

Welcome and Introduction

5 October 2017



Marion Hammerl
President



Global Nature Fund - International Foundation for the Protection of Nature

The protection of Natural Capital is our mission!

Living Lakes:
International Network for the
Protection of Lakes and
Wetlands

European
Business and
Biodiversity
Campaign

Biodiversity in
standards for the
food sector

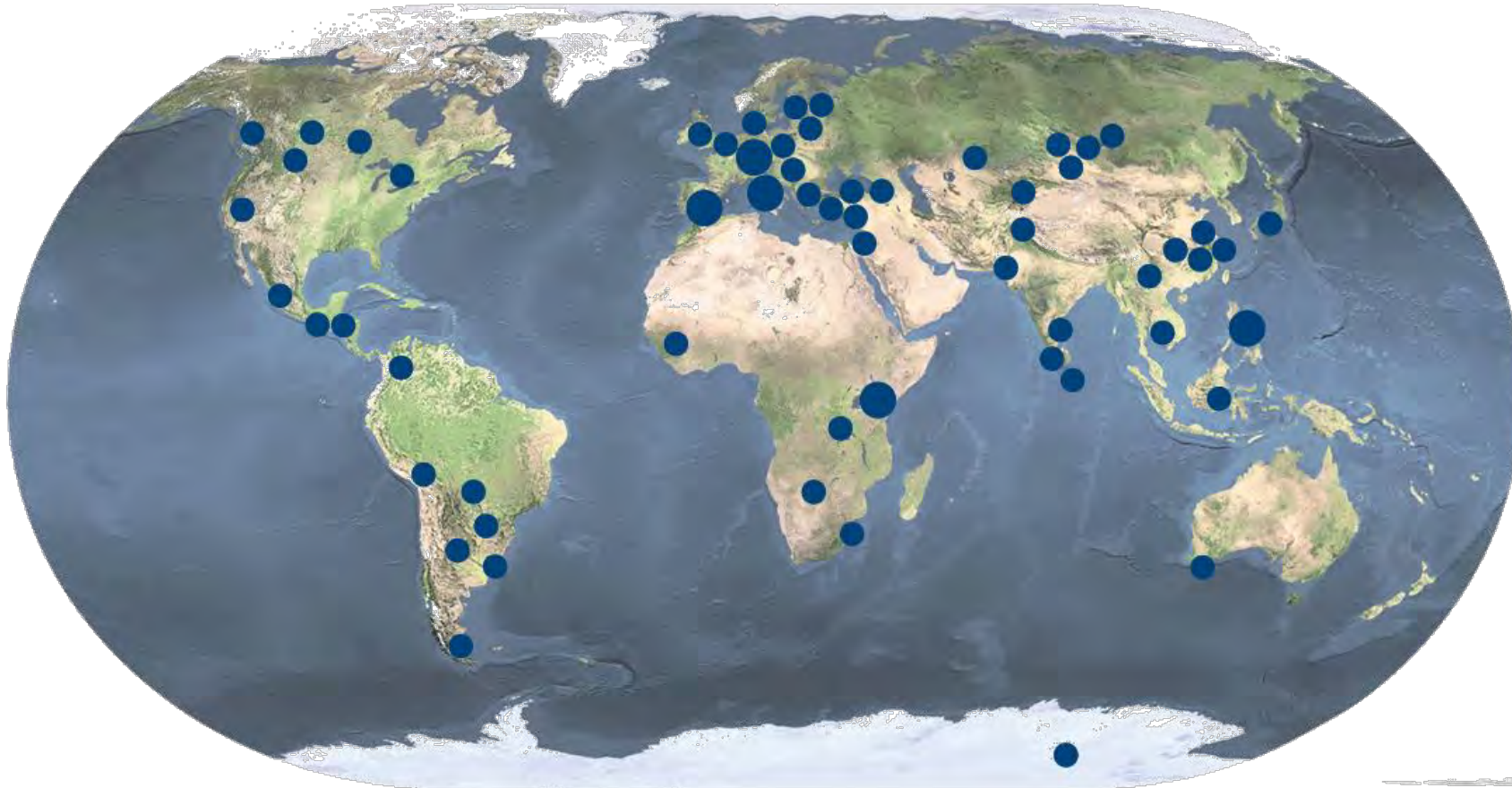
Model projects for sustainable
development in lake regions

Management of water
resources

Protection of
ecosystems, fauna
and flora



Living Lakes

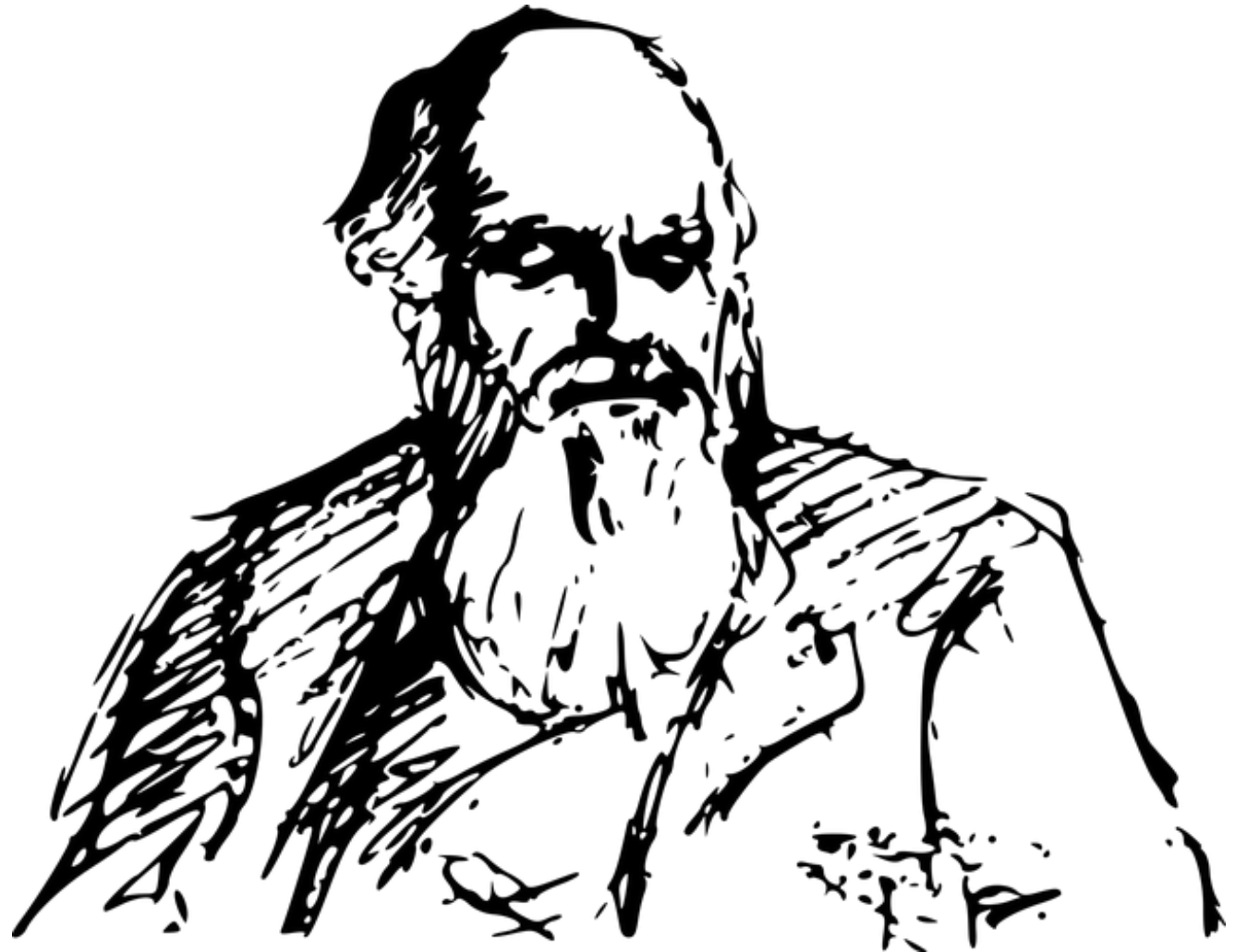




Nature protection
Biodiversity
Ecosystem Services
Natural Capital

“Each living creature must be
looked at as a microcosm-
a little universe, formed of a
host of self-propagating
organisms, inconceivably
minute and as numerous as
the stars in heaven.”

- Charles Darwin





Global Nature Fund (GNF)

Project:
Network Natural
Capital Accounting
Duration:
2015 – 2017
Support by:
BMUB,
Umweltbundesamt



Case Study: Juist

Content:
Environmental impacts of the
tourism sector on the island
Juist

Release:
October 2017



Case Study: TRACTO-TECHNIK

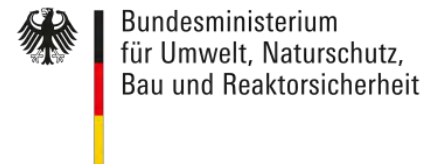
Content:
Comparison of trenchless
technology with open
construction

Release date:
September 2017



NM

NATURAL CAPITAL MARKETS AND VALUATION



Natural Capital as „Business Case“

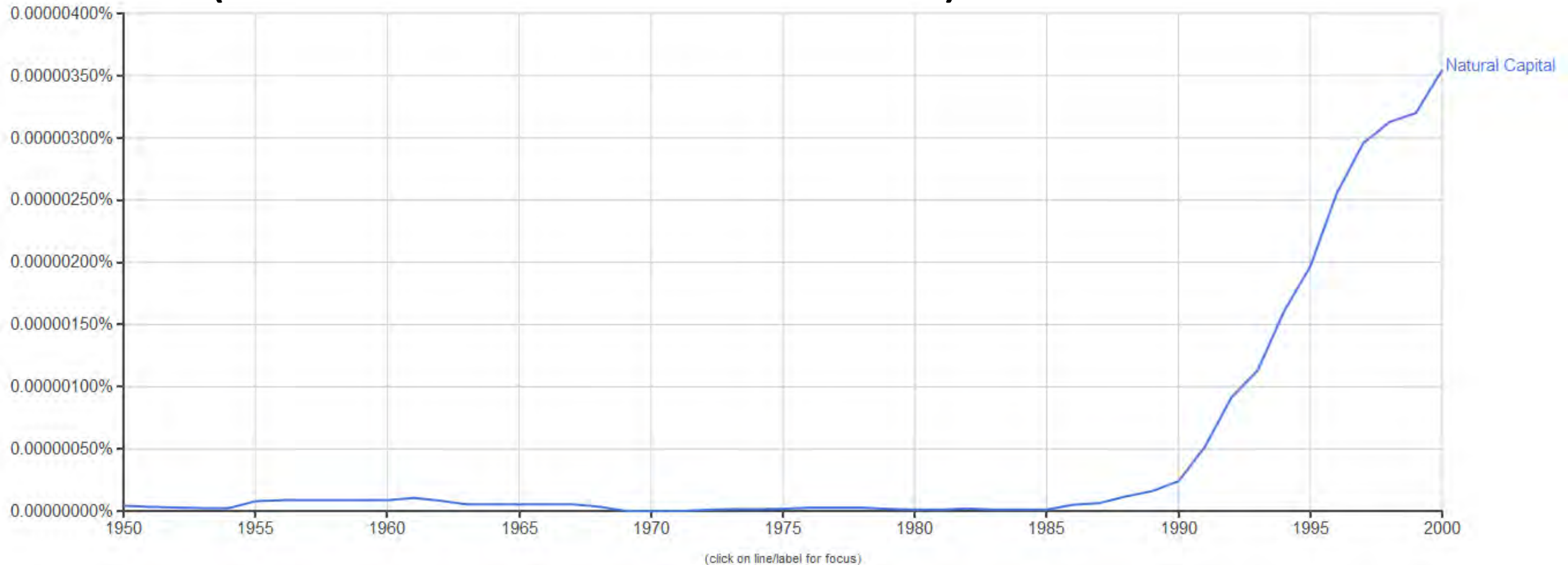
In its mid-term review published in 2015, the European Commission reported that although many local successes demonstrate that action on the ground delivers positive outcomes, biodiversity loss and the degradation of ecosystem services have continued.

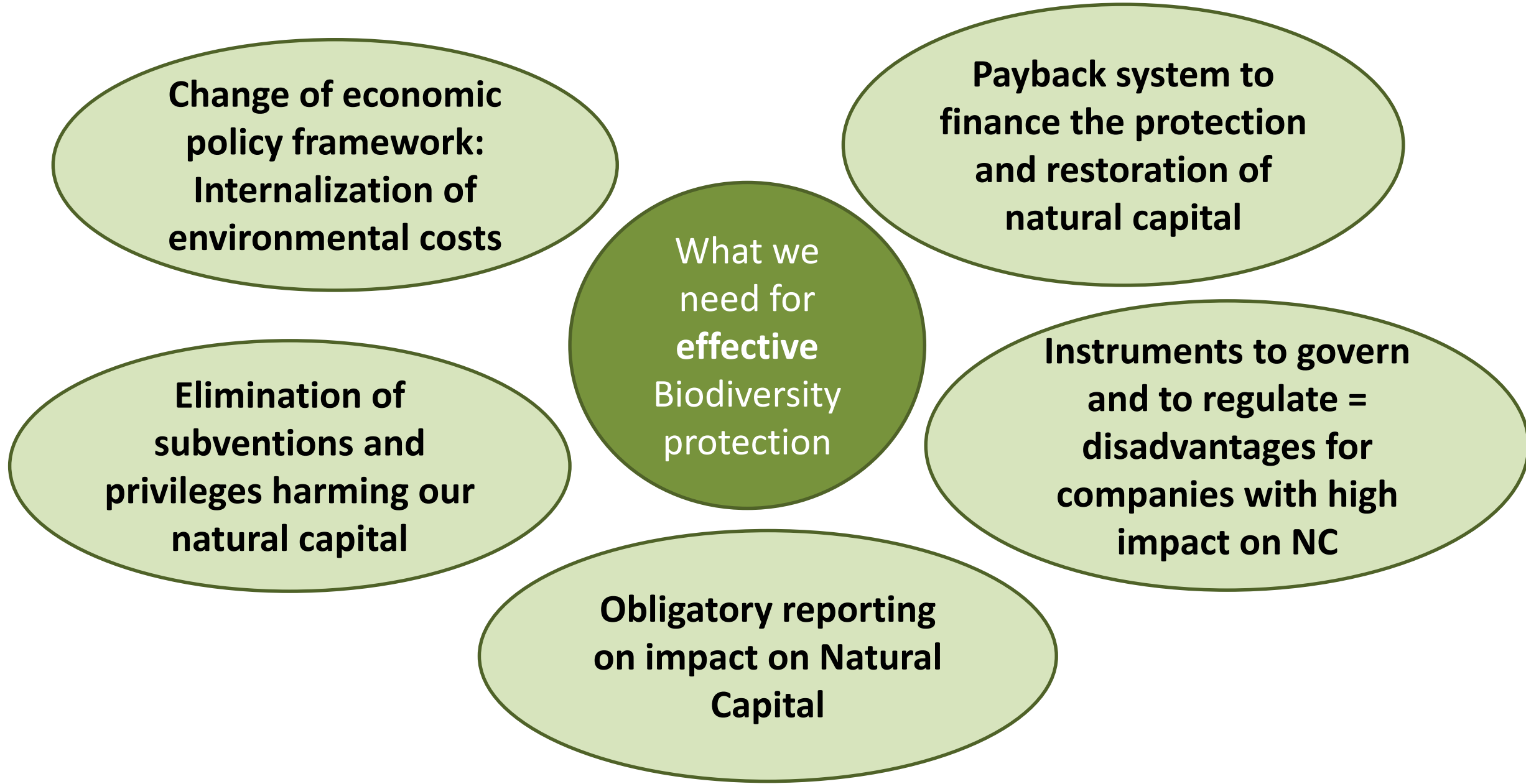
This review also highlighted that the opportunity cost of not reaching the 2020 EU biodiversity headline target is estimated at up to EUR 50 billion a year, while one in six jobs in the EU depends to some extent on nature.





Growing interest in Natural Capital (GOOGLE N-GRAM-VIEWER)





Thank you

**To the team of the European Commission
and of GNF!**

To all supporters of the conference!



Federal Ministry for the
Environment, Nature Conservation,
Building and Nuclear Safety

**Umwelt
Bundesamt**



ARCADIS

Design & Consultancy
for natural and
built assets

Handelsblatts BUSINESS BRIEFING

**NACHHALTIGE
INVESTMENTS**

www.handelsblatt-nachhaltigkeit.de

Forum

CSR international



UnternehmensGrün



Global Compact
Netzwerk Deutschland



B.A.U.M.



**NATURAL
CAPITAL
COALITION**



wbcsd



**Natural Capital
Finance Alliance**
Finance sector leadership on natural capital

VU

„**Before I flew I was already**
aware of how small and
vulnerable our planet is;
But only when I saw it from
space, in all its ineffable
beauty and fragility, did I
realize that humankind's most
urgent task is to cherish and
preserve it for future
generations.“

- Sigmund Jähn, Astronaut



5 October 2017



Bianca Nijhof
Global Sustainability Program
Manager





NATURAL CAPITAL

How we started to appreciate nature

“We recognise that our **long-term success depends upon natural capital**, particularly forests, land, soils and water. We aim to develop our business and operations to safeguard natural capital, acting as a **responsible steward of natural resources**, particularly in terms of water preservation, **net zero deforestation by 2020, soil management and biodiversity conservation**”



Sourcing
program
based on
natural
capital

2020: 70% of the volume of our 12 priority categories of raw materials has been assessed against our RSG requirements and is compliant, **or improvement plans to preserve natural capital are ongoing**

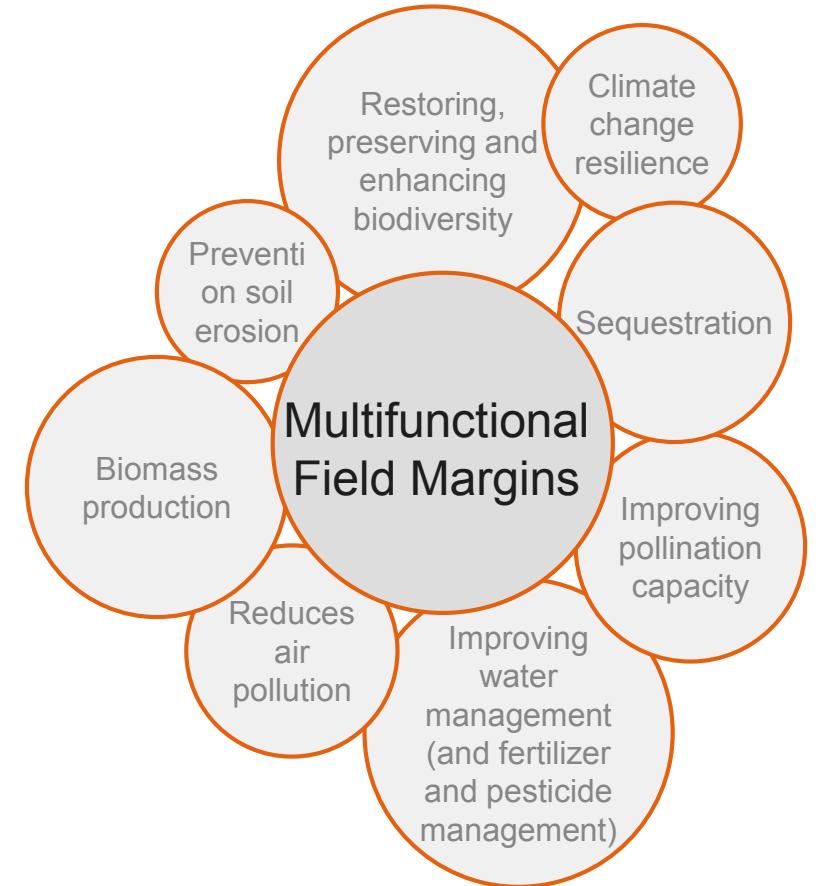
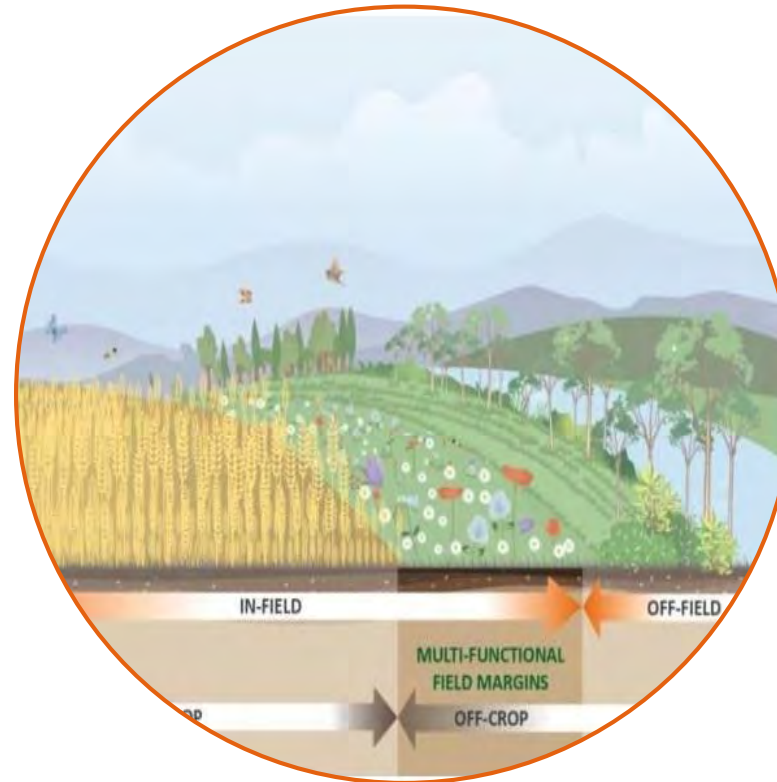


Integrating natural capital in sustainable production

Good Growth Plan for sustainable agriculture to be achieved **in 2020** with strong focus on biodiversity; **“help biodiversity flourish”**

The **2020 target** is to reach **5 million hectares** of farmland that have been benefited by **biodiversity enhancing practices**

syngenta

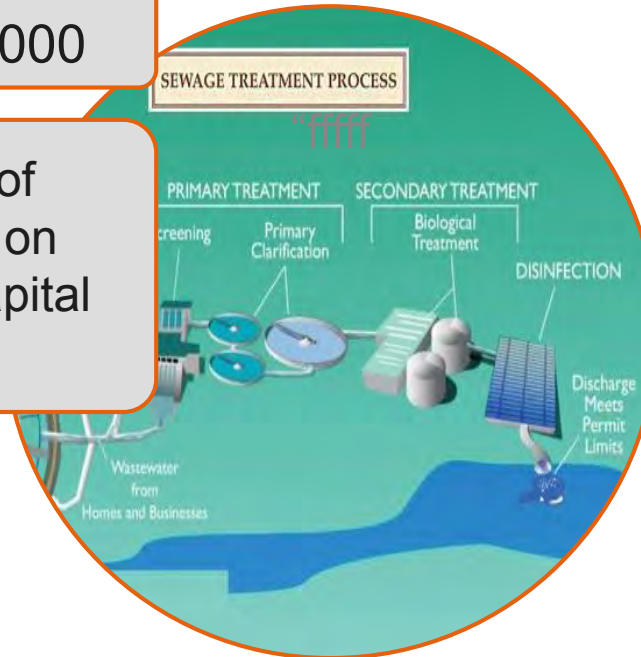


Multidisciplinary benefits



\$40.000.000

Costs of
impacts on
natural capital
\$??



WIN⁴: Natural
capital as a
solution for
water
management



\$1.500.000

Value of
ecosystem
services
generated \$??

Savings in
employment,
maintenance,
materials
\$200.000.000

Benefit of Green versus Grey

**Alternative
sourcing**

reducing impact
and dependency
on natural
capital

 **nutreco**



Changed from fish feed
from fish to plant-based
fish feed based on
natural capital
assessment and risk
analysis. Achieved
**reduction of impact
on natural capital and
increased supply
security**

Alternative sourcing

Ecosystem Services



Global annual value of ecosystem services is **US\$125 - US\$145 trillion**

(Costanza et al, 2014)

60% of the ecosystem services in the world have degraded over the last 50 years

(Millennium Ecosystem Assessment, 2005)



It's serious business and it's threatened



NATURAL
CAPITAL
COALITION

Natural Capital

... is 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



**First
mentioning of
the term
“*natural
capital*”
(1973)**

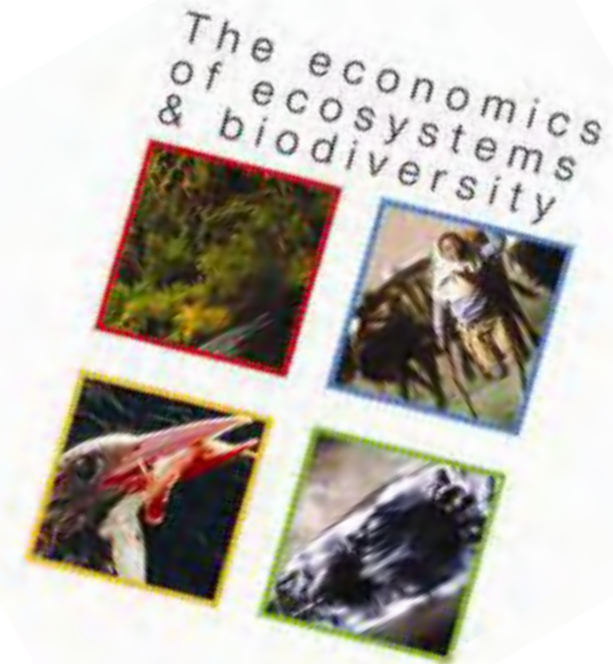
**small
is
beautiful**
**a study of economics
as if people mattered**
EF Schumacher

The Economics of Ecosystems and Biodiversity (TEEB)

TEEB sizes the global problem of biodiversity loss and ecosystem degradation in economic and human welfare terms, and proposes solutions targeted at policy-makers, administrators, businesses and citizens

TEEB core principles

- Recognizing value
- Demonstrating value
- Capturing value



“making nature’s values visible”

National natural capital accounting

The System of Environmental-Economic Accounting (SEEA)



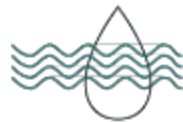
Integrating economic and environmental data to provide a more comprehensive and multipurpose view of the interrelationships between the economy and the environment and the stocks and changes in stocks of environmental assets, as they bring benefits to humanity.



Energy



Land Accounts



Water



Environmental Activity
Accounts



Air Emissions
Accounts



Agriculture, Forestry
and Fisheries



Environmental
Ecosystem Accounts



Material Flow
Accounts

Wealth Accounting and the Valuation of Ecosystem Services

WAVES is a World Bank-led global partnership that aims to promote sustainable development by ensuring that natural resources are mainstreamed in development planning and national economic accounts



Collective action



Business @
Biodiversity



platform **biodiversiteit,**
ecosystemen & economie



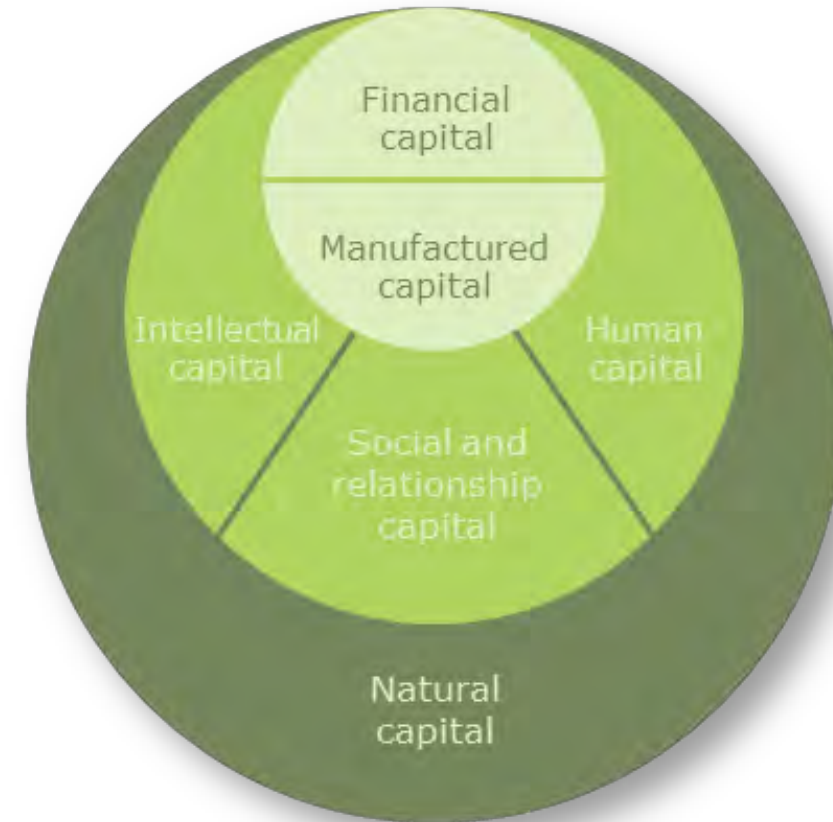
BUSINESS AND BIODIVERSITY INITIATIVE

Who makes up the Coalition? Putting the puzzle together

The Coalition is purpose driven, bringing together a wide range of stakeholders who agree to collaborate on activities to help create a world where business conserves and enhances natural capital.



Relation to Sustainability



Natural Capital as basis for sustainability

From Biodiversity to Natural Capital

Biological diversity

...means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

Natural Capital

...is 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 business uses the natural capital concept?



Various drivers

Drivers for change



Transparantiebenchmark



EU Non-Financial Reporting Directive



- environmental matters,
- social and employee aspects,
- respect for human rights,
- anticorruption and bribery issues, and
- diversity in their board of directors.



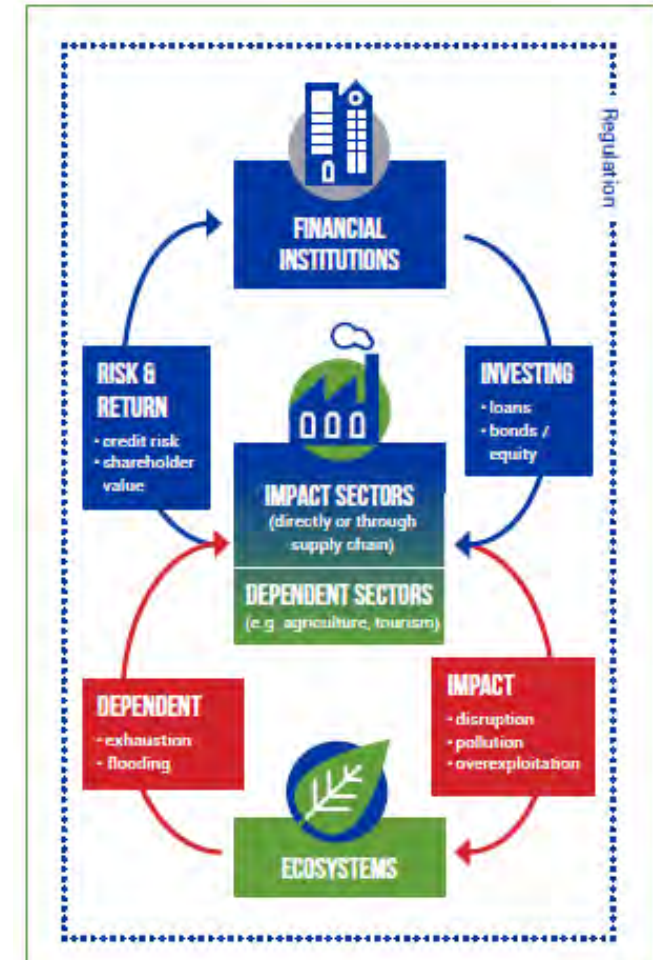
Legislation & Reporting

Drivers for change



WHY IS NATURAL CAPITAL MATERIAL TO FINANCIAL

- Credit and investment risks
- Business opportunities
- Legal liability risk
- Market and systemic risk
- Regulatory risk
- Reputational Risk



Put in the global context



Connect to the essential developments

Is natural capital next?

Shareholders launch 'world-first' lawsuit against Commonwealth Bank over climate change risks

TWO shareholders have lodged a world-first lawsuit against the Commonwealth Bank because it failed to mention climate change risk in its annual report last year.



Guardian sustainable
business

Exxon, Shell and other carbon producers sued for sea level rises in California

As a trio of lawsuits claim compensation for sea rises resulting from fossil fuel emissions, campaigners say carbon majors must change their business models



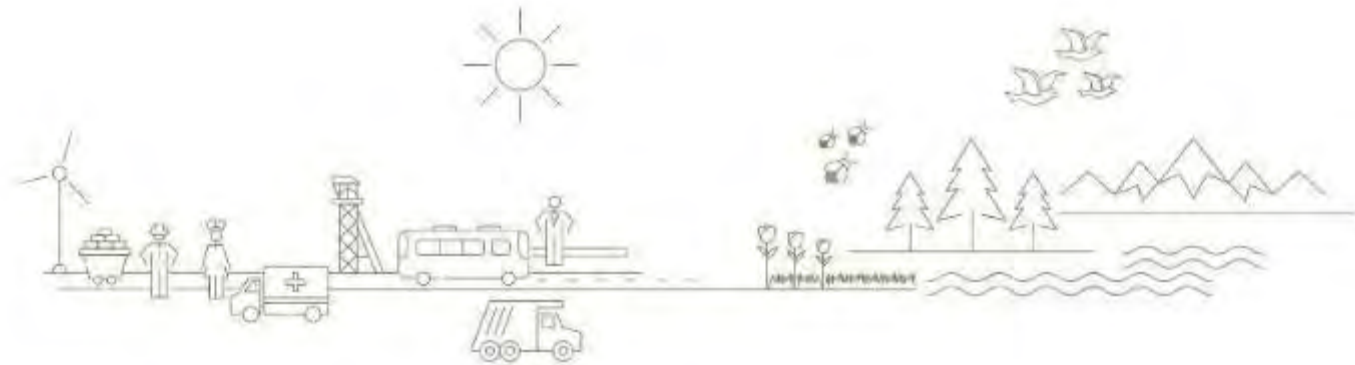
Houses hanging over a cliff in Pacifica, San Mateo County, California. Storms and powerful waves have been intensifying erosion in the area. Photograph: Josh Edelson/AFP/Getty Images



Introducing the Protocol



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



“Without valuing natural capital we overlook opportunities”

Pavan Sukdhev, Founder TEEB



**Global Sustainability
Program Manager**

Bianca Nijhof

e bianca.nijhof@arcadis.com

t +31 6 2706 0220

Enjoy the conference!

Integrating Natural Capital into Business across all Sectors

5 October 2017



Heinz Zeller
Head of Sustainability &
Logistics

H U G O B O S S

Integrating Natural Capital into Business

Heinz Zeller, Head of Sustainability & Logistics

Agenda

- From Life Cycle Assessment (LCA) to Natural Capital Valuation
- Some Natural Capital Valuation examples
 - a) T-shirt
 - b) Leather shoe
 - c) Wool knitwear
- Fact based materiality analyze to shape the sustainability strategy

From Life Cycle Assessment to Natural Capital Valuation

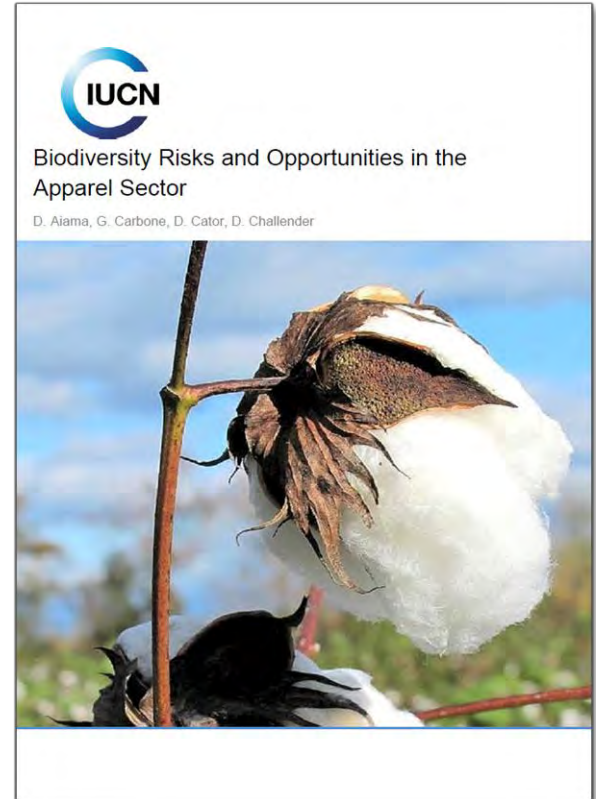
From LCA to Natural Capital Valuation

Qualitative approach in collaboration with the IUCN

- Holistic view that shows the interaction of the sector's value chains and their direct impact on biodiversity
- It creates an important awareness to all involved parties within the company and in general to all stakeholders
- It outlines potential mid- and long-term business risks for the entire sector
- It indicates various opportunities for raw material sourcing and manufacturing
- Achieved improvements and mitigation proposals are not quantified, so additional methods are necessary to demonstrate benefits

More details provided at:

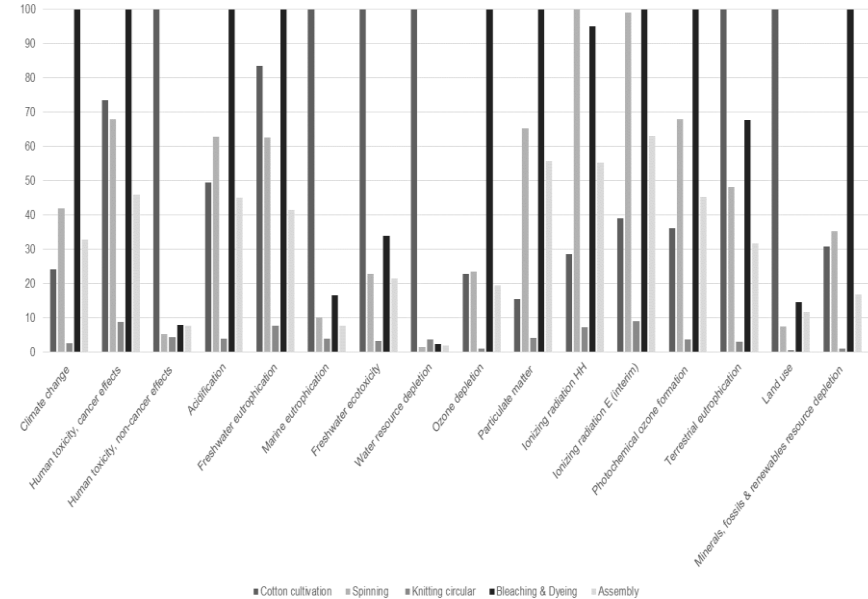
http://www.iucn.org/about/work/programmes/business/bbp_work/by_engagement/hugo_boss_ag/



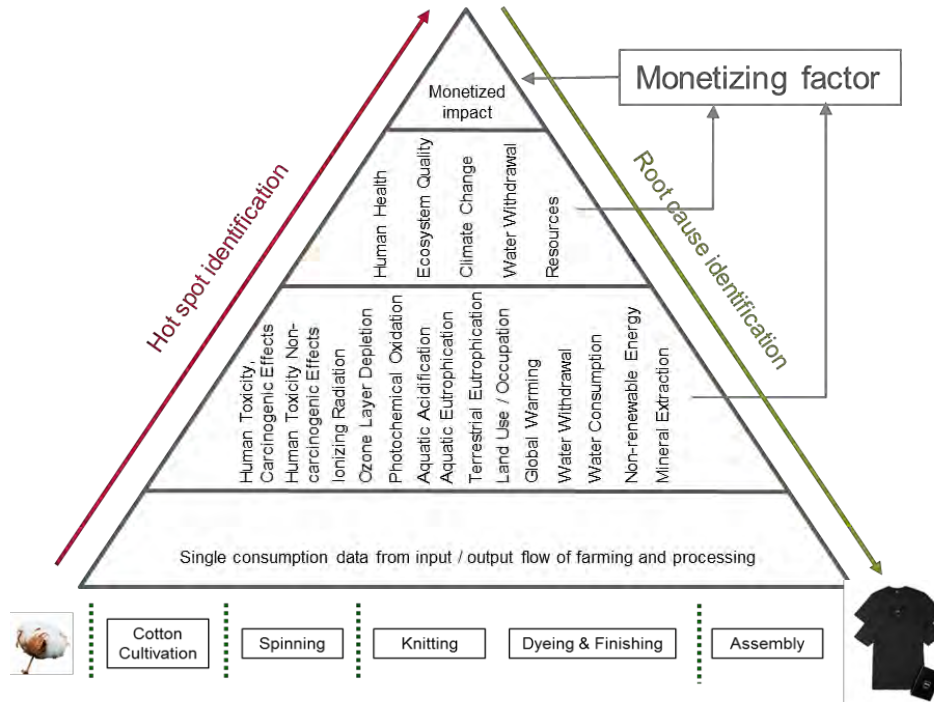
From LCA to Natural Capital Valuation

Quantitative approach in collaboration with the WALDB

- Over 7 years of data collection and elaboration
- Gaining detailed information on all process steps
- Established long lasting partnership through knowledge sharing for improvements
- Difficult to share information with non environmental experts
- No real direct comparison between the different impacts due to units of measurement (such as kgCO2, m3, DALY)



From LCA to Natural Capital Valuation



Natural Capital Valuation

The five damage categories can be normalized by applying “monetizing factors” which take into account local characteristics.

Damage categories

The many midpoint categories can be grouped into the five main damage categories according to the impact 2002+ methodology.

Midpoint categories

The single data flow information are transformed according to the ILCD methodology and/or to the EU PEF guidelines.

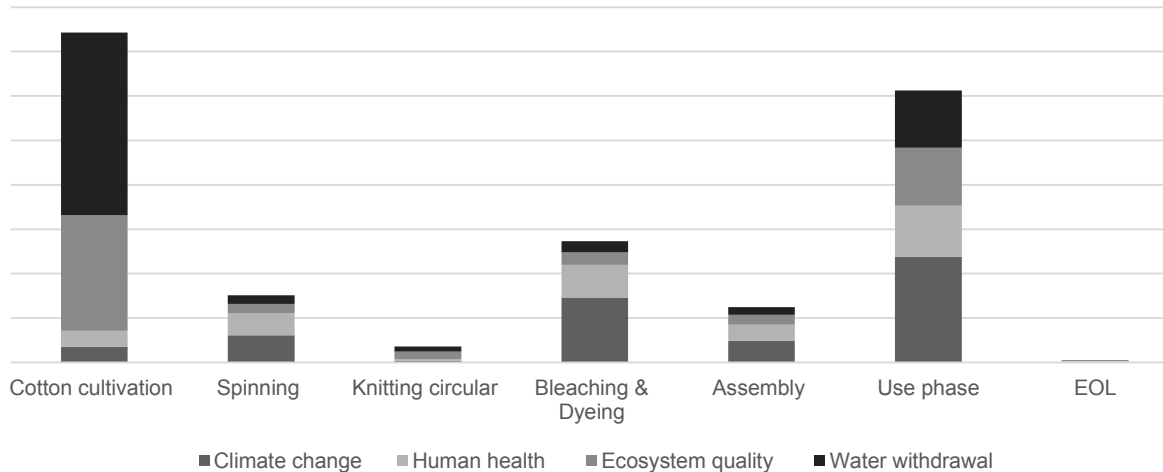
Process data

The respective low level process data result from single input/output flows. Overall, the data offer a basis for any valid analysis (available for example in WALDB).

Some Natural Capital Valuation examples

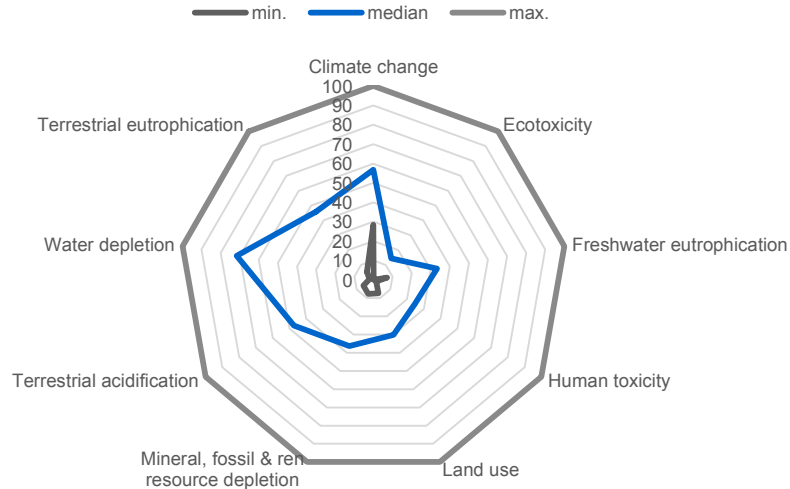
T-Shirt

The natural capital value of a T-shirt



- Water withdrawal is the most relevant impact for this supply chain, representing the 36% of the total monetized impact. It mainly comes from cotton cultivation
- Wet processes (bleaching and dyeing) account to 21%, due to chemicals impact on ecosystem quality and human health
- The use phase accounts to about 1/3 of the total impact of t-shirt's life cycle

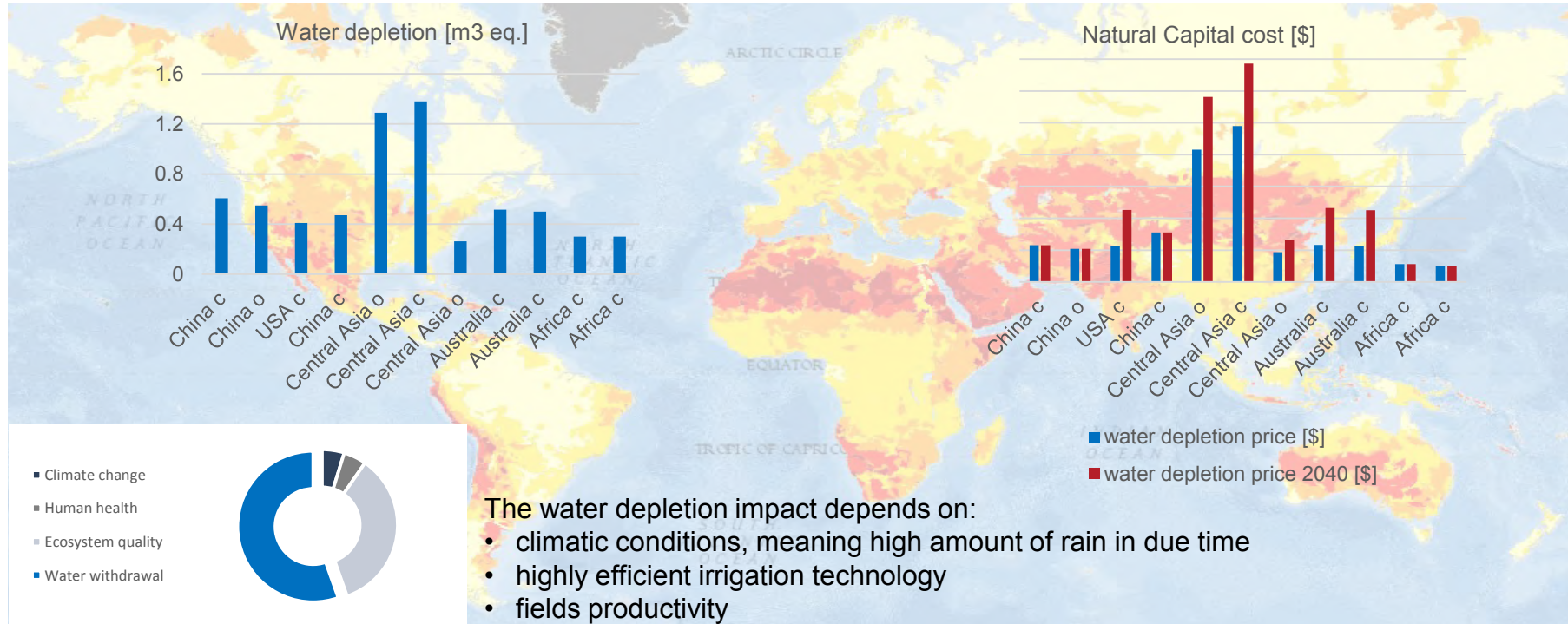
The natural capital value of a T-shirt : cotton farming



- Cotton shows a very high variance from worst to best (up to 95%)
- The median cotton reduces the average environmental impacts by more than the half
- Water depletion is a major topic also for the median cotton, but rain-fed only cotton has the risk of lower fiber length

Further information: <http://group.hugoboss.com/en/sustainability/products/cotton-commitment/>

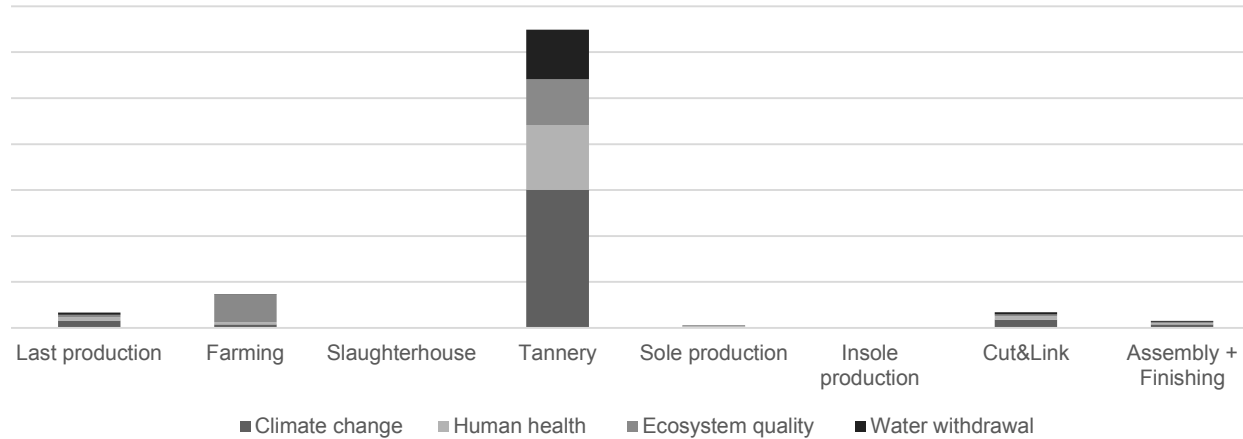
The natural capital value of a T-shirt : cotton farming



Some Natural Capital Valuation examples

Leather shoe

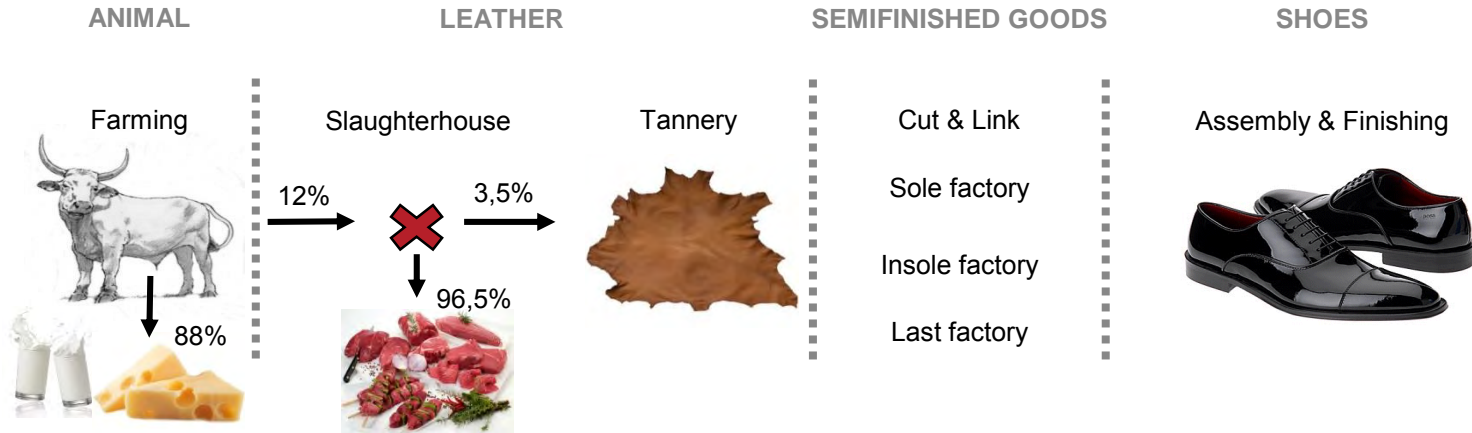
The natural capital value of a leather shoe



- Tanning requires high amounts of energy, which is responsible for nearly 50% of the impacts
- All tanning methods use lots of chemicals, that impact on human health and ecosystem quality

The natural capital value of a leather shoe: allocation of cattle farming

According to the latest environmental impacts' allocation rules for hides from the EU PEF pilot project on leather, only $12\% \times 3.5\% = \mathbf{0.42\%}$ of the **cattle farming** is allocated to leather products.

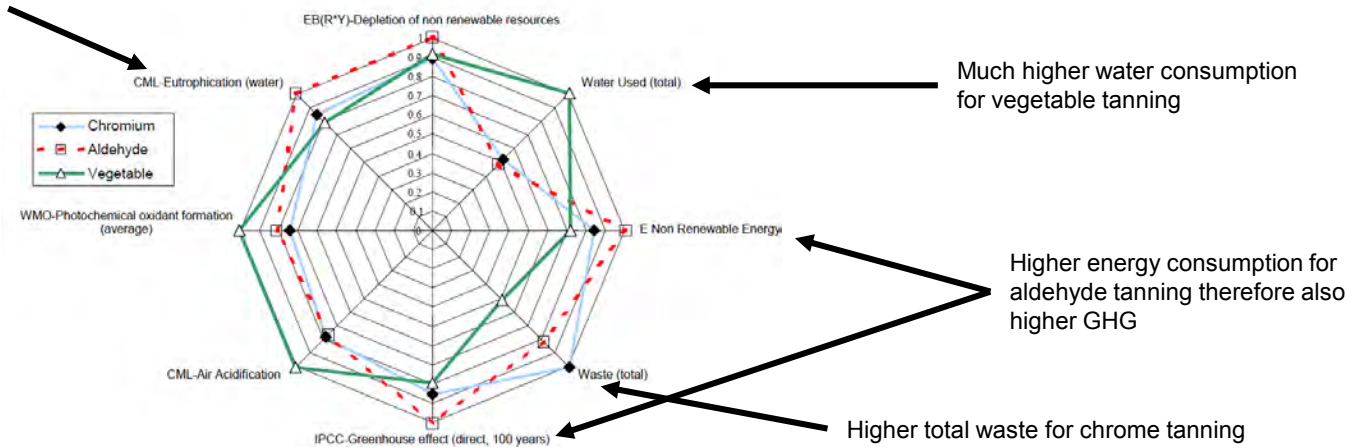


- Hides are a byproduct of cattle farming, whose impacts are allocated mainly to the milk and meat industry

The natural capital value of a leather shoe: impact of tanning methods

Comparison of tanning methods: chrome, wet white (aldehyde; chrome-free) and vegetable (LCA study from Ecobilan)

Higher water eutrophication for aldehyde tanning



- The total impacts of non-chrome (synthetic or vegetable) are not lower than the impacts of chrome tanned leather.
- Good environmental management systems need to be in place to protect against negative impacts

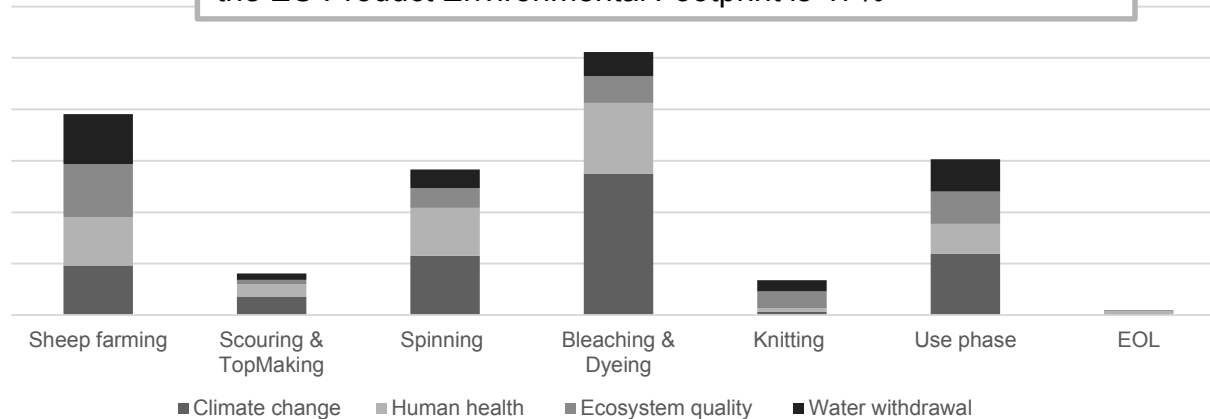
Further information: <http://group.hugoboss.com/en/sustainability/products/natural-capital-evaluation/>

Some Natural Capital Valuation examples

Wool knitwear

The natural capital value of a wool knitwear

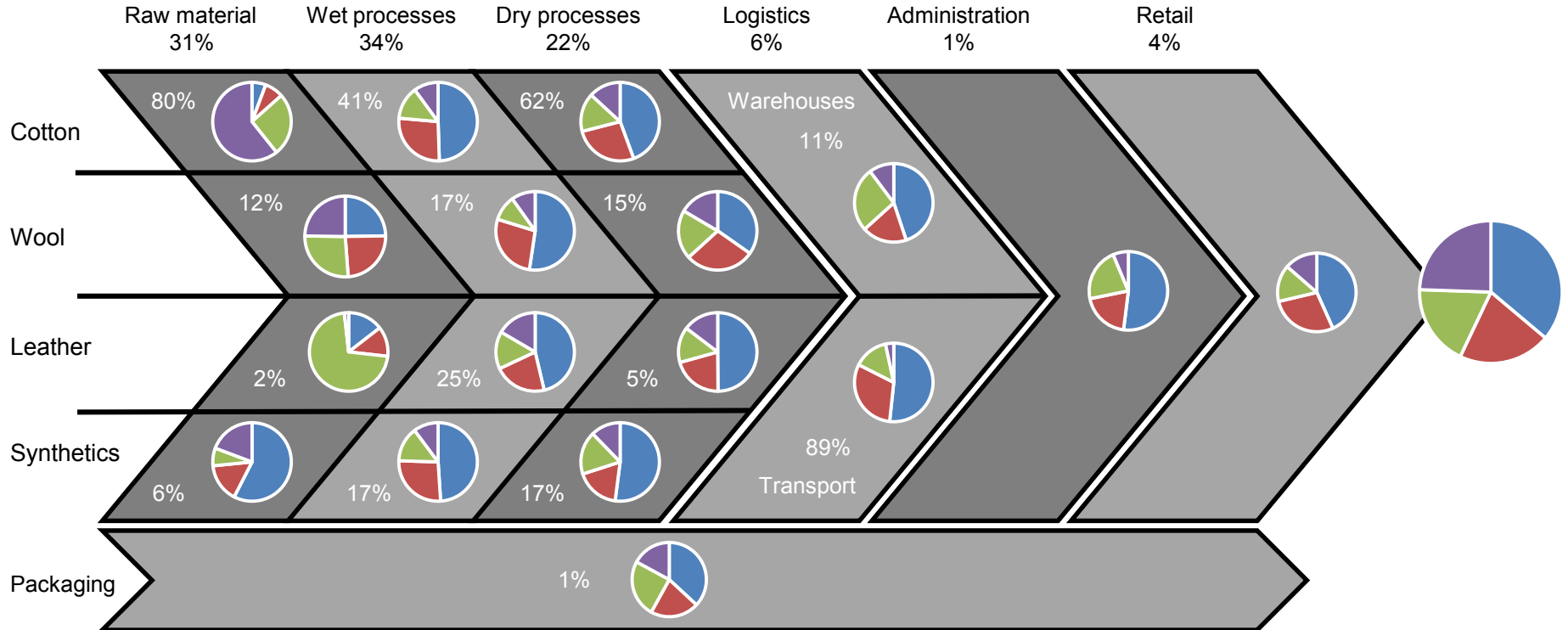
The allocation rule of impacts for sheep farming according to the EU Product Environmental Footprint is 47%



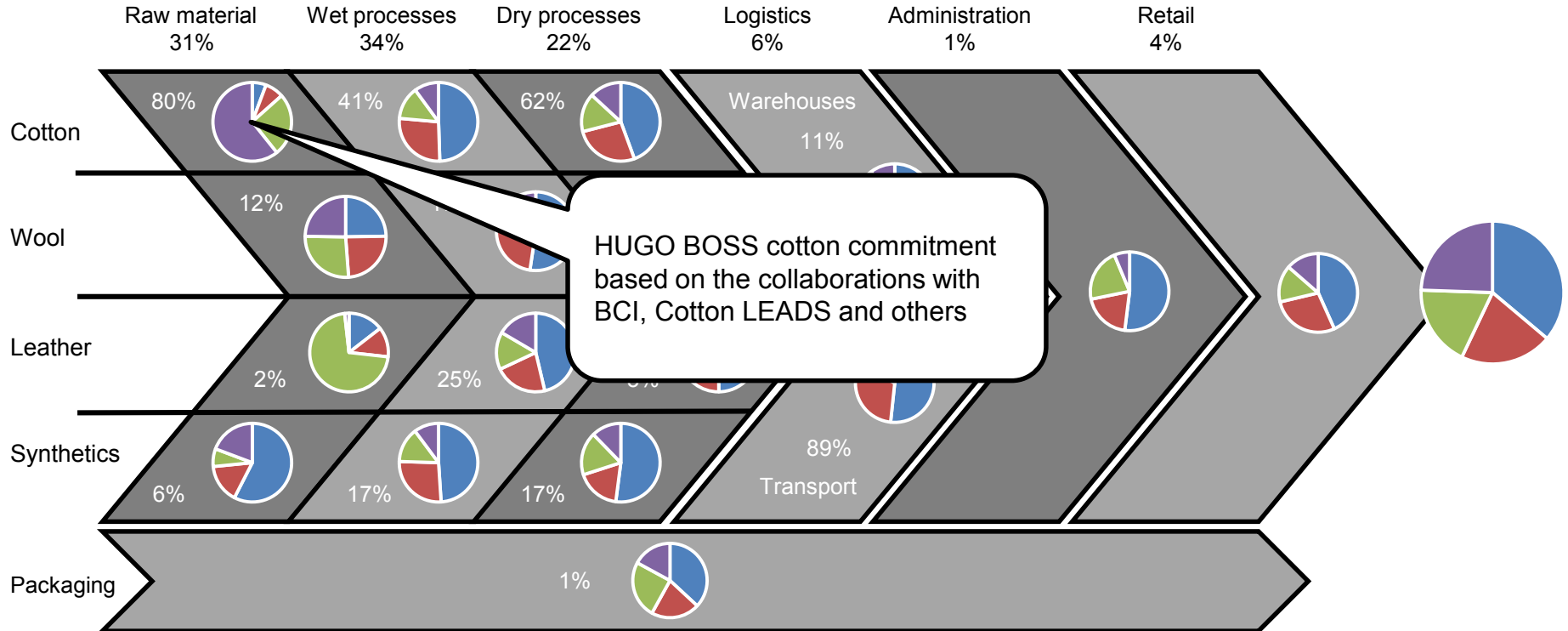
- The impacts are distributed over the three processes: sheep farming (29%), spinning (21%) and bleaching & dyeing (36%)
- In spinning and bleaching & dyeing the major impacts come from the energy sources that in Asia are fossil based. Fossil based energy compared to a typical Swiss energy grid mix shows a 5x higher impact on climate change and 1,5 x higher impact on human health.

Corporate Environmental Impact

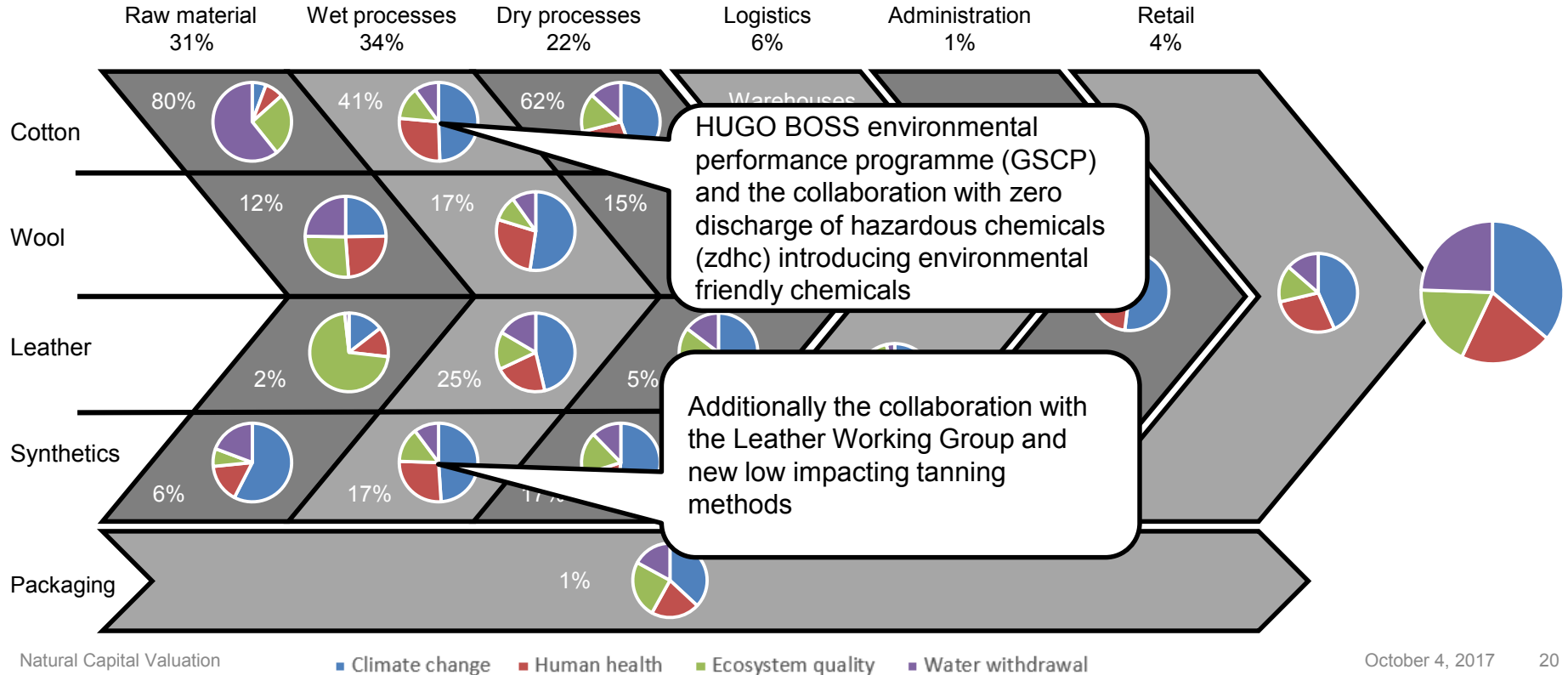
Corporate Environmental Impact



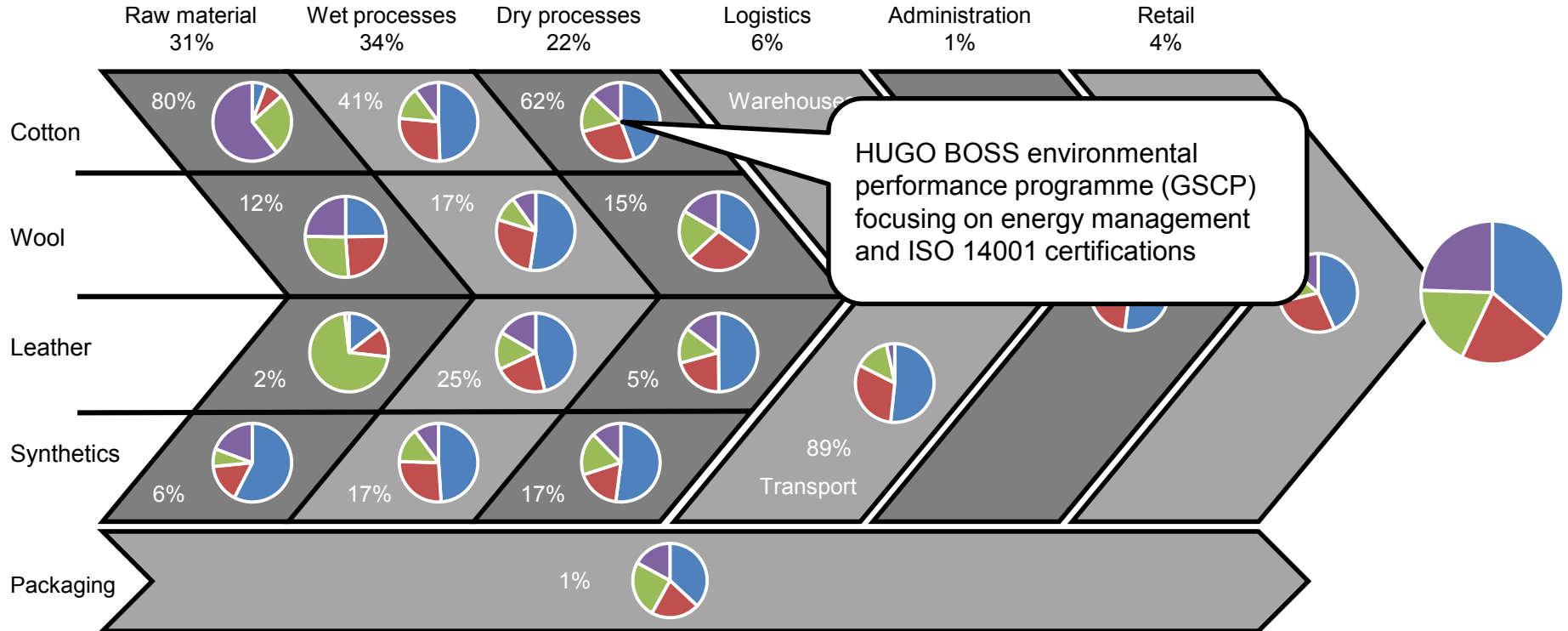
Corporate Environmental Impact : Mitigation Strategies



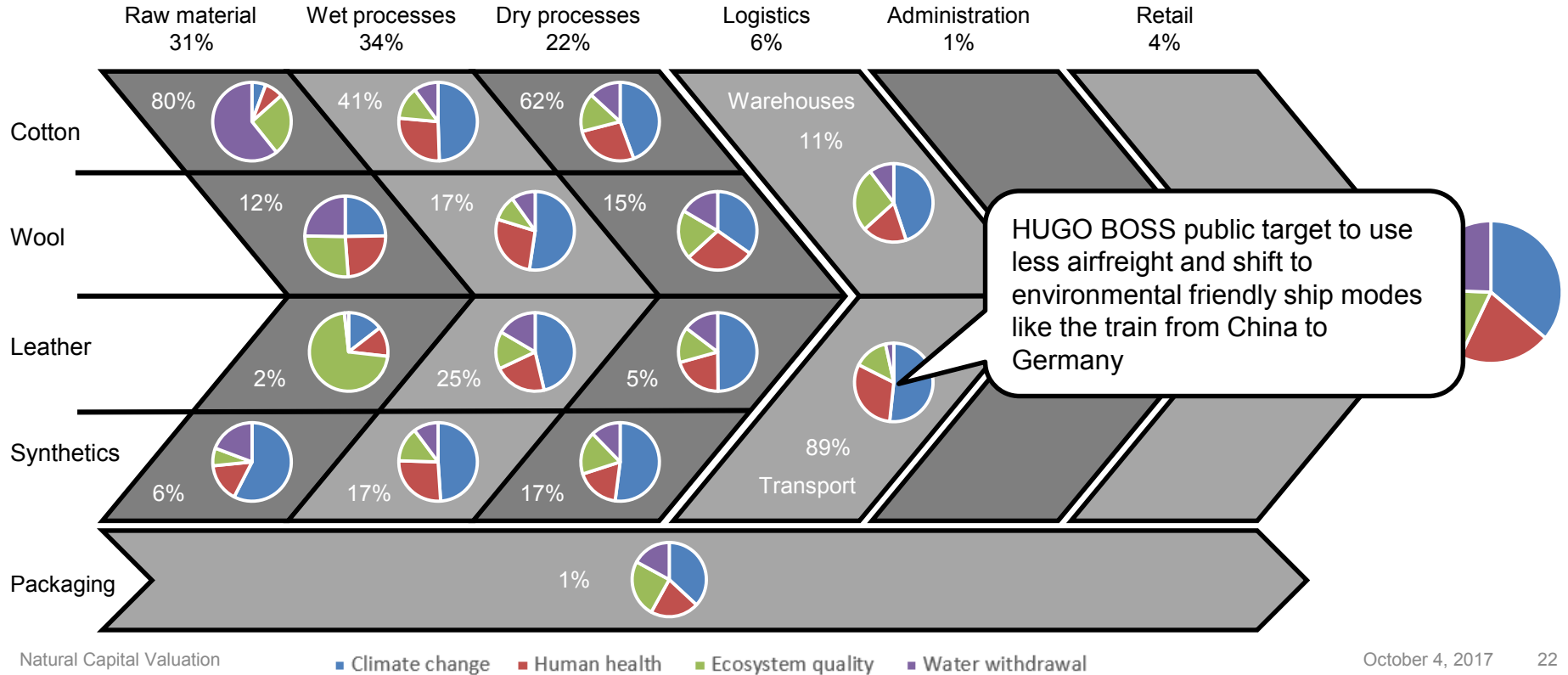
Corporate Environmental Impact : Mitigation Strategies



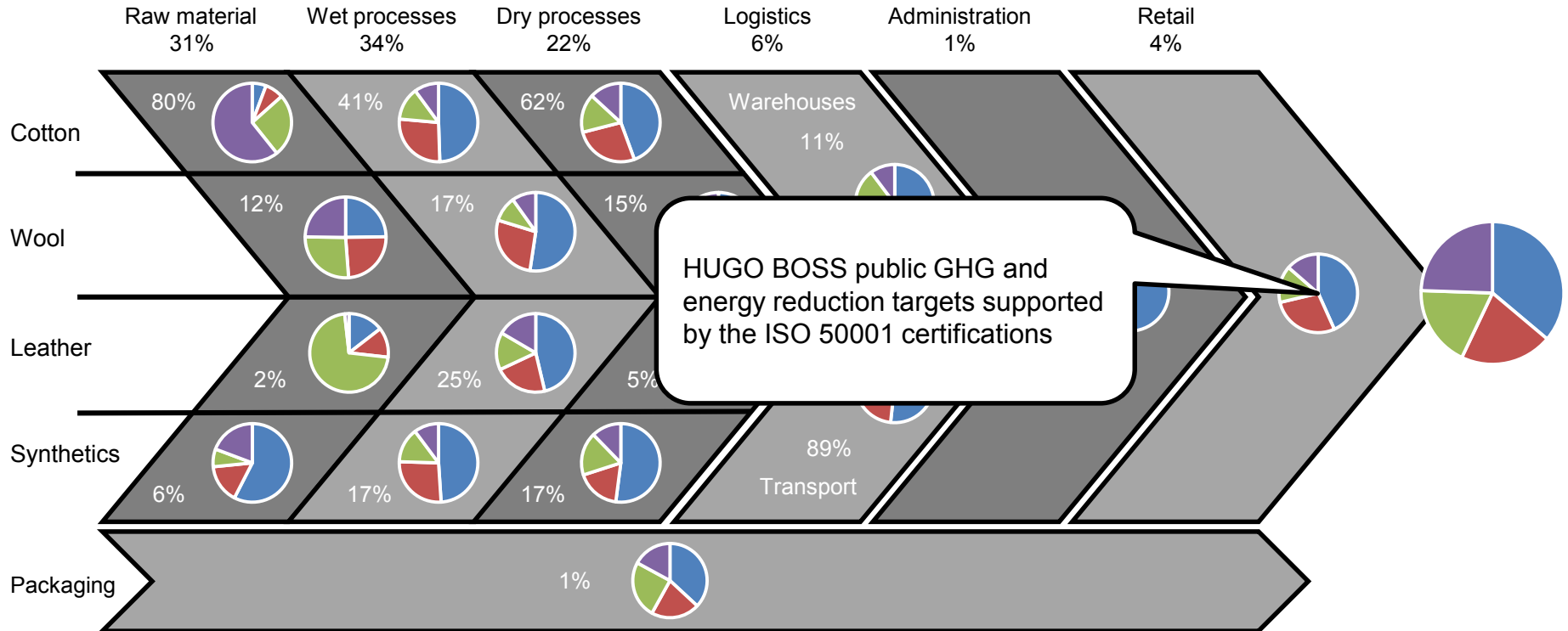
Corporate Environmental Impact : Mitigation Strategies



Corporate Environmental Impact : Mitigation Strategies



Corporate Environmental Impact : Mitigation Strategies



Further information at

hugoboss.com

group.hugoboss.com

Integrating Natural Capital into Business across all Sectors

5 October 2017



Volkert Engelsman
CEO





He's one of the busiest men in town. While his door may say *Office Hours 2 to 4*, he's actually on call 24 hours a day.

The doctor is a scientist, a diplomat, and a friendly sympathetic human being all in one, no matter how long and hard his schedule.



According to a recent Nationwide survey:

MORE DOCTORS SMOKE CAMELS THAN ANY OTHER CIGARETTE

DOCTORS in every branch of medicine—113,597 in all—were queried in this nationwide study of cigarette preference. Three leading research organizations made the survey. The gist of the query was—What cigarette do you smoke, Doctor?

The brand named most was Camel!

The rich, full flavor and cool mildness of Camel's superb blend of costlier tobaccos seem to have the same appeal to the smoking tastes of doctors as to millions of other smokers. If you are a Camel smoker, this preference among doctors will hardly surprise you. If you're not—well, try Camels now.



Your "T-Zone" Will Tell You...

**T for Taste . . .
T for Throat . . .**
that's your
proving ground
for any cigarette.
See if Camels
don't suit your
"T-Zone" to a "T."



CAMELS

Costlier Tobaccos

eosta
where ecology meets economy

For a better start in life
start **COLA** earlier!



How soon is too soon?

Not soon enough. Laboratory tests over the last few years have proven that babies who start drinking soda during that early formative period have a much higher chance of gaining acceptance and "fitting in" during those awkward pre-teen and teen years. So, do yourself a favor. Do your child a favor. Start them on a strict regimen of sodas and other sugary carbonated beverages right now, for a lifetime of guaranteed happiness.

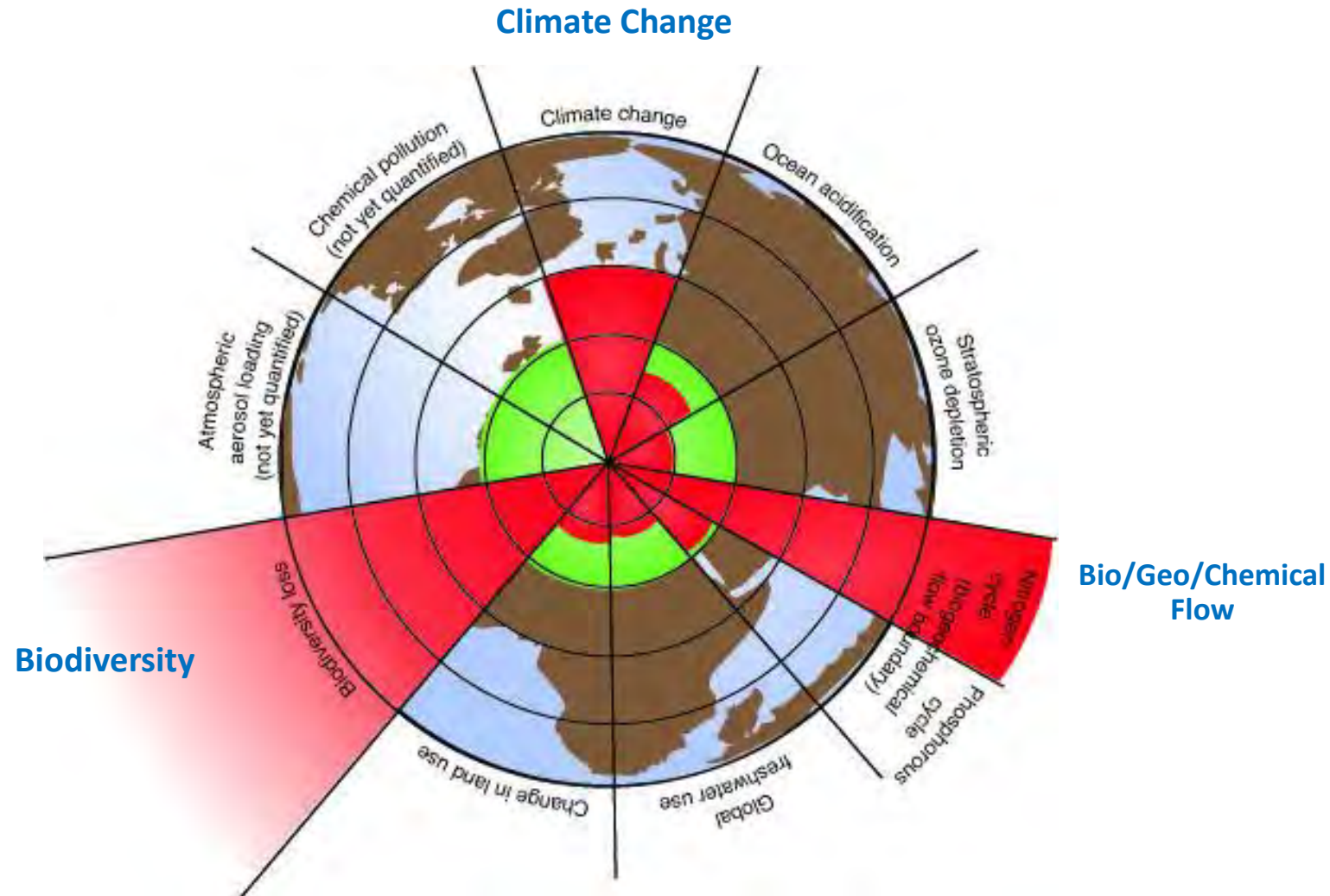
The Soda Pop Board of America
1515 W. Hart Ave. - Chicago, ILL.

- Promotes Active Lifestyle!
- Boosts Personality!
- Gives body essential sugars!



Coca-Cola
light

Planetary Boundaries





SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD

Graphics by Jitendra Lakshmi/Akshat





Consumer 1.0



Consumer 2.0







Hi, I'm Gonzalo and I grow organic avocado's in Peru!



'Click to see my personal sustainability flower in action!'



About my farm

VIDEO

Best Authentic Guacamole Re...



and I joined him two years later. My wife Luisa, my three daughters and one son and their families are all involved with the company one way or another. Thanks to our organic approach, we live a wonderful life in the countryside, amidst an abundance of plant and animal diversity.

Hi, I'm Jose Luis Tungui Olivo and I grow organic avocado's on the West coast of Mexico. I'm also known as "Don Aguacato". As the manager of Huertitas Organicas I represent a group of 20 small avocado growers in the beautiful area of Michoacán, who joined forces to ensure that the fruit we grow reaches you in the best possible condition. Apart from avocados we also grow mango's, grapefruits, green limes, passion fruit and more. Thank you for buying our products!

Michoacán is a Mexican state located on the west coast, bordering the beautiful Pacific ocean. Our region is perfect for growing avocados, due to the fertile volcanic soil, the excellent climate and the altitude. The avocado orchards are all between 1000 and 2100 meters above sea level. It therefore comes as no surprise that people call this region the world capital of the avocado. Our farmers are really in love with their avocado's. We eat them all the time!

Our farm is a real family business. My father started farming organically in 1984

Products grown on this farm









Ethical Trading Initiative
Respect for workers worldwide



BSCI
Business Social Compliance Initiative



**Global
Reporting
Initiative™**



THE
SUSTAINABILITY
CONSORTIUM™

GLOBALG.A.P.



World Business Council for
Sustainable Development



Food and Agriculture
Organization of the
United Nations

FOOD WITH A STORY
WWW.NATUREANDMORE.COM



GROWER PASSPORT



PASSED

GLOBAL G.A.P.
The Global Partnership for Good Agricultural Practice



CERTIFIED ORGANIC



NAME

GONZALO DE LA VEGA

LOCATION

PERU

FARM

AVORGANIC

GROWER CODE
AT NATUREANDMORE.COM
321

ORGANIC CROPS
AVOCADO

CERTIFIED BY

- PERUCERT
- CONTROL UNION DEL PERU

CERTIFICATES

- ORGANIC 834/2007
- GLOBAL G.A.P.



>>> NATURE & MORE GROWER PASSPORT >>>

<<< GONZALO DE LA VEGA <<< PERU <<<



**ORGANIC TOO
EXPENSIVE...
OR CONVENTIONAL
TOO CHEAP?
CLICK HERE AND
DISCOVER THE TRUE
BENEFITS AND COSTS
OF GONZALO'S
ORGANIC
AVOCADOS!**

CLICK



LIVELIHOODS

Conventional cost: € 998
Organic benefit: € 1.025

Organic benefit
for society: € 2.023

HEALTH

Conventional cost: € 2.808
Organic benefit: € 498

Organic benefit
for society: € 3.246

CLIMATE

Conventional cost: € 3.143
Organic benefit: € 1.101

Organic benefit
for society: € 4.244

**BIO-
DIVERSITY**

Conventional cost: € 2.169
Organic benefit: € 254

Organic benefit
for society: € 2.417

SOIL

Conventional cost: € 1.169
Organic benefit: € 254

Organic benefit
for society: € 1.417

WATER

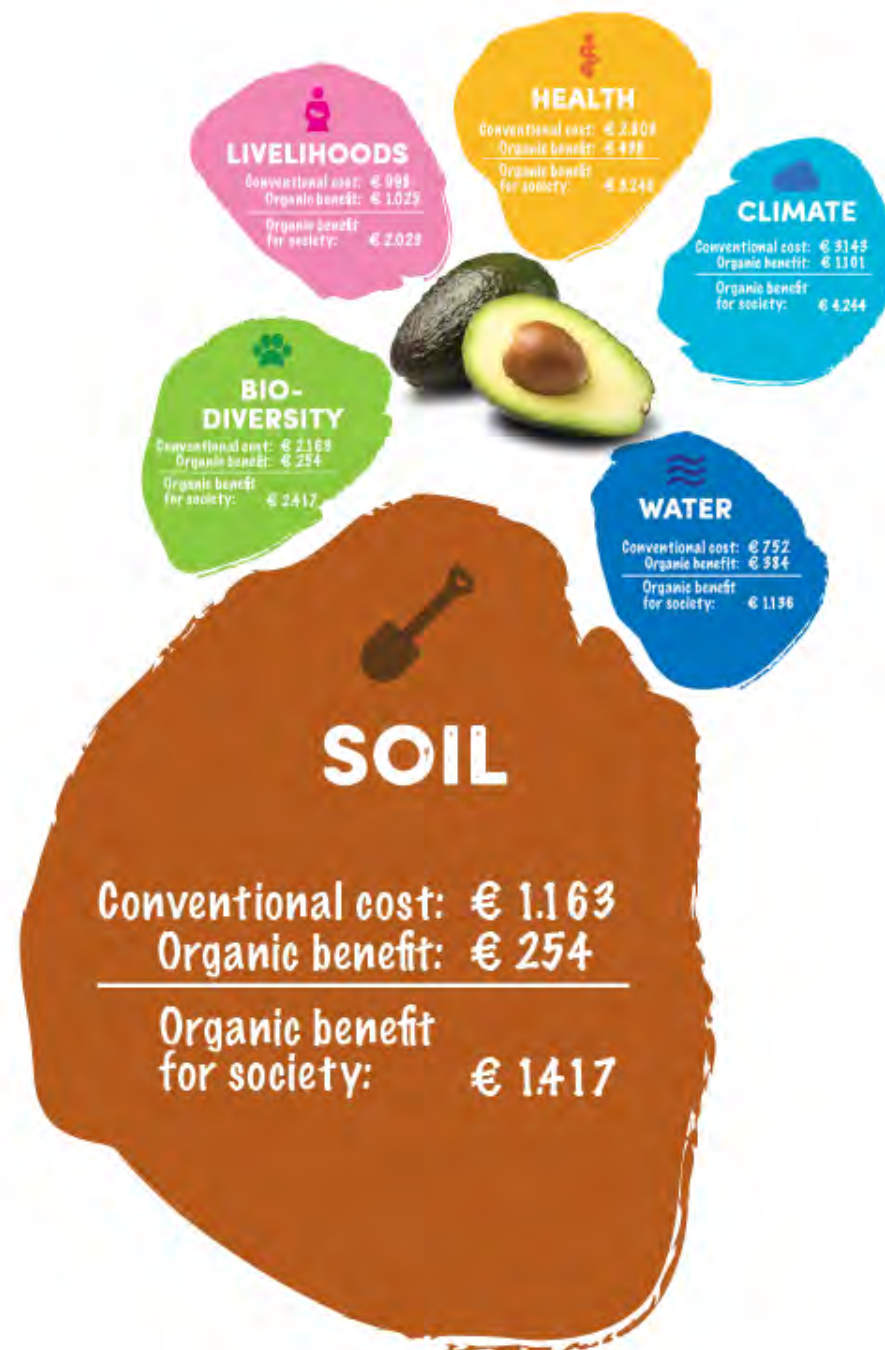
Conventional cost: € 752
Organic benefit: € 384

Organic benefit
for society: € 1.136

cost comparison per hectare / year,
and according to FAO

>>> NATURE & MORE GROWER PASSPORT >>>

<<< GONZALO DE LA VEGA <<< PERU <<<





Recycling municipal green waste - biodynamic compost in South Africa





The Soil is the Limit

According to the United Nations every minute 30 soccer fields of soil are lost, mostly due to irresponsible farming techniques. This causes hunger, speeds up climate change and threatens our ability to feed the world. Considering that 99.7% of our food comes directly from the soil, we need to turn the tide.

That's why the United Nations and Nature & More call for action now!



Organic = the Soilution

Healthy food starts with healthy soils.

Organic farmers:

- restore degraded soils and prevent erosion
- make soils resistant to droughts & floods
- stimulate biodiversity
- fight climate change by increasing carbon storage

Become a Soldier and win a prize

1. Become an urban farmer
2. Film it, Youtube it and make a buzz
3. Win a trip to Egypt and see how we green the desert.

www.saveoursoils.com





Desmond Tutu



Vandana Shiva



Jose Graziano da Silva FAO



Sarah Wiener



Klaus Töpfer



Chief Arvol Looking Horse



Julia Roberts



Dalai Lama



Renate Künast



The Prince of Wales



**BUY ORGANIC
AVOCADOS
AND SAVE 6 M³
OF FERTILE
SOIL.***

* PER 1000 SQM AND YEAR

 **THE
TRUE
COST
OF FOOD** 







**BUY ORGANIC
GRAPES
AND SAVE
25.200 LITRES*
OF WATER.**

* PER 100 SQM AND YEAR

 **THE
TRUE
COST
OF FOOD** 





CLIMATE

Conventional cost: € 3.143

Organic benefit: € 1.101

Organic benefit
for society: € 4.244



**BUY ORGANIC
PINEAPPLES
AND SAVE
400 LITRES* OF
GREENHOUSE
GASSES.**

*PER HECTARE AND YEAR



**THE
TRUE
COST
OF FOOD**





HEALTH

Conventional cost: € 2.808

Organic benefit: € 438

Organic benefit
for society: € 3.246



LIVELIHOODS

Conventional cost: € 998
Organic benefit: € 1.025

Organic benefit
for society: € 1.025

CLIMATE

Conventional cost: € 3145
Organic benefit: € 1101

Organic benefit
for society: € 4.244



BIO-DIVERSITY

Conventional cost: € 2165
Organic benefit: € 254

Organic benefit
for society: € 2417

SOIL

Conventional cost: € 1165
Organic benefit: € 254

Organic benefit
for society: € 1417

WATER

Conventional cost: € 752
Organic benefit: € 384

Organic benefit
for society: € 1196





WAS UNSER
ESSEN
WIRKLICH
KOSTET

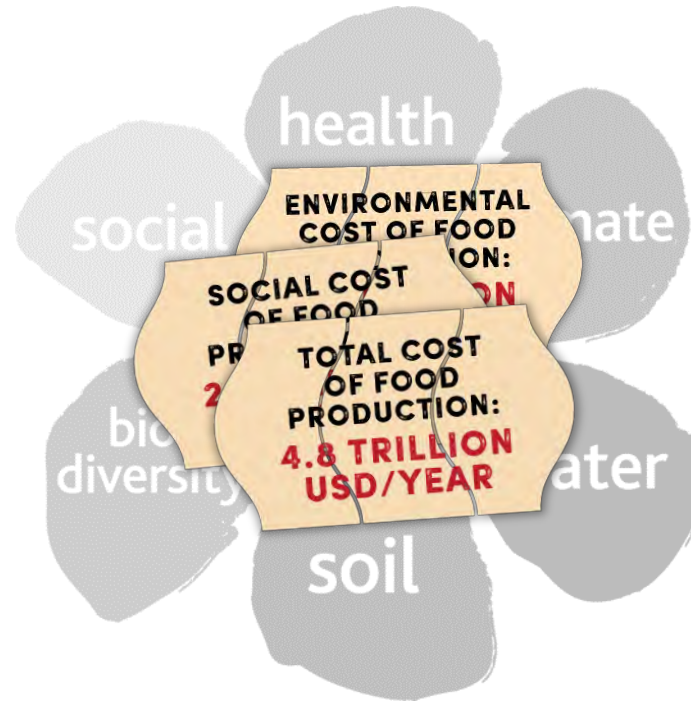


KAUFE BIOLOGISCHE
ÄPFEL UND
SPARE DIR 27
KRANKHEITSTAGE.*

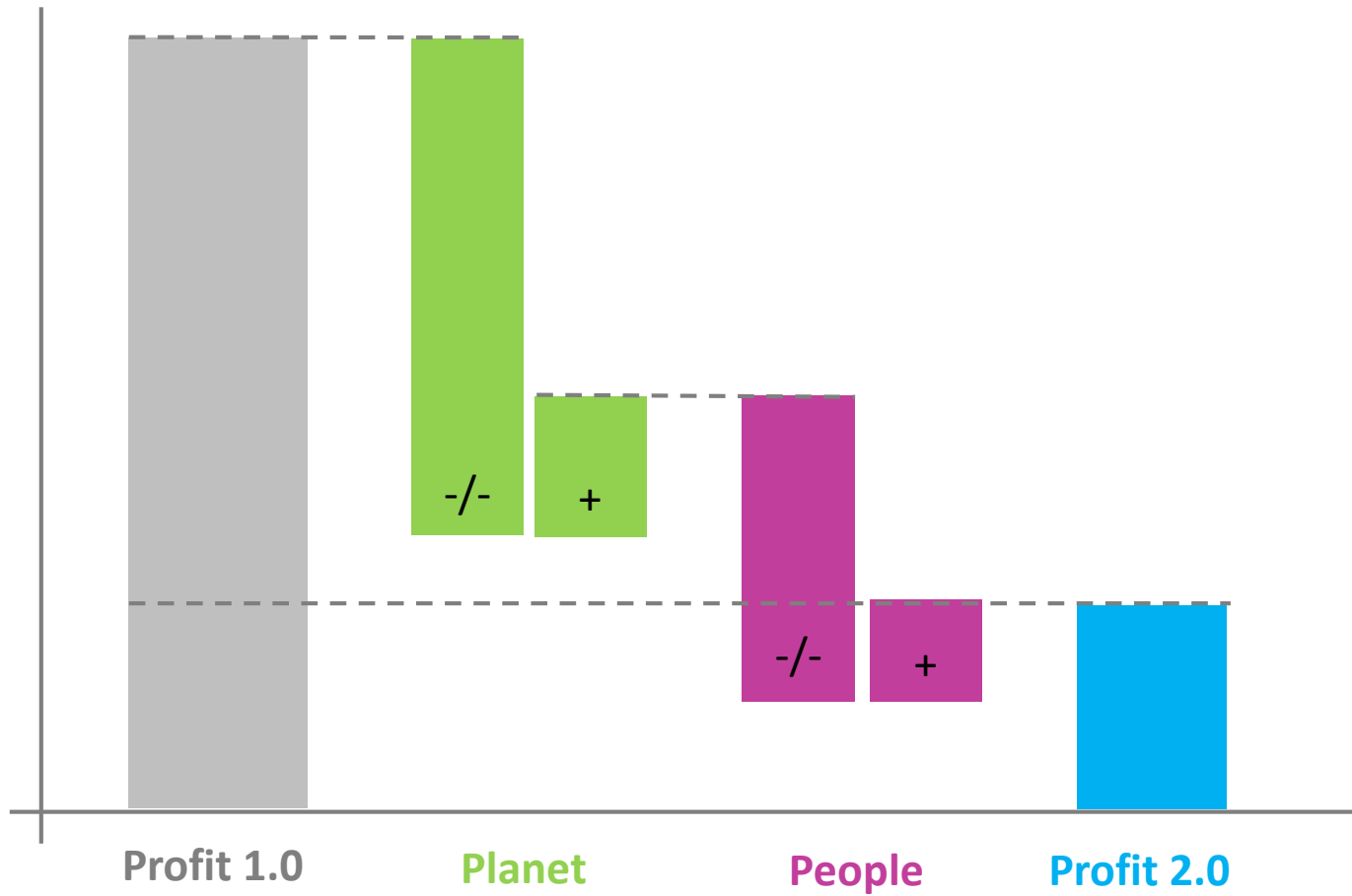
* PRO HEKTAR UND JAHR



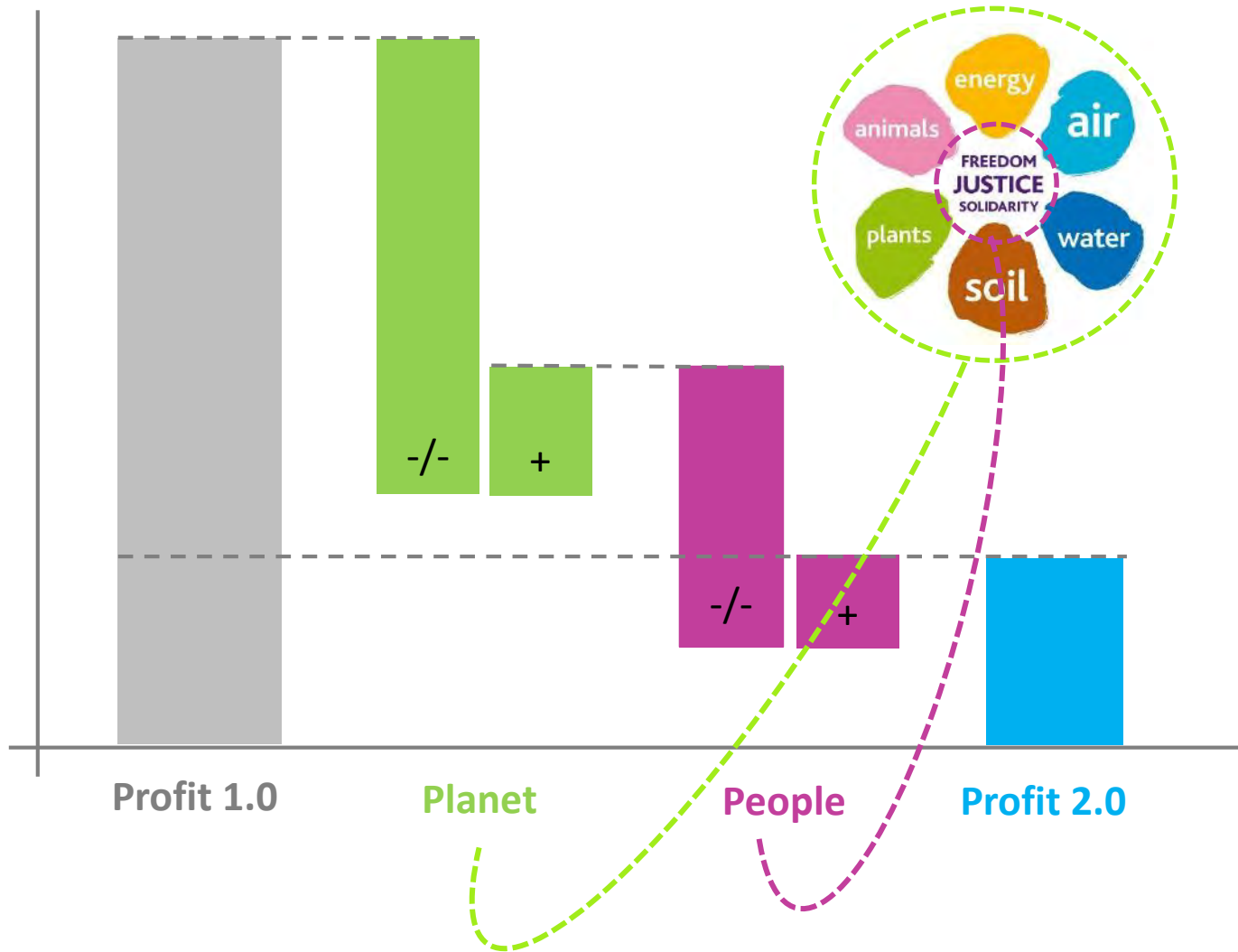




Re-defining Profit



Re-defining Profit



Pilot: True Cost Accounting for Food, Farming, Finance





Use with recipe
only

Side effect:
Yellow fingers

Alcohol use:
Do use with a
glass of good
wine

Driving or
operating
machines:
finish plate
first

Nu met
recepten
verkrijgbaar

KURKUMA

6 curcumine wortels 20 gram

In handige doordrukstrips

Bewezen effectief bij meer dan 600 aandoeningen waaronder winderigheid, hart- en vaatziekten, diabetes, parkinson, alzheimer, bronchitis, astma en alvleesklierkanker

LET OP: KAN DE LEVENSV ERWACHTING VERLENGEN

Voor oraal gebruik

**BIO MAAKT
JE BETER!**



KURKUMA 6 curcumine wortels 20 gram

SAMENSTELLING

Werkzame stof: primare polyphenolen genaamd curcumine in een dosering van tabletten van 10-20 gram in doordrukverpakking

DOSERING

Volwassenen en adolescenten van 12 jaar en ouder
Eenmaal daags 10 mg (1 tablet).
Kinderen van 6 tot 12 jaar
Tweemaal daags 5 mg (tweemaal daags 1/2 tablet)

Lees de hele bijsluit er.
Gebruik dit middel altijd precies zoals beschreven in deze bijsluit er of zoals uw cheffkok, kookboekauteur of restauranthouder u dat heeft verteld.


NIET TE GEBRUIKEN BIJ

Het gebruik van de Curcumine/Kurkuma tablet is niet zinvol bij kinderen jonger dan 6 maanden omdat ze nog borstvoeding krijgen.
Neemt u nog andere groenten kruiden of specerijen in? Overleg dan met uw cheffkok of groentenspecialist of deze smaak en werking niet belemmeren.

DUUR VAN DE BEHANDELING

In minstens in één, maximaal 7 warme maaltijden per week

Heeft u nog vragen?
Neem dan contact op met uw groentespecialist of kijk op natureandmore.com



Also suffering
from Big Pharma?

Ook wel eens last van Big Pharma?



How about
checking your
green grocer

**Verwijs jezelf naar de
groentespecialist voor
een Kurkuma-kuur**



BIO MAAKT JE BETER

natureandmore.com

eosta
where ecology meets economy



MILLIONS OF HEALTH FREAKS CAN'T BE WRONG

Check the benefits of ginger at natureandmore.com



eosta
where ecology meets economy

Integrating Natural Capital into Business across all Sectors

5 October 2017



Hitomi Miura
Environmental
Management Group

SEKISUI

SEKISUI Environment Sustainability Index



Hitomi Miura
Environmental Management Group
SEKISUI Chemical Co., Ltd.

Introduction of SEKISUI

Name: SEKISUI Chemical Co., Ltd.
Headquarters: Tokyo / Osaka, Japan
Net Sales: 1,065,700 Mio. Yen
Ordinary Income: 91,500 Mio. Yen
International sales ratio: 23,6%
URL: www.sekisuichemical.com



Tokyo Head Office

Processing outstanding plastics for industrial applications

Residential and Social Infrastructure



Housing



Residential
Services



Piping



Construction and
Infrastructure



Automotive and
Transportation

Chemical Solution



Life Science



Electronics

SEKISUI and Sustainability

Group Vision

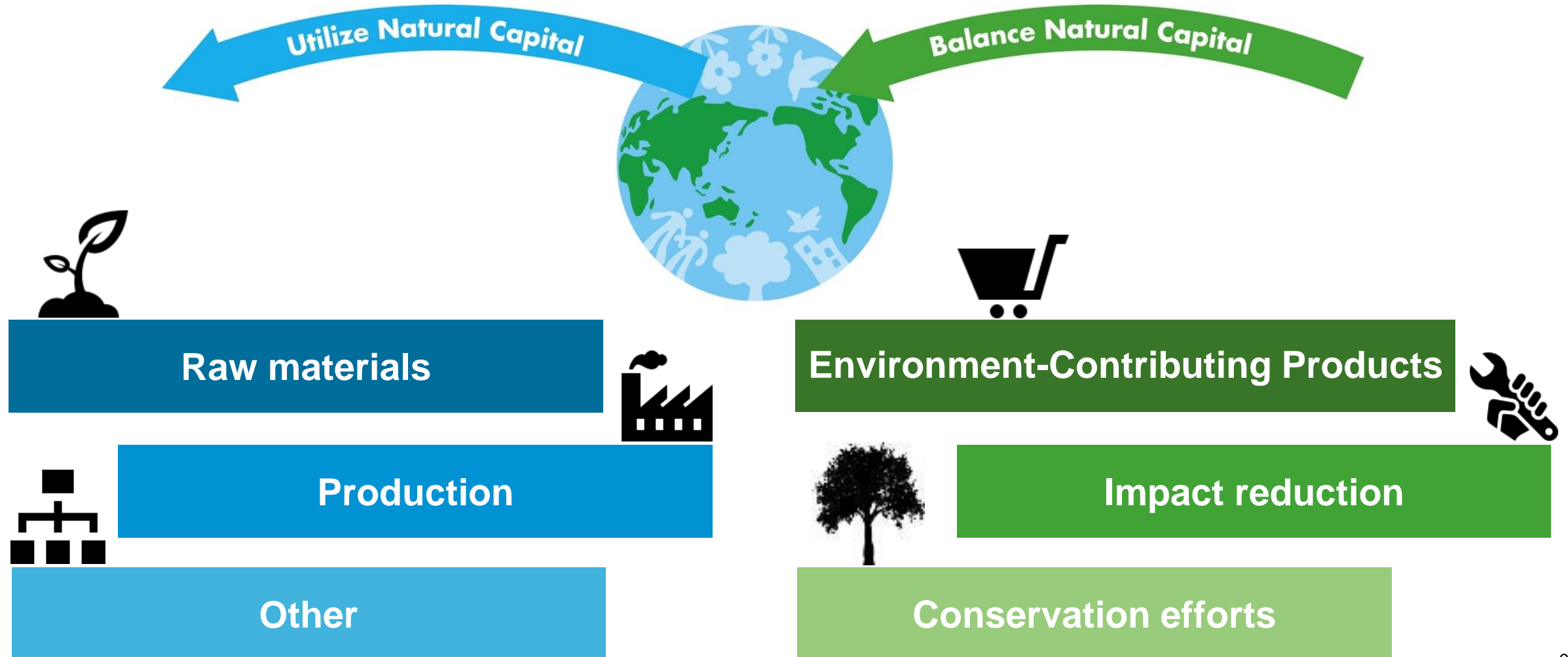
Through prominence in technology and quality, SEKISUI Chemical Group will contribute to improving the lives of the people of the world and the Earth's environment, by continuing to open up new frontiers in residential and social infrastructure creation and chemical solutions.



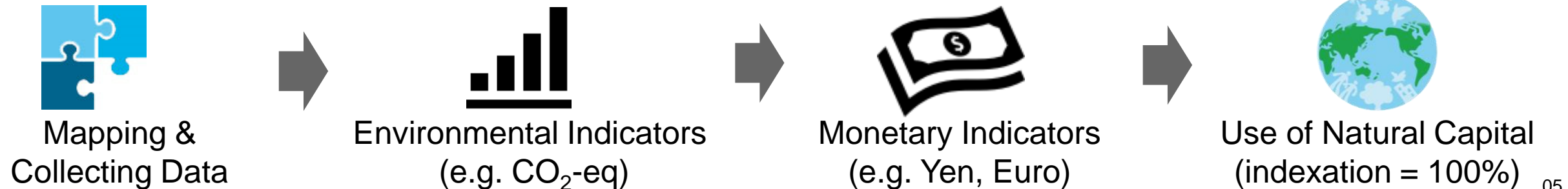
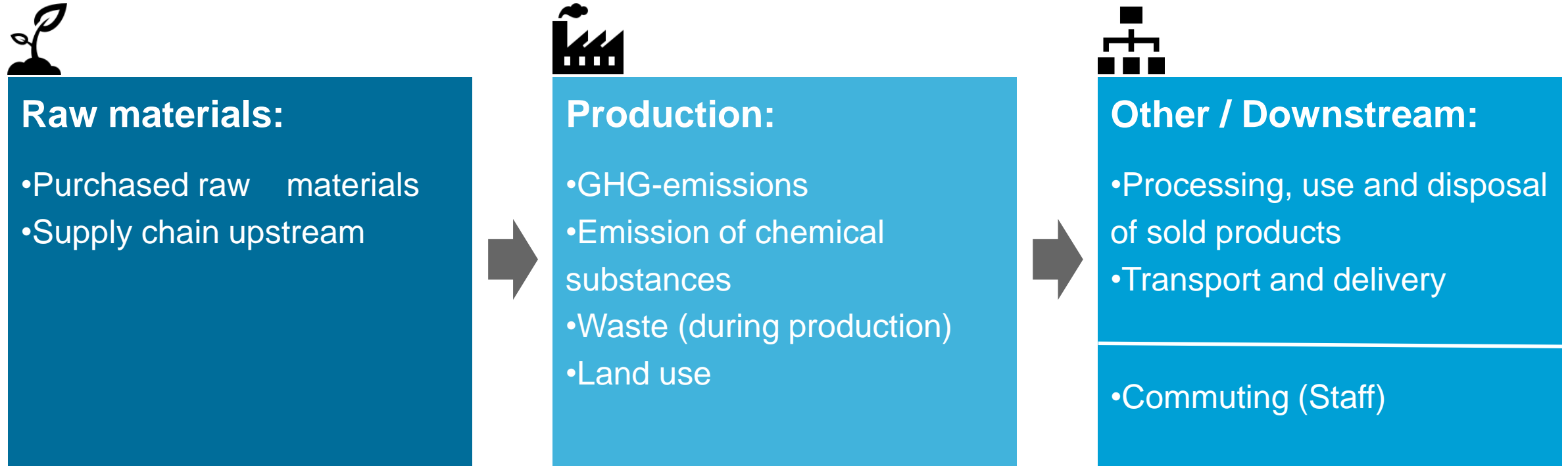
Our approach to CSR



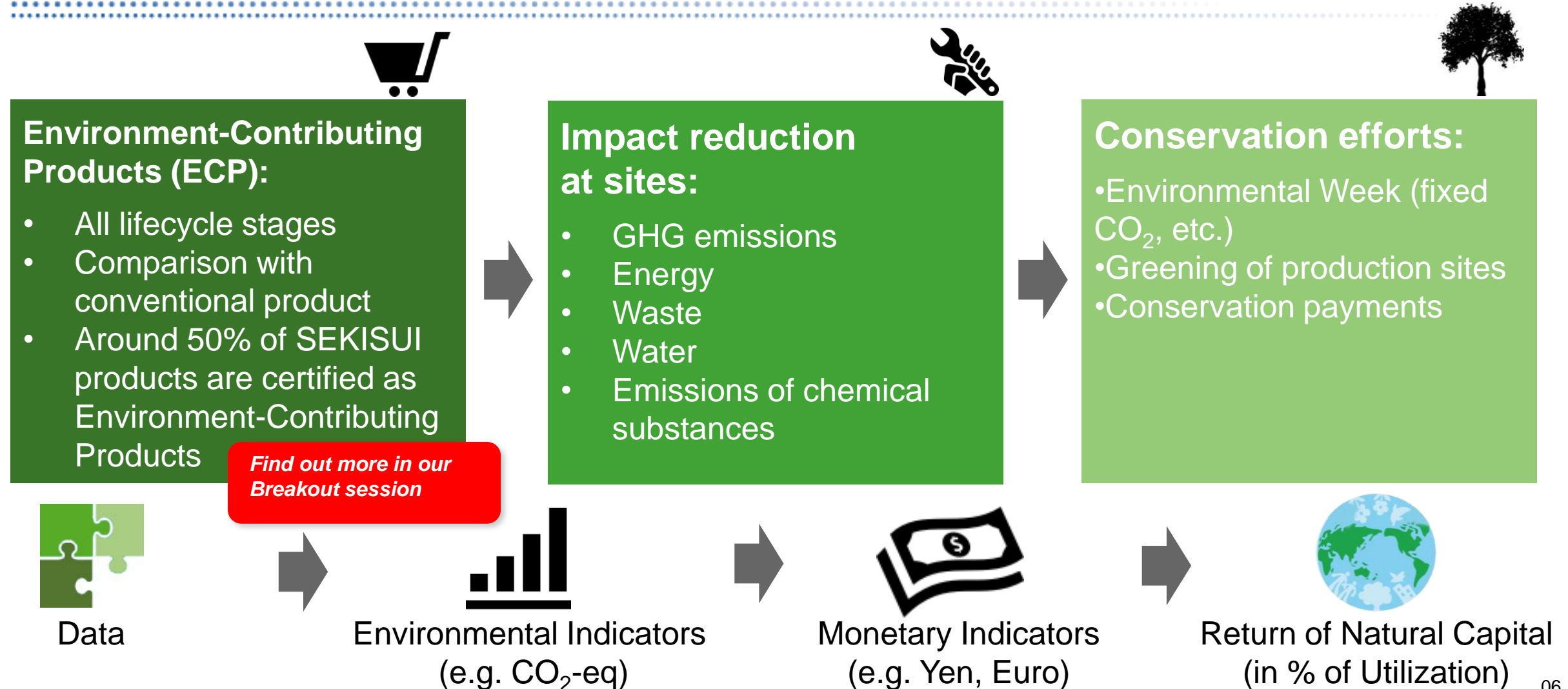
Environment Sustainability Index



Utilizing Natural Capital



Balance Natural Capital



Environment-Contributing Products

Environment-Contributing Products



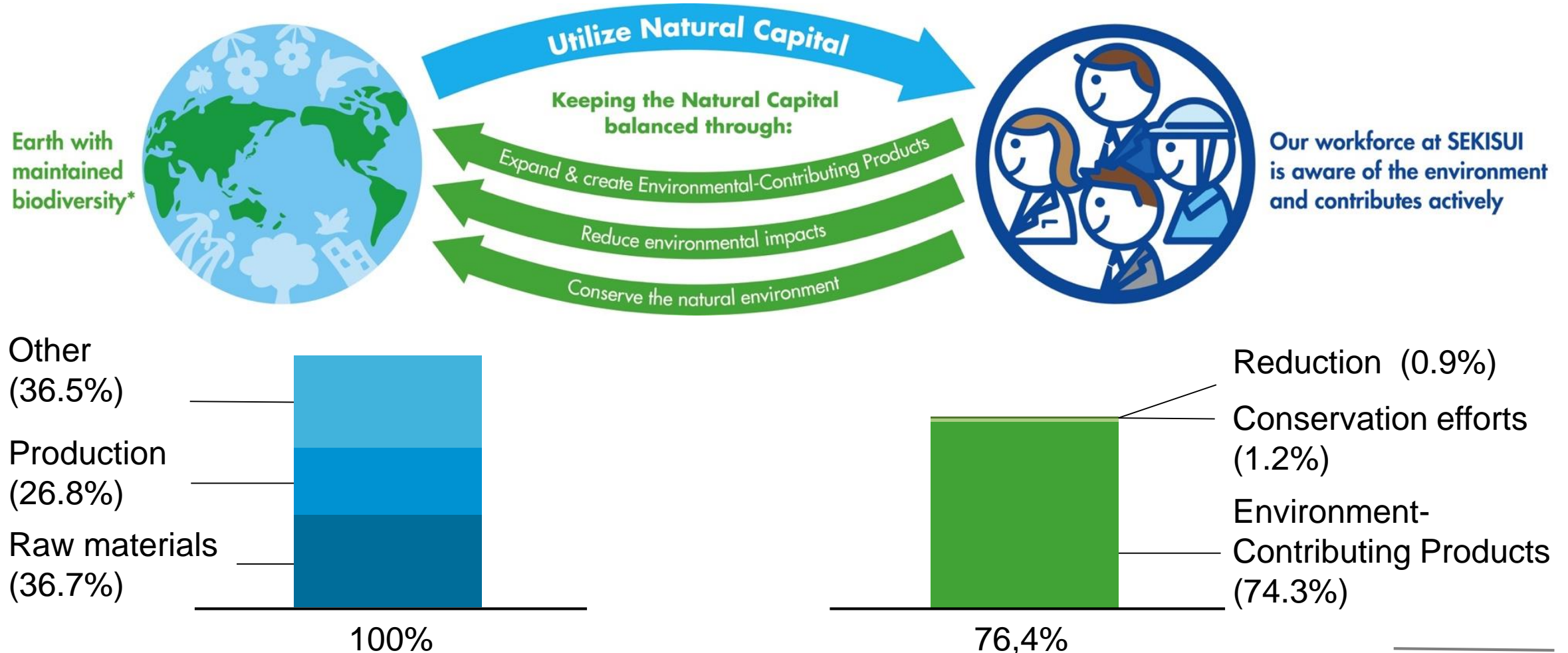
Impact reduction



Conservation efforts



The SEKISUI Index



Integration of Natural Capital

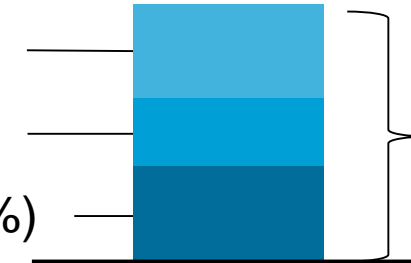


Supply chain aspects
need to be further
analyzed

Other (36.5%)

Production (26.8%)

Raw materials (36.7%)



Supply Chain: 73,2%

Utilize Natural Capital



Integration in R&D
department

KYDEX® 6565
Thermoplastics sheet
instead of metals



Results are used for
our 2050-vision





Thank you for your attention!

The Natural Capital Protocol and Toolkit – delivering change

5 October 2017



Mark Gough
Director



NATURAL
CAPITAL
COALITION

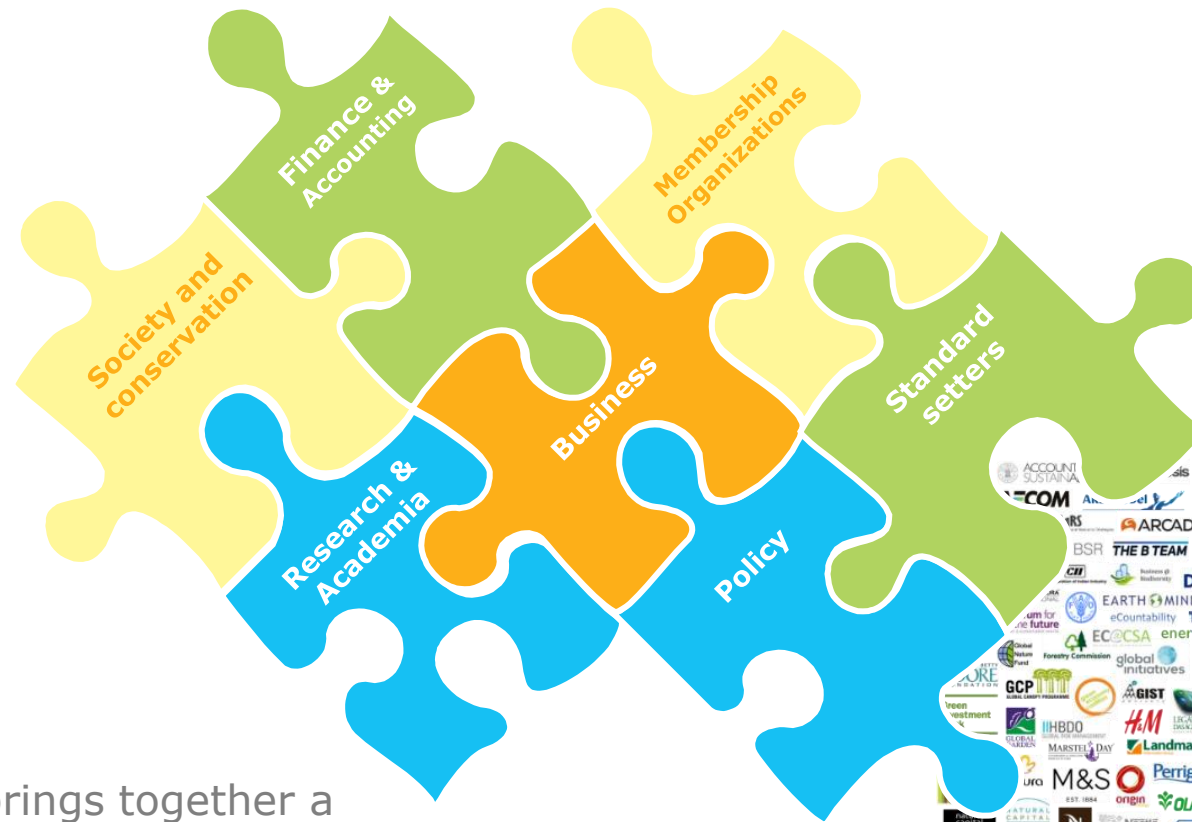
The Natural Capital Protocol and Toolkit: delivering change



**NATURAL
CAPITAL
COALITION**

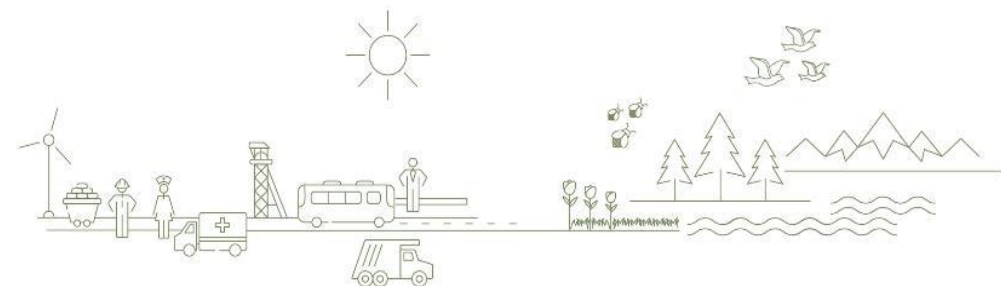
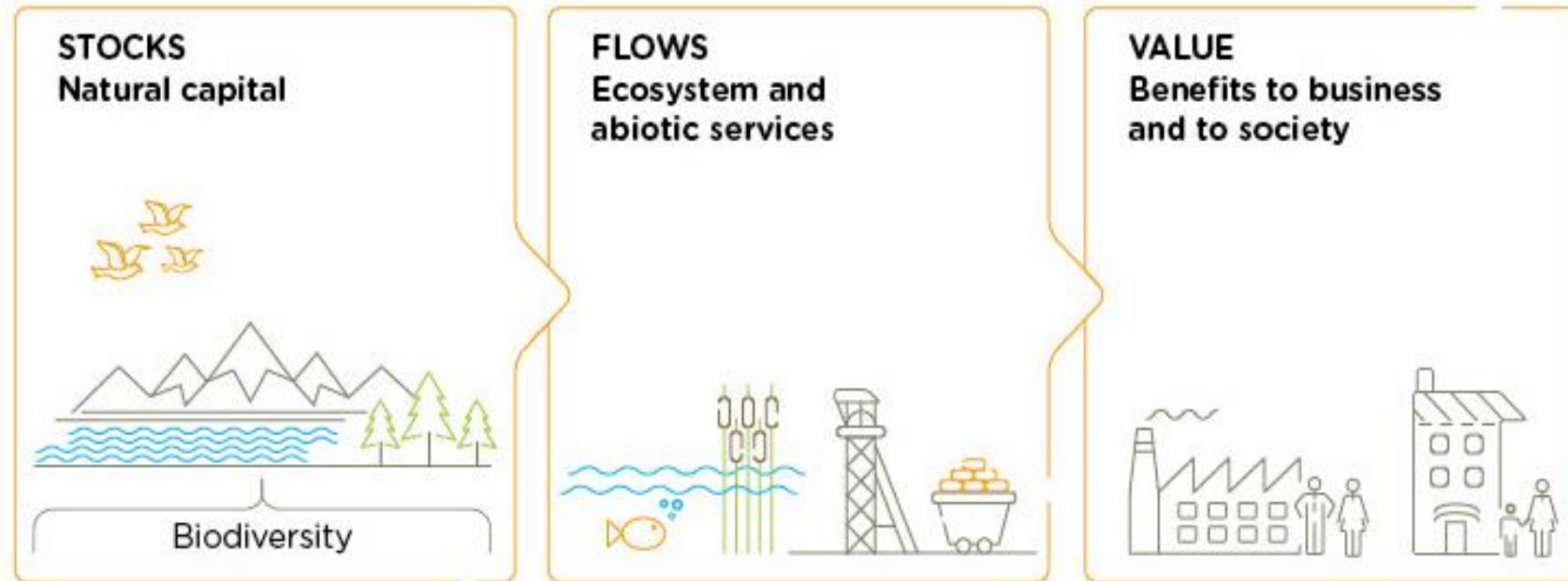
 [@NatCapCoalition](https://twitter.com/NatCapCoalition) [#NatCapProtocol](https://twitter.com/NatCapCoalition)

The Answer: Collaboration



The Coalition brings together a wide range of stakeholders who collaborate on activities. Their aim is to help create a world where we conserve and enhance the natural capital we depend upon.

So what is Natural Capital?



A unique collaborative process



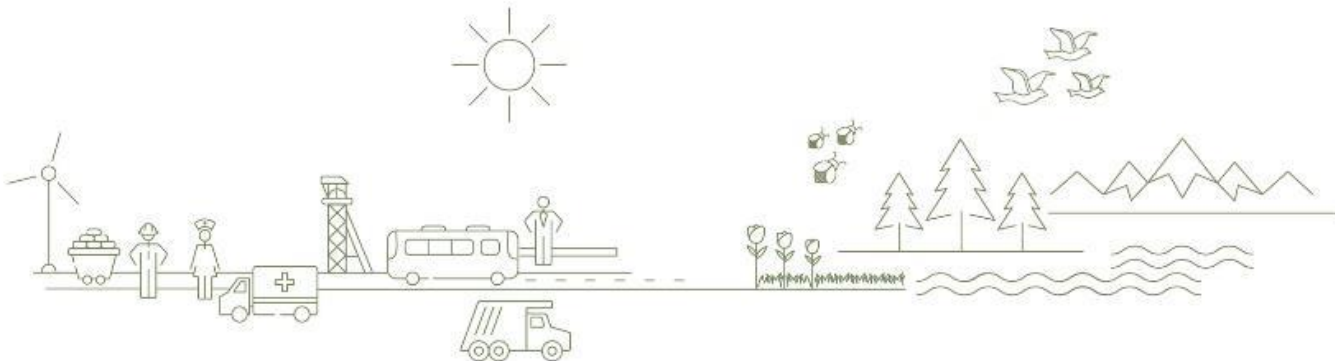
The Coalition is hosted by ICAEW



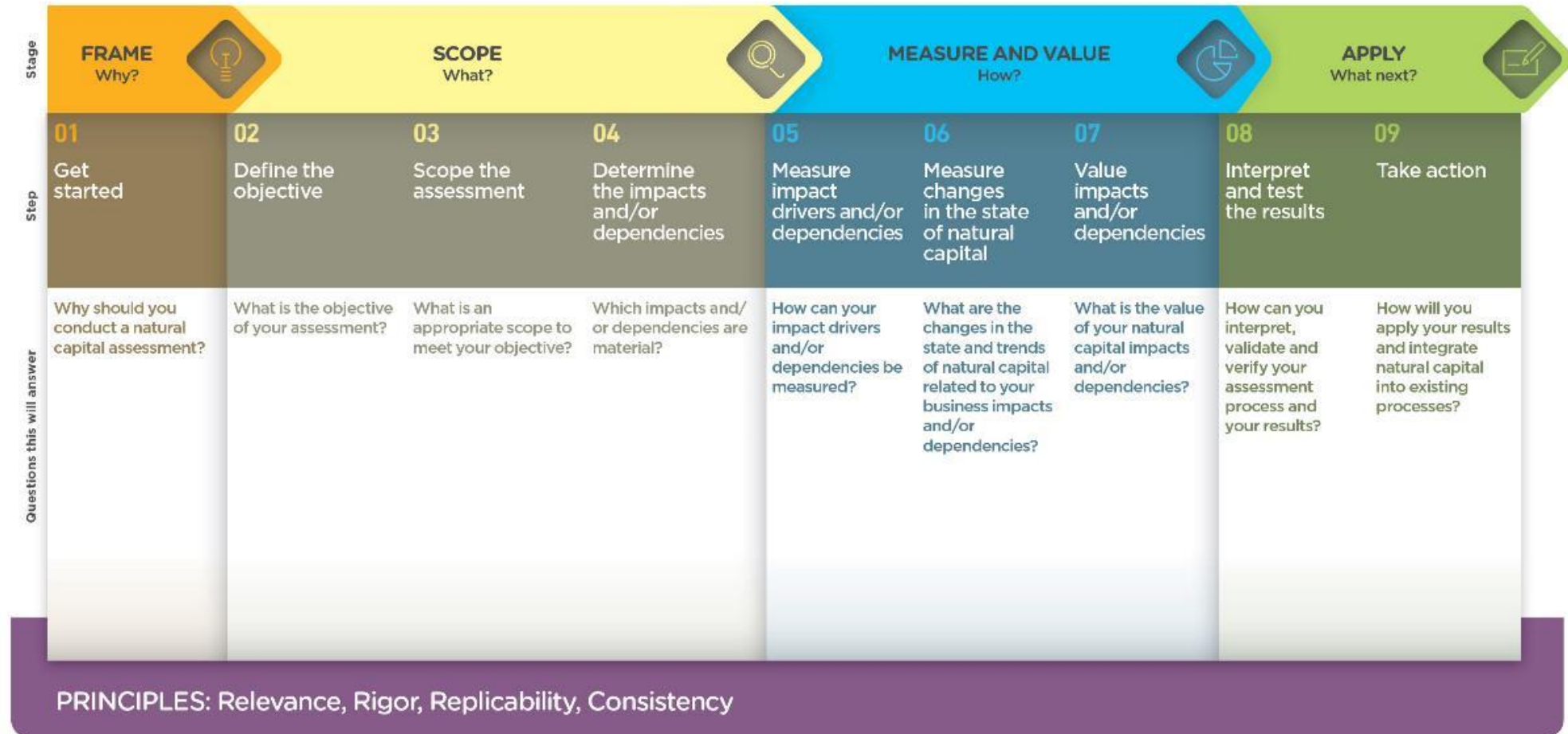
The Protocol



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**



The Protocol Framework



What do Capitals provide?



Impacts



Dependencies

Measure

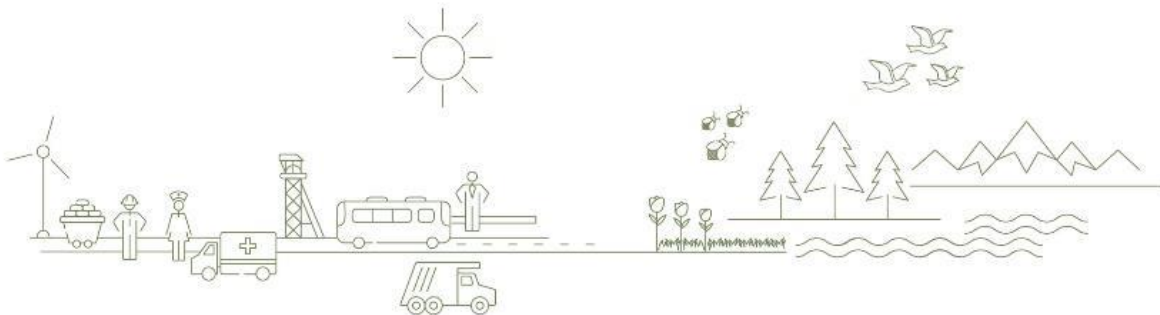


Value

Separate issues



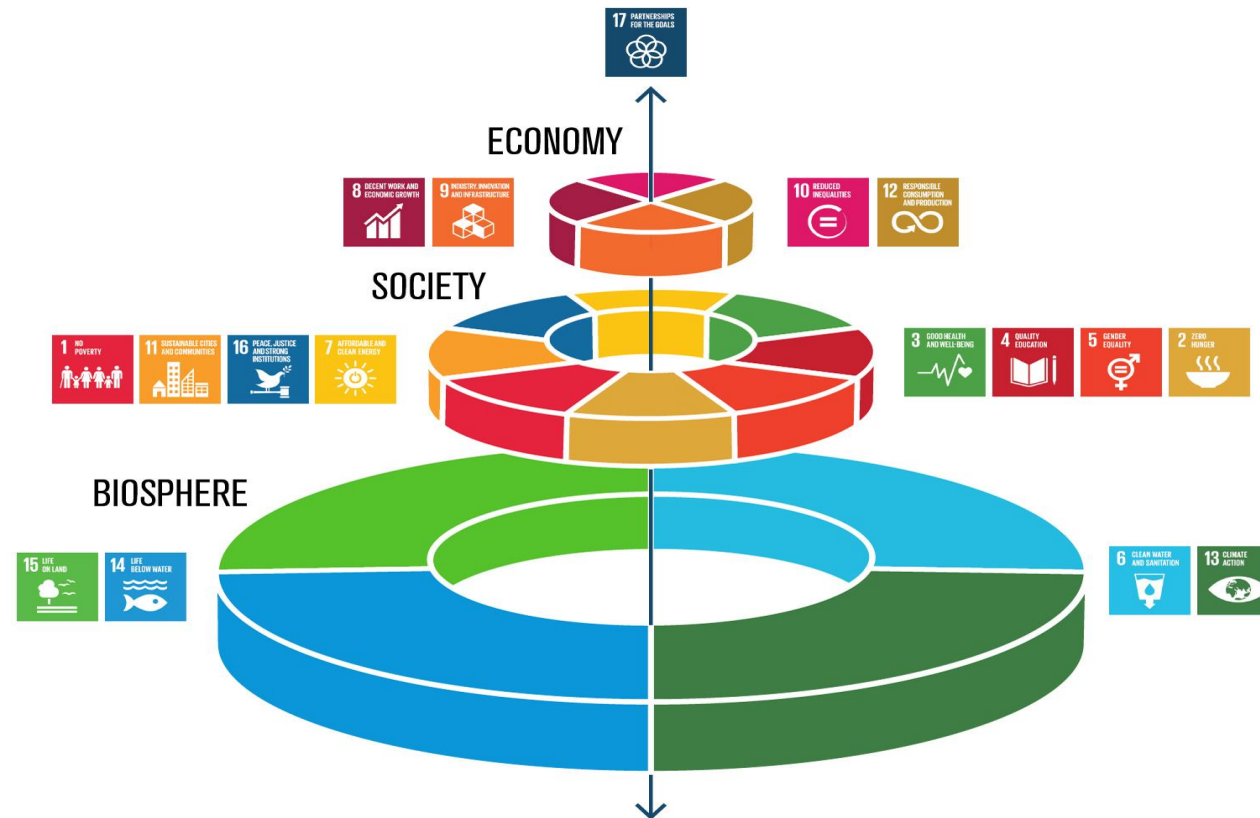
A systems approach



The Landscape



The Sustainable Development Goals

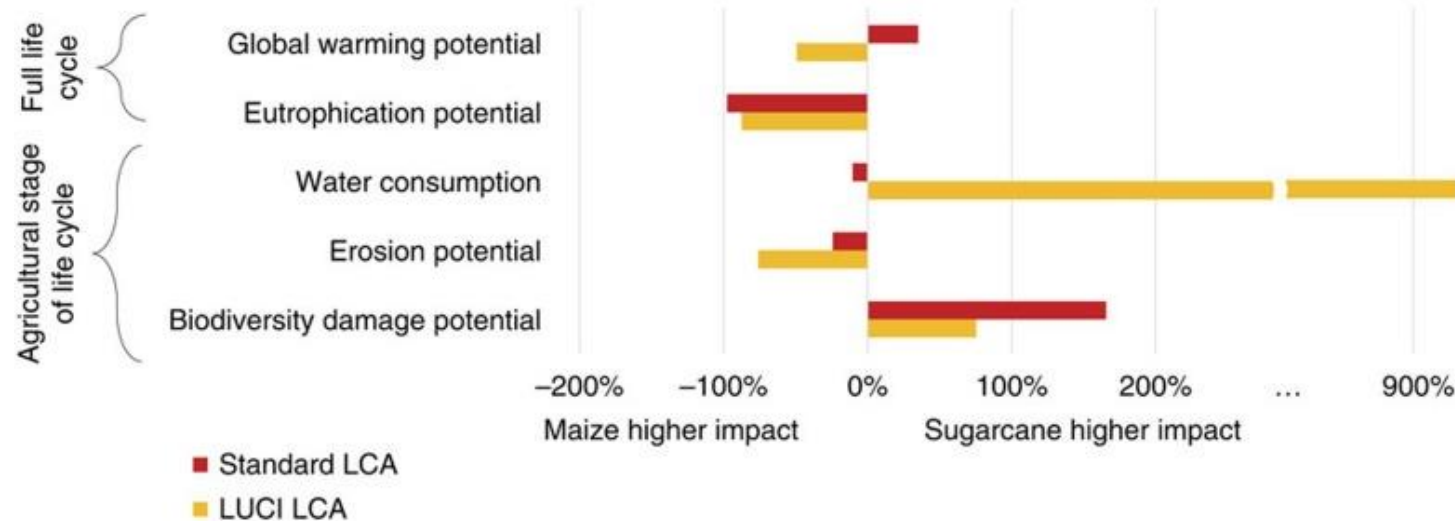


The Protocol Applied – Food & Beverage



Scope

Comparing increased demand for bio-plastics derived from two alternative feedstock-location scenarios for maize and sugarcane



Source: Chaplin-Kramer et al. (2017) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5413941/>

Outcomes

Valuation improves the level of detail and delivers different results beyond standard Life Cycle Analysis.

The Protocol Applied – Built Environment



DESIGNING FOR NATURAL CAPITAL:

Understanding and communicating the
natural capital benefits of built asset
design improvements

Sir Robert McAlpine, a construction company, and Hammerson plc, a major owner, manager and developer of retail property. Report by TruCost

The Protocol Applied – Automobiles

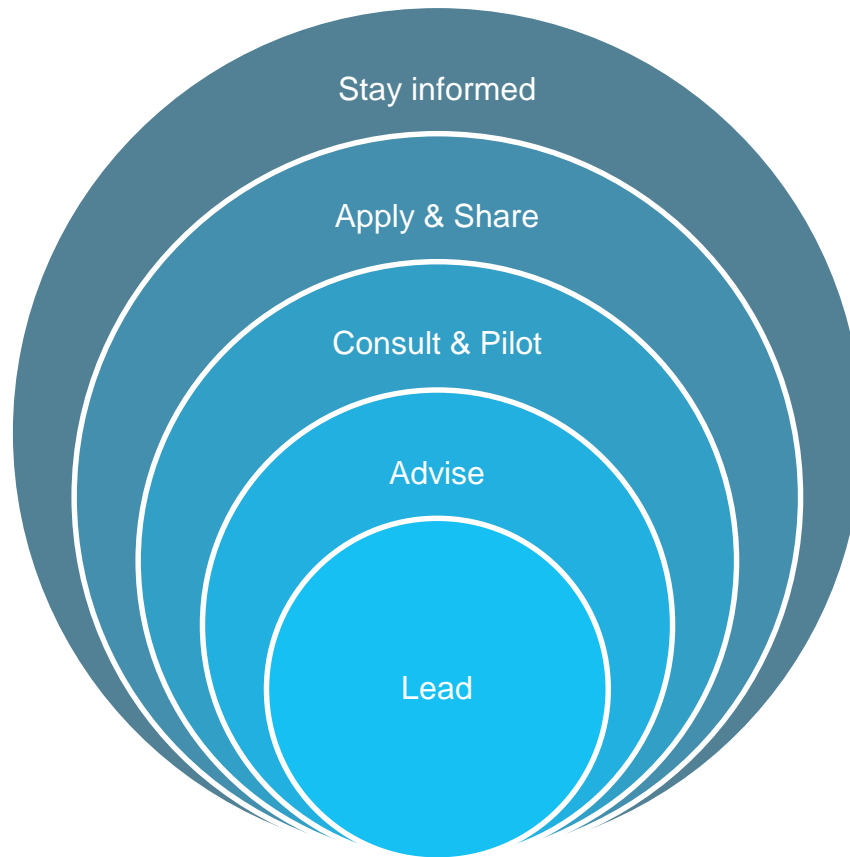


- Identified **material impacts and dependencies**; whilst steel and aluminum were already appreciated, magnesium and certain plastics were illuminated as energy intensive relative to overall weight in a vehicle.
- Built a **prediction model** for natural capital on future vehicles.
- Identified **data challenges**.

What needs to be achieved?



All Coalition projects are collaborative and open



Do you have a project that you would like to propose and **lead**?

Would you welcome a technical **advisory role** to any of the projects mentioned here?

Would you wait until they are available to **consult and pilot**, and **share** your experiences?

Do you want to simply **stay informed**?

We welcome all forms of engagement

Further guidance needed



Protocol



Food & Beverage



Apparel



Built Environment



Forest products



Finance



Oceans



Biodiversity



Data Kit

Sector Guides

Supplementary Information



The Coalition Organizations are broadening the Protocol with supporting work.

Forest Products Sector Guide



Forest
products

Just starting consultation
and pilot October 2017.

Developed by the WBCSD
Forest Solutions Group, on
behalf of the Coalition.

For more information and to register for
updates, please see the [project webpage](#)



Connecting Finance and Natural Capital: The Users Guide

To help financial institutions to incorporate consideration of natural capital impacts and dependencies into their lending, investment and insurance practices and processes.



Finance

To be released in 2018



Joint project between the Natural Capital Coalition, the Natural Capital Finance Alliance (NCFA) and the Dutch Association of Investors for Sustainable Development (VBDO).

Oceans Supplement



Oceans

How do we develop marine based assessments, to the same level as terrestrial? How do we value the oceans?

Project launched in May 2017 with an interactive workshop in London, to brainstorm the need, identify expertise, and develop the scope for this work.

Developed in collaboration with ICAEW, Conservation International and US NOAA.

Please register for updates on the [project webpage](#)



Biodiversity Project



Biodiversity

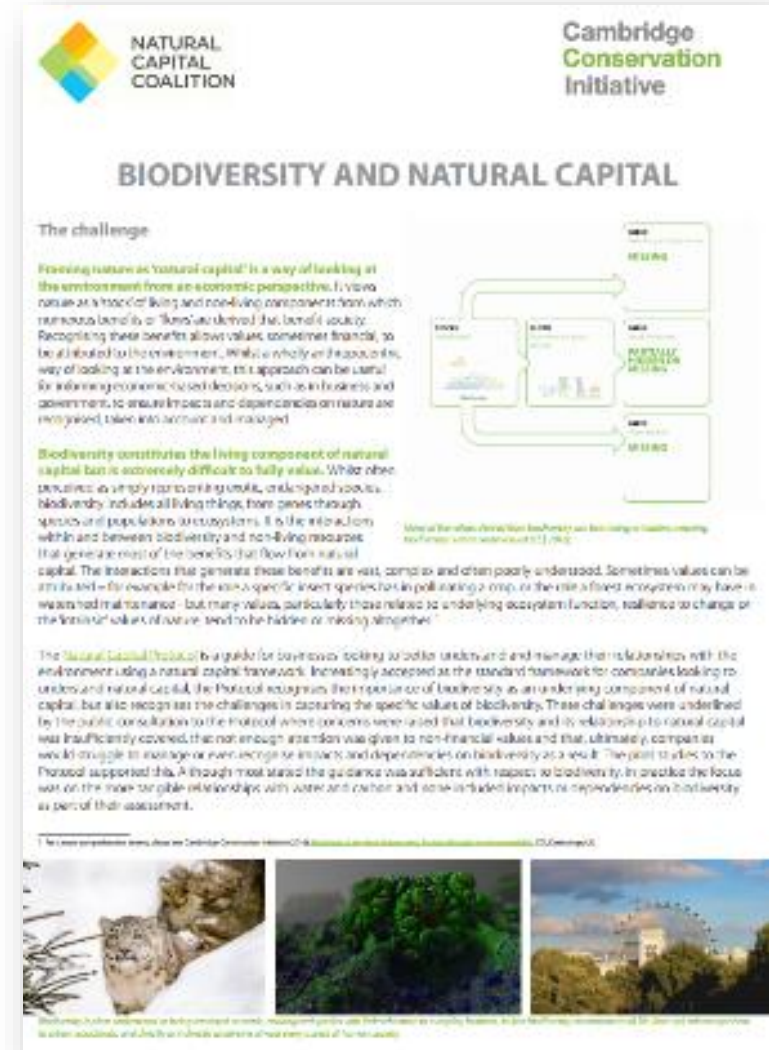
Biodiversity is often a major challenge for natural capital assessments, with many of its benefits missing, hidden or complex to quantify.

The Biodiversity Supplement aims to strengthen the way biodiversity is covered in the Protocol.

Engagement and Workshop phase

Cambridge Conservation Initiative (CCI), is leading this project on behalf of the Coalition

Please register for updates on the [project webpage](#)



NATURAL CAPITAL COALITION **Cambridge Conservation Initiative**

BIODIVERSITY AND NATURAL CAPITAL


The challenge

Viewing nature as 'natural capital' is a way of looking at the environment from an economic perspective. It views nature as a source of living and non-living components from which numerous benefits or 'flows' are derived that benefit society. Recognising these benefits allows values, sometimes financial, to be attributed to the environment. Whilst a wholly or in part economic way of looking at the environment, this approach can be useful for informing economic based decisions, such as in business and government, to ensure impacts and dependencies on nature are recognised, taken into account and managed.

Biodiversity constitutes the living component of natural capital but is extremely difficult to fully value. Whilst often perceived as simply plants and animals, and perhaps various species, biodiversity includes all living things, from genes through species and populations to ecosystems. It is the interactions within and between biodiversity and non-living resources that generate most of the benefits that flow from natural capital. The interactions that generate these benefits are vast, complex and often poorly understood. Sometimes values can be attributed – for example to the role a specific insect species has in pollinating a crop, or the role a forest ecosystem may have in watershed maintenance – but many values, particularly those related to underlying ecosystem function, resilience to change or the intrinsic values of nature, tend to be hidden or missing altogether.

The **Natural Capital Protocol** is a guide for businesses looking to better understand and manage their relationship with the environment using a natural capital framework. Increasingly accepted as the standard framework for companies looking to understand and manage their natural capital, the Protocol recognises the importance of biodiversity as an underlying component of natural capital, but also recognises the challenges in capturing the specific values of biodiversity. These challenges were underlined by the public consultation to the Protocol where concerns were raised that biodiversity and its relationship to natural capital was insufficiently covered, that not enough attention was given to non-financial values and that, ultimately, companies would struggle to manage or even recognise impacts and dependencies on biodiversity as a result. The project to develop the Protocol addressed this. Although most stated the guidance was sufficient with respect to biodiversity, in practice the focus was on the more tangible relationships with water and carbon and some included important dependencies on biodiversity as part of their assessment.

© 2020 Cambridge Conservation Initiative. All rights reserved. Cambridge Conservation Initiative is a registered charity in England and Wales (1130508) and in Scotland (SC045080). Cambridge Conservation Initiative is a registered charity in England and Wales (1130508) and in Scotland (SC045080).



Biodiversity is the foundation of natural capital. It provides the services that underpin our economies and societies. It is the lifeblood of our planet. It is the source of our food, our medicine, our inspiration and our well-being. It is the foundation of our natural capital. It is the lifeblood of our planet. It is the source of our food, our medicine, our inspiration and our well-being. It is the foundation of our natural capital.

Data Kit



Data Kit

Looking for partners



UN Environment WCMC is leading this project on behalf of the Coalition, with other partners

Please register for updates on the [project webpage](#)

Companies applying the Protocol have identified data as one of the biggest challenges they face.

The data kit project will improve the flow of information by working with those collecting, collating, providing and using data.

Phase 1

Defining private sector needs around natural capital data

Phase 2

Developing a natural capital Data Kit

Phase 3

Testing and refining the Data Kit

Phase 4

Capacity building for natural capital data users and providers

The Enabling Environment: A Colombia country case



Rwanda TEA

- **Company:** Charitable organisation managing tea factories
- **Objective:** Understand externalities of tea production while the company aims to increase its output



Indonesia COFFEE

- **Company:** Multinational corporation sourcing coffee
- **Objective:** Improvement of yields and reducing dependency on water



Philippines TOURISM

- To be confirmed



[Home](#) [About](#) [How](#) [Who](#) [Submit](#) [Resources](#)

Welcome to the Natural Capital Protocol Toolkit

This interactive database helps businesses find the right tools to measure and value natural capital as they use the [Natural Capital Protocol](#).

Start searching for a tool below, or [learn more about the Toolkit here](#). Each tool is described in the words of its developer.

What do we mean by "tool"? A tool can be any resource, methodology or approach that is relevant to natural capital measurement and valuation



The filters below can help refine your search. You can use them to select which Step(s) of the [Natural Capital Protocol](#) you are working on, which impact drivers and dependencies you're interested in, your geographical scope and more. Please note that the list of filters on the left use the AND function.

FRAME

Why?

SCOPE

What?

MEASURE AND VALUE

How?

APPLY

What next?

FRAME Why?	SCOPE What?			MEASURE AND VALUE How?			APPLY What next?	
01 Get started	02 Define the objective	03 Scope the assessment	04 Determine the impacts and/or dependencies	05 Measure impact drivers and/or dependencies	06 Measure changes in the state of natural capital	07 Value impacts and/or dependencies	08 Interpret and test the results	09 Take action

Refine your search		57 Results sorting by Name ▼	
		Tool name Developer(s)	
Impact drivers	▼	Aqueduct Water Risk Atlas World Resources Institute	Impact drivers
Dependencies	▼	Artificial Intelligence for Ecosystem Services (ARIES) Basque Centre for Climate Change	Dependencies
Geographical scope	▼	Biodiversity Footprint Tool Plansup, Wageningen Environmental Research, Netherlands Environmental Assessment Agency (PBL)	
Sectoral scope	▼	Biodiversity Indicators for Monitoring Impacts and Conservation Actions BP, ChevronTexaco, Conservation International, Fauna & Flora International, IUCN, The Nature Conservancy, Shell, Smithsonian Institution, Statoil	
Type of tool	▼	Biodiversity Management Plan Guidance Cement Sustainability Initiative (CSI) within the WBCSD	
Valuation type	▼	BioScope Developed by PRé Consultants, Arcadis & CODE. Commissioned by Platform BEE; a collaboration between IUCN NL and VNO-NCW, financed by the Dutch min	
Organizational focus	▼	Business guide to natural capital valuation PwC	
Value chain boundary	▼	Business Guide to Water Valuation WBCSD + working group of companies	
Intended user	▼	Co\$tingNature (Costing Nature) Kino's College London (applications, data, models). AmbioTEK (software, data, models).	
Cost to access	▼		
Data needs	▼		

Biodiversity Footprint Tool

Plansup, Wageningen Environmental Research, Netherlands Environmental Assessment Agency (PBL)

This tool enables a business to measure its impact on biodiversity based on the two major pressure factors 'Land use' (type of management and number of hectares) and 'Greenhouse gas emissions' (in tons CO₂). The impact of selected products is measured for the suppliers/raw materials and for the production process itself. The tool uses existing cause-effect relations from the GLOBIO3 biodiversity model and calculates the biodiversity footprint in [MSA.hectare], once you have entered the data. The MSA indicator is a proxy for biodiversity, expressing the extent to which the natural state of ecosystems is still intact. You can assess both the present biodiversity performance of the company (/product/sector), and an alternative or future performance. This allows you to measure the effectiveness of these measures. In a next version of the tool the pressure factors 'Water use' and 'Emissions (N and P) to water' will be included.

Applies to Step 01, 02, 03, 04, 05, 06, 07, 08

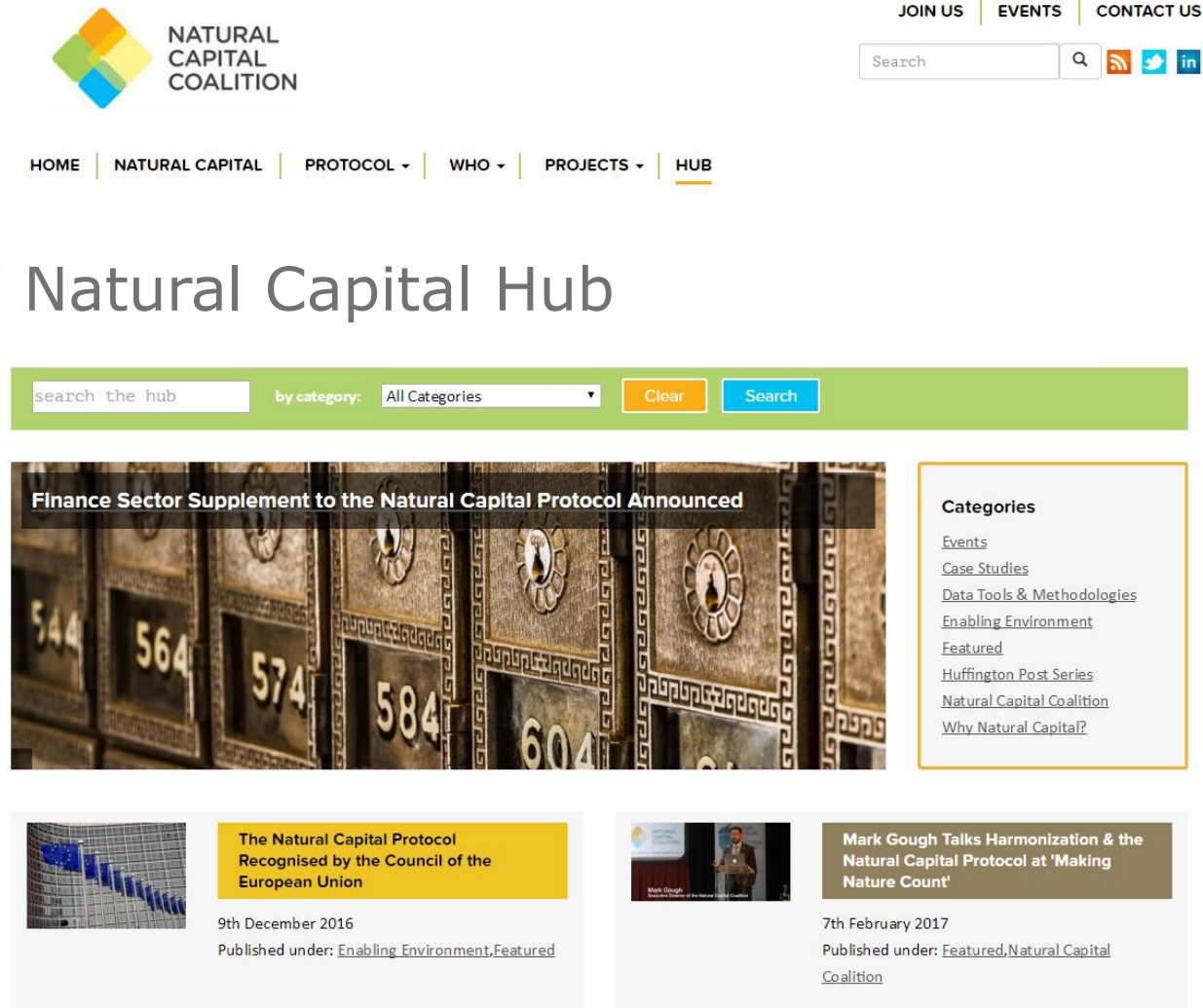
[DOWNLOAD FACTSHEET](#)

[VIEW WEBSITE](#)

Version 1/2017

Natural Capital Hub

- Providing a link to everything natural capital
- Searchable database of events, case studies, news stories and much, much more.



The screenshot shows the Natural Capital Hub website interface. At the top, there is a navigation bar with the Natural Capital Coalition logo, a search bar, and links for JOIN US, EVENTS, and CONTACT US. Below the navigation bar, there is a main menu with links for HOME, NATURAL CAPITAL, PROTOCOL, WHO, PROJECTS, and HUB. The main heading is "Natural Capital Hub". Below the heading, there is a search bar with the text "search the hub", a dropdown menu for "by category" set to "All Categories", and buttons for "Clear" and "Search". The main content area features a large image of a safe with the headline "Finance Sector Supplement to the Natural Capital Protocol Announced". To the right of the image is a sidebar titled "Categories" with links for Events, Case Studies, Data Tools & Methodologies, Enabling Environment, Featured, Huffington Post Series, Natural Capital Coalition, and Why Natural Capital?. Below the main content area, there are two featured articles. The first article is titled "The Natural Capital Protocol Recognised by the Council of the European Union" and is dated 9th December 2016. The second article is titled "Mark Gough Talks Harmonization & the Natural Capital Protocol at 'Making Nature Count'" and is dated 7th February 2017.

NATURAL
CAPITAL
COALITION

JOIN US | EVENTS | CONTACT US

Search

HOME | NATURAL CAPITAL | PROTOCOL | WHO | PROJECTS | HUB

Natural Capital Hub

search the hub by category: All Categories Clear Search

Finance Sector Supplement to the Natural Capital Protocol Announced

Categories

- [Events](#)
- [Case Studies](#)
- [Data Tools & Methodologies](#)
- [Enabling Environment](#)
- [Featured](#)
- [Huffington Post Series](#)
- [Natural Capital Coalition](#)
- [Why Natural Capital?](#)

The Natural Capital Protocol Recognised by the Council of the European Union

9th December 2016
Published under: [Enabling Environment](#), [Featured](#)

Mark Gough Talks Harmonization & the Natural Capital Protocol at 'Making Nature Count'

7th February 2017
Published under: [Featured](#), [Natural Capital Coalition](#)

The Natural Capital Event



World Forum on Natural Capital

EDINBURGH 27th – 28th November 2018

+ Coalition Collaboration day 29th November 2018



www.naturalcapitalcoalition.org

Join the Coalition