



An Introduction to Carbon Accounting & Reporting using SmartWay Data

**US Environmental Protection Agency
and Carbon Disclosure Project**

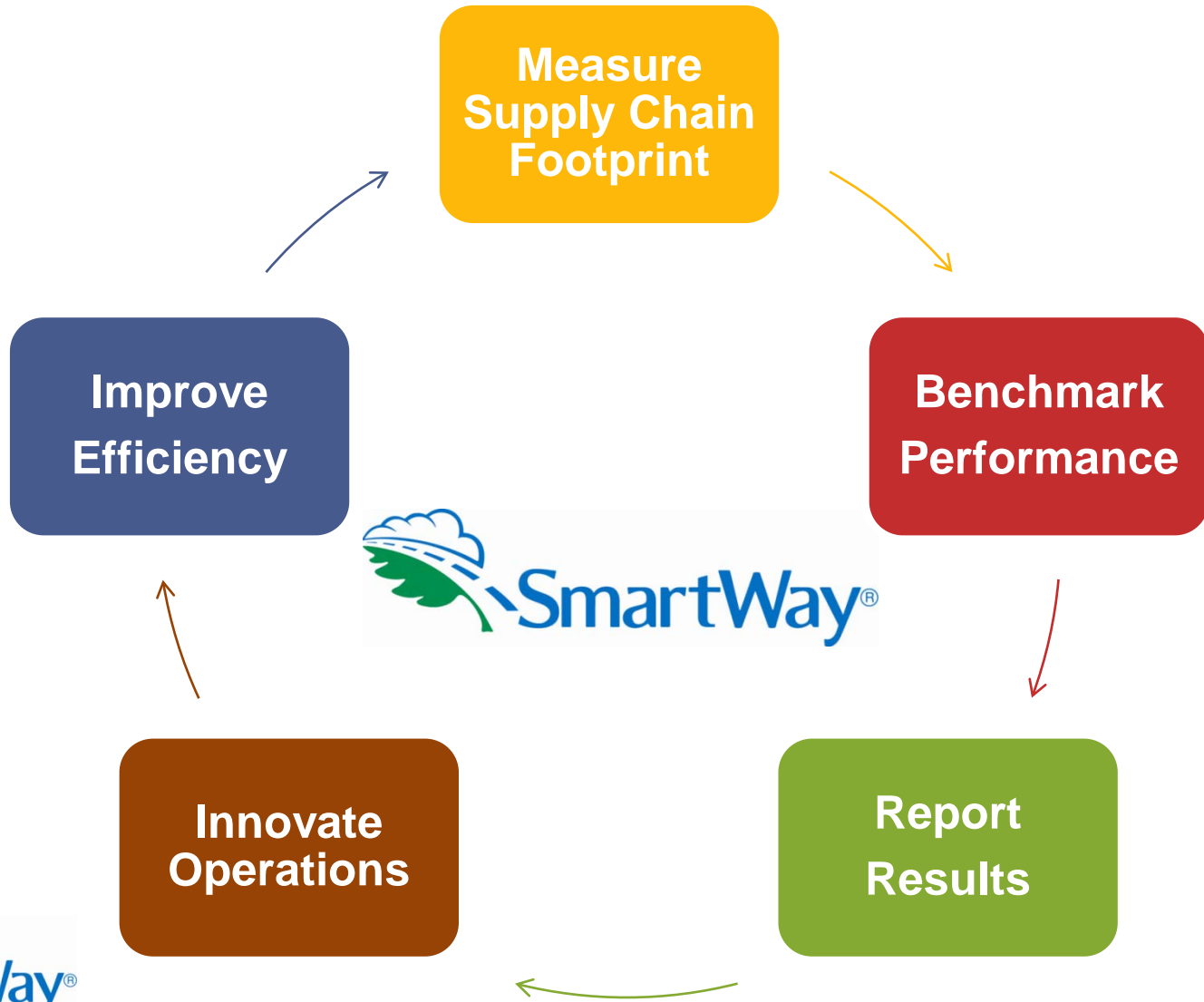
September 17, 2014



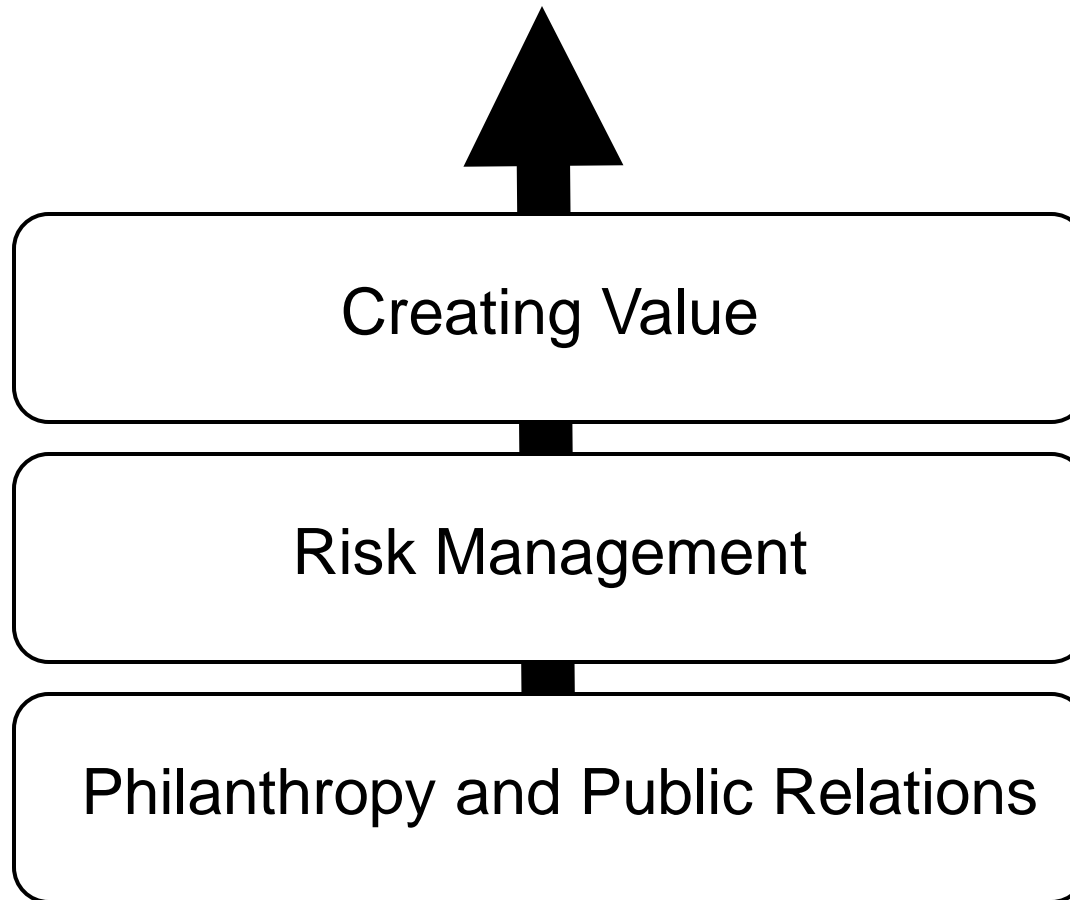
Introductions

- Buddy Polovick, EPA SmartWay Team Lead
- Ashlyn Gurley, EPA SmartWay ORISE Fellow
- Christina Copeland, CDP Disclosure Services
- Kate Broderick, CDP Disclosure Services

How to Address Supply Chain Carbon



Continuum of CSR Engagement



Carbon Disclosure and Transparency

Shareholder Resolutions Spur U.S. Companies to Act on Sustainability During 2012 Proxy Season



110 Shareholder Resolutions Related to Climate Change and Fossil Fuel Use Yield Strong Results During 2013 Proxy Season

Investors win company commitments to address flaring and fracking; carbon bubble and methane emission resolutions win strong support

Key stats and ratios

	Q2 (Jun '14)	2013
Net profit margin	0.72%	3.43%
Operating margin	-1.19%	3.16%
EBITD margin	-	8.11%
Return on average assets	0.65%	3.38%
Return on average equity	1.95%	11.54%
Employees	219,000	-
CDP Score	-	100 A-

“Used to have a difficult time finding data, now **wading** through data...however we do often check SmartWay membership and data to determine supply chain sustainability.”

Disclosure Standards



DRIVING SUSTAINABLE ECONOMIES



**Global
Reporting
Initiative™**

Using SmartWay data for CDP reporting

14.1

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Purchased goods and services					
Capital goods					
Fuel-and-energy-related activities (not included in Scope 1 or 2)					
Upstream transportation and distribution	Relevant, calculated	676096	2010 US EPA Smartway Program Partnership methodology		
Upstream transportation and distribution	Relevant, calculated	274962	This data includes: 1) 50% of our North America EPA SmartWay Transport Partner emissions, provided by that regulator, and allocated by us for inbound North America truck, van and intermodal transport modes and corrected to include 9% of our North America miles driven by non-SmartWay carriers. EPA-specific emissions factors provided by the EPA include 1730 g CO2/mile for trucks, 1,706 g CO2/mile for intermodal, and 2,007 g CO2/mile for vans. 2) 100% of inbound truck, intermodal, and sea transport, using the above EPA-specific emissions factors for truck and intermodal transport and an EPA emissions factor of 549 g CO2/mile for sea transport.	100%	Each year EPA models our NA emissions based on carrier-provided fuel efficiency data and miles driven data to model our NA emissions. EPA-specific emissions factors for NA logistics and distribution network are applied to transport data provided by the regional Director of Transportation for that region.

Introduction to CDP Disclosure

September 17, 2014

CDP North America

- ▼ Introduction to CDP
- ▼ Why Disclose?
- ▼ CDP Programs
- ▼ Climate Questionnaire Overview
- ▼ Resources and Getting Started

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CDP 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.



▼ 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.

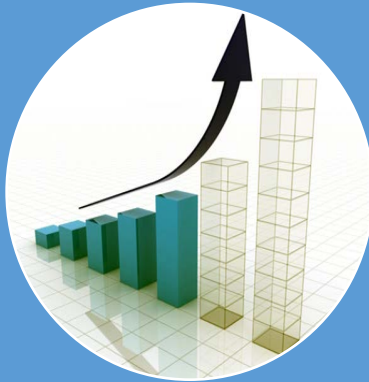
CDP has 501(c)3 charitable status in the U.S.

▼ CLIMATE CHANGE

▼ WATER

▼ FORESTS

Why Disclose?



Disclosure
process
improves
performance



Benchmarking
accelerates
learning



Data informs
investment and
procurement
analysis and
engagement

Why Disclose?



**CDP is to the future of business
what the X-ray was to the then-
future of medicine — without it,
we would never have seen the
insides of the patient's health.**

Christiana Figueres

Executive Secretary of the UN
Framework Convention on Climate
Change (UNFCCC)

How CDP Works

Signatory Investors and
Corporate Purchasers

How CDP Works

Signatory Investors and
Corporate Purchasers

Environmental Information and Data

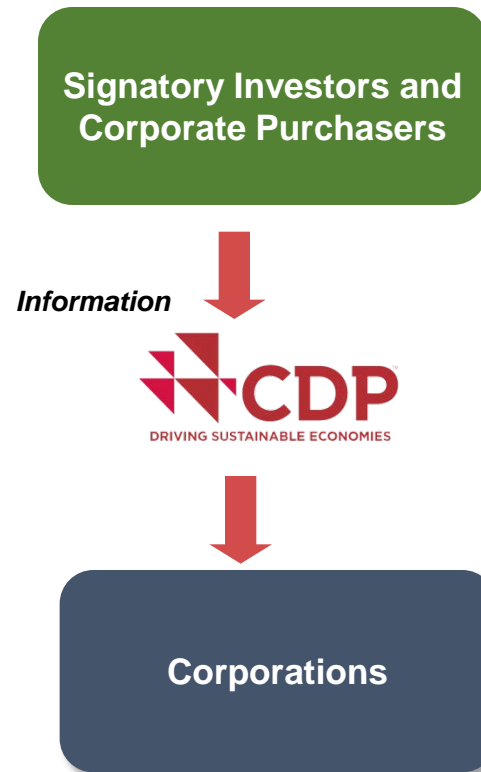


Corporations

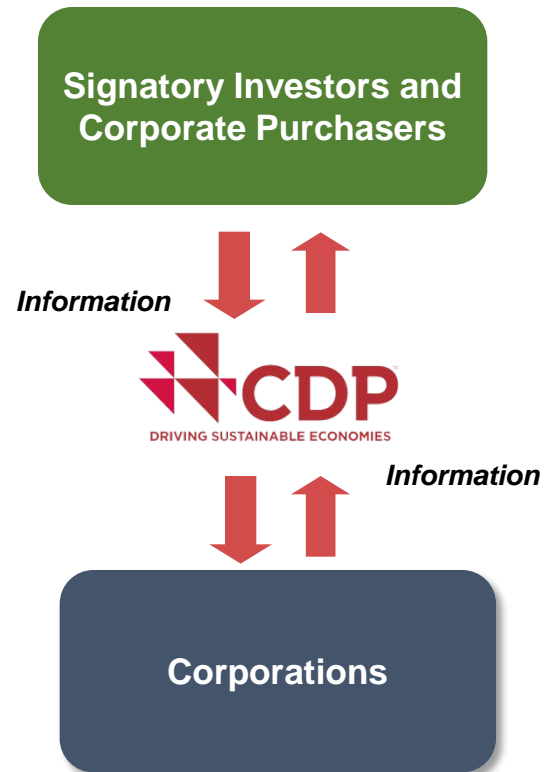
How CDP Works



How CDP Works



How CDP Works



How CDP Works

CDP Investor Program

How CDP Works

CDP Investor Program



How CDP Works

CDP Investor Program



CDP Supply Chain Program

How CDP Works

CDP Investor Program



CDP Supply Chain Program



How CDP Works

CDP Investor Program



CDP Supply Chain Program



How CDP Works

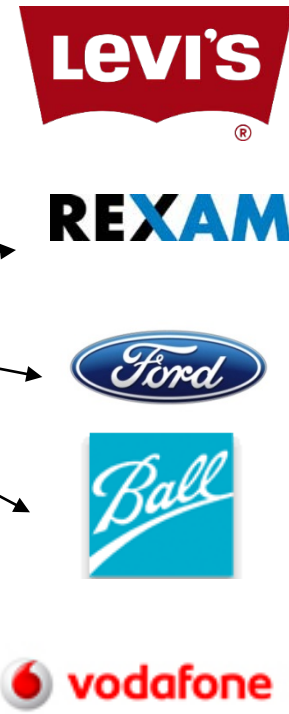
CDP Investor Program



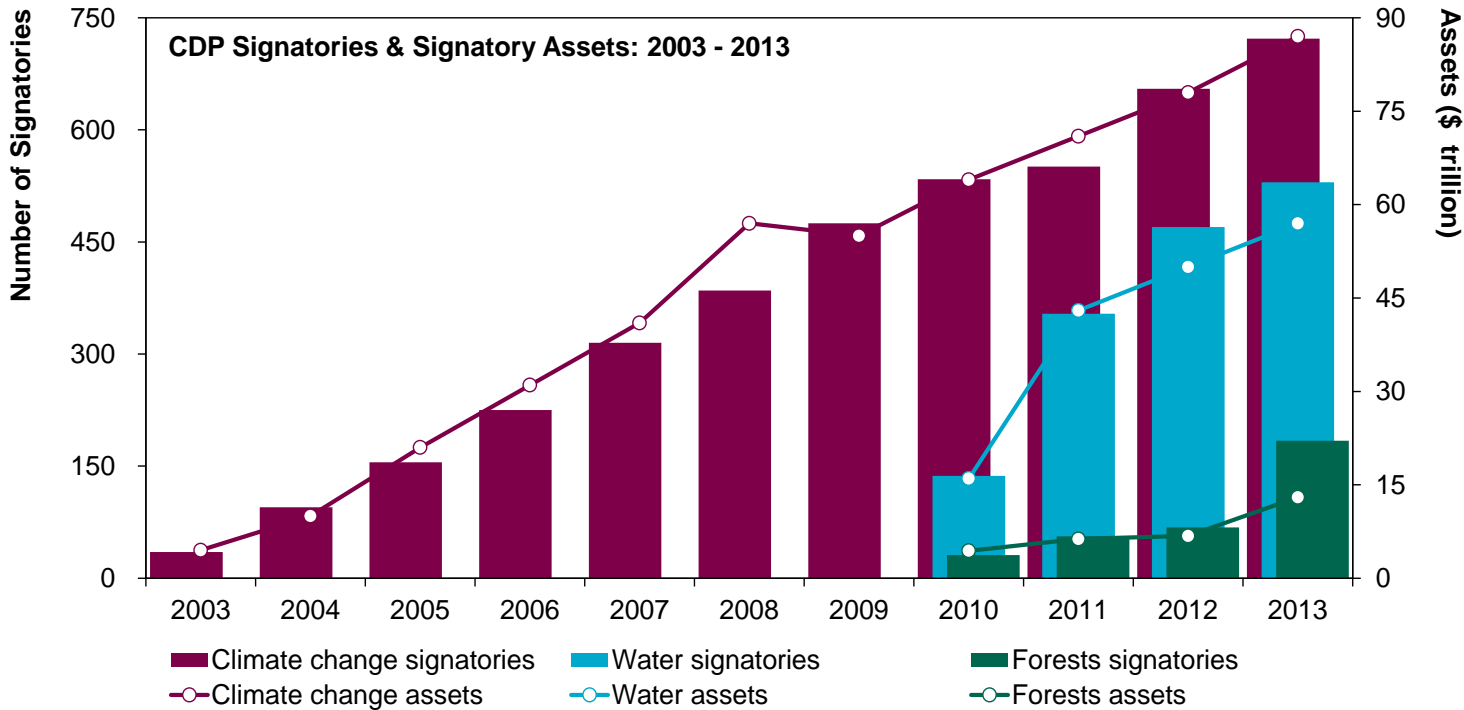
CDP Supply Chain Program



One response per company regardless of number of requests



Investor Interest



Climate change
4100+
Companies reporting via CDP

Water
590+
Companies reporting via CDP

Forests
100
Companies reporting via FFD

Corporate Purchaser Interest

REXAM

“In 2011, 50% of our major suppliers signed up to the CDP, and our target is to increase our **supplier response rate to 80% by 2015**”.

acer

Asking suppliers to set a intensity target of 5% for suppliers Scope1 & 2

Walmart 

Walmart plans to eliminate **20 million metric tons** of greenhouse gas emissions from their global supply chain by the end of 2015

CDP Data Use

Index **RRRR**

BHP AU Equity		Carbon Emissions Disclosure - CED	
BHP BILLITON LTD		Reporting Year: 20	
Total Global Emissions (Metric Tons)		Intensity (Metric Tons/Million US\$)	
Scope 1 Activity Emissions Globally	21,394,070	Scope 1/Sales	520
Scope 1 Activity Emissions Annex B	13,912,390	Scope 1/EBITDA	1,010
Scope 2 Activity Emissions Globally	30,626,090	Scope 2/EBITDA	1,450
Scope 2 Activity Emissions Annex B	4,058,350	Emissions by Country (Metric Tons)	
Emissions from Disposal of Services	329,993,000	<input checked="" type="radio"/> Scope 1 <input type="radio"/> Scope 2	
Emissions from Distribution/Logistics	N.A.	Australia	12,565,660
Emissions from Employee Business Travel	172,450	South Africa	4,544,870
Company Supply Chain	N.A.	USA	1,162,430
Electricity Purchases (Megawatt Hours)		Mozambique	933,480
Global Electricity Use	33,973,690	Colombia	668,160
Global Electricity Use Annex B	5,039,900	Chile	431,740
Electricity from Renewables	1,717,300	EU Emissions Trading (Metric Tons)	
Electricity from Renewables - Annex B	735,020	Year ↓	Allowance
Total Costs of Energy Consumption (US\$)*	2,570	2005	306,165
% of Total Operating Costs	18	2005	306,165
% Energy Costs from Renewables	3	2006	415,652
		2006	415,652
		2007	415,652
		2007	323,020
Metric Ton is in CO2 Equivalent		* In Millions	
<small> Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2008 Bloomberg Finance L.P. 6516-983-2 19-Sep-2008 18:35:30 </small>			

CDP Data Use

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13,912,390	1,010
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12,565,660	1,450
Scope 2 Activity Emissions from Direct	
4,544,870	
Scope 2 Activity Emissions from Indirect	
1,162,430	
Scope 2 Activity Emissions from Purchased	
933,480	
Scope 2 Activity Emissions from Company Supply Chain	
668,160	
Scope 2 Activity Emissions from Electricity Purchases	
431,740	
Scope 2 Activity Emissions from Global Electricity Use	
333,193	
Scope 2 Activity Emissions from Global Electricity Use	
333,193	
Scope 2 Activity Emissions from Electricity from Renewable	
333,193	
Scope 2 Activity Emissions from Electricity from Renewable	
333,193	
Scope 2 Activity Emissions from Total Costs of Energy	
333,193	
Scope 2 Activity Emissions from % of Total Operating Costs	
333,193	
Scope 2 Activity Emissions from % Energy Costs from Renewables	
333,193	

Metric Ton is in CO2 Equivalent * In Millions

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2008 Bloomberg Finance L.P. 6516-983-2 19-Sep-2008 18:35:30

Over 7.5 million downloads of 15 key CDP data fields in the last year



*“The CDP reporting framework has helped us both as a respondent and a signatory, to improve our understanding of the strategic risks and opportunities in this area.” – **HSBC***

“Analysis on a comparable basis is vital to assess a company’s management of ESG issues. CDP is a valuable tool for analysis of climate change related aspects of environmental performance.”

*– **Goldman Sachs***



Climate Change Information Request



2014 Climate Change Questionnaire



2014 Climate Change Questionnaire

- ▼ 14 questions
- ▼ Qualitative & quantitative
- ▼ Main areas:
 - 1) Management
 - 2) Risks & opportunities
 - 3) Emissions & energy reporting

Example: Management

▼ Is climate change integrated into your business strategy?*

- ✓ Yes: please describe
- ✓ No: please explain

* Both responses can earn full credit for disclosure

2014 Climate Change Questionnaire

▼ 14 questions

▼ Qualitative & quantitative

▼ Main areas:

1) Management

2) Risks & opportunities

3) Emissions & energy reporting

Example: Risks & Opportunities

▼ Have you identified any climate change risks that have the potential to generate a substantive change in operations, revenue or expenditure?*

✓ Yes: regulatory, physical, other

✓ No: please explain

* Both responses can earn full credit for disclosure

2014 Climate Change Questionnaire

- ▼ 14 questions
- ▼ Qualitative & quantitative
- ▼ Main areas:

- 1) Management
- 2) Risks & opportunities
- 3) Emissions & energy reporting

Example: Emissions & energy reporting

▼ Please state how much fuel, electricity, heat, steam and cooling in MWh your organization has purchased and consumed during the reporting year.*

Energy Type	MWh
Fuel	
Electricity	
Heat	
Steam	
Cooling	

*All numeric responses can earn full credit for disclosure

Common Concerns



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▼ CITIES

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Guidance on responding

Scoring information

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Guidance on responding

Climate change guidance document
Using the Online Response System (ORS)
Guidance for first time responders
Climate change reporting roadmap
Company Guidance on Carbon Action
Climate change drafting document
Changes document for 2015
Responding tips

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Responding tips

Scoring information

2015 scoring methodology

Introduction to climate change scoring (webinar)

Understanding the scoring methodology (webinar)

Transparent Methodology

▼ Example: Did you have an emissions reduction target that was active in the reporting year?

Number	Question	Disclosure Score		Disclosure scoring criteria
		Numerator	Denominator	
	CC3.1 "Absolute target" route			
CC3.1	Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?	1	1	Drop-down menu option: Absolute target
CC3.1a	Please provide details of your absolute target			2 The following columns must all be completed to score 1.5 points : i) scope ii) % reduction from base year iii) base year iv) base year emissions v) target year If "% of emissions in scope" is given in the same row, an extra 0.5 point is scored.

Transparent Methodology

- Example: Did you have an emissions reduction target that was active in the reporting year?
- Routes: absolute, intensity, both, none (all eligible for full disclosure points)

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Route

Disclosure points available for route (denominator)

Transparent Methodology

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Route

Disclosure points available for route (denominator)

Criteria that determines amount of disclosure points earned (numerator)

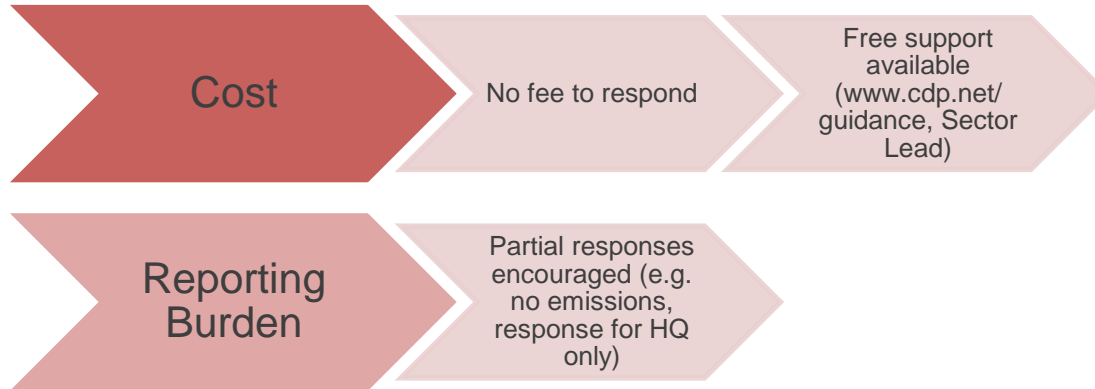
Common Concerns



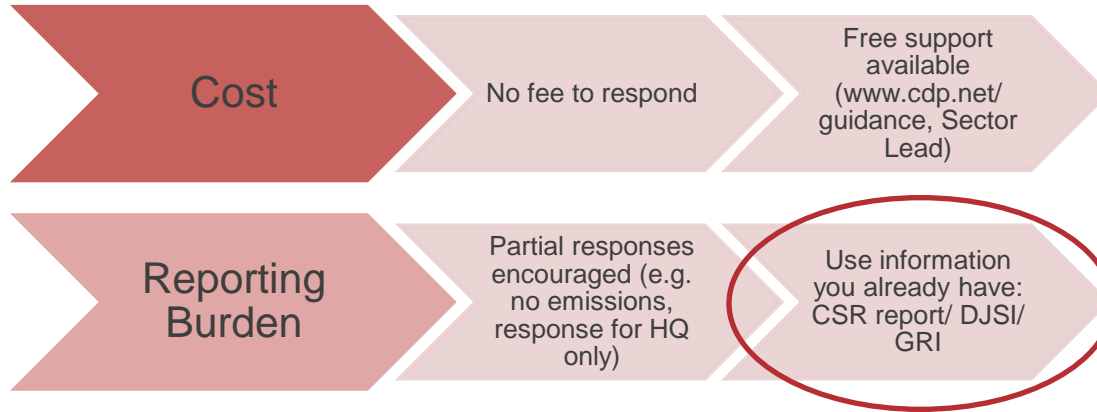
Common Concerns



Common Concerns



Common Concerns

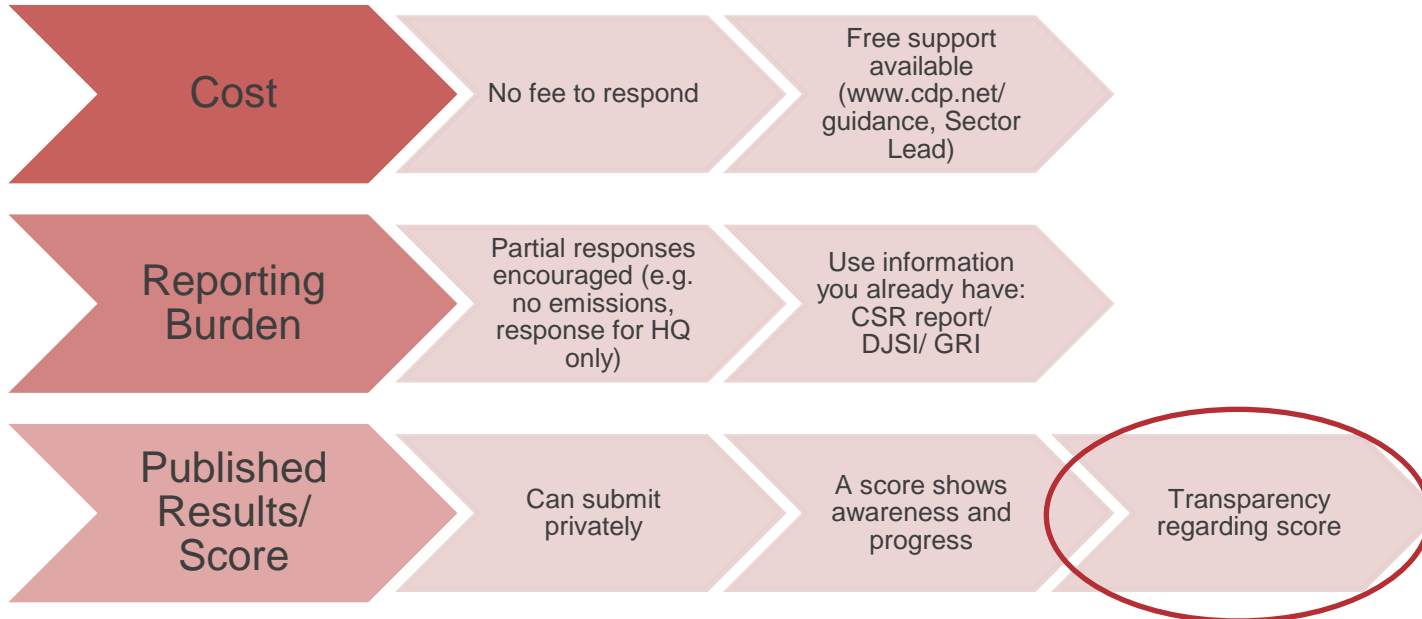


▼ GRI includes CDP climate change questions in its GRI G4 Sustainability Reporting Guidelines

Dow Jones Sustainability Indexes
In Collaboration With RobecoSAM

▼ DJSI has incorporated 7 CDP climate change questions into its request

Common Concerns



Key Dates



Summary and Next Steps

- ▼ Review the CDP website (www.cdp.net)
 - ▼ www.cdp.net/guidance
 - ▼ www.cdp.net/US
- ▼ For further questions, or if you're interested in responding in 2015, email respond@cdp.net and cc Christina.Copeland@cdp.net





Thank You

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