



# REPORT: ET EUROPE 300 2011 CARBON RANKINGS

**Environmental Investment Organisation**

Where the needs of the future meet the practicalities of the present



# EI



## WHO WE ARE

# ENVIRONMENTAL INVESTMENT ORGANISATION

An independent non-profit research organisation  
promoting ecological investment systems

## WHAT WE DO

# ENVIRONMENTAL TRACKING

### ET Carbon Rankings

creating public pressure through the “spotlight effect”

### ET Index Series

creating share price incentive through supply & demand pressure

## WHY WE DO IT

designed specifically to **reduce**  
global corporate **Greenhouse Gas**



The Environmental Investment Organisation (EIO) is an independent non-profit body that seeks to improve the environmental 'output' of the financial system. In recent years this mandate has been focused almost entirely on the need to tackle the climate crisis.



ET Europe 300 Carbon Rankings 2011 Report

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## Foreword

Dear Reader,

Welcome to the ET Europe 300 Carbon Ranking Report.

Before going into the detail of the report, I would like to highlight a quote from a recent Royal Society paper, authored by Kevin Anderson and Alice Bows, entitled “Beyond ‘dangerous’ climate change: emission scenarios for a new world”, as part of the theme series “Four degrees and beyond”, highlighting the latest scientific views on the current climate trajectory:

“The analysis suggests that despite high-level statements to the contrary, there is now little to no chance of maintaining the global mean surface temperature at or below 2°C. Moreover, the impacts associated with 2°C have been revised upwards, sufficiently so that 2°C now more appropriately represents the threshold between ‘dangerous’ and ‘extremely dangerous’ climate change.”

Given that not only limiting the global increase in temperatures to 2°C is now very unlikely, but moreover that the impacts of even this level of increase are now more serious than originally conceived, the global chasm between public policy, public understanding, corporate behaviour and scientific reality is extraordinary and profound.

The need for a practical mechanism to work quickly, circumventing the aforementioned log jam is immense.

Enter the ET Carbon Ranking and its logical offshoot: the ET Index Series.

As companies improve their reporting and achieve cuts in emissions intensity, they will be rewarded with higher positions in the Rankings and correspondingly place pressure on other companies to maintain progress. Ultimately, through the index mechanism, share price pressure will result in a new incentive to cut emissions.

The enormous gap between serious scientific estimates as to where we are heading in terms of a climate calamity and the response of policy makers everywhere, highlight the need for accurate corporate emissions reporting, which is the only logical basis for establishing actual emissions reduction strategies, or even statements of emission reduction. Yet even amongst those companies providing verified data (43%), serious questions remain about the validity of existing assurance procedures.

For example, many companies producing third party “Verified” figures fail to meet the EIO's simple requirement for providing clearly defined Scope 1 and 2 figures. If companies cannot meet this minimum requirement, how many will be able to successfully implement the new GHG Scope 3 standard, which the EIO wishes to see urgently integrated into company reporting?

The fact is that neither the GRI Reporting Initiative, nor the efforts of the Carbon Disclosure Project, nor any other existing initiative, is creating enough pressure on corporate behaviour to solve this problem.

The EIO's view is that the time for debating this issue is long past. We need accurate and public data in order to create our Rankings and the current reporting regimes do not provide this.

On page 32 we have produced a simple and straightforward online “self report” template which meets all our requirements. We look forward to engaging with companies who wish to take advantage of this, thus ensuring that their position in our rankings accurately reflects their true emissions.

I hope the full report will make interesting reading and I would like to express my thanks again to all those dedicated people, all unpaid, who have made this report possible.

**Michael Gill,**

Chairman & Founder, The Environmental Investment Organisation

April 2011

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# EXECUTIVE 4

## SUMMARY

The ET Carbon Rankings serve the twin purpose of encouraging transparency through making emissions data more publicly accessible, while also laying the foundations for the ET Index Series, a market mechanism designed to tackle emissions within a rapid time-frame.

The Rankings methodology orders companies into four categories according to their emissions reporting standards: public, complete & verified; public, complete & unverified; public, incomplete (verified or unverified); and, no public data. Where data is incomplete or not reported, companies are benchmarked against their sectoral competitors using the highest reported emissions intensity for that sector. Companies in each category are then ranked according to their emissions intensity (emissions tCO<sub>2</sub>e/\$M turnover).

Topping the 2011 ET Europe 300 Carbon Ranking are UK based financial services giant Aviva, followed closely by Dutch firm Aegon, which offers Life Insurance, Pensions and Asset management services, with respective carbon intensities of 0.85 and 1.35 (tCO<sub>2</sub>e/\$M turnover). The top three non-financial companies are Switzerland's leading Telecoms provider Swisscom (5th, 2.16), Nokia (11th, 5.61), BSkyB (13th, 6.69).

All five of the companies mentioned above rank in the top category of the ET Carbon Rankings because they publicly report 'public, complete and verified' data for their Scope 1 & 2 Greenhouse Gas (GHG) emissions. The number of companies providing data in this category totals 129 across Europe's largest 300 companies.

Crucially, however, the current criteria does not include Scope 3 emissions, which is due to be integrated into the ET Carbon Ranking methodology following the release of the new Corporate Standard for Scope 3 from the Greenhouse Gas Protocol. The integration of Scope 3 to the Ranking methodology, which will include all other indirect emission not covered under Scope 1 & 2, including a company's investment activities, will potentially have a large impact on the financial companies that currently occupy 9 of the 10 top spots in the Rankings.

### THE RANKINGS ARE BASED ON THE FOLLOWING CORE PRINCIPLES:

- ▶ DATA USED IN THE RANKINGS MUST BE PUBLICLY AVAILABLE AND THEREFORE FULLY TRANSPARENT.
- ▶ IN ORDER TO ADDRESS THE ISSUE OF CLIMATE CHANGE, THE RANKINGS' PRIMARY OBJECTIVE MUST BE TO ENCOURAGE DISCLOSURE.
- ▶ DATA WHICH HAS BEEN VERIFIED BY AN INDEPENDENT THIRD PARTY WILL ALWAYS BE RANKED ABOVE DATA WHICH HAS NOT.
- ▶ COMPANIES HONEST ENOUGH TO DISCLOSE THEIR TOTAL EMISSIONS MUST NOT BE PENALISED FOR DOING SO RELATIVE TO THOSE WHO FAIL TO DISCLOSE.
- ▶ IN ORDER TO BE FULLY EFFECTIVE, THE RANKINGS MUST TAKE INTO ACCOUNT THE FULL SCOPE OF A COMPANY'S CARBON EMISSIONS, INCLUDING SCOPE 3.

# 5 EXECUTIVE SUMMARY

## Key Findings

- ▶ **The biggest absolute emitter for which information was available was E.ON, followed very closely by ArcelorMittal, with Scope 1 & 2 emissions of 164,800,000 and 164,000,000 respectively**
- ▶ **Aviva tops the ET Europe 300 Carbon Ranking and Swisscom is the highest ranking non-financial company**
- ▶ **43% of companies publicly disclose complete and independently verified Scope 1 and 2 emissions data**
- ▶ **13% of companies do not publicly disclose their emissions data**
- ▶ **With the exception of Novartis and BP, whose joint venture with TNK-BP is not factored into its emissions total, rendering its data 'incomplete', all ET Europe 300 companies with a market value exceeding \$100 billion publicly disclose complete data**
- ▶ **The Utilities sector has the highest average intensity representing 48% of the total, with Materials, which represents 28%, coming second**

## Key Reporting Recommendations

- ▶ **Report Scope 1, 2 & 3 emissions following GHG Protocol guidelines**
- ▶ **Ensure emissions data is publicly available and easy to find in CSR/ Sustainability reports and online**
- ▶ **Have emissions data verified by an independent third party**
- ▶ **Ensure verification statements are easily available to the public**

Among those that publicly disclose but lack independent verification, Legal and General is by far the best performer, achieving an intensity of 0.27. Italian giants Generali, UK based Prudential and Zurich Financial Services all hover around the 0.85 mark. Had their emissions data been verified by an independent third party, these four firms would be in the top five.

These Rankings highlight that carbon reporting is, with few exceptions, extremely inconsistent. The majority of companies do not follow the guidelines provided by the GHG Protocol for reporting emissions under Scopes 1, 2 & 3, with many that do failing to present the data in a clear manner. The ET Europe 300 Carbon Ranking highlights certain cases in which improved reporting practices could drastically alter a company's position within the Ranking.

The introduction of The Corporate Value Chain (Scope 3) Accounting and Reporting Standard from the GHG Protocol later in 2011 will have a significant impact on company positions within the Europe 300 Carbon Ranking. Currently, only 44% of companies are reporting figures for one or more Scope 3 emissions categories.

Ernst and Young (2010) have also predicted an increase in corporate spending on climate change initiatives in the near future, an area that will be heavily influenced by current and future domestic and international climate policy. However, as this report highlights, proper verification and full disclosure still have a long way to go.

The ET Carbon Rankings make up the first phase of the Environmental Tracking concept. The EIO will use them to create a series of tradable indexes, to be launched later this year. The ET Carbon Indexes have been designed to lower corporate emissions by influencing a company's share price; giving the investment community a tool to encourage transparency and emission reductions on a global scale.

## METHODOLOGY

The ET Carbon Rankings have been designed specifically to encourage disclosure and verification, paving the way for absolute emissions reductions.

In essence, the ET Carbon Ranking methodology follows a three step process based on four information categories, as detailed below. Intensity is currently only determined by Scope 1 and 2 emissions, with Scope 3 emissions to be included once the new Corporate Value Chain (Scope 3) Accounting and Reporting Standard from the GHG Protocol is fully introduced in 2011.

### Step 1: Categorisation

Companies are placed into one of **four data categories**:

- 1) **Public, Complete, Verified**
- 2) **Public, Complete, Unverified**
- 3) **Public, Incomplete**
- 4) **No Public Data**

### Step 2: Inference

Wherever data is not complete, which means Scope 1 and 2 have not been reported for the company's entire scope of operations, or they have not been expressed in a sufficiently clear manner (or no public data is available), a worst case figure is inferred based on the highest reported emissions intensity by any company within the same sector within the ranking (See figure 1.)

### Step 3: Ranking

Finally, companies are ranked within the data categories according to their emissions intensity, which is calculated using turnover figures from the same financial year as their latest publicly available (at time of publication) reported emissions.

Whilst there is no universally accepted system of establishing relative company size, turnover is generally accepted within the field of carbon accounting as a reasonable metric to determine company size.

THE CARBON RANKINGS HAVE BEEN DESIGNED SPECIFICALLY TO ENCOURAGE DISCLOSURE AND VERIFICATION

COMPANIES WITH EXTERNALLY VERIFIED DATA WILL ALWAYS FIND THEMSELVES RANKED ABOVE THOSE WITH UNVERIFIED DATA

COMPANIES THAT DO NOT HAVE ANY PUBLICLY AVAILABLE DATA ARE BENCHMARKED AGAINST THE HIGHEST INTENSITY FROM THE WORST PERFORMING COMPANY WITHIN THEIR SECTOR

Where one or more companies have the same emissions intensity within the Rankings, smaller market capitalisation is given an advantage. The justification for this is simple: larger companies have greater resources to both improve their reporting and realign their business towards a low carbon model. For a complete explanation of the methodology behind the ET Carbon Rankings please visit the [EIO website](http://www.eio.org.uk).

# 7 CARBON RANKING METHODOLOGY

## Spotlight on Inference:

Figure 1.

Nestle is the company with the highest emissions intensity disclosing complete data within the Food, Beverage & Tobacco sector.

P, C, V	110	CRH	IE	11,564	811.77	18,080,000
P, C, V	111	BHP Billiton Plc	GB	64,933	865.56	45,700,000
P, C, V	112	Nestle SA Reg	CH	192,918	915.14	94,140,000
P, C, V	113	Anglo American Plc	GB	50,084	915.72	19,100,000
P, I	251	Pernod-Ricard	FR	21,225	915.14	data unclear
P, I	252	Danone	FR	36,191	915.14	data unclear
P, I	253	Heineken NV	NL	38,211	915.14	data unclear

Here, Pernod-Ricard, Danone and Heineken have been benchmarked against the highest disclosing company with complete data from the Food, Beverage & Tobacco sector. This means they have been given an *inferred* intensity of 915.14 tCO<sub>2</sub>e/\$M turnover. This is not an approximation of their emissions but a means of making sure that the highest *disclosing* company in the sector is not penalised for being honest enough to report a large figure.

As all three companies have the same *inferred* intensity figure, the company with the largest market capitalisation is placed lower down the Ranking.

# RANKING 8

## ANALYSIS

### Top 5

Figure 2.

Carbon Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	Aviva	76,351	0.85	Complete & Verified
2	Aegon NV	80,388	1.35	Complete & Verified
3	Banco Popular Espanol SA	2,168	1.57	Complete & Verified
4	AXA	277,003	1.71	Complete & Verified
5	Swisscom AG	25,422	2.16	Complete & Verified

Topping the 2011 ET Europe 300 Carbon Ranking are UK based financial services giant **Aviva**, followed closely by Dutch firm **Aegon**, which offers life insurance, pensions and asset management services, with respective carbon intensities of 0.85 and 1.35 (tCO<sub>2</sub>e/\$M turnover). **Banco Popular Español** rank third, with an intensity of 1.57, followed by French

group **AXA** with an intensity of 1.57. Switzerland's leading telecoms provider **Swisscom** comes in fifth with an intensity of 2.16, a figure which is around a quarter of their next sectoral competitor, Belgium's Belgacom which has an intensity of 8.08 coming in 15th place.

### Bottom 5

Figure 3.

Carbon Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
296	EnscO Plc	no public data	1,129.88	No public data
297	Seadrill Ltd	no public data	1,129.88	No public data
298	Carnival Plc	no public data	2,990.90	No public data
299	Sodexo	no public data	2,990.90	No public data
300	KGHM Polska Miedz SA	no public data	5,350.62	No public data

Last among the Europe's 300 biggest companies is Polish Mining company **KGHM**, which deals in copper and silver. French food services and facilities management company **Sodexo** ranks 299th place, as they fail to put data in the public domain. These last two companies join one cruise company and two companies operating in offshore drilling to make up the bottom 5, and are among the

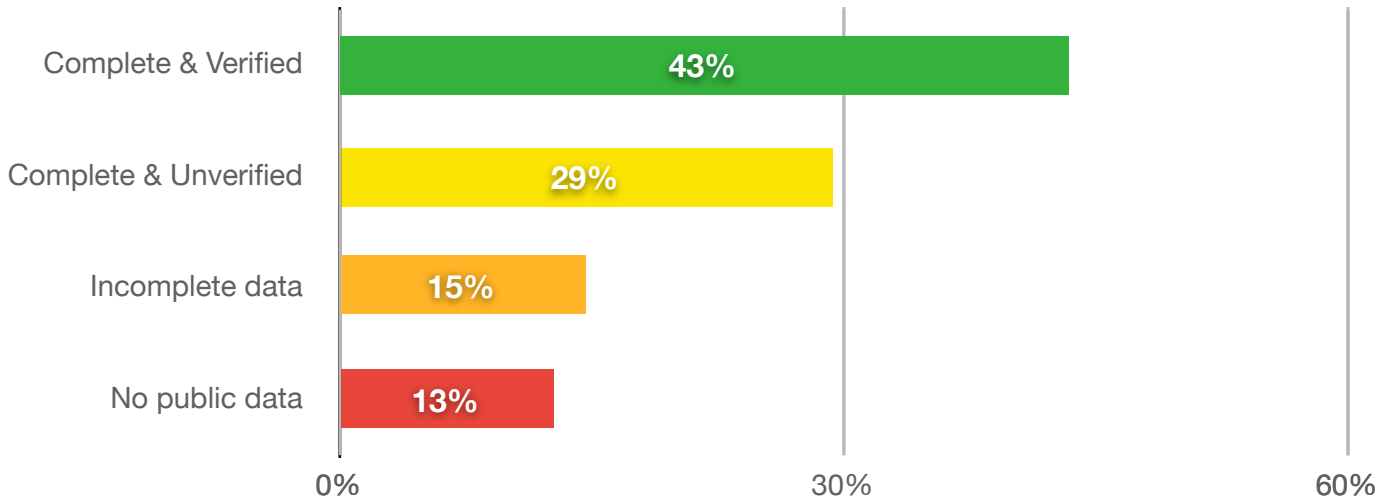
13% that do not directly disclose their emissions.

**Randgold**, who had previously been ranked last in the ET UK 100, move out of the bottom category after publishing their emissions data for the first time in their latest Annual report.

# 9 RANKING ANALYSIS

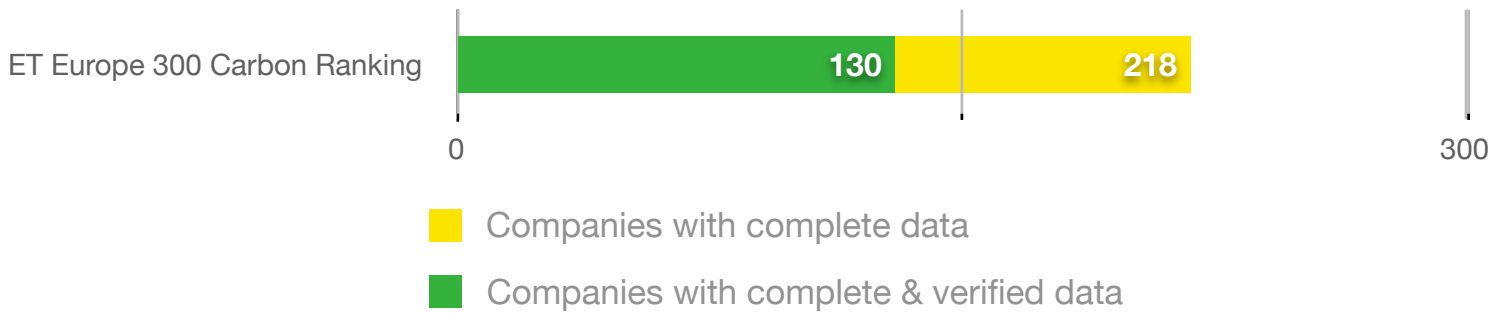
## The disclosure and verification landscape of the ET Europe 300

Figure 4.



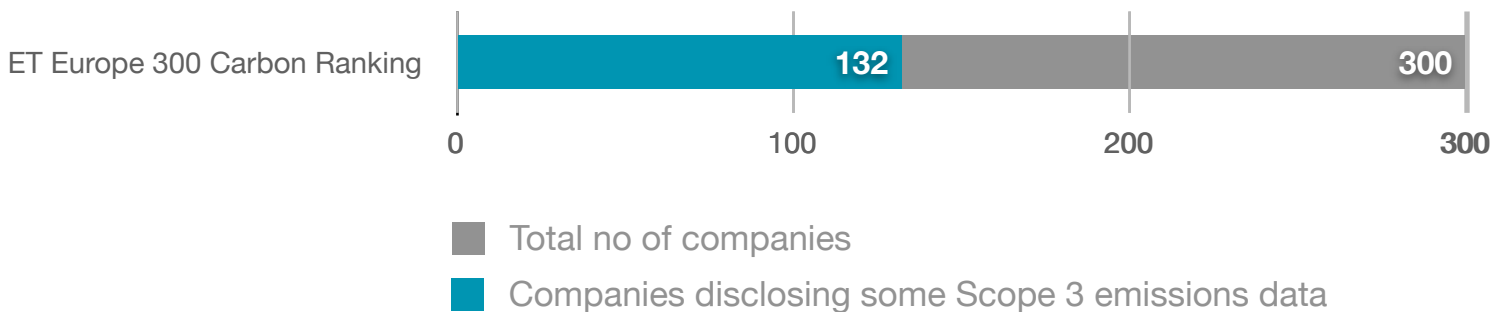
## Complete data versus verified data

Figure 5.



## Looking forward: Scope 3

Figure 6.



# RANKING 10

## ANALYSIS

Figure 11.

### Lowest Absolute Emitters

(sample taken from the 218 companies providing complete data)

Absolute Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(3)	Banco Popular Espanol SA	2,168	1.57	Complete & Verified
2	(139)	Admiral Group	4,285	4.32	Complete & Unverified
3	(8)	Man Group	6,059	4.50	Complete & Verified
4	(135)	Tele2 AB	8,453	1.60	Complete & Unverified
5	(142)	Sonova Holding AG	10,929	7.41	Complete & Unverified

Figure 11 lists the five lowest absolute emitters from those disclosing complete information. Verification status is included on the right but does not affect the ranking.

**Banco Popular Español** and UK based **Man Group**, who rank in the top 10 based on intensity, also appear in the top five based on absolute emissions.

Figure 12.

### Highest Absolute Emitters

(sample taken from the 218 companies providing complete data)

Absolute Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
214	(115)	GDF Suez	98,197,768	958.57	Complete & Verified
215	(125)	Enel SpA	122,089,000	1,487.21	Complete & Verified
216	(127)	RWE AG	152,100,000	2,490.19	Complete & Verified
217	(121)	ArcelorMittal	164,000,000	1,312.67	Complete & Verified
218	(120)	E.ON AG	164,800,000	1,290.54	Complete & Verified

Figure 12 lists the five largest absolute emitters from those disclosing complete information, ignoring verification status.

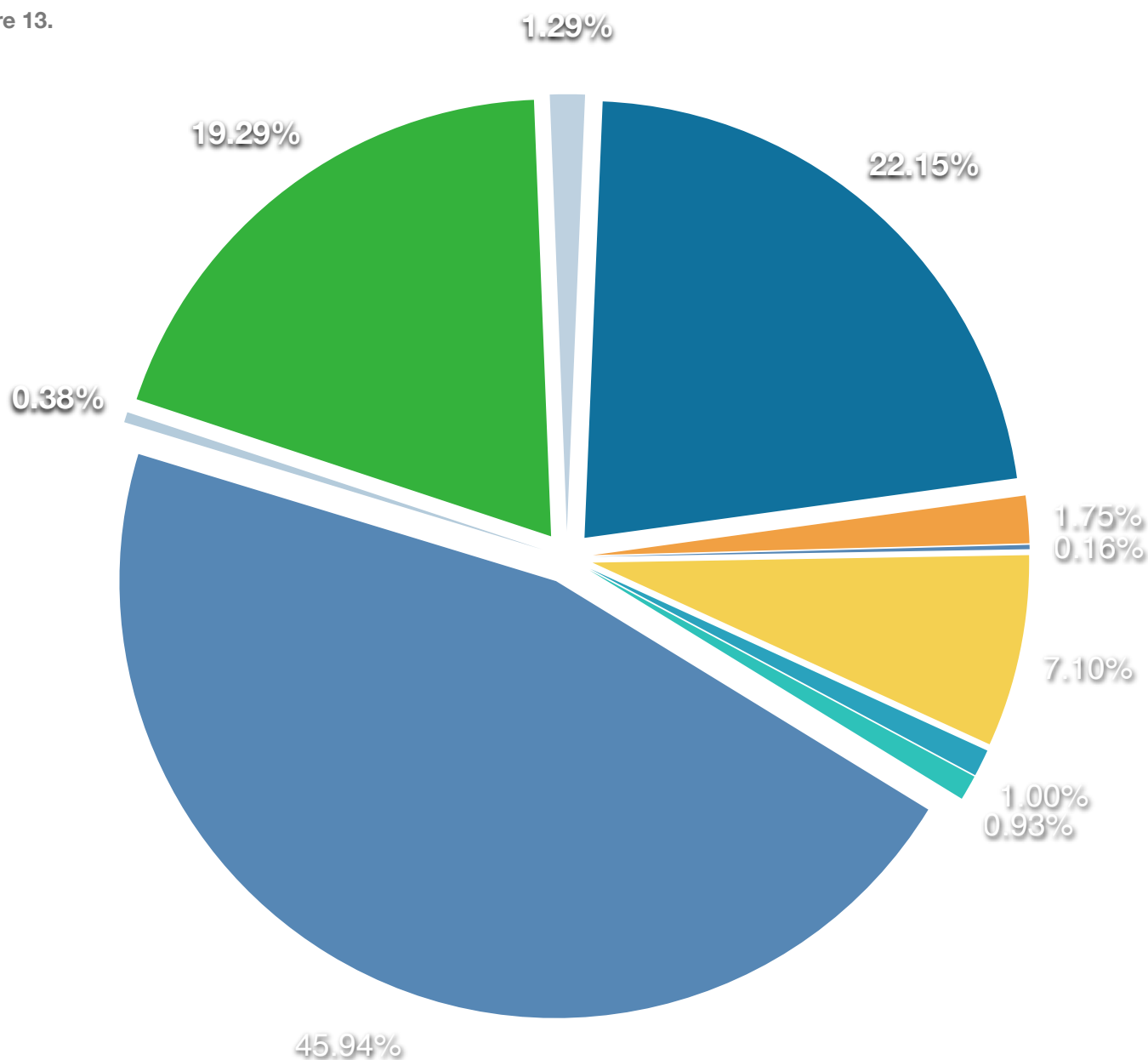
Four of the bottom five companies are from the carbon-intensive Utilities sector, with **ArcelorMittal** representing Materials as the biggest absolute emitter from that sector.

Of note: despite all of the bottom five having large Scope 1 + 2 totals, all have their emissions verified by an independent third party and thereby gain an advantage in the Ranking, this can be in large part attributed to their existing participation in the EU ETS which imposes mandatory reporting.

# 11 RANKING ANALYSIS

## Average Absolute Emissions as % of total by sector

Figure 13.



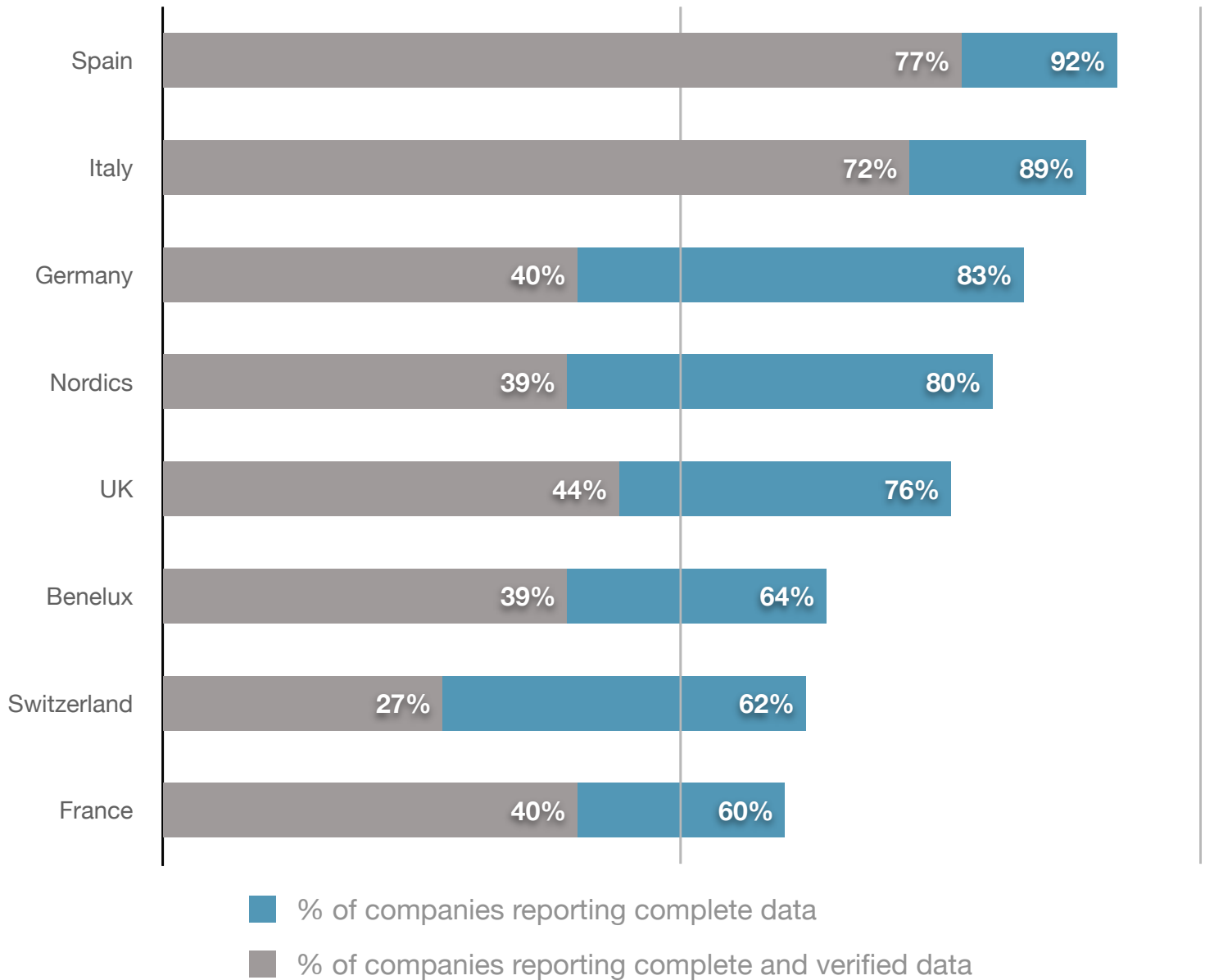
Sector	Emissions intensity as % of total
Utilities	45.94%
Materials	22.15%
Energy	19.29%
Consumer Staples	7.10%
Industrials	1.75%
Health Care	1.29%
Consumer Discretionary	1.00%
Telecoms Services	0.93%
Information Technology	0.38%
Financials	0.16%

# GEOGRAPHICAL 12 ANALYSIS

## Summary

### Countries leading the field of disclosure

Figure 7.



It is interesting to note the variation across different countries within Europe in terms of the number of companies reporting complete data, as well as the percentage of companies who have their emissions data verified. Leading the pack, Spain comes in top with 92% of the companies featuring in the Rankings reporting complete emissions figures for Scope 1 & 2. They also have their

highest proportion having their emissions verified by a third party.

France has the lowest proportion of companies disclosing complete figures, despite having introduced its own 'Bilan Carbone' which supplies a framework for emissions reporting.

# 13 GEOGRAPHICAL ANALYSIS

## Spotlight on: GERMANY

### Top 5

Figure 8.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(9)	Deutsche Bank AG	92,540	4.68	Complete & Verified
2	(21)	SAP AG	202,700	12.69	Complete & Verified
3	(36)	Deutsche Telekom	2,100,000	25.36	Complete & Verified
4	(52)	Siemens AG	3,372,000	34.31	Complete & Verified
5	(63)	Commerzbank AG	207,238	42.91	Complete & Verified

### Bottom 5

Figure 9.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
26	(219)	Infineon Technologies AG	data unclear	4.32	Incomplete data
27	(222)	Adidas AG	data unclear	44.88	Incomplete data
28	(224)	Porsche Automobil SE	data unclear	45.44	Incomplete data
29	(263)	Fresenius AG	no public data	19.34	No public data
30	(265)	Fresenius Medical	no public data	19.34	No public data

## Spotlight on: FRANCE

### Top 5

Figure 10.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(4)	AXA	277,003	1.71	Complete & Verified
2	(12)	Credit Agricole SA	38,156	6.52	Complete & Verified
3	(16)	L'Oreal	185,600	8.29	Complete & Verified
4	(19)	LVMH	253,390	11.59	Complete & Verified
5	(28)	Alstom	433,000	18.02	Complete & Verified

### Bottom 5

Figure 11.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
41	(269)	Cap Gemini SA	no public data	51.37	No public data
42	(275)	SCOR SE	no public data	60.56	No public data
43	(290)	Safran SA	no public data	293.76	No public data
44	(291)	Bouygues	no public data	293.76	No public data
45	(299)	Sodexo	no public data	2,990.90	No public data

## ANALYSIS

### Spotlight on: UK

#### Top 5

Figure 12.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(1)	Aviva	76,351	0.85	Complete & Verified
2	(7)	RSA Insurance Group Plc	48,769	4.23	Complete & Verified
3	(8)	Man Group	6,059	4.50	Complete & Verified
4	(13)	British Sky Broadcasting	61,139	6.69	Complete & Verified
5	(17)	AMEC	32,667	8.32	Complete & Verified

#### Bottom 5

Figure 13.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
78	(277)	Resolution Ltd	no public data	60.56	No public data
79	(280)	Old Mutual	no public data	60.56	No public data
80	(289)	Weir Group	no public data	293.76	No public data
81	(296)	Ensco Plc	no public data	1,129.88	No public data
82	(298)	Carnival Plc	no public data	2,990.90	No public data

### Spotlight on: Spain

#### Top 5

Figure 14.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(3)	Banco Popular Espanol SA	2,168	1.57	Complete & Verified
2	(39)	Inditex SA	377,286	26.55	Complete & Verified
3	(41)	Telefonica SA	2,045,780	28.13	Complete & Verified
4	(47)	Banco Santander SA	603,539	30.63	Complete & Verified
5	(61)	Abertis Infraestructuras SA	205,232	41.22	Complete & Verified

#### Bottom 5

Figure 15.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
9	(123)	Gas Natural SDG SA	26,810,000	1,387.42	Complete & Verified
10	(124)	Iberdrola SA	48,490,000	1,426.77	Complete & Verified
11	(160)	Banco de Sabadell SA	21,766	16.55	Complete & Unverified
12	(200)	Grupo ACS	2,107,878	104.49	Complete & Unverified
13	(270)	Amadeus IT Hldg SA	no public data	51.37	No public data

# 15 GEOGRAPHICAL ANALYSIS

## Spotlight on: ITALY

### Top 5

Figure 16.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(22)	UBI Banca	28,195	13.26	Complete & Verified
2	(23)	Banca MPS	33,164	13.89	Complete & Verified
3	(27)	Intesa SanPaolo	159,877	17.67	Complete & Verified
4	(32)	Finmeccanica SpA	500,000	20.58	Complete & Verified
5	(33)	Unicredit SpA	313,000	21.01	Complete & Verified

### Bottom 5

Figure 17.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
14	(132)	Assicurazioni Generali SpA	87,415	0.80	Complete & Unverified
15	(159)	Mediaset SpA	79,164	15.90	Complete & Unverified
16	(188)	Atlantia SpA	194,593	42.41	Complete & Unverified
17	(255)	Tenaris SA	data unclear	1,129.88	Incomplete data
18	(293)	Parmalat SpA	no public data	915.14	No public data

## Spotlight on: SWITZERLAND

### Top 5

Figure 18.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(5)	Swisscom AG	25,422	2.16	Complete & Verified
2	(20)	UBS AG	224,813	12.53	Complete & Verified
3	(31)	Roche Hldgs AG	897,392	19.22	Complete & Verified
4	(66)	ABB Ltd	1,469,000	46.50	Complete & Verified
5	(79)	Syngenta AG	985,000	84.61	Complete & Verified

### Bottom 5

Figure 19.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
22	(266)	Alcon Inc	no public data	19.34	No public data
23	(267)	Swatch Group AG	no public data	44.88	No public data
24	(272)	Adecco SA	no public data	55.06	No public data
25	(288)	Actelion Ltd	no public data	202.72	No public data
26	(292)	Kuehne + Nagel AG	no public data	704.39	No public data

## ANALYSIS

### Spotlight on: BENELUX

#### Top 5

Figure 20.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(2)	Aegon NV (NL)	80,388	1.35	Complete & Verified
2	(15)	Belgacom SA (BE)	62,000	8.08	Complete & Verified
3	(24)	TNT NV (NL)	83,000	15.08	Complete & Verified
4	(25)	Koninklijke KPN NV (NL)	263,700	15.35	Complete & Verified
5	(40)	Philips Electronics NV (NL)	897,000	27.53	Complete & Verified

#### Bottom 5

Figure 21.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
24	(278)	AGEAS (BE)	no public data	60.56	No public data
25	(281)	GBL (BE)	no public data	60.56	No public data
26	(286)	Colruyt SA (BE)	no public data	102.19	No public data
27	(287)	QIAGEN AG (NL)	no public data	202.72	No public data
28	(295)	Fugro NV (NL)	no public data	1,129.88	No public data

### Spotlight on: NORDICS

#### Top 5

Figure 22.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	(6)	DNB NOR ASA (NO)	12,850	4.04	Complete & Verified
2	(10)	Nordea AB (SE)	31,000	4.86	Complete & Verified
3	(11)	Nokia OYJ (FI)	229,806	5.61	Complete & Verified
4	(14)	Ericsson (SE)	200,000	7.04	Complete & Verified
5	(38)	Wartsila OYJ (FI)	138,236	26.03	Complete & Verified

#### Bottom 5

Figure 23.

Country Rank	ET Rank	Company Name	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
37	(250)	Swedish Match AB (SE)	data unclear	915.14	Incomplete data
38	(259)	UPM-Kymmene Oyj (FI)	data unclear	5,350.62	Incomplete data
39	(283)	Investor AB (SE)	no public data	60.56	No public data
40	(284)	Sampo Oyj (FI)	no public data	60.56	No public data
41	(297)	Seadrill Ltd (NO)	no public data	1,129.88	No public data

# 17 SECTORAL ANALYSIS

Figure 24.

## Sector: Energy

(total no. of companies in sector 20)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO2e (Scope 1+2)	Emissions Intensity (tCO2e/\$M turnover)	Disclosure & Verification status
1	AMEC	GB	32,667	8.32	Complete & Verified
2	Saipem SpA	IT	1,445,171	109.24	Complete & Verified
3	Statoil ASA	NO	13,100,000	152.66	Complete & Verified

## Sector: Materials

(total no. of companies in sector 32)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO2e (Scope 1+2)	Emissions Intensity (tCO2e/\$M turnover)	Disclosure & Verification status
1	Johnson, Matthey	GB	371,414	30.65	Complete & Verified
2	Umicore	BE	531,279	42.52	Complete & Verified
3	Syngenta AG	CH	985,000	84.61	Complete & Verified

## Sector: Industrials

(total no. of companies in sector 49)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO2e (Scope 1+2)	Emissions Intensity (tCO2e/\$M turnover)	Disclosure & Verification status
1	TNT NV	NL	83,000	15.08	Complete & Verified
2	Experian Plc	GB	62,000	15.98	Complete & Verified
3	Alstom	FR	433,000	18.02	Complete & Verified

## Sector: Consumer Discretionary

(total no. of companies in sector 38)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO2e (Scope 1+2)	Emissions Intensity (tCO2e/\$M turnover)	Disclosure & Verification status
1	British Sky Broadcasting	GB	61,139	6.69	Complete & Verified
2	LVMH	FR	253,390	11.59	Complete & Verified
3	Inditex SA	ES	377,286	26.55	Complete & Verified

## Sector: Consumer Staples

(total no. of companies in sector 27)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO2e (Scope 1+2)	Emissions Intensity (tCO2e/\$M turnover)	Disclosure & Verification status
1	L'Oreal	FR	185,600	8.29	Complete & Verified
2	Carrefour SA	FR	4,384,000	39.14	Complete & Verified
3	Diageo Plc	GB	743,000	49.14	Complete & Verified

# SECTORAL 18

## ANALYSIS

Figure 24. (continued)

### Sector: Health Care

(total no. of companies in sector 19)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	AstraZeneca Plc	GB	630,000	18.94	Complete & Verified
2	Roche Hldgs AG Ptg Genus	CH	897,392	19.22	Complete & Verified
3	Sanofi-Aventis	FR	1,155,970	29.32	Complete & Verified

### Sector: Financials

(total no. of companies in sector 66)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	Aviva	GB	76,351	0.85	Complete & Verified
2	Aegon NV	NL	80,388	1.35	Complete & Verified
3	Banco Popular Espanol SA	ES	2,168	1.57	Complete & Verified

### Sector: Information Technology

(total no. of companies in sector 12)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	Nokia	FI	229,806	5.61	Complete & Verified
2	Ericsson, L.M. Telefonaktie	SE	200,000	7.04	Complete & Verified
3	SAP AG	DE	202,700	12.69	Complete & Verified

### Sector: Telecommunication Services

(total no. of companies in sector 16)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	Swisscom AG	CH	25,422	2.16	Complete & Verified
2	Belgacom SA	BE	62,000	8.08	Complete & Verified
3	Koninklijke KPN NV	NL	263,700	15.35	Complete & Verified

### Sector: Utilities

(total no. of companies in sector 21)

Sector Rank	Company Name	Cntry	Absolute Emissions tCO <sub>2</sub> e (Scope 1+2)	Emissions Intensity (tCO <sub>2</sub> e/\$M turnover)	Disclosure & Verification status
1	Terna SpA	IT	234,608	131.66	Complete & Verified
2	United Utilities Group Plc	GB	574,912	236.39	Complete & Verified
3	Centrica	GB	11,799,441	347.49	Complete & Verified

# 19 SECTORAL ANALYSIS

## Average Emissions Intensity by 10 tier sector breakdown

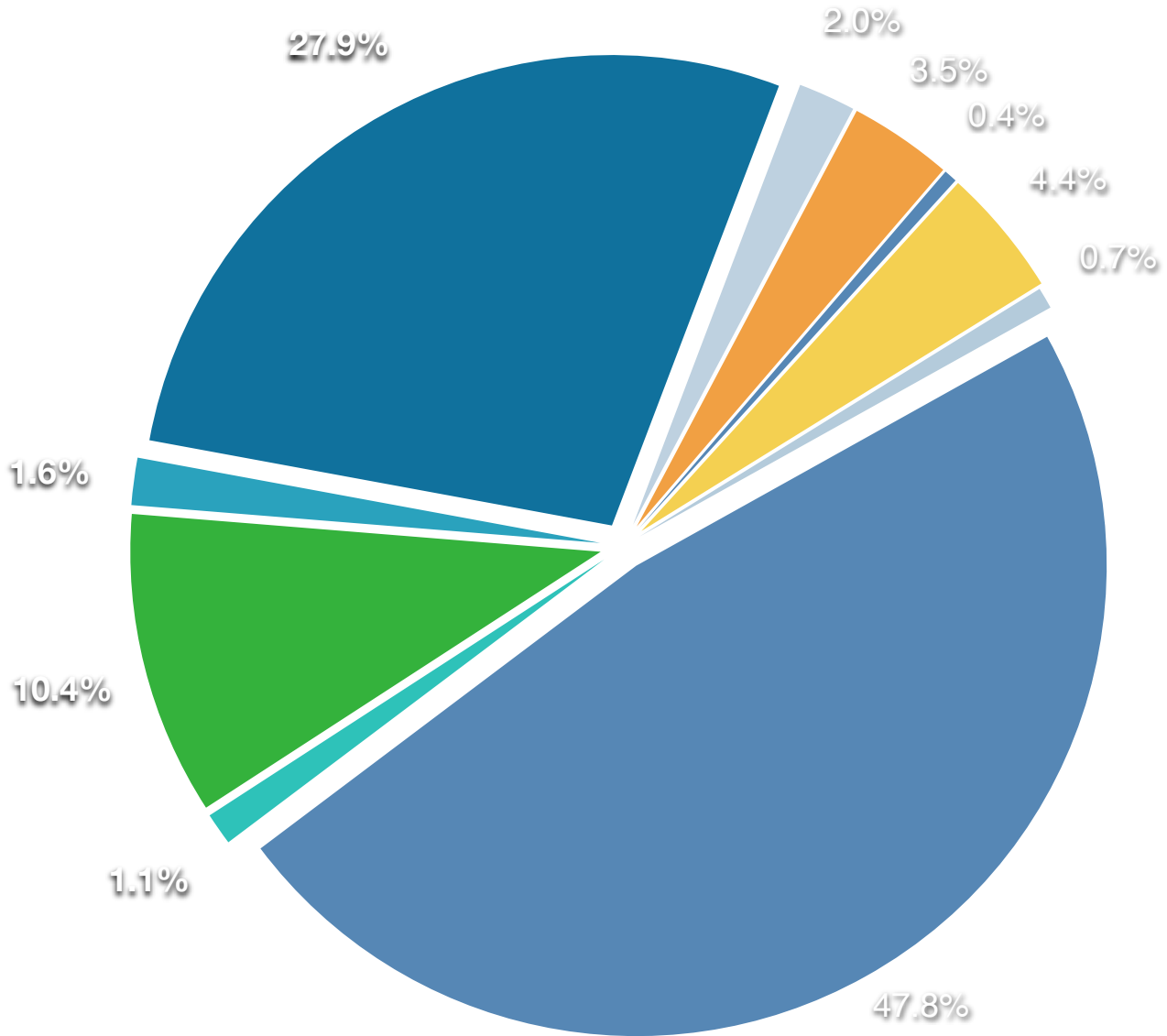
Figure 25.



# SECTORAL 20 ANALYSIS

## Average Emissions Intensity as % of total by sector

Figure 26.

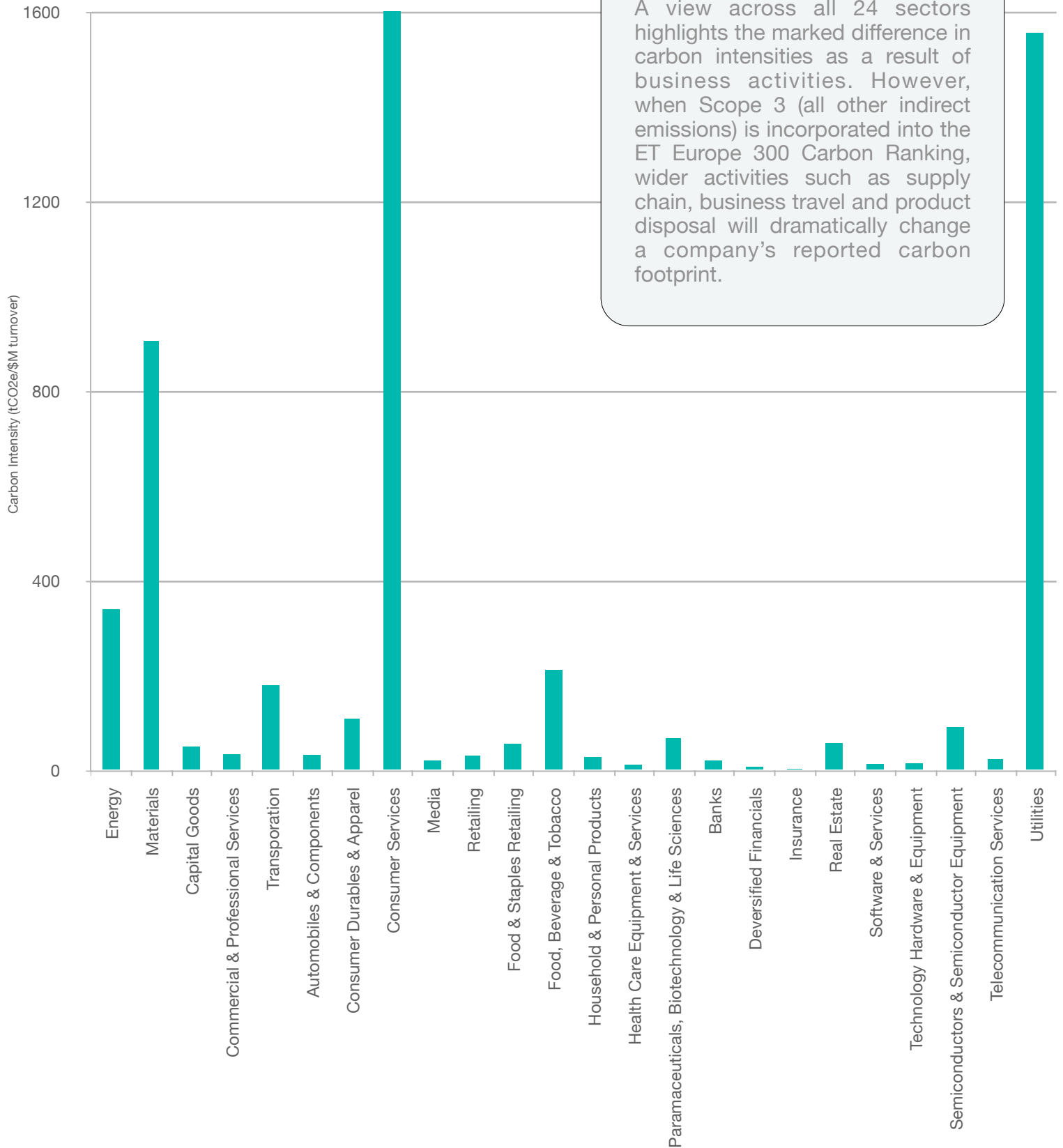


Sector	Emissions intensity as % of total
Utilities	47.83%
Materials	27.88%
Energy	10.44%
Consumer Discretionary	4.43%
Consumer Staples	3.55%
Industrials	1.97%
Health Care	1.62%
Information Technology	1.11%
Telecoms Services	0.73%
Financials	0.45%

# 21 SECTORAL ANALYSIS

## Average Emissions Intensity by 24 tier sector breakdown

Figure 27.



A view across all 24 sectors highlights the marked difference in carbon intensities as a result of business activities. However, when Scope 3 (all other indirect emissions) is incorporated into the ET Europe 300 Carbon Ranking, wider activities such as supply chain, business travel and product disposal will dramatically change a company's reported carbon footprint.

# VERIFICATION 22

## ANALYSIS

### Verifier Analysis

The breakdown of the top 10 verifiers shown in figure 14 is taken from companies which have been categorised as having their emissions verified by the ET Carbon Ranking methodology.

Perhaps unsurprisingly the 'big four' audit firms PwC, Ernst & Young, KPMG and Deloitte represent approximately 75% of the market share amongst the top 10 verifiers.

The Most common standards being employed are:

- ISAE 3000
- AA1000AS (2008) or AA1000 or AA1000APS

With only a handful of companies currently employing a specific Greenhouse Gas emissions standard, such as ISO14064:3.

Figure 28.



## KEY POINTS

WITHOUT COMPLETE AND VERIFIED DATA  
WE CANNOT ACCURATELY PAINT A PICTURE  
OF THE EMISSIONS LANDSCAPE

CONSIDERING BUSINESS' MOTIVATION TO  
PROVIDE SHAREHOLDER RETURN, WE CAN  
INCENTIVISE CHANGE THROUGH AFFECTING  
A COMPANY'S SHARE PRICE

### Non-Sectoral approach

The ET Carbon Ranking methodology is based on a non-sectoral approach as it is intended to create incentives for disclosure and emissions reduction across the board. Under this wider Environmental Tracking system, companies with higher intensities will experience greater downward pressure than those with low intensities, reflecting the science behind climate change mitigation dictating that absolute emissions have to be reduced.

### Disclosure & Verification before intensity

It could be argued that the present Ranking does not accurately reflect the emissions landscape as the key determinant of positioning is disclosure and verification before intensity. However, without complete and verified data we cannot accurately paint a picture of the emissions landscape.

### High intensity by definition

By definition some companies pollute more than others, moreover, many of these companies provide valuable and vital services to society. Yet without strong incentives to change, they will continue to carry out their activities in a way which is detrimental to the environment. Virtually all the technological advances needed to tackle climate change are already in existence, or are only a few years away with the necessary investment.

The only way we can expect these companies to invest in new technologies and employ new environmentally friendly policies is to provide them with an incentive to do so. The EIO argues that within the framework of the existing system this incentive must accord with a company's *raison d'être*: to maximise share price return. This can only be achieved by creating a system which influences share price according to the environmental costs of a company's actions.

# REPORTING 24

## LANDSCAPE

Sustainability reporting has grown rapidly over the past two decades as companies supplement their annual reports with issues pertaining to corporate social responsibility.

However, the lack of a universally accepted or mandatory standard concerning corporate responsibility disclosure means both reporting formats and content vary widely.

A large number of Europe's top companies follow the framework set out by the Global Reporting Initiative. This clearly defines the disclosure of environmental, social and governance indicators, including Greenhouse Gas emissions expressed as metric tonnes of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e). (See page 27 for more details). However, following GRI guidelines does not specifically require clear Scope 1 and 2 reporting.

The internationally recognised and accepted standard for Greenhouse Gas (GHG) reporting has been established by the Greenhouse Gas Protocol, and defines Greenhouse Gas emissions reporting by Scope 1, 2 and 3 emissions. However, as this report highlights companies do not always apply the standard correctly. Important issues of coverage and key calculation and reporting requirements are often not clearly stated or are hidden within the main document.

In 2000 the Carbon Disclosure Project launched an initiative to encourage corporate GHG disclosure. However, this information is not always included in sustainability reports or placed in the public domain.

▶ **Scope 1 emissions:**

All direct emissions

▶ **Scope 2 emissions:**

Indirect emissions generated from the purchase of electricity

▶ **Scope 3 emissions:**

All other indirect emissions, such as distribution of goods, transportation of purchased goods, transportation of waste, disposal of waste, employee commuting, business travel

**AS THE ET EUROPE 300 CARBON RANKING HIGHLIGHTS, THERE ARE STILL MAJOR DISCREPANCIES BETWEEN COMPANIES IN REPORTING STANDARDS**

# 25 REPORTING LANDSCAPE

THERE ARE CURRENTLY WIDE VARIATIONS IN INTERPRETATION OF METHODS FOR THE MAJORITY OF VOLUNTARY SCHEMES

ERM (2010) NOTES THAT THERE ARE FEW INITIATIVES PROVIDING INCENTIVES SUCH AS LEAGUE TABLES OR FINANCIAL PENALTIES/REWARDS - A GAP THE EIO SEEKS TO ADDRESS DIRECTLY THROUGH ITS ET CARBON RANKINGS AND INDEX SERIES

## Variations

As pointed out by the ERM (2010) study on GHG reporting methods and initiatives, “Voluntary methods are open to varying degrees of interpretation by the user whilst mandatory methods tend to be much more prescriptive. An example of this can be seen on the issue of boundary setting. Voluntary methods such as the WBCSD/WRI GHG Protocol, and voluntary reporting schemes such as CDP, allow the user to select the boundary based on a number of options (e.g. operational or financial control; equity share), to ensure maximum flexibility. By way of contrast, mandatory schemes and their associated calculation methods, such as those for the UK Carbon Reduction Commitment and the schemes linked to trading of emissions allowances or permits (e.g. EU ETS; JETS), define quite precisely the boundary, to ensure consistency in reporting between organisations covered by the scheme.”

## Gaps

Interestingly, the report notes that “few methods or initiatives provide incentives such as benchmarks, league tables and financial penalties/rewards”. This is a gap the EIO seeks to address through its Environmental Tracking (ET) Carbon Rankings and Index Series.

The report also draws attention to the “lack of clear statement of a ‘mandatory minimum’ GHG reporting requirements in most of the voluntary methods and initiatives”, suggesting that “most voluntary methods have shied away from being prescriptive on key issues or have put complex arrangements in place to ensure adaptability” in order to encourage maximum uptake (ERM 2010).

Please see the Reporting guidance section (pages 31-32) for suggestions on the EIO’s recommendations for how companies can report their GHG emissions more clearly.

# EXEMPLARY 26

## REPORT

### PwC Typico Example

## 2. Primary statement of greenhouse gas emissions for the Group

Summary of GHG emissions for the year ended 31 December 2009

CO <sub>2</sub> e emissions ('000 tonnes)	Note	Performance		Adjusted Baseline	Target	Percentage Change	
		2009	2008	2006	2012	2008 /2009	2006 /2009
		Assured*					
Scope 1	2,3,4	432	521	645	364	-17%	-33%
Scope 2	2,3,4	1,293	1,386	1,494	1,038	-7%	-13%
<b>Total gross controlled emissions</b>	<b>2,3,4</b>	<b>1,725</b>	<b>1,907</b>	<b>2,139</b>	<b>1,402</b>	<b>-10%</b>	<b>-19%</b>
Scope 3	2,3,4	7,245	7,320	8,001	6,101	-1%	-9%
<b>Total gross emissions</b>	<b>2,3,4</b>	<b>8,970</b>	<b>9,227</b>	<b>10,140</b>	<b>7,503</b>	<b>-3%</b>	<b>-12%</b>
Renewable electricity purchased in the UK	1.9	(12)	(89)	-	-		
Renewable electricity sold to grid		(946)	(500)	-	(1,038)		
Voluntary carbon offsets		(1,725)	(1,907)	-	(1,402)		
<b>Net emissions</b>		<b>6,287</b>	<b>6,731</b>	<b>10,140</b>	<b>5,063</b>	<b>-7%</b>	<b>-38%</b>

Taken from the PwC example report for "Typico plc" (PwC 2009). The report asks what a Greenhouse Gas Emissions report would look like and aims to provide a template for clear and accurate carbon reporting.

It clearly shows how to set out the top level Scope 1, 2 & 3 emissions total in an easily accessible manner. This model is currently followed by British Land Co, who rank 25th in the ET UK 100 Carbon Ranking.

## TEMPLATE



3.12 Table identifying the location of the Standard Disclosures in the report. Identify the page numbers or web links where the following can be found: \* Strategy and Analysis 1.1 - 1.2; \* Organizational Profile 2.1 - 2.10; \* Report Parameters 3.1 - 3.13; \* Governance, Commitments, and Engagement 4.1 - 4.17; \* Disclosure of Management Approach, per category; \* Core Performance Indicators; \* Any GRI Additional Indicators that were included; and \* Any GRI Sector Supplement Indicators included in the report.

3.13 Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s).

3.2 Date of most recent previous report (if any).

Using a GRI index helps anyone reading a report to navigate it quickly and easily.

It is strongly advised to clearly label where any verification statement can be found within the report.



EN14 Strategies, current actions, and future plans for managing impacts on biodiversity. (Additional)

EN15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk. (Additional)

EN16 Total direct and indirect greenhouse gas emissions by weight. (Core)

EN17 Other relevant indirect greenhouse gas emissions by weight. (Core)

EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved. (Additional)

EN19 Emissions of ozone-depleting substances by weight. (Core)

EN20 NO<sub>x</sub>, SO<sub>x</sub>, and other significant air emissions by type and weight. (Core)









Clear labeling of where GHG emissions totals, calculated as tCO<sub>2</sub>e (metric tonnes of CO<sub>2</sub> equivalent) is extremely important for a member of the general public to be able to find the data easily.

# REPORTING 28

## EXAMPLES

 = Fully reported  
 = Partly reported  
 = Not reported

### Emissions, effluents & waste

EN16 Direct and indirect greenhouse gas emissions		Key indicators/Environment, <a href="#">page 56</a>
EN17 Other relevant indirect greenhouse gas emissions		Key indicators/Environment, <a href="#">page 57</a>
EN18 Initiatives to reduce greenhouse gas emissions		Environment, <a href="#">page 45</a> Environment, <a href="#">page 46</a>
EN19 Emissions of ozone-depleting substances		Not reported.
EN20 NO, SO, and other significant air emissions		Not reported.
EN21 Total water discharge		Not reported.
EN22 Waste by type and disposal method		Key indicators/Environment, <a href="#">page 57</a>
EN23 Number and volume of significant spills		Additional facts, <a href="#">page 64</a>

This is an example of a company making good use of an online GRI index which provides quick links to the relevant indicators. In this instances it also provides a clear key to indicate whether or not the information is fully reported.

### Greenhouse Gas Emissions

#### Greenhouse gas emissions (tonnes CO<sub>2</sub>e) from assets under control

	2009	2008 <sup>(a)</sup>	2007 <sup>(a)</sup>	2006 <sup>(a)</sup>
Scope 1	<b>8 644 396</b>	8 833 610	9 055 848	6 199 526
Scope 2	<b>29 198</b>			
<b>Total gross controlled emissions</b>	<b>8 673 594</b>			

Note: Scope 2 emissions in CO<sub>2</sub>e are presented here for the first time. Scope 2 emissions have been calculated by converting electricity used to GHG emissions using standard grid factors, by country.

This emissions statement clearly shows the total figures according to Scope 1 and 2, as well as year on year comparisons where available.

However, there is currently no mention of Scope 3 emissions.

# 29 REPORTING EXAMPLES

## CO<sub>2</sub> emission scope 1 (on site)

CHART

TABLE

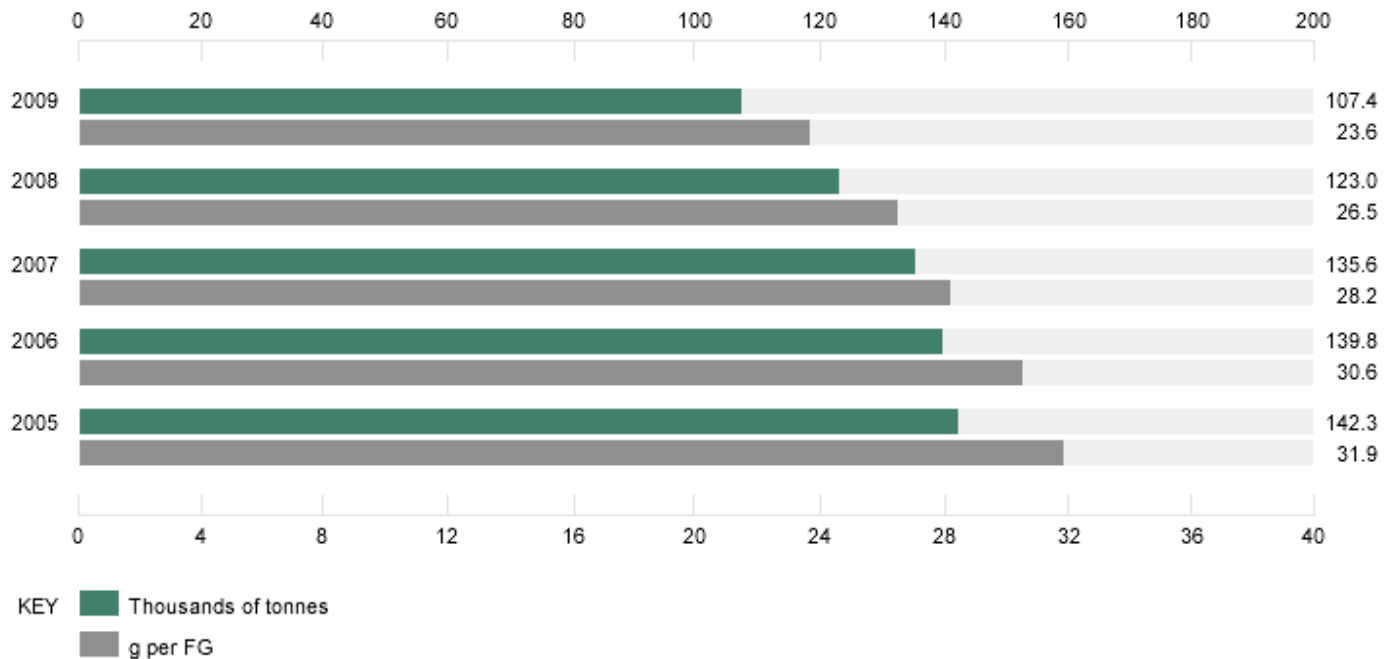
	2005	2006	2007	2008	2009
Thousands of tonnes	88.0	84.0	82.7	80.8	78.2
g per FG	19.8	18.4	17.2	17.4	17.2

↑ Back to top

## CO<sub>2</sub> emission scope 2 (off site)

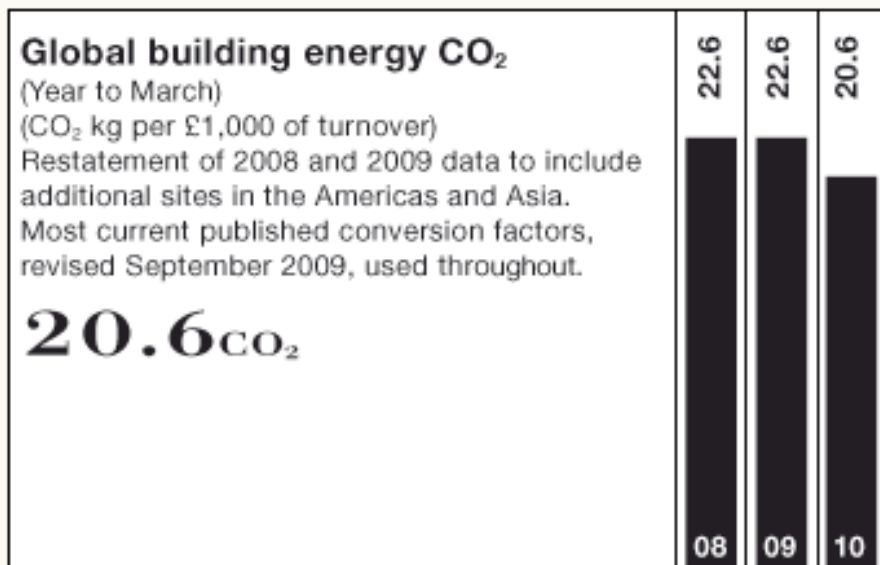
CHART

TABLE



In this instance the company provides its CO<sub>2</sub> emissions data in tabular and graph format which is easy to navigate. It also clearly defines its emissions under the Scope 1 and 2 categories.

## EXAMPLES



This is an example of a company not reporting to the GHG protocol standard which asks for emissions to be expressed as tonnes of CO<sub>2</sub>e.

Like many reports, this one has chosen its own metric. Whilst this is better than no disclosure at all it does not allow for cross comparison between companies.

	2005	2006	2007	2008	2009
Energy consumption from operations and transport (million gigajoules) <sup>1</sup>	19.4	26.4	26.4	26.2	25.3
Climate change impacts (thousand tonnes):					
– From operations	1966	2223	2226	2234	2166
– Inhaler use by patients <sup>1</sup>		4685	5200	4747	4243
– Total climate change impacts		7411	7796	7275	6676

In this example the terminology used is not clear, referring to emissions as “climate change impacts” rather than stating that it represents metric tonnes of CO<sub>2</sub>e.

# 31 REPORTING GUIDANCE

- ▶ **Report Scope 1, 2 & 3 emissions following GHG protocol guidelines**
- ▶ **Ensure emissions data is publicly available in CSR/Sustainability reports and online**
- ▶ **Have emissions data verified by an independent third party**
- ▶ **Ensure verification certificates are easily available to the publicly**

Companies can easily improve their standings within the ET Carbon Rankings by following several simple steps:

1. Publishing emissions data for Scopes 1, 2 and 3 in the public domain, in a clear and accessible manner, either on the company website or in a Sustainability Report, Annual report or ideally, all three.

2. Ensuring this information has been externally verified to a reasonable standard of assurance, ideally against a specific GHG standard such as ISO 14064-3, but at least against a general assurance standard such as ISAE 3000 (the International Standard on Assurance Engagement).

3. Calculate Scope 3 emissions comprehensively according to the new GHG protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. The latest information on verification of Scope 3 can be found at the GHG Protocol and ISO websites.

4. Ensure that any verification statement is publicly available and included in the relevant Sustainability Report or Annual Report, as well as ensuring it can be easily found on your company's website.

One of the primary aims of the EIO's series of Rankings is to ensure that reliable GHG emissions data is publicly available and we applaud all companies making a serious effort to reach this standard.

## **Encouraging clearer reporting**

The key areas which are identified by the various bodies of research carried out in the field of GHG emissions reporting, including by the EIO, suggest that there is an urgent need for:


- ▶ Standardised reporting
- ▶ More emphasis on the verification of GHG emissions data reported by companies

The following page outlines the EIO's suggestions for how companies could and should report their emissions going forward.

## GUIDANCE

### Environmental Tracking reporting template

The reporting template below provides guidance on how companies can report their Greenhouse Gas emissions in a **simple, clear and cross comparable** format. It is intended to integrate with the existing and widely used GHG Protocol standard of reporting emissions in terms of Scope 1, 2 & 3. Crucially, it seeks to provide a framework by which companies can report their key GHG information in one place covering three core areas: **total GHG emissions**; **scope of reporting**; and, **verification**. The EIO is currently exploring how it might be able to link the reporting of such data directly to the ET Carbon Rankings.

ENVIRONMENTAL TRACKING REPORTING STANDARD TEMPLATE		
<b>Reporting Period:</b>		
1 January 2009 to 31 December 2010: Yes/No? _____		
If other please specify _____		
	Metric tonnes of CO <sub>2</sub> e (tCO <sub>2</sub> e)	
	2010	2009
Scope 1	25,000	23,000
Scope 2	350,000	370,000
Scope 3	11,000,000	9,600,000
<b>Total gross emissions</b>	<b>11,375,000</b>	<b>9,993,000</b>
Green tariff	(28,000)	-
<b>Total net emissions</b>	<b>11,347,000</b>	<b>9,993,000</b>
<b>Other greenhouse gases</b>		
Does your company produce any greenhouse gases which are not covered by the Kyoto basket of 6 gases? Yes/No? _____		
If you have answered yes to the previous question, have they been included in the Scope 1, 2 and 3 calculations listed above? Yes/No? _____		
<b>Scope of Reporting</b>		
Do the emissions gross emissions reported for Scope 1, 2 & 3 represent 100% of your companies operations? Yes/No? _____		
If you have answered no to the previous question, what percentage do of your companies operations do they represent? _____		
<b>Verifications/Assurance (to be completed by an independent third party)</b>		
Name of Verifier: _____		
Which standard has been used to assure the data? (E.g. ISO14064, AA1000AS etc) _____		
Has the company covered all of the Scopes accurately (for Scope 3 please refer to the GHG Protocol new Corporate Value Chain (Scope 3) Accounting and Reporting Standard), including any GHGs not covered by the GHG Protocol which may be material? Yes/No? _____		
Are there any material issues with the numbers represented for the company under Scope 1, 2 or 3? Yes/No? _____		
Is the data presented by the company representative of the company's entire scope of operations? Yes/No? If no approximately what % does it cover? _____		
Please state any other further comments or qualifications _____ _____		
Please attach the verification full statement.		

## Moving forward: The ET Index Series

The ET Carbon Rankings represent the first phase of the Environmental Tracking concept, paving the way for the ET Index Series, which will follow soon after.

The ET Index Series has been designed to provide the investment community with a tool to encourage transparency and emission reductions on a global scale. Through the creation of a mainstream financial product, in the form of a series of broad market indexes, the world's largest companies can be incentivised to cut their emissions. This is done by re-weighting companies in the index series, either positively or negatively, on a sliding scale, according to their position in the ET Carbon Ranking.

As pointed out by the recent Mercer report on Climate Change Scenarios and the Implications for Asset Allocation (Mercer 2011), the use of sustainability themed indices in passive portfolios is identified as one way investors can take action to improve their portfolio resilience to climate-related risks.

However, the key question, which the EIO seeks to address through its Index series, is how to create an investable index which can have sufficient appeal to investors, evidently concerned with the bottom line. This is why the ET Index Series has been created to mirror the risk/reward profile of their non weight-adjusted counterparts, whilst still applying pressure to companies across the board to reduce their emissions.

The potential of ET Index Series to tackle GHG emissions rests on the logic that if a significantly large pool of investors track the indexes, it will alter the supply and demand for these companies' shares based on their position in our Ranking. This effectively increases the cost of emitting Greenhouse Gasses, incentivising companies to take action.



### NATIONAL INDEXES:

ET UK 100

### REGIONAL INDEXES:

ET EUROPE 300

ET NORTH AMERICA 300

ET ASIA-PACIFIC 300

ET BRICS 100

### GLOBAL INDEXES:

ET GLOBAL 1000

ET GLOBAL 800

THROUGH APPLYING PRESSURE TO A  
COMPANY'S SHARE PRICE, THE ET  
INDEX SERIES AIMS TO RAISE THE  
COST OF CARBON FOR COMPANIES

## LANDSCAPE

### EU initiatives

In 2009, the EU launched the Climate and Energy Package. This aims to reduce GHG emissions by 2020 by 20% compared to 1990 levels, to deliver 20% energy consumption from renewable sources, and to reduce primary energy use by 20% compared with projected levels. To achieve this, the EU is reforming its Emissions Trading System (ETS), producing new, binding targets for renewable energy in Member States, providing a legal framework to promote the development of carbon capture and storage (CCS), and bringing in the new Effort Sharing Decision. This supplements existing legislation under the EU ETS, Renewables Directive, and various efficiency and quality standards across a range of industries. The implementation of these is left to individual EU Member States (European Commission 2010).

**CURRENTLY , THE EU IS COMMITTED TO REDUCING GHG EMISSIONS BY 2020 BY 20% COMPARED TO 1990 LEVELS**

### The Effort Sharing Decision

The EU Effort Sharing Decision aims to bring 10% reduction in GHG emissions from non-ETS sectors across the EU by 2020 compared to 2005 levels. Each Member State is set a target under this scheme according to its relative wealth. Announced in 2009, it sets binding annual targets for EU Member States to limit their GHG emissions in sectors not covered by the EU ETS, and excluding the land use, land change, and forestry (LULCF) and international shipping sectors. Under this scheme, Member States must draw up plans to reduce their emissions accordingly, and be adaptable to higher targets in the event of a binding international agreement on emissions reductions (European Commission 2010). As a result, it is anticipated that emissions will become more strictly regulated across the EU, providing incentives for better disclosure and emissions reductions across the board.

**THE EFFORT SHARING DECISION IS INTENDED TO BRING ABOUT EMISSIONS REDUCTIONS IN SECTORS NOT COVERED BY THE EU ETS**

### European Union Emissions Trading Scheme (EU ETS)

#### *The story so far...*

The EU's most prominent initiative to reduce Greenhouse Gas emissions is the European Union Emissions Trading Scheme.

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THE INSTALLATIONS COVERED BY THE EU ETS ACCOUNT FOR 40% OF THE EU'S GREENHOUSE GAS EMISSIONS.

This EU-wide cap and trade scheme covers the most carbon intensive industries in the 27 EU Member States, as well as Iceland, Liechtenstein, and Norway. It covers carbon dioxide (CO<sub>2</sub>) emissions, plus nitrous oxide (N<sub>2</sub>O) emissions from certain processes. The c.11,000 installations covered by the scheme account for 40% the EU's Greenhouse Gas emissions. The number of allowances is gradually being reduced, with the aim that emissions covered by the scheme in 2020 will be 21% lower than in 2005. Together with a 10% 2020 emissions reduction target over 2005 levels in sectors not covered by the EU ETS this is aimed at reducing overall EU emissions by 14% compared to 2005, or 20% compared to 1990 levels, in line with Kyoto Protocol targets. The EU as a whole is on track to meet its targets, with a GHG emissions reduction of 8% on 1990 levels by 2008-2012, and Austria and Italy are the only two Member States likely to face difficulties meeting their individual targets (European Commission progress report 2010).

Phase I of the EU ETS, from 2005 to 2007, is estimated to have reduced emissions by 120-300MtCO<sub>2</sub> over the three years, meaning up to 5% emissions reduction (Ellerman et al. 2010). This is despite the over-allocation of permits and a lenient cap leading the carbon price to reach a low of just €0.03/tCO<sub>2</sub> in December 2007. Phase II of the scheme, which started in 2008 and lasts until the end of 2012, is currently in progress. It has been criticised for not adjusting its targets to account for the economic downturn. Carbon trading pressure group Sandbag claims that these problems mean that companies in the scheme can meet their targets simply by following a Business as Usual (BAU) trajectory until 2016, deterring action and hindering green investment. In analysing data released by the EU Community Independent Transaction Log (CITL), Sandbag points out that "emissions covered by the EU Emissions Trading Scheme have grown to 1.76 billion tonnes in 2010, up 3.6% on last year. This leaves 2010 emissions 126 [billion tonnes] below the cap designed to limit them, making the 5th year of of the six years the scheme has been set running in which the cap has been set to high." (Sandbag 2011).

RESEARCH FROM WATCHDOG GROUPS SUCH AS SANDBAG SUGGESTS THAT THE EU ETS HAS SO FAR FAILED TO DO ITS JOB IN ACHIEVING THE NECESSARY EMISSIONS REDUCTIONS

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Accordingly some Member State governments, such as that of the UK, support a stricter cap, raising the 20% target to 30% (Ellerman et al. 2010).

### *On the horizon...*

Airlines will join the scheme in 2012. Phase III of the EU ETS is set for 2013-2020, inclusive. This entails several changes to the way the system operates (European Commission, 2008). The most salient of these are:

- ▶ Expansion to cover the petrochemical, ammonia, and aluminum industries;
- ▶ Increased Greenhouse Gas coverage, adding N<sub>2</sub>O from certain industrial sources and perfluorocarbons from aluminum production;
- ▶ Longer trading period and possibility of carrying over allowances between trading phases to improve market efficiency;
- ▶ Annually declining emissions caps;
- ▶ Increased proportion of allowances auctioned: over half, compared to under 4% at present under Phase II. This should reduce the problems of over-allocation encountered in the current and previous systems. This is intended to reach 70% by 2020 and 100% by 2027;
- ▶ Emissions caps and rules governing allocation of allowances not auctioned will be set at the EU level rather than by national governments to reduce complexity and remove incentives for each national government to favour its domestic industries; and,
- ▶ Some allowances will be set aside to finance carbon capture and storage demonstration projects and innovative renewable energy technologies.

### *Looking further ahead...*

There are longer term provisions proposed to link the EU ETS tightly with emerging emissions trading frameworks beyond the EU, from 2013 onwards (European Commission 2008):

- ▶ Possibility of increasing EU-wide emissions reductions to 30% below 1990 levels by 2020 if other major developed and developing country emitters agree to a binding international policy.

**AFTER MUCH DEBATE SURROUNDING THE CURRENT EXCLUSION OF AIRLINES FROM THE SCHEME, THEY WILL BE ADDED TO THE EU ETS IN 2012**

**ALL COMPANIES OPERATING IN THE EU SHOULD THEREFORE BE AWARE OF POSSIBLE TIGHTENING OF DOMESTIC ENVIRONMENTAL POLICIES AND INCREASES IN THE PRICE OF CARBON**

- ▶ Provision to increase links with CDM/JI carbon credits and any new emissions trading systems, to allow global emissions trading.

Whilst the ET Europe 300 Carbon Rankings covers companies registered in Europe, most operate on an international scale and will be affected by a range of national, regional and global emissions policies.

## International Outlook

The Kyoto Protocol will remain in force until 2012, but so far there is no legally binding emissions treaty to replace it. The Copenhagen (2009) and Cancun (2010) climate conferences both produced accords, but lacked binding commitments. Negotiation continues in the build up to Durban later this year, with UNFCCC Executive Secretary Christian Figueres urging countries to push ahead with their work to aim for another significant step in addressing global climate change in 2011 at Bangkok's summit (UNFCCC 2011). In the meantime, market-based schemes are beginning to occur at the national level in spite - or perhaps because - of a lack of concrete agreement at the international level.

A US cap-and-trade scheme has to date failed to be passed into law, but inter-state and intra-state schemes are becoming more prevalent in progressive states in the North-West and Mid-Atlantic. However, states such as Texas which are still heavily reliant on fossil fuels and energy-intensive industries are resisting local and national initiatives. China is also planning a national cap-and-trade scheme with the help of the Asian Development Bank.

This follows the relative success of two city-wide voluntary schemes but it also prompted by growing concerns around national energy security and the international competitiveness of China's biggest businesses through energy efficiency (Zhi and Bo 2010). Other regional actors are waiting to see the outcome before committing to similar plans. A move towards trading should greatly increase transparency in reporting and allow greater scrutiny of emissions data. However, emissions are likely to continue rising among the emerging economies of Brazil, China, India and Russia, although moves towards energy efficiency can lower overall intensity.

**THERE IS CURRENTLY NO LEGALLY BINDING EMISSIONS TREATY TO REPLACE KYOTO WHEN IT EXPIRES IN 2012. IF THIS REMAINS THE CASE THEN WE NEED TO BE PREPARED TO LOOK BEYOND GOVERNMENT TO BRING ABOUT THE NECESSARY EMISSIONS REDUCTIONS**

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## OF TERMS

BAU: Business As Usual

CCC: Committee on Climate Change

CDM: Clean Development Mechanism

CRC: Carbon Reduction Commitment

CSR: Corporate Social Responsibility

CO<sub>2</sub>e: Greenhouse Gas emissions expressed as Carbon Dioxide (CO<sub>2</sub>) Equivalents, meaning calculated to express their global warming potential in terms of CO<sub>2</sub>.

DECC: Department of Energy and Climate Change

EIO: Environmental Investment Organisation

ET: Environmental Tracking

EU ETS: EU Emissions Trading Scheme

GHG: Greenhouse Gas

GRI: Global Reporting Initiative

JI: Joint Implementation

tCO<sub>2</sub>e: Metric Tonnes Carbon Dioxide Equivalent

ROC: Renewable Obligation Certificates

Scope 1: All direct GHG emissions.

Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam.

Scope 3: Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

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