

# POWER TO THE OLDER PEOPLE!

## AGEING, ENERGY DEMAND AND INTERGENERATIONAL RESPONSIBILITY

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# Age and environmental justice

- Distributional justice: a fair distribution of environmental 'goods' and 'bads' (after Rawls, Barry)
- Justice as 'recognition': recognising and catering for specific group characteristics and needs (after Fraser, Young)
- Procedural justice: transparency; free information; democratic and inclusive decision –making (see e.g. Aarhus convention, Young)
- Enhancing 'capabilities': providing the material and social basis for people to flourish (after Sen, Nussbaum)



# Energy and environmental justice

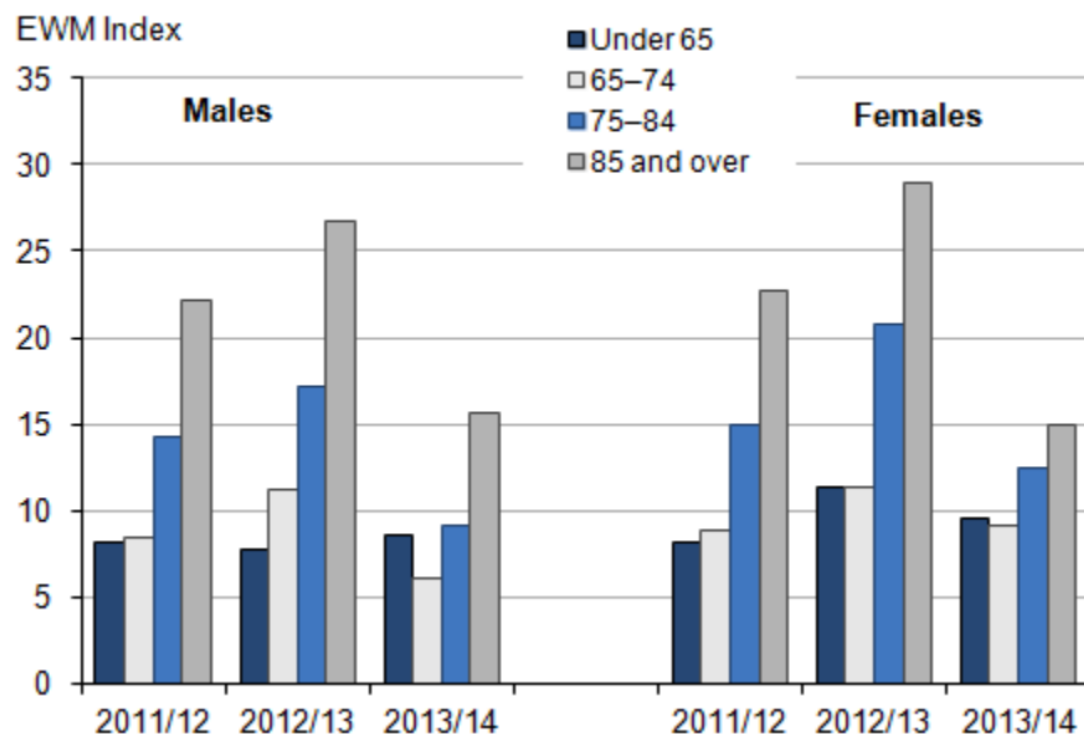
- Access to sufficient energy as an environmental resource
- Access to a healthy living environment
- Energy and specific needs
- Energy as a material pre-requisite of capabilities
- Fairness in the costs of energy production and consumption

# Older people and energy 1: need and vulnerability

- Older people tend to use more energy at home
- More time at home (retirement)
- Specific physiological issues (thermoregulation)

**Figure 5: Excess winter mortality index: by sex and age group, England and Wales, 2011/12–2013/14**

England and Wales



Source: Office for National Statistics

Excess deaths by age and gender - France - August 1st to 20th, 2003.

Age	Total			Males			Females		
	Pop	O-E	O/E [CI(95%)]	Pop	O-E	O/E [CI(95%)]	Pop	O-E	O/E [CI(95%)]
<b>&lt;35 years</b>	<b>26.9</b>	<b>67</b>	<b>1.1 [1.0; 1.2]</b>	<b>13.7</b>	<b>73</b>	<b>1.1 [1.0; 1.2]</b>	<b>13.3</b>	<b>-6</b>	<b>1.0 [0.9; 1.1]</b>
<1 year	0.7	15	1.1 [0.9; 1.3]	0.4	25	1.3 [1.0; 1.6]	0.4	-9	0.9 [0.7; 1.1]
1-14 years	10.4	4	1.0 [0.8; 1.3]	5.3	-4	0.9 [0.7; 1.3]	5.1	8	1.2 [0.8; 1.8]
15-24 years	7.8	24	1.1 [0.9; 1.3]	4.0	26	1.1 [1.0; 1.4]	3.8	-2	1.0 [0.7; 1.3]
25-34 years	8.0	24	1.1 [0.9; 1.2]	4.0	26	1.1 [1.0; 1.3]	4.0	-2	1.0 [0.8; 1.2]
<b>35-74 years</b>	<b>28.2</b>	<b>2930</b>	<b>1.3 [1.3; 1.4]</b>	<b>13.7</b>	<b>1773</b>	<b>1.3 [1.2; 1.3]</b>	<b>14.5</b>	<b>1157</b>	<b>1.4 [1.3; 1.4]</b>
35-44 years	8.6	151	1.2 [1.1; 1.3]	4.3	147	1.3 [1.2; 1.4]	4.4	4	1.0 [0.9; 1.2]
45-54 years	8.3	488	1.3 [1.2; 1.3]	4.1	364	1.3 [1.2; 1.4]	4.2	124	1.2 [1.1; 1.3]
55-64 years	6.2	615	1.3 [1.2; 1.3]	3.1	357	1.2 [1.1; 1.3]	3.2	258	1.4 [1.2; 1.5]
65-74 years	5.1	1676	1.4 [1.3; 1.5]	2.3	905	1.3 [1.2; 1.4]	2.8	771	1.5 [1.4; 1.6]
<b>≥75 years</b>	<b>4.7</b>	<b>11731</b>	<b>1.7 [1.6; 1.8]</b>	<b>1.7</b>	<b>3505</b>	<b>1.5 [1.4; 1.6]</b>	<b>3.0</b>	<b>8226</b>	<b>1.8 [1.7; 2.0]</b>
75-84 years	3.6	4558	1.6 [1.5; 1.7]	1.4	1910	1.5 [1.4; 1.5]	2.2	2648	1.7 [1.6; 1.8]
85-94 years	1.0	5691	1.8 [1.7; 2.0]	0.3	1355	1.6 [1.5; 1.7]	0.7	4336	1.9 [1.8; 2.1]
>=95 years	0.1	1482	2.0 [1.8; 2.2]	0.0	240	1.8 [1.6; 2.1]	0.1	1242	2.0 [1.8; 2.3]
<b>Total</b>	<b>59.9</b>	<b>14729</b>	<b>1.5 [1.5; 1.6]</b>	<b>29.1</b>	<b>5351</b>	<b>1.4 [1.3; 1.5]</b>	<b>30.8</b>	<b>9378</b>	<b>1.7 [1.6; 1.8]</b>

Pop: estimated population in June 2003 (millions inhabitants); O: observed number of deaths; E: expected number of deaths; O-E: excess deaths, rounded up to the nearest integer; O/E: mortality ratio; CI(95%): 95% confidence interval of O/E.





# Older people and energy 2: a travel boom among retired people?

- Tourism is generally on the increase globally...
- 'senior' tourism increasing faster than other groups
- British International Passenger survey shows trips taken by 55-64 and 65+ age groups growing much faster than for population as a whole (ONS 2013)
- European data showed 65+ age group to be the only group increasing in number of trips taken, 2006-2011 (Demunter 2012)
- Not only demographic change; also changing culture around ageing and consumption



## THE DEMAND CENTRE FOCUSES ON WHAT ENERGY IS FOR.

Our research takes a distinctive approach to end use energy demand, recognising that energy is not used for its own sake but as part of accomplishing social practices at home, at work and in moving around.

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**University of Reading**  
**University of Birmingham**  
**Lancaster University**  
**Lancaster University**



# Intergenerational responsibility

## Ethic of care towards older people

- Supportive environments
- Access to resources
- agency

## Responsibility towards next generations

- Consideration of legacy
- Responsible use of resources

# Interdisciplinarity to support intergenerational dialogue and mutuality

## Design, planning and policy

- Inclusive, flexible design
- With the involvement of older people
- Delivered efficiently and equitably
- Meeting older peoples needs while involving them in low carbon transition

<http://www.sed.manchester.ac.uk/research/marc/research/conditioningdemand/>

# Universal design

- Equitable
- Flexible
- Simple and intuitive
- Tolerance for error
- Easy perception of information
- Low physical effort
- Suitable size and space

(see also inclusive design)

# New technologies for intergenerational dialogue?



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Smarter Households

What's it all about?

Back



SMARTER HOUSEHOLDS  
Intelligent digital networks for low carbon lifestyles

Smarter Households

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Smarter Households is a 5 year research project that aims to develop an interactive digital system designed to make it easier for households to see, understand and manage their energy consumption and bills.

The project has 4 stages:

1. To develop an **Integrated smart Meters and internet enabling Sensors System (IMSS)**. The IMSS will collect real data from households about the gas, electricity and water they use and will integrate this with data on temperature, humidity and CO2 levels. This will be displayed in real time on an interactive 3D dashboard, viewable on a tablet or smart phone, where the user can display historical data and set goals for themselves.
2. To create a **Virtual Energy World Game (VEWG)** for tablet or smart phone, allowing for virtual simulations of energy use and testing of different scenarios, alongside fun and engaging activities in a virtual world, to involve those not responsible for paying the utility bills.
3. To trial the IMSS and VEWG with real Orbit Housing Group households for one year.
4. To develop a low carbon lifestyles engagement activities to support the IMSS and VEWG in helping households to meet their

# Using arts and humanities for expression and engagement





# Stories and narratives can be...

- Historical
- Biographical
- Literary
- Architectural
- Told through different media and forms
- Analysed using different methods
- Community building
- Pedagogical
- Emancipatory









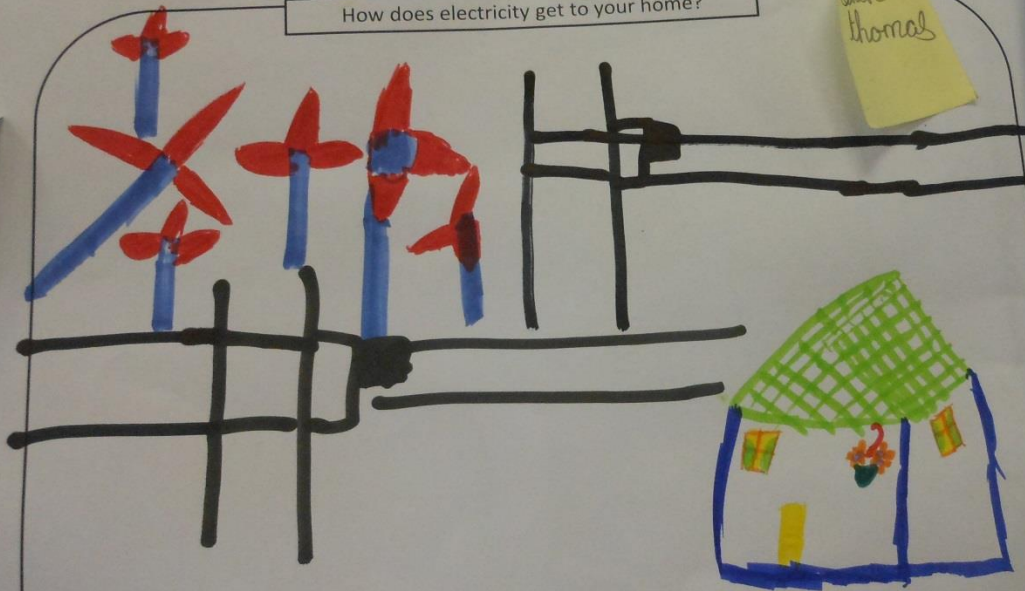




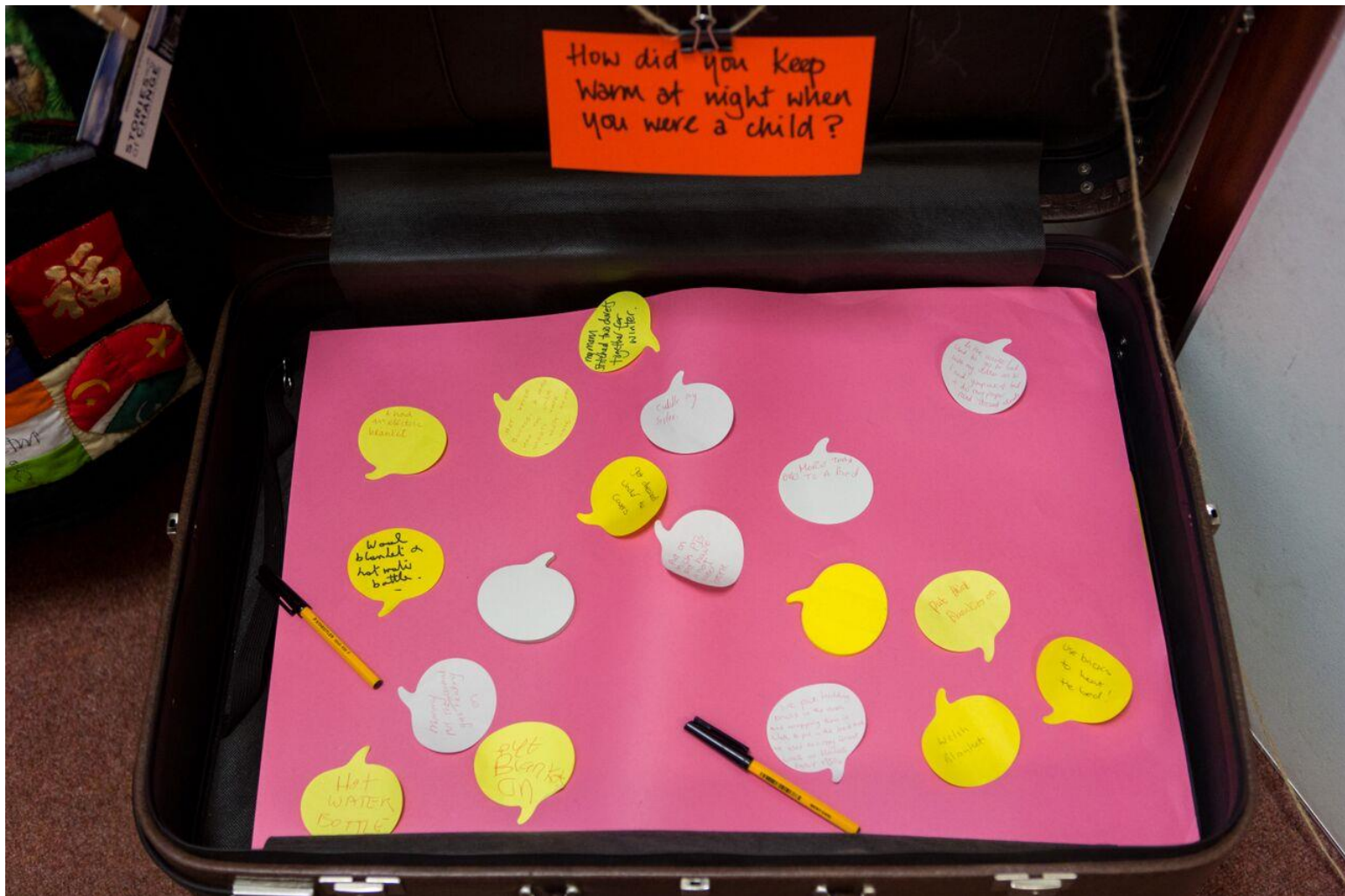


How does electricity get to your home?

Alan Thomas







How did you keep  
warm at night when  
you were a child?

no more  
stuffed animals  
together for  
winter

a good  
blanket  
blanket

no more  
stuffed animals  
together for  
winter

stuffed  
animal

no more  
stuffed animals  
together for  
winter

no more  
stuffed animals  
together for  
winter

no more  
stuffed animals  
together for  
winter

would  
blanket &  
hot water  
bottle

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Hot  
WATER  
BOTTLE

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stuffed animals  
together for  
winter

no more  
stuffed animals  
together for  
winter











# Some reflections on interdisciplinary working

- Doesn't suit everyone!
- Need to be open minded
- Don't take vocabularies for granted
- Disciplinary modes of interaction can differ
- Build in time for discussing core concepts and team building

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