



# HECA reporting in Devon

CAN, Taunton, 28<sup>th</sup> Feb 2013

Tony Norton , Director, Centre for Energy and the Environment

[a.d.s.norton@ex.ac.uk](mailto:a.d.s.norton@ex.ac.uk) Tel 01392 724141



# The HECA “Further Report”

ACTION	DESCRIPTION	TIMING
<b>i) LOCAL ENERGY EFFICIENCY AMBITIONS AND PRIORITIES</b>		
<b>ii) MEASURES WE ARE TAKING TO RESULT IN SIGNIFICANT ENERGY EFFICIENCY IMPROVEMENTS OF OUR RESIDENTIAL ACCOMMODATION</b>		
Green Deal and ECO		
Feed in Tariffs scheme		
Renewable Heat Premium Payment		
Zero Carbon Homes		
EPCs		
Minimum standards in the private rental sector		
<b>iii) MEASURES WE PROPOSE TO COST EFFECTIVELY DELIVER ENERGY EFFICIENCY IMPROVEMENTS IN RESIDENTIAL ACCOMMODATION BY USING AREA BASED/STREET BY STREET ROLL OUT</b>		
<b>iv) TIME FRAME FOR DELIVERY AND NATIONAL AND LOCAL PARTNERS</b>		

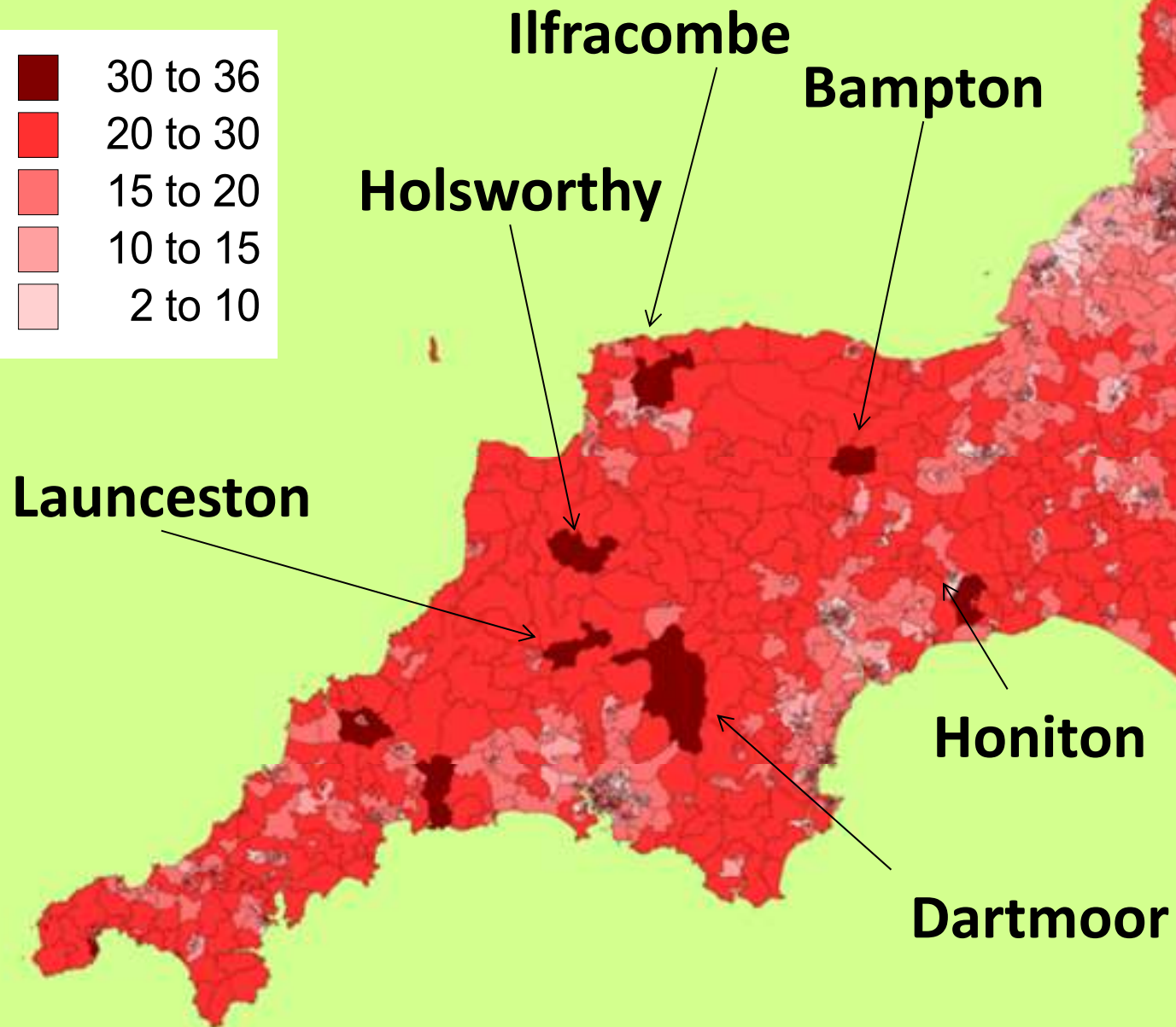
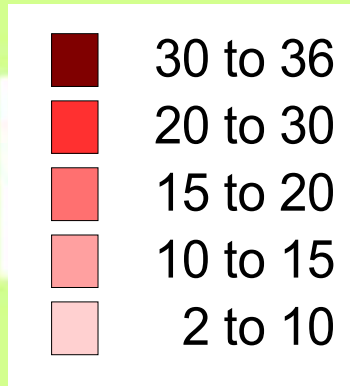
Signature: \_\_\_\_\_  
 Position: \_\_\_\_\_

# Baseline

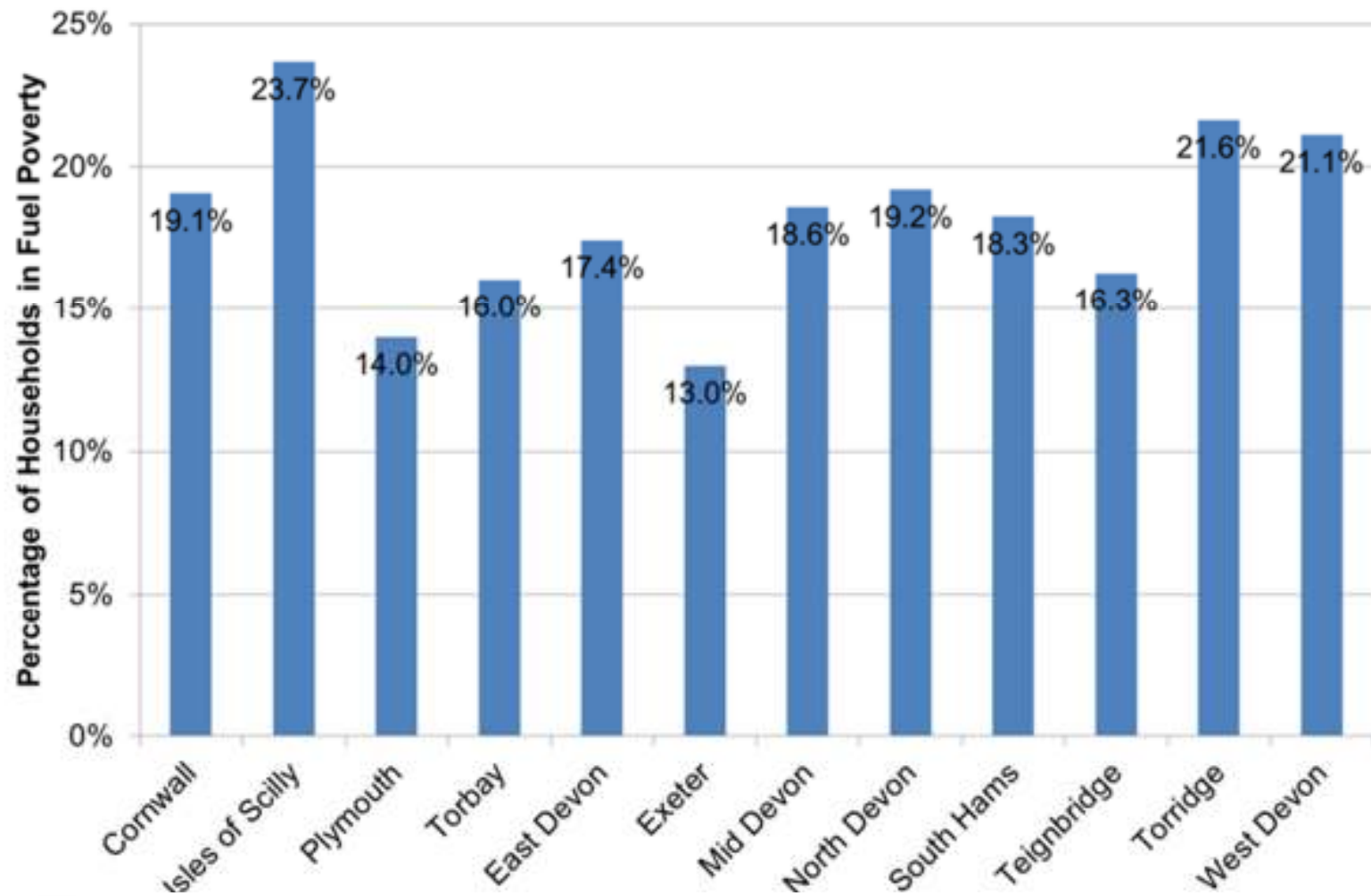
	A	B	C	D	E	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	District	County	LUA1 (f	MLSOA	LSOA	Solid W	Off Gas	Off Gas	Urban I	Numbe	Popula	Area 20	Househ	IMD Sc	IMD Ra	IMD Hd	IMD Hd	IMD Liv
2	Bristol, City of	Bristol	UKK1100	E02003012	E01014601	0.065097	37	0.051247	1	722	1468	45	617	31.92	7375	10.05	27672	15.
3	Bristol, City of	Bristol	UKK1100	E02003012	E01014602	0	17	0.020962	1	811	1597	42	740	42.02	3963	18.82	17833	18.
4	Bristol, City of	Bristol	UKK1100	E02003012	E01014603	0	15	0.016043	1	935	1700	51	758	22.91	11947	19.26	17306	10.
5	Bristol, City of	Bristol	UKK1100	E02003012	E01014604	0.023217	39	0.064677	1	603	1470	74	599	19.51	14358	30.52	6806	17.
6	Bristol, City of	Bristol	UKK1100	E02003012	E01014605	0	28	0.036364	1	770	1485	29	735	54.6	1461	13.04	24525	29.
7	Bristol, City of	Bristol	UKK1100	E02003012	E01014606	0.055758	52	0.06303	1	825	1778	106	798	31.88	7391	15.41	21862	23.
8	Bristol, City of	Bristol	UKK1100	E02003013	E01014688	0	50	0.078003	1	641	1638	25	618	45.85	3028	18.39	18298	34.
9	Bristol, City of	Bristol	UKK1100	E02003013	E01014689	0.025954	28	0.042748	1	655	1506	27	634	66.81	378	13.48	24023	29.
10	Bristol, City of	Bristol	UKK1100	E02003013	E01014690	0.022901	23	0.035115	1	655	1547	26	633	33.87	6599	14.06	23386	24.
11	Bristol, City of	Bristol	UKK1100	E02003013	E01014691	0.025492	64	0.07416	1	863	1762	62	741	32.06	7319	12.88	24704	20.
12	Bristol, City of	Bristol	UKK1100	E02003013	E01014692	0.012478	0	0	1	561	1517	28	528	42.19	3918	15.5	21767	30.
13	Bristol, City of	Bristol	UKK1100	E02003013	E01014693	0	0	0	1	670	1466	76	645	9.81	24270	21.19	15234	11.
14	Bristol, City of	Bristol	UKK1100	E02003013	E01014694	0.032593	43	0.063704	1	675	1569	34	628	37.92	5206	13.94	23516	18.
15	Bristol, City of	Bristol	UKK1100	E02003014	E01014497	0	19	0.027496	1	691	1500	62	652	42.79	3757	16.59	20458	25.
16	Bristol, City of	Bristol	UKK1100	E02003014	E01014498	0.14121	58	0.083573	1	694	1497	811	644	31.5	7555	18.87	17760	22.
17	Bristol, City of	Bristol	UKK1100	E02003014	E01014638	0.008951	27	0.034527	1	782	1599	53	758	48.53	2472	13.22	24331	26.
18	Bristol, City of	Bristol	UKK1100	E02003014	E01014639	0.01059	13	0.019667	1	661	1501	54	627	50.95	2011	19.47	17060	20.
19	Bristol, City of	Bristol	UKK1100	E02003014	E01014640	0	0	0	1	603	1576	105	627	40.99	4260	14	23445	10.
20	Bristol, City of	Bristol	UKK1100	E02003015	E01014631	0	20	0.0409	1	489	1259	49	467	12.4	21054	9.08	28572	11.
21	Bristol, City of	Bristol	UKK1100	E02003015	E01014632	0.145897	54	0.082067	1	658	1428	42	634	24.16	11174	11.79	25938	26.
22	Bristol, City of	Bristol	UKK1100	E02003015	E01014633	0.077273	0	0	1	660	1503	37	649	17.94	15643	14.46	22926	21.
23	Bristol, City of	Bristol	UKK1100	E02003015	E01014636	0.065728	0	0	1	639	1365	27	636	36.83	5564	21.96	14413	32.
24	Bristol, City of	Bristol	UKK1100	E02003016	E01014630	0.033588	0	0	1	655	1332	27	504	40.83	4316	15.31	21987	25.
25	Bristol, City of	Bristol	UKK1100	E02003016	E01014634	0.326433	0	0	1	628	1510	16	605	10.18	23786	14.04	23416	25.
26	Bristol, City of	Bristol	UKK1100	E02003016	E01014659	0.06875	47	0.073438	1	640	1692	28	619	52.03	1848	18.62	18063	39.
27	Bristol, City of	Bristol	UKK1100	E02003016	E01014661	0	21	0.034884	1	602	1618	37	610	35.35	6095	15.96	21204	26.
28	Bristol, City of	Bristol	UKK1100	E02003017	E01014616	0.44843	30	0.044843	1	669	1496	38	647	7.28	27452	10.19	27520	18.
29	Bristol, City of	Bristol	UKK1100	E02003017	E01014719	0.489362	71	0.116203	1	611	1356	27	625	10.49	23377	10.38	27359	21.
30	Bristol, City of	Bristol	UKK1100	E02003017	E01014720	0.066841	20	0.026212	1	763	1527	31	752	17.07	16417	15.73	21501	16.
31	Bristol, City of	Bristol	UKK1100	E02003017	E01014721	0.111628	25	0.03876	1	645	1493	42	648	11.15	22523	9.98	27731	9.
32	Bristol, City of	Bristol	UKK1100	E02003018	E01014641	0.099526	24	0.037915	1	633	1484	74	625	13.22	20124	16.34	20785	9.
33	Bristol, City of	Bristol	UKK1100	E02003018	E01014642	0.047468	31	0.049051	1	632	1491	81	631	17.13	16351	19.24	17323	14.
34	Bristol, City of	Bristol	UKK1100	E02003018	E01014643	0.158863	59	0.098662	1	598	1539	85	605	34.09	6525	12.48	25165	28.
35	Bristol, City of	Bristol	UKK1100	E02003018	E01014644	0.055732	0	0	1	628	1654	30	618	22.94	11931	11.18	26547	12.
36	Bristol, City of	Bristol	UKK1100	E02003019	E01014492	0.071615	94	0.122396	1	768	1526	45	750	32.5	7135	15.27	22033	17.

<http://centres.exeter.ac.uk/cee/resources/heca/index.html>

# Fuel Poverty

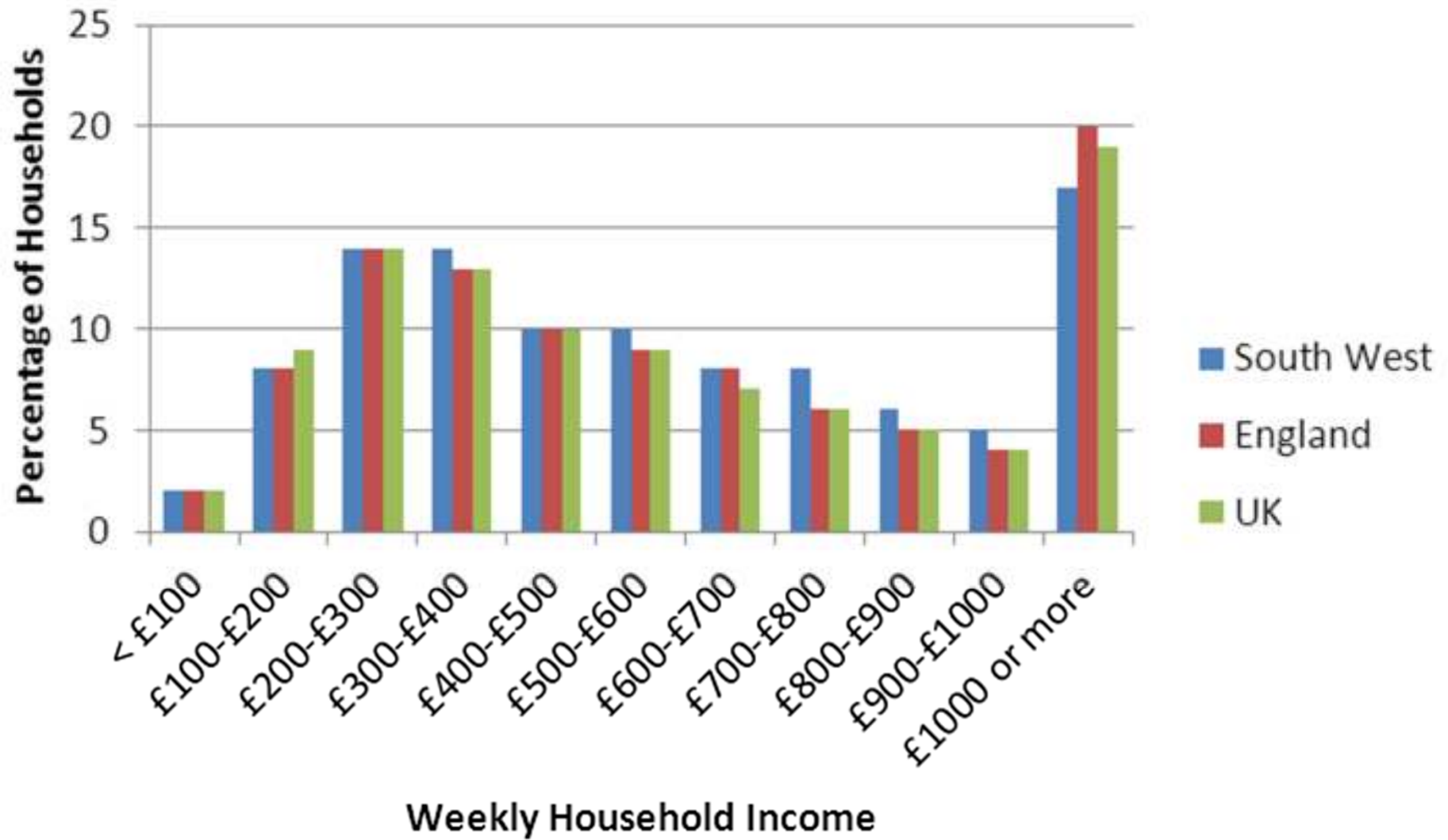


# Fuel Poverty

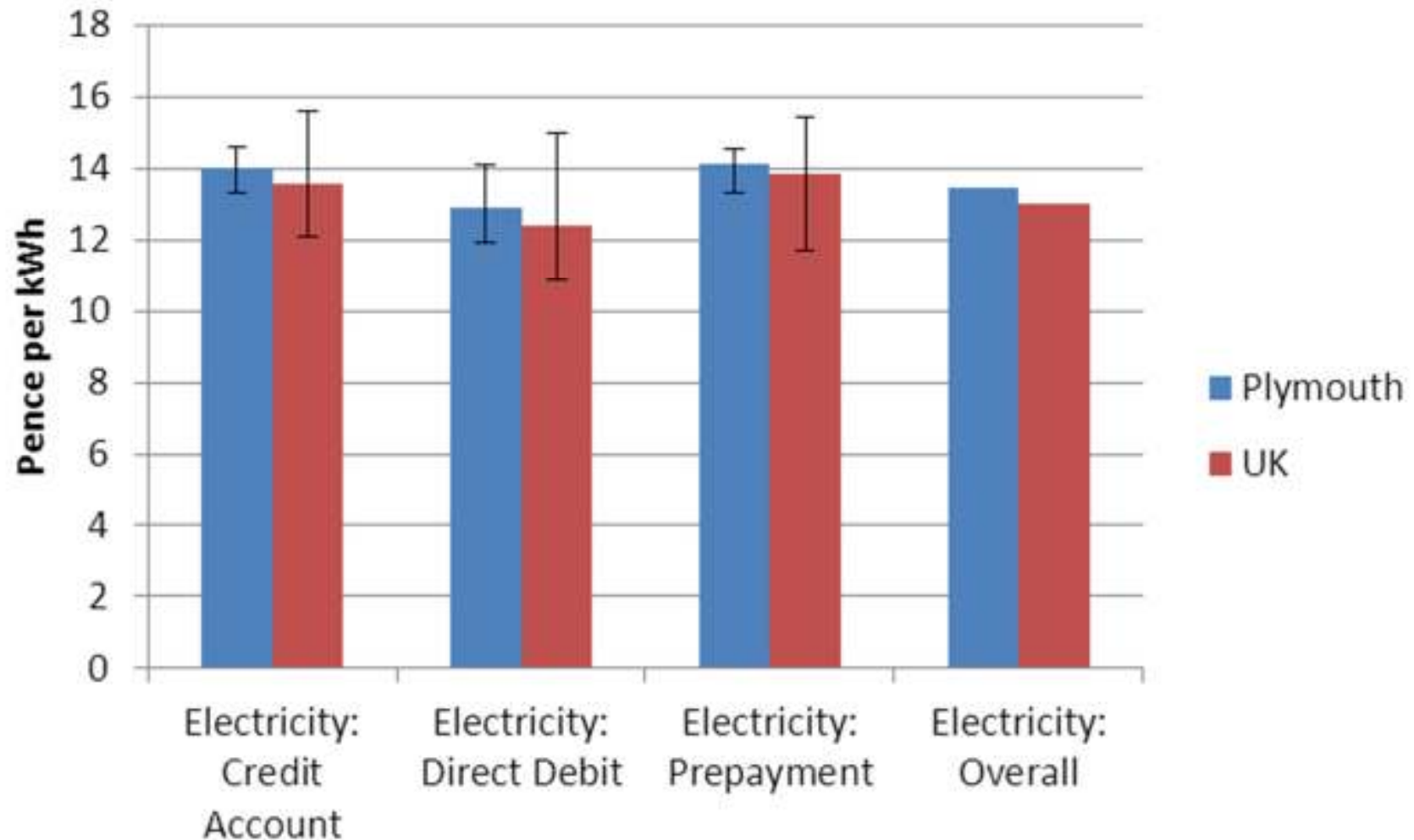




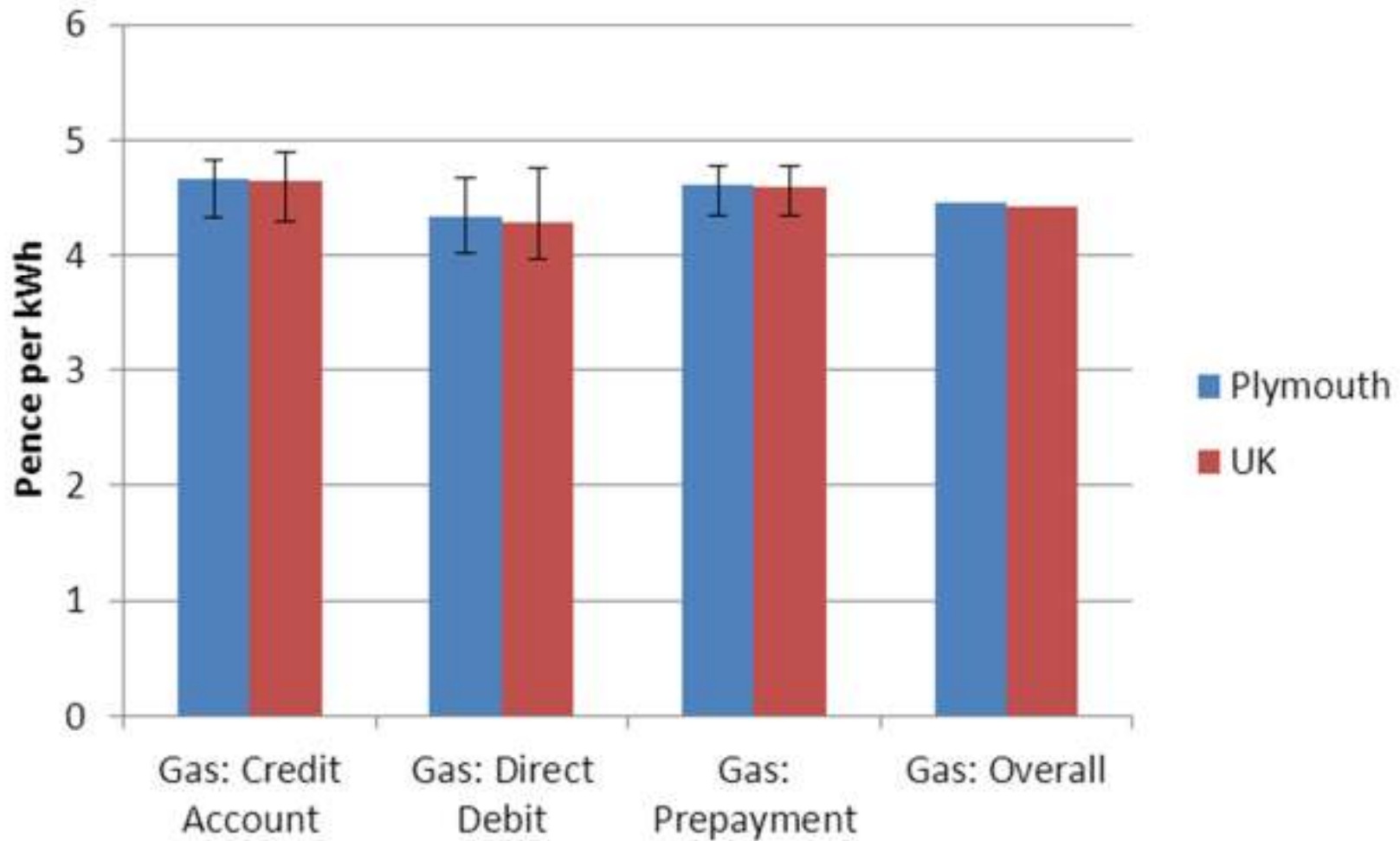
# Income



# Energy Prices (Plymouth)

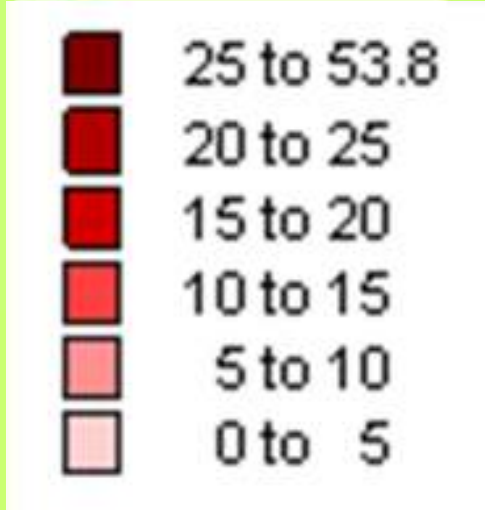


# Energy Prices (Plymouth)





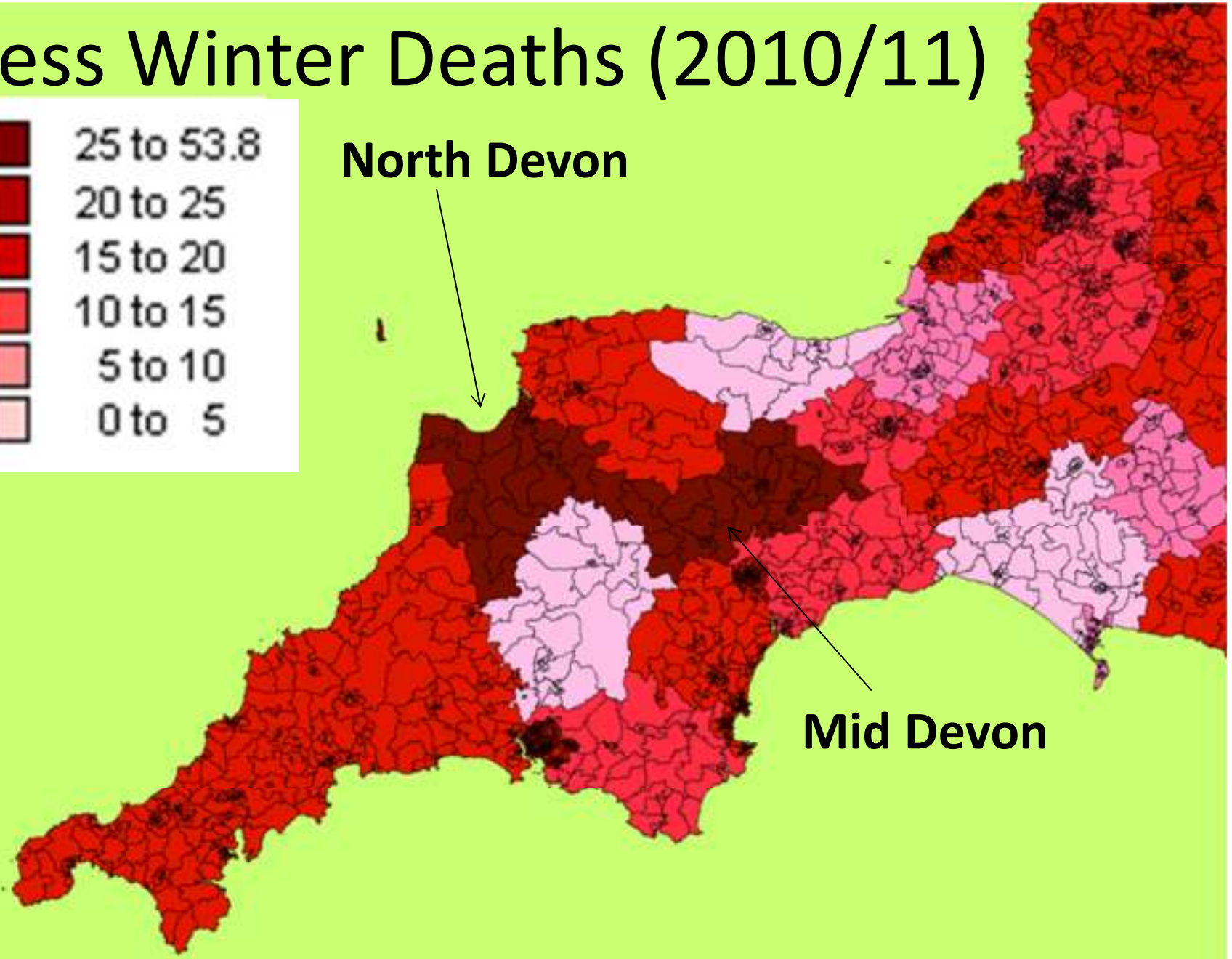
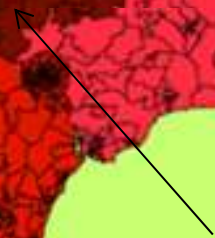
# Excess Winter Deaths (2010/11)



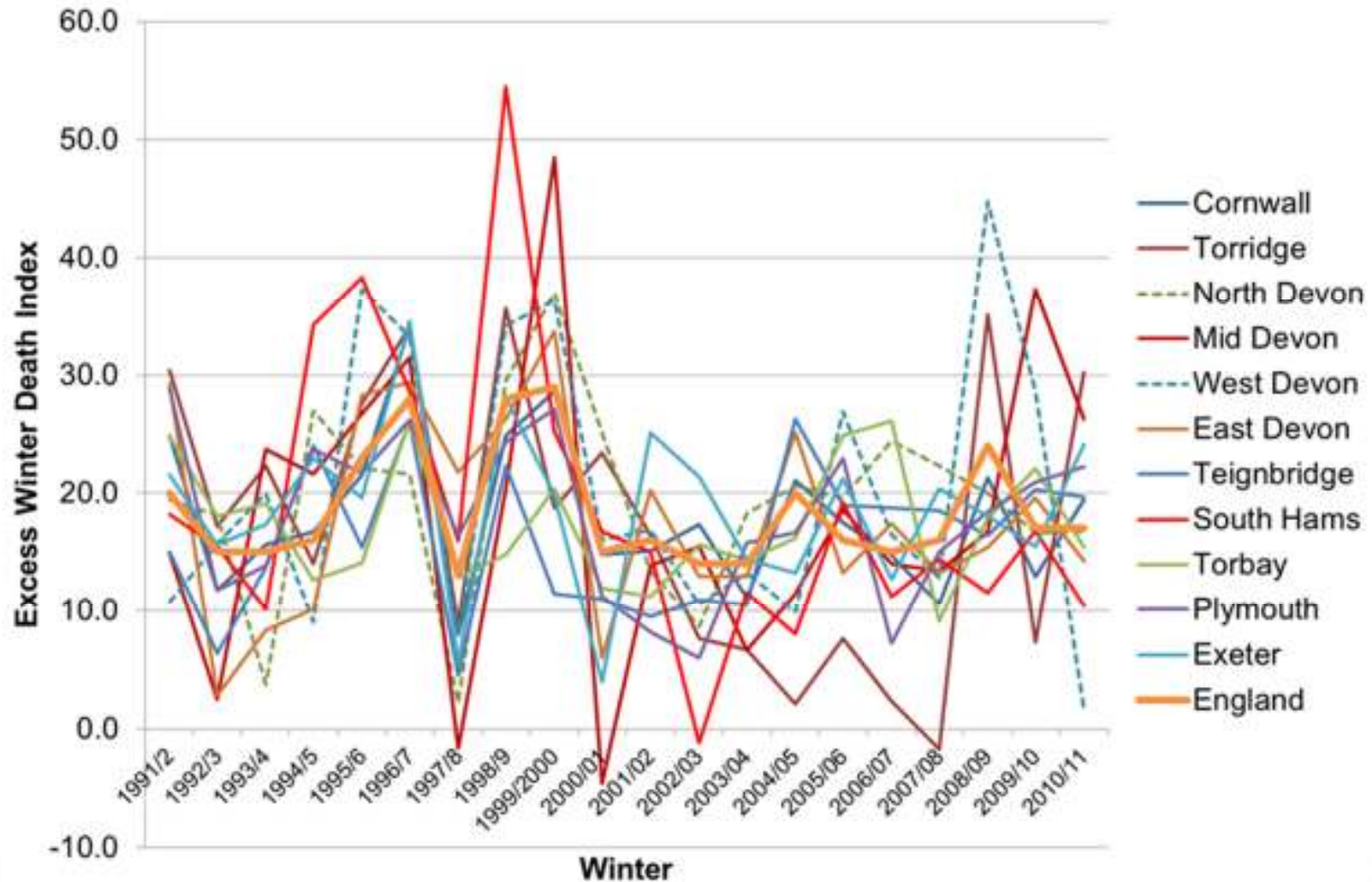
**North Devon**



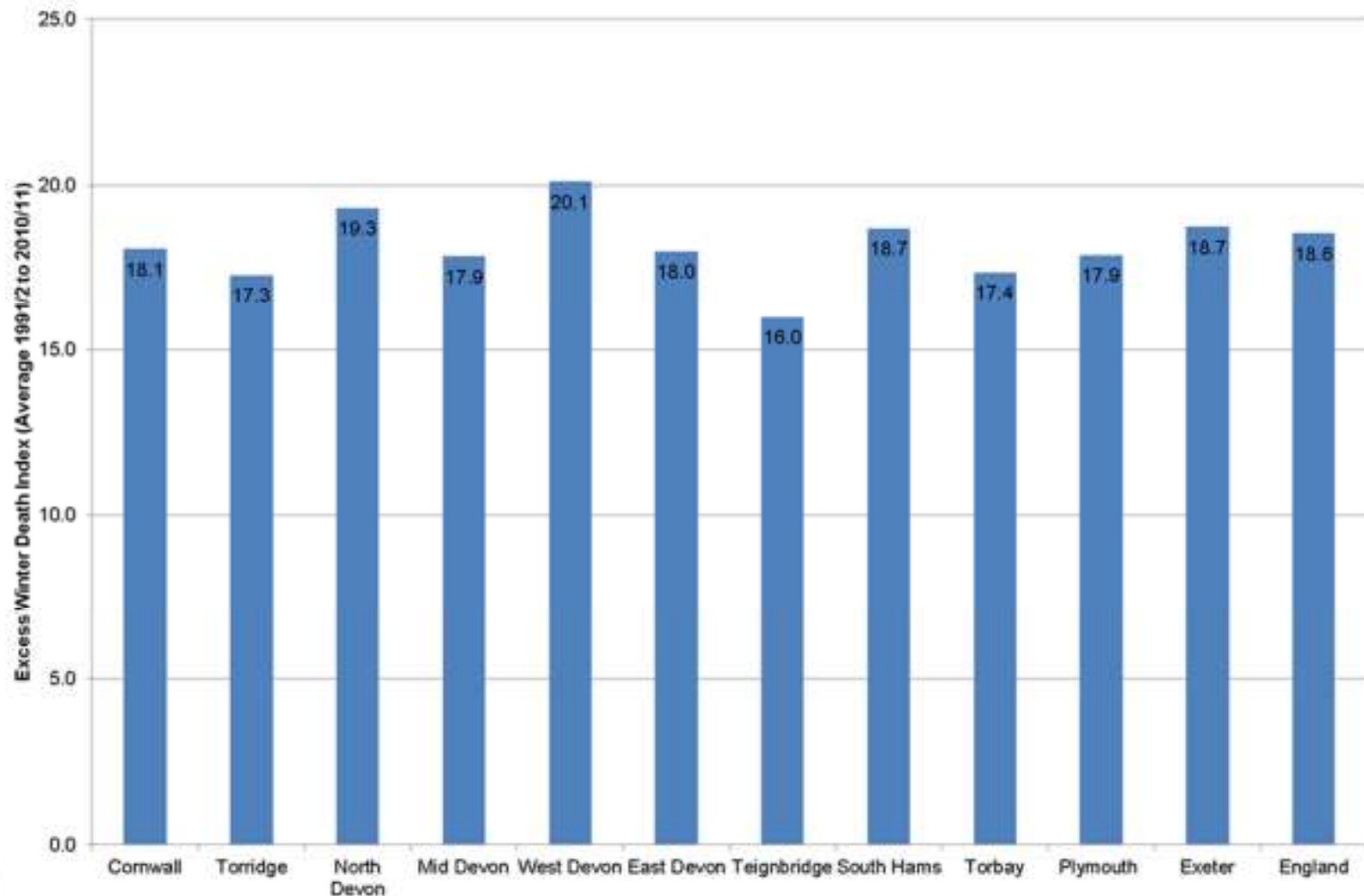
**Mid Devon**



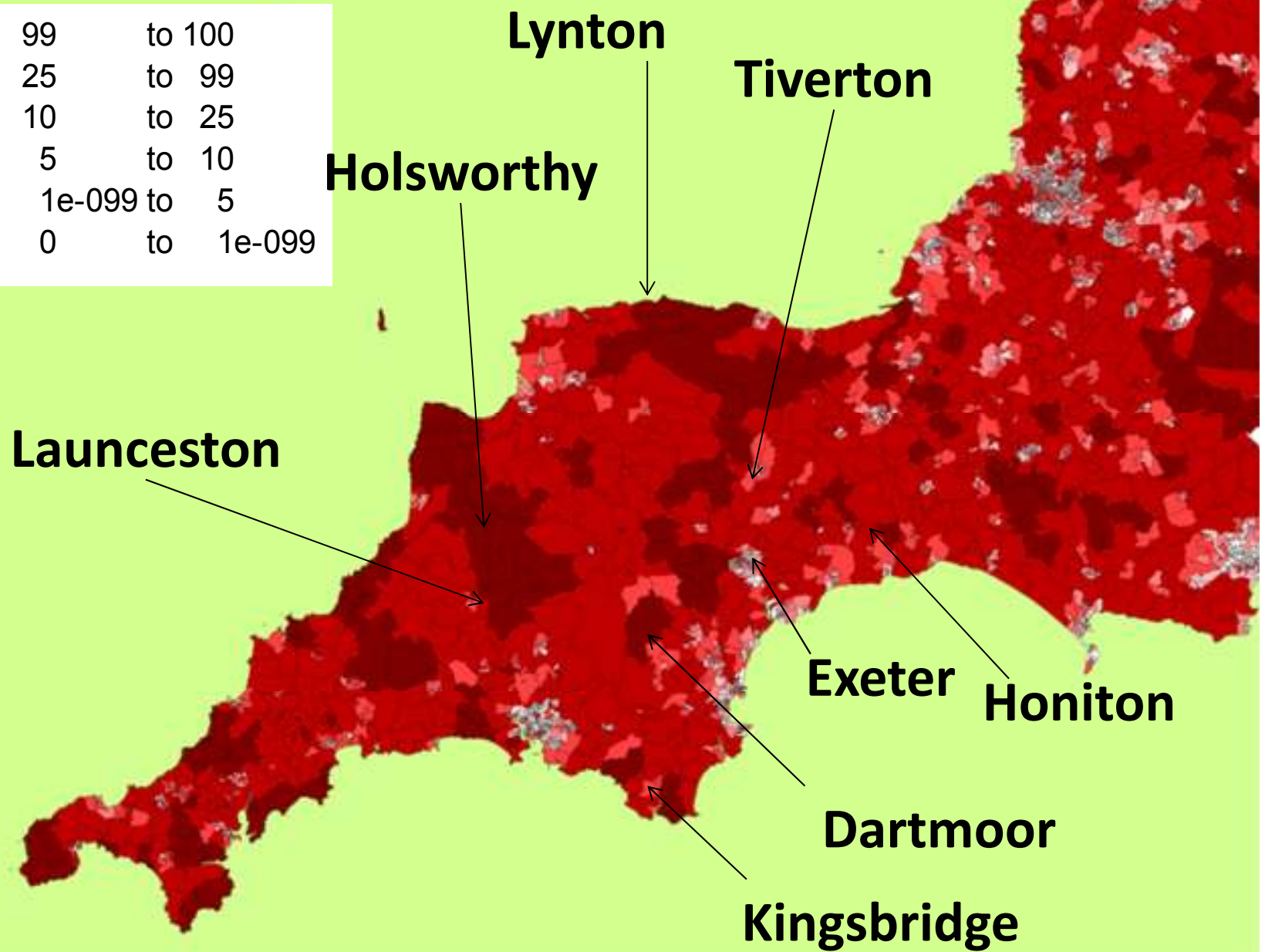
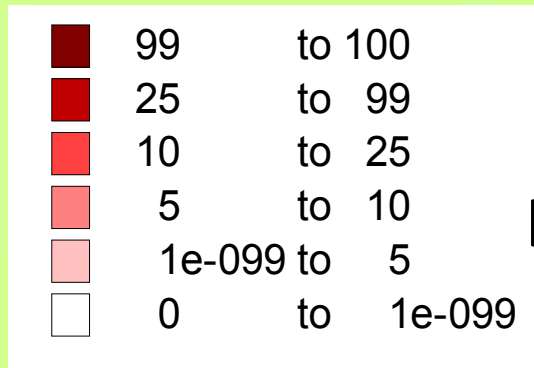
# Excess Winter Deaths (year on year)



# Excess Winter Deaths: Long Term

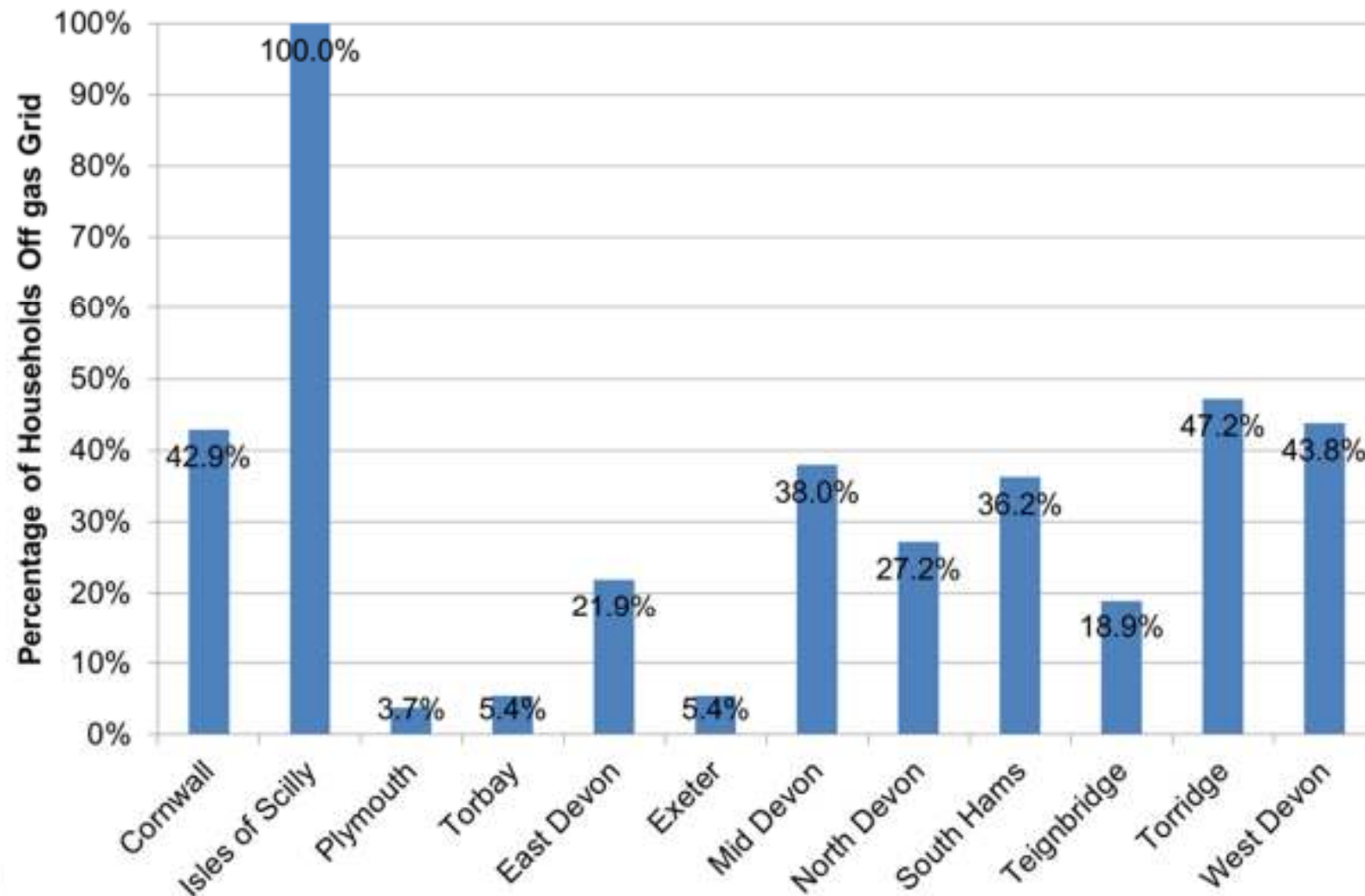


# Off Gas Grid

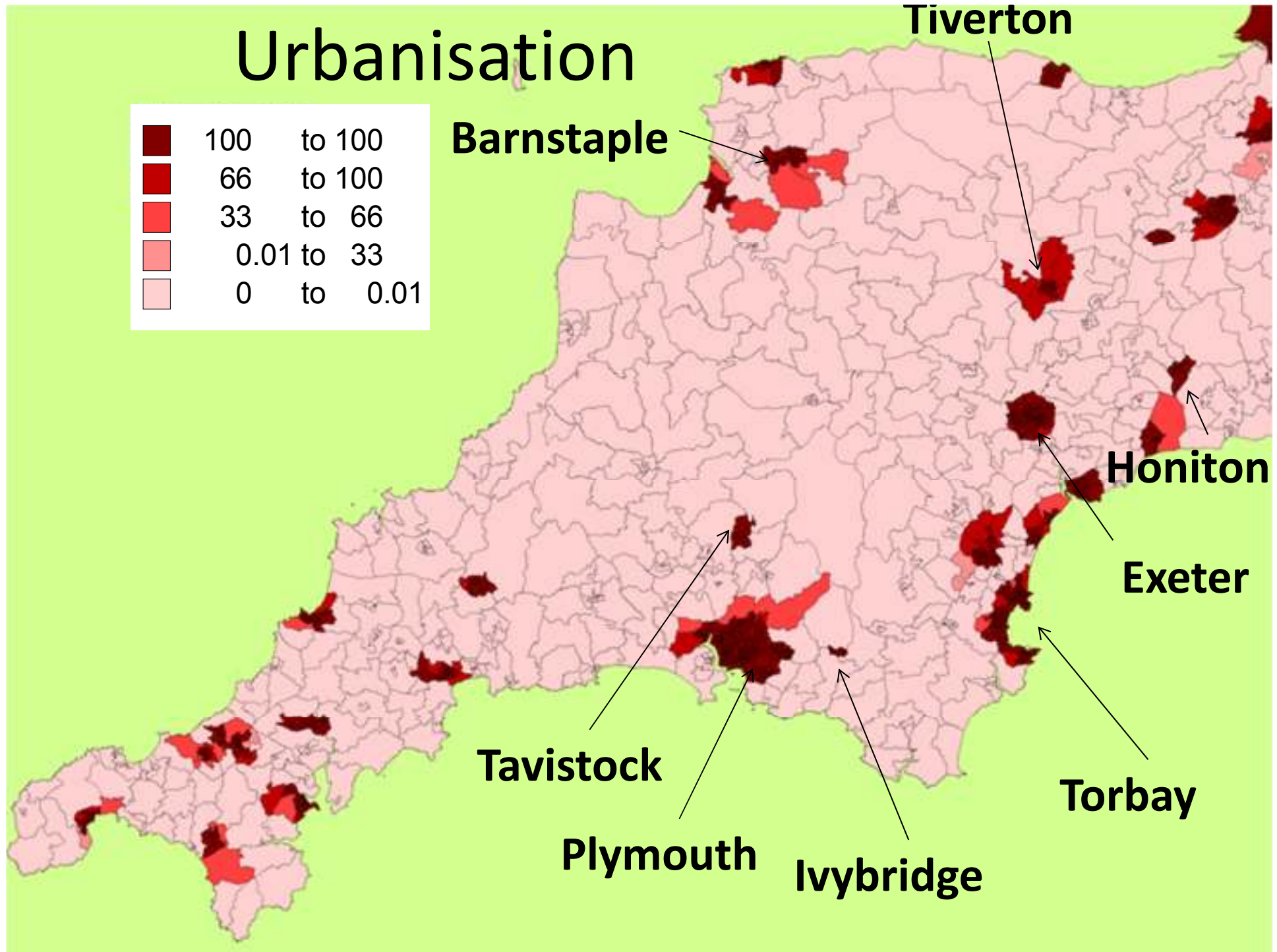
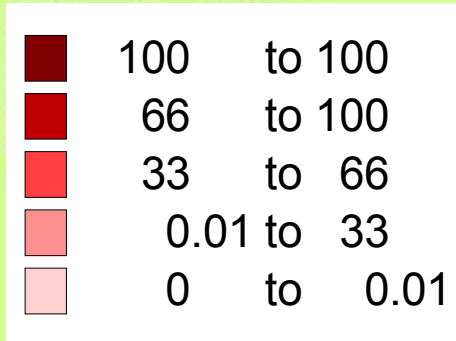




# Off Gas Grid

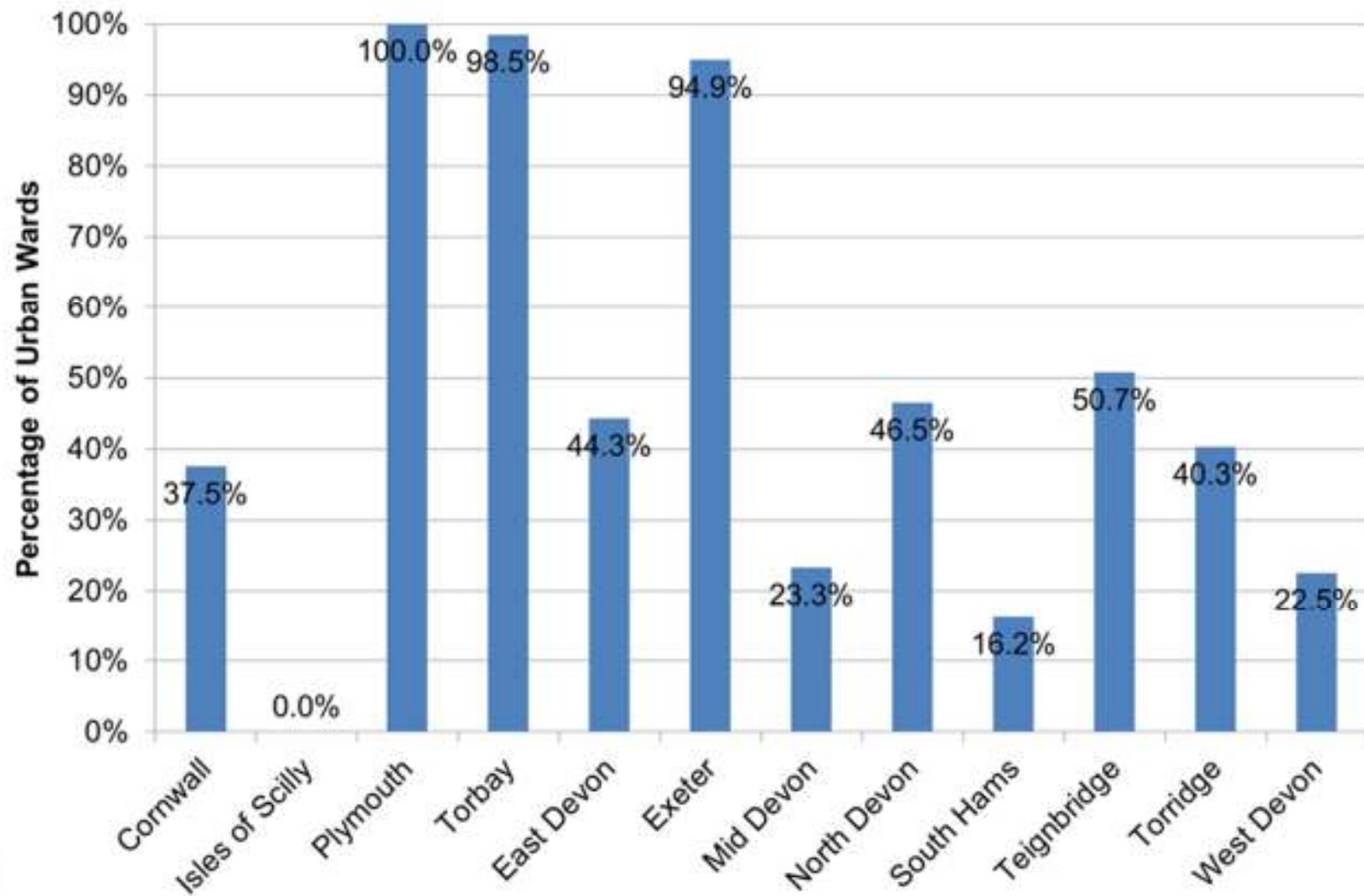


# Urbanisation

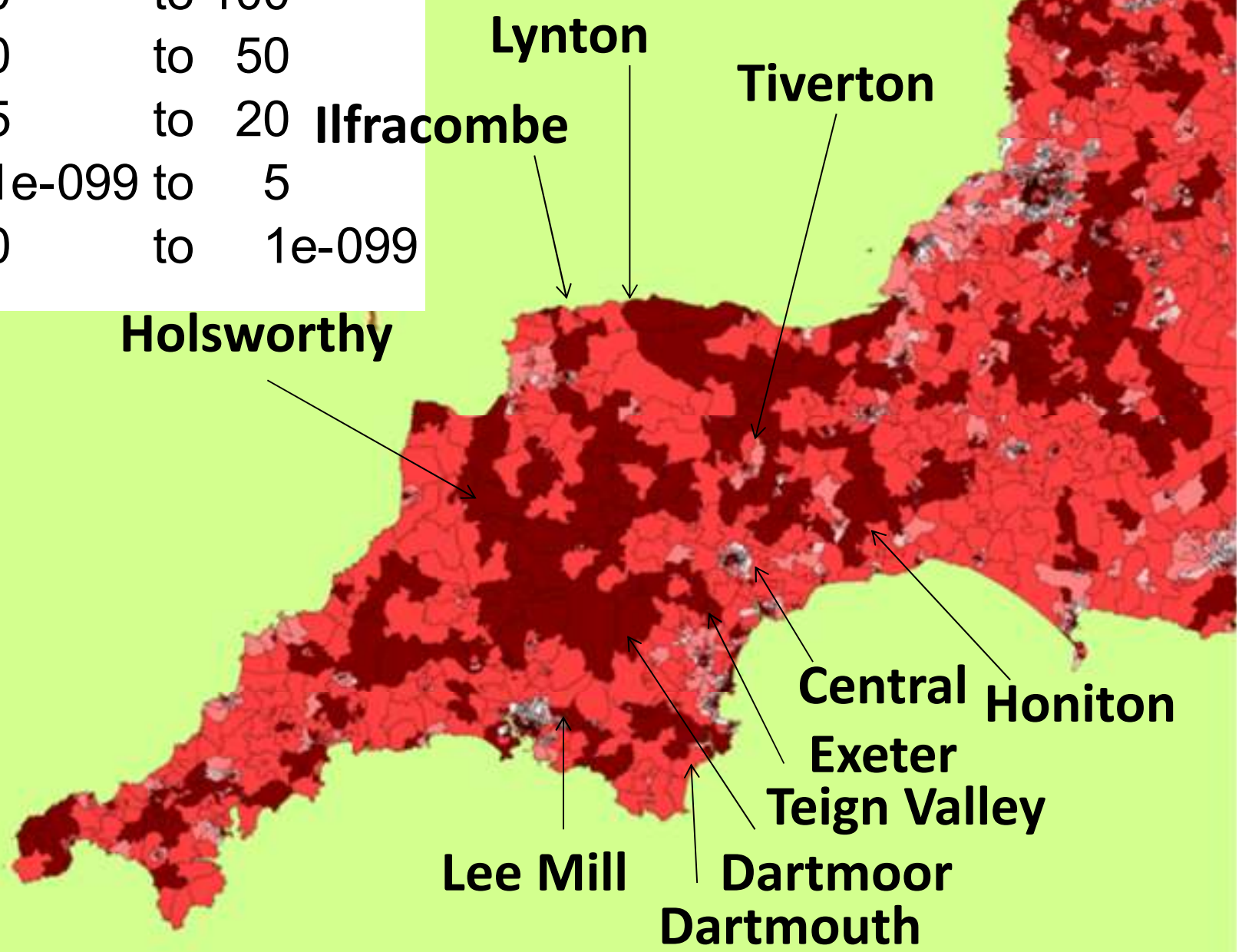
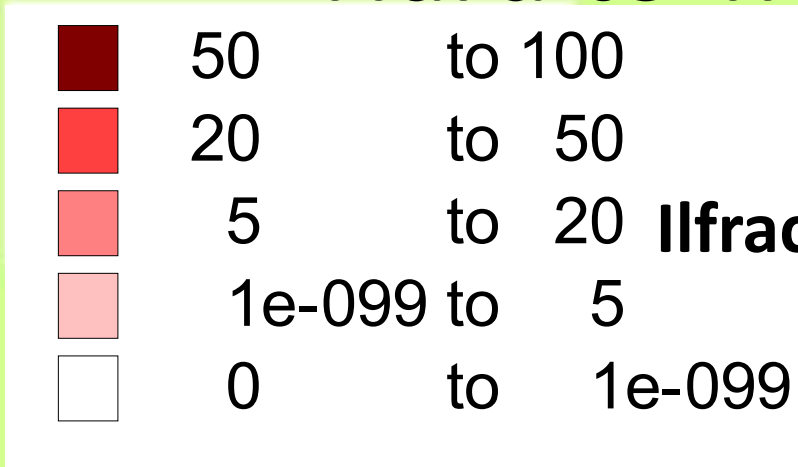




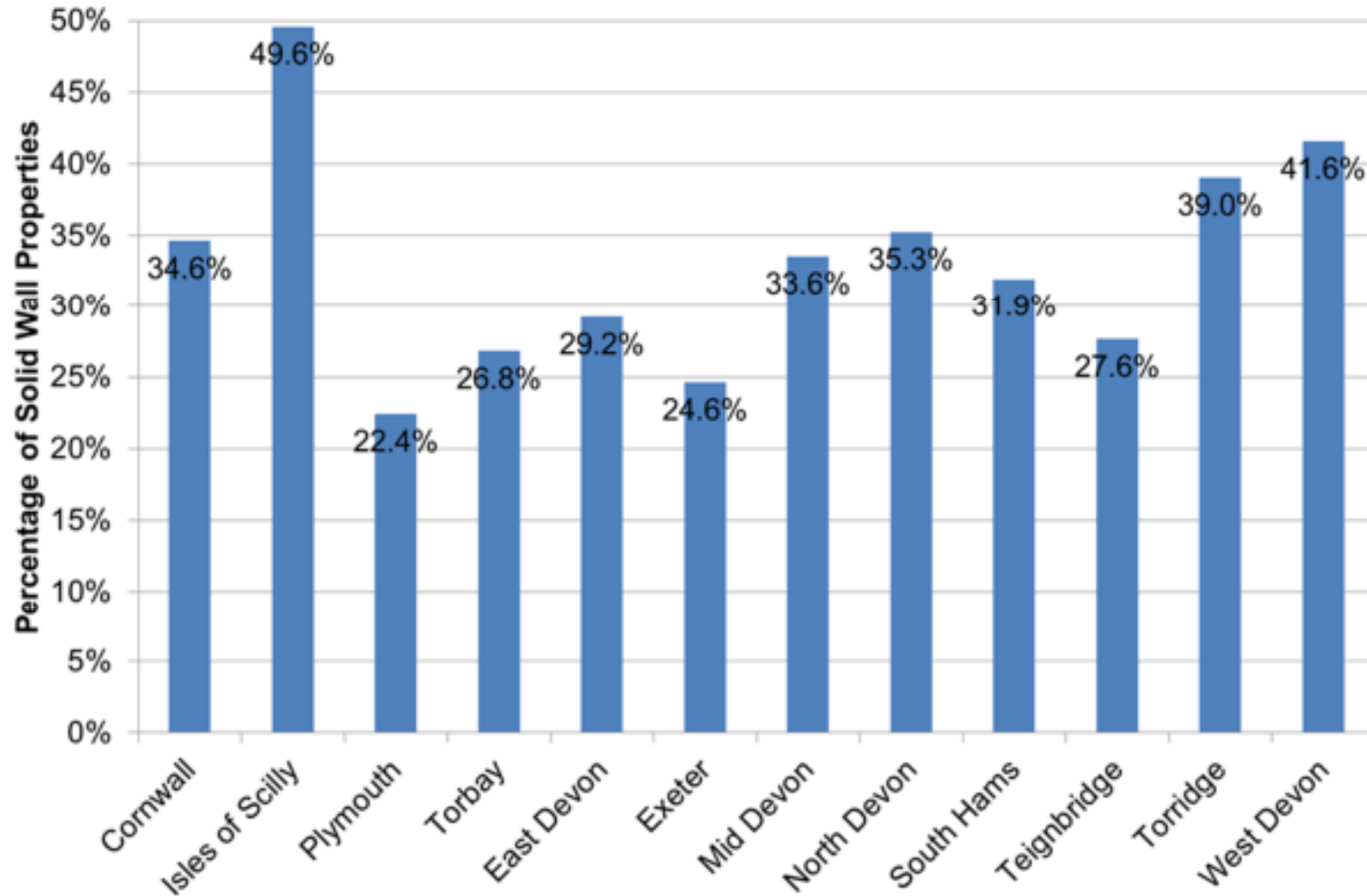
# Urbanisation



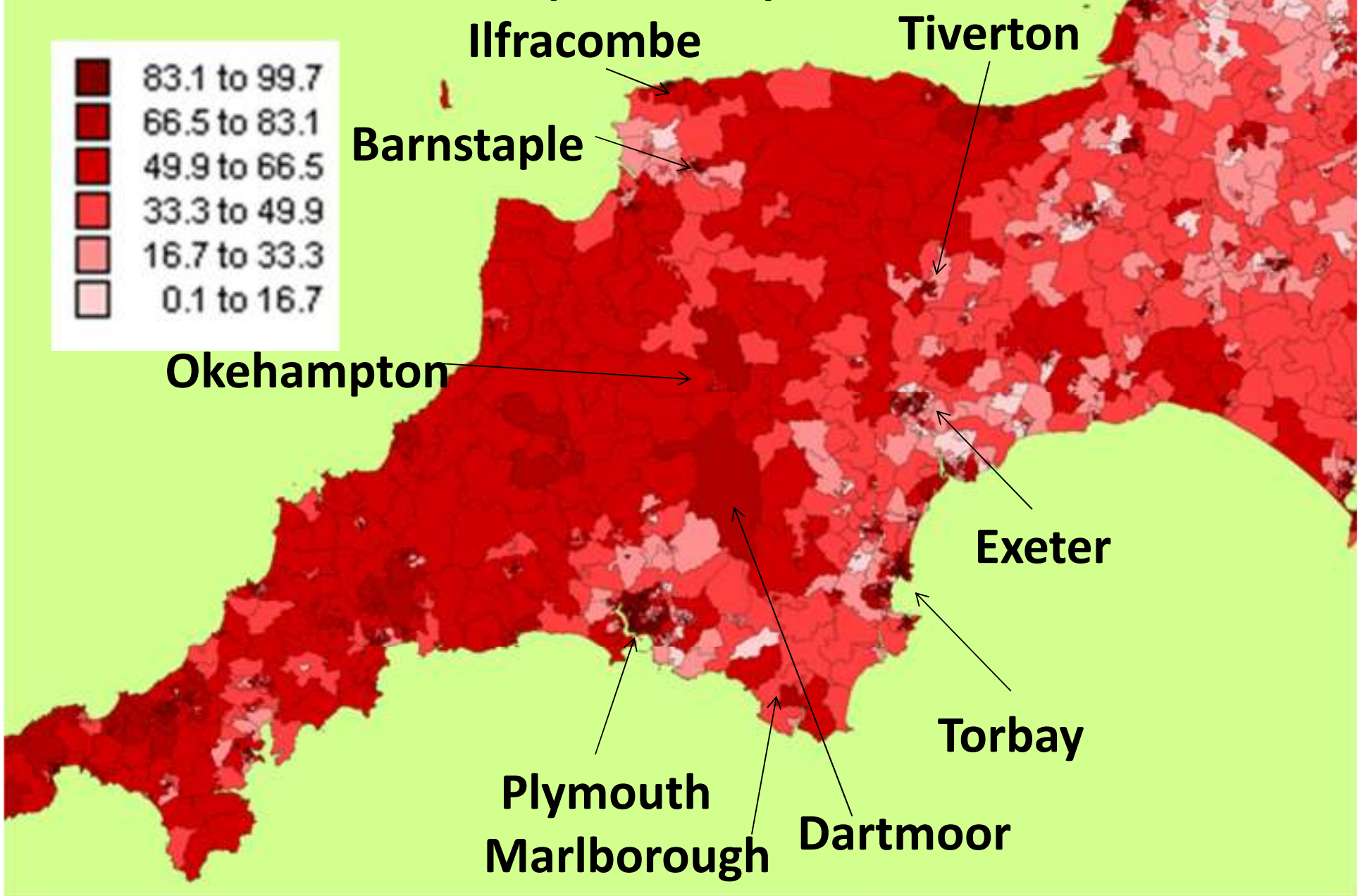
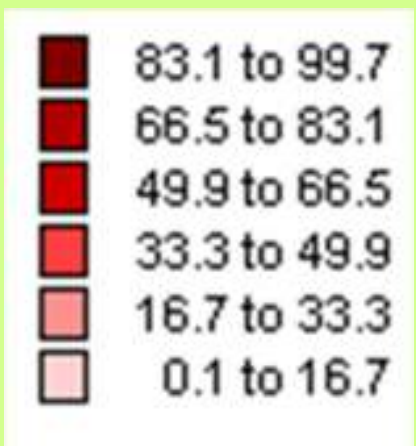
# Hard to Treat: Solid Wall



# Hard to Treat: Solid Wall

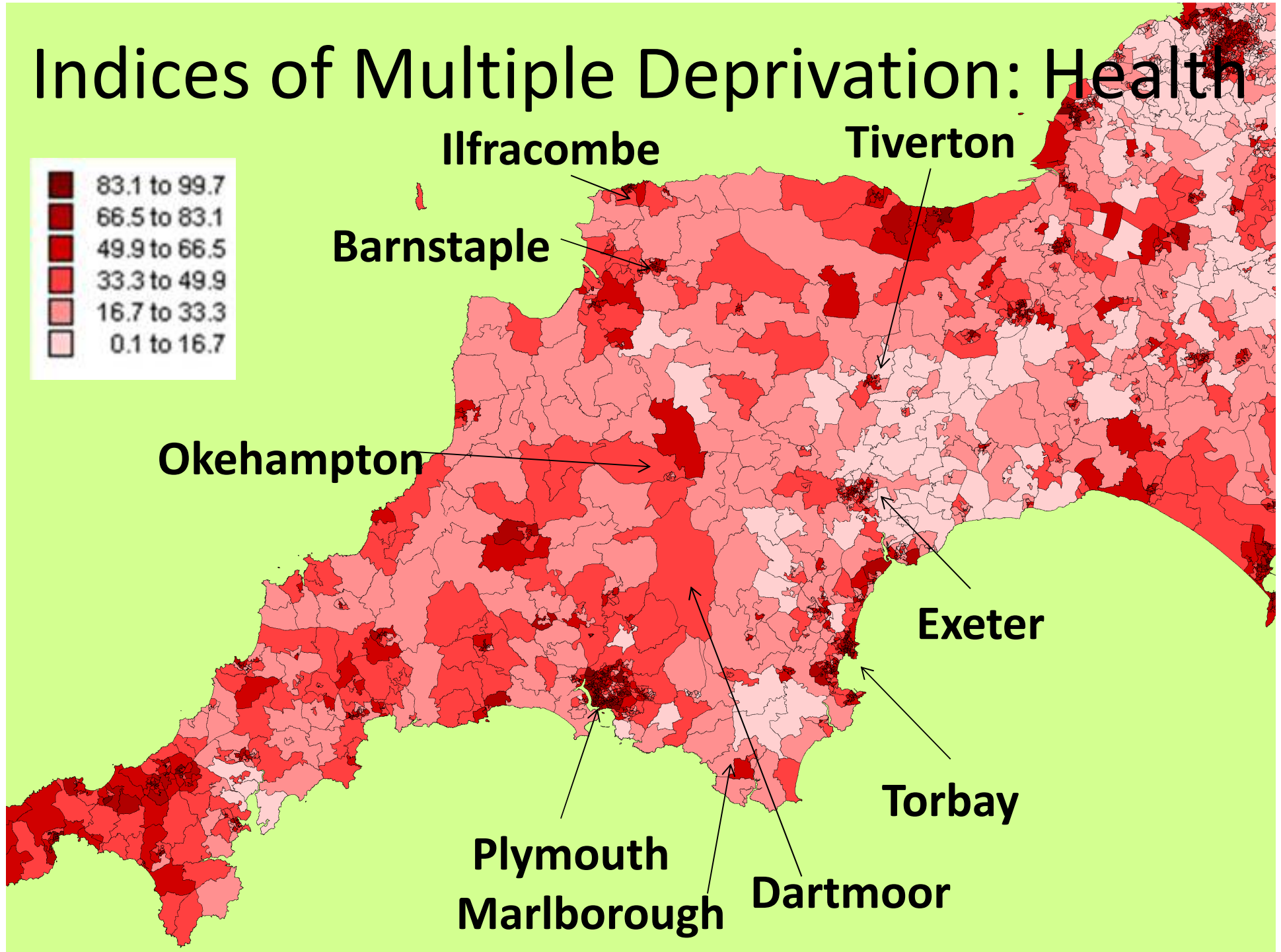
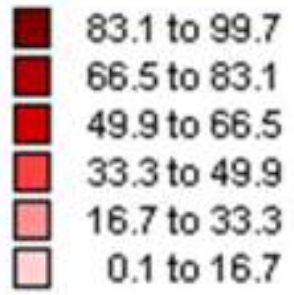


# Indices of Multiple Deprivation: Overall

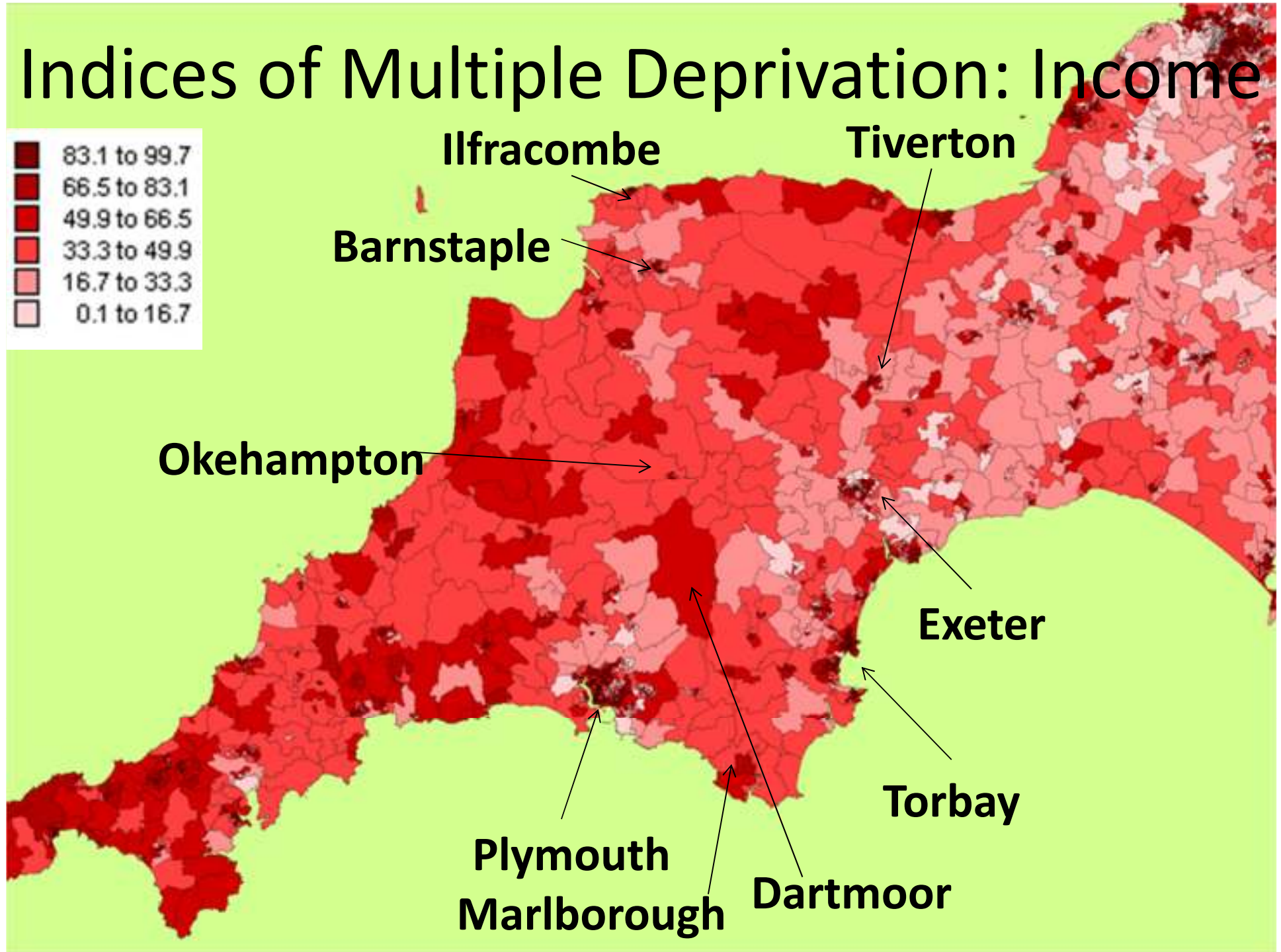
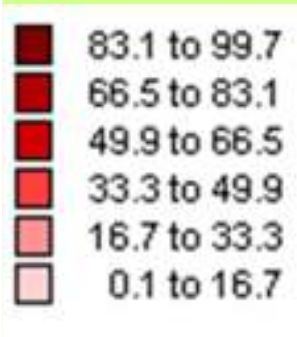




# Indices of Multiple Deprivation: Health

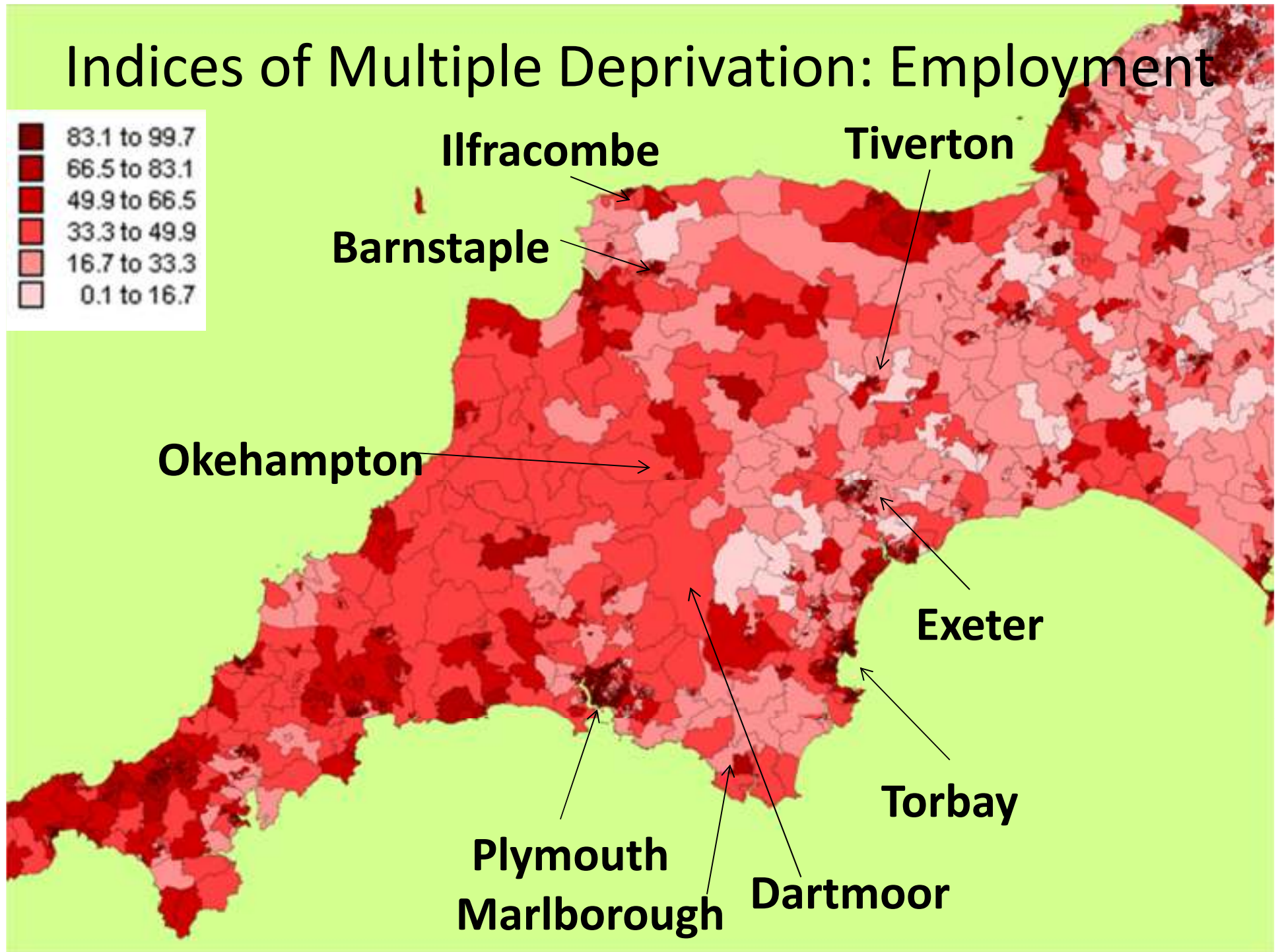
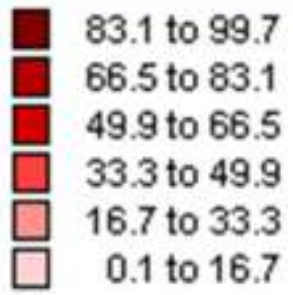


# Indices of Multiple Deprivation: Income

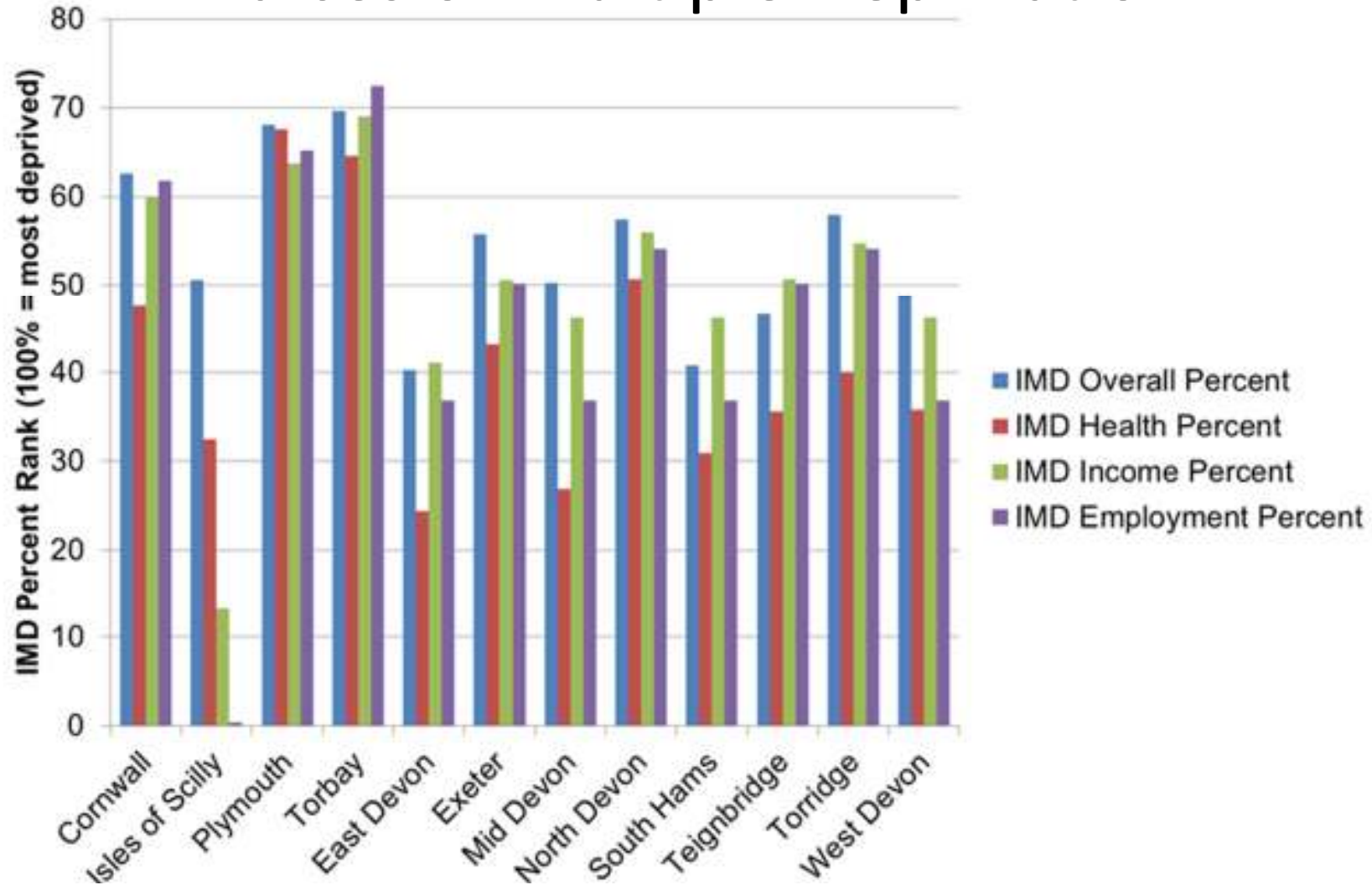




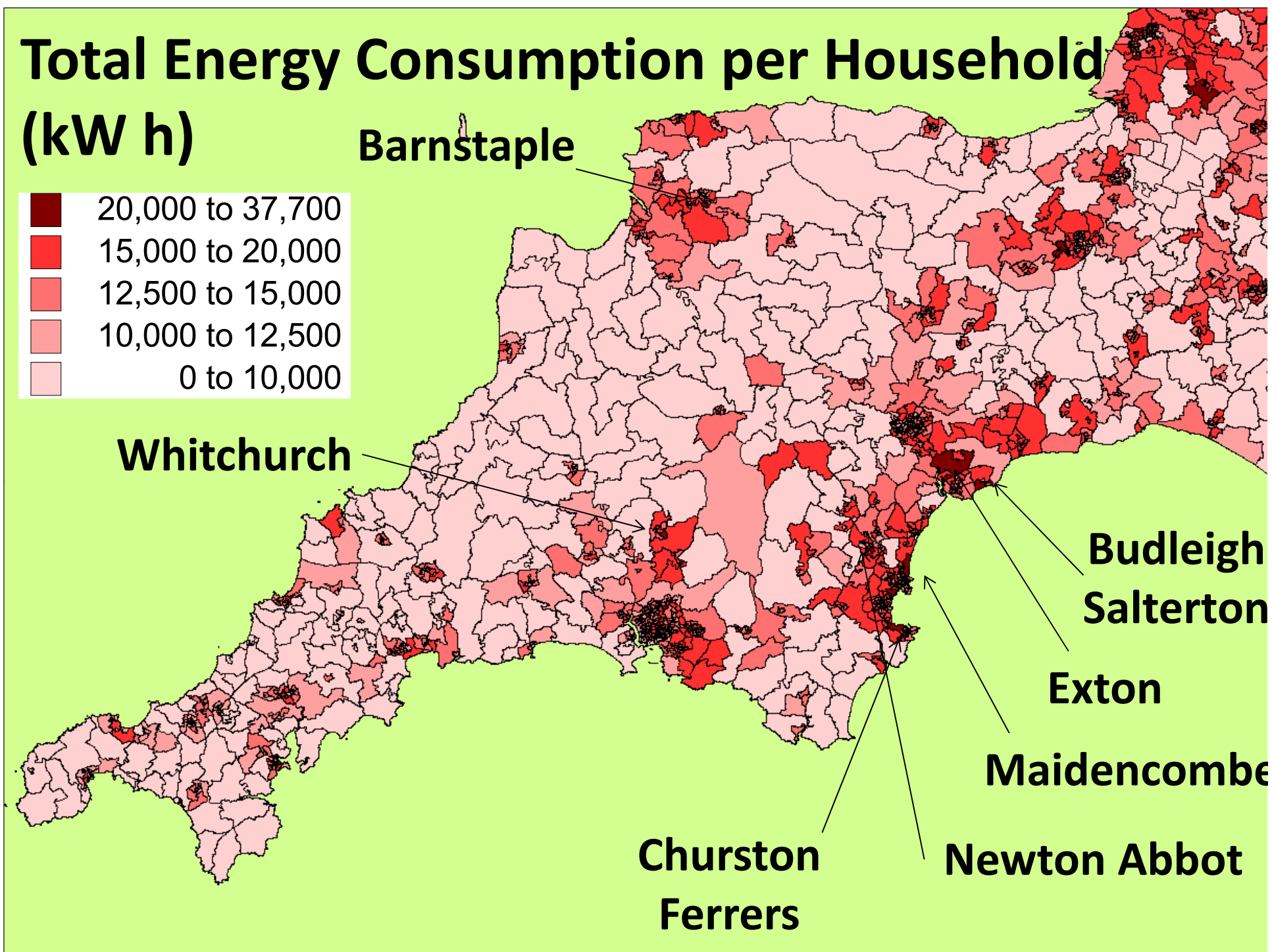
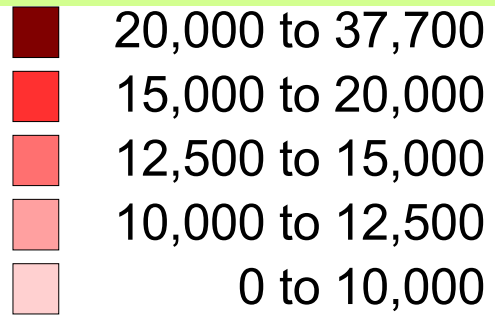
# Indices of Multiple Deprivation: Employment



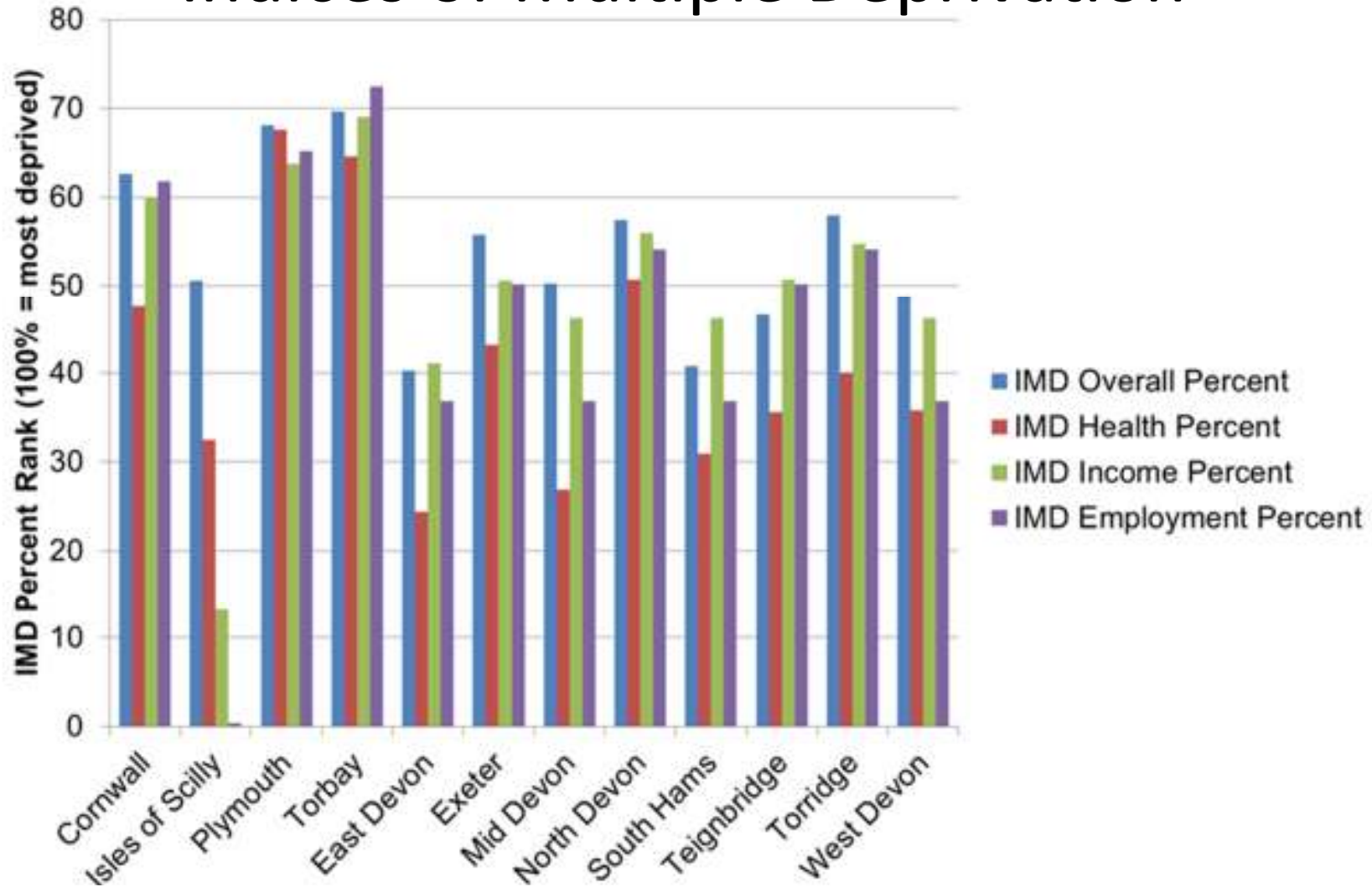
# Indices of Multiple Deprivation



# Total Energy Consumption per Household (kW h)



# Indices of Multiple Deprivation



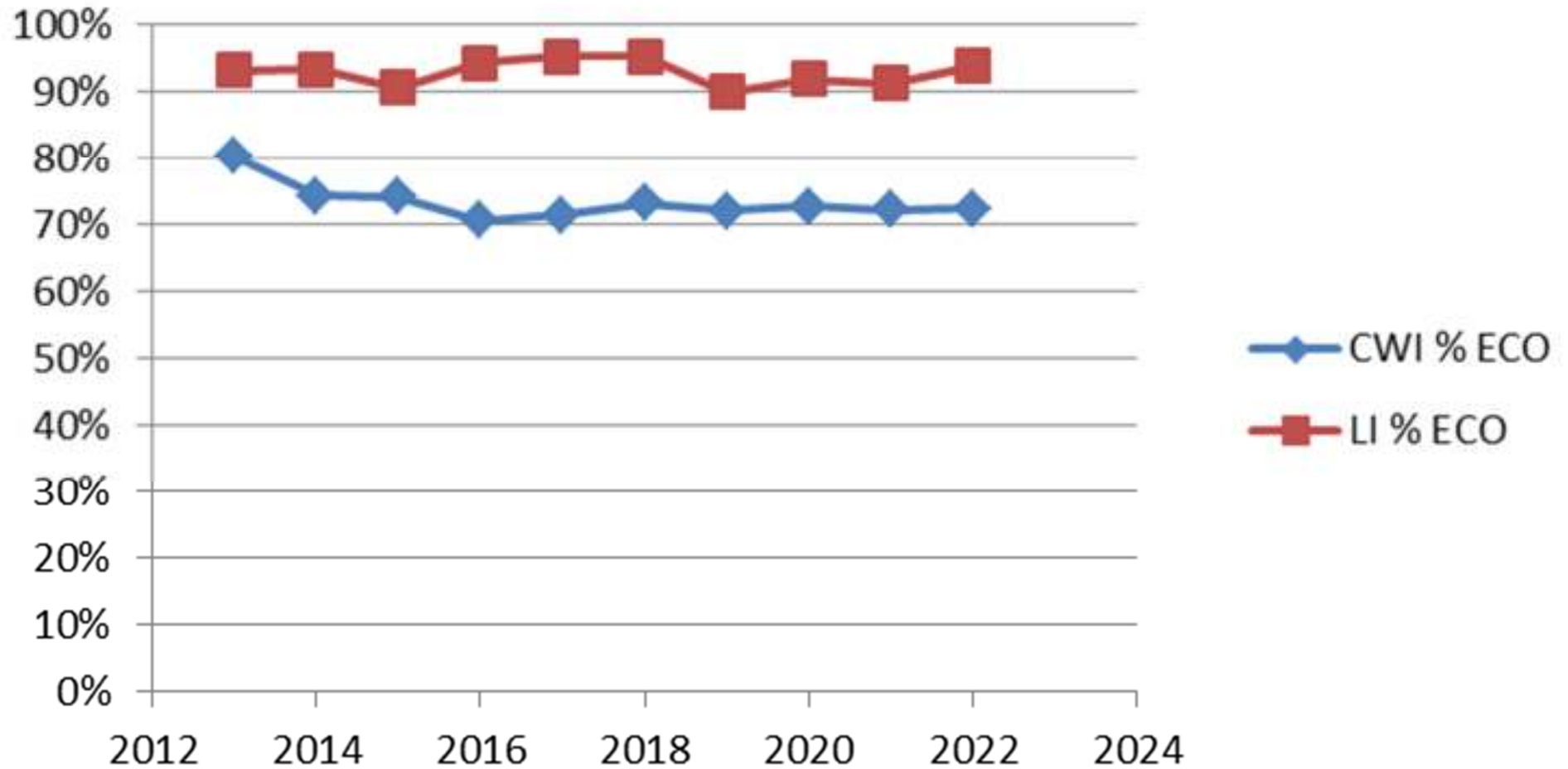
# The HECA “Further Report”

ACTION	DESCRIPTION	TIMING
<b>i) LOCAL ENERGY EFFICIENCY AMBITIONS AND PRIORITIES</b>		
<b>ii) MEASURES WE ARE TAKING TO RESULT IN SIGNIFICANT ENERGY EFFICIENCY IMPROVEMENTS OF OUR RESIDENTIAL ACCOMMODATION</b>		
Green Deal and ECO		
Feed in Tariffs scheme		
Renewable Heat Premium Payment		
Zero Carbon Homes		
EPCs		
Minimum standards in the private rental sector		
<b>iii) MEASURES WE PROPOSE TO COST EFFECTIVELY DELIVER ENERGY EFFICIENCY IMPROVEMENTS IN RESIDENTIAL ACCOMMODATION BY USING AREA BASED/STREET BY STREET ROLL OUT</b>		
<b>iv) TIME FRAME FOR DELIVERY AND NATIONAL AND LOCAL PARTNERS</b>		

Signature: \_\_\_\_\_  
 Position: \_\_\_\_\_

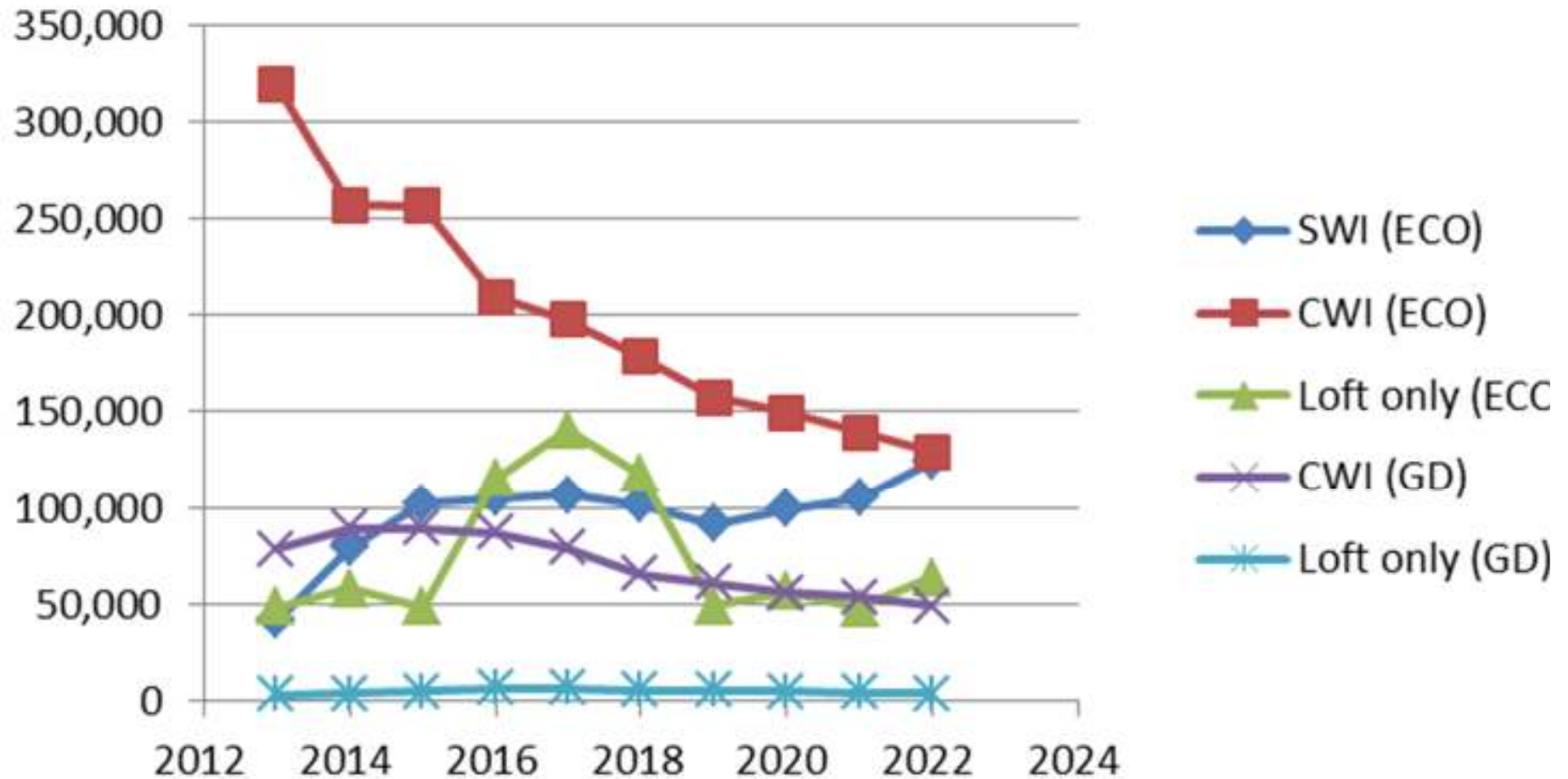


# National GD and ECO measures

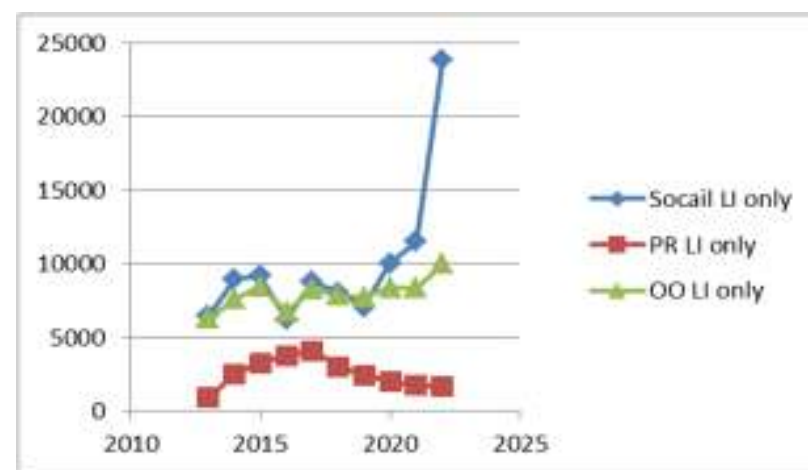
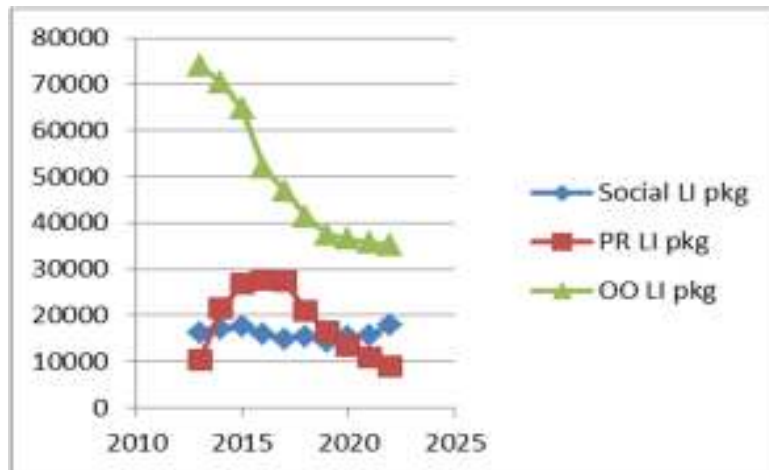
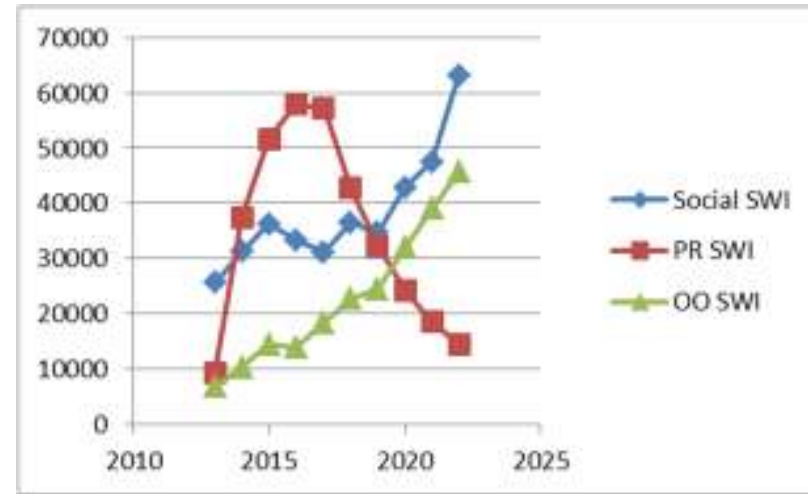
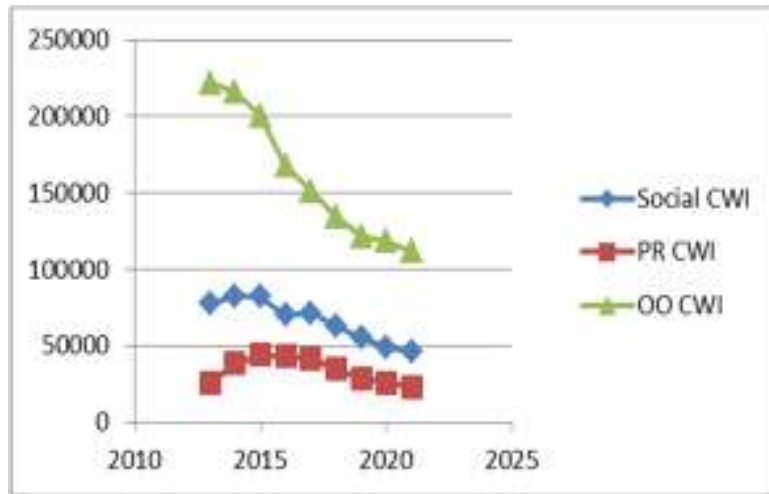




# National GD and ECO measures



# National green deal measure by tenure



# The HECA “Further Report”

ACTION	DESCRIPTION	TIMING
<b>i) LOCAL ENERGY EFFICIENCY AMBITIONS AND PRIORITIES</b>		
<b>ii) MEASURES WE ARE TAKING TO RESULT IN SIGNIFICANT ENERGY EFFICIENCY IMPROVEMENTS OF OUR RESIDENTIAL ACCOMMODATION</b>		
Green Deal and ECO		
Feed in Tariffs scheme		
Renewable Heat Premium Payment		
Zero Carbon Homes		
EPCs		
Minimum standards in the private rental sector		
<b>iii) MEASURES WE PROPOSE TO COST EFFECTIVELY DELIVER ENERGY EFFICIENCY IMPROVEMENTS IN RESIDENTIAL ACCOMMODATION BY USING AREA BASED/STREET BY STREET ROLL OUT</b>		
<b>iv) TIME FRAME FOR DELIVERY AND NATIONAL AND LOCAL PARTNERS</b>		

Signature: \_\_\_\_\_  
 Position: \_\_\_\_\_

# EPC data - Exeter as a pilot



# Overview

## Coverage

19,603 records

92% unique properties

(1403 properties with two+ EPCs)

18,200 of 50,380 or 36% of stock have  
EPCs

## Spurious values

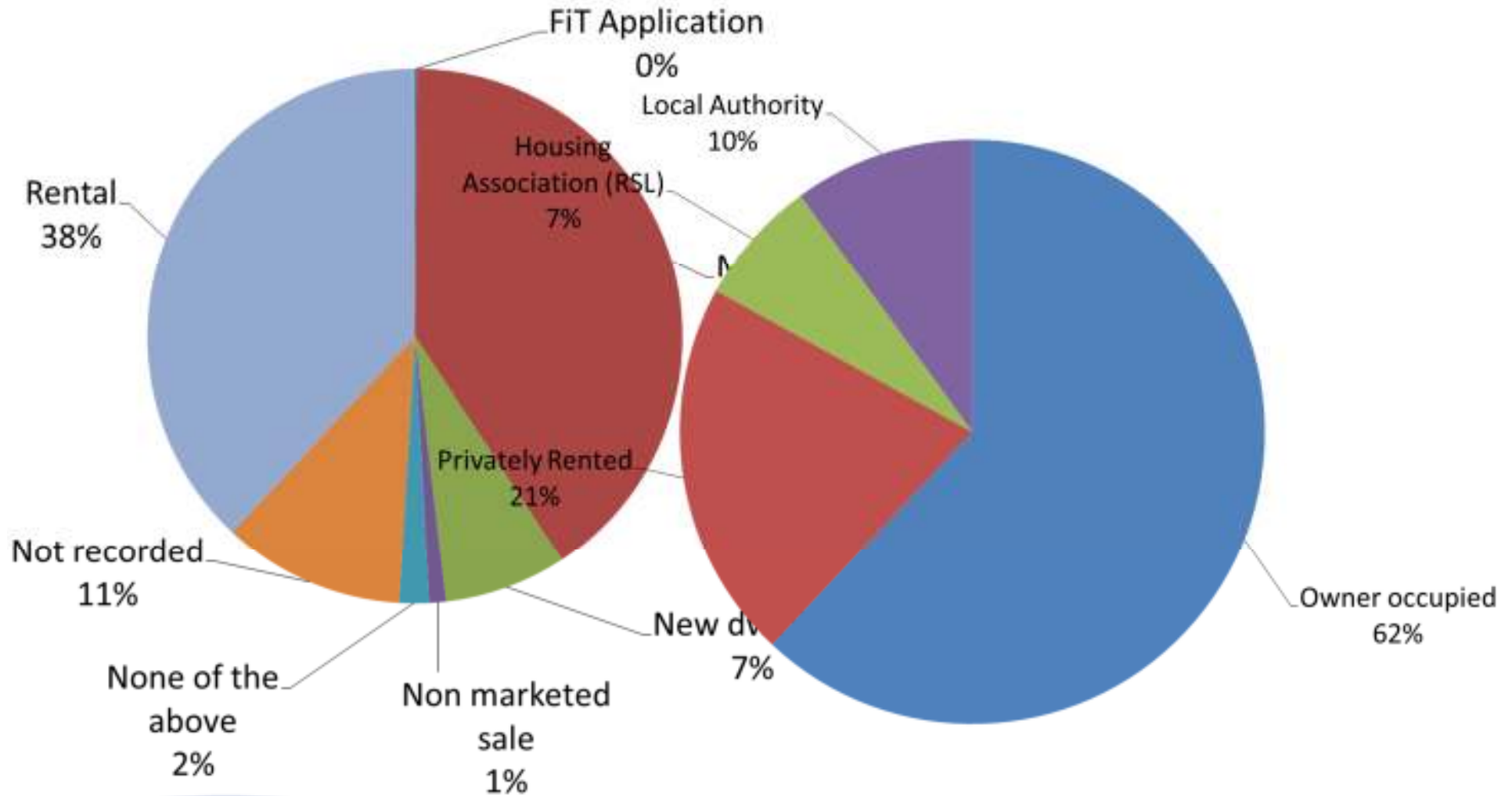
50 with a SAP of 1

1374 with energy use > 1000 kWh/m<sup>2</sup>

1119 With a floor area of zero

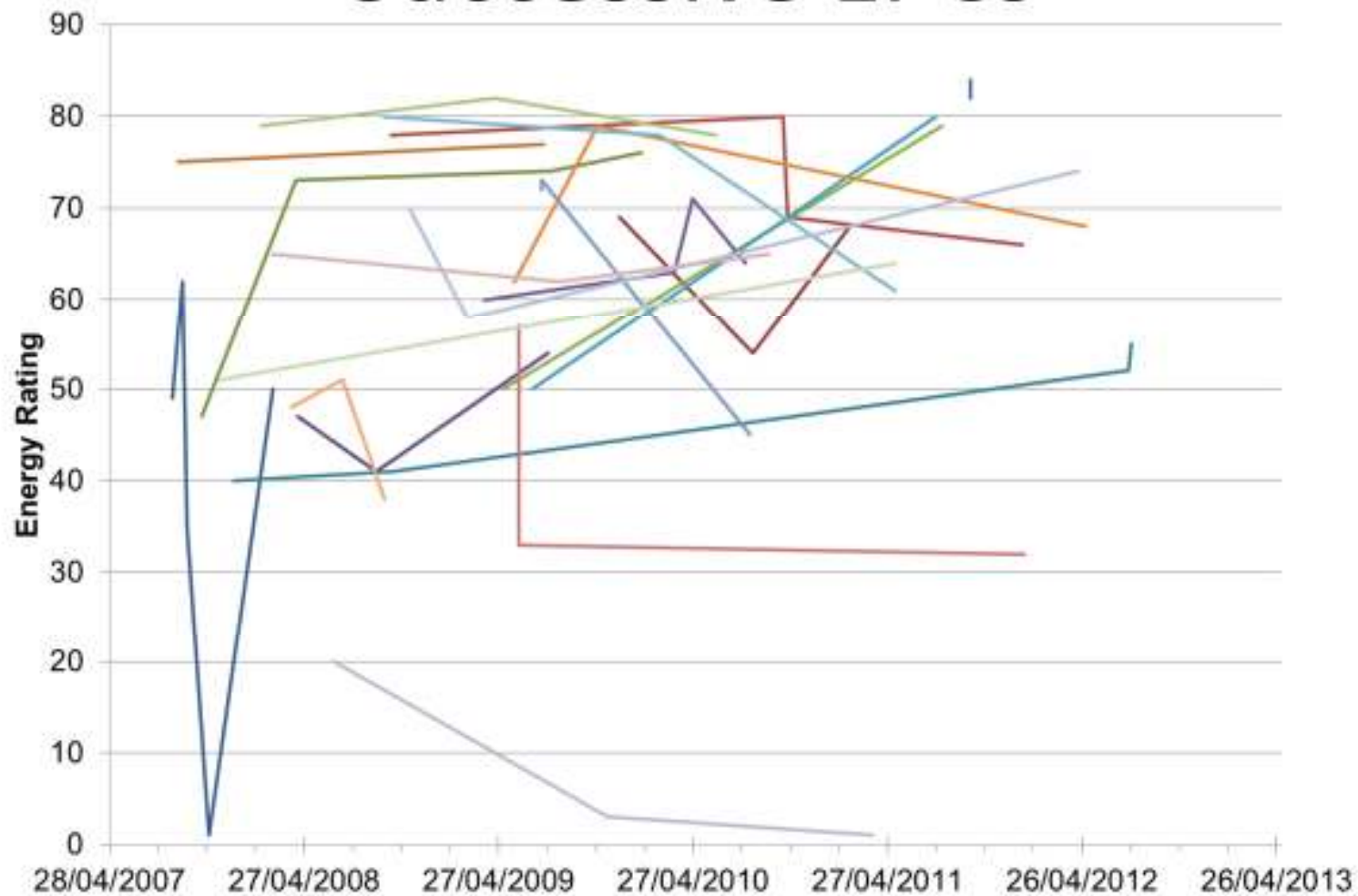


# Triggers for EPCs

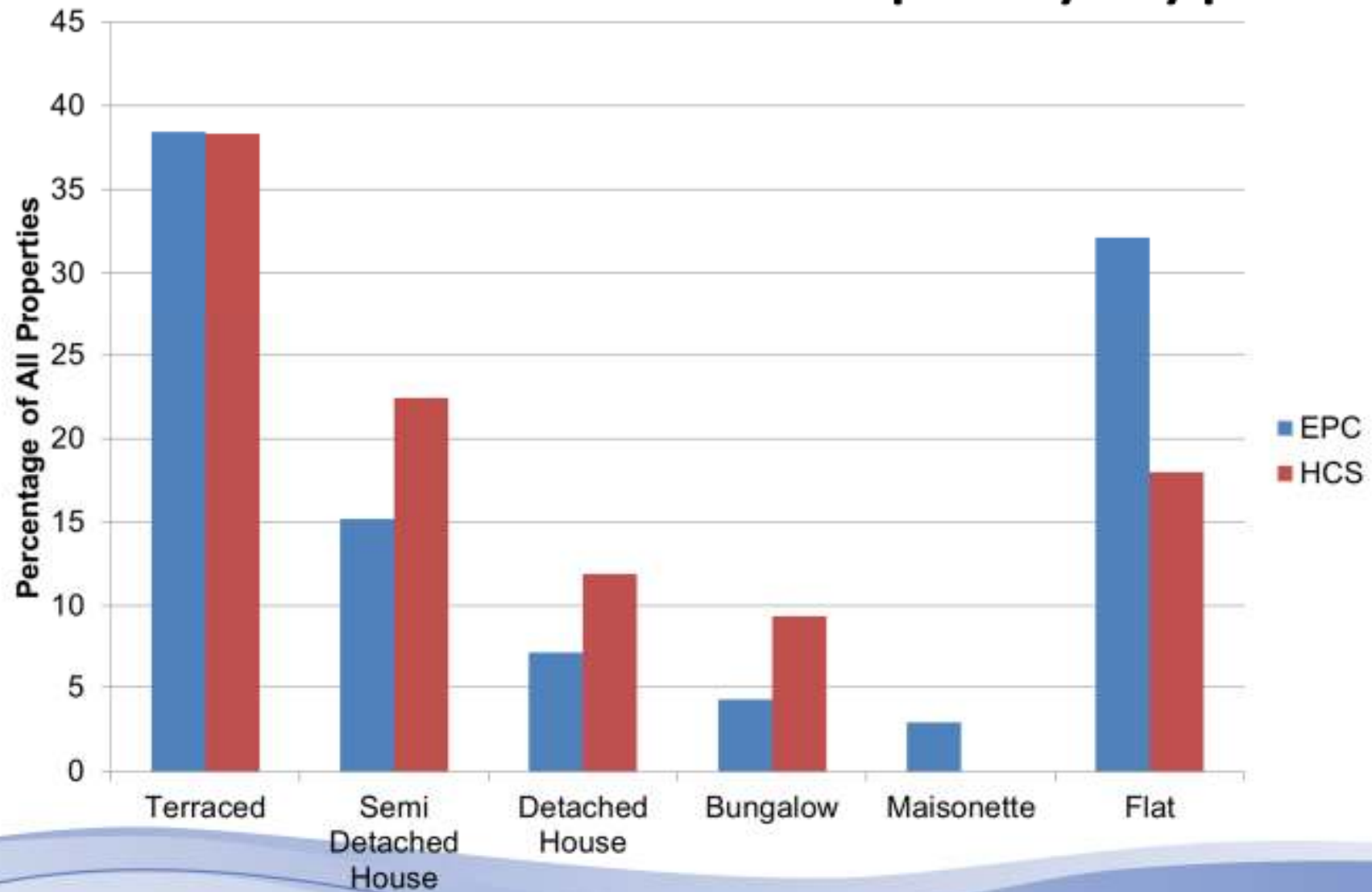




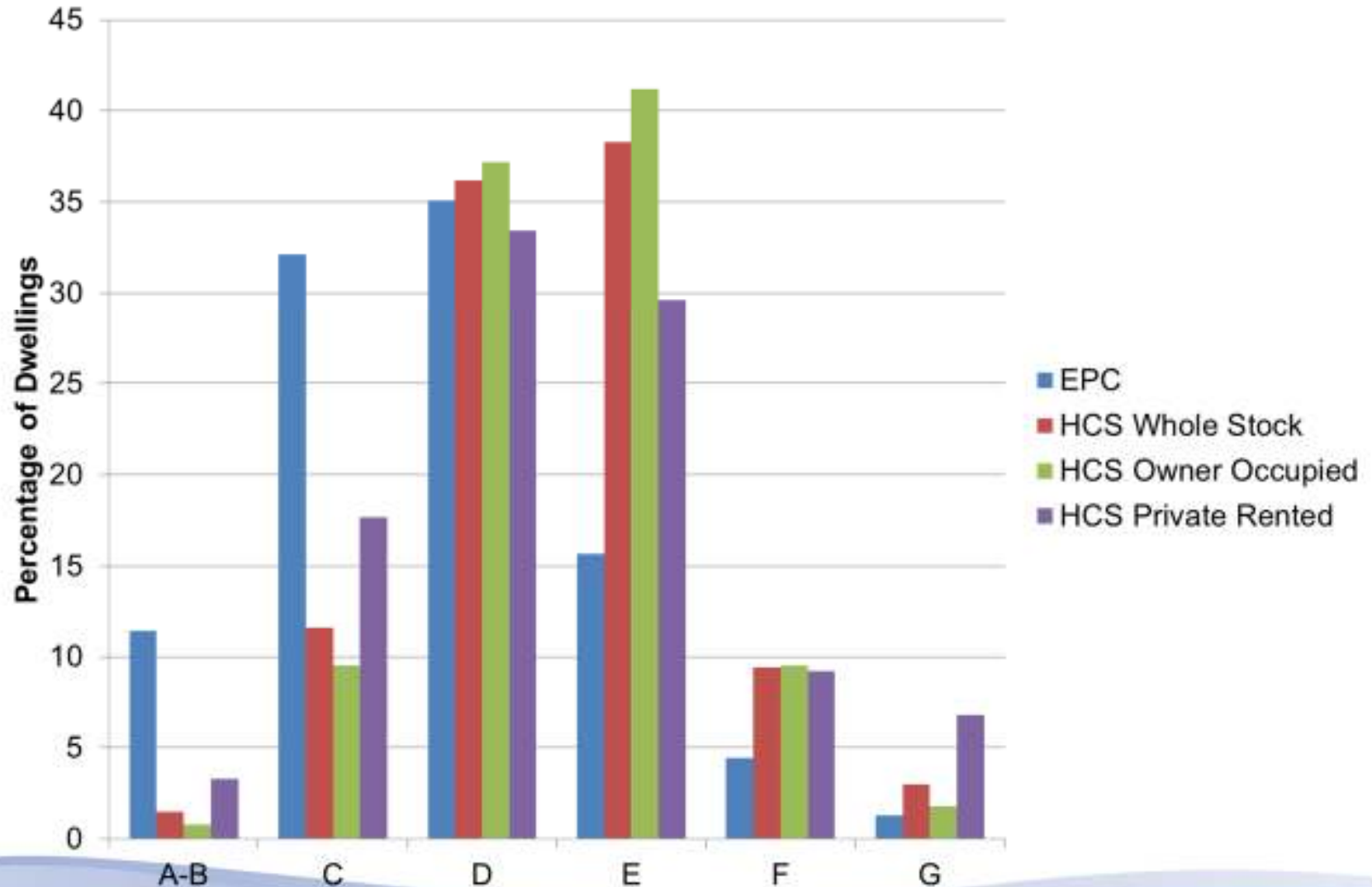
# Successive EPCs



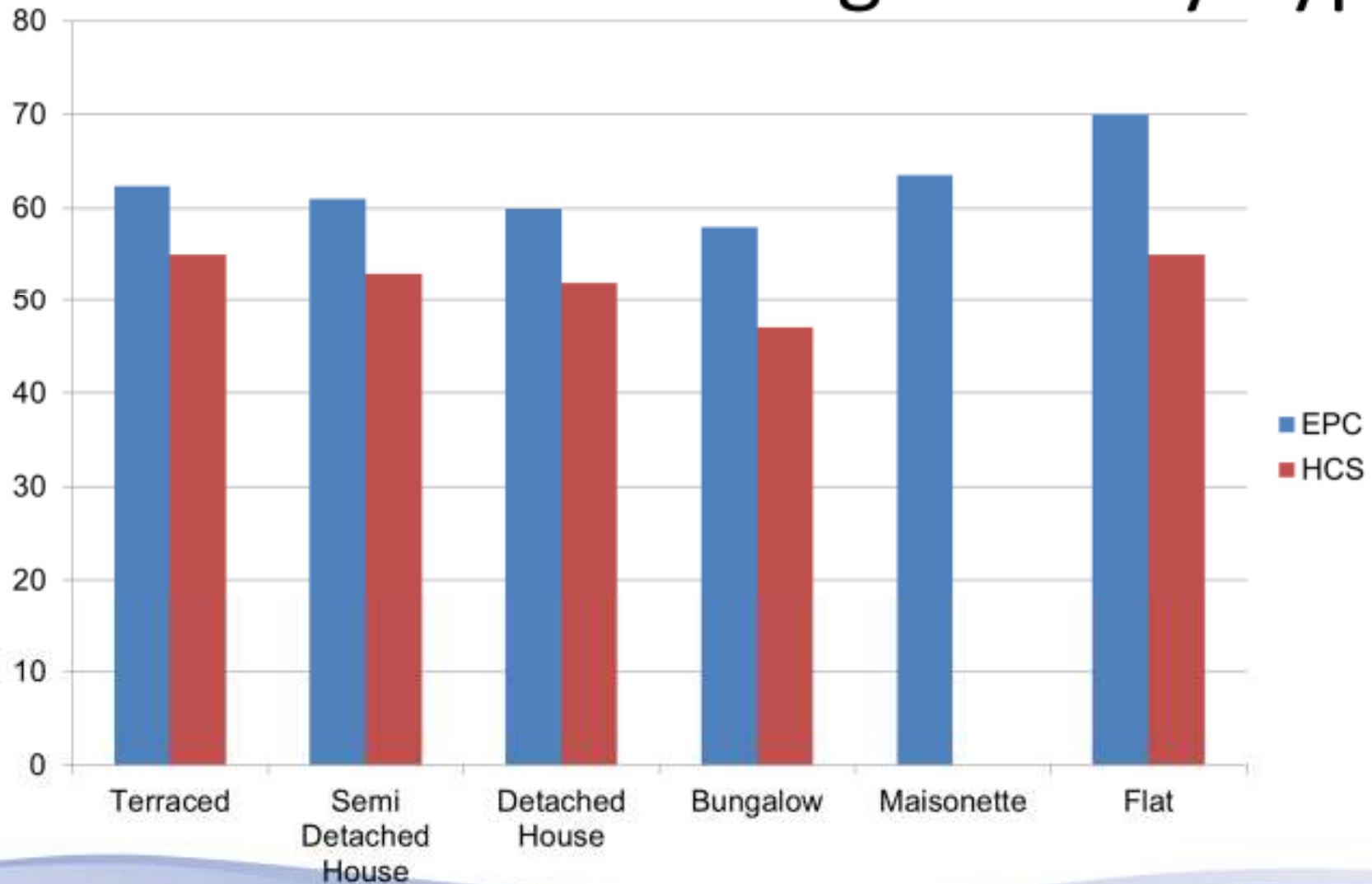
# Overall Statistics: Property Type



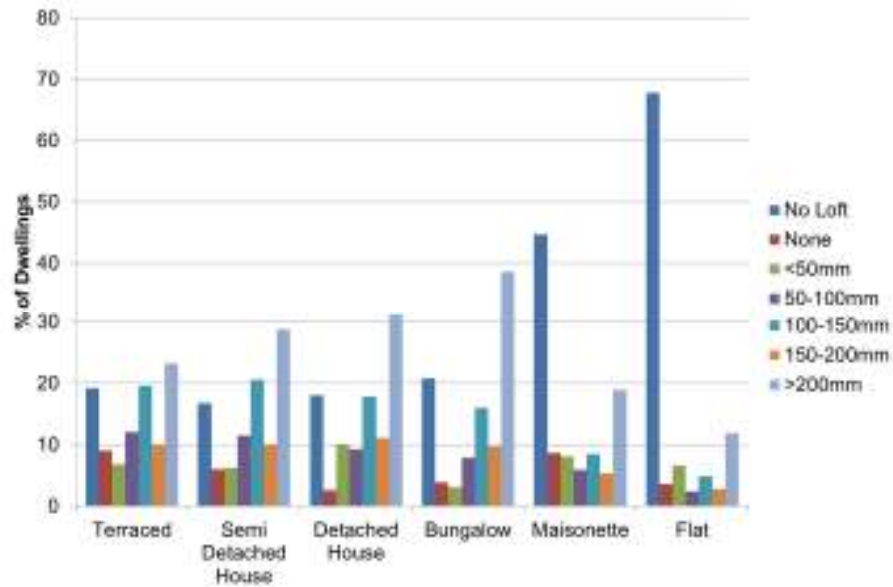
# Overall Statistics: SAP Distribution



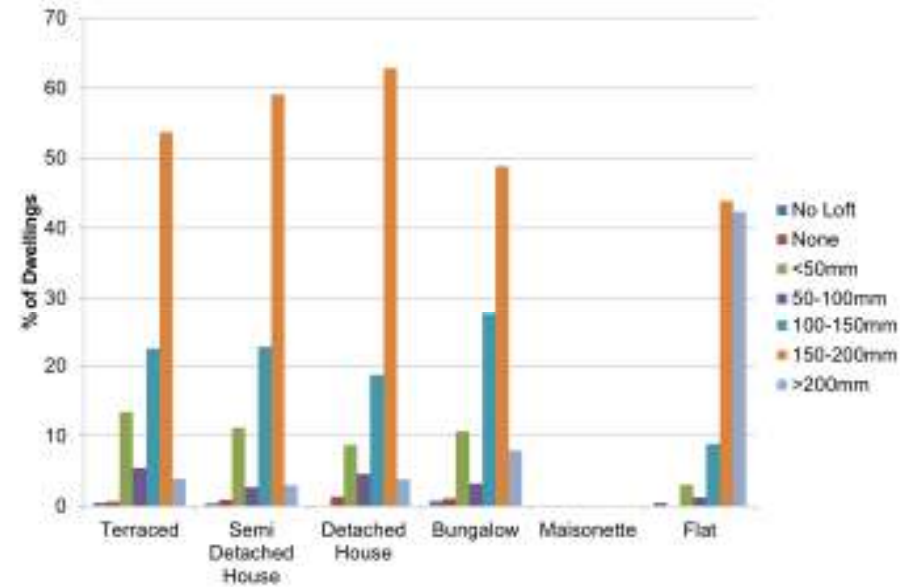
# Overall Statistics: Average SAP by Type



# Overall Statistics: Loft Insulation



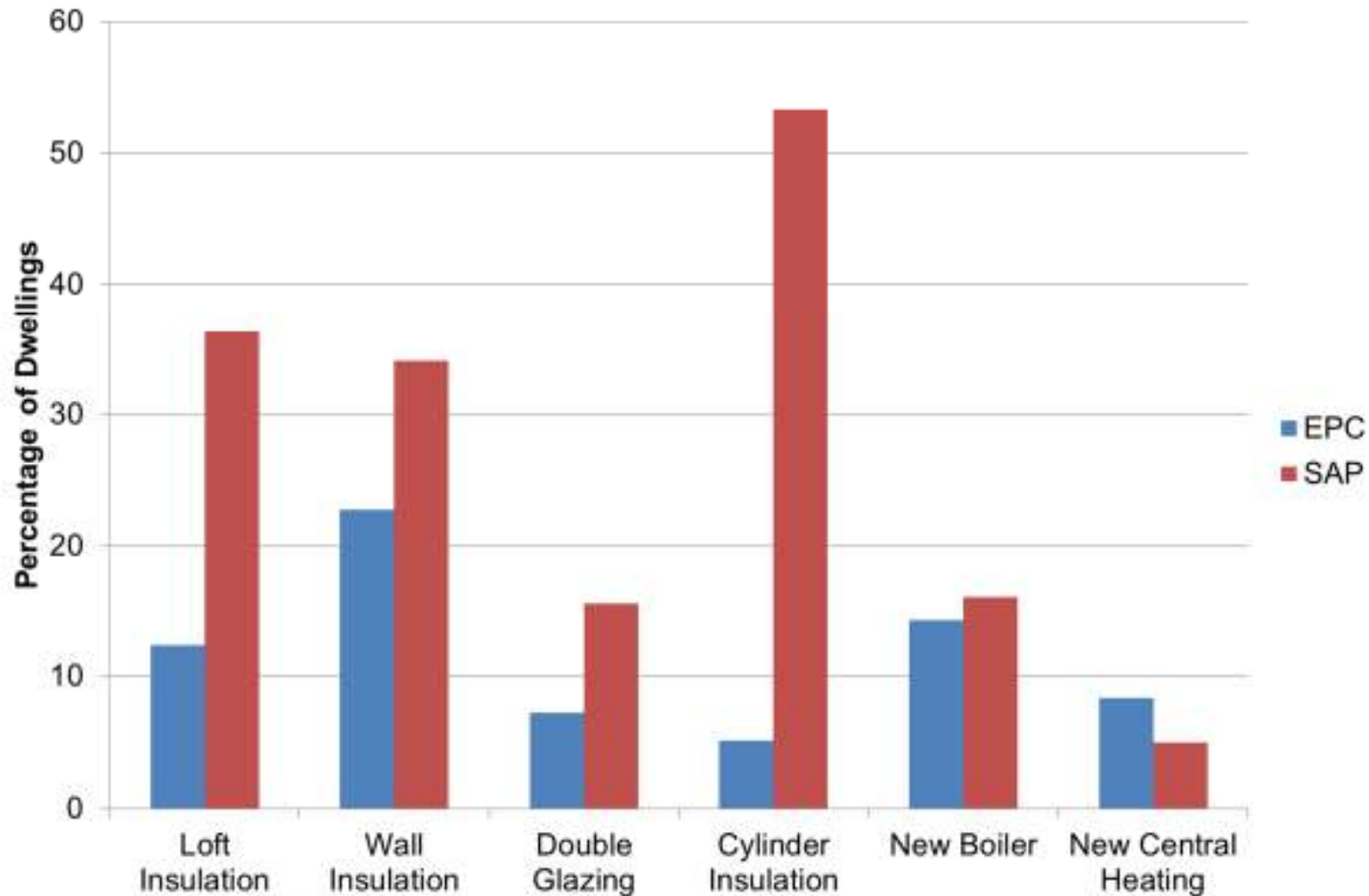
EPC



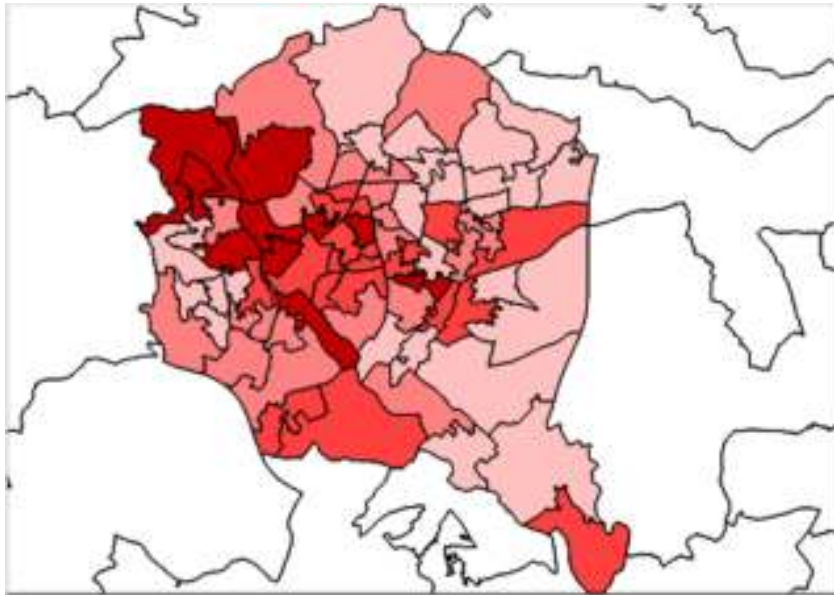
HCS



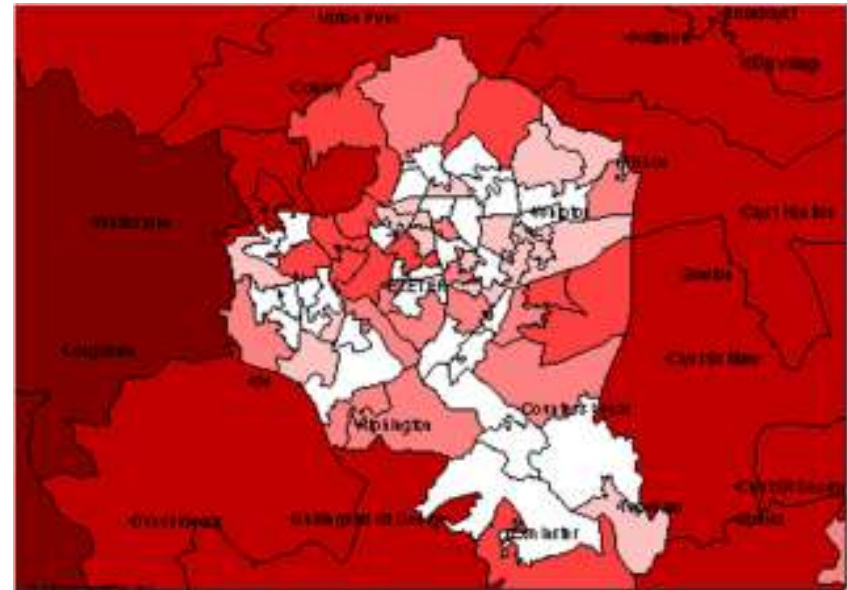
# Overall Statistics: Potential Measures



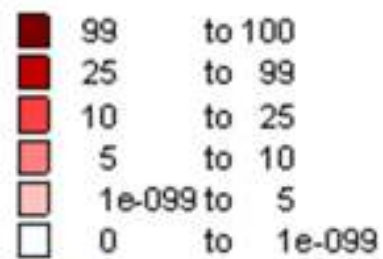
# LLSOA Mapping Off Gas Grid



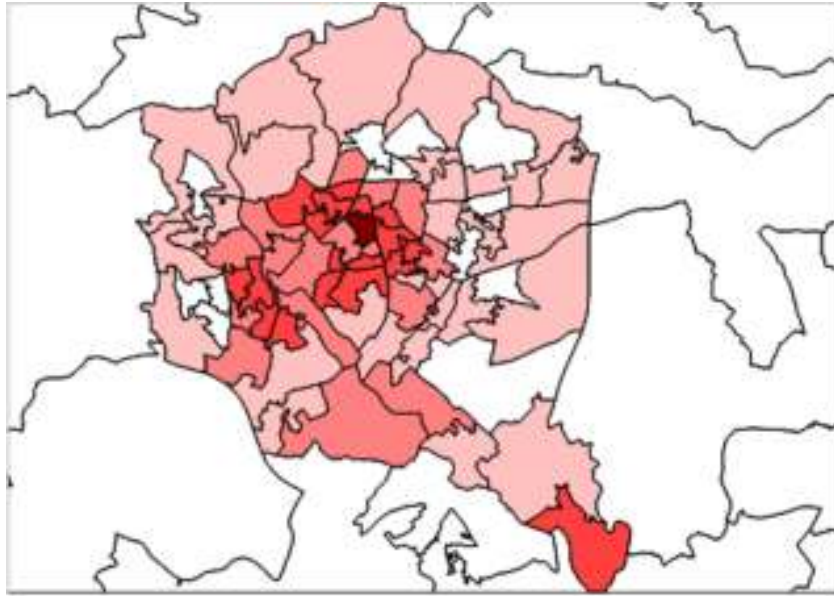
EPC



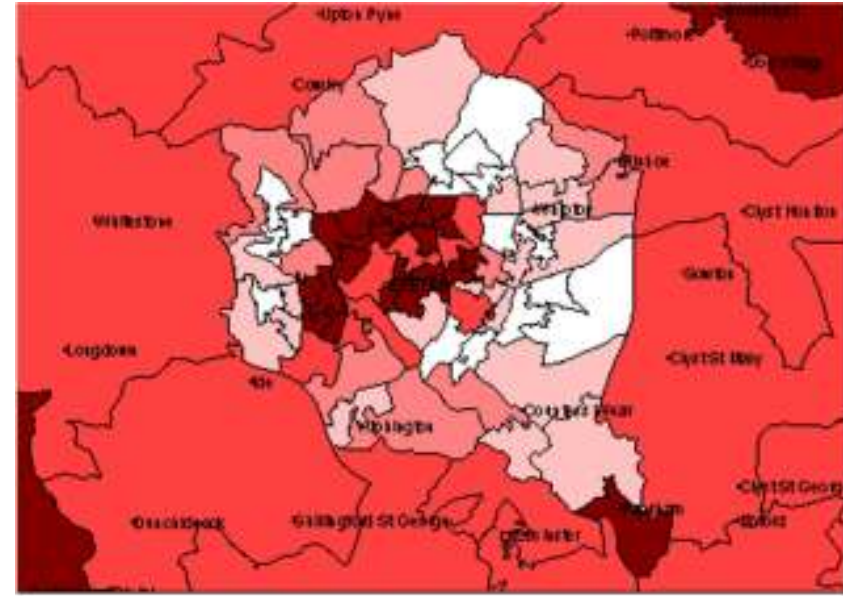
CSE



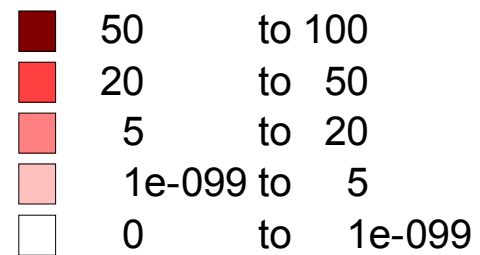
# LLSOA Mapping Solid Wall



EPC

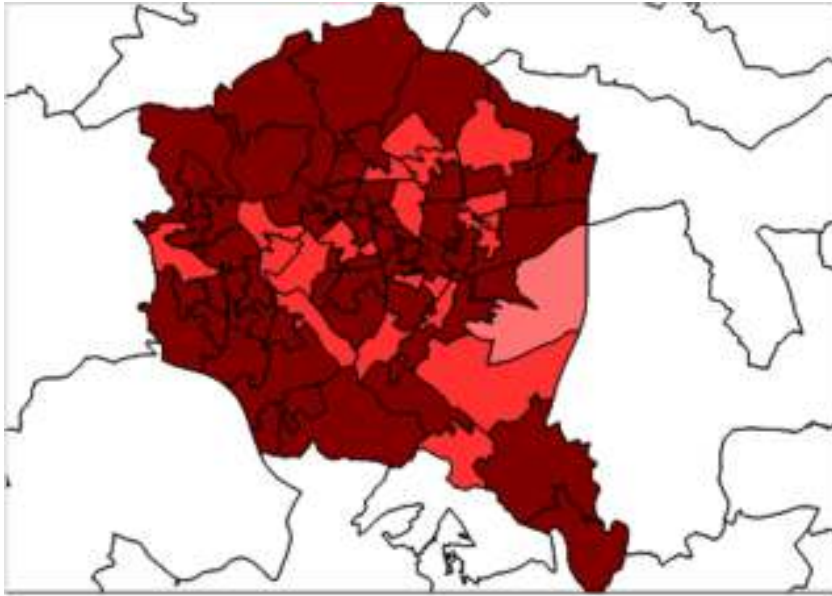


CSE



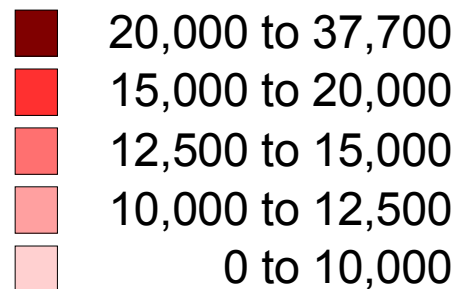
# LLSOA Mapping

## Per Household Energy Use (kW h)

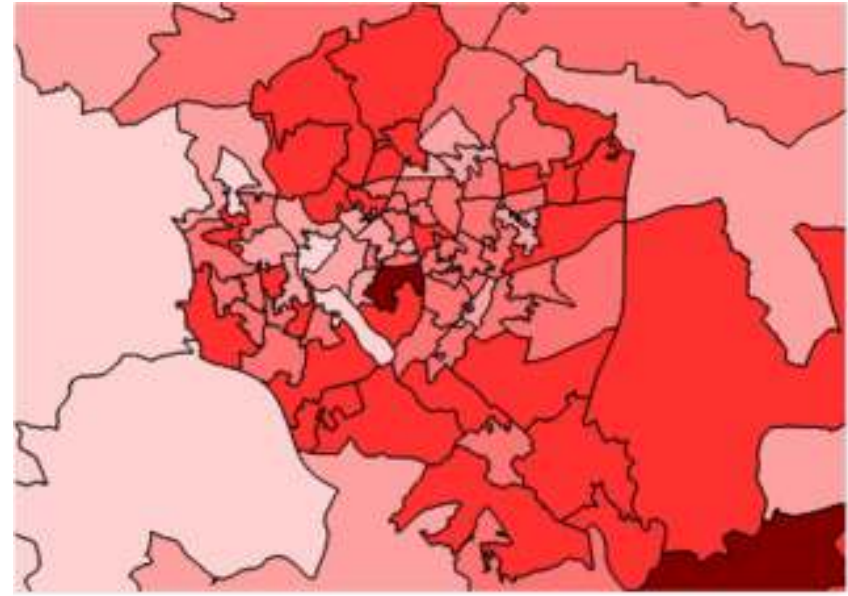


**EPC**

(from floor area and per m<sup>2</sup> figure)



**DECC**

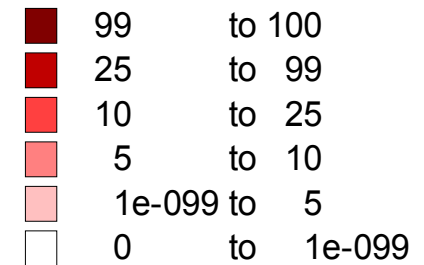
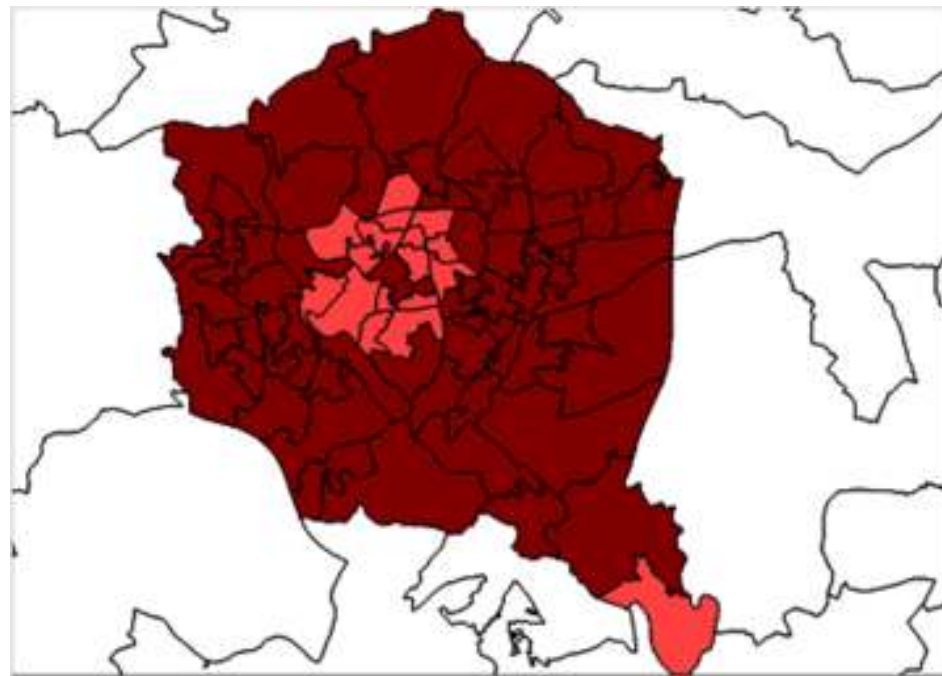




# LLSOA Mapping

## Many Additional Fields

e.g. Percentage Double Glazing





# The HECA “Further Report”

ACTION	DESCRIPTION	TIMING
<b>ii) MEASURES WE ARE TAKING TO RESULT IN SIGNIFICANT ENERGY EFFICIENCY IMPROVEMENTS OF OUR RESIDENTIAL ACCOMMODATION</b>		
<b>Green Deal and ECO</b>	<p>It is anticipated that the lessons learned for these projects will inform how the District develops further plans for the Green Deal and ECO.</p> <p>The Government’s Green Deal and ECO Impact Assessment suggest that over 70% of measures installed will be ECO funded. The Council therefore considers that ECO providers will be strongly motivated to identify ECO eligible households and that this may naturally lead to focussed deliver of energy efficiency in particular localities.</p>	
<b>Feed in Tariffs scheme</b>	<p>The Districts favourable solar climate has led to some [ ]% or over [ ] homes in the district having photovoltaic panels installed the 19<sup>th</sup> highest in the South West of England. The Council’s web site has links to information on renewable energy and guidance for householders who wish to install technologies in their home. It is anticipated that Green Deal activity in the District will further stimulate the uptake of the Feed in Tariff with PV forming part of a package of whole house energy measures.</p>	
<b>Renewable Heat Premium Payment</b>	<p>Off gas grid homes have the greatest potential to benefit from the RHI and the RHPP. Unfortunately statistics are not available to enable the council to know how many RHPP installations there have been in the district or which technology type’s householders have chosen. The publication of this data would greatly assist a local understanding of progress in renewable heat which can potentially offer so much to the districts renewable energy deployment.</p>	
<b>Zero Carbon Homes</b>		
<b>EPCs</b>	<p>The Council is not currently funding the purchase of EPC data for the district as the conclusions from the purchase of EPC data elsewhere in Devon suggests that it does not currently add significant extra information to that provided from other statistics and the district’s home condition survey. This conclusion will be kept under review as the proportion of properties which have up to date EPCs increases.</p>	
<b>Minimum standards in the private rental sector</b>	<p>Minimum standards in private rented accommodation are set out on our web site. The Council generally engages with Landlord and Private Tenants usually following complaints and/or service requests about property conditions. Where these occur properties are assessed using our informal/formal process under the Housing Health &amp; Safety Risk Assessment (Housing Act 2004). The Council has standards for HMO’s and use a guidance document for landlords for both mandatory licensable HMO’s and non-licensable HMO’s.</p>	

# The HECA “Further Report”

ACTION	DESCRIPTION	TIMING
<b>i) LOCAL ENERGY EFFICIENCY AMBITIONS AND PRIORITIES</b>		
<b>ii) MEASURES WE ARE TAKING TO RESULT IN SIGNIFICANT ENERGY EFFICIENCY IMPROVEMENTS OF OUR RESIDENTIAL ACCOMMODATION</b>		
Green Deal and ECO		
Feed in Tariffs scheme		
Renewable Heat Premium Payment		
Zero Carbon Homes		
EPCs		
Minimum standards in the private rental sector		
<b>iii) MEASURES WE PROPOSE TO COST EFFECTIVELY DELIVER ENERGY EFFICIENCY IMPROVEMENTS IN RESIDENTIAL ACCOMMODATION BY USING AREA BASED/STREET BY STREET ROLL OUT</b>		
<b>iv) TIME FRAME FOR DELIVERY AND NATIONAL AND LOCAL PARTNERS</b>		

Signature: \_\_\_\_\_

Position: \_\_\_\_\_



# HECA reporting in Devon

CAN, Taunton, 28<sup>th</sup> Feb 2013

Tony Norton , Director, Centre for Energy and the Environment

[a.d.s.norton@ex.ac.uk](mailto:a.d.s.norton@ex.ac.uk) Tel 01392 724141

