

---

# **LAND SECURITIES EPRA DATA REPORT 2016**

---

## EPRA SUSTAINABILITY REPORTING

At Land Securities we have disclosed our impacts and greenhouse gas emissions for many years. We report in line with EPRA (European Public Real Estate Association) sustainability best practice – winning a gold award in 2014 and 2015.

This report contains our EPRA disclosure for 2016.

For further details on our sustainability strategy and progress please visit:

[www.landsecurities.com/sustainability](http://www.landsecurities.com/sustainability)

### PORTFOLIO DEFINITIONS:

**Absolute portfolio:** The absolute portfolio includes all properties where Land Securities has 'operational control', where we purchase energy or appoint agents who control the purchase of energy.

**Like-for-like portfolio:** The like-for-like portfolio includes all properties which have been in the portfolio since 1 April 2014, but excluding those which were acquired, sold or included in the development pipeline at any time since that date.

---

## HEADLINES:

### GHG emissions

- 8.4% reduction in like-for-like portfolio GHG emissions since 2015
- 11.6% reduction in total GHG emissions since 2015 (absolute portfolio)
- 8.1% reduction in total carbon intensity (kgCO<sub>2</sub>/m<sup>2</sup>) since 2015 (absolute portfolio)

### Energy

- 3% reduction in like-for-like portfolio energy consumption since 2015
- 6% reduction in total energy consumption since 2014 baseline (absolute portfolio)
- 10% reduction in total energy intensity (kWh/m<sup>2</sup>) since 2014 baseline (absolute portfolio)

### Waste

- 72% of total waste recycled in 2016 (absolute portfolio)
- 98.6% of total waste diverted from landfill (absolute portfolio)
- Recycling rate in London up 27 points, from 49% in 2015 to 76% in 2016 (absolute portfolio)

---

## EPRA REPORTING

The below sections contain our EPRA performance data split into our London and Retail portfolios, as well as Land Securities as a whole, for each relevant indicator.

We report our data using an operational control approach to define our organisational boundary. A detailed description of our methodology can be found at:

[www.landsecurities.com/sustainability](http://www.landsecurities.com/sustainability)

### Exclusions

Please note that impact area 'district heating and cooling consumption' is not applicable to Land Securities and so EPRA codes DH&C-Lfl and DH&C-Abs have not been included.

### Assurance

A statement from our assurance provider, Ernst & Young, can be found at:

[www.landsecurities.com/sustainability](http://www.landsecurities.com/sustainability)

**LIKE-FOR-LIKE PORTFOLIO – ENERGY**

Table 1

Impact area	EPRA Sustainability Performance Measures			London			Retail			Land Securities			
	EPRA codes	Units of measure	Indicator	2014/15	2015/16	% change	2014/15	2015/16	% change	2014/15	2015/16	% change	
Energy	Elec - LfL	kWh	Electricity	for landlord shared services	49,834,353	50,157,848	1%	33,113,979	32,221,832	-3%	82,948,332	82,379,680	-1%
				(sub)metered exclusively to tenants	44,697,679	39,731,886	-11%	9,038,560	9,943,360	10%	53,736,239	49,675,246	-8%
				<b>Total landlord-obtained electricity</b>	<b>94,532,032</b>	<b>89,889,734</b>	<b>-5%</b>	<b>42,152,539</b>	<b>42,165,192</b>	<b>0%</b>	<b>136,684,571</b>	<b>132,054,926</b>	<b>-3%</b>
	Fuels - LfL		Fuels	for landlord shared services	30,739,803	30,853,973	0%	17,685,204	15,822,958	-11%	48,425,007	46,676,931	-4%
				(sub)metered exclusively to tenants	3,512,778	3,312,380	-6%	10,394,360	11,439,703	10%	13,907,138	14,752,083	6%
				<b>Total landlord-obtained fuels</b>	<b>34,252,581</b>	<b>34,166,352</b>	<b>0%</b>	<b>28,079,564</b>	<b>27,262,661</b>	<b>-3%</b>	<b>62,332,145</b>	<b>61,429,014</b>	<b>-1%</b>
	Total energy - LfL		Total energy	for landlord shared services	80,574,156	81,011,820	1%	50,799,184	48,044,791	-5%	131,373,340	129,056,611	-2%
				(sub)metered exclusively to tenants	48,210,457	43,044,266	-11%	19,432,920	21,383,063	10%	67,643,377	64,427,329	-5%
				<b>Total landlord-obtained energy</b>	<b>128,784,613</b>	<b>124,056,086</b>	<b>-4%</b>	<b>70,232,104</b>	<b>69,427,854</b>	<b>-1%</b>	<b>199,016,716</b>	<b>193,483,940</b>	<b>-3%</b>
	Energy-Int		kWh/m <sup>2</sup> /year	Energy intensity	Total building energy intensity	263	253	-4%	58	57	-2%	117	113

2015/16 – % of total LfL assets included: 100%

2015/16 – % of data estimated: 1%

**ABSOLUTE PORTFOLIO – ENERGY**

Table 2

Impact area	EPRA Sustainability Performance Measures			London				Retail					
	EPRA codes	Units of measure	Indicator	2013/14	2014/15	2015/16	% change vs 2013/14	2013/14	2014/15	2015/16	% change vs 2013/14		
Energy	Elec - Abs	kWh	Electricity	for landlord shared services	69,712,985	75,330,235	74,317,784	7%	51,572,760	52,509,945	48,159,947	-7%	
				(sub)metered exclusively to tenants	63,359,907	61,464,551	54,479,700	-14%	12,922,986	9,040,635	9,943,360	-23%	
				<b>Total landlord-obtained electricity</b>	<b>133,072,891</b>	<b>136,794,786</b>	<b>128,797,484</b>	<b>-3%</b>	<b>64,495,747</b>	<b>61,550,580</b>	<b>58,103,306</b>	<b>-10%</b>	
	Fuels - Abs		Fuels	for landlord shared services	43,905,928	46,021,170	48,696,565	11%	28,907,134	21,651,698	18,230,208	-37%	
				(sub)metered exclusively to tenants	3,490,983	3,674,757	3,805,667	9%	12,644,129	10,680,277	11,439,703	-10%	
				<b>Total landlord-obtained fuels</b>	<b>47,396,911</b>	<b>49,695,928</b>	<b>52,502,231</b>	<b>11%</b>	<b>41,551,264</b>	<b>32,331,974</b>	<b>29,669,911</b>	<b>-29%</b>	
	Total energy - Abs		Total energy	for landlord shared services	116,925,239	121,351,405	123,014,348	5%	80,479,895	74,161,643	66,390,155	-18%	
				(sub)metered exclusively to tenants	63,544,564	65,139,308	58,285,367	-8%	25,567,116	19,720,912	21,383,063	-16%	
				<b>Total landlord-obtained energy</b>	<b>180,469,803</b>	<b>186,490,714</b>	<b>181,299,715</b>	<b>0%</b>	<b>106,047,010</b>	<b>93,882,554</b>	<b>87,773,217</b>	<b>-17%</b>	
	Energy-Int		kWh/m <sup>2</sup> /year	Energy intensity	Total building energy intensity	278	270	271	-2%	57	46	45	-21%

**ABSOLUTE PORTFOLIO – ENERGY**

Table 2

Impact area	EPRA Sustainability Performance Measures			Land Securities					
	EPRA codes	Units of measure	Indicator	2013/14	2014/15	2015/16	% change vs 2013/14		
Energy	Elec - Abs	kWh	Electricity	for landlord shared services	121,285,745	127,840,180	122,477,730	1%	
				(sub)metered exclusively to tenants	76,282,893	70,505,186	64,423,060	-16%	
				<b>Total landlord-obtained electricity</b>	<b>197,568,638</b>	<b>198,345,367</b>	<b>186,900,790</b>	<b>-5%</b>	
	Fuels - Abs		Fuels	for landlord shared services	76,119,388	67,672,868	66,926,773	-12%	
				(sub)metered exclusively to tenants	12,828,787	14,355,034	15,245,370	19%	
				<b>Total landlord-obtained fuels</b>	<b>88,948,175</b>	<b>82,027,902</b>	<b>82,172,143</b>	<b>-8%</b>	
	Total energy - Abs		Total energy	for landlord shared services	197,405,133	195,513,048	189,404,503	-4%	
				(sub)metered exclusively to tenants	89,111,680	84,860,220	79,668,430	-11%	
				<b>Total landlord-obtained energy</b>	<b>286,516,813</b>	<b>280,373,268</b>	<b>269,072,932</b>	<b>-6%</b>	
	Energy-Int		kWh/m <sup>2</sup> /year	Energy intensity	Total building energy intensity	114	103	103	-10%

2015/16 – % of total assets included: 100%

2015/16 – % of data estimated: 1%

**LIKE-FOR-LIKE PORTFOLIO – GREENHOUSE GAS EMISSIONS**

Table 3

Impact area	EPRA Sustainability Performance Measures			London			Retail			Land Securities			
	EPRA codes	Units of measure	Indicator	2014	2015	% change	2014	2015	% change	2014	2015	% change	
Greenhouse Gas Emissions	GHG - Dir - LfL	annual tonnes CO <sub>2</sub> e	Direct	Total direct GHG emissions - landlord shared services	5,686	5,691	0%	3,271	2,919	-11%	8,957	8,610	-4%
				Total direct GHG emissions - (sub)metered to tenants	650	611	-6%	1,923	2,110	10%	2,572	2,721	6%
				<b>Total direct GHG emissions</b>	<b>6,336</b>	<b>6,302</b>	<b>-1%</b>	<b>5,194</b>	<b>5,029</b>	<b>-3%</b>	<b>11,530</b>	<b>11,331</b>	<b>-2%</b>
	GHG -Indir - LfL		Indirect	Total indirect GHG emissions - landlord shared services (local)	23,324	23,084	-1%	16,367	14,893	-9%	39,691	37,976	-4%
				Total indirect GHG emissions - (sub)metered to tenants (local)	23,169	18,310	-21%	4,467	4,596	3%	27,636	22,906	-17%
				<b>Total indirect GHG emissions (local)</b>	<b>46,493</b>	<b>41,394</b>	<b>-11%</b>	<b>20,834</b>	<b>19,488</b>	<b>-6%</b>	<b>67,327</b>	<b>60,882</b>	<b>-10%</b>
				Total indirect GHG emissions - landlord shared services (market)		13,391			8,792			22,183	
				Total indirect GHG emissions - (sub)metered to tenants (market)		10,629			2,665			13,294	
				<b>Total indirect GHG emissions (market)</b>		<b>24,020</b>			<b>11,456</b>			<b>35,477</b>	
	GHG-Int		tCO <sub>2</sub> e/m <sup>2</sup> /year	GHG intensity	Total building GHG emission intensity (local factors)	0.108	0.097	-10%	0.021	0.020	-7%	0.046	0.042

2015/16 – % of total Lfl assets included: 100%

2015/16 – % of data estimated: 1%

**ABSOLUTE PORTFOLIO – GREENHOUSE GAS EMISSIONS**

Table 4

Impact area	EPRA Sustainability Performance Measures				London				Retail				
	EPRA codes	Units of measure	Indicator		2013/14	2014/15	2015/16	% change vs 2013/14	2013/14	2014/15	2015/16	% change vs 2013/14	
Greenhouse Gas Emissions	GHG - Dir - Abs	annual tonnes CO <sub>2</sub> e	Direct	Total direct GHG emissions - landlord shared services	8,008	8,580	9,020	13%	5,089	4,005	3,363	-34%	
				Total direct GHG emissions - (sub)metered to tenants	642	680	702	9%	2,284	1,976	2,110	-8%	
				<b>Total direct GHG emissions</b>	<b>8,650</b>	<b>9,260</b>	<b>9,722</b>	<b>12%</b>	<b>7,374</b>	<b>5,981</b>	<b>5,473</b>	<b>-26%</b>	
	GHG -Indir - Abs Total energy - Abs		Indirect	Total indirect GHG emissions - landlord shared services (local)	31,056	37,002	34,250	10%	22,968	27,668	22,259	-3%	
				Total indirect GHG emissions - (sub)metered to tenants (local)	28,226	30,382	25,127	-11%	5,757	4,468	4,596	-20%	
				<b>Total indirect GHG emissions (local)</b>	<b>59,281</b>	<b>67,384</b>	<b>59,377</b>	<b>0%</b>	<b>28,725</b>	<b>32,137</b>	<b>26,855</b>	<b>-7%</b>	
				Total indirect GHG emissions - landlord shared services (market)			19,866				14,881		
				Total indirect GHG emissions - (sub)metered to tenants (market)			14,582				2,665		
				<b>Total indirect GHG emissions (market)</b>			<b>34,447</b>				<b>17,546</b>		
	GHG-Int		tCO <sub>2</sub> e /m <sup>2</sup> /year	GHG Intensity	Total building GHG emission intensity (local factors)	0.104	0.111	0.103	-1%	0.019	0.019	0.017	-15%

**ABSOLUTE PORTFOLIO – GREENHOUSE GAS EMISSIONS**

Table 4

Impact area	EPRA Sustainability Performance Measures				Land Securities			
	EPRA codes	Units of measure	Indicator		2013/14	2014/15	2015/16	% change vs 2013/14
Greenhouse Gas Emissions	GHG - Dir - Abs	annual tonnes CO <sub>2</sub> e	Direct	Total direct GHG emissions - landlord shared services	13,706	12,585	12,383	-10%
				Total direct GHG emissions - (sub)metered to tenants	2,318	2,655	2,812	21%
				<b>Total direct GHG emissions</b>	<b>16,024</b>	<b>15,241</b>	<b>15,195</b>	<b>-5%</b>
	GHG -Indir - Abs Total energy - Abs		Indirect	Total indirect GHG emissions - landlord shared services (local)	54,023	64,670	56,509	5%
				Total indirect GHG emissions - (sub)metered to tenants (local)	33,983	34,850	29,723	-13%
				<b>Total indirect GHG emissions (local)</b>	<b>88,006</b>	<b>99,520</b>	<b>86,232</b>	<b>-2%</b>
				Total indirect GHG emissions - landlord shared services (market)			34,747	
				Total indirect GHG emissions - (sub)metered to tenants (market)			17,246	
				<b>Total indirect GHG emissions (market)</b>			<b>51,994</b>	
	GHG-Int		tCO <sub>2</sub> e /m <sup>2</sup> /year	GHG Intensity	Total building GHG emission intensity (local factors)	0.041	0.042	0.039

2015/16 – % of total assets included: 100%

2015/16 – % of data estimated: 1%

**LIKE-FOR-LIKE PORTFOLIO – WATER, WASTE & REFRIGERANT GASES**

Table 5

Impact area	EPRA Sustainability Performance Measures				London			Retail			Land Securities		
	EPRA codes	Units of measure	Indicator		2014/15	2015/16	% change	2014/15	2015/16	% change	2014/15	2015/16	% change
Water	Water - Lfl	m <sup>3</sup>	Water	for landlord shared services	221,070	221,398	0%	193,973	214,899	11%	415,043	436,297	5%
				(sub)metered exclusively to tenants	76,406	65,642	-14%	159,334	190,904	20%	235,740	256,546	9%
				Total landlord-obtained water	297,476	287,040	-4%	353,306	405,804	15%	650,783	692,844	6%
	Water - Int	m <sup>3</sup> /m <sup>2</sup> /year	Water intensity	Total building water intensity	0.71	0.69	-3%	0.33	0.39	16%	0.57	0.62	8%
Waste	Waste - Lfl (recycled)	annual metric tonnes	Waste	Total weight of waste - Recycled	2,470	4,751	92%	12,276	12,492	2%	14,746	17,243	17%
	Waste - Lfl (EfW)		Waste	Total weight of waste - Energy from Waste	2,332	1,674	-28%	6,717	6,691	0%	9,049	8,365	-8%
	Waste - Lfl (landfill)		Waste	Total weight of waste - Landfill	0	0		532	485	-9%	532	485	-9%
	Waste - Lfl (recycled)	proportion of total waste %	Waste	Porportion of waste - Recycled	51%	74%	44%	63%	64%	1%	61%	66%	9%
	Waste - Lfl (EfW)		Waste	Proportion of waste - Energy from Waste	49%	26%	-46%	34%	34%	-1%	37%	32%	-14%
	Waste - Lfl (landfill)		Waste	Proportion of waste - Landfill	0%	0%		3%	2%	-9%	2%	2%	-15%
Refrigerant gases	Refrigerant gases - Lfl	annual tonnes CO <sub>2</sub> e	Direct	Refrigerant gases - annual metric tonnes CO <sub>2</sub> e	413	919	123%	96	333	248%	508	1,252	146%

2015/16 – % of total Lfl assets included: Water – 99%, Waste – 90%, Refrigerant gases – 75%

2015/16 – % of data estimated: Water – 5%, Waste – 0%, Refrigerant gases – 100% (estimated using the 'screening' methodology)

**ABSOLUTE PORTFOLIO – WATER, WASTE & REFRIGERANT GASES**

Table 6

Impact area	EPRA Sustainability Performance Measures				London				Retail			
	EPRA codes	Units of measure	Indicator		2013/14	2014/15	2015/16	% change vs 2013/14	2013/14	2014/15	2015/16	% change vs 2013/14
Water	Water - Abs	m <sup>3</sup>	Water	for landlord shared services	334,842	365,623	345,839	3%	294,637	406,635	432,194	47%
				(sub)metered exclusively to tenants	55,293	76,419	70,155	27%	246,779	210,497	199,782	-19%
				Total landlord-obtained water	390,135	442,042	415,994	7%	541,417	617,132	631,976	17%
	Water - Int	m <sup>3</sup> /m <sup>2</sup> /year	Water intensity	Total building water intensity	0.67	0.72	0.71	6%	0.28	0.18	0.21	-24%
Waste	Waste - Abs (recycled)	annual metric tonnes	Waste	Total weight of waste - Recycled	2,850	2,867	6,380	124%	24,524	17,348	18,968	-23%
	Waste - Abs (EfW)		Waste	Total weight of waste - Energy from Waste	2,337	2,865	2,001	-14%	6,018	7,885	7,363	22%
	Waste - Abs (landfill)		Waste	Total weight of waste - Landfill	0	0	0		1,304	556	487	-63%
	Waste - Abs (recycled)	proportion of total waste %	Waste	Proportion of waste - Recycled	55%	50%	76%	39%	77%	67%	71%	-8%
	Waste - Abs (EfW)		Waste	Proportion of waste - Energy from Waste	45%	50%	24%	-48%	19%	31%	27%	45%
	Waste - Abs (landfill)		Waste	Proportion of waste - Landfill	0%	0%	0%		4%	2%	2%	-56%
Refrigerant gases	Refrigerant gases - Abs	annual tonnes CO <sub>2</sub> e	Direct	Refrigerant gases - annual metric tonnes CO <sub>2</sub> e	447	425	897	100%	101	96	333	229%

**ABSOLUTE PORTFOLIO – WATER, WASTE & REFRIGERANT GASES**

Table 6

Impact area	EPRA Sustainability Performance Measures				Land Securities			
	EPRA codes	Units of measure	Indicator		2013/14	2014/15	2015/16	% change vs 2013/14
Water	Water - Abs	m <sup>3</sup>	Water	for landlord shared services	629,480	772,258	778,032	24%
				(sub)metered exclusively to tenants	302,073	286,916	269,937	-11%
				Total landlord-obtained water	931,552	1,059,175	1,047,969	12%
	Water - Int	m <sup>3</sup> /m <sup>2</sup> /year	Water intensity	Total building water intensity	0.49	0.43	0.52	7%
Waste	Waste - Abs (recycled)	annual metric tonnes	Waste	Total weight of waste - Recycled	27,373	20,214	25,348	-7%
	Waste - Abs (EfW)		Waste	Total weight of waste - Energy from Waste	8,356	10,751	9,364	12%
	Waste - Abs (landfill)		Waste	Total weight of waste - Landfill	1,304	556	487	-63%
	Waste - Abs (recycled)	proportion of total waste %	Waste	Proportion of waste - Recycled	74%	64%	72%	-2%
	Waste - Abs (EfW)		Waste	Proportion of waste - Energy from Waste	23%	34%	27%	18%
	Waste - Abs (landfill)		Waste	Proportion of waste - Landfill	3%	2%	1%	-54%
Refrigerant gases	Refrigerant gases - Abs	annual tonnes CO <sub>2</sub> e	Direct	Refrigerant gases - annual metric tonnes CO <sub>2</sub> e	549	434	1,230	124%

2015/16 – % of total assets included: Water – 99%, Waste – 90%, Refrigerant gases – 75%

2015/16 – % of data estimated: Water – 5%, Waste – 0%, Refrigerant gases – 100% (estimated using the 'screening' methodology)

---

**ABSOLUTE PORTFOLIO – SUSTAINABILITY CERTIFICATION**

Table 7

EPRA Code – Cert-Tot

---

**BREEAM Statistics (sq ft)**

Total space with BREEAM rating	6,285,258
Total tenanted areas	27,079,727
Total common areas	1,779,043
Total common & tenanted	28,858,770
<b>Percentage of total BREEAM rated</b>	<b>22%</b>

---

<b>Rating</b>	<b>Total (sq ft)</b>	<b>% of total space</b>
BREEAM Excellent	3,636,608	13%
BREEAM Very Good	1,268,991	4%
BREEAM Good	1,379,660	5%

**LAND SECURITIES' OWN OFFICE**

Table 8

Impact area	EPRA Sustainability Performance Measures			LS Office			
	EPRA codes	Units of measure	Indicator	2014/15	2015/16	% change	
<b>Energy</b>	Elec - LfL	kWh	Electricity	Total landlord-obtained electricity	2,112,662	2,131,163	1%
	Fuels - LfL		Fuels	Total landlord-obtained fuels	874,314	992,724	14%
	Total energy - LfL		Total energy	Total landlord-obtained energy	2,986,976	3,123,887	5%
	Energy-Int	kWh/m <sup>2</sup> /year	Energy intensity	Total building energy intensity	257	269	4%
	<b>Greenhouse Gas Emissions</b>	GHG - Dir - LfL	annual tonnes CO <sub>2</sub> e	Direct	Total direct GHG emissions	162	183
GHG -Indir - LfL		Indirect		Total indirect GHG emissions (local)	1,044	985	-6%
				Total indirect GHG emissions (local)		571	
GHG-Int		tCO <sub>2</sub> e /m <sup>2</sup> /year	GHG intensity	Total building GHG emission intensity (local factors)	0.104	0.100	-3%
<b>Water</b>		Waste - Lfl	m <sup>3</sup>	Water	Total landlord-obtained water	6,777	6,797
	Waste - Int	m <sup>3</sup> /m <sup>2</sup> /year	Water intensity	Total building water intensity	0.58	0.58	0%
<b>Waste</b>	Waste - Lfl (recycled)	annual metric tonnes	Waste	Total weight of waste - Recycled	78	110	41%
	Waste - Lfl (EfW)		Waste	Total weight of waste - Energy from Waste	17	17	1%
	Waste - Lfl (landfill)		Waste	Total weight of waste - Landfill	0	0	
	Waste - Lfl (recycled)	proportion of total waste %	Waste	Porportion of waste - Recycled	82%	87%	5%
	Waste - Lfl (EfW)		Waste	Proportion of waste - Energy from Waste	18%	13%	-25%
	Waste - Lfl (landfill)		Waste	Proportion of waste - Landfill	0%	0%	
<b>Refrigerant gases</b>	Refrigerant gases - Abs	annual tonnes CO <sub>2</sub> e	Direct	Refrigerant gases - annual metric tonnes CO <sub>2</sub> e	13	22	69%

All consumption is for landlord areas, there is no sub-metering to other tenants.

2015/16 – % of total assets included: 100%

2015/16 – % of data estimated: Refrigerant gases – 100% (estimated using the 'screening' methodology), all other indicators – 0%