

**Delivering affordable, energy efficient,  
low carbon solutions to homes and buildings**

**Shaun Hurworth – Product Manager**

** Dimplex<sup>®</sup>**

# What is the future for electric heating?

- Market – where is the electric heating market today?
- Future – what will happen in the electric heating market?
- Product – what can be used to meet these requirements?
- You – what does this means for your business?

# The electric heating market

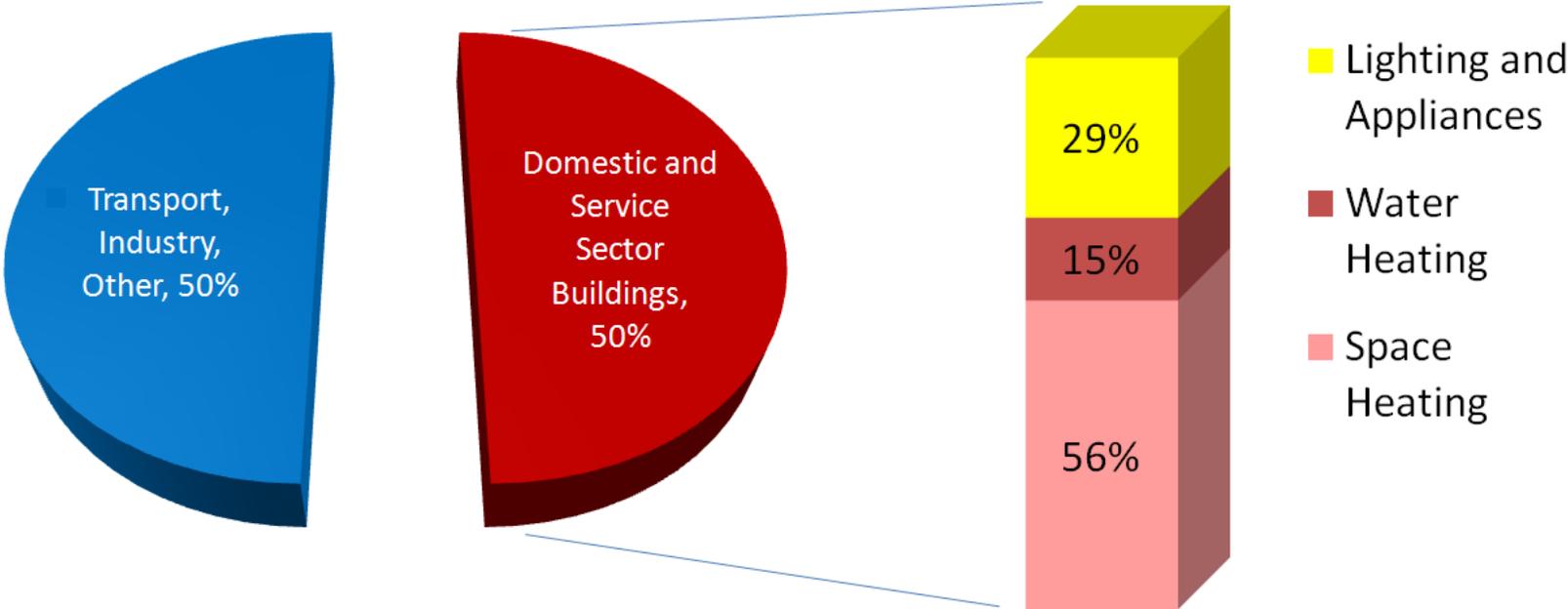
Gas connectivity and main heating fuels	England		Scotland		Wales		Great Britain	
	,000	%	,000	%	,000	%	,000	%
Total on mains gas grid <sup>1</sup>	19,872	92.8	2,013	86.4	1,079	85.0	22,964	91.8
Mains gas heating	18,031	84.2	1,773	76.1	996	78.6	20,799	83.2
Communal heating (mainly gas) <sup>2</sup>	262	1.2	16	0.7	5	0.4	283	1.1
LPG or bottled gas	128	0.6	18	0.8	25	2.0	171	0.7
Heating oil	828	3.9	135	5.8	143	11.3	1,106	4.4
Solid fuel	240	1.1	33	1.4	37	2.9	310	1.2
<b>Electricity</b>	<b>1,919</b>	<b>9.0</b>	<b>354</b>	<b>15.2</b>	<b>63</b>	<b>5.0</b>	<b>2,336</b>	<b>9.3</b>
All non-gas heating fuels	3,120	14.6	541	23.2	268	21.2	3,929	15.7
<b>Total households</b>	<b>21,407</b>	<b>100.0</b>	<b>2,330</b>	<b>100.0</b>	<b>1,268</b>	<b>100.0</b>	<b>25,005</b>	<b>100.0</b>

(Source: Consumer focus – offgas consumers 2011 )

# The electric heating market

	No. of Units	Connected Load (GW)	Peak Winter Load (GW)
Storage Heaters	6.5m	16.5	
Panel Heaters	3.5m	5.3	2.6
Fixed Convector Heaters	1.5m	3.0	0.7
Bathroom Heaters	1.4m	2.8	0.1
Electric Towel Rails	0.7m	0.1	0.1
<b>Total</b>	<b>13.6m</b>	<b>28.7</b>	<b>3.5</b>

# UK energy consumption

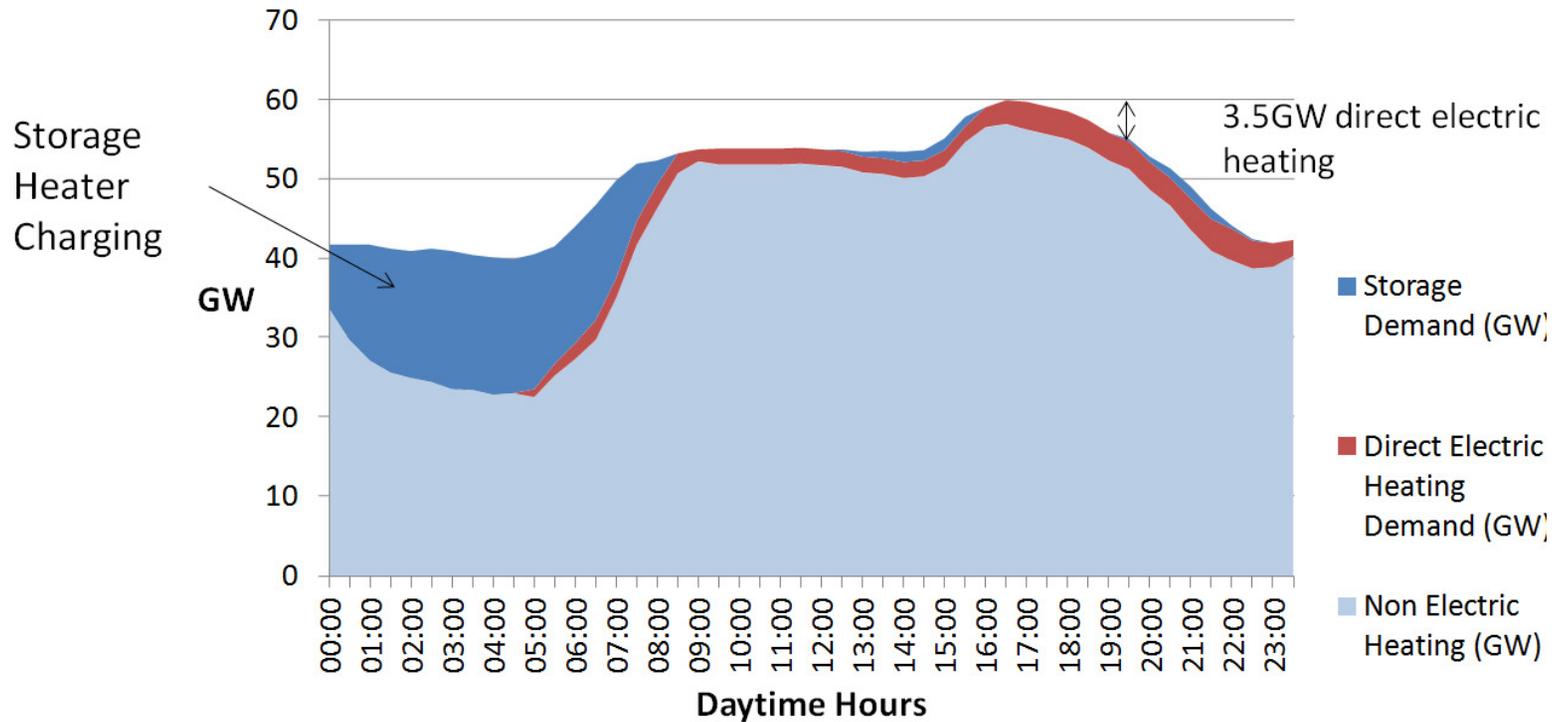


36% of all primary energy is used for space and water heating in buildings

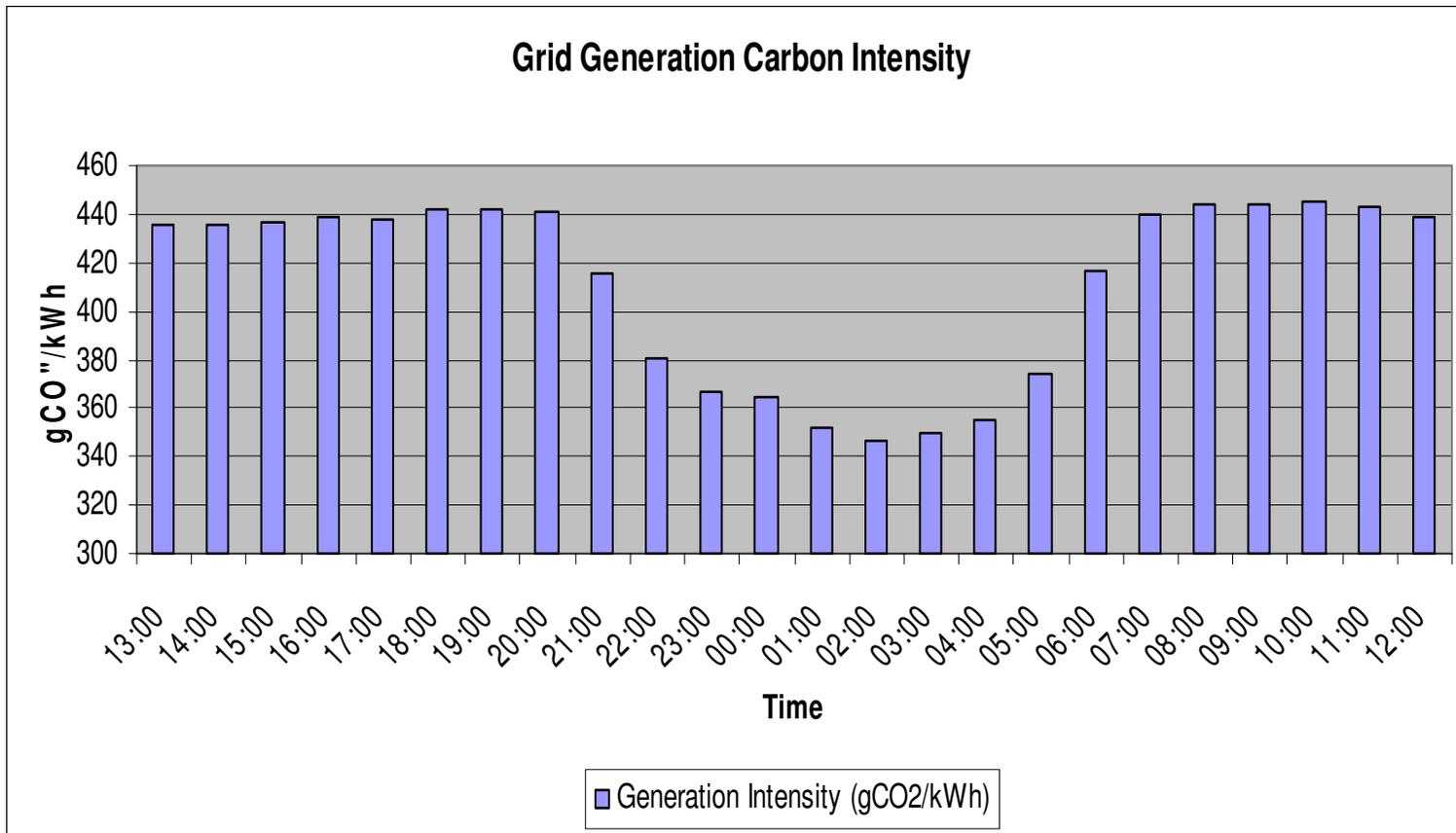
Source: DECC/UK National Statistics

# Electric heating on the grid

7<sup>th</sup> December 2010



# Carbon intensity



(Source: Elexon 2011)

## Summary - the market

Nearly 10% of the homes in the UK are heated electrically.

There are 11.5m installed electric heating appliances in the UK.

Space and hot water heating accounts for one third of the electricity used in the UK.

The vast majority of this energy is taken between 12am and 7am by storage heaters.

**...But things are changing!**

# The future of the electric heating market

We must reach the 20/20/20 European Union target:

- 20% emissions reduction
  - 20% increase of renewable energy
  - 20% increase in energy efficiency
- ...by 2020

‘Technologies that use electricity to generate heat are well placed to become major low-carbon heating technologies in the coming decades.’

(DECC - ‘Future of Heating’ paper)

We’ve all seen the effects of legislation and product development in the lighting market... electric heating is next!

## Why electric heating?

- Can be used to balance supply and demand on the grid
- Facilitates an increase in renewable energy production
- Relatively low capital cost
- Easy to install
- No maintenance
- Highly accurate temperature control in each room
- Ideal for heating well insulated properties
- Aesthetic benefits – no pipework, boiler etc.

**.....but not all electric heaters are the same!**

## The facts

The facts are:

- Whilst **ALL** electric resistance heaters are 100% efficient at the point-of-use...
- Off-peak storage heaters for a given property will **always** be cheaper to run over a typical heating day than a direct electric heater using standard rate electricity.  
(As ratified by the European Commission, SAP, and the ASA)
- Heaters that can use these low-cost tariffs effectively enable cleaner generation, and will help meet the future requirements in this sector.

# The challenge

To produce a range of products which:

- Maintains an off-peak market to balance demand on the grid
- Addresses the stigma associated with off-peak storage heaters
- Meets modern legislation for new build and refurbishment
- Is cost effective, easy to install and desirable to the end user
- Is the obvious choice at refurbishment / replacement

The future of smart space and water heating



## Meeting the challenge

Quantum enables the continuation of the off-peak heating market by offering a product that meets current and future proposed regulations, is set up to work with future grid technologies, looks great and is easy to use.

As recognised within SAP2012:

- Quantum meets 90% of annual room heating needs with off peak rate electricity.
- Quantum annual **energy consumption up to 22% less than standard storage heaters.**
- Quantum annual **running cost up to 27% less than standard storage heaters.**

**Quantum is the cheapest way to heat a room for 24hrs electrically**

# Approvals

- The Quantum's credentials are now recognised in SAP2012 and RdSAP2012
- Installation of this product will give you an improved EPC rating
- Quantum is a Green Deal approved measure
- The Quantum is BEAB approved



## What does this mean for your business?

- The market is changing and you need to be aware of these new requirements.
- There is a range of premium products from a reputable brand that have been formally recognised as the most efficient way to meet the needs of a property that is heated electrically.
- These products are easy to install and have lots of benefits to the end user, which makes them the obvious choice whenever an electric heater needs to be replaced.

## The opportunity

Products	Quantity
Storage Heaters	6.5m
Panel Heaters	3.5m
Fixed Convector Heaters	1.5m

**11.5m**

## The target market

### Electrically Heated Households

Local Authority / Housing Associations	- 187k Households
Private Rented Sector	- 465k Households
Owner Occupiers	- 962k Households

**1.9m Households**

England only: Source English Housing Survey

## Conclusion

We are supporting the Quantum range with marketing campaigns on the radio, internet and in print.

The social and private rented landlords, local authorities and owner-occupiers that own the 2.4m electrically heated homes are being targeted with information about these products.

There is already a huge demand for this technology, so don't get left behind!

**Come and see us on Stand 30 for more information.**