

Annual Lender Report No.3

Corporate 'Green' Loan

In July 2014 Sainsbury's announced it had entered into a £200m 'Green' bank loan with proceeds to be invested in on-going carbon reduction and sustainability projects including, for example, our award winning project Graphite programme.

Project Graphite is focused on improving energy efficiency in our existing stores and investing in onsite renewable energy, and it includes measures such as replacing existing lighting with energy efficient LED lamps, producing renewable heat from ground source heat pumps and installing photovoltaic solar panels on our roofs.

Proceeds from the Green Loan will be further used to fund clean energy generation, energy efficiency, carbon reduction through refrigeration gas replacement and water saving projects.

The key activities undertaken by the Company during the financial year 2016/17 were as follows:

- Energy Efficiency and LED lighting replacement in 171 stores and Shire Park RDC;
- Energy Efficiency and LED lighting in 1 fulfilment centre, 4 stores during a Refit, 3 new supermarkets, 26 new convenience stores and 2 refits in convenience stores,
- Solar Panels on 1 new store;
- Ground Source Heat Pumps in 1 new store and in 1 refurbishment;
- Refrigeration system gas replacement to natural refrigerant (Carbon Dioxide) in 17 stores;
- BMS lighting setting adjustment in 281 stores and the Greenest Grocer program in the entire store estate.

A majority of the investment has been focused on replacing our existing lighting with LED lighting. The full year effect of this work saves over 26 million kWh, which is the equivalent to the annual electricity use of 12 mid-size supermarkets.

Summary of Expenditure and Carbon Reduction

2016/17 (Year 3)

The data collection and methodology used to calculate the Greenhouse Gas savings shown in the table below has been independently verified by the **Carbon Trust** ⁽¹⁾

	2016/2017						Investment (£)
	YTD			Full Year Effect			
	Savings (kWh)	CO ₂ e (tonnes)		Savings (kWh)	CO ₂ e (tonnes)		
	Scope 1	Scope 2		Scope 1	Scope 2		
Energy Efficiency Programme	26,197,435		10,795	55,053,882		22,685	£ 29,296,885
CO ₂ e Refrigeration Replacement	-	24,764		-	30,769		£ 9,188,048
Energy Efficiency in new stores, refits and extensions	4,171,727	533	524	10,939,477	1,339	1,496	£ 951,389
BMS lighting adjustment & Greenest Grocer	20,547,758		7,803	29,228,043		11,366	£ 638,000
Total	50,916,920	27,816	19,121	95,221,403	32,110	35,547	£ 40,074,322

(1) The Carbon Trust has verified that the data collection and methodology used by J Sainsbury plc to evaluate the Greenhouse Gas emissions savings from the investments included in this report are in accordance with the principles of the international standard ISO 14064-2. The Carbon Trust is an independent, expert partner of leading organizations around the world, helping them contribute to and benefit from a more sustainable future through carbon reduction, resource efficiency strategies and commercializing low carbon technologies.

Summary of Expenditure and Carbon Reduction

2014/15, 2015/16 and 2016/17 (Year 1 + Year 2 + Year 3)

	Y1+Y2+Y3						Investment (£)
	YTD			Full Year Effect			
	Savings (kWh)	CO ₂ e (tonnes)		Savings (kWh)	CO ₂ e (tonnes)		
	Scope 1	Scope 2		Scope 1	Scope 2		
Energy Efficiency Programme	58,942,750	-	26,642	126,909,726	-	57,277	£ 82,731,966
CO ₂ e Refrigeration Replacement	-	107,749		-	163,994		£ 35,712,876
Energy Efficiency in new stores, refits and extensions	17,150,725	1,008	5,788	38,819,918	2,247	12,662	£ 7,763,671
Graphite PV	391,079	-	193	8,389,898	-	4,147	£ 8,716,961
Graphite GSHP	4,521,729	715	323	15,851,209	2,508	1,133	£ 5,132,756
BMS lighting adjustment, defrost/suction optimisation and Greenest Grocer	27,074,511	-	10,820	42,601,602	-	17,547	£ 1,626,000
Total	108,080,795	109,472	43,766	232,572,353	168,749	92,766	£141,684,230