TRUCOST ACADEMIC SERVICES

WORLD-LEADING ENVIRONMENTAL METRICS TO MEET YOUR TEACHING AND RESEARCH REQUIREMENTS

FAST AND COST-EFFECTIVE ENVIRONMENTAL FOOTPRINTING OF YOUR OPERATIONS AND PROCUREMENT

"With Trucost, we can add depth to studies and projects which in the past would have been impossible to conduct."

HOW CAN TRUCOST HELP YOUR UNIVERSITY?

"WE'VE BEEN WORKING WITH TRUCOST FOR OVER FOUR YEARS AND ARE IMPRESSED WITH THE EVOLUTION OF THEIR PRODUCT. OUR STUDENTS HAVE ALWAYS HAD REAL TIME ACCESS TO TRADITIONAL DATA SETS LIKE FINANCIAL STATEMENTS AND MARKET DATA. NOW, WITH TRUCOST, WE CAN ADD DEPTH TO STUDIES AND PROJECTS WHICH IN THE PAST WOULD HAVE BEEN IMPOSSIBLE TO CONDUCT."

DUQUESNE UNIVERSITY

Trucost helps academic institutions to embed sustainability across teaching curricula, bespoke research and through your institution's operations and procurement.

Whether you're a professor, researcher, librarian, chief financial officer or head of procurement, Trucost can help you. Our academic services support academic institutions wishing to demonstrate leadership in the field of sustainability and attract increasingly environmentally conscious students to their programs. The Trucost Environmental Register holds the world's most comprehensive set of natural capital metrics, answering your need for high quality quantitative metrics that measure sustainability performance in financial and traditional terms. Using this data set allows researchers to differentiate their research at the cutting edge of business management and scientific debates. The Trucost Academic Research Portal provides real time access that allows professors to embed this unique data set in coursework, research and teaching curricula. In addition, our tools and data sets provide fast and cost-effective approaches to footprints.

What is Natural Capital? Natural Capital is the term used to describe the value of the resources and flows of goods and services that ecosystems provide (e.g. water, climate regulation, and resources to produce food) which are essential for economic growth but have traditionally been undervalued or worse still, left unvalued.

Companies and investors increasingly have to account for their exposure to natural capital risk against a backdrop of volatile commodity prices and natural resource constraints that erode their profits. Add ethically aware consumers and environmental regulation into the mix and it is easy to understand why interest in the sustainability agenda has never been higher. This shift towards sustainable thinking has been reflected in higher education, with a steady growth in the number of environmentally-focused programs and academic research papers. There has also been a trend towards sustainability within more traditional academic courses, such as finance and supply chain management, demonstrating how the impact of natural capital is being felt across the global economy.

WHAT ACADEMIC SERVICES DOES TRUCOST OFFER?

ACADEMIC RESEARCH PORTAL 3

The Trucost University Solution Portal provides access to the Trucost Environmental Register - our database of the world's most comprehensive natural capital metrics, enabling universities and business schools to embed environmental research and analysis into their teaching curricula.

CUSTOMIZED ACADEMIC DATA AND TOOLS 8

Trucost provides robust and academically-defensible natural capital metrics that supports academics in testing hypotheses and providing insight for research papers.

ACADEMIC INSTITUTION FOOTPRINTING SERVICE 11

Trucost analysis helps academic institutions to measure and manage the environmental impacts of their campus and procurement decisions, helping them to attract environmentally-conscious students and demonstrate leadership. To enhance the educational offering, an institution's own green procurement management can also be used as a teaching tool for students.

TRUCOST ACADEMIC RESEARCH PORTAL

32

academic institutions (including Harvard, Yale & Oxford University) are embedding Trucost's data in research and classes.

225,739

environmental impact disclosures in Trucost's Environmental Register.

$100bn

purchasing expenditure Trucost has assessed for environmental risk & opportunity.

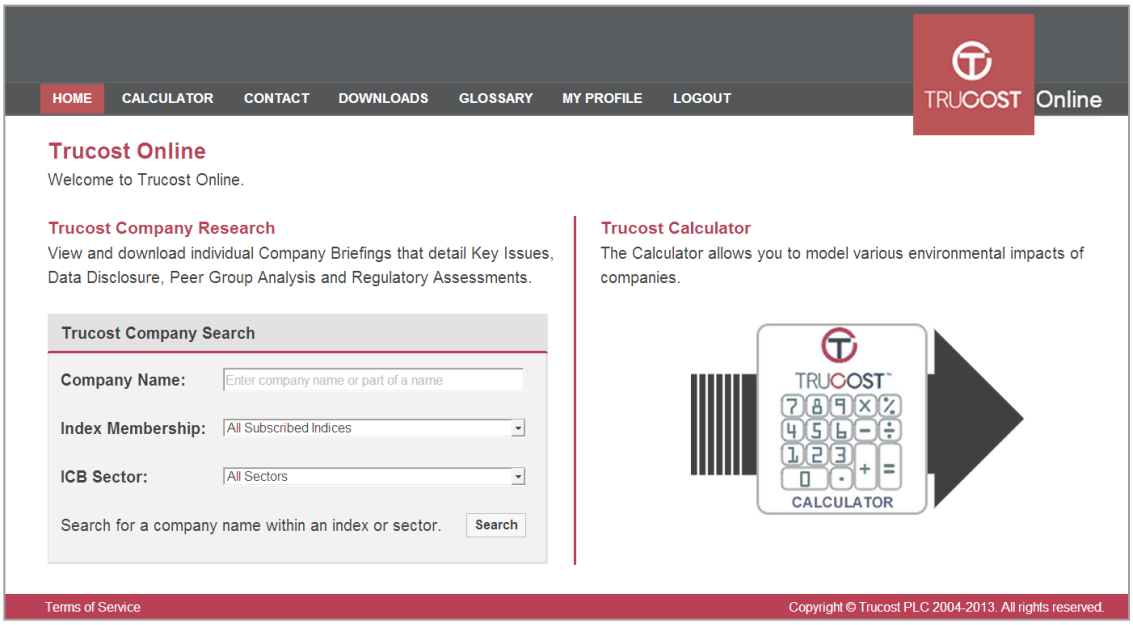
Trucost's academic research portal provides you with the data and tools to integrate natural capital analysis into your teaching curricula.

Our global Trucost Environmental Register of natural capital metrics is available through the Trucost academic research portal, and the offering is enhanced by analytical tools to help support your research and teaching requirements. Access to the portal can be adapted by user group, allowing access at both student and research level data sets.

AT A GLANCE

THE TRUCOST UNIVERSITY SOLUTION PORTAL OFFERS :
The Trucost Environmental Register - The world's most comprehensive database of natural capital metrics
A unique data set of high quality quantitative natural capital performance metrics
Easy access to a data set that allows researchers to differentiate their research and professors to embed this unique data set in coursework
Ability to export data sets to Excel*
Access to the Trucost Natural Capital Impact Valuation Calculator (Research level subscription only)
Access to Trucost Company Briefings (Research level subscription only)

THE TRUCOST ACADEMIC RESEARCH PORTAL



* Trucost provides data downloads in a CSV (.csv) format. CSV files (.csv) are a non-proprietary file format natively supported by a wide range of spreadsheet, database and scientific applications for importing and exporting tabular data.

TRUCOST ACADEMIC RESEARCH PORTAL

"TRUCOST'S ABILITY TO DIG OUT THE ENVIRONMENTAL CONSEQUENCES OF PRODUCTION IS ABSOLUTELY SECOND TO NONE ANYWHERE IN THE GLOBE."

HERMES

NATURAL CAPITAL METRICS IN THE TRUCOST ENVIRONMENTAL REGISTER

The Trucost Environmental Register is the world's most comprehensive database of natural capital metrics, containing time-series data on over 4,500 companies and represents 93% of global markets by market capitalization.

NATURAL CAPITAL METRICS	Our quantitative natural capital data covers: Carbon and other Greenhouse Gas (GHG) emissions; water use; resource dependency; air/land/water pollutants; waste Our financial natural capital data covers: Externality valuation ($); impact ratio (proxy for resource risk exposure); profit at risk; environmentally adjusted net present value (NPV)
COMPANY ENVIRONMENTAL DISCLOSURE DATA	Data on environmental reporting rates of companies, representing 93% market capitalization globally
ENVIRONMENTALLY EXTENDED INPUT-OUTPUT MODELING (EEIO)	In the absence of company disclosed environmental data we complete the gaps with advanced EEIO modeling
HISTORY	Time series data (typically 5-10 years)
INDICES COVERED	MSCI World, S&P 500, MSCI Emerging Markets, MSCI Europe, STOXX Europe 600, S&P/IFCI LargeMidCap, MSCI Asia Ex-Japan, FTSE All-Share, Nikkei 225, Topix 150, Bovespa, ASX 200, CAC 40, SMI, KOSPI, IBEX, AEX and FTSE MIB
GHG PROTOCOL SCOPES (1, 2, 3) COVERED	ALL Scopes (covering operational impacts, fuel use and upstream supply chain impacts)
INFORMATION SOURCES	Standardized and validated data gathered from: • Company environmental reports, financial reports, websites • Carbon Disclosure Project (CDP) responses • Direct engagement with companies
ECONOMIC VALUATIONS	Natural capital data provided in financial terms (using environmental cost analysis derived from academic literature)
VERIFICATION	Robust verification process, including: • Independent quality checks • Identification of data outliers and sector level comparisons • Direct engagement with companies

STUDENT LEVEL

- Access data on the most material environmental impacts of companies in the Trucost Environmental Register
- View information on a company's peers, sectors and indices
- View natural capital valuation data for a range of years
- Export data sets to Excel

Trucost's natural capital metrics are unique in their scope, with up to ten years of time series data on over 4,500 companies, covering carbon emissions, water use, pollutants, waste and

CLASSROOM MATERIALS

Trucost collaborates with professors to develop coursework based on new trends in our corporate and investor work to help students graduate with cutting edge skills. We do so by partnering in writing case studies and creating analytic tools.

natural resource use - including external cost valuations. This provides a comprehensive data source to support students in an array of classes combining business and environment. Student level access enables users to see quantitative data on the most material impacts for each company via Trucost's university solution portal. You can search the Trucost Environmental Register by company name, stock, index, portfolio and ICB subsector.

NATURAL CAPITAL METRICS IN THE TRUCOST ACADEMIC RESEARCH PORTAL

Resource	Data Source	Direct Quantity	Direct Cost	Indirect Cost	Total Cost	Impact Ratio
Total			$8,191.05	$1,245.66	$9,436.71	70.53%
Greenhouse Gases, Carbon Dioxide, Sink - Air	1	156,300,000.00	$5,349.60	$63.08	$5,412.69	40.45%
Acid Rain Precursors, Sulphur Dioxide , Sink - Air	1	679,564.00	$887.60	$15.90	$903.49	6.75%
Water Abstraction, Other (Process Water), Source - Land	2	1,450,759,065.99	$704.77	$57.80	$762.58	5.70%

Your students will be able to take a closer look at each company within the Trucost Environmental Register via the company overview, which offers access to information on a company's peers, sectors and indices. Company information can be further refined by environmental category filters to view natural capital valuation data across a range of years. This data can then be exported to Excel.*

COMPANY ENVIRONMENTAL IMPACTS

Show Company Briefings

Search:

Company	ICB Sector	Year	Revenue	Impact Ratio	Direct Cost	Indirect Cost	Total Cost	Disclosure	Direct Disclosure	Scope 1 Quantity	Scope 2 Quantity	Scope 3 Quantity
International Consolidated Airlines Group SA (IAG-ES)	Travel & Leisure	2011	20,853.41	5.46%	957.63	181.30	1,138.93	99.67%	43.00%	23,128,708	122,442	2,447,873
Glencore Xstrata PLC (GLEN)	Mining	2011	186,152.00	8.49%	1,466.37	14,343.76	15,810.13	79.94%	38.00%	8,074,851	2,842,210	52,441,050
Aberdeen Asset Management PLC (ADN)	General Financial	2012	1,683.19	0.30%	0.04	5.01	5.05	10.10%	13.00%	176	2,131	57,752

CASE STUDY

STANFORD UNIVERSITY

Stanford University wanted students of the Business and Engineering schools to have access to Trucost's natural capital metrics for their coursework. In addition to its use as a teaching tool Stanford also wanted to give academics access to the Trucost database, seeing the value in it for their research.

Trucost developed online access to Trucost natural capital metrics customized for universities at two levels – study and researcher.

Trucost's natural capital metrics are unique in pricing externalities and include multiple years of academically defensible information for use in trend analysis. This is a significant data source to support students in an array of classes, whilst academics can add the Trucost Environmental Register to their research references.

* Trucost provides data downloads in a CSV (.csv) format. CSV files (.csv) are a non-proprietary file format natively supported by a wide range of spreadsheet, database and scientific applications for importing and exporting tabular data.

TRUCOST ACADEMIC RESEARCH PORTAL

"WITH THE HELP OF TRUCOST, WE HAVE ASSESSED HOW THE PRICE OF A COMMON BASKET OF CPG GOODS MIGHT CHANGE IF IT WERE TO REFLECT THE COSTS OF ITS ENVIRONMENTAL IMPACT IN TERMS, FOR EXAMPLE, OF CARBON EMISSIONS AND WATER USE THAT ARE CURRENTLY UNPRICED IN MOST CASES."

McKinsey&Company

RESEARCH LEVEL

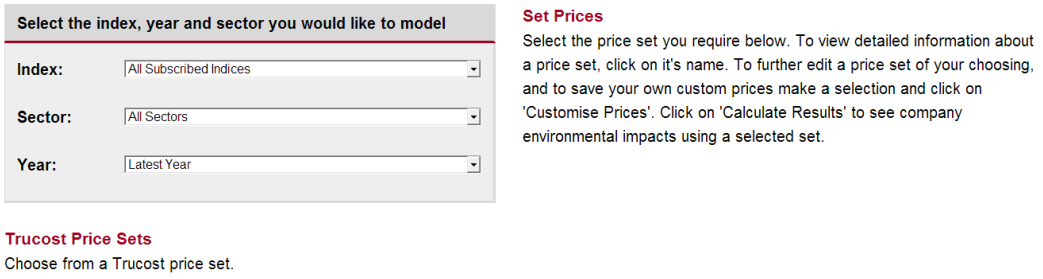
- Access all the same features available to student level subscribers
- Access to the Trucost Valuation Calculator
- Access to Trucost Company Briefings

Research level subscription to the Trucost university solution portal gives you access to all the same features as student level subscription but with the addition of several key features.

TRUCOST VALUATION CALCULATOR

Trucost's valuation calculator offers the ability to perform external environmental costing and scenario analysis as well as environmental impact modeling using Trucost default or user-defined damage values.

THE TRUCOST VALUATION CALCULATOR



USERS OF TRUCOST DATA

Tuck School of Business at Dartmouth
University of Minnesota
Stanford University
Griffith University
Michigan State University
Emory University
BatteryMarch Financial Management, Inc.
University of Michigan
Vanguard
IFC International Finance Corporation World Bank Group
Bank of America Merrill Lynch
The Hong Kong Polytechnic University 香港理工大學
First State Investments
Arisaig Partners Investment Managers
Yale University
Nanyang Technological University
Duquesne University
Université Concordia University

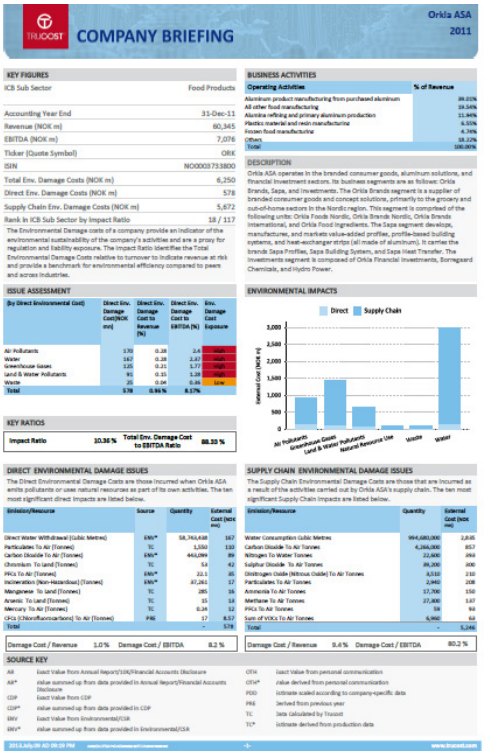
TRUCOST ACADEMIC RESEARCH PORTAL

"WE CHOSE TO WORK WITH TRUCOST BECAUSE OF THEIR UNRIVALLED EXPERIENCE IN ENVIRONMENTAL IMPACT MEASUREMENT AND REDUCTION."

mecom

TRUCOST COMPANY BRIEFINGS

Exclusive to the research level subscription, Trucost Company Briefings highlight key areas of interest and rank a company's environmental performance against its peers and sector benchmark.


COMPANY BRIEFING

Orkla ASA
2011

KEY FIGURES

ICB Sub Sector	Food Products
Accounting Year End	31-Dec-11
Revenue (NOK m)	60,345
EBITDA (NOK m)	7,076
Ticker (Quote Symbol)	ORK
ISIN	NO0003733800
Total Env. Damage Costs (NOK m)	6,250
Direct Env. Damage Costs (NOK m)	578
Supply Chain Env. Damage Costs (NOK m)	5,672
Rank in ICB Sub Sector by Impact Ratio	18 / 117

BUSINESS ACTIVITIES

Operating Activities	% of Revenue
Aluminium product manufacturing from purchased aluminium	39.01%
All other food manufacturing	19.54%
Alumina refining and primary aluminium production	11.94%
Plastics material and resin manufacturing	4.55%
Frozen food manufacturing	4.76%
Others	18.22%
Total	100.00%

DESCRIPTION

Orkla ASA operates in the branded consumer goods, aluminium solutions, and financial investment sectors. Its business segments are as follows: Orkla Brands, Sapa, and Investments. The Orkla Brands segment is a supplier of branded consumer goods and concept solutions, primarily to the grocery and out-of-home sectors in the Nordic region. This segment is comprised of the following units: Orkla Foods Nordic, Orkla Brands Nordic, Orkla Brands International, and Orkla Food Ingredients. The Sapa segment develops, manufactures, and markets value-added profiles, profile-based building systems, and heat-exchanger strips (all made of aluminum). It carries the brands Sapa Profiles, Sapa Building System, and Sapa Heat Transfer. The Investments segment is composed of Orkla Financial Investments, Borregaard Chemicals, and Hydro Power.

ISSUE ASSESSMENT

(by Direct Environmental Cost)	Direct Env. Damage Cost(NOK mn)	Direct Env. Damage Cost to Revenue (%)	Direct Env. Damage Cost to EBITDA (%)	Env. Damage Cost Exposure
Air Pollutants	170	0.28	2.4	High
Water	167	0.28	2.37	High
Greenhouse Gases	125	0.21	1.77	High
Land & Water Pollutants	91	0.15	1.28	High
Waste	25	0.04	0.36	Low
Total	578	0.96 %	8.17%	

ENVIRONMENTAL IMPACTS

KEY RATIOS

Impact Ratio	10.36 %	Total Env. Damage Cost to EBITDA Ratio	88.33 %

DIRECT ENVIRONMENTAL DAMAGE ISSUES

The Direct Environmental Damage Costs are those incurred when Orkla ASA emits pollutants or uses natural resources as part of its own activities. The ten most significant direct impacts are listed below.

Emission/Resource	Source	Quantity	External Cost (NOK mn)
Direct Water Withdrawal (Cubic Metres)	ENV*	58,743,648	167
Particulates To Air (Tonnes)	TC	1,550	132
Carbon Dioxide To Air (Tonnes)	ENV*	443,099	89
Chromium To Land (Tonnes)	TC	52	42
PICs To Air (Tonnes)	ENV*	22.1	35
Incineration (Non-Hazardous) (Tonnes)	ENV*	47,261	17
Manganese To Land (Tonnes)	TC	285	16
Arsenic To Land (Tonnes)	TC	15	14
Mercury To Air (Tonnes)	TC	0.24	12
CFCs (Chlorofluorocarbon) To Air (Tonnes)	PRE	17	8.57
Total		-	578

Damage Cost / Revenue	1.0%	Damage Cost / EBITDA	8.2 %

SUPPLY CHAIN ENVIRONMENTAL DAMAGE ISSUES

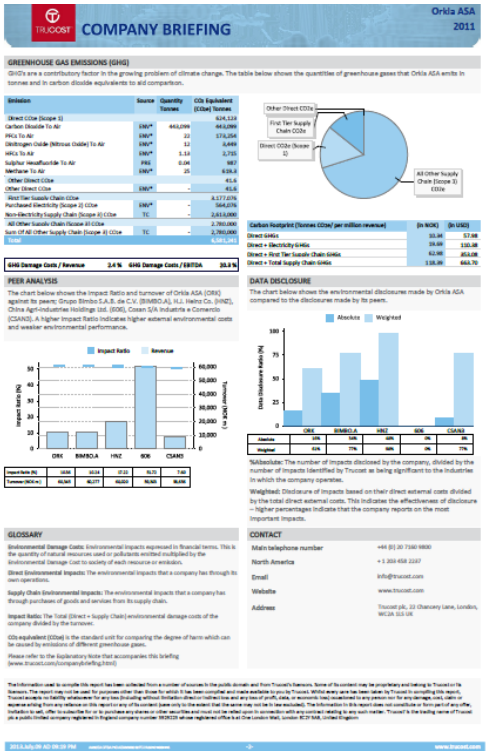
The Supply Chain Environmental Damage Costs are those that are incurred as a result of the activities carried out by Orkla ASA's supply chain. The ten most significant Supply Chain impacts are listed below.

Emission/Resource	Quantity	External Cost (NOK mn)
Water Consumption Cubic Metres	994,680,000	2,835
Carbon Dioxide To Air Tonnes	4,266,000	857
Nitrogen To Water Tonnes	22,600	692
Sulphur Dioxide To Air Tonnes	99,200	600
Dinitrogen Oxide (Nitrous Oxide) To Air Tonnes	8,510	210
Particulates To Air Tonnes	2,940	208
Ammonia To Air Tonnes	17,700	150
Methane To Air Tonnes	27,300	137
PICs To Air Tonnes	59	93
Sum of VOCs To Air Tonnes	6,960	64
Total	-	5,246

Damage Cost / Revenue	9.4 %	Damage Cost / EBITDA	80.2 %

SOURCE KEY

AR	Exact Value from Annual Report/10K/Financial Accounts Disclosure	OTH	Exact Value from personal communication
AR*	value summed up from data provided in Annual Report/Financial Accounts Disclosure	OTH*	value derived from personal communication
CDP	Exact Value from CDP	POO	estimate scaled according to company-specific data
CDP*	value summed up from data provided in CDP	PRE	Derived from previous year
ENV	Exact Value from Environmental/CSR	TC	Data Calculated by Trucost
ENV*	value summed up from data provided in Environmental/CSR	TC*	estimate derived from production data


COMPANY BRIEFING

Orkla ASA
2011

GREENHOUSE GAS EMISSIONS (GHG)

GHGs are a contributory factor in the growing problem of climate change. The table below shows the quantities of greenhouse gases that Orkla ASA emits in tonnes and in carbon dioxide equivalents to aid comparison.

Emission	Source	Quantity Tonnes	CO2 Equivalent (CO2e) Tonnes
Direct CO2e (Scope 1)			624,122
Carbon Dioxide To Air	ENV*	443,099	443,099
PICs To Air	ENV*	22	178,354
Dinitrogen Oxide (Nitrous Oxide) To Air	ENV*	12	3,449
HFCs To Air	ENV*	1.14	2,755
Sulphur Hexafluoride To Air	PRE	0.04	987
Methane To Air	ENV*	25	639.4
Other Direct CO2e			41.4
Other Direct CO2e	ENV*	-	41.4
First Tier Supply Chain CO2e			4,177,075
Purchased Electricity (Scope 2) CO2e	ENV*	-	564,076
Non-Electricity Supply Chain (Scope 3) CO2e	TC	-	2,613,000
All Other Supply Chain (Scope 3) CO2e			2,780,000
Sum Of All Other Supply Chain (Scope 3) CO2e	TC	-	2,780,000
Total			4,345,241

Carbon Footprint (Tonnes CO2e) per million revenue	(in NOK)	(in USD)
Direct GHGs	10.34	57.88
Direct + Electricity GHGs	19.68	110.18
Direct + First Tier Supply Chain GHGs	62.90	352.08
Direct + Total Supply Chain GHGs	118.36	662.70

6HG Damage Costs / Revenue	2.4 %	6HG Damage Costs / EBITDA	20.8 %

PEER ANALYSIS

The chart below shows the Impact Ratio and turnover of Orkla ASA (ORK) against its peers: Grupo Bimbo S.A.B. de C.V. (BIMBO.A), N.J. Heinz Co. (HNZ), China Agri-Industries Holdings Ltd. (606), Cosan S/A Industria e Comercio (CSAN3). A higher Impact Ratio indicates higher external environmental costs and weaker environmental performance.

Impact Ratio (%)	10.36	10.54	17.01	15.71	7.40
Turnover (NOK m)	60,345	46,277	44,099	99,965	38,498

DATA DISCLOSURE

The chart below shows the environmental disclosures made by Orkla ASA compared to the disclosures made by its peers.

Data Disclosure Ratio (%)	ORK	BIMBO.A	HNZ	606	CSAN3
Absolute	16%	34%	48%	0%	8%
Weighted	61%	77%	98%	0%	77%

%Absolute: The number of impacts disclosed by the company, divided by the number of impacts identified by Trucost as being significant to the industries in which the company operates.

Weighted: Disclosure of impacts based on their direct external costs divided by the total direct external costs. This indicates the effectiveness of disclosure – higher percentages indicate that the company reports on the most important impacts.

GLOSSARY

Environmental Damage Costs: Environmental impacts expressed in financial terms. This is the quantity of natural resources used or pollutants emitted multiplied by the Environmental Damage Cost to society of each resource or emission.

Direct Environmental Impacts: The environmental impacts that a company has through its own operations.

Supply Chain Environmental Impacts: The environmental impacts that a company has through purchases of goods and services from its supply chain.

Impact Ratio: The Total (Direct + Supply Chain) environmental damage costs of the company divided by the turnover.

CO2e equivalent (CO2e) is the standard unit for comparing the degree of harm which can be caused by emissions of different greenhouse gases.

Please refer to the Explanatory Note that accompanies this briefing (www.trucost.com/companybriefing.html)

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KEY RATIOS

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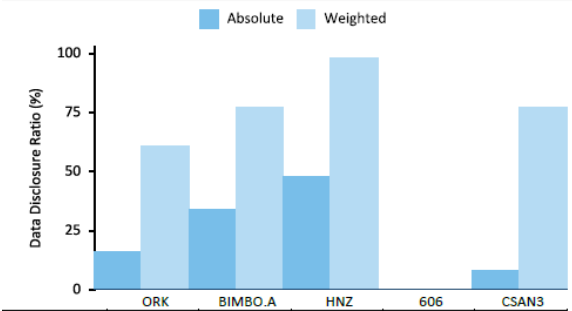

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TRUCOST COMPANY BRIEFINGS HELP ACADEMICS TO:

Understand a company's exposure to natural capital risk.

Identify a company's material environmental impacts, including carbon, water, waste, metals and pollutants.

Understand variations in risk across company operations and supply chain (Scopes 1,2 and 3).

Compare a company's natural capital risk to peer and sector benchmarks.

Understand how company environmental reporting disclosure compares to peer and sector benchmarks.

TRUCOST CUSTOMIZED ACADEMIC DATA & TOOLS

"THE PRI AND UNEP FI COMMISSIONED TRUCOST TO CALCULATE THE COST OF GLOBAL ENVIRONMENTAL DAMAGE AND EXAMINE WHY THIS IS IMPORTANT TO THE ECONOMY, CAPITAL MARKETS, COMPANIES AND INSTITUTIONAL INVESTORS."

PRI UNEP

Trucost can provide customized data and tools for academics - offering access to the world's most comprehensive natural capital metrics. Our environmental data is used by some of the world's leading academic institutions.

Trucost offers the only data set of its kind to place a financial value on the environmental impacts of corporations and their supply chains, back to raw material extraction. We support academics with thematic research, such as sector-specific resource constraints or environmental disclosure in emerging markets. Our research is used by numerous academic institutions, including Harvard Business School, Yale Business School, Oxford University and ETH Zurich (Swiss Federal Institute of Technology).

In addition, Trucost is regularly commissioned to write reports for organizations such as Carbon Disclosure Project (CDP), United Nations Principles for Responsible Investment (UN PRI) and The Economics of Ecosystems and Biodiversity (TEEB). Our research furthers understanding of natural capital risk and opportunity across a range of indices, regions and sectors.

TRUCOST'S NATURAL CAPITAL METRICS COVER:
Over 4,500 companies
65 countries
700 data points
Up to 10 years of historical data
93% coverage of global markets by market capitalization
20 indices
ALL operational and upstream GHG Protocol scopes (operations, fuel use and upstream supply chain impacts)

EXAMPLES OF PUBLICATIONS SUPPORTED BY TRUCOST DATA

de Boer, Y. & van Bergen, B., 2012. *Expect the Unexpected: Building business value in a changing world* **KPMG International and the Erb Institute at The University of Michigan.**

Marquis,C. & Toffel, M., 2011. *The Globalization of Corporate Environmental Disclosure: Accountability or Greenwashing?* **Harvard Business School.**

Knight, E., 2010. *The Economic Geography of European Carbon Market Trading* **Oxford University Press.**

Delmas, M. & Nairn-Birch, N., 2010. *Is the Tail Wagging the Dog? An Empirical Analysis of Corporate Carbon Footprints and Financial Performance* **The University of California, Los Angeles.**

TRUCOST CUSTOMIZED ACADEMIC DATA & TOOLS

TRUCOST IN NUMBERS

12+
years that Trucost has been researching, standardizing and validating the world's most comprehensive environmental impact data.

32
academic institutions (including Harvard, Yale & Oxford University) academic institutions have used Trucost's data in research and classes.

225,739
environmental impact disclosures in Trucost's Environmental Register.

136,000
corporate environmental footprints analyzed by Trucost.

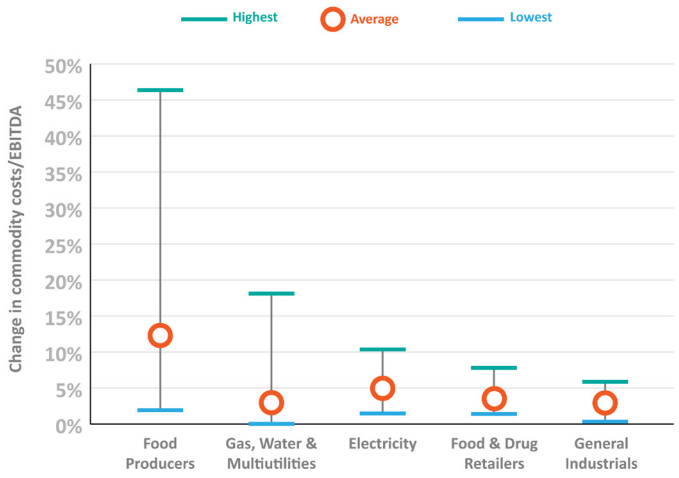
$2.7tn
value of funds Trucost has assessed for environmental risk & opportunity.

$100bn
purchasing expenditure Trucost has assessed for environmental risk & opportunity.

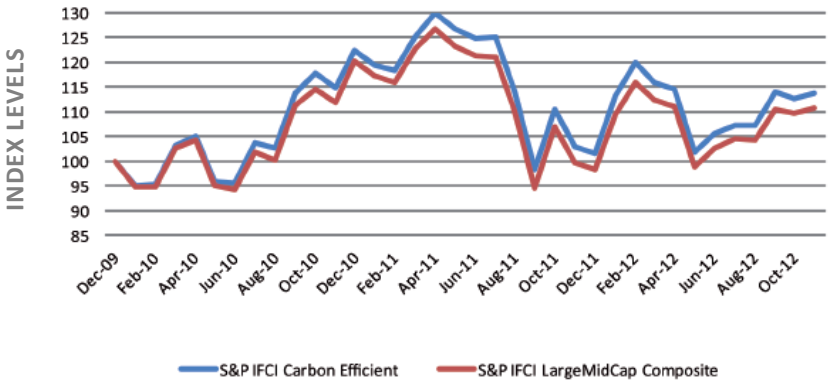
$582mn
assets under management (AUM) driven by Trucost data.

EXAMPLES OF OUTPUTS PRODUCED WITH TRUCOST DATA

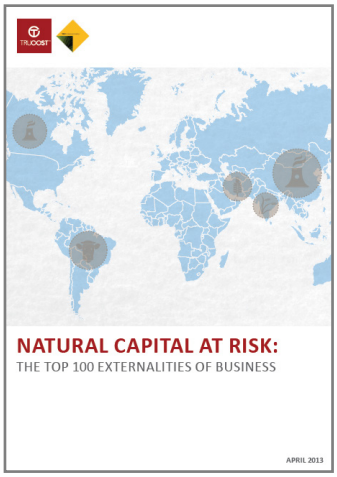
CHANGE IN COMMODITY COSTS/EBITDA

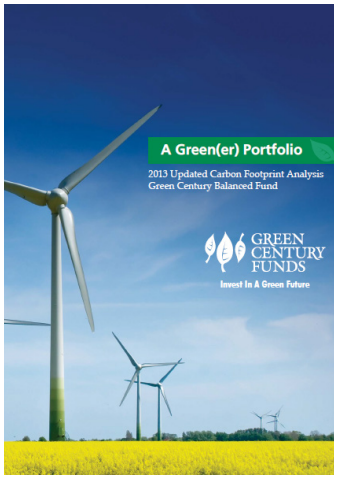


S&P IFCI CARBON EFFICIENT INDEX



EXAMPLES OF TRUCOST RESEARCH REPORTS





TRUCOST CUSTOMIZED ACADEMIC DATA

"IF WATER WERE TO BE PRICED ACCORDING TO ITS AVAILABILITY, BASED ON CURRENT PRODUCTION LOCATIONS 27% OF PROFITS WOULD BE AT RISK ACROSS THE WORLD'S LARGEST COMPANIES"

TRUCOST

CASE STUDY

HARVARD BUSINESS SCHOOL

Harvard Business School wanted to test their hypotheses using a novel panel dataset of 4,484 public companies in many industries, headquartered in 38 countries, during 2005-2008, when environmental disclosure increased among global corporations.

To meet Harvard Business School's requirements Trucost enables access to our natural capital metrics, customized for the researcher's interests. Harvard Business School used the data in publication: The Globalization of Corporate Environmental Disclosure: Accountability or Greenwashing?

Trucost regularly speaks to the Environmentally Sustainable Strategy & Operations MBA course and contributed to the Harvard Business School case write-up that has been done on Trucost itself.

USERS OF TRUCOST DATA

STANDARD & POOR'S
UBS
aiest
FTSE
HERMES
glg.
VicSuper
NOVARTIS
AustralianSuper
BNP PARIBAS ASSET MANAGEMENT
UNEP Finance Initiative
ASN BANK
CORTAL CONSORS BNP PARIBAS
storebrand
BANCO POPULAR
Mc Graw Hill

ACADEMIC INSTITUTION FOOTPRINTING SERVICE

TWO THIRDS OF COLLEGE APPLICANTS SAY A SCHOOL'S GREEN RECORD WOULD INFLUENCE THEIR ENROLLMENT DECISION.

The Princeton Review

OVER 650

academic institutions have signed up to the President's Climate Commitment to become climate neutral.

Trucost's footprinting service can help your academic institution minimize its impact on the environment, enabling you to attract an increasing number of environmentally-aware students and demonstrate leadership in the sustainability field.

AT A GLANCE

TRUCOST FOOTPRINTING HELPS ACADEMIC INSTITUTIONS TO:
Attract increasingly environmentally-aware students
Demonstrate environmental best practice and leadership
Reduce costs through improved operational efficiency and supply chain management
Offer their own supply chain management as a teaching tool for students

A growing number of students are factoring environmental performance into their choice of higher education provider. Rankings of green colleges are being released by organizations such as the Sierra Club and the Princeton Review. Many academics institutions, such as Harvard and Yale, are implementing green campus programs and an increasing number of institutions are demonstrating environmental leadership by signing up to initiatives such as the President's Climate Commitment.

Trucost's footprinting service helps academic institutions to attract environmentally-conscious students by enabling them to demonstrate good management of the environmental costs within their own campus and procurement. We help academic institutions increase environmental efficiency and reduce costs across their campus and by supporting green procurement decisions. In addition, your institution can enhance its educational offering by using its own green procurement management as a teaching tool for students.

"THE DRIVERS THERE ARE THE INCOMING POOL OF STUDENTS... WE'RE HEARING THAT FROM ALUMNI AFFAIRS AND DEVELOPMENT, WE'RE HEARING THAT FROM ADMISSIONS, WE'RE HEARING THAT FROM VISITORS WHO ARE ASKING, 'WHERE'S YOUR GREEN BUILDING, I WANT TO LOOK AT IT."

Cornell University

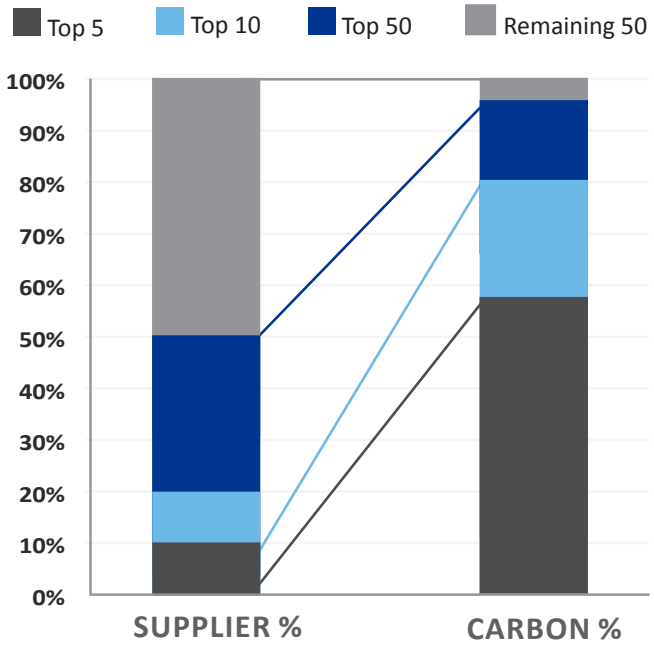
YOUR CAMPUS AND PROCUREMENT FOOTPRINT

Trucost's footprinting service enables academic institutions to measure the environmental impacts arising from their campus and procurement activities. This provides important focus areas for management and optimization and allows institutions to meet the concerns of increasingly environmentally-aware stakeholders, such as students, staff, alumni and foundations. Effective purchasing management not only helps to inform procurement strategy and planning but can also be used by academics as a teaching tool for their classes.

RESULTS OF PUMA'S ENVIRONMENTAL PROFIT & LOSS ACCOUNT

	Water use $ million	GHGs $ million	Land use $ million	Other air pollution $ million	Waste $ million	TOTAL $ million	% of total
	33%	32%	26%	7%	2%	100%	
TOTAL	**47**	**47**	**37**	**11**	**3**	**145**	100%
PUMA operations						**8**	6%
Tier 1						**13**	9%
Tier 2						**14**	10%
Tier 3						**27**	19%
Tier 4						**83**	57%

DISTRIBUTION OF CARBON THROUGH PURCHASING



"THE SCHOOLS ARE SEEING {ENVIRONMENTAL CREDENTIALS} AS A WAY OF ATTRACTING THE BEST STUDENTS POSSIBLE."

SUSTAINABLE ENDOWMENTS INSTITUTE

CASE STUDY

MICHIGAN STATE UNIVERSITY

Michigan State University was interested in understanding the impact of its procurement because it had "gained awareness of the importance of supply chain risks and opportunities."

Trucost adapted its Corporate supply chain analysis for a university, enabling Michigan State to both understand the scale of its procurement impacts and main suppliers contributing the majority.

From this analysis MSU was able to develop an annual conference to inform its suppliers of their impacts and ways MSU would like them to improve.

USERS OF TRUCOST DATA

MICHIGAN STATE UNIVERSITY, hp, STANFORD UNIVERSITY, Sprint, BECKER UNDERWOOD, Tuck School of Business at Dartmouth, LG, UNIVERSITY OF MICHIGAN, UNIVERSITY OF MINNESOTA, FOTA, SAMSUNG, EMORY UNIVERSITY, FUJI xerox, biogen idec, BOEING, MITIE, NANYANG TECHNOLOGICAL UNIVERSITY, DELL, PUMA, 3M, DUQUESNE UNIVERSITY

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