

H U G O B O S S

Natural capital valuation of a t-shirt

Heinz Zeller, March 2016

HUGO BOSS AT A GLANCE

HUGO BOSS AT A GLANCE

A Global Success Story

EMPLOYEES
WORLDWIDE



~13.000

COUNTRIES
DISTRIBUTION NETWORK



130

DIRECTLY OPERATED
STORES & SHOPS*



1.113

BOSS STORE LONDON, SLOANE SQUARE

Shops: 643, Stores: 487 including Outlets

WHOLESALE PARTNERS
WORLDWIDE

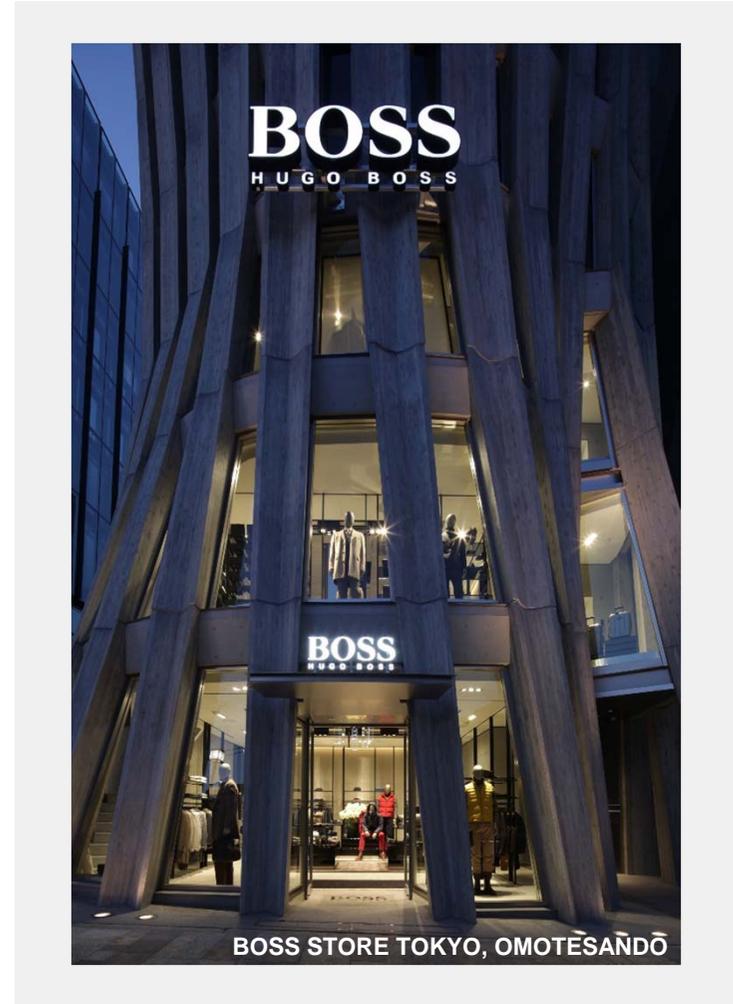
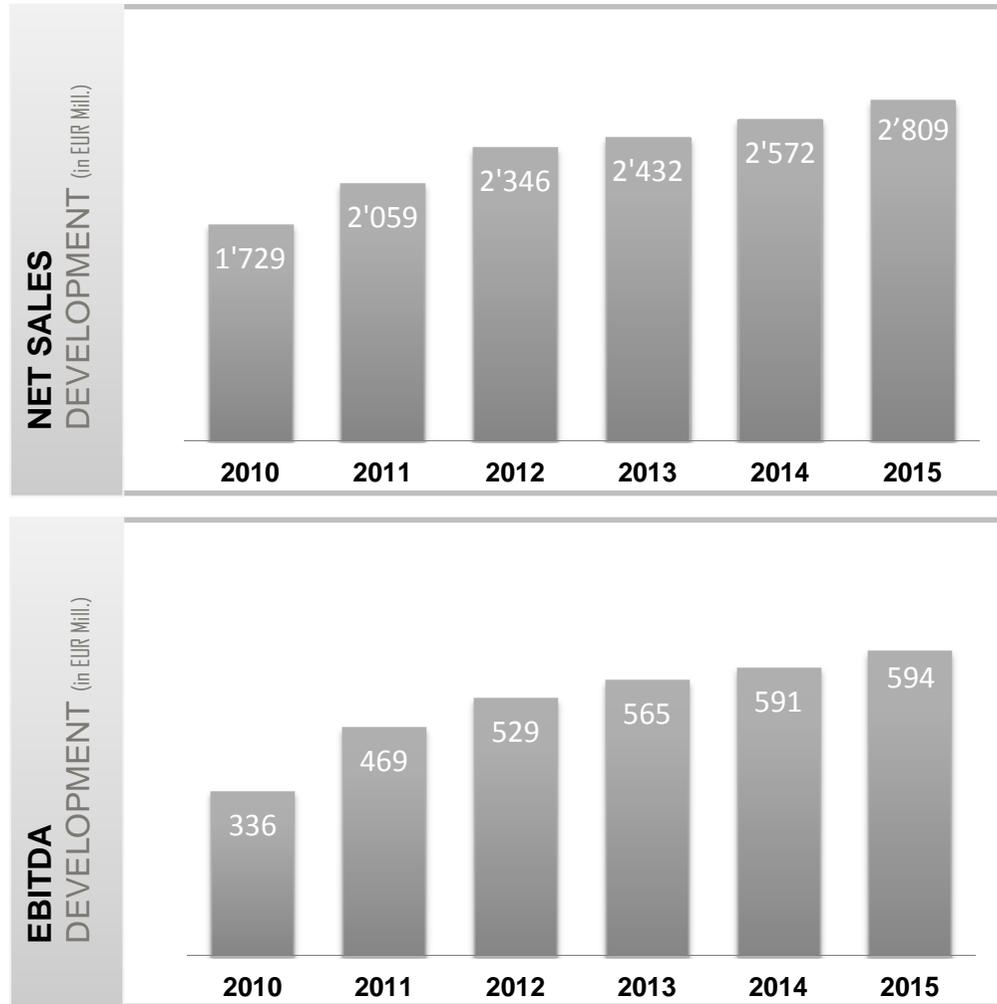


~3.400

Top Customer

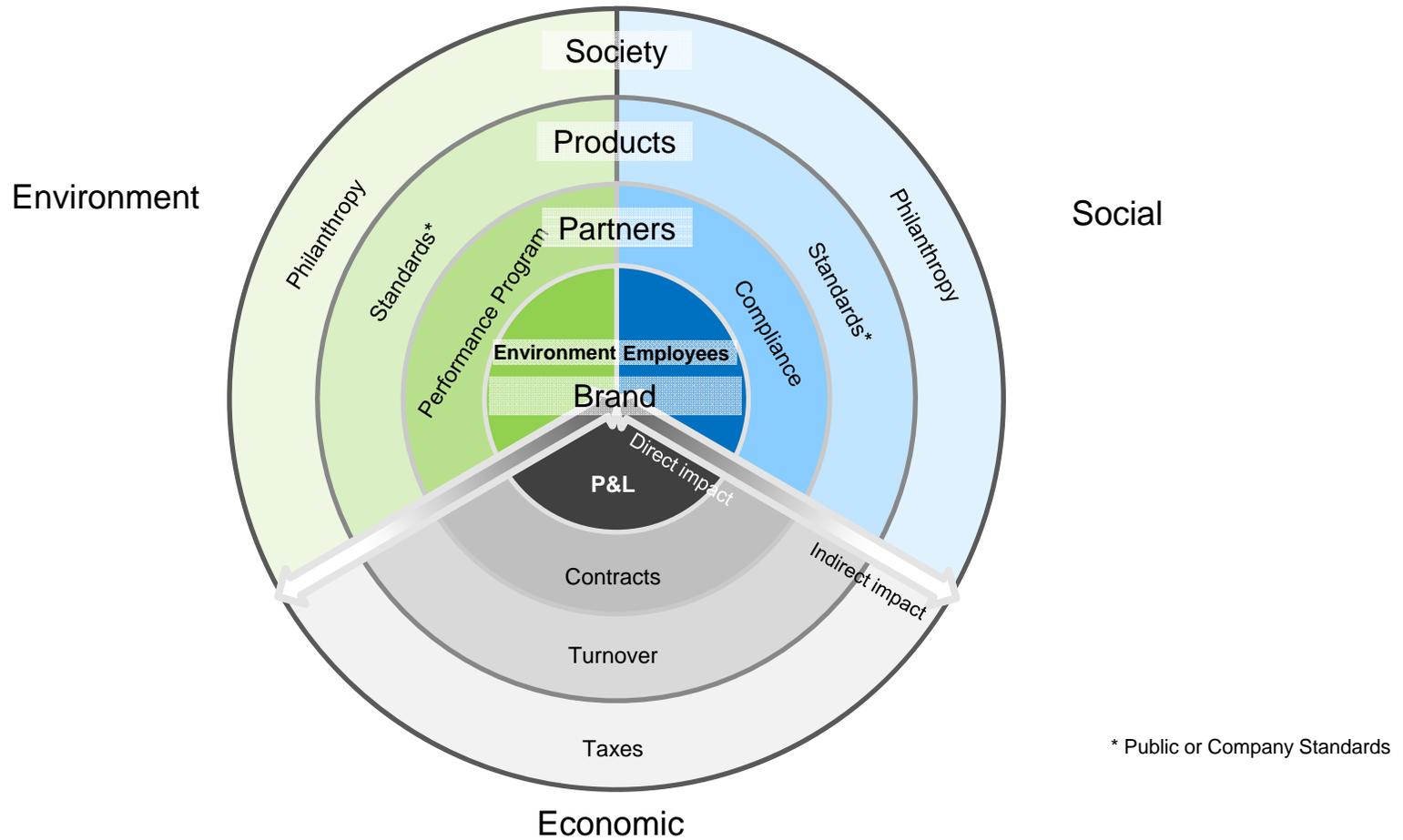
HUGO BOSS AT A GLANCE

Net Sales and EBITDA Development



Sustainability – an integrated approach

Sustainability – an integrated approach



Sustainability – an integrated approach

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- a. Life Cycle Assessment (LCA)
the environmental impact of a product's complete life cycle
 - b. Restricted Substance List (RSL)
a list of all chemical substances that are restricted for materials and components
 - c. Biodiversity - Protected Species
a list of threatened or protected species
-
- a. Environmental Performance Improvement Program (GSCP)
a standard program to support the continuous environmental improvement at factory level
 - b. Manufacturing Restricted Substance List (MRSL)
a list of chemical substances that are restricted in the manufacturing process and therefore part of the chemical management
 - c. Animal welfare
Animal welfare legislation and best practices that serve to protect animals and ensure their welfare

Methods of assessing biodiversity

Qualitative approach in collaboration with the IUCN

Identifying the general hot spots of the apparel sector

- 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



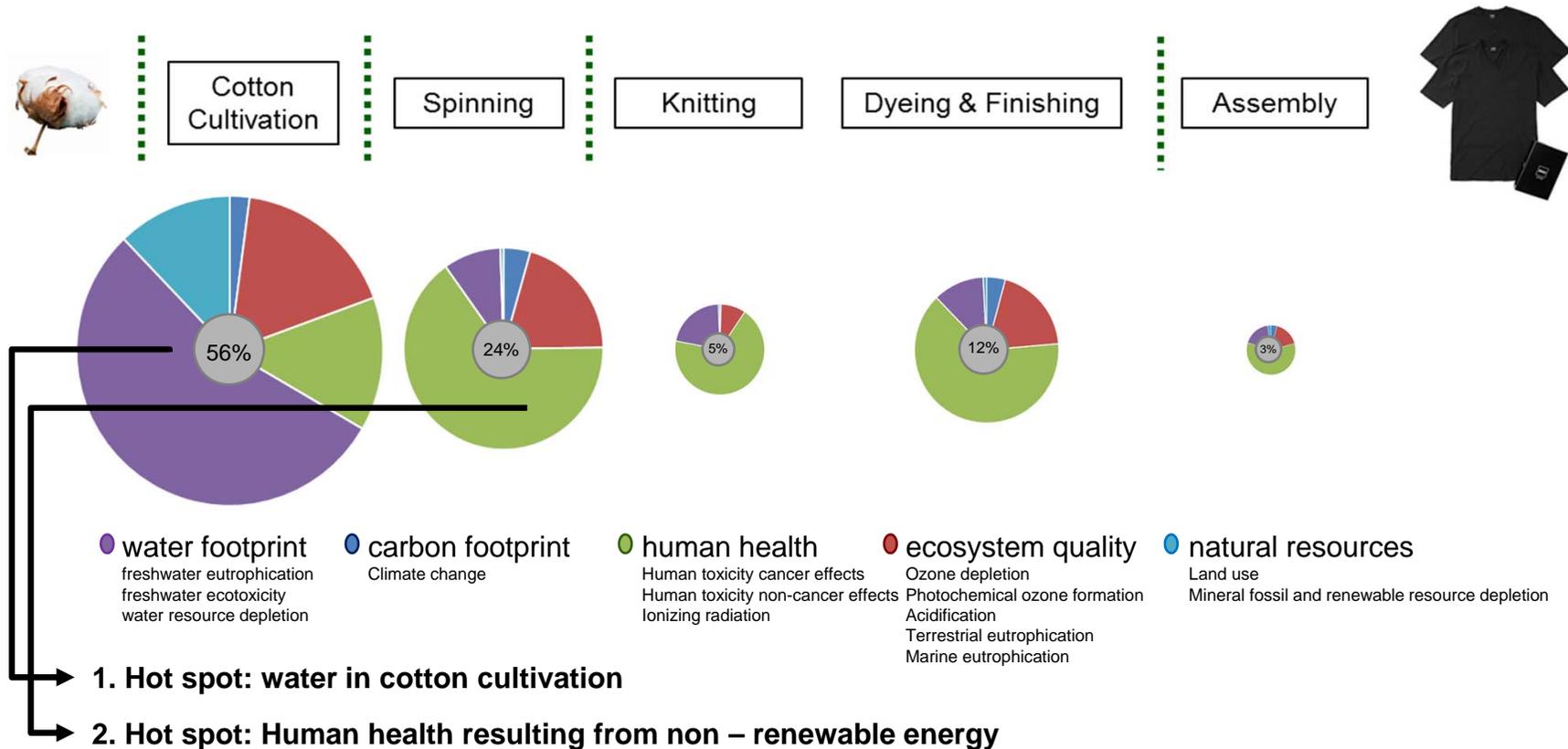
More details provided at:

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

Quantitative approach using life cycle assessments (LCA)

Identifying specific hot spots per product and process step

Example of a t-shirt from the EU Product Environmental Footprint (PEF) using the mid point evaluation method

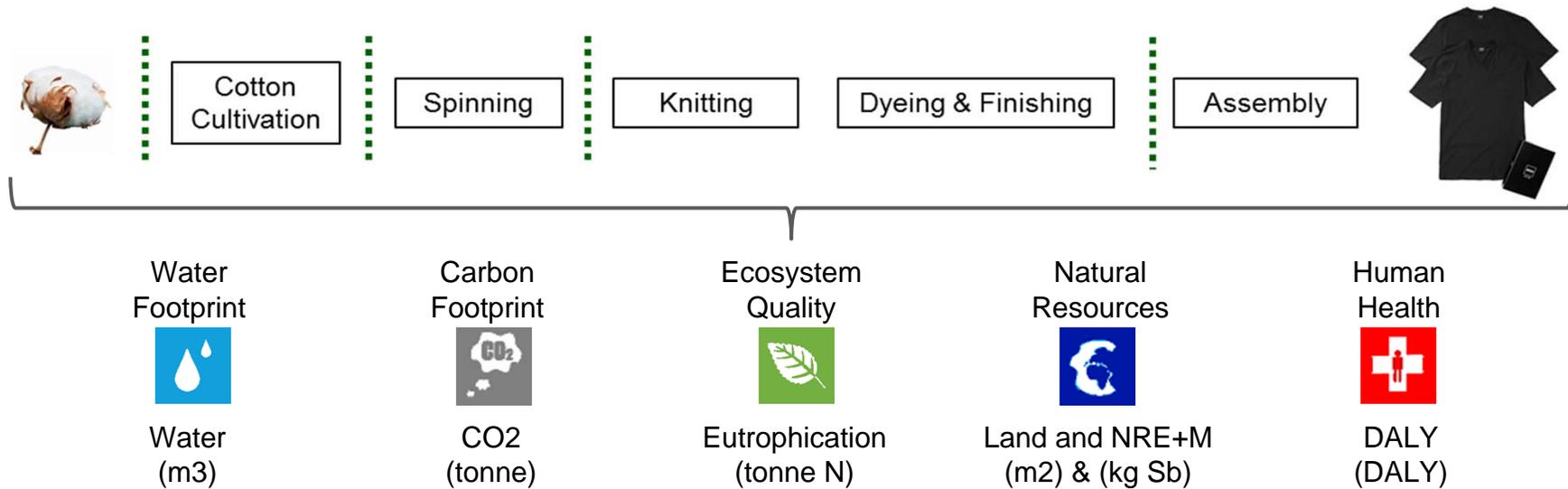


Additional support is provided by the World Apparel & Footwear Life Cycle Database (WALDB) working group

Quantitative approach using life cycle assessments (LCA)

Identifying specific hot spots per product and process step

Correlation of different impact categories, relation to the business and results communication



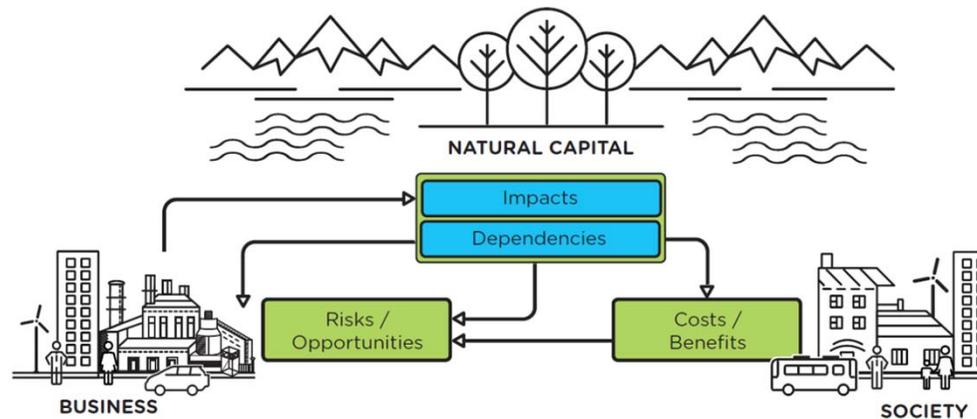
- LCA results can be accurately measured for single impact categories (depending on the quality of data)
- The difficulty lies in the correlation of specific impacts in terms of importance, as every weighting process requires a data manipulation and distortion
- Prioritizing mitigation programs with typical business / project methods (ROI) is difficult since reliable financial figures of the benefits are missing
- Challenges: communication to non LCA experts and the correlation between impacts and company's business

Natural Capital Protocol

Valuation of natural capital in a business context



The Natural Capital Coalition, composed of brands, universities and NGO's, has launched a Protocol to support companies in assessing their relationship with Natural Capital.



- The **Natural Capital Protocol** (NCP) provides a standardized framework for businesses to measure and value their direct and indirect impacts and dependencies (positive and negative) on natural capital
- The NCP provides a guidance on **qualitative, quantitative** and **monetary valuation** of natural capital impacts and dependencies
- HUGO BOSS, supported by Quantis, participated in the pilot testing phase in order to explore the NCP as an additional possibility to analyze environmental impacts, their root causes and potential solutions, and to support decision making

Natural Capital Protocol

Valuation of natural capital in a business context



The Natural Capital Coalition has involved around 40 companies in testing the protocol in real life situations.

HUGO BOSS and 9 other companies have been selected as Deep Dive Pilots, asked to apply the whole protocol and provide regular feedback.



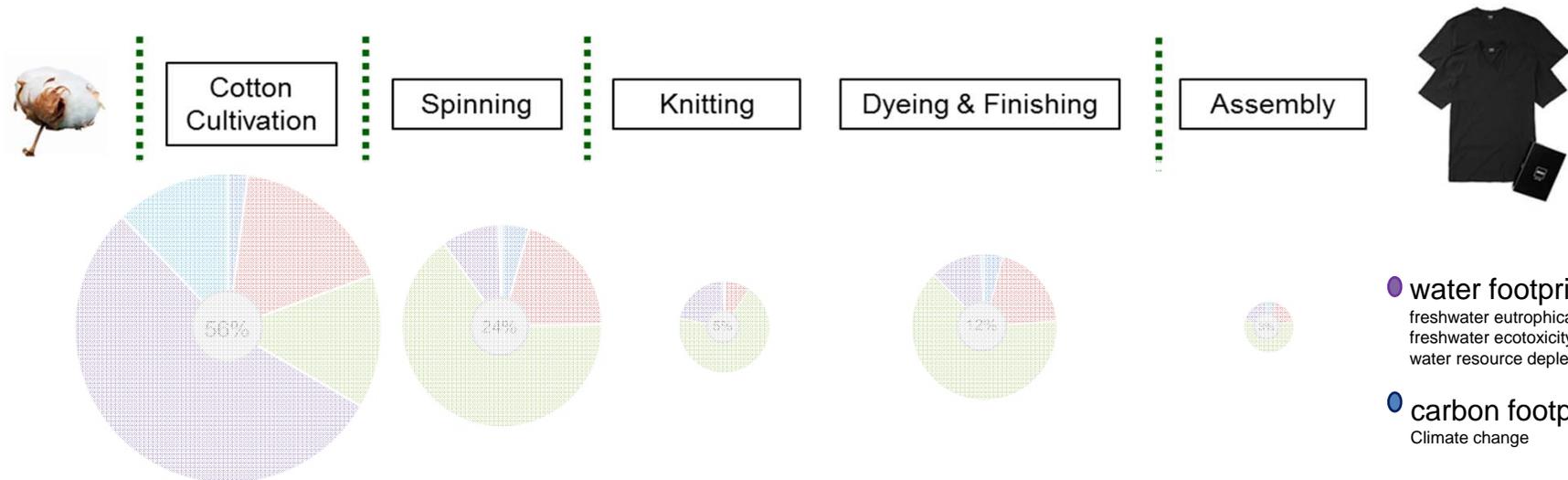
HUGO BOSS has applied the protocol at two levels:

- Macro → on corporate level with qualitative analysis of the natural capital impacts and dependencies
- Micro → monetary valuation of the t-shirt LCA impacts

Natural Capital Valuation

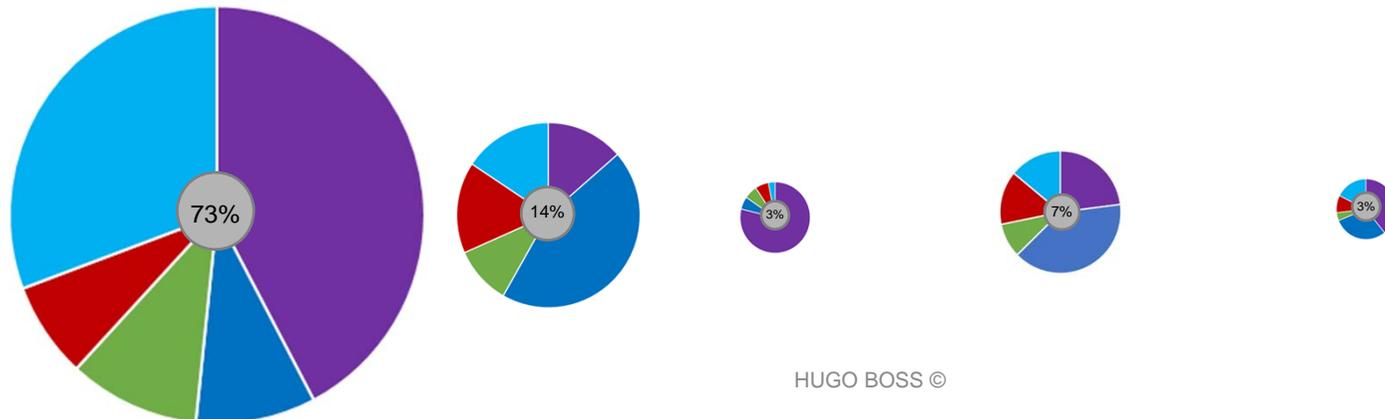
Identifying the value of ecosystem services

Monetary valuation of ecosystem services – according to the Natural Capital Protocol



- **water footprint**
freshwater eutrophication
freshwater ecotoxicity
water resource depletion
- **carbon footprint**
Climate change
- **human health**
Human toxicity cancer effects
Human toxicity non-cancer effects
ionizing radiation
- **ecosystem quality**
Ozone depletion
Photochemical ozone formation
Acidification
Terrestrial eutrophication
Marine eutrophication
- **natural resources**
Land use
Mineral fossil and renewable resource depletion

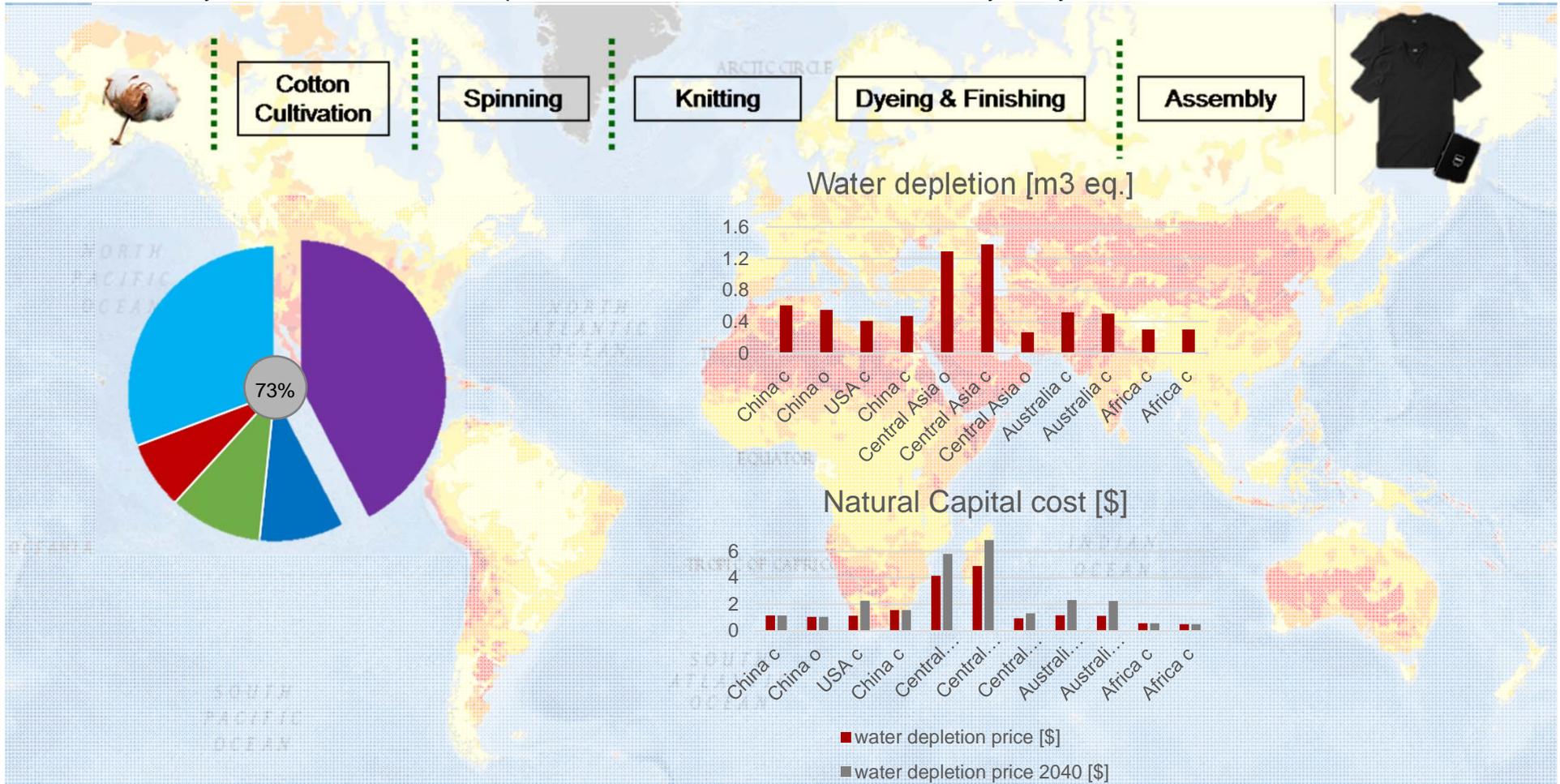
From the LCA midpoint calculation to a monetary valuation of the t-shirt supply chain



Natural Capital Valuation

Identifying the value of ecosystem services

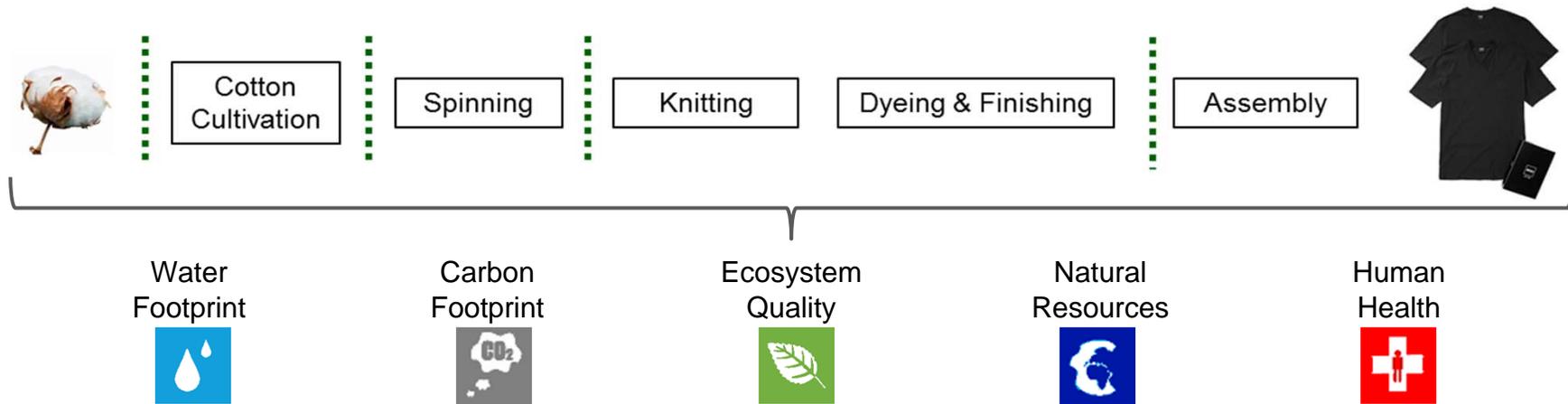
Monetary valuation of the water depletion of cotton in relation to water scarcity today and in the future



Natural Capital Valuation

Identifying the value of ecosystem services

Monetary valuation of consumed ecosystem services – the Natural Capital Protocol

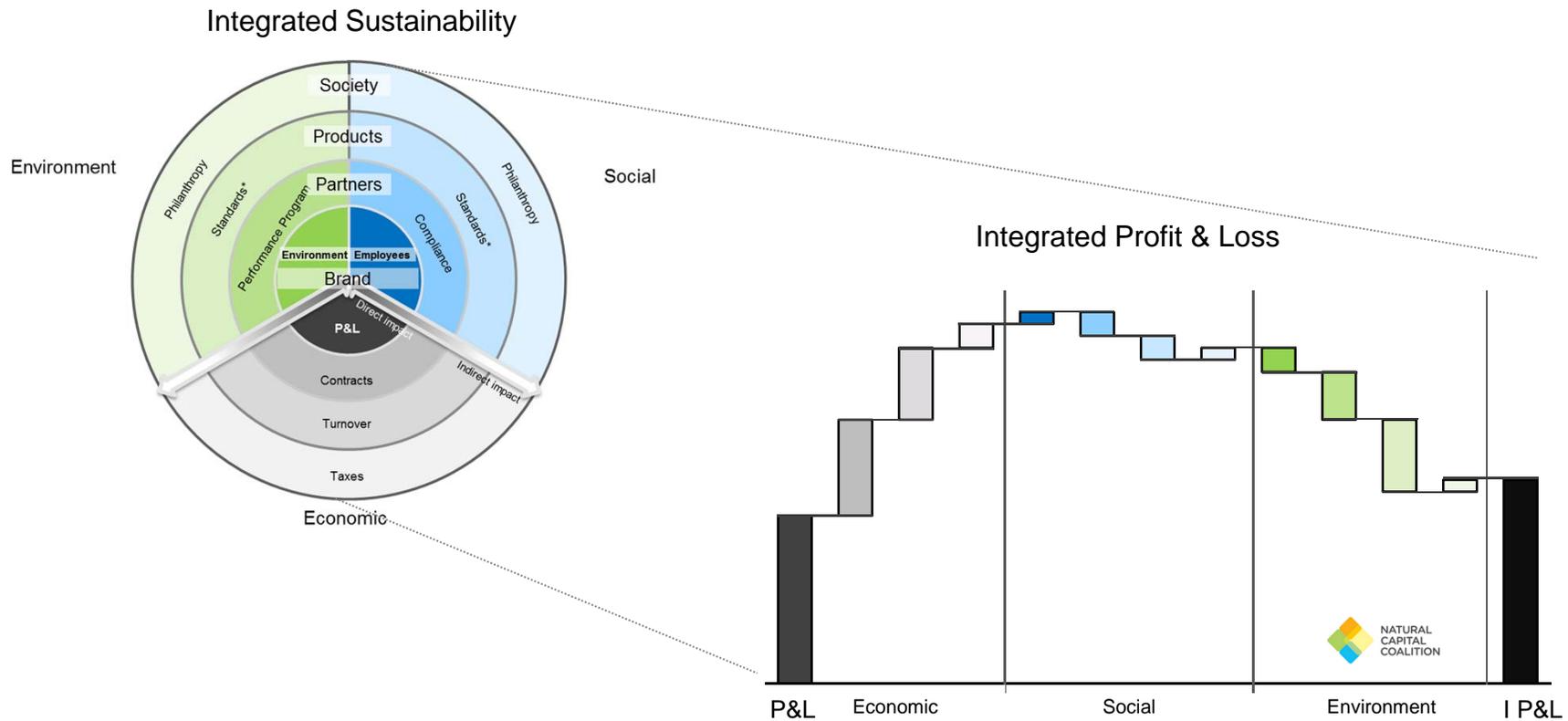


- Expressing impacts on natural resources or their consumption during the product’s life cycle in monetary values definitely allows an easier communication with all stakeholders
- Available valuation factors are not yet sufficiently reliable in order to allow comparable and reproducible results
- Some focus areas change from the LCA midpoint calculation to a monetary evaluation of ecosystem services
- Until good valuation factors are not made public, the focus remains mainly on internal, company specific improvement valuation

Natural Capital Valuation

Part of an integrated approach of sustainability – part of an integrated Profit & Loss

Ecosystem services as part of an integrated sustainability approach



The Natural Capital Valuation as one important element of a companies integrated business strategy

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