

# **Natural Capital Protocol – System of Environmental Economic Accounting Toolkit**

**Discussion paper**

**September 2017**

# NCP – SEEA Toolkit

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## STATUS OF CURRENT DRAFT

This draft toolkit examining the links between the Natural Capital Protocol (NCP) and the System of Environmental-Economic Accounting (SEEA) is intended to form a basis for discussion about the ways in which these two tools for natural capital accounting (NCA) might be combined to further support advances in this important area of work.

The Toolkit was drafted by IDEEA Group to support discussion at the upcoming Natural Capital Coalition / ICAEW / IDEEA Group workshop “Combining forces on Natural Capital” held in London on 31 August, 2017.

The Toolkit focuses specifically on placing the accounting framework and approach of the SEEA within the broader natural capital assessment process articulated in the NCP. A separate background paper that places the SEEA approach in context with other natural capital related initiatives is also provided as context. This can support the other materials provided as references for the workshop.

It is intended that the Toolkit will, in due course, incorporate a range of stylised examples, case studies and checklists to support implementation of the types of linkages that are described in the present draft. The content at present describes the multiple ways in which the progress that has been made on accounting for natural capital in the SEEA could be applied at corporate level within the NCP process.

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IDEEA Group, September 2017

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## BACKGROUND

The environment, **our natural capital**, is a resource that is used and managed by individuals, corporations and governments. Our capacity to continue to secure the benefits we receive from the environment relies on the availability and sustainability of this natural capital base. Natural capital has both **private and public** dimensions that are reflected in different perceptions, management and decision-making approaches. These differences often lead to overuse and poor management of natural capital – often referred to as the tragedy of the commons – at both global and local scales.

A key feature of the differences between public and private approaches to natural capital concerns the language that is used to describe and discuss the relevant environmental stocks and flows. Central to improving the management of natural capital is having a **common language** to define, measure and report on it. Establishing a common language would facilitate a movement towards an agreed framework to account for the use of natural capital and its changing state. As part of this, aligning private and public perspectives on defining and measuring our natural capital is an important objective.

There have been significant advances in recent years towards building a common language. From a public perspective, building on a long history of environmental reporting and national accounting, the United Nations, together with the World Bank, IMF, OECD, FAO and the European Commission, has published the **System of Environmental-Economic Accounting (SEEA)** in 2014 (UN et. al., 2014a & 2014b). The SEEA provides an internationally agreed, accounting framework for the recording of a comprehensive and integrated set of environmental data. The framework is fully aligned with the standard approaches used to measure economic activity at the national level, including measures of GDP, productivity, saving and national wealth.

A key feature of the SEEA is the implementation of common terms and definitions to describe a comprehensive set of environmental stocks and flows, including **natural resources** (e.g. minerals, timber, fish), **physical flows** (e.g. water, energy, GHG emissions), land and ecosystems, **ecosystem services and biodiversity**.

From a private perspective, building on a long history of sustainability and non-financial reporting at the corporate level the Natural Capital Coalition (NCC) released the **Natural Capital Protocol (NCP)** in 2016 (NCC, 2016). The NCP describes a process for assisting companies, large and small, to understand their links to natural capital and assess the magnitude of their dependencies and impacts on natural capital. The NCP does not have an agreed set of terms or a language for the measurement of natural capital but does describe a standard process for incorporating natural capital into decision-making.

There is now an opportunity to combine forces and leverage the language and accounting principles of the SEEA in support of the NCP. Doing so would support the objective of the protocol to be a trusted and credible process for the production of information for business

decision-making. This document outlines an **NCP – SEEA toolkit** and provides guidance on how the various component accounts and measurement methods of the SEEA can be adapted and applied to support implementation of the Natural Capital Protocol (NCP).

## TOOLKIT - OVERVIEW

The NCP describes nine steps to support a discussion of natural capital for a business. The steps cover the ‘why’, ‘what’, ‘how’ and the ‘what next’ stages of a discussion. In developing the Protocol, it was acknowledged that the relationship of individual businesses to natural capital is highly varied, from agriculture and forestry, to retail and finance. Given these sectoral variations, the development of distinct approaches for each could be justified. However, in keeping with the inclusive and aligned spirit of the NCP, a single series of steps is described to ensure all sectors, especially when seen through a supply chain lens, have a common language to discuss our common natural capital. This supports a shared understanding of the relative importance, or materiality, of natural capital to companies.

The NCP has not developed or prescribed specific measurement approaches for the many dimensions of natural capital. Indeed, the fact that natural capital encompasses many different stocks and flows is a potential barrier to wide spread adoption and progress for the NCP. This barrier can be overcome by using some of the principles and guidance of the SEEA. While the SEEA does not provide a process by which companies can work through the relevance of natural capital, it can provide a complementary, robust and consistent basis for the scoping and measurement of natural capital at the corporate level. Importantly, the integrated, conceptual basis of the SEEA also embodies the four key principles of the NCP, namely relevance, rigour, replicability and consistency.

This toolkit takes, as given, the NCP process by which a company should consider its links to natural capital. The focus of this toolkit is on the way in which the principles and methods of the SEEA to defining and measuring environmental stocks and flows can be applied at the corporate level to support the NCP process.

The rationale for using the SEEA within an NCP context is that it can:

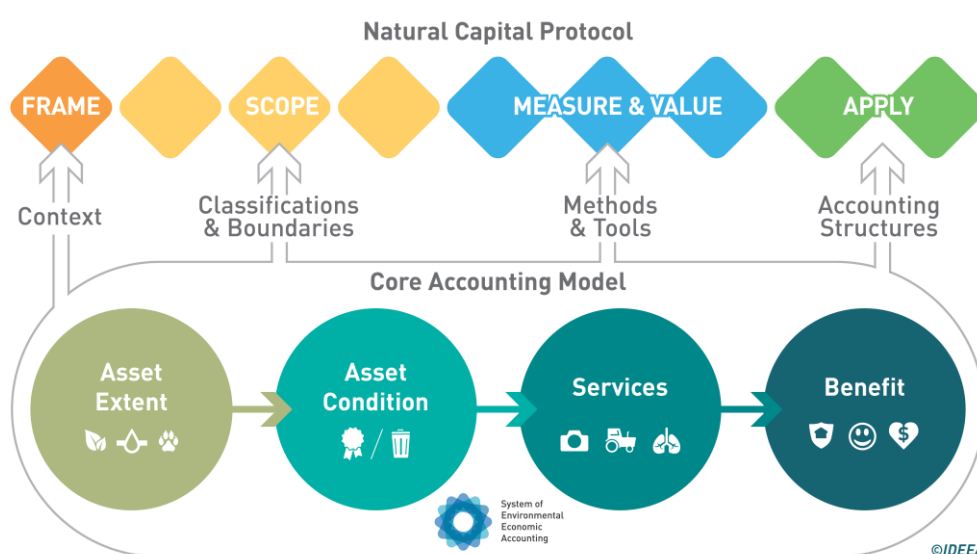
- Use existing, internationally agreed findings on the measurement and reporting of environmental stocks and flows;
- Support comparison and benchmarking within and across businesses and countries;
- Integrate internal management and decision making around natural capital;
- Support the use of public environmental information datasets at corporate level; and
- Encourage consistency in information used at public and private levels.

Further, the progress on the development and implementation of the SEEA around the world may be used to highlight the increasing importance that governments are placing on improved and high quality environmental information to support policy directed at environmental improvement and sustainable development. This may provide a general motivation for

companies to start a discussion on natural capital and link to sustainable development objectives.

The following sections outline how the core accounting model of the SEEA can be used to support the implementation of the NCP process. As shown in the figure below, four key connections are envisaged in the toolkit – context, classifications and boundaries, methods and tools, and accounting structures.

Figure: Connecting the SEEA accounting model and the NCP



## STAGE #1: FRAME – THE WHY?

Framing a discussion on natural capital is an essential part of the process that underpins subsequent measurement and reporting for accounting purposes. A general understanding and agreement that “the environment is important” is not sufficient to build a business case. The NCP identifies a range of possible rationales for undertaking natural capital accounting including:

- Reducing costs and reducing supply chain risks;
- Identifying efficiency gains;
- Responding to legal and regulatory requirements;
- Improving access to finance and attracting investment;
- Identifying new revenue streams and increasing ability to attract and retain employees; and
- Supporting a social licence to operate.

An important aspect of assessing the relevance of natural capital for an individual business is understanding the environmental context in which it operates. For example, is an investment located in a region suffering water scarcity or declining soil fertility? What is the benchmark for an industry in terms of energy use, water use and GHG emissions? Have there been rapid changes in land use in recent years in a particular province that are impacting on biodiversity and ecosystem services? Answering these questions requires information that is consistent at different scales allowing local businesses and multi-national operations to be placed in appropriate context. The SEEA methods and principles provide clear guidance on the collection of information that can support an informed discussion of the why, and can be used to identify the natural capital issues of most significance in a specific location, region or country.

## **STAGE #2: SCOPE – THE WHAT?**

Having framed, in general terms, the connection between a business and natural capital, NCP Stage 2 requires a discussion to clearly define what will be the focus for a particular assessment. Given the breadth of possible connections to different forms of natural capital in different locations, a business will likely focus on a limited number of environmental stocks and flows in the first instance and, over time, build a broader coverage. Examples of environmental stocks and flows include water, energy, GHG emissions, soil, wetlands, rivers, forest and timber resources, biodiversity and ecosystem services.

To support this discussion, the SEEA provides a comprehensive set of principles and methods for the measurement and reporting of environmental stocks and flows including those listed above. The SEEA includes definitions, terminology and classifications which can be used to establish checklists to focus discussions and ensure a consistency of language and understanding.

Once the target for a natural capital assessment has been established, the precise scope of the assessment needs to be determined. This scope of the assessment may focus internally or include broader upstream and downstream aspects of the business' supply chain. Further, the geographical scope must be determined – is the assessment for a specific establishment or operational unit in a given location, or are all business locations within scope?

The core accounting framework of the SEEA is well suited to supporting these areas of discussion since it is designed to capture all production and consumption activity (i.e. all possible supply chains) and to encompass environmental stocks and flows across all regions. It is important to recognise that while the SEEA is economy wide and national in scope, the framework itself can be applied to the measurement of environmental stocks and flows at the level of individual businesses and for specific spatial areas, e.g. individual farms. Again, the classifications underpinning the SEEA in terms of the types of economic activity and geographical areas, can be used to provide checklists to support standardised discussion and framing.

When considering the scope of the assessment, it is important to determine whether the focus is on the impact that a business' activity is having on natural capital (and associated benefits) or on the extent to which a business' operations are dependent on natural capital and hence may be affected by their own actions, or the actions of others.

The SEEA framework's inclusion of all environmental stocks and flows means that a discussion of both impacts and dependencies can be undertaken using the same framework. Also, it forces the discussion of impacts and dependencies to involve natural capital itself. Often, particularly in the context of impacts, discussion focuses on the impact that one business has on another business or household, following the standard "externalities" framing provided by economic theory. The SEEA approach first makes the direct connection between business activity and the relevant environmental asset (e.g. a river, agricultural land, forest, marine area), and then makes the connection to other businesses and households. This two-step approach used in accounting is particularly useful in ensuring a clarity of discussion with those responsible for measuring environmental stocks and flows.

### **STAGE #3: MEASURE AND VALUE – THE HOW?**

The NCP's third stage involves the practical aspects of gathering data and developing estimates of environmental stocks and flows and, as appropriate, relevant valuations in monetary terms. A wide variety of methods and techniques are available, in part reflecting the broad range of environmental stocks and flows, but also reflecting a lack of progress towards commonly agreed approaches. The NCP does not prescribe any specific measurement or valuation approaches. Rather it focuses on describing the measurement alternatives that will depend on the focus area and the purpose of the assessment.

Building on its definitions and classifications, the SEEA can be used to support the implementation of the NCP through its description of measurement approaches for different environmental stocks and flows. While these methods have been developed with economy wide measures in mind, they are strictly formulated to ensure consistent measurement over time and comparable measurement across countries and regions. Indeed, many of the measurement approaches will rely on the aggregation of information collected from individual businesses. While some refinement of the methods may be needed for application at the business level, in most instances the SEEA guidance provides an excellent starting point for measurement and implementation of the NCP.

Special note is required concerning valuation. The NCP and the SEEA have a similar perspective on monetary valuation of environmental stocks and flows. Both frameworks see the relevance of monetary valuation in some, but not all circumstances, and see significant importance in the organisation of information on the underlying stocks and flows to support decision making with respect to natural capital. Providing this robust and commonly agreed information base is fundamental since there are a number of additional, and sometimes diverging, concepts and perspectives that emerge when valuation takes place.

Another important role that the SEEA can play arises when a business aims to measure multiple components of natural capital, e.g. land use and GHG emissions. Often each type of natural capital is measured independently using dissimilar data sources and methods. This often results in studies that cannot be compared in a meaningful manner for decision-making within the business. This may result in competing or inefficient (not cost effective) policies and approaches being implemented.

On the other hand, since the SEEA encompasses all components of natural capital (including biodiversity), it provides a means to utilise multiple data sources in a consistent way and establishes a common, underlying data infrastructure for assessment. This data organization role of the SEEA may be one of its greatest benefits, particularly as businesses seek to expand beyond their initial areas of focus and work to embed a range of natural capital measures in their business operations. From a business perspective, this supports a lower cost approach that is adaptable to business needs over the long term.

## **STAGE #4: APPLY – WHAT NEXT?**

The final stage of the NCP requires interpretation and communication of the estimates from Stage #3 and the incorporation of the results into future planning and decision-making. This final step may be the most challenging.

For the communication of estimates, for example to highlight trends with relevant stakeholders, the SEEA supports the consistent derivation of indicators (the SEEA framework is being used to support measurement of a number of SDG indicators) and also provides accounting structures to show extended financial and non-financial reporting of balance sheets and operating statements. Depending on the audience and their requirements these may be usefully adapted for use at a business level.

For the use of results in decision making and action, beyond the reporting of information, the SEEA framework can be used to support the environmental extension of a range of analytical models and approaches such as cost benefit analysis, trade-off and scenario analysis (including input-output, general equilibrium and other economic modelling), return on investment measurement and risk assessments. Since the SEEA has been designed to integrate environmental data with economic and financial data, it is ideally suited to translating environmental information into a language and format that can be readily understood in a standard, financially-based decision making situation.

## **CONCLUSION**

The NCP is an important step forward in providing a standard process to underpin the recognition of the role that natural capital plays in supporting business activity. By establishing a common platform for the consideration of natural capital in all sectors, the NCP embodies the collaborative spirit that is essential in seeking to understand the connection to natural capital and the appropriate responses to ensure sustainability.

An important part of the solution will be establishing clear links between the private and public sector activities in relation to natural capital. It is in this broader context that forging links between the assessment of natural capital at the corporate level, through the NCP, and at the government level, through the SEEA, has considerable potential.

This toolkit highlights that the SEEA can play a range of roles to support implementation of the NCP process and allows businesses to gain directly from the measurement activity and



experience that has been advancing rapidly towards standardised approaches for the public sector. In addition, establishing links between private and public sector measurement opens the potential for investments in data and information to be more effectively aligned, notwithstanding the reality that the information may be organised and used with different purposes in mind.

Ultimately, we must aim for a common framing of the information on environmental stocks and flows, and in doing so, integrating a wide range of currently fragmented data. This toolkit is one element of progressing towards this larger ambition.

IDEEA Group, September 2017

## REFERENCES

Natural Capital Coalition (2016) *Natural Capital Protocol*. (Online) Available at: [www.naturalcapitalcoalition.org/protocol](http://www.naturalcapitalcoalition.org/protocol)

United Nations, European Commission, Food and Agriculture Organization of the United Nations, International Monetary Fund, Organisation for Economic Co-operation and Development and The World Bank (2014a) *System of Environmental-Economic Accounting 2012 – Central Framework*. Available at <https://unstats.un.org/unsd/envaccounting/searev/>

United Nations, European Commission, Food and Agriculture Organization of the United Nations, Organisation for Economic Co-operation and Development and The World Bank (2014b) *System of Environmental-Economic Accounting 2012 – Experimental Ecosystem Accounting*. Available at <https://unstats.un.org/unsd/envaccounting/searev/>