2

McArthurGlen Group Greenprint Performance Report™

VOLUME 2, 2010[1]

GREENPRINT FOUNDATION

REDUCING CARBON. BUILDING VALUE.

GREENPRINT FOUNDATION

REDUCING CARBON. BUILDING VALUE.

Greenprint Foundation is a worldwide alliance of real estate owners, investors, financial institutions and other industry stakeholders committed to reducing carbon emissions across the global property industry. Greenprint Foundation is a catalyst for change, taking meaningful, immediate and measurable actions to generate solutions that improve energy efficiency while demonstrating the correlation with increased property values. Greenprint focuses on reducing the carbon footprint of the built environment, which currently represents one-third of all carbon emissions. Greenprint works to achieve its carbon reduction goals through education and action.

Greenprint's mission is to lead the global real estate community toward value-enhancing carbon reduction strategies that support the Intergovernmental Panel on Climate Change (IPCC) goals for global greenhouse gas stabilization by 2030.[2]

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Executive Summary

The results of the Greenprint Performance Report, Volume 2 are based on 16 property submissions representing 0.6 million square meters across 5 countries, which is a 100% increase in number of submitted properties from Volume 1.

All 16 properties submitted are used to provide total carbon emissions and other portfolio-wide metrics. Seven (7) of the 16 properties submitted by McArthurGlen included historical data, which comprises the Like for Like portfolio. This portfolio is used to provide year over year performance. Castel Romano provided refrigerant data in 2009, but not in 2010. Therefore, this property is not included in the Like for Like dataset.

Highlights for McArthurGlen Group Greenprint Performance Report, Volume 2

- **Overall energy consumption of the McArthurGlen Group portfolio decreased 1.1% from 2009 on a Like for Like portfolio basis.** The decrease is attributable to increased efficiency at several of McArthurGlen's properties, including Bridgend, Cheshire Oaks, La Reggia Designer Outlet and Serravalle.
- **Greenhouse gas emissions increased 19.6% from 2009 to 2010 on a Like for Like portfolio basis.** Emissions decreased at most of McArthurGlen's properties from 2009 to 2010. A majority of McArthurGlen's increasing emissions are from natural gas due to McArthurGlen offsetting most electricity-related emissions with renewable electricity purchases. Swindon Designer Outlet reported a large increase in natural gas from 2009 to 2010, which is a primary factor in the overall increase in emissions. La Reggia also decreased onsite renewable energy consumption from 16% of total energy consumption in 2009 to 3% in 2010, which offset less emissions in 2010.
- **McAthurGlen is one of the leading Greenprint members in the implementation of onsite renewable energy, and the purchase of certified renewable electricity.** Onsite renewable energy consumption decreased at La Reggia Designer Outlet from 16% of the property's total energy to 3% in 2010. The purchase of certified renewable electricity at other McArthurGlen properties remained the same from 2009 to 2010.

A Guide to the Greenprint Performance Report

Greenprint sets the global standard for a common system to measure and benchmark energy and emissions across the global property industry. This standard is transparent and accessible, and the data in the Greenprint Performance Report represents the most comprehensive voluntary disclosure of energy and emissions performance by commercial property owners.

- Standardized definitions and data collection methodology allow for direct comparisons between properties and portfolios, and the creation of robust energy and emissions intensities.
- Year over year progress from 2009 to 2010 is provided through a Like for Like analysis. This is a direct comparison of the properties' current year data against the same properties' historical data. Properties without historical data are excluded in the Like for Like portfolio, but are included in Current Year snapshots.
- Normalized indicators are used in many instances in order for buildings of different sizes to be compared, and to account for changes in portfolio composition so that trends can be assessed over the longer term.
- Energy is referred to as being obtained by the landlord, or tenant, when analyzing the landlord and tenant metering arrangements in Appendix C. Although a majority of energy is obtained by purchasing from a power company, energy may also be obtained through onsite generation.
- The complete methodology is provided throughout this report, including emission boundaries and calculations in line with GHG Protocol, emission factors provided by the Australian NGER, IEA, UK DEFRA, the US EPA and quality control processes in line with ISO 14064. A third-party audit of this report will be publicly available in January 2012.

2010 HIGHLIGHTS

ENERGY

-1.1% McArthurGlen Group

-0.7% Greenprint

Year over Year – Like for Like

CARBON

+19.6% McArthurGlen Group

-0.7% Greenprint

Year over Year – Like for Like

OCCUPANCY

+1.6% McArthurGlen Group

+0.5% Greenprint

Year over Year – Like for Like

NUMBER OF PROPERTIES

+100% McArthurGlen Group

+170% Greenprint

Year over Year - Absolute

NUMBER OF COUNTRIES

+150% McArthurGlen Group

+22% Greenprint

Year over Year – Absolute

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1 McArthurGlen Group Portfolio Overview

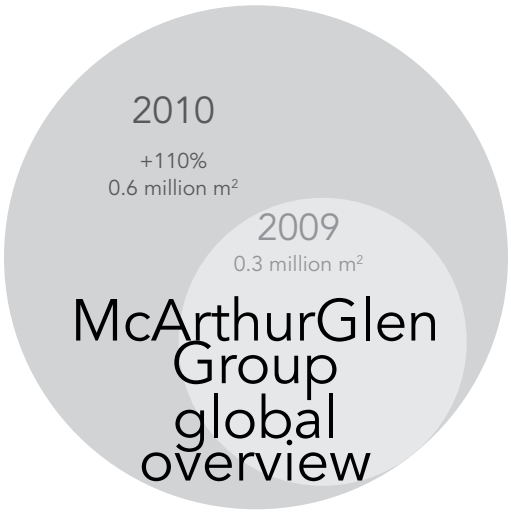
Distribution by Geography

YEAR OVER YEAR – ABSOLUTE

The McArthurGlen Group's portfolio spans Europe, with the largest number of assets located in the United Kingdom, followed by Italy and Austria.

Greenprint members have self-selected which assets to submit to the Performance Report based upon:

- Data Availability[3]
- Geographic Distribution
- Managerial Control

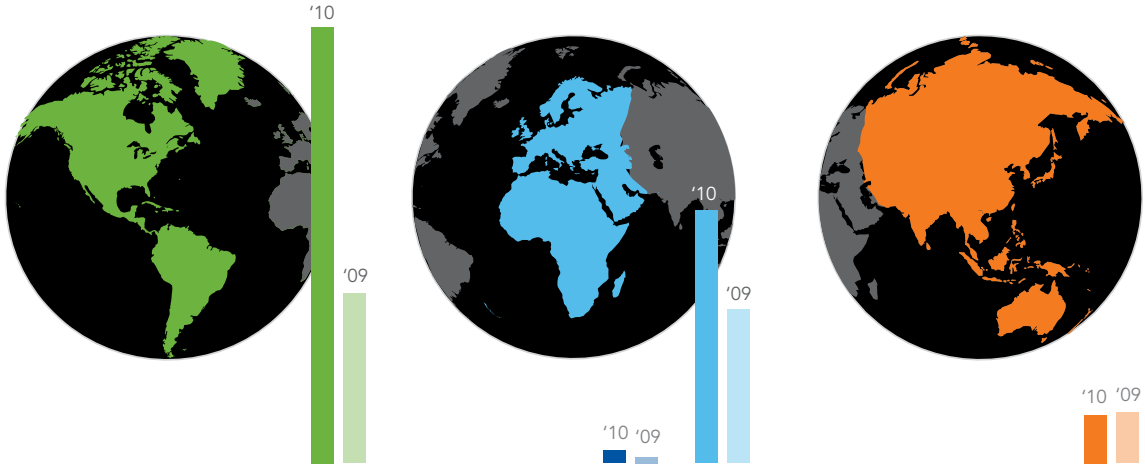


MCARTHURGLEN GROUP

AMERICAS
0 assets, 0 countries
0 million m² (0 MSF)

EMEA
16 assets, 5 countries
0.56 million m² (6.1 MSF)
+110%

ASIA PACIFIC
0 assets, 0 countries
0 million m² (0 MSF)



GREENPRINT

AMERICAS
892 assets, 6 countries
19 million m² (200 MSF)
+152%

EMEA
621 assets, 23 countries
11 million m² (116 MSF)
+60%

ASIA PACIFIC
110 assets, 15 countries
2.1 million m² (22 MSF)
-6%

By number of properties, McArthurGlen Group's portfolio increased 110%. The number of countries represented increased by 150% for a total of 5.

Distribution by Property Type

YEAR OVER YEAR – ABSOLUTE

The McArthurGlen Group portfolio includes some of the premier retail assets in the Greenprint portfolio.

- Office
- Retail
- Industrial
- Multifamily
- Hotel

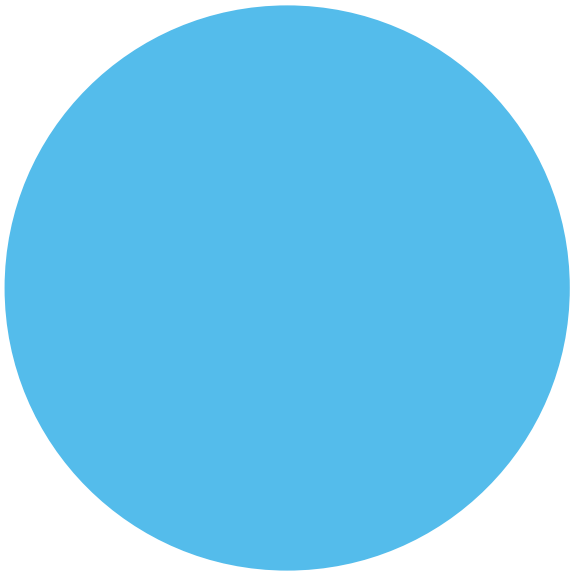
2010

MCARTHURGLEN GROUP 2010

RETAIL

0.56 million m^2

100%



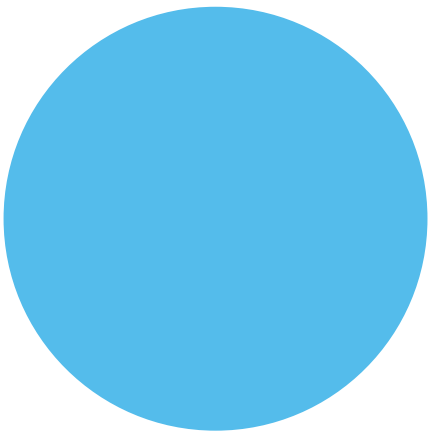
MCARTHURGLEN GROUP 2009

RETAIL

0.27 million m^2

100%

2009



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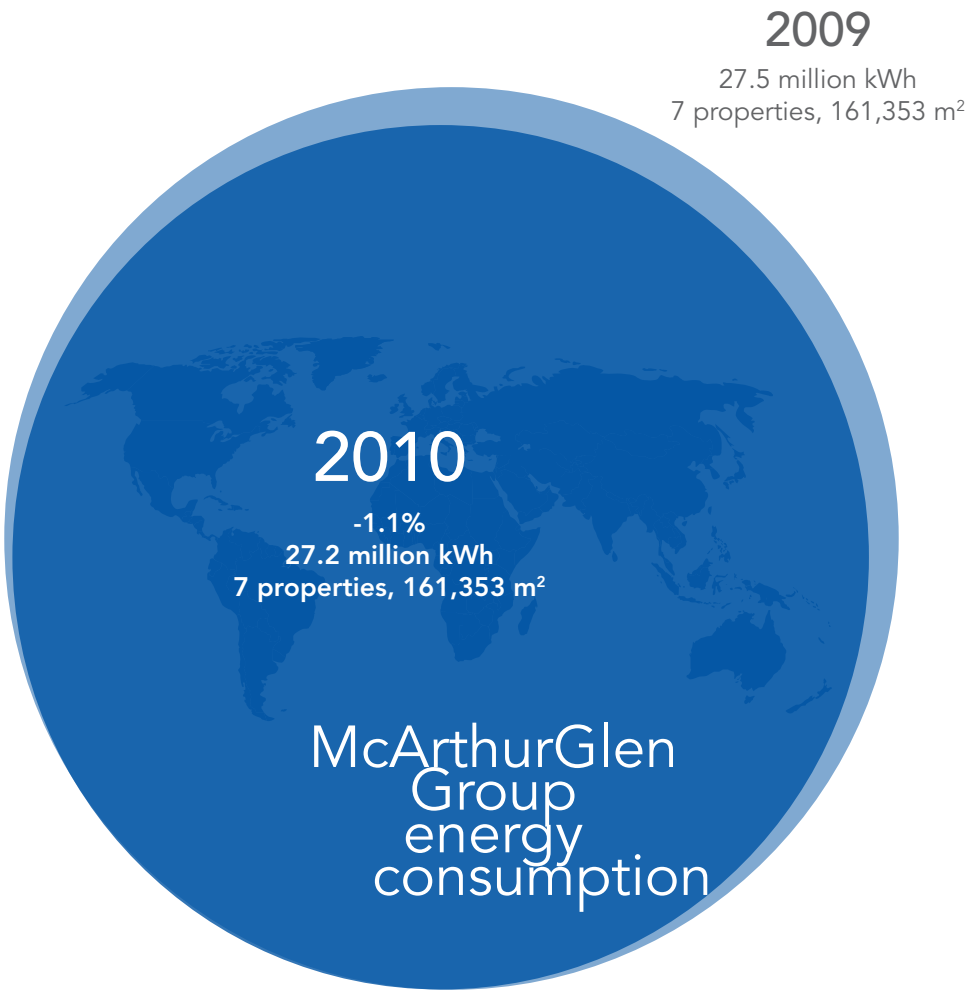
2 McArthurGlen Group Energy Profile

Energy Consumption

YEAR OVER YEAR – LIKE FOR LIKE

Overall energy consumption for the McArthurGlen Group decreased 1.1% on a Like for Like portfolio basis. The chart below shows the Like for Like portfolio, which includes properties with 2010 and 2009 data, and consists of 7 properties. Although Castel Romano provided both 2010 and 2009 data, the property did not provide refrigerant information in 2010, which would skew emissions performance. Therefore, Castel Romano is not included in the Like for Like datast.

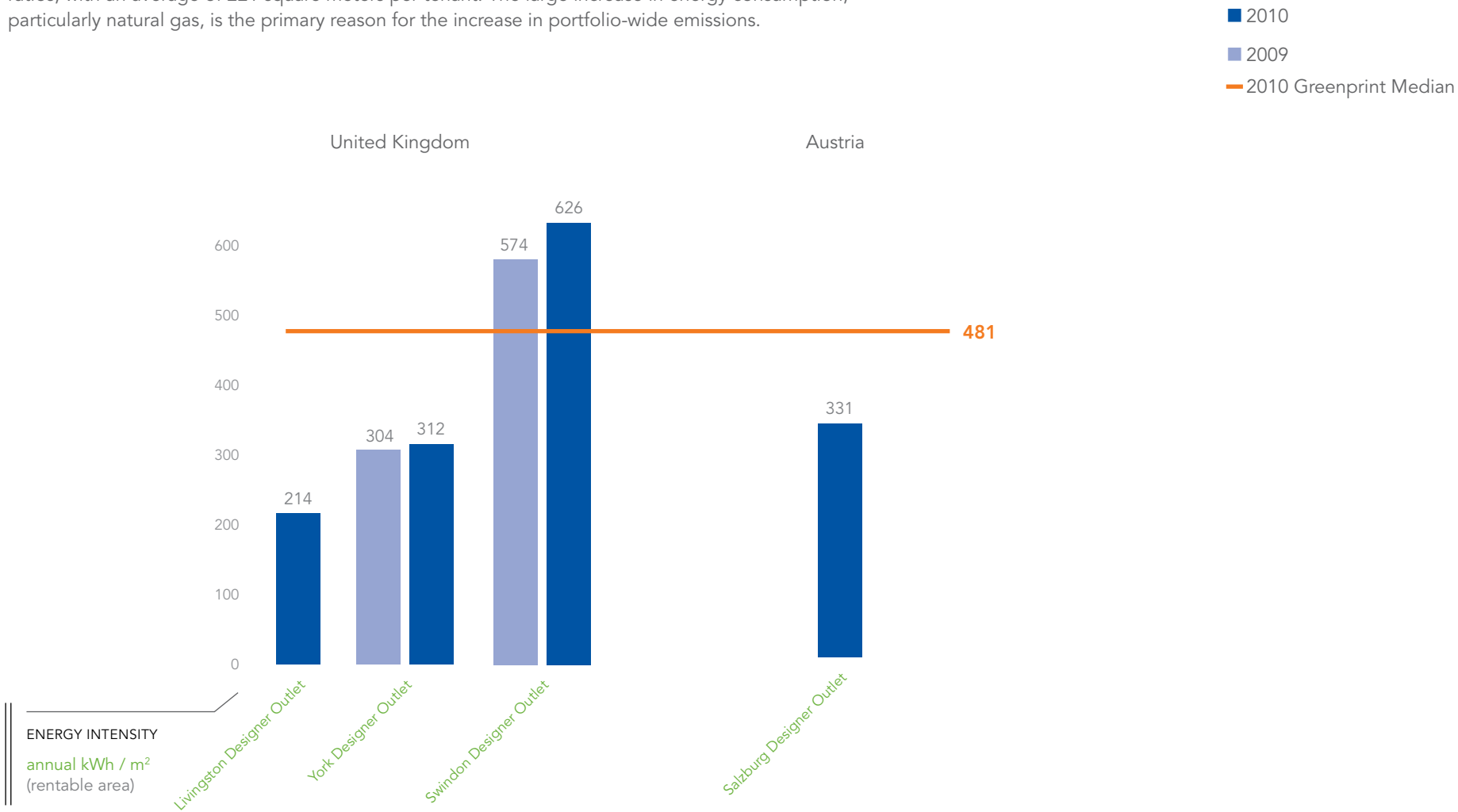


McArthurGlen Group portfolio's energy consumption decreased 1.1% on a Like for Like portfolio basis.

Energy Use Intensity of McArthurGlen Group Enclosed Retail Properties

COMPARED TO GREENPRINT MEDIAN (BASED ON 79 PROPERTIES) OF ENCLOSED RETAIL PROPERTIES

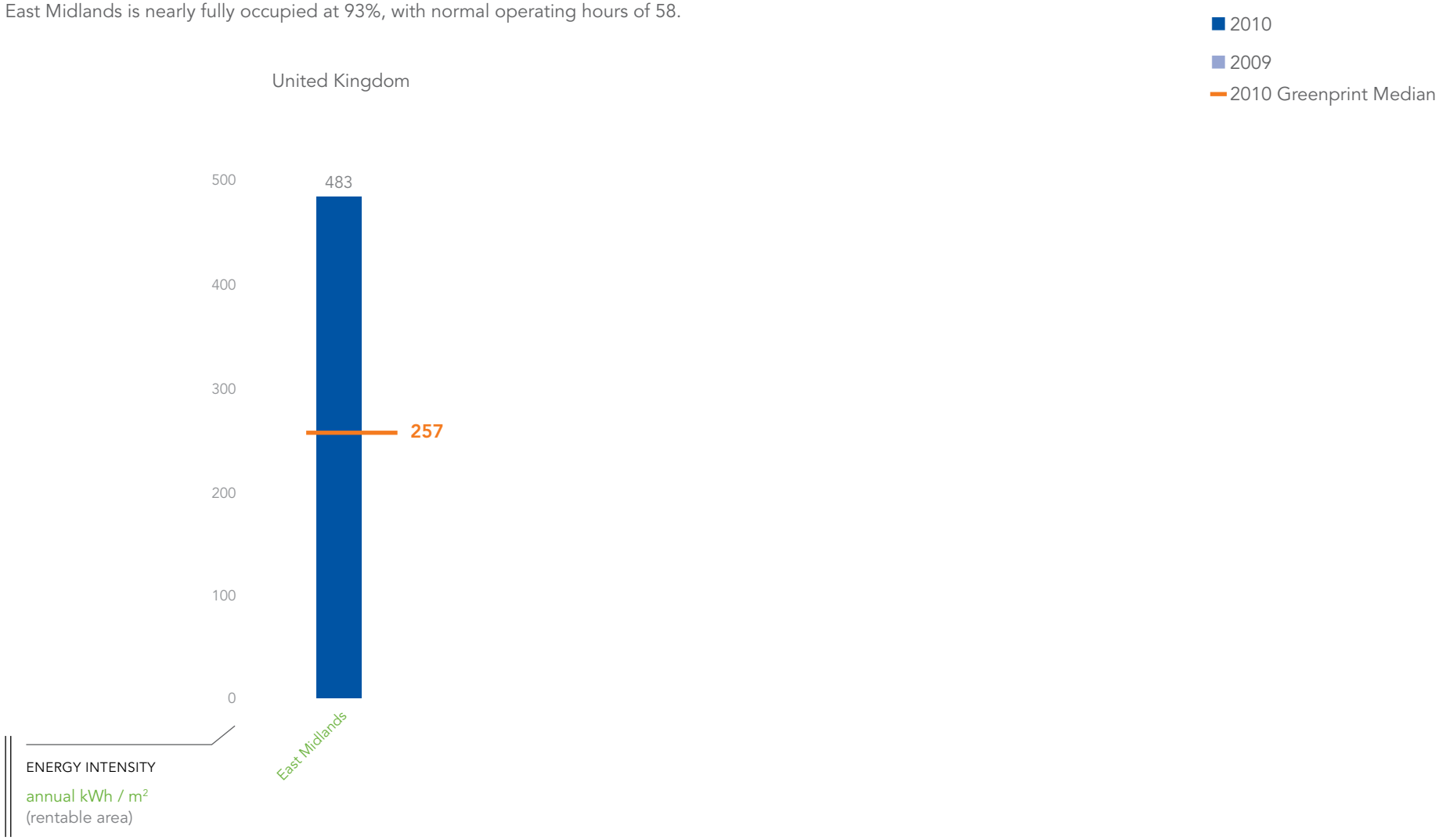
All properties are relatively new, with Swindon having the oldest renovation in 1999. Swindon also has one of the highest occupancy rates at 95%, and one of the most compressed tenant/floor area ratios, with an average of 221 square meters per tenant. The large increase in energy consumption, particularly natural gas, is the primary reason for the increase in portfolio-wide emissions.



Energy Use Intensity of McArthurGlen Group Unenclosed Retail Properties

COMPARED TO GREENPRINT MEDIAN (BASED ON 12 PROPERTIES) OF UNENCLOSED RETAIL PROPERTIES

East Midlands is nearly fully occupied at 93%, with normal operating hours of 58.



Energy Use of McArthurGlen Group Properties

The table below shows the year-over-year change in energy consumption for McArthurGlen properties. Only 5 properties were able to be benchmarked against the Greenprint median, including East Midlands, Livingston, Salzburg, Swindon and York.

Properties were unable to be benchmarked because these properties provided common area electricity and whole building natural gas. These two indicators cannot be combined with a common floor area denominator and, thus the energy intensity on a floor area basis cannot be provided.

There is an opportunity to look at this issue in more depth, and create unique intensity indicators for the retail asset class in the Third Volume of the Report.

Property	Retail Sub-Type	2010 Energy (kWh)	2009 Energy (kWh)	% Change of Energy	2010 Rentable Floor Area (m^2)	2010 Weekly Operating Hours
Ashford Designer Outlet	Unenclosed		2,071,794		16,970	66
Barberino Designer Outlet	Unenclosed	883,800	872,464	(1.3%)	21,000	62
Berlin Designer Outlet	Unenclosed		805,134		22,615	56
Bridgend Designer Outlet	Unenclosed	1,254,439	1,098,364	(12.4%)	19,189	127
Castel Romano Designer Outlet	Unenclosed	1,108,972	1,091,919	(1.5%)	23,846	73
Cheshire Oaks Designer Outlet	Unenclosed	2,137,538	1,663,447	(22.2%)	31,354	66
East Midlands	Unenclosed		7,226,696		14,974	58
La Reggia Designer Outlet Naples	Unenclosed	1,644,900	1,184,517	(28.0%)	21,800	84
Livingston Designer Outlet	Enclosed		4,638,563		24,570	63
Parndorf Designer Outlet	Unenclosed		2,386,192		36,614	57
Roermond Designer Outlet	Unenclosed		662,729		28,000	46
Salzburg Designer Outlet	Enclosed		7,461,979		30,718	57
Serravalle Designer Outlet	Unenclosed	7,815,760	6,843,376	(12.4%)	38,156	70
Swindon Designer Outlet	Enclosed	11,427,334	12,452,176	9.0%	19,893	66
Veneto Designer Outlet	Unenclosed		682,575		21,913	60
York Designer Outlet	Enclosed	3,023,598	3,107,188	2.8%	22,554	57

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3 Greenhouse Gas Emissions (GHGs)

Methodology

The Greenprint Performance Report separates Greenhouse Gas Emissions (GHG) into three categories – Scopes 1, 2 and 3. This reporting system is aligned with the World Resources Institute/WBCSD's Greenhouse Gas Protocol. Categorizing emissions by Scope enables separate accounting of GHG sources by different related entities, such as landlord and tenants, and also increases transparency.

Organizational Boundary: Greenprint Foundation has chosen to use the Operational Control approach, and defines areas under control to include all areas where Greenprint members (landlord or tenant) have full authority to introduce and implement operating policies at the building.

Scope 1 primarily covers emissions generated onsite. It includes emissions from the onsite combustion of fuels to generate electricity, heat or steam within Greenprint members' buildings. Fugitive emissions created by the operation of buildings, such as the use of refrigeration and air conditioning equipment, are also included. Scope 1 does not include energy generated offsite, building construction or waste disposal.

Scope 1 includes emissions from:

- Onsite combustion of fuels for electricity, heat or steam
- Fugitive emissions from refrigeration and air conditioning equipment

Scope 2 covers emissions from energy produced offsite, but consumed onsite. These emissions are attributed to the organization paying the energy bill, unless the energy is passed through on a submetered basis to another organization. Emissions from energy that is submetered by landlords to their tenants falls into Scope 3.

Scope 2 includes indirect emissions associated with the consumption of purchased or acquired electricity and thermal energy, such as district heating or cooling. These emissions are a consequence of energy consumption that takes place within the building's boundaries, but are generated at sources controlled by another entity. Scope 2 does not include emissions from transport, building construction, waste disposal, energy generated onsite or fugitive emissions.

Scope 2 includes emissions from:

- Electricity and imported thermal energy

Scope 3 covers emissions from energy consumed onsite that does not fall into Scope 1 or 2. Within the Greenprint Performance Report, Scope 3 does not include emissions from transport, building construction, or waste.

Scope 3 includes emissions from:

- Energy consumed onsite that is attributable to tenants through direct utility meters or landlord-provided submeters.
- Occupier members' energy that is attributable to an occupier by the landlord on a prorated basis (floor area).

Greenhouse gas emissions are calculated using the following formula:

Energy [kWh] x Emissions Factor = Greenhouse Gas Emissions

Emissions coefficients are used to calculate the amount of generated CO_2e. Developing and applying accurate emissions' coefficients is critical to reliable GHG emissions reporting. For additional information regarding emissions coefficients refer to Appendix B.

Absolute Emissions*

CURRENT YEAR – ABSOLUTE

The chart below shows the absolute greenhouse gas emissions by Scope, in line with Greenhouse Gas Protocol. Scope 3 emissions for landlord members are associated with directly metered or submetered energy to tenants. Scope 3 emissions for occupier members are associated with energy provided by the landlord on a prorated basis (floor area).

	Thousand metric tonnes of CO_2e / year in 2010				
	Scope 1	Scope 2	Scopes 1+2	Scope 3	Scopes 1+2+3
MCARTHURGLEN GROUP 7 properties	4.6	0.9	**5.5**	1.0	**6.5**
TOTAL GREENPRINT PORTFOLIO 1,623 properties	194	1,567	**1,761**	376	**2,137**

* These are absolute emissions, without adjustments nor normalisations.

Emissions

YEAR OVER YEAR – LIKE FOR LIKE

The table below shows the change in absolute emissions by property type from 2009 to 2010 on a Like for Like basis for McArthurGlen Group's portfolio and Greenprint's portfolio.

Thousand Metric Tonnes CO_2 / year
Like for Like Portfolio Over Last Two Years

	2010	2009	Change
McArthurGlen Group Retail Portfolio (7 properties)	4.8	4.0	19.6%
Greenprint Retail Portfolio (91 properties)	161	178	(9.0%)

The table below shows the change in absolute emissions by anonymous members from 2009 to 2010 on Greenprint's Like for Like portfolio basis. Greenprint occupier members' portfolios change on an annual basis as leases are consolidated and expanded. The increase in emissions is primarily due to the restatement of energy consumption at Swindon Designer Outlet.

Thousand Metric Tonnes CO_2 / year
Like for Like Portfolios Over Last Two Years

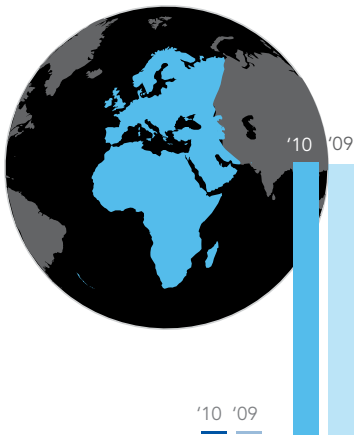
Member	2010	2009	Change
O	97	115	(15.2%)
M	79	91	(12.7%)
A	67	71	(5.3%)
H	36	38	(5.0%)
C	150	157	(4.3%)
G	198	204	(3.2%)
D	98	100	(2.7%)
P	181	184	(1.8%)
R	127	126	0.8%
B	75	74	1.9%
J	25	25	2.9%
Q	250	240	3.9%
L	18	17	4.6%
I	50	44	13.9%
MCARTHURGLEN GROUP	**4.8**	**4.0**	**19.6**
N	25	21	21.1%
F	84	65	30.7%
Greenprint Total	1,562	1,573	(0.7%)

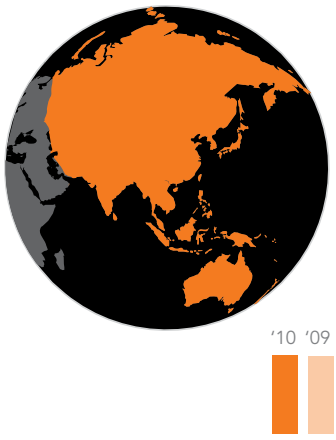
Emissions by Global Region

YEAR OVER YEAR – LIKE FOR LIKE

This map illustrates the change in emissions (Scopes 1, 2 and 3) from 2009 to 2010 for the Like for Like portfolio for each global region.

- McArthurGlen Group
- Greenprint Americas
- Greenprint EMEA
- Greenprint Asia Pacific





AMERICAS

0 assets, 0 million m^2
2010: 0 tonnes CO_2e
2009: 0 tonnes CO_2e

402 assets, 12 million m^2
2010: 909 tonnes CO_2e -1.5% decrease
2009: 923 tonnes CO_2e

EMEA

7 assets, 0.2 million m^2
2010: 4.8 tonnes CO_2e +19.6% increase
2009: 4.0 tonnes CO_2e

401 assets, 7.8 million m^2
2010: 507 tonnes CO_2e +0.4% increase
2009: 504 tonnes CO_2e

ASIA PACIFIC

0 assets, 0 million m^2
2010: 0 tonnes CO_2e
2009: 0 tonnes CO_2e

80 assets, 1.9 million m^2
2010: 147 tonnes CO_2e +0.9% increase
2009: 145 tonnes CO_2e

*CO_2e measured in thousand metric tonnes

Emission Equivalencies By Global Region

YEAR OVER YEAR – LIKE FOR LIKE

The chart below provides context to the change in the McArthurGlen Group's portfolio's emissions from 2009 to 2010 on a Like for Like portfolio basis. Properties consuming the same amount of energy can emit different amounts of CO_2e for several reasons, including:

- Government Approaches: Policies and incentives to decarbonise the power supply vary. For example, combined heat and power (CHP) options are widely available in Germany due to government support and three quarters of French electricity is now produced by low carbon nuclear plants.
- Geographic Location: The viability and utilization of onsite renewable energy technologies varies by location according to natural factors, such as water availability and sunlight intensity.

McArthurGlen Group Emissions by Global Region Comparison[4]

	Americas		EMEA		Asia Pacific	
	2010	2009	2010	2009	2010	2009
Number of properties	N/A	N/A	7	7	N/A	N/A
Floor Area (million m^2)	N/A	N/A	0.2	0.2	N/A	N/A
CO_2e emissions (Thousand metric tonnes) (Scopes 1, 2 and 3)	N/A	N/A	4.8	4.0 ↑	N/A	N/A
Barrels of oil equivalent to amount of CO_2e emissions	N/A	N/A	11,163	9,302 ↑	N/A	N/A
Cars on the road in a year equivalent to amount of CO_2e emissions	N/A	N/A	941	784 ↑	N/A	N/A
Number of trees needed to sequester the equivalent amount of CO_2e emissions	N/A	N/A	123,077	102,564 ↑	N/A	N/A

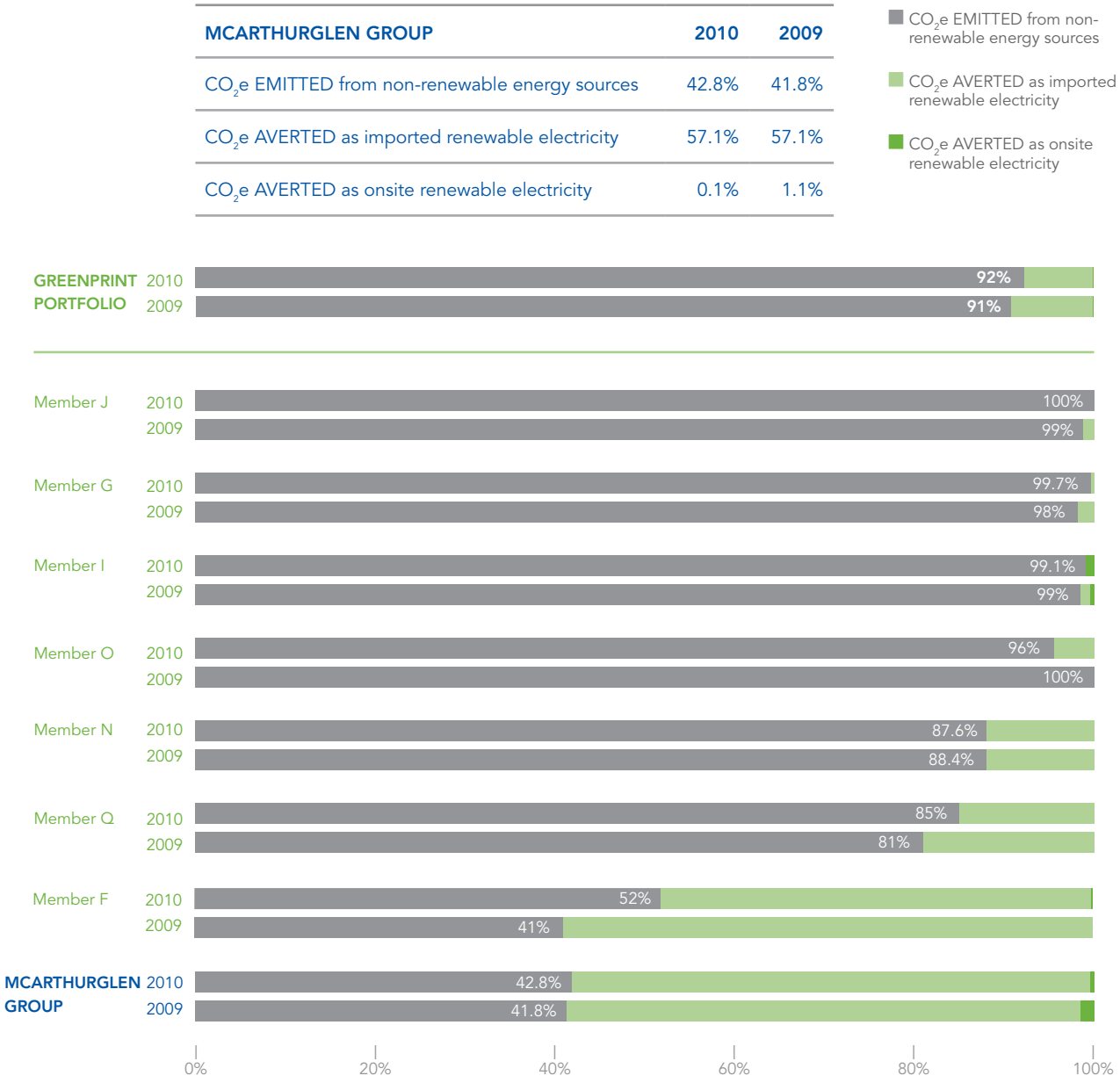
Emissions Averted Due to Renewable Energy

YEAR OVER YEAR – LIKE FOR LIKE

Greenprint members are committed to increasing the use of onsite renewable energy, such as rooftop photovoltaic panels, as well as the procurement of renewable energy from power suppliers. The chart below presents greenhouse gas emissions averted as a percentage of total emissions emitted.

McArthurGlen Group is one of the largest consumers of renewable energy within Greenprint. Onsite renewable electricity decreased due to less demand at La Reggia Designer Outlet. This contributed to the overall increase of McArthurGlen's emissions.

MCARTHURGLEN GROUP	2010	2009
CO_2e EMITTED from non-renewable energy sources	42.8%	41.8%
CO_2e AVERTED as imported renewable electricity	57.1%	57.1%
CO_2e AVERTED as onsite renewable electricity	0.1%	1.1%



PERCENTAGE

of CO_2e/
2010 compared to 2009

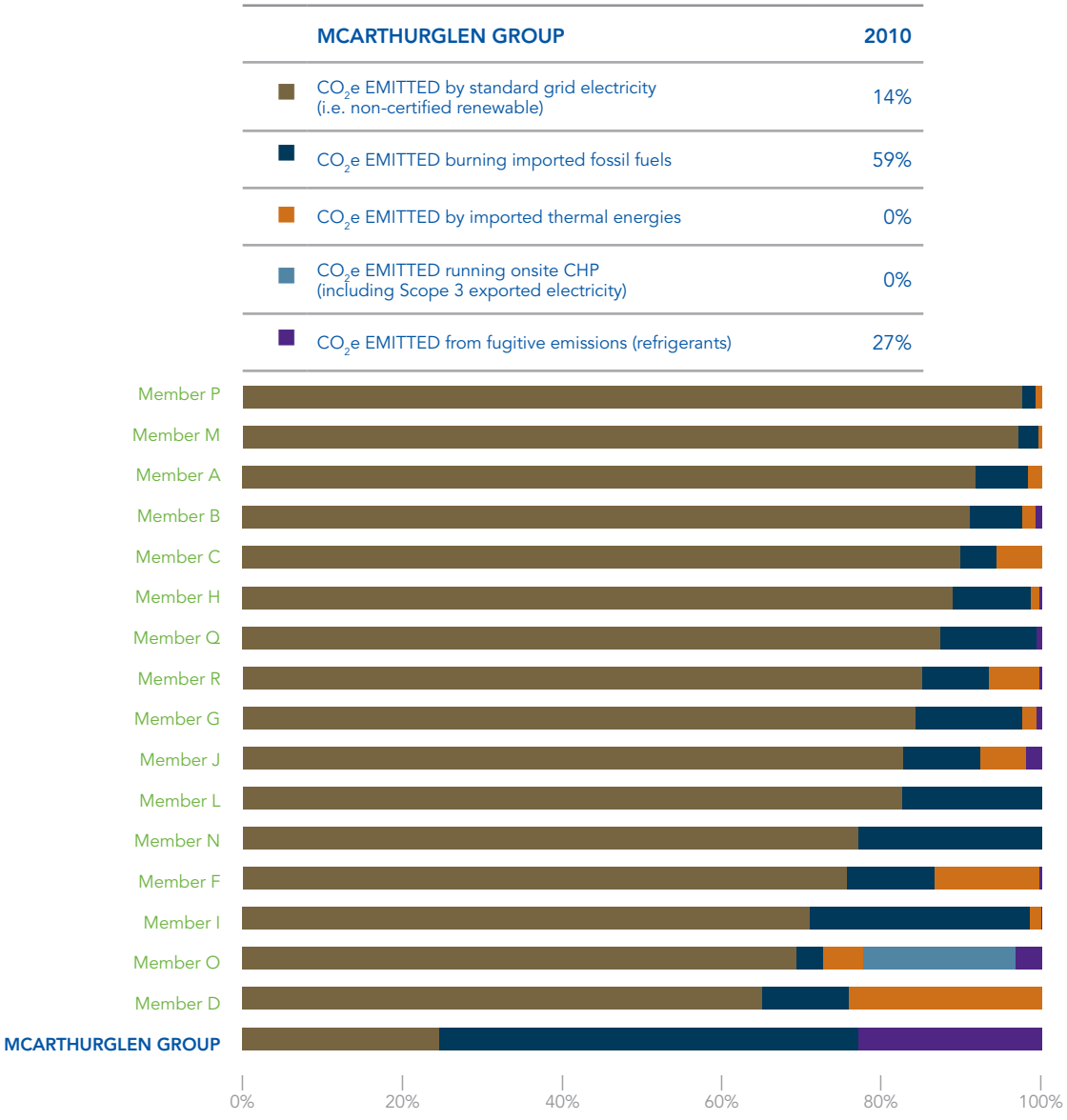
Emissions Profile by Member Portfolio

CURRENT YEAR – ABSOLUTE

The chart below shows each Greenprint members' emissions by source of energy for the Current Year. The members are sorted by emissions attributable to the purchase of electricity. McArthurGlen's primary source of electricity is renewable energy consumption, which is the reason for the low proportion of electricity to gas in the chart below.

Greenprint members' portfolio greenhouse gas emissions (CO_2e) vary due to:

- Geographic distribution of individual portfolios
- Regional policies and incentives
- Property type allocation
- Corporate sustainability policies



PERCENTAGE

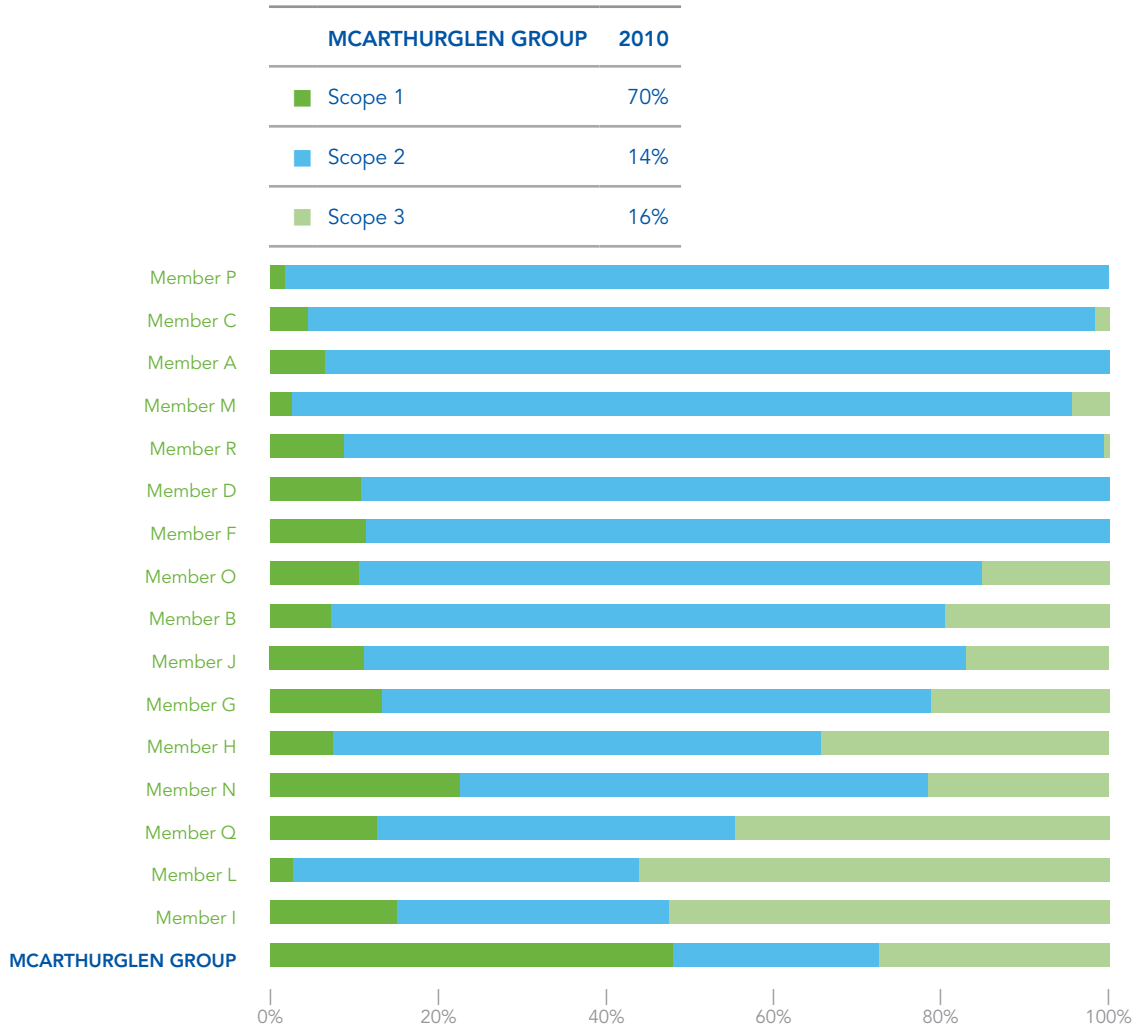
of CO_2e
2010

Emissions of Member Portfolio by Scope

CURRENT YEAR – ABSOLUTE

The Greenprint Performance Report separates Greenhouse Gas Emissions (GHG) into three categories – Scopes 1, 2 and 3. Categorizing emissions by Scope enables separate accounting of GHG sources by different related entities, such as landlord and tenants, increases transparency of operational control, and prevents double counting of emissions between organizations.

A large proportion of McArthurGlen Group's emissions is due to the combustion of natural gas, a Scope 1 emission.



PERCENTAGE

of CO_2e
2010

Provided by the World Resources Institute and the World Business Council for Sustainable Development, the Greenhouse Gas Protocol is an international accounting tool to quantify and manage greenhouse gas emissions. It provides the framework for global emission standards and programs.

Emissions by Property

The table below shows emissions and energy for each of the properties submitted by McArthurGlen. The Like for Like set of properties includes submissions with both 2010 and 2009 data, and is comprised of 7 properties.

The overall increase in emissions for McArthurGlen is primarily attributable to a large increase in natural gas consumption at Swindon Designer Outlet, which increased Scope 1 emissions at this property by over 200%.

Property	Retail Sub-Type	2010 Energy (kWh)	2009 Energy (kWh)	% Change of Energy	2009 kg CO_2e	2010 kg CO_2e	% Change of Energy
Ashford Designer Outlet	Unenclosed		2,071,794			40,440	
Barberino Designer Outlet	Unenclosed	883,800	872,464	(1.3%)	11,904	3,851	(67.6%)
Berlin Designer Outlet	Unenclosed		805,134			74,036	
Bridgend Designer Outlet	Unenclosed	1,254,439	1,098,364	(12.4%)	404,469	316,749	(21.7%)
Castel Romano Designer Outlet	Unenclosed	1,108,972	1,091,919	-1.5%	284,213	0	(100.0%)
Cheshire Oaks Designer Outlet	Unenclosed	2,137,538	1,663,447	(22.2%)	110,920	66,836	(39.7%)
East Midlands	Unenclosed		7,226,696			90,163	
La Reggia Designer Outlet Naples	Unenclosed	1,644,900	1,184,517	(28.0%)	447,996	448,083	0.0%
Livingston Designer Outlet	Enclosed		4,638,563			529,081	
Parndorf Designer Outlet	Unenclosed		2,386,192			795	
Roermond Designer Outlet	Unenclosed		662,729			219,528	
Salzburg Designer Outlet	Enclosed		7,461,979			472,906	
Serravalle Designer Outlet	Unenclosed	7,815,760	6,843,376	(12.4%)	1,336,825	1,126,273	(15.8%)
Swindon Designer Outlet	Enclosed	11,427,334	12,452,176	9.0%	757,653	2,490,921	228.8%
Veneto Designer Outlet	Unenclosed		682,575			275,760	
York Designer Outlet	Enclosed	3,023,598	3,107,188	2.8%	324,743	355,580	9.5%

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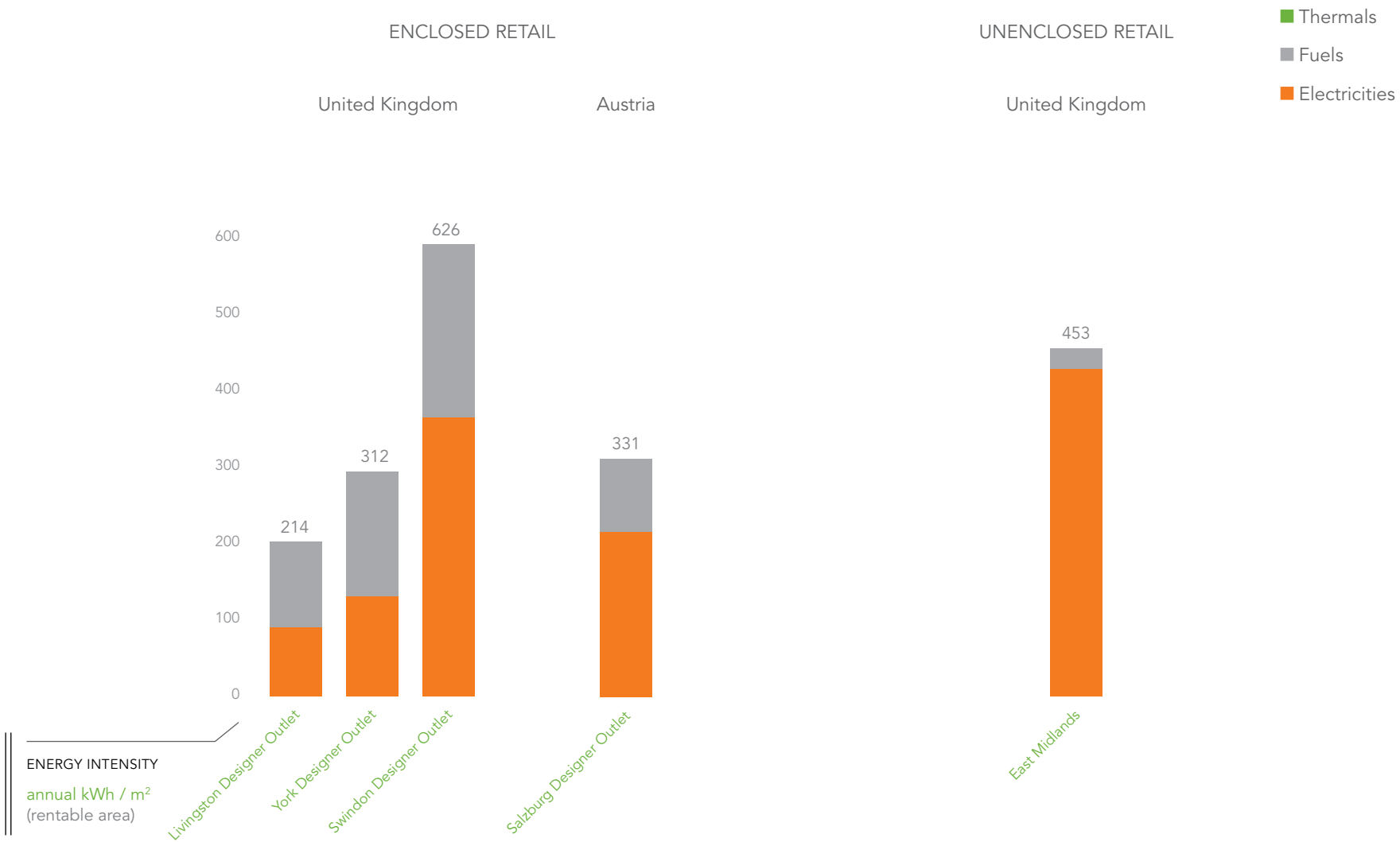
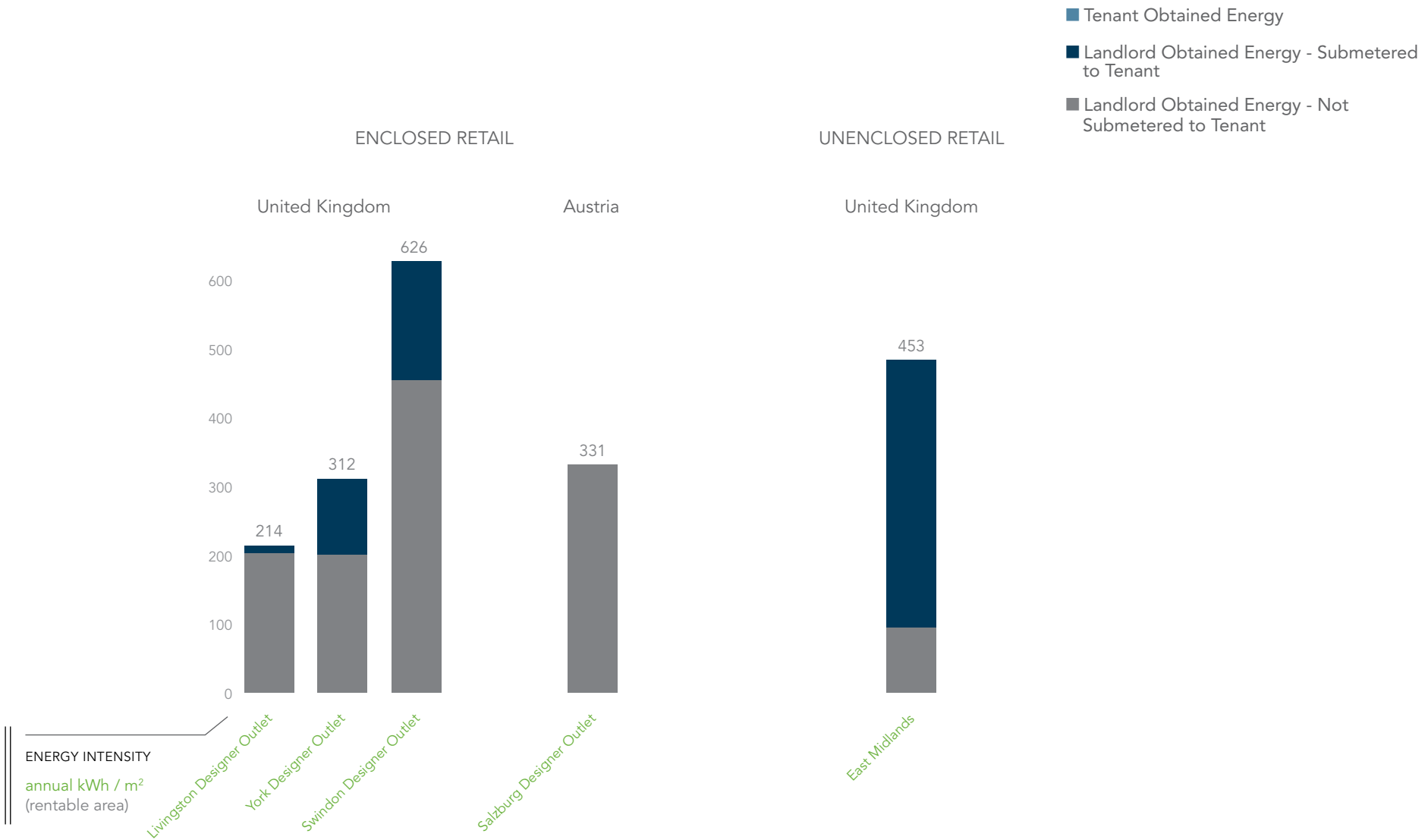
4 Appendices

McArthurGlen Group Retail Energy Use Intensity by Energy Type in EMEA



McArthurGlen Group Retail Energy Use Intensity by Landlord/Tenant Metering Arrangement in EMEA



Quality Controls & Verifications

Greenprint Foundation employs a data collection, verification and calculation process aligned with the Greenhouse Gas Protocol and the principles of ISO 14064.

The Performance Report Committee employs a quality management procedure to ensure accurate and verifiable results adhering to the following steps:

	Responsibility	Role
1.	Identification of Sites	Member Approver
2.	Input of Property Data	Member Respondent
3.	Software Plausibility Checks	Greenprint Software
4.	Review and Approval of Data	Member Approver
5.	Verification of Data	Greenprint Validator / Project Coordinator
6.	Calculation of GHG Emissions	Project Coordinator
7.	Verification of Results	Greenprint Validator

Roles:

- Member Approver: A senior-level employee from each Greenprint member who selects sites for inclusion in the Report and provides oversight of the review process on behalf of the member firm.
- Member Respondent: A property-level employee from each Greenprint member that collects property data.
- Project Coordinator: An ISO 9001-certified contractor administers the web-enabled questionnaire, manages the software plausibility checks and performs GHG emissions calculations.
- Greenprint Validator: Greenprint's Vice President of Technology & Member Services provides oversight review of the software architecture, data collection and results, and creates workflow process with Members' Approvers.

Data sources include:

- Property data based upon the records of building landlords or their building management companies. Occupier space data is based upon tenant records and lease agreements.
- Energy data based upon utility bills, invoices, power supply company records or meter readings.
- Refrigerant data based upon property maintenance logs.

Greenprint Foundation will commission verification of its Performance Report by an independent third party. The verifier will produce materiality thresholds to assess any material discrepancies in Volume 2 of the Report. The verification report will be publicly released in January 2012.

Emissions Coefficients

Electricity Emissions Factors (2006) [except USA eGRID factors (2007)]: kg CO_2 per kWh electricity generated

Americas	
Argentina	0.3034
Brazil	0.0810
Canada	0.1840
Chile	0.2942
Mexico	0.5410
United States (by eGRID subregion)	0.5895
ASCC Alaska Grid	0.5828
ASCC Miscellaneous	0.2430
ERCOT All	0.5682
FRCC All	0.5535
HICC Miscellaneous	0.6096
HICC Oahu	0.7352
MRO East	0.7677
MRO West	0.7814
NPCC Long Island	0.6436
NPCC New England	0.3756
NPCC NYC/Westchester	0.3197
NPCC Upstate NY	0.3099
RFC East	0.4805
RFC Michigan	0.7490
RFC West	0.7038
SERC Midwest	0.8071
SERC Mississippi Valley	0.4555
SERC South	0.6784
SERC Tennessee Valley	0.6989
SERC Virginia/Carolina	0.5073
SPP North	0.8159
SPP South	0.7367
WECC California	0.3089
WECC Northwest	0.3896
WECC Rockies	0.8646
WECC Southwest	0.5682

EMEA	
Austria	0.2140
Belgium	0.2600
Czech Republic	0.5270
Finland	0.2420
France	0.0850
Germany	0.4040
Greece	0.7250
Hungary	0.3440
Ireland	0.5350
Italy	0.4040
Luxembourg	0.3260
Netherlands	0.3940
Poland	0.6590
Portugal	0.4160
Romania	0.4290
Russian Federation	0.3290
Slovakia	0.2230
Spain	0.3500
Sweden	0.0440
Turkey	0.4380
Ukraine	0.3440
United Arab Emirates	0.8200
United Kingdom	0.4980

Asia Pacific	
Australia (NGER determination)	0.9210
New South Wales and Australian Capital Territory	0.9000
Victoria	1.2300
Queensland	0.8900
South Australia	0.7200
South West Interconnected System in Western Australia	0.8200
Tasmania	0.3200
Northern Territory	0.6800
China	0.7880
Hong Kong	0.8550
India	0.9440
Indonesia	0.6770
Japan	0.4180
Korea, Republic Of	0.5330
Malaysia	0.6550
New Zealand	0.3090
Philippines	0.4350
Singapore	0.5360
Taiwan, Province Of China	0.6590
Thailand	0.5110
Vietnam	0.3963

Source

Emission factor data is from International Energy Agency Data Services, 2006 and 2008 for "CO_2 Emissions per kWh Electricity and Heat Generated" and mainly sourced from the GHG Protocol website http://www.ghgprotocol.org/calculation-tools (as cited in table 10a of 2010 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting, Version 1.2.1 FINAL, Updated 6/Oct/2010; http://archive.defra.gov.uk/environment/business/reporting/pdf/101006-guidelines-ghg-conversion-factors.xls

Where government sponsored sub-country emissions factors are publicly available, these are used (for the USA and Australia).

For the USA: US EPA eGRID2010 (2007 data) Version 1.1; http://www.epa.gov/cleanenergy/documents/egridzips/eGRID2010V1_1_year07_SummaryTables.pdf

For Australia: National Greenhouse and Energy Reporting (Measurement) Determination 2008, Chapter 6; http://www.comlaw.gov.au/Details/F2010C00563/Html/Text#param538

Emissions Coefficients (continued)

Fuel Emissions Factors	kg CO_2e per kWh
Diesel	0.26916
Fuel Oil	0.28289
LPG	0.23027
Natural Gas	0.20558
Petrol Gasoline	0.25449

Source

Table 10d of 2010 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting, Version 1.2.1 FINAL, Updated 6/Oct/2010; http://archive.defra.gov.uk/environment/business/reporting/pdf/101006-guidelines-ghg-conversion-factors.xls

Notes

Within this report, the same fuel emissions factors have been used across countries. This is in keeping with the following:

"… companies reporting on their emissions may need to include emissions resulting from overseas activities. Whilst many of the standard fuel emissions factors are likely to be similar for fuels used in other countries, grid electricity emission factors vary very considerably. It was therefore deemed useful to provide a set of overseas electricity emission factors to aid in reporting where such information is hard to source locally."

Paragraph 190, page 54: http://www.defra.gov.uk/environment/business/reporting/pdf/091013-guidelines-ghg-conversion-factors-method-paper.pdf

Thermal Energies Emissions Factors	kg CO_2e / MBtu	kg CO_2e / kWh
District Steam	78.95	0.269488544
District Hot Water	78.95	0.269388544
District Chilled Water – Absorption Chiller using Natural Gas	66.50	0.226907387
District Chilled Water – Engine-Driven Chiller using Natural Gas	44.33	0.151260217

Source

Greenhouse Gas Inventory and Tracking in Portfolio Manager August 31, 2009; Table 2 Indirect Greenhouse Gas Emission Factors (District Energy) (page 3); http://www.energystar.gov/ia/business/evaluate_performance/Emissions_Supporting_Doc.pdf

In turn: Form EIA-1605, Voluntary Reporting of Greenhouse Gases, Revised Pursuant to 10 CFR Part 300; Guidelines for Voluntary Greenhouse Gas Reporting; Energy Information Administration, U.S. Department of Energy, October 15, 2007; http://www.eia.doe.gov/oiaf/1605/pdf/EIA1605_Instructions_10-23-07.pdf

Glossary of Terms

CO_2e averted as onsite renewable electricity the amount of GHGs averted from the use of onsite renewable energy, e.g. wind, water, solar, geothermal energy, and biofuels.

CO_2e averted as certified renewable the amount of GHGs averted through the purchase of certified renewable electricity from power supply companies.

CO_2e emitted from onsite thermal energies the GHGs emitted from the onsite generation of thermal heating and, or cooling.

CO_2e emitted running onsite CHP the GHGs emitted from the operation of onsite combined heat and power (CHP) producing thermal energy and electricity (for consumption both onsite and exported).

CO_2e emitted from all imported fossil fuels the GHGs emitted from the consumption of fossil fuels purchased by the landlord or tenant(s) from power supply companies.

CO_2e emitted from non-certified grid electricity GHGs emitted from the consumption of standard grid electricity purchased by the landlord or tenant(s).

CO_2e emitted from fugitive emissions are the GHGs emitted through the intentional or unintentional loss of refrigerants.

Current Year is the complete sample set of properties submitted in the current year Greenprint Performance Report that have corresponding energy and floor area.

ISO 14064 is a globally recognized standard for quantification, monitoring and reporting of sources of greenhouse gas emissions, as well as the validation of emissions data and assertions.

Like for Like is a specific Year over Year analysis of the current year's properties that also have data from the previous year.

Mean Average is obtained by dividing the sum of observed values in a dataset by the number of observations. In the context of the Greenprint Carbon Index™ (GCX) the emissions intensity is the aggregated emissions of the current year divided by the aggregated floor area of the same set of properties.

Median is the value lying at the midpoint of a distribution of observed values.

Normalized refers to an energy use metric that is independent of the size of the building by dividing energy use by corresponding floor area.

Occupancy is calculated on rentable floor area.

Year over Year is an analysis that compares the current year's data against historical data in the Greenprint dataset.

Endnotes

1 The 2010 Greenprint Performance Report primarily consists of member data from calendar year 2010, however, some member data was provided from their fiscal year 2010, ending March 2011.

2 Contribution of Working Group III to the Fourth Assessment Report of IPCC (2007), Chapter 3: Issues Related to Mitigation in the Long-Term Context, p. 173: "Using the 'best estimate' assumption of climate sensitivity, the most stringent scenarios (stabilizing at 445–490 ppmv CO_2-equivalent) could limit global mean temperature increases to 2–2.4 degrees Celsius above the pre-industrial level, at equilibrium, requiring emissions to peak before 2015. Global CO_2 emissions would return to 2000 levels no later than 2030."

3 Members have submitted properties for which they have a full 12-month period of energy consumption (and fugitive emissions) data.

4 http://www.epa.gov/cleanenergy/energy-resources/calculator.html

Disclaimer

All calculations presented in this report are based on data submitted to Greenprint Foundation. While every effort has been made to ensure these data's accuracy, the possibility for errors exists. This report is not intended to be a flawless accounting of carbon emissions by the Foundation's membership. Greenprint Foundation does not accept responsibility for the completeness or accuracy of this report, and it shall not be held liable for any damage or loss that may result, either directly or indirectly, as a result of its use.

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2010 Greenprint Performance Report Participating Firms

Beacon Capital Partners
British Land
Canary Wharf Group
Deutsche Bank
Douglas Emmett
Equity Office Properties
GE Capital Real Estate
GLL Real Estate Partners
Grosvenor
Hammerson
Henderson Global Investors
Hermes Real Estate
Hines
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