

## REGIONAL SAVINGS OPPORTUNITIES ASSESSMENT

Assumptions for  
2010 ENERGY STAR Regional Sales Projections

	Total Sales (millions)	Ref. E* MP <sup>1</sup> (%)	Total E* MP <sup>2</sup> (%)	Increased Effort E* MP <sup>3</sup> (%)	Unit Energy Savings (kWh/yr)	Regionalization Method
Residential fixtures	245	1	14	16	76.86	Number of households
CFLs	1,776	4.2	7.3	7.6	85	Number of households
Traffic Signals	8.8 (in place)	31	51	53	505	Urban population
Ceiling Fans <sup>4</sup>	15	29/1	45/31	47/34	Varies	Number of households
CAC <sup>5</sup>	5	5	9	9.5	Varies	RECs distribution + usage patterns
Heatpumps <sup>5</sup>	1.5	10	15	15.3	Varies	RECs distribution + usage patterns
Furnace fans	3.3	24	35	36.5	Varies	RECs distribution + usage patterns
Commercial AC	740 m sq ft	9	14	15	Varies	Gross state product + usage patterns
Home sealing <sup>6</sup>		5	7.5	7.75	Varies	Number of households + usage patterns
Duct sealing <sup>6</sup>		3	4.5	4.65	Varies	Number of households + usage patterns
Clothes washers	8	30	45	47	0.31 mBtu/yr primary	Number of households
Dish washers	5	0	20	22	1.03 mBtu/yr primary	Number of households
Refrigerators	9.5	0	8	9	79	Number of households
Room AC	5	0	5	6	Varies	RECs distribution + usage patterns
Dehumidifiers	1	25	45	47	115	RECs distribution
Commercial refrig.	0.25	32	44	45	1968	Number of households
Water coolers	1.5	0	14	15	142	Gross state product
Telephony	77	0	50	55	17	Number of households
Set-top boxes	31	41	63	65	38.5	Number of households
LCD monitors	46	50		100		Number of households/gross state product
Computer Mon. PM	NA		1 million	1.1 mill	457	Gross state product

<sup>1</sup> baseline E\* penetration in 2010 (not due to E\* program)

<sup>2</sup> total projected E\* penetrations for 2010 (savings due to E\*: total E\*% - ref. E\* %)

<sup>3</sup> potential penetration assuming regional investment

<sup>4</sup> without/with lighting

<sup>5</sup> projections for E\* HVAC penetrations are conservative based on limited market response to date (technical potential is significant)

<sup>6</sup> projections for home and duct sealing reflect an assumption that the number of homes reached could be comparable to the number of E\* HVAC units sold  
 Estimated ENERGY STAR MARKET Impact with “Extra Effort” in 2010

Energy Savings (GWh)

	National	New Eng	Mid Atl	S Atl	E N Cent	E S Cent	W N Cen	W S Cent	Mountain	Pacific
Residential fixtures	27,223	1,383	3,857	5,054	4,478	1,686	1,924	2,956	1,694	4,192
CFLs	24,016	1,220	3,403	4,459	3,950	1,487	1,698	2,607	1,494	3,698
Traffic Signals	910	48	147	147	151	41	57	97	53	169
Ceiling Fans <sup>1</sup>	4,914	235	752	909	855	337	340	483	335	668
CAC	267	1	10	78	29	29	6	86	12	14
Heatpumps	257	0	15	137	13	40	0	27	16	10
Furnace fans	507	43	108	39	143	22	54	35	30	33
Commercial AC	704	28	99	142	93	39	46	79	43	135
Home sealing	10,595	375	1,046	2,816	1,345	937	427	1,668	790	1,190
Duct sealing	3,122	43	170	845	320	270	172	703	255	345
Clothes washers	945	48	134	175	155	58	67	103	59	146
Dish washers	483	25	68	90	79	30	34	52	30	74
Refrigerators	333	17	47	62	55	21	24	36	21	51
Room AC	125	4	11	30	29	12	5	27	3	5
Dehumidifiers	202	17	44	20	65	10	35	6	3	3
Commercial refrig.	409	21	58	76	67	25	29	44	25	63
Water coolers	146	8	23	26	23	7	10	15	9	25
Telephony	4,002	203	567	743	658	248	283	435	249	616
Set-top boxes	1,952	99	277	362	321	121	138	212	121	301
LCD monitors	2,424	136	423	476	339	115	155	235	143	402
Computer Monitor PM	503	28	88	99	70	24	32	49	30	83

<sup>1</sup> without and with lighting

Note: With the exception of LCD monitors and computer monitor PM, all numbers represent savings for all E\* units shipped between 2003 and 2010, taking into account extra effort. Savings for LCD monitors and computer monitor PM include only units impacted in 2010 for LCDs and in a given year for PM

Dollar Savings (2000 \$M)

	National	New Eng	Mid Atl	S Atl	E N Cent	E S Cent	W N Cen	W S Cent	Mountain	Pacific
Residential fixtures	2,227	151	432	362	352	96	127	204	116	386
CFLs	1,965	133	381	320	310	85	112	180	103	341
Traffic Signals	65	5	14	9	10	2	3	6	3	14
Ceiling Fans <sup>1</sup>	401	26	83	65	67	19	23	33	23	62
CAC	19	0.1	1	6	2	2	0.4	6	0.8	1
Heatpumps	19	0.0	2	10	1	2	0	2	1	1
Furnace fans	43	5	12	3	11	1	4	2	2	3
Commercial AC	49	3	9	8	6	2	3	5	2	11
Home sealing	1,393	104	276	240	258	69	84	143	79	139
Duct sealing	415	17	54	71	89	21	36	57	28	42
Clothes washers	100	7	19	18	15	5	6	9	5	17
Dish washers	54	4	10	10	8	3	3	5	3	9
Refrigerators	27	2	5	4	4	1	2	2	1	5
Room AC	10	0.4	1	2.2	2.2	0.7	0.3	1.8	0.2	0.3
Dehumidifiers	17	2	5	1.5	5.1	0.6	2.3	0.4	0.2	0.3
Commercial refrig.	33	2	6	5	5	1	2	3	2	6
Water coolers	10	1	2	1.5	1.5	0.4	0.5	0.9	0.5	2.0
Telephony	327	22	63	53	52	14	19	30	17	57
Set-top boxes	160	11	31	26	25	7	9	15	8	28
LCD monitors	206	15	49	34	27	7	10	16	10	38
Computer Monitor PM	36	3	8	6	5	1	2	3	2	7

<sup>1</sup> without and with lighting

Note: With the exception of LCD monitors and computer monitor PM, all numbers represent savings for all E\* units shipped between 2003 and 2010, taking into account extra effort. Savings for LCD monitors and computer monitor PM include only units impacted in 2010 for LCDs and in a given year for PM

Peak Energy Savings (GW)

	National	New Eng	Mid Atl	S Atl	E N Cent	E S Cent	W N Cen	W S Cent	Mountain	Pacific
Residential fixtures	3.03	0.15	0.43	0.56	0.50	0.19	0.21	0.33	0.19	0.47
CFLs	2.68	0.14	0.38	0.50	0.44	0.17	0.19	0.29	0.17	0.41
Traffic Signals	0.10	0.01	0.02	0.02	0.02	0.00	0.01	0.01	0.01	0.02
Ceiling Fans <sup>1</sup>	0.58	0.03	0.09	0.10	0.10	0.04	0.04	0.06	0.04	0.08
CAC	0.20	0.00	0.01	0.06	0.02	0.02	0.00	0.07	0.01	0.01
Heatpumps	0.03	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Furnace fans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial AC	0.54	0.02	0.08	0.11	0.07	0.03	0.04	0.06	0.03	0.10
Home sealing	2.77	0.06	0.22	0.78	0.28	0.24	0.05	0.62	0.23	0.29
Duct sealing	1.41	0.03	0.11	0.40	0.14	0.12	0.02	0.31	0.12	0.15
Clothes washers	0.16	0.01	0.02	0.03	0.03	0.01	0.01	0.02	0.01	0.02
Dish washers	0.07	0.004	0.01	0.01	0.01	0.004	0.005	0.008	0.004	0.01
Refrigerators	0.04	0.002	0.006	0.007	0.007	0.002	0.003	0.004	0.002	0.006
Room AC	0.095	0.003	0.008	0.02	0.02	0.009	0.004	0.02	0.002	0.004
Dehumidifiers	0.056	0.005	0.012	0.006	0.018	0.003	0.01	0.002	0.001	0.001
Commercial refrig.	0.049	0.002	0.007	0.009	0.008	0.003	0.003	0.005	0.003	0.008
Water coolers	0.024	0.001	0.004	0.004	0.004	0.001	0.002	0.003	0.001	0.004
Telephony	0.457	0.023	0.065	0.085	0.075	0.028	0.032	0.050	0.028	0.070
Set-top boxes	0.450	0.023	0.064	0.084	0.074	0.028	0.032	0.049	0.028	0.069
LCD monitors	0.71	0.04	0.12	0.14	0.10	0.03	0.05	0.07	0.04	0.12
Computer Monitor PM	0.053	0.003	0.009	0.010	0.007	0.002	0.003	0.005	0.003	0.009

<sup>1</sup> without and with lighting

Note: With the exception of LCD monitors and computer monitor PM, all numbers represent savings for all E\* units shipped between 2003 and 2010, taking into account extra effort. Savings for LCD monitors and computer monitor PM include only units impacted in 2010 for LCDs and in a given year for PM

Fuel Savings (trillion Btu)

	National	New Eng	Mid Atl	S Atl	E N Cent	E S Cent	W N Cen	W S Cent	Mountain	Pacific
Residential fixtures										
CFLs										
Traffic Signals										
Ceiling Fans <sup>1</sup>										
CAC										
Heatpumps										
Furnace fans										
Commercial AC										
Home sealing	80	7	18.5	4.3	25.7	2.3	9.3	4.5	4.3	4.6
Duct sealing	27	1.4	4.1	1.3	10.8	0.82	4.1	1.35	1.7	1.7
Clothes washers	3.2	0.16	0.44	0.6	0.52	0.2	0.22	0.34	0.2	0.5
Dish washers	2.1	0.1	0.3	0.4	0.3	0.1	0.15	0.22	0.13	0.32
Refrigerators										
Room AC										
Dehumidifiers										
Commercial refig.										
Water coolers										
Telephony										
Set-top boxes										
LCD monitors										
Computer Monitor PM										

<sup>1</sup> without and with lighting

Note: With the exception of LCD monitors and computer monitor PM, all numbers represent savings for all E\* units shipped between 2003 and 2010, taking into account extra effort. Savings for LCD monitors and computer monitor PM include only units impacted in 2010 for LCDs and in a given year for PM

## Carbon Reductions (MtC)

	National	New Eng	Mid Atl	S Atl	E N Cent	E S Cent	W N Cen	W S Cent	Mountain	Pacific
Residential fixtures	3.85	0.20	0.58	0.91	0.73	0.31	0.24	0.29	0.17	0.42
CFLs	3.39	0.17	0.51	0.80	0.65	0.27	0.22	0.25	0.15	0.37
Traffic Signals	0.13	0.01	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.02
Ceiling Fans <sup>1</sup>	0.7	0.03	0.11	0.16	0.14	0.06	0.04	0.05	0.03	0.07
CAC	0.04	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00
Heatpumps	0.04	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00
Furnace fans	0.07	0.01	0.02	0.01	0.02	0.00	0.01	0.00	0.00	0.00
Commercial AC	0.10	0.00	0.01	0.03	0.02	0.01	0.01	0.01	0.00	0.01
Home sealing	2.681	0.153	0.422	0.567	0.59	0.204	0.188	0.228	0.142	0.187
Duct sealing	0.827	0.026	0.084	0.170	0.208	0.061	0.081	0.088	0.051	0.059
Clothes washers	0.179	0.009	0.026	0.04	0.033	0.013	0.012	0.015	0.009	0.022
Dish washers	0.098	0.005	0.014	0.022	0.018	0.007	0.006	0.008	0.005	0.012
Refrigerators	0.047	0.002	0.007	0.011	0.009	0.004	0.003	0.004	0.002	0.005
Room AC	0.018	0.001	0.002	0.005	0.005	0.002	0.001	0.003	0.000	0.001
Dehumidifiers	0.031	0.002	0.007	0.004	0.011	0.002	0.004	0.001	0.000	0.000
Commercial refrig.	0.058	0.003	0.009	0.014	0.011	0.005	0.004	0.004	0.003	0.006
Water coolers	0.020	0.001	0.003	0.005	0.004	0.001	0.001	0.002	0.001	0.003
Telephony	0.566	0.029	0.085	0.133	0.108	0.045	0.036	0.042	0.025	0.062
Set-top boxes	0.276	0.014	0.041	0.065	0.053	0.022	0.017	0.021	0.012	0.030
LCD monitors	0.34	0.02	0.06	0.08	0.06	0.02	0.02	0.02	0.01	0.04
Computer Monitor PM	0.07	0.00	0.01	0.02	0.01	0.00	0.00	0.08	0.00	0.01

<sup>1</sup> without and with lighting

Note: With the exception of LCD monitors and computer monitor PM, all numbers represent savings for all E\* units shipped between 2003 and 2010, taking into account extra effort. Savings for LCD monitors and computer monitor PM include only units impacted in 2010 for LCDs and in a given year for PM

