


Local Government – Climate Change Toolkit
Green California Summit and Exposition
March 18, 2009

Local Government Toolkit:
Guidance and Resources to Save Money and
Reduce GHG Emissions

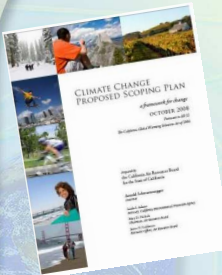
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 California Environmental Protection Agency

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Role of Local Government
Achieving the Goals of AB 32


- Local Governments are Essential Partners
- Influence and Exclusive Authority Over Significant Emission Sources
 - Implementing Local Programs
 - Passing Ordinances, Standards, and Codes
- Establish GHG Targets
- Scoping Plan Encourages Consistency with State's Goal



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Local Government Action
Climate Leadership

- ARB encourages local goals be consistent with State's goal to reduce GHG emissions by 15% below today's levels by 2020.
 - State, Regional, Local, and Individual Effort
 - Climate Action Plans
- ARB is Building a "Local Government Toolkit"
 - Listed as an Early Action
 - Consistent with Policy Statement
 - Assist Local Governments with GHG Emission Reductions



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DRAFT Toolkit is Available NOW
<http://Beta.CoolCalifornia.org>



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Climate Action
Local Government Toolkit



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Toolkit Components
Local Government Toolkit

- Climate Action Planning
- How to Save Money
- Financial Resources
- California Case Studies
- Climate Calculators
- Decision Support Tool
- Peer-Networking Online Discussion Forum
- Award Program



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Climate Action Planning GHG Emission Reductions

- Lead By Example in Municipal Operations
- Set Policy for Community Action
- Conduct a Baseline GHG Inventory
- Establish a GHG Reduction Target
- Develop a Climate Action Plan
- Implement Policies and Measures
- Monitor and Track GHG Emission Reductions
- Challenge Residents and Businesses

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How to Save Money Toolkit Component

- Save Energy
- Drive Less and Drive Clean
- Use Green Energy
- Save Water
- Recycle and Cut Waste
- Buy Green
- Build Green
- Promote Individual and Community Action



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How to Save Money Checklist Prioritization

| Upfront Investment | Annual Cost Savings | GHG Reduction Potential |
|-----------------------|---------------------|-------------------------|
| No-to-Low Cost | | |
| Medium Cost | | |
| High Cost | | |

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Save Energy Local Government Toolkit

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Save Energy Local Government Toolkit

- Change Energy Use Behavior
- Plan a Comprehensive Energy Management Program
- Assess Energy Performance
- Retrofit Existing Buildings and Roadways
- Consider Energy Efficiency for New Construction
- Civic Engagement
- Policy for Community Action

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Change Energy Use Behavior No-Cost Actions to Save Energy


- Set computers and monitors to "sleep" when inactive for more than a few minutes.
- Turn off office equipment at night, over the weekend, and during holidays.
- Make duplexing (double-side printing) the default mode for copiers and printers.
- Plug equipment into surge protectors and turn them off when not in use.
- Reduce hours street lights are on each day

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Assess Energy Performance

Low-Cost Actions to Save Energy

- Measure and Track Energy Usage
 - Energy Star Portfolio Manager
 - Contact Utility to Upload Energy Consumption Data
 - Verify and Track Progress of Improvement Projects
- Benchmark Municipal Facilities
 - EnergyIQ: Action-Oriented Energy Benchmarking Tool
 - Generates List of Opportunities for Efficiency Upgrades
 - Recommendations to Save Energy, Money, and GHG Emissions




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Retrofit Existing Buildings

Medium-Cost Actions to Save Energy

- Conduct Energy Audits of Municipal Facilities
 - CEC's Energy Partnership Program
 - Technical Assistance Available to Retrofit Facilities
 - Financing Up to \$20,000 Available
- Complete Retrofits with a Fast Payback Period
 - Interior Lighting Retrofits
 - Main Focus for Office Buildings
 - Represents 26% of End-Use Energy Demand (CEUS)



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Financial Resources

Toolkit Component

- Organized by Topic
 - Energy, Transportation, Renewable Energy, Water, Waste, Green Building
- Up-to-date Summary of Available Resources
 - Grants
 - Rebate Programs
 - Federal Tax Incentives
 - Low-Interest Loans
 - Third Party Financing
- Links to More Information



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California Case Studies

Toolkit Component

- 2-Page Overview with Pictures and Quotes
- Highlight GHG Reductions Achieved
- Climate Action Plan Summary
- Initial Investment/Annual Cost Savings
- Lessons Learned
- Contact Information
- Video Testimonials




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City and County of San Francisco

Climate Action Plan Case Study

Green Actions

- Technical Assistance & Building Codes
- City Fleet with More than 800 Clean-Air Vehicles
- Mass Transit Fleet with 57% Zero-Emission Vehicles
- Increased Recycling



CO₂e Reduced Annually

- Energy Efficiency - 800,000 tons
- Transportation - 963,000 tons
- Renewable Energy - 550,000 tons
- Solid Waste - 302,000 tons

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City of Berkeley


Climate Action Plan Case Study

Green Actions

- Energy Audits and Retrofit City Buildings
- Replaced Traffic Lights with LED

CO₂e Reduced Annually

- Energy Retrofits - 1,200 tons
- LED Traffic Lights - 250 tons
- Renewable Energy - 15,000 tons



Cost Savings

- \$370,000 from Energy Retrofits
- \$143,000 from Traffic Lights

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Decision Support Tool Toolkit Component

- Climate and Air Pollution Planning Assistant (CAPPA)
- Under Development by ICLEI
- Primary Decision Support Tool for Local Governments
- Assistance to Develop Customized Climate Action Plans
- Comprehensive Library of Emission Reduction Strategies
- Estimates GHG Emission Reductions, Local Air Pollution Benefits, and Cost Savings



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California CAPPA Reduce Daily Street Light Time by 2 Hours

| Government Operations | |
|-----------------------|---|
| \$ 0.0988 | Price of Electricity (\$ per kWh) |
| 11 | Number of Daily Hours Street Lights Previously Lit |
| 9,816,310 | Annual Energy Previously Used for Street Lighting (kWh) |
| 1,737,400 | Total Annual Energy Savings (kWh) |
| \$171,655 | Annual Cost Savings |

Associated Annual Greenhouse Gas and Criteria Air Pollutant Emission

The values below are calculated using default emissions factors consistent with and Climate Protection software.

Select Utility Region:

| Government Operations | | | | | |
|-----------------------|-----------|-----------|----------|------------|------------|
| CO2e (metric tons) | NOx (lbs) | SOx (lbs) | CO (lbs) | VOCs (lbs) | PM10 (lbs) |
| 865 | 2,966 | 13,960 | 973 | 109 | 858 |

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Recognition Program Toolkit Component

- Partnering with the ILG California Climate Action Network (CCAN)
- Climate Leadership Recognition Program
- Recognize Achievements of Cities and Counties
- Based on Measurable GHG and Energy Reductions



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Next Steps Submit Comments

- Review the Draft Local Government Toolkit
 - www.Beta.CoolCalifornia.org
- Submit Comments and Feedback
 - Online Form
- Suggestions Requested By
 - March 30, 2009



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Tentative Timeline Local Government Toolkit

| | |
|---|-------------------|
| Toolkit Content Development | Ongoing |
| ARB Internal Review of Toolkit Content | Ongoing |
| Kick-Off Public Workshop | March 9, 2008 |
| Release Beta Toolkit for Public Comment | March 9, 2009 |
| Advisory Group Meeting | March 26, 2008 |
| Public Workshops (Nor Cal and So Cal) | Early April, 2009 |
| Advisory Group Meeting | Mid-April, 2009 |
| Finalize Toolkit Content | May, 2009 |
| Board Hearing | May 28-29, 2009 |

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Contact Information Local Government Toolkit

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Thank you!

