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## Planning for Success: Developing Climate Action Plans for Local Governments and Agencies

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*Redwood City, CA  
July 11, 2007*

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## ICLEI – Local Governments for Sustainability



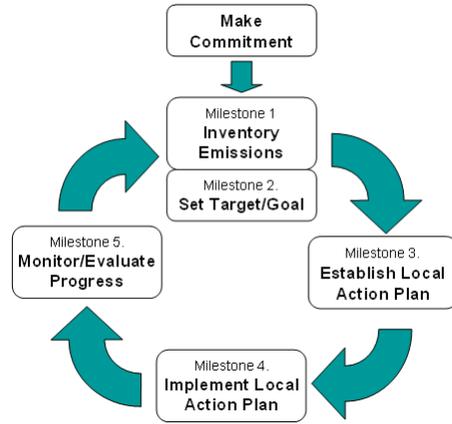
**A worldwide movement of local governments  
dedicated to achieving tangible improvements in  
global environmental conditions through  
cumulative local action**

- Membership association: over 700 cities, towns, counties in over 50 countries
- 11 offices worldwide

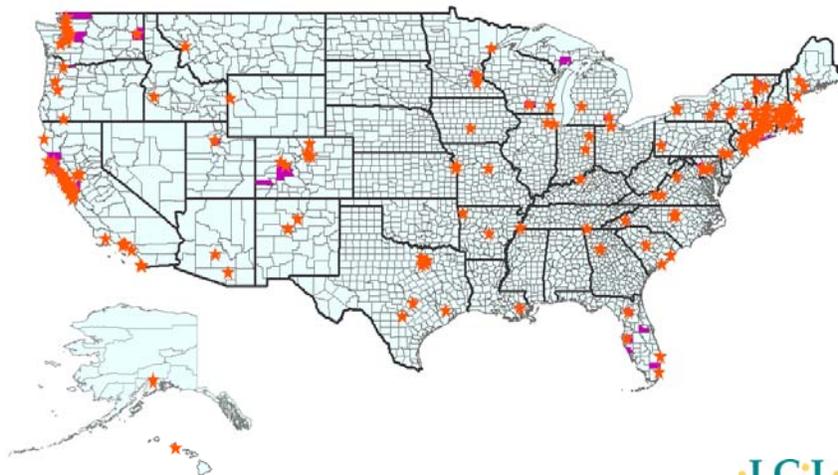


## What Does ICLEI Provide?

- Technical assistance
- Emissions Analysis Software
- Professional Network
- Tools and Resources
- Training Sessions
- Competitive Grants
- Standard Methodology



## The ICLEI Network



## ICLEI in California

67 California communities and growing!

Alameda City	Hercules	Palo Alto	Santa Barbara
Alameda Co.	Hermosa Beach	Petaluma	Santa Clara Co.
Albany	Irvine	Piedmont	Santa Cruz
Arcata	Lafayette	Pinole	Santa Monica
Atherton	Los Angeles	Pleasanton	Santa Rosa
Berkeley	Marin Co.	Point Arena	Sausalito
Chula Vista	Marin Water Dist.	Portola Valley	Sebastopol
Cloverdale	Mendocino Co.	Richmond	Sonoma City
Contra Costa Co.	Menlo Park	Rohnert Park	Sonoma Co.
Cotati	Mill Valley	Sacramento	St. Helena
Davis	Millbrae	Sacramento Co.	Union City
El Cerrito	Moraga	San Anselmo	Walnut Creek
Emeryville	Nevada City	San Diego	West Hollywood
Fairfax	Newark	San Francisco	West Sacramento
Fort Bragg	North Marin WD	San Jose	Willits
Hayward	Novato	San Leandro	Windsor
Healdsburg	Oakland	San Rafael	



## How Are California Local Governments Doing?

- 32 GHG inventories completed
- 21 GHG reduction targets adopted
- 13 municipal climate action plans developed
- 7 community-wide local action plans developed



## Bay Area Climate Action

	TOTAL	CCP	Inventory	Target	Action Plan	MCP
Alameda	15	12	11	5	2	9
Contra Costa	20	8	0	0	0	2
Marin	12	7	6	1	1	4
Napa	6	1	0	0	0	0
San Francisco	1	1	1	1	1	1
San Mateo	21	3	0	0	0	6
Santa Clara	16	3	1	2	0	6
Solano	7	0	0	0	0	1
Sonoma	10	10	10	10	0	9



## What Does This Mean for the Country?

- 23 million tons of CO<sub>2</sub>e emissions
- 43,000 tons of local air pollution
- \$535 million in energy and fuel costs

Equal to the emissions from:  
4 million cars  
1.8 million homes  
2.1 billion gallons of gasoline



## Annual Results from CCP Participants

*Cumulative local actions have a positive impact on global climate change.*

- 23 million tons of CO<sub>2</sub>e reduced
- \$535 million saved in fuel costs
- 4 million MWh of electricity savings
- 74 million gallons of gasoline savings



## What Is an Emissions Reduction Plan?

- Base Year Emissions Inventory
- Emissions Reduction Target
- Business-as-usual forecast of emissions levels
- Quantified measures to reach the target
- Implementation strategy



## The Importance of Quantification

- Establish a firm baseline against which future action can be evaluated
- Compare the impact of alternatives, before implementation
- Develop analytical evidence to secure political and community support for actions
- Illustrate the critical role local governments play in reducing emissions
- **Demonstrate and monitor progress towards achieving emission reduction goals**



## Clean Air and Climate Protection Software (CACPS)

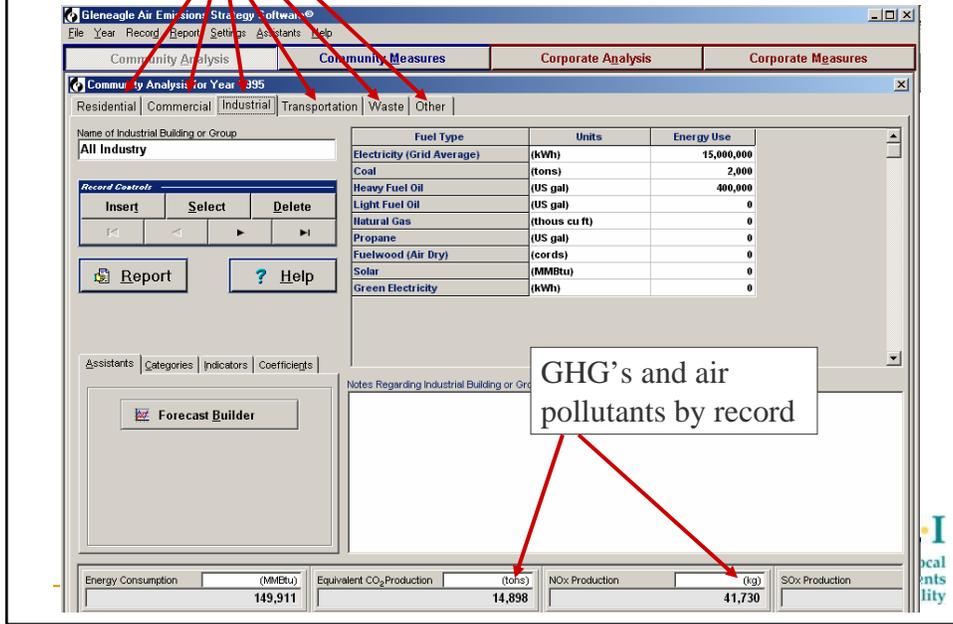


“Towards harmonized air emissions and climate action planning”

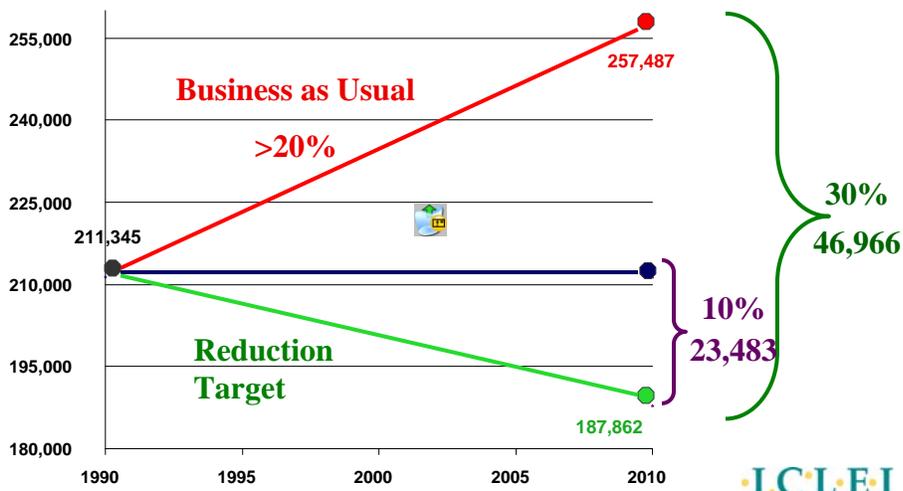
	eCO <sub>2</sub> (tons)	NO <sub>x</sub> (kg)	SO <sub>x</sub> (kg)	VOC (kg)
<b>Residential</b>	43,875	38,618	24,255	2,600
<b>Commercial</b>	15,442	52,732	261,431	1,509
<b>Industrial</b>	30,884	63,077	136,902	1,285
<b>Transportation</b>	9,652	53,797	2,407	6,136
<b>Total</b>	99,852	208,224	424,996	11,530



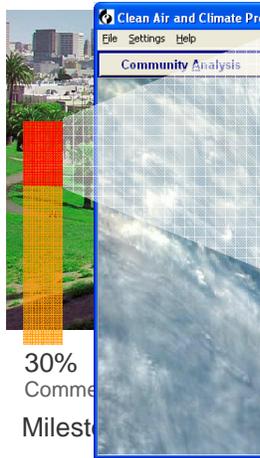
## Emissions Analysis by Sector



## Picking a Target



## Milestones 1-3: Baseline; Target; Action Plan



### Commercial Sector Emissions Reductions

#### New Construction Energy Codes

- Require higher efficiency HVAC, lighting and window technologies; reduced air infiltration; and appropriate solar orientation
- Implement in 2009
- Anticipated annual savings: 64.5 million kWh  
450,000 therms  
77,300 tons CO<sub>2</sub>e  
\$110,404,859

#### Existing Commercial Facility Retrofits

- Offer free facility energy audits and expert advice, along with financial incentives for HVAC and lighting equipment improvements
- Implement in 2008
- Anticipated annual savings: 80 million kWh  
700,000 therms  
105,200 tons CO<sub>2</sub>e  
\$79,407,558

#### Install Solar Photovoltaic Panels

- Install photovoltaic panels on all municipal facilities where feasible
- Implement in 2007
- Anticipated annual savings: 140,000 kWh  
103 tons CO<sub>2</sub>e  
\$14,000

## Local Government Opportunities

Local governments influence all major sources of global warming and local air pollution



Energy Use



Transportation and Land Use



Solid Waste

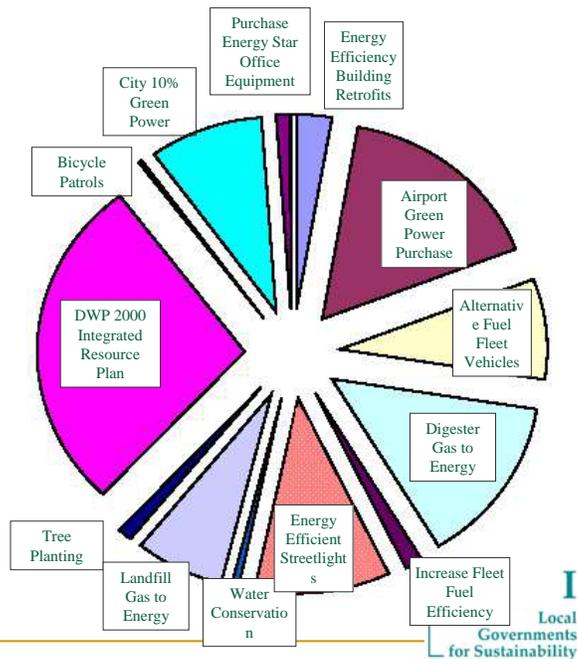
## What Actions are Cities Taking?

- Energy Efficiency (retrofits, ordinances)
- Renewable Energy (solar, wind, grid purchases)
- Energy Generation (cogeneration, districting)
- Alternative Fuel Vehicles (biodiesel, CNG)
- Transit-Oriented Development (zoning, infill)
- Trip Reduction Programs (carshare, telecommute)
- Waste Reduction (recycling, composting)
- Urban Forestry (planting, management)



## Be strategic!

Side-by-side measure comparisons allow jurisdictions to assess the relative impact of the actions included in their actions plans



## Prioritizing Action: Why are we reducing emissions?

- Reduce municipal operating costs
- Improve air quality
- Protect public health
- Address traffic and other transport woes
- Be recognized as a leader on the issue
- Develop local economy and employment
- Improve sustainability and livability of the community



## Different County Approaches

- **Sonoma County – public participation**
  - Community outreach/involvement:
    - Web-based commute survey
    - Community workshop
    - *Cool Schools*: faculty/students/parents
- **Marin County – integrated planning**
  - Integrated into General Plan update
  - Identifying all climate-related activities
  - Creating model Action Plan for county localities



## Options for Cities

- Integrate into regular work of in-house staff
- Hire a Climate Action Coordinator
- Hire outside consultant
- Collaborate with County, municipal neighbors
- Cheap labor – the student intern



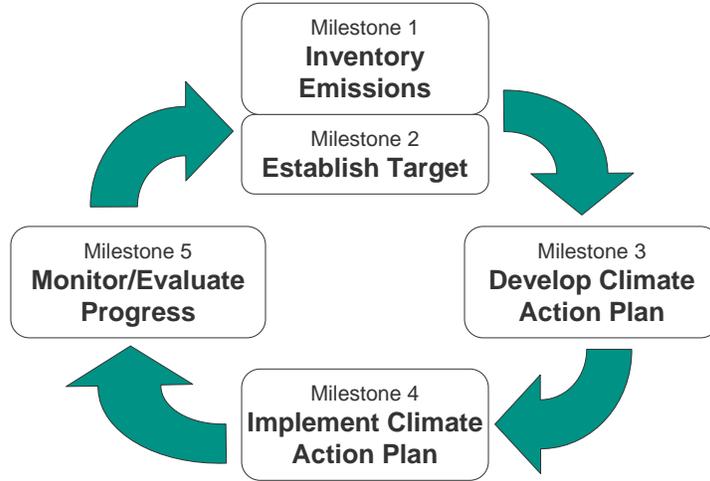
## The ICLEI Climate Action Planning Assistant

What if the climate protection experiences of hundreds of cities and counties could be captured and delivered to you in the form of one powerful advising tool?

What if?



## The ICLEI Climate Action Planning Assistant



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## The ICLEI Climate Action Planning Assistant

Community info

Operations info

Implemented measures

Relative value of  
decision criteria

Experiences of  
Your Peers

Expert input

Your Local Climate Action Plan!



## Local Action Moves the World!

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## The ICLEI Climate Action Planning Assistant

Assigned Weight	3	5	3	4
	Initial Cost	Financial Return	Level of Effort	Public Support
Free CFL Giveaway	4	5	4	5
Designate Hybrid Parking	4	2	3	2
Expanding Recycling Program	3	3	3	5



## The ICLEI Climate Action Planning Assistant

### Draft Local Action Plan

#### Free CFL Giveaway

- Description
- Resource Savings
- Emissions Benefits
- Financial Costs and Savings
- Co-Benefits
- Links to Examples
- Links to Tools & Resources

#### Expand Recycling Program...

With your help...  
Coming in September 2007

