ICLEI Local Governments for Sustainability USA

Mission

Our mission is to build, serve and drive a movement of local governments to advance deep reductions in greenhouse gas emissions and achieve tangible improvements in local sustainability.

ICLEI - A Worldwide Movement of Local Governments

11 International Offices

68 Countries

6 Continents (over 1000 members)

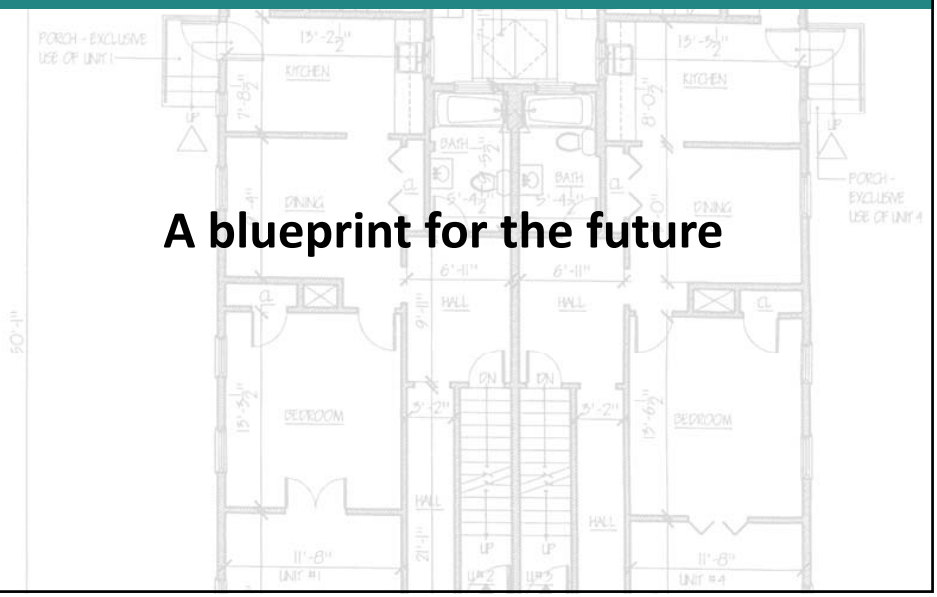
7 U.S. Offices

- **Climate Change Mitigation**
- **Climate Adaptation / Resilience**
- **Sustainability Performance**

The 5-Milestone Methodology

ICLEI Local Governments for Sustainability USA

What is a Climate Action Plan?



A blueprint for the future

What is a Climate Action Plan?

- Insightful analysis of past progress, current status, and future plans
- Set of complimentary strategies, measures and policies
- Quantitative and qualitative estimates with supporting detail and justification of each strategy
- Guidance on implementation

Why Create a Climate Action Plan?

Undergo a consensus building process that provides a roadmap for climate efforts.

- Reduce jurisdiction's/community's operating costs
- Improve air quality
- Protect public health
- Address traffic and other transport woes
- Develop local economy and employment
- Improve sustainability and livability of the community
- Lead by example and gain recognition

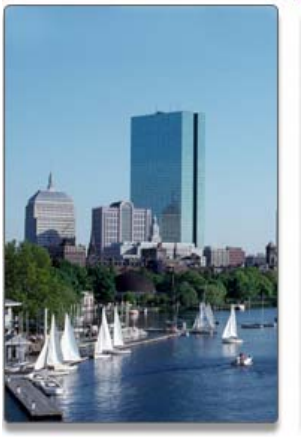
Climate Action Planning (CAP) Process

- Evaluate GHG reduction still needed
- Identify and prioritize selection criteria
- Select new measures
- Quantify GHG reduction of new measures
- Identify responsibilities: implementation, financing, monitoring, etc.
- Write Plan and seek approval

Selecting Measures

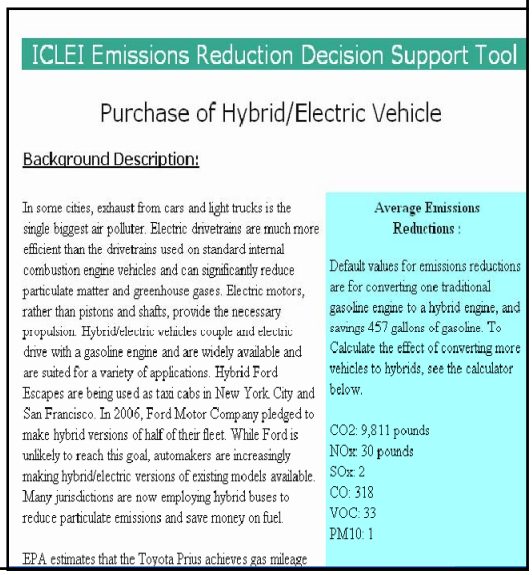
Selecting New Measures – Things to Consider

- Maximizing reductions
- Cost-effectiveness
- Stakeholder support
- Goals of related plans
- Regional collaboration and/or cost-sharing
- Legislation/Regulations
- Tie to local priorities



Climate and Air Pollution Planning Assistant (CAPPA)

- **Decision support & action planning tool**
- **Contains a library of individual calculators and related resources for 110 mitigation actions**
- **Based on best practices and local circumstances**
- **Scalable, customizable**
- **Implementation guidance**
- **Evolving dynamically**



ICLEI Emissions Reduction Decision Support Tool

Purchase of Hybrid/Electric Vehicle

Background Description:

In some cities, exhaust from cars and light trucks is the single biggest air polluter. Electric drivetrains are much more efficient than the drivetrains used on standard internal combustion engine vehicles and can significantly reduce particulate matter and greenhouse gases. Electric motors, rather than pistons and shafts, provide the necessary propulsion. Hybrid/electric vehicles couple and electric drive with a gasoline engine and are widely available and are suited for a variety of applications. Hybrid Ford Escapes are being used as taxi cabs in New York City and San Francisco. In 2006, Ford Motor Company pledged to make hybrid versions of half of their fleet. While Ford is unlikely to reach this goal, automakers are increasingly making hybrid/electric versions of existing models available. Many jurisdictions are now employing hybrid buses to reduce particulate emissions and save money on fuel.

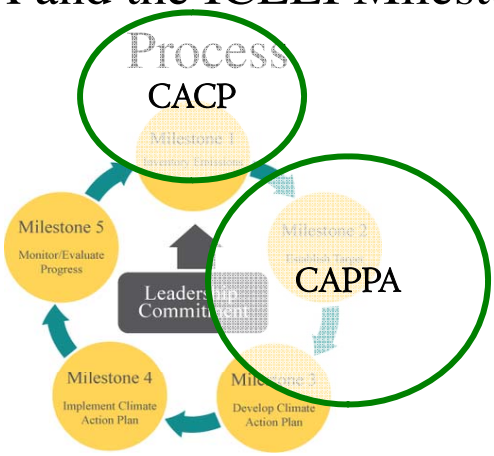
EPA estimates that the Toyota Prius achieves gas mileage

Average Emissions Reductions :

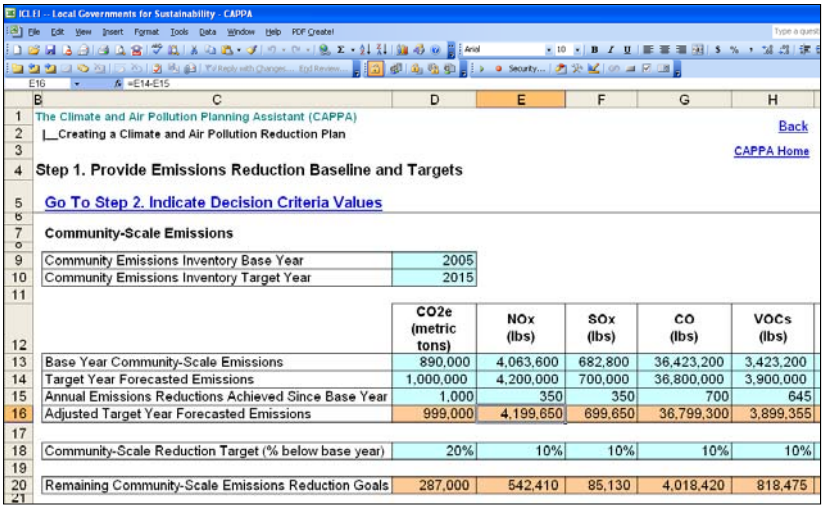
Default values for emissions reductions are for converting one traditional gasoline engine to a hybrid engine, and savings 457 gallons of gasoline. To Calculate the effect of converting more vehicles to hybrids, see the calculator below.

CO2: 9,811 pounds
NOx: 30 pounds
SOx: 2
CO: 318
VOC: 33
PM10: 1

CAPPA and the ICLEI Milestone



Creating a Draft Climate Action Plan
Step 1. Specify Inventory



ICLEI – Local Governments for Sustainability - CAPPA

The Climate and Air Pollution Planning Assistant (CAPPA)

Creating a Climate and Air Pollution Reduction Plan

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CAPPA Home

Step 1. Provide Emissions Reduction Baseline and Targets

Go To Step 2. Indicate Decision Criteria Values

Community-Scale Emissions

Community Emissions Inventory Base Year	2005
Community Emissions Inventory Target Year	2015

	CO2e (metric tons)	NOx (lbs)	SOx (lbs)	CO (lbs)	VOCs (lbs)
Base Year Community-Scale Emissions	890,000	4,063,600	682,800	36,423,200	3,423,200
Target Year Forecasted Emissions	1,000,000	4,200,000	700,000	36,800,000	3,900,000
Annual Emissions Reductions Achieved Since Base Year	1,000	350	350	700	645
Adjusted Target Year Forecasted Emissions	999,000	4,199,650	699,650	36,799,300	3,899,355
Community-Scale Reduction Target (% below base year)	20%	10%	10%	10%	10%
Remaining Community-Scale Emissions Reduction Goals	287,000	542,410	85,130	4,018,420	818,475

Creating a Draft Climate Action Plan
Step 2. Rate Importance Values

The Climate and Air Pollution Planning Assistant (CAPPA) | Back

Creating a Climate and Air Pollution Reduction Plan | Emission Reduction Baseline and Targets

Step 2. Rate Relative Value of Measure Benefits | CAPPA Home

To assist you in developing a local climate action plan, CAPPA needs to know how much you relatively value each of the criteria below in making decisions about which strategies to implement. Rate each of the criteria below on a 1 to 5 scale, with 5 implying a very high degree of importance and 1 implying a very low degree of importance for decision-making. Be sure to use the full range of relative values.

1 = low importance **5= high importance**

5	Initial Implementation Cost
2	Operation and Maintenance Costs
5	Financial Return on Investment
1	Implementation Timeframe
5	Level of Effort Required by Local Government Staff
2	Degree of Implementation Control Held by Local Government
	User Defined Criterion 1
	User Defined Criterion 2
	User Defined Criterion 3

Creating a Draft Climate Action Plan
Step 3. Final Customization

Degree of Implementation CAPPA considers each measure for inclusion in your action plan based on a set potential degree of implementation (i.e., if measure X is implemented, exactly Y amount of it will be implemented). Default assumptions have been provided.			Include Exclude	Measure Benefits Ratings The default values below are based on the reported collective experience of US [illegible] them as appropriate, being mindful of the scaling associated with the degree of quantitative criterion, hover the mouse over the header cells below.				
				Initial Implementation Cost	Operation and Maintenance Costs	Financial Return on Investment	Implementation Timeframe	Level of Effort Required by Local Government Staff
Government Operations Measures	**Number**	**Unit Definition**	**1/0 (or blank)**	**1-5 (or blank)**	**1-5 (or blank)**	**1-5 (or blank)**	**1-5 (or blank)**	**1-5 (or blank)**
Energy Efficiency / Conservation								
Equipment								
ENERGY STAR Computers	50	computers		5	5	5	5	5
ENERGY STAR Monitors	50	monitors		4	5	5	5	5
ENERGY STAR Printers	20	printers		4	5	5	5	5
ENERGY STAR Copiers	20	copiers		4	5	5	5	5
ENERGY STAR Refrigerators	5	refrigerators		4	5	5	5	5
ENERGY STAR Vending Machines	5	vending machines		5	5	5	5	5
ENERGY STAR Water Coolers	5	water coolers		5	5	5	5	5
High Efficiency Water Heaters	5	water heaters		4	5	5	4	5
Energy-Efficient Chillers	50,000	square feet of facility space served		3	5	5	4	4
Energy-Efficient Boilers	50,000	square feet of facility space served		3	5	4	4	4
HVAC Fan Upgrades	50,000	square feet of facility space served		4	5	5	4	5
Retro-Commissioning	50,000	square feet of facility space served		5	5	5	4	5
Switch Electric Heat to Natural Gas	20,000	square feet of facility space served		5	5	5	5	5
Geothermal Heat Pump	20,000	square feet of facility space served		2	3	3	3	3
Facility-Scale Energy Improvement								
Adopt a High Performance Local Energy Code (such as green building ordinance) for new construction and renovation of facilities	50,000	square feet of construction/renovation		2	5	4	3	4
Perform energy efficiency retrofits of existing [illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Final Report

Draft Emissions Reduction Plan Measure	Emissions Reductions					
	CO2e (metric tons)	NOx (lbs)	SOx (lbs)	CO (lbs)	VOCs (lbs)	PM10 (lbs)
Purchase Green Electricity	5,706	24,795	12,137	570	30	80
Renewable Energy Certificates	5,706	24,795	12,137	570	30	80
Water System Efficiency	3,149	13,684	6,696	315	17	44
Anaerobic Digester at Wastewater Treatment Facility	1,397	6,029	2,951	139	7	19
Reduce Hours Street Lights Are on Each Day	788	3,426	1,677	79	4	11
Fleet Conversion to Biodiesel (B20)	725	-68	0	539	0	56
Establish/Expand Recycling Programs	386	0	0	0	0	0
LED Street Lights	217	942	461	22	1	3
Efficient Street Lights (other than LED)	196	853	418	20	1	3
Energy Efficient Computers	6	25	12	1	0	0
Promote Carpooling and Vanpooling	6	2	0	402	42	1
Reflective Roofing	5	22	9	1	0	0
Energy Efficient Vending Machines	5	21	10	0	0	0
High Efficiency Water Heaters	5	19	7	1	0	0
Energy Efficient Printers	4	18	9	0	0	0
Green Roofs	4	17	8	0	0	0
Promote Telecommuting	3	1	0	247	26	1
Irrigation Control Sensors	3	15	7	0	0	0
Increase Boiler Efficiency	3	8	0	2	0	0
Reduce Municipal Fleet Milage	2	1	0	172	18	0
Use Solar Hot Water	2	6	0	1	0	0
Limit Idling of Light Duty Vehicles	2	7	1	9	3	1
Energy Efficient Computer Monitors	2	8	4	0	0	0
Energy Efficient Refrigerators	1	6	3	0	0	0
Bicycling Paths and Facilities	1	0	0	79	8	0
Total	19,833	79,444	38,742	34,589	3,856	411
Goal	48,425	1,950	110	6,425	300	220
% Reduction Toward Goal	41%	4074%	35220%	538%	1285%	187%

How can your local government make a difference?

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