



Country fact sheet: Key tool parameters –SPAIN

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: 3.89% MFH/AB:8.73%	D2.1 Country section: Fact sheet on the national (rental) housing stock (Germany)
			Census 2011
D2.1	Predominant heating systems	SFH/TH: 243 KWh/m2a Gas heating: 52.5% of total Electric facilities: 18.1% total Central heating system: 3.2% (1.8 is with gas) MFH/AB: 190 KWh/m2a Gas heating: 30% of total Electric facilities: 11.1% total Central heating system: 10.6% (5.21% is with gas)	D2.1 Country section : Fact sheets on national technical framework conditions (SPAIN)
			Databases from Census 2011 and specific statistics on energy installations. Weights over only those houses with hitting. There are 13.7% without heating
D2.1	Predominant energy carrier	SFH/TH: gas 60.0 % oil 20.0 % Electric system:20% MFH/AB: Gas: 70% of total Oil: 10% Electric facilities: 20% total	D2.1 Country section : Fact sheets on national technical framework conditions (spain)
			Estimated based on the installed facilities
D2.2	Energy consumption before refurbishment	SFH/TH: - 26-54 kWh/m ² a MFH/AB: - 27-51 kWh/m ² a	D2.2 Table 5: Cross country comparison on results of the energy balance calculations according to TABULA, page 27. Only for the Mediterranean climatic area
			TABULA 2012, EPISCOPE update 2016
D2.2	Energy consumption after refurbishment	Standard package: SFH/TH: - 23-41 kWh/m ² a MFH/AB: - 25-38 kWh/m ² a Advanced package: SFH/TH: - 17-39 kWh/m ² a MFH/AB: - 17-36 kWh/m ² a	D2.2 Table 5: Cross country comparison on results of the energy balance calculations according to TABULA, page 27. Only for the Mediterranean climatic area
			TABULA 2012, EPISCOPE update 2016
D2.2	Investment costs (ranges; without VAT)	Standard package: SFH/TH: - 92-365 €/m ² MFH/AB: - 50-240 €/m ² Advanced package: SFH/TH: - 109-1057 €/m ² MFH/AB: - 27-629 €/m ²	D 2.2 Table 3: Cross country comparison on calculation results for costs of system and building packages, page 25
			Rentalcal calculations
D2.3	Energy balance	2.36 of TPE where 1.954 is non-renewable energy. Based	D2.3 Country section : Fact sheet on nationally used energy



	calculation method	on Conventional electricity.(2016)	performance calculation methods (SPAIN)
D2.3	Non-renewable primary energy factors	Electricity: 1.945 kWh/kWh Oil: 1.179 kWh/kWh Gas: 1.190/1.201 kWh/kWh Coal: 0 kWh/kWh Biomass: 0.034 (WOOD PELLETS) kWh/kWh District Heating: 0 kWh/kWh	D2.3 Country section : Fact sheet on national primary energy and emission factors (SPAIN) EPISCOPE Synthesis Report No. 1 (Stein et al. 2016)
D2.3	CO2 emission factors	Electricity: 331 g/kWh Oil: 1.179 /kWh Gas: 1.190 g/kWh Coal: 0 g/kWh Biomass: 18 g/kWh District Heating: 0 g/kWh	D2.3 Country section : Fact sheet on national primary energy and emission factors (SPAIN) EPISCOPE Synthesis Report No. 1 (Stein et al. 2016)
D3.1	Rent Increase Method 1	According to legal requirements, the increase is according to CPI evolution until the 3 rd year of the contract if the house is primary home. Every year if it is not or the period agreed by parts.	D3.1 Country section : Fact Sheets regarding rent regulations (SPAIN)
D3.1	Rent Increase Method 2	By agreement. When the contract time ends, the landlord can determine the new rent.	D3.1 Country section : Fact Sheets regarding rent regulations (SPAIN)
D3.1	Rent Increase Method 3	In case of repair or improvements in the house, the landlord agrees with the tenant the increase on rent based on the cost of improvements. Repair costs should be covered by landlord with no effect on rent.	D3.1 Country section : Fact Sheets regarding rent regulations (SPAIN)
D4.1	Depreciation system	linear with different weights depending on the nature of components to be amortized	D4.1 Country section : Fact sheet – relevant decision making parameters (part 1) (SPAIN)
D4.1	Depreciation rate	2% – 100% (2016)	D4.1 Country section : Fact sheet – relevant decision making parameters (part 1) (SPAIN)
D4.1	Marginal tax rate	IRPF is max 46%(until 52% depending on regions) Firms is max 25% Financial investors is 1% (REITS at 0%)	D4.1 Country section : Fact sheet – relevant decision making parameters (part 1) (SPAIN)



D4.1	VAT deduction	VAT is 21% for most products and materials (but in Ceuta, Melilla and Canary Islands). It is 10% for houses, renovation, construction and rehabilitation. A 4% for rent and ownership of Public houses	D4.1 Country section : Fact sheet – relevant decision making parameters (part 1) (SPAIN)
D4.1	Direct subsidies (grants)	Max 30% costs Max 70% costs of intervention is eligible for the loan	D4.1 Country section : Fact sheet – relevant decision making parameters (part 1) (SPAIN)
D4.1	Interest rates on loans	Euribor + 0% (in some cases, +0.4%)	D4.1 Country section : Fact sheet – relevant decision making parameters (part 2) (SPAIN)
D4.1	Interest rates on deposits	0.02%-0.5% Avg July15-March 16= 0.13	D4.1 Country section : Fact sheet – relevant decision making parameters (part 2) (SPAIN)
D4.1	LTV ratio	Max 70% (if Public sector, 100%) in energy credits. Max 70%, currently (2016) 55-60% in mortgages(INE, mortgage statistics). Varies for other purposes between 27%-45%	D4.1 Country section : Fact sheet – relevant decision making parameters (part 2) (SPAIN)
D4.1	Debt repayment structure	annuity loan	D4.1 Country section : Fact sheet – relevant decision making parameters (part 3) (SPAIN)
D4.1	Planning (calculation) period	5-25/30 years	D4.1 Country section : Fact sheet – relevant decision making parameters (part 3) (SPAIN)



D5.2	Energy price level	Electricity: 0.242€/kWh Oil: 0.079€ /kWh Gas: 0.064 €/kWh Coal: -- /kWh Biomass: ----kWh District Heating: ---y/kWh	RentalCal web tool (default values)
D5.2	Vacancy rate (national average)	7.3%	D5.2 Country section : Table regional rental market disparities (SPAIN)
D5.2	Size of Value premium (national average)	3% (Alicante province. No data at national level)	D5.2 Country section : Table market impact evaluation of green premium issues by region (SPAIN)
D5.2	Size of Rent premium (national average)	No data at national level.	D5.2 Country section : Table market impact evaluation of green premium issues by region (SPAIN)