Table 6-2. Energy use in buildings stocks in Finland, Sweden, Norway and Russia.

	Building stock		Average size		Final energy consumption		Final electric. consumption			Heating energy production %	Emissions	
	million units	Gross floor area million m ^{2 1)}	m²/ habitant 29)	Total floor area m²/ dwelling ²⁹⁾	Average use kWh/m²	Mtoe/TWh	TWh	Average use kWh/m² per year	TWh	check unit/m²	Energy CO₂ mtons	Electr. kgCO ₂ /m ²
Finland						25.2 ¹²⁾ / 291 ¹²⁾	84.6 ¹²⁾ 85.1 ³⁾		48.3 ¹²⁾	c-p 34, bf 33 ¹²⁾	56 ¹²⁾	
*Buildings 2)	1.5	449.5		309	310 33)				93.6 3)	dh, e, o-g 4)		49 22)
Residential 2)	1.3	282.1	39.6	81.5		5.7 3)/ 66.73)	22.43) 21.212)	150-200 ³²⁾	55.8 ³⁾ 17.6 ¹²⁾	dh, w-p, e ⁷⁾		
Detached ²⁾	1.1 (76 %)	156.4		109.5					33.73)	e, w-p, dh		
Attached ²⁾	0.08 (5 %)	33.2		71.3					5.83)	dh, e, o-g		
Block of flats 2)	0.06 (4 %)	92.5		56.5					16.3 3)	dh, e, o ²⁾		
*Dwellings ²⁾	2.87		36.3 ²⁸⁾	79.9				192 21)				
Sweden 12)						33 12)/ 384	132.6 12)		48.1 12)	bf 50, was 18 ¹²⁾	43.4 12)	
*Buildings					250 33)	/1439) 16034)			80 35)			17 22)
Residential	4 550 779					7 ¹²⁾ / 146.6 ₂₄₎	36 ¹²⁾ 70,9 ²⁴⁾		29.112)		3.3 24)	
Detached	2 014 394	301			158 ²⁶⁾ 113 ¹⁰⁾		heating electricity 16 ³⁶⁾	113 ¹⁰⁾	32.5 ¹⁰⁾ include attached	e 78, dh 13 ¹⁰⁾		
Attached					113 10)			10)		dh 78 ? 10)		
Block of flats	2 536 385	238 25)			155 ²⁵⁾	/37 25)	8 25)	144 ¹⁰⁾ 156 ²³⁾	25 10) 29 25)	dh 50, e 7 ¹⁰⁾		
*Dwellings			44.4 37)					183 21)		dh 57,e 24 ¹⁰⁾		
Norway 12)						20.4 12)/ 238	116.4 12)		3.9 12)	was 60, ot 18 ¹²⁾	38 12)	
*Buildings	3.9 20)				210 ³³⁾					e, w		
Residential	1.48 20)	230				3.912)/46	35.4 ¹²⁾		0.788 12)	e, w	5.6 ²⁰⁾	5 22)
Detached	1.28 20)				168 ³¹⁾	3.2 TWh				e, w		
Attached	0.49 20)				178 31)	1.2 TWh				e, w		
Block of flats	0.54 20)				162 ³¹⁾	1 TWh		160 ³⁰⁾		e, w		
*Dwellings	2.4 20)	230		70	170 ³¹⁾			194 21)		e 70, w 12		
Russia						459 12)/5338	927 12)		1437.1 ¹²⁾	g 67, c-p 20 12)	165312)	
*Buildings						144.5 ¹³⁾						
Residential	18.9 ¹⁹⁾ - 19.7	2850 ¹⁹⁾ - 3345 ¹⁴⁾				118 ¹²⁾ /1372 4628 ¹⁵⁾	131 ¹²⁾		677.6 ¹²⁾			
Detached	16.4	975										1
Block of flat 11)	3.2 11)	2 237						22916) 26627)				
*Dwellings	55.0 ¹⁹⁾	2853 ¹⁹⁾	23.4 14)	78.4 ¹⁴⁾								

- 1) Gross floor area 2012, calculated on the basis of outer surfaces
- 2) Data source Statistics Finland 2012. Dwelling and housing conditions. Building heating measured as from building units
- 3) Official Statistics Finland 2012 Energy sources for space heating by type of buildings, Electricity consumption
- 4) Calculation is based on gross floor area. District heating (dh), wood fuels (w) and electricity (e). Statistics Finland
- 5) Wood (w), stone (st),
- 6) the value is based on the sum of heating energy and household appliances
- 7) Calculation is based on the units of buildings. District heating (dh), wood (), electricity (e).
- 8) Private (pr), tenure (ten)
- 9) year 2013
- 10) Include space heating and warming the water in a year 2012 for the units (?) Rounding is made for the values that are presented for unit of buildings. Detached house values include also semi-detached houses, multi-dwelling apartment values consist block of flats and attached houses (Sahlin and Blomqvist 2013).
- 11) Year 2011? Lychkov et al 2012.
- 12) IEA country reports for the year 2011. Rounding is done. Emissions are from fuel combustion only. Energy consumption includes not marine an aviation transportation
- 13) World Bank Report 2008.
- 14) Calculations are based on the total dwelling floor space for the year 2012. Source: Russia in Figures 2013, Russia Federal Statistics.
- 15) Value is for the year 2005-2008. IEA Report of Russian energy indices 2011
- 16) for multifamily, high-rise buildings kWh/m2/year. Data source World Bank 2008.
- 17) calculated from TFC in mtoe with the equation (mtoe x 41868)/1000
- 18) calculated from TWh with the equation: (GWh x 3.6)/1000
- 19) Chapter III, calculated in a year 2002
- 20) Statistics Norway, year 2012, emissions for households only
- 21) Sbsa 2007, values are calculated for heating space and water for piobenchmark dwelling according to calculation procedure of each country. Degree days are not taken into account.
- 22) BPIE 2011.
- 23) Statistics Sweden 2006, space and water heating
- 24) year 2011, Final energy use in residential and service sector, Swedish energy agency and Statistics Sweden, temperature corrected 157.1 TWh
- 25) total floor area in m2 Atemp3, "15 proposals to accelerate energy efficiency in current apartment buildings"
- 26) Swedish energy agency, average value for year 2009
- 27) Paiho et al 2014, value is the sum of heating energy consumption and used electricity per square meter
- 28) Boverket 2005, Utility floor area per inhabitant
- 29) Year 2012. For dwellings in different building types, Total floor area is measured from the inner surfaces of its walls, floor area per habitant is measured from inner surfaces of the walls
- 30) Thyholt et al

- 31) Statistics Norway. 6 Average energy consumption by house type, year of construction and region. KWh utilized energy per household 1995,2001,2004,2006,2009. Average over the years.
- 32) European heat pump market and statistic report 2013
- 33) Energy efficiency trends in building in the EU, Lapillone et al 2012, Specific energy consumption per building
- 34) Wahlström et al 2013
- 35) Sahlin and Blomqvist 2013a
- 36) Energy in Sweden 2012, values are for the year 2010, electricity, heating energy use are for detached houses
- 37) year 2003, calculated from occupied dwelling stock
- 38)