



## CIBSE Energy Benchmarking Dashboard

Category	Type	Unit	Benchmark Updated	Source	Years Covered	Sample Size	25 <sup>th</sup> Percentile - Electricity	25 <sup>th</sup> Percentile - Fossil Fuels	50 <sup>th</sup> Percentile - Electricity	50 <sup>th</sup> Percentile - Fossil Fuels
Catering	Fast food restaurants	kWh/m <sup>2</sup> per £1000 turnover/yr	2021	GUIDE F (2021)	-	-	820	480	890	670
Catering	Public houses	kWh/m <sup>2</sup> per £1000 turnover/yr	2021	GUIDE F (2021)	-	-	0.8	1.5	1.8	3.5
Catering	Restaurants (with bar)	kWh/cover/yr	2021	GUIDE F (2021)	-	-	650	1100	730	1250
Catering	Restaurants (in public houses)	kWh/cover/yr	2021	GUIDE F (2021)	-	-	1300	2700	1500	3500
Domestic	Detached House (gas-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	40052	24	124	35	164
Domestic	Detached House (elec-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	265	58	-	118	-
Domestic	Semi-Detached House (gas-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	97662	26	126	36	166
Domestic	Semi-Detached House (elec-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	461	76	-	127	-
Domestic	End Terrace House (gas-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	90595	26	119	37	159
Domestic	End Terrace House (elec-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	934	95	-	141	-



## CIBSE Energy Benchmarking Dashboard

Domestic	Mid Terrace House (gas-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	241996	25	105	35	142
Domestic	Mid Terrace House (elec-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	3439	93	-	132	-
Domestic	Bungalow (gas-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	14895	27	138	39	186
Domestic	Bungalow (elec-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	264	106	-	158	-
Domestic	Flat (gas-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	179884	26	94	37	138
Domestic	Flat (elec-heated)	kWh/m <sup>2</sup> /yr	2020	BEIS	2016	64393	85	-	123	-
Education (Higher Education)	Academic - art and design	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	117	43	80	62	116
Education (Higher Education)	Academic - dry	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	268	36	82	59	112
Education (Higher Education)	Academic - engineering or lab	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	246	55	91	89	135
Education (Higher Education)	Academic - performance	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	60	48	77	66	109
Education (Higher Education)	Academic - science - chemistry	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	28	92	138	122	166
Education (Higher Education)	Academic - science - medical or biology	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	196	63	105	107	160



## CIBSE Energy Benchmarking Dashboard

Education (Higher Education)	Academic - science - physics	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	27	83	83	116	130
Education (Higher Education)	Administration	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	172	36	69	57	106
Education (Higher Education)	Lecture theatre / conference facility	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	109	39	71	67	117
Education (Higher Education)	Library or learning centre	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	129	50	75	76	107
Education (Higher Education)	Residential	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	456	30	111	43	146
Education (Higher Education)	Catering / bar	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	45	50	129	90	166
Education (Higher Education)	Sports	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	109	50	83	74	130
Education (Higher Education)	Hospital or clinic	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	114	78	155	120	253
Education (Schools)	Special School	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	419	41	117	51	157
Education (Schools)	Primary School	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	5,316	33	95	40	118
Education (Schools)	Secondary School	kWh/m <sup>2</sup> /yr	2025	DEC	2022-2023	1,359	36	80	44	104
Education (Schools)	Secondary (with swimming pool)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	29	142	36	187



## CIBSE Energy Benchmarking Dashboard

Entertainment	Theatre	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	91	62	103	86	137
Entertainment	Bingo clubs	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	190	440	230	540
Entertainment	Cinemas	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	135	515	160	620
Entertainment	Social clubs	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	60	140	110	250
Hospitals	Community hospital (with inpatient beds)	kWh/m <sup>2</sup> /yr	2025	ERIC	2023-2024	42	61	178	81	227
Hospitals	General acute hospital	kWh/m <sup>2</sup> /yr	2025	ERIC	2023-2024	215	59	257	113	331
Hospitals	Mental Health (including Specialist services)	kWh/m <sup>2</sup> /yr	2025	ERIC	2023-2024	150	65	161	79	202
Hospitals	Mixed service hospital	kWh/m <sup>2</sup> /yr	2025	ERIC	2023-2024	78	46	122	68	198
Hospitals	Specialist hospital (acute only)	kWh/m <sup>2</sup> /yr	2025	ERIC	2023-2024	29	100	167	143	240
Hospitals	Cottage	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	55	443	78	492
Hospitals	Long stay	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	48	401	72	518
Hotels	Holiday	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	80	260	140	400
Hotels	Luxury	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	90	300	150	460
Hotels	Small	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	80	240	120	360
Industrial buildings	Post-1995; >5000 m <sup>2</sup>	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	-	92	-	-



## CIBSE Energy Benchmarking Dashboard

Industrial buildings	Post-1995; ≤5000 m2	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	-	96	-	-
Industrial buildings	Pre-1995; >5000 m2	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	-	103	-	-
Industrial buildings	Pre-1995; ≤5000 m2	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	-	107	-	-
Local authority buildings	Town hall	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	113	46	101	85	132
Local authority buildings	Community centres	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	242	33	107	47	139
Local authority buildings	Day centre	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	170	34	143	46	177
Local authority buildings	Residential care homes	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	372	68	250	83	319
Local authority buildings	Car park (enclosed)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	-	-	15	-
Local authority buildings	Car park (open)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	-	-	1	-
Local authority buildings	Depots	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	37	283	39	311
Local authority buildings	Sheltered housing	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	46	314	68	432
Local authority buildings	Temporary homeless units	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	48	408	71	467



## CIBSE Energy Benchmarking Dashboard

Ministry of Defence (MoD) buildings	Aircraft hangars (heated)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	23	220	-	-
Ministry of Defence (MoD) buildings	Junior mess	kWh/meal/yr	2021	GUIDE F (2021)	-	-	1.4	2.5	-	-
Ministry of Defence (MoD) buildings	Motor transport facilities	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	20	317	-	-
Ministry of Defence (MoD) buildings	Multi-occupancy accommodation	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	29	225	-	-
Ministry of Defence (MoD) buildings	Officers' mess	kWh/meal/yr	2021	GUIDE F (2021)	-	-	2.5	4.4	-	-
Ministry of Defence (MoD) buildings	Stores/warehouses (occupied)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	34	187	-	-
Ministry of Defence (MoD) buildings	Stores/warehouses (unoccupied)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	3	54	-	-
Ministry of Defence (MoD) buildings	Workshops	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	29	175	-	-
Offices	Central government office	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	387	67	82	93	116



## CIBSE Energy Benchmarking Dashboard

Offices	Local government office	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	668	65	79	89	108
Offices	Air conditioned, prestige	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	234	114	358	210
Offices	Air conditioned, standard	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	128	97	226	178
Offices	Naturally ventilated, cellular	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	33	79	54	151
Offices	Naturally ventilated, open plan	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	54	79	85	151
Primary health care	Health Centre/Surgery /Clinic (All-electric)	kWh/m <sup>2</sup> /yr	2025	NHSPS dataset	2024	103	32	-	53	-
Primary health care	Offices (All electric)	kWh/m <sup>2</sup> /yr	2025	NHSPS dataset	2024	30	28	-	48	-
Primary health care	Health Centre/Surgery /Clinic	kWh/m <sup>2</sup> /yr	2025	NHSPS dataset	2024	820	27	91	34	121
Primary health care	Hospitals	kWh/m <sup>2</sup> /yr	2025	NHSPS dataset	2024	86	32	157	53	207
Primary health care	Offices	kWh/m <sup>2</sup> /yr	2025	NHSPS dataset	2024	56	27	75	40	101
Public buildings	Crown and county courts	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	71	63	93	86	122
Public buildings	Library	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	275	53	85	76	117
Public buildings	Museum	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	195	39	79	55	120
Public buildings	Fire station	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	259	55	170	69	223



## CIBSE Energy Benchmarking Dashboard

Public buildings	Police station	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	456	100	152	134	190
Public buildings	Prisons	kWh/prisoner/yr	2020	DEC	2014-2015	101	3562	7794	3952	9987
Public buildings	Prisons (high security)	kWh/prisoner/yr	2020	DEC	-	-	5144	12922	5220	13677
Public buildings	Ambulance stations	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	50	350	70	460
Public buildings	Churches	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	10	80	20	150
Retail	Banks and building societies	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	71	63	101	98
Retail	Banks and building societies (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	40052	122	-	195	-
Retail	Book stores (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	265	210	-	255	-
Retail	Catalogue stores	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	97662	83	37	101	69
Retail	Catalogue stores (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	461	100	-	133	-
Retail	Clothes shops	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	90595	234	65	287	108
Retail	Clothes shops (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	934	270	-	324	-
Retail	Department stores	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	241996	237	194	294	248
Retail	Department stores (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	3439	209	-	259	-



## CIBSE Energy Benchmarking Dashboard

Retail	Distribution warehouses	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	14895	53	103	67	169
Retail	Distribution warehouses (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	264	55	-	101	-
Retail	DIY stores	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	179884	127	149	160	192
Retail	Electrical goods rental	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	64393	281	-	368	-
Retail	Electrical goods retail	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	117	172	-	230	-
Retail	Frozen food centres	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	268	858	-	1029	-
Retail	High street agencies	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	246	55	150	75	230
Retail	High street agencies (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	60	90	-	160	-
Retail	Meat butchers (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	28	475	-	577	-
Retail	Off licences (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	196	475	-	562	-
Retail	Post office (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	27	80	-	140	-
Retail	Post offices	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	172	45	140	70	210
Retail	Shoe shops (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	109	197	-	279	-
Retail	Small food shops	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	129	400	80	500	100
Retail	Small food shops (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	456	440	-	550	-



## CIBSE Energy Benchmarking Dashboard

Retail	Supermarket	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	45	915	200	1026	261
Retail	Supermarket (all electric)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	109	1034	-	1155	-
Sports and recreation	Swimming pool	kWh/m <sup>2</sup> /yr	2018	DEC	2010-2012	114	140	464	192	648
Sports and recreation	Combined centre	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	419	96	264	152	598
Sports and recreation	Dry sports centre (local)	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	5,316	64	158	105	343
Sports and recreation	Fitness centre	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	1,359	127	201	194	449
Sports and recreation	Ice rink	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	167	100	255	217
Sports and recreation	Leisure pool centre	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	91	164	573	258	1321
Sports and recreation	Sports ground changing facility	kWh/m <sup>2</sup> /yr	2021	GUIDE F (2021)	-	-	93	141	164	216

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