

# 2003-2010 State-Owned Buildings Energy Use and Benchmarking Data (Updated 9/21/2011)

Data gathered from agency representatives by the Department of General Services

| Dept.               | Department Name                                       | Agency Name                                | # of Facilities | 2003 Total Bldg. Area Sq. Ft. | 2010 Total Bldg. Area Sq. Ft. | % Bldg Area Incr. | 2003 Elect. Use (kWh) | 2010 Elect. Use (kWh) | % Change Electricity Use | % Change Electricity EUI (kWh/s.f.) | 2003 Gas Use (Therms) | 2010 Gas Use (Therms) | % Change in Gas Use | % Change Gas EUI (Therms per sq. ft.) | % Change Overall Energy Use (elect. & gas) 2003-2010 | 2003 Energy Use Intensity (kBtu/sq. ft.) | 2010 Energy Use Intensity (kBtu/sq. ft.) | % Change in Energy Use Intensity 2003-2010 | Notes   |
|---------------------|---|--|-----------------|-------------------------------|-------------------------------|-------------------|-----------------------|-----------------------|--------------------------|-------------------------------------|-----------------------|-----------------------|---------------------|---------------------------------------|--|--|--|--|---|
| ARB                 | Air Resources Board                                   | Calif. Environmental Protection Agency     | 1               | 54,000                        | 65,000                        | 20.4%             | 1,862,162             | 2,857,839             | 53.5%                    | 27.5%                               | 32,427                | 61,878                | 90.8%               | 58.5%                                 | 66.1%  | 177.7                                    | 245.2                                    | 38.0%                                      | space grew 20% + more lab equip. & occupancy  |
| CAAM                | California African American Museum                    | State & Consumer Services Agency           | 1               | 45,000                        | 45,000                        | 0.0%              | 691,029               | 762,253               | 10.3%                    | 10.3%                               | 2,774                 | 4,238                 | 52.8%               | 52.8%                                 | 14.8%  | 58.6                                     | 67.2                                     | 14.8%                                      | info from PM through 9/09   |
| CADA                | Capitol Area Development Authority                    | State & Consumer Services Agency           | 45              | 525,632                       | 525,632                       | 0.0%              | 951,983               | 932,269               | -2.1%                    | -2.1%                               | 164,994               | 155,850               | -5.5%               | -5.5%                                 | -5.0%  | 37.6                                     | 35.7                                     | -5.0%                                      |   |
| CCC                 | California Conservation Corps                         | Natural Resources Agency                   | 5               | 205,341                       | 198,471                       | -3.3%             | 977,275               | 888,636               | -9.1%                    | -5.9%                               | 52,565                | 54,940                | 4.5%                | 8.1%                                  | -0.8%  | 41.8                                     | 43.0                                     | 2.7%                                       | closed facility (3.3% less bldg area)   |
| CDJR                | Department of Corrections & Rehabilitation            | Department of Corrections & Rehabilitation | 41              | 36,544,310                    | 38,390,928                    | 5.1%              | 582,723,453           | 587,796,493           | 0.9%                     | -4.0%                               | 40,860,896            | 42,512,242            | 4.0%                | -1.0%                                 | 3.0%   | 166.2                                    | 163.0                                    | -2.0%                                      | 5.1% more bldg. area in 2010 than 2003, DJJ & fire camps not included (data not avail both yrs)                                       |
| CDE                 | California Department of Education                    | California Department of Education         | 139             | 951,146                       | 1,041,273                     | 9.5%              | 7,999,308             | 8,168,935             | 2.1%                     | -6.7%                               | 395,108               | 560,264               | 41.8%               | 29.5%                                 | 25.6%  | 70.2                                     | 80.6                                     | 14.7%                                      | Added 90,127 sq. ft. (+9.5%), also AC & lighting data included on 89% of facilities with complete data, incomplete gas data from 2003 |
| CAL FIRE            | California Department of Forestry and Fire Protection | Natural Resources Agency                   | 227             | 2,098,261                     | 2,098,261                     | 0.0%              | 9,601,735             | 9,007,279             | -6.2%                    | -6.2%                               | NA                    | NA                    | NA                  | NA                                    | -6.2%  | 15.6                                     | 14.6                                     | -6.2%                                      | added new and closed old facilities, resulting in net reduction of 32K sq. ft. (-4.6%)  |
| CDPH                | Department of Public Health                           | Health and Human Services                  | 3               | 707,807                       | 675,390                       | -4.6%             | 21,807,424            | 19,057,824            | -12.6%                   | -8.4%                               | 1,451,719             | 901,480               | -37.9%              | -34.9%                                | -29.3%   | 310.2                                    | 229.8                                    | -25.9%                                     | mostly gas data missing on ~27% of sites  |
| CHP                 | California Highway Patrol                             | Business, Transportation & Housing         | 172             | 1,135,068                     | 1,135,068                     | 0.0%              | 28,424,291            | 27,765,816            | -2.3%                    | -2.3%                               | 370,607               | 349,665               | -5.7%               | -5.7%                                 | -3.2%  | 118.1                                    | 114.3                                    | -3.2%                                      | added office space, reduced warehouse space   |
| CLC                 | California Lottery Commission                         | Calif. Lottery Commission                  | 2               | 190,000                       | 256,897                       | 35.2%             | 1,667,760             | 1,330,123             | -20.2%                   | -41.0%                              | 18,538                | 9,869                 | -46.8%              | -60.6%                                | -26.8%   | 39.7                                     | 21.5                                     | -45.8%                                     |   |
| CON                 | Department of Conservation                            | Natural Resources Agency                   | 1               | 2,000                         | 2,000                         | 0.0%              | 14,099                | 13,995                | -0.7%                    | -0.7%                               | 226                   | 164                   | -27.4%              | -27.4%                                | -9.3%  | 35.4                                     | 32.1                                     | -9.3%                                      |   |
| CSC                 | California Science Center                             | State & Consumer Services Agency           | 10              | 306,648                       | 1,340,512                     | 337%              | 8,139,840             | 12,943,520            | 59.0%                    | -63.6%                              | 42,404                | 108,778               | 157.0%              | -41.2%                                | 72.0%  | 104.4                                    | 41.1                                     | -60.7%                                     | more than tripled building area (+335%)   |
| DAA                 | District Agricultural Associations                    | Food and Agriculture                       | 49              | 8,779,484                     | 8,800,884                     | 0.2%              | 37,115,140            | 32,575,379            | -12.2%                   | -12.4%                              | 2,555,131             | 2,922,002             | 14.4%               | 14.1%                                 | 5.5%   | 43.5                                     | 45.8                                     | 5.3%                                       | incl. new PV's & reports from 47 of 49 fairgrnds  |
| DCA                 | Department of Consumer Affairs                        | State & Consumer Services Agency           | 1               | 30,893                        | 30,893                        | 0.0%              | 180,206               | 161,192               | -10.6%                   | -10.6%                              | 6,551                 | 5,095                 | -22.2%              | -22.2%                                | -16.6%   | 41.1                                     | 34.3                                     | -16.6%                                     |   |
| DDS                 | Department of Developmental Services                  | Health and Human Services                  | 6               | 5,382,990                     | 5,510,071                     | 2.4%              | 58,862,258            | 55,294,515            | -6.1%                    | -8.2%                               | 7,026,019             | 5,876,328             | -16.4%              | -18.3%                                | -14.1%   | 167.8                                    | 140.9                                    | -16.1%                                     | Agnews mostly closed & Sierra Vista closed in 2010, overall 127K s.f. added (2.4%)  |
| DFA                 | Department of Food and Agriculture                    | Department of Food and Agriculture         | 26              | 430,308                       | 449,426                       | 4.4%              | 98,685,190            | 108,562,199           | 10.0%                    | 5.3%                                | 3,596,095             | 3,919,340             | 9.0%                | 4.4%                                  | 9.5%   | 1,618.2                                  | 1,696.3                                  | 4.8%                                       | 6 more bldgs included (4.3% more bldg area)   |
| DFG                 | Department of Fish and Game                           | Natural Resources Agency                   | 113             | 1,283,369                     | 1,299,863                     | 1.3%              | 29,780,971            | 27,421,191            | -7.9%                    | -9.1%                               | 109,184               | 121,179               | 11.0%               | 9.6%                                  | -6.1%  | 87.7                                     | 81.3                                     | -7.3%                                      | Added 1.3% more bldg. area  |
| DGS                 | Department of General Services                        | State & Consumer Services Agency           | 59              | 14,416,016                    | 17,559,906                    | 21.8%             | 189,969,589           | 232,284,330           | 22.3%                    | 0.4%                                | 5,882,622             | 6,163,935             | 4.8%                | -14.0%                                | 14.0%  | 85.8                                     | 80.2                                     | -6.4%                                      | 3 new facilities 3.144M s.f. added (21.8%)  |
| DMH                 | Department of Mental Health                           | Health and Human Services                  | 5               | 4,830,732                     | 6,599,989                     | 36.6%             | 49,279,583            | 71,058,388            | 44.2%                    | 5.5%                                | 5,335,483             | 5,614,610             | 5.2%                | -23.0%                                | 14.6%  | 145.3                                    | 121.8                                    | -16.1%                                     | Coalinga opened in 2005 & new bldgs (+36.6%)  |
| DMV                 | Department of Motor Vehicles                          | Business, Transportation & Housing         | 98              | 1,573,710                     | 1,601,185                     | 1.7%              | 15,558,789            | 14,514,180            | -6.7%                    | -8.3%                               | 104,340               | 117,460               | 12.6%               | 10.6%                                 | -3.5%  | 40.4                                     | 38.3                                     | -5.2%                                      | Added bldgs (1.8%), some bldgs. incomplete  |
| DOJ                 | Department of Justice                                 | Attorney General                           | 6               | 145,057                       | 145,057                       | 0.0%              | 5,587,785             | 3,938,182             | -29.5%                   | -29.5%                              | 168,438               | 100,835               | -40.1%              | -40.1%                                | -34.5%   | 247.6                                    | 162.1                                    | -34.5%                                     | Efficiency improvements in laboratories   |
| DOR                 | Department of Rehabilitation                          | Health and Human Services                  | 1               | 42,278                        | 42,278                        | 0.0%              | 342,599               | 370,522               | 8.2%                     | 8.2%                                | 52,923                | 40,356                | -23.7%              | -23.7%                                | -18.0%   | 152.8                                    | 125.4                                    | -18.0%                                     |   |
| DOT                 | Department of Transportation                          | Business, Transportation & Housing         | 310             | 6,170,268                     | 6,534,248                     | 5.9%              | 71,429,814            | 67,910,869            | -4.9%                    | -10.2%                              | 1,187,687             | 1,217,172             | 2.5%                | -3.2%                                 | -2.5%  | 58.7                                     | 54.1                                     | -7.9%                                      | Added 364K s.f. of bldg area (5.9%)   |
| DPR                 | Department of Parks and Recreation                    | Natural Resources Agency                   | 189             | 6,416,477                     | 6,718,224                     | 4.7%              | 38,203,252            | 35,439,559            | -7.2%                    | -11.4%                              | 179,531               | 206,130               | 14.8%               | 9.7%                                  | -4.6%  | 23.1                                     | 21.1                                     | -8.9%                                      | Added 4.7% more building area   |
| OTech               | Office of Technology Services                         | California Technology Agency               | 1               | 154,250                       | 154,250                       | 0.0%              | 9,307,862             | 18,037,800            | 93.8%                    | 93.8%                               | 25,733                | 16,124                | -37.3%              | -37.3%                                | 84.0%  | 222.6                                    | 409.4                                    | 84.0%                                      | many state servers moved from agencies & leased space to state-owned data center  |
| DVA                 | Department of Veterans Affairs                        | Department of Veterans Affairs             | 5               | 1,602,562                     | 1,602,562                     | 0.0%              | 18,614,967            | 20,691,502            | 11.2%                    | 11.2%                               | 2,011,738             | 1,730,698             | -14.0%              | -14.0%                                | -7.9%  | 165.2                                    | 152.0                                    | -7.9%                                      | some facilities were closed for renov. in 2003  |
| DWR                 | Department of Water Resources                         | Natural Resources Agency                   | 11              | 184,639                       | 189,439                       | 2.6%              | 2,490,489             | 2,483,848             | -0.3%                    | -2.8%                               | 37,105                | 30,134                | -18.8%              | -20.8%                                | -5.9%  | 66.1                                     | 60.6                                     | -8.3%                                      | converted 2,100 sf of warehouse to office (1%) 2 more bldgs added 4,800 sf (2.6%)   |
| EDD                 | Employment Development Department                     | Labor and Workforce Development            | 24              | 532,668                       | 518,298                       | -2.7%             | 9,128,009             | 10,099,500            | 10.6%                    | 13.7%                               | 107,996               | 99,050                | -8.3%               | -5.7%                                 | 5.8%   | 78.7                                     | 85.6                                     | 8.7%                                       | 1 less bldg in 2011, 14,370 s.f. less (-2.7%)   |
| EXPO                | Cal Expo  | Department of Fish & Game                  | 1               | 1,500,000                     | 1,500,000                     | 0.0%              | 8,617,001             | 9,557,544             | 10.9%                    | 10.9%                               | 227,629               | 155,879               | -31.5%              | -31.5%                                | -7.6%  | 34.8                                     | 32.1                                     | -7.6%                                      |   |
| HCD                 | Housing and Community Development                     | Business, Transportation & Housing         | 24              | 1,614,600                     | 1,598,496                     | -1.0%             | 4,349,260             | 4,005,577             | -7.9%                    | -7.0%                               | 226,016               | 200,110               | -11.5%              | -10.6%                                | -10.0%   | 23.2                                     | 21.1                                     | -9.1%                                      | 84 fewer bldgs (0.1% less bldg area)  |
| MIL                 | Military Department                                   | Military Department                        | 140             | 3,416,996                     | 3,475,929                     | 1.7%              | 20,859,451            | 14,588,566            | -30.1%                   | -31.2%                              | 1,846,533             | 716,272               | -61.2%              | -61.9%                                | -52.5%   | 74.9                                     | 34.9                                     | -53.3%                                     | More efficient lighting, tankless waterheaters and more building area (+1.7%) unit deployment also reduced energy use                 |
| SLC                 | State Lands Commission                                | Natural Resources Agency                   | 1               | 3,325                         | 3,325                         | 0.0%              | 7,909                 | 6,439                 | -18.6%                   | -18.6%                              | 87                    | 76                    | -12.6%              | -12.6%                                | -17.1%   | 10.7                                     | 8.9                                      | -17.1%                                     |   |
| SMMC                | Santa Monica Mountains Conservancy                    | Natural Resources Agency                   | 1               | 20,429                        | 20,429                        | 0.0%              | 70,812                | 37,307                | -47.3%                   | -47.3%                              | 1,450                 | 2,213                 | 52.6%               | 52.6%                                 | -9.8%  | 18.9                                     | 17.1                                     | -9.8%                                      | litg. retrofits reduced elect., repaired gas heat   |
| <b>STATE TOTALS</b> |   |  | <b>1,718</b>    | <b>101,296,262</b>            | <b>110,129,184</b>            | <b>8.7%</b>       | <b>1,333,301,295</b>  | <b>1,400,563,751</b>  | <b>5.0%</b>              | <b>-3.4%</b>                        | <b>74,080,547</b>     | <b>73,974,564</b>     | <b>-0.1%</b>        | <b>-8.2%</b>                          | <b>1.8%</b>  | <b>118.0</b>                             | <b>110.6</b>                             | <b>-6.3%</b>                               | <b>Statewide Totals &amp; Averages</b>  |

kBtu Equivalent Energy Use  
 Electricity kWh: 4,549,224,017 / 4,778,723,517  
 Gas Therms: 7,408,054,744 / 7,397,456,438

| STATE TOTALS                         | Combined Energy kBtu | Electricity kWh | Gas Therms |
|--------------------------------------|----------------------|-----------------|------------|
| Total 2003 Energy Use (kBtu)         | 11,957,278,761       | 1,333,301,295   | 74,080,547 |
| Total 2010 Energy Use (kBtu)         | 12,176,179,956       | 1,400,563,751   | 73,974,564 |
| % Change in Energy Use During Period | 1.8%                 | 5.0%            | -0.1%      |

|                                  |             |
|----------------------------------|-------------|
| Bldg Area Added since 2003       | 8,832,922   |
| Total 2010 bldg area             | 110,129,184 |
| Bldg Area Increased % since 2003 | 8.7%        |

| Energy Use Intensity | 2003  | 2010               | 2003  | 2010                |
|----------------------|-------|--------------------|-------|---------------------|
|                      | 13.16 | 12.72 kWh/sq. ft.  | 0.73  | 0.67 Therms/sq. ft. |
|                      | 44.91 | 43.39 kBtu/sq. ft. | 73.13 | 67.17 kBtu/sq. ft.  |

|                                |   |
|--------------------------------|---|
| Electricity                    | -3.4% Change in kBtu per sq. ft. of building area |
| Gas                            | -8.2% Change in kBtu per sq. ft. of building area |
| Total Combined kBtu Energy Use | -6.3% Change in kBtu per sq. ft. of building area |

|  |                  |                     |                  |             |                              |
|--|------------------|---------------------|------------------|-------------|------------------------------|
| Estimated Energy Savings based on improved energy use intensity in 2010 building areas | 48,999,945 kWh   | +                   | 6,565,725 therms | =           | 823,760,314 kBtu             |
| Estimated Ave. 2010 Energy cost/unit   | \$0.1274 per kWh |                     | \$0.62 per therm |             |                              |
| Estimated 2010 Energy Savings  | \$6,242,593      | Electricity Savings | \$4,079,332      | Gas Savings | = \$10,321,925 Total Savings |

| 2010 Natural Gas Purchases    | Therms     | Cost/Therm | 2011 Electricity Purchases            | Ave. Cost |
|-------------------------------|------------|------------|---------------------------------------|-----------|
| State Gas Purchasing Program  | 56,000,000 | 0.58       | Statewide Ave. Energy Costs 7/09-7/10 | \$0.1271  |
| All Other State Gas Purchases | 17,974,564 | 0.75       | Statewide Ave. Energy Costs 7/10-7/11 | \$0.1277  |
| Total Gas Purchases           | 73,974,564 | \$0.62     | Est. Average Energy Cost CY2010       | \$0.1274  |
| (prices per DGS)              |            | Average    | (prices per CEC)                      | Average   |

|   |               |  |               |
|---|---------------|--|---------------|
| Total 2010 State Natural Gas Purchases                        | \$45,960,923  | Total 2010 State Electricity Purchases | \$178,431,822 |
| Total 2010 State Energy Purchases (comb. nat. gas and elect.) | \$224,392,745 |  |               |

\* This data includes state owned Executive Branch buildings only, not UC, CSU or Courts, or leased buildings.