



Building Stock	FR	Local	Local building stock of OPH Montreuillois (OPHM), France	Year	2015
Details	Existing state 2015				

Annotations to this sheet

	1	2	3	4	5	6	7	8	9	10
Building type	LC_PE.99	LC_PE.00	LC_INT.74	LC_INT.99	LC_INT.00	LC_GR.74	LC_GR.99	LC_ENS.48	LC_ENS.74	LC_ENS.99
Dataset	FR.LocalCaseStudy.2015.001.01	FR.LocalCaseStudy.2015.001.02	FR.LocalCaseStudy.2015.001.03	FR.LocalCaseStudy.2015.001.04	FR.LocalCaseStudy.2015.001.05	FR.LocalCaseStudy.2015.001.06	FR.LocalCaseStudy.2015.001.07	FR.LocalCaseStudy.2015.001.08	FR.LocalCaseStudy.2015.001.09	FR.LocalCaseStudy.2015.001.10

Thermal Envelope Average Building

Basic data	TABULA average buildings										
Floor area TABULA	851,4	497,2	1289,2	7022,4	4580,8	5687,0	4889,9	753,5	2869,4	1226,5	m²
Floor area national	928,8	542,4	1406,4	7660,8	4997,2	6204,0	5334,5	822,0	3130,2	1338,0	m²
Number of dwellings	10,87	6,12	19,08	91,17	62,06	89,16	65,88	13,86	42,13	17,18	

Thermal envelope areas (external dimensions)	TABULA average buildings										
Roof	245,9	150,7	302,0	1564,2	498,0	831,0	654,0	139,4	625,5	298,0	m²
Wall	657,9	436,8	794,0	5612,0	1969,4	3743,3	2915,0	841,1	1423,4	1214,5	m²
Window	159,5	88,0	179,6	992,1	455,3	752,2	884,0	170,5	781,2	264,5	m²
Floor	245,9	150,7	302,0	1565,3	498,0	831,0	654,0	139,4	625,0	298,0	m²

Original state / not refurbished fraction of the envelope area

U-values of the original state	Building stock model - state indicators										
Roof	0,43	0,28	0,29	0,50	0,28	0,33	0,44	0,31	0,32	0,34	W/(m²K)
Wall	0,56	0,36	0,96	0,44	0,35	0,44	0,38	1,39	0,60	0,31	W/(m²K)
Window	2,90	1,67	2,57	2,45	1,74	1,82	2,83	1,84	2,26	1,96	W/(m²K)
Floor	0,53	0,38	1,49	0,42	0,47	0,56	0,80	2,05	1,61	0,76	W/(m²K)

Refurbishments (averages)

Refurbished fraction of envelope areas	Building stock model - state indicators										
Roof											
Wall											
Window											
Floor											
<i>Total (indicative)</i>											
U-values of the refurbished fraction (averages)	Building stock model - state indicators										
Roof											W/(m²K)
Wall											W/(m²K)
Window											W/(m²K)
Floor											W/(m²K)

Energy Need for Heating TABULA

Utilisation	TABULA standard calculation procedure										
Utilisation dataset	FR.MUH-DPE1	FR.MUH-DPE1	FR.MUH-DPE1	FR.MUH-DPE1	FR.MUH-DPE1	FR.MUH-DPE1	FR.MUH-DPE1	FR.MUH-DPE1	FR.MUH-DPE1	FR.MUH-DPE1	
Internal temperature	19,0	19,0	19,0	19,0	19,0	19,0	19,0	19,0	19,0	19,0	°C
Reduction factor temp.	0,94	0,96	0,94	0,96	1,00	0,99	0,96	0,91	0,94	0,95	
Air exchange rate (use)	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	1/h
Internal heat sources	4,17	4,17	4,17	4,17	4,17	4,17	4,17	4,17	4,17	4,17	W/m²
Red. factor ext. shading	0,60	0,60	0,60	0,60	0,60	0,60	0,60	0,60	0,60	0,60	
Energy need for DHW	19,8	19,8	19,8	19,8	19,8	19,8	19,8	19,8	19,8	19,8	kWh/(m²a)

Climate	TABULA standard calculation procedure										
Climate dataset	ZoneH1	ZoneH1	ZoneH1	ZoneH1	ZoneH1	ZoneH1	ZoneH1	ZoneH1	ZoneH1	ZoneH1	
Base temperature	12,0	12,0	12,0	12,0	12,0	12,0	12,0	12,0	12,0	12,0	°C
Length of heating season	229	229	229	229	229	229	229	229	229	229	d/a
External temp. during HS	6,4	6,4	6,4	6,4	6,4	6,4	6,4	6,4	6,4	6,4	
Accum. temp. diff. ext. to int. temp.	2885	2885	2885	2885	2885	2885	2885	2885	2885	2885	Kd/a

Envelope	TABULA standard calculation procedure										
Heat transfer by transmission related to surface area	1184	471	1688	6466	2062	3435	4366	1601	3474	1187	W/K
related to ref. floor area	0,90	0,57	1,07	0,66	0,60	0,56	0,85	1,24	1,01	0,57	W/(m²K)
	1,39	0,95	1,31	0,92	0,45	0,60	0,89	2,13	1,21	0,97	W/(m²K)

Annual energy balance building	TABULA standard calculation procedure										
Transmission heat losses	90,3	62,7	85,2	61,1	31,3	41,4	59,4	134,3	79,1	63,9	kWh/(m²a)
Ventilation heat losses	33,1	39,4	38,7	33,8	41,4	40,8	33,9	48,3	50,0	39,3	kWh/(m²a)
Usable solar gains	-12,2	-9,6	-9,3	-9,4	-5,0	-7,7	-9,7	-13,0	-17,3	-12,9	kWh/(m²a)
Usable internal gains	-20,5	-20,7	-20,8	-20,7	-21,1	-20,8	-20,6	-20,6	-20,0	-20,3	kWh/(m²a)
Energy need for heating	90,7	71,7	93,9	64,9	46,6	53,7	63,0	149,0	91,8	70,0	kWh/(m²a)
recovered by vent. system	-6,5	-14,3	-1,5	-6,7	-17,5	-4,8	-6,7	-5,7	-3,3	-7,7	kWh/(m²a)
Net energy need for heating	84,1	57,4	92,4	58,2	29,1	48,8	56,3	143,4	88,4	62,3	kWh/(m²a)



Building Stock	FR	Local	Local building stock of OPH Montreuillois (OPHM), France	Year	2015
Details	Existing state 2015				

Annotations to this sheet

	1	2	3	4	5	6	7	8	9	10
Building type	LC_PE.99	LC_PE.00	LC_INT.74	LC_INT.99	LC_INT.00	LC_GR.74	LC_GR.99	LC_ENS.48	LC_ENS.74	LC_ENS.99

Total Building Stock

		Building stock model - state indicators										Total
Number of buildings	10 ⁰	21	13	18	16	6	3	14	36	104	104	336
Number of dwellings	10 ⁰	232	82	349	1 470	346	231	954	504	4 373	1 790	10 331
Floor area national	10 ³ m ²	20	7	26	124	28	16	77	30	325	139	792
Floor area TABULA	10 ³ m ²	18	7	24	113	26	15	71	27	298	128	726

Ventilation Systems with Heat Recovery

	Building stock model - state indicators									
Occurrences	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Heating Systems

Occurrences or Fractions of Produced Heat

	Building stock model - state indicators										
1	DH	TS	C						17%	13%	
2	EI	E_SH	D	67%			82%		34%	21%	90%
3	Gas	B_C	D				18%				
4	Gas	B_C	C				28%	60%			
5	Gas	B_C	C				41%				
6	Gas	B_C	C							12%	
7	Gas	B_NC_CT	D			13%					
8	Gas	B_NC_CT	D			58%	14%		14%		2%
9	Gas	B_NC_CT	C								7%
10	Gas	B_NC_CT	C			29%	4%			79%	66%
11	Gas	B_NC_LT	D	16%					19%		
12	Gas	B_NC_LT	D	17%	91%			13%			
13	Gas	B_NC_LT	C		9%						
14	Gas	B_NC_LT	C					40%			
15	Gas	B_NC_LT	C						15%		
16	DH	TS	C								
17	EI	HP_ExhAir	D								
18	Gas	B_C	D								
19	Gas	B_C	C								
20											
Sum				100%	100%	100%	100%	100%	100%	100%	100%
thereof central					9%	29%	4%	69%	100%	32%	79%
decentral				100%	91%	71%	96%	31%	68%	21%	2%
Other Systems											

DHW Systems

Occurrences or Fractions of Produced Heat

	Building stock model - state indicators										
1	DH	TS	C						17%	13%	
2	EI	E_Immersi	D	67%			82%		34%	21%	90%
3	Gas	B_C	D				18%				
4	Gas	B_C	C				28%	60%			12%
5	Gas	B_C	C				21%				
6	Gas	B_NC_CT	D			13%					
7	Gas	B_NC_CT	C			29%	4%			79%	17%
8	Gas	B_NC_CT	C	16%							
9	Gas	B_NC_LT	D		39%						
10	Gas	B_NC_LT	C		9%						
11	Gas	B_NC_LT	C					40%	11%		
12	Gas	G_IWH	D								49%
13	Gas	G_IWH_C	D								7%
14	Gas	G_IWH_NC	D	17%		58%	14%		34%		2%
15	Gas	G_IWH_NC	D		52%			13%			
16	Gas	Solar	C				21%		5%		
17	DH	TS	C								
18	EI	HP_ExhAir	D								
19	Gas	B_C	D								
20	Gas	B_C	C								
Sum				100%	100%	100%	100%	100%	100%	100%	100%
thereof central				16%	9%	29%	4%	69%	100%	32%	79%
decentral				84%	91%	71%	96%	31%	68%	21%	58%
Other Systems							0%		-0%		



Building Stock	FR	Local	Local building stock of OPH Montreuillois (OPHM), France	Year	2015
Details	Existing state 2015				

Annotations to this sheet

	1	2	3	4	5	6	7	8	9	10
Building type	LC_PE.99	LC_PE.00	LC_INT.74	LC_INT.99	LC_INT.00	LC_GR.74	LC_GR.99	LC_ENS.48	LC_ENS.74	LC_ENS.99

Heating Systems

Heat demand / heat generation

TABULA standard calculation procedure

Energy need for heating	90,7	71,7	93,9	64,9	46,6	53,7	63,0	149,0	91,8	70,0	kWh/(m ² a)
Net en. need for heating	84,1	57,4	92,4	58,2	29,1	48,8	56,3	143,4	88,4	62,3	kWh/(m ² a)

Distribution + storage losses

TABULA system indicators

Central systems	C										kWh/(m ² a)
Decentral systems	D										kWh/(m ² a)

Auxiliary energy

TABULA system indicators

Ventil. systems (average)											kWh/(m ² a)
Central systems	C	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6	kWh/(m ² a)
Decentral systems	D										kWh/(m ² a)

Energy expenditure factors (fuels: related to gross calorific value)

TABULA system indicators

1	DH	TS	C	1,43	1,43	1,43	1,43	1,43	1,43	1,43	1,43	1,43
2	EI	E SH	D	1,06	1,06	1,06	1,06	1,06	1,06	1,06	1,06	1,06
3	Gas	B C	D	1,36	1,36	1,36	1,36	1,36	1,36	1,36	1,36	1,36
4	Gas	B C	C	1,30	1,30	1,30	1,30	1,30	1,30	1,30	1,30	1,30
5	Gas	B C	C	1,32	1,32	1,32	1,32	1,32	1,32	1,32	1,32	1,32
6	Gas	B C	C	1,41	1,41	1,41	1,41	1,41	1,41	1,41	1,41	1,41
7	Gas	B NC CT	D	1,82	1,82	1,82	1,82	1,82	1,82	1,82	1,82	1,82
8	Gas	B NC CT	D	1,91	1,91	1,91	1,91	1,91	1,91	1,91	1,91	1,91
9	Gas	B NC CT	C	1,82	1,82	1,82	1,82	1,82	1,82	1,82	1,82	1,82
10	Gas	B NC CT	C	1,67	1,67	1,67	1,67	1,67	1,67	1,67	1,67	1,67
11	Gas	B NC LT	D	1,61	1,61	1,61	1,61	1,61	1,61	1,61	1,61	1,61
12	Gas	B NC LT	D	1,54	1,54	1,54	1,54	1,54	1,54	1,54	1,54	1,54
13	Gas	B NC LT	C	1,63	1,63	1,63	1,63	1,63	1,63	1,63	1,63	1,63
14	Gas	B NC LT	C	1,59	1,59	1,59	1,59	1,59	1,59	1,59	1,59	1,59
15	Gas	B NC LT	C	1,68	1,68	1,68	1,68	1,68	1,68	1,68	1,68	1,68
16	DH	TS	C	1,19	1,19	1,19	1,19	1,19	1,19	1,19	1,19	1,19
17	EI	HP ExhAir	D	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40
18	Gas	B C	D	1,20	1,20	1,20	1,20	1,20	1,20	1,20	1,20	1,20
19	Gas	B C	C	1,26	1,26	1,26	1,26	1,26	1,26	1,26	1,26	1,26
20												

Delivered Energy

TABULA standard calculation procedure

1	DH	TS	C	120,2	82,0	132,0	83,1	41,6	69,7	80,4	204,9	126,4	89,0	kWh/(m ² a)
2	EI	E SH	D	89,4	61,0	98,2	61,9	30,9	51,9	59,8	152,4	94,0	66,2	kWh/(m ² a)
3	Gas	B C	D	114,1	77,8	125,2	78,9	39,4	66,2	76,3	194,4	119,9	84,5	kWh/(m ² a)
4	Gas	B C	C	109,0	74,4	119,7	75,4	37,7	63,3	73,0	185,8	114,6	80,7	kWh/(m ² a)
5	Gas	B C	C	110,7	75,5	121,6	76,6	38,3	64,2	74,1	188,7	116,4	82,0	kWh/(m ² a)
6	Gas	B C	C	118,5	80,8	130,1	81,9	41,0	68,7	79,3	201,9	124,5	87,7	kWh/(m ² a)
7	Gas	B NC CT	D	152,9	104,3	167,9	105,8	52,9	88,7	102,3	260,6	160,8	113,2	kWh/(m ² a)
8	Gas	B NC CT	D	160,7	109,6	176,4	111,1	55,6	93,2	107,5	273,8	168,9	119,0	kWh/(m ² a)
9	Gas	B NC CT	C	152,9	104,3	167,9	105,8	52,9	88,7	102,3	260,6	160,8	113,2	kWh/(m ² a)
10	Gas	B NC CT	C	140,2	95,7	154,0	97,0	48,5	81,4	93,8	239,0	147,4	103,8	kWh/(m ² a)
11	Gas	B NC LT	D	135,7	92,6	149,0	93,9	46,9	78,7	90,8	231,2	142,7	100,5	kWh/(m ² a)
12	Gas	B NC LT	D	129,5	88,3	142,2	89,5	44,8	75,1	86,6	220,6	136,1	95,9	kWh/(m ² a)
13	Gas	B NC LT	C	137,4	93,7	150,8	95,0	47,5	79,7	91,9	234,1	144,4	101,7	kWh/(m ² a)
14	Gas	B NC LT	C	133,5	91,1	146,6	92,3	46,2	77,5	89,3	227,5	140,4	98,8	kWh/(m ² a)
15	Gas	B NC LT	C	141,3	96,4	155,2	97,8	48,9	82,0	94,6	240,9	148,6	104,6	kWh/(m ² a)
16	DH	TS	C	100,2	68,3	110,0	69,3	34,6	58,1	67,0	170,7	105,3	74,2	kWh/(m ² a)
17	EI	HP ExhAir	D	33,9	23,1	37,2	23,4	11,7	19,7	22,7	57,8	35,6	25,1	kWh/(m ² a)
18	Gas	B C	D	100,8	68,7	110,7	69,7	34,8	58,5	67,4	171,8	106,0	74,6	kWh/(m ² a)
19	Gas	B C	C	106,3	72,5	116,7	73,5	36,7	61,6	71,1	181,1	111,7	78,7	kWh/(m ² a)
20														kWh/(m ² a)

Delivered Energy - weighted by frequencies

TABULA standard calculation procedure

1	DH	TS	C							13,6		16,6		kWh/(m ² a)
2	EI	E SH	D	60,2			50,5			20,6	32,5		59,3	kWh/(m ² a)
3	Gas	B C	D					7,1						kWh/(m ² a)
4	Gas	B C	C					10,6	37,9					kWh/(m ² a)
5	Gas	B C	C					15,8						kWh/(m ² a)
6	Gas	B C	C									14,7		kWh/(m ² a)
7	Gas	B NC CT	D			21,7								kWh/(m ² a)
8	Gas	B NC CT	D			102,7	15,8			15,4		2,9	12,5	kWh/(m ² a)
9	Gas	B NC CT	C									11,3		kWh/(m ² a)
10	Gas	B NC CT	C				44,5	4,1			188,1	97,9		kWh/(m ² a)
11	Gas	B NC LT	D	21,6						17,4				kWh/(m ² a)
12	Gas	B NC LT	D	21,8	80,5			5,7						kWh/(m ² a)
13	Gas	B NC LT	C		8,2									kWh/(m ² a)
14	Gas	B NC LT	C						31,1					kWh/(m ² a)
15	Gas	B NC LT	C							14,4				kWh/(m ² a)
16	DH	TS	C											kWh/(m ² a)
17	EI	HP ExhAir	D											kWh/(m ² a)
18	Gas	B C	D											kWh/(m ² a)
19	Gas	B C	C											kWh/(m ² a)
20														kWh/(m ² a)

Electricity production by CHP

TABULA standard calculation procedure

														kWh/(m ² a)
														kWh/(m ² a)
														kWh/(m ² a)
														kWh/(m ² a)



Building Stock	FR	Local	Local building stock of OPH Montreuillois (OPHM), France	Year	2015
Details	Existing state 2015				

Annotations to this sheet

	1	2	3	4	5	6	7	8	9	10
Building type	LC_PE.99	LC_PE.00	LC_INT.74	LC_INT.99	LC_INT.00	LC_GR.74	LC_GR.99	LC_ENS.48	LC_ENS.74	LC_ENS.99

DHW Systems

Heat demand / heat generation

TABULA standard calculation procedure

Energy need for DHW		19,8	19,8	19,8	19,8	19,8	19,8	19,8	19,8	19,8	19,8	kWh/(m ² a)
Distribution + storage losses												
Central systems	C	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,6	kWh/(m ² a)
Decentral systems	D	3,7	3,7	3,7	3,7	3,7	3,7	3,7	3,7	3,7	3,7	kWh/(m ² a)
Auxiliary energy												
Central systems	C	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	kWh/(m ² a)
Decentral systems	D											kWh/(m ² a)

Energy expenditure factors (fuels: related to gross calorific value)

TABULA system indicators

1	DH	TS	C	4,83	4,83	4,83	4,83	4,83	4,83	4,83	4,83	4,83
2	EI	E Immersiv	D	1,11	1,11	1,11	1,11	1,11	1,11	1,11	1,11	1,11
3	Gas	B C	D	1,61	1,61	1,61	1,61	1,61	1,61	1,61	1,61	1,61
4	Gas	B C	C	2,35	2,35	2,35	2,35	2,35	2,35	2,35	2,35	2,35
5	Gas	B C	C	2,13	2,13	2,13	2,13	2,13	2,13	2,13	2,13	2,13
6	Gas	B NC CT	D	1,86	1,86	1,86	1,86	1,86	1,86	1,86	1,86	1,86
7	Gas	B NC CT	C	2,48	2,48	2,48	2,48	2,48	2,48	2,48	2,48	2,48
8	Gas	B NC CT	C	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75	1,75
9	Gas	B NC LT	D	1,65	1,65	1,65	1,65	1,65	1,65	1,65	1,65	1,65
10	Gas	B NC LT	C	2,45	2,45	2,45	2,45	2,45	2,45	2,45	2,45	2,45
11	Gas	B NC LT	C	2,42	2,42	2,42	2,42	2,42	2,42	2,42	2,42	2,42
12	Gas	G IWH	D	2,52	2,52	2,52	2,52	2,52	2,52	2,52	2,52	2,52
13	Gas	G IWH C	D	1,61	1,61	1,61	1,61	1,61	1,61	1,61	1,61	1,61
14	Gas	G IWH NC	D	1,71	1,71	1,71	1,71	1,71	1,71	1,71	1,71	1,71
15	Gas	G IWH NC	D	1,65	1,65	1,65	1,65	1,65	1,65	1,65	1,65	1,65
16	Gas	Solar	C									
17	DH	TS	C	1,56	1,56	1,56	1,56	1,56	1,56	1,56	1,56	1,56
18	EI	HP ExhAir	D	0,63	0,63	0,63	0,63	0,63	0,63	0,63	0,63	0,63
19	Gas	B C	D	1,22	1,22	1,22	1,22	1,22	1,22	1,22	1,22	1,22
20	Gas	B C	C	1,80	1,80	1,80	1,80	1,80	1,80	1,80	1,80	1,80

Delivered Energy

TABULA standard calculation procedure

1	DH	TS	C	108,4	108,4	108,4	108,4	108,4	108,4	108,4	108,4	108,4	kWh/(m ² a)
2	EI	E Immersiv	D	26,1	26,1	26,1	26,1	26,1	26,1	26,1	26,1	26,1	kWh/(m ² a)
3	Gas	B C	D	37,8	37,8	37,8	37,8	37,8	37,8	37,8	37,8	37,8	kWh/(m ² a)
4	Gas	B C	C	52,8	52,8	52,8	52,8	52,8	52,8	52,8	52,8	52,8	kWh/(m ² a)
5	Gas	B C	C	47,8	47,8	47,8	47,8	47,8	47,8	47,8	47,8	47,8	kWh/(m ² a)
6	Gas	B NC CT	D	43,6	43,6	43,6	43,6	43,6	43,6	43,6	43,6	43,6	kWh/(m ² a)
7	Gas	B NC CT	C	55,7	55,7	55,7	55,7	55,7	55,7	55,7	55,7	55,7	kWh/(m ² a)
8	Gas	B NC CT	C	39,4	39,4	39,4	39,4	39,4	39,4	39,4	39,4	39,4	kWh/(m ² a)
9	Gas	B NC LT	D	38,7	38,7	38,7	38,7	38,7	38,7	38,7	38,7	38,7	kWh/(m ² a)
10	Gas	B NC LT	C	55,0	55,0	55,0	55,0	55,0	55,0	55,0	55,0	55,0	kWh/(m ² a)
11	Gas	B NC LT	C	54,3	54,3	54,3	54,3	54,3	54,3	54,3	54,3	54,3	kWh/(m ² a)
12	Gas	G IWH	D	59,2	59,2	59,2	59,2	59,2	59,2	59,2	59,2	59,2	kWh/(m ² a)
13	Gas	G IWH C	D	37,8	37,8	37,8	37,8	37,8	37,8	37,8	37,8	37,8	kWh/(m ² a)
14	Gas	G IWH NC	D	40,2	40,2	40,2	40,2	40,2	40,2	40,2	40,2	40,2	kWh/(m ² a)
15	Gas	G IWH NC	D	38,7	38,7	38,7	38,7	38,7	38,7	38,7	38,7	38,7	kWh/(m ² a)
16	Gas	Solar	C										kWh/(m ² a)
17	DH	TS	C	35,1	35,1	35,1	35,1	35,1	35,1	35,1	35,1	35,1	kWh/(m ² a)
18	EI	HP ExhAir	D	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7	14,7	kWh/(m ² a)
19	Gas	B C	D	28,6	28,6	28,6	28,6	28,6	28,6	28,6	28,6	28,6	kWh/(m ² a)
20	Gas	B C	C	40,4	40,4	40,4	40,4	40,4	40,4	40,4	40,4	40,4	kWh/(m ² a)

Delivered Energy - weighted by frequencies

TABULA standard calculation procedure

1	DH	TS	C						18,3		14,2	kWh/(m ² a)	
2	EI	E Immersiv	D	17,6			21,3		9,0	5,6		23,3	kWh/(m ² a)
3	Gas	B C	D					6,8					kWh/(m ² a)
4	Gas	B C	C					14,8	31,6			6,2	kWh/(m ² a)
5	Gas	B C	C					9,9					kWh/(m ² a)
6	Gas	B NC CT	D										kWh/(m ² a)
7	Gas	B NC CT	C										kWh/(m ² a)
8	Gas	B NC CT	C										kWh/(m ² a)
9	Gas	B NC LT	D	6,3									kWh/(m ² a)
10	Gas	B NC LT	C		15,1								kWh/(m ² a)
11	Gas	B NC LT	C		4,8								kWh/(m ² a)
12	Gas	G IWH	D						21,8	5,9			kWh/(m ² a)
13	Gas	G IWH C	D										kWh/(m ² a)
14	Gas	G IWH NC	D										kWh/(m ² a)
15	Gas	G IWH NC	D	6,7		23,4	5,7						kWh/(m ² a)
16	Gas	G IWH NC	D										kWh/(m ² a)
17	Gas	G IWH NC	D										kWh/(m ² a)
18	Gas	G IWH NC	D										kWh/(m ² a)
19	Gas	G IWH NC	D										kWh/(m ² a)
20	Gas	G IWH NC	D										kWh/(m ² a)
21	Gas	G IWH NC	D										kWh/(m ² a)
22	Gas	G IWH NC	D										kWh/(m ² a)
23	Gas	G IWH NC	D										kWh/(m ² a)
24	Gas	G IWH NC	D										kWh/(m ² a)
25	Gas	G IWH NC	D										kWh/(m ² a)
26	Gas	G IWH NC	D										kWh/(m ² a)
27	Gas	G IWH NC	D										kWh/(m ² a)
28	Gas	G IWH NC	D										kWh/(m ² a)
29	Gas	G IWH NC	D										kWh/(m ² a)
30	Gas	G IWH NC	D										kWh/(m ² a)
31	Gas	G IWH NC	D										kWh/(m ² a)
32	Gas	G IWH NC	D										kWh/(m ² a)
33	Gas	G IWH NC	D										kWh/(m ² a)
34	Gas	G IWH NC	D										kWh/(m ² a)
35	Gas	G IWH NC	D										kWh/(m ² a)
36	Gas	G IWH NC	D										kWh/(m ² a)
37	Gas	G IWH NC	D										kWh/(m ² a)
38	Gas	G IWH NC	D										kWh/(m ² a)
39	Gas	G IWH NC	D										kWh/(m ² a)
40	Gas	G IWH NC	D										kWh/(m ² a)
41	Gas	G IWH NC	D										kWh/(m ² a)
42	Gas	G IWH NC	D										kWh/(m ² a)
43	Gas	G IWH NC	D										kWh/(m ² a)
44	Gas	G IWH NC	D										kWh/(m ² a)
45	Gas	G IWH NC	D										kWh/(m ² a)
46	Gas	G IWH NC	D										kWh/(m ² a)
47	Gas	G IWH NC	D										kWh/(m ² a)
48	Gas	G IWH NC	D										kWh/(m ² a)
49	Gas	G IWH NC	D										kWh/(m ² a)
50	Gas	G IWH NC	D										kWh/(m ² a)
51	Gas	G IWH NC	D										kWh/(m ² a)
52	Gas	G IWH NC	D										kWh/(m ² a)
53	Gas	G IWH NC	D										kWh/(m ² a)
54	Gas	G IWH NC	D										kWh/(m ² a)
55	Gas	G IWH NC	D										kWh/(m ² a)
56	Gas	G IWH NC	D										kWh/(m ² a)
57	Gas	G IWH NC	D										kWh/(m ² a)
58	Gas	G IWH NC	D										kWh/(m ² a)
59	Gas	G IWH NC	D										kWh/(m ² a)
60	Gas	G IWH NC	D										kWh/(m ² a)
61	Gas	G IWH NC	D										kWh/(m ² a)
62	Gas	G IWH NC	D										kWh/(m ² a)
63	Gas	G IWH NC	D										kWh/(m ² a)
64	Gas	G IWH NC	D										kWh/(m ² a)
65	Gas	G IWH NC	D										kWh/(m ² a)
66	Gas	G IWH NC	D										kWh/(m ² a)
67	Gas	G IWH NC	D										kWh/(m ² a)
68	Gas	G IWH NC	D										kWh/(m ² a)
69	Gas	G IWH NC	D										kWh/(m ² a)
70	Gas	G IWH NC	D										kWh/(m ² a)
71	Gas	G IWH NC	D										kWh/(m ² a)
72	Gas	G IWH NC	D</										



Building Stock	FR	Local	Local building stock of OPH Montreuillois (OPHM), France	Year	2015
Details	Existing state 2015				

Annotations to this sheet

Total Building Stock

	1	2	3	4	5	6	7	8	9	10	Total	
Building type	LC_PE.99	LC_PE.00	LC_INT.74	LC_INT.99	LC_INT.00	LC_GR.74	LC_GR.99	LC_ENS.48	LC_ENS.74	LC_ENS.99		
Floor area TABULA	10 ³ m ²	18	7	24	113	26	15	71	27	298	128	726

All energy quantities in **MWh/a**

Heating Systems

Heat Demand for Heating	TABULA standard calculation procedure / projection to building stock										Total
Energy need for heating	1 647	478	2 214	7 344	1 189	791	4 460	4 083	27 326	8 944	58 475
Net en. need for heating	1 529	382	2 178	6 588	743	719	3 987	3 927	26 341	7 959	54 353
Produced heat	1 529	382	2 178	6 588	743	719	3 987	3 927	26 341	7 959	54 353

Delivered Energy TABULA	TABULA standard calculation procedure / projection to building stock										Sum
1 DH TS C	0	0	0	0	0	0	963	0	4 931	0	5 894
2 EI E_SH D	1 094	0	0	5 715	0	0	1 458	889	0	7 572	16 727
3 Gas B_C D	0	0	0	0	180	0	0	0	0	0	180
4 Gas B_C C	0	0	0	0	270	558	0	0	0	0	828
5 Gas B_C C	0	0	0	0	404	0	0	0	0	0	404
6 Gas B_C C	0	0	0	0	0	0	0	0	4 376	0	4 376
7 Gas B_NC_CT D	0	0	511	0	0	0	0	0	0	0	511
8 Gas B_NC_CT D	0	0	2 422	1 787	0	0	1 089	0	855	1 596	7 749
9 Gas B_NC_CT C	0	0	0	0	0	0	0	0	3 352	0	3 352
10 Gas B_NC_CT C	0	0	1 050	461	0	0	0	5 153	29 157	0	35 820
11 Gas B_NC_LT D	392	0	0	0	0	0	1 235	0	0	0	1 627
12 Gas B_NC_LT D	395	536	0	0	146	0	0	0	0	0	1 078
13 Gas B_NC_LT C	0	55	0	0	0	0	0	0	0	0	55
14 Gas B_NC_LT C	0	0	0	0	0	458	0	0	0	0	458
15 Gas B_NC_LT C	0	0	0	0	0	0	1 018	0	0	0	1 018
16 DH TS C	0	0	0	0	0	0	0	0	0	0	0
17 EI HP_ExhAir D	0	0	0	0	0	0	0	0	0	0	0
18 Gas B_C D	0	0	0	0	0	0	0	0	0	0	0
19 Gas B_C C	0	0	0	0	0	0	0	0	0	0	0
20											
Not specified systems	0	0	0	0	0	0	0	0	0	0	0
Auxiliary energy	0	0	4	3	11	9	15	14	187	0	244
CHP electr. production											0

DHW Systems

Heat Demand for DHW	TABULA standard calculation procedure / projection to building stock										Total
Energy need for DHW	360	132	467	2 242	506	292	1 402	542	5 897	2 530	14 369
Produced heat	424	156	547	2 656	581	331	1 640	621	6 866	3 003	16 825

Delivered Energy TABULA	TABULA standard calculation procedure / projection to building stock										Total
1 DH TS C	0	0	0	0	0	0	1 297	0	4 229	0	5 527
2 EI E_Immersi D	319	0	0	2 410	0	0	635	152	0	2 983	6 500
3 Gas B_C D	0	0	0	0	173	0	0	0	0	0	173
4 Gas B_C C	0	0	0	0	378	466	0	0	1 856	0	2 699
5 Gas B_C C	0	0	0	0	252	0	0	0	0	0	252
6 Gas B_NC_CT D	0	0	133	0	0	0	0	0	0	0	133
7 Gas B_NC_CT C	0	0	379	265	0	0	0	1 200	2 835	0	4 680
8 Gas B_NC_CT C	114	0	0	0	0	0	0	0	0	0	114
9 Gas B_NC_LT D	0	100	0	0	0	0	0	0	0	0	100
10 Gas B_NC_LT C	0	32	0	0	0	0	0	0	0	0	32
11 Gas B_NC_LT C	0	0	0	0	0	321	415	0	0	0	736
12 Gas G_IWH D	0	0	0	0	0	0	0	0	8 691	0	8 691
13 Gas G_IWH_C D	0	0	0	0	0	0	0	0	788	0	788
14 Gas G_IWH_NC D	123	0	551	646	0	0	953	0	203	539	3 015
15 Gas G_IWH_NC D	0	135	0	0	127	0	0	0	0	0	261
16 Gas Solar C	0	0	0	0	0	0	0	0	0	0	0
17 DH TS C	0	0	0	0	0	0	0	0	0	0	0
18 EI HP_ExhAir D	0	0	0	0	0	0	0	0	0	0	0
19 Gas B_C D	0	0	0	0	0	0	0	0	0	0	0
20 Gas B_C C	0	0	0	0	0	0	0	0	0	0	0
Not specified systems	0	0	0	0	1	0	- 1	0	0	0	- 1
Auxiliary energy	3	1	6	4	16	13	21	19	113	0	195
CHP electr. production											0



Building Stock **FR Local** Local building stock of OPH Montreuillois (OPHM), France Year **2015**
 Details Existing state 2015

Annotations to this sheet

Total Building Stoc	1	2	3	4	5	6	7	8	9	10	Total	
Building type	LC_PE.99	LC_PE.00	LC_INT.74	LC_INT.99	LC_INT.00	LC_GR.74	LC_GR.99	LC_ENS.48	LC_ENS.74	LC_ENS.99		
Floor area TABULA	10 ³ m ²	18	7	24	113	26	15	71	27	298	128	726

Total Heat Need and Final Energy All energy quantities in **MWh/a** Heating + DHW

Simplified TABULA projection	fuels related to gross calorific value (TABULA standard)										TABULA standard calculation procedure projection to building stock		Total	per m ²
	1	2	3	4	5	6	7	8	9	10				
Net heat need	1 888	514	2 645	8 830	1 248	1 011	5 389	4 470	32 238	10 489	68 723	95		
Produced heat	2 071	633	2 761	10 000	1 771	1 121	6 101	4 704	34 192	11 947	75 300	104		
Gas	1 024	859	5 045	3 159	1 928	1 803	4 710	6 353	52 114	2 135	79 129	109		
Oil	0	0	0	0	0	0	0	0	0	0	0	0		
Coal	0	0	0	0	0	0	0	0	0	0	0	0		
Bio	0	0	0	0	0	0	0	0	0	0	0	0		
DH	0	0	0	0	0	0	2 260	0	9 160	0	11 421	16		
EI (incl. aux. en.)	1 415	1	10	8 132	27	23	2 128	1 075	300	10 555	23 667	33		
Other / not specified	0	0	0	0	1	0	- 1	0	0	0	- 1	0		
<i>Sum final energy</i>	<i>2 439</i>	<i>859</i>	<i>5 056</i>	<i>11 291</i>	<i>1 956</i>	<i>1 825</i>	<i>9 097</i>	<i>7 427</i>	<i>61 574</i>	<i>12 690</i>	<i>114 215</i>	<i>157</i>		
CHP electr. production	0	0	0	0	0	0	0	0	0	0	0	0		

Separate individual model

or total metered consumption

	fuels related to gross calorific value (TABULA standard)										Individual building stock model	Total	per m ²
	1	2	3	4	5	6	7	8	9	10			
Net heat need	0	0	0	0	0	0	0	0	0	0	0	0	
Produced heat	0	0	0	0	0	0	0	0	0	0	0	0	
Gas	1,00	0	0	0	0	0	0	0	0	0	0	0	
Oil	1,00	0	0	0	0	0	0	0	0	0	0	0	
Coal	1,00	0	0	0	0	0	0	0	0	0	0	0	
Bio	1,00	0	0	0	0	0	0	0	0	0	0	0	
DH		0	0	0	0	0	0	0	0	0	0	0	
EI		0	0	0	0	0	0	0	0	0	0	0	
Other / not specified		0	0	0	0	0	0	0	0	0	0	0	
<i>Sum final energy</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	
CHP electr. production	0	0	0	0	0	0	0	0	0	0	0	0	

Ratio of individual model or total metered consumption to simplified TABULA projection (TABULA balance calibration factors)

											Total	
Net heat need	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Produced heat	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gas	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Oil												
Coal												
Bio												
DH							0%		0%			0%
EI	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other					0%		0%					0%
Sum final energy	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CHP electr. production												