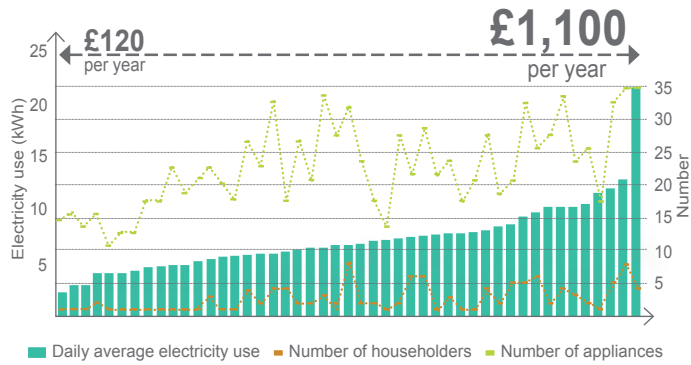
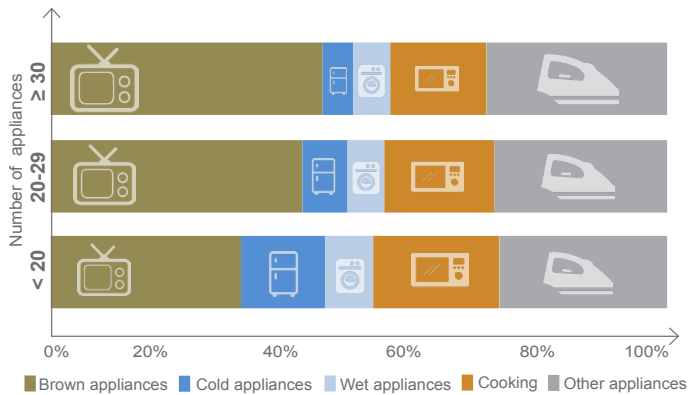


What we have found so far?

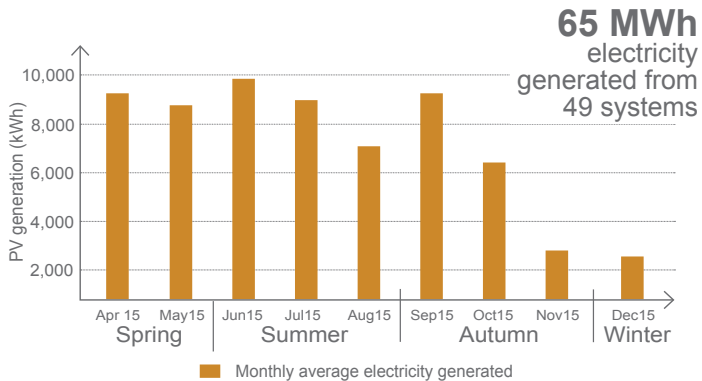
Baseline electricity use:
ERIC householders spend between £120 and £1,100 on electricity each year.



Types of appliances owned by ERIC householders.



Solar PV generated electricity from ERIC householders.



What do Project ERIC householders think ...



About Project ERIC

'This is marvellous as far as I'm concerned ... It's fantastic, isn't it?'

'The one thing I'll be interested in will be my bill when it comes in. That will be the crunch of it all.'



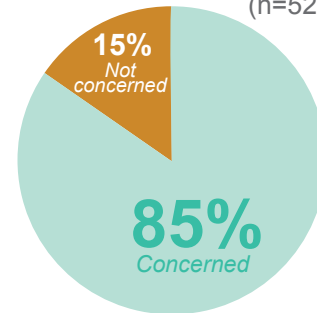
About rising energy prices, climate change and energy security

'I'm very concerned about the prices as it seems to be going up and up and up.'



'I'm concerned I suppose. I recycle and do all the bits I should'

How concerned are you about rising energy prices? (n=52)



About installation of the Solar PVs panels and the Maslow batteries

'It was good. It was done in one day. They offered to clean up any mess they had made.'



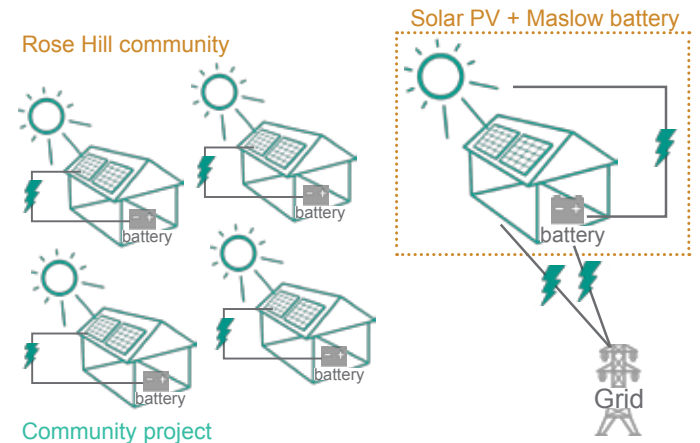
PROJECT ERIC
re-energising communities

Insights from evaluation

What is Project ERIC?

Project ERIC is an initiative bringing solar Photovoltaic (PV) power and smart electricity storage together in Rose Hill, East Oxford. It is a community project with the aim of linking the technologies together in a 'virtual' localised energy grid in order to:

- Increase self-consumption of PV generated electricity within the community.
- Reduce average peak export and demand.
- Give households control over their electricity use.



Low Carbon Building Group of Oxford Brookes University is evaluating Project ERIC by:

- Monitoring electricity consumption, Solar PV generated electricity and contribution of smart electricity storage.
- Conducting household interviews.
- Undertaking energy audits of electrical appliances.



Evaluation methodology

Baseline electricity use & attitudes survey

Household interviews (1st round)

Energy audit & meter readings

Monitoring of PV generation and electricity consumption

Monitoring & evaluation of energy savings

Validation of Maslow data

Monitoring and contribution of smart electricity storage

Household interviews (2nd round)

Analysis & Reporting

Final analysis & reporting

Who is taking part in Project ERIC?

77 houses
65 houses
8 flats
4 bungalows

139 people
24 families
20 singles
8 couples

Examples of different households type



Dwelling type: **Terrace (old construction)**
Average floor area: 84 m²
No. bedrooms: 2-3
Household type: **families**
Occupancy pattern: **mornings & evenings**

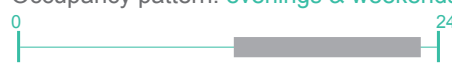


over 65

Dwelling type: **Bungalow**
Average floor area: 49 m²
No. bedrooms: 1
Household type: **1 person retired**
Occupancy pattern: **always occupied**

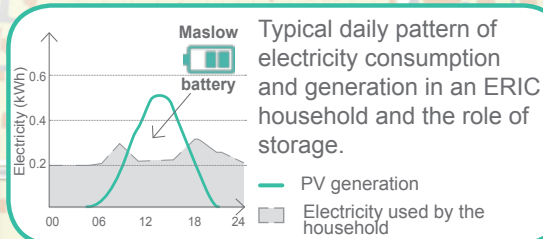


Dwelling type: **Terrace (new construction)**
Average floor area: 93 m²
No. bedrooms: 3 or more
Household type: **families / couples**
Occupancy pattern: **evenings & weekends**



over 65

Dwelling type: **Flat**
Average floor area: 42 m²
No. bedrooms: 1
Household type: **1 person retired**
Occupancy pattern: **always occupied**



Typical daily pattern of electricity consumption and generation in an ERIC household and the role of storage.



Community centre

The new Rose Hill community centre has 43kW of PV installed and four Maslow batteries. Additionally an EV car club has been installed within the project, managed by CoWheels.

Oxford, Rose Hill community

New Community Centre

Rose Hill dwellings
■ Oxford City Council (49 dwellings)
■ Green Square (28 dwellings)

As part of ERIC, 2kWh Maslow batteries have been installed across **77 houses** having solar PV panels (1.5-3.5 kWp). All the case study houses are located in Rose Hill, Oxford. Solar PVs and 4 Maslow batteries have also been installed in the new Rose Hill Community Centre.

OXFORD BROOKES UNIVERSITY



PI: Prof. Rajat Gupta;
Researchers: Dr. Adorkor Bruce, Chiara Fratter
For more information, please contact rgupta@brookes.ac.uk

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