



APPROVED
BY THE CITY COUNCIL
MAY 20 1997

A.I.

OFFICE OF THE
CITY CLERK

1697-071

DEPARTMENT OF
PUBLIC WORKS

CITY OF SACRAMENTO
CALIFORNIA

ARCHITECTURE & ENGINEERING DIVISION
ENGINEERING DESIGN

927 10TH STREET
ROOM 300
SACRAMENTO, CA
95814-2702

May 2, 1997

916-264-8427
FAX 916-264-7903

City Council
Sacramento, California

Honorable Members in Session:

SUBJECT: CITY OF SACRAMENTO/EPA ENERGY STAR BUILDINGS PARTNERSHIP

LOCATION AND COUNCIL DISTRICT: Citywide.

RECOMMENDATION:

This report recommends City Council:

1. Authorize the City Manager to sign a Memorandum of Understanding with the U.S. Environmental Protection Agency (EPA); and
2. Support the continued commitment to analysis and implementation of energy efficient technologies within City-owned facilities.

CONTACT PERSON: Brian Reilly, Associate Mechanical Engineer, 264-8427

FOR COUNCIL MEETING OF: May 20, 1997

SUMMARY:

The Public Works Department recommends that the City enter into a voluntary partnership with the U.S. Environmental Protection Agency. The partnership is known as the *Energy Star Buildings Program*. This program will promote the City of Sacramento's commitment to energy efficiency and will obtain recognition for the success of our recently completed Energy Service Company (ESCO) energy retrofit project.

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COMMITTEE/COMMISSION ACTION:

None.

BACKGROUND INFORMATION:

The primary purpose of the program is to encourage organizations within the United States to implement energy efficient facility upgrades and practices to prevent the creation of air pollution, solid waste, and other environmental impacts of energy production, distribution and consumption.

The lighting and mechanical energy efficiency upgrades completed under the City's ESCO project incorporated many of the technologies recommended by the EPA through the *Energy Star Buildings* Program. Recognition of the completed work as a partner in the Program will highlight the City's accomplishments in the cost-effective implementation of these technologies.

The City of Sacramento has completed Phase I of its ESCO project. The project included lighting retrofits in 80 City buildings as well as mechanical system upgrades in 14 City buildings. The energy retrofit was implemented through an energy partnership with Aircon Energy, Inc. and SMUD.

The project provided the City with an estimated \$136,650 in annual energy savings and \$25,536 in annual maintenance cost savings.

The U.S. EPA *Energy Star Buildings* Program is an enhancement of the popular *Green Lights* Program introduced by the EPA to promote energy efficient lighting retrofits in buildings throughout the United States. The new program incorporates the Green Lights technology into a staged approach which recommends implementation of profitable mechanical system upgrades such as:

- 1) Building Tune-Up (preventive maintenance, calibration of system controls).

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- 2) Heating, Ventilation and Air Conditioning (HVAC) Load Reductions (installation of insulation, window films, and energy efficient computer equipment).
- 3) Fan System Upgrades (use of high-efficiency motors, upgrade to efficient variable air volume systems).
- 4) HVAC Plant Improvements (replacement of chillers, pumps & inefficient heaters).

The EPA assists participants by providing technical and administrative assistance to ensure maximum energy savings while satisfying cost-effective criteria.

Benefits to the City by entering into this partnership include:

- Technical support from the EPA, including written materials and workshops.
- Access to the EPA hotline for direct communication with EPA advisors.
- Software tools to aid the City in estimating energy savings and environmental benefits for specific upgrades.
- Public recognition of the City of Sacramento for its participation and success in the program.

FINANCIAL CONSIDERATIONS:

None at this time. Future building energy surveys will identify cost-effective energy projects.

ENVIRONMENTAL CONSIDERATIONS:

Implementation of energy efficient technologies results in decreased air pollution due to reductions of carbon dioxide, sulfur dioxide and nitrogen oxides, pollutants that contribute to acid rain, smog and global climate change.

POLICY CONSIDERATIONS:

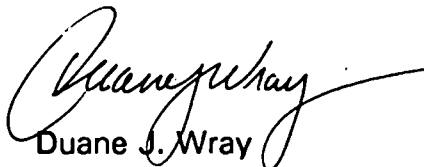
None.

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MBE/WBE EFFORTS:

Not applicable to this report.

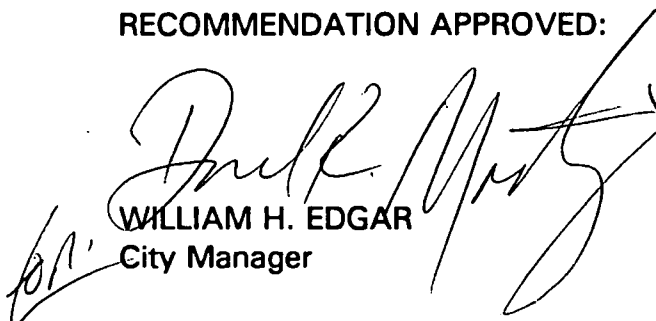
Respectfully submitted,



Duane J. Wray
Architecture and Engineering Manager

RECOMMENDATION APPROVED:

Approved:



WILLIAM H. EDGAR
City Manager



Michael Kashiwagi
Director of Public Works



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MEMORANDUM

DATE: May 12, 1997

TO: Valerie Burrowes, City Clerk

FROM: Brian Reilly, Mechanical Engineer

SUBJECT: **CITY OF SACRAMENTO/ ENERGY STAR BUILDINGS PARTNERSHIP
CITY COUNCIL PACKET INFORMATION**

Please find enclosed one copy of the Environmental Protection Agency's "Memorandum of Understanding" and "MOU in Brief" for incorporation into the City Council Members' packets at the May 20th afternoon session.

Once approved by the City Council, the MOU will require signature by the City. Please return the signed form to the Public Works Department with my attention (MS 3132). Feel free to contact me at 8427 if questions arise. Thank you.

Brian Reilly, P.E.
Associate Mechanical Engineer

cc Angie Louie

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The Energy Star Buildings MOU in Brief



Energy Star Buildings participants sign an addendum to the Green Lights Memorandum of Understanding (MOU) with EPA agreeing to improve the overall energy efficiency of their facilities through the implementation of a comprehensive set of profitable upgrades. EPA assists participants by providing technical and administrative assistance to ensure maximum energy savings while satisfying cost-effective criteria.

EPA Responsibilities:

- Provide technical support, including written materials and guides, and a technical hotline
- Provide software tools to aid in estimating energy savings and environmental benefits from specific upgrades (ie. variable speed drives, fan systems)
- Advise and assist partners in planning and implementing the upgrades
- Provide marketing resources, such as posters and fact sheets, to help Partners communicate the Energy Star Buildings program within their organizations
- Create an Ally Program of equipment manufacturers and distributors, contractors, utility companies, and building technology experts
- Publicly recognize Partners for their participation and publicize their successes
- Provide special recognition for those buildings that achieve the greatest energy-use reductions
- Allow Partners to use EPA's Energy Star logo to publicize their participation in the program

Partner Responsibilities:

- Survey and implement all profitable upgrades in one Pilot Building within 2 years
- Complete profitable upgrades in at least 50% of remaining qualifying space within 7 years (qualifying space is conditioned space that is owned or financially controlled by the Partner)
- Maintain or improve indoor air quality in upgraded Energy Star Buildings
- Partners are encouraged to follow EPA Energy Star Buildings staged approach to upgrades, or at a minimum account for inter-system effects
- Adhere to Energy Star energy-efficiency and profitability criteria when replacing failed or retired equipment during the term of the MOU
- Annually report progress to EPA
- Develop an employee outreach program entailing the Energy Star Buildings program goals and results and your pollution prevention accomplishments
- Allow EPA to use your results to promote EPA pollution prevention programs