

semester: 4

year 2008

EURO TOPTEN

Market Monitoring n.4 / Deliverable n. 12

**Refrigerator freestanding**

State	Energy/annum In kWh best	Energy/annum In kWh mean	Number of appliances	Efficiency Index average best	Efficiency Index average mean	EU Energy Class (A, A+ or A++)	Price (Eur) best
Austria	84	120	34	29,5	41,4	A++	479
Belgium	84	122	9	29,01	32,5	A+ or A++	280
CZ	84	131	4	0	0	A++	0
Finland	119	138	21	41	42	A+	399
France	113	157,7	27	29,8	39,8	A+	205
Hungary							
Italy	141	172	26	29,94	35,8	A+	565
Netherlands	84	119	19			A++ and A+	269
Poland	161	158	17	29,84	39,9	A++, A+	527
Switzerland	84	120,4	15	28	29,43	A++	465
TopTen association	84	118,66	23	28	29,48	A++	0

**Refrigerator in-build**

State	Energy/a (kWh) best	Energy/a (kWh) mean	EU Energy Class (A, A+ or A++)	Efficiency Index average best	Efficiency Index average mean	Number of appliances	Price (Eur) best
Austria	102	131,4	A++	28,6	41	56	1156
Belgium	117	205	A+ or A++	23,37	34,34	14	590
CZ	120	163	A+, A++	0	0	17	0
Finland	120	129	A+	36	42	17	249
France	124	175,15	A+ and A++	29,3	38,9	30	435
Hungary							
Italy	158	184	A+	32,4	37,1	25	944
Netherlands	87	125	A++ and A+			13	359
Poland	219	204	A+	40,67	41,52	9	330
Switzerland	128	164,84	A++	27	29,45	32	626
TopTen association	88	158,8	A++	27,1	29,42	40	0

**2 Door refrigerator freezer**

State	Energy/a (kWh) best	Energy/a (kWh) mean	Number of appliances	Efficiency Index average best	Efficiency Index average mean	EU Energy Class (A, A+ or A++)	Price (Eur) best
Austria	208	219	111	29,4	41,8	A++	999,99
Belgium	201	251	13	33,07	36,15	A+ or A++	460
CZ	193	261	53	29	32,5	A++, A+	
Finland	194	282	40	28	45	A++, A+	499
France	226	252,5	14	40	41,2	A+	280
Hungary							
Italy							
Netherlands	181	210	6			A++ and A+	279
Poland	212	280	54	29,9	40,3	A++, A+	625
Switzerland	186	196	3	29,7	29,87	A++	674
TopTen association	168	201,17	19	28,6	29,75	A++	0

**UpRight Freezer**

State	Energy/a (kWh) best	Energy/a (kWh) mean	Number of appliances	Efficiency Index best	Efficiency Index mean	EU Energy Class (A, A+ or A++)	Price (Eur) best
Austria	217	190	120	24,9	41,7	A++	1299
Belgium	135	200	24	29,37	32,57	A+ or A++	344
CZ	146	184	6	0	0	A++	0
Finland	186	287	16	33	45	A+	499
France	135	234,4	28	29,4	36,6	A+ and A++	320
Hungary							
Italy	200	221	17	29,6	32,9	A+	746
Netherlands	135	182	9			A++	369
Poland	186	252	23	39,37	41,49	A+	278
Switzerland	128	202,17	35	24,9	29,5	A++	470
TopTen association	128	188,48	45	24,9	29,62	A++	0

**Chest freezer**

State	Energy/a (kWh) best	Energy/a (kWh) mean	Number of appliances	Efficiency Index best	Efficiency Index mean	EU Energy Class (A, A+ or A++)	Price (Eur) best
Austria	182,5	237	31	28,5	37,1	A++	799
Belgium	161	212	12	27,55	33,99	A+ or A++	450
CZ	135	192	6	0	0	A+, A++	0
Finland	197	235	20	41	43	A+	349
France	167	219,9	17	28,5	39,6	A+ and A++	250
Hungary							
Italy	182	236,6	15	28	34,7	A+	635
Netherlands	141	168	12			A++	469
Poland	135	231	21	29,37	40,75	A++, A+	332
Switzerland	141	186,43	14	28,4	29,26	A++	315
TopTen association	134	175,6	36	27,4	29,11	A++	0

**Dishwasher freestanding**

State	Energy/cycle (kWh) best	Energy/cycle (kWh) mean	Number of appliances	EU-class washing (A-G)	EU-class drying (A-G)	Price (Eur) best	Price (Eur) mean
Austria	0,8	1,05	43	A	A	789	1479
CZ	0,8	0,98	9	A	A	0	0
France	0,8	1,044	16	A	A	460	705,8
Hungary							
Italy	0,8	0,87	12	A	A	638	784
Netherlands	0,8	0,9	12	A	A	349	711
Poland	0,7	0,92	25	A	A	434	555
Switzerland	0,8	0,978	7	A	A	750	838

**Dishwasher in**

State	Energy/cycle (kWh) best	Energy/cycle (kWh) mean	Number of appliances	EU-class washing (A-G)	EU-class drying (A-G)	Price (Eur) best	Price (Eur) mean
Austria	0,8	1,08	65	A	A	1369	1599
CZ	0,8	0,9	8	A	A	0	0

Finland	0,8	1	27	A	A		
France	0,8	1,04	22	A	A	540	783
Hungary							
Italy	0,92	0,95	16	A	A	920	1058
Netherlands	0,8	0,9	19	A	A	949	1063
Poland	0,8	0,91	51	A	A	765	667
Switzerland	0,8	1,047	65	A	A	687	1113

**Oven fre**

State	Energy/a - conventional (kWh) best	Energy/a - conventional (kWh) mean	Number of appliances	Energy/a - forced air convection (kWh) best	Energy/a - forced air convection (kWh) mean	Price (Eur) best	Price (Eur) mean
Austria	0,79	0,89	14	0,78	0,79	599,99	329,99
Switzerland	0,79	0,79	2	0,78	0,78	750	838

**Oven in**

State	Energy/a - conventional (kWh) best	Energy/a - conventional (kWh) mean	Number of appliances	Energy/a - forced air convection (kWh) best	Energy/a - forced air convection (kWh) mean	Price (Eur) best	Price (Eur) mean
Austria	0,72	0,89	71	0,78	0,89	849,95	2238
Switzerland	0,75	0,7634	26	0,76	0,784	822	1082

**Washing machine front**

State	Energy/cycle (kWh) best	Energy/cycle (kWh) mean	Number of appliances	washing performance class (A-G)	spin drying efficiency class (A-G)	water consumption (l) best	water consumption (l) mean
Austria	0,85	1,33	73	A	A	35	49
Belgium	0,8	1,07	21	A	A	39	45
CZ	0,85	1,16	9	A	A	37	47
Finland	1,02	1,02	18	A	A	37	47
Hungary							
Italy	0,66	0,85	22	A	A	7,8	8,8
Netherlands	0,9	1	10	A	A	37	43
Poland	0,76	0,92	24	A+, A	A, B	40	42,8
Switzerland	0,85	1,06	55	A	A	35	47

**Washing machine top**

State	Energy/cycle (kWh) best	Energy/cycle (kWh) mean	Number of appliances	washing performance class (A-G)	spin drying efficiency class	water consumption (l) best	water consumption (l) mean
Austria	0,85	0,95	16	A	B	39	48
Belgium	0,95	0,95	1	A	A	48	48
CZ	0,85	0,96	7	A	A,B	39	45,8
Finland	1,19	1,19	1	A	A	57	57
Hungary							
Italy	0,85	0,9	11	A	A	8,36	8,48
Netherlands	0,85	0,94	2	A	A	39	42
Poland	0,85	0,85	11	A	B, C	39	41,7
Switzerland	0,93	0,99	3	A	A	45	46

**Combined Washers - Driers**

State	Energy consumption (washing, spinning and dry best)	Energy consumption (washing, spinning and dry mean)	Number of appliances	Energy consumption (washing only) (kW) best	Energy consumption (washing only) (kW) mean	Energy consumption (spinning only) (kW) best	Energy consumption (spinning only) (kW) mean
Austria	3,4	5,44	13	0,85	1,22	0	0
CZ	3,4	5,2	4	0,85	1,3		

**Electric Tumble Driers**

State	Energy/cycle (kWh) best	Energy/cycle (kWh) mean	Number of appliances	Price (Eur) best	Price (Eur) mean
Austria	2	3,84	41	999	699
Belgium	2,2	2,2	2	850	925
CZ	2,2	2,3	3	0	0
Netherlands	1,4	1,8	3	299	632
Poland	2,4	2,4	2	973	947
Switzerland	1,83	2,204	11	1003	1860
TopTen association	1,83	2,185	12	0	0

**Air conditioner fix**

State	Energy/a (kWh) best	Energy/a (kWh) mean	Number of appliances	Energy Efficiency Ratio best	Energy Efficiency Ratio mean	Price (Eur) best	Price (Eur) mean
Austria	0	425	39	5,51	4,12	1697	1680
Switzerland	245	591,76	17	5,1	3,8	1009	2009

**Air conditioner mobile**

State	Energy/a (kWh) best	Energy/a (kWh) mean	Number of appliances	Energy Efficiency Ratio best	Energy Efficiency Ratio mean	Price (Eur) best	Price (Eur) mean
Austria	463	517	19	3,22	2,9	1990	0
Switzerland	462,5	508,5	7	3,22	3,22	1006	1110

**Coffee machine**

State	Energy/a (kWh) best	Energy/a (kWh) mean	Number of appliances	Standby (W) best	Standby (W) mean	Price (Eur) best	Price (Eur) mean
Switzerland	0	0	6	0	2	496	646

**Induction hub**

State	Energy/a (kWh) best	Energy/a (kWh) mean	Standby (W) best	Standby (W) mean	Number of appliances	Price (Eur) best	Price (Eur) mean
Switzerland			1	1	16	796	1253

**Humidifier**

State	Energy/a (kWh) best	Energy/a (kWh) mean	Number of appliances	Power on (W) best	Power on (W) mean	Price (Eur) best	Price (Eur) mean
Switzerland			17	0	22,176	30	116

**Inkjet-equipment**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
Austria	11	10	55	0,7	3	0,4	0,4
Switzerland	n.a.	n.a.	23	0,8	1,71	0,2	0,57
Top Ten Association	n.a.	n.a.	23	0,8	1,71	0,2	0,57

**Laser-Printer b/w**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
Austria	259	0	39	0	9	0	0
Switzerland	n.a.	n.a.	23	2	17	0	0,156
Top Ten Association	n.a.*	n.a.*	23	n.a.*	n.a.*	n.a.*	n.a.*

**Laser-Printer color**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
Austria	207	400	31	11	10	0	0
Czech Republic	207	378	12	3	13,5	0	0,3
Switzerland	n.a.	n.a.	14	3	13,114	0	0,268
Top Ten Association	n.a.*	n.a.*	14	n.a.*	n.a.*	n.a.*	n.a.*

**Laser MFD b/w**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
Austria	730	1280	96	0	0	3	0
Switzerland	n.a.	n.a.	28	1	16,051	0	0,195
Top Ten Association	n.a.*	n.a.*	28	1,4	16,064	0	0,205

**Laser MFD color**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
Austria	515	686,2	71	0	194,9	0	0,23
Switzerland	n.a.	n.a.	15	5	31,573	0	0,207
Top Ten Association	n.a.*	n.a.*	14	5	31,757	0	0,221

**Fax**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
Switzerland	n.a.	n.a.	13	1	1,915	n.a.	n.a.

**Monitor LCD only**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
Austria	21,4	53	98	0,4	1,7	0,4	1
Finland	17,3	36	54	0,4	1	0	0,6
France	20	38,05	39	0,6	1,49	0,46	0,87
Italy	17,3	30,7	28	0,6	0,87	0,4	0,65
Switzerland	17,3	37,43	54	0,4	1,107	0	0,613
Top Ten Association	17,3	38,93	55	0,4	1,1419	0	0,6135

**PC**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
<b>Notebooks</b>							

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
<b>DVD-recorder</b>							

State	Power on (W) best	Power on (W) mean	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean	Price (Eur) best
Austria	24	36	0,8	2	0	0	629
Switzerland	22	41,73	0,65	1,538			174

**TV (CRT)**

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
<b>TV (LCD)</b>							

State	Power on (W) best	Power on (W) mean	Number of appliances	Power sleep (W) best	Power sleep (W) mean	Power off (W) best	Power off (W) mean
Austria	109,9	171,1	19	0	0	0	0
Italy	103,8	123,23	51	0,36	0,8		
Netherlands	63	82	8	0,2	0,5	0,2	0,4
Switzerland	50	103,41	31	0,3	1,05		
France	50	114	38	0,2	0,81		

**CFL lamps**

State	Input power (W) best	Input power (W) mean	Number of appliances	EU-class efficiency A-G	rated lifetime (hours) best	rated lifetime (hours) mean	On-Off cycles best
Austria	24	5	155	A	12000	15000	0
Belgium	3	14,72	48	A	15000	14850	600000
CZ	3	16	24	A	15000	15000	600000
Finland	3	12	47	A	15000	15000	600000
France	5	15,25	44	A	15000	10068	60000
Italy	5	15,02	138	A	15000	12000	
Poland	3	13	49	A	15000	15000	600000
Switzerland	3	12,95	92	A / B	15000	12870	600000
TopTen association	3	13,46	41	A	15000	15000	600000

**Cars (3,5 - 4,4 m wide)**

State	Fuel type	Number of cars	Consumption (liters/100 km avg.) best	Consumption (liters/100 km avg.) mean	CO2 emission (g/km) best	CO2 emission (g/km) mean	Noise (db) best
Austria	Diesel/Petrol	43	4,1	5,5	108	130	0
Belgium	diesel + petrol	24	3,8	4,56	99	118,7	68
CZ	petrol/diesel	21	3,9	5	102	122	0
France	all	30	4,6	5,7	109	127,2	68
Hungary							
Italy	diesel	31	4,1	5,2	108	129	71
Netherlands	petrol, diesel	37	3,8	4,8	99	120	
Poland	diesel	31	4,1	5,2	108	129	71
Switzerland	petrol/diesel/natural gaz	31	3,8	4,73	84	110,5	68
TopTen association	petrol/diesel/natural gaz	30	3,8	4,73	99	117,4	68

**Cars (4,5 - 4,9 m. and over wide)**

State	Fuel Type	Number of cars	Consumption (liters/100 km avg.) best	Consumption (liters/100 km avg.) mean	CO2 emissions (g/km) best	CO2 emissions (g/km) mean	Noise (db) best
Austria	Diesel/Petrol	188	4,5	7,3	120	175	0
Belgium	diesel + petrol	26	4,3	5,33	104	139,8	70
France	all	60	3,8	5,05	99	128,21	68

Netherlands	hybrid, petrol, diesel	21	4,3	5,6	104	140	
Poland	petrol	40	4,3	6,1	104	156	71
Switzerland	petrol/diesel/natural gaz	40	4,3	5,92	101,4	143,9	66,7
TopTen association	petrol/diesel/natural gaz	41	4,3	5,93	104	150,94	66,7

#### Vacuum cleaners

State	Consumption (Wh per 10m2 according to EN60312) - best	Consumption (Wh per 10m2 according to EN60312) - average	Number of appliances	Average Power (W)
CZ	263	274	5	1720

#### Electric motors (0,09 - 0,12 kW)

State	Efficiency [%] best	Efficiency [%] mean	Number of appliances
Poland	69	59	31

#### Electric motors (0,18 - 0,37 kW)

State	Efficiency [%] best	Efficiency [%] mean	Number of appliances
Poland	77,5	66,5	58

#### Electric motors (0,55 - 1,1 kW)

State	Efficiency [%] best	Efficiency [%] mean	Number of appliances
Poland	84	76,5	87

#### Electric motors (1,5-3 kW)

Country	Efficiency [%] best	Efficiency [%] mean	Number of appliances
Poland	87,6	83,2	96

#### Electric motors (4-7,5 kW)

State	Efficiency [%] best	Efficiency [%] mean	Number of appliances
Poland	90,9	87,2	89

#### Circulation pumps\*

State	Energy/period in kWh best	Energy/period in kWh mean	Number of products	Efficiency index best	Efficiency index average mean	Energy label class (A, A+ or A++)	Price (Eur) best
Finland	64	154	4	0,2	0,275	A	-

#### Windows \*\*

State	E-value best kWh/m²/a	E-value mean kWh/m²/a	Number of products	U-value best W/m²K	U-value average mean W/m²K	Energy label class (A, A+ or A++)	Price (Eur) best
Finland	56	69	19	0,77	0,88	A	-

#### Gas-fired condensing boilers

State	Output (kW) best	Output (kW) mean	Number of appliances	Efficiency (W) best	Efficiency (W) mean	Energy & ecology efficiency index - best	Energy & ecology efficiency index - mean
Poland	24	24,65	2	106,4	105,4	4,16	3,34

#### Gas-fired boilers (standard)

State	Output (kW) best	Output (kW) mean	Number of appliances	Efficiency (W) best	Efficiency (W) mean	Energy & ecology efficiency index - best	Energy & ecology efficiency index - mean
Poland	26	27,5	2	92,7	92,7	4,65	4,33

#### Solid fuels-fired boilers (periodically loaded fuel)

State	Output (kW) best	Output (kW) mean	Number of appliances	Efficiency (W) best	Efficiency (W) mean	Energy & ecology efficiency index - best	Energy & ecology efficiency index - mean
Poland	25	24	10	91,6	85,75	4,1	2,89

#### Solid fuels-fired boilers (automatically loaded fuel)

State	Output (kW) best	Output (kW) mean	Number of appliances	Efficiency (W) best	Efficiency (W) mean	Energy & ecology efficiency index - best	Energy & ecology efficiency index - mean
Poland	26	24,63	4	83,9	80,85	3,31	2,1

#### SUMMARY

	2008	2007
Austria	1541	1020
Belgium	194	267
CZ	207	142
Finland	284	149
France	365	246
Hungary	0	101
Italy	298	491
Netherlands	171	247
Poland	825	363
Switzerland	652	893
TopTen association	495	246
All	5032	4165

Country	Number of categories covered				Number of appliances listed			
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 1	Semester 2	Semester 3	Semester 4
Austria	23	25	23	26	959	1104	1020	1541
Belgium	7	7	8	11	266	266	267	194
Czech Republic	11	12	13	14	110	168	142	207
Finland	0	3	6	13	0	67	149	284
France	9	10	10	12	213	247	246	365
Hungary	0	10	10	0	0	102	101	0
Italy	4	9	12	13	133	289	491	298
Netherlands	8	9	12	12	210	176	247	171
Poland	6	11	12	22	148	314	363	825
Switzerland	29	29	30	30	1091	843	893	652
Top Ten EU	9	9	10	14	244	251	246	495
<b>Total</b>	<b>106</b>	<b>134</b>	<b>146</b>	<b>167</b>	<b>3374</b>	<b>3822</b>	<b>4165</b>	<b>5032</b>

Semester 1	Semester 2	Semester 3	Semester 4
106	134	146	167
3374	3822	4165	5032

