

Model for European Light Sources Analysis (MELISA)

Version 0, 31 January 2015 [Work in Progress]

As presented during the 1st stakeholder meeting light sources, 5 February 2015, Brussels.

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If a version is disseminated with changed input/output data, this should be clearly mentioned and the author(s) of the changes should be clearly identified.

Comments:

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File Structure

The Excel file consists of the following sheets:

Sales	annual sales per lamp type (quantity in units; mainly input-data)
Life&Use	collects and centralizes other non-sales input data and directly derived data (life-times, operating hours, efficiencies, watts, lumens, prices, per unit).
	Copies of these data are usually provided on other sheets where these input-data are used.
Stock	installed lighting points in number of units in the EU-28
Lumen	installed lighting capacity in the EU-28 expressed in lumens
Power	installed lighting power in the EU-28 expressed in Watt
Hours	total number of operating hours per lamp type in the EU-28
Energy	total electric energy consumption by light sources in the EU-28
ConsMarket	total end-user acquisition costs for lamps, in Euro
IndustryRevenue	total industry revenue from lamp sales, in Euro
EnergyCost	total cost in Euro of electric energy consumed for lighting purposes
ConsExpense	total consumer expense in Euro for lighting (acquisition costs + running costs)

Light green fields are input fields
 All input is on sheets Sales and Life&Use

Sheet Structure (except for sheet Life&Use)

Years are organised in columns (current coverage is 1990-2013)

Lamp-types are organised in rows

Tables are to the left; graphs to the right

Top table: summary for major lamp-types over All Sectors

Second table: data for all considered lamp-subtypes over All Sectors

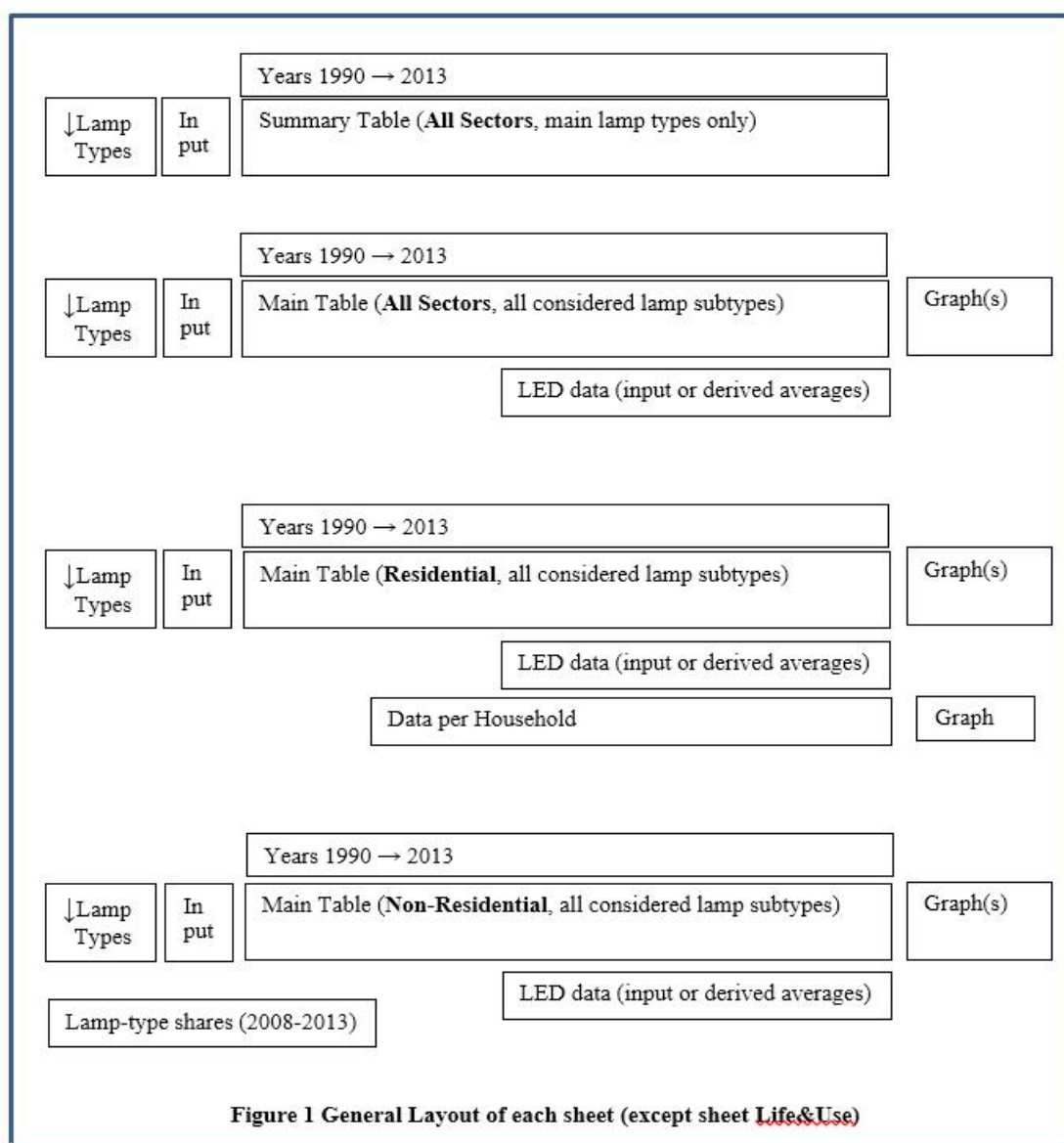
Third Table: data for the Residential Sector

Fourth Table: data for the Non-Residential Sector

For non-LED lamps, copies of input-data (taken from sheet Life&Use) or weighted average derived data are to the left of each table (data per lamp-type); for LED-lamps these data are below the table (data per year)

Below the Residential table there is often a table with Data per Household (hh)

Near the bottom of the sheet there is usually a table that gives the % share per lamptype for years 2008 and 2013.



On most sheets the values in the Residential and Non-Residential tables are computed from the input-data .

The values in the Main Table for All Sectors are then the sum of the Residential and Non-Residential contributions.

On the Sales sheet this is slightly different: the green fields are input; other fields are calculated.

The Summary Table contains the same data as the Main Table for All Sectors but it is a condensed copy, reporting only the totals-lines for main lamp-types.

Each sheet contains graphs for All Sectors, Residential and Non-Residential (totals per main lamp-type). There are always two graphs, a cumulative area graph and a line-graph.

In addition many sheets contain a graph with the data per household

Almost all sheets contain hidden columns. These are simply blank or reserved for future projections, which are now all zero. Hence: no need to unhide these columns.

The only exception is the sheet Sales: there are sales data also before 1990, to improve the stock calculations for years 1990 and following.

For additional information, see:

	<u>Report ref. 1</u>		<u>Report ref. 2</u>	
General	Task 2 report	par. 2.1		
Sales	Task 2 report	par. 2.2		
Life&Use (unit prices)	Task 2 report	par. 2.3		
ConsMarket	Task 2 report	par. 2.4		
IndustryRevenue	Task 2 report	par. 2.5		
Life&Use (lifetimes)	Task 2 report	par. 2.6	& Task 3 report	par.3.3
Life&Use (operating hours)	Task 2 report	par. 2.6	& Task 3 report	par.3.2
Stock	Task 2 report	par. 2.7		
Life&Use (power)	Task 3 report	par. 2.2	& Task 3 report	par.3.4.2
Life&Use (lumen)	Task 3 report	par. 2.2	& Task 3 report	par.3.5.2
Life&Use (efficacy)	Task 3 report	par. 2.2	& Task 3 report	par.3.6.2
Lumen	Task 3 report	par. 2.4	& Task 3 report	par.3.5.3 and 3.5.4
Power	Task 3 report	par. 2.5	& Task 3 report	par.3.4.3 and 3.4.4
Hours	Task 3 report	par. 2.6	& Task 3 report	par.3.2.3 and 3.2.4
Energy	Task 3 report	par. 2.7	& Task 3 report	par.3.7
EnergyCost	Task 3 report	par. 2.8		
ConsExpense	Task 3 report	par. 2.9		
Reporting of MELISA data	Task 3 report	par.2.x		
Comparison of data with others	Task 3 report	par.3.x		

The Task reports are available on the website: <http://ecodesign-lightsources.eu/documents>

Prices and Costs:

All monetary information is in fixed 2010 euros (inflation corrected for years preceding 2010).

For years after 2010 a 4% escalation rate has been applied to electricity prices.

**EU-28 SALES
SUMMARY, All Sectors
Mln (10^6) units**

LFL (total)
CFL (total)
Tungsten-HL (total)
GLS (total)
HID (total)
LED (total)
GLS stock
Tungsten stock
TOTAL

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
269	266	267	269	272	276	283	290	296	309	318	325	329	345	362	376	380	385	389	387	390	387	372	344
51	54	61	72	84	99	112	127	138	148	154	160	165	171	197	282	381	493	545	589	567	514	422	342
88	110	137	168	184	201	213	226	239	253	268	282	297	311	326	352	377	433	514	603	650	678	726	772
1688	1678	1666	1655	1643	1631	1620	1609	1598	1587	1576	1565	1553	1542	1530	1519	1506	1490	1290	968	697	461	299	159
17	17	18	19	20	21	21	22	23	24	25	26	27	28	30	32	34	36	38	40	42	41	37	33
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	8	17	31
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	112	168	228	267
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	140	140	130
2112	2124	2149	2182	2202	2228	2249	2273	2295	2321	2341	2359	2371	2397	2445	2560	2677	2836	2777	2592	2354	2099	1889	1731

**EU-28 SALES
TOTAL, All Sectors
Mln (10^6) units**

LFL	T12
	T8 Halophosphor
	T8 tri-phosphor
	T5 new (14 - 80w) including Circular
	All others (including T5 old types 4 - 13w and Special FL)
CFL	LFL (total)
	Retrofit - CFLi
	Non-Retrofit - CFLni
TUNGSTEN (HL)	CFL (total)
	Single Ended, Mirrored (Low voltage) [M16,M25etc]
	Linear (High voltage) [R7s]
	LV Halogen Capsule [G4, GY6.35]
	HV Halogen Capsule [G9]
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.
	Tungsten-HL (total)
	Reflector
	GLS (Including clear/pearl, candles, coloured & decorative)
GLS	GLS (total)
	All Mercury Lamps (including mixed)
HID	All Sodium Lamps
	Metal Halide Lamps
	HID (total)
LED	LED Directional
	LED Non Directional
	LED (total)
	GLS stock
	Tungsten stock
TOTAL	

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
80	73	66	59	52	47	43	39	34	32	29	26	22	20	18	16	14	12	10	8	6	5	3	1
95	98	103	108	113	119	126	132	139	147	154	158	162	172	178	176	165	154	143	113	68	26	4	2
71	72	75	77	80	83	85	88	91	95	100	104	103	105	110	121	131	142	153	175	216	254	261	245
0	0	0	0	0	0	0	0	0	0	0	0	4	9	17	23	31	39	47	57	68	76	81	76
23	23	24	25	26	28	29	31	32	34	36	37	38	39	40	40	39	38	37	34	32	27	23	19
269	266	267	269	272	276	283	290	296	309	318	325	329	345	362	376	380	385	389	387	390	387	372	344
28	30	35	44	55	68	79	91	100	106	109	113	116	119	140	220	313	420	467	506	480	431	345	271
23	24	26	27	29	31	33	36	38	41	44	47	49	52	56	62	67	73	79	84	87	83	78	72
51	54	61	72	84	99	112	127	138	148	154	160	165	171	197	282	381	493	545	589	567	514	422	342
20	24	31	39	46	54	62	69	77	85	93	101	109	116	124	130	136	140	144	148	150	151	154	164
15	33	53	77	83	90	90	90	90	90	90	90	90	90	90	90	80	67	54	47	45	41	40	38
52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	53	52	49	45	42
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	23	47	60	70	70	70	70	67
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	27	81	141	172	196	244	303
0	0	0	1	2	5	9	14	20	26	32	39	46	53	60	69	82	101	122	144	162	172	174	158
88	110	137	168	184	201	213	226	239	253	268	282	297	311	326	352	377	433	514	603	650	678	726	772
173	172	171	168	165	163	161	160	158	157	155	153	151	149	146	144	140	134	115	94	72	61	54	36
1514	1505	1496	1486	1477	1468	1458	1449	1440	1431	1421	1412	1403	1393	1384	1375	1365	1356	1174	874	624	400	245	123
1688	1678	1666	1655	1643	1631	1620	1609	1598	1587	1576	1565	1553	1542	1530	1519	1506	1490	1290	968	697	461	299	159
8	8	8	9	9	9	9	9	9	9	9	9	8	8	8	7	7	6	6	5	5	4	3	2
7	7	8	8	8	8	8	8	9	9	9	10	11	11	11	12	13	14	16	16	15	14	14	14
2	2	2	3	3	4	4	5	5	6	7	7	8	9	11	12	14	15	17	19	22	23	20	16
17	17	18	19	20	21	21	22	23	24	25	26	27	28	30	32	34	36	38	40	42	41	37	33
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	11	18	41
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	6	13	41
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	8	17	31	82
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	112	168	228	267
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	140	140	130
2112	2124	2149	2182	2202	2228	2249	2273	2295	2321	2341	2359	2371	2397	2445	2560	2677	2836	2777	2592	2354	2099	1889	1731

EU-28 SALES ECO		Fraction Residential	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
RESIDENTIAL																										
Mln (10^6) units																										
LFL	T12	0.064	5	5	4	4	3	3	3	2	2	2	2	2	1	1	1	1	1	1	0	0	0	0	0	
	T8 Halophosphor	0.064	6	6	7	7	7	8	8	8	9	9	10	10	10	11	11	11	11	10	9	7	4	2	0	0
	T8 tri-phosphor	0.064	5	5	5	5	5	5	5	6	6	6	6	7	7	7	7	8	8	9	10	11	14	16	17	16
	T5 new (14 - 80w) including Circular	0.064	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	3	4	4	5	5	5
	All others (including T5 old types 4 - 13w and Special Fl.)	0.064	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	1	1
	LFL (total)		17	17	17	17	17	18	18	19	19	20	20	21	21	22	23	24	24	25	25	25	25	25	25	24
CFL	Retrofit - CFLi	0.600	17	18	21	27	33	41	47	55	60	64	66	68	69	71	84	132	188	252	280	304	288	259	207	162
	Non-Retrofit - CFLni	0.300	7	7	8	8	9	9	10	11	11	12	13	14	15	16	17	19	20	22	24	25	26	25	23	22
	CFL (total)		23	25	29	35	42	50	57	65	71	76	79	82	84	87	101	151	208	274	304	329	314	284	230	184
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	0.800	16	19	25	31	37	43	49	55	62	68	74	81	87	93	99	104	108	112	115	118	120	120	123	131
	Linear (High voltage) [R7s]	0.800	12	27	43	61	67	72	72	72	72	72	72	72	72	72	72	72	64	53	43	38	36	33	32	30
	LV Halogen Capsule [G4, GY6.35]	0.800	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	41	39	36	34
	HV Halogen Capsule [G9]	0.800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	19	37	48	56	56	56	56	53
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	0.800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	21	65	113	138	157	195	242
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.	0.800	0	0	0	0	2	4	7	11	16	21	26	31	37	42	48	55	66	80	98	115	129	138	139	127
	Tungsten-HL (total)		70	88	110	135	147	161	170	181	191	203	214	226	238	249	261	281	302	347	411	482	520	543	581	617
GLS	Reflector	0.800	138	138	136	135	132	130	129	128	127	126	124	122	121	119	117	115	112	107	92	75	58	49	43	29
	GLS (Including clear/pearl, candles, coloured & decorative)	0.800	1212	1204	1197	1189	1182	1174	1167	1159	1152	1144	1137	1129	1122	1115	1107	1100	1092	1085	940	700	500	320	196	99
	GLS (total)		1350	1342	1333	1324	1314	1305	1296	1287	1279	1270	1261	1252	1243	1234	1224	1215	1204	1192	1032	775	558	369	239	127
HID	All Mercury Lamps (including mixed)	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	All Sodium Lamps	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Metal Halide Lamps	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	HID (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LED	LED Directional		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	6	10	17	33
	LED Non Directional		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	6	13	34
	LED (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	8	15	30	68
	GLS stock		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	112	168	228	267	
	Tungsten stock		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	140	140	130	
	TOTAL		1461	1472	1489	1510	1520	1533	1542	1552	1560	1569	1575	1580	1585	1592	1609	1671	1739	1837	1773	1614	1425	1235	1104	1018

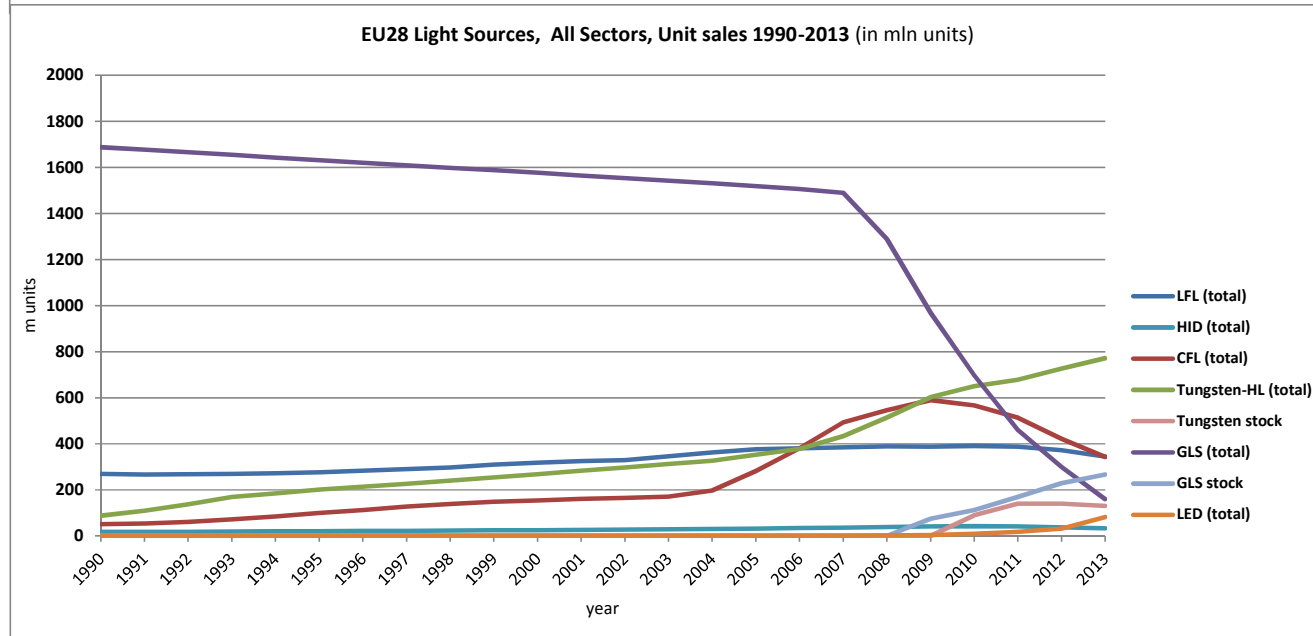
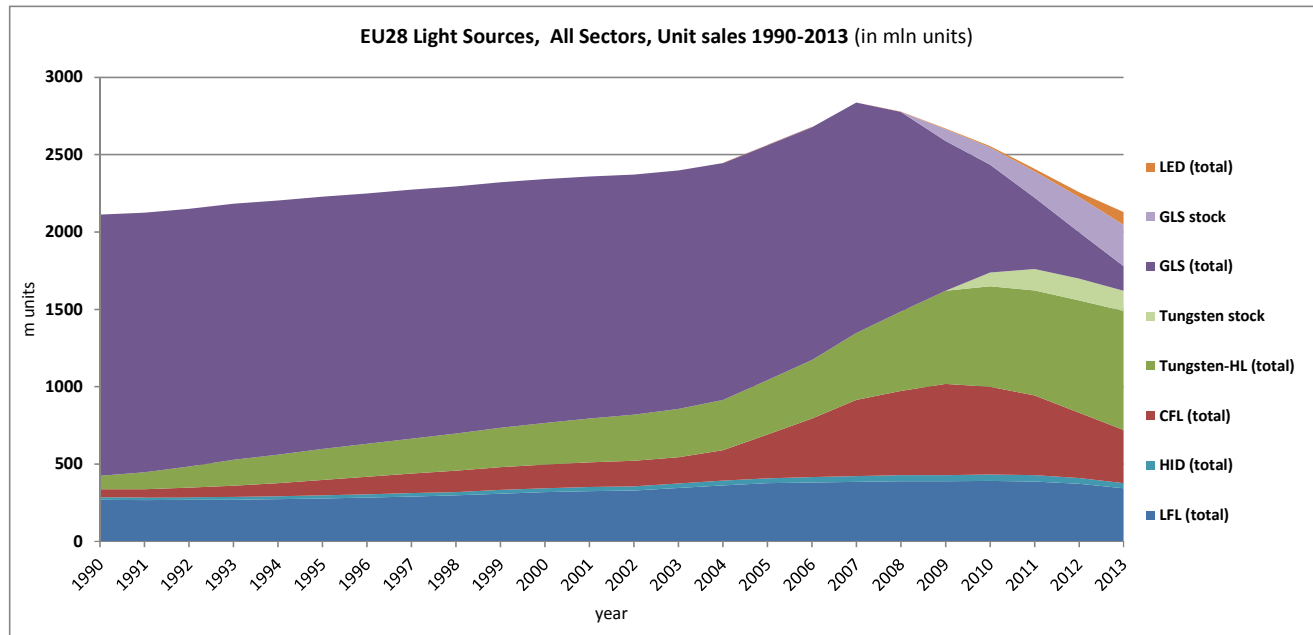
Check on Sales per Household
Number of Households (mln)
Number of dwellings (mln)
LFL per hh
CFL per hh
Tungsten per hh
GLS per hh
LED per hh
TOTAL lamps/hh
of which DLS

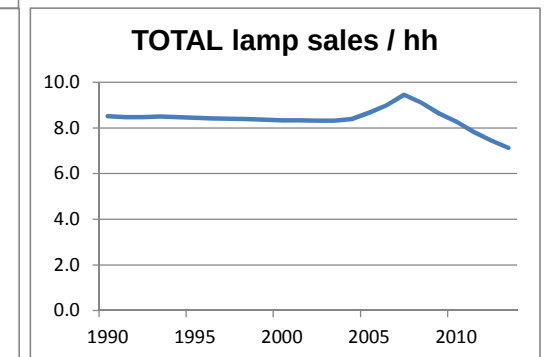
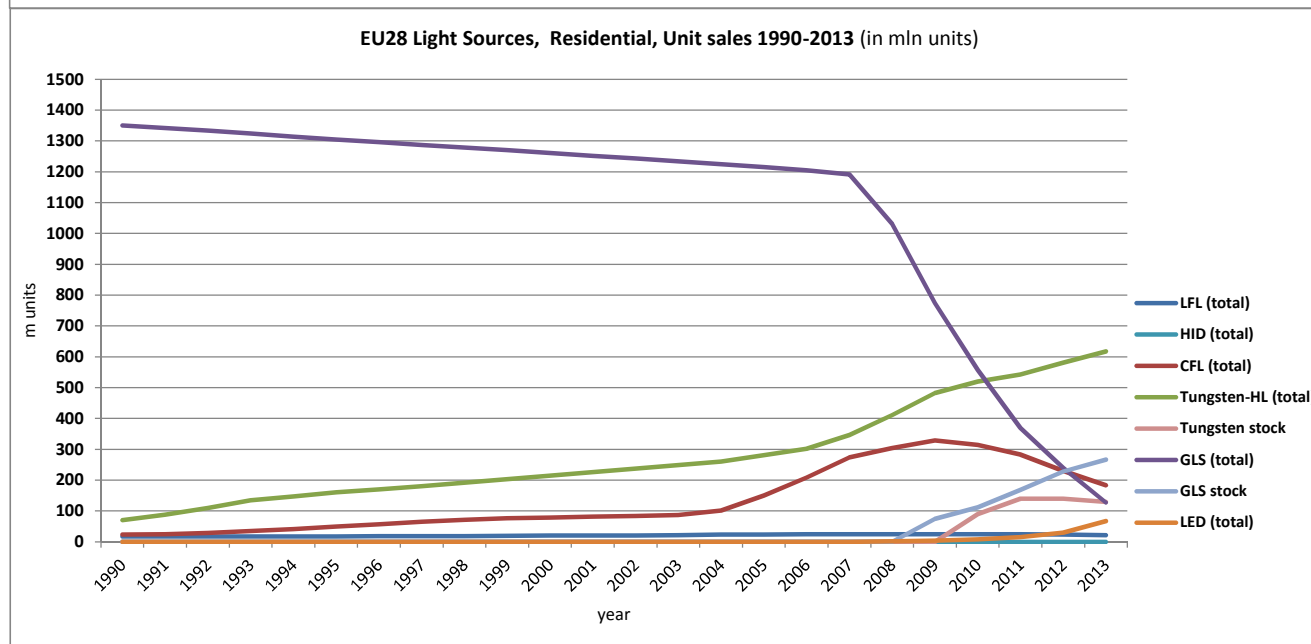
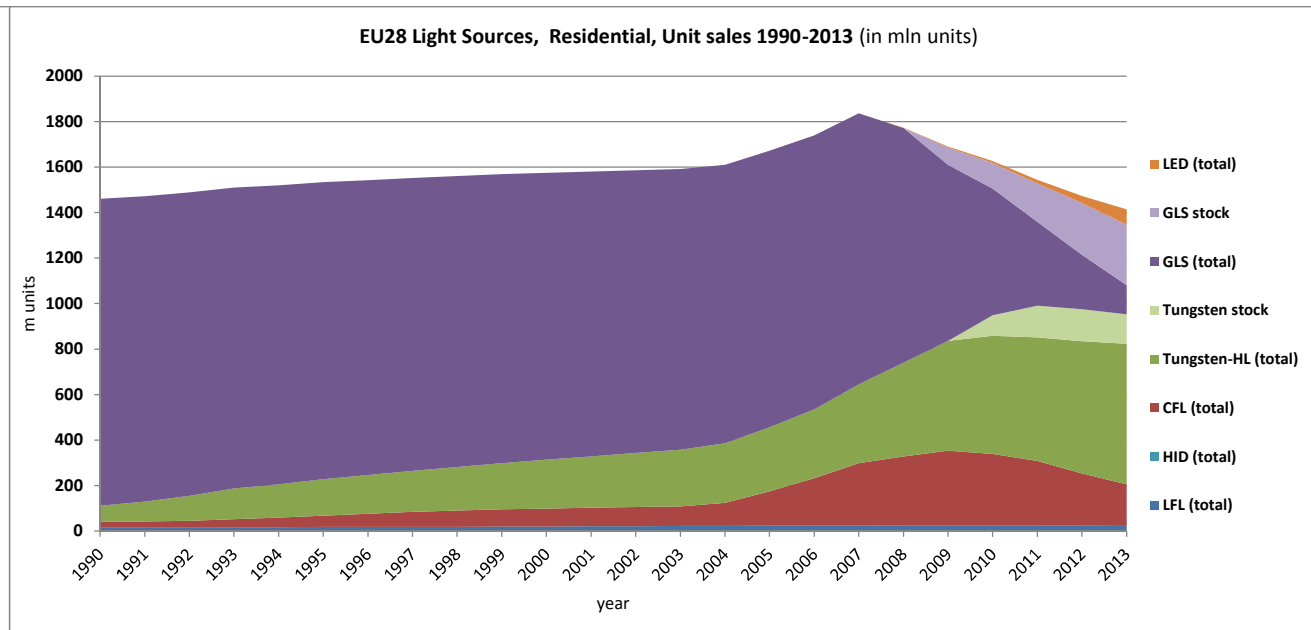
171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
212.8	215.2	217.7	220.1	222.6	225.1	226.9	228.7	230.6	232.4	234.2	235.2	236.1	237.0	237.9	238.8	239.7	240.7	241.6	242.5	243.4	244.4	245.3	246.2
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.8	1.1	1.4	1.6	1.7	1.6	1.4	1.2	0.9
0.4	0.5	0.6	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.8	2.1	2.5	3.1	3.5	3.6	3.8
7.9	7.7	7.6	7.5	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.5	6.4	6.3	6.2	6.1	5.3	4.3	3.4	2.7	2.4	2.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3
8.5	8.5	8.5	8.5	8.5	8.4	8.4	8.4	8.4	8.3	8.3	8.3	8.3	8.3	8.4	8.7	9.0	9.5	9.1	8.6	8.3	7.8	7.4	7.1
0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6

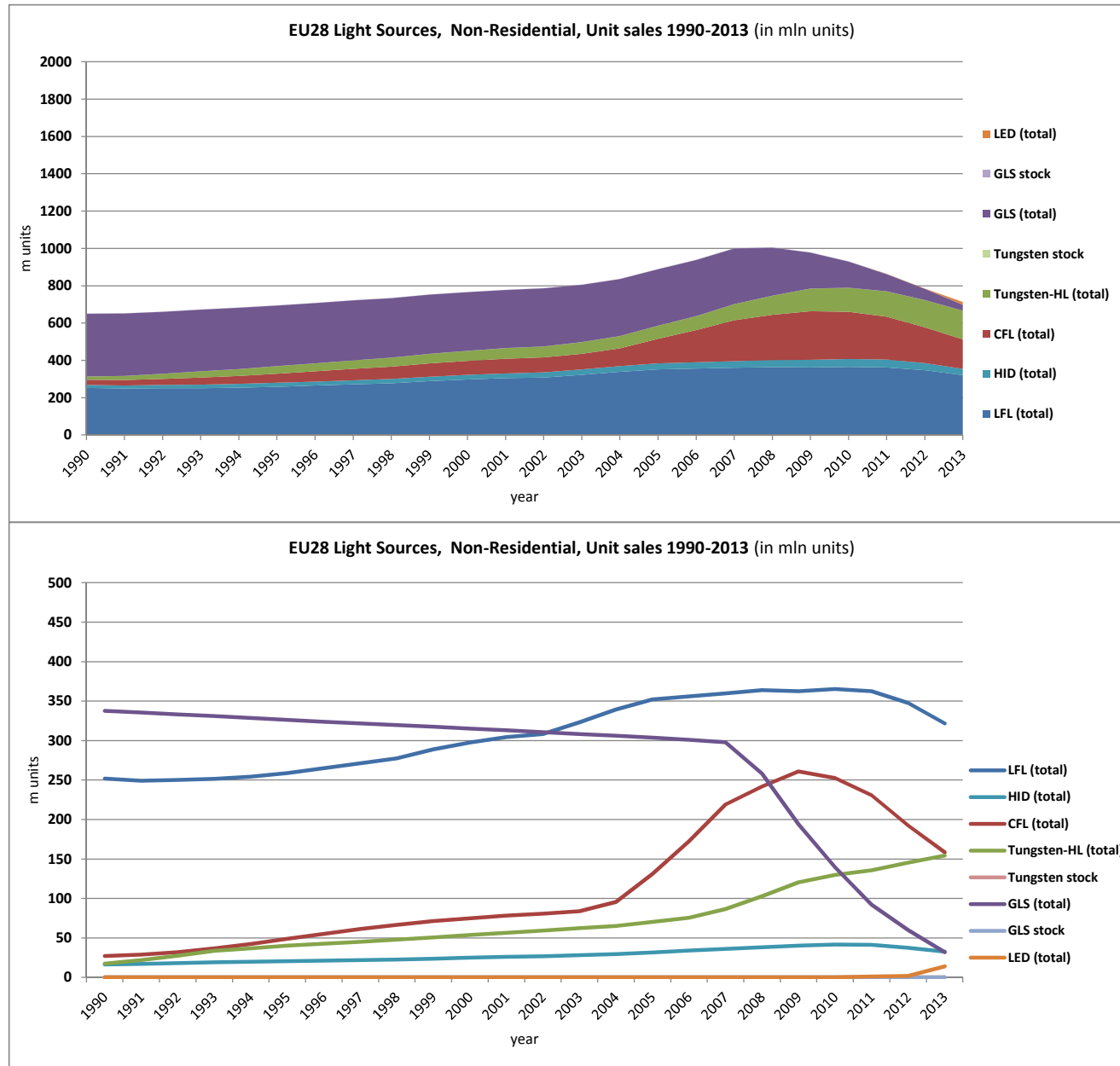
EU-28 SALES ECO NON-RESIDENTIAL Mln (10^6) units			Fraction Non- Residential	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	0.936		75	68	62	55	49	44	40	36	32	30	27	25	21	18	17	15	13	11	9	7	6	5	3	1
	T8 Halophosphor	0.936	89	91	96	101	106	111	118	124	130	138	144	148	152	161	166	165	155	144	134	106	63	24	4	2	
	T8 tri-phosphor	0.936	67	68	70	72	75	77	80	83	85	89	93	97	97	99	103	113	123	133	143	164	203	238	244	230	
	T5 new (14 - 80w) including Circular	0.936	0	0	0	0	0	0	0	0	0	0	0	0	4	8	16	22	29	37	44	53	64	71	76	71	
	All others (including T5 old types 4 - 13w and Special FL.)	0.936	21	22	23	24	25	26	27	29	30	31	33	35	36	37	38	38	37	35	34	32	30	25	21	18	
LFL (total)				252	249	250	251	254	259	265	271	277	289	298	304	308	323	339	352	356	360	364	363	365	362	348	322
CFL	Retrofit - CFLi	0.400	11	12	14	18	22	27	32	36	40	43	44	45	46	48	56	88	125	168	187	202	192	172	138	108	
	Non-Retrofit - CFLni	0.700	16	17	18	19	20	22	23	25	27	29	31	33	34	36	39	43	47	51	55	58	61	58	54	50	
	CFL (total)		27	29	32	37	42	49	55	61	67	72	75	78	81	84	96	131	172	219	242	261	253	231	192	158	
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	0.200	4	5	6	8	9	11	12	14	15	17	19	20	22	23	25	26	27	28	29	30	30	30	31	33	
	Linear (High voltage) [R7s]	0.200	3	7	11	15	17	18	18	18	18	18	18	18	18	18	18	16	13	11	9	9	8	8	8		
	LV Halogen Capsule [G4, GY6.35]	0.200	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	10	10	9	8		
	HV Halogen Capsule [G9]	0.200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	9	12	14	14	14	13		
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	0.200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	16	28	34	39	49	61	
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.	0.200	0	0	0	0	0	1	2	3	4	5	6	8	9	11	12	14	16	20	24	29	32	34	35	32	
	Tungsten-HL (total)		18	22	27	34	37	40	43	45	48	51	54	56	59	62	65	70	75	87	103	121	130	136	145	154	
GLS	Reflector	0.200	35	34	34	34	33	33	32	32	32	31	31	31	30	30	29	29	28	27	23	19	14	12	11	7	
	GLS (Including clear/pearl, candles, coloured & decorative)	0.200	303	301	299	297	295	294	292	290	288	286	284	282	281	279	277	275	273	271	235	175	125	80	49	25	
	GLS (total)		338	336	333	331	329	326	324	322	320	317	315	313	311	308	306	304	301	298	258	194	139	92	60	32	
HID	All Mercury Lamps (including mixed)	1.000	8	8	8	9	9	9	9	9	9	9	9	9	8	8	8	7	7	6	6	5	5	4	3	2	
	All Sodium Lamps	1.000	7	7	8	8	8	8	8	8	9	9	9	10	10	11	11	12	13	14	16	16	15	14	14		
	Metal Halide Lamps	1.000	2	2	2	3	3	4	4	5	5	6	7	7	8	9	11	12	14	15	17	19	22	23	20	16	
	HID (total)		17	17	18	19	20	21	21	22	23	24	25	26	27	28	30	32	34	36	38	40	42	41	37	33	
LED	LED Directional		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	7	
	LED Non Directional		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
	LED (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	14	
GLS stock				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tungsten stock				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL				651	652	661	672	682	695	708	721	734	752	766	778	786	806	836	889	939	999	1004	978	929	863	784	713

Division of EU-28 lamp sales (quantities) over the technology types

	year 2008				year 2013		
	All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
LFL	14%	1%	36%		20%	2%	45%
CFL	20%	17%	24%		20%	18%	22%
HL	18%	23%	10%		45%	61%	22%
GLS	46%	58%	26%		9%	13%	4%
HID	1%	0%	4%		2%	0%	5%
LED	0%	0%	0%		5%	7%	2%







	LFL						CFL			TUNGSTEN								GLS			HID				LED				
Life & Use Basic Data	T12	T8 Halophosphor	T8 tri-phosphor	T5 new (14 - 80w) including Circular	All others (including T5 old types 4 - 13w and	LFL	Retrofit - CFLi	Non-Retrofit - CFLni	CFL	Single Ended, Mirrored (Low voltage)	Linear (High voltage) [R7s]	LV Halogen Capsule [G4, GY6.35]	HV Halogen Capsule [G9]	Mains Halogen (Substitute for GLS and	Other Mains Halogen - PAR 16/20/25/30 Hard	Tungsten	Reflector	GLS (Including clear/pearl, candles,	GLS	All Mercury Lamps (including mixed)	All Sodium Lamps	Metal Halide Lamps	HID	Directional	Non Directional	LED	GLS stock	Tungsten stock	
Life (hours)	8000	8000	13000	20000	11000		6000	10000		2000	1000	2000	1500	1500	1500		1000	1000			8000	12000	8000		20000	20000		1000	1500
Operating (h/a) Residential	700	700	700	700	700		500	700		450	450	450	450	450	450		450	450			700	700	700		500	500		450	450
Operating (h/a) Non-Residential	2200	2200	2200	2200	2200		500	1600		450	450	450	450	450	450		450	450			4000	4000	4000		729	1500		450	450
Life (years) Residential	11.4	11.4	18.6	28.6	15.7		12.0	14.3		4.4	2.2	4.4	3.3	3.3	3.3		2.2	2.2			11.4	17.1	11.4		40.0	40.0		2.2	3.3
Life (years) Non-Residential	3.6	3.6	5.9	9.1	5.0		12.0	6.3		4.4	2.2	4.4	3.3	3.3	3.3		2.2	2.2			2.0	3.0	2.0		27.4	13.3		2.2	3.3
Watt <=2016	35	32	30	25	12		9.5	12		35	250	35	35	36	35		54	54			250	140	160		see table below			54	36
lm/W <=2016	70	75	80	91	86		55	55		14	12	14	12	12	12		9.5	9.5			40	95	82		see table below			9.5	14
lm <=2016	2450	2400	2400	2275	1032		523	633		490	3000	490	420	432	420		513	513			10000	13300	13120		500	500		513	504
gear/ballast/driver losses																													
LWF <=2016 (LWF_1)	1.25	1.25	1.10	1.10	1.20		1.00	1.10		1.06	1.00	1.06	1.00	1.00	1.00		1.00	1.00			1.20	1.20	1.20		1.10	1.10		1.00	1.03
Price/unit (2006-'10) Residential	10.10	10.10	10.10	9.50	9.50		5.26	5.26		3.79	3.16	3.16	3.79	2.63	14.21		1.37	0.84			20.40	32.40	32.40						
Price/unit (2006-'10) Non-Resid.	8.42	8.42	8.42	7.92	7.92		4.39	4.39		3.16	2.63	2.63	3.16	2.19	11.84		1.14	0.70			17.00	27.00	27.00						
electricity prices 2010 (euros/kWh)																													
Residential (euros/kWh)	0.170																												
Non-Residential (euros/kWh)	0.106																												
Escalation Rate (%/yr after 2010)	4.0%																												
(see below for year < 2010)																													
ManuFrac Residential	66%	66%	66%	66%	66%		38%	38%		38%	38%	38%	38%	38%	38%		38%	38%			66%	66%	66%		38%	38%			
ManuFrac Non-Residential	66%	66%	66%	66%	66%		38%	38%		38%	38%	38%	38%	38%	38%		38%	38%			66%	66%	66%		38%	38%			

electricity prices < 2010 (euros/kWh)																					
year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
Residential (euros/kWh)	0.178	0.188	0.195	0.188	0.188	0.181	0.176	0.173	0.168	0.163	0.162	0.158	0.156	0.155	0.153	0.153	0.158	0.167	0.169	0.167	
Non-Residential (euros/kWh)	0.119	0.119	0.118	0.112	0.110	0.103	0.095	0.092	0.088	0.085	0.084	0.083	0.079	0.083	0.082	0.087	0.097	0.099	0.105	0.107	

Fixed euros 2010
(inflation corrected)

	Additional Data for LEDs							
	Year			2009	2010	2011	2012	2013
LED General	lm / W (for sales in year)			25	30	40	60	80
	Watt @ 500 Lm			20.00	16.67	12.50	8.33	6.25
	Euro / Lumen			0.056	0.048	0.042	0.034	0.020
	(source: Lighting Europe 2013)							
LED-NDLS (incl. LFL replacement) Residential Use	Lumen to Fit (NDLS)			500	550	600	600	600
	lm / W (avg. NDLS stock)		40	25	28	35	49	68
	Watt to Fit (avg. NDLS stock)			20.00	19.37	17.03	12.13	8.83
	Operation Hours to Fit (NDLS)			500	500	500	500	500
	Euro for Lumen to fit (NDLS)			33.60	31.68	30.24	24.48	14.40
LED-NDLS (incl. LFL replacement) NON-Resid. Use	Lumen to Fit (NDLS)			1800	1800	1800	1800	1800
	lm / W (average for stock)		11	25	30	40	49	76
	Watt to Fit (avg. NDLS stock)			72.00	60.00	45.00	36.38	23.58
	Operation Hours to Fit (NDLS)			1500	1500	1500	1500	1500
	Euro for Lumen to fit (NDLS)			100.8	86.40	75.60	61.20	36.00
LED- DLS Residential Use	Lumen to Fit (DLS)			600	600	600	600	600
	lm / W (average for stock)		40	25	28	35	47	63
	Watt to Fit (avg. DLS stock)			24.00	21.15	17.34	12.83	9.55
	Operation Hours to Fit (DLS)			500	500	500	500	500
	Euro for Lumen to fit (DLS)			40.32	34.56	30.24	24.48	14.40
LED- DLS NON-Resid. Use	Lumen to Fit (DLS)			600	600	600	600	600
	lm / W (average for stock)		18	25	30	40	53	74
	Watt to Fit (avg. DLS stock)			24.00	20.00	15.00	11.33	8.08
	Operation Hours to Fit (DLS)			600	625	646	790	984
	Euro for Lumen to fit (DLS)			33.60	28.80	25.20	20.40	12.00
Year				2009	2010	2011	2012	2013

EU-28 STOCK SUMMARY, All Sectors Mln (10 ⁶) units		Life (years)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL (total)		6.7	1241	1267	1286	1299	1311	1328	1351	1381	1413	1453	1495	1539	1579	1626	1684	1748	1809	1864	1921	1979	2047	2111	2165	2209
CFL (total)		11.5	325	361	402	450	507	576	655	746	844	949	1056	1165	1274	1384	1513	1715	2002	2387	2810	3264	3682	4037	4293	4460
Tungsten-HL (total)		3.8	297	349	417	492	557	611	661	709	759	813	868	924	981	1038	1095	1164	1243	1363	1549	1804	2059	2264	2426	2569
GLS (total)		2.2	3731	3737	3719	3694	3668	3641	3616	3591	3567	3543	3519	3494	3469	3443	3417	3392	3364	3333	3114	2589	1952	1373	915	561
HID (total)		2.5	40	41	42	44	46	48	50	51	53	55	57	60	62	65	68	72	77	82	87	93	98	99	94	84
LED (total)		38.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	14	31	62	144
GLS stock		2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	187	297	421	532
Tungsten stock		3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	230	370	440	
TOTAL		5.5	5634	5754	5866	5979	6088	6204	6333	6478	6637	6812	6996	7182	7365	7556	7777	8091	8496	9028	9483	9809	10128	10442	10747	11001

EU-28 STOCK TOTAL, All Sectors Mln (10 ⁶) units		Life (years)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	5.4	321	320	309	288	263	239	217	198	181	165	150	137	122	108	96	85	76	67	58	50	42	34	27	20
	T8 Halophosphor	5.0	370	381	394	410	428	450	472	497	522	550	578	605	627	653	678	698	701	684	653	596	504	380	251	152
	T8 tri-phosphor	7.7	432	444	457	470	485	499	515	532	550	569	590	612	631	650	671	698	732	772	824	895	1003	1138	1270	1376
	T5 new (14 - 80w) including Circular	10.4	0	0	0	0	0	0	0	0	0	0	0	0	4	13	30	53	84	123	170	227	295	367	440	501
	All others (including T5 old types 4 - 13w and Special Fl.)	6.7	119	122	126	130	135	140	147	153	160	168	177	185	194	202	209	214	217	218	216	211	203	192	177	160
	LFL (total)		1241	1267	1286	1299	1311	1328	1351	1381	1413	1453	1495	1539	1579	1626	1684	1748	1809	1864	1921	1979	2047	2111	2165	2209
CFL	Retrofit - CFLi	12.0	197	219	244	278	321	376	440	515	597	683	770	858	946	1035	1141	1317	1575	1926	2314	2729	3109	3434	3669	3827
	Non-Retrofit - CFLni	9.7	128	142	158	172	186	200	215	231	247	266	286	307	328	349	372	398	428	460	496	535	573	604	624	633
	CFL (total)		325	361	402	450	507	576	655	746	844	949	1056	1165	1274	1384	1513	1715	2002	2387	2810	3264	3682	4037	4293	4460
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	4.4	64	78	98	121	149	181	214	248	282	317	352	387	422	457	491	523	554	581	605	625	642	654	665	683
	Linear (High voltage) [R7s]	2.2	29	51	90	137	172	190	199	200	200	200	200	200	200	200	200	200	190	167	138	116	104	96	91	87
	LV Halogen Capsule [G4, GY6.35]	4.4	204	219	229	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	233	234	233	229	222	211
	HV Halogen Capsule [G9]	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	33	80	133	184	216	230	233	230
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	30	111	250	403	536	659	800
	Other Mains Halogen - PAR 16/20/ 25/30 Hard glass reflectors, GU10 etc.	3.3	0	0	0	1	3	7	15	28	44	62	83	104	126	148	171	197	229	272	328	394	461	518	555	558
	Tungsten-HL (total)		297	349	417	492	557	611	661	709	759	813	868	924	981	1038	1095	1164	1243	1363	1549	1804	2059	2264	2426	2569
GLS	Reflector	2.2	383	384	381	377	372	366	361	357	354	351	347	343	338	334	329	324	317	306	280	239	192	154	131	104
	GLS (Including clear/pearl, candles, coloured & decorative)	2.2	3348	3353	3337	3317	3296	3275	3255	3234	3213	3192	3172	3151	3130	3110	3089	3068	3047	3027	2834	2350	1760	1219	784	457
	GLS (total)		3731	3737	3719	3694	3668	3641	3616	3591	3567	3543	3519	3494	3469	3443	3417	3392	3364	3333	3114	2589	1952	1373	915	561
HID	All Mercury Lamps (incl. mixed)	2.0	15	15	16	17	17	18	18	18	18	18	18	18	17	17	16	15	14	13	12	11	10	9	8	6
	All Sodium Lamps	3.0	22	22	22	23	23	24	24	25	25	26	27	28	30	31	32	34	37	40	43	46	47	45	44	42
	Metal Halide Lamps	2.0	3	3	4	5	6	7	8	9	10	11	13	14	16	17	20	23	26	29	32	36	41	44	43	37
	HID (total)		40	41	42	44	46	48	50	51	53	55	57	60	62	65	68	72	77	82	87	93	98	99	94	84
LED	Directional	39.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	10	20	39	79
	Non Directional	37.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	10	24	65
	LED (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	14	31	62	144
	GLS stock	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	187	297	421	532
	Tungsten stock	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	230	370	440	
	TOTAL		5634	5754	5866	5979	6088	6204	6333	6478	6637	6812	6996	7182	7365	7556	7777	8091	8496	9028	9483	9809	10128	10442	10747	11001

EU-28 STOCK RESIDENTIAL Mln (10 ⁶) units	
LFL	T12
	T8 Halophosphor
	T8 tri-phosphor
	T5 new (14 - 80w) including Circular
	All others (including T5 old types 4 - 13w and Special FL.)
LFL (total)	
CFL	Retrofit - CFLi
	Non-Retrofit - CFLni
CFL (total)	
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]
	Linear (High voltage) [R7s]
	LV Halogen Capsule [G4, GY6.35]
	HV Halogen Capsule [G9]
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.
	Tungsten-HL (total)
GLS	Reflector
	GLS (Including clear/pearl, candles, coloured & decorative)
GLS (total)	
HID	All Mercury Lamps (including mixed)
	All Sodium Lamps
	Metal Halide Lamps
HID (total)	
LED	LED Directional
	LED Non Directional
LED (total)	
GLS stock	
Tungsten stock	
TOTAL	

Life (years)
11.4
11.4
18.6
28.6
15.7
12.0
14.3
4.4
2.2
4.4
3.3
3.3
3.3
2.2
2.2
11.4
17.1
11.4
40.0
40.0
2.2
3.3

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
59	58	57	56	54	52	50	47	44	41	38	34	31	28	25	22	20	18	16	14	12	11	9	8
60	61	63	66	68	71	73	77	80	84	88	92	96	101	105	110	113	115	115	114	109	101	91	81
66	68	70	72	74	76	79	81	84	86	89	92	95	98	101	105	109	114	119	125	135	146	158	168
0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	5	8	11	15	19	24	29	34
18	19	20	20	21	22	22	23	24	25	26	27	28	30	31	32	33	34	35	35	36	35	35	34
203	206	210	213	217	220	224	228	232	236	241	246	251	257	264	272	280	288	296	303	311	317	322	325
118	131	146	167	193	225	264	309	358	410	462	515	568	621	684	790	945	1156	1388	1637	1865	2060	2201	2296
50	57	65	71	78	84	91	99	107	115	124	133	143	152	162	174	186	200	215	231	247	262	274	283
168	188	211	238	270	310	356	408	465	525	586	648	710	773	847	964	1131	1356	1604	1869	2113	2322	2475	2580
51	63	78	97	119	144	171	198	226	254	282	310	338	365	393	419	443	465	484	500	513	523	532	546
23	41	72	110	137	152	159	160	160	160	160	160	160	160	160	160	152	133	111	93	83	77	72	70
165	177	184	187	187	187	187	187	187	187	187	187	187	187	187	187	187	187	187	187	186	184	178	169
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	27	64	107	148	172	184	187	184
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	24	89	200	323	429	527	640
0	0	0	0	2	6	12	22	35	50	66	83	101	119	137	158	183	218	263	315	369	415	444	446
239	280	334	394	445	489	529	567	608	650	694	739	785	831	876	931	994	1091	1239	1443	1647	1811	1941	2055
306	307	305	302	297	293	289	286	283	281	278	274	271	267	263	259	254	245	224	191	154	124	105	83
2675	2682	2670	2653	2637	2620	2604	2587	2570	2554	2537	2521	2504	2488	2471	2454	2438	2421	2267	1880	1408	975	627	366
2981	2989	2975	2955	2934	2913	2893	2873	2854	2835	2815	2795	2775	2754	2734	2713	2691	2666	2491	2071	1561	1099	732	449
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	187	297	421	532
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	230	370	440
3590	3664	3731	3801	3866	3932	4001	4076	4158	4246	4336	4428	4521	4615	4721	4880	5097	5401	5632	5767	5923	6105	6321	6509

Check on Stock per Household	
Number of Households (mln)	
Number of dwellings (mln)	
LFL per hh	
CFL per hh	
Tungsten per hh	
GLS per hh	
LED per hh	
TOTAL lamps/hh	
of which DLS	

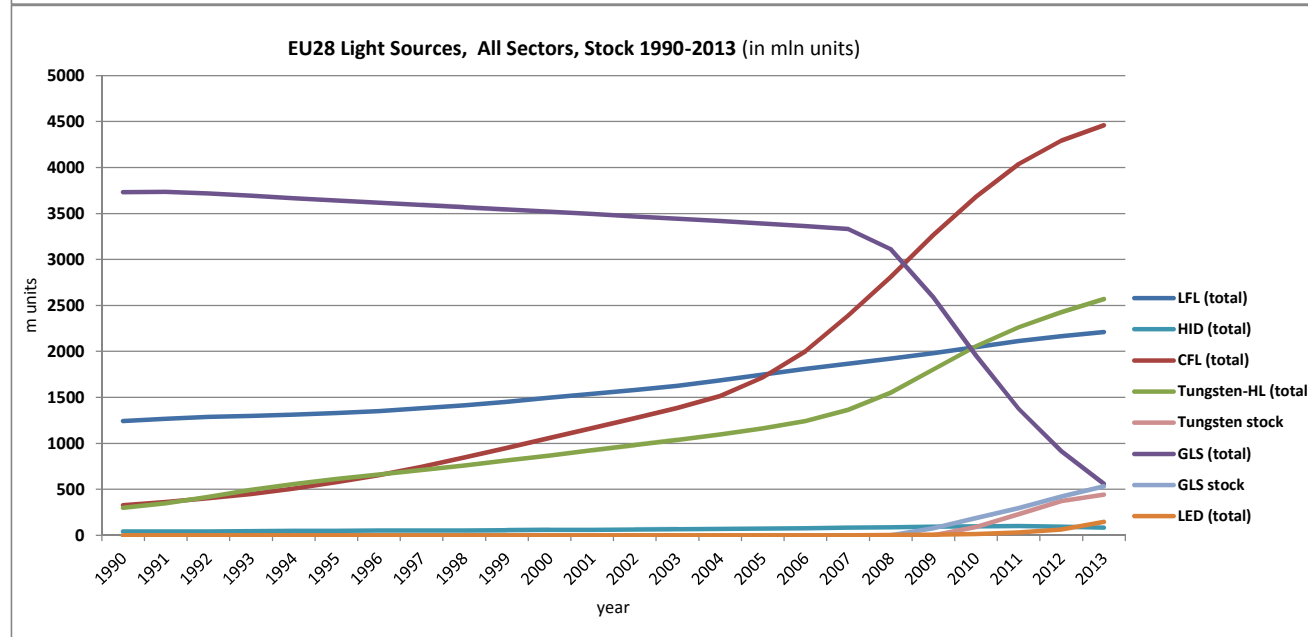
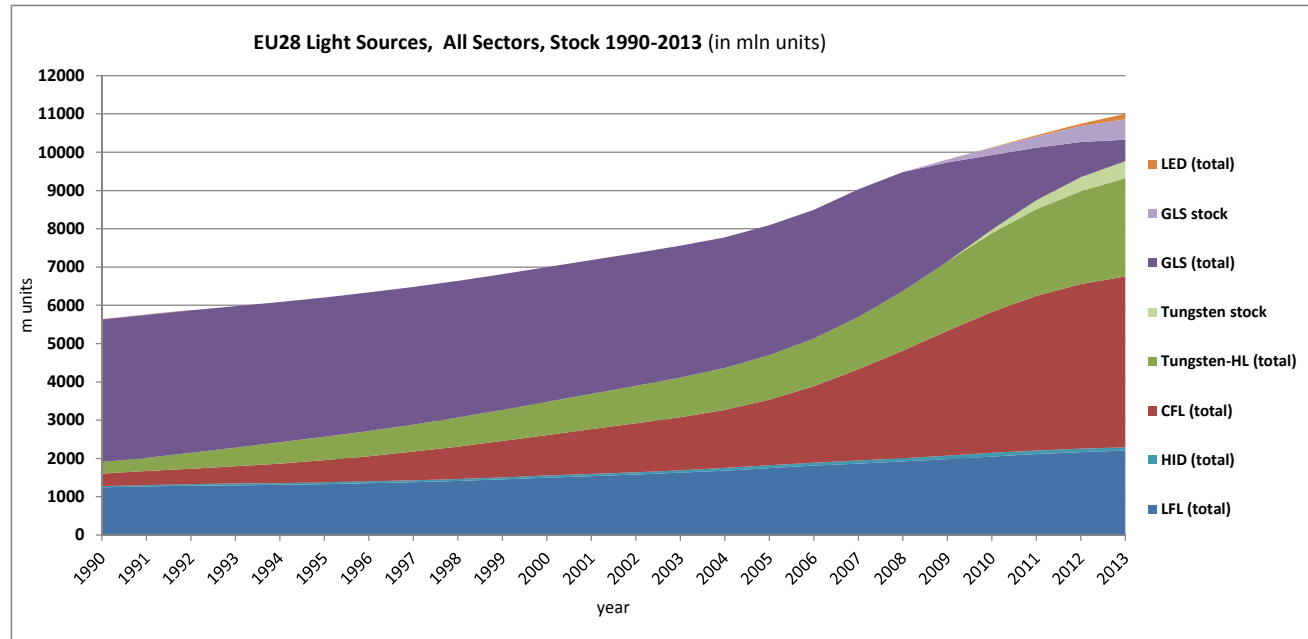
171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
212.8	215.2	217.7	220.1	222.6	225.1	226.9	228.7	230.6	232.4	234.2	235.2	236.1	237.0	237.9	238.8	239.7	240.7	241.6	242.5	243.4	244.4	245.3	246.2
1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6
1.0	1.1	1.2	1.3	1.5	1.7	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.0	4.4	5.0	5.9	7.0	8.2	9.6	10.8	11.8	12.5	13.0
1.4	1.6	1.9	2.2	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.1	4.3	4.6	4.8	5.1	5.6	6.4	7.4	8.8	10.4	11.7	12.6
17.4	17.2	16.9	16.6	16.3	16.0	15.8	15.6	15.3	15.1	14.9	14.7	14.6	14.4	14.2	14.1	13.9	13.7	12.8	11.0	8.9	7.1	5.8	4.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.6
20.9	21.1	21.2	21.4	21.5	21.7	21.9	22.1	22.4	22.7	23.0	23.4	23.7	24.1	24.6	25.3	26.4	27.8	28.9	29.5	30.2	31.0	32.0	32.8
2.1	2.1	2.2	2.2	2.3	2.4	2.6	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.1	4.3	4.6	4.8	5.0	5.2	5.3	5.5	5.7	5.8

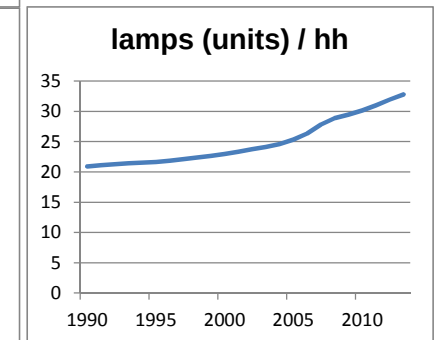
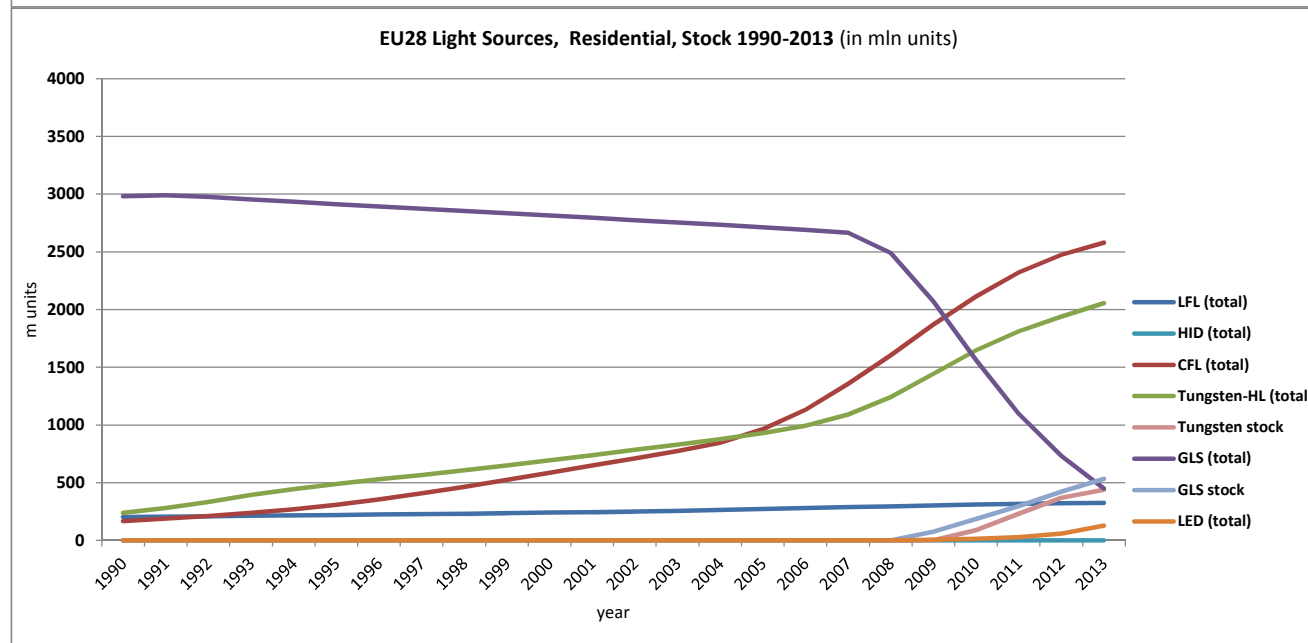
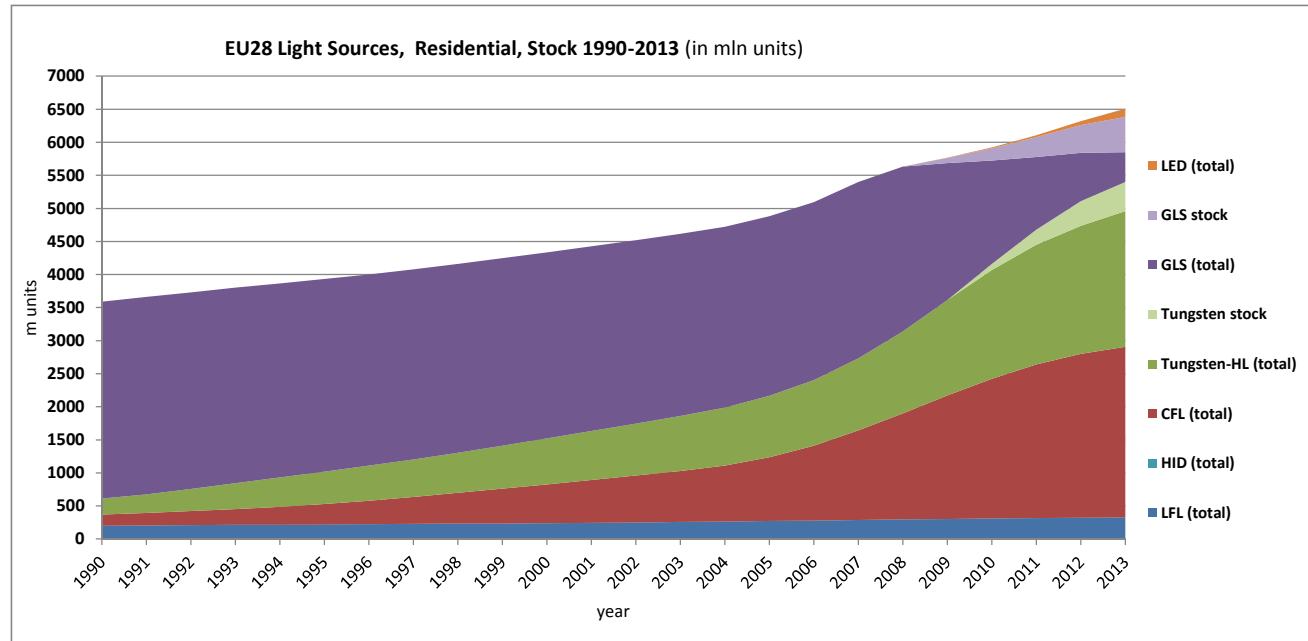
EU-28 STOCK NON-RESIDENTIAL Mln (10 ⁶) units		Life (years)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	3.6	262	261	251	232	209	187	168	151	137	124	113	102	92	81	71	63	56	49	42	35	29	24	18	12
	T8 Halophosphor	3.6	310	320	331	344	360	379	399	420	442	467	491	513	531	552	573	589	588	569	537	482	395	279	159	71
	T8 tri-phosphor	5.9	366	376	387	399	411	423	436	451	466	483	501	520	536	552	570	593	623	659	705	770	868	992	1112	1208
	T5 new (14 - 80w) including Circular	9.1	0	0	0	0	0	0	0	0	0	0	0	0	4	12	28	50	79	115	159	212	276	344	411	467
	All others (including T5 old types 4 - 13w and Special FL)	5.0	100	103	106	110	114	119	124	130	136	143	151	158	165	172	178	182	184	184	182	176	168	156	142	126
LFL (total)			1039	1060	1076	1086	1094	1108	1127	1153	1181	1216	1254	1293	1328	1369	1420	1477	1530	1576	1625	1676	1736	1794	1843	1884
CFL	Retrofit - CFLi	12.0	79	87	98	111	128	150	176	206	239	273	308	343	379	414	456	527	630	771	926	1092	1244	1373	1468	1531
	Non-Retrofit - CFLni	6.3	78	85	93	101	108	116	123	132	141	151	162	174	185	197	210	225	241	260	281	304	326	342	350	350
CFL (total)			157	173	191	212	236	266	299	338	379	424	470	517	564	611	666	751	871	1030	1207	1395	1569	1715	1817	1881
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	4.4	13	16	20	24	30	36	43	50	56	63	70	77	84	91	98	105	111	116	121	125	128	131	133	137
	Linear (High voltage) [R7s]	2.2	6	10	18	27	34	38	40	40	40	40	40	40	40	40	40	40	38	33	28	23	21	19	18	17
	LV Halogen Capsule [G4, GY6.35]	4.4	39	42	45	46	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	46	44	42
	HV Halogen Capsule [G9]	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	16	27	37	43	46	47	46
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	22	50	81	107	132	160
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	3.3	0	0	0	0	1	1	3	6	9	12	17	21	25	30	34	39	46	54	66	79	92	104	111	112
	Tungsten-HL (total)		58	68	82	98	111	122	132	142	152	163	174	185	196	208	219	233	249	273	310	361	412	453	485	514
GLS	Reflector	2.2	77	77	76	75	74	73	72	71	71	70	69	69	68	67	66	65	63	61	56	48	38	31	26	21
	GLS (Including clear/pearl, candles, coloured & decorative)	2.2	673	671	667	663	659	655	651	647	643	638	634	630	626	622	618	614	609	605	567	470	352	244	157	91
GLS (total)			750	748	744	739	734	728	723	718	713	709	704	699	694	689	683	678	673	667	623	518	390	275	183	112
HID	All Mercury Lamps (including mixed)	2.0	15	15	16	17	17	18	18	18	18	18	18	18	17	17	16	15	14	13	12	11	10	9	8	6
	All Sodium Lamps	3.0	22	22	22	23	23	24	24	25	25	26	27	28	30	31	32	34	37	40	43	46	47	45	44	42
	Metal Halide Lamps	2.0	3	3	4	5	6	7	8	9	10	11	13	14	16	17	20	23	26	29	32	36	41	44	43	37
HID (total)			40	41	42	44	46	48	50	51	53	55	57	60	62	65	68	72	77	82	87	93	98	99	94	84
LED	LED Directional	27.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	9
	LED Non Directional	13.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8
	LED (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	17
GLS stock		2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tungsten stock		3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL			2044	2090	2135	2178	2222	2272	2332	2402	2479	2566	2659	2754	2844	2941	3057	3211	3399	3628	3851	4042	4205	4337	4426	4492

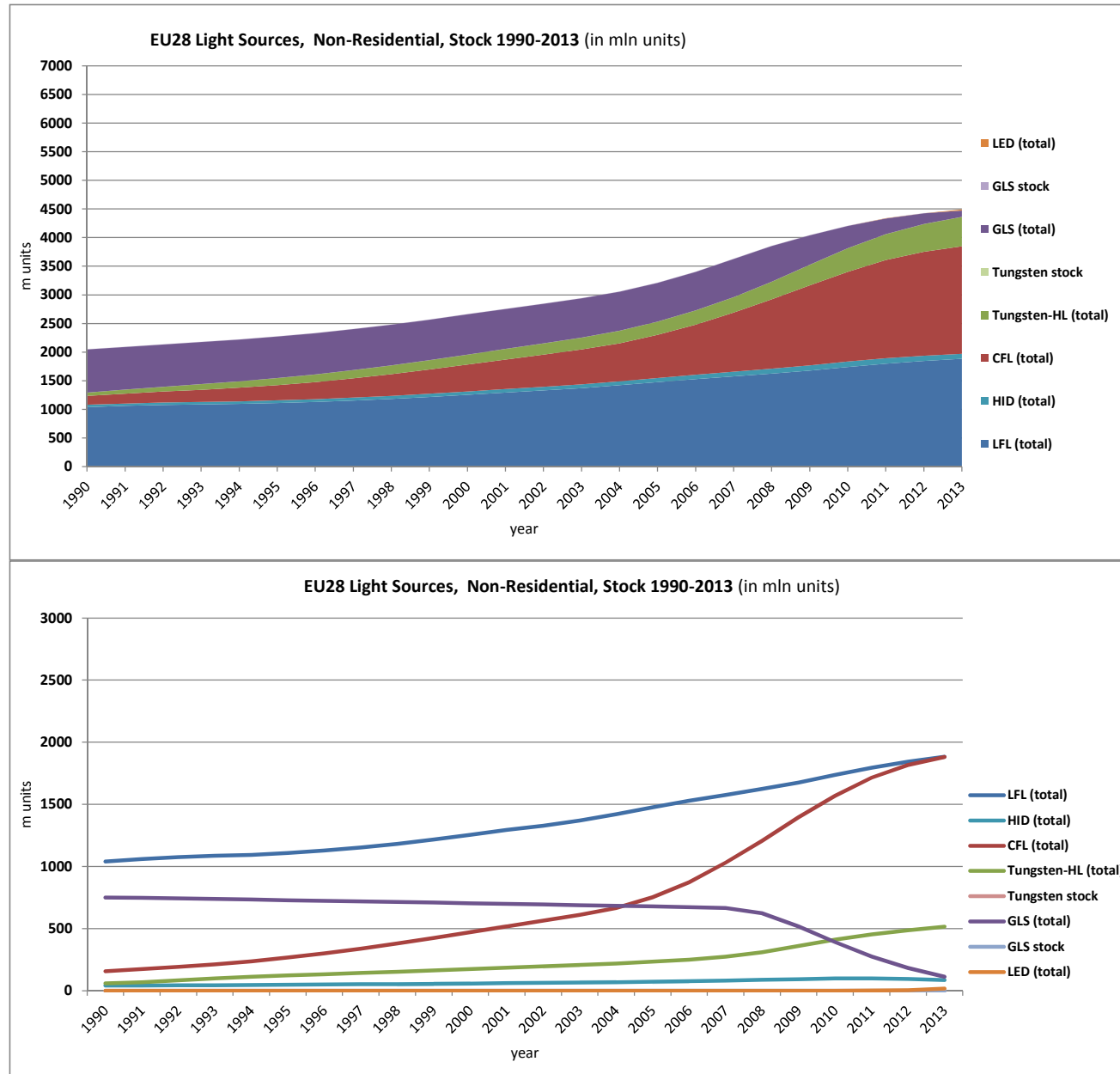
Division of EU-28 installed stock over the technology types

	year 2008				year 2013		
	All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
LFL	20%	5%	42%		20%	5%	42%
CFL	30%	28%	31%		41%	40%	42%
HL	16%	22%	8%		27%	38%	11%
GLS	33%	44%	16%		10%	15%	2%
HID	1%	0%	2%		1%	0%	2%
LED	0%	0%	0%		1%	2%	0%

Includes Tungsten stock
Includes GLS stock







EU-28 LUMEN SUMMARY, All Sectors Tera (10^12) Lumens		Lm/Unit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	LFL (total)	2251	2.8	2.9	2.9	3.0	3.0	3.0	3.1	3.1	3.2	3.3	3.4	3.4	3.5	3.6	3.8	3.9	4.0	4.2	4.3	4.4	4.6	4.8	4.9	5.0
	CFL (total)	545	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.1	1.3	1.5	1.8	2.0	2.2	2.3	2.4
	Tungsten-HL (total)	809	0.2	0.3	0.4	0.6	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.3	1.3	1.4
	GLS (total)	513	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.3	1.0	0.7	0.5	0.3
	HID (total)	12506	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.3	1.2	1.1
	LED (total)	636	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	GLS stock	513	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3
	Tungsten stock	504	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2
	TOTAL	1030	5.6	5.8	6.0	6.2	6.4	6.6	6.7	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.5	8.9	9.3	9.6	9.9	10.2	10.5	10.7	10.8

EU-28 LUMEN TOTAL, All Sectors Tera (10^12) Lumens		Lm/Unit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	2450	0.79	0.78	0.76	0.71	0.64	0.59	0.53	0.49	0.44	0.40	0.37	0.33	0.30	0.27	0.24	0.21	0.19	0.16	0.14	0.12	0.10	0.08	0.07	0.05
	T8 Halophosphor	2400	0.89	0.91	0.95	0.98	1.03	1.08	1.13	1.19	1.25	1.32	1.39	1.45	1.51	1.57	1.63	1.68	1.68	1.64	1.57	1.43	1.21	0.91	0.60	0.37
	T8 tri-phosphor	2400	1.04	1.07	1.10	1.13	1.16	1.20	1.24	1.28	1.32	1.37	1.42	1.47	1.52	1.56	1.61	1.67	1.76	1.85	1.98	2.15	2.41	2.73	3.05	3.30
	T5 new (14 - 80w) including Circular	2275	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.07	0.12	0.19	0.28	0.39	0.52	0.67	0.84	1.00	1.14
	All others (including T5 old types 4 - 13w and Special FL.)	1032	0.12	0.13	0.13	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.21	0.20	0.18	0.17
	LFL (total)		2.83	2.89	2.93	2.95	2.97	3.01	3.05	3.11	3.18	3.26	3.35	3.45	3.53	3.63	3.76	3.90	4.04	4.16	4.30	4.43	4.60	4.76	4.90	5.02
CFL	Retrofit - CFLi	523	0.10	0.11	0.13	0.15	0.17	0.20	0.23	0.27	0.31	0.36	0.40	0.45	0.49	0.54	0.60	0.69	0.82	1.01	1.21	1.43	1.62	1.79	1.92	2.00
	Non-Retrofit - CFLni	633	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.21	0.22	0.24	0.25	0.27	0.29	0.31	0.34	0.36	0.38	0.39	0.40
	CFL (total)		0.18	0.20	0.23	0.25	0.29	0.32	0.37	0.41	0.47	0.53	0.58	0.64	0.70	0.76	0.83	0.94	1.09	1.30	1.52	1.76	1.99	2.18	2.31	2.40
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	490	0.03	0.04	0.05	0.06	0.07	0.09	0.10	0.12	0.14	0.16	0.17	0.19	0.21	0.22	0.24	0.26	0.27	0.28	0.30	0.31	0.31	0.32	0.33	0.33
	Linear (High voltage) [R7s]	3000	0.09	0.15	0.27	0.41	0.52	0.57	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.57	0.50	0.42	0.35	0.31	0.29	0.27	0.26
	LV Halogen Capsule [G4, GY6.35]	490	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10
	HV Halogen Capsule [G9]	420	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.08	0.09	0.10	0.10	0.10
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	432	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.11	0.17	0.23	0.28	0.35
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	420	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.08	0.10	0.11	0.14	0.17	0.19	0.22	0.23	0.23
	Tungsten-HL (total)		0.22	0.30	0.43	0.59	0.70	0.78	0.82	0.85	0.87	0.90	0.92	0.95	0.97	1.00	1.03	1.06	1.07	1.06	1.07	1.12	1.20	1.27	1.32	1.38
GLS	Reflector	513	0.20	0.20	0.20	0.19	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16	0.14	0.12	0.10	0.08	0.07	0.05
	GLS (Including clear/pearl, candles, coloured & decorative)	513	1.72	1.72	1.71	1.70	1.69	1.68	1.67	1.66	1.65	1.64	1.63	1.62	1.61	1.60	1.58	1.57	1.56	1.55	1.45	1.21	0.90	0.63	0.40	0.23
	GLS (total)		1.91	1.92	1.91	1.89	1.88	1.87	1.85	1.84	1.83	1.82	1.81	1.79	1.78	1.77	1.75	1.74	1.73	1.71	1.60	1.33	1.00	0.70	0.47	0.29
HID	All Mercury Lamps (including mixed)	10000	0.15	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.06
	All Sodium Lamps	13300	0.29	0.29	0.30	0.30	0.31	0.32	0.33	0.33	0.34	0.35	0.36	0.37	0.39	0.41	0.43	0.45	0.49	0.53	0.57	0.61	0.62	0.60	0.58	0.56
	Metal Halide Lamps	13120	0.04	0.04	0.05	0.06	0.07	0.09	0.10	0.11	0.13	0.14	0.17	0.19	0.21	0.23	0.26	0.30	0.34	0.38	0.42	0.47	0.54	0.58	0.56	0.48
	HID (total)		0.49	0.49	0.51	0.53	0.56	0.58	0.60	0.62	0.64	0.67	0.70	0.74	0.77	0.80	0.85	0.90	0.97	1.04	1.12	1.19	1.26	1.28	1.22	1.10
LED	Directional	595	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.05
	Non Directional	694	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.05
	LED (total)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.10
	GLS stock	513	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10	0.15	0.22	0.27
	Tungsten stock	504	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.12	0.19	0.22
	TOTAL		5.63	5.80	6.00	6.22	6.40	6.56	6.70	6.84	6.99	7.17	7.37	7.57	7.76	7.96	8.21	8.54	8.90	9.27	9.60	9.88	10.19	10.47	10.66	10.77

Weighted Averages over Residential and Non-Residential.

All Sectors		year	2009	2010	2011	2012	2013
LED	DLS	lm to fit	600	600	600	600	600
LED	NDLS	lm to fit	500	550	654	645	739
LED	All	lm to fit	569	584	618	617	662

EU-28 LUMEN RESIDENTIAL Tera (10^12) Lumens		Lm/Unit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
			1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	2450	0.14	0.14	0.14	0.14	0.13	0.13	0.12	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02
	T8 Halophosphor	2400	0.14	0.15	0.15	0.16	0.16	0.17	0.18	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.28	0.27	0.26	0.24	0.22	0.20
	T8 tri-phosphor	2400	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.23	0.23	0.24	0.25	0.26	0.27	0.29	0.30	0.32	0.35	0.38	0.40
	T5 new (14 - 80w) including Circular	2275	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.08
	All others (including T5 old types 4 - 13w and Special FL.)	1032	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
LFL (total)			0.46	0.47	0.48	0.49	0.49	0.50	0.51	0.52	0.53	0.53	0.54	0.55	0.56	0.58	0.59	0.61	0.63	0.64	0.66	0.68	0.70	0.71	0.72	0.73
CFL	Retrofit - CFLi	523	0.06	0.07	0.08	0.09	0.10	0.12	0.14	0.16	0.19	0.21	0.24	0.27	0.30	0.32	0.36	0.41	0.49	0.60	0.73	0.86	0.97	1.08	1.15	1.20
	Non-Retrofit - CFLni	633	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.18
	CFL (total)		0.09	0.10	0.12	0.13	0.15	0.17	0.20	0.22	0.25	0.29	0.32	0.35	0.39	0.42	0.46	0.52	0.61	0.73	0.86	1.00	1.13	1.24	1.32	1.38
TUNGSTEN (HU)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	490	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.14	0.15	0.17	0.18	0.19	0.21	0.22	0.23	0.24	0.25	0.25	0.26	0.26	0.27
	Linear (High voltage) [R7s]	3000	0.07	0.12	0.22	0.33	0.41	0.46	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.46	0.40	0.33	0.28	0.25	0.23	0.22	0.21
	LV Halogen Capsule [G4, GY6.35]	490	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08
	HV Halogen Capsule [G9]	420	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.06	0.07	0.08	0.08	0.08
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	432	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.09	0.14	0.19	0.23	0.28
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	420	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.11	0.13	0.16	0.17	0.19	0.19
	Tungsten-HL (total)		0.18	0.24	0.34	0.47	0.56	0.62	0.66	0.68	0.70	0.72	0.74	0.76	0.78	0.80	0.82	0.85	0.85	0.85	0.85	0.90	0.96	1.01	1.06	1.10
GLS	Reflector	513	0.16	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.11	0.10	0.08	0.06	0.05	0.04
	GLS (Including clear/pearl, candles, coloured & decorative)	513	1.37	1.38	1.37	1.36	1.35	1.34	1.34	1.33	1.32	1.31	1.30	1.29	1.28	1.28	1.27	1.26	1.25	1.24	1.16	0.96	0.72	0.50	0.32	0.19
	GLS (total)		1.53	1.53	1.53	1.52	1.51	1.49	1.48	1.47	1.46	1.45	1.44	1.43	1.42	1.41	1.40	1.39	1.38	1.37	1.28	1.06	0.80	0.56	0.38	0.23
HID	All Mercury Lamps (including mixed)	10000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	All Sodium Lamps	13300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Metal Halide Lamps	13120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	HID (total)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED	Directional																					0.00	0.01	0.01	0.02	0.04
	Non Directional																					0.00	0.00	0.01	0.01	0.03
	LED (total)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.08
GLS stock		513	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10	0.15	0.22	0.27	
Tungsten stock		504	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.12	0.19	0.22	
TOTAL			2.26	2.35	2.47	2.60	2.71	2.79	2.85	2.89	2.94	2.99	3.05	3.10	3.15	3.21	3.28	3.37	3.47	3.59	3.66	3.68	3.74	3.81	3.92	4.01

The data below are linked copies from sheet Life&Use. Do NOT change here !

Residential		year	2009	2010	2011	2012	2013
LED	DLS	lm to fit	600	600	600	600	600
LED	NDLS	lm to fit	500	550	600	600	600

Lumens per Household
Number of Households (mln)
Number of dwellings (mln)
LFL lumens per hh
CFL lumens per hh
Tungsten lumens per hh
GLS lumens per hh
LED lumens per hh
TOTAL lumens/hh
of which DLS lumens

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
212.8	215.2	217.7	220.1	222.6	225.1	226.9	228.7	230.6	232.4	234.2	235.2	236.1	237.0	237.9	238.8	239.7	240.7	241.6	242.5	243.4	244.4	245.3	246.2
2702	2719	2733	2745	2755	2766	2784	2804	2825	2851	2879	2920	2962	3017	3085	3163	3242	3320	3398	3470	3541	3604	3651	3676
544	603	669	744	834	943	1070	1214	1370	1532	1694	1864	2032	2202	2399	2713	3163	3765	4423	5123	5763	6303	6691	6944
1024	1382	1963	2641	3137	3424	3590	3676	3748	3824	3902	3997	4093	4187	4281	4393	4416	4369	4385	4583	5117	5729	6291	6660
8911	8834	8694	8539	8384	8233	8109	7990	7874	7759	7645	7561	7477	7393	7310	7227	7141	7047	6560	5630	4568	3632	2992	2535
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	42	90	180	384
13181	13537	14058	14670	15111	15366	15555	15685	15816	15965	16120	16342	16564	16800	17075	17497	17962	18500	18765	18823	19031	19358	19805	20198
1060	1083	1110	1141	1180	1230	1297	1373	1457	1543	1632	1726	1821	1914	2006	2099	2194	2292	2373	2444	2502	2567	2646	2718

EU-28 LUMEN NON-RESIDENTIAL Tera (10^12) Lumens		Lm/Unit
LFL	T12	2450
	T8 Halophosphor	2400
	T8 tri-phosphor	2400
	T5 new (14 - 80w) including Circular	2275
	All others (including T5 old types 4 - 13w and Special FL.)	1032
LFL (total)		
CFL	Retrofit - CFLi	523
	Non-Retrofit - CFLni	633
	CFL (total)	
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	490
	Linear (High voltage) [R7s]	3000
	LV Halogen Capsule [G4, GY6.35]	490
	HV Halogen Capsule [G9]	420
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	432
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.	420
	Tungsten-HL (total)	
GLS	Reflector	513
	GLS (Including clear/pearl, candles, coloured & decorative)	513
	GLS (total)	
HID	All Mercury Lamps (including mixed)	10000
	All Sodium Lamps	13300
	Metal Halide Lamps	13120
	HID (total)	
LED	Directional	
	Non Directional	
	LED (total)	
	GLS stock	513
	Tungsten stock	504
	TOTAL	

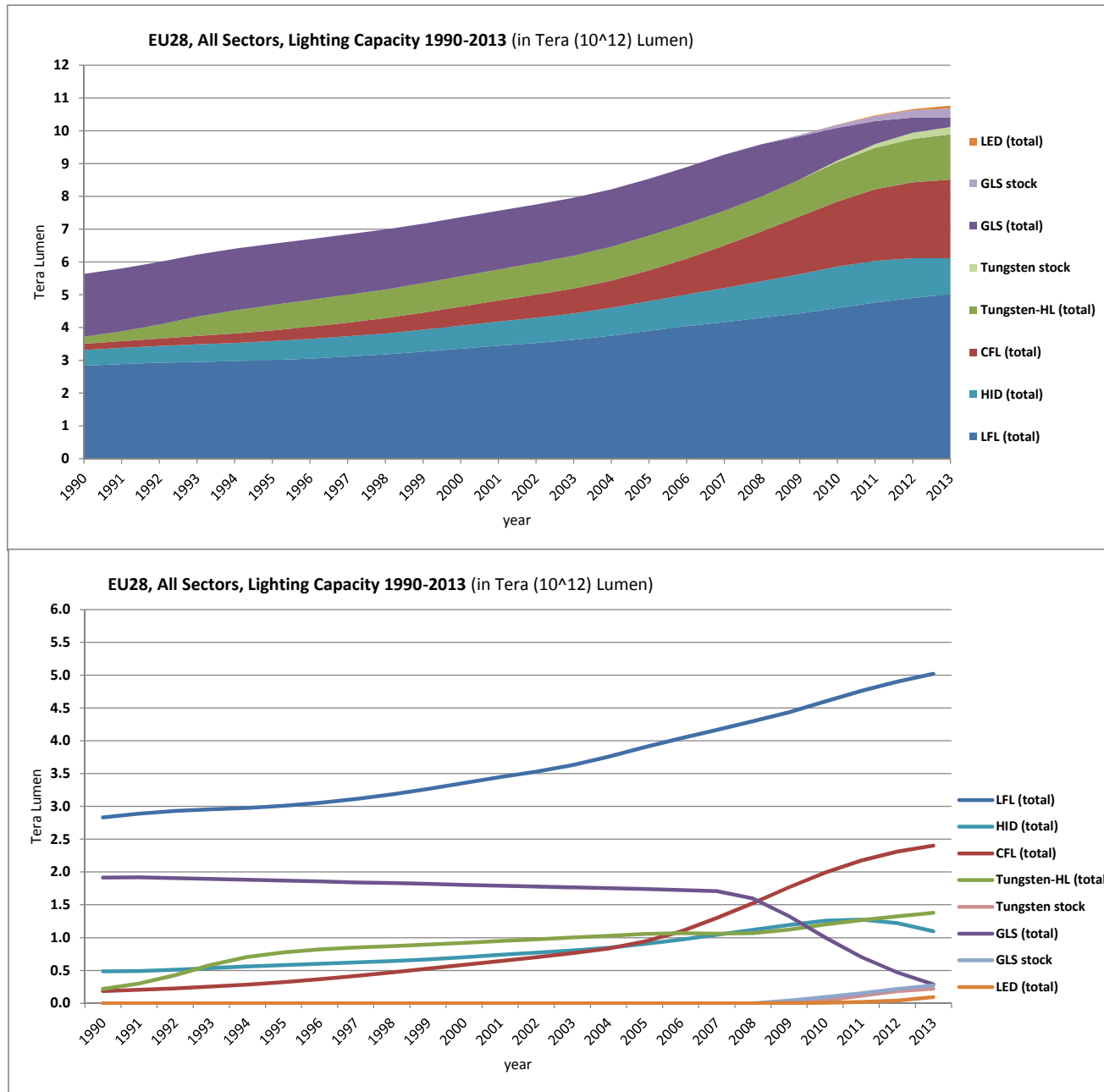
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
0.64	0.64	0.62	0.57	0.51	0.46	0.41	0.37	0.33	0.30	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.10	0.09	0.07	0.06	0.04	0.03
0.75	0.77	0.79	0.83	0.87	0.91	0.96	1.01	1.06	1.12	1.18	1.23	1.28	1.32	1.38	1.41	1.41	1.37	1.29	1.16	0.95	0.67	0.38	0.17
0.88	0.90	0.93	0.96	0.99	1.02	1.05	1.08	1.12	1.16	1.20	1.25	1.29	1.32	1.37	1.42	1.49	1.58	1.69	1.85	2.08	2.38	2.67	2.90
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.11	0.18	0.26	0.36	0.48	0.63	0.78	0.94	1.06
0.10	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.18	0.19	0.19	0.19	0.19	0.18	0.17	0.16	0.15	0.13
2.37	2.42	2.45	2.47	2.48	2.51	2.54	2.60	2.66	2.73	2.81	2.89	2.97	3.05	3.16	3.29	3.41	3.52	3.63	3.76	3.90	4.05	4.18	4.29
0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.11	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.28	0.33	0.40	0.48	0.57	0.65	0.72	0.77	0.80
0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.18	0.19	0.21	0.22	0.22	0.22
0.09	0.10	0.11	0.12	0.14	0.15	0.17	0.19	0.21	0.24	0.26	0.29	0.31	0.34	0.37	0.42	0.48	0.57	0.66	0.76	0.86	0.93	0.99	1.02
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07
0.02	0.03	0.05	0.08	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.10	0.08	0.07	0.06	0.06	0.05	0.05
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.05	0.06	0.07
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05
0.04	0.06	0.09	0.12	0.14	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.21	0.21	0.22	0.24	0.25	0.26	0.28
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
0.35	0.34	0.34	0.34	0.34	0.34	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.29	0.24	0.18	0.13	0.08	0.05
0.38	0.38	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.36	0.36	0.36	0.36	0.35	0.35	0.35	0.35	0.34	0.32	0.27	0.20	0.14	0.09	0.06
0.15	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.06	0.06
0.29	0.29	0.30	0.30	0.31	0.32	0.33	0.33	0.34	0.35	0.36	0.37	0.39	0.41	0.43	0.45	0.49	0.53	0.57	0.61	0.62	0.60	0.58	0.56
0.04	0.04	0.05	0.06	0.07	0.09	0.10	0.11	0.13	0.14	0.17	0.19	0.21	0.23	0.26	0.30	0.34	0.38	0.42	0.47	0.54	0.58	0.56	0.48
0.49	0.49	0.51	0.53	0.56	0.58	0.60	0.62	0.64	0.67	0.70	0.74	0.77	0.80	0.85	0.90	0.97	1.04	1.12	1.19	1.26	1.28	1.22	1.10
																			0.00	0.00	0.00	0.00	0.01
																			0.00	0.00	0.00	0.00	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.37	3.45	3.54	3.62	3.69	3.77	3.85	3.95	4.05	4.18	4.32	4.47	4.60	4.75	4.94	5.17	5.42	5.68	5.94	6.20	6.46	6.66	6.75	6.76

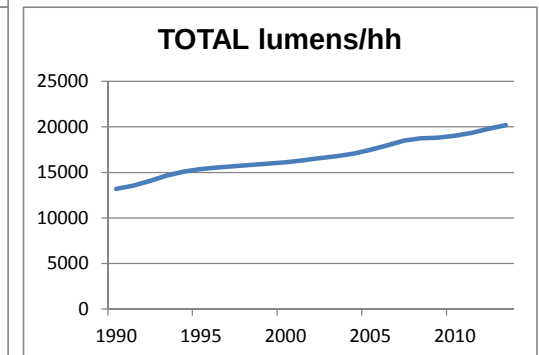
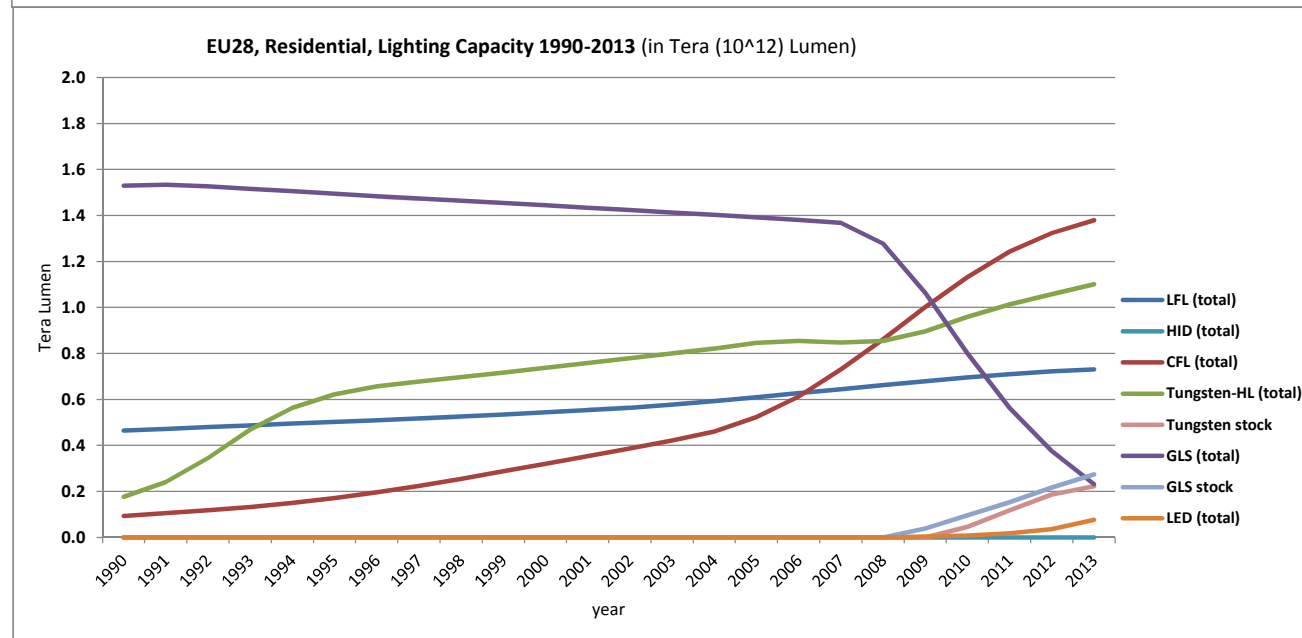
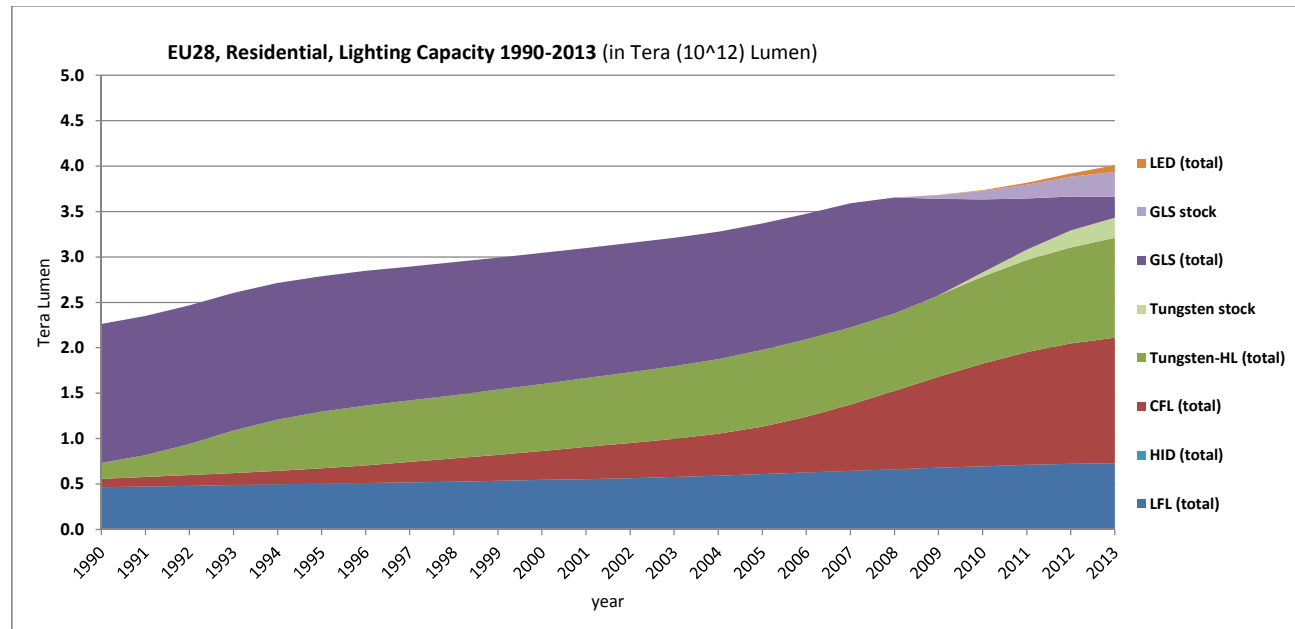
The data below are linked copies from sheet Life&Use. Do NOT change here !

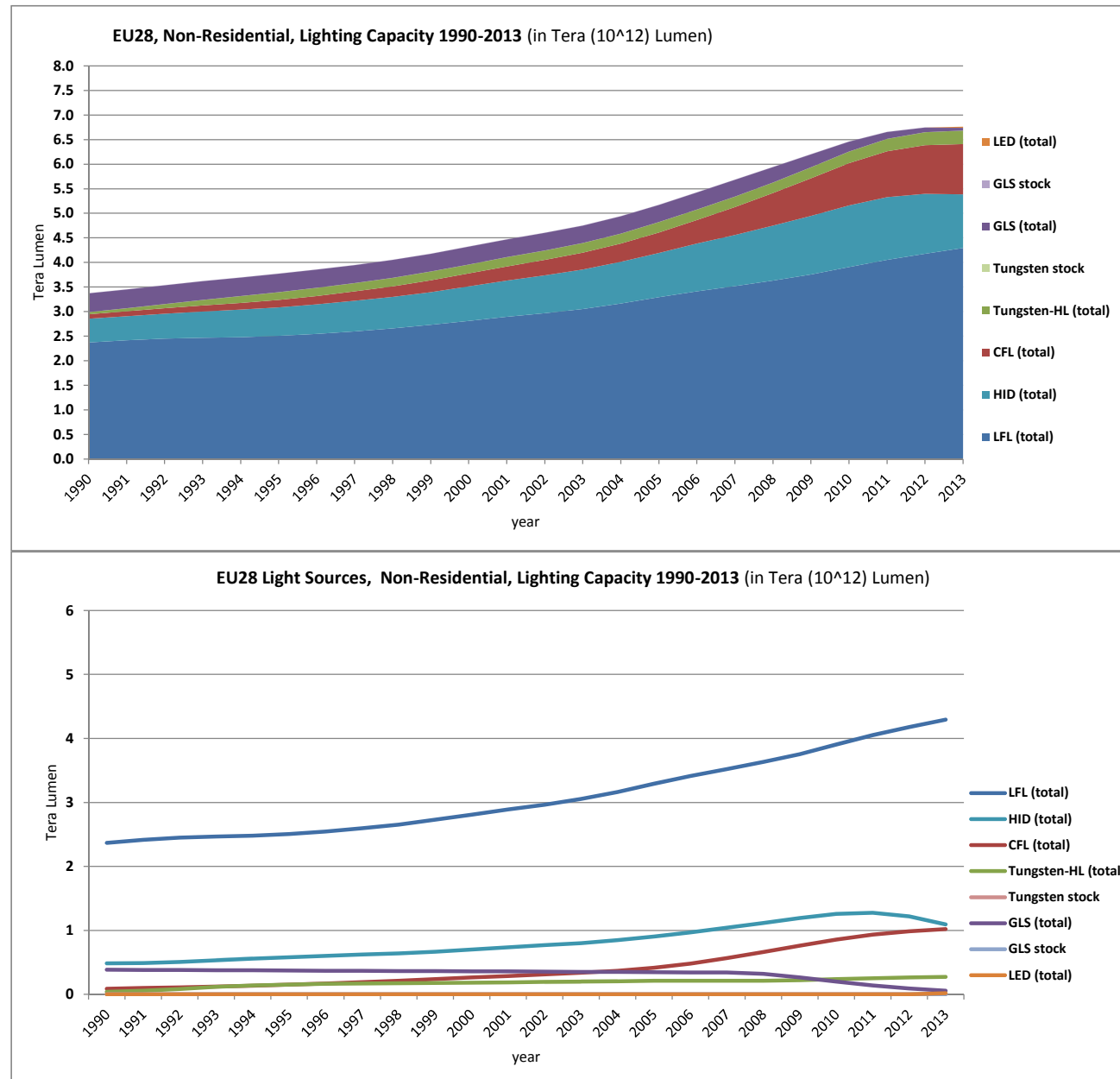
Non-Resident		year	2009	2010	2011	2012	2013
LED	DLS	lm to fit	600	600	600	600	600
LED	NDLS	lm to fit	1800	1800	1800	1800	1800

		year 2008				year 2013		
		All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
Division of EU-28 lighting capacity over the technology types	LFL	45%	18%	61%		47%	18%	63%
	CFL	16%	24%	11%		22%	34%	15%
	HL	11%	23%	4%		15%	33%	4%
	GLS	17%	35%	5%		5%	13%	1%
	HID	12%	0%	19%		10%	0%	16%
	LED	0%	0%	0%		1%	2%	0%

Includes Tungsten stock
Includes GLS stock







EU-28 POWER SUMMARY, All Sectors Giga (10^9) Watt		W/Unit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
LFL (total)			29	37	38	39	39	39	39	40	41	41	42	44	45	46	47	48	50	52	53	54	56	57	59	60	61
CFL (total)			10	3	4	4	5	5	6	7	8	9	10	11	12	13	14	15	17	20	24	28	32	36	40	42	44
Tungsten-HL (total)			64	17	23	34	47	56	62	66	68	70	71	73	75	77	79	81	84	84	84	84	88	95	100	105	109
GLS (total)			54	201	202	201	199	198	197	195	194	193	191	190	189	187	186	185	183	182	180	168	140	105	74	49	30
HID (total)			171	7	7	8	8	9	9	9	9	10	10	10	11	11	11	12	12	13	14	14	15	16	16	15	13
LED (total)			12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	0.3	0.5	0.8	1.4
GLS stock			54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	16	23	29
Tungsten stock			36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	13	16
TOTAL		41.32	266	274	285	298	307	313	317	319	322	325	328	331	334	337	341	346	350	354	349	335	323	314	308	304	

EU-28 POWER TOTAL, All Sectors Giga (10^9) Watt		W/Unit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
LFL	T12		35	11	11	11	10	9	8	8	7	6	6	5	5	4	4	3	3	3	2	2	2	1	1	1	1
	T8 Halophosphor		32	12	12	13	13	14	14	15	16	17	18	19	19	20	21	22	22	22	22	21	19	16	12	8	5
	T8 tri-phosphor		30	13	13	14	14	15	15	15	16	16	17	18	18	19	19	20	21	22	23	25	27	30	34	38	41
	T5 new (14 - 80w) including Circular		25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3	4	6	7	9	11	13
	All others (including T5 old types 4 - 13w and Special FL.)		12	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	2	2	2	2
LFL (total)			29	37	38	39	39	39	39	40	41	41	42	44	45	46	47	48	50	52	53	54	56	57	59	60	61
CFL	Retrofit - CFLi		10	2	2	2	3	3	4	4	5	6	6	7	8	9	10	11	13	15	18	22	26	30	33	35	36
	Non-Retrofit - CFLni		12	1	2	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	6	6	7	7	7	7
	CFL (total)	10	3	4	4	5	5	6	7	8	9	10	11	12	13	14	15	17	20	24	28	32	36	40	42	44	
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	35	2	3	3	4	5	6	7	9	10	11	12	14	15	16	17	18	19	20	21	22	22	23	23	24	
	Linear (High voltage) [R7s]	250	7	13	23	34	43	48	50	50	50	50	50	50	50	50	50	50	48	42	35	29	26	24	23	22	
	LV Halogen Capsule [G4, GY6.35]	35	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	
	HV Halogen Capsule [G9]	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	6	8	8	8	8	
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	9	15	19	24	29	
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	35	0	0	0	0	0	0	1	1	2	2	3	4	4	5	6	7	8	10	11	14	16	18	19	20	
	Tungsten-HL (total)	64	17	23	34	47	56	62	66	68	70	71	73	75	77	79	81	84	84	84	84	88	95	100	105	109	
GLS	Reflector	54	21	21	21	20	20	20	19	19	19	19	19	19	18	18	18	17	17	17	15	13	10	8	7	6	
	GLS (Including clear/pearl, candles, coloured & decorative)	54	181	181	180	179	178	177	176	175	174	172	171	170	169	168	167	166	165	163	153	127	95	66	42	25	
	GLS (total)	54	201	202	201	199	198	197	195	194	193	191	190	189	187	186	185	183	182	180	168	140	105	74	49	30	
HID	All Mercury Lamps (including mixed)	250	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	2	2	1	
	All Sodium Lamps	140	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5	5	6	6	6	7	6	6	6	
	Metal Halide Lamps	160	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4	5	5	6	7	7	7	6	
	HID (total)	171	7	7	8	8	9	9	9	9	9	10	10	10	11	11	11	12	12	13	14	14	15	16	16	15	13
LED	Directional	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.1	0.2	0.4	0.5	0.7	
	Non Directional	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.1	0.2	0.3	0.7	
	LED (total)	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.1	0.3	0.5	0.8	1.4	
GLS stock		54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	16	23	29	
Tungsten stock		36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	13	16	
TOTAL		41	266	274	285	298	307	313	317	319	322	325	328	331	334	337	341	346	350	354	349	335	323	314	308	304	

Weighted Averages over Residential and Non-Residential.

All Sectors		year	2009	2010	2011	2012	2013
LED	DLS	W to fit	24	21	17	13	9
LED	NDLS	W to fit	20	19	18	13	11
LED	All	W to fit	23	21	18	13	10

EU-28 POWER RESIDENTIAL Giga (10 ¹²) Watt		W/Unit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	35	2.1	2.0	2.0	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3
	T8 Halophosphor	32	1.9	2.0	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.2	3.4	3.5	3.6	3.7	3.7	3.6	3.5	3.2	2.9	2.6
	T8 tri-phosphor	30	2.0	2.0	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.6	2.7	2.8	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.8	4.0	4.4	4.7	5.0
	T5 new (14 - 80w) including Circular	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
	All others (including T5 old types 4 - 13w and Special FL.)	12	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
LFL (total)		29	6	6	6	6	7	7	7	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	9
CFL	Retrofit - CFLi	10	1	1	1	2	2	2	3	3	3	4	4	5	5	6	7	8	9	11	13	16	18	20	21	22
	Non-Retrofit - CFLni	12	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3
	CFL (total)	10	2	2	2	2	3	3	4	4	5	5	6	6	7	8	8	10	11	13	16	18	21	23	24	25
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	35	2	2	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	16	17	18	18	18	19	19
	Linear (High voltage) [R7s]	250	6	10	18	27	34	38	40	40	40	40	40	40	40	40	40	40	38	33	28	23	21	19	18	17
	LV Halogen Capsule [G4, GY6.35]	35	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6
	HV Halogen Capsule [G9]	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	5	6	6	7	6
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	7	12	15	19	23
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	35	0	0	0	0	0	0	0	1	1	2	2	3	4	4	5	6	6	8	9	11	13	15	16	16
	Tungsten-HL (total)	64	13	19	27	37	45	50	53	54	56	57	59	60	62	63	65	67	67	67	67	71	76	80	84	88
GLS	Reflector	54	17	17	16	16	16	16	16	15	15	15	15	15	15	14	14	14	14	13	12	10	8	7	6	4
	GLS (Including clear/pearl, candles, coloured & decorative)	54	144	145	144	143	142	141	141	140	139	138	137	136	135	134	133	133	132	131	122	102	76	53	34	20
	GLS (total)	54	161	161	161	160	158	157	156	155	154	153	152	151	150	149	148	147	145	144	135	112	84	59	40	24
HID	All Mercury Lamps (including mixed)	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	All Sodium Lamps	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Metal Halide Lamps	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	HID (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LED	Directional	13																				0.1	0.2	0.3	0.5	0.7
	Non Directional	11																				0.0	0.1	0.2	0.3	0.5
	LED (total)	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.1	0.3	0.5	0.7	1.2
	GLS stock	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	16	23	29
	Tungsten stock	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	13	16
TOTAL		45	182	188	196	206	213	217	219	220	221	222	224	225	226	227	229	231	232	232	226	214	203	196	194	192

The data below are linked copies from sheet Life&Use. Do NOT change here !

Residential		year	2009	2010	2011	2012	2013
LED	DLS	W to fit	24.0	21.1	17.3	12.8	9.5
LED	NDLS	W to fit	20.0	19.4	17.0	12.1	8.8

Installed Power per Household (W)
Number of Households (mln)
Number of dwellings (mln)
LFL power per hh
CFL power per hh
Tungsten power per hh
GLS power per hh
LED power per hh
TOTAL power/hh
of which DLS power

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
212.8	215.2	217.7	220.1	222.6	225.1	226.9	228.7	230.6	232.4	234.2	235.2	236.1	237.0	237.9	238.8	239.7	240.7	241.6	242.5	243.4	244.4	245.3	246.2
36	36	36	36	36	36	37	37	37	37	38	38	39	39	40	41	42	43	44	44	45	46	46	46
10	11	12	14	15	17	19	22	25	28	31	34	37	40	44	49	58	68	80	93	105	115	122	126
78	107	155	211	251	275	288	294	299	305	311	318	325	332	339	348	349	344	345	361	403	450	492	521
938	930	915	899	883	867	854	841	829	817	805	796	787	778	769	761	752	742	690	593	481	382	315	267
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	4	6
1062	1084	1118	1159	1186	1195	1198	1194	1190	1187	1184	1186	1188	1190	1192	1199	1200	1198	1160	1092	1035	995	979	966
107	108	109	111	113	116	120	126	131	138	144	151	157	164	171	177	184	191	196	199	201	202	204	201

EU-28 POWER NON-RESIDENTIAL Giga (10^9) Watt	
LFL	T12
	T8 Halophosphor
	T8 tri-phosphor
	T5 new (14 - 80w) including Circular
	All others (including T5 old types 4 - 13w and Special FL.)
LFL (total)	
CFL	Retrofit - CFLi
	Non-Retrofit - CFLni
	CFL (total)
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]
	Linear (High voltage) [R7s]
	LV Halogen Capsule [G4, GY6.35]
	HV Halogen Capsule [G9]
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.
	Tungsten-HL (total)
GLS	Reflector
	GLS (Including clear/pearl, candles, coloured & decorative)
	GLS (total)
HID	All Mercury Lamps (including mixed)
	All Sodium Lamps
	Metal Halide Lamps
	HID (total)
LED	Directional
	Non Directional
	LED (total)
GLS stock	
Tungsten stock	
TOTAL	

W/Unit
35
32
30
25
12
29
10
12
10
35
250
35
35
36
35
64
54
54
54
250
140
160
171
9
26
16
54
36
35

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
9	9	9	8	7	7	6	5	5	4	4	4	3	3	2	2	2	2	1	1	1	1	1	0
10	10	11	11	12	12	13	13	14	15	16	16	17	18	18	19	19	18	17	15	13	9	5	2
11	11	12	12	12	13	13	14	14	14	15	16	16	17	17	18	19	20	21	23	26	30	33	36
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3	4	5	7	9	10	12
1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
31	32	32	32	33	33	33	34	35	35	36	37	38	39	41	42	44	45	46	47	49	50	51	52
1	1	1	1	1	1	2	2	2	3	3	3	4	4	4	5	6	7	9	10	12	13	14	15
1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4
2	2	2	2	2	3	3	3	4	4	5	5	6	6	7	8	9	10	12	14	16	17	18	19
0	1	1	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	4	5	5	5
1	3	5	7	9	10	10	10	10	10	10	10	10	10	10	10	10	8	7	6	5	5	5	4
1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6
0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	3	3	4	4	4
3	5	7	9	11	12	13	14	14	14	15	15	15	16	16	17	17	17	17	18	19	20	21	22
4.2	4.1	4.1	4.1	4.0	4.0	3.9	3.9	3.8	3.8	3.7	3.7	3.7	3.6	3.5	3.5	3.4	3.3	3.0	2.6	2.1	1.7	1.4	1.1
36	36	36	36	36	35	35	35	35	34	34	34	34	34	33	33	33	33	31	25	19	13	8	5
41	40	40	40	40	39	39	39	39	38	38	38	37	37	37	37	36	36	34	28	21	15	10	6
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	2	2	1
3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5	5	6	6	6	7	6	6	6
1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4	5	5	6	7	7	7	6
7	7	8	8	9	9	9	9	10	10	10	11	11	11	12	12	13	14	14	15	16	16	15	13
																			0.0	0.0	0.0	0.0	0.1
																			0.0	0.0	0.0	0.0	0.2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.1	0.3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	86	89	92	94	96	98	99	100	102	104	106	108	110	112	115	118	121	123	122	120	118	115	112

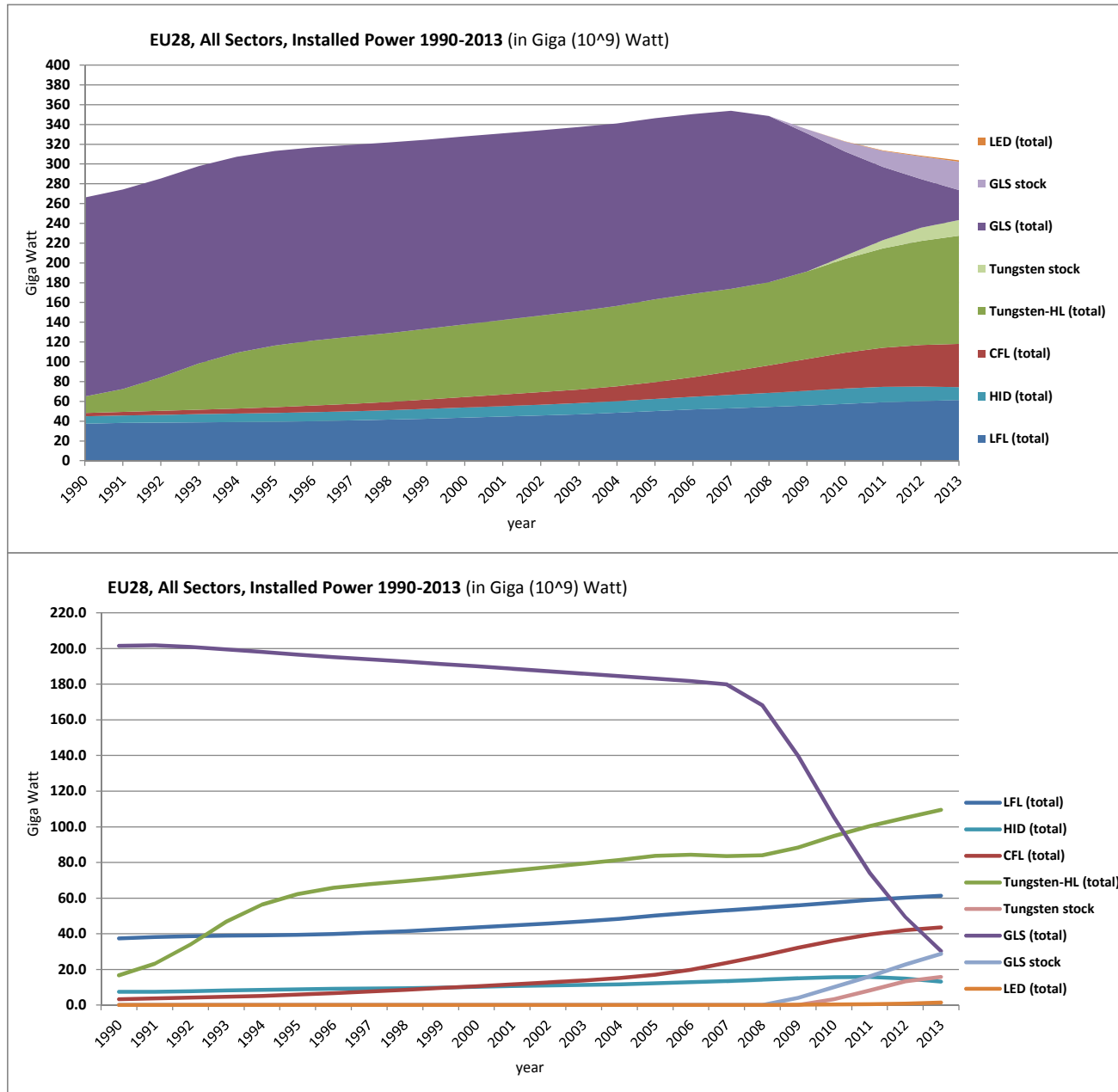
The data below are linked copies from sheet Life&Use. Do NOT change here !

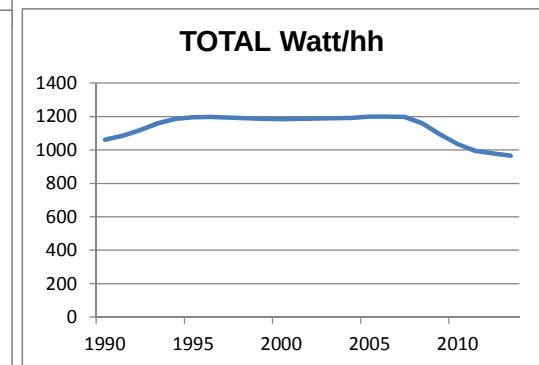
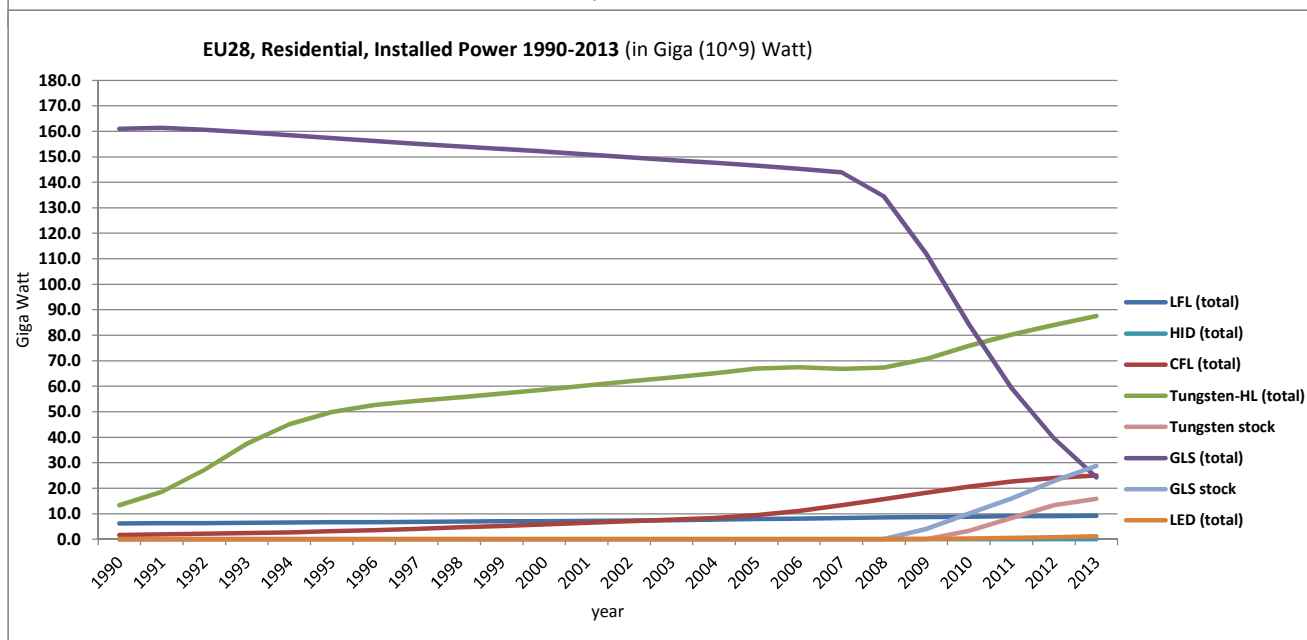
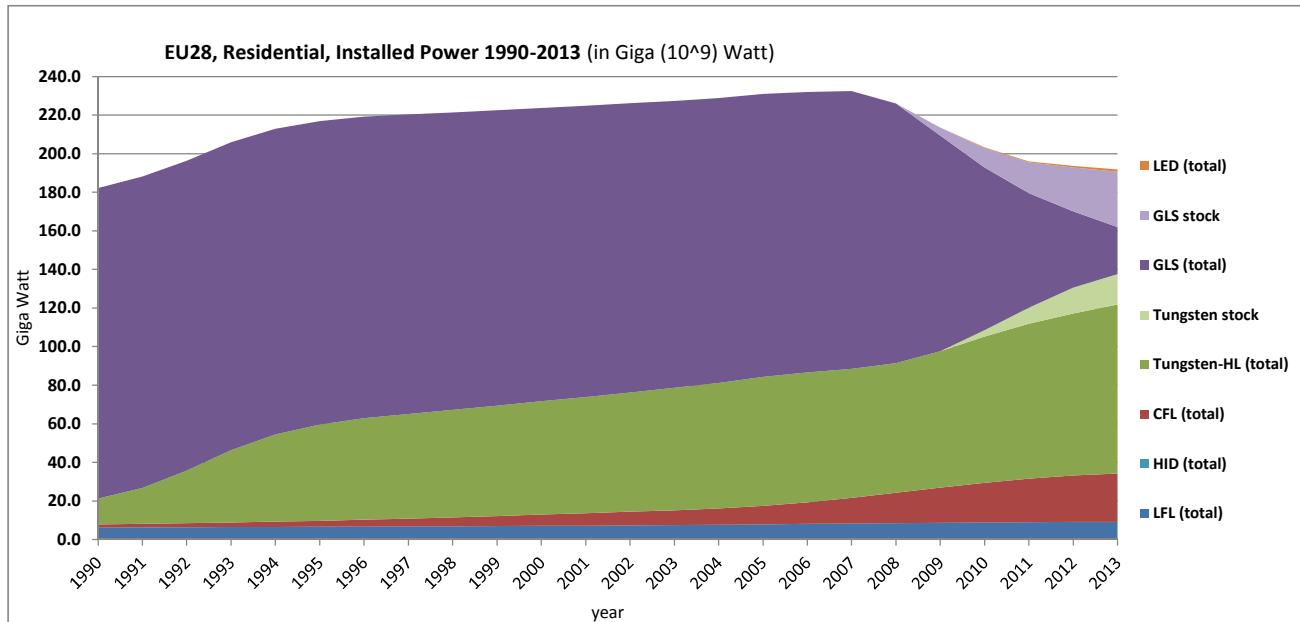
Non-Resident		year	2009	2010	2011	2012	2013
LED	DLS	W to fit	24.0	20.0	15.0	11.3	8.1
LED	NDLS	W to fit	72.0	60.0	45.0	36.4	23.6

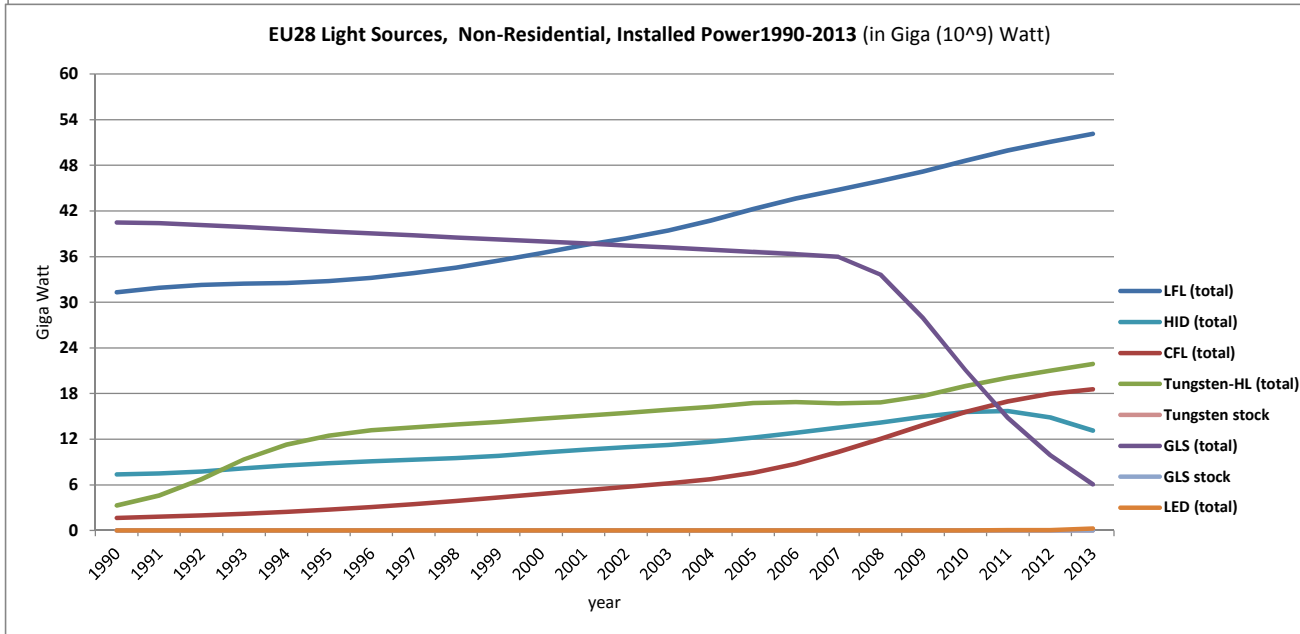
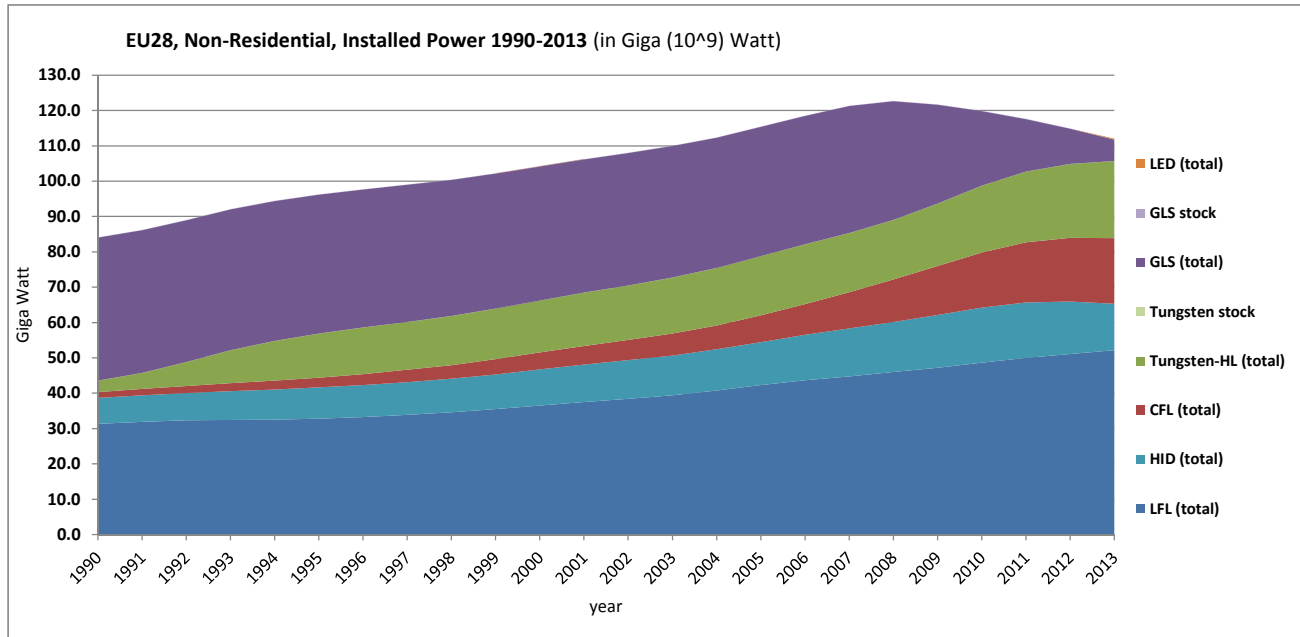
year 2008				year 2013			
	All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
LFL	16%	4%	37%		20%	5%	47%
CFL	8%	7%	10%		14%	13%	17%
HL	24%	30%	14%		41%	54%	20%
GLS	48%	60%	27%		19%	28%	5%
HID	4%	0%	12%		4%	0%	12%
LED	0%	0%	0%		0%	1%	0%

Division of EU-28 lighting power over the technology types

Includes Tungsten stock
Includes GLS stock







EU-28 HOURS SUMMARY, All Sectors Tera (10^12) Hours		Operating Hours / yr	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
LFL (total)	1964		2.4	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.8	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.6	3.7	3.8	3.9	4.0	4.2	4.3	4.4	
CFL (total)	645		0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.3	1.5	1.8	2.0	2.2	2.4	2.6	2.7	
Tungsten-HL (total)	450		0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	
GLS (total)	450		1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.4	1.2	0.9	0.6	0.4	0.3	
HID (total)	4000		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	
LED (total)	551		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
GLS stock	450		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
Tungsten stock	450		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
TOTAL		841.4	4.7	4.8	4.9	4.9	5.0	5.1	5.2	5.4	5.5	5.7	5.9	6.0	6.2	6.4	6.6	6.9	7.2	7.6	8.0	8.3	8.6	8.9	9.1	9.3	

EU-28 HOURS TOTAL, All Sectors Tera (10^12) Hours		Operating Hours / yr	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
LFL	T12		1863	0.62	0.62	0.59	0.55	0.50	0.45	0.40	0.37	0.33	0.30	0.27	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.10	0.09	0.07	0.06	0.05	0.03
	T8 Halophosphor		1938	0.72	0.75	0.77	0.80	0.84	0.88	0.93	0.98	1.03	1.09	1.14	1.19	1.24	1.29	1.33	1.37	1.37	1.33	1.26	1.14	0.94	0.68	0.41	0.21
	T8 tri-phosphor		1985	0.85	0.88	0.90	0.93	0.96	0.98	1.02	1.05	1.08	1.12	1.16	1.21	1.25	1.28	1.32	1.38	1.45	1.53	1.63	1.78	2.00	2.28	2.56	2.78
	T5 new (14 - 80w) including Circular		2102	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.11	0.18	0.26	0.36	0.48	0.62	0.77	0.92	1.05
	All others (including T5 old types 4 - 13w and Special Fl.)		1961	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.35	0.37	0.38	0.40	0.41	0.42	0.43	0.43	0.42	0.41	0.39	0.37	0.34	0.30
LFL (total)				2.43	2.48	2.51	2.54	2.56	2.59	2.64	2.70	2.76	2.84	2.93	3.02	3.10	3.19	3.31	3.44	3.56	3.67	3.78	3.90	4.04	4.17	4.28	4.37
CFL	Retrofit - CFLi		500	0.10	0.11	0.12	0.14	0.16	0.19	0.22	0.26	0.30	0.34	0.39	0.43	0.47	0.52	0.57	0.66	0.79	0.96	1.16	1.36	1.55	1.72	1.83	1.91
	Non-Retrofit - CFLni		1211	0.16	0.18	0.19	0.21	0.23	0.24	0.26	0.28	0.30	0.32	0.35	0.37	0.40	0.42	0.45	0.48	0.52	0.56	0.60	0.65	0.69	0.73	0.75	0.76
CFL (total)				0.26	0.29	0.32	0.35	0.39	0.43	0.48	0.54	0.60	0.66	0.73	0.80	0.87	0.94	1.02	1.14	1.30	1.52	1.76	2.01	2.25	2.45	2.59	2.67
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]		450	0.03	0.04	0.04	0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.19	0.21	0.22	0.24	0.25	0.26	0.27	0.28	0.29	0.29	0.30	0.31
	Linear (High voltage) [R7s]		450	0.01	0.02	0.04	0.06	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.06	0.05	0.05	0.04	0.04	0.04
	LV Halogen Capsule [G4, GY6.35]		450	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.10	0.10
	HV Halogen Capsule [G9]		450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.08	0.10	0.10	0.11	0.10
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]		450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.11	0.18	0.24	0.30	0.36
	Other Mains Halogen - PAR 16/20/ 25/30 Hard glass reflectors, GU10 etc.		450	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.12	0.15	0.18	0.21	0.23	0.25	0.25
	Tungsten-HL (total)			0.13	0.16	0.19	0.22	0.25	0.28	0.30	0.32	0.34	0.37	0.39	0.42	0.44	0.47	0.49	0.52	0.56	0.61	0.70	0.81	0.93	1.02	1.09	1.16
GLS	Reflector		450	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.14	0.14	0.13	0.11	0.09	0.07	0.06	0.05
	GLS (Including clear/pearl, candles, coloured & decorative)		450	1.51	1.51	1.50	1.49	1.48	1.47	1.46	1.46	1.45	1.44	1.43	1.42	1.41	1.40	1.39	1.38	1.37	1.36	1.28	1.06	0.79	0.55	0.35	0.21
	GLS (total)			1.68	1.68	1.67	1.66	1.65	1.64	1.63	1.62	1.61	1.59	1.58	1.57	1.56	1.55	1.54	1.53	1.51	1.50	1.40	1.17	0.88	0.62	0.41	0.25
HID	All Mercury Lamps (including mixed)		4000	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.02
	All Sodium Lamps		4000	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.17
	Metal Halide Lamps		4000	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.12	0.13	0.14	0.16	0.18	0.17
	HID (total)			0.16	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.29	0.31	0.33	0.35	0.37	0.39	0.40	0.38	0.34
LED	Directional	531	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.04	
	Non Directional	582	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.04	
	LED (total)			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.08
	GLS stock	450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.13	0.19	0.24	
	Tungsten stock	450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10	0.17	0.20	
TOTAL			4.66	4.76	4.86	4.95	5.03	5.13	5.24	5.37	5.52	5.68	5.86	6.05	6.22	6.41	6.63	6.92	7.25	7.63	7.99	8.30	8.61	8.90	9.13	9.31	

Weighted Averages over Residential and Non-Residential.

All Sectors		year	2009	2010	2011	2012	2013
LED	DLS	hr to fit	500	500	505	515	558
LED	NDLS	hr to fit	500	500	545	538	616
LED	All	hr to fit	500	500	519	524	584

EU-28 HOURS RESIDENTIAL Tera (10^12) Hours		Operating Hours / yr	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
			0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LFL	T12	700	0.04 <td>0.04<td>0.04<td>0.04<td>0.04<td>0.04<td>0.03<td>0.03<td>0.03<td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.04 <td>0.04<td>0.04<td>0.04<td>0.04<td>0.03<td>0.03<td>0.03<td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.04 <td>0.04<td>0.04<td>0.04<td>0.03<td>0.03<td>0.03<td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.04 <td>0.04<td>0.04<td>0.03<td>0.03<td>0.03<td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.04 <td>0.04<td>0.03<td>0.03<td>0.03<td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.04 <td>0.03<td>0.03<td>0.03<td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.03 <td>0.03<td>0.03<td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.03 <td>0.03<td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.03 <td>0.03<td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.03 <td>0.03<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.03 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td></td>	0.02 <td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.01<td>0.01</td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.01</td></td></td>	0.01 <td>0.01<td>0.01</td></td>	0.01 <td>0.01</td>	0.01
	T8 Halophosphor	700	0.04 <td>0.04<td>0.04<td>0.05<td>0.05<td>0.05<td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.04 <td>0.04<td>0.05<td>0.05<td>0.05<td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.04 <td>0.05<td>0.05<td>0.05<td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.05<td>0.05<td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.05<td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.06<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td></td>	0.07 <td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td></td>	0.07 <td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td></td>	0.07 <td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td></td>	0.08 <td>0.08<td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td></td>	0.08 <td>0.08<td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td></td>	0.08 <td>0.08<td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td></td>	0.08 <td>0.08<td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td></td>	0.08 <td>0.08<td>0.07<td>0.06<td>0.06</td></td></td></td>	0.08 <td>0.07<td>0.06<td>0.06</td></td></td>	0.07 <td>0.06<td>0.06</td></td>	0.06 <td>0.06</td>	0.06
	T8 tri-phosphor	700	0.05 <td>0.05<td>0.05<td>0.05<td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.05<td>0.05<td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.05<td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.05<td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.05<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.05 <td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.06<td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.06<td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.06<td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.06<td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.06<td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td></td>	0.06 <td>0.07<td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td></td>	0.07 <td>0.07<td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td></td>	0.07 <td>0.07<td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td></td>	0.07 <td>0.07<td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td></td>	0.07 <td>0.08<td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td></td>	0.08 <td>0.08<td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td></td>	0.08 <td>0.08<td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td></td>	0.08 <td>0.08<td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td></td>	0.08 <td>0.09<td>0.09<td>0.10<td>0.11</td></td></td></td>	0.09 <td>0.09<td>0.10<td>0.11</td></td></td>	0.09 <td>0.10<td>0.11</td></td>	0.10 <td>0.11</td>	0.11
	T5 new (14 - 80w) including Circular	700	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td>	0.00 <td>0.00<td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td>	0.00 <td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td></td>	0.01 <td>0.01<td>0.02<td>0.02<td>0.02</td></td></td></td>	0.01 <td>0.02<td>0.02<td>0.02</td></td></td>	0.02 <td>0.02<td>0.02</td></td>	0.02 <td>0.02</td>	0.02
	All others (including T5 old types 4 - 13w and Special Fl.)	700	0.01 <td>0.01<td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.01<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.01 <td>0.01<td>0.01<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.01 <td>0.01<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.01 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02<td>0.02</td></td></td></td>	0.02 <td>0.02<td>0.02<td>0.02</td></td></td>	0.02 <td>0.02<td>0.02</td></td>	0.02 <td>0.02</td>	0.02
LFL (total)			0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22	0.23	0.23
CFL	Retrofit - CFLi	500	0.06	0.07	0.07	0.08	0.10	0.11	0.13	0.15	0.18	0.20	0.23	0.26	0.28	0.31	0.34	0.39	0.47	0.58	0.69	0.82	0.93	1.03	1.10	1.15
	Non-Retrofit - CFLni	700	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
	CFL (total)		0.09	0.11	0.12	0.13	0.15	0.17	0.20	0.22	0.25	0.29	0.32	0.35	0.38	0.42	0.46	0.52	0.60	0.72	0.84	0.98	1.11	1.21	1.29	1.35
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	450	0.02	0.03	0.04	0.04	0.05	0.06	0.08	0.09	0.10	0.11	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.23	0.24	0.24	0.25
	Linear (High voltage) [R7s]	450	0.01	0.02	0.03	0.05	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.05	0.04	0.04	0.03	0.03	0.03
	LV Halogen Capsule [G4, GY6.35]	450	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	HV Halogen Capsule [G9]	450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.05	0.07	0.08	0.08	0.08	0.08
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.09	0.15	0.19	0.24	0.29
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	450	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.14	0.17	0.19	0.20	0.20
	Tungsten-HL (total)		0.11	0.13	0.15	0.18	0.20	0.22	0.24	0.26	0.27	0.29	0.31	0.33	0.35	0.37	0.39	0.42	0.45	0.49	0.56	0.65	0.74	0.81	0.87	0.92
GLS	Reflector	450	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.10	0.09	0.07	0.06	0.05	0.04
	GLS (Including clear/pearl, candles, coloured & decorative)	450	1.20	1.21	1.20	1.19	1.19	1.18	1.17	1.16	1.16	1.15	1.14	1.13	1.13	1.12	1.11	1.10	1.10	1.09	1.02	0.85	0.63	0.44	0.28	0.16
	GLS (total)		1.34	1.35	1.34	1.33	1.32	1.31	1.30	1.29	1.28	1.28	1.27	1.26	1.25	1.24	1.23	1.22	1.21	1.20	1.12	0.93	0.70	0.49	0.33	0.20
HID	All Mercury Lamps (including mixed)	700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	All Sodium Lamps	700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Metal Halide Lamps	700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	HID (total)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LED	Directional																					0.00	0.00	0.01	0.02	0.03
	Non Directional																					0.00	0.00	0.00	0.01	0.03
	LED (total)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.06
	GLS stock	450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.13	0.19	0.24
	Tungsten stock	450	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10	0.17	0.20	0.20
	TOTAL		1.68	1.72	1.75	1.79	1.82	1.86	1.89	1.93	1.97	2.02	2.07	2.11	2.16	2.21	2.27	2.35	2.46	2.61	2.73	2.81	2.90	3.00	3.11	3.20

The data below are linked copies from sheet Life&Use. Do NOT change here !

Residential		year	2009	2010	2011	2012	2013
LED	DLS	hr to fit	500	500	500	500	500
LED	NDLS	hr to fit	500	500	500	500	500

Hours per Household
Number of Households (mln)
Number of dwellings (mln)
LFL hours per hh
CFL hours per hh
Tungsten hours per hh
GLS hours per hh
LED hours per hh
TOTAL hours/hh
of which DLS hours

171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
212.8	215.2	217.7	220.1	222.6	225.1	226.9	228.7	230.6	232.4	234.2	235.2	236.1	237.0	237.9	238.8	239.7	240.7	241.6	242.5	243.4	244.4	245.3	246.2
826	832	837	842	846	850	857	864	872	882	892	906	921	940	962	988	1013	1038	1063	1086	1107	1126	1140	1146
548	608	675	750	839	946	1072	1213	1365	1524	1683	1850	2016	2182	2376	2682	3118	3700	4337	5014	5634	6158	6534	6781
627	727	857	999	1116	1212	1301	1384	1470	1561	1654	1754	1855	1956	2055	2175	2314	2529	2862	3320	3982	4661	5256	5655
7816	7749	7626	7490	7355	7222	7114	7009	6907	6806	6706	6633	6559	6485	6412	6340	6264	6182	5754	4939	4007	3186	2624	2224
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	36	75	150	320
9818	9916	9995	10081	10156	10231	10343	10470	10614	10773	10935	11143	11351	11563	11805	12184	12710	13448	14016	14374	14766	15206	15704	16126
935	958	982	1012	1049	1098	1162	1236	1318	1403	1490	1583	1676	1768	1859	1952	2048	2150	2242	2327	2400	2474	2553	2614

EU-28 HOURS NON-RESIDENTIAL Tera (10^12) Hours	
LFL	T12
	T8 Halophosphor
	T8 tri-phosphor
	T5 new (14 - 80w) including Circular
	All others (including T5 old types 4 - 13w and Special FL)
	LFL (total)
CFL	Retrofit - CFLi
	Non-Retrofit - CFLni
	CFL (total)
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]
	Linear (High voltage) [R7s]
	LV Halogen Capsule [G4, GY6.35]
	HV Halogen Capsule [G9]
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.
	Tungsten-HL (total)
GLS	Reflector
	GLS (Including clear/pearl, candles, coloured & decorative)
	GLS (total)
HID	All Mercury Lamps (including mixed)
	All Sodium Lamps
	Metal Halide Lamps
	HID (total)
LED	Directional
	Non Directional
	LED (total)
	GLS stock
	Tungsten stock
	TOTAL

Operating Hours / yr
2200
2200
2200
2200
2200
500
1600
450
450
450
450
450
450
450
4000
4000
4000
450
450

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
0.58	0.57	0.55	0.51	0.46	0.41	0.37	0.33	0.30	0.27	0.25	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.09	0.08	0.06	0.05	0.04	0.03
0.68	0.70	0.73	0.76	0.79	0.83	0.88	0.92	0.97	1.03	1.08	1.13	1.17	1.21	1.26	1.29	1.29	1.25	1.18	1.06	0.87	0.61	0.35	0.16
0.80	0.83	0.85	0.88	0.90	0.93	0.96	0.99	1.03	1.06	1.10	1.14	1.18	1.21	1.25	1.31	1.37	1.45	1.55	1.69	1.91	2.18	2.45	2.66
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.11	0.17	0.25	0.35	0.47	0.61	0.76	0.90	1.03
0.22	0.23	0.23	0.24	0.25	0.26	0.27	0.29	0.30	0.31	0.33	0.35	0.36	0.38	0.39	0.40	0.41	0.40	0.40	0.39	0.37	0.34	0.31	0.28
2.29	2.33	2.37	2.39	2.41	2.44	2.48	2.54	2.60	2.68	2.76	2.85	2.92	3.01	3.12	3.25	3.37	3.47	3.57	3.69	3.82	3.95	4.05	4.14
0.04	0.04	0.05	0.06	0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.17	0.19	0.21	0.23	0.26	0.31	0.39	0.46	0.55	0.62	0.69	0.73	0.77
0.12	0.14	0.15	0.16	0.17	0.18	0.20	0.21	0.23	0.24	0.26	0.28	0.30	0.31	0.34	0.36	0.39	0.42	0.45	0.49	0.52	0.55	0.56	0.56
0.16	0.18	0.20	0.22	0.24	0.26	0.29	0.31	0.34	0.38	0.41	0.45	0.49	0.52	0.56	0.62	0.70	0.80	0.91	1.03	1.14	1.23	1.29	1.33
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.05	0.06	0.07
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.05	0.05	0.05
0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.12	0.14	0.16	0.19	0.20	0.22	0.23
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
0.30	0.30	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.26	0.21	0.16	0.11	0.07	0.04
0.34	0.34	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.31	0.31	0.30	0.30	0.28	0.23	0.18	0.12	0.08	0.05
0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.02
0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.17
0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.12	0.13	0.14	0.16	0.18	0.17	0.15
0.16	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.29	0.31	0.33	0.35	0.37	0.39	0.40	0.38	0.34
																			0.00	0.00	0.00	0.00	0.01
																			0.00	0.00	0.00	0.00	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.97	3.04	3.11	3.16	3.21	3.27	3.35	3.44	3.54	3.67	3.80	3.93	4.06	4.20	4.37	4.57	4.79	5.02	5.26	5.48	5.71	5.90	6.03	6.11

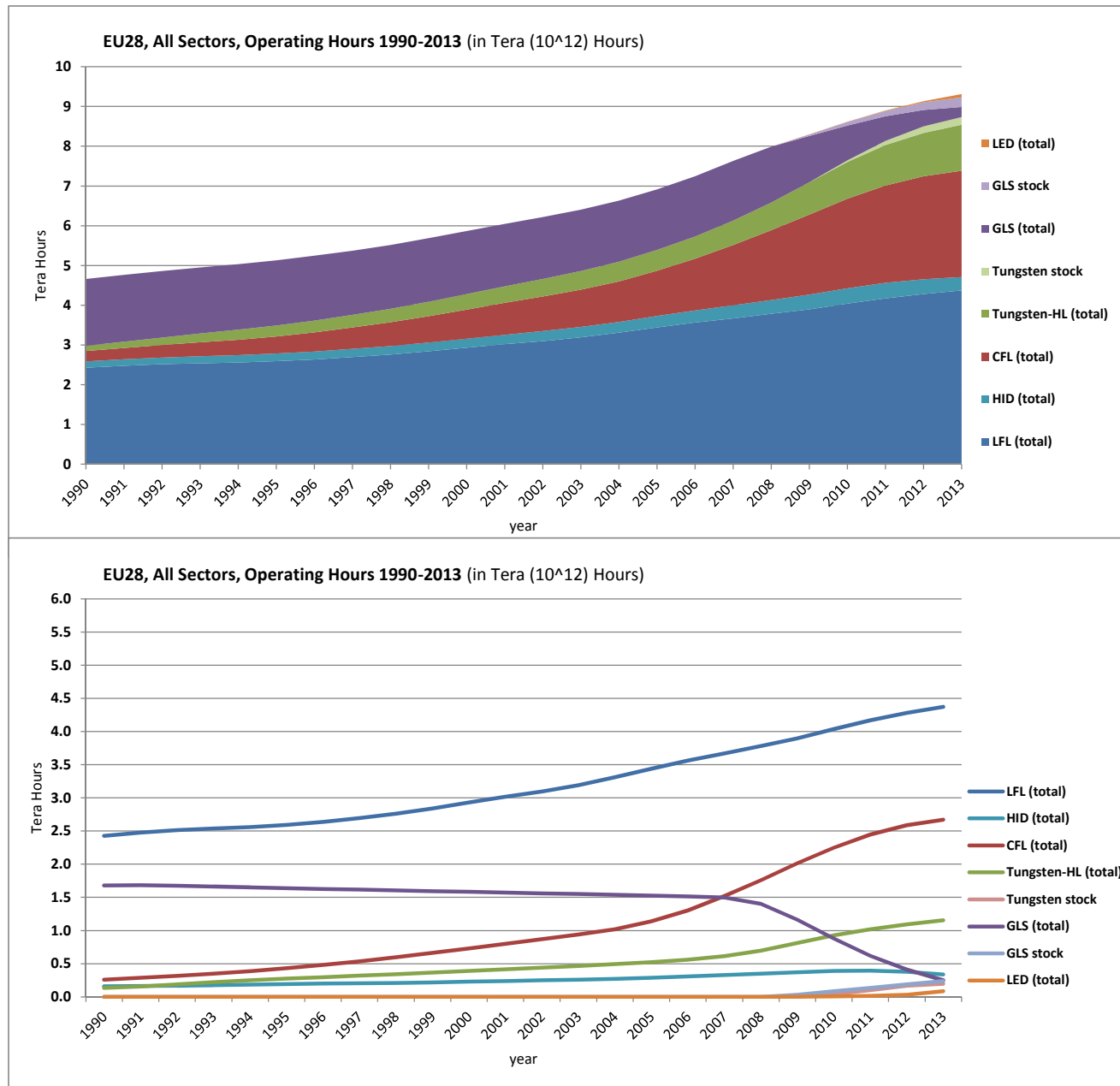
The data below are linked copies from sheet Life&Use. Do NOT change here !

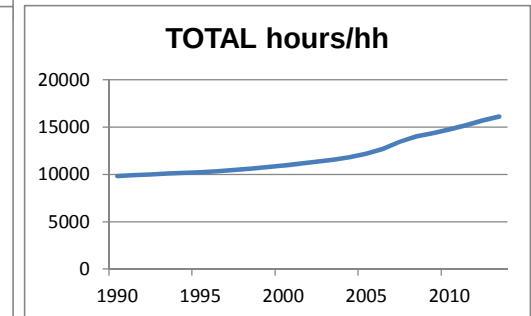
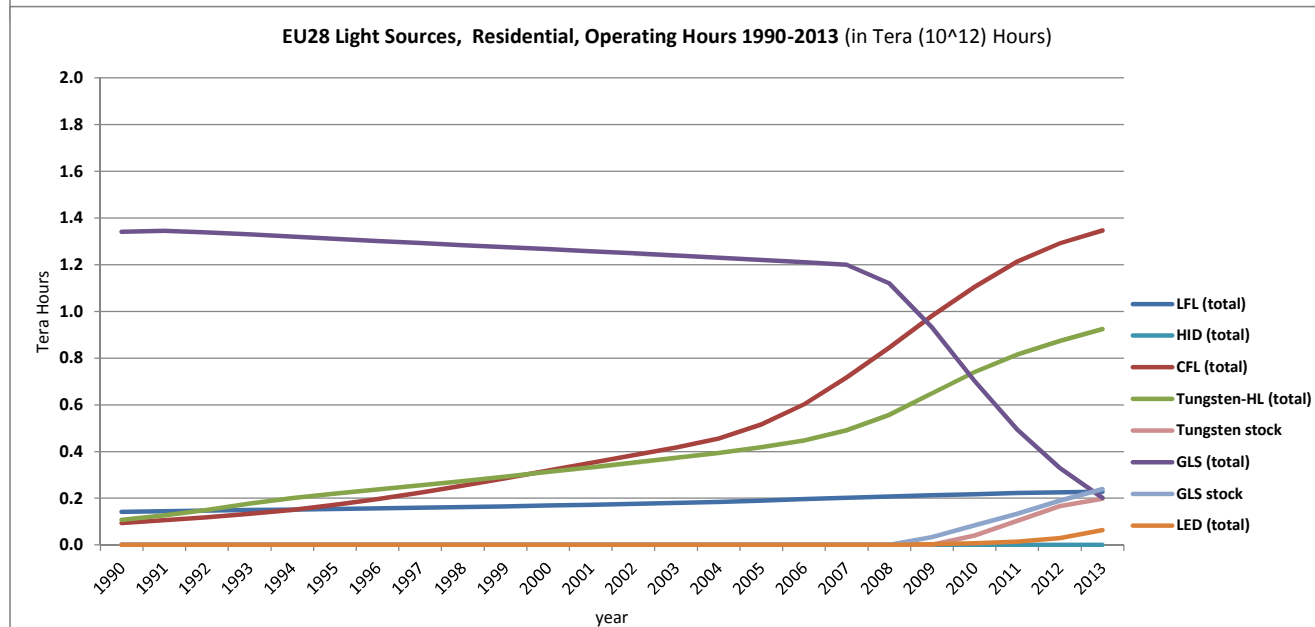
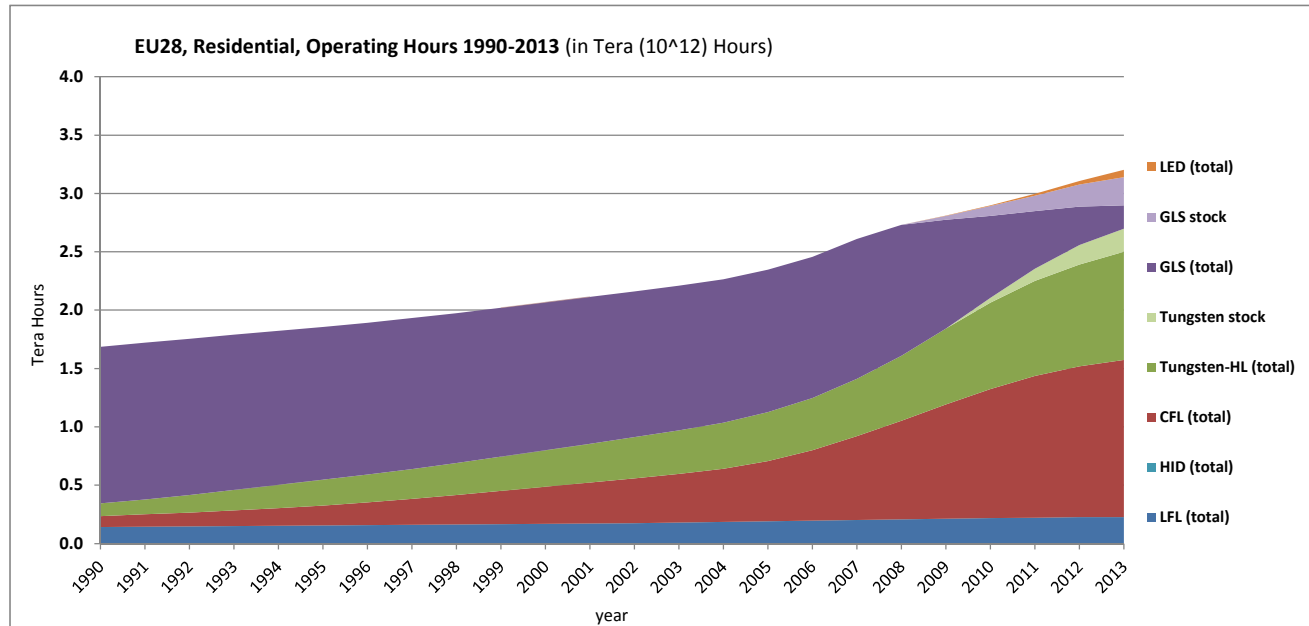
Non-Resident		year	2009	2010	2011	2012	2013
LED	DLS	hr to fit	600	625	646	790	984
LED	NDLS	hr to fit	1500	1500	1500	1500	1500

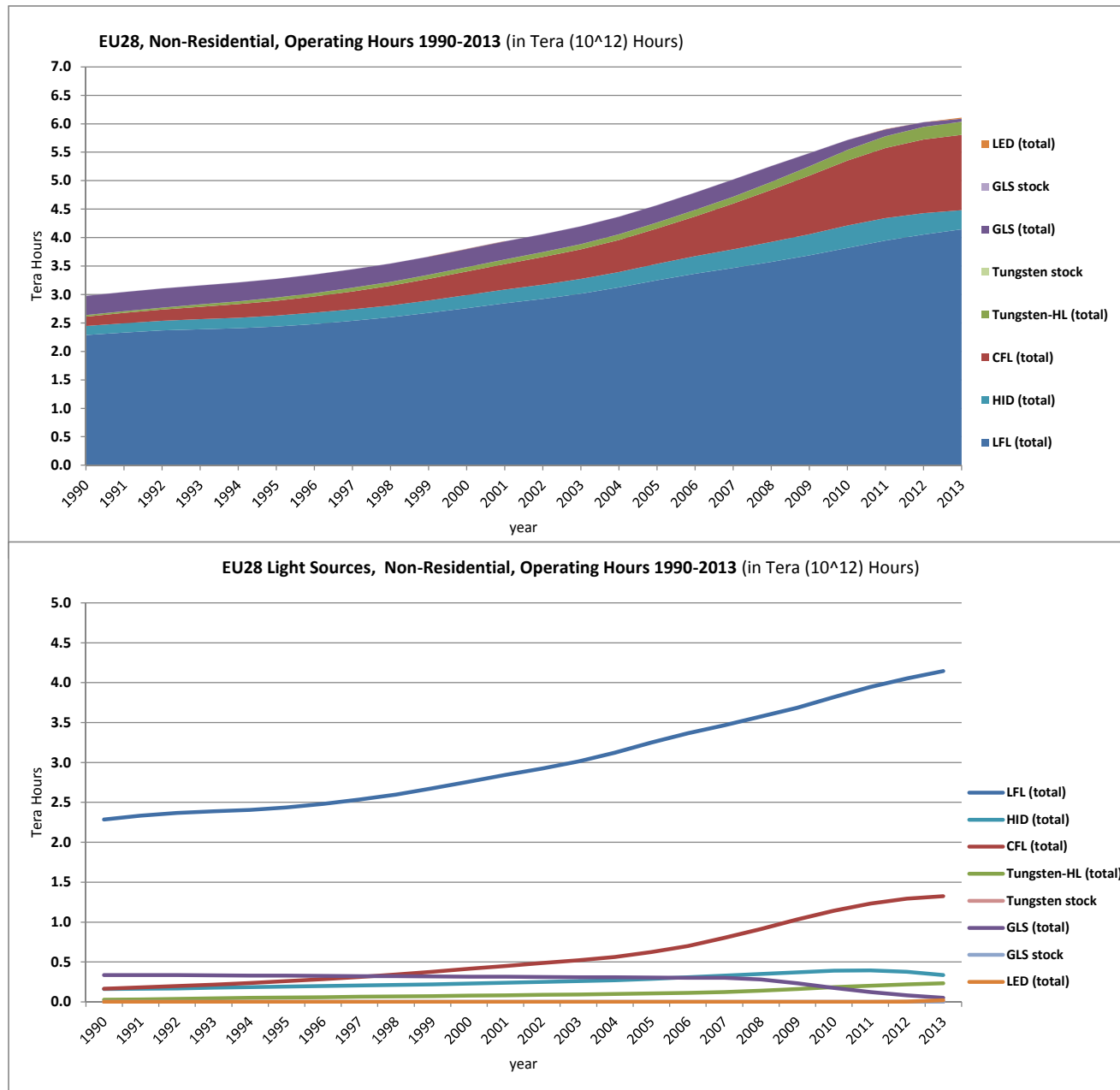
		year 2008				year 2013		
		All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
LFL		47%	8%	68%		47%	7%	68%
CFL		22%	31%	17%		29%	42%	22%
HL		9%	20%	3%		15%	35%	4%
GLS		18%	41%	5%		5%	14%	1%
HID		4%	0%	7%		4%	0%	6%
LED		0%	0%	0%		1%	2%	0%

Division of EU-28 operating hours over the technology types

Includes Tungsten stock
Includes GLS stock







EU-28 ENERGY, TWh (10 ¹²) / year SUMMARY, All Sectors			% resid.		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL (total)		6%			87.5	89.1	90.1	90.5	90.7	91.4	92.5	94.1	96.0	98.4	101.1	103.8	106.1	108.9	112.4	116.2	119.7	122.3	124.9	127.3	129.9	131.9	133.3	134.8
CFL (total)		44%			3.0	3.3	3.6	4.0	4.4	4.9	5.4	6.0	6.6	7.3	8.0	8.8	9.5	10.2	11.1	12.3	14.0	16.2	18.6	21.2	23.6	25.5	26.9	27.8
Tungsten-HL (total)		80%			7.7	10.7	15.6	21.4	25.8	28.4	30.0	31.0	31.8	32.7	33.6	34.5	35.4	36.4	37.3	38.4	38.7	38.4	38.6	40.6	43.5	46.0	48.1	50.1
GLS (total)		80%			90.7	90.8	90.4	89.8	89.1	88.5	87.9	87.3	86.7	86.1	85.5	84.9	84.3	83.7	83.0	82.4	81.8	81.0	75.7	62.9	47.4	33.4	22.2	13.6
HID (total)		0%			35.6	36.0	37.4	39.3	41.2	42.7	43.8	44.8	45.9	47.4	49.3	51.2	52.7	54.2	56.3	58.8	61.9	65.1	68.4	72.0	75.2	75.7	71.7	63.3
LED (total)		76%			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	1.0	
(Special Purpose Lamps, SPL)					40.0	41.0	42.0	43.1	44.1	45.2	46.3	47.3	48.4	49.4	50.5	51.5	52.6	53.6	54.7	55.7	56.8	57.8	58.9	59.9	60.6	59.0	57.4	55.8
(Controls and Standby)					11.2	11.5	11.8	12.1	12.4	12.7	13.0	13.3	13.6	13.9	14.2	14.5	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.0	16.6	16.1	15.7
GLS stock					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	4.5	7.2	10.2	12.9	
Tungsten stock					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.8	6.2	7.3	
TOTAL					275.6	282.4	290.9	300.1	307.7	313.7	318.9	323.8	328.9	335.2	342.1	349.1	355.4	362.0	370.1	379.6	388.7	397.0	401.6	402.6	403.3	399.5	392.6	382.3

EU-28 ENERGY, TWh (10^12) / year TOTAL, All Sectors				1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12			27.0	26.9	25.9	24.1	21.7	19.6	17.7	16.0	14.5	13.2	12.0	10.9	9.7	8.6	7.6	6.7	6.0	5.3	4.5	3.8	3.2	2.6	2.0	1.4
	T8 Halophosphor			29.0	29.8	30.9	32.1	33.6	35.3	37.2	39.1	41.2	43.4	45.6	47.7	49.4	51.4	53.4	54.9	54.9	53.3	50.5	45.6	37.8	27.4	16.6	8.5
	T8 tri-phosphor			28.1	28.9	29.7	30.6	31.5	32.5	33.5	34.6	35.8	37.0	38.4	39.9	41.1	42.3	43.7	45.5	47.7	50.4	53.9	58.8	66.2	75.4	84.4	91.6
	T5 new (14 - 80w) including Circular			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	1.7	3.1	4.9	7.1	9.8	13.1	17.1	21.2	25.4	28.9
	All others (including T5 old types 4 - 13w and Special FL)			3.4	3.5	3.6	3.7	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.3	5.5	5.8	6.0	6.1	6.2	6.2	6.1	5.9	5.7	5.3	4.9	4.3
	LFL (total)			87.5	89.1	90.1	90.5	90.7	91.4	92.5	94.1	96.0	98.4	101.1	103.8	106.1	108.9	112.4	116.2	119.7	122.3	124.9	127.3	129.9	131.9	133.3	134.8
CFL	Retrofit - CFLi			0.9	1.0	1.2	1.3	1.5	1.8	2.1	2.4	2.8	3.2	3.7	4.1	4.5	4.9	5.4	6.3	7.5	9.2	11.0	13.0	14.8	16.3	17.4	18.2
	Non-Retrofit - CFLni			2.0	2.2	2.5	2.7	2.9	3.1	3.3	3.5	3.8	4.1	4.4	4.7	5.0	5.3	5.7	6.1	6.5	7.0	7.6	8.2	8.8	9.2	9.5	9.6
	CFL (total)			3.0	3.3	3.6	4.0	4.4	4.9	5.4	6.0	6.6	7.3	8.0	8.8	9.5	10.2	11.1	12.3	14.0	16.2	18.6	21.2	23.6	25.5	26.9	27.8
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]			1.1	1.3	1.6	2.0	2.5	3.0	3.6	4.1	4.7	5.3	5.9	6.5	7.0	7.6	8.2	8.7	9.2	9.7	10.1	10.4	10.7	10.9	11.1	11.4
	Linear (High voltage) [R7s]			3.3	5.7	10.1	15.5	19.3	21.4	22.3	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	21.4	18.8	15.6	13.1	11.7	10.8	10.2	9.8
	LV Halogen Capsule [G4, GY6.35]			3.4	3.7	3.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.8	3.7	3.5
	HV Halogen Capsule [G9]			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.3	2.1	2.9	3.4	3.6	3.7	3.6
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.8	4.1	6.5	8.7	10.7	13.0
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.			0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.7	1.0	1.3	1.6	2.0	2.3	2.7	3.1	3.6	4.3	5.2	6.2	7.3	8.2	8.7	8.8
	Tungsten-HL (total)			7.7	10.7	15.6	21.4	25.8	28.4	30.0	31.0	31.8	32.7	33.6	34.5	35.4	36.4	37.3	38.4	38.7	38.4	38.6	40.6	43.5	46.0	48.1	50.1
GLS	Reflector			9.3	9.3	9.3	9.2	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.7	7.4	6.8	5.8	4.7	3.8	3.2	2.5
	GLS (Including clear/pearl, candles, coloured & decorative)			81.4	81.5	81.1	80.6	80.1	79.6	79.1	78.6	78.1	77.6	77.1	76.6	76.1	75.6	75.1	74.6	74.1	73.5	68.9	57.1	42.8	29.6	19.0	11.1
	GLS (total)			90.7	90.8	90.4	89.8	89.1	88.5	87.9	87.3	86.7	86.1	85.5	84.9	84.3	83.7	83.0	82.4	81.8	81.0	75.7	62.9	47.4	33.4	22.2	13.6
HID	All Mercury Lamps (including mixed)			18.3	18.6	19.3	20.2	21.0	21.4	21.5	21.3	21.2	21.3	21.4	21.3	20.7	20.0	19.3	18.3	17.2	15.9	14.6	13.3	12.1	10.9	9.1	6.7
	All Sodium Lamps			14.8	14.8	15.0	15.4	15.8	16.2	16.5	16.8	17.2	17.5	18.2	19.0	20.0	20.7	21.6	22.8	24.7	26.8	29.1	30.8	31.5	30.7	29.5	28.5
	Metal Halide Lamps			2.5	2.6	3.1	3.7	4.4	5.1	5.9	6.7	7.5	8.5	9.7	10.9	12.1	13.4	15.3	17.6	20.1	22.4	24.8	27.9	31.5	34.2	33.1	28.1
	HID (total)			35.6	36.0	37.4	39.3	41.2	42.7	43.8	44.8	45.9	47.4	49.3	51.2	52.7	54.2	56.3	58.8	61.9	65.1	68.4	72.0	75.2	75.7	71.7	63.3
LED	Directional			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4
	Non Directional			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	
	LED (total)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	1.0
	GLS stock			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	4.5	7.2	10.2	12.9
	Tungsten stock			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.8	6.2	7.3
	(Special Purpose Lamps, SPL)			40.0	41.0	42.0	43.1	44.1	45.2	46.3	47.3	48.4	49.4	50.5	51.5	52.6	53.6	54.7	55.7	56.8	57.8	58.9	59.9	60.6	59.0	57.4	55.8
	(Controls and Standby)			11.2	11.5	11.8	12.1	12.4	12.7	13.0	13.3	13.6	13.9	14.2	14.5	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.0	16.6	16.1	15.7
	TOTAL			275.6	282.4	290.9	300.1	307.7	313.7	318.9	323.8	328.9	335.2	342.1	349.1	355.4	362.0	370.1	379.6	388.7	397.0	401.6	402.6	403.3	399.5	392.6	382.3

Weighted Averages over Residential and Non-Residential.

Weighted Averages Over Residential and Non-Residential:							
All Sectors		year	2009	2010	2011	2012	2013
LED	DLS	W to fit	24.0	21.1	17.2	12.7	9.2
LED	NDLS	W to fit	20.0	19.4	20.5	14.7	13.0
LED	All	W to fit	22.8	20.6	18.4	13.5	11.0

EU-28 ENERGY RESIDENTIAL TWh (10^12) / year		W/Unit	LWF	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	35	1.25	1.8	1.8	1.8	1.7	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.0	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.2
	T8 Halophosphor	32	1.25	1.7	1.7	1.8	1.8	1.9	2.0	2.1	2.1	2.2	2.3	2.5	2.6	2.7	2.8	2.9	3.1	3.2	3.2	3.2	3.2	3.1	2.8	2.6	2.3
	T8 tri-phosphor	30	1.10	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.7	2.9	3.1	3.4	3.6	3.9
	T5 new (14 - 80w) including Circular	25	1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.6
	All others (including T5 old types 4 - 13w and Special Fl.)	12	1.20	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3
	LFL (total)			5.2	5.3	5.3	5.4	5.5	5.5	5.6	5.7	5.8	5.8	5.9	6.0	6.1	6.2	6.4	6.6	6.7	6.9	7.0	7.2	7.3	7.3	7.4	7.4
CFL	Retrofit - CFLi	9.5	1.00	0.6	0.6	0.7	0.8	0.9	1.1	1.3	1.5	1.7	1.9	2.2	2.4	2.7	3.0	3.3	3.8	4.5	5.5	6.6	7.8	8.9	9.8	10.5	10.9
	Non-Retrofit - CFLni	11.5	1.10	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.7	1.8	1.9	2.0	2.2	2.3	2.4	2.5
	CFL (total)			1.0	1.1	1.3	1.4	1.6	1.8	2.1	2.3	2.6	3.0	3.3	3.6	4.0	4.3	4.7	5.3	6.1	7.3	8.5	9.8	11.1	12.1	12.9	13.4
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	35	1.06	0.9	1.0	1.3	1.6	2.0	2.4	2.9	3.3	3.8	4.2	4.7	5.2	5.6	6.1	6.6	7.0	7.4	7.8	8.1	8.4	8.6	8.7	8.9	9.1
	Linear (High voltage) [R7s]	250	1.00	2.6	4.6	8.1	12.4	15.5	17.1	17.9	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.1	15.0	12.5	10.5	9.4	8.6	8.2	7.8
	LV Halogen Capsule [G4, GY6.35]	35	1.06	2.8	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	2.8
	HV Halogen Capsule [G9]	35	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.0	1.7	2.3	2.7	2.9	2.9
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	36	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.4	3.2	5.2	6.9	8.5	10.4
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	35	1.00	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.3	1.6	1.9	2.2	2.5	2.9	3.4	4.1	5.0	5.8	6.5	7.0	7.0
	Tungsten-HL (total)			6.2	8.6	12.5	17.1	20.6	22.7	24.0	24.8	25.4	26.1	26.9	27.6	28.3	29.1	29.8	30.7	31.0	30.7	30.9	32.5	34.8	36.8	38.5	40.1
GLS	Reflector	54	1.00	7.4	7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.9	6.8	6.7	6.7	6.6	6.5	6.4	6.3	6.2	5.9	5.4	4.6	3.7	3.0	2.6	2.0
	GLS (Including clear/pearl, candles, coloured & decorative)	54	1.00	65.0	65.2	64.9	64.5	64.1	63.7	63.3	62.9	62.5	62.1	61.7	61.3	60.9	60.4	60.0	59.6	59.2	58.8	55.1	45.7	34.2	23.7	15.2	8.9
	GLS (total)			72.4	72.6	72.3	71.8	71.3	70.8	70.3	69.8	69.3	68.9	68.4	67.9	67.4	66.9	66.4	65.9	65.4	64.8	60.5	50.3	37.9	26.7	17.8	10.9
HID	All Mercury Lamps (including mixed)	250	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All Sodium Lamps	140	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Metal Halide Lamps	160	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	HID (total)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LED	Directional		1.10																				0.1	0.1	0.2	0.3	0.4
	Non Directional		1.10																				0.0	0.0	0.1	0.2	0.3
	LED (total)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.6
	GLS stock	54	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	4.5	7.2	10.2	12.9
	Tungsten stock	36	1.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.8	6.2	7.3
	TOTAL			84.8	87.6	91.4	95.8	99.0	100.9	102.0	102.6	103.2	103.8	104.5	105.2	105.8	106.6	107.3	108.5	109.2	109.6	107.0	101.7	97.3	94.3	93.4	92.7

The data below are linked copies from sheet Life&Use. Do NOT change here !

Residential		year	2009	2010	2011	2012	2013
LED	DLS	W to fit	24.0	21.1	17.3	12.8	9.5
LED	NDLS	W to fit	20.0	19.4	17.0	12.1	8.8

Energy per Household in kWh/year	
Number of Households (mln)	
Number of dwellings (mln)	
LFL energy per hh	
CFL energy per hh	
Tungsten energy per hh	
GLS energy per hh	
LED energy per hh	
TOTAL energy/hh	
of which DLS energy	

171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
212.8	215.2	217.7	220.1	222.6	225.1	226.9	228.7	230.6	232.4	234.2	235.2	236.1	237.0	237.9	238.8	239.7	240.7	241.6	242.5	243.4	244.4	245.3	246.2
30.1	30.3	30.4	30.5	30.5	30.6	30.7	30.8	31.0	31.2	31.4	31.8	32.1	32.7	33.3	34.0	34.7	35.4	36.1	36.6	37.0	37.3	37.4	37.2
5.8	6.5	7.2	8.0	8.9	10.0	11.3	12.7	14.2	15.8	17.4	19.1	20.8	22.5	24.4	27.5	31.7	37.4	43.6	50.2	56.3	61.4	65.1	67.6
36.3	49.5	71.1	96.4	114.8	125.3	131.4	134.3	136.8	139.4	142.2	145.5	148.8	152.2	155.5	159.5	160.1	158.2	158.6	166.0	184.9	206.2	225.7	238.8
422.1	418.4	411.8	404.5	397.2	390.0	384.1	378.5	373.0	367.5	362.1	358.2	354.2	350.2	346.3	342.3	338.3	333.8	310.7	266.7	216.4	172.0	141.7	120.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.8	1.4	2.1	3.2
494.3	504.7	520.5	539.3	551.4	555.9	557.5	556.4	555.0	554.0	553.2	554.6	556.0	557.5	559.5	563.3	564.9	564.8	549.1	519.9	495.4	478.4	472.0	466.9
48.3	49.0	49.7	50.5	51.5	53.0	55.1	57.5	60.3	63.2	66.1	69.3	72.5	75.6	78.7	81.9	85.1	88.3	90.7	92.1	92.9	93.7	94.5	93.4

EU-28 ENERGY NON-RESIDENTIAL TWh (10 ¹²) / year		W/Unit	LWF	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	35	1.25	25.2	25.1	24.2	22.4	20.1	18.0	16.2	14.6	13.1	11.9	10.8	9.9	8.8	7.8	6.9	6.0	5.4	4.7	4.1	3.4	2.8	2.3	1.7	1.2
	T8 Halophosphor	32	1.25	27.3	28.1	29.1	30.3	31.7	33.3	35.1	37.0	38.9	41.1	43.2	45.1	46.8	48.6	50.4	51.8	51.8	50.1	47.3	42.4	34.7	24.5	14.0	6.2
	T8 tri-phosphor	30	1.10	26.6	27.3	28.1	28.9	29.8	30.7	31.7	32.7	33.8	35.0	36.3	37.8	38.9	40.1	41.4	43.1	45.2	47.8	51.2	55.9	63.0	72.0	80.7	87.7
	T5 new (14 - 80w) including Circular	25	1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	1.7	3.0	4.8	7.0	9.6	12.9	16.7	20.8	24.9	28.3
	All others (including T5 old types 4 - 13w and Special Fl.)	12	1.20	3.2	3.3	3.4	3.5	3.6	3.8	3.9	4.1	4.3	4.5	4.8	5.0	5.2	5.5	5.6	5.8	5.8	5.8	5.8	5.6	5.3	4.9	4.5	4.0
	LFL (total)			82.3	83.9	84.8	85.1	85.2	85.8	86.9	88.4	90.2	92.6	95.1	97.7	100.0	102.6	106.0	109.7	112.9	115.4	117.9	120.1	122.6	124.6	125.9	127.4
CFL	Retrofit - CFLi	9.5	1.00	0.4	0.4	0.5	0.5	0.6	0.7	0.8	1.0	1.1	1.3	1.5	1.6	1.8	2.0	2.2	2.5	3.0	3.7	4.4	5.2	5.9	6.5	7.0	7.3
	Non-Retrofit - CFLni	11.5	1.10	1.6	1.7	1.9	2.0	2.2	2.3	2.5	2.7	2.8	3.1	3.3	3.5	3.7	4.0	4.2	4.5	4.9	5.3	5.7	6.1	6.6	6.9	7.1	7.1
	CFL (total)			2.0	2.1	2.3	2.6	2.8	3.1	3.3	3.6	4.0	4.4	4.7	5.1	5.5	5.9	6.4	7.1	7.9	8.9	10.1	11.3	12.5	13.4	14.1	14.4
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	35	1.06	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.3
	Linear (High voltage) [R7s]	250	1.00	0.7	1.1	2.0	3.1	3.9	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	3.8	3.1	2.6	2.3	2.2	2.0	2.0
	LV Halogen Capsule [G4, GY6.35]	35	1.06	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7
	HV Halogen Capsule [G9]	35	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.6	0.7	0.7	0.7	0.7
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	36	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.8	1.3	1.7	2.1	2.6
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	35	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.9	1.0	1.2	1.5	1.6	1.7	1.8
	Tungsten-HL (total)			1.5	2.1	3.1	4.3	5.2	5.7	6.0	6.2	6.4	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.7	7.7	7.7	8.1	8.7	9.2	9.6	10.0
GLS	Reflector	54	1.00	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.5	1.5	1.4	1.2	0.9	0.8	0.6	0.5
	GLS (Including clear/pearl, candles, coloured & decorative)	54	1.00	16.4	16.3	16.2	16.1	16.0	15.9	15.8	15.7	15.6	15.5	15.4	15.3	15.2	15.1	15.0	14.9	14.8	14.7	13.8	11.4	8.6	5.9	3.8	2.2
	GLS (total)			18.2	18.2	18.1	18.0	17.8	17.7	17.6	17.5	17.3	17.2	17.1	17.0	16.9	16.7	16.6	16.5	16.4	16.2	15.1	12.6	9.5	6.7	4.4	2.7
HID	All Mercury Lamps (including mixed)	250	1.20	18.3	18.6	19.3	20.2	21.0	21.4	21.5	21.3	21.2	21.3	21.4	21.3	20.7	20.0	19.3	18.3	17.2	15.9	14.6	13.3	12.1	10.9	9.1	6.7
	All Sodium Lamps	140	1.20	14.8	14.8	15.0	15.4	15.8	16.2	16.5	16.8	17.2	17.5	18.2	19.0	20.0	20.7	21.6	22.8	24.7	26.8	29.1	30.8	31.5	30.7	29.5	28.5
	Metal Halide Lamps	160	1.20	2.5	2.6	3.1	3.7	4.4	5.1	5.9	6.7	7.5	8.5	9.7	10.9	12.1	13.4	15.3	17.6	20.1	22.4	24.8	27.9	31.5	34.2	33.1	28.1
	HID (total)			35.6	36.0	37.4	39.3	41.2	42.7	43.8	44.8	45.9	47.4	49.3	51.2	52.7	54.2	56.3	58.8	61.9	65.1	68.4	72.0	75.2	75.7	71.7	63.3
LED	Directional		1.10																				0.0	0.0	0.0	0.0	0.1
	Non Directional		1.10																				0.0	0.0	0.0	0.1	0.3
	LED (total)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
	GLS stock	54	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Tungsten stock	36	1.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	(Special Purpose Lamps, SPL)			40.0	41.0	42.0	43.1	44.1	45.2	46.3	47.3	48.4	49.4	50.5	51.5	52.6	53.6	54.7	55.7	56.8	57.8	58.9	59.9	60.6	59.0	57.4	55.8
	(Controls and Standby)			11.2	11.5	11.8	12.1	12.4	12.7	13.0	13.3	13.6	13.9	14.2	14.5	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.0	16.6	16.1	15.7
	TOTAL			190.8	194.8	199.6	204.4	208.7	212.8	216.9	221.1	225.7	231.3	237.6	243.9	249.5	255.4	262.7	271.1	279.5	287.4	294.6	300.9	306.0	305.2	299.3	289.6

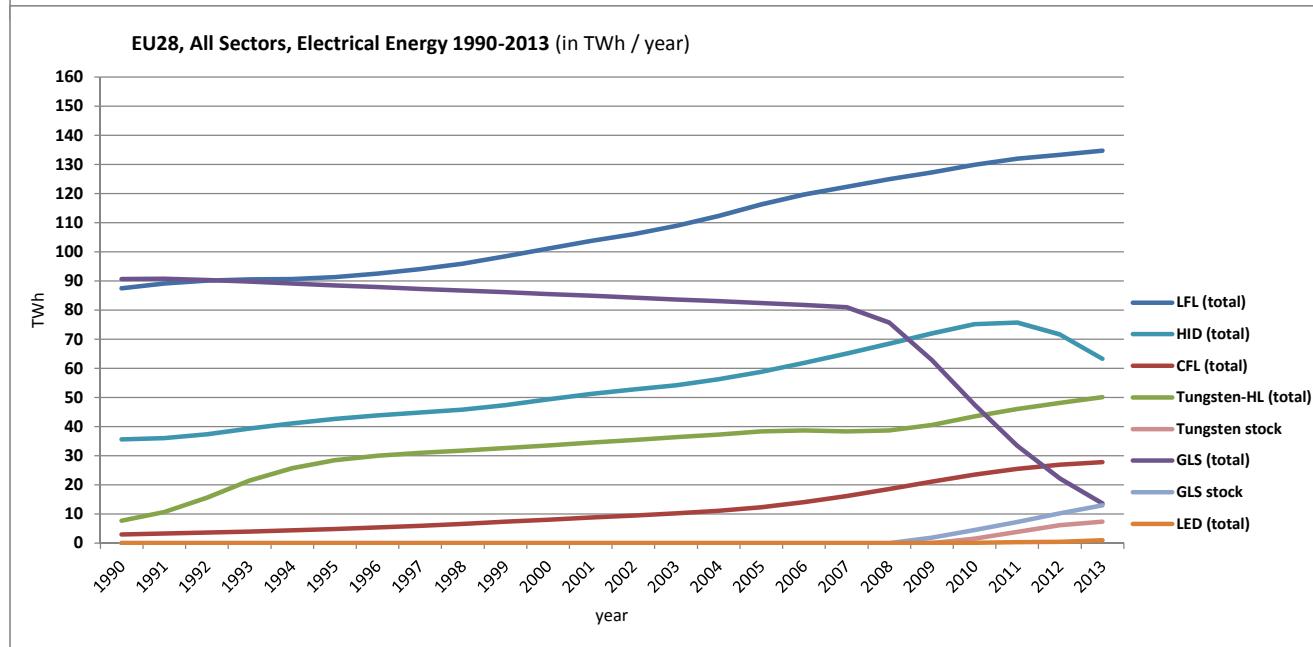
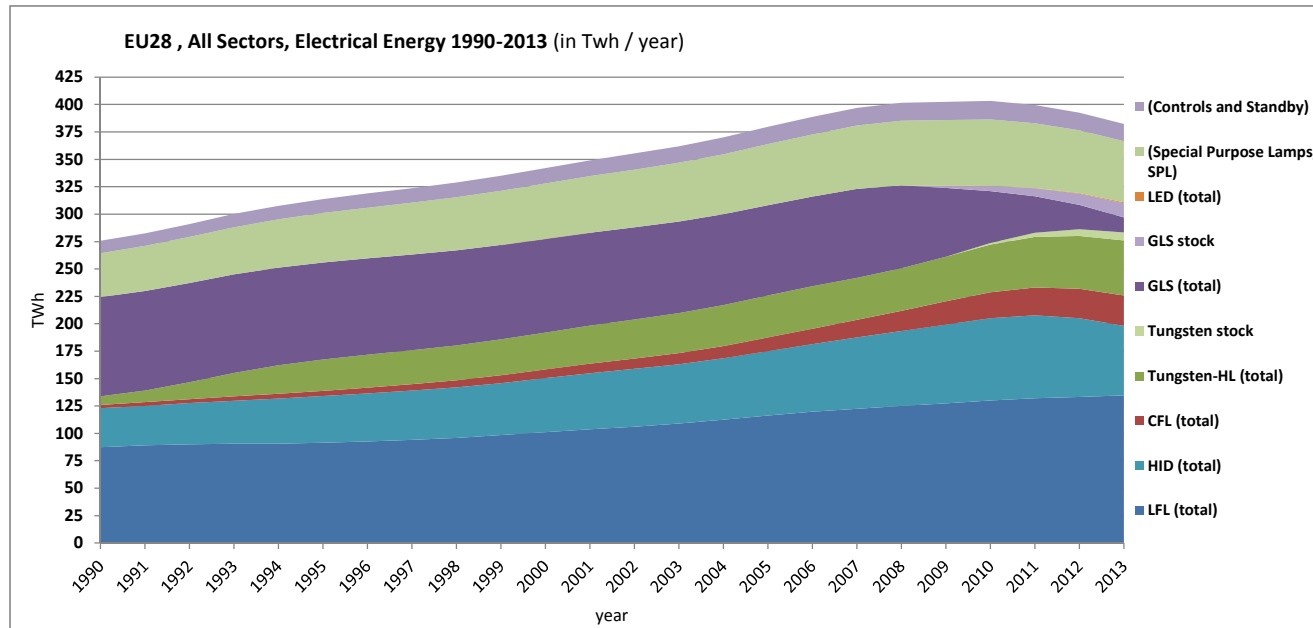
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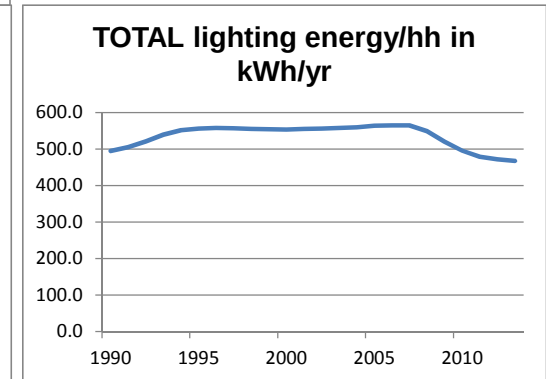
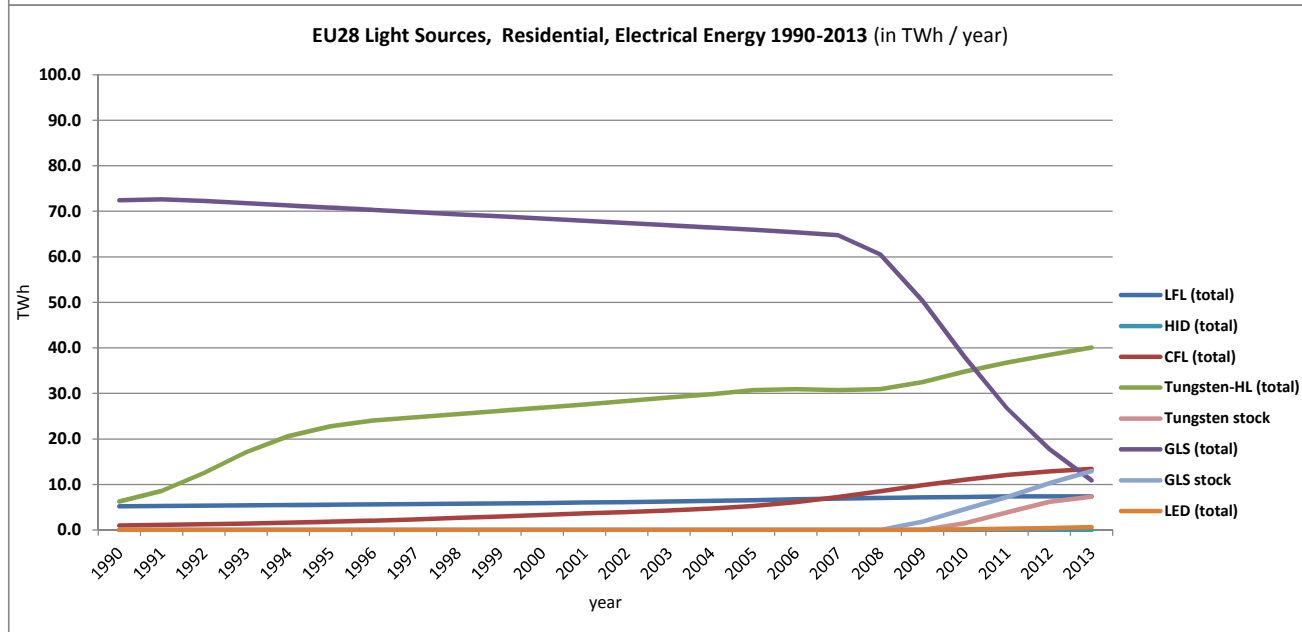
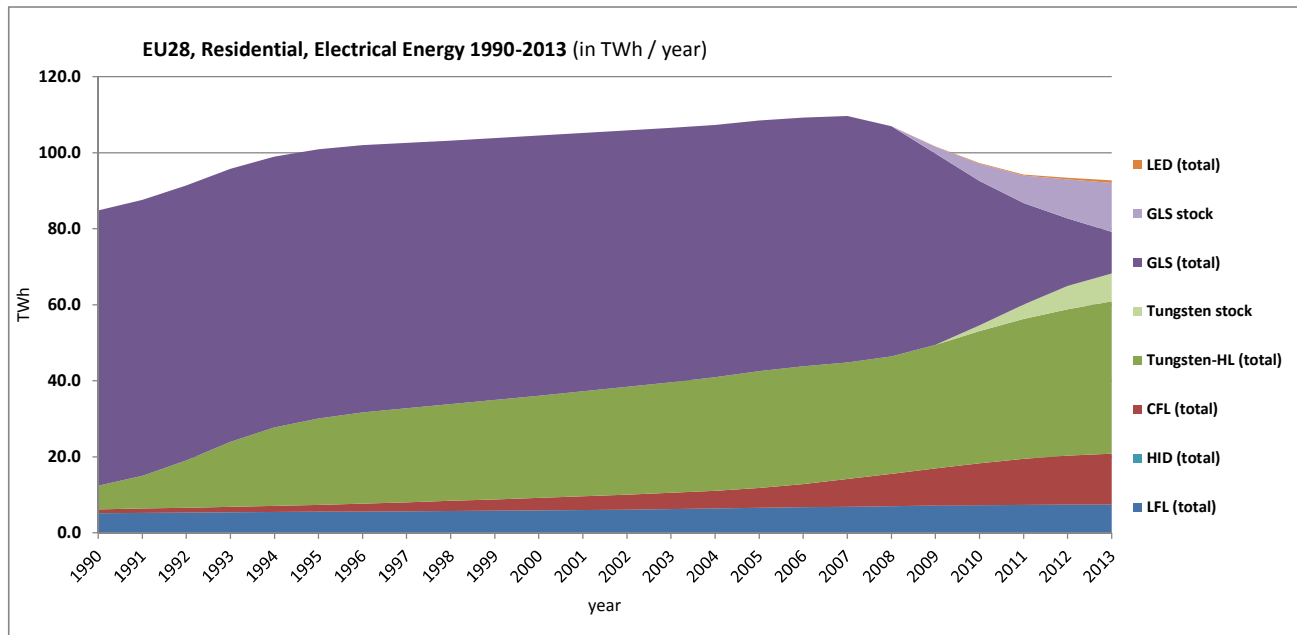
Non-Resident		year	2009	2010	2011	2012	2013
LED	DLS	W to fit	24.0	20.0	15.0	11.3	8.1
LED	NDLS	W to fit	72.0	60.0	45.0	36.4	23.6

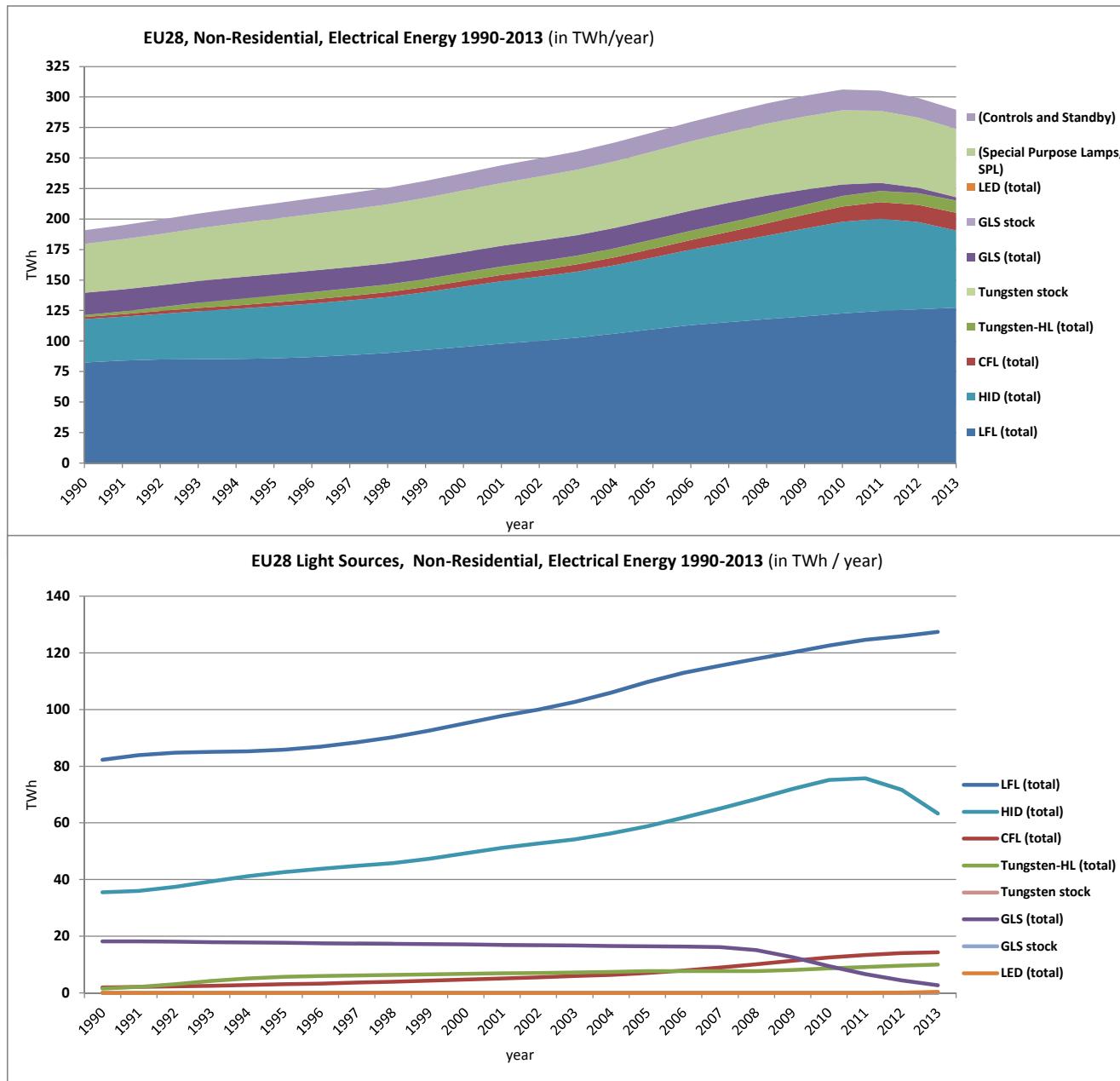
Division of EU-28 lighting energy over
the technology types

	year 2008				year 2013		
	All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
LFL	38%	7%	54%		43%	8%	58%
CFL	6%	8%	5%		9%	14%	7%
HL	12%	29%	4%		18%	51%	5%
GLS	23%	57%	7%		9%	26%	1%
HID	21%	0%	31%		20%	0%	29%
LED	0%	0%	0%		0%	1%	0%

Includes Tungsten stock
Includes GLS stock
exclusive SPL , Controls, Standby







EU-28 END-USER SALES SUMMARY, All Sectors mIn Euro (10^6)/year (fixed 2010 euros)	
LFL (total)	
CFL (total)	
Tungsten-HL (total)	
GLS (total)	
HID (total)	
LED (total)	
GLS stock	
Tungsten stock	
TOTAL	

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2283	2257	2267	2277	2302	2342	2398	2454	2510	2614	2692	2753	2786	2918	3060	3175	3206	3238	3270	3256	3277	3249	3115	2881
243	259	291	344	405	479	543	613	668	715	744	773	796	825	951	1369	1851	2401	2658	2873	2760	2503	2054	1663
280	350	438	543	610	696	780	879	987	1102	1221	1341	1462	1583	1711	1899	2126	2498	2956	3438	3757	3943	4084	4032
1461	1453	1443	1432	1421	1410	1400	1391	1381	1372	1362	1351	1341	1330	1320	1309	1297	1280	1108	836	604	406	271	148
370	381	404	427	448	468	485	503	521	551	585	618	642	674	722	783	846	909	971	1038	1079	1073	978	855
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155	285	522	781	1301	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4637	4699	4843	5023	5186	5394	5607	5840	6067	6353	6603	6836	7026	7331	7764	8535	9327	10326	10964	11596	11762	11697	11284	10880

VAT included for residential part

EU-28 END-USER SALES TOTAL, All Sectors mIn Euro (10^6)/year (fixed 2010 euros)	
LFL	T12
	T8 Halophosphor
	T8 tri-phosphor
	T5 new (14 - 80w) including Circular
	All others (including T5 old types 4 - 13w and Special FL.)
CFL	LFL (total)
	Retrofit - CFLi
	Non-Retrofit - CFLni
	CFL (total)
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]
	Linear (High voltage) [R7s]
	LV Halogen Capsule [G4, GY6.35]
	HV Halogen Capsule [G9]
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.
	Tungsten-HL (total)
	Reflector
GLS	GLS (Including clear/pearl, candles, coloured & decorative)
	GLS (total)
HID	All Mercury Lamps (including mixed)
	All Sodium Lamps
	Metal Halide Lamps
	HID (total)
LED	Directional
	Non Directional
	LED (total)
GLS stock	
Tungsten stock	
TOTAL	

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
684	622	560	499	445	401	365	329	293	275	247	223	187	168	151	134	117	100	83	66	54	42	26	10
810	831	874	916	963	1015	1071	1128	1184	1256	1309	1348	1380	1465	1514	1502	1407	1312	1216	965	578	222	37	18
607	617	638	659	681	704	729	753	777	812	848	883	879	898	939	1031	1120	1210	1300	1494	1845	2166	2222	2091
0	0	0	0	0	0	0	0	0	0	0	0	32	73	134	185	249	313	377	457	547	606	648	607
182	186	195	203	212	222	233	245	256	270	287	298	307	315	322	322	313	304	295	274	253	213	182	155
2283	2257	2267	2277	2302	2342	2398	2454	2510	2614	2692	2753	2786	2918	3060	3175	3206	3238	3270	3256	3277	3249	3115	2881
135	147	172	218	270	334	388	447	491	522	537	553	568	584	689	1082	1538	2061	2292	2485	2357	2117	1693	1329
108	111	119	126	135	145	155	166	177	192	207	220	228	241	262	287	313	340	366	388	403	387	361	333
243	259	291	344	405	479	543	613	668	715	744	773	796	825	951	1369	1851	2401	2658	2873	2760	2503	2054	1663
74	88	114	142	169	197	225	254	283	312	341	369	398	426	452	476	496	514	528	540	548	551	562	600
46	102	163	234	254	275	275	275	275	275	275	275	275	275	275	275	244	203	165	144	136	124	122	116
160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	161	157	150	137	129
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	85	171	220	256	256	256	256	244
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	68	206	359	437	498	621	770
0	0	1	7	26	64	120	190	270	356	445	537	629	723	823	952	1132	1382	1678	1976	2222	2363	2385	2174
280	350	438	543	610	696	780	879	987	1102	1221	1341	1462	1583	1711	1899	2126	2498	2956	3438	3757	3943	4084	4032
229	228	226	222	219	216	213	211	210	208	205	202	200	197	194	191	186	177	153	124	96	81	72	48
1233	1225	1217	1210	1202	1195	1187	1179	1172	1164	1157	1149	1141	1134	1126	1119	1111	1104	956	712	508	326	199	100
1461	1453	1443	1432	1421	1410	1400	1391	1381	1372	1362	1351	1341	1330	1320	1309	1297	1280	1108	836	604	406	271	148
129	133	139	146	150	152	151	150	149	152	150	149	143	140	133	126	117	107	98	90	81	72	57	38
197	200	205	211	216	220	225	229	233	239	254	267	278	285	302	327	358	388	419	426	416	386	378	376
43	49	59	70	82	95	110	124	138	159	181	202	221	249	287	331	372	413	455	523	581	615	544	442
370	381	404	427	448	468	485	503	521	551	585	618	642	674	722	783	846	909	971	1038	1079	1073	978	855
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	201	317	442	568
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	84	204	339	732
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155	285	522	781	1301
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4637	4699	4843	5023	5186	5394	5607	5840	6067	6353	6603	6836	7026	7331	7764	8535	9327	10326	10964	11596	11762	11697	11284	10880

Weighted Averages over Residential and Non-Residential.

All Sectors		year	2009	2010	2011	2012	2013
LED	DLS	€ to fit	40.3	34.6	29.9	24.2	14.0
LED	NDLS	€ to fit	33.6	31.7	33.8	25.7	17.9
LED	All	€ to fit	38.2	33.7	31.3	24.8	15.9

VAT included																												
EU-28 END-USER SALES		Price/Unit (2010)																										
RESIDENTIAL																												
mIn Euro (10^6)/year (fixed 2010 euros)		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
LFL	T12	10.10	52	47	42	38	34	30	28	25	22	21	19	17	14	13	11	10	9	8	6	5	4	3	2	1		
	T8 Halophosphor	10.10	61	63	66	69	73	77	81	85	90	95	99	102	105	111	115	114	107	99	92	73	44	17	3	1		
	T8 tri-phosphor	10.10	46	47	48	50	52	53	55	57	59	62	64	67	67	68	71	78	85	92	99	113	140	164	169	159		
	T5 new (14 - 80w) including Circular	9.50	0	0	0	0	0	0	0	0	0	0	0	0	2	6	10	14	19	24	29	35	42	46	49	46		
	All others (including T5 old types 4 - 13w and Special FL.)	9.50	14	14	15	15	16	17	18	19	19	20	22	23	23	24	24	24	24	23	22	21	19	16	14	12		
LFL (total)			173	171	172	173	175	178	182	186	190	198	204	209	211	221	232	241	243	246	248	247	249	246	236	218		
CFL	Retrofit - CFLi	5.26	87	95	111	140	174	215	249	287	316	336	345	356	365	375	443	696	989	1325	1473	1597	1515	1361	1088	855		
	Non-Retrofit - CFLni	5.26	37	38	40	43	46	49	53	56	60	65	70	75	77	82	89	97	106	115	124	132	137	131	123	113		
	CFL (total)		123	133	151	183	219	264	302	344	376	401	415	430	443	457	532	793	1095	1440	1598	1729	1652	1492	1211	968		
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	3.79	62	73	95	117	140	163	187	210	234	258	282	306	330	353	374	394	411	425	437	447	453	456	465	497		
	Linear (High voltage) [R7s]	3.16	38	84	135	194	210	227	227	227	227	227	227	227	227	227	227	227	202	168	136	120	113	103	101	96		
	LV Halogen Capsule [G4, GY6.35]	3.16	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	130	124	114	106		
	HV Halogen Capsule [G9]	3.79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	71	141	182	212	212	212	212	202		
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	2.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	56	170	297	362	412	514	637		
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.	14.21	0	0	1	6	22	53	99	157	223	294	369	444	520	598	681	788	937	1144	1389	1636	1839	1956	1974	1799		
	Tungsten-HL (total)		232	289	363	449	505	576	646	727	817	912	1010	1110	1210	1310	1416	1572	1760	2067	2447	2845	3109	3263	3380	3337		
GLS	Reflector	1.37	189	189	187	184	181	178	177	175	173	172	170	167	165	163	160	158	154	146	126	103	79	67	59	39		
	GLS (Including clear/pearl, candles, coloured & decorative)	0.84	1020	1014	1007	1001	995	989	982	976	970	964	957	951	945	938	932	926	920	913	791	589	421	269	165	83		
	GLS (total)		1209	1202	1194	1185	1176	1167	1159	1151	1143	1135	1127	1118	1110	1101	1092	1084	1073	1059	917	692	500	336	224	122		
HID	All Mercury Lamps (including mixed)	20.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	All Sodium Lamps	32.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Metal Halide Lamps	32.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	HID (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
LED	Directional																					113	201	300	416	479		
	Non Directional																					42	84	169	313	495		
	LED (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155	285	468	729	974		
GLS stock			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Tungsten stock			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL			1738	1795	1880	1990	2075	2184	2289	2408	2526	2647	2757	2867	2973	3090	3272	3689	4171	4813	5210	5668	5795	5806	5781	5619		

The data below are linked copies from sheet Life&Use. Do NOT change here !

Residential		year	2009	2010	2011	2012	2013
LED	DLS	€ to fit	40.32	34.56	30.24	24.48	14.40
LED	NDLS	€ to fit	33.60	31.68	30.24	24.48	14.40

Sales per Household in Euro (incl. VAT)	
Number of Households (mln)	
Number of dwellings (mln)	
LFL sales (euro) per hh	
CFL sales (euro) per hh	
Tungsten sales (euro) per hh	
GLS sales (euro) per hh	
LED sales (euro) per hh	
TOTAL sales (euro)/hh	
of which DLS sales (euro)	

171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
212.8	215.2	217.7	220.1	222.6	225.1	226.9	228.7	230.6	232.4	234.2	235.2	236.1	237.0	237.9	238.8	239.7	240.7	241.6	242.5	243.4	244.4	245.3	246.2
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.1
0.7	0.8	0.9	1.0	1.2	1.5	1.7	1.9	2.0	2.1	2.2	2.3	2.3	2.4	2.8	4.1	5.7	7.4	8.2	8.8	8.4	7.6	6.1	4.9
1.4	1.7	2.1	2.5	2.8	3.2	3.5	3.9	4.4	4.9	5.3	5.9	6.4	6.9	7.4	8.2	9.1	10.7	12.6	14.6	15.8	16.6	17.1	16.8
7.0	6.9	6.8	6.7	6.6	6.4	6.3	6.2	6.1	6.1	6.0	5.9	5.8	5.8	5.7	5.6	5.6	5.5	4.7	3.5	2.5	1.7	1.1	0.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	2.4	3.7	4.9
10.1	10.3	10.7	11.2	11.6	12.0	12.5	13.1	13.6	14.1	14.6	15.1	15.6	16.2	17.1	19.2	21.6	24.8	26.7	29.0	29.5	29.5	29.2	28.3
1.5	1.5	1.6	1.7	1.9	2.2	2.5	2.9	3.4	3.9	4.3	4.8	5.3	5.8	6.3	7.0	7.8	8.8	10.0	11.8	13.1	14.1	14.7	14.2

VAT excluded

EU-28 END-USER SALES	
NON-RESIDENTIAL	
mln Euro (10^6)/year (fixed 2010 euros)	
LFL	T12
	T8 Halophosphor
	T8 tri-phosphor
	T5 new (14 - 80w) including Circular
	All others (including T5 old types 4 - 13w and Special FL)
LFL (total)	
CFL	Retrofit - CFLi
	Non-Retrofit - CFLni
	CFL (total)
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]
	Linear (High voltage) [R7s]
	LV Halogen Capsule [G4, GY6.35]
	HV Halogen Capsule [G9]
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.
	Tungsten-HL (total)
	Reflector
GLS	GLS (Including clear/pearl, candles, coloured & decorative)
	GLS (total)
HID	All Mercury Lamps (including mixed)
	All Sodium Lamps
	Metal Halide Lamps
	HID (total)
LED	Directional
	Non Directional
	LED (total)
GLS stock	
Tungsten stock	
TOTAL	

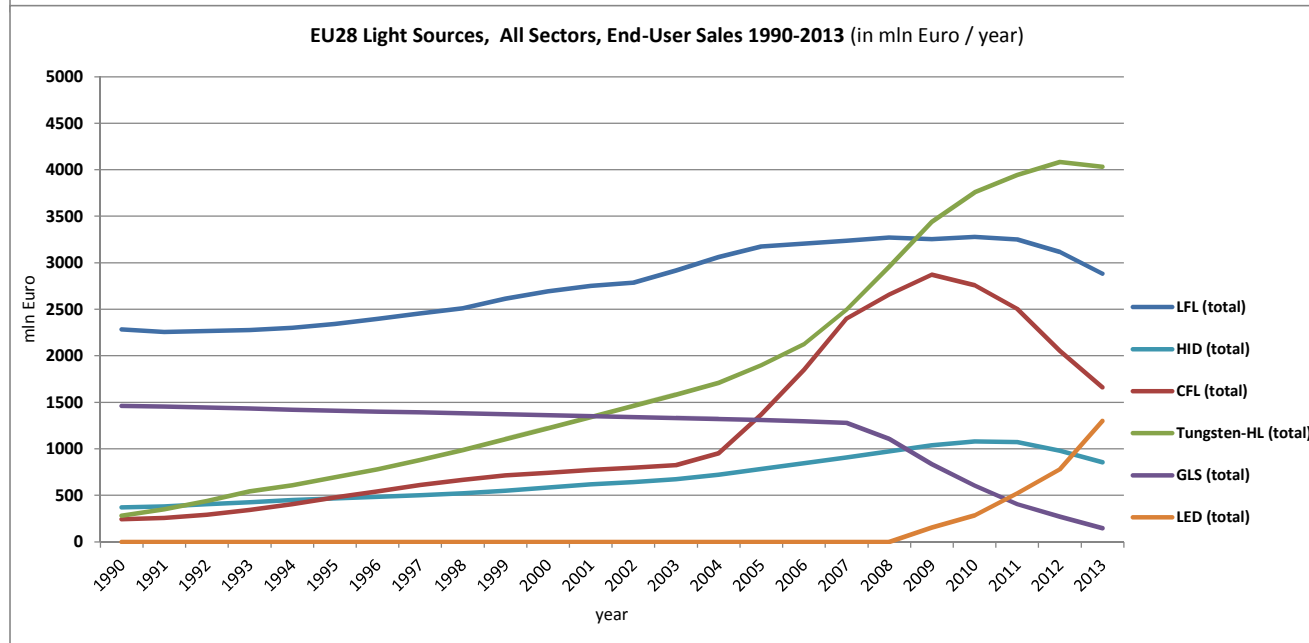
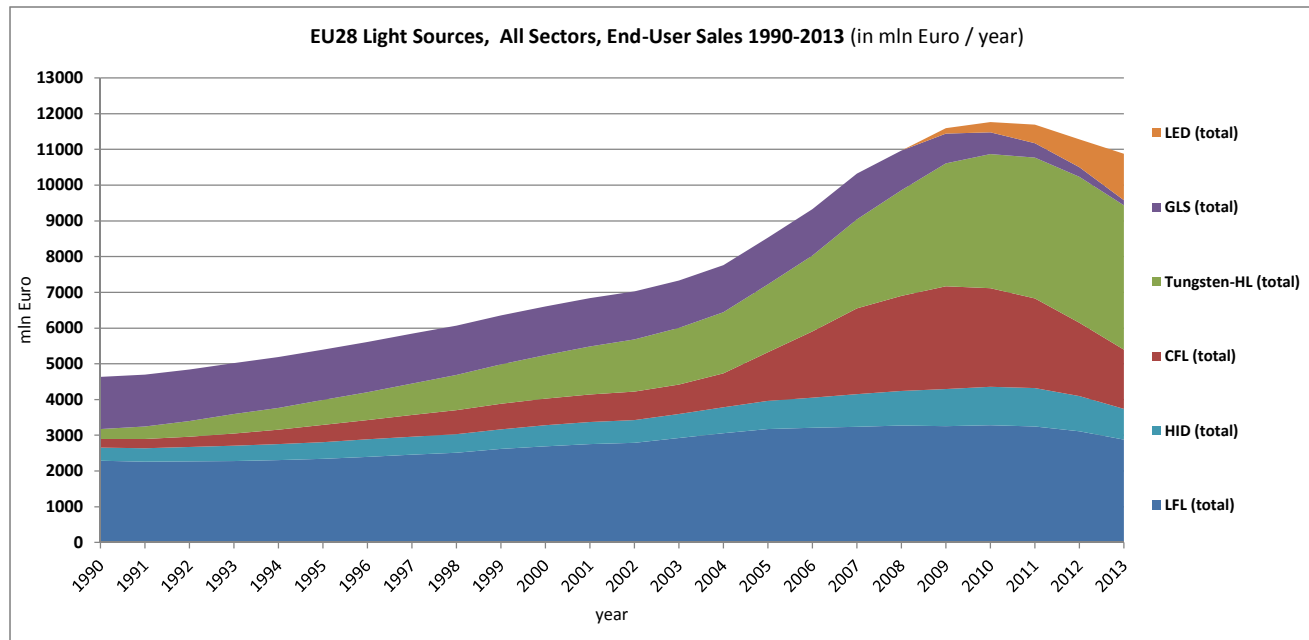
Price/Unit
(2010)

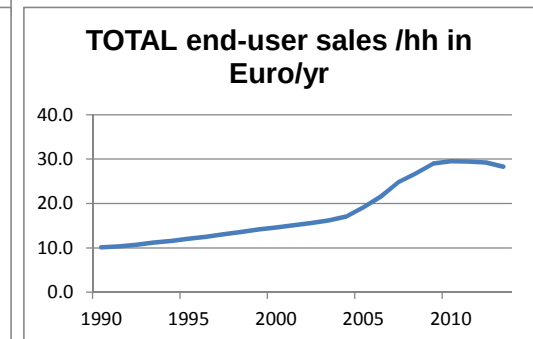
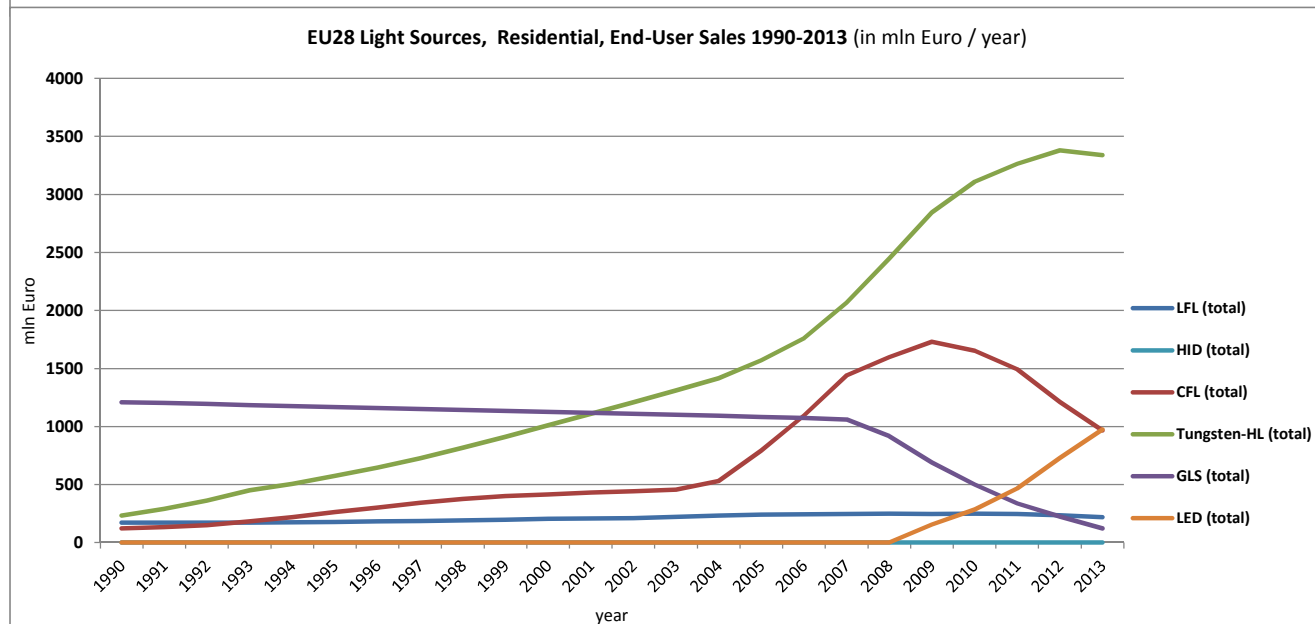
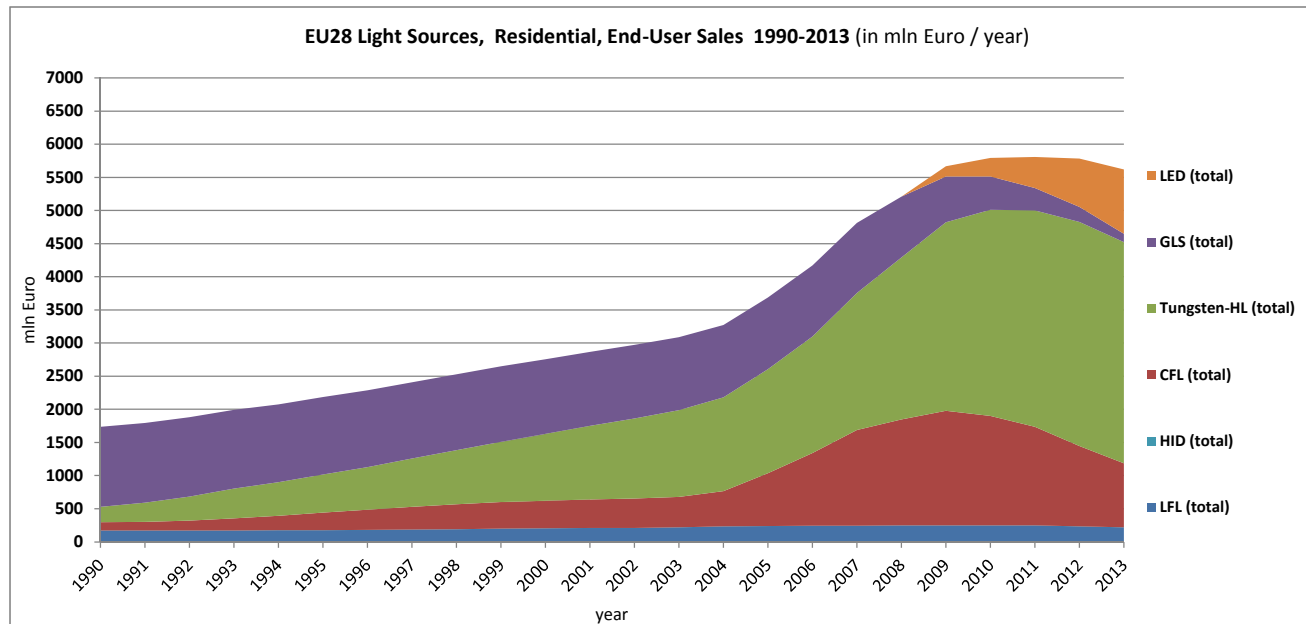
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
632	575	518	461	412	371	337	304	271	254	228	206	173	155	139	124	108	92	76	61	50	39	24	9
748	768	807	847	890	938	990	1042	1094	1161	1210	1246	1275	1354	1399	1388	1300	1212	1124	891	534	206	34	17
561	571	590	609	630	651	673	695	718	751	784	816	813	830	868	952	1036	1119	1202	1381	1705	2002	2054	1932
0	0	0	0	0	0	0	0	0	0	0	0	30	67	124	171	230	289	348	422	506	560	599	561
169	172	180	187	196	205	216	226	237	249	265	275	283	291	298	298	289	281	272	254	234	197	168	143
2110	2086	2095	2104	2127	2165	2216	2268	2320	2416	2488	2544	2574	2697	2828	2934	2963	2993	3022	3009	3029	3003	2879	2663
48	53	61	78	96	119	139	160	175	187	192	198	203	208	246	386	549	736	819	887	842	756	605	475
71	73	78	83	89	95	103	110	117	127	137	145	151	159	173	189	207	224	242	256	266	255	239	220
119	126	140	161	186	215	241	269	292	314	328	343	353	368	419	576	756	961	1060	1144	1108	1011	843	695
13	15	20	24	29	34	39	44	49	54	59	64	69	73	78	82	86	89	91	93	94	95	97	103
8	18	28	40	44	47	47	47	47	47	47	47	47	47	47	47	42	35	28	25	24	21	21	20
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	27	26	24	22
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12	36	62	75	86	107	133
0	0	0	1	4	11	21	33	46	61	77	93	108	125	142	164	195	238	289	341	383	407	411	375
48	60	76	94	105	120	134	152	170	190	210	231	252	273	295	327	367	431	510	593	648	680	704	695
39	39	39	38	38	37	37	36	36	36	35	35	34	34	33	33	32	30	26	21	17	14	12	8
213	211	210	209	207	206	205	203	202	201	199	198	197	195	194	193	192	190	165	123	88	56	34	17
252	251	249	247	245	243	241	240	238	237	235	233	231	229	228	226	224	221	191	144	104	70	47	26
129	133	139	146	150	152	151	150	149	152	150	149	143	140	133	126	117	107	98	90	81	72	57	38
197	200	205	211	216	220	225	229	233	239	254	267	278	285	302	327	358	388	419	426	416	386	378	376
43	49	59	70	82	95	110	124	138	159	181	202	221	249	287	331	372	413	455	523	581	615	544	442
370	381	404	427	448	468	485	503	521	551	585	618	642	674	722	783	846	909	971	1038	1079	1073	978	855
																			0	0	18	27	89
																			0	0	36	26	238
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	53	327
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2899	2904	2963	3033	3111	3210	3319	3432	3541	3706	3847	3969	4053	4241	4492	4846	5156	5513	5755	5928	5967	5891	5503	5261

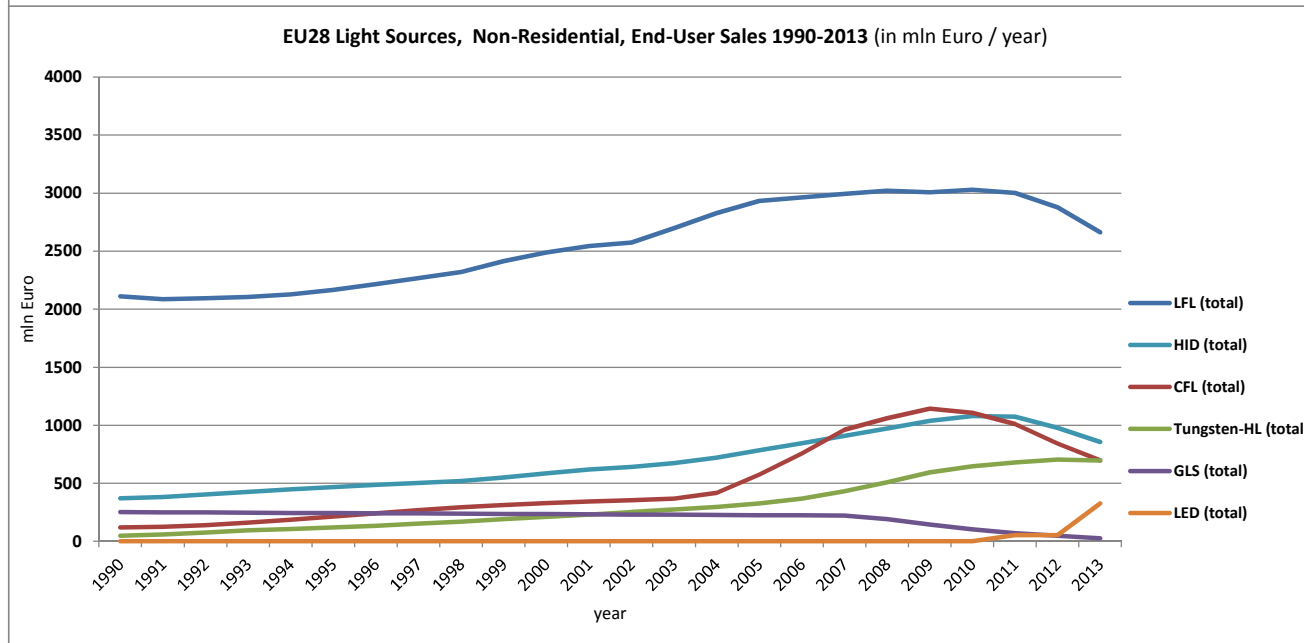
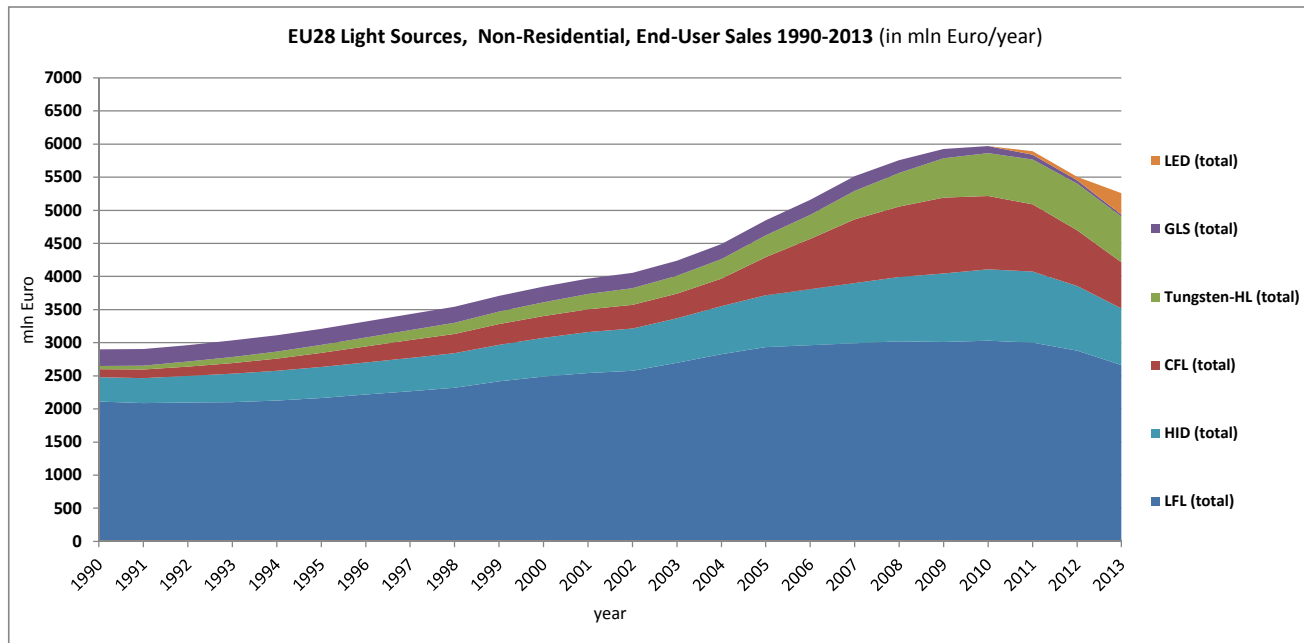
The data below are linked copies from sheet Life&Use. Do NOT change here !

Non-Resident	year	2009	2010	2011	2012	2013
LED	DLS	€ to fit	33.60	28.80	25.20	20.40
LED	NDLS	€ to fit	100.80	86.40	75.60	61.20

		year 2008			year 2013		
		All Sectors	Residential	Non-Residential	All Sectors	Residential	Non-Residential
Division of EU-28 consumer acquisition costs for lamps over the technology types	LFL	30%	5%	53%	26%	4%	51%
	CFL	24%	31%	18%	15%	17%	13%
	HL	27%	47%	9%	37%	59%	13%
	GLS	10%	18%	3%	1%	2%	0%
	HID	9%	0%	17%	8%	0%	16%
	LED	0%	0%	0%	12%	17%	6%







EU-28 INDUSTRY REVENUE	
SUMMARY, All Sectors	
mln Euro (10 ⁶)/year (fixed 2010 euros)	
LFL (total)	
CFL (total)	
Tungsten-HL (total)	
GLS (total)	
HID (total)	
LED (total)	
GLS stock	
Tungsten stock	
TOTAL	
% LED of Total	

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1507	1490	1497	1503	1520	1547	1584	1620	1657	1726	1777	1818	1839	1927	2021	2096	2117	2138	2159	2150	2164	2145	2057	1902
92	98	110	131	154	182	206	233	254	272	283	294	302	314	361	520	703	912	1010	1092	1049	951	781	632
107	133	167	207	232	265	297	335	376	420	465	511	557	603	651	723	810	951	1126	1309	1431	1501	1555	1536
558	555	551	547	542	538	534	531	527	524	520	516	512	508	504	500	495	489	423	319	231	155	104	56
244	251	267	282	296	309	320	332	344	363	386	408	423	445	477	517	558	600	641	685	712	708	645	565
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	108	198	297	494
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2508	2528	2592	2669	2744	2840	2942	3051	3158	3304	3431	3546	3634	3796	4014	4356	4684	5090	5359	5614	5694	5660	5439	5185
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.9%	3.5%	5.5%	9.5%

EU-28 INDUSTRY REVENUE	
TOTAL, All Sectors	
mln Euro (10 ⁶)/year (fixed 2010 euros)	
LFL	T12
	T8 Halophosphor
	T8 tri-phosphor
	T5 new (14 - 80w) including Circular
	All others (including T5 old types 4 - 13w and Special FL)
LFL (total)	
CFL	Retrofit - CFLi
	Non-Retrofit - CFLni
	CFL (total)
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]
	Linear (High voltage) [R7s]
	LV Halogen Capsule [G4, GY6.35]
	HV Halogen Capsule [G9]
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.
	Tungsten-HL (total)
GLS	Reflector
	GLS (Including clear/pearl, candles, coloured & decorative)
	GLS (total)
HID	All Mercury Lamps (including mixed)
	All Sodium Lamps
	Metal Halide Lamps
	HID (total)
LED	Directional
	Non Directional
	LED (total)
GLS stock	
Tungsten stock	
TOTAL	

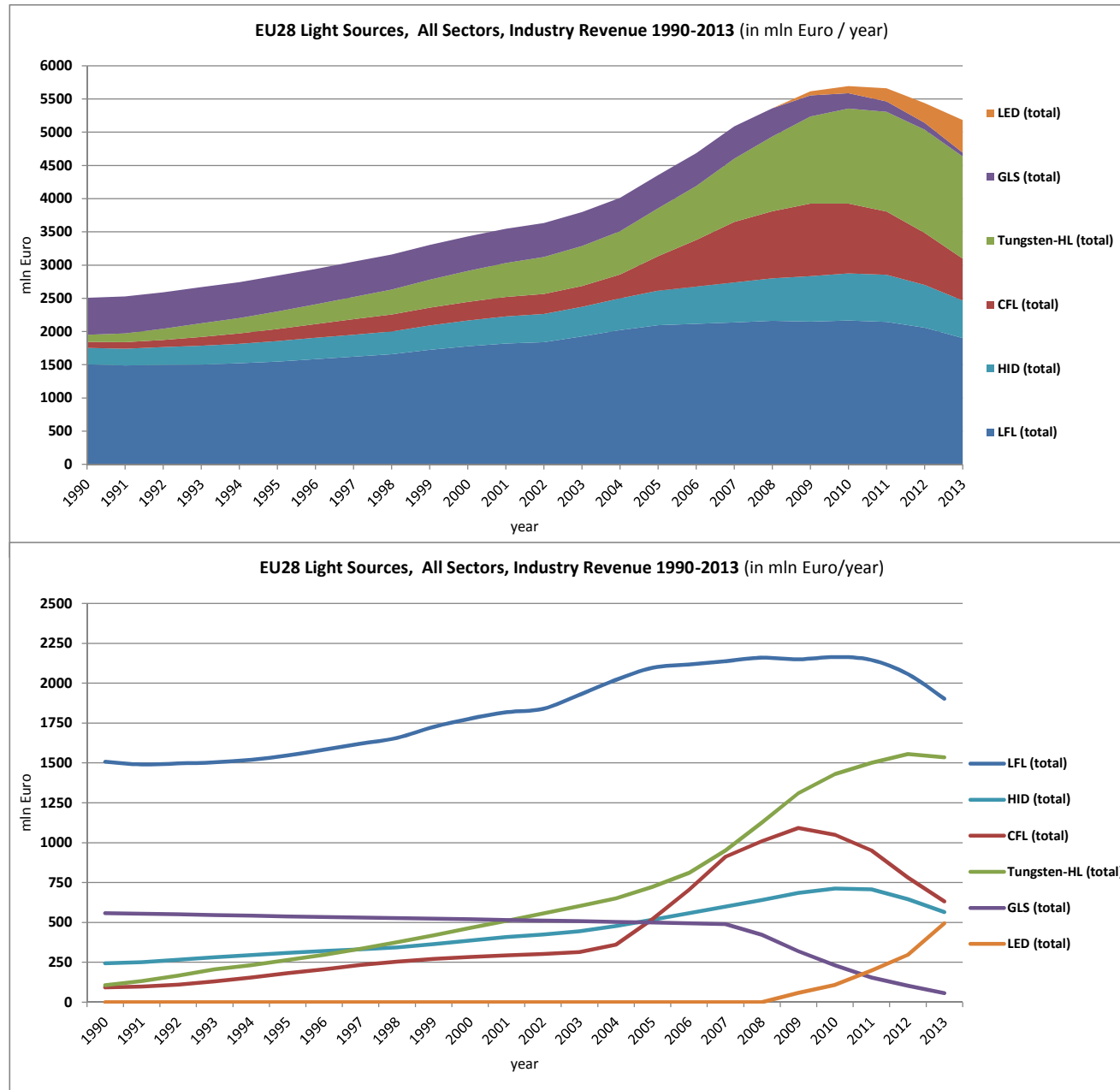
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452	411	370	329	294	265	241	217	194	182	163	148	124	111	99	88	77	66	55	44	36	28	17	7
535	549	577	605	636	670	707	744	782	830	865	890	911	967	1000	992	929	866	803	637	381	147	24	12
401	408	422	435	450	465	481	497	513	536	560	583	581	593	620	681	740	799	858	986	1218	1430	1467	1381
0	0	0	0	0	0	0	0	0	0	0	0	21	48	89	122	165	207	249	302	361	400	428	401
120	123	128	134	140	147	154	162	169	178	189	197	203	208	213	213	207	201	195	181	167	140	120	102
1507	1490	1497	1503	1520	1547	1584	1620	1657	1726	1777	1818	1839	1927	2021	2096	2117	2138	2159	2150	2164	2145	2057	1902
51	56	65	83	103	127	147	170	187	198	204	210	216	222	262	411	584	783	871	944	896	804	643	505
41	42	45	48	51	55	59	63	67	73	79	83	87	92	99	109	119	129	139	148	153	147	137	127
92	98	110	131	154	182	206	233	254	272	283	294	302	314	361	520	703	912	1010	1092	1049	951	781	632
28	33	44	54	64	75	86	97	108	119	130	141	152	162	172	181	189	196	201	206	209	210	214	228
17	39	62	89	97	105	105	105	105	105	105	105	105	105	105	105	93	77	63	55	52	47	46	44
61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	60	57	52	49
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	33	65	84	98	98	98	98	93
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	26	78	137	167	190	237	293
0	0	0	3	10	24	46	72	103	135	170	204	239	275	314	362	431	526	639	753	846	900	908	828
107	133	167	207	232	265	297	335	376	420	465	511	557	603	651	723	810	951	1126	1309	1431	1501	1555	1536
87	87	86	85	84	82	81	81	80	79	78	77	76	75	74	73	71	67	58	47	37	31	27	18
470	468	465	462	459	456	453	450	447	444	441	439	436	433	430	427	424	421	365	272	194	124	76	38
558	555	551	547	542	538	534	531	527	524	520	516	512	508	504	500	495	489	423	319	231	155	104	56
85	88	92	96	99	100	100	99	98	100	99	99	94	92	88	83	77	71	65	59	54	48	37	25
130	132	135	139	142	145	148	151	154	158	168	176	184	188	199	216	236	256	276	281	274	255	249	248
29	32	39	46	54	63	72	82	91	105	119	134	146	164	190	218	246	273	300	345	384	406	359	292
244	251	267	282	296	309	320	332	344	363	386	408	423	445	477	517	558	600	641	685	712	708	645	565
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	76	121	168	216
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	108	198	297	494
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2508	2528	2592	2669	2744	2840	2942	3051	3158	3304	3431	3546	3634	3796	4014	4356	4684	5090	5359	5614	5694	5660	5439	5185

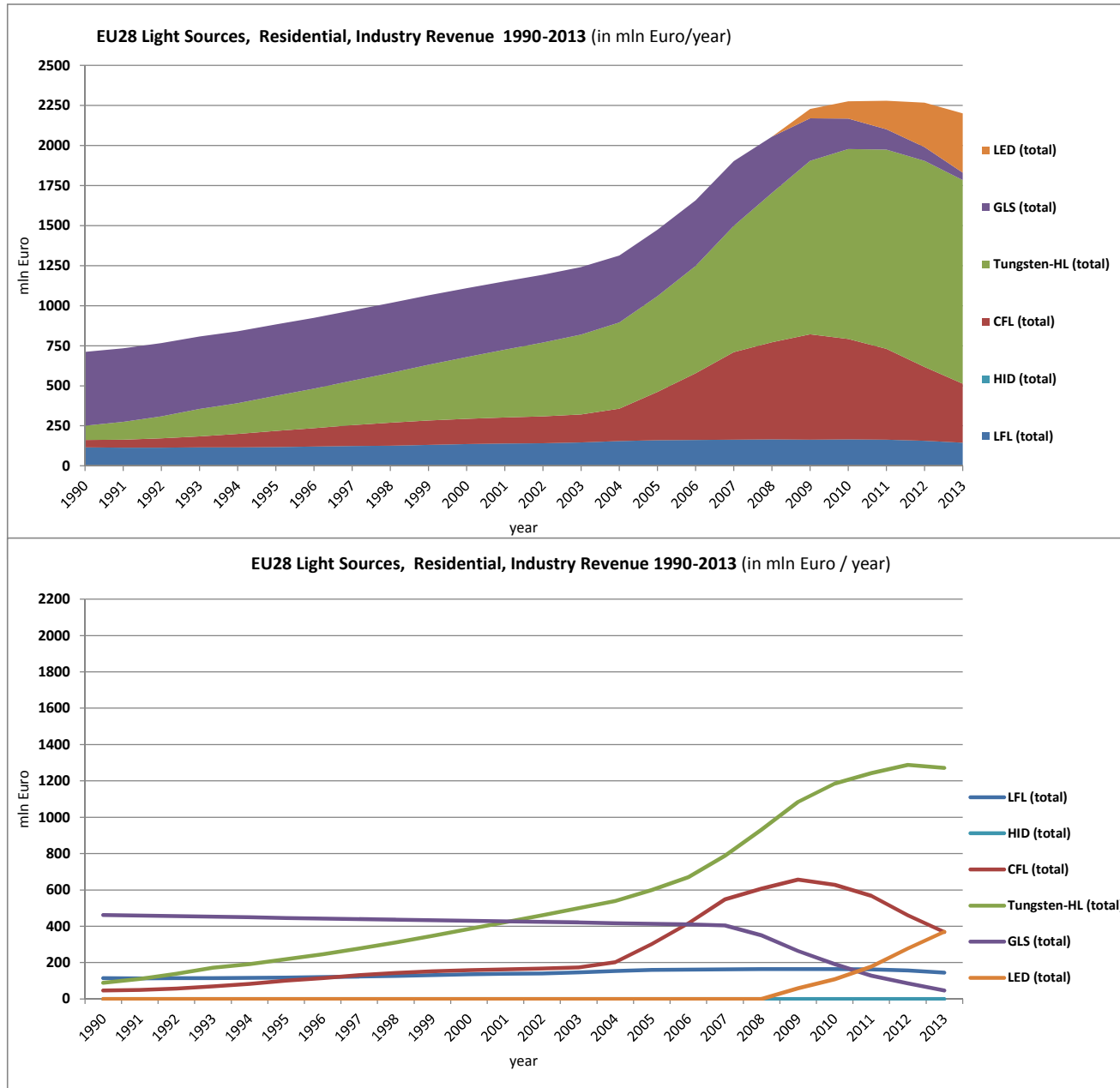
EU-28 INDUSTRY REVENUE			ManuFrac	199019911992199319941995199619971998199920002001200220032004200520062007200820092010201120122013																						
RESIDENTIAL																										
mln Euro (10^6)/year (fixed 2010 euros)																										
LFL	T12	66%	34	31	28	25	22	20	18	17	15	14	12	11	9	8	8	7	6	5	4	3	3	2	1	1
	T8 Halophosphor	66%	41	42	44	46	49	51	54	57	60	63	66	68	69	74	76	76	71	66	61	49	29	11	2	1
	T8 tri-phosphor	66%	31	31	32	33	34	35	37	38	39	41	43	44	44	45	47	52	56	61	65	75	93	109	112	105
	T5 new (14 - 80w) including Circular	66%	0	0	0	0	0	0	0	0	0	0	0	0	2	4	7	9	13	16	19	23	28	30	33	31
	All others (including T5 old types 4 - 13w and Special Fl.)	66%	9	9	10	10	11	11	12	12	13	14	14	15	15	16	16	16	16	15	15	14	13	11	9	8
LFL (total)			115	114	114	115	116	118	121	124	126	132	136	139	140	147	154	160	161	163	165	164	165	164	157	145
CFL	Retrofit - CFLi	38%	33	36	42	53	66	82	95	109	120	128	131	135	139	143	168	264	376	504	560	607	576	517	414	325
	Non-Retrofit - CFLni	38%	14	14	15	16	17	19	20	21	23	25	27	28	29	31	34	37	40	44	47	50	52	50	47	43
	CFL (total)		47	50	57	69	83	100	115	131	143	152	158	164	168	174	202	301	416	547	607	657	628	567	460	368
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	38%	23	28	36	45	53	62	71	80	89	98	107	116	126	134	143	150	157	162	166	170	173	174	177	189
	Linear (High voltage) [R7s]	38%	14	32	51	74	80	87	87	87	87	87	87	87	87	87	87	87	77	64	52	46	43	39	38	37
	LV Halogen Capsule [G4, GY6.35]	38%	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	51	50	47	43	41	
	HV Halogen Capsule [G9]	38%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	27	54	69	81	81	81	81	77
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	38%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	21	65	113	138	157	196	243
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.	38%	0	0	0	2	8	20	38	60	85	112	140	169	198	228	260	300	357	436	529	623	701	745	752	686
	Tungsten-HL (total)		88	110	138	171	192	219	246	277	311	347	385	423	461	499	539	599	670	788	932	1084	1185	1243	1288	1271
GLS	Reflector	38%	72	72	71	70	69	68	67	67	66	66	65	64	63	62	61	60	59	56	48	39	30	26	23	15
	GLS (Including clear/pearl, candles, coloured & decorative)	38%	390	387	385	382	380	378	375	373	370	368	366	363	361	358	356	354	351	349	302	225	161	103	63	32
	GLS (total)		462	459	456	453	449	446	443	440	437	434	430	427	424	421	417	414	410	405	350	264	191	128	86	47
HID	All Mercury Lamps (including mixed)	66%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	All Sodium Lamps	66%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Metal Halide Lamps	66%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	HID (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LED	Directional	38%																				43	76	114	158	182
	Non Directional	38%																				16	32	64	119	188
	LED (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	108	178	277	370
	GLS stock		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tungsten stock		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL		712	734	766	808	841	883	924	971	1017	1065	1109	1152	1193	1241	1313	1474	1658	1903	2054	2228	2277	2280	2268	2201

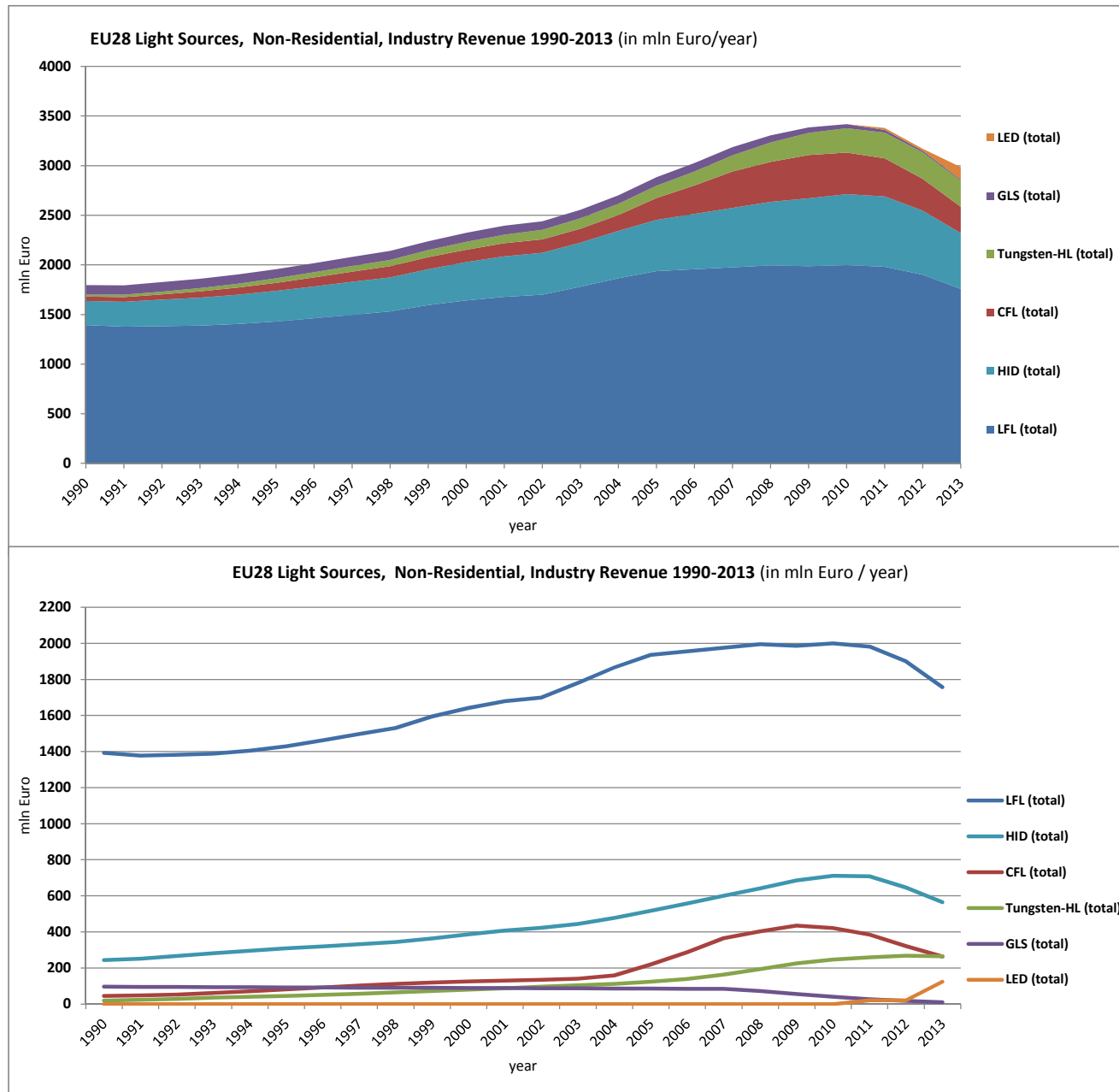
EU-28 INDUSTRY REVENUE NON-RESIDENTIAL mln Euro (10^6)/year (fixed 2010 euros)		ManuFrac	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	66%	417	379	342	304	272	245	223	201	179	168	151	136	114	103	92	82	71	61	50	40	33	26	16	6
	T8 Halophosphor	66%	494	507	533	559	588	619	653	688	722	766	799	822	842	894	923	916	858	800	742	588	352	136	22	11
	T8 tri-phosphor	66%	370	377	389	402	416	430	444	459	474	495	517	539	536	548	573	629	683	738	793	911	1125	1321	1355	1275
	T5 new (14 - 80w) including Circular	66%	0	0	0	0	0	0	0	0	0	0	0	0	20	44	82	113	152	191	230	279	334	369	395	370
	All others (including T5 old types 4 - 13w and Special FL)	66%	111	114	119	124	129	135	142	149	156	165	175	182	187	192	196	197	191	185	180	167	154	130	111	94
LFL (total)			1392	1377	1383	1389	1404	1429	1463	1497	1531	1594	1642	1679	1699	1780	1867	1936	1956	1975	1995	1986	1999	1982	1900	1757
CFL	Retrofit - CFLi	38%	18	20	23	30	37	45	53	61	67	71	73	75	77	79	94	147	209	280	311	337	320	287	230	180
	Non-Retrofit - CFLni	38%	27	28	30	32	34	36	39	42	44	48	52	55	57	61	66	72	79	85	92	97	101	97	91	84
	CFL (total)		45	48	53	61	71	82	92	102	111	119	125	130	134	140	159	219	287	365	403	435	421	384	320	264
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	38%	5	6	7	9	11	13	15	17	19	20	22	24	26	28	30	31	33	34	35	35	36	36	37	39
	Linear (High voltage) [R7s]	38%	3	7	11	15	17	18	18	18	18	18	18	18	18	18	18	18	16	13	11	9	9	8	8	8
	LV Halogen Capsule [G4, GY6.35]	38%	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	10	10	9	8
	HV Halogen Capsule [G9]	38%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	11	14	17	17	17	17	16
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	38%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	13	24	29	33	41	50
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	38%	0	0	0	0	2	4	8	12	18	23	29	35	41	47	54	62	74	91	110	129	146	155	156	142
	Tungsten-HL (total)		18	23	29	36	40	46	51	58	65	72	80	88	96	104	112	124	139	164	194	225	246	258	268	264
GLS	Reflector	38%	15	15	15	15	14	14	14	14	14	14	13	13	13	13	13	12	12	12	10	8	6	5	5	3
	GLS (Including clear/pearl, candles, coloured & decorative)	38%	81	80	80	79	79	78	78	77	77	76	76	75	75	74	74	73	73	72	63	47	33	21	13	7
	GLS (total)		96	95	95	94	93	92	92	91	91	90	89	89	88	87	86	86	85	84	73	55	40	27	18	10
HID	All Mercury Lamps (including mixed)	66%	85	88	92	96	99	100	100	99	98	100	99	99	94	92	88	83	77	71	65	59	54	48	37	25
	All Sodium Lamps	66%	130	132	135	139	142	145	148	151	154	158	168	176	184	188	199	216	236	256	276	281	274	255	249	248
	Metal Halide Lamps	66%	29	32	39	46	54	63	72	82	91	105	119	134	146	164	190	218	246	273	300	345	384	406	359	292
	HID (total)		244	251	267	282	296	309	320	332	344	363	386	408	423	445	477	517	558	600	641	685	712	708	645	565
LED	Directional	38%																				0	0	7	10	34
	Non Directional	38%																				0	0	14	10	90
	LED (total)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	124
GLS stock			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tungsten stock			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL			1796	1794	1826	1861	1903	1957	2018	2080	2141	2239	2322	2394	2440	2555	2701	2882	3026	3188	3305	3386	3418	3380	3171	2984

Division of EU-28 industry revenue from lamps over the technology types

	year 2008				year 2013		
	All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
LFL	40%	8%	60%		37%	7%	59%
CFL	19%	30%	12%		12%	17%	9%
HL	21%	45%	6%		30%	58%	9%
GLS	8%	17%	2%		1%	2%	0%
HID	12%	0%	19%		11%	0%	19%
LED	0%	0%	0%		10%	17%	4%







EU-28 ENERGY COST SUMMARY, All Sectors bn Euro (10^9)/year (fixed 2010 euros)			Elec. Price (2010)		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL (total)	0.110	10.7			10.9	11.1	10.6	10.4	9.9	9.3	9.1	9.0	8.8	8.9	9.0	8.8	9.5	9.7	10.5	12.0	12.6	13.5	14.0	14.2	15.0	15.8	16.6	
CFL (total)	0.134	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.4	1.7	2.1	2.5	2.9	3.2	3.6	4.0	4.3			
Tungsten-HL (total)	0.157	1.3	1.9	2.8	3.7	4.4	4.7	4.8	4.9	4.8	4.8	4.9	4.9	5.0	5.1	5.2	5.4	5.7	5.9	6.0	6.3	6.8	7.5	8.2	8.9			
GLS (total)	0.157	15.1	15.8	16.2	15.5	15.4	14.6	14.0	13.7	13.2	12.7	12.5	12.1	11.9	11.8	11.5	11.5	11.9	12.4	11.8	9.8	7.5	5.5	3.8	2.4			
HID (total)	0.106	4.2	4.3	4.4	4.4	4.5	4.4	4.2	4.1	4.1	4.0	4.1	4.2	4.2	4.5	4.6	5.1	6.0	6.5	7.2	7.7	8.0	8.3	8.2	7.5			
LED (total)	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2			
GLS stock	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.3	1.9	2.5		
Tungsten stock	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.1	1.4		
TOTAL	0.138	31.7	33.3	35.1	34.8	35.3	34.2	32.9	32.5	31.8	31.1	31.3	31.3	30.9	32.1	32.2	34.0	37.3	39.5	41.0	40.9	40.7	42.0	43.1	43.7			

EU-28 ENERGY COST TOTAL, All Sectors bn Euro (10^9)/year (fixed 2010 euros)			Elec. Price (2010)		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	0.111	3.3			3.3	3.2	2.8	2.5	2.1	1.8	1.6	1.4	1.2	1.1	1.0	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.2	
T8 Halophosphor	0.110	3.5	3.7	3.8	3.7	3.8	3.8	3.7	3.8	3.8	3.9	4.0	4.1	4.1	4.5	4.6	5.0	5.5	5.5	5.5	5.1	4.2	3.2	2.1	1.2			
T8 tri-phosphor	0.109	3.4	3.5	3.6	3.6	3.6	3.5	3.3	3.3	3.3	3.4	3.5	3.4	3.7	3.7	4.1	4.8	5.2	5.8	6.5	7.2	8.5	9.9	11.2				
T5 new (14 - 80w) including Circular	0.107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	0.7	1.0	1.4	1.8	2.4	3.0	3.5		
All others (including T5 old types 4 - 13w and Special FL.)	0.110	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.5			
LFL (total)		10.7	10.9	11.1	10.6	10.4	9.9	9.3	9.1	9.0	8.8	8.9	9.0	8.8	9.5	9.7	10.5	12.0	12.6	13.5	14.0	14.2	15.0	15.8	16.6			
CFL	0.144	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	1.0	1.3	1.6	1.9	2.1	2.4	2.7	3.0			
Non-Retrofit - CFLni	0.122	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3			
CFL (total)		0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.4	1.7	2.1	2.5	2.9	3.2	3.6	4.0	4.3			
TUNGSTEN (HL)	0.157	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.5	1.6	1.6	1.7	1.8	1.9	2.0			
Linear (High voltage) [R7s]	0.157	0.5	1.0	1.8	2.7	3.3	3.5	3.6	3.5	3.4	3.3	3.3	3.2	3.2	3.2	3.1	3.1	3.1	2.9	2.4	2.0	1.8	1.8	1.7	1.7			
LV Halogen Capsule [G4, GY6.35]	0.157	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6			
HV Halogen Capsule [G9]	0.157	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.5	0.6	0.6	0.6			
Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	0.157	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	1.0	1.4	1.8	2.3			
Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.	0.157	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.7	0.8	1.0	1.1	1.3	1.5	1.6			
Tungsten-HL (total)		1.3	1.9	2.8	3.7	4.4	4.7	4.8	4.9	4.8	4.8	4.9	4.9	5.0	5.1	5.2	5.4	5.7	5.9	6.0	6.3	6.8	7.5	8.2	8.9			
GLS	0.157	1.5	1.6	1.7	1.6	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	0.9	0.7	0.6	0.5	0.4			
GLS (Including clear/pearl, candles, coloured & decorative)	0.157	13.5	14.2	14.6	14.0	13.8	13.2	12.6	12.3	11.9	11.4	11.3	10.9	10.7	10.6	10.4	10.4	10.8	11.3	10.8	8.9	6.7	4.8	3.2	2.0			
GLS (total)		15.1	15.8	16.2	15.5	15.4	14.6	14.0	13.7	13.2	12.7	12.5	12.1	11.9	11.8	11.5	11.5	11.9	12.4	11.8	9.8	7.5	5.5	3.8	2.4			
HID	0.106	2.2	2.2	2.3	2.3	2.3	2.2	2.0	2.0	1.9	1.8	1.8	1.8	1.6	1.7	1.6	1.6	1.7	1.6	1.5	1.4	1.3	1.2	1.0	0.8			
All Mercury Lamps (including mixed)	0.106	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.5	1.5	1.5	1.5	1.6	1.6	1.7	1.8	2.0	2.4	2.7	3.0	3.3	3.4	3.4	3.4				
Metal Halide Lamps	0.106	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.3	1.5	1.9	2.2	2.6	3.0	3.3	3.8	3.8	3.4			
HID (total)		4.2	4.3	4.4	4.4	4.5	4.4	4.2	4.1	4.1	4.0	4.1	4.2	4.2	4.5	4.6	5.1	6.0	6.5	7.2	7.7	8.0	8.3	8.2	7.5			
LED	0.164	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1			
Directional	0.145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1			
Non Directional		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1			
LED (total)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2			
GLS stock	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.3	1.9	2.5		
Tungsten stock	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.1	1.4		
TOTAL		31.7	33.3	35.1	34.8	35.3	34.2	32.9	32.5	31.8	31.1	31.3	31.3	30.9	32.1	32.2	34.0	37.3	39.5	41.0	40.9	40.7	42.0	43.1	43.7			

EU-28 ENERGY COST RESIDENTIAL bn Euro (10^9)/year (fixed 2010 euros)		Elec.Price (2010)	Escal.Rate after 2010	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
LFL	T12			0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
	T8 Halophosphor			0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
	T8 tri-phosphor	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.7		
	T5 new (14 - 80w) including Circular	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1		
	All others (including T5 old types 4 - 13w and Special FL.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
LFL (total)		0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.4	1.4	
CFL	Retrofit - CFLi	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.9	1.1	1.3	1.5	1.7	1.9	2.1		
	Non-Retrofit - CFLni	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5		
	CFL (total)	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	1.0	1.2	1.4	1.6	1.9	2.1	2.4	2.6	2.6		
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.7	1.7		
	Linear (High voltage) [R7s]	0.5	0.9	1.6	2.3	2.9	3.1	3.1	3.1	3.0	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.7	2.5	2.1	1.7	1.6	1.5	1.5	1.5	1.5		
	LV Halogen Capsule [G4, GY6.35]	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
	HV Halogen Capsule [G9]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.6		
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.9	1.2	1.6	2.0		
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8	1.0	1.2	1.3	1.3		
	Tungsten-HL (total)		1.1	1.6	2.4	3.2	3.9	4.1	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.5	4.6	4.7	4.9	5.1	5.2	5.4	5.9	6.5	7.1	7.7		
	Reflector	1.3	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.6	0.5	0.5	0.4	0.4		
GLS	GLS (Including clear/pearl, candles, coloured & decorative)	11.6	12.2	12.7	12.1	12.0	11.5	11.1	10.9	10.5	10.1	10.0	9.7	9.5	9.4	9.2	9.1	9.4	9.8	9.3	7.6	5.8	4.2	2.8	1.7	1.7		
	GLS (total)		12.9	13.6	14.1	13.5	13.4	12.8	12.4	12.1	11.7	11.2	11.1	10.7	10.5	10.4	10.2	10.1	10.3	10.8	10.2	8.4	6.5	4.7	3.3	2.1		
	All Mercury Lamps (including mixed)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
HID	All Sodium Lamps	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	Metal Halide Lamps	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	HID (total)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	Directional																					0.0	0.0	0.0	0.0	0.1		
LED	Non Directional																					0.0	0.0	0.0	0.0	0.1		
	LED (total)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1		
	GLS stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.3	1.9	2.5		
Tungsten stock		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.1	1.4		
TOTAL		15.1	16.5	17.8	18.0	18.6	18.2	17.9	17.8	17.4	16.9	16.9	16.6	16.5	16.6	16.4	16.6	17.3	18.3	18.1	17.0	16.5	16.7	17.2	17.7	17.7		

Residential prices of electricity (fixed 2010 euros) (up to year 2010 taken from sheet Life&Use, do not change here)

year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
€/kWh	0.178	0.188	0.195	0.188	0.188	0.181	0.176	0.173	0.168	0.163	0.162	0.158	0.156	0.155	0.153	0.153	0.158	0.167	0.169	0.167	0.170	0.177	0.184	0.191

Energy Cost in Euro per Household	
Number of Households (mln)	
LFL costs (euro) per hh	
CFL costs (euro) per hh	
Tungsten costs (euro) per hh	
GLS costs (euro) per hh	
LED costs (euro) per hh	
TOTAL costs (euro)/hh	
of which DLS costs (euro)	

171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
5.4	5.7	5.9	5.7	5.7	5.5	5.4	5.3	5.2	5.1	5.1	5.0	5.0	5.1	5.1	5.2	5.5	5.9	6.1	6.1	6.3	6.6	6.9	7.1
1.0	1.2	1.4	1.5	1.7	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.5	3.7	4.2	5.0	6.2	7.4	8.4	9.6	10.9	12.0	12.9
6.5	9.3	13.9	18.2	21.6	22.7	23.1	23.3	23.0	22.7	23.0	23.0	23.2	23.6	23.8	24.4	25.3	26.4	26.9	27.8	31.4	36.5	41.5	45.7
75.3	78.6	80.3	76.2	74.7	70.5	67.6	65.5	62.7	59.8	58.6	56.5	55.3	54.4	52.9	52.4	53.5	55.7	52.6	44.6	36.8	30.4	26.1	23.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.6
88.1	94.8	101.6	101.6	103.7	100.5	98.1	96.3	93.4	90.1	89.5	87.5	86.8	86.6	85.5	86.2	89.4	94.3	92.9	86.9	84.2	84.6	86.8	89.3
8.6	9.2	9.7	9.5	9.7	9.6	9.7	10.0	10.1	10.3	10.7	10.9	11.3	11.7	12.0	12.5	13.5	14.7	15.3	15.4	15.8	16.6	17.4	17.9

EU-28 ENERGY COST NON-RESIDENTIAL bn Euro (10 ⁹)/year (fixed 2010 euros)		Elec.Price (2010)	Escal.Rate after 2010	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
LFL	T12	0.11	4.0%	3.0	3.0	2.9	2.5	2.2	1.9	1.5	1.3	1.2	1.0	0.9	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.1		
	T8 Halophosphor			3.2	3.3	3.4	3.4	3.5	3.4	3.3	3.4	3.4	3.5	3.6	3.7	3.7	4.0	4.1	4.5	5.0	5.0	4.9	4.5	3.7	2.7	1.6	0.7		
	T8 tri-phosphor			3.2	3.2	3.3	3.3	3.3	3.2	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.3	3.4	3.7	4.4	4.7	5.3	6.0	6.7	7.9	9.3	10.5		
	T5 new (14 - 80w) including Circular			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	0.7	1.0	1.4	1.8	2.3	2.9	3.4
	All others (including T5 old types 4 - 13w and Special FL.)			0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
	LFL (total)			9.8	10.0	10.0	9.6	9.4	8.9	8.3	8.1	8.0	7.9	7.9	8.1	7.9	8.5	8.7	9.5	11.0	11.5	12.3	12.8	13.0	13.7	14.4	15.2		
CFL	Retrofit - CFLi			0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.8	0.9
	Non-Retrofit - CFLni			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.8
	CFL (total)			0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.8	0.9	1.1	1.2	1.3	1.5	1.6	1.7	
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]			0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
	Linear (High voltage) [R7s]			0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2
	LV Halogen Capsule [G4, GY6.35]			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	HV Halogen Capsule [G9]			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
	Tungsten-HL (total)			0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.2
GLS	Reflector			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	GLS (Including clear/pearl, candles, coloured & decorative)			1.9	1.9	1.9	1.8	1.8	1.6	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.3	1.2	1.3	1.4	1.5	1.4	1.2	0.9	0.7	0.4	0.3
	GLS (total)			2.2	2.2	2.1	2.0	2.0	1.8	1.7	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.3	1.4	1.4	1.4	1.6	1.6	1.6	1.3	1.0	0.7	0.5	0.3
HID	All Mercury Lamps (including mixed)			2.2	2.2	2.3	2.3	2.3	2.2	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.6	1.7	1.6	1.6	1.6	1.7	1.6	1.5	1.4	1.3	1.2	1.0	0.8
	All Sodium Lamps			1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.7	1.8	2.0	2.4	2.7	3.0	3.3	3.3	3.4	3.4	3.4
	Metal Halide Lamps			0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.3	1.5	1.9	2.2	2.6	3.0	3.3	3.8	3.8	3.4	
	HID (total)			4.2	4.3	4.4	4.4	4.5	4.4	4.2	4.1	4.1	4.1	4.0	4.1	4.2	4.2	4.5	4.6	5.1	6.0	6.5	7.2	7.7	8.0	8.3	8.2	7.5	
LED	Directional																								0.0	0.0	0.0	0.0	0.0
	Non Directional																								0.0	0.0	0.0	0.0	0.0
	LED (total)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GLS stock				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tungsten stock				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL				16.6	16.9	17.2	16.8	16.7	16.0	15.0	14.8	14.5	14.3	14.4	14.7	14.4	15.5	15.8	17.4	20.1	21.2	22.9	23.9	24.2	25.3	25.9	26.0		

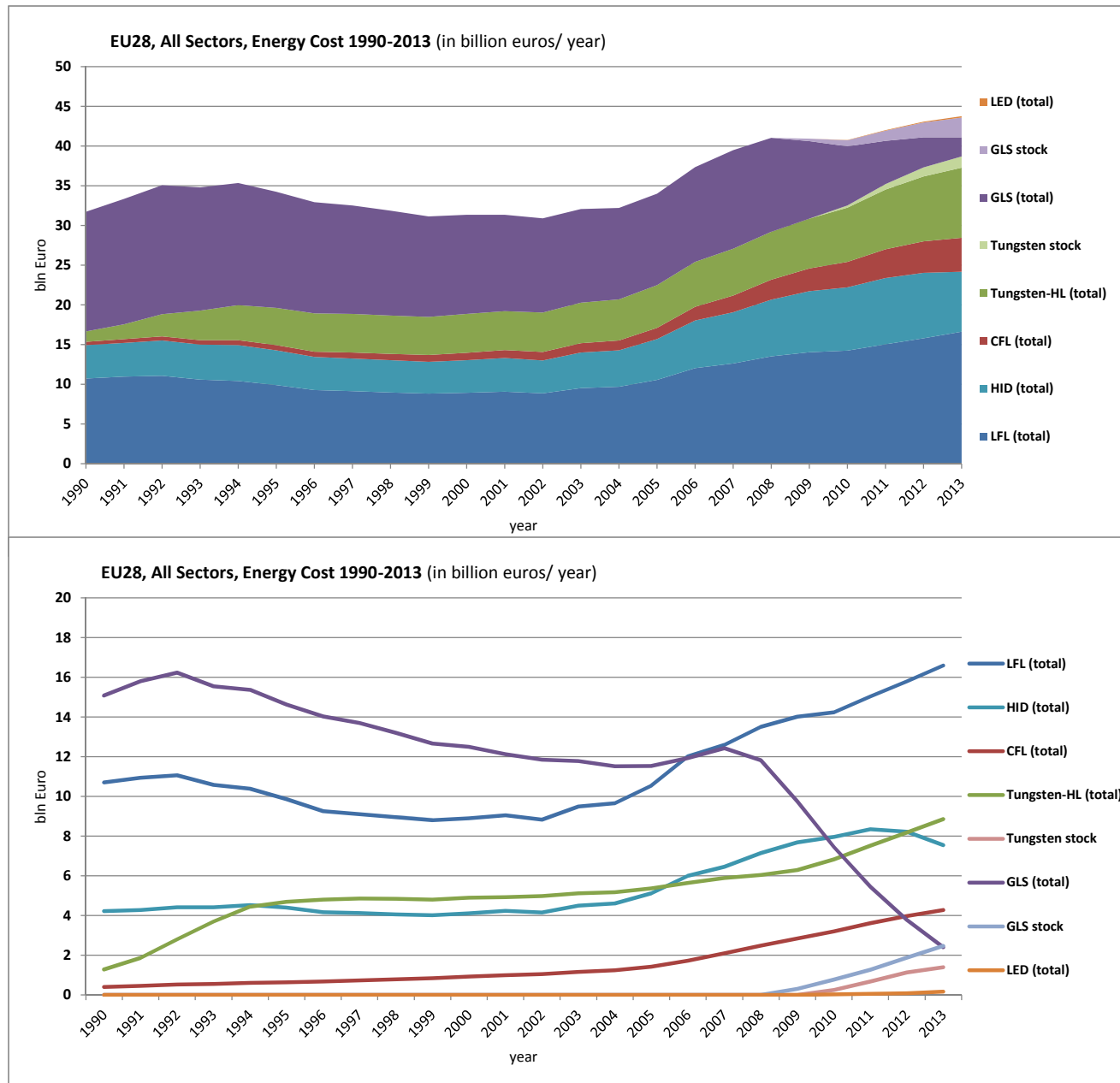
Non-Residential prices of electricity (fixed 2010 euros) (for years up to 2010 taken from sheet Life&Use, do not change here)

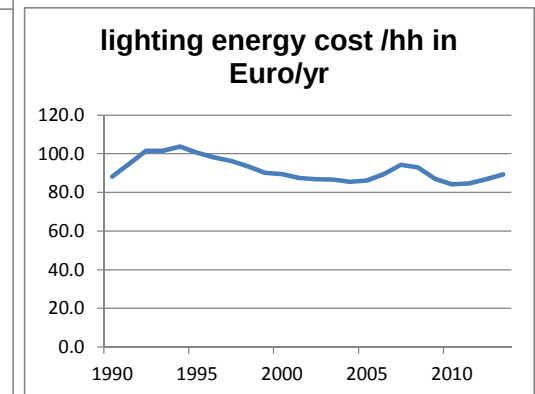
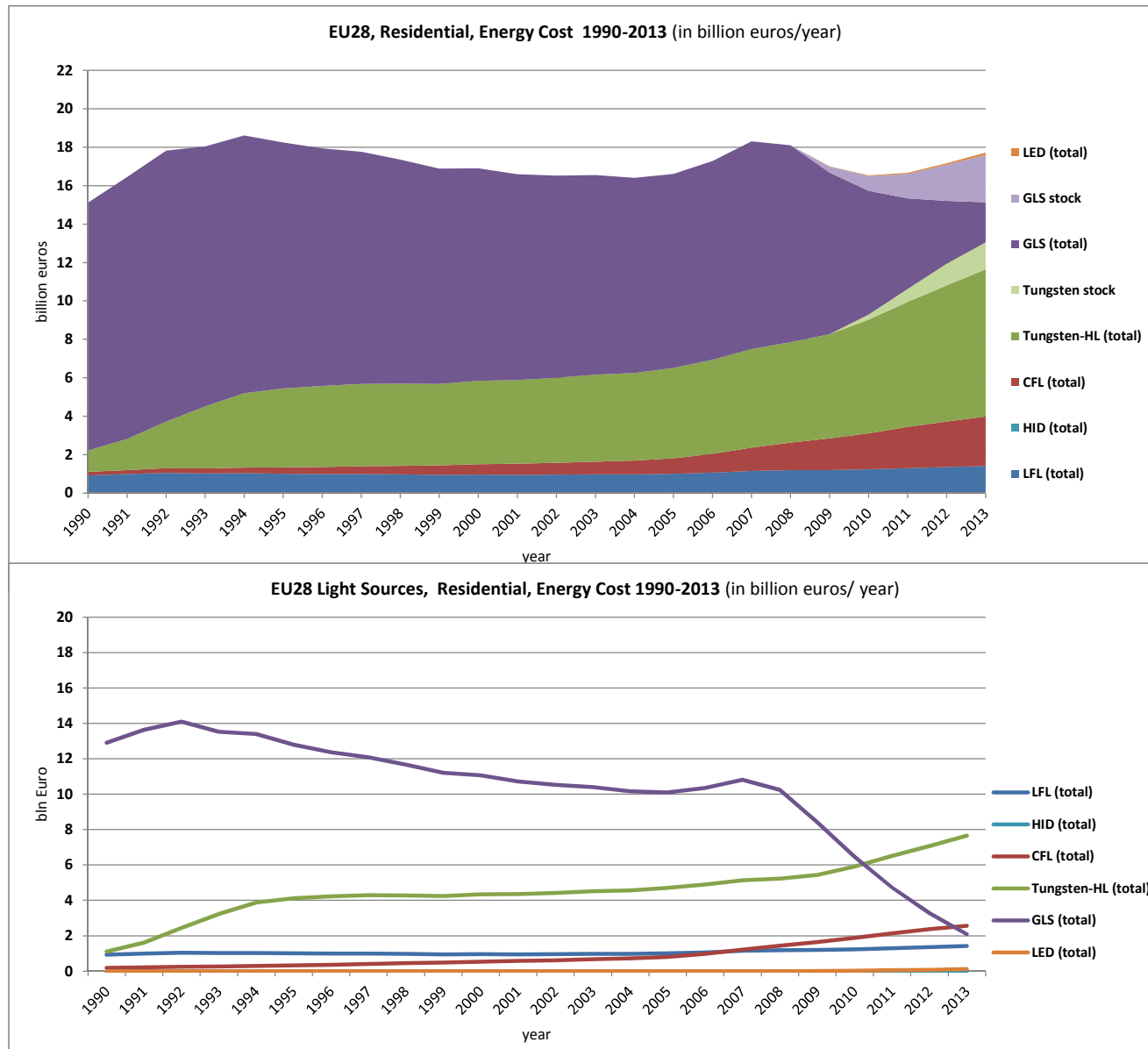
year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
€/kWh	0.119	0.119	0.118	0.112	0.110	0.103	0.095	0.092	0.088	0.085	0.084	0.083	0.079	0.083	0.082	0.087	0.097	0.099	0.105	0.107	0.106	0.110	0.115	0.119

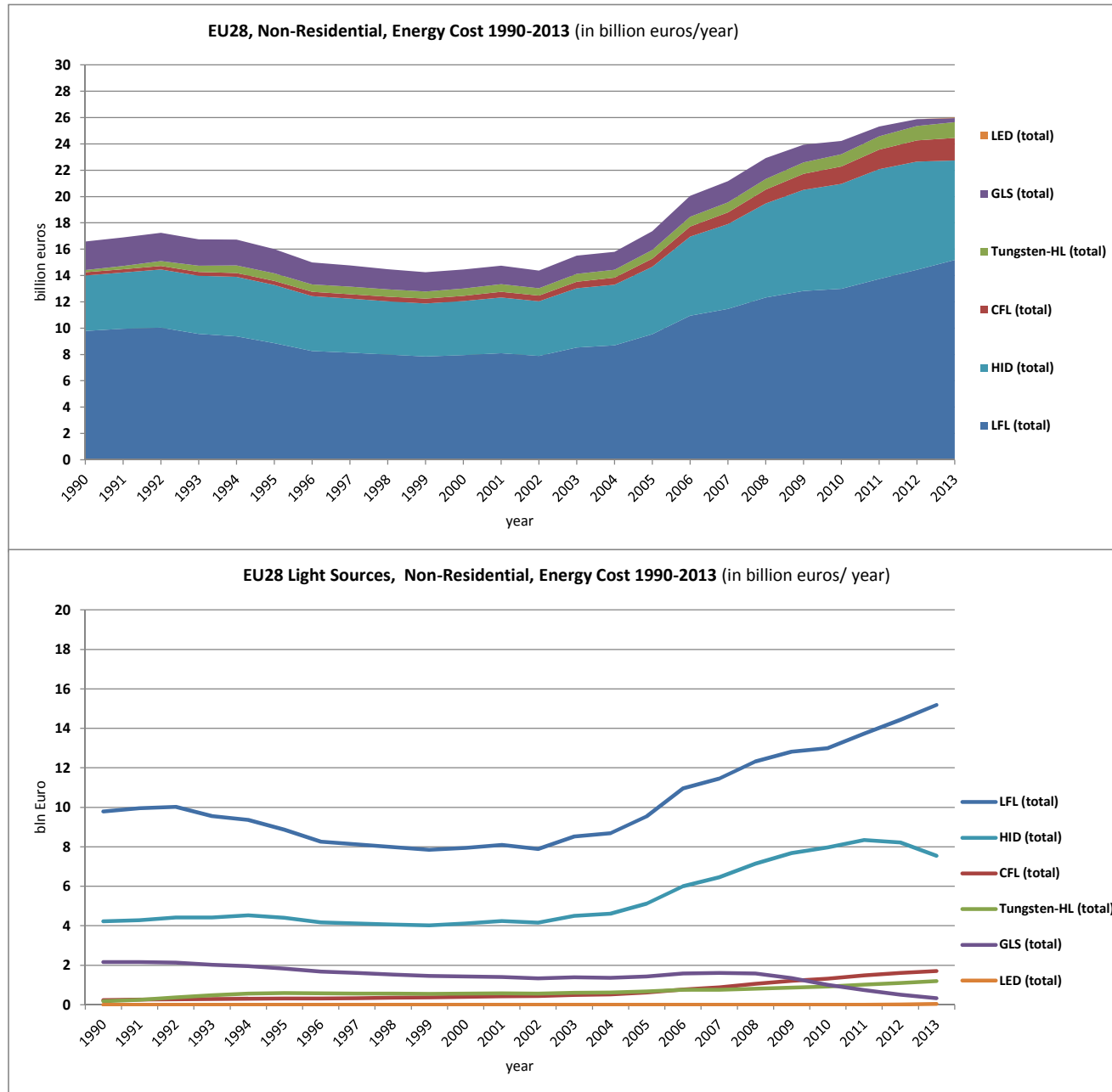
Division of EU-28 energy costs for lighting
over the technology types

year 2008				year 2013			
	All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
LFL	33%	7%	54%		38%	8%	58%
CFL	6%	8%	5%		10%	14%	7%
HL	15%	29%	4%		23%	51%	5%
GLS	29%	57%	7%		11%	26%	1%
HID	17%	0%	31%		17%	0%	29%
LED	0%	0%	0%		0%	1%	0%

Includes Tungsten stock
Includes GLS stock







EU-28 CONSUMER EXPENSE SUMMARY, All Sectors bn Euro (10^9)/year (fixed 2010 euros)		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL (total)		13.0	13.2	13.3	12.9	12.7	12.2	11.7	11.6	11.5	11.4	11.6	11.8	11.6	12.4	12.7	13.7	15.2	15.8	16.8	17.3	17.5	18.3	18.9	19.5
CFL (total)		0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.2	2.8	3.6	4.5	5.2	5.7	6.0	6.1	6.0	5.9
Tungsten-HL (total)		1.6	2.2	3.2	4.2	5.0	5.4	5.6	5.7	5.8	5.9	6.1	6.3	6.4	6.7	6.9	7.3	7.8	8.4	9.0	9.7	10.6	11.5	12.3	12.9
GLS (total)		16.5	17.2	17.7	17.0	16.8	16.0	15.4	15.1	14.6	14.0	13.9	13.5	13.2	13.1	12.8	12.8	13.2	13.7	12.9	10.6	8.1	5.9	4.1	2.6
HID (total)		4.6	4.7	4.8	4.8	5.0	4.9	4.7	4.6	4.6	4.6	4.7	4.9	4.8	5.2	5.3	5.9	6.8	7.4	8.1	8.7	9.0	9.4	9.2	8.4
LED (total)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.6	0.9	1.5
GLS stock		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.3	1.9	2.5
Tungsten stock		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.1	1.4	1.4
TOTAL		36.4	38.0	39.9	39.8	40.5	39.6	38.5	38.4	37.9	37.5	38.0	38.2	37.9	39.4	40.0	42.5	46.7	49.8	52.0	52.5	52.5	53.7	54.3	54.6
<i>o/w acquisition cost</i>		4.6	4.7	4.8	5.0	5.2	5.4	5.6	5.8	6.1	6.4	6.6	6.8	7.0	7.3	7.8	8.5	9.3	10.3	11.0	11.6	11.8	11.7	11.3	10.9
<i>o/w energy cost</i>		31.7	33.3	35.1	34.8	35.3	34.2	32.9	32.5	31.8	31.1	31.3	31.3	30.9	32.1	32.2	34.0	37.3	39.5	41.0	40.9	40.7	42.0	43.1	43.7

EU-28 CONSUMER EXPENSE TOTAL, All Sectors bn Euro (10^9)/year (fixed 2010 euros)		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	4.0	3.9	3.8	3.3	3.0	2.5	2.2	1.9	1.7	1.5	1.3	1.2	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.2
	T8 Halophosphor	4.4	4.5	4.7	4.7	4.8	4.8	4.8	4.9	5.0	5.1	5.3	5.5	5.5	5.9	6.1	6.5	6.9	6.8	6.7	6.0	4.8	3.4	2.1	1.2
	T8 tri-phosphor	4.0	4.2	4.3	4.2	4.3	4.2	4.1	4.1	4.1	4.1	4.2	4.3	4.3	4.6	4.7	5.1	5.9	6.4	7.1	7.9	9.1	10.7	12.1	13.3
	T5 new (14 - 80w) including Circular	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	0.7	1.0	1.4	1.9	2.4	3.0	3.6	4.1
	All others (including T5 old types 4 - 13w and Special FL)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.0	0.9	0.9	0.8	0.8	0.7
LFL (total)		13.0	13.2	13.3	12.9	12.7	12.2	11.7	11.6	11.5	11.4	11.6	11.8	11.6	12.4	12.7	13.7	15.2	15.8	16.8	17.3	17.5	18.3	18.9	19.5
CFL	Retrofit - CFLi	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.4	1.9	2.5	3.3	3.9	4.3	4.5	4.6	4.4	4.3
	Non-Retrofit - CFLni	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	1.0	1.2	1.3	1.4	1.5	1.6	1.6	1.7
	CFL (total)	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.2	2.8	3.6	4.5	5.2	5.7	6.0	6.1	6.0	5.9
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.0	2.1	2.2	2.2	2.3	2.5	2.6
	Linear (High voltage) [R7s]	0.6	1.1	2.0	2.9	3.6	3.8	3.8	3.8	3.7	3.6	3.6	3.5	3.4	3.4	3.4	3.4	3.4	3.1	2.6	2.2	2.0	1.9	1.9	1.8
	LV Halogen Capsule [G4, GY6.35]	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	HV Halogen Capsule [G9]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.8	0.8	0.9	0.9
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.0	1.5	1.9	2.4	3.1
	Other Mains Halogen - PAR 16/20/25/ 30 Hard glass reflectors, GU10 etc.	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.1	1.2	1.4	1.7	2.0	2.5	2.9	3.4	3.7	3.9	3.7
	Tungsten-HL (total)	1.6	2.2	3.2	4.2	5.0	5.4	5.6	5.7	5.8	5.9	6.1	6.3	6.4	6.7	6.9	7.3	7.8	8.4	9.0	9.7	10.6	11.5	12.3	12.9
GLS	Reflector	1.8	1.8	1.9	1.8	1.8	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.2	1.0	0.8	0.7	0.6	0.5
	GLS (Including clear/pearl, candles, coloured & decorative)	14.8	15.4	15.8	15.2	15.0	14.4	13.8	13.5	13.1	12.6	12.4	12.1	11.8	11.8	11.5	11.5	11.9	12.4	11.7	9.6	7.2	5.2	3.4	2.1
	GLS (total)	16.5	17.2	17.7	17.0	16.8	16.0	15.4	15.1	14.6	14.0	13.9	13.5	13.2	13.1	12.8	12.8	13.2	13.7	12.9	10.6	8.1	5.9	4.1	2.6
HID	All Mercury Lamps (including mixed)	2.3	2.3	2.4	2.4	2.5	2.4	2.2	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.7	1.7	1.8	1.7	1.6	1.5	1.4	1.3	1.1	0.8
	All Sodium Lamps	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.8	1.8	1.9	2.0	2.1	2.3	2.7	3.0	3.5	3.7	3.8	3.8	3.8	3.8
	Metal Halide Lamps	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.9	2.3	2.6	3.0	3.5	3.9	4.4	4.3	3.8
	HID (total)	4.6	4.7	4.8	4.8	5.0	4.9	4.7	4.6	4.6	4.6	4.7	4.9	4.8	5.2	5.3	5.9	6.8	7.4	8.1	8.7	9.0	9.4	9.2	8.4
LED	Directional	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.5	0.6
	Non Directional	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.8
	LED (total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.6	0.9	1.5
	GLS stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.3	1.9	2.5
	Tungsten stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.1	1.4
	TOTAL	36.4	38.0	39.9	39.8	40.5	39.6	38.5	38.4	37.9	37.5	38.0	38.2	37.9	39.4	40.0	42.5	46.7	49.8	52.0	52.5	52.5	53.7	54.3	54.6

EU-28 CONSUMER EXPENSE RESIDENTIAL bn Euro (10 ⁹)/year (fixed 2010 euros)		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
	T8 Halophosphor	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4
	T8 tri-phosphor	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9
	T5 new (14 - 80w) including Circular	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2
	All others (including T5 old types 4 - 13w and Special FL)	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LFL (total)		1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6
CFL	Retrofit - CFLi	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.8	0.8	0.9	1.3	1.7	2.2	2.6	2.9	3.0	3.1	3.0	2.9
	Non-Retrofit - CFLni	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
	CFL (total)	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.6	2.1	2.7	3.0	3.4	3.5	3.6	3.6	3.5
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.2
	Linear (High voltage) [R7s]	0.5	0.9	1.7	2.5	3.1	3.3	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	3.0	3.0	2.9	2.7	2.2	1.9	1.7	1.6	1.6	1.6
	LV Halogen Capsule [G4, GY6.35]	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6
	HV Halogen Capsule [G9]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.6	0.7	0.7	0.8	0.8
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.8	1.3	1.6	2.1	2.6
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.7	0.8	0.9	1.0	1.2	1.4	1.7	2.1	2.5	2.8	3.1	3.3	3.1
	Tungsten-HL (total)	1.3	1.9	2.8	3.7	4.4	4.7	4.9	5.0	5.1	5.2	5.4	5.5	5.6	5.8	6.0	6.3	6.7	7.2	7.7	8.3	9.0	9.8	10.5	11.0
GLS	Reflector	1.5	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	0.9	0.7	0.6	0.5	0.4
	GLS (Including clear/pearl, candles, coloured & decorative)	12.6	13.3	13.7	13.1	13.0	12.5	12.1	11.9	11.5	11.1	10.9	10.6	10.4	10.3	10.1	10.1	10.3	10.7	10.1	8.2	6.2	4.5	3.0	1.8
	GLS (total)	14.1	14.8	15.3	14.7	14.6	14.0	13.5	13.2	12.8	12.3	12.2	11.8	11.6	11.5	11.2	11.2	11.4	11.9	11.2	9.1	7.0	5.1	3.5	2.2
HID	All Mercury Lamps (including mixed)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	All Sodium Lamps	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Metal Halide Lamps	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	HID (total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LED	Directional																				0.1	0.2	0.3	0.5	0.5
	Non Directional																				0.0	0.1	0.2	0.3	0.5
	LED (total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.5	0.8	1.1
	GLS stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	1.3	1.9	2.5
Tungsten stock		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.1	1.4
TOTAL		16.9	18.2	19.7	20.0	20.7	20.4	20.2	20.2	19.9	19.5	19.7	19.5	19.5	19.6	19.7	20.3	21.5	23.1	23.3	22.7	22.3	22.5	23.0	23.3

Expense per Household (euros)		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of Households (mln)		171.6	173.6	175.6	177.5	179.5	181.5	183.0	184.5	185.9	187.4	188.9	189.6	190.4	191.1	191.9	192.6	193.3	194.1	194.8	195.6	196.3	197.1	197.8	198.6
Number of dwellings (mln)		212.8	215.2	217.7	220.1	222.6	225.1	226.9	228.7	230.6	232.4	234.2	235.2	236.1	237.0	237.9	238.8	239.7	240.7	241.6	242.5	243.4	244.4	245.3	246.2
LFL costs (euro) per hh		6.4	6.7	6.9	6.7	6.7	6.5	6.4	6.3	6.2	6.1	6.2	6.1	6.1	6.2	6.3	6.5	6.8	7.2	7.4	7.4	7.6	7.8	8.1	8.2
CFL costs (euro) per hh		1.8	2.0	2.3	2.5	2.9	3.3	3.6	4.1	4.4	4.7	5.0	5.3	5.6	5.9	6.5	8.3	10.7	13.7	15.6	17.2	18.0	18.4	18.1	17.8
Tungsten costs (euro) per hh		7.8	11.0	15.9	20.7	24.4	25.8	26.6	27.2	27.4	27.6	28.3	28.8	29.6	30.5	31.1	32.6	34.4	37.1	39.4	42.3	47.3	53.0	58.6	62.5
GLS costs (euro) per hh		82.3	85.5	87.1	82.9	81.2	76.9	73.9	71.8	68.9	65.9	64.5	62.4	61.1	60.2	58.6	58.0	59.1	61.2	57.3	48.1	39.3	32.1	27.2	23.6
LED costs (euro) per hh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.6	2.6	4.1	5.5
TOTAL costs (euro)/hh		98.3	105.1	112.3	112.8	115.2	112.6	110.6	109.4	107.0	104.3	104.1	102.7	102.4	102.8	102.6	105.4	111.0	119.1	119.7	115.9	113.7	114.0	116.0	117.6
<i>of which DLS costs (euro)</i>		<i>10.1</i>	<i>10.7</i>	<i>11.3</i>	<i>11.2</i>	<i>11.6</i>	<i>11.7</i>	<i>12.2</i>	<i>12.9</i>	<i>13.5</i>	<i>14.1</i>	<i>15.0</i>	<i>15.8</i>	<i>16.6</i>	<i>17.6</i>	<i>18.4</i>	<i>19.5</i>	<i>21.2</i>	<i>23.6</i>	<i>25.4</i>	<i>27.2</i>	<i>28.9</i>	<i>30.7</i>	<i>32.1</i>	<i>32.0</i>

EU-28 CONSUMER EXPENSE NON-RESIDENTIAL bn Euro (10 ⁹)/year (fixed 2010 euros)		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
LFL	T12	3.6	3.6	3.4	3.0	2.6	2.2	1.9	1.6	1.4	1.3	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.2	0.2
	T8 Halophosphor	4.0	4.1	4.3	4.3	4.4	4.4	4.3	4.4	4.5	4.6	4.8	5.0	5.0	5.4	5.5	5.9	6.3	6.2	6.1	5.4	4.2	2.9	1.6	0.8
	T8 tri-phosphor	3.7	3.8	3.9	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.8	3.9	3.9	4.2	4.3	4.7	5.4	5.9	6.5	7.3	8.4	9.9	11.3	12.4
	T5 new (14 - 80w) including Circular	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.7	1.0	1.4	1.8	2.3	2.9	3.5	3.9
	All others (including T5 old types 4 - 13w and Special FL)	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6
LFL (total)		11.9	12.0	12.1	11.7	11.5	11.0	10.5	10.4	10.3	10.3	10.4	10.6	10.5	11.2	11.5	12.5	13.9	14.4	15.3	15.8	16.0	16.7	17.3	17.8
CFL	Retrofit - CFLi	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.8	1.1	1.3	1.4	1.5	1.5	1.4	1.3
	Non-Retrofit - CFLni	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.1
	CFL (total)	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.2	1.5	1.8	2.1	2.4	2.4	2.5	2.5	2.4
TUNGSTEN (HL)	Single Ended, Mirrored (Low voltage) [M16,M25etc]	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
	Linear (High voltage) [R7s]	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3
	LV Halogen Capsule [G4, GY6.35]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	HV Halogen Capsule [G9]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Mains Halogen (Substitute for GLS and Reflector)[E14, E27]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.4
	Other Mains Halogen - PAR 16/20/25/30 Hard glass reflectors, GU10 etc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.6
	Tungsten-HL (total)	0.2	0.3	0.4	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.8	1.9
GLS	Reflector	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
	GLS (Including clear/pearl, candles, coloured & decorative)	2.2	2.1	2.1	2.0	2.0	1.9	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.5	1.4	1.5	1.6	1.6	1.6	1.3	1.0	0.7	0.5	0.3
	GLS (total)	2.4	2.4	2.4	2.3	2.2	2.1	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.6	1.7	1.8	1.8	1.8	1.5	1.1	0.8	0.6	0.4
HID	All Mercury Lamps (including mixed)	2.3	2.3	2.4	2.4	2.5	2.4	2.2	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.7	1.7	1.8	1.7	1.6	1.5	1.4	1.3	1.1	0.8
	All Sodium Lamps	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.8	1.8	1.9	2.0	2.1	2.3	2.7	3.0	3.5	3.7	3.8	3.8	3.8	3.8
	Metal Halide Lamps	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.9	2.3	2.6	3.0	3.5	3.9	4.4	4.3	3.8
	HID (total)	4.6	4.7	4.8	4.8	5.0	4.9	4.7	4.6	4.6	4.6	4.7	4.9	4.8	5.2	5.3	5.9	6.8	7.4	8.1	8.7	9.0	9.4	9.2	8.4
LED	Directional																				0.0	0.0	0.0	0.0	0.1
	Non Directional																				0.0	0.0	0.0	0.0	0.3
	LED (total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4
	GLS stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Tungsten stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		19.5	19.8	20.2	19.8	19.8	19.2	18.3	18.2	18.0	18.0	18.3	18.7	18.4	19.8	20.3	22.2	25.2	26.7	28.7	29.9	30.2	31.2	31.4	31.3

Division of EU-28 consumer expense for lighting over the technology types

		year 2008				year 2013		
		All Sectors	Residential	Non-Residential		All Sectors	Residential	Non-Residential
LFL		32%	6%	54%		36%	7%	57%
CFL		10%	13%	7%		11%	15%	8%
HL		17%	33%	5%		26%	53%	6%
GLS		25%	48%	6%		9%	20%	1%
HID		16%	0%	28%		15%	0%	27%
LED		0%	0%	0%		3%	5%	1%

