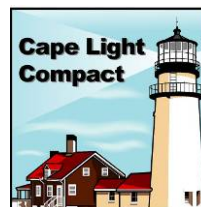


The Massachusetts' Energy Efficiency 3 Year Plan V2 Overview 2010-2012 Planning

July 14, 2009



Agenda



1

Big picture overview (headlines)

2

Detailed views of the 3 year plan

Plan V2 positions MA as a national leader, with robust, grounded program level plans and resource requirements.

- The Plan proposes close to doubling annual savings for Electric and Gas *in 2012 over 2009*
- Cumulative Savings translate to a reduction of 11 millions tons of CO₂ – *equivalent to removing nearly 2 million cars off the road – 85,000 houses heated, electrified.*
- \$5 Billion in savings – electric, gas water
- \$1.4 billion cost

V2 is a detailed plan grounded in common, vetted assumptions

- Program level detail
- Savings reflect program design and strategies worked on collaboratively with consultants and Council
- Assumptions grounding the Plan vetted by working groups
- CHP is reflected as a component of C&I retrofit

The Electric Plan calls for almost \$5B in benefits over the lifetime of the measures ...

| Electric PA's EE Activities | | | | | | | | | | | | |
|-----------------------------|--------------|--------------------|--------------------|---------------------------|--------------------|------------------|--------------------|--------------------|------------------|--------------------|--------------|--------------------|
| Year | Sector | Benefits (\$) | | | | | TRC Costs (\$) | | | TRC B/C Ratio | Net Benefits | |
| | | Capacity | Energy | DRIPE (Capacity & Energy) | Non-Elec. Resource | Non-Resource | Total Benefits | PA | Customer | | | TOTAL |
| | Residential | \$73,156 | \$149,601 | \$28,099 | \$103,248 | \$11,891 | \$365,995 | \$85,513 | \$14,627 | \$100,141 | 3.65 | \$265,594 |
| | Low Income | \$10,272 | \$33,792 | \$3,218 | \$28,897 | \$48,398 | \$124,577 | \$36,293 | \$0 | \$36,293 | 3.43 | \$88,278 |
| | C&I | \$185,513 | \$455,007 | \$58,141 | -\$1,972 | \$10,323 | \$707,011 | \$137,424 | \$47,213 | \$184,637 | 3.82 | \$521,226 |
| 2010 | Total | \$268,941 | \$638,400 | \$89,457 | \$130,172 | \$70,612 | \$1,197,583 | \$259,229 | \$61,840 | \$321,070 | 3.73 | \$1,235,779 |
| | Residential | \$88,607 | \$173,409 | \$30,620 | \$128,177 | \$12,949 | \$433,761 | \$109,386 | \$18,066 | \$127,452 | 3.43 | \$307,213 |
| | Low Income | \$12,625 | \$40,766 | \$3,653 | \$39,874 | \$63,693 | \$160,610 | \$48,968 | \$0 | \$48,968 | 3.28 | \$111,662 |
| | C&I | \$247,199 | \$608,696 | \$72,989 | -\$2,057 | \$13,801 | \$940,627 | \$195,913 | \$66,070 | \$261,983 | 3.59 | \$677,539 |
| 2011 | Total | \$348,430 | \$822,870 | \$107,263 | \$165,993 | \$90,443 | \$1,534,999 | \$354,267 | \$84,136 | \$438,403 | 3.51 | \$1,522,144 |
| | Residential | \$106,047 | \$198,000 | \$33,170 | \$158,062 | \$14,004 | \$509,283 | \$134,077 | \$21,565 | \$155,642 | 3.31 | \$354,725 |
| | Low Income | \$16,011 | \$49,399 | \$4,289 | \$53,917 | \$85,974 | \$209,591 | \$65,635 | \$0 | \$65,635 | 3.18 | \$143,194 |
| | C&I | \$334,102 | \$831,733 | \$97,115 | -\$2,704 | \$18,281 | \$1,278,527 | \$281,898 | \$94,442 | \$376,340 | 3.37 | \$892,929 |
| 2012 | Total | \$456,160 | \$1,079,132 | \$134,574 | \$209,275 | \$118,259 | \$1,997,400 | \$481,610 | \$116,007 | \$597,617 | 3.34 | \$1,390,848 |
| | Residential | \$267,810 | \$521,009 | \$91,889 | \$389,486 | \$38,844 | \$1,309,038 | \$328,975 | \$54,258 | \$383,234 | 3.44 | \$927,533 |
| | Low Income | \$38,907 | \$123,957 | \$11,160 | \$122,688 | \$198,065 | \$494,778 | \$150,896 | \$0 | \$150,896 | 3.28 | \$343,134 |
| | C&I | \$766,813 | \$1,895,435 | \$228,245 | -\$6,733 | \$42,406 | \$2,926,166 | \$615,235 | \$207,725 | \$822,960 | 3.54 | \$2,091,694 |
| GRAND TOTAL | | \$1,073,530 | \$2,540,402 | \$331,294 | \$505,441 | \$279,315 | \$4,729,982 | \$1,095,106 | \$261,983 | \$1,357,089 | 3.48 | \$3,362,361 |

... and over 27 million mWh in lifetime Energy savings

| Electric PA's EE Activities | | | | | | | | | | | | | |
|-----------------------------|--------------|-----------------|------------------|------------------|-------------------|----------------|------------------|----------------|------------------|-------------------------|--|--|------------------|
| Year | Sector | Savings | | | | | | | | Avg Measure Life (yrs.) | TR Summer Demand Cost (\$/Lifetime kW) | TR Energy Cost (\$/Lifetime-mWh saved) | Participants |
| | | Capacity (kW) | | Energy (mWh) | | Gas (Therms) | | Other Fuels | | | | | |
| | | Annual (Summer) | Lifetime | Annual | Lifetime | Annual | Lifetime | Annual | Lifetime | | | | |
| | Residential | 29,541 | 333,265 | 214,788 | 1,717,854 | 126,587 | 1,012,434 | 31,267 | 250,072 | 8.0 | \$300.44 | \$58.29 | 745,818 |
| | Low Income | 2,924 | 47,524 | 25,479 | 400,883 | 7,176 | 112,902 | 6,196 | 97,481 | 15.7 | \$763.47 | \$90.51 | 24,227 |
| | C&I | 63,387 | 844,483 | 370,823 | 4,888,520 | (18,558) | (244,643) | 35 | 466 | 13.2 | \$218.59 | \$37.76 | 5,642 |
| 2010 | Total | 95,852 | 1,225,272 | 611,090 | 7,007,256 | 76,804 | 880,693 | 30,350 | 348,019 | 11.5 | \$261.99 | \$45.81 | 775,687 |
| | Residential | 34,550 | 399,592 | 245,573 | 1,984,157 | 153,642 | 1,241,380 | 37,945 | 306,589 | 8.1 | \$316.06 | \$63.65 | 931,315 |
| | Low Income | 3,522 | 57,564 | 30,770 | 480,500 | 7,968 | 124,429 | 8,676 | 135,491 | 15.6 | \$850.34 | \$101.87 | 30,358 |
| | C&I | 83,840 | 1,113,693 | 496,226 | 6,518,148 | (21,823) | (286,661) | 61 | 804 | 13.1 | \$235.14 | \$40.18 | 7,559 |
| 2011 | Total | 121,913 | 1,570,849 | 772,569 | 8,982,805 | 92,812 | 1,079,148 | 38,090 | 442,884 | 11.6 | \$278.27 | \$48.66 | 969,232 |
| | Residential | 39,946 | 475,524 | 274,308 | 2,257,639 | 186,351 | 1,533,725 | 44,893 | 369,483 | 8.2 | \$323.54 | \$68.15 | 1,120,321 |
| | Low Income | 4,354 | 72,243 | 37,817 | 577,759 | 9,155 | 139,869 | 12,036 | 183,878 | 15.3 | \$907.96 | \$113.53 | 39,055 |
| | C&I | 112,667 | 1,497,396 | 675,406 | 8,863,851 | (28,949) | (379,917) | 109 | 1,435 | 13.1 | \$251.18 | \$42.43 | 9,971 |
| 2012 | Total | 156,967 | 2,045,163 | 987,531 | 11,699,249 | 109,199 | 1,293,677 | 46,830 | 554,796 | 11.8 | \$291.21 | \$50.91 | 1,169,347 |
| | Residential | 104,037 | 1,208,382 | 734,668 | 5,959,650 | 466,579 | 3,787,538 | 114,106 | 926,144 | 8.1 | \$314.70 | \$63.81 | 2,797,454 |
| | Low Income | 10,801 | 177,331 | 94,066 | 1,459,142 | 24,299 | 377,200 | 26,908 | 416,850 | 15.5 | \$850.53 | \$103.37 | 93,640 |
| | C&I | 259,894 | 3,455,572 | 1,542,455 | 20,270,519 | (69,330) | (911,221) | 206 | 2,704 | 13.1 | \$238.05 | \$40.58 | 23,172 |
| GRAND TOTAL | | 374,732 | 4,841,284 | 2,371,189 | 27,689,310 | 421,548 | 3,253,518 | 141,219 | 1,345,698 | 11.7 | \$279.62 | \$48.89 | 2,914,266 |

Estimated Benefits of Gas programs are over \$889 million

| Gas PA's Master Summary | | | | | | | | | | | | |
|-------------------------|--------------|----------------------|----------------|------------------|---------------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|---------------|----------------------|
| Year | Sector | TRC Benefits (\$) | | | | | | TRC Costs (\$) | | | TRC B/C Ratio | Net Benefits |
| | | Gas | Electric | | Non-gas Non-elec Resource | Non- Resource | TOTAL BENEFITS | PA | Customer | TOTAL | | |
| | | | Capacity | Energy | | | | | | | | |
| | Residential | \$102,338,939 | \$0 | \$0 | \$1,559,009 | \$0 | \$103,897,948 | \$32,651,640 | \$13,093,825 | \$45,745,465 | 2.27 | \$58,163,816 |
| | Low Income | \$12,241,911 | \$2,510 | \$268,262 | \$9,344 | \$6,159,258 | \$18,681,286 | \$13,760,272 | \$1,089 | \$13,761,361 | 1.36 | \$4,910,581 |
| | C&I | \$116,631,819 | \$0 | \$0 | \$0 | \$0 | \$116,631,819 | \$19,594,963 | \$17,590,037 | \$37,184,999 | 3.14 | \$79,446,819 |
| 2010 | Total | \$231,212,668 | \$2,510 | \$268,262 | \$1,568,353 | \$6,159,258 | \$239,211,052 | \$66,006,875 | \$30,684,951 | \$96,691,826 | 2.47 | \$142,521,216 |
| | Residential | \$127,570,379 | \$0 | \$0 | \$1,542,966 | \$0 | \$129,113,344 | \$40,054,660 | \$15,570,523 | \$55,625,183 | 2.32 | \$73,497,653 |
| | Low Income | \$13,946,142 | \$3,019 | \$322,867 | \$12,577 | \$7,263,852 | \$21,548,457 | \$18,572,211 | -\$219,958 | \$18,352,253 | 1.17 | \$3,183,626 |
| | C&I | \$140,530,546 | \$0 | \$0 | \$0 | \$0 | \$140,530,546 | \$26,276,191 | \$23,916,761 | \$50,192,952 | 2.80 | \$90,337,594 |
| 2011 | Total | \$282,047,067 | \$3,019 | \$322,867 | \$1,555,543 | \$7,263,852 | \$291,192,347 | \$84,903,063 | \$39,267,326 | \$124,170,388 | 2.35 | \$167,018,873 |
| | Residential | \$160,748,825 | \$0 | \$0 | \$1,524,833 | \$0 | \$162,273,658 | \$50,355,267 | \$18,278,684 | \$68,633,951 | 2.37 | \$93,706,608 |
| | Low Income | \$17,093,214 | \$3,771 | \$403,327 | \$17,145 | \$9,076,664 | \$26,594,121 | \$23,199,141 | -\$520,577 | \$22,678,564 | 1.17 | \$3,898,413 |
| | C&I | \$169,930,247 | \$0 | \$0 | \$0 | \$0 | \$169,930,247 | \$35,803,141 | \$33,111,149 | \$68,914,290 | 2.47 | \$101,015,957 |
| 2012 | Total | \$347,772,287 | \$3,771 | \$403,327 | \$1,541,977 | \$9,076,664 | \$358,798,027 | \$109,357,550 | \$50,869,255 | \$160,226,805 | 2.24 | \$198,620,978 |
| | Residential | \$390,658,143 | \$0 | \$0 | \$4,626,808 | \$0 | \$395,284,951 | \$123,061,568 | \$46,943,031 | \$170,004,599 | 2.33 | \$225,368,077 |
| | Low Income | \$43,281,267 | \$9,300 | \$994,457 | \$39,066 | \$22,499,774 | \$66,823,864 | \$55,531,624 | -\$739,446 | \$54,792,178 | 1.22 | \$11,992,620 |
| | C&I | \$427,092,612 | \$0 | \$0 | \$0 | \$0 | \$427,092,612 | \$81,674,295 | \$74,617,946 | \$156,292,242 | 2.73 | \$270,800,370 |
| GRAND TOTAL | | \$861,032,021 | \$9,300 | \$994,457 | \$4,665,874 | \$22,499,774 | \$889,201,426 | \$260,267,487 | \$120,821,531 | \$381,089,019 | 2.33 | \$508,161,067 |

With over 844 million therms saved over the lifetime

| Gas PA's Master Summary | | | | | | | | | | | | |
|-------------------------|--------------|-------------------|--------------------|-----------------------|--------------------|------------------------|--------------|------------------------------------|-----------|-------------------------|--|----------------|
| Year | Sector | Savings | | | | | | | | Avg Measure Life (yrs.) | TR Energy Cost (\$/Lifetime-Therm saved) | Participants |
| | | Gas (Therms) | | Electric Energy (kWh) | | Electric Capacity (KW) | | Non-gas non-elec Resources (MMBTU) | | | | |
| | | Annual | Lifetime | Annual | Lifetime | Annual | Lifetime | Annual | Lifetime | | | |
| | Residential | 4,873,355 | 91,131,743 | 1,710,000 | 31,977,000 | - | - | NA | NA | 18.7 | \$0.50 | 42,970 |
| | Low Income | 533,422 | 11,575,253 | 152,374 | 3,306,518 | 19 | 417 | NA | NA | 21.7 | \$1.19 | 2,615 |
| | C&I | 6,678,698 | 100,848,347 | - | - | - | - | NA | NA | 15.1 | \$0.37 | 2,909 |
| 2010 | Total | 12,085,476 | 223,581,297 | 1,862,374 | 35,283,518 | 19 | 417 | NA | NA | 18.5 | \$0.43 | 48,494 |
| | Residential | 6,116,170 | 114,372,386 | 1,710,000 | 31,977,000 | - | - | NA | NA | 18.7 | \$0.49 | 53,601 |
| | Low Income | 612,937 | 13,300,732 | 183,390 | 3,979,554 | 23 | 501 | NA | NA | 21.7 | \$1.38 | 3,040 |
| | C&I | 8,181,423 | 123,539,485 | - | - | - | - | NA | NA | 15.1 | \$0.41 | 3,621 |
| 2011 | Total | 14,910,530 | 275,844,808 | 1,893,390 | 35,956,554 | 23 | 501 | NA | NA | 18.5 | \$0.45 | 60,262 |
| | Residential | 7,750,151 | 144,927,832 | 1,710,000 | 31,977,000 | - | - | NA | NA | 18.7 | \$0.47 | 67,851 |
| | Low Income | 760,076 | 16,493,659 | 229,092 | 4,971,286 | 29 | 626 | NA | NA | 21.7 | \$1.37 | 3,835 |
| | C&I | 10,121,756 | 152,838,513 | - | - | - | - | NA | NA | 15.1 | \$0.45 | 4,545 |
| 2012 | Total | 18,631,984 | 344,691,698 | 1,939,092 | 36,948,286 | 29 | 626 | NA | NA | 18.5 | \$0.46 | 76,231 |
| | Residential | 18,739,677 | 350,431,961 | 5,130,000 | 95,931,000 | - | - | NA | NA | 18.7 | \$0.49 | 164,422 |
| | Low Income | 1,906,435 | 41,369,644 | 564,855 | 12,257,357 | 71 | 1,544 | NA | NA | 21.7 | \$1.32 | 9,491 |
| | C&I | 24,981,877 | 377,226,344 | - | - | - | - | NA | NA | 15.1 | \$0.41 | 11,075 |
| GRAND TOTAL | | 45,627,989 | 844,117,803 | 5,694,855 | 108,188,357 | 71 | 1,544 | NA | NA | 18.5 | \$0.45 | 184,988 |

Agenda

1

Big picture overview (headlines)

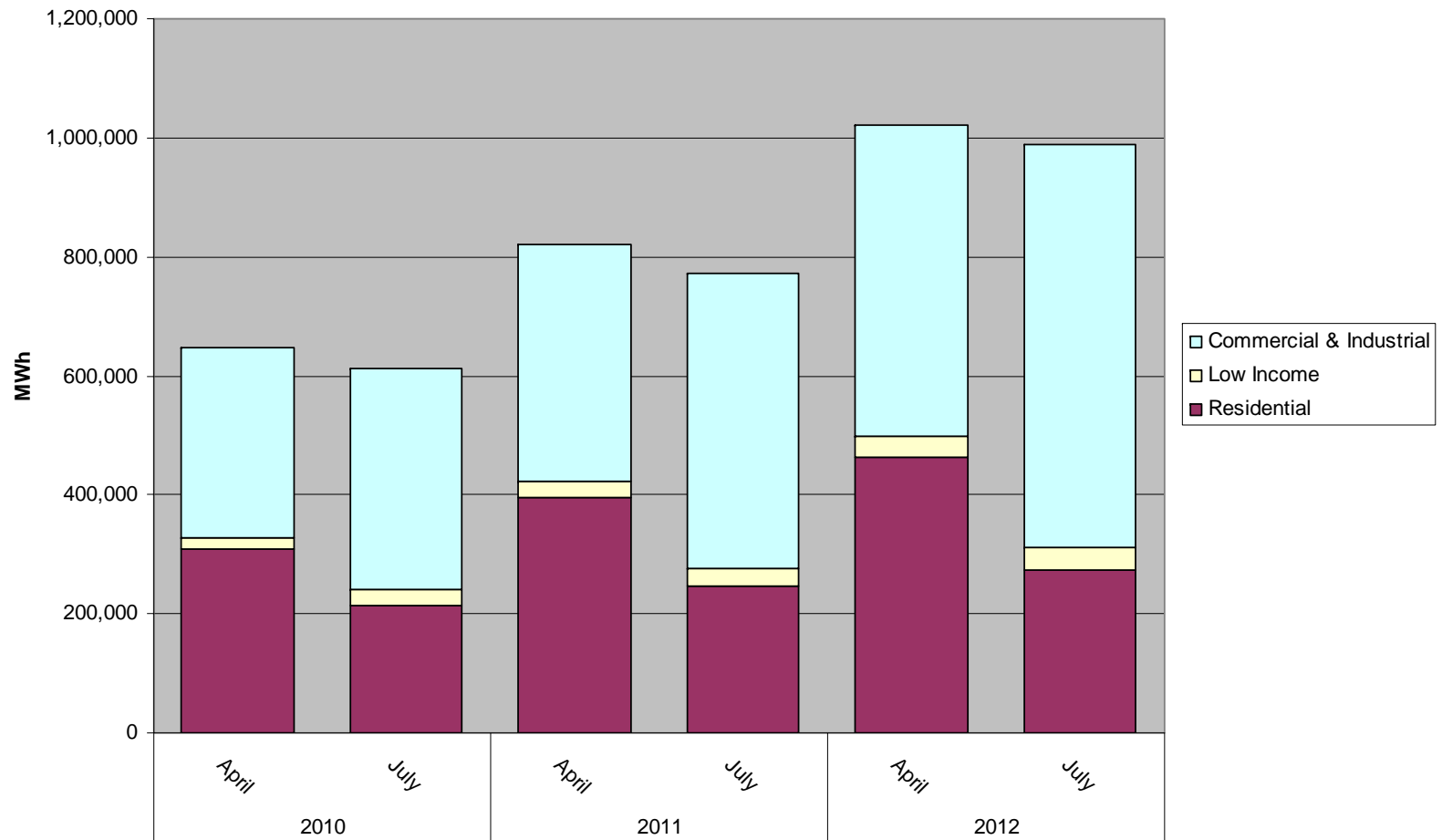


2

Detailed views of the 3 year plan

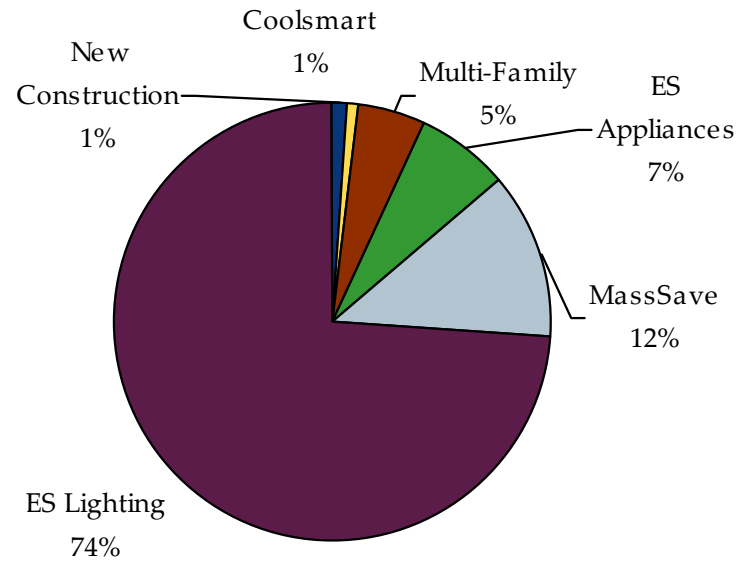
Comparison of Electric Savings – by Sector

Electric Savings by Sector

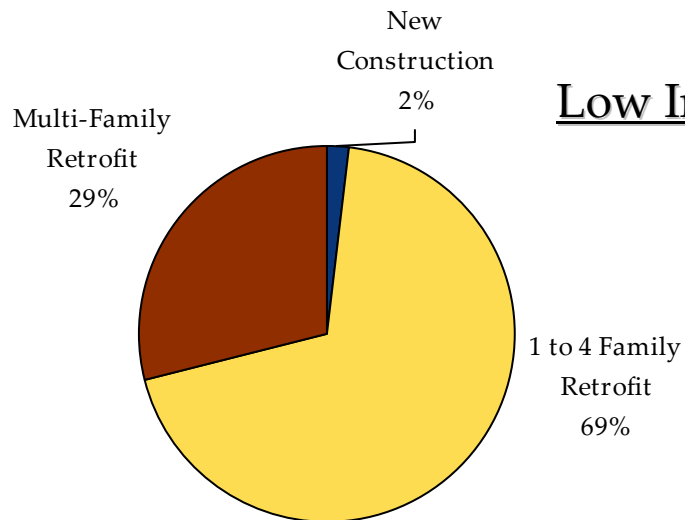


Electric Savings by Program ...

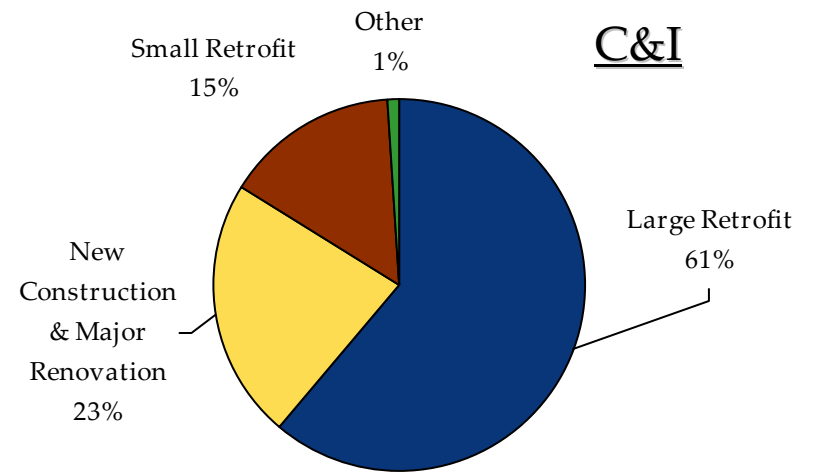
Residential



Low Income

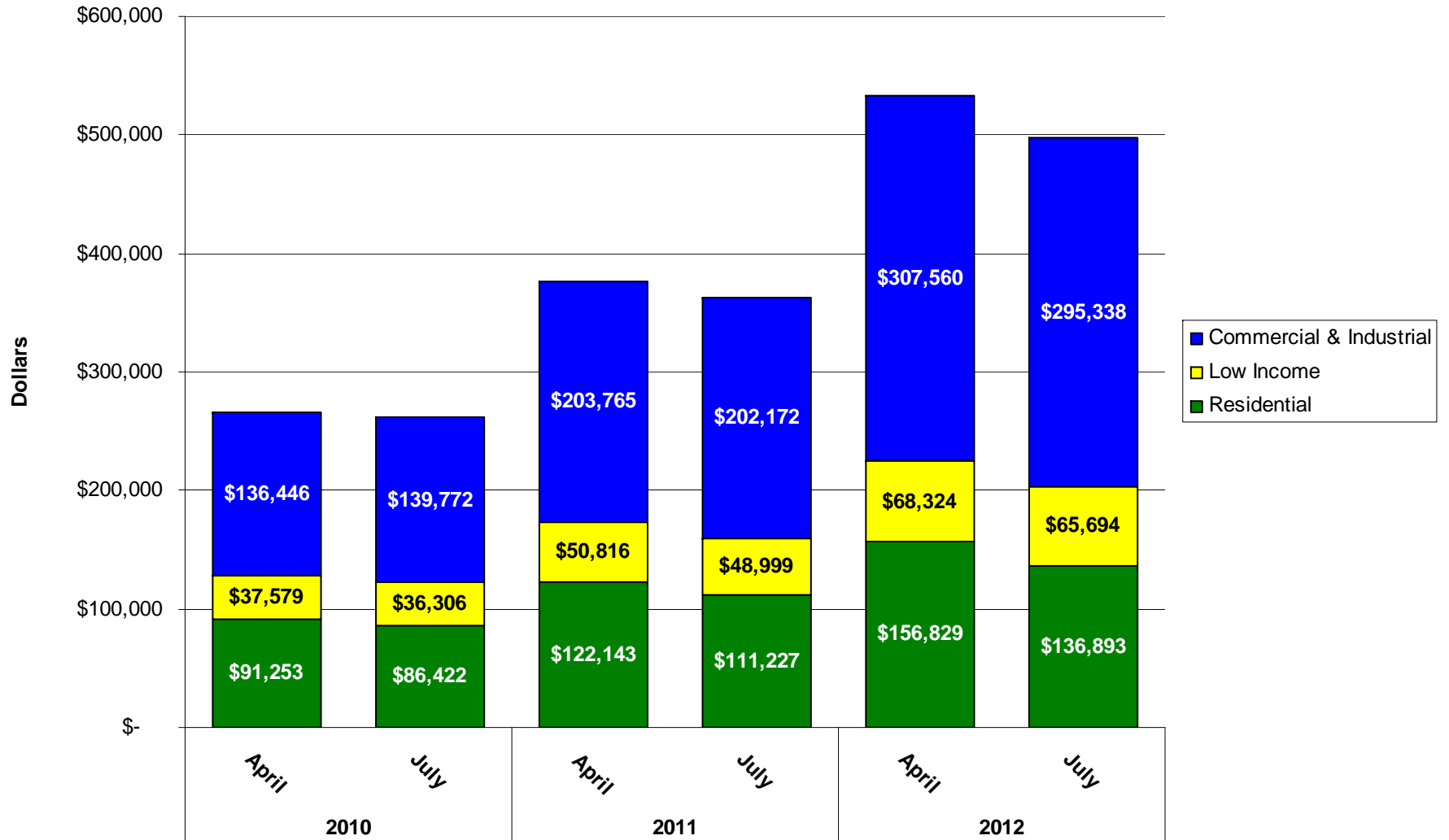


C&I



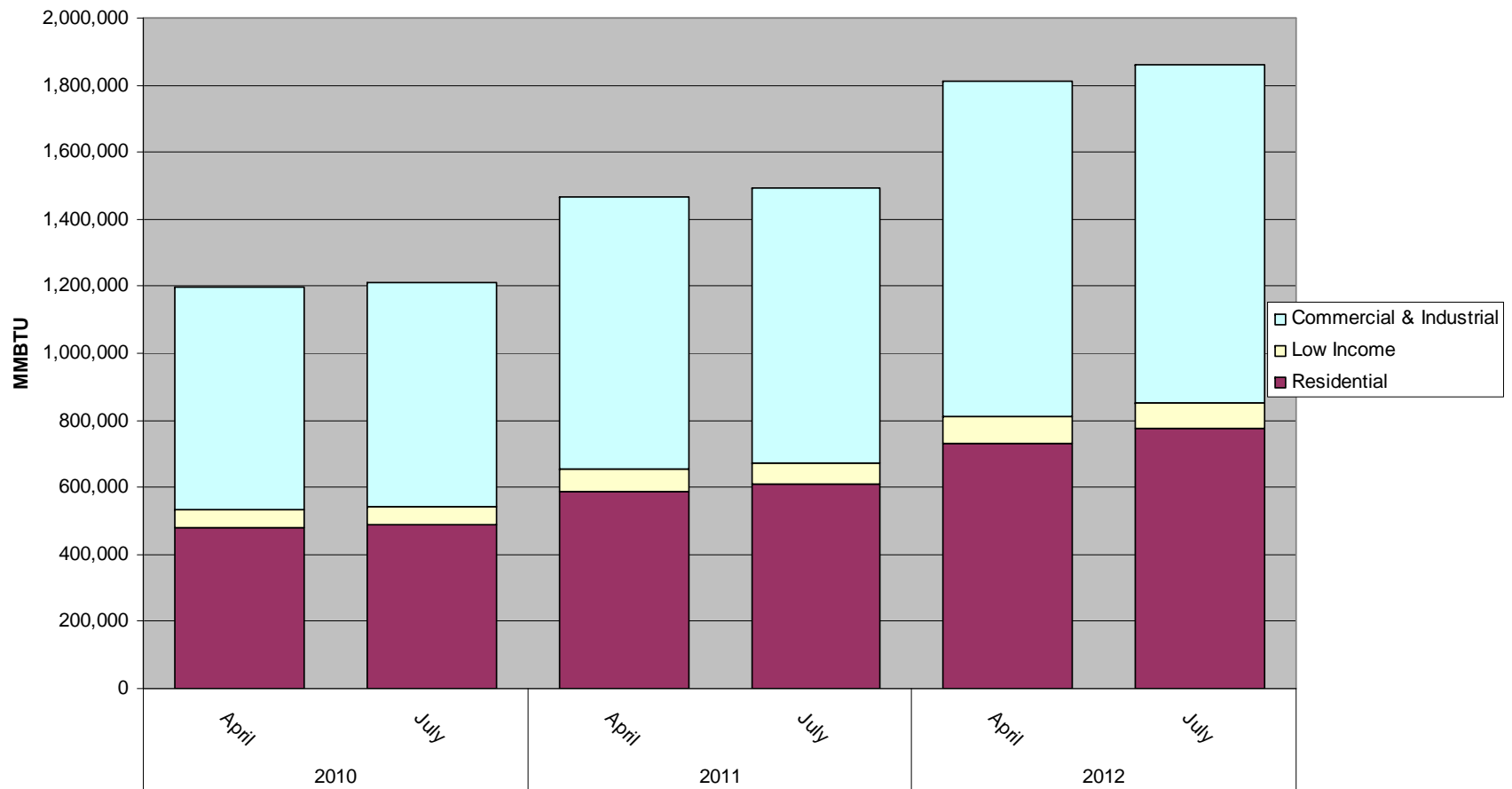
Comparison of Electric Budgets – By Sector

Electric Budgets by Sector



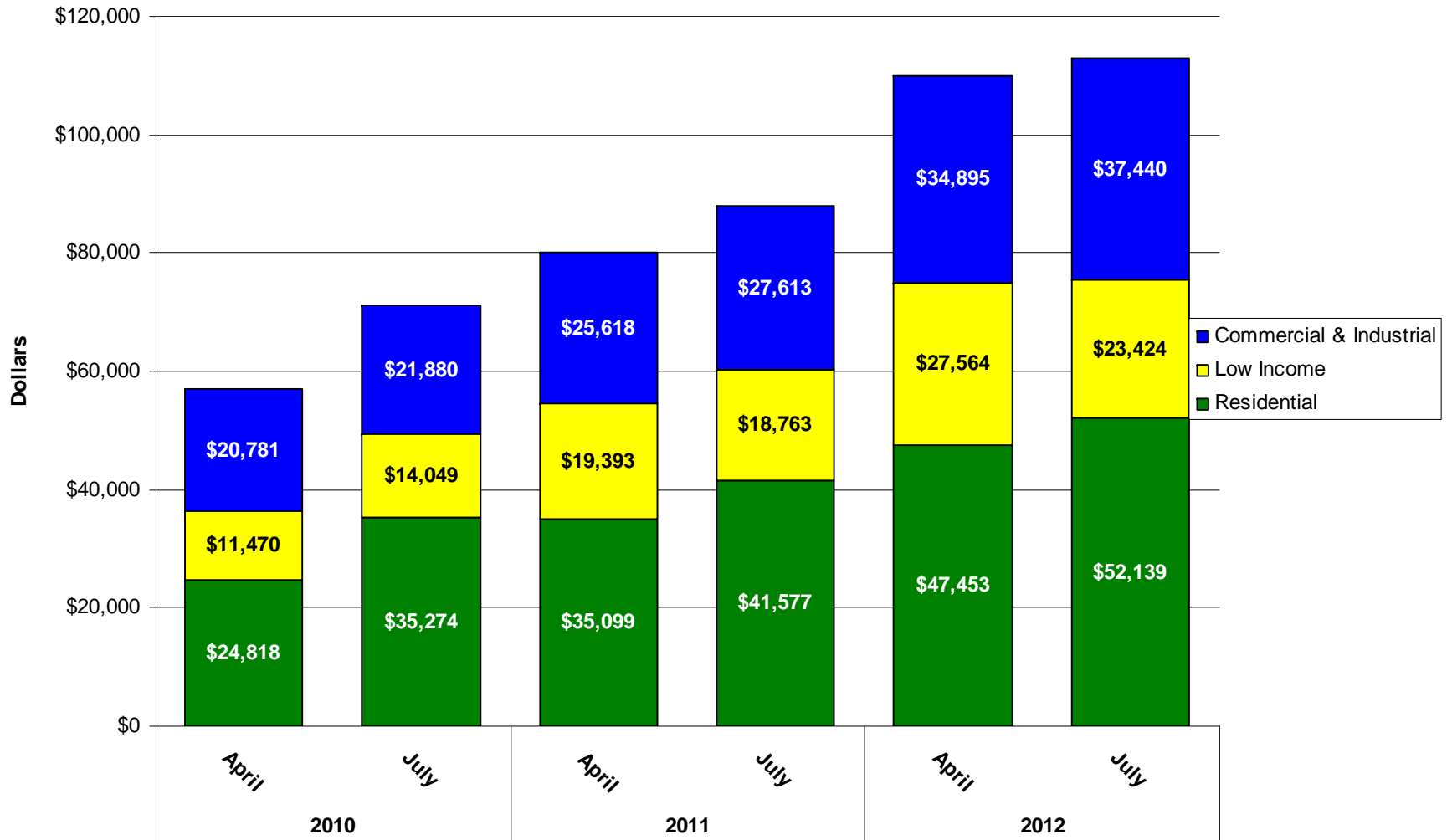
Comparison of Gas Savings – by Sector

Gas Savings by Sector



Comparison of Gas Budgets– by Sector

Gas Budgets by Sector





The next step is to further optimize this plan, mindful of:

- Rapidly expanding programs to minimizing inefficiencies
- A challenging economic environment
- Complementing federal stimulus efforts
- Resource requirements and constraints
- Customer bill impacts