JSE

ENVIRONMENTAL REPORT

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.

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.

- 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.
- Only business air travel was reported for Scope 3 emissions.
- 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*.

Our contribution towards saving energy
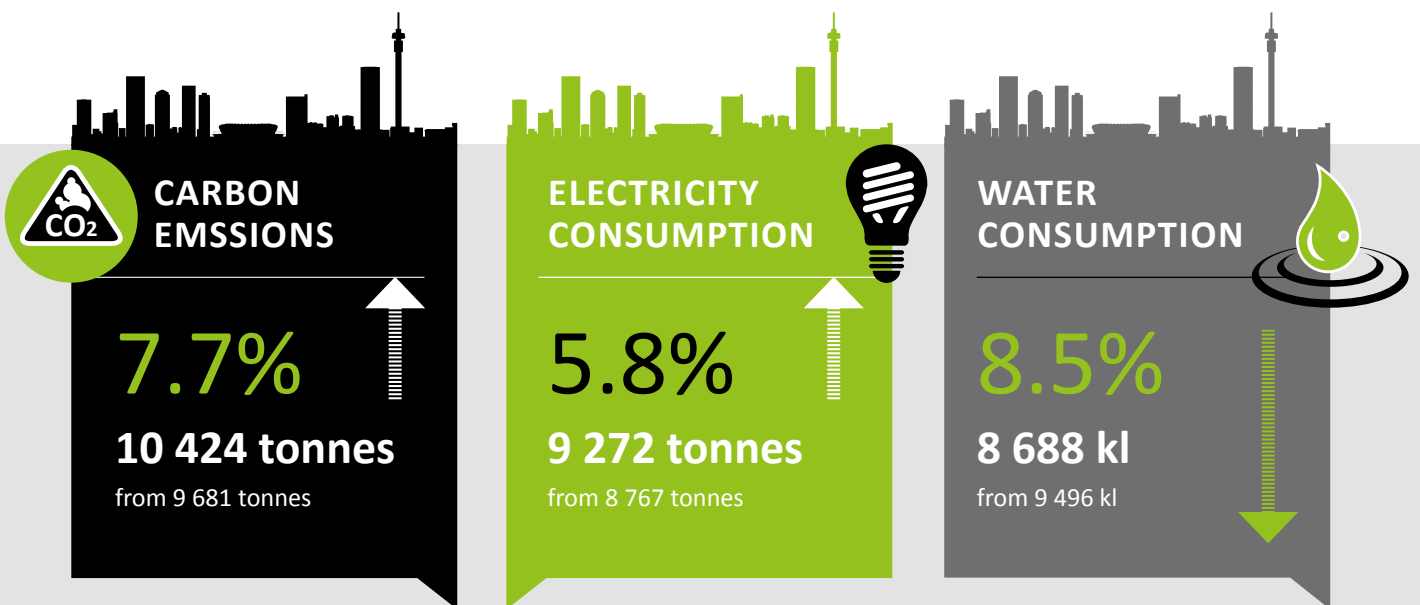
IT related

- Virtualisation of servers result in reduced infrastructure costs, and associated decreased cooling costs.
- Temperatures in the production environment are at 21°C. In consequence, less water and less energy are 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. In 2015 the use of glass partitions for offices has added to more natural flowing throughout the building.
- A proactive energy management system has sensors that detect a person's movement and automatically switches on the lighting necessary for the immediate area. This includes the levels of underground parking. 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 the recently renovated floors were fitted with low brightness louvre LED fittings made from 100% recyclable materials that emit 40% less CO_2.
- The air-conditioning units are on a timer switch. They switch off at night and during weekends and public holidays. Regular and ongoing maintenance is carried out on these units.

Assessment

The JSE's Scope 2 indirect emissions contribute approximately 89% towards its total carbon footprint.

CARBON EMSSIONS
7.7%
10 424 tonnes
from 9 681 tonnes

ELECTRICITY CONSUMPTION
5.8%
9 272 tonnes
from 8 767 tonnes

WATER CONSUMPTION
8.5%
8 688 kl
from 9 496 kl

Our contribution towards saving water

The following interventions help reduce water consumption by JSE employees and guests:

- All taps in bathrooms are fitted with water flares that aerate the water
- Waterless urinals
- Toilets are fitted with two flushing devices, a half-flush and a full flush.

Assessment

While water consumption remains insignificant, the above interventions help reduce the JSE's water consumption.

Other recycling/waste management interventions

Office paper

Paper recycling bins are located in all areas of operation, from which office paper; newspapers and magazines are collected and recycled by outside service providers

Other waste management initiatives

Every week an outside service provider collects glass, tin, plastics and cardboard from the JSE building and recycled. Proceeds from the sale of clean recycled products goes towards the group of sorters.

Toner cartridges are recycled

Every month used toner cartridges are collected centrally and collected and recycled by outside service providers.

Cleaning products used by cleaning company

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

Recyclable office walls

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 while insignificant remain under control.

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

		Consumption		Consumption	
Carbon footprint summary		**2015**	**tCO$_2$e**	2014	tCO$_2$e
Scope 1	Direct emissions (litres of petrol/diesel used)	**29 957**	**78.4**	10 611	27.4
Scope 2	Electricity used (kWh)	**9 272 103**	**9 272**	8 766 653	8 767
Scope 3	Air travel* (kms travelled)	**3 673 903**	**1 073**	2 679 767	887
			10 424		9 681

*The JSE's Scope 3 business air travel contributes approximately 10% to its carbon footprint. In 2015, air travel data **increased** by 21%. Also note that private travel and other business travel by employees have not been analysed owing to cost constraints.*

Other factors	**2015**	2014
Energy spend (R)	**7 309 774**	6 214 069
Energy consumed (kWh)	**9 272**	8 757
Number of employees	**506**	485
Floor space (m)	**17 226**	17 226
Revenue (R)	**2 133 548 000**	1 778 629 000
Energy spend as % of turnover	**0.34**	0.35

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| Intensity factors (per unit tCO$_2$e)	2015	2014
Per unit of total revenue	0.0000049	0.00000543
Per unit of full-time employee	21	20
Per square metre of office space	0.6051	0.5611

The sustainability strategy and framework is under review to take into latest developments.

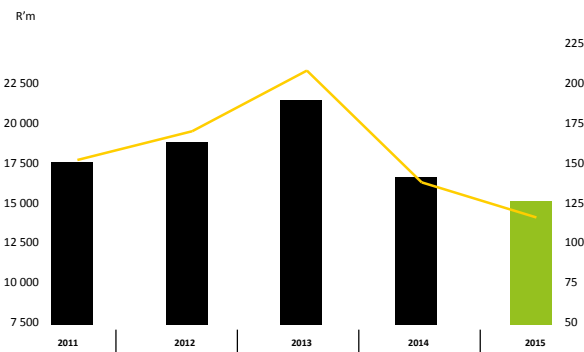During the year under review, no contraventions occurred and no fines were levied.

Carbon / Energy usage
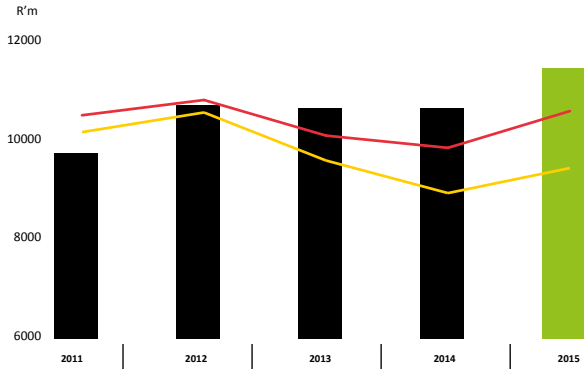
Water usage
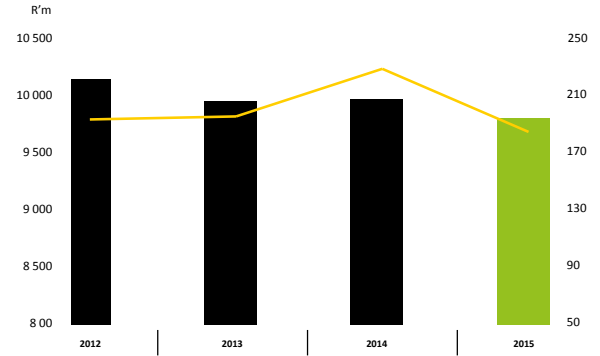
Officer paper recycled

Other waste material recycled

Paper	46%
Plastic	33%
Glass	12%
Cans	9%