



## Country fact sheet: Key tool parameters – UK

When considering an energy efficiency retrofit within your national housing market, a wide plethora of consideration needs to be made. Below, we list the key parameters that will later be used and combined within the RentalCal tool to facilitate your analysis of this retrofit investment. More details and backgrounds on these parameters can be found in the corresponding deliverables as indicated in the first and last column of this table.

Deliver.	Parameter	Default Value	From Fact sheet / Source
D2.1	Building types	SFH/TH/MFH/AB	D2.1 Country section: Fact sheet on the national (rental) housing stock (UK)
			TABULA 2012, EPISCOPE update 2016
D2.1	Predominant heating systems	SFH/TH/MFH/AB: Central heating 91% Individual room heating: 7% District/block heating: 2%	D2.1 Country section : Fact sheets on national technical framework conditions (UK)
			iNSPIRE Project 2014
D2.1	Predominant energy carrier	SFH/TH/MFH/AB: Gas 82% Oil: 8% Electricity: 7%	D2.1 Country section : Fact sheets on national technical framework conditions (UK)
			iNSPIRE Project 2014
D2.2	Energy consumption before refurbishment	SFH/TH: 147-234 kWh/m <sup>2</sup> a MFH/AB: 123-176 kWh/m <sup>2</sup> a	D2.2 Table 5: Cross country comparison on results of the energy balance calculations according to TABULA, page 27
			TABULA 2012, EPISCOPE update 2016
D2.2	Energy consumption after refurbishment	Standard package: SFH/TH: 94-149 kWh/m <sup>2</sup> a MFH/AB: 72-96 kWh/m <sup>2</sup> a  Advanced package: SFH/TH: 48-117 kWh/m <sup>2</sup> a MFH/AB: 42-86 kWh/m <sup>2</sup> a	D2.2 Table 5: Cross country comparison on results of the energy balance calculations according to TABULA, page 27
			TABULA 2012, EPISCOPE update 2016
D2.2	Investment costs (ranges; without VAT)	Standard package: SFH/TH: 42-162 €/m <sup>2</sup> MFH/AB: 30-114 €/m <sup>2</sup>  Advanced package: SFH/TH: 145-287 €/m <sup>2</sup> MFH/AB: 123-242 €/m <sup>2</sup>	D 2.2 Table 3: Cross country comparison on calculation results for costs of system and building packages, page 25
			Preliminary calculation results for selected TABULA packages and building types based on cost data delivered by RentalCal partners.
D2.3	Energy balance calculation method	SAP 2012 - Standard Assessment Procedure (DECC, 2014)	D2.3 Country section: Fact sheet on nationally used energy performance calculation methods (UK)
			EPISCOPE Synthesis Report No. 1 ( <a href="https://www.gov.uk/guidance/standard-assessment-procedure">https://www.gov.uk/guidance/standard-assessment-procedure</a> )
D2.3	Non-renewable primary	Electricity: N/A Oil: N/A Gas: N/A Coal: N/A	D2.3 Country section: Fact sheet on national primary energy and emission factors (UK)



	energy factors	Biomass: N/A District Heating: N/A	EPISCOPE Synthesis Report No. 1 (Stein et al. 2016)
D2.3	CO2 emission factors	Electricity: 519 g/kWh Oil: 298 g/kWh Gas (Natural): 216 g/kWh Gas (Liquid): 241 g/kWh Coal: N/A Biomass: N/A District Heating: 216 g/kWh	D2.3 Country section: Fact sheet on national primary energy and emission factors (UK)
			EPISCOPE Synthesis Report No. 1 (Stein et al. 2016)
D3.1	Rent Increase Method 1	Contract renewal.  Rent increase mechanism: willingness to pay (negotiation)	D3.1 Country section: Fact Sheets regarding rent regulations (UK)
			N/A
D3.1	Rent Increase Method 2	Indexation  Rent increase mechanism: indexation	D3.1 Country section: Fact Sheets regarding rent regulations (Germany)
			N/A
D3.1	Rent Increase Method 3	N/A	D3.1 Country section: Fact Sheets regarding rent regulations (UK)
			N/A
D4.1	Depreciation system	Linear {5-15}	D4.1 Country section: Fact sheet – relevant decision making parameters (part 1) (UK)
			<a href="http://www.energysavingtrust.org.uk">http://www.energysavingtrust.org.uk</a>
D4.1	Depreciation rate	According to the lifetime of the investment	D4.1 Country section: Fact sheet – relevant decision making parameters (part 1) (UK)
			<a href="http://www.energysavingtrust.org.uk">http://www.energysavingtrust.org.uk</a>
D4.1	Marginal tax rate	Tax / revenues {0-45%} for natural landlords {18 or 28%} Tax on profit / legal persons	D4.1 Country section: Fact sheet – relevant decision making parameters (part 1) (UK)
			<a href="http://www.shipleys.com/resources/issue/uk-real-estate-taxes">http://www.shipleys.com/resources/issue/uk-real-estate-taxes</a>
D4.1	VAT deduction	5% V.A.T. rate for energy efficiency products. So 15% deductibility	D4.1 Country section: Fact sheet – relevant decision making parameters (part 1) (UK)
			<a href="https://www.gov.uk/tax-on-shopping/energy-saving-products">https://www.gov.uk/tax-on-shopping/energy-saving-products</a>



D4.1	Direct subsidies (grants)	Small subsidies available to social housing investors	D4.1 Country section: Fact sheet – relevant decision making parameters (part 1) (UK)
			<a href="http://www.energysavingtrust.org.uk/domestic/grants-and-support-england">http://www.energysavingtrust.org.uk/domestic/grants-and-support-england</a>
D4.1	Interest rates on loans	{3% – 5%}	D4.1 Country section: Fact sheet – relevant decision making parameters (part 2) (UK)
			<a href="http://uk.deposits.org/personal-loans/">http://uk.deposits.org/personal-loans/</a>
D4.1	Interest rates on deposits	{0,46% – 1.40%}	D4.1 Country section: Fact sheet – relevant decision making parameters (part 2) (UK)
			<a href="http://www.deposits.org/world-deposit-rates.html">http://www.deposits.org/world-deposit-rates.html</a>
D4.1	LTV ratio	{50% – 90%}	D4.1 Country section: Fact sheet – relevant decision making parameters (part 2) (UK)
			<a href="http://www.bankofengland.co.uk/publications/Documents/other/monetary/trendsjanuary15.pdf">http://www.bankofengland.co.uk/publications/Documents/other/monetary/trendsjanuary15.pdf</a>
D4.1	Debt repayment structure	N/A	D4.1 Country section: Fact sheet – relevant decision making parameters (part 3) (UK)
			<a href="http://www.ipf.org.uk/asset/8EBB41B2-FEE2-4091-8AE061A81A248228/">http://www.ipf.org.uk/asset/8EBB41B2-FEE2-4091-8AE061A81A248228/</a> .
D4.1	Planning (calculation) period	{10 – 15 years} for natural landlords	D4.1 Country section: Fact sheet – relevant decision making parameters (part 3) (UK)
		{Up to 20 years} for companies	<a href="http://www.ipf.org.uk/asset/8EBB41B2-FEE2-4091-8AE061A81A248228/">http://www.ipf.org.uk/asset/8EBB41B2-FEE2-4091-8AE061A81A248228/</a> .
D5.2	Energy price level	Electricity: 0.14 £/kWh Oil: 0.036 £/kWh Gas: 0.04 £/kWh Coal: 0.04 £/kWh Biomass: 0.04 £/kWh	RentalCal web tool (default values)



		District Heating: N/A	N/A
D5.2	Vacancy rate (national average)	N/A	D5.2 Country section: Table regional rental market disparities (UK)
			N/A
D5.2	Size of Value premium (national average)	A/B-rated premium of 5% and C-rated premium of 1.8%	D5.2 Country section: Table market impact evaluation of green premium issues by region (UK)
			Fuerst et al, 2015
D5.2	Size of Rent premium (national average)	B-rated premium of 5.2- 5.3% and C-rated premium of 4.6%-4.9%	D5.2 Country section: Table market impact evaluation of green premium issues by region (UK)
			Adan & Fuerst, 2016