How much would social housing residents save if their homes were made energy efficient?

Analysis of published EPC and English Housing Survey data to estimate the potential savings to residents from retrofitting social housing

8 November 2022

Summary

- More than half of social rent homes with Energy Performance Certificates (EPCs) are rated A, B or C.
- Social renters in the most inefficient homes will have to spend 15.5% of their income on heating, equivalent to nearly two months' worth of their annual income
- Upgrading the remaining social rent homes to EPC A, B, or C could save residents more than £700m a year in heating costs.
- This equates to an average saving of £567 per household per year.



Introduction

For the UK to meet the legally binding target of net zero carbon emissions by 2050, all homes, including social homes, will need to be 'decarbonised' so that they emit no carbon at all. With this in mind, the government has set a target of improving all UK homes so that they meet (or surpass) the EPC C efficiency standard by 2030.

With dramatic increases to the cost of heating a home, and the disproportionate impact this will have on low income households, the work necessary to bring the homes of housing association residents up to EPC C is now urgent in order to reduce their fuel bills.

To better understand the impact of increasing energy costs and the extent to which improving the energy efficiency of homes might protect residents, we have undertaken analysis of published EPC data and information from the English Housing Survey.



Approach

Energy Performance Certificate data

Data on Energy Performance Certificates (EPCs) is published by the government and split by geography and tenure. The tenure flags are as follows:

- Owner occupied.
- Rental (private).
- · Rental (social).
- Unknown.

Therefore, it is not possible to distinguish between housing association and local authority stock within this dataset. As a result, references to social rented homes in this document include both.

This dataset only records certificates logged since 2008 and runs up to 2022, so does not cover the entire UK housing stock. If a home has not been assessed in this time, no record will exist for it. Any home which has been assessed more than once may well have multiple certificates. To allow for this, a data cleaning exercise was undertaken to remove all but the latest record for properties where multiple certificates were logged. This gave us estimated coverage of 69.8% across all homes in England¹. However, more than two million records had no tenure details attached. Excluding these brought our coverage down to 61.1%. Coverage is higher in the social housing sector (combining housing association and local authority homes) at 68.5% than in the private sector (combining private rented and owner occupied homes)² at 59.6%.

² Although the EPC data distinguishes between owner occupied and privately rented homes, the benchmark data in table 100 does not, which is why the private sector is counted as a whole in this particular calculation.



¹ Compared with data in <u>DLUHC Live Table 100.</u>

Table 1: Number of EPC certificates at each level, by tenure

EPC band	Owner	Private	Social rent	Unknown	Total
	occupied	rent			
ABC	2,650,423	1,264,625	1,643,330	1,907,447	7,465,825
D	4,061,172	1,467,418	1,010,885	188,197	6,727,672
E	1,651,749	601,505	201,851	60,130	2,515,235
F	384,236	89,957	26,645	12,658	513,496
G	104,050	29,880	5,314	4,776	144,020
Total	8,851,630	3,453,385	2,888,025	2,173,208	17,366,248

Table 2: Proportion of certificates at each level, by tenure

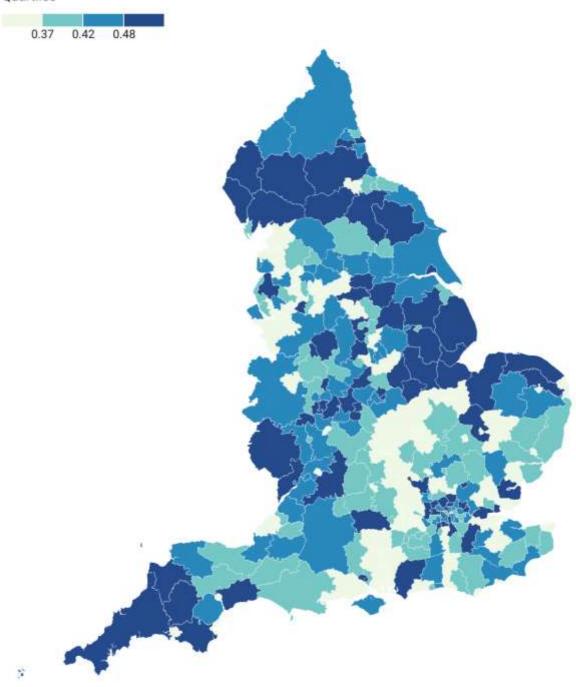
EPC Band	Owner	Private	Social rent	Unknown	Total
	occupied	rent			
ABC	29.9%	36.6%	56.9%	87.8%	43.0%
D	45.9%	42.5%	35.0%	8.7%	38.7%
E	18.7%	17.4%	7.0%	2.8%	14.5%
F	4.3%	2.6%	0.9%	0.6%	3.0%
G	1.2%	0.9%	0.2%	0.2%	0.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Concentrating on social rent homes below EPC C – that is, rated D, E, F or G – we plotted the local authority level figures on a map to examine the geographical distribution. As you can see, areas with high proportions of homes below EPC C are spread across the country, with particular concentrations in the south west, the north, eastern areas around the Wash, and the west midlands.



% of social EPCs below C





Map: National Housing Federation • Source: Department for Levelling Up, Housing and Communities • Created with Datawrapper



Estimating spend

In order to estimate the total amount spent on heating we looked at heating cost figures from the English Housing Survey. The average annual space heating costs for social rented homes are shown in the first row of table 3. Note that these figures pre-date the recent increases in the energy price cap. The remaining rows apply the impact of the increases³, including the 'Energy Price Guarantee' announced on 8 September 2022. – The Energy Price Guarantee is represented as an effective increase in the cap of 27%⁴. These increases are cumulative so each row is calculated as an increase on the previous row.

Table 3: Annual space heating costs, social housing

	A/B/C	D	Е	F	G
Total annual	£325.06	£508.28	£743.10	£1,058.73	£1,526.27
space heating					
cost					
+9%	£354.32	£554.02	£809.98	£1,154.02	£1,663.64
(April 2021)					
+12%	£396.83	£620.51	£907.17	£1,292.50	£1,863.27
(October 2021)					
+54%	£611.12	£955.58	£1,397.05	£1,990.45	£2,869.44
(April 2022)					
+27%	£776.13	£1,213.59	£1,774.25	£2,527.87	£3,644.19
(October 2022,					
Guarantee)					

Obviously the impact of these increased costs will be felt more by lower-income households. Using household income figures also sourced from the English Housing Survey, we can see that households in social rented homes will have to spend higher proportions of their income to cover their heating costs. Social tenants on average incomes in the least efficient homes will have to spend 15.5% of their income on heating, equivalent to nearly two months' worth of their annual income. By way of comparison, this is nearly five times the average proportion spent across all households.

 $^{^4}$ Based on a move from an average bill of £1,971 under the April 22 cap to an average bill of £2,500 under the guarantee.



³ Default Tariff Cap Level set by OFGEM.

Table 4: Annual space heating costs as % of gross household income by tenure

	A/B/C	D	E	F	G	Average all A-G	Average all D-G
Owner occupied (£46,865)	2.3%	3.3%	5.0%	7.7%	11.3%	3.6%	4.1%
Private rent (£38,934)	2.0%	3.3%	5.1%	7.7%	11.9%	3.3%	4.1%
Social rent (£23,445)	3.3%	5.2%	7.6%	10.8%	15.5%	4.4%	5.7%
All (£41,466)	2.3%	3.5%	5.4%	8.2%	12.3%	3.4%	4.3%

NHF Analysis of English Household Survey; uprated space heating costs by tenure as a percentage of mean income of all adults in household from all sources. Proportions of dwellings in each band to obtain averages for "All" include those where tenure is marked as "Unknown".

We can also see the total estimated spend on heating in social homes across the regions:

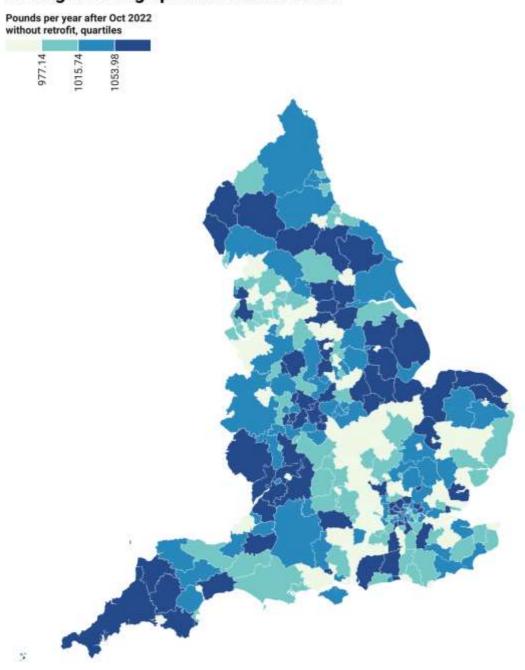
Table 5: Total and average estimated spend on heating in social homes

Region	Total spend post	Average spend	Average spend
	October 2022	(all bands)	(bands D-G)
North east	£218,243,580	£1,013	£1,286
North west	£433,695,720	£981	£1,316
Yorkshire and	£335,219,989	£1,033	£1,327
Humber			
East midlands	£256,332,730	£1,024	£1,335
West midlands	£340,081,332	£1,068	£1,373
East of England	£283,210,843	£993	£1,339
London	£489,873,614	£1,044	£1,347
South east	£360,418,626	£999	£1,367
South west	£230,003,869	£1,038	£1,398
England (all	£2,947,080,302	£1,020	£1,343
regions)			



This information is broken down to local authority level in the appendix. Mapping the average spend at a local authority level post-October 2022, we can see a broadly similar distribution of the hardest hit areas to the previous map.

Average heating spend in social homes



Map: National Housing Federation • Source: Calculated from EPC and EHS data • Created with Datawrapper

NATIONAL HOUSING FEDERATION

Estimating savings

Using the figures above we can estimate the savings from improving energy efficiency, as shown in table 6 below.

Table 6: Space heating costs and savings in social housing

	A/B/C	D	E	F	G
Total annual	£776.13	£1,213.59	£1,774.25	£2,527.87	£3,644.19
space heating					
cost post Oct 22					
Saving from	n/a	£437.46	£998.12	£1,751.74	£2,868.06
moving to A, B or					
C post Oct 22					

Combining the EPC data with these estimates allows us to demonstrate the potential savings to social tenants if all social homes were brought up to a standard of EPC A, B or C. Note that these savings only relate to heating costs - other energy uses (cooking, lighting, running other household appliances, etc.) are not affected by retrofit measures.

Table 7: Potential heating cost savings from retrofitting all social homes to EPC A, B or C.

Region	Savings against October 2022 costs	Average saving per home retrofitted
North east	£51,006,327	£510
North west	£90,527,055	£540
Yorkshire and	£83,246,101	£551
Humber		
East midlands	£62,031,196	£558
West midlands	£92,834,826	£597
East of England	£61,929,625	£563
London	£125,675,044	£571
South east	£80,276,030	£591
South west	£58,083,473	£622
England (all	£705,609,678	£567
regions)		

The savings across all social homes rated below EPC C average to £567 per household compared to October 2022 costs under the guarantee.



Appendix 1 – Local authority level data

Post October 2022

Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Adur	45.4%	£1,881,850	£1,058	£1,380,728	£501,122	£620
Allerdale	57.2%	£7,371,600	£1,074	£5,328,880	£2,042,721	£520
Amber Valley	53.6%	£5,366,760	£1,078	£3,864,330	£1,502,430	£563
Arun	34.7%	£4,960,717	£1,000	£3,850,360	£1,110,357	£645
Ashfield	32.6%	£7,566,041	£939	£6,252,469	£1,313,572	£501
Ashford	40.3%	£5,449,051	£983	£4,301,289	£1,147,762	£513
Babergh	40.0%	£4,267,001	£1,008	£3,285,340	£981,661	£580
Barking and Dagenham	59.6%	£16,265,995	£1,113	£11,346,183	£4,919,813	£564
Barnet	54.6%	£13,303,651	£1,123	£9,197,090	£4,106,561	£634
Barnsley	54.6%	£12,570,645	£1,058	£9,217,270	£3,353,375	£517
Barrow in Furness	38.4%	£3,090,510	£988	£2,427,721	£662,789	£551
Basildon	38.0%	£8,293,871	£997	£6,458,919	£1,834,953	£580
Basingstoke and Deane	31.2%	£7,156,426	£942	£5,894,675	£1,261,751	£533
Bassetlaw	49.4%	£9,866,927	£1,038	£7,380,956	£2,485,971	£530
Bath and North East Somerset	40.6%	£7,032,567	£1,024	£5,332,760	£1,699,807	£610
Bedford	27.6%	£8,908,362	£935	£7,395,702	£1,512,660	£575
Bexley	48.1%	£13,873,308	£1,029	£10,462,175	£3,411,133	£526
Birmingham	56.3%	£85,376,083	£1,135	£58,373,195	£27,002,887	£638
Blaby	48.2%	£1,973,465	£1,036	£1,478,520	£494,945	£539
Blackburn with Darwen	30.6%	£8,012,121	£941	£6,604,830	£1,407,291	£541
Blackpool	42.1%	£5,559,490	£1,041	£4,145,288	£1,414,202	£630
Bolsover	37.5%	£4,363,517	£1,010	£3,352,087	£1,011,429	£625



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Bolton	35.9%	£16,864,207	£977	£13,394,379	£3,469,829	£560
Boston	49.1%	£4,814,209	£1,042	£3,584,149	£1,230,060	£543
Bournemouth Christchurch & Poole	36.5%	£11,728,167	£1,004	£9,067,477	£2,660,689	£623
Bracknell Forest	29.3%	£4,665,015	£934	£3,875,972	£789,043	£540
Bradford	42.9%	£24,808,812	£1,018	£18,914,961	£5,893,851	£563
Braintree	43.3%	£6,756,316	£1,030	£5,090,609	£1,665,708	£587
Breckland	45.0%	£5,399,689	£1,031	£4,065,347	£1,334,342	£566
Brent	46.9%	£13,019,343	£1,061	£9,527,720	£3,491,623	£607
Brentwood	33.0%	£1,910,396	£958	£1,548,371	£362,025	£549
Brighton and Hove	27.0%	£10,836,025	£933	£9,013,925	£1,822,100	£581
Bristol City of	40.8%	£20,818,467	£1,051	£15,371,947	£5,446,520	£674
Broadland	49.8%	£2,909,854	£1,069	£2,113,390	£796,463	£587
Bromley	40.6%	£12,059,978	£1,001	£9,347,659	£2,712,320	£555
Bromsgrove	43.4%	£2,992,823	£1,053	£2,204,973	£787,850	£639
Broxbourne	28.5%	£3,362,579	£948	£2,752,142	£610,437	£604
Broxtowe	44.9%	£3,424,710	£1,039	£2,558,887	£865,823	£585
Buckinghamshire	36.6%	£22,862,881	£975	£18,205,582	£4,657,299	£543
Burnley	42.4%	£4,546,234	£985	£3,581,044	£965,189	£493
Bury	41.6%	£8,956,532	£994	£6,995,222	£1,961,310	£523
Calderdale	42.4%	£10,924,915	£1,009	£8,400,785	£2,524,130	£551
Cambridge	30.5%	£6,139,762	£955	£4,990,489	£1,149,273	£586
Camden	50.6%	£17,192,307	£1,071	£12,458,371	£4,733,936	£583
Cannock Chase	56.9%	£4,630,042	£1,070	£3,359,072	£1,270,969	£516
Canterbury	38.9%	£5,350,355	£982	£4,228,333	£1,122,022	£530
Carlisle	47.0%	£4,944,123	£1,014	£3,784,389	£1,159,733	£506



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Castle Point	52.8%	£1,238,725	£1,069	£899,530	£339,195	£554
Central Bedfordshire	39.6%	£11,024,605	£989	£8,649,922	£2,374,683	£538
Charnwood	37.5%	£5,894,962	£993	£4,608,635	£1,286,327	£577
Chelmsford	31.4%	£5,668,184	£954	£4,611,739	£1,056,445	£566
Cheltenham	34.2%	£4,691,512	£976	£3,732,389	£959,124	£582
Cherwell	37.9%	£5,033,331	£987	£3,956,689	£1,076,642	£558
Cheshire East	46.3%	£16,593,244	£1,038	£12,405,594	£4,187,650	£565
Cheshire West and Chester	36.2%	£14,590,146	£973	£11,634,125	£2,956,021	£544
Chesterfield	38.4%	£7,560,696	£965	£6,078,617	£1,482,079	£492
Chichester	48.4%	£5,569,644	£1,126	£3,838,718	£1,730,926	£723
Chorley	42.1%	£4,602,981	£984	£3,629,940	£973,041	£495
City of London	34.4%	£590,547	£986	£464,899	£125,648	£610
Colchester	26.1%	£8,490,036	£917	£7,186,148	£1,303,887	£539
Copeland	53.6%	£4,300,852	£1,066	£3,132,444	£1,168,408	£540
Corby	46.1%	£3,563,636	£1,013	£2,730,410	£833,226	£513
Cornwall	49.8%	£22,659,345	£1,112	£15,815,115	£6,844,230	£674
Cotswold	59.8%	£5,010,667	£1,209	£3,217,041	£1,793,625	£724
County Durham	51.1%	£45,009,901	£1,028	£33,982,667	£11,027,234	£493
Coventry	50.8%	£21,368,608	£1,086	£15,268,722	£6,099,886	£611
Craven	44.9%	£1,662,675	£1,016	£1,269,742	£392,933	£535
Crawley	23.6%	£5,060,881	£895	£4,388,991	£671,889	£503
Croydon	48.4%	£17,738,187	£1,059	£13,002,435	£4,735,752	£584
Dacorum	51.9%	£9,944,805	£1,055	£7,314,209	£2,630,596	£538
Darlington	35.1%	£5,575,533	£960	£4,506,186	£1,069,346	£524
Dartford	28.0%	£3,529,661	£924	£2,966,353	£563,308	£526



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Daventry	45.6%	£2,813,396	£1,022	£2,135,898	£677,498	£540
Derby	39.0%	£17,250,087	£1,022	£13,106,436	£4,143,651	£629
Derbyshire Dales	45.6%	£2,817,316	£1,034	£2,114,943	£702,373	£565
Doncaster	53.4%	£14,930,704	£1,063	£10,900,686	£4,030,017	£537
Dorset	37.1%	£12,702,561	£1,014	£9,726,408	£2,976,153	£639
Dover	41.2%	£5,181,195	£987	£4,075,436	£1,105,759	£511
Dudley	54.6%	£18,377,719	£1,112	£12,824,702	£5,553,017	£615
Ealing	48.5%	£13,918,679	£1,055	£10,237,099	£3,681,580	£576
East Cambridgeshire	56.4%	£3,877,949	£1,098	£2,742,052	£1,135,897	£570
East Devon	48.5%	£4,269,792	£1,082	£3,064,145	£1,205,648	£629
East Hampshire	30.9%	£3,836,379	£970	£3,071,130	£765,250	£626
East Hertfordshire	40.6%	£3,907,994	£1,034	£2,932,979	£975,015	£635
East Lindsey	50.6%	£6,116,762	£1,062	£4,470,484	£1,646,277	£565
East Northamptonshire	43.9%	£3,393,175	£1,031	£2,555,006	£838,169	£580
East Riding of Yorkshire	46.4%	£10,580,793	£1,039	£7,907,169	£2,673,624	£565
East Staffordshire	38.6%	£5,726,149	£996	£4,463,499	£1,262,649	£569
East Suffolk	40.7%	£8,888,710	£1,002	£6,884,236	£2,004,474	£555
Eastbourne	30.0%	£3,613,585	£957	£2,930,651	£682,934	£604
Eastleigh	37.4%	£5,304,772	£977	£4,215,915	£1,088,857	£535
Eden	55.8%	£2,772,388	£1,159	£1,857,269	£915,119	£685
Elmbridge	39.5%	£3,179,650	£983	£2,510,767	£668,883	£523
Enfield	52.0%	£18,791,209	£1,096	£13,309,781	£5,481,428	£615
Epping Forest	45.8%	£5,204,369	£1,033	£3,908,569	£1,295,800	£562
Epsom and Ewell	36.8%	£1,693,561	£969	£1,356,668	£336,893	£523
Erewash	27.5%	£4,259,056	£929	£3,556,984	£702,072	£556



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Exeter	29.2%	£4,983,412	£956	£4,046,720	£936,692	£616
Fareham	34.4%	£2,881,232	£1,045	£2,139,003	£742,230	£784
Fenland	36.6%	£2,914,678	£976	£2,316,735	£597,943	£547
Folkestone and Hythe	42.9%	£5,733,196	£1,018	£4,371,140	£1,362,056	£564
Forest of Dean	60.0%	£3,787,980	£1,256	£2,340,019	£1,447,960	£800
Fylde	47.4%	£2,257,065	£1,069	£1,639,178	£617,888	£617
Gateshead	48.8%	£16,310,341	£1,025	£12,355,922	£3,954,419	£509
Gedling	45.8%	£5,399,781	£1,021	£4,103,377	£1,296,404	£535
Gloucester	44.0%	£5,980,995	£1,029	£4,513,171	£1,467,824	£574
Gosport	33.6%	£4,171,832	£957	£3,382,356	£789,476	£539
Gravesham	35.9%	£4,818,109	£959	£3,900,032	£918,077	£508
Great Yarmouth	27.3%	£4,264,887	£921	£3,595,791	£669,097	£529
Greenwich	38.0%	£20,643,175	£978	£16,383,239	£4,259,936	£531
Guildford	40.0%	£4,484,813	£990	£3,516,626	£968,187	£534
Hackney	42.0%	£22,300,075	£1,007	£17,192,738	£5,107,337	£549
Halton	35.4%	£9,791,812	£976	£7,787,646	£2,004,166	£565
Hambleton	52.1%	£5,365,820	£1,068	£3,899,256	£1,466,564	£561
Hammersmith and Fulham	50.0%	£15,507,047	£1,059	£11,364,034	£4,143,014	£566
Harborough	43.3%	£2,465,427	£1,030	£1,857,269	£608,158	£587
Haringey	49.0%	£21,510,914	£1,052	£15,870,996	£5,639,918	£563
Harlow	57.3%	£11,580,399	£1,064	£8,446,577	£3,133,823	£503
Harrogate	39.7%	£5,120,153	£997	£3,983,854	£1,136,300	£557
Harrow	48.6%	£6,130,381	£1,070	£4,446,425	£1,683,957	£605
Hart	40.2%	£2,237,373	£1,048	£1,657,029	£580,345	£676
Hartlepool	45.1%	£8,431,218	£996	£6,572,233	£1,858,985	£487



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Hastings	33.2%	£5,196,080	£946	£4,264,811	£931,269	£511
Havant	35.5%	£6,745,785	£976	£5,365,357	£1,380,428	£563
Havering	47.6%	£9,989,176	£1,034	£7,495,823	£2,493,354	£542
Herefordshire County of	54.2%	£8,961,173	£1,126	£6,177,961	£2,783,212	£645
Hertsmere	38.9%	£4,157,780	£988	£3,265,161	£892,619	£545
High Peak	43.4%	£3,021,878	£989	£2,370,288	£651,590	£492
Hillingdon	48.8%	£12,207,242	£1,044	£9,073,686	£3,133,556	£549
Hinckley and Bosworth	44.1%	£3,757,232	£1,019	£2,860,800	£896,433	£551
Horsham	48.3%	£4,690,136	£1,105	£3,294,654	£1,395,482	£681
Hounslow	40.2%	£10,383,960	£1,008	£7,998,752	£2,385,208	£576
Huntingdonshire	40.0%	£9,306,087	£984	£7,339,045	£1,967,041	£520
Hyndburn	35.0%	£3,591,035	£959	£2,905,815	£685,220	£523
lpswich	28.4%	£8,001,715	£941	£6,599,397	£1,402,318	£581
Isle of Wight	42.7%	£5,599,715	£1,039	£4,184,870	£1,414,844	£615
Isles of Scilly	71.2%	£188,643	£1,357	£107,881	£80,761	£816
Islington	45.9%	£21,136,322	£1,031	£15,905,145	£5,231,177	£556
Kensington and Chelsea	49.5%	£10,742,157	£1,075	£7,753,496	£2,988,660	£604
Kettering	29.1%	£3,451,692	£939	£2,852,262	£599,429	£561
King s Lynn and West Norfolk	54.3%	£10,177,832	£1,201	£6,578,442	£3,599,390	£782
Kingston upon Hull City of	50.2%	£26,121,645	£1,045	£19,408,577	£6,713,068	£535
Kingston upon Thames	50.2%	£6,145,500	£1,077	£4,427,798	£1,717,703	£600
Kirklees	35.1%	£18,535,913	£956	£15,044,422	£3,491,491	£514
Knowsley	30.4%	£17,658,125	£937	£14,629,195	£3,028,930	£529
Lambeth	54.6%	£27,904,914	£1,098	£19,721,356	£8,183,558	£590
Lancaster	31.8%	£5,766,012	£960	£4,661,411	£1,104,601	£578



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Leeds	43.9%	£61,893,025	£1,087	£44,211,228	£17,681,797	£708
Leicester	48.4%	£24,914,196	£1,050	£18,422,897	£6,491,298	£565
Lewes	38.6%	£3,513,078	£998	£2,731,187	£781,891	£576
Lewisham	45.5%	£23,101,444	£1,023	£17,522,591	£5,578,852	£544
Lichfield	46.8%	£4,397,218	£1,069	£3,191,429	£1,205,789	£627
Lincoln	38.1%	£6,197,466	£977	£4,924,518	£1,272,948	£527
Liverpool	39.5%	£37,902,997	£997	£29,509,854	£8,393,143	£559
Luton	29.9%	£7,406,893	£933	£6,162,439	£1,244,455	£523
Maidstone	30.2%	£7,672,761	£935	£6,365,784	£1,306,978	£527
Maldon	53.4%	£2,283,475	£1,083	£1,636,849	£646,626	£574
Malvern Hills	44.0%	£3,484,034	£1,042	£2,594,588	£889,445	£605
Manchester	38.6%	£52,883,788	£992	£41,382,250	£11,501,538	£558
Mansfield	36.7%	£5,286,339	£980	£4,186,422	£1,099,917	£555
Medway	33.5%	£12,852,307	£954	£10,461,399	£2,390,908	£529
Melton	53.8%	£2,215,349	£1,164	£1,477,743	£737,606	£720
Mendip	47.2%	£3,999,182	£1,059	£2,932,203	£1,066,979	£598
Merton	51.9%	£11,412,654	£1,082	£8,183,470	£3,229,184	£590
Mid Devon	39.8%	£3,014,154	£1,023	£2,285,690	£728,464	£621
Mid Suffolk	38.1%	£3,525,506	£974	£2,810,351	£715,154	£518
Mid Sussex	35.3%	£3,951,204	£980	£3,127,787	£823,417	£579
Middlesbrough	37.5%	£12,488,912	£957	£10,127,665	£2,361,247	£483
Milton Keynes	42.0%	£14,706,213	£1,007	£11,329,884	£3,376,329	£551
Mole Valley	46.5%	£2,812,909	£1,084	£2,014,822	£798,087	£661
New Forest	31.5%	£4,519,932	£959	£3,659,433	£860,499	£579
Newark and Sherwood	47.3%	£5,501,441	£1,054	£4,051,377	£1,450,065	£588



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Newcastle under Lyme	39.8%	£6,183,037	£1,001	£4,791,800	£1,391,237	£567
Newcastle upon Tyne	47.5%	£23,638,266	£1,036	£17,715,071	£5,923,195	£546
Newham	45.3%	£15,988,536	£1,023	£12,125,413	£3,863,123	£546
North Devon	42.5%	£3,662,351	£1,037	£2,742,052	£920,299	£612
North East Derbyshire	65.6%	£7,124,577	£1,147	£4,820,517	£2,304,059	£566
North East Lincolnshire	41.0%	£7,111,242	£1,000	£5,516,702	£1,594,540	£548
North Hertfordshire	45.5%	£10,767,715	£1,022	£8,174,933	£2,592,782	£541
North Kesteven	60.9%	£4,518,821	£1,134	£3,092,085	£1,426,736	£588
North Lincolnshire	42.4%	£8,442,798	£1,002	£6,540,412	£1,902,386	£532
North Norfolk	53.6%	£4,506,841	£1,090	£3,210,056	£1,296,785	£585
North Somerset	24.9%	£7,902,321	£925	£6,633,547	£1,268,774	£596
North Tyneside	41.9%	£13,901,505	£1,001	£10,780,387	£3,121,118	£536
North Warwickshire	49.7%	£3,353,005	£1,068	£2,437,035	£915,970	£587
North West Leicestershire	61.8%	£6,112,208	£1,108	£4,282,662	£1,829,546	£537
Northampton	33.9%	£10,447,730	£951	£8,523,413	£1,924,316	£517
Northumberland	47.3%	£18,616,594	£1,035	£13,958,622	£4,657,972	£547
Norwich	34.6%	£13,399,307	£952	£10,928,627	£2,470,680	£508
Nottingham	42.4%	£37,995,256	£996	£29,592,899	£8,402,356	£519
Nuneaton and Bedworth	49.9%	£6,212,772	£1,075	£4,487,559	£1,725,213	£598
Oadby and Wigston	48.5%	£1,719,436	£1,050	£1,271,294	£448,142	£564
Oldham	36.2%	£13,974,986	£962	£11,274,779	£2,700,207	£513
Oxford	29.9%	£9,536,448	£943	£7,852,841	£1,683,608	£556
Pendle	37.0%	£3,468,974	£975	£2,761,455	£707,519	£538
Peterborough	14.1%	£11,391,401	£854	£10,354,294	£1,037,107	£551
Plymouth	34.4%	£16,349,906	£966	£13,135,929	£3,213,977	£552



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Portsmouth	34.2%	£11,409,937	£965	£9,177,687	£2,232,249	£553
Preston	29.0%	£9,601,953	£927	£8,042,215	£1,559,738	£520
Reading	38.3%	£6,260,073	£1,012	£4,802,666	£1,457,406	£615
Redbridge	52.4%	£8,156,314	£1,070	£5,917,959	£2,238,355	£560
Redcar and Cleveland	38.1%	£8,360,480	£978	£6,635,099	£1,725,381	£530
Redditch	36.5%	£4,262,249	£980	£3,376,923	£885,326	£558
Reigate and Banstead	23.6%	£5,457,418	£906	£4,673,053	£784,365	£553
Ribble Valley	38.6%	£1,376,814	£998	£1,071,054	£305,761	£574
Richmond upon Thames	45.0%	£5,959,861	£1,044	£4,429,350	£1,530,511	£596
Richmondshire	55.7%	£2,378,876	£1,079	£1,710,581	£668,295	£545
Rochdale	34.2%	£13,899,801	£947	£11,392,750	£2,507,050	£499
Rochford	29.7%	£1,560,481	£936	£1,293,802	£266,679	£539
Rossendale	45.3%	£3,453,968	£1,006	£2,664,440	£789,529	£507
Rother	42.3%	£4,123,435	£1,038	£3,084,324	£1,039,112	£618
Rotherham	39.4%	£15,713,333	£969	£12,582,551	£3,130,782	£490
Rugby	36.7%	£4,093,740	£977	£3,251,967	£841,773	£547
Runnymede	35.1%	£2,368,338	£954	£1,926,344	£441,994	£508
Rushcliffe	33.0%	£3,109,613	£956	£2,523,961	£585,652	£545
Rushmoor	37.0%	£6,259,085	£976	£4,978,847	£1,280,238	£539
Rutland	48.4%	£1,320,208	£1,079	£949,978	£370,230	£625
Ryedale	55.1%	£2,510,042	£1,145	£1,701,268	£808,774	£670
Salford	25.2%	£25,891,350	£907	£22,164,600	£3,726,751	£518
Sandwell	48.5%	£23,561,790	£1,066	£17,146,947	£6,414,843	£599
Scarborough	42.3%	£4,597,583	£1,021	£3,493,342	£1,104,241	£580
Sedgemoor	43.6%	£8,407,745	£1,031	£6,329,306	£2,078,439	£585



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Sefton	37.6%	£15,706,525	£990	£12,309,355	£3,397,171	£570
Selby	47.3%	£3,326,961	£1,054	£2,449,453	£877,508	£587
Sevenoaks	53.5%	£4,139,934	£1,110	£2,894,173	£1,245,761	£624
Sheffield	35.5%	£36,970,957	£961	£29,845,140	£7,125,817	£523
Shropshire	47.0%	£14,519,662	£1,046	£10,770,297	£3,749,364	£575
Slough	40.5%	£6,685,013	£1,002	£5,176,759	£1,508,254	£558
Solihull	43.7%	£9,224,228	£1,040	£6,883,459	£2,340,768	£604
Somerset West and Taunton	40.9%	£8,074,384	£1,011	£6,197,364	£1,877,020	£575
South Cambridgeshire	41.3%	£7,571,095	£1,017	£5,775,928	£1,795,167	£584
South Derbyshire	46.7%	£3,606,603	£1,034	£2,707,903	£898,700	£552
South Gloucestershire	46.9%	£8,902,690	£1,070	£6,458,919	£2,443,771	£627
South Hams	57.6%	£3,083,286	£1,190	£2,010,166	£1,073,120	£719
South Holland	69.7%	£3,701,665	£1,119	£2,566,648	£1,135,017	£492
South Kesteven	55.5%	£12,181,411	£1,157	£8,170,276	£4,011,135	£686
South Lakeland	50.8%	£4,573,594	£1,041	£3,410,297	£1,163,297	£521
South Norfolk	47.1%	£6,018,724	£1,047	£4,461,171	£1,557,553	£575
South Northamptonshire	34.0%	£2,451,056	£959	£1,983,001	£468,055	£539
South Oxfordshire	38.1%	£3,509,626	£1,005	£2,710,231	£799,395	£600
South Ribble	31.6%	£3,359,608	£933	£2,793,277	£566,331	£497
South Somerset	39.8%	£9,845,071	£998	£7,654,928	£2,190,142	£559
South Staffordshire	39.5%	£3,943,028	£986	£3,103,727	£839,301	£531
South Tyneside	52.0%	£20,304,635	£1,041	£15,145,318	£5,159,317	£508
Southampton	55.0%	£22,279,579	£1,265	£13,669,903	£8,609,676	£889
Southend on Sea	35.1%	£6,415,713	£1,015	£4,904,339	£1,511,374	£682
Southwark	45.9%	£26,486,867	£1,046	£19,659,266	£6,827,602	£588



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Spelthorne	45.9%	£2,997,468	£1,027	£2,265,511	£731,957	£547
St Albans	34.5%	£6,539,019	£945	£5,367,686	£1,171,333	£491
St Helens	42.5%	£11,355,023	£991	£8,895,177	£2,459,846	£505
Stafford	41.1%	£5,851,562	£1,035	£4,385,887	£1,465,676	£632
Staffordshire Moorlands	61.5%	£3,907,888	£1,106	£2,742,828	£1,165,060	£536
Stevenage	38.3%	£7,203,784	£983	£5,689,778	£1,514,006	£539
Stockport	33.9%	£12,711,594	£962	£10,251,069	£2,460,525	£550
Stockton on Tees	42.0%	£13,580,935	£994	£10,605,759	£2,975,176	£519
Stoke on Trent	53.0%	£19,701,589	£1,057	£14,469,313	£5,232,277	£530
Stratford on Avon	37.1%	£7,142,661	£996	£5,565,598	£1,577,063	£593
Stroud	48.4%	£5,224,694	£1,064	£3,810,778	£1,413,916	£596
Sunderland	46.2%	£32,025,259	£1,000	£24,852,323	£7,172,936	£485
Surrey Heath	39.0%	£2,491,974	£973	£1,986,882	£505,092	£506
Sutton	35.2%	£8,236,021	£980	£6,524,113	£1,711,907	£579
Swale	44.2%	£6,472,091	£1,019	£4,931,503	£1,540,588	£549
Swindon	41.9%	£9,399,537	£1,016	£7,179,163	£2,220,374	£573
Tameside	32.2%	£16,434,325	£943	£13,531,753	£2,902,572	£516
Tamworth	47.7%	£4,426,244	£1,060	£3,240,325	£1,185,919	£596
Tandridge	41.3%	£1,995,358	£1,005	£1,541,386	£453,972	£554
Teignbridge	42.2%	£3,240,974	£1,018	£2,470,408	£770,566	£573
Telford and Wrekin	29.5%	£8,922,012	£930	£7,445,375	£1,476,638	£522
Tendring	41.4%	£3,798,565	£1,003	£2,938,412	£860,153	£549
Test Valley	38.4%	£4,530,368	£1,036	£3,395,550	£1,134,817	£676
Tewkesbury	46.1%	£3,539,689	£1,082	£2,539,484	£1,000,206	£664
Thanet	33.5%	£6,514,146	£950	£5,320,342	£1,193,804	£520



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
Three Rivers	42.4%	£4,228,315	£1,017	£3,225,579	£1,002,736	£569
Thurrock	49.5%	£8,223,381	£1,049	£6,083,274	£2,140,107	£552
Tonbridge and Malling	43.6%	£4,026,511	£1,010	£3,093,637	£932,873	£537
Torbay	35.7%	£2,502,800	£991	£1,959,718	£543,082	£602
Torridge	48.9%	£2,523,862	£1,108	£1,768,015	£755,848	£678
Tower Hamlets	40.5%	£21,859,770	£1,000	£16,973,871	£4,885,899	£551
Trafford	49.9%	£12,072,332	£1,029	£9,108,612	£2,963,720	£506
Tunbridge Wells	43.7%	£4,414,116	£1,047	£3,271,370	£1,142,745	£621
Uttlesford	41.7%	£3,324,335	£1,026	£2,515,424	£808,912	£598
Vale of White Horse	37.5%	£4,425,011	£1,003	£3,422,715	£1,002,297	£607
Wakefield	63.2%	£56,182,183	£1,073	£40,621,647	£15,560,536	£471
Walsall	48.0%	£17,045,468	£1,046	£12,652,402	£4,393,065	£562
Waltham Forest	45.4%	£15,194,317	£1,035	£11,390,422	£3,803,895	£571
Wandsworth	43.9%	£17,423,496	£1,019	£13,271,751	£4,151,745	£553
Warrington	31.9%	£8,137,004	£933	£6,767,041	£1,369,963	£493
Warwick	45.3%	£7,699,387	£1,033	£5,786,794	£1,912,593	£567
Watford	40.0%	£3,693,919	£1,004	£2,854,591	£839,329	£571
Waverley	37.5%	£3,748,461	£970	£2,998,174	£750,287	£519
Wealden	38.9%	£3,785,374	£1,015	£2,894,949	£890,425	£614
Wellingborough	24.3%	£3,300,876	£895	£2,863,128	£437,748	£489
Welwyn Hatfield	34.9%	£7,013,650	£963	£5,654,076	£1,359,574	£535
West Berkshire	50.2%	£6,044,495	£1,084	£4,326,125	£1,718,370	£615
West Devon	53.7%	£1,532,139	£1,151	£1,033,023	£499,116	£698
West Lancashire	48.6%	£5,283,779	£1,072	£3,823,972	£1,459,808	£610
West Lindsey	49.8%	£5,487,756	£1,060	£4,018,003	£1,469,753	£570



Local authority name	% of social housing EPCs at DEFG	Total spend (no action)	Average spend (no action)	Total spend (after retrofit)	Potential total saving	Average saving for homes at EPC D-G
West Oxfordshire	37.1%	£3,747,566	£994	£2,925,218	£822,348	£587
West Suffolk	34.7%	£7,742,136	£959	£6,268,768	£1,473,368	£526
Westminster	41.9%	£14,700,265	£1,017	£11,213,465	£3,486,800	£576
Wigan	41.1%	£16,626,389	£988	£13,066,853	£3,559,536	£514
Wiltshire	46.7%	£24,944,976	£1,050	£18,444,629	£6,500,347	£585
Winchester	35.7%	£4,429,977	£982	£3,501,879	£928,098	£577
Windsor and Maidenhead	34.0%	£6,070,598	£967	£4,870,965	£1,199,633	£562
Wirral	42.8%	£20,726,195	£1,003	£16,045,624	£4,680,570	£529
Woking	41.5%	£4,095,018	£994	£3,197,638	£897,380	£524
Wokingham	31.5%	£3,853,742	£942	£3,173,578	£680,164	£529
Wolverhampton	42.3%	£19,771,497	£1,018	£15,077,019	£4,694,478	£571
Worcester	38.0%	£4,619,268	£1,002	£3,579,492	£1,039,776	£593
Worthing	40.3%	£2,995,810	£1,033	£2,249,989	£745,821	£639
Wychavon	47.3%	£5,276,967	£1,065	£3,844,151	£1,432,816	£612
Wyre	36.1%	£2,986,242	£983	£2,357,870	£628,372	£573
Wyre Forest	49.2%	£5,049,430	£1,045	£3,749,464	£1,299,967	£547
York	39.2%	£5,470,915	£975	£4,354,842	£1,116,074	£508
England	43.1%	£2,947,080,302	£1,020	£2,241,470,624	£705,609,678	£567

