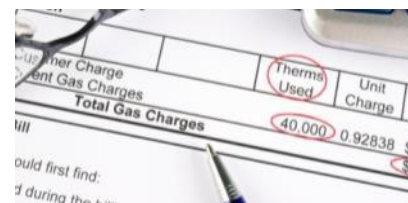


ENERGY PRODUCTIVITY INDEX FOR COMPANIES

2016 Australia Summer Study

24 February 2016





The Energy Productivity Index for Companies provides investors with tools to engage with industrial companies, around energy productivity

- Energy productivity is **a cost effective** way to decarbonise portfolios
- Evidence of **2-8x** spread in energy productivity
- **+2% to +10%** p.a. EBIT potential for underperforming companies
- Improvement needed in **data disclosure**
- **New benchmark tool** can support engagement



Investors are progressing from measuring and understanding climate related risks to taking action to reduce those risks in their portfolios

 **PRI** Montréal **PLEDGE**



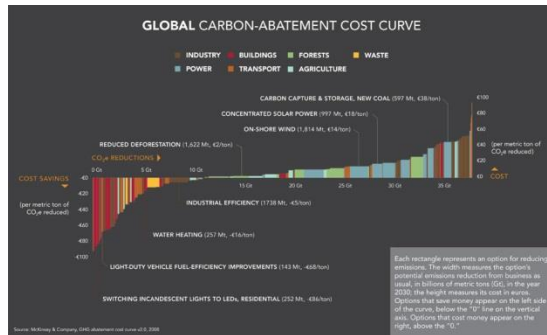
**GLOBAL INVESTOR STATEMENT
ON CLIMATE CHANGE**



The project is a partnership between the ClimateWorks Foundation and ClimateWorks Australia, with strong support from investor groups



Real-world,
practical solutions



Positive messages,
through influential
actors



To influence policy
& catalyse
business action



CalSTRs is lead investor for the project

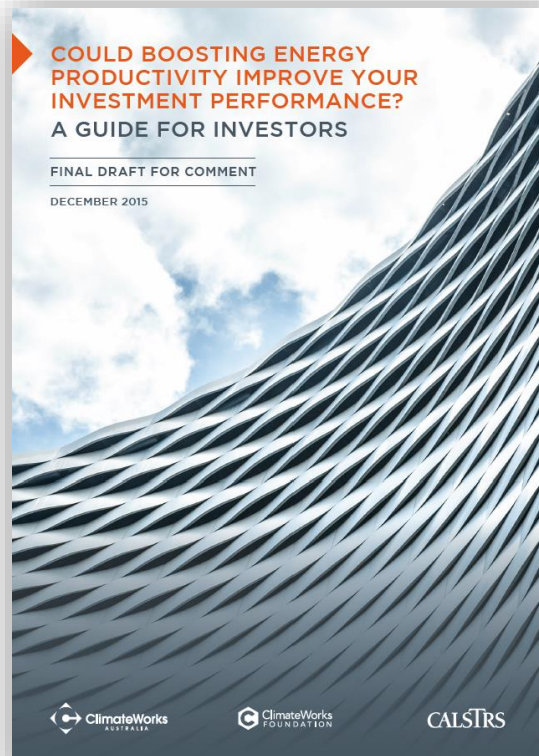


Investors groups are participating to our Steering Committee and will help us disseminate results



Following a consultation period, we are currently finalising the following deliverables in anticipation of final launch in March

Guide for investors



Sector summaries



AIRLINES



AUTOMOBILES



PAPER



STEEL



CHEMICALS



CONSTRUCTION MATERIALS



For over 70% of companies assessed, analysis indicated profitable opportunities to improve energy productivity and reduce emissions

Results for 71 companies analysed, 2013 and 2014



For **1** unit
of energy used

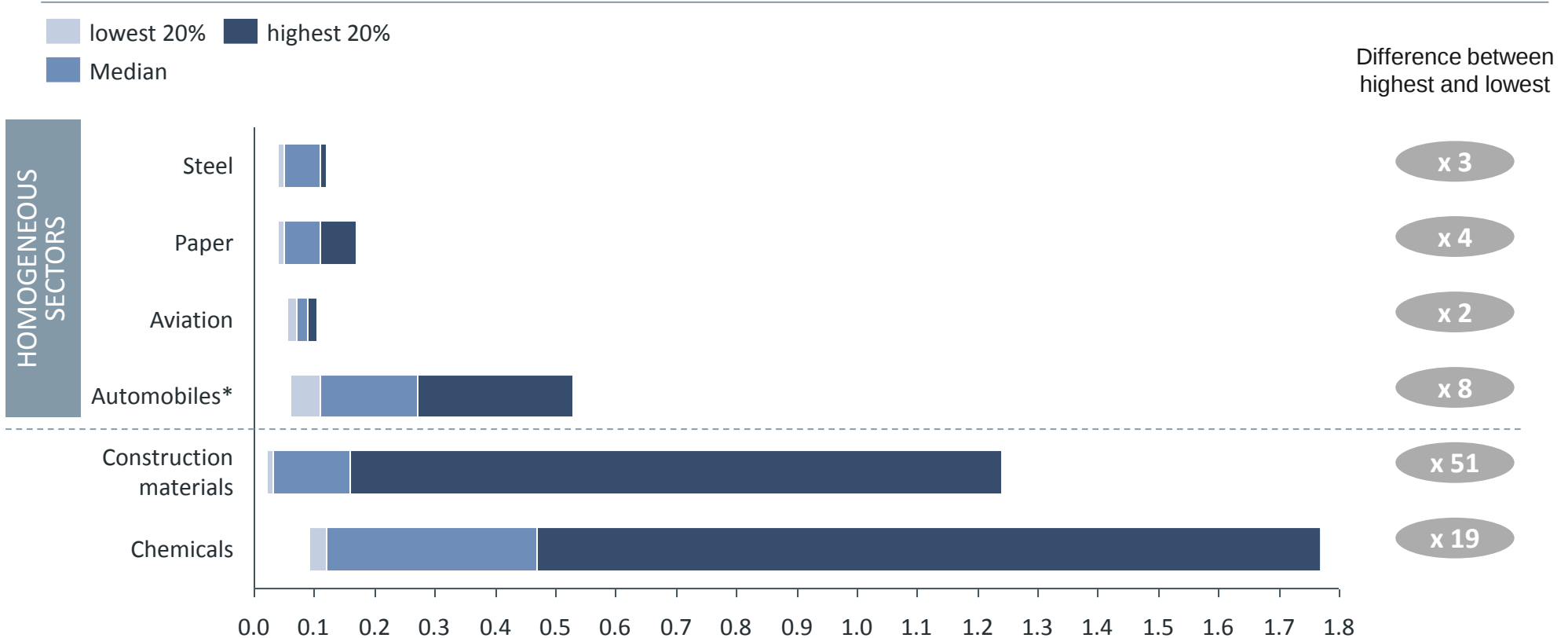
\$900m saved

7 MtCO₂e abated



Leading companies in each sector can produce the same output as their competitors with 2 to 8 times less energy input

Distribution in energy productivity, \$ revenue per GJ energy use, Latest values

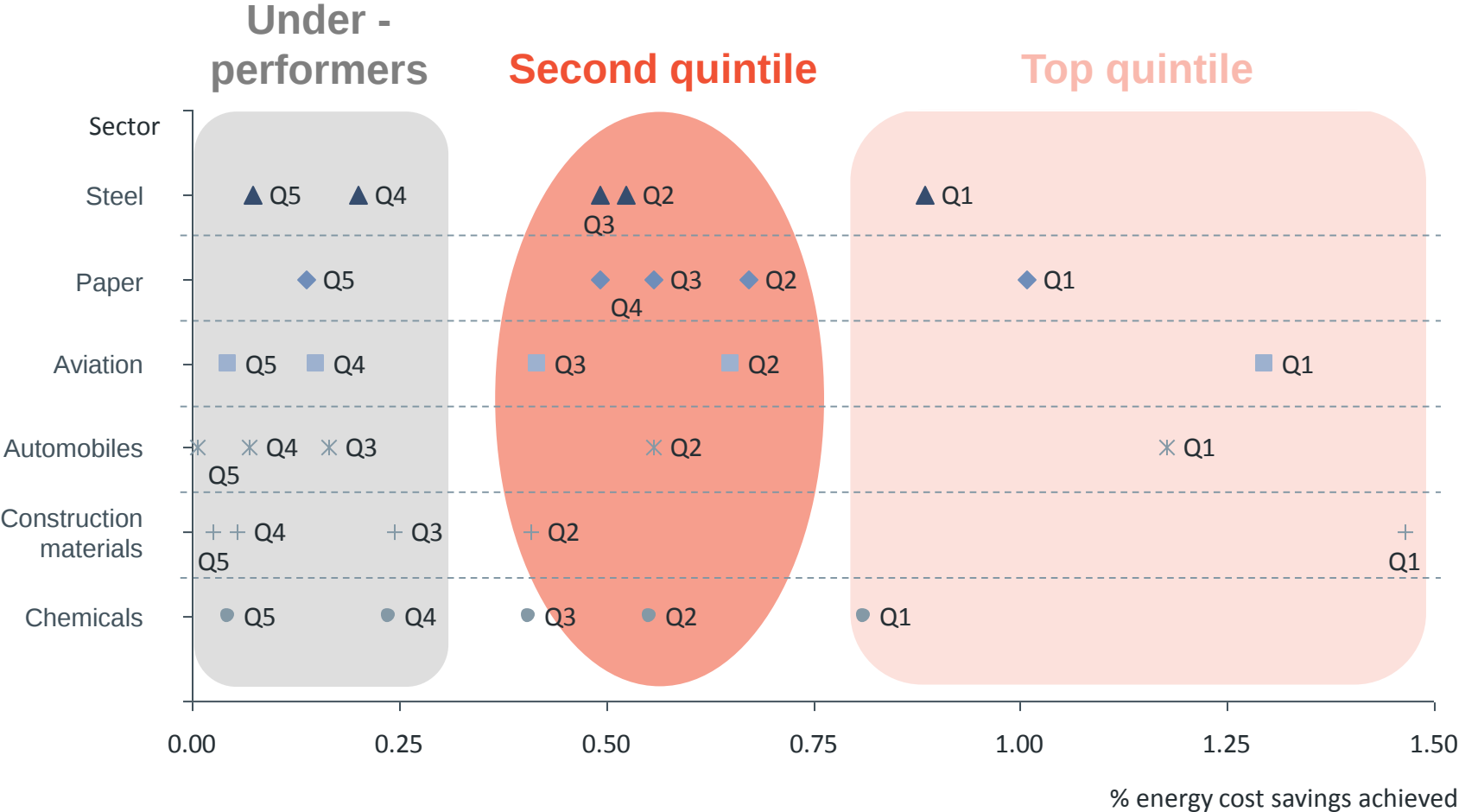


*Automobiles is expressed in units produced per GJ energy use to be of comparable magnitude with other sectors



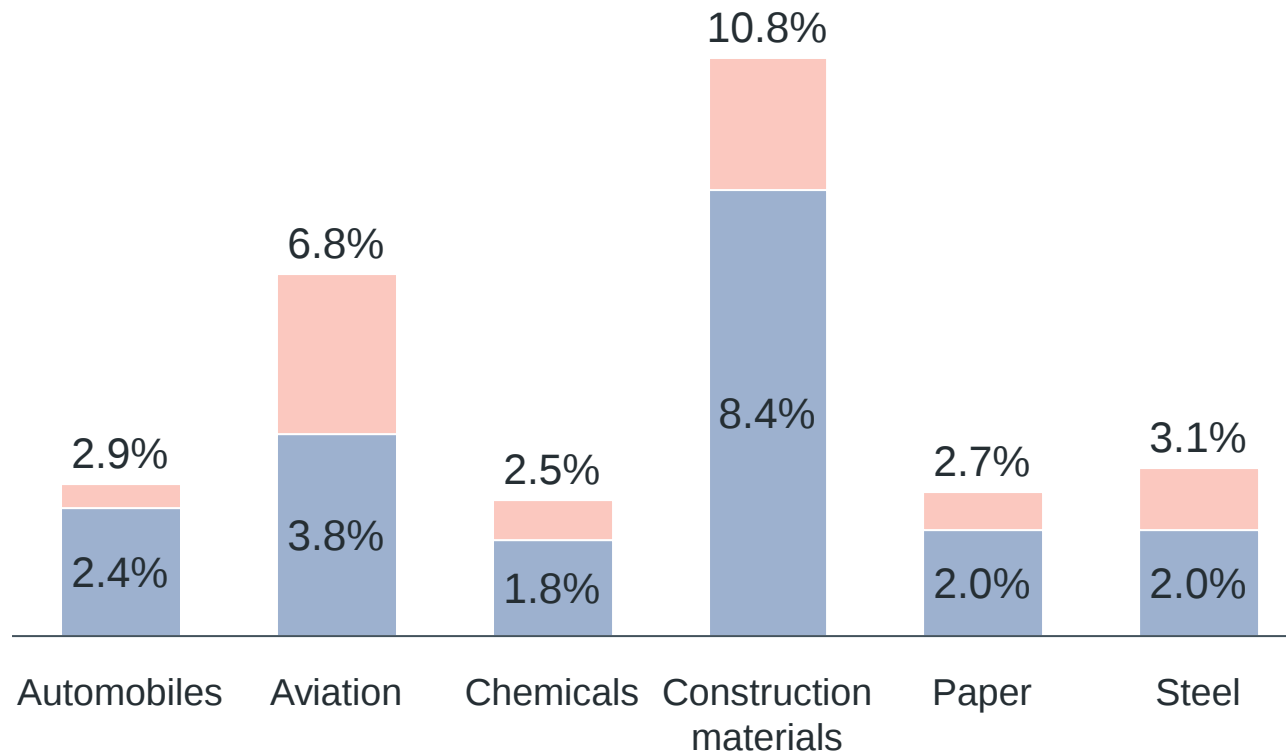


We found that leaders consistently report greater savings than the rest of the sector



Companies stand to gain between 2% and 10% growth in annual profits from each year of energy efficiency improvements in line with their best performing peers

% EBIT uplift per annum if lagging companies match top quintile (20%)
(50% companies with highest increase)



Gross savings
+ 2 to 10% p.a.

Net savings
+ 2 to 8% p.a.



We developed six sector indices which identify portfolio companies and recommended actions for each

Company	General Rating	Energy cost resilience	Energy productivity outcome	Energy efficiency performance
 Air New Zealand	74%		40% 	100% 
 Finnair	72%		0% 	77% 
 United Continental Holdings	65%		29% 	60% 
 Air France - KLM	61%		9% 	85% 
 Korean Air	52%		8% 	16% 
 Southwest Airlines Co.	49%		50% 	37% 
 Air Canada	32%		32% 	72% 
 British Airways	27%		36% 	32% 
 Qantas Airways Ltd	22%		0% 	64% 
 Delta Air Lines	19%		29% 	10% 
 Cathay Pacific Airways Limited	13%		14% 	30% 
 American Airlines Group Inc	13%		44% 	0% 
 7 companies	8%	Incomplete/insufficient data provided to CDP to conduct analysis (Aer Lingus Group PLC, Asiana Airlines, easyJet, Gol Linhas Aereas Inteligentes S.A., TAM S.A., Virgin Australia Holdings, WestJet Airlines Ltd.).		
 Non reporters	0%	All other companies did not respond to CDP		
5 companies	N/A	Reviewed but excluded from analysis (Air Partner Plc, Hong Kong Aircraft Engineering, IBERIA, International Consolidated Airlines Group, S.A., SAS).		

Satisfactory data

-  Positive results; could discuss potential to optimize
-  Request clarification of results and discuss potential to improve

Insufficient data

-   Results provisional due to data uncertainty. Request additional data to confirm rating
-  Data provided is insufficient to conduct analysis; require more information

Not included in analysis

-  Out of scope

Company performance against each metric is also provided to help support discussions with companies

Performance against each metric

[Data is 2013-14 values unless otherwise specified]

Company	Weights (%)	Energy cost resilience		Energy productivity outcome		Energy efficiency performance			Additional information
		10%	10%	20%	15%	15%	15%	15%	
		Energy cost range, % opex	Profitability, EBIT/Revenue	Energy productivity, \$000 Revenue/GJ	Energy productivity, Average annual % change (earliest to latest)	Savings per year, % est. energy cost	Potential financial uplift (% EBIT) if reach top quintile	Potential financial uplift (% EBIT) if reach second quintile	
Air New Zealand	74%	25-30%	7.3%	0.10	7.1%	0.55%	2.6%	0.3%	0.6%
\$ Finnair	72%	30-35%	-0.5%	0.09	-0.4%	1.61%	0.0%	0.0%	2.5%
United Continental Holdings	65%	NR	5.7%	0.08	5.3%	0.75%	2.5%	0.0%	1.3%
Air France - KLM	61%	40-45%	1.7%	0.08	7.6%	1.07%	6.0%	0.0%	2.0%
Korean Air	52%	NR	1.6%	0.06	-1.3%	1.52%	0.0%	0.0%	1.6%
Southwest Airlines Co.	49%	35-40%	10.2%	0.07	2.8%	0.45%	2.8%	0.7%	0.5%
Air Canada	32%	25-30%	5.6%	0.09	-1.5%	0.07%	5.7%	2.7%	0.4%
British Airways	27%	30-35%	7.3%	0.07	0.2%	0.23%	4.4%	1.8%	0.2%
Qantas Airways Ltd	22%	30-35%	-3.1%	0.08	3.8%	0.07%	-13.3%	-6.3%	0.1%
Delta Air Lines	19%	35-40%	5.7%	0.07	-4.0%	0.39%	5.7%	1.7%	0.5%
Cathay Pacific Airways Limited	13%	35-40%	2.8%	0.06	2.1%	0.00%	12.0%	6.0%	0.0%
American Airlines Group Inc	13%	30-35%	8.8%	0.07	ID	0.06%	4.2%	2.0%	0.2%

Performance legend

	High > 75%	> 50%	> 25%	Low < 25%
Energy cost resilience				
Energy productivity outcome				
Energy efficiency performance				

Low quality/uncertain data

Uncertain data	1.61%
Not Reported	NR
Insufficient Data	ID



We provide example questions investors can take to companies' boards, with some information to support discussions

1. Clarify current performance

- a) Are you reporting on energy-related issues comprehensively and accurately in public reports?
- b) How do your current efforts to improve energy efficiency and energy productivity compare with your peers?

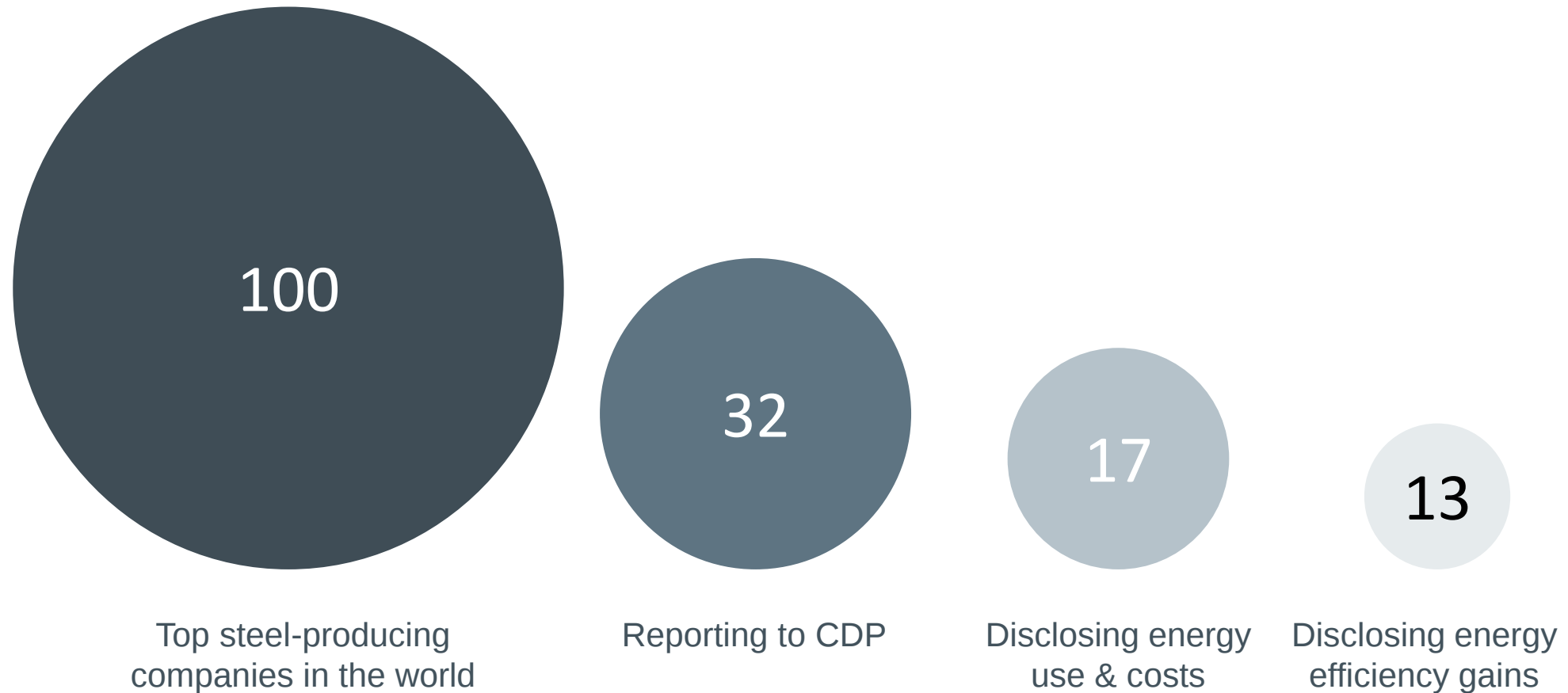
2. Discuss how performance can be improved in the future

- a) Are your future plans to improve energy efficiency and energy productivity ambitious enough?
- b) What processes do you have in place to ensure your plans are implemented effectively?



Company information on energy productivity and energy efficiency is both scarce and in need of greater transparency

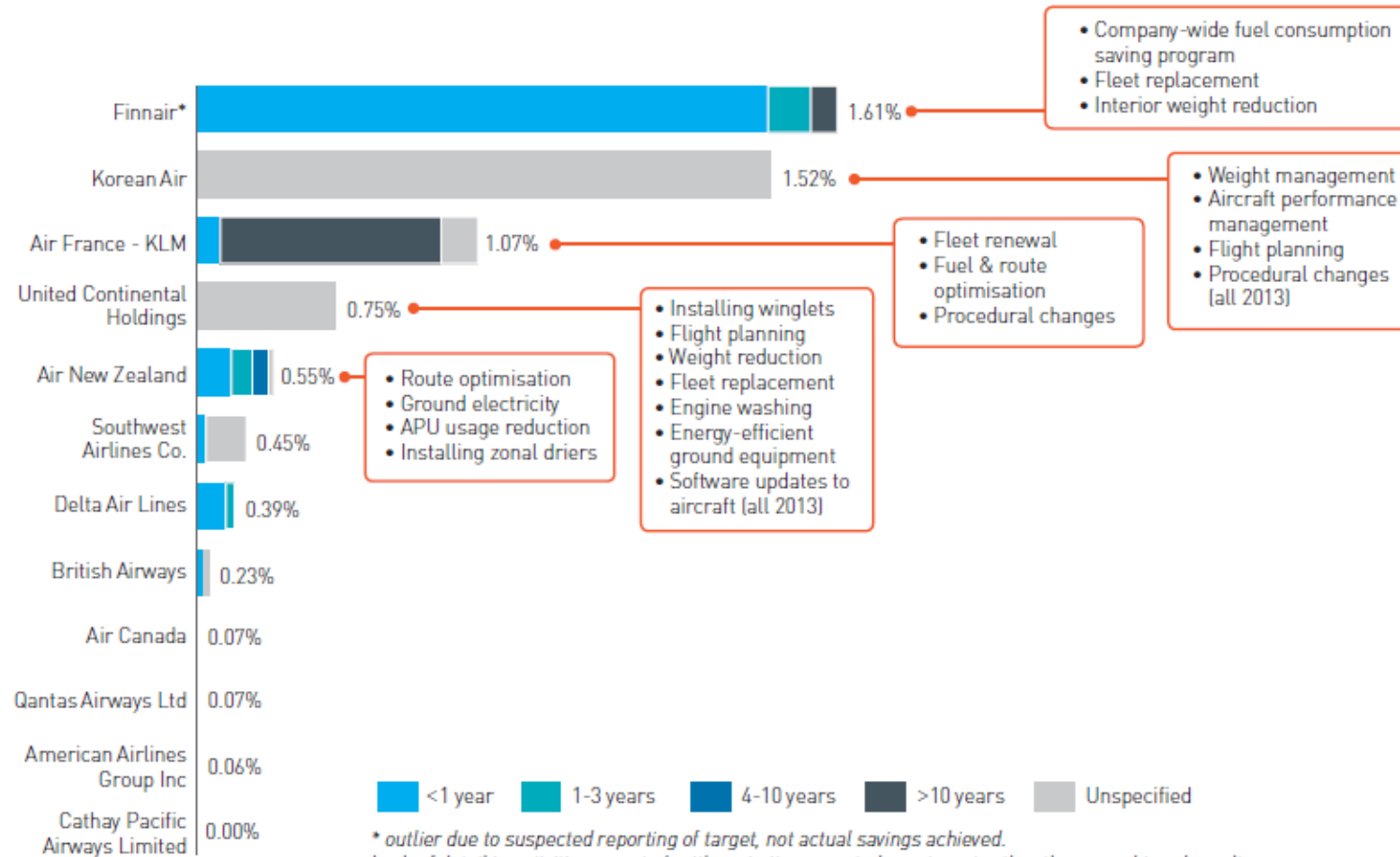
Example of Steel sector



An overview of energy efficiency activities that have been implemented by leaders in a sector are shown to support discussions of current efforts

Energy savings shown as a percentage of energy cost

Energy efficiency improvements by airlines detailed in orange boxes



* outlier due to suspected reporting of target, not actual savings achieved.

Lack of detail in activities reported, with majority presented as a target rather than an achieved result. As a result, the savings were not included in the best practice averages for the sector.





Energy management best practices that companies can consider to improve performance are provided

- Setting ambitious goals and targets
- Collecting and managing energy data
- Driving from the top
- Establishing a supportive culture
- Valuing energy efficiency projects





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FOR FURTHER INFORMATION:

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