

US EPA ARCHIVE DOCUMENT

CHP Partnership Tools/Support Available for WWTPs

- Report: “***Opportunities for and Benefits of Combined Heat and Power at Wastewater Treatment Facilities***”
- ENERGY STAR® CHP Awards for exceptionally efficient projects
- Database of state & federal CHP incentives, policies, regulations
- Technical assistance, including identifying opportunities; quantifying economic, environmental, and efficiency benefits; level 1 feasibility analysis
- Facilitating peer-to-peer marketing and networking
- Identifying opportunities for policy developments (energy, environmental, and economic) to encourage energy efficiency through CHP

Web Site: www.epa.gov/chp

For More Information:





Felicia Ruiz, US EPA,
CHP Partnership Team Lead
ruiz.felicia@epa.gov
(202) 343-9610



Identifying Priorities

What should we
work on first?





2. Set
Priorities
Page 41

1. Activities
Operations
Page 36



Sample Criteria to Rank Priorities

- Feasibility
- Costs to implement
- Rate of return, return on investment
- Regulated activity
- Availability of funding
- Other?

What goals should we set?





3. Objectives
Targets
Page 46

2. Set
Priorities
Page 41

1. Activities
Operations
Page 36

Examples of Objectives

- Reduce energy cost
- Reduce petroleum consumption
- Reduce peak energy demand
- Reduce GHG emissions
- Improve reliability
- Increase use of renewable fuels
- Reduce vehicle fuel use



How much and by when: Targets

- Reduce overall energy cost by 10% by January 2009
- Increase energy purchased or generated from renewable sources of energy by 10% by 2012
- California Proposition 7:
 - 40% renewable electricity by 2020, and 50% by 2025

California Global Warming Solutions Act of 2006 (AB 32)

- **2010:** emissions at 2000 levels*
- **2020:** emissions at 1990 levels




- *Set in Executive Order S-3-05, June 2005.

Performance Indicators

- Exactly what will we measure?
(e.g., \$\$s, kWh,
\$ or kWh/gallon)





OBJECTIVE	TARGET	PERF. INDICATOR
Reduce Energy use	Reduce overall energy use by 10% by Jan 2009	kWh

How do we move into action?





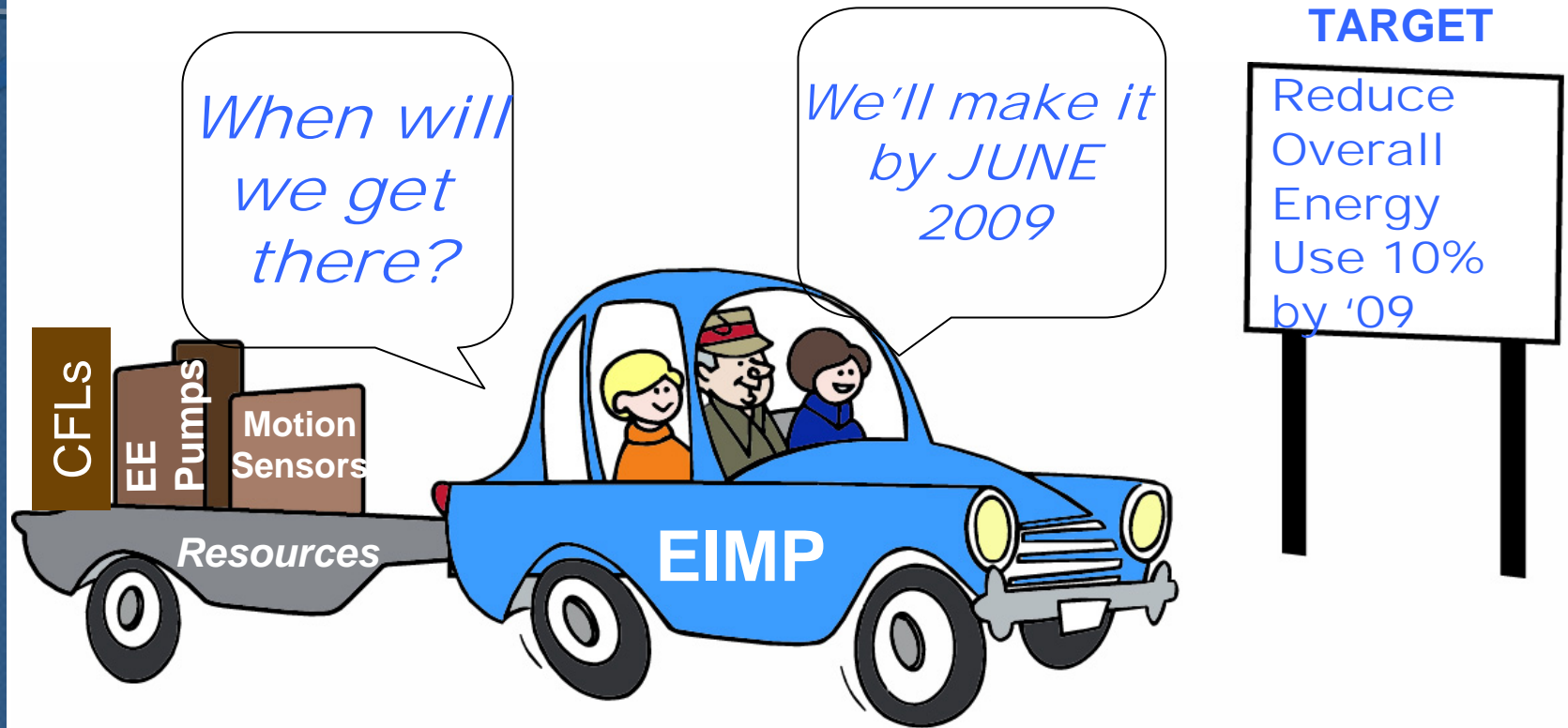
4. EIMPS *p.53*

3. Objectives/Targets *p.46*

2. Set Priorities *p.41*

1. Activities and Ops *p.36*

An EIMP is the Vehicle to Reach Your Objectives and Targets



Moving to Action with Energy Improvement Management Programs

- What to do to reach the target
- Who will do it
- When to do it by
- What resources or level of effort are needed

Good Project Management!
(Page 53)



Good project management

Replace Pump #1 with a more efficient one

CFLs

Motion Sensors

TASKS	WH O	WHEN	\$\$
Determine optimal pump size	Jones	9/31/08	(\$60 K)
Research pump manufacturer	Smith	11/15/08	
Etc.....			

Target to be completed by January 2009

Maintaining and Continuing Energy Improvements





5. Monitor/Measure
p.63

4. EIMPS p. 53

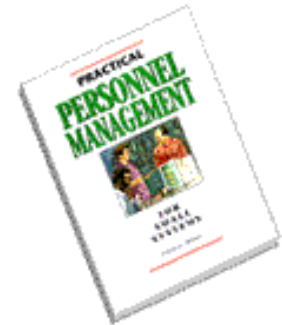
3. Objectives/Targets p. 46

2. Set Priorities p. 41

1. Activities and Ops, p. 36

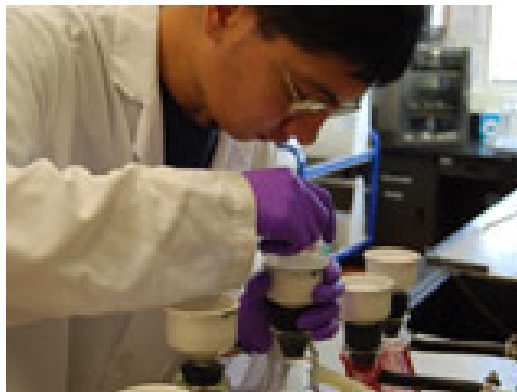
What does it take to implement and maintain energy improvements?

- Roles and responsibilities
- Operating controls
- Training
- Managing and controlling documents and records



Dedicated staff make the District a leader in its field

- Communication (inside and outside)
- Monitoring and measuring
- Apply lessons learned



Afternoon Break



Using the Energy Management Guide





Congratulations! Your utility just got a large energy grant, the \$\$ to be spent over the next 2 yrs to develop a sustainable energy management effort that can produce energy improvements now and on into the future. You have to write a program plan for how you will move forward. What “elements” will go into your plan? What will need to happen in your organization to make this a success?

What's Next?



Observations & Closing Remarks

Jim Horne, EPA Office of Water
&
Gary Lucks

sustainable
EARTH
initiative

LOCAL ACTIONS TOWARD A SUSTAINABLE PLANET





Questions on Next Steps from Region 9 EPA

1. Are you interested in using some or all of the steps in the Guidebook after this workshop?
2. Would you be interested in working with EPA as you use the Guidebook to take these next steps? If yes, please provide name & contact information (phone # and email address)
3. Do you have suggestions on how EPA could assist you further with energy management challenges?

Any Questions/Comments:

Jim Horne, US EPA (202) 564-0571

horne.james@epa.gov



Eric Byous, US EPA Region 9

415-972-3531 byous.eric@epa.gov

Cheryl McGovern, US EPA Region 9

(415) 972-3415 mcgovern.cheryl@epa.gov



Faith Leavitt, GETF (239) 281-0052

faith.leavitt@getf.org



Madeline Snow, UMass Lowell

(617) 817-5111 madeline_snow@uml.edu