



CALIFORNIA ENERGY COMMISSION

The Energy Aware Planning Guide, Facility Siting and Permitting Guide, and California Local Energy Assurance Plan (CaLEAP)

Special Projects Office

Fuels and Transportation Division

Bill Pfanner

IEPR Workshop

Regional Strategies to Identify Areas for Renewable Development

Sacramento, CA

May 10, 2012



Energy Aware Planning Guide

- Originally published in 1993.
- Resource for information on strategies to reduce energy use through community design, transportation improvements, energy efficiency and other means.
- Targets regional and local governments.
- Contributors included: Cambridge Systematics , Local Government Commission and Calthorpe Associates.
- www.energy.ca.gov/energy_aware_guide/



Energy Aware Planning Guide Updates

- California's greenhouse gas reduction requirements and data.
- Adaptation planning.
- Creating an Energy Action Plan.
- Updated strategies to reduce energy consumption.



Energy Aware Planning Guide Strategies

- Land Use
- Transportation
- Building
- Water Use
- Community Energy



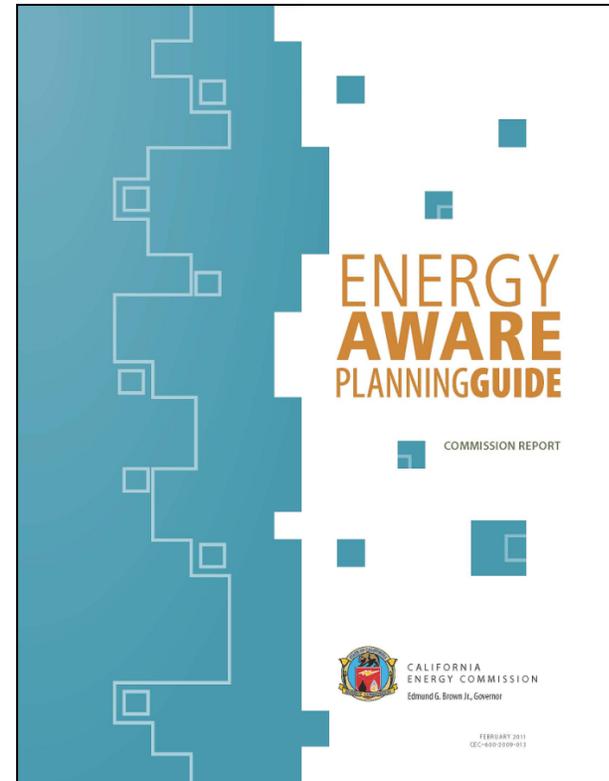
Outline of Strategy Sections

- General Plan Language Ideas
- Implementation Ideas
- Energy Benefits
- Environmental Benefits
- Economics
- Examples of Programs in Operation
- Resources



Energy Aware Planning Guide Web Tool

- The *Energy Aware Planning Guide* was adopted as an Energy Commission Report in February 2011 (CEC-600-2009-013).
- The **Local Energy and Land Use Assistance Unit**, in conjunction with **PIER** and **Lawrence Berkeley National Lab (LBNL)**, is developing a web-tool of the *Energy Aware Planning Guide*, to assist regional and local jurisdictions in making land use choices that reduce energy consumption and greenhouse gas emissions.





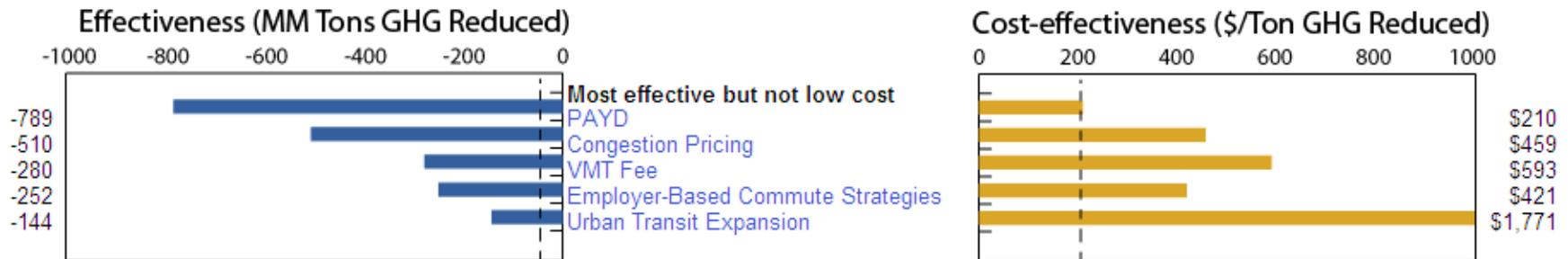
Energy Aware Web Tool Contents

- Major recommendation from the *Energy Aware Planning Guide* was made into an individual web page containing links to additional resources, providing a more in-depth review of energy measures with emission reduction potential and cost effectiveness.
- **LBNL** added 21 briefs on related topics not covered in the print version of the *Energy Aware Planning Guide*.
- Provides detail by Density, Jurisdiction Level, and General Plan Element, helping the reader focus on the topics areas pertinent to a specific local and or needs of a community.
- Includes links to other websites that contain similar information, including estimates of emission reductions.



Energy Aware Web Tool Additions

The web tool provides estimates of energy savings, GHG reductions, and cost effectiveness of the measures described in the briefs. Estimates obtained from *Moving Cooler* (a 2009 study by the Urban Land Institute), Energy Commission, and other non-Energy Commission sources.





Energy Aware Facility Siting and Permitting Guide

- Assists local governments in developing General Plan Energy Elements and Transmission Elements.
- Discusses increased role of local governments in energy planning.
- Provides guidance on utility-scale electricity generation, transmission and permitting.
- Identifies key players in future electricity planning and development.
- Identifies utility scale generation/transmission likely to occur.
- Discusses environmental review process and permitting responsibilities.
- www.energy.ca.gov/energy_aware_guide/siting.html



Energy Aware Facility Siting and Permitting Guide

- Helps local governments plan for and permit electrical generating facilities and transmission lines for generation facilities:
 - Less than 2 MW
 - Between 2 and 20 MW
 - Greater than 20 MW
- Sets the stage for:
 - Electricity Generation and Use
 - Preferred Sources for Electricity Generation
 - Electricity Transmission Preferences
- Provides Information on Current Energy Infrastructure.



Energy Aware Facility Siting and Permitting Guide

- Legal Authority
- Importance of Local Plans in State and Federal Processes
- Information Base
- Energy Planning Considerations
 - Local Environmental Planning Documents
 - Locational Data Resources
- Public Involvement
- Local Involvement in Energy Infrastructure Permitting
- Improving the Local Government Permitting Process



Energy Aware Facility Siting and Permitting Guide

Expected New Renewable Energy Infrastructure Developments:

- Renewable Energy Transmission Initiative (RETI)
- CA Transmission Planning Group 2010 Statewide Transmission Plan
- Desert Renewable Energy Conservation Plan (DRECP)
- BLM Renewable Energy Zones
- Utility-Scale Renewable Projects Under Recent Review



Energy Aware Facility Siting and Permitting Guide

Generation and Transmission Facilities – Regulatory Process, Authorities and Roles

- Land Use Approvals
- Environmental Review Process
- Permitting Authority/Process for Energy Projects
- Planning Documents



California Local Energy Assurance Plans (CaLEAP)

- **Goal:** Assist Local Governments become more energy resilient by ensuring energy to “essential and critical” facilities.
- **Objectives:**
 - Demonstrate how to prepare Energy Assurance Plans and/or incorporate into other planning and emergency plans.
 - Integration of new and advanced energy technologies, including renewables.
 - Build local energy awareness and expertise.
- **Importance:**
 - Aging energy infrastructure
 - Increase in energy disruptions (frequency, duration, impact)



CaLEAP Methodology

