

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: CHIEF EXECUTIVE OFFICE

BOARD AGENDA # B-26

Urgent _____ Routine X

AGENDA DATE July 10, 2001

CEO Concurs with Recommendation YES Not NO _____
(Information Attached)

4/5 Vote Required YES _____ NO X

SUBJECT: APPROVAL OF A STANISLAUS COUNTY ENERGY STRATEGY IN RESPONSE TO THE STATEWIDE ENERGY CRISIS

STAFF
RECOMMEN-
DATIONS:

1. APPROVE THE STANISLAUS COUNTY ENERGY STRATEGY.
2. AUTHORIZE THE CHIEF EXECUTIVE OFFICE TO DETERMINE WAYS IN WHICH DEPARTMENTS CAN MODIFY WORK HOURS, RESULTING IN AN ENERGY USE REDUCTION, WHILE NOT REDUCING PUBLIC HOURS OF OPERATION.

FISCAL
IMPACT:

The current statewide energy crisis has prompted a review of our current energy practices. This strategy offers ways that all employees can contribute to save energy, as well as offers ideas about potential short and long term building efficiency proposals. While some proposals require initial up-front funds which would be considered as part of the Final and Mid-Year 2001-2002 Budgets, it is anticipated that reduction in energy costs would more then off-set the initial investment. It is anticipated that the closing of offices would not result in a reduction of open hours to the public, although some offices may be open longer each day and close one day a week. Any change in office hours would be returned to the Board of Supervisors for final approval prior to implementation.

BOARD ACTION AS FOLLOWS:

No. 2001-532

On motion of Supervisor Caruso , Seconded by Supervisor Simon
and approved by the following vote,

Ayes: Supervisors: Mayfield, Blom, Simon, Caruso, and Chair Paul

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) X Approved as recommended

2) _____ Denied

3) _____ Approved as amended

Motion:

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

By: Christine Ferraro
Deputy

File No.

DISCUSSION: With the increase in energy costs and resulting energy crisis, Stanislaus County government took a proactive role and evaluated what could be done quickly to reduce our energy consumption. Initial steps included reducing elevator, interior and exterior lights, air conditioning unit supply times, reduction of hot water heater temperatures, and decreasing fan operating times in departments, to name a few. This effort resulted in the reduction of 1,711,227 kilowatt hours and 346 therms, at a savings of \$134,071.39 for the first year to the County. This initial savings was realized with an initial county investment of only \$656.41.

While this first step was very important, it is clear that the crisis will continue and a strategic action plan is necessary to address the larger issues we will be facing. Attached is an energy strategy, which establishes a plan to lower energy usage (demand), through conservation and energy efficiency programs. It is anticipated that demand-side programs and energy management will yield the most immediate and direct benefits to Stanislaus County.

Included in the action plan are recommendations to review and implement energy conservation retrofits where possible, proper use of Energy Management Systems, load shedding and coasting of energy, the establishment of a minimum temperature of 75 degrees during the summer months in county facilities, reduction of after hours/week-end use of County facilities and a potential relaxed dress code, to name a few.

Additionally, immediate cost saving recommendations include actions to be taken by employees and the departments directly. They include turning off all equipment (or setting on Energy Saving Mode if appropriate) when not in use, including computers, fax machines, copiers and other equipment and lights when not in use. Personal office equipment should be kept to a minimum and should be turned off at the end of the day. Portable electric space heaters, microwave ovens, cup warmers, small refrigerators, electric radios and televisions will not be allowed unless furnished by the County and/or approved by the department.

Finally, both a short term and long term energy savings plans are recommended to be considered as part of the 2001-2002 Final Budget (short term plan) and the 2001-2002 Mid-Year Budget (long term plan). These plans will identify the specific projects and amounts when presented at that time.

POLICY ISSUES: Approval of this recommendation will meet the Board's priority of efficient government.

STAFFING IMPACT: There are no staffing impacts associated with these recommendations.

STANISLAUS COUNTY ENERGY STRATEGY

PURPOSE

This is an energy strategy that establishes a plan for Stanislaus County to lower its energy usage (demand) through conservation and energy efficiency programs..

REDUCTION PLAN

Energy reduction management programs include energy efficiency initiatives, energy conservation efforts and other programs that reduce the use (demand) of energy. Of all the energy strategies, it is likely that demand-side programs and energy management will yield the most immediate and direct benefits to Stanislaus County.

The County should continue to expand its energy conservation initiatives through the following efforts:

1. Review and employ energy conservation retrofits where possible.
2. Benchmark energy consumption of all major County buildings to prioritize future energy conservation measures.
3. Include energy conservation projects in future capital improvement budgets.
4. Through the use of existing energy management systems, operate County facilities as economically as possible while maintaining acceptable working conditions.(Energy Management systems in use in some County facilities allow the County to analyze its energy usage for those buildings in much greater detail and should be expanded where practicle).
 - a) Duty cycling which rotates heating, ventilation and cooling throughout a building to minimize the total energy load at any one time and reduce demand charges from the utility
 - b) Load shedding which automatically shuts down energy systems, in a prioritized order, when the total energy load in a building exceeds predetermined limits.
 - c) Coasting which shuts off energy systems or changes desired temperatures within a building, before the building is actually vacated at the end of a workday.
5. Establish a building temperature standard that limits the temperature in County facilities to a maximum of 69 degrees in the winter and minimum of 75 degrees in the summer.
6. Reduce non-essential after hours/weekend use of County office buildings.
7. Utilize utility tracking software to analyze energy consumption for irregularities in usage and take corrective action.
8. Maximize the use of federal and state programs for energy conservation.
9. Establish a relaxed dress code to be utilized during extraordinary circumstances during the energy crisis.

Attached are three proposals to further this strategy. One is a cost saving recommendation to be distributed to all county employees and implemented immediately. The second is a proposal of short term and long term projects that could assist in the implementation of this strategy, as well as a proposed relaxed dress code.

COST SAVING RECOMMENDATIONS

TURN OFF YOUR COMPUTER:

- If you are leaving your office for an extended period of time during the day, and especially at the end of your shift, make sure you have turned off all your computer equipment including your CPU, monitors, printers, plotters, speakers, etc. Please take an extra few minutes to make sure your computer equipment is completely shut off. Computers and monitors in Energy Saving mode use an incremental amount of power that, when multiplied across the County for all computers, equates to a fairly substantial amount of energy use.
- Consider using a printer instead of a copier to make copies if only one or two copies are needed; copiers use more electricity.
- If your computer operating system is Windows 98 or Windows 2000, please set the monitor to the Energy Saving mode. This is different from the screen saver mode. If you are unsure how to activate the Energy Saving mode, please contact the IT Help Desk for assistance.

TURN OFF EQUIPMENT:

For equipment and devices that are shared by a number of employees (i.e., lights, copiers, printers, plotters, fax machines, coffee pots, etc.), we would ask department heads to assign staff the job of shutting off these devices at the end of the day, including shared work areas and restrooms where light switches exist.

- All fax machines should be set to Energy Saving mode. If your department's fax machines do not receive fax transmissions outside of normal working hours, then please turn them off at the end of the day.
- Please turn off all copiers at the end of the day even though they may have an Energy Saving mode. The Energy Saving mode still draws a significant amount of electricity just as they do with computers when multiplied across the County for all copiers.
- If you are coming in after hours and turn on equipment and lights, please do not forget to turn all the equipment and lights off when you leave.

DISCONTINUE USE OF PERSONAL COMFORT EQUIPMENT:

- Keep usage of personal electric office equipment to a minimum and please turn such equipment off at the end of your shift.
- Portable electric space heaters are not allowed and should be removed immediately.
- Items such as microwave ovens and small refrigerators are a fire hazard in work modules and private offices due to potential circuit overload and heat exposure to flammable materials. They also may damage computer equipment. If you currently have any such equipment in your work area, it should be removed. This would include electric cup heaters, televisions, radios (other than battery operated), if not furnished by the county.

HELP THE HEATING AND COOLING SYSTEM WORK MORE EFFECTIVELY:

- Please make certain vent grills are not blocked by plants, books, furnishings, etc.
- Please keep all large facility doors such as loading docks and roll up doors closed for better climate control when not being used.

CURRENT PROJECTS AND SAVINGS

1. Spread sheets for county facilities and 1010 10th St.

SHORT TERM – RECOMMENDATIONS (\$30,000 FY 2001-2002 budget)

- A. Building thermostats to be set at 75 degrees in summer and 68 degrees in winter.
- B. Employ the use of low wattage lighting, ie: mini fluorescent, in place of incandescent. Initial cost - \$10,000. 75% reduction in energy consumption where used.
- C. Designate a staff member as department energy monitor – make departments responsible for conservation efforts.
- D. Personal electric appliances shall be restricted. Personal heaters cost approx. \$19.80 per month to operate. Personal heaters, refrigerators, cup warmers, television, radios (non-battery operated) are not to be used.
- E. All other personal equipment must be approved by the department head with the assistance of the building maintenance division
- F. Water heater water temperature will be reduced to approximately 106 degrees
- G. MIS to configure computers to activate the sleep mode after 10 minutes of non-use.
- H. Departments should review and establish work schedules to avoid peak energy use times, as practical.
- I. Use of county facilities after hours and on weekends should be discouraged, or at least limited, where possible.
- J. Consider an alternate dress code for extreme heat days
- K. Install motion detectors in facility lighting controls (infrared and sound detectors)
- L. Consider additional lighting projects, such as parking lot lighting changovers, etc.
- M. Print and distribute conservation reminder stickers

LONG TERM – CONSIDERATIONS (to be appropriated at mid-year FY 2001-2002 budget)

- A. Establish a budget for energy conservation opportunities.
- B. Include energy conservation components in future capitol improvement projects.
- B. Make use of state and federal grant programs where possible.
- C. Replace chillers with more efficient and updated equipment as needed – develop priority list

Energy Conservation Team was established by the Public Works Department, Building Maintenance Division, headed up by Rob Macha.