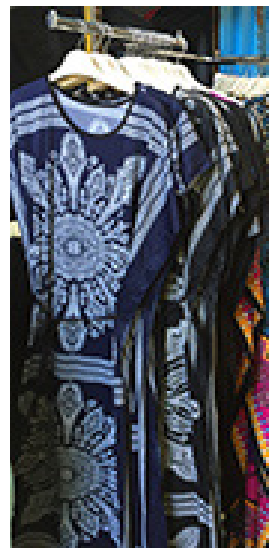
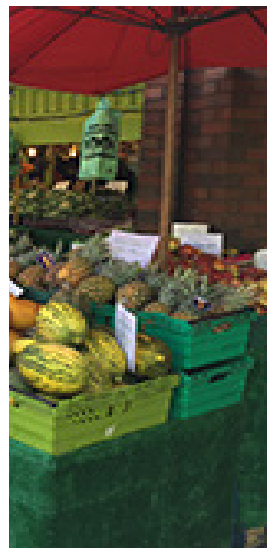


Practice Note

Note No: 3

Integrated Value Creation from Natural Capital

May 2016



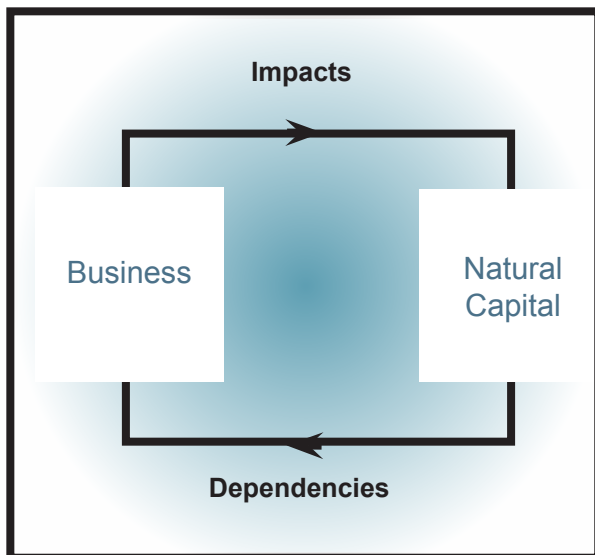
eftec

 **JNCC**
Joint Nature Conservation Committee

What is Integrated Value Creation?

- Value Creation is the process that results in increases of capital assets through the activities of a business. It applies to all types of capital, namely, financial, manufactured, intellectual, human, social and relationship, and natural. Businesses create value not only for themselves but for society as a whole.
- Integrated thinking is the active consideration of the value creation process, particularly how the different capitals interact with each other and with the activities of a business.

Integrated thinking recognises the circularity of a business' dependencies and impacts on the capital assets it uses to create value. For example, a business may have impact on Natural Capital through its discharge of effluent to water courses, whilst also depending on the same local source for clean freshwater supply in its production processes. Reducing the negative impacts (i.e. the effluent) protects the natural capital (i.e. clean freshwater), secures the natural assets, and reduces the risks the business is exposed to through its dependency on the Natural Capital.



Integrated thinking leads to a better understanding that capital stocks are finite and need to be maintained to ensure they continue to provide benefits, and support value creation, long into the future. The challenge for understanding the Natural Capital element of integrated thinking is that the capital is underpinned by biotic relationships and constantly changing and this change is driven by factors other than the impacts of business. This is partly why businesses have not traditionally thought about nature and natural processes as a capital asset.

“Generally, natural capital is not perceived as capital [stock], but as a flow. Most investors do not see natural capital as something that is finite.”

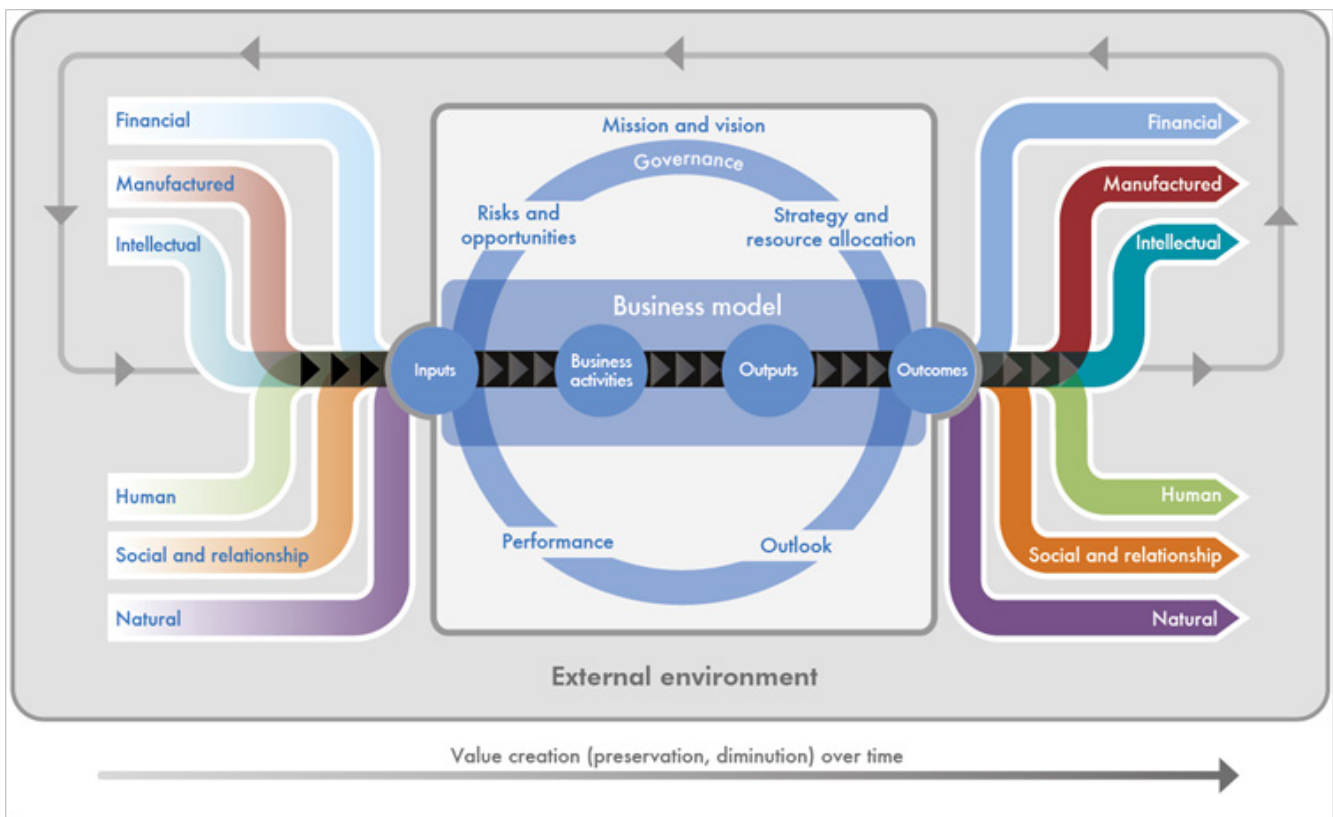
Emma Howard Boyd,
Acting Chair, Environment Agency; former Director of
Stewardship at Jupiter Asset Management

Businesses that have adopted integrated thinking demonstrate a common perception that their decision making has been improved by considering all types of capital when considering their business' value creation in broader terms and over longer time horizons. **Some businesses are starting to make their shift to integrated thinking visible through their corporate disclosure by adopting Integrated Reporting (IR).**

Developed by the International Integrated Reporting Council (IIRC) in 2013, the **Integrated Reporting (IR) Framework is the most comprehensive framework for recognising interconnectivity** between capital assets. It involves the production of periodic reports that demonstrate how the organisation uses the principle of integrated thinking to create value over time. The diagram overleaf (emphasises the importance of managing a business in a manner that takes accounts of all capitals that underpin value creation.

Integrated Thinking and Natural Capital Accounting

Natural Capital Accounting (NCA) is a collective term that refers to ways in which parties can measure, record, monitor and present information that can help inform, and thus improve, the management of Natural Capital. These tools (such as those presented on page 5 of this practice note and in previous JNCC practice notes) measure the stock of Natural Capital, its condition, and can help quantify the benefits that flow from these assets to different beneficiaries. NCA can contribute to



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integrated thinking by highlighting those important business dependencies and impacts on Natural Capital and how these may affect value creation (positively or negatively). **Linking Natural Capital to value creation is essential for demonstrating the importance of natural systems and the resources they provide in industry.**

Benefits of Integrated Reporting and Natural Capital Accounting

IR and NCA can benefit a business in a multitude of ways. Some of the benefits communicated by early adopters of integrated thinking include:

- **Building strategic resilience and enhancing competitive advantage**

Kering have invested in understanding their supply chain dependencies and impacts via their Environmental Profit and Loss (eP&L) work. This has provided insights into the future sustainability of their supply chain and helped distinguish their premium brands from

- **Reducing costs and improving value creation**

Adopting IR changed Yorkshire Water's perspective for making investment decisions related to natural capital impacts and dependencies. One investment case saved millions of pounds in demolition and landfill costs, and earned additional income from recycling filter bed materials as aggregates, which would have traditionally been considered as 'waste'.

- **Improving the business' understanding of, and hence ability to manage, its current and future risks due to natural resource scarcity**

A retailer with a major reliance on timber is focused on the potential future scarcity of timber supply. They have invested heavily in researching and understanding the risks of timber sourcing and consequently believe they are better placed to source sustainably in the future.

▪ **Improving the communication with stakeholders; including investors, regulators, customers and society at large –**

An executive from the power utility sector said that integrated reporting and natural capital analysis has enabled them to articulate the business strategy in a more effective way to investors so as to improve the case for future

An executive working in the water industry mentioned the desire to anticipate future regulatory requirements and saw NCA as a proactive way of leading and engaging with regulators on natural capital issues. “As soon as it [Natural Capital] becomes a regulated measure then it becomes a top priority.”

An extractives industry executive highlighted the importance of consistent and high quality sustainability reporting for obtaining quarrying permissions from local authorities and other important local stakeholders, “...when you can roll out 10-15 years of annual reports, that provides them with the track record.”

Adopting an Integrated Approach to Business Decision Making

Embedding integrated thinking, IR and NCA into a business' operations takes time. Observing the benefits of doing so and communicating these to internal and external shareholders may take longer. There are three major threads in the process of shifting towards integrated thinking, all of which interact and inform one another:

- 1. Business management** and the extent to which it embodies integrated thinking, including business strategy, business models, risk assessments and business decision making processes.
- 2. External reporting** which includes all communications to stakeholders, with a focus on annual performance reporting.
- 3. Natural Capital Analysis** which identifies and quantifies business impacts and dependencies upon Natural Capital, thus informing value creation through more integrated thinking.

Understand

Businesses tend to start with identifying and then understanding their impacts and dependencies using available, but usually partial, data. For example, most businesses have in-house data, or can readily access external data, on their extent of water use and direct CO2 emissions.

Assess

Following the initial impact identification, it is then possible to assess what can be reported, which often includes each impact or dependency for which reporting is possible, usually without a judgement on its relative importance.

Implement

Putting previous learning into practice, businesses start to implement environmental improvement initiatives and use recognised standard reporting and NCA approaches (e.g. Natural Capital Protocol, GRI – see Guidelines, Protocols and Analytical Tools section, on page 5, for examples.).

Embed

In successful applications of integrated thinking, the next step is embedding natural capital issues in decision making. For example, considering Natural Capital impacts and dependencies in investment decisions, evaluating Natural Capital dependencies in supply chain management and benchmarking performance against peer businesses.

Materiality


Once sufficient experience is gained, businesses begin focusing on issues that are considered material (i.e. essential) for value creation and develop the capacity to identify what Natural Capital really governs their ability to create value and consolidate their long term success.

Depth

Going through the previous steps regularly over a period of time enables a business to gain significant depth of knowledge about how it is generating value and makes it possible to demonstrate how corporate strategies are addressing material capital issues and delivering sustainable and resilient value creation.

Maturity Progression

Businesses are considered to become more 'mature' as they work through this process by following these general steps.



	Integrated Thinking & Business Management	External Reporting	NC Analysis
Understand	Environment is largely considered a separate issue in decision making	Some discussion of environmental impacts but not linked to business strategy	Begin to understand environmental links to business
Assess		Begin to report some environmental impact factors	The relevance and prioritisation of some Natural Capital issues begin to emerge
Implement	Environmental improvement actions taken (e.g. energy efficiency measures implemented)	Report some environmental metrics but not always linked to what is considered 'material' to the business	Trial Natural Capital analysis, gain new learning and insights
Embed	Natural Capital impacts and dependencies are part of business decision making process	Structured approach to reporting Natural Capital risks, but not necessarily linked to business strategy	Adopt protocols to introduce consistent approach for covering Natural Capital issues
Materiality	Material Natural Capital impacts and dependencies brought into business strategies	IR used to report performance. Natural Capital dependencies articulated in strategy and business model	Natural Capital analysis with more precision and focus on maximum sustainable value creation
Depth	Share feedback on lessons learned and Natural Capital considerations fully incorporated into business decision making	IR demonstrates the effectiveness of business decisions aimed at enhancing and sustaining value through efficient management of all relevant capitals	Natural Capital analysis with more precision and focus on maximum sustainable value creation

Guidelines, Protocols and Analytical Tools

Guidelines, protocols and analytical tools can aid businesses in progressing towards more integrated approach to business strategy development. For example, the Natural Capital Protocol has been developed to help businesses select the tools that are appropriate to their needs; such as, identifying natural capital impacts and dependencies, ascertain data requirements, and how to identify material issues.

Type	Tool	Where along the maturity process each is used and relevant to integrated thinking
Natural Capital Guidelines	Natural Capital Protocol (NCA)	Embed step onwards A framework for businesses to define their NCA needs and select the right tools to fulfil them. The Protocol is explicit on value chain and materiality issues.
Corporate Reporting Frameworks & Standards	GRI	Implement step onwards Considers a wide range of Natural Capital issues, but does not apply full Integrated Thinking.
	CDSB, CDP	Implement step onwards Encourages systematic disclosure, and enables materiality judgements through benchmarking.
	IR Framework	Materiality step onwards Encourages integrated thinking and reporting, but is not explicit on any particular type of capital.
Natural Capital Accounting – Ways for Businesses to account for natural capital under different analytical boundaries and purposes	Corporate Natural Capital Accounting	Embed step onwards This values the assets directly under management control and the maintenance liabilities. It does not examine value chains lying outside of the organisational boundary.
	Environmental Profit & Loss	Embed step onwards Explicitly examines value chain outside organisational boundary across a range of NC impacts.
	Triple bottom line	Embed step onwards Provides a structure for the treatment and evaluation of natural, social and economic capital performance.
Ecosystem Service Modelling– non-monetary tools used in the assessment of goods, services and benefits	ARIES ; LUCI; SENCE; Co\$ting Nature; Woodland carbon code; Peatland carbon code	Implement step onwards Provide methods for modelling ecosystem service flows and information to help assess materiality. Requires significant expert judgement.
Externality Valuation - tools used in the economic value estimates of impacts and benefits stemming from natural capital	INVEST; TIM; MIMES; Total Contribution; Corporate Ecosystems Valuation	Embed step onwards Provide methods for modelling and valuing ecosystem services flowing from Natural capital assets, thus providing information to judge materiality.

JNCC have collaborated with the Ecosystem Knowledge Network to develop 'Tools Assessor' <http://ecosystemsknowledge.net/resources/tools/tool-assessor>. This Natural Capital tools 'sourcebook' is designed to help decision makers from different sectors transition from current environmental management practices towards more integrated accounting for impacts and dependencies on Natural Capital. Tools Assessor demonstrates which tools are fit for particular purpose and their limitations; what data is required and its accessibility; and the level of technical expertise required to use a particular tool.

As with all tools, they are only effective if the information that is being used in them is of sufficient quality. For NCA, businesses already collect some of the necessary data internally, (such as emissions and operating costs). Other data that can be used in NCA and IR may be sourced from:

- Publicly available sources from different public sector departments and agencies. Each organisation will produce data related to its remit; such as water data from environmental agencies; species and habitats data from nature agencies; and Greenhouse Gas conversion factors from DECC for calculating CO₂ emissions for units of energy consumed by type.
- Business networks where organisations can collaborate and share learning and best practice amongst peers.
- Specialist consultancies provide bespoke information and advice on specific issues, such as impacts on the natural environment. For example, a timber retailer may commission regional specialists to assess timber supply from tropical forests.
- Business partners in terms of major suppliers, may also be critical in the provision of data.

Businesses should note that the processes behind environmental data provision are changing, for a number of reasons. Technological advances in data collection (e.g. earth observation from satellites) and in analysis (e.g. more powerful computing mapping and modelling tools), and moves to make public data open source. All of these factors have the potential to improve the data available to business to improve corporate Natural Capital analyses.

Networks

Peer-to-peer learning and knowledge sharing is an invaluable process for informing business plans and activities in this area, as in other areas of management. Key professional networks that are working in this area include:

- Natural capital initiatives (for example, NC Coalition, NC Declaration, NC Initiative, NC Project) and Business sustainability networks (for example, CISL, A4S, BSR, WBCSD). Joining these multidisciplinary networks or following their events and publications can benefit businesses by providing access to knowledge and expertise that may otherwise be more costly to source and are an important way in which practical experience can be demonstrated, helping move businesses beyond theory into practice.
- Reporting working groups (for example, GRI, IIRC and CDSB) can provide important knowledge and opportunity for individual businesses to influence the development of the tools and standards.
- Professional bodies (for example, Institute of Chartered Accountants in England and Wales) is encouraging its members to engage with the natural capital debate through a sustainable business community of interest and by encouraging involvement in NCA initiatives such as Natural Capital Protocol and the Natural Capital Declaration.

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Images

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This note should be cited as:

eftec, JNCC. 2016, Integrated Value Creation from Natural Capital, JNCC Practice Note No.3, ISSN 2059-9382

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