

# ENVIRONMENTAL MANAGEMENT REPORT

## Scope

The JSE is aware of its interdependence with the natural environment. According to the classification of the JSE Socially Responsible Investment (SRI) Index, the JSE is a low environmental impact company, which means that the typical activities are unlikely to have a significant direct impact on the environment. Even so, the organisation takes responsibility for its impacts by better managing its direct environmental impacts such as its consumption of limited resources and its production of waste. The JSE also takes cognisance of the threat that global warming poses and humanity's shared responsibility to manage its carbon footprint.

The JSE took advantage of the National Business Initiative (NBI) Private Sector Energy Efficiency Project during the year under review and received a report describing the use of energy at the JSE and the various options available to consider for any future reduction strategies. The current building renovations should contribute to a future reduction in energy use.

The most material contribution to the JSE's carbon footprint continues to be its Scope 2 emissions, as is expected, considering its business activities and low impact classification.

Major cost containment was necessary in 2014, which resulted in the delay of investigations into employee private and business non-air travel behaviours. These investigations remain critical if the JSE is to understand its Scope 3 emissions better.

Senior responsibility for management of the JSE's carbon footprint resides with the Group Company Secretary, who reports to the CEO. The carbon footprint is calculated by self-assessment for the JSE's business operations located in Sandton, including all its employees. A baseline assessment of its carbon footprint was conducted in 2010, using an external service provider. The JSE's environmental policy can be found at <https://www.jse.co.za/about/sustainability>



## Energy saving and management

### IT related

Virtualisation of servers has resulted in reduced infrastructure costs, with associated decreased cooling costs.

Temperatures in the computer sites are at 21°C. In consequence, less water and less energy is used to cool the sites.

### Building and maintenance

The design of the JSE building facilitates the use of natural light to illuminate the front portion of the building and the ground floor as well as offices elsewhere, glass partitions have been installed during renovations.

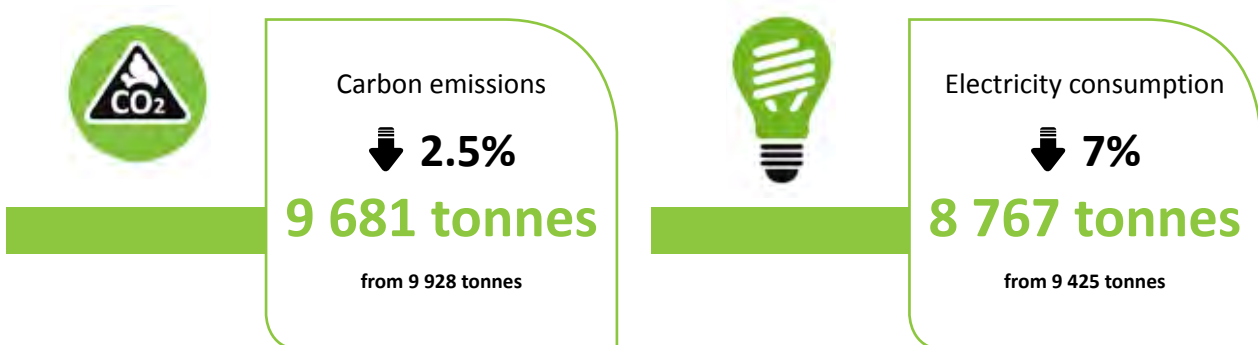
The proactive energy management system has sensors that detect a person's movement and automatically switch on the lighting necessary for the immediate area. When there is no motion in an area for ten minutes, the lights switch off.

Low-power lamps (36 watt) are used and external spotlights and floodlights located around the building are switched off after a certain time at night. Light fittings on floors that are being renovated are gradually being fitted with low brightness louvre LED fittings made from 100% recyclable materials that emit 40% less CO<sub>2</sub>. An assessment was conducted at the end of 2014, which highlighted a number of additional energy saving opportunities. These will be taken up subject to budget approval.

The air-conditioning units are on a time switch and switch off at night and during weekends and public holidays. Ongoing maintenance is carried out on all facilities in the building.

### Assessment

The JSE's Scope 2 indirect emissions contribute approximately 91% towards its total carbon footprint. During 2014, there was a decline in usage.



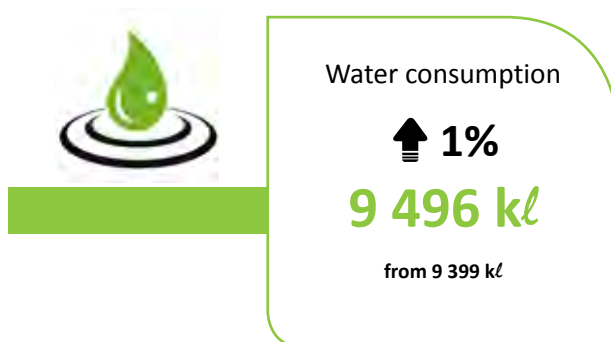
## Water management

All taps in the bathrooms are fitted with water flares that aerate the water, so less water is used.

Toilets are fitted with two flushing devices, a half-flush and a full flush. The installation of waterless urinals will be complete in 2015 and this will further help to reduce consumption.

### Assessment

Water consumption remains insignificant and under control.



## Recycling/waste management

### Office paper

Paper recycling bins are located in all areas of operation, from which office paper, newspapers and magazines are collected and recycled.

### Other waste management initiatives

Recycling bins for glass, tin, plastics and cardboard are located throughout the building.

### Toner cartridges are recycled

Chemicals used at the JSE surpass international environmental accreditation agencies' standards and can be gainfully used to earn credits toward certifications like LEED and Go Green (BOMA).

Demountable walls are sourced from a company that is committed to reducing the impact that the business and its products have on the environment.

### Assessment

General and office paper waste production remain insignificant and well controlled.

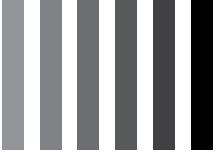
Any major positive impact in these areas can only come from increased employee action as a result of ongoing awareness drives.

Refer to the graph on page 3 for other waste management data.

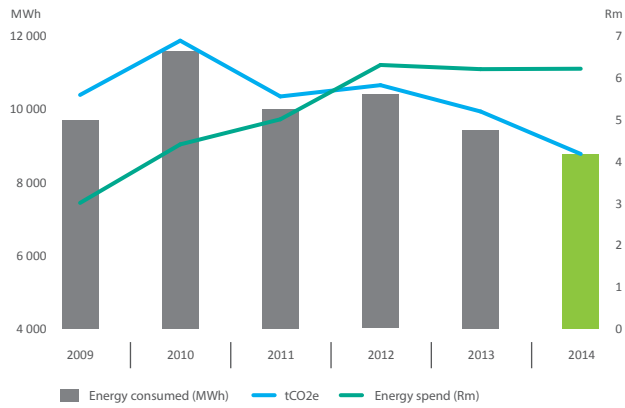
Carbon footprint summary		Consumption		Consumption	
		2014	tCO <sub>2</sub> e	2013	tCO <sub>2</sub> e
<b>Scope 1</b>	Direct emissions	10 611	27.4	6 883	16.7
<b>Scope 2</b>	Electricity purchased	8 766 653	8 767	9 425 254	9 425
<b>Scope 3</b>	Air travel*	2 679 767	887	2 100 797	486
			<b>9 681</b>		9 928

\*The JSE's Scope 3 business air travel contributes approximately 9% to its carbon footprint. In 2014, air travel data increased significantly. Also note that private travel and other business travel by employees have not been analysed owing to cost constraints.

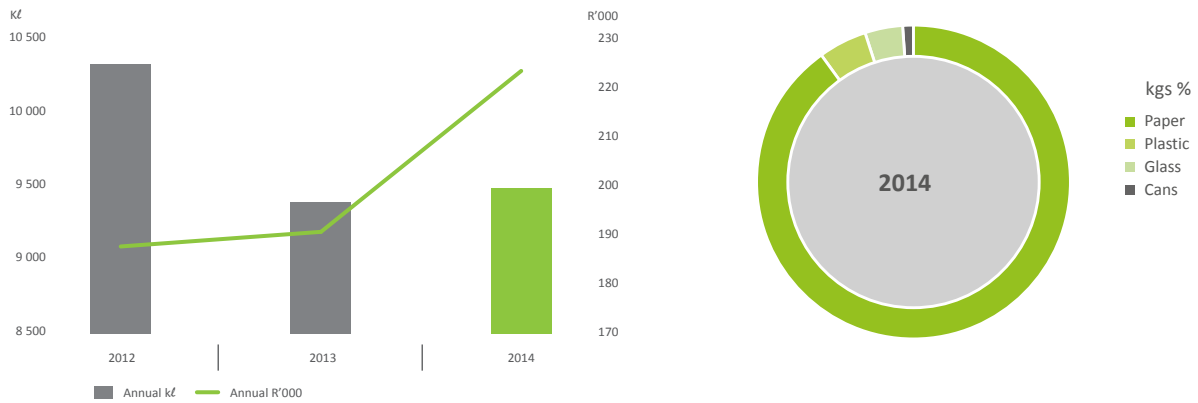
Other factors	2014	2013
Energy spend (R)	6 214 069	6 219 553
Energy consumed (MWh)	8 767	9 425
Number of employees	485	497
Floor space (m)	17 226	17 226
Revenue (R)	1 778 629 000	1 577 552 000
Energy spend as % of turnover	0.35%	0.39%
Intensity factors (per unit tCO <sub>2</sub> e)	2014	2013
Per unit of total revenue	0.00000543	0.00000629
Per unit of full-time employee	20	20
Per square metre of office space	0.5611	0.5763



### Carbon/energy usage



### Waste material recycled and water usage



The sustainability strategy and framework identified areas that should also be addressed and progress in this regard is set out below:

#### Status in various areas

Reviewed the environmental policy and identified key impact areas

Analysing and monitoring energy and water usage

Encouraging switch to environmentally friendly detergents, soap, etc.

During the year under review, no contraventions occurred and no fines were levied.