



## Country fact sheet: Key tool parameters – France

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 (France) / D.4.2. Country section : Fact sheet on the
			TABULA 2012, EPISCOPE update 2016 ADEME Chiffres Clés 2013 Batiment.
D2.1	Predominant heating systems	SFH/TH: central heating 92.2.6% Central DHW system:41,4%  MFH/AB: central heating 98.4% Central DHW system:51,4%	D2.1 Country section : Fact sheets on national technical framework conditions (France) ADEME 2013, Chiffres Clés Bâtiment.
			D2.1 Country section : Fact sheets on national technical framework conditions (France) ADEME 2013, Chiffres Clés Bâtiment.
D2.1	Predominant energy carrier	SFH/TH: gas 36.6 % electricity:33% oil: 21% wood 3.8 %  MFH/AB: gas 54.5 % electricity:33% Oil:5.6% district heating 4.2 %	D2.1 Country section : Fact sheets on national technical framework conditions (France)
			ADEME 2013, Chiffres Clés Bâtiment
D2.2	Energy consumption before refurbishment	SFH/TH: 110-269 kWh/m <sup>2</sup> a  MFH/AB: 99-237 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: 21-109 kWh/m <sup>2</sup> a MFH/AB: 58-129 kWh/m <sup>2</sup> a  Advanced package: SFH/TH: 17-70 kWh/m <sup>2</sup> a MFH/AB: 33-93 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: 386-569 €/m <sup>2</sup> MFH/AB: 209-503 €/m <sup>2</sup>  Advanced package: SFH/TH: 409-885 €/m <sup>2</sup> MFH/AB: 402-869 €/m <sup>2</sup>	D 2.2 Table 3: Cross country comparison on calculation results for costs of system and building packages, page 25
			TABULA 2012, EPISCOPE update 2016



D2.3	Energy balance calculation method	3 CL 2012	D2.3 Country section : Fact sheet on nationally used energy performance calculation methods (France)
			EPISCOPE Synthesis Report No. 1
D2.3	Non-renewable primary energy factors	Electricity: 2,58 kWh/kWh Oil: 1 kWh/kWh Gas: 1 kWh/kWh Coal: N/A Biomass: 50 kWh/kWh District Heating: 1 kWh/kWh	D2.3 Country section : Fact sheet on national primary energy and emission factors
			Réglementation Thermique 2012 EPISCOPE Synthesis Report No. 1
D2.3	CO2 emission factors	Electricity: 180 g/kWh Oil: 300 g/kWh Gas: 234 g/kWh Coal: N/A Biomass: 13 g/kWh District Heating: 100-228 g/kWh	D2.3 Country section : Fact sheet on national primary energy and emission factors (France)
			EPISCOPE Synthesis Report No. 1
D3.1	Rent Increase Method 1	According to legal requirements: 50% of the annual energy savings in case of energy renovation for 15 years max.	D3.1 Country section : Fact Sheets regarding rent regulations (France)
			Partage des économies, Décrets 2009-1438 et 2009-1439 du 23 novembre 2009
D3.1	Rent Increase Method 2	Free negotiations: Annual increase according to the Indice de Référence des Loyers (I.R.L. Index).	D3.1 Country section : Fact Sheets regarding rent regulation
			<a href="https://www.french-property.com/guides/france/working-in-france/letting-property/rents/annual-increase/">https://www.french-property.com/guides/france/working-in-france/letting-property/rents/annual-increase/</a>
D4.1.	Depreciation system	Linear {15-25} e.g. facade /15 years e.g. windows /25 years  for a whole building according the method of components: average period: 33 years. Average %: 3,33	D3.2. Country section : Fact sheet sheet 11– Depreciation rules (table 11) France section
			D4.1. Country section Fact sheet 1.8.1.  IFRS Standards defined for the different components and equipments of the building  <a href="http://www.editions-tissot.com/campagnes/cfp/0513/pdf/composant_immeuble.pdf">http://www.editions-tissot.com/campagnes/cfp/0513/pdf/composant_immeuble.pdf</a>
D4.1.	Depreciation rate	Linear {15-25} e.g. facade /15 years e.g. windows /25 years  for a whole building according the method of components: average period: 33 years. Average %: 3,33	D3.2 Country section : Fact sheet 11– Depreciation rules (table 11) France section
			<a href="http://bofip.impots.gouv.fr/bofip/2060-PGP.html#2060-PGP_Consequences_de_la_decompos_11">http://bofip.impots.gouv.fr/bofip/2060-PGP.html#2060-PGP_Consequences_de_la_decompos_11</a>
D3.2.	Marginal tax rate	On income: { 0% – 45% }  On profits (companies):	D3.2 Country section : Fact sheet – Income taxation regulation (France)



		{ 2,5% – 33% }	<a href="https://impots.dispofi.fr/bareme-impot/calcul-impot-par-tranche">https://impots.dispofi.fr/bareme-impot/calcul-impot-par-tranche</a> <a href="http://bofip.impots.gouv.fr/bofip/2489-PGP.html">http://bofip.impots.gouv.fr/bofip/2489-PGP.html</a>
D4.1	VAT deduction	No but reduced V.A.T. rate for energy efficiency works:  5,5%	D4.1 Country section : Fact sheet – relevant decision making parameters (part 1) (France)
			www.impots.gouv.fr
D4.1	Direct subsidies (grants)	0% loan , 30.000 € max, 15 years max.	D4.1 Country section : Fact sheet – relevant decision making parameters (part 1) (France)
			L'éco-prêt à taux zéro, Available at : <a href="http://www.developpement-durable.gouv.fr/Tout-sur-l-eco-pret-a-taux-zero,28949.html">http://www.developpement-durable.gouv.fr/Tout-sur-l-eco-pret-a-taux-zero,28949.html</a>
D4.1	Interest rates on loans	Eco-loan = 0% for the energy efficiency works + {1,63 – 2,80} for a complementary loan for the other building works	D4.1 Country section : Fact sheet – relevant decision making parameters (part 2) (France)
			L'éco-prêt à taux zéro, Available at : <a href="http://www.developpement-durable.gouv.fr/Tout-sur-l-eco-pret-a-taux-zero,28949.html">http://www.developpement-durable.gouv.fr/Tout-sur-l-eco-pret-a-taux-zero,28949.html</a> <a href="https://www.banque-france.fr/statistiques/credit/credit/credits-aux-particuliers">https://www.banque-france.fr/statistiques/credit/credit/credits-aux-particuliers</a> (2018).
D4.1	Interest rates on deposits	{-0,17-2,76} Average rate : 0,87%	D4.1 Country section : Fact sheet – relevant decision making parameters (part 2) (France)
			<a href="https://www.banque-france.fr/economie-et-statistiques/stats-info/detail/taux-de-remuneration-des-depots-bancaires.html">https://www.banque-france.fr/economie-et-statistiques/stats-info/detail/taux-de-remuneration-des-depots-bancaires.html</a>
D4.1	LTV ratio	{ 20- Max: 80% (Private Natural Landlord) Max: 85% ( company)}	D4.1 Country section : Fact sheet – relevant decision making parameters (part 2) (France)
			Caisse-des Dépôts SFGAS (eco-loan)
D4.1	Debt repayment structure	annuity loan, instalment loan, bullet loan	D4.1 Country section : Fact sheet – relevant decision making parameters (part 3) (France)
			DELPHIS survey



D4.1	Planning (calculation) period	{10 – 35}	D4.1 Country section : Fact sheet – relevant decision making parameters (part 3) (France)
			Delphis Survey / Testing RentalCal Tool.
D5.2	Energy price level	Electricity: 0,1589€/kWh Oil: 0,0819 €/kWh Gas: 0,0715€/kWh Coal: N/A Biomass (wood): 0,0554 €/kWh District Heating: 0,1031 €/kWh	RentalCal web tool (default values)
			<a href="http://www.picbleu.fr/page/prix-officiel-des-energies-electricite-bois-fioul-gaz">www.picbleu.fr/page/prix-officiel-des-energies-electricite-bois-fioul-gaz</a> (2018)
D5.2	Vacancy rate (national average)	7.9 %	D5.2 Country section : Table regional rental market disparities (France)
			IDP, 2015 FNAIM , DATA 2015
D5.2	Size of Value premium (national average)	1. In declining cities or regions , a green discount of 9% for properties in the lowest energy performance category (EFG). 2. In growing cities or regions, an average price premium of 8% for properties in the AB category, 4.5% for those in the C category and price discounts between 3% and 7% for those in the FG category.	D5.2 Country section : Table market impact evaluation of green premium issues by region (France)
			Dinamic 2015 Notaires de France
D5.2	Size of Rent premium (national average)	A one level improvement = +3.5% yield.	D5.2 Country section : Table market impact evaluation of green premium issues by region (France)
			European Commission, 2013. Ecole des ponts, 2013.