



Building Stock	<b>IT</b> <b>Regional</b>	Residential building stock of Piedmont region, Italy	Year	2015
Details	Basic case - year 2015, POLITO model / Basic case - year 2015			

Annotations to this sheet

	1	2	3	4	5	6	7	8	9	10
Building type	SFH I	SFH II	SFH III	SFH IV	SFH V	MFH I	MFH II	MFH III	MFH IV	MFH V
Dataset	IT.Region MidClim.20 15.001.01	IT.Region MidClim.20 15.001.02	IT.Region MidClim.20 15.001.03	IT.Region MidClim.20 15.001.04	IT.Region MidClim.20 15.001.05	IT.Region MidClim.20 15.001.06	IT.Region MidClim.20 15.001.07	IT.Region MidClim.20 15.001.08	IT.Region MidClim.20 15.001.09	IT.Region MidClim.20 15.001.10

## Thermal Envelope Average Building

### Basic data

	TABULA average buildings										
<b>Floor area TABULA</b>	<b>115,0</b>	<b>156,3</b>	<b>199,1</b>	<b>171,8</b>	<b>173,9</b>	<b>1035,0</b>	<b>822,0</b>	<b>1088,0</b>	<b>975,0</b>	<b>829,4</b>	<b>m<sup>2</sup></b>
Floor area national	115,0	156,3	199,1	171,8	173,9	1035,0	822,0	1088,0	975,0	829,4	m <sup>2</sup>
Number of dwellings	1,00	1,00	1,00	1,00	1,00	15,92	10,02	11,96	15,00	12,96	

### Thermal envelope areas (external dimensions)

	TABULA average buildings										
Roof	75,0	124,5	132,9	96,0	96,4	652,8	186,7	403,5	373,5	305,0	m <sup>2</sup>
Wall	210,9	239,8	243,8	223,1	223,3	822,2	1196,8	1065,8	1012,0	885,4	m <sup>2</sup>
Window	16,8	21,9	27,3	23,9	24,1	80,3	97,2	120,9	147,9	104,0	m <sup>2</sup>
Floor	65,0	107,8	115,1	96,0	96,4	652,8	186,7	403,5	373,5	305,0	m <sup>2</sup>

### Original state / not refurbished fraction of the envelope area

#### U-values of the original state

	Building stock model - state indicators										
Roof	1,80	2,20	1,14	0,69	0,30	2,86	1,65	0,97	0,69	0,30	W/(m <sup>2</sup> K)
Wall	1,47	1,33	1,06	0,74	0,42	1,47	1,33	1,06	0,74	0,42	W/(m <sup>2</sup> K)
Window	4,63	4,69	2,70	2,69	1,97	4,90	4,90	2,80	2,80	2,00	W/(m <sup>2</sup> K)
Floor	2,00	2,00	0,98	0,77	0,33	1,87	1,30	0,98	0,77	0,33	W/(m <sup>2</sup> K)

### Refurbishments (averages)

#### Refurbished fraction of envelope areas

	Building stock model - state indicators										
Roof											
Wall	22%	25%				21%	25%				
Window	41%	42%				48%	47%				
Floor											
<i>Total (indicative)</i>	<i>14%</i>	<i>14%</i>				<i>10%</i>	<i>20%</i>				

#### U-values of the refurbished fraction (averages)

	Building stock model - state indicators										
Roof											W/(m <sup>2</sup> K)
Wall	0,82	0,81				0,82	0,81				W/(m <sup>2</sup> K)
Window	2,80	2,80				2,80	2,80				W/(m <sup>2</sup> K)
Floor											W/(m <sup>2</sup> K)

## Energy Need for Heating TABULA

### Utilisation

#### Utilisation dataset

	TABULA standard calculation procedure										
EU.SUH	EU.SUH	EU.SUH	EU.SUH	EU.SUH	EU.MUH	EU.MUH	EU.MUH	EU.MUH	EU.MUH	EU.MUH	
Internal temperature	20,0	20,0	20,0	20,0	20,0	20,0	20,0	20,0	20,0	20,0	°C
Reduction factor temp.	0,80	0,80	0,84	0,87	0,90	0,89	0,89	0,92	0,93	0,97	
Air exchange rate (use)	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	1/h
Internal heat sources	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00	W/m <sup>2</sup>
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	10,0	10,0	10,0	10,0	10,0	15,0	15,0	15,0	15,0	15,0	kWh/(m <sup>2</sup> a)

### Climate

#### Climate dataset

	TABULA standard calculation procedure										
Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	Climatic Zone (Italian)	
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	174	174	174	174	174	174	174	174	174	174	d/a
External temp. during HS	5,2	5,2	5,2	5,2	5,2	5,2	5,2	5,2	5,2	5,2	
Accum. temp. diff. ext. to int. temp.	2575	2575	2575	2575	2575	2575	2575	2575	2575	2575	Kd/a

### Envelope

#### Heat transfer by transmission related to surface area related to ref. floor area

	TABULA standard calculation procedure										
Heat transfer by transmission	565	803	553	336	184	2769	2197	2211	1651	698	W/K
related to surface area	1,54	1,63	1,07	0,77	0,42	1,25	1,32	1,11	0,87	0,44	W/(m <sup>2</sup> K)
related to ref. floor area	4,91	5,14	2,78	1,96	1,06	2,68	2,67	2,03	1,69	0,84	W/(m <sup>2</sup> K)

### Annual energy balance building

	TABULA standard calculation procedure										
Transmission heat losses	242,9	254,0	144,4	105,0	58,7	147,8	147,7	115,0	97,0	50,3	kWh/(m <sup>2</sup> a)
Ventilation heat losses	21,0	21,0	22,1	22,8	21,2	23,5	23,5	24,0	24,3	22,8	kWh/(m <sup>2</sup> a)
Usable solar gains	-12,2	-12,2	-12,1	-12,1	-10,8	-8,4	-11,2	-9,5	-12,4	-11,3	kWh/(m <sup>2</sup> a)
Usable internal gains	-11,6	-11,6	-11,5	-11,5	-11,5	-11,8	-11,6	-11,7	-11,5	-11,6	kWh/(m <sup>2</sup> a)
Energy need for heating	240,1	251,1	142,8	104,2	57,5	151,2	148,4	117,8	97,4	50,3	kWh/(m <sup>2</sup> a)
recovered by vent. system											kWh/(m <sup>2</sup> a)
Net energy need for heating	240,1	251,1	142,8	104,2	57,5	151,2	148,4	117,8	97,4	50,3	kWh/(m <sup>2</sup> a)



Building Stock	<b>IT</b>	<b>Regional</b>	Residential building stock of Piedmont region, Italy	Year	2015
Details	Basic case - year 2015, POLITO model / Basic case - year 2015				

Annotations to this sheet

	1	2	3	4	5	6	7	8	9	10
Building type	SFH I	SFH II	SFH III	SFH IV	SFH V	MFH I	MFH II	MFH III	MFH IV	MFH V

**Total Building Stock**

		Building stock model - state indicators										Total
Number of buildings	10 <sup>0</sup>	282 311	126 380	90 070	45 725	16 029	28 089	59 370	37 014	11 941	4 249	701 178
Number of dwellings	10 <sup>0</sup>	282 311	126 623	90 115	45 672	16 018	447 257	595 148	442 545	179 116	55 066	2 279 871
Floor area national	10 <sup>6</sup> m <sup>2</sup>	32	20	18	8	3	29	49	40	12	4	214
Floor area TABULA	10 <sup>6</sup> m <sup>2</sup>	32	20	18	8	3	29	49	40	12	4	214

**Ventilation Systems with Heat Recovery**

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

**Heating Systems**

**Occurrences or Fractions of Produced Heat**

	Building stock model - state indicators											
1	Gas	B_NC	C	85%	75%	75%	81%	40%		73%		40%
2	Gas	B_C	C	15%	19%	25%	19%	53%		20%		53%
3	DH	TS	C		6%					7%		
4	El	HP_Air	C					7%				7%
5	Gas	B_NC	D					85%		75%	81%	
6	Gas	B_C	D					15%		25%	19%	
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
Sum				100%	100%	100%	100%	100%	100%	100%	100%	100%
thereof central				100%	100%	100%	100%	100%	100%			100%
decentral									100%	100%	100%	
Other Systems												

**DHW Systems**

**Occurrences or Fractions of Produced Heat**

	Building stock model - state indicators											
1	Gas	B_NC	C	85%	75%	75%	81%	40%				40%
2	Gas	B_C	C	15%	19%	25%	19%	53%				53%
3	DH	TS	C		6%							
4	El	HP_Air	C					7%				7%
5	Gas	B_NC	D					85%	80%	75%	81%	
6	Gas	B_C	D					15%	20%	25%	19%	
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
Sum				100%	100%	100%	100%	100%	100%	100%	100%	100%
thereof central				100%	100%	100%	100%	100%				100%
decentral									100%	100%	100%	
Other Systems												



Building Stock **IT Regional** Residential building stock of Piedmont region, Italy Year 2015

Details Basic case - year 2015, POLITO model / Basic case - year 2015

Annotations to this sheet

	1	2	3	4	5	6	7	8	9	10
Building type	SFH I	SFH II	SFH III	SFH IV	SFH V	MFH I	MFH II	MFH III	MFH IV	MFH V

**Heating Systems**

**Heat demand / heat generation**

TABULA standard calculation procedure

Energy need for heating	240,1	251,1	142,8	104,2	57,5	151,2	148,4	117,8	97,4	50,3	kWh/(m <sup>2</sup> a)
Net en. need for heating	240,1	251,1	142,8	104,2	57,5	151,2	148,4	117,8	97,4	50,3	kWh/(m <sup>2</sup> a)

Distribution + storage losses

TABULA system indicators

Central systems	C	53,1	46,7	13,7	13,7	1,6		29,0			2,0	kWh/(m <sup>2</sup> a)
Decentral systems	D						22,4		8,6	8,6		kWh/(m <sup>2</sup> a)

Auxiliary energy

TABULA system indicators

Ventil. systems (average)												kWh/(m <sup>2</sup> a)
Central systems	C	4,4	4,4	4,4	4,4	4,4		2,6			2,6	kWh/(m <sup>2</sup> a)
Decentral systems	D						1,6		1,6	1,6		kWh/(m <sup>2</sup> a)

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

TABULA system indicators

1	Gas	B NC	C	1,31	1,31	1,31	1,25	1,21		1,31		1,19
2	Gas	B C	C	1,14	1,14	1,14	1,14	1,12		1,14		1,12
3	DH	TS	C	1,02	1,02					1,02		
4	El	HP Air	C	0,49				0,49				0,47
5	Gas	B NC	D	1,27				1,27		1,27	1,27	
6	Gas	B C	D	1,14				1,14		1,14	1,14	
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

**Delivered Energy**

TABULA standard calculation procedure

1	Gas	B NC	C	385,2	391,4	205,7	147,3	71,6		233,1		62,2	kWh/(m <sup>2</sup> a)
2	Gas	B C	C	334,2	339,5	178,4	134,4	66,2		202,2		58,5	kWh/(m <sup>2</sup> a)
3	DH	TS	C	299,0	303,8					180,9			kWh/(m <sup>2</sup> a)
4	El	HP Air	C	143,6				29,0				24,6	kWh/(m <sup>2</sup> a)
5	Gas	B NC	D	304,8					220,4		160,5	134,6	kWh/(m <sup>2</sup> a)
6	Gas	B C	D	273,7					197,9		144,1	120,8	kWh/(m <sup>2</sup> a)
7													kWh/(m <sup>2</sup> a)
8													kWh/(m <sup>2</sup> a)
9													kWh/(m <sup>2</sup> a)
10													kWh/(m <sup>2</sup> a)
11													kWh/(m <sup>2</sup> a)
12													kWh/(m <sup>2</sup> a)
13													kWh/(m <sup>2</sup> a)
14													kWh/(m <sup>2</sup> a)
15													kWh/(m <sup>2</sup> a)
16													kWh/(m <sup>2</sup> a)
17													kWh/(m <sup>2</sup> a)
18													kWh/(m <sup>2</sup> a)
19													kWh/(m <sup>2</sup> a)
20													kWh/(m <sup>2</sup> a)

**Delivered Energy - weighted by frequencies**

TABULA standard calculation procedure

1	Gas	B NC	C	327,5	293,5	154,3	119,3	28,6		170,2		24,9	kWh/(m <sup>2</sup> a)
2	Gas	B C	C	50,1	64,5	44,6	25,5	35,1		40,4		31,0	kWh/(m <sup>2</sup> a)
3	DH	TS	C		18,2					12,7			kWh/(m <sup>2</sup> a)
4	El	HP Air	C					2,0				1,7	kWh/(m <sup>2</sup> a)
5	Gas	B NC	D						187,3		120,4	109,0	kWh/(m <sup>2</sup> a)
6	Gas	B C	D						29,7		36,0	23,0	kWh/(m <sup>2</sup> a)
7													kWh/(m <sup>2</sup> a)
8													kWh/(m <sup>2</sup> a)
9													kWh/(m <sup>2</sup> a)
10													kWh/(m <sup>2</sup> a)
11													kWh/(m <sup>2</sup> a)
12													kWh/(m <sup>2</sup> a)
13													kWh/(m <sup>2</sup> a)
14													kWh/(m <sup>2</sup> a)
15													kWh/(m <sup>2</sup> a)
16													kWh/(m <sup>2</sup> a)
17													kWh/(m <sup>2</sup> a)
18													kWh/(m <sup>2</sup> a)
19													kWh/(m <sup>2</sup> a)
20													kWh/(m <sup>2</sup> a)

**Electricity production by CHP**

TABULA standard calculation procedure

													kWh/(m <sup>2</sup> a)
													kWh/(m <sup>2</sup> a)
													kWh/(m <sup>2</sup> a)
													kWh/(m <sup>2</sup> a)



Building Stock	<b>IT</b> <b>Regional</b>	Residential building stock of Piedmont region, Italy	Year	2015
Details	Basic case - year 2015, POLITO model / Basic case - year 2015			

Annotations to this sheet

	1	2	3	4	5	6	7	8	9	10
Building type	SFH I	SFH II	SFH III	SFH IV	SFH V	MFH I	MFH II	MFH III	MFH IV	MFH V

**DHW Systems**

**Heat demand / heat generation**

TABULA standard calculation procedure

Energy need for DHW	10,0	10,0	10,0	10,0	10,0	15,0	15,0	15,0	15,0	15,0	kWh/(m <sup>2</sup> a)
Distribution + storage losses	TABULA system indicators										
Central systems	C	9,7	9,7	5,0	5,0	3,6					4,1 kWh/(m <sup>2</sup> a)
Decentral systems	D						9,3	1,9	5,0	5,0	kWh/(m <sup>2</sup> a)
Auxiliary energy	TABULA system indicators										
Central systems	C	1,4	1,4	1,4	1,4	1,4					2,8 kWh/(m <sup>2</sup> a)
Decentral systems	D						1,4		1,4	1,4	kWh/(m <sup>2</sup> a)

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

TABULA system indicators

1	Gas	B NC	C	1,35	1,35	1,35	1,32	1,22				1,22
2	Gas	B C	C	1,12	1,12	1,12	1,12	1,12				1,12
3	DH	TS	C	1,14	1,14							
4	El	HP Air	C	0,41				0,41				0,39
5	Gas	B NC	D	1,33					1,33	1,39	1,33	1,33
6	Gas	B C	D	1,12					1,12	1,24	1,12	1,12
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

**Delivered Energy**

TABULA standard calculation procedure

1	Gas	B NC	C	26,5	26,5	20,3	19,9	16,6				23,3 kWh/(m <sup>2</sup> a)
2	Gas	B C	C	22,0	22,0	16,8	16,8	15,3				21,4 kWh/(m <sup>2</sup> a)
3	DH	TS	C	22,4	22,4							kWh/(m <sup>2</sup> a)
4	El	HP Air	C	8,1				5,6				7,4 kWh/(m <sup>2</sup> a)
5	Gas	B NC	D	13,3					32,3	23,5	26,5	26,5 kWh/(m <sup>2</sup> a)
6	Gas	B C	D	11,2					27,2	20,9	22,4	22,4 kWh/(m <sup>2</sup> a)
7												kWh/(m <sup>2</sup> a)
8												kWh/(m <sup>2</sup> a)
9												kWh/(m <sup>2</sup> a)
10												kWh/(m <sup>2</sup> a)
11												kWh/(m <sup>2</sup> a)
12												kWh/(m <sup>2</sup> a)
13												kWh/(m <sup>2</sup> a)
14												kWh/(m <sup>2</sup> a)
15												kWh/(m <sup>2</sup> a)
16												kWh/(m <sup>2</sup> a)
17												kWh/(m <sup>2</sup> a)
18												kWh/(m <sup>2</sup> a)
19												kWh/(m <sup>2</sup> a)
20												kWh/(m <sup>2</sup> a)

**Delivered Energy - weighted by frequencies**

TABULA standard calculation procedure

1	Gas	B NC	C	22,6	19,9	15,2	16,1	6,7				9,3 kWh/(m <sup>2</sup> a)
2	Gas	B C	C	3,3	4,2	4,2	3,2	8,1				11,3 kWh/(m <sup>2</sup> a)
3	DH	TS	C		1,3							kWh/(m <sup>2</sup> a)
4	El	HP Air	C					0,4				0,5 kWh/(m <sup>2</sup> a)
5	Gas	B NC	D						27,5	18,8	19,9	21,5 kWh/(m <sup>2</sup> a)
6	Gas	B C	D						4,1	4,2	5,6	4,2 kWh/(m <sup>2</sup> a)
7												kWh/(m <sup>2</sup> a)
8												kWh/(m <sup>2</sup> a)
9												kWh/(m <sup>2</sup> a)
10												kWh/(m <sup>2</sup> a)
11												kWh/(m <sup>2</sup> a)
12												kWh/(m <sup>2</sup> a)
13												kWh/(m <sup>2</sup> a)
14												kWh/(m <sup>2</sup> a)
15												kWh/(m <sup>2</sup> a)
16												kWh/(m <sup>2</sup> a)
17												kWh/(m <sup>2</sup> a)
18												kWh/(m <sup>2</sup> a)
19												kWh/(m <sup>2</sup> a)
20												kWh/(m <sup>2</sup> a)

**Electricity production by CHP**

TABULA standard calculation procedure

												kWh/(m <sup>2</sup> a)
												kWh/(m <sup>2</sup> a)
												kWh/(m <sup>2</sup> a)
												kWh/(m <sup>2</sup> a)



Building Stock	<b>IT</b>	<b>Regional</b>	Residential building stock of Piedmont region, Italy	Year	2015
Details	Basic case - year 2015, POLITO model / Basic case - year 2015				

Annotations to this sheet

**Total Building Stock**

	1	2	3	4	5	6	7	8	9	10	Total	
Building type	SFH I	SFH II	SFH III	SFH IV	SFH V	MFH I	MFH II	MFH III	MFH IV	MFH V		
Floor area TABULA	10 <sup>6</sup> m <sup>2</sup>	32	20	18	8	3	29	49	40	12	4	214

All energy quantities in **GWh/a**

**Heating Systems**

Heat Demand for Heating		TABULA standard calculation procedure / projection to building stock										Total
Energy need for heating		7 794	4 961	2 561	818	160	4 396	7 242	4 744	1 134	177	33 987
Net en. need for heating		7 794	4 961	2 561	818	160	4 396	7 242	4 744	1 134	177	33 987
Produced heat		9 517	5 883	2 807	926	165	5 047	8 657	5 091	1 234	184	39 511

Delivered Energy TABULA		TABULA standard calculation procedure / projection to building stock										Sum		
1	Gas	B_NC	C	10 631	5 798	2 766	937	80	0	8 305	0	0	88	28 606
2	Gas	B_C	C	1 627	1 274	800	201	98	0	1 974	0	0	109	6 083
3	DH	TS	C	0	360	0	0	0	0	618	0	0	0	978
4	El	HP_Air	C	0	0	0	0	6	0	0	0	0	6	12
5	Gas	B_NC	D	0	0	0	0	0	5 446	0	4 847	1 269	0	11 563
6	Gas	B_C	D	0	0	0	0	0	863	0	1 451	267	0	2 581
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
	Not specified systems			0	0	0	0	0	0	0	0	0	0	0
	Auxiliary energy			143	87	79	35	12	47	128	65	19	9	623
	CHP electr. production													0

**DHW Systems**

Heat Demand for DHW		TABULA standard calculation procedure / projection to building stock										Total
Energy need for DHW		325	198	179	79	28	436	732	604	175	53	2 808
Produced heat		638	388	270	118	38	706	824	804	232	67	4 086

Delivered Energy TABULA		TABULA standard calculation procedure / projection to building stock										Total		
1	Gas	B_NC	C	732	393	273	126	19	0	0	0	0	33	1 576
2	Gas	B_C	C	107	83	76	25	23	0	0	0	0	40	353
3	DH	TS	C	0	27	0	0	0	0	0	0	0	0	27
4	El	HP_Air	C	0	0	0	0	1	0	0	0	0	2	3
5	Gas	B_NC	D	0	0	0	0	0	798	917	802	250	0	2 767
6	Gas	B_C	D	0	0	0	0	0	119	204	225	49	0	598
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
	Not specified systems			0	0	0	0	0	0	0	0	0	0	0
	Auxiliary energy			45	28	25	11	4	41	0	56	16	10	236
	CHP electr. production													0



Building Stock **IT Regional** Residential building stock of Piedmont region, Italy Year **2015**  
 Details Basic case - year 2015, POLITO model / Basic case - year 2015

Annotations to this sheet

Total Building Stoc	1	2	3	4	5	6	7	8	9	10	Total	
Building type	SFH I	SFH II	SFH III	SFH IV	SFH V	MFH I	MFH II	MFH III	MFH IV	MFH V		
Floor area TABULA	10 <sup>6</sup> m <sup>2</sup>	32	20	18	8	3	29	49	40	12	4	214

### Total Heat Need and Final Energy All energy quantities in **GWh/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 <sup>2</sup>
	Net heat need	Produced heat	Gas	Oil	Coal	Bio	DH	EI (incl. aux. en.)	Other / not specified	Sum final energy		
Net heat need	8 118	5 158	2 740	897	188	4 832	7 974	5 349	1 309	230	36 794	172
Produced heat	10 156	6 271	3 076	1 044	203	5 753	9 481	5 895	1 466	251	43 597	204
Gas	13 098	7 548	3 915	1 290	219	7 226	11 400	7 325	1 836	270	54 127	253
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	387	0	0	0	0	618	0	0	0	1 005	5
EI (incl. aux. en.)	188	115	104	46	23	88	128	121	35	27	874	4
Other / not specified	0	0	0	0	0	0	0	0	0	0	0	0
Sum final energy	13 287	8 050	4 019	1 335	242	7 314	12 146	7 446	1 871	297	56 006	262
CHP electr. production	0	0	0	0	0	0	0	0	0	0	0	0

### Separate individual model or total metered consumption

Separate individual model or total metered consumption	fuels related to gross calorific value (TABULA standard)					Individual building stock model					Total	per m <sup>2</sup>	
	Net heat need	Produced heat	Gas	Oil	Coal	Bio	DH	EI	Other / not specified	Sum final energy			CHP electr. production
Net heat need	10 739	6 363	3 681	913	206	5 819	7 413	4 735	1 022	153	41 044	192	
Produced heat	13 846	8 037	4 513	1 043	218	7 030	9 672	5 767	1 112	171	51 408	240	
Gas	1,00	17 831	9 619	5 759	1 290	232	8 803	11 698	7 191	1 396	171	63 990	299
Oil	1,00	0	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	0
Bio	1,00	0	0	0	0	0	0	0	0	0	0	0	0
DH		0	519	0	0	0	605	0	0	0	1 125	5	
EI		183	113	108	46	20	98	122	160	42	21	915	4
Other / not specified		0	0	0	0	0	0	0	0	0	0	0	0
Sum final energy		18 014	10 252	5 867	1 336	252	8 902	12 426	7 351	1 438	192	66 029	308
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	132%	123%	134%	102%	109%	120%	93%	89%	78%	67%	112%
Produced heat	136%	128%	147%	100%	107%	122%	102%	98%	76%	68%	118%
Gas	136%	127%	147%	100%	106%	122%	103%	98%	76%	64%	118%
Oil											
Coal											
Bio											
DH		134%					98%				112%
EI	97%	99%	104%	100%	89%	113%	96%	132%	121%	77%	105%
Other											
Sum final energy	136%	127%	146%	100%	104%	122%	102%	99%	77%	65%	118%
CHP electr. production											