

# Measuring and Valuing Natural Capital

How to Enhance Business Value in the Technology Sector

Annabelle Bennett, Account Director

Trucost Plc

@bella\_bennett



# Introducing Trucost



Trucost has been helping companies and investors to assess environmental impacts and natural capital costs since 2000



Trucost maintains the world's largest database of corporate natural capital metrics: 4,600 companies over 12 years covering 93% listed equity



Trucost tools have analyzed supply chain natural capital risks of >500,000 suppliers representing >\$100 B expenditure



Leading academic institutions (including Stanford, Harvard, Yale & Oxford University) use Trucost data in their research and curricula, and Trucost models are supported by an International Academic Advisory Panel

## Example Trucost clients



# Overview of session

1. What is natural capital?
2. What does it mean to the Technology sector?
3. How can valuing natural capital enhance your business?

# Environmental Risks in Supply Chains

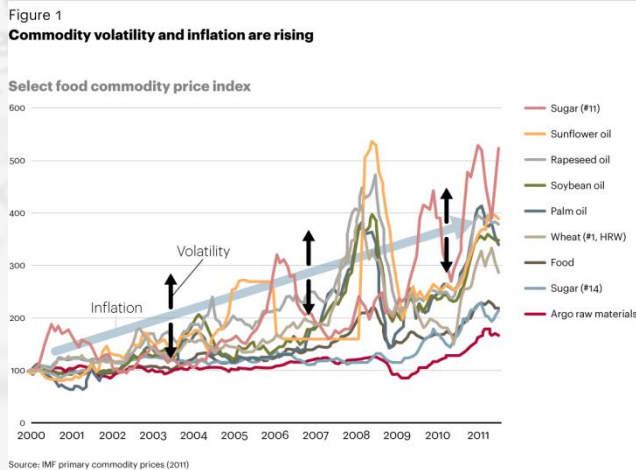
## Business disruption



## Availability

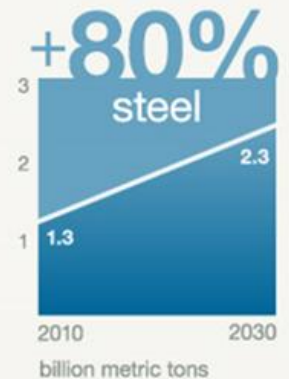
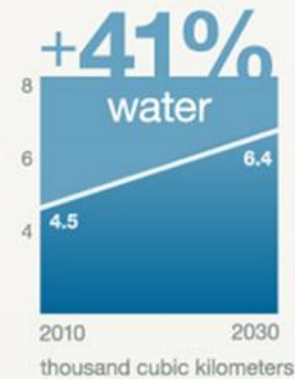
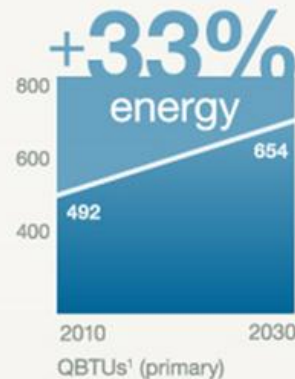


## Price Volatility



## Rising demand

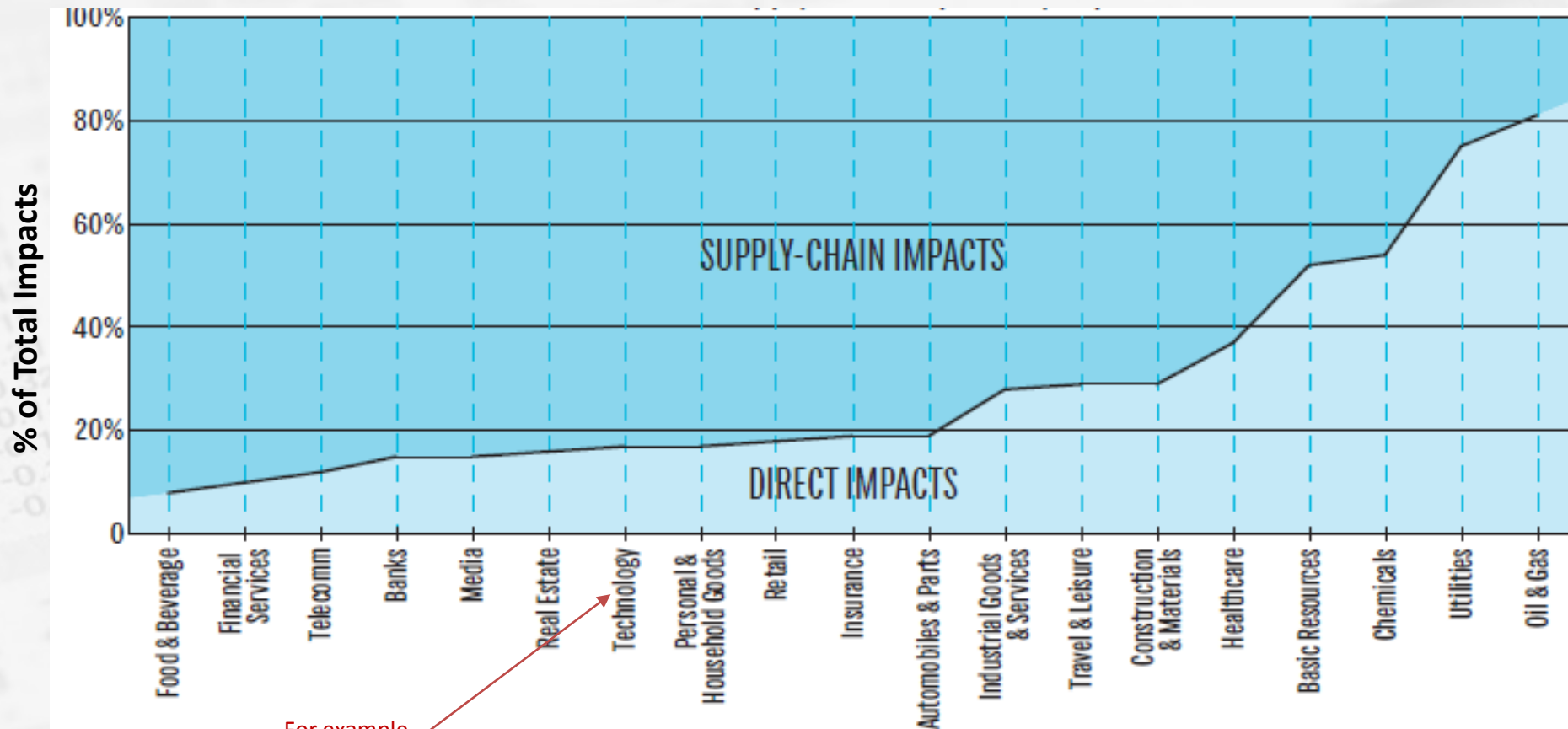
Projected growth, 2010–30<sup>1</sup>





# Environmental Impacts in Supply Chains

On average, 60% of business' natural capital impacts and risks are embedded in supply chains. Green procurement programs can save costs, reduce environmental risks, and build more resilient sourcing and supply chains.



For example, technology companies have over 80% of impacts in the supply chain

# Are supply chain emissions relevant to me?

**Question 14.1.** Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.

Source of Scope 3 emissions considered for this analysis: **Purchased good and services.**

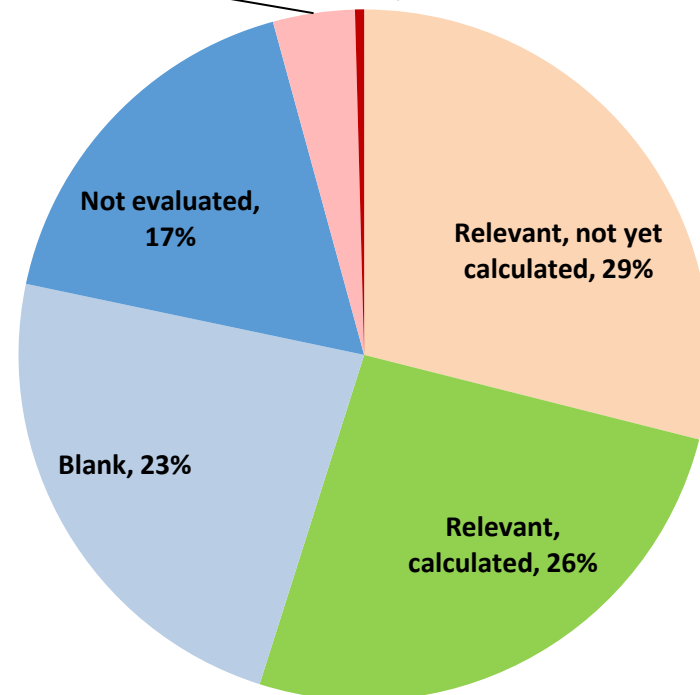
Response Rate 75%

Only 4% of respondents listed supply chain emissions 'not relevant', yet only 26% have quantified their supply chain footprint

Not relevant,  
explanation  
provided, 4%

## Technology Sector Responses to Q14.1

Not relevant,  
calculated, 0%



Source: CDP

# Am I exposed to water-related risks in the supply chain ?

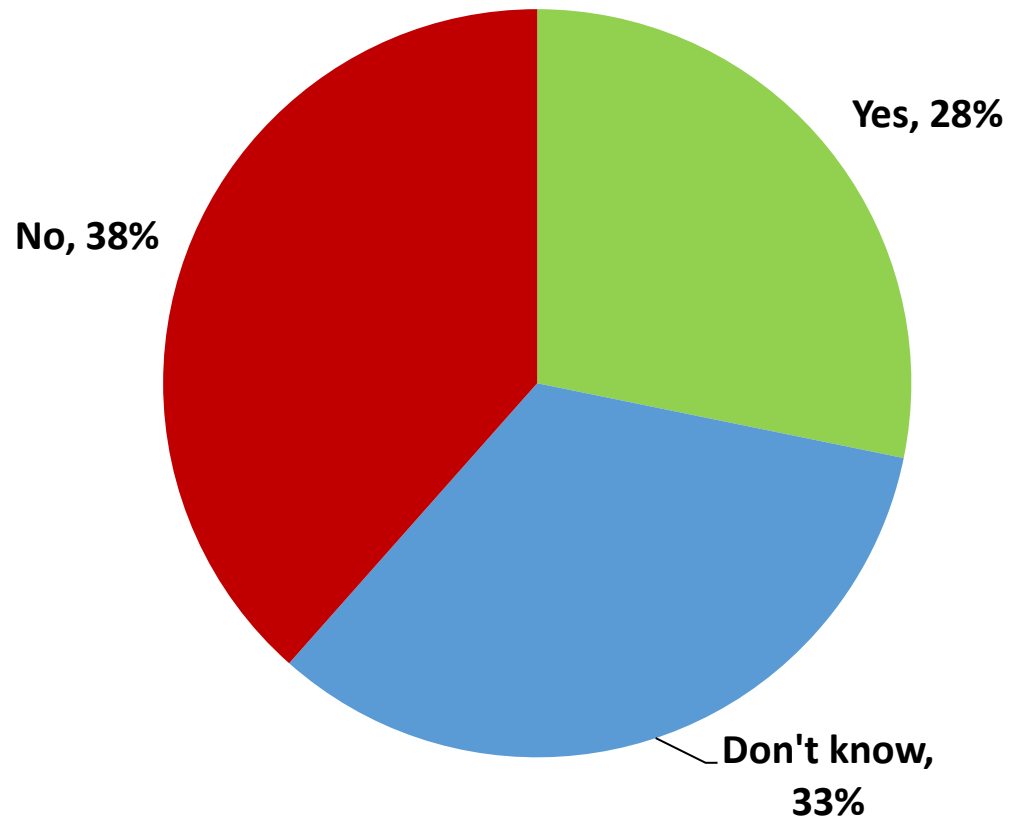
## Question 3.4.

Is your supply chain exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Response Rate

95%

### Technology Sector Responses to Q.3.4

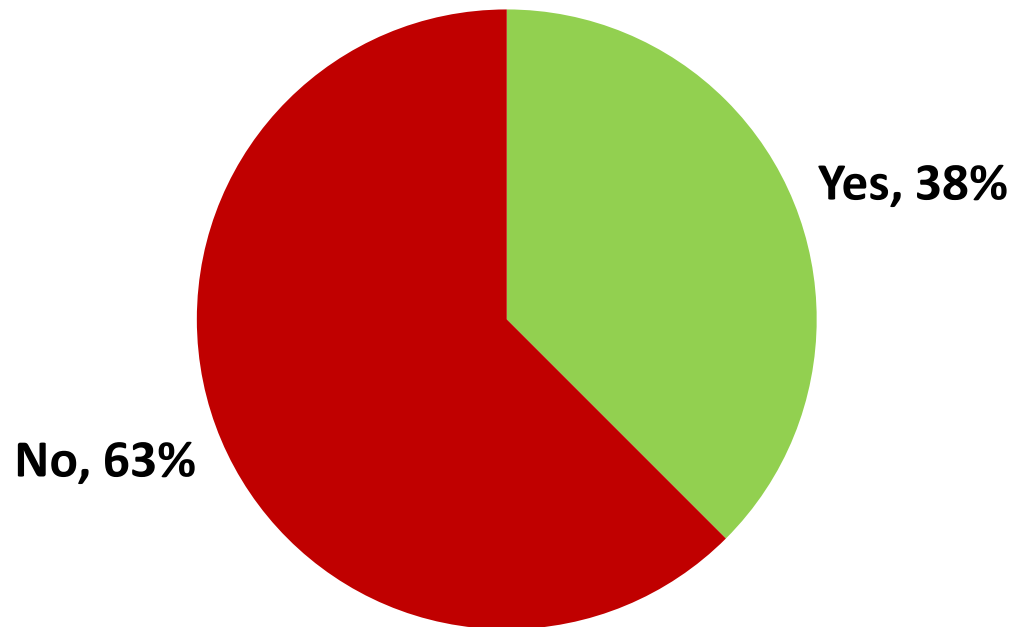


# Am I exposed to water-related risks in the supply chain ?

## Question 3.3.

Do you require your key suppliers to report on their water use, risks and management?

Technology Sector Responses to Q3.3



Response Rate

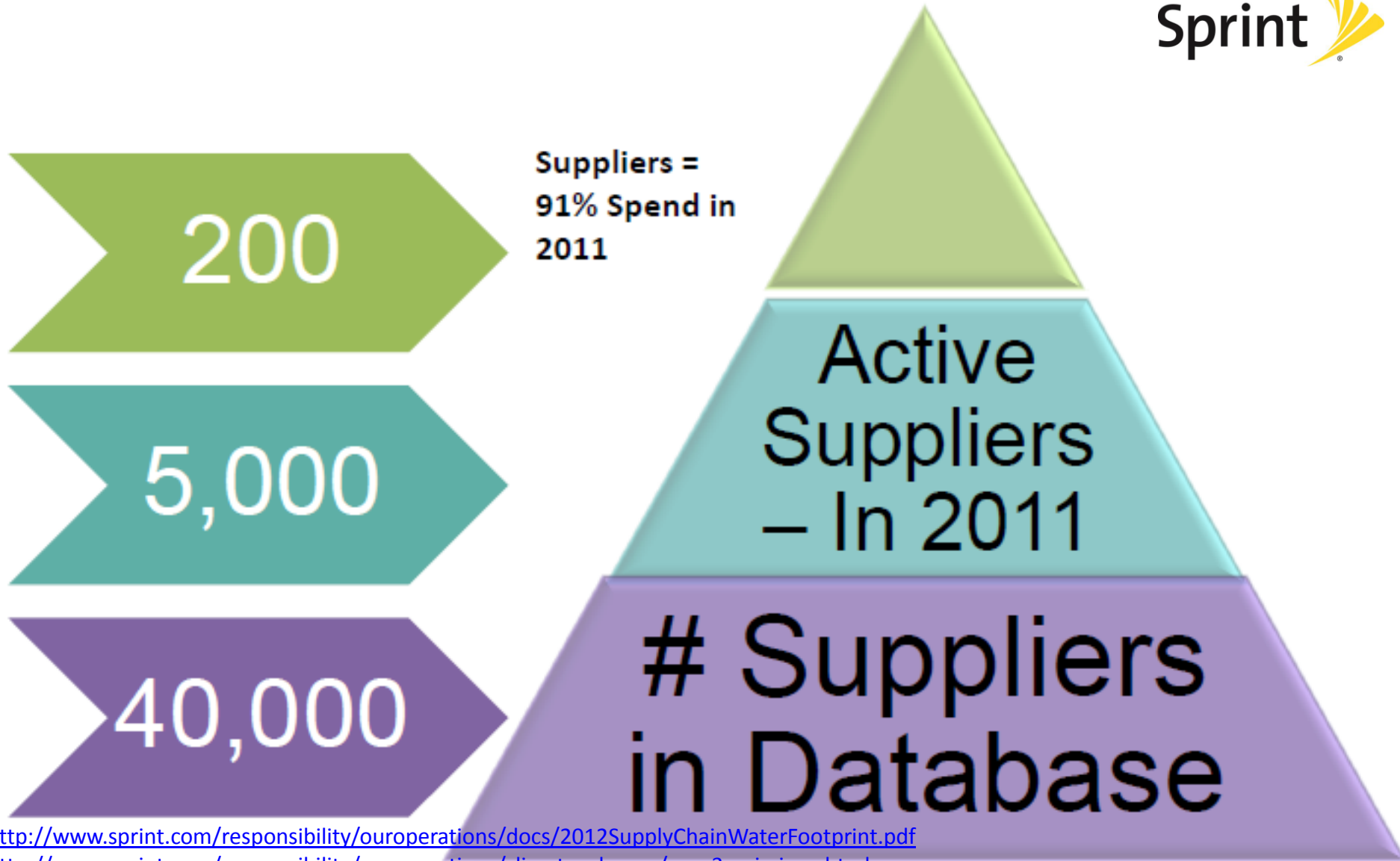
98%



**Sprint<sup>®</sup>**



# EIO Impact Spend Analysis Allows You to Focus Green Procurement on Most Important Suppliers

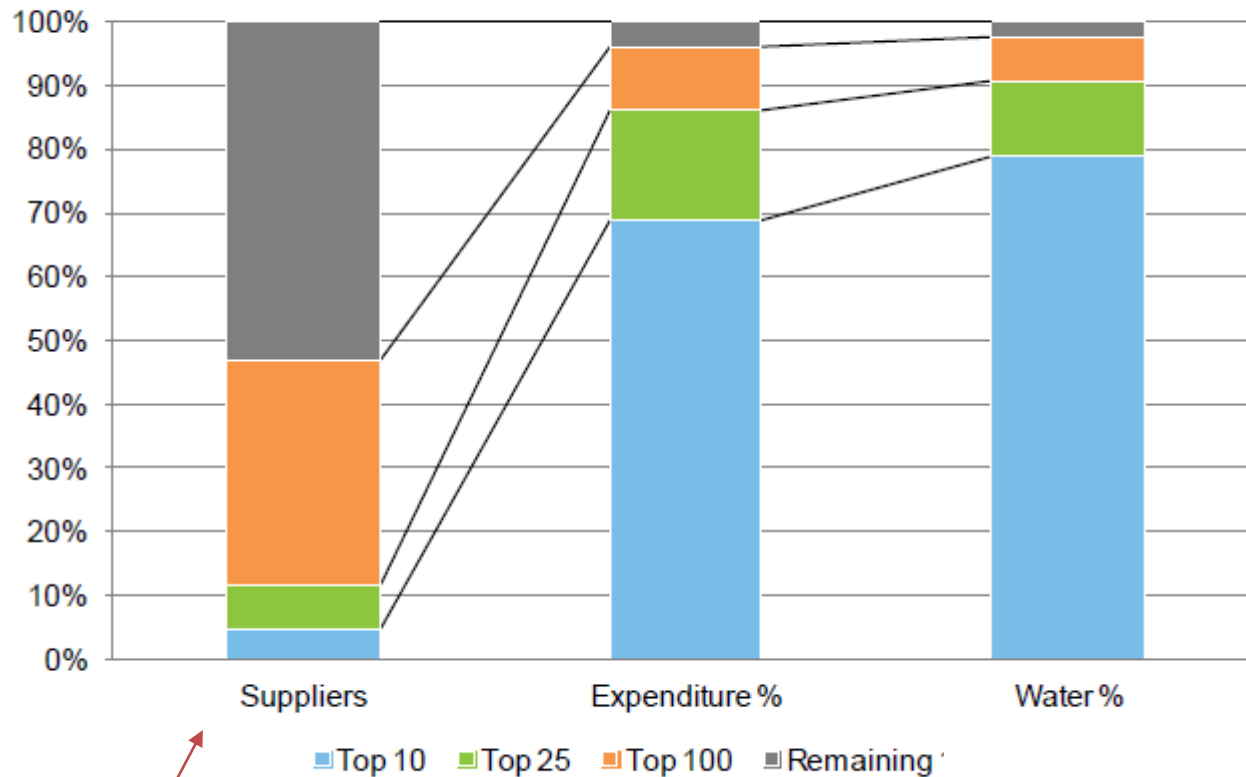


<http://www.sprint.com/responsibility/ouroperations/docs/2012SupplyChainWaterFootprint.pdf>

[http://www.sprint.com/responsibility/ouroperations/climate\\_change/scop3emissions.html](http://www.sprint.com/responsibility/ouroperations/climate_change/scop3emissions.html)

# Small number of suppliers = big impact

Distribution of water usage throughout the supply chain



Targeting a green procurement program at these 25 suppliers will address 85% of supply chain water risk

# Sprint Selling iPhone cases made of waste CO2

A I R C A R B O N



# Opportunity





# Are we part of the solution?

## Question 3.2.

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

All Sector Responses to Q 3.2



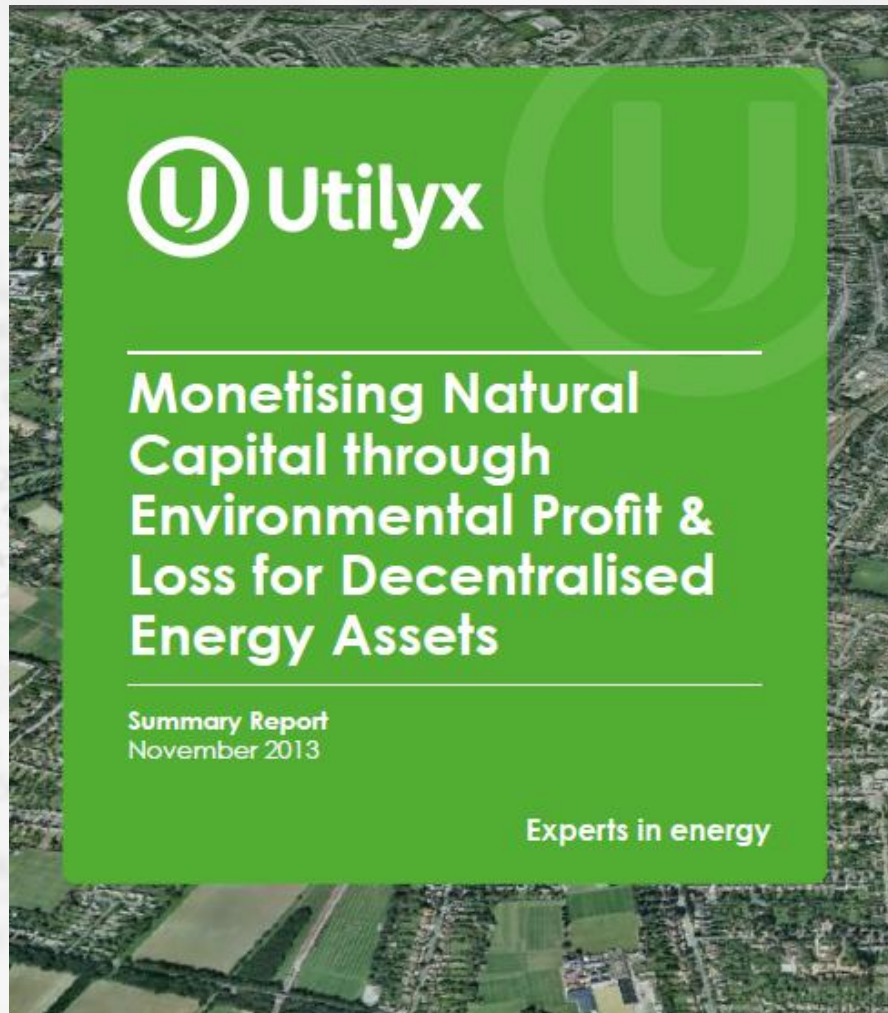
92%

73%

Source: CDP

# Communicating Benefits

Utilyx, a £1B UK-based company, wanted to demonstrate the benefits of its new technology to investors and customers.



<http://www.utilyx.com/documents/pdf/natural-capital-report.pdf>

# Communicating benefits

New wood-based electricity and heat generation plant



OR

Conventional electricity +  
landfilled wood waste



## The Challenge

Each key environmental benefit is measured by a different metric

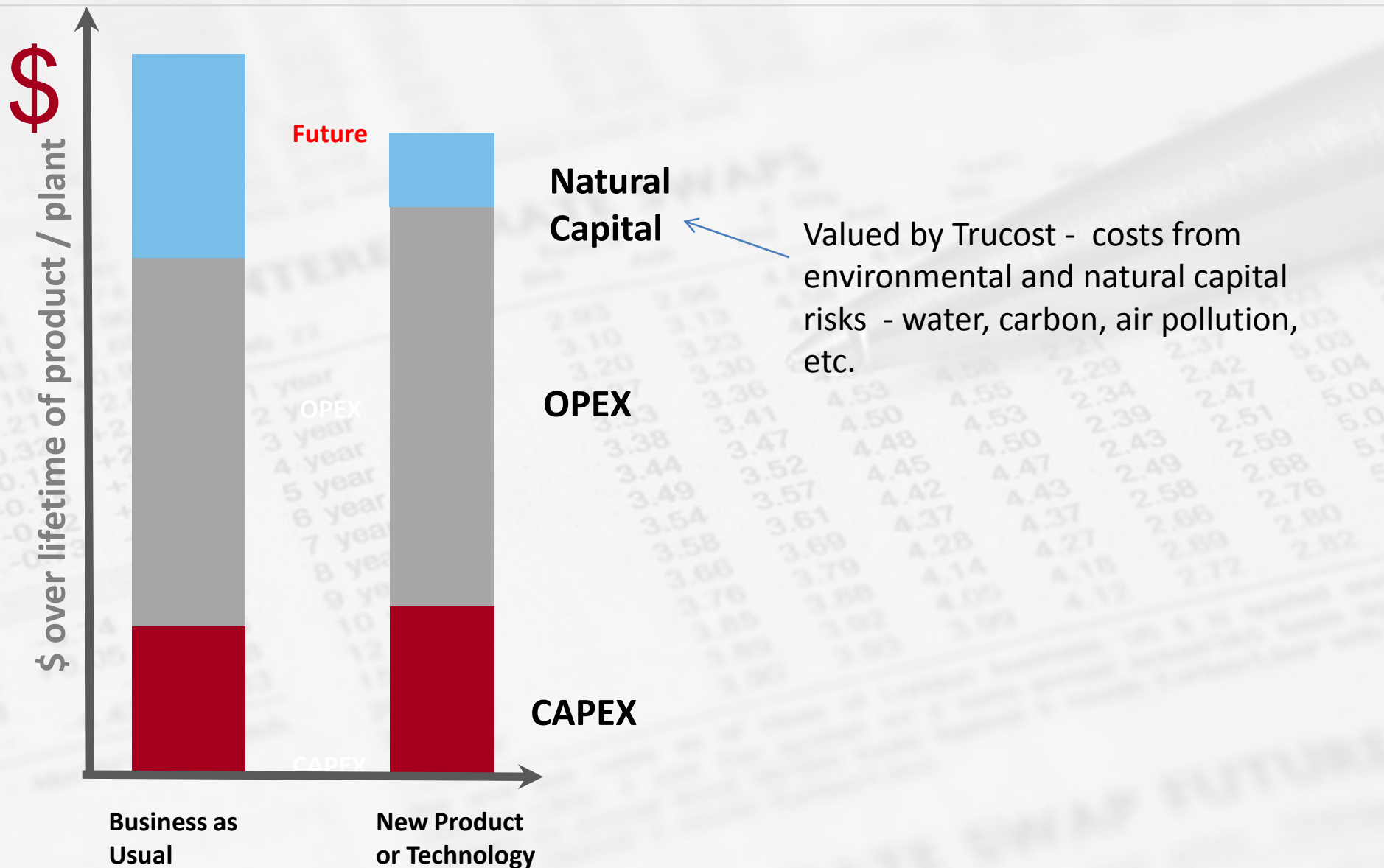
- Avoids sending wood waste to landfill
- Reduced CO<sub>2</sub>
- Reduced air and water pollution
- Reduced water consumption
- etc



## The Solution

Value each benefit in financial terms

# Communicating benefits





# Communicating Benefits

## Net benefit

**Over \$1,300,000 in  
benefit to society every  
year!**



**Wood-based electricity and heat  
generation plant**

**-33%**



**Conventional electricity  
generation plant**



**Landfill waste**



# Thank You



[Annabelle.Bennett@trucost.com](mailto:Annabelle.Bennett@trucost.com)

917-747-8569

@bella\_bennett

