

Business tools to manage water challenges

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Mat 7-9, Valencia*



**NATURAL
CAPITAL
COALITION**

 @NatCapCoalition #NatCapProtocol

The Natural Capital Coalition was established by the natural capital community as a collaborative space to harmonize approaches and grow a supportive enabling environment for natural capital thinking.



Purpose

To mainstream the inclusion of natural capital in decision making, harmonizing approaches and getting them to scale, quickly.

Our Vision

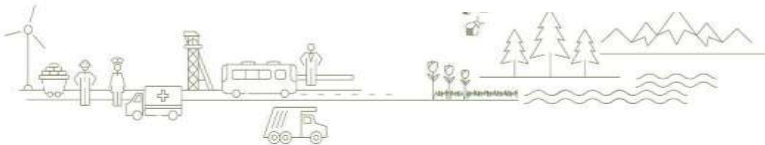
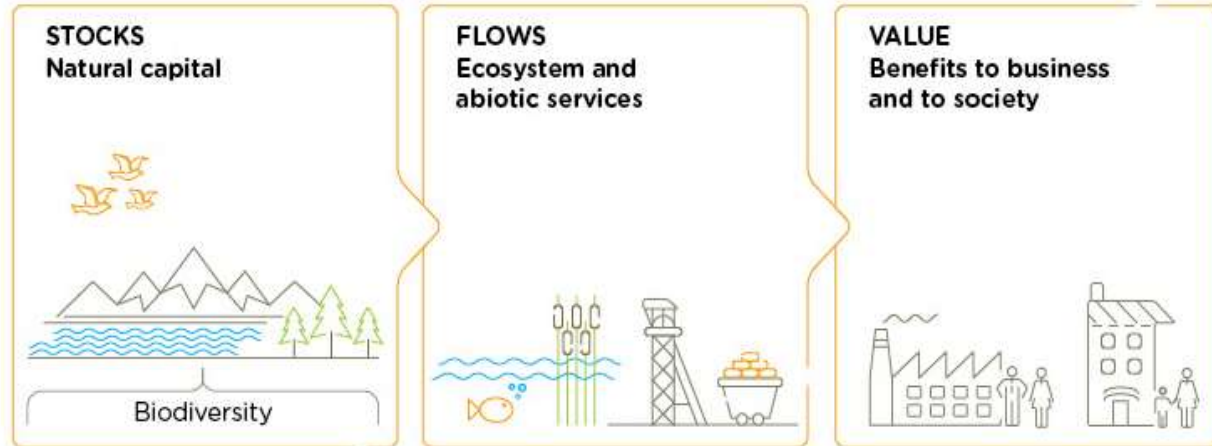
A world that conserves and enhances natural capital

We are a network of 300+ organizations



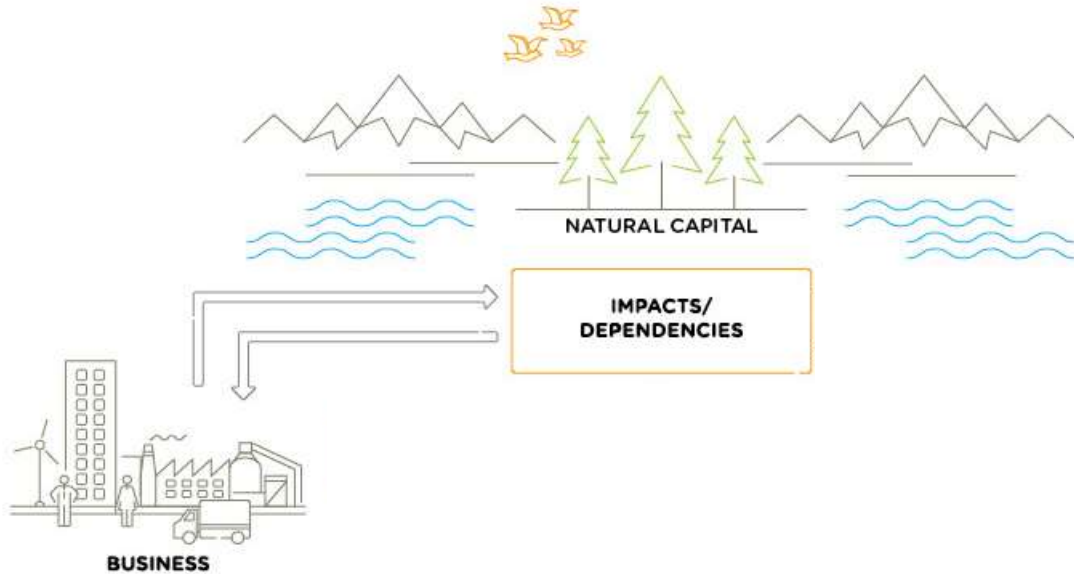
What is Natural Capital?

The **stock** of renewable and non-renewable **natural resources**, (e.g. plants, animals, air water, soils, minerals)
that combine to yield a **flow**
of **benefits** to people



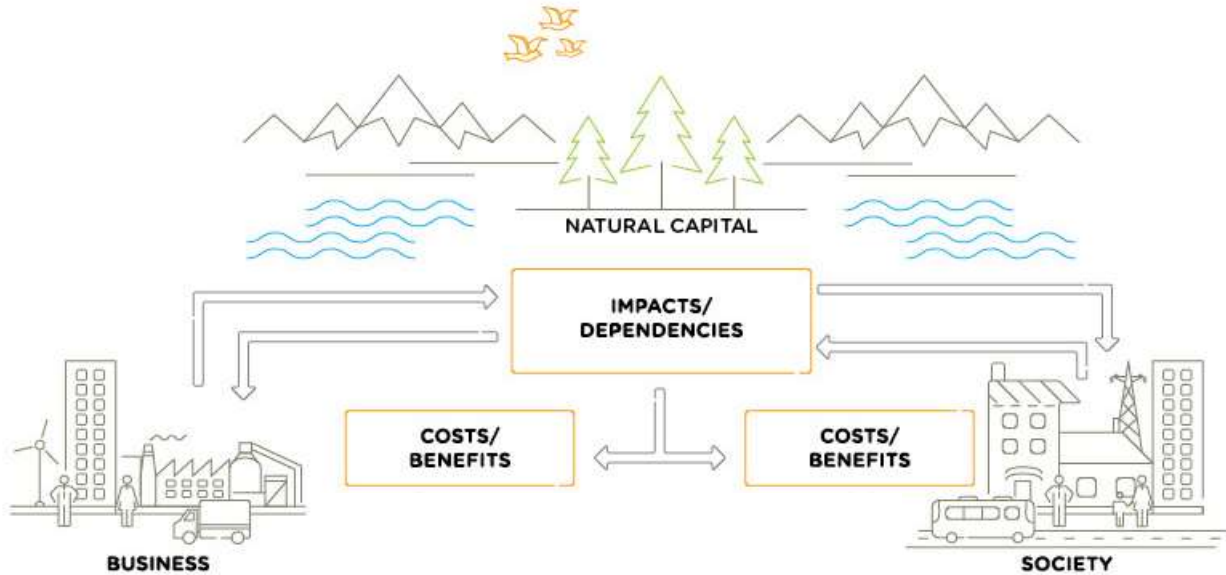


Why natural capital is relevant for business?





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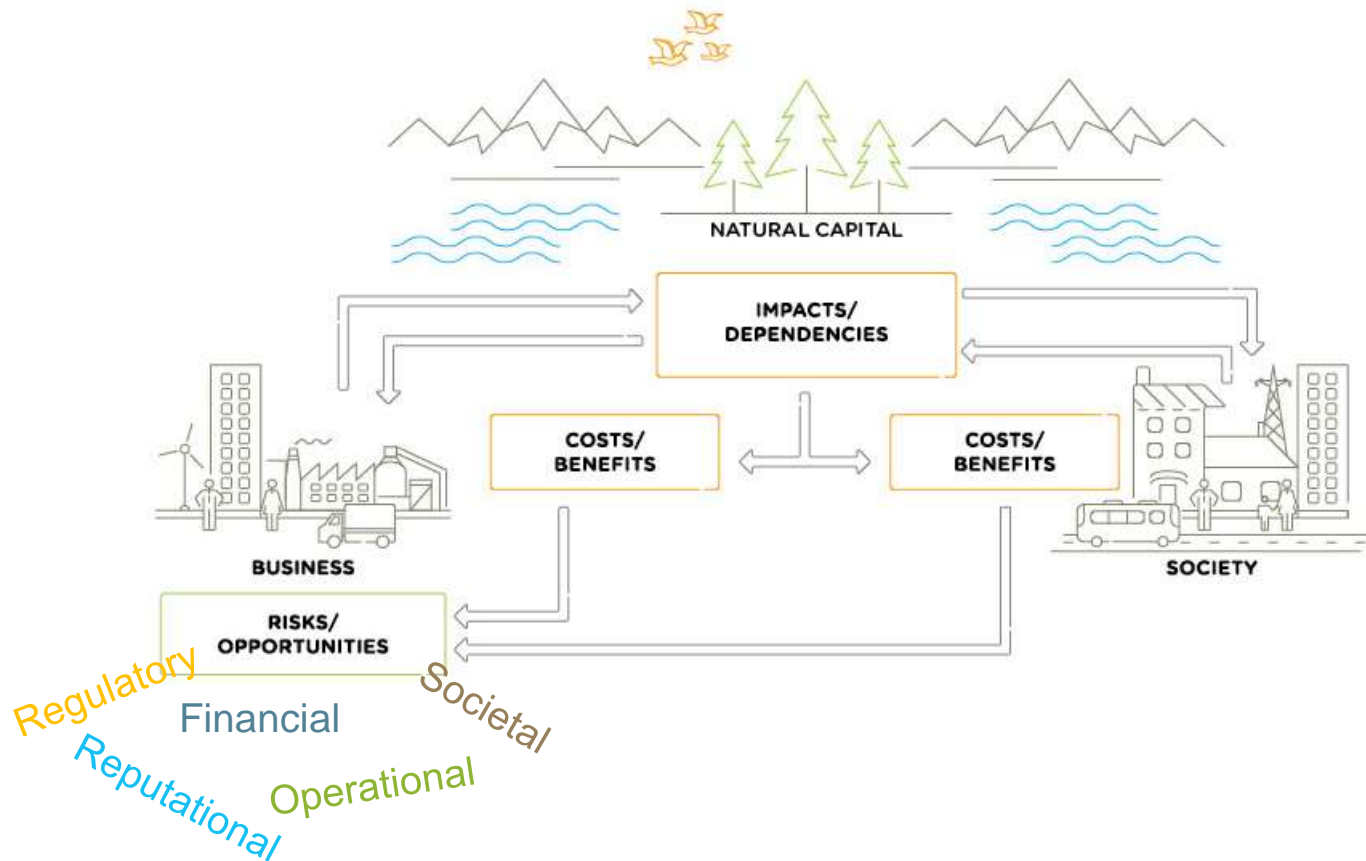
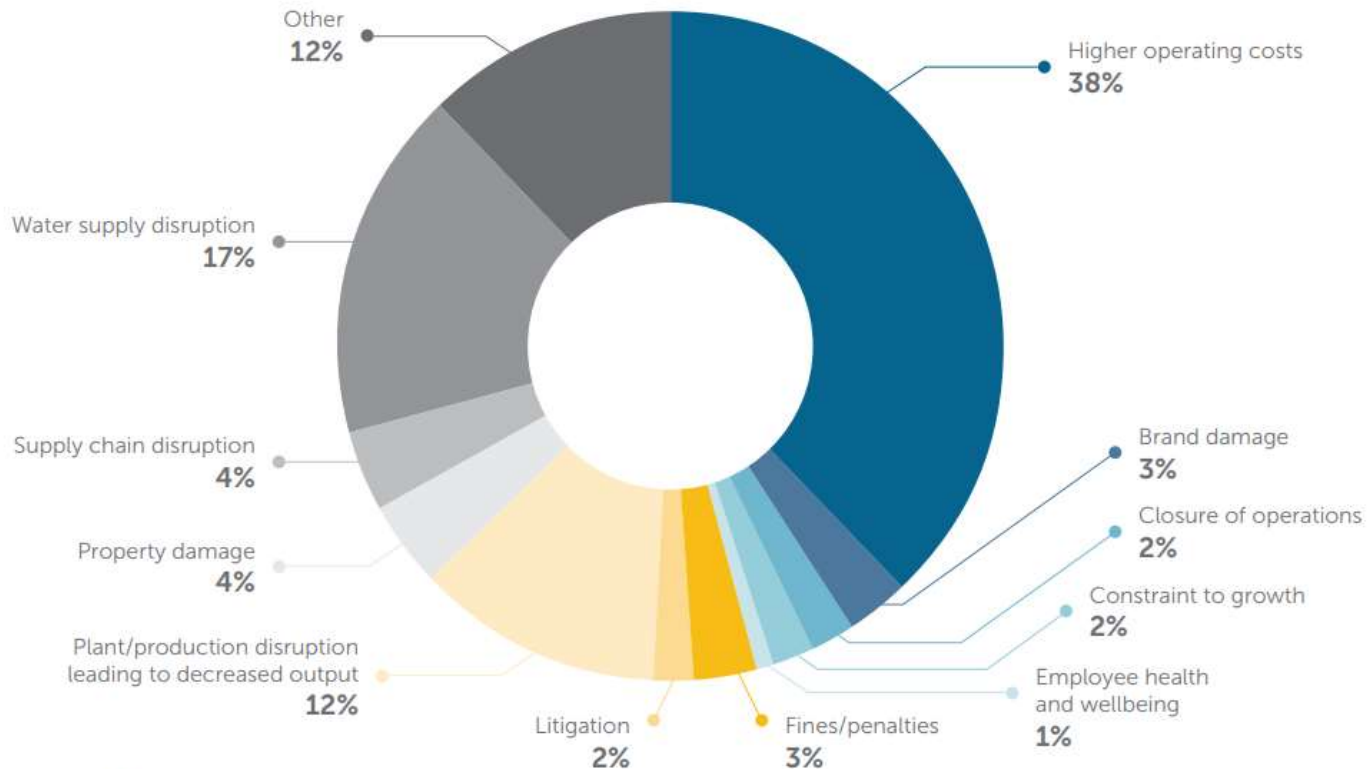


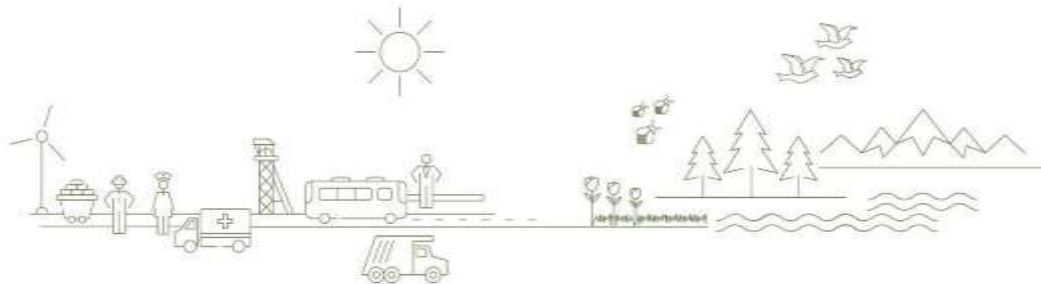
FIGURE 1: Financial impacts of declining water quality and increasing regulatory costs



Source: CDP (2016b)



The **Natural Capital Protocol** is a **standardized framework for business** to **identify, measure and value** its direct and indirect **impacts and dependencies** on **natural capital**



Launched July 2016



Over 35,000 copies of the Protocol in circulation

100+ businesses involved in Protocol Application Program

Growing number of case studies on the Natural Capital HUB



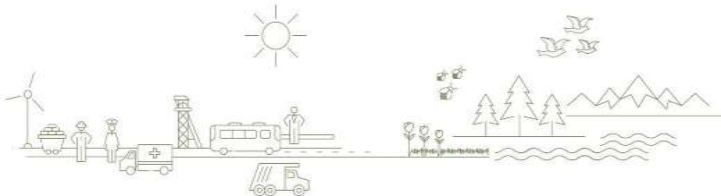
What does Capital's approach provide?



Impacts




Dependencies





Example materiality matrix from the food and beverage sector guide

DEPENDENCIES										BARLEY TO BEER 	IMPACT DRIVERS													
CONSUMPTIVE				NON-CONSUMPTIVE							INPUTS				OUTPUTS									
ENERGY	WATER	NUTRITION	MATERIALS	REGULATION OF PHYSICAL ENVIRONMENT	REGULATION OF LIVING ENVIRONMENT	REGULATION OF WASTE AND EMISSIONS	EXPERIENCE	KNOWLEDGE	WELL-BEING		SPIRITUAL AND ETHICAL VALUES	WATER USE	TERRESTRIAL ECOSYSTEM USE	FRESHWATER ECOSYSTEM USE	MARINE ECOSYSTEM USE	OTHER RESOURCE USE	GHG EMISSIONS	NON-GHG AIR POLLUTANTS	WATER POLLUTANTS	SOIL POLLUTANTS	SOLID WASTE	DISTURBANCES		
○	○	○	○	○	○	○					RAW MATERIALS	○	○	■	■	■	○	○	○	○				
○	○	■									FOOD PROCESSING	○		■	■	■		○						
○	○										PACKAGING, DISTRIBUTION, AND RETAIL						○	○					○	○
○											CONSUMER USE	■	■	■	■	■				■	■			
○											END-OF-USE		○	■	■	■							○	○

KEY: ○ IMPACTS AND DEPENDENCIES THAT ARE MATERIAL TO DIRECT BUSINESS OPERATIONS AT THIS VALUE CHAIN LEVEL
 MATERIALITY ACROSS WHOLE VALUE CHAIN: ■ HIGH MATERIALITY ■ MEDIUM MATERIALITY ■ LOW MATERIALITY ■ NOT MATERIAL

What does Capital's approach provide?



Impacts

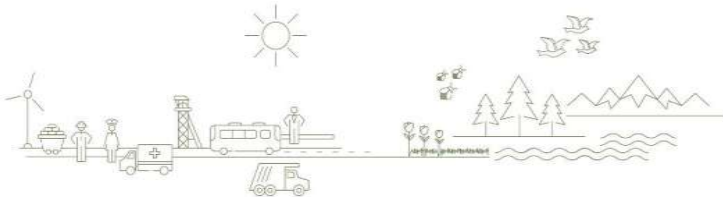


Dependencies

Measure



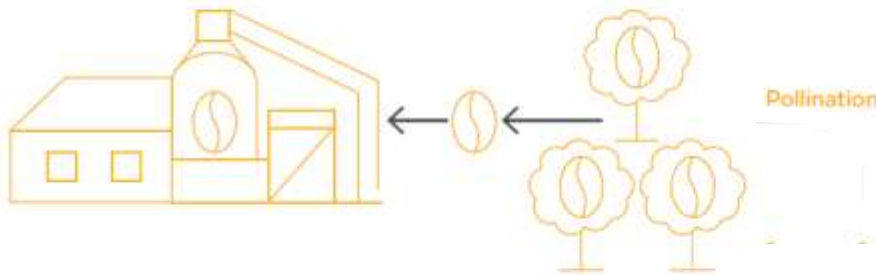
Value





Business activities at a coffee production plant have a **dependency** on the pollination of coffee plants

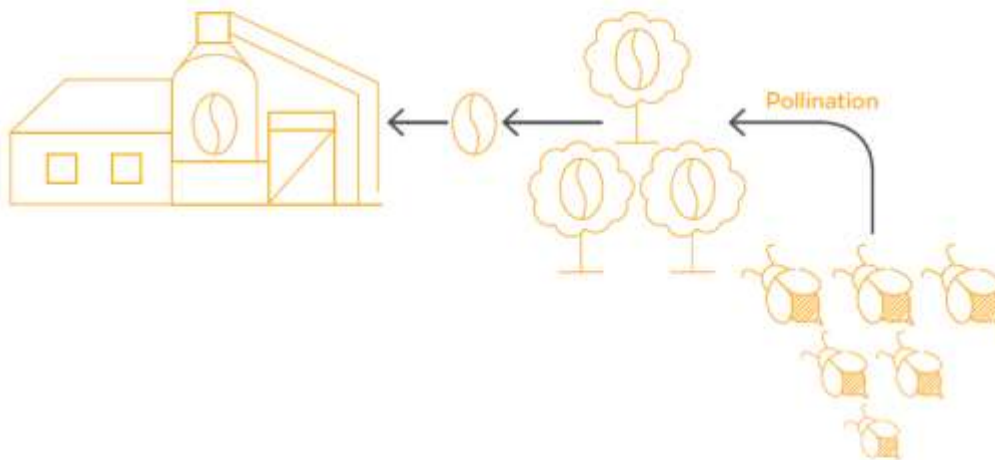
Step 05: Measure dependencies





Business activities at a coffee production plant have a **dependency** on the pollination of coffee plants

Step 05: Measure dependencies



Changes in natural capital cause the bee population to decline, due to:

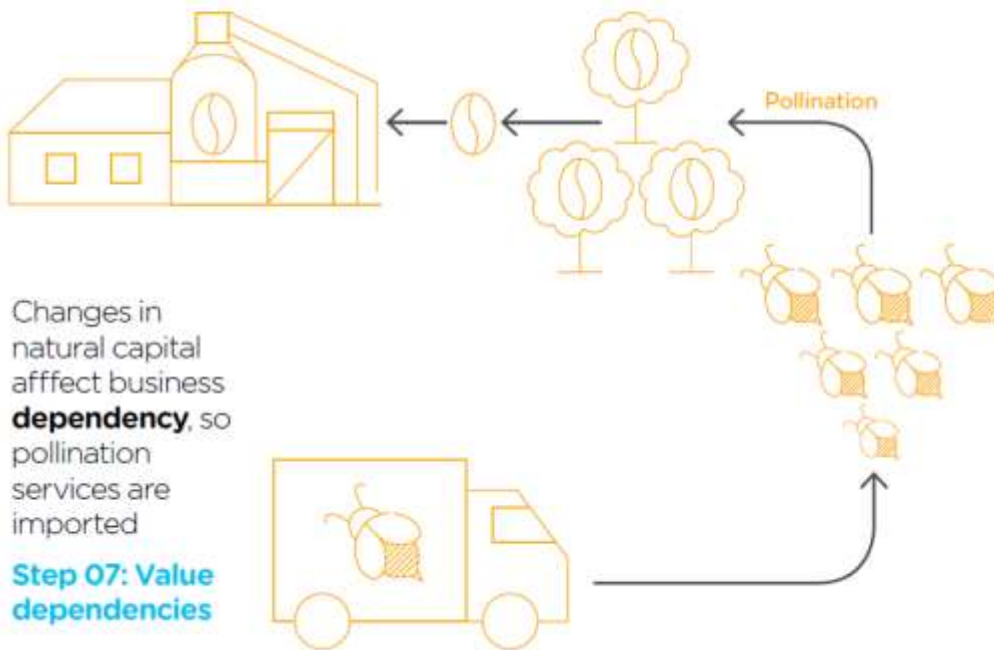
- The business itself, e.g. overuse of pesticides
- Natural changes e.g. extreme weather events
- Human-induced changes, including due to the activity of other businesses, e.g. habitat change

Step 06: Measure changes in natural capital



Business activities at a coffee production plant have a **dependency** on the pollination of coffee plants

Step 05: Measure dependencies



Step 07: Value dependencies

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- Natural changes e.g. extreme weather events
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Step 06: Measure changes in natural capital

What do Capitals provide?



Impacts



Dependencies

Measure

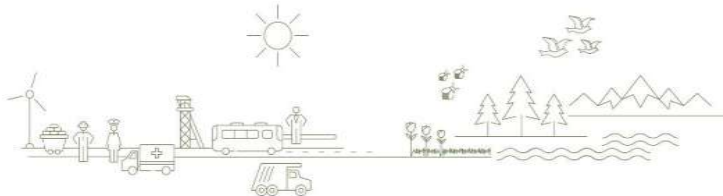


Value

Separate issues



A systems approach



What's after the Protocol?



Natural Capital Protocol



Food &
Beverage



Apparel



Forest
products



Finance



Data



Oceans



Biodiversity

Sector Guides

Sector Guides bring together a peer-based analysis of natural capital risks and opportunities within that sector, and recommend specific resources or tools from within that industry.

Supplements

Supplements aim to strengthen the Protocol in regards to more challenging topics. They span across communities, and leverage existing expertise and experience where possible.

We are always looking to identify new projects where there is demand



'The Natural Capital Protocol has been an essential resource in this journey'

Outcome:

Yorkshire Water, UK water company, have adopted a **Capitals model** into their strategic planning, by quantifying and, where possible and appropriate, monetizing impacts on environment and society.

HOW?: applications

- 2016 Natural capital to **inform investment** on a treatment site
- 2017 **Natural and social capital** assessment of sludge landfill
- 2018 Capitals to **inform a recreation strategy** in an area



‘This is an important element of our strategic reorientation from water management to water stewardship’

Outcome:

International Paper, US fiber-based packaging, pulp and paper company, have assessed the **societal value of water** to help them shape their water risk management and stewardship efforts.

HOW?:

Three diverse sites from each of their three core businesses were piloted. They focused on **water intake and effluent**. They created and **internal tool** to scale up the application in all their sites.



'Natural capital accounting is a useful tool to meet the growing interest of investors in understanding companies impact and dependency in the environment'

Outcome:

Kepler, advice provider to investment management industry, found **~EUR 150,000 of social value was lost, for every EUR million** generated. Most of this came from a number of high-impact sectors.

HOW?:

Conducted **a high level screening** (146 sectors and 20 industries) to identify where social value was being created or lost. They assessed: **use of resources (land, water) and emission of pollution**, both for direct operations and whole value chain.



Other applications and tools

Other applications



28TH MAY 2018
Dow Builds the Business Case for Green Infrastructure

[Case Studies With Natural Capital](#)



28TH MARCH 2017
Brazilian Water Company Demonstrates Return on Investment for Nature Based Solutions

[Case Studies Restoring Environment](#)



20TH APRIL 2016
Connecting Finance and Natural Capital: Case Study for ACTIAM

Other tools



28TH MARCH 2017
Ecolab Water Risk Monetizer – Powered by Microsoft & Trucost

[Data Tools & Methodologies](#)



27TH NOVEMBER 2016
The Natural Capital Finance Alliance Launches New ENCORE Tool At Natural Capital Week

[Data Tools & Methodologies](#)



www.naturalcapitalcoalition.org

Join the Coalition