

Federal CHP Market and DOD in California

Cheri Sayer

FEMP-Seattle Regional Office

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What is Potential for CHP in the federal sector?

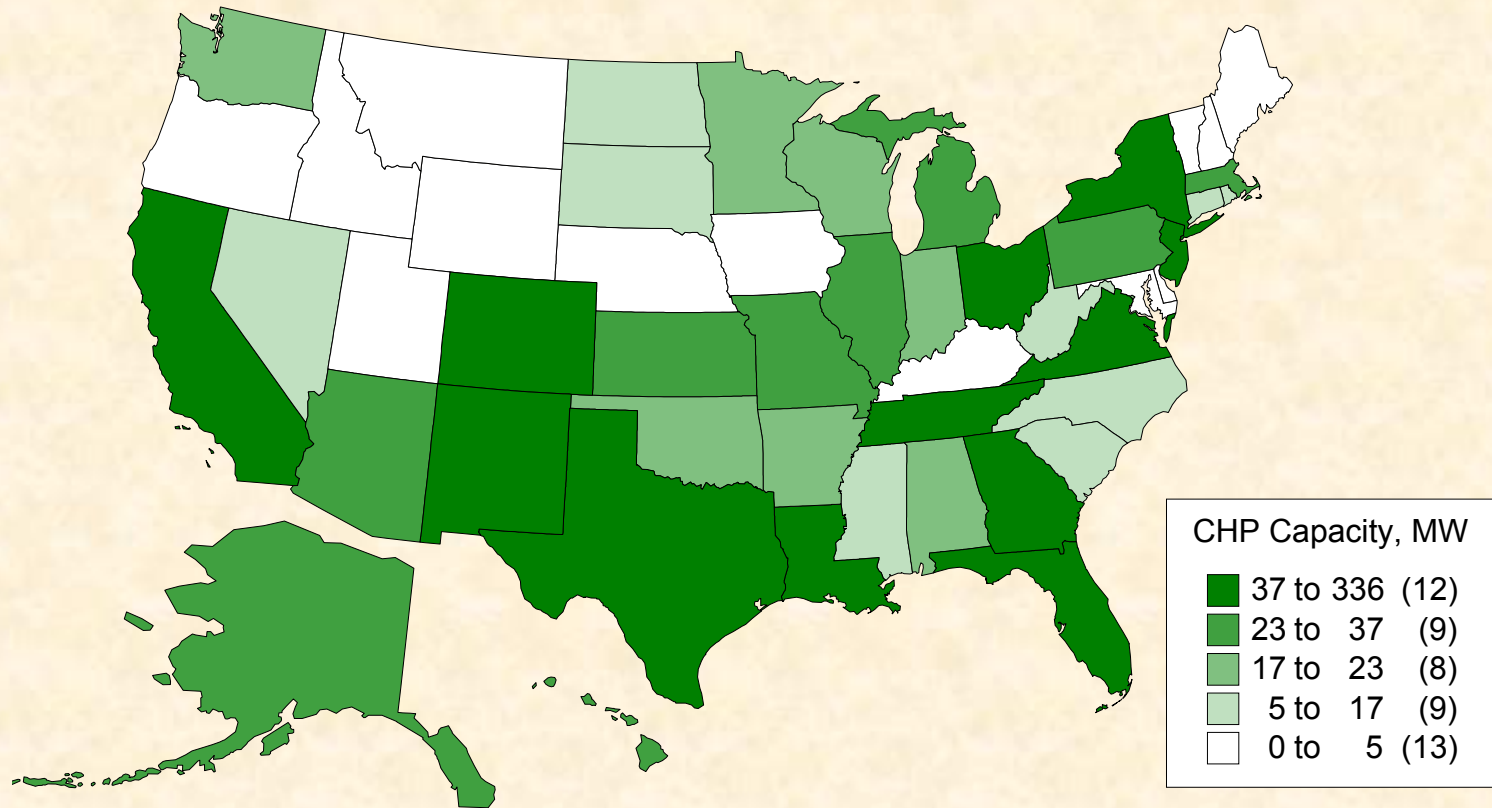
- **Assessment of CHP potential at Federal sites (Feb. 2002)**
- **Based on:**
 - **GSA federal building database**
 - **EIA-CBECS energy intensities**
 - **EIA Year 2000 industrial energy rates**
 - **CHP system cost and O&M data**
 - **Tech-specific performance assumptions**



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Federal CHP Potential Nation-Wide: 1500-1600 MW (Base case engines or turbines with payback <10 yrs)



FEMP Market Assessment: 1500 MW Federal CHP Potential =

- **\$170 million/year in energy cost savings**
- **Avg. return on investment <8 years**
- **50 trillion Btu/yr of source energy savings**
- **4 million metric tons/yr of avoided CO2**
- **Increase reliability/security representing 13% of total federal electricity purchased (in 2000)**

e.g. this is significant!

California's Share: Estimated 336 MW of CHP Potential

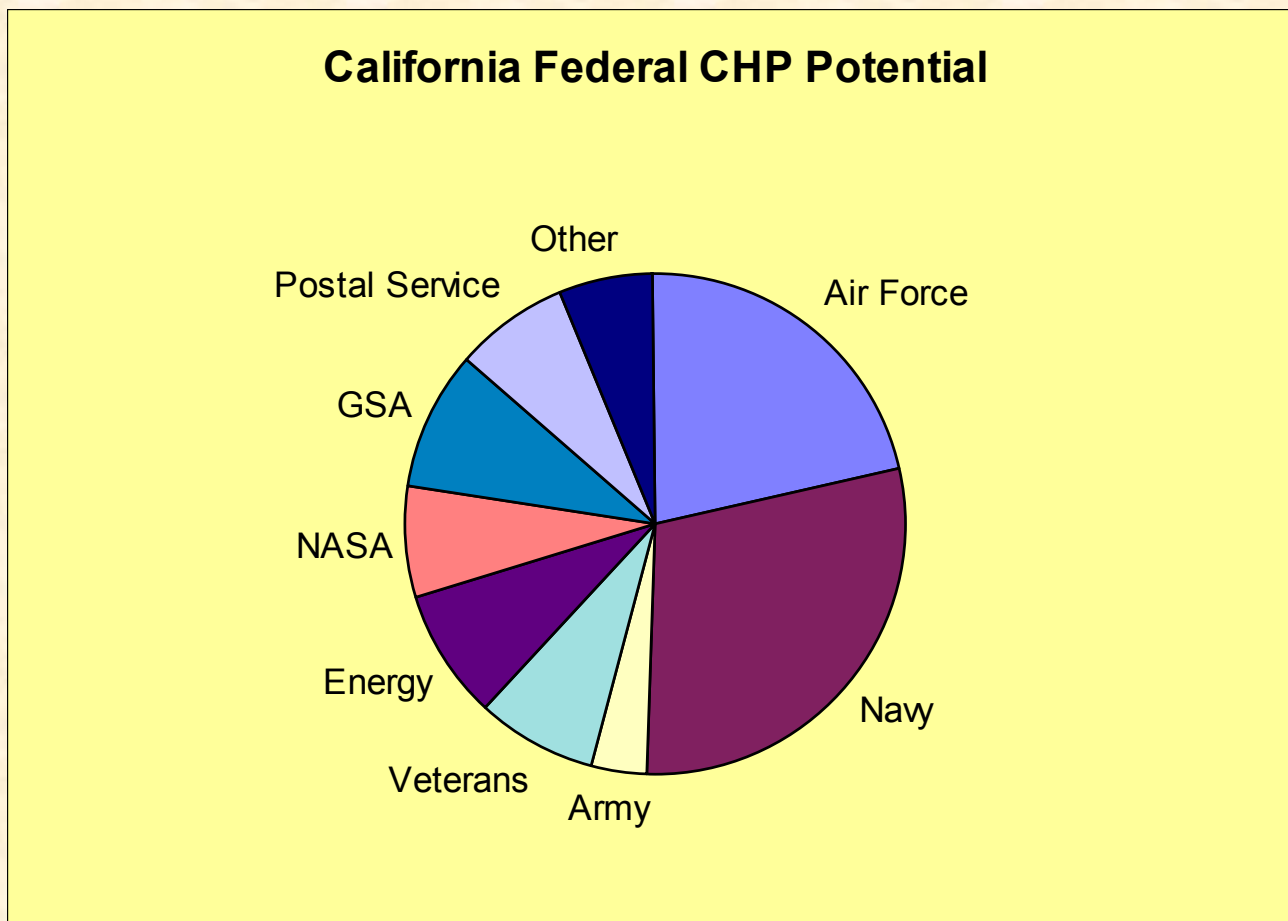
- **Prime candidates include**
 - R&D facilities, sites with central plants
 - Hospitals
 - Energy-intensive service facilities and
 - Office buildings paying commercial rates
- **Average simple return on investment under 7 years**



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California CHP Potential: Navy and Air Force represent half of total (336 MW)



FEMP “ADD CHP” Offers Support to Federal Sites

- Need estimate of CHP potential?
 - **Quick Screening Service**
- Need information on options and performance?
 - **TA to agencies and project facilitators**
- Need financing?
 - **Assistance to identify potential partners**



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FEMP CHP Contacts

- Your Regional DOE Office:
Cheri.Sayer@ee.doe.gov (206) 553-7838
- DER/CHP Programs at FEMP HQ:
Shawn.Herrera@ee.doe.gov
(202) 586-1511
- Keith Kline, ORNL FEMP CHP coordinator
(865) 574-4230 Klinekl@ornl.gov

Web-based Info:

- **Call for Projects (funding) and upcoming DER Workshops for federal facilities:**
http://www.eren.doe.gov/femp/techassist/der_resources.html
- **Full CHP Market Assessment Report:**
www.ornl.gov/femp/pdfs/chp_market_assess.pdf
- **DOE Websites:**
FEMP <http://www.eren.doe.gov/femp/>
Power Technologies <http://www.eren.doe.gov/power/>