



CDP Supply Chain

Key Drivers for Supply Chain Sustainability Collaboration

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CDP Supply Chain

Agenda

- ▼ **The business case for building a sustainable supply chain**
- ▼ **Introduction to CDP Supply Chain**
- ▼ **Members using the CDP data**
- ▼ **Collaborative Opportunities**
- ▼ **Questions**

Mission

To transform the global economic system to prevent dangerous climate change and value our natural resources by putting relevant information at the heart of business, investment and policy decisions.

About CDP

▼ CDP is an international, not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information.

▼ CARBON ACTION

▼ CITIES

▼ CLIMATE CHANGE

▼ CLIMATE DISCLOSURE
STANDARDS BOARD

▼ FORESTS

▼ REPORTER SERVICES

▼ SUPPLY CHAIN

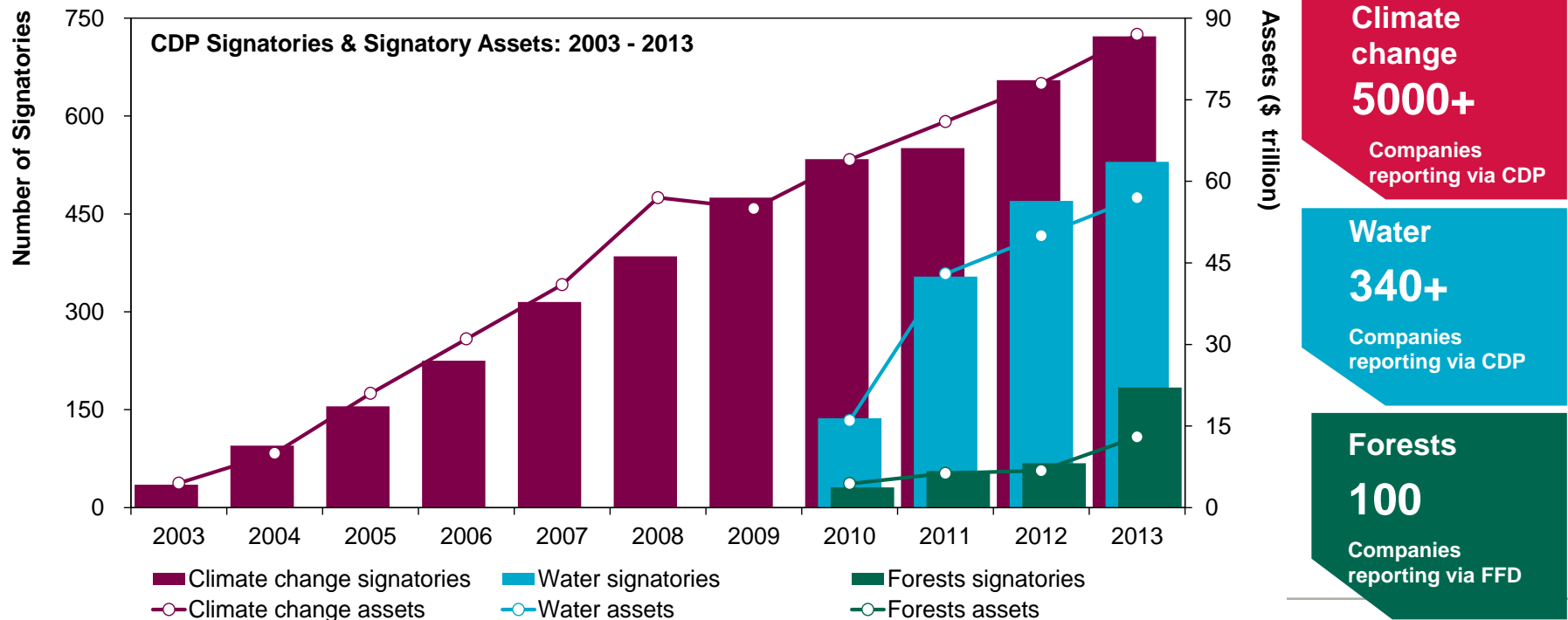
▼ WATER

CDP has 501(c)3 charitable status in the U.S. via its fiscal agent and sponsor liaison,
Rockefeller Philanthropy Advisors

www.cdp.net | @CDP



CDP Signatories: Increasing Investor Interest



1. The business case for building a sustainable supply chain

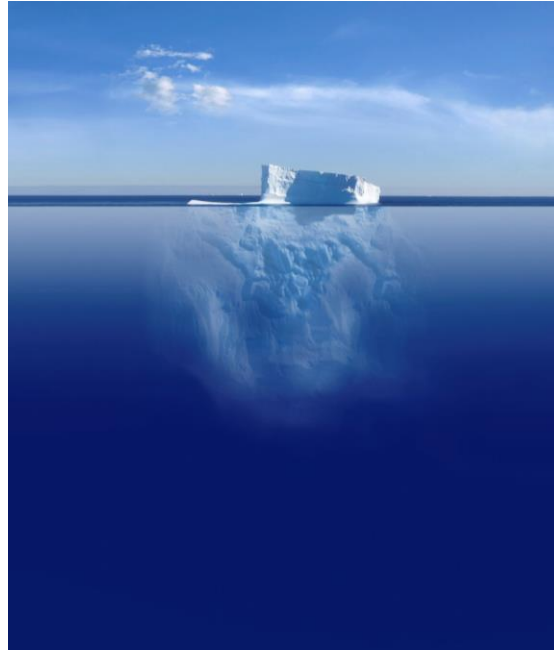
What risks are businesses currently facing from the supply chain?

Why Sustainable Supply Chains? Recognizing the risks...



“We must extend beyond our own operations to promote best practices among our business partners, in order to deliver on our commitment to protect natural resources and mitigate business risks.”

PepsiCo

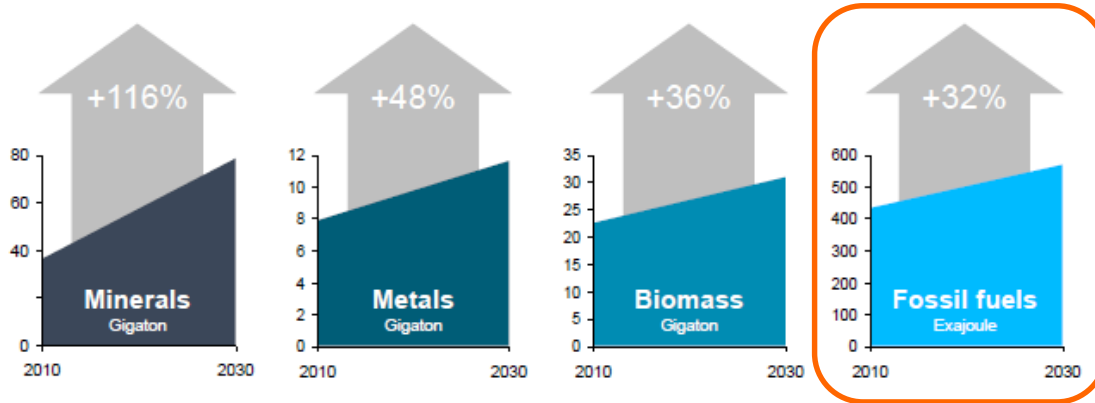


Our analysis suggests that for consumer goods makers, high-tech players, and other manufacturers, between 40% and 60% of a company’s carbon footprint resides upstream in its supply chain—from raw materials, transport, and packaging to the energy consumed in manufacturing processes.

McKinsey Quarterly

Supply Chain Risks: Increased costs from resource pressure

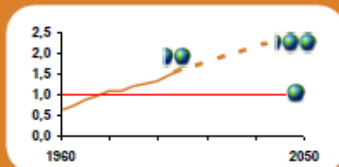
Forecasted growth in resource use 2010-2030¹



- Increased population and a burgeoning middle class is putting increased pressure on natural resources
- We're currently using 1.5 planets worth of resources, this will grow to 2.3 in 2050
- With limited resources action must be taken now to avert global shortage crises

A use beyond means²

The world is currently using ~1.5 planets worth of resources every year, going for 2.3 in 2050



Externalities

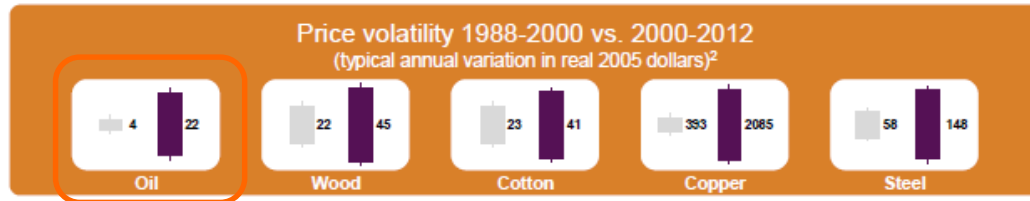
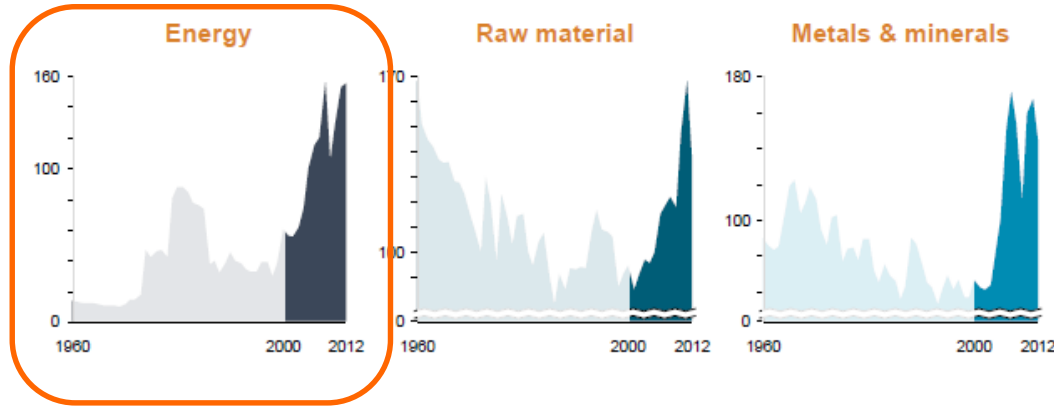
Include soil degradation, water acidification, air pollution, waste generation and carbon emissions

¹ OECD & SERI (2012) for Minerals, Metals, Biomass; Exxon (2013) & Shell (2013) for Fossil fuels

² Global Footprint Network (2012)

Supply Chain Risks: Increased costs from resource pressure

Real price index 1960-2012 (2005=100)¹



- Businesses are feeling the impacts of this increased pressure now through increasing costs in the supply chain.
- Uncertainties around supply of resources has caused increased costs and price spikes.
- Speculation around the winners and losers for resources have also caused price volatility.

¹ World Bank pink sheets 2013 (Raw mtrl. = timber, cotton, rubber, tobacco)

² Ibid. & Accenture Analysis (Std), Oil = Brent crude, Wood = Logs (Cam), Cotton = A index, Steel = Cold rolled coilsheet

Supply Chain Risks: Potential Business Disruption

2 November 2011 Last updated at 14:18



Thailand floods hit production at Honda in Swindon

Staff at Honda motors in Swindon have been forced to work a three-day week because of flooding in Thailand.

The floods have stopped production at the Thai factories that make the electronic components for Honda cars built at the Wiltshire plant.

A Honda spokesman said: "We are working closely with our suppliers in Thailand and throughout our global network to re-establish the flow of parts."

Mass production of the Civic was due to start but month.

Staff have been told they might have to continue



Thai floods: a repeat of 2011?

September 14, 2012 4:00 am by Jake Maxwell Watts



A mere eight months since flood waters receded from Thailand's capital, there is once again fear in the Kingdom that history is being repeated.

Last year the World Bank estimated that the cost to Thailand's economy of severe flooding was approximately 1.4tn baht (\$46bn). In the last few days, much of the north of the country has been inundated and as high water advances towards Bangkok the government has issued warnings to urban residents.

In 2011, several companies including Honda, Hitachi, Sanyo and Western Digital became submerged and the global supply chain for consumer electronics and automobiles was disrupted. However, based on the government's rainfall and dam capacity statistics, investors perhaps do not need to be excessively concerned that

- Increased severity and frequency of extreme weather events have impacted the global economy
- Companies have been impacted by suppliers failing to deliver goods and services, leading to either delays when switching suppliers or increased prices where alternatives are in short supply. Both impact profit forecasts.
- Suppliers are often concentrated in regions that have not recognized climate change threats and have no mitigation or resiliency plans.

Supply Chain Risks: Changing consumer demands

Figure 5: Percentage of companies selecting most common risk

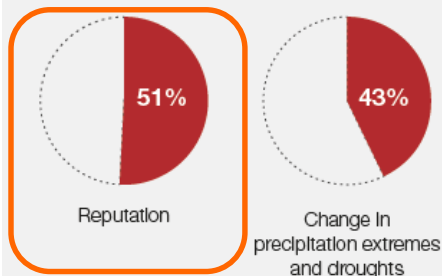
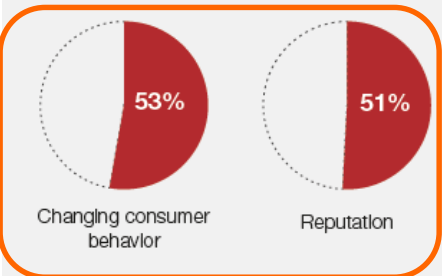


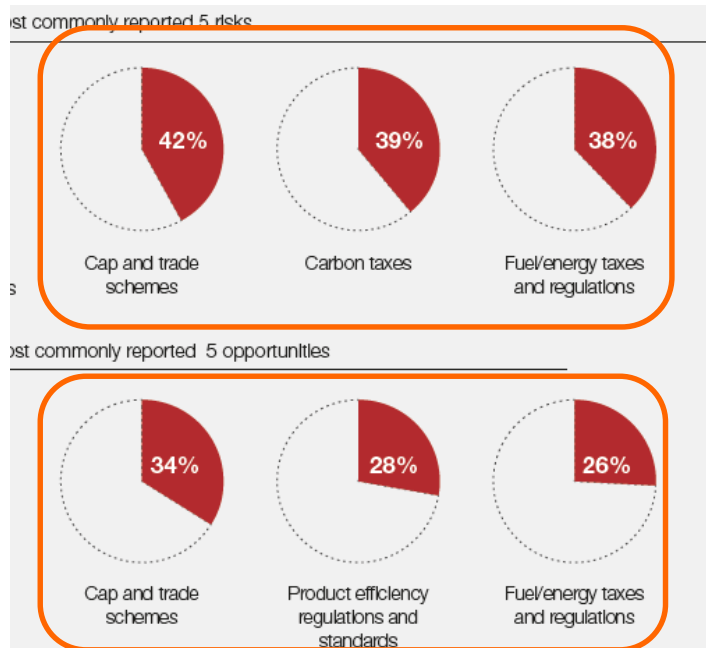
Figure 6: Percentage of companies selecting most common risk



- Reputational risk is not isolated to a company's own operations and ethos.
- Brands are increasingly being targeted based on the behavior of their suppliers.
- Suppliers are not always prepared for the NGO, media & consumer scrutiny.

Supply Chain Risks: Increased regulation on environment impacts

- Costs aren't only associated with taxes, resources to respond to regulation lead to increased costs.
- These costs are often passed through the supply chain as operational increases



“Should the US federal government pass a carbon tax, we estimate the approximate annual cost impacts to be \$13 million - \$26 million. Recognizing the complexity of supply chain costs, **we estimate the potential added annual cost of purchased goods and services (excluding energy) due to energy/carbon taxes to be \$180 million to \$500 million**”

Bank of America

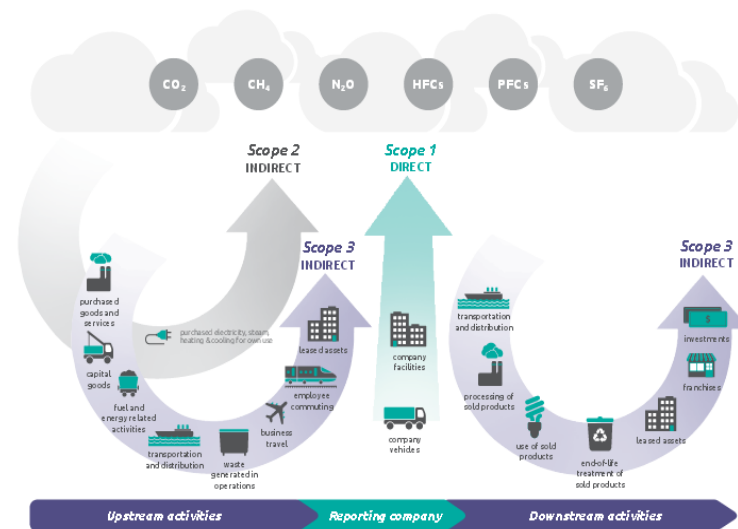


Supply Chain Risks: Increased interest from investors and customers

Scope 3

Investors and customers are taking more interest in what is being measured outside of a company's operational control.

CC14.1	Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions
CC14.2	Please indicate the verification/assurance status that applies to your reported Scope 3 emissions
CC14.3	Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?
CC14.4	Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies?

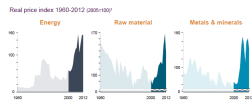


CDP as global standard for environmental disclosure

Increased risks such as....

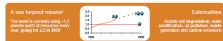
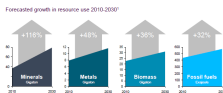
Result in....

And not taking action can lead to



Greenpeace links big brands to China river pollution
By Katie Hunt
Business reporter, BBC News, Hong Kong

Suppliers to several big clothing brands are polluting one of China's most important rivers with hazardous chemicals, Greenpeace says.



1. Population growth causing price volatility and supply speculation
2. Increasingly global implications and complications from a changing climate
3. Reputational risk not being isolated to operational borders affecting stakeholder opinion
4. Costs of increased regulation being passed along
5. Increasing pressure from investors for full accounting and transparency

Sustainable Supply Chain Business Case:

A real need for pragmatic and action-focused approach to drive transparency, understanding and improvements in the supply chain.

- ▶ **Increased Costs \$\$\$** passed along through the supply chain
- ▶ **Unknown reputational risk** if suppliers are targeted by media / NGOs.
- ▶ **Supply disruption** from extreme weather events.
- ▶ **Lost opportunities** by not collaborating more closely with suppliers

2. Introduction to CDP Supply Chain

2014 supply chain members



2014 supply chain members



Abbott

accenture

acer

amdocs

embrace challenge e*perience success



at&t



Bradesco

Bank of America

BMW Group



Bristol-Myers Squibb



BRITISH AMERICAN
TOBACCO

Braskem

New ways to look at the world

sky

BT



CAESARS
ENTERTAINMENT

CISCO

CNH
INDUSTRIAL



COLGATE-PALMOLIVE COMPANY

[CSX]



Deutsche
Telekom

DIAGEO

Domtar

EATON



ELOPAK

enagas

Endesa



FIAT GROUP PURCHASING



asNatural
fenosa



IMI



Imperial
Tobacco



JAGUAR



LAND
ROVER

Johnson & Johnson

Johnson
Controls



JTI

JUNIPER
NETWORKS

KAO

Enriching lives, in harmony with nature.

KPMG

L'ORÉAL



MARFRIG

MetLife

Microsoft

nationalgrid



Nestlé
Good Food, Good Life

nsn

NISSAN MOTOR CORPORATION



pwc



PEPSICO



PHILIP MORRIS INTERNATIONAL

PIRELLI

REXAM



SC Johnson
A FAMILY COMPANY

starwood

Hotels and
Resorts



swisscom

TAISEI
For a Lively World

Coca-Cola



Unilever



vodafone



Walmart

DRIVING SUSTAINABLE ECONOMIES

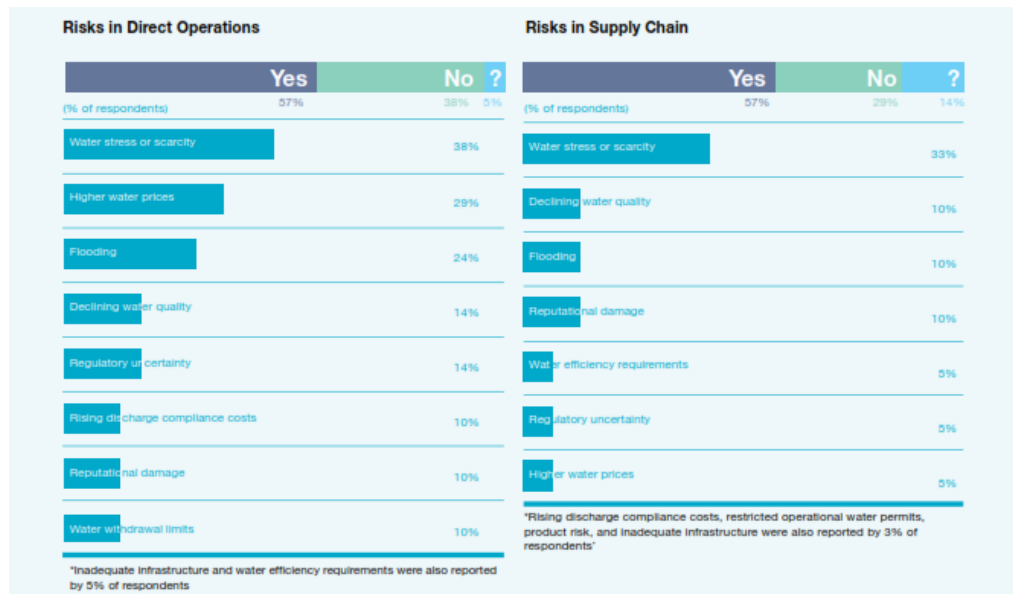
Water risk as a supply chain engagement driver



Water in Supply Chain: gain a complete understanding of your supply-chain-related water risks by inviting your key suppliers to do CDP Water via the SC program.....

Physical risk: General Motors

Increases in the frequency of drought conditions can further depress water availability for production in water-stressed areas. GM has production facilities in Mexico, an area that was hit hard by drought in 2012, and there is a risk that increases in the frequency of such events could disrupt production due to lack of water availability. Mexico accounts for about 6% of total global production. A one month disruption of GM's production, for example, could result in loss of US\$27 Million in net income.



....and be an example for your suppliers and your competitors by becoming a **strategic water partner** of CDP.

Source: CDP Water 2013 Report, pp. 12 and 26

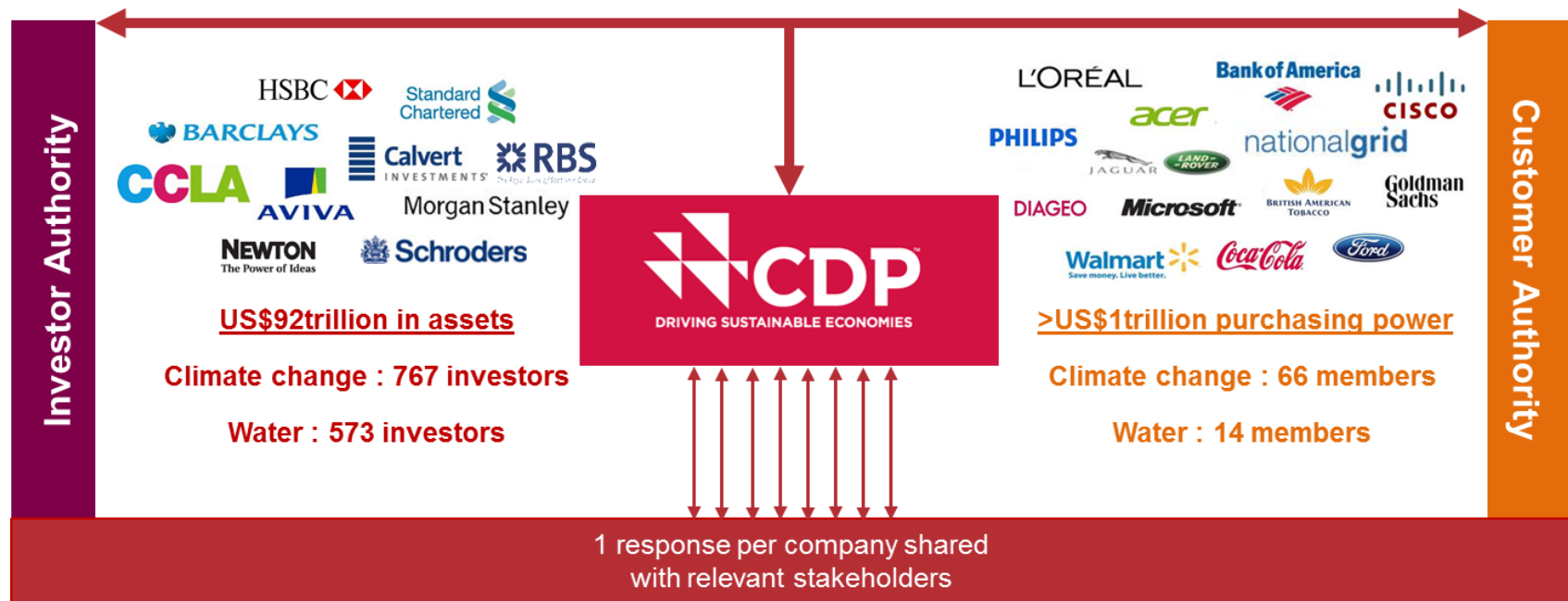
www.cdp.net | @CDP

2014 supply chain water members




How does it work?

Are your suppliers already disclosing to CDP?



CDP's Supply Chain Questionnaire

Over 2,800 companies, the greatest number than ever before, responded to CDP's supply chain questionnaire in 2013, as requested by their customers.

Supply Chain Questionnaire		
Climate change questions	Water questions	Supply chain module questions
<p>Management Strategies, targets, emissions reduction activities</p> <p>Risks & Opportunities Regulatory, physical, other</p> <p>Emissions Reporting Emissions methodology and data</p>	<p>Current State Growth strategy & experienced detrimental impacts</p> <p>Risk Assessment & Implications Risk assessment, exposure and opportunities</p> <p>Water Accounting Water consumption, discharge, withdrawals and recycling</p> <p>Corporate Response Governance, strategy, targets and initiatives</p>	<p>Customer Specific Information Allocating emissions to customers Collaborative opportunities Product (goods & services) level data</p> 

CDP Timelines



April to July

DISCLOSURE & DATA COLLECTION

April: CDP invite to suppliers sent in early April

July: Deadline for disclosing is July 31st

August to January

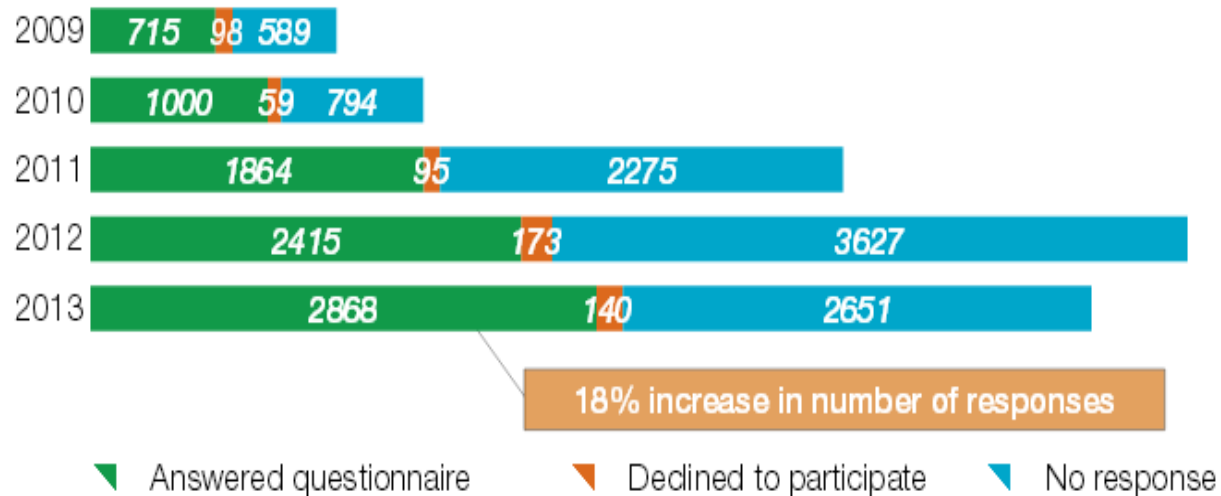
ANALYSIS REPORTING & FEEDBACK

September: Data is made available to members

November: Scores are sent back to suppliers

December: Custom reports, and public report launch.

2014 – Where are we now?



66 Supply Chain members

14 +Water members

>6,500 suppliers invited

>1,300 also +Water

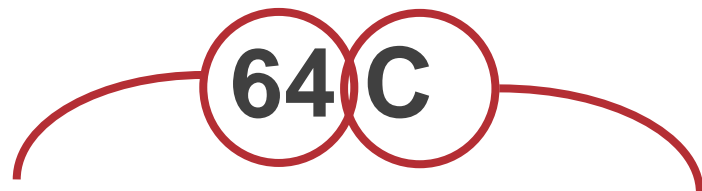
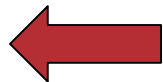
>600 SMEs

75 countries

Supplier support: Scores

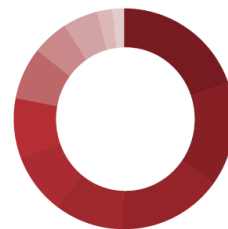
Available on the CDP website

- Questionnaire guidance
- CDP scoring methodology
- Reporting roadmap
- Technical guidance
- FAQ's
- Upcoming webinars
- Tailored score feedback call
- Email support: respond@cdp.net



Disclosure score:

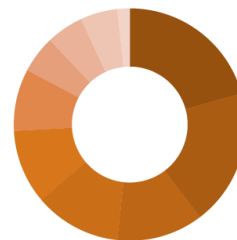
Expressed as a number (out of 100) and reflects the completeness and the quality of the response, and hence its usefulness to data users



20% Scope 1 and 2 emissions data	15% Risks
15% Opportunities	10% Scope 3
9% Scope 1 & 2 verification	9% Targets & Initiatives
8% Energy and emissions trading	5% Emissions performance
5% Strategy	2% Governance

Performance score:

Expressed as a band (A, A-, B, C, D, E) and points are awarded for actions in the reporting year that contribute to climate change mitigation, adaptation and transparency



21% Emissions performance	19% Targets & Initiatives
12% Strategy	12% Scope 1 & 2 verification
10% Governance	9% Scope 3
5% Communications	5% Risks
5% Opportunities	2% Energy and emissions trading

Understanding the Scoring Methodology


1. Responses are scored for both disclosure and performance

Disclosure Score	Performance Score
<ul style="list-style-type: none">Assesses level of detail and comprehensiveness of a responsePercentage; out of 100 (e.g. 87, 62)	<ul style="list-style-type: none">Assesses level of action taken on climate changeLetter band; based on percentage of performance points earned (e.g. A, B, C, D, E)Awarded when at least 50% of disclosure pts earnedNot all questions are scored for performance

2. Each question has a certain number of raw disclosure and performance points associated with it, depending on the route taken. After all questions are scored, disclosure and performance scores are calculated:

- ($\frac{\text{Raw disclosure points earned}}{\text{Raw disclosure points available based on chosen routes}}$) X 100 = Disclosure Score
- ($\frac{\text{Raw performance points earned}}{\text{Raw performance points available based on chosen routes}}$) X 100 = Performance Percentage -> converted to a Letter Band (threshold for Letter Bands set after responses scored)

Members encourage CDP disclosure through a variety of mechanisms



	Policy or Mechanism	% of Members in 2013
Mandate	Industry accepted audit standards	36%
	Contractual obligation	36%
Collaborative	Collaborative platforms	36%
	Supplier training & outreach	50%
	Scorecard	41%
Foundation	Request for proposals	48%
	Supplier self-declaration	43%
	Procurement policy (e.g. code of conduct)	59%

3. Members using the CDP data

CDP Supplier Data Use by Purchasing Companies

Supplier Evaluation

In conjunction with members L'Oreal & Coca-Cola, CDP developed a supplier score card designed to inform meaningful interactions between buyer and vendor.

Delta Air Lines

Disclosure Score	78	Performance Band	C
Emissions Inventory			
Reported Emissions	Scope 1 31,951,708.00	Scope 2 421,004.00	
Verification	Verification or assurance underway but not yet complete - first year it has taken place	Verification or assurance underway but not yet complete - first year it has taken place	
>1 country/region?	Yes	Yes	
Reporting Period	01-01-2011 - 31-12-2011	Emissions Allocated to TCCC?	Yes
Reduction Activities & Targets			
Absolute Targets	0	Reduction Activities*	7
Intensity Targets	1	Supplier Engagement	Yes
		Collaborative Opportunities	No
Required Investment: USD(\$) Annual Monetary Savings: USD(\$) 48,544,948			
For reduction initiatives implemented in current reporting year.			
Target Type	Scope of Target	Base Year	Target Year
Intensity	Scope 1	2010	2011
		%emis. in scope	%reduction from base
		96	3.4
		Base Year Emissions	30,856,830.0
Intensity Metric			
Other: Delta has a 2011 goal, consistent with the industry-wide goal of 1.5% reduction in aircraft fuel consumption per revenue ton-kilometer (RTK) per year. A RTK is a composite unit representing one ton of revenue traffic transported one kilometer. In 2011, Delta's aircraft CO2 emissions constituted 96% of all Scope 1 emissions.			

Price Negotiation “When suppliers ask for price increases due to energy cost, we first turn to their CDP reporting history. We require reporting on energy and climate risk management before granting these increases except in exceptional circumstances.”



Scope 3 Emissions

Many companies are now using supplier-reported emissions data to contribute to their Scope 3 emissions reporting. CDP works closely with World Resources Institute and provides helpful guidance on how to complete this work.

Transparency: Assessing the supply chain's current state of health

KPI	2015
Response Rate	55%
Reporting Scope 1 & 2 Emissions	45%
Have Emissions Target	43%
Reporting Emissions Reduction Activities	30%
# of Collaborative Opportunities Reported	15
% Engaging with their Own Supply Chain	20%
Total Amount of CO2 Reduced Reported	8531
Total Amount of Monetary Savings Reported	\$53,540
Total amount of CO2 specifically associated with member engagement	N/A

Collecting primary information in the first year informs you of the current state of affairs and supplier capacity

“What isn't measured cant be managed”

Member Benefit
Business intelligence on current state of supply chain ✓

Transparency & Reporting – Communicating work publicly



Ford Motors Inc communicate selected key KPIs via their website, based on specific supplier statistics from their CDP custom report

Some Key Findings from Our 2012 Supplier GHG Survey

Of the suppliers responding...

A large majority of suppliers have developed management and governance structures to address climate change.

Nearly **90%** have a person or committee that is directly responsible for managing climate change issues within their company.

Nearly **80%** have integrated climate change management into their overall business strategy.

A large majority of suppliers have active greenhouse gas emissions-reduction programs.

More than **65%** have set greenhouse gas emissions-reduction targets (an increase from 2011), and more than 75 percent have active emissions-reduction initiatives. In general, more Ford suppliers responded that they have set intensity-based targets than absolute targets.

A majority of suppliers track and report on their greenhouse gas emissions.

Members Driving Action – The mechanisms...



1:1 Supplier Meetings

“When suppliers ask for price increases due to energy cost, we first turn to their **CDP reporting history**. We require reporting on energy and climate risk management before granting these increases unless there are exceptional circumstances.”

Supplier Scorecards

Dell's guidelines for suppliers:

- report scope 1 and 2 emissions
- set public goals to reduce operational GHG impacts
- Tier 1 suppliers to establish GHG management and reporting requirements for their suppliers

"Failure to meet these requirements can impact your supplier ranking and potentially **diminish your ability to compete for Dell's business**"



Members Driving Action - ... Tracking progress...



We set a *Healthy Future 2015* goal for all strategic suppliers to publicly report on two or more sustainability goals ... as a participant in the Carbon Disclosure Project's (CDP) Supply Chain program, we encourage suppliers to **measure their energy use and greenhouse gas emissions**, and to **develop and publicly report** on their emissions.



Johnson & Johnson



We'd like to see our **top 100 suppliers reporting an active emissions reduction target and activities to achieve this target** via their CDP disclosure.



Members Driving Action - ... The outcomes



We recognize from our own experience, that working to reduce greenhouse gas emissions can **drive innovation and enable cost savings**....we are asking suppliers to **publicly report their GHG emissions, reduction strategy and actions** to the Carbon Disclosure Project.



Eliminate 20 million metric tons (20 MMT) of greenhouse gas (GHG) emissions from the global supply chain by the end of 2015



4. Collaborative Opportunities

Performance: Engaging suppliers on emissions reductions



"Johnson Controls asked its key suppliers to report their greenhouse gas emissions through the CDP Supply Chain Program and also asked them to reduce their annual emissions associated with their business with Johnson Controls by a 1% absolute."

L'ORÉAL



3. Lightweighting

By reducing the weight of a vehicle's body and components we can make our cars more efficient, while delivering the outstanding performance our customers expect. Lightweighting plays an important role in reducing tailpipe emissions, and brings significant performance benefits for our customers. We want to continue to lead the industry in building lighter and higher quality vehicles efficiently, so that we can make lightweight vehicles as affordable as possible in future years (see case study, page 33).

Investing in aluminium

Engineering Physical Science Research Council on growing UK manufacturing by focusing research on environmental technology.

Recycled materials

Using more aluminium brings significant sustainability benefits when vehicles are driven by our customers, but producing primary aluminium uses large amounts of energy and water, and creates waste. Recycled aluminium, however, uses 95% less energy, causes fewer greenhouse gas emissions, reduces water consumption and produces less waste. We are therefore

through a closed loop system and re-melted into the same grade quality sheet.



Recycling materials in this way reduces the amount of

Collecting information on emissions reductions associated with your request. **SM 2.2b**

Exploring collaborative opportunities to reduce emissions. **SM 2.1**

Encouraging innovation in the supply chain. **SM 2.1**

Member Benefit
Realizing real cost- and emissions-savings in partnership with suppliers ✓

Performance: CDP's Action Exchange

A platform to accelerate the deployment of profitable solutions to climate change

- Identify emissions reduction opportunities and cost savings potential for key suppliers
- Connect suppliers with technology and solutions providers

Member Benefit ✓
Address common barriers to investing in emissions reduction activities

▼ In 2013, **84%** of members reported monetary savings from emissions reduction activities, compared to **31%** of their suppliers.

▼ **\$11.5 billion** was saved as a result of the emissions reduction activities reported by this **31%**.

Bank of America



PHILIPS

L'ORÉAL



vodafone



PEPSICO

Walmart



Pilot Action
Exchange
members

Questions?



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