future.

2 Dealing with complexity
 Interconnected domains, multiple stakeholders and various spatial scales add complexity to the formulation of effective policies. The SEEA accounts for interconnections between different domains, allowing users to model outcomes and identify trade-offs and synergies at multiple scales.

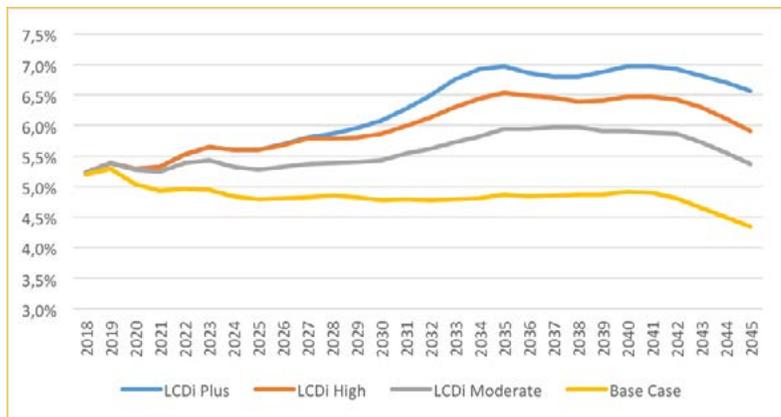
4 Linking the economy and the environment
 Using the same conceptual basis as the System of National Accounts (SNA), the SEEA allows the formulation of integrated policies taking both domains into account. It enables users to explore the environmental and economic impacts of different policy options.

PROGRESSING TOWARDS BETTER POLICY SOLUTIONS: LOW CARBON GROWTH IN INDONESIA

The Ministry of National Development Planning in Indonesia recently introduced the country's Low Carbon Development Initiative (LCDI). To facilitate a better understanding of the feasibility of low-carbon growth, scenario modelling was conducted using environmental accounting approaches based on the SEEA. This included the use of land cover accounts, land extent accounts and peat accounts developed at the national and provincial levels.

Data on energy and water was also incorporated into the model to estimate the impact of natural resource availability and provision of ecosystem services on economic productivity. The projections contributed to more accurate forecasts for GDP and economic growth under different policy scenarios, allowing the government to pursue policies that promote both economic growth and environmental sustainability.

Indonesian GDP growth trajectories for various scenarios



LCDI Plus

Reflects LCDI High for 2020–2024 and additional, more ambitious policy measures thereafter

LCDI High

Includes more ambitious policy measures than LCDI Moderate for 2020–2045, achieves the conditional NDC target

LCDI Moderate

Includes new low carbon policy measures for 2020–2045, achieves the unconditional NDC target

Base Case

No new policies but reflects environmental degradation

Source: Indonesia, Bappenas (2019)

This publication has received financial support from the German Federal Ministry for Economic Cooperation and Development, implemented through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Please visit seea.un.org, where you can find more information and e-learning on the SEEA and its policy applications.

Comments and questions are welcome.

Please contact us at: United Nations Statistics Division (UNSD), Environmental Economic Accounts Section, New York, USA

seea@un.org | seea.un.org



System of Environmental Economic Accounting