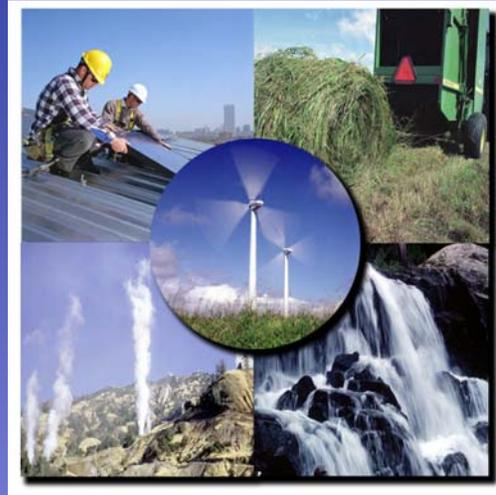




Update on Federal Policy on Renewable Energy



Anne Crawley
U.S. Department of Energy
Federal Energy Management Program



GovEnergy
www.govenergy.gov



Renewable Energy Overview



By using renewable energy, Federal agencies can:

- Meet Federal renewable energy goals
- Get stable prices for your energy supply
- Conserve natural resources
- Increase the nation's energy security
- Provide energy security for agency facilities
- Provide environmental benefits such as reduced greenhouse gases and air pollution



Key RE Requirements

- Statutory renewable energy goals under EPACT 2005 Section 203 are:
 - 3% of electric energy by 2007
 - 5% of electric energy by 2010
 - 7.5% of electric energy by 2013
- Bonus Provision
 - Doubled if produced on Federal or Indian land and used by Federal agency
- Under EO 13423:
 - At least half of the statutorily required renewable energy consumed comes from new renewable sources
 - New means renewable sources placed into service after January 1, 1999
 - Guidance at: <http://www.ofee.gov/whats/e013423.pdf>



EPACT 2005 Definitions

- Biomass – Summarized – Biomass is lignin waste segregated and non-hazardous or solid non-hazardous cellulosic material derived from forest resources, wood waste, agricultural waste, or plants grown exclusively as electric fuel. (Revised per EPACT)
- Geothermal
- Solar
- Wind
- Landfill Gas- New as separate category
- Municipal Solid Waste – New as separate category
- Ocean - New
- Incremental Hydropower - New



Renewable Energy Basics



Wind



Ocean



Geothermal



Solar



Incremental
Hydropower



Biomass



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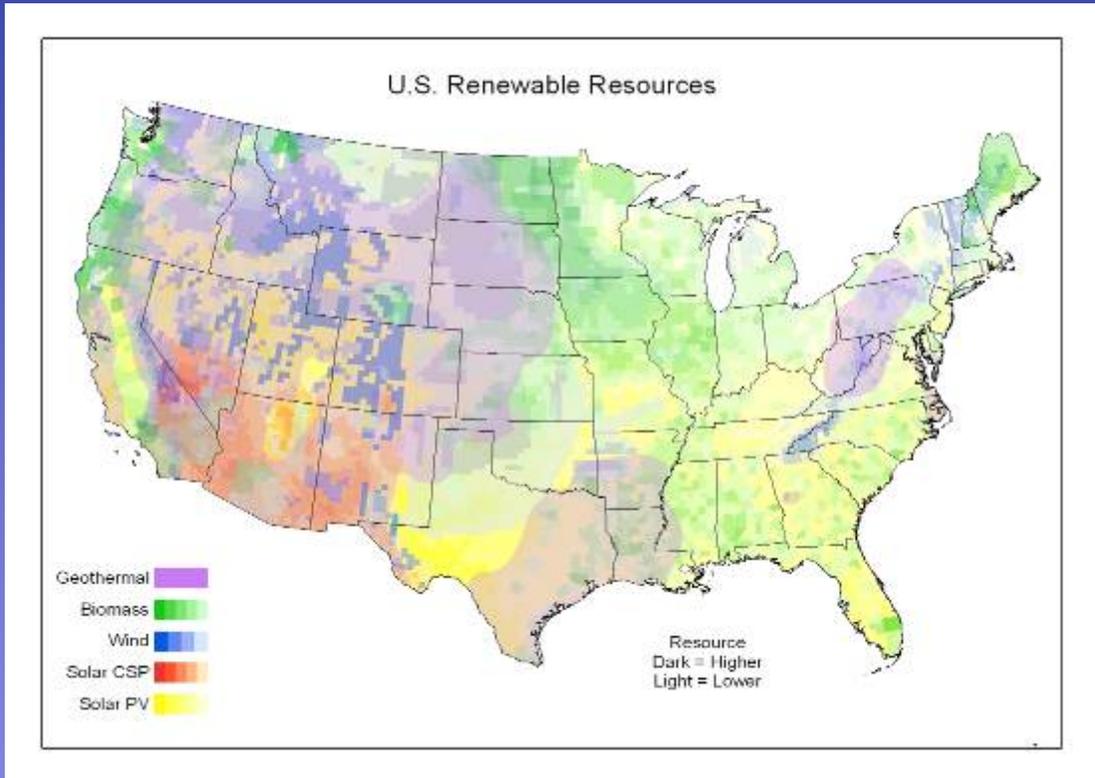


Anne Crawley

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Renewable Energy Major Resources

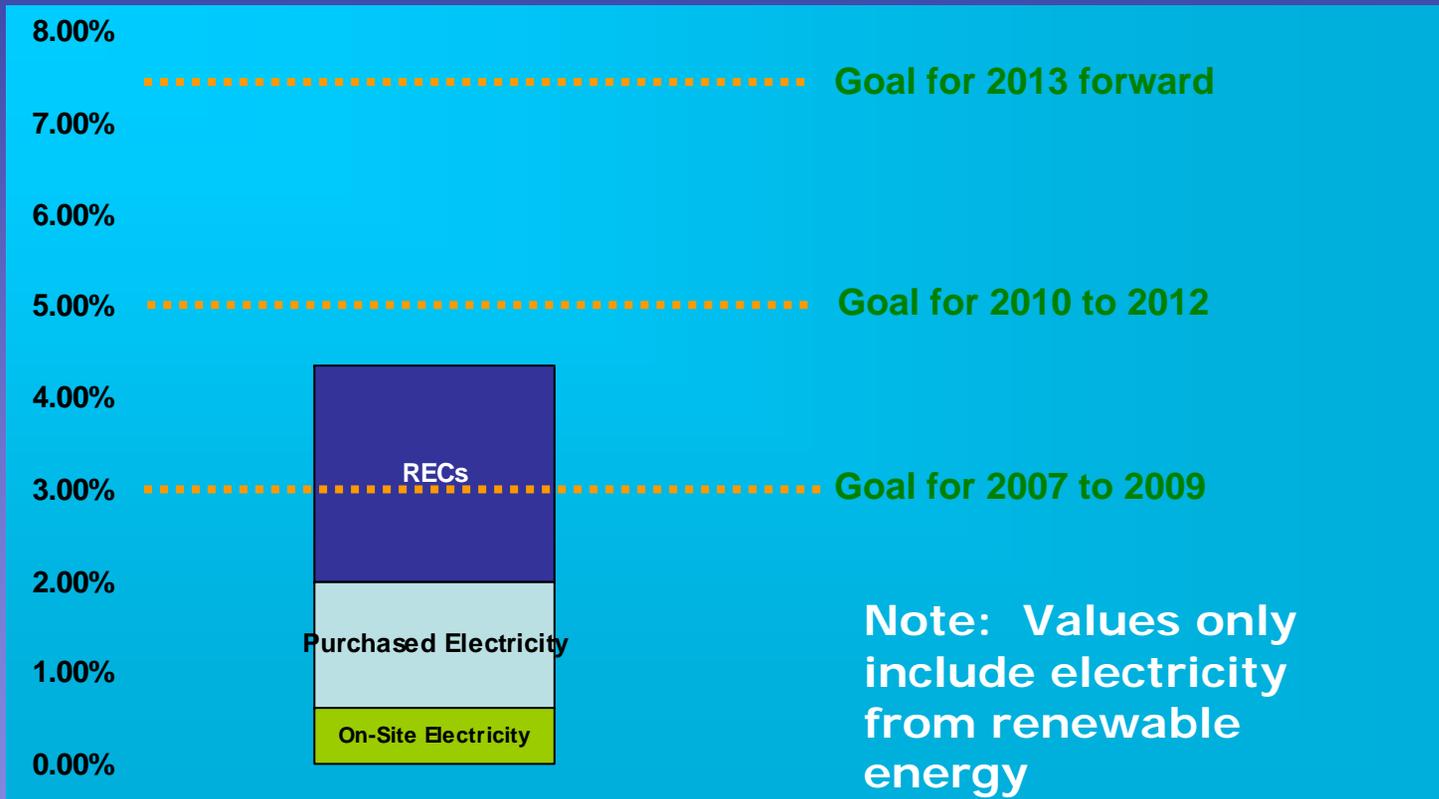


...and Wave Energy resources = 2,100 TWH (1/2 of total U.S. electricity consumption)





2006 Progress in Renewable Energy





Guidance and Instructions

- DOE-FEMP will issue Guidance soon on
 - Renewable energy goal and use of Renewable Energy Credits
 - Use of and investment in renewable energy generation
 - Renewable energy and energy efficiency goals
- Funding –
 - Bundle long and short term payback projects
 - Include renewable projects
 - Each proposal shall consider Renewable Energy

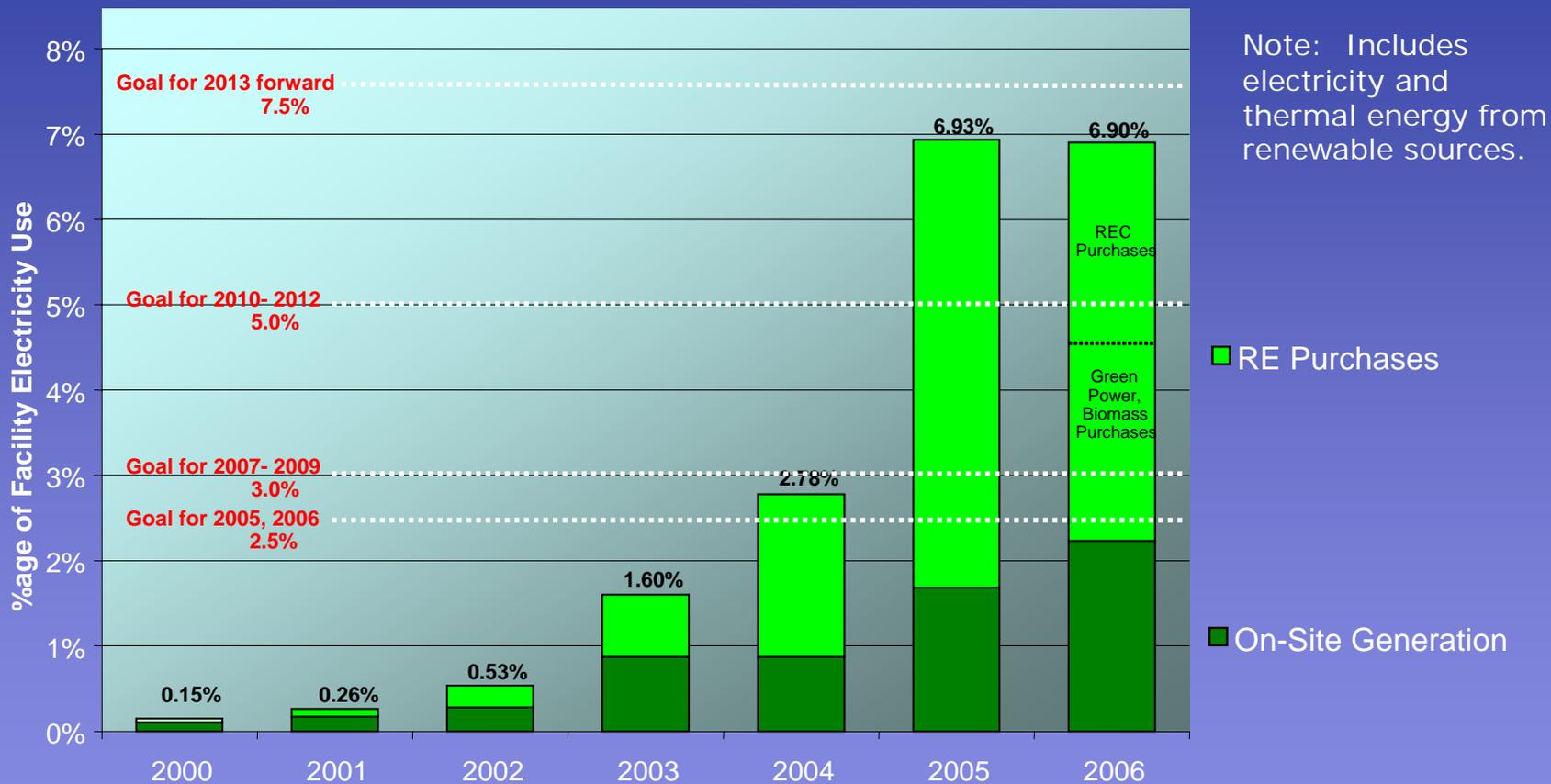


Guidance and Instructions

- Distributed Generation-
 - Agencies shall implement life cycle cost-effective distributed generation including renewables
 - Solar electric, solar lighting, geothermal (including ground coupled), small wind.
 - Agencies are encouraged to use distributed generation where it enhances energy reliability or security



Re Use Has Leveled Off





Recent Policy Issues

- Markets for Renewable Energy Certificates (RECs) are developing and changing quickly.
- Important to count RECs only once to avoid double counting:
 - So RECs can't count toward State RPS and Federal goal.
 - Challenge to balance consistent RECs and most advantageous financial benefits.
- Definitions of New set by EO 13423 Guidance – built after January 1, 1999



RECs for On-Site Projects

- Renewable Energy Credits (RECs) are a piece of paper defining the renewable attributes of a renewable project. A renewable project without a REC produces 'brown' power in the marketplace.
- DOE does not want to damage the credibility of the general REC marketplace by double counting projects against the Federal goal and other goals like state Renewable Portfolio Standards.
- DOE requires on-site projects to have RECs .
- Agencies may trade expensive RECs (like solar) for cheap RECs to count against the Federal goal to improve project cost-effectiveness.

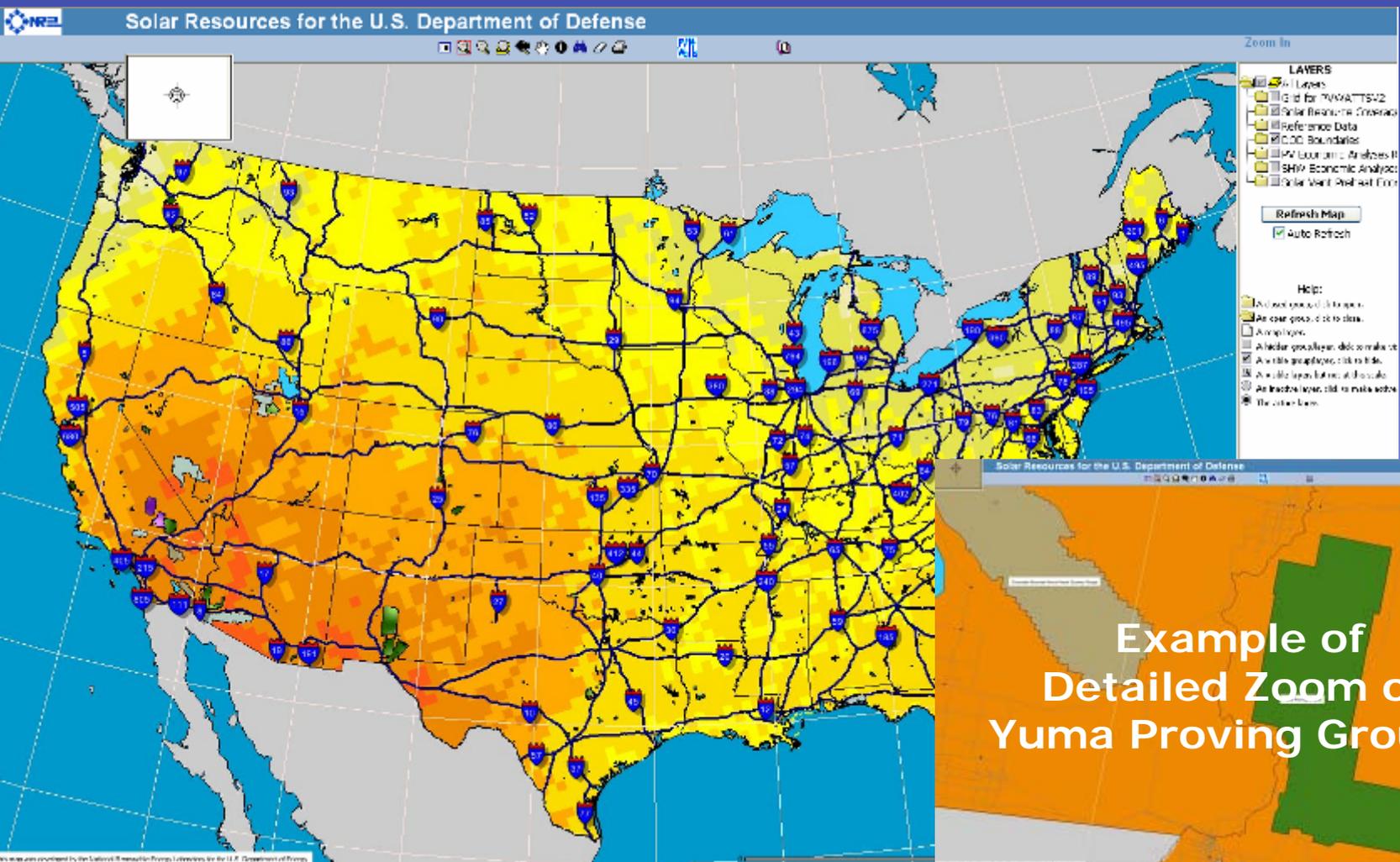


Agency Strategies

- Agency or Regional level –
- Assess where you are
 - Current RE use
 - Geographic location of large facilities
 - Economics vary by location:
 - Renewable resource
 - State incentives, tax credits, markets target specific states
 - Economies of scale: a few large on-site projects in good locations
 - Purchases: Competitive in deregulated states
- Specific facility level
 - What is available to you where you are
 - On site counts twice



Tools: <http://www.nrel.gov/gis/femp.html>





Federal Facilities Recommendations

- Strategies Agencies Can Use to Meet the Goals
- Develop more on-site (including Federal lands) generation from renewables (counts twice toward goal)
 - Increase the amount of long-term renewable energy purchase contracts
- What FEMP Can and Will Do to Assist:
- Provide purchase support for long term renewable energy purchases
- Provide planning, development and implementation support for renewable elements in ESPC and UESC projects
- Provide technical support for renewable energy projects deploying advanced technologies



DOE/FEMP Support

- Technical Assistance
 - Project Assistance
- Financing Options: ESPCs and UESCs, others
- State Efficiency/Renewable Funds/Incentives
 - <http://www.dsireusa.org/>
- Workshops/Training
 - Sessions at GovEnergy – August 5-8 2007 New Orleans LA
- Literature/Case Studies
 - Project Case Studies and FEMP Focus articles
 - Guide To Purchasing Green Power
- Web Information
 - http://www1.eere.energy.gov/femp/renewable_energy/



Sources of Information

- Anne Crawley, U.S. DOE Federal Energy Management Program
 - 202-586-1505, anne.crawley@ee.doe.gov
- FEMP Web Site - Renewables
 - http://www1.eere.energy.gov/femp/renewable_energy
 - FEMP Focus newsletter
 - <http://www1.eere.energy.gov/femp/newsevents/fempfocus.cfm>
 - Choose Winter 2007



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