



# Lockheed Martin BPS/EES Industrial Efficiency Programs

**Presented By**  
**William Steigelmann**  
**Senior Engineering Consultant**

**at meeting of**  
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# Programs

- 1. Production Efficiency Program  
(operated for Energy Trust of Oregon)**
- 2. Industrial Energy Efficiency Program  
(operated for Southern California Edison)**
- 3. Heavy Industry Program  
(operated for Pacific Gas & Electric)**

*Industrial Efficiency Programs*



# Program Goals

## ETO – Production Efficiency Program

- 101,000,000 kWh annualized savings in 2007  
(The goal was met or exceeded in each prior year)

## SCE – Industrial Efficiency Program

- Started in April 2006 – Ends Dec. 31, 2008
- 105,000,000 kWh net annualized savings

## PG&E – Heavy Industry Program

- Started in August 2006 – Ends Dec. 31, 2008
- 15,400,000 kWh net annualized savings
- 1,613,333 therms net annual savings

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# Program Objectives

## Assist “industrial” firms to:

- Identify opportunities to install energy-efficient systems and equipment and other opportunities (e.g., demand response, DG-PV, CHP)
- Install energy-efficient systems and equipment (i.e., by providing financial incentives)
- Reduce operating costs per unit of product
- Improve product quality and production rate
- Reduce waste, pollutants, and GHG emissions (often required)
- Improve competitive position – Remain in business and remain a utility customer!

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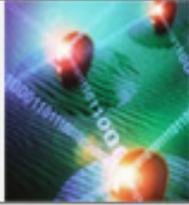


## Program Objectives (continued)

### Benefit “society” by:

- Reducing GHG emissions and other emissions from electric power plants and industrial plants
- Reducing peak power demand (which in turn (1) reduces need for new power plants and T&D infrastructure, and (2) reduces electricity prices)
- Strengthening the local economy (employment, taxes)

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# Program Strategy

## Mitigate Barriers to Installing More Efficient Systems/Equipment

- Lack of information about:
  - \* Opportunities to reduce operating costs
  - \* Cost-effectiveness of each opportunity
  - \* Vendors of more efficient systems/equipment
  - \* Successful projects done by others
- Staff too busy to obtain this information; Management unwilling to hire consultants
- Payback period too long
- Concern that project will not be successful

## Mitigation By:

- Providing Industry Experts to conduct technical studies
- Providing financial incentives
- Providing Quality Assurance services

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# Program Services

## **Conduct Detailed Technical Studies**

- **Studies performed by “Project Champions”**
- **Comprehensive in nature (usually)**
- **No cost to customer**

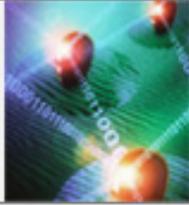
## **Project Implementation Assistance [SCE and PG&E programs]**

- **Coordination with other programs [Dr, PV, CHP]**
- **Project procurement support**
- **Installation oversight**
- **Post-installation inspection**

## **Provide Financial Incentives [PG&E - Heavy Industry Program]**

- **\$2,550,000 Incentives**
- **Target 2-year Payback (project-specific)**
- **\$0.09/kWh (Avg.)**
- **\$0.40/therm (Avg.)**

## ***Industrial Efficiency Programs***



# Program Budgets

**ETO – Production Efficiency Program:  
~ \$11 million per year (2002 – 2007)**

**SCE – Industrial Energy Efficiency Program:  
\$18 million (2006 – 2008) [LM project]**

**PG&E – Heavy Industry Program:  
\$8 million (2006 – 2008) [LM project]**

**(Programs are funded by “Public Benefits”  
charge assessed on electric/gas utility’s  
customer’s monthly bills)**

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# Program Budget Details

## **Production Efficiency Program:**

**Services: \$2 million/yr paid to LM (T&M basis)**

**Incentives: \$9 million per year paid directly by ETO**

## **Industrial Energy Efficiency Program:**

**Services: \$10 million to be paid to LM over 2.6 yrs**

**Incentives: \$8 million to be paid directly by SCE**

## **Heavy Industry Program**

**\$8 million to be paid to LM over 2.3 yrs**

**(covers both Services and Incentives; FUP basis)**

**Note: “Services” covers managing program, marketing, and providing technical studies and support to participants**

## ***Industrial Efficiency Programs***



# Speaker Contract Information

**Lockheed Martin Business Process Services  
2277 Research Boulevard, M.S. 4-T  
Rockville, MD 20850**

**William Steigelmann**

**Phone: 301-519-5803**

**Fax: 301-519-6333**

**[william.h.steigelmann@lmco.com](mailto:william.h.steigelmann@lmco.com)**

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