

# Sustainable Business Breakfast

A Green Growth Platform event  
Delivered by the Sustainable Business Network

Crawley, 23<sup>rd</sup> June 2015

**Sustainable  
Business  
Network**



GreenGrowth  
**PLATFORM**



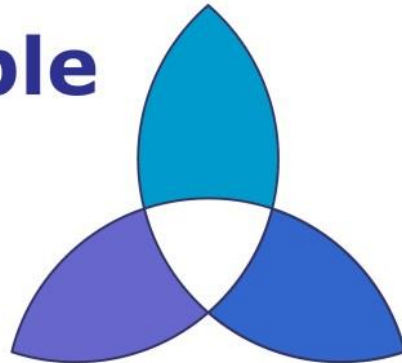
**University of Brighton**

HIGHER EDUCATION  
FUNDING COUNCIL FOR ENGLAND

*hefce*

Working in partnership...

**Sustainable  
Business  
Network**



Green**Growth**  
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# What's coming up?

**08:30 Welcome**

Rowan Wallis, Sustainable Business Network

**08:35 Best Practice Case Study**

Jack White, Affinity Sutton

**08:50 Living Roofs**

Lee Evans, Organic Roofs

**09:05 Rainwater Harvesting**

Graham Cross, Halsted Rain

**09:15 Round-the-Tables**

**09:25 Green Growth Platform – what's on offer?**

Zoe Osmond, Green Growth Platform

**09:30 Networking & Refreshments**



# Affinity Sutton



**HELPING PEOPLE  
PUT DOWN ROOTS**

# Our 2020 challenge



## Organisation

Reduce our carbon footprint by 20% by 2020 across business travel; gas; water; electricity and waste



## Customer

Enable all residents to take control of their energy bills by offering targeted advice and guidance

**HELPING PEOPLE  
PUT DOWN ROOTS**

# ENERGY MONITORING

- The monitoring and managing of electricity and gas consumption has been brought in house. This is saving £48k per year
- Benchmark consumption figures are used to adjust inconsistent Service Charges and identify poorly performing sites
- The installation of AMR meters (smart meters) will further help to manage consumption

Est Ann Cost	Day Rate (£)	Night Rate (£)	Daily Fixed Charge (£)
£6,623	0.265	0.218	0.45
£17,321	0	0	

Days Billed	Total	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
170	£383.19			£73.49	£76.03	£53.22					£56.97	£64.62	£58.86

# LED LIGHTING

- LED lighting has now been installed at a Supported Housing scheme
- Electricity use has reduced by 17% and it is estimated this will save 11 tonnes of CO<sub>2</sub> and £4,200 per year, a payback period of less than 3 years
- Feedback from staff and residents has been very positive and the appearance of the building has improved



**BEFORE**



**AFTER**

- We've also installed the lighting at three offices
- The technology is now installed where lighting has failed wiring tests
- Street lighting is being upgraded to LED

## SOLAR PANELS

The installation of solar PV at the Bromley office will bring the following benefits:

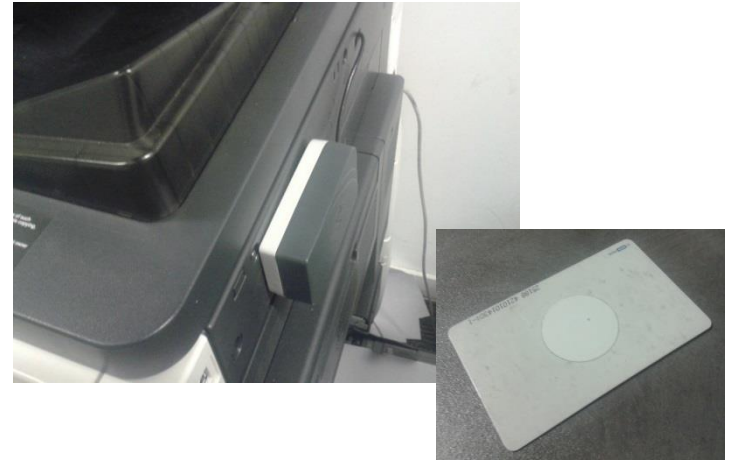
- Reduced energy costs and revenue generated through renewable energy generation – worth £2.7k per year
- Protection against future utility unit cost increases
- The reliability of a mature technology with no moving parts



# PRINTING

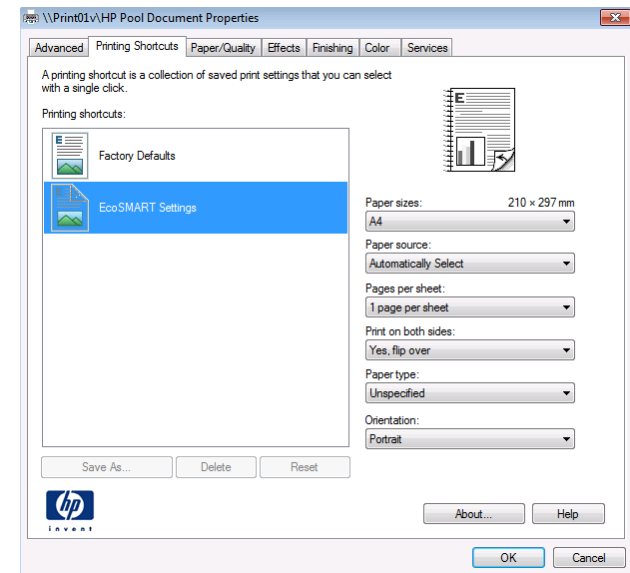
## SWIPE PRINTING

- Print jobs will be released using staff ID cards
- Feedback so far has been very positive with environmental, cost and data protection benefits



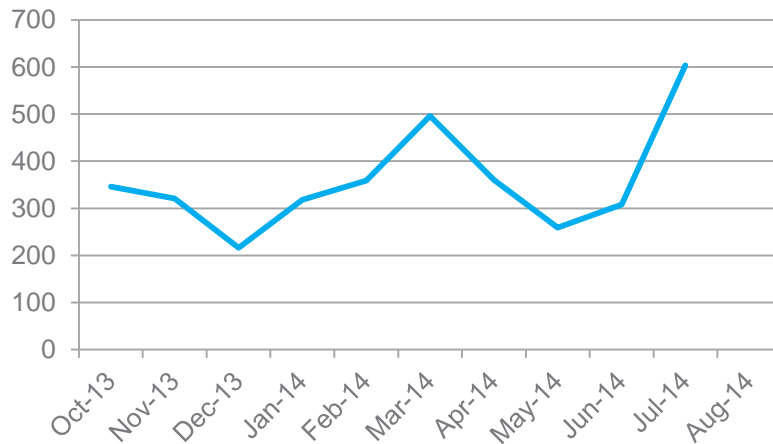
## PRINTER DEFAULT SETTINGS

- Printer defaults were changed to B&W and double-sided
- This saves £175k per year
- Saving of 4 tonnes of CO<sub>2</sub> per year

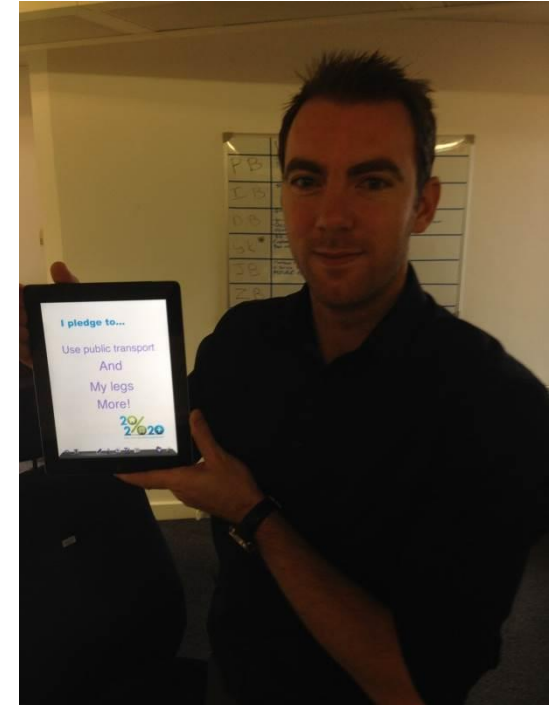


# VIDEO CONFERENCING

- Meeting rooms, laptops and iPads are VC enabled
- Training and promotion have helped to increase usage



# Employee engagement



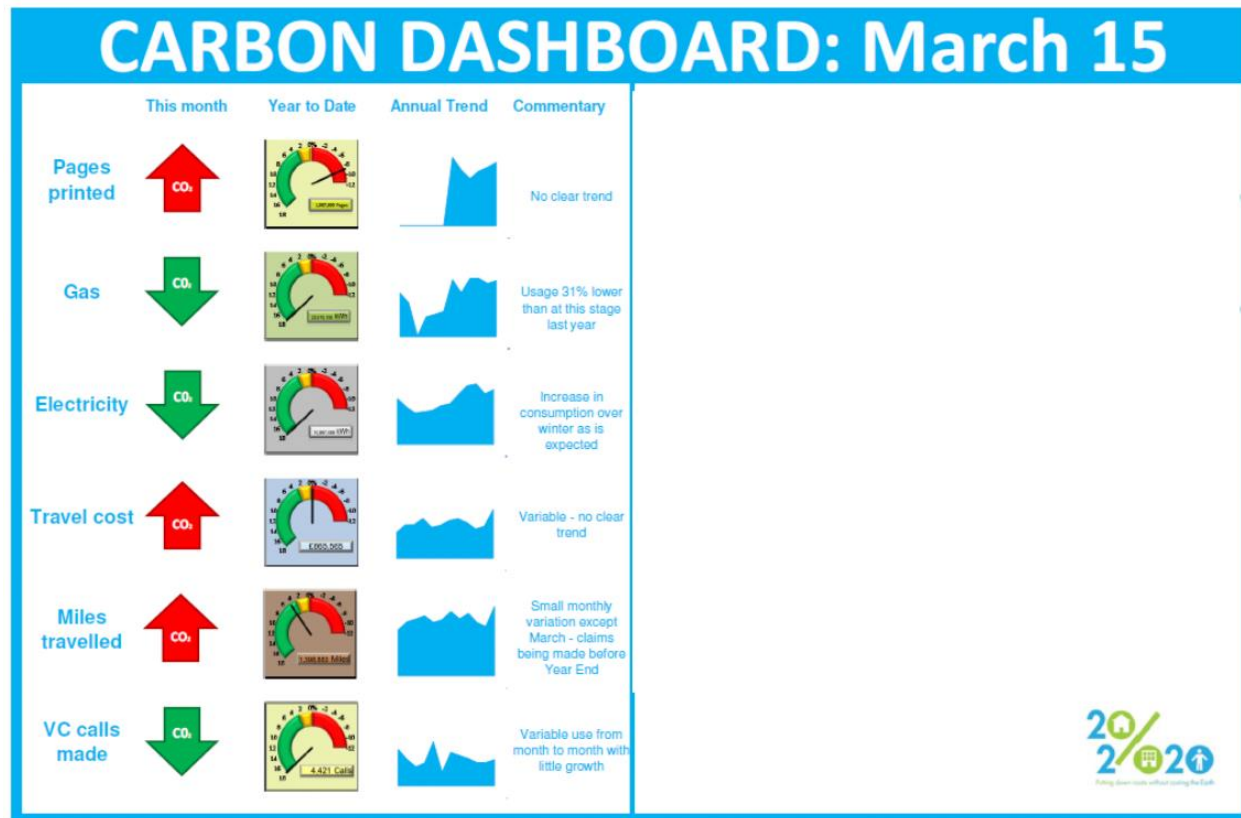
## INTERNAL GREEN FUND

- £10k made available for pilots that members of staff could submit a business case for
- The winning submissions were: Staff bikes and Green waste composting



# RESULTS

- 2013/13 - Baseline year: 16,597
- 2013/14 - A 5.8% reduction: 15,643
- 2014/15



# Organic Roofs

Presentation [here](#):

# Halsted Rain Rainwater Harvesting Sustainable Business Network

Graham Cross - June 2015

# Drivers of Change

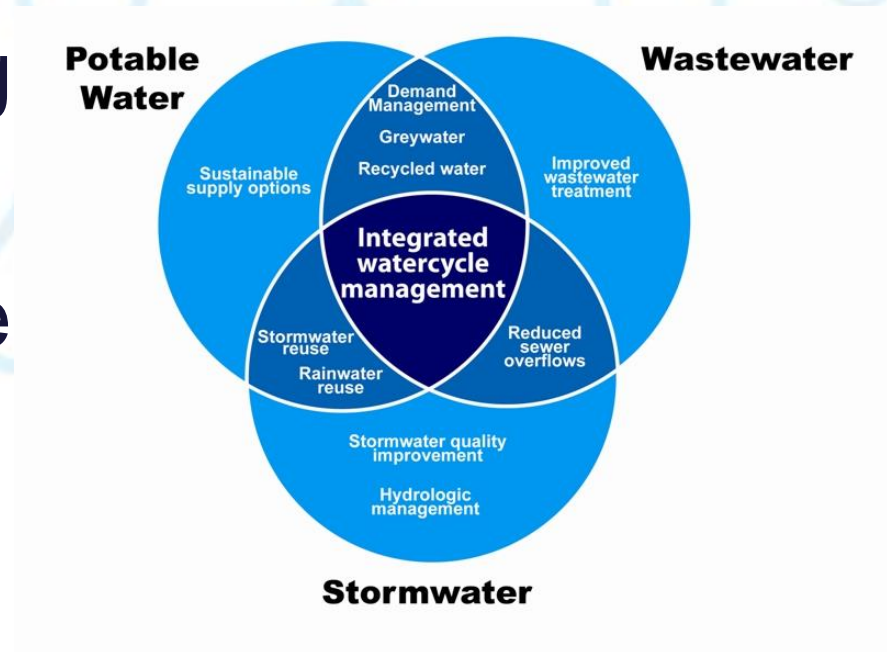
- Increasing water stress
- Attenuating storm water
- Tighter Building Regulation
- Rising water costs
- Need to lower carbon emissions



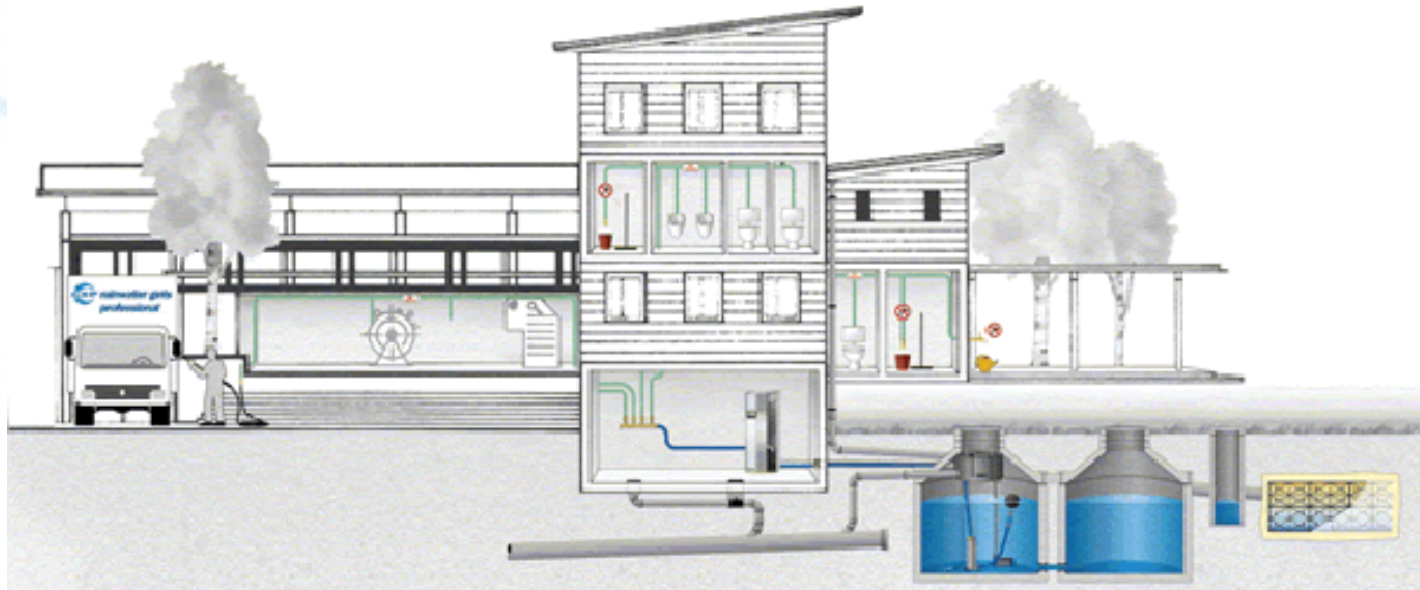


# Urban Water Recycling

- Rainwater Harvesting
- Greywater Recycling
- Sustainable Drainage Systems (SUDS)



# Commercial RWH System



# Design Guidance

- Building Regulations
- BREEAM & CSH
- British Standards
- Environmental Agency
- Water Company's
  - No cross connection
  - Marking & labeling

anglianwater  
iphe  
Chartered Institute of  
Plumbing and Heating Engineering

**WRAS**  
Water Regulations Advisory Scheme  
INFORMATION &  
GUIDANCE NOTE

April 2011  
**No 9-02-05**  
ISSUE 2

Marking & Identification of  
Pipework for Water  
Reuse Systems

**Mains Water Stop Tap**  
Caution Rainwater system  
installed in this property supplying:-

- Toilet
- Garden Outside Tap
- Washing Machine



# Cost Benefit Analysis

- Equipment
- Installation
- Maintenance
- Offset by Government Incentives
  - Capital Allowances available
  - Grant Funding



# Slim-line Tank Design



- From 20 cm wide
- From 235 litres capacity
- Modular design
- Filter Diverter
- Rainwater Pump
- Mains Water Top Up

# Platform Tank Design



- 6 sizes to 15 000 L
- Minimum installation depth 1.1m
- Pump sump to maximises tank capacity
- Range of shaft options incl. drivable
- Pre-installed filter

# Commercial Tower Tank System

- Silo tank up to 25 000 L
- One-piece construction
- Ribbed design
- High capacity filter up to 800m<sup>2</sup>



# Problems Experienced

- Wrongly sized
- Poorly designed
- Unnecessarily complicated
- Components not fit for duty
- Confusing instructions
- Badly installed
- Poorly maintained



# Summary

- Increasing need to recycle water
- Partner with a proven supplier to specify the correct system
- Be aware of regulations
- Design for ease of installation and maintenance
- Don't forget retrofit options

# Questions?

## Contact Details

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Halsted House,  
Lock Chase,  
Blackheath,  
London SE3 9HB

Direct Line: 07900 427450  
Switchboard: 0208 318 0957  
[www.halstedrain.com](http://www.halstedrain.com)

# GreenGrowth PLATFORM



**University of Brighton**

**Unlocking** business potential

GreenGrowth  
**PLATFORM**



**University of Brighton**

# 4 SERVICE AREAS

**1-2-1 BUSINESS SUPPORT**

**BUSINESS EVENTS AND  
OPPORTUNITIES**

**INNOVATION, RESEARCH AND  
DEVELOPMENT**

**SKILLS AND TRAINING**

**[www.greengrowthplatform.co.uk](http://www.greengrowthplatform.co.uk)**

# Join us again...

## Case Study Site Visit

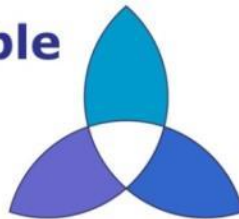
Earthship Brighton 2<sup>nd</sup> July

## Tendering Masterclass

Brighthelm Centre, Brighton – 30<sup>th</sup> September

[www.sustainablebusiness.org.uk](http://www.sustainablebusiness.org.uk)

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