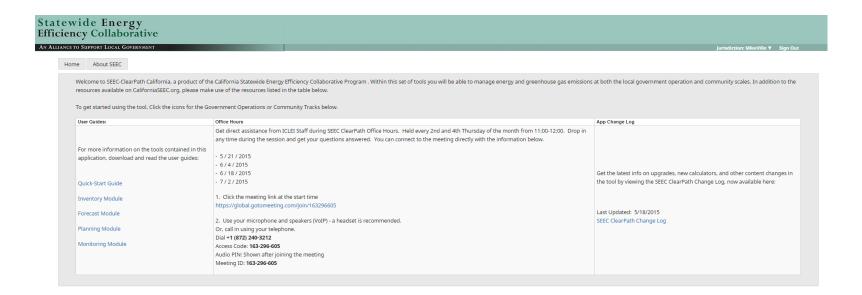
Moving Forward with ClearPath







Within this track you will find the resources you need to perform a Local Government Operations Protocol compliant greenhouse gas emissions inventory and forecast.

Within this track you will find the resources you need to perform a US Community Protocol compliant greenhouse gas emissions inventory and forecast.

clearpath.californiaseec.org

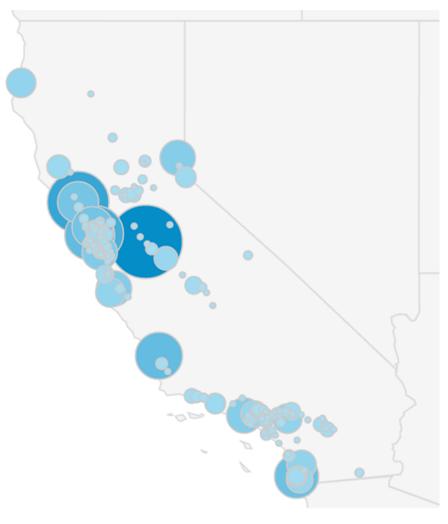
Current CA Local Governments in SEEC

ClearPath California

ClearPath



Supporting California local governments





Recent Updates & Improvements



Inventory Updates

- Grouping Tags & Indicator Reports
- Direct Entry for LGO Vehicle Fleet
- Gov Ops Employee Transit Use & Air Travel Calculators
- Add 5th Assessment Global Warming Potentials as an option
- Change Log
- File Attachment to each calculator

Planning Updates

- Gov Operations New Measures: PV Installation, Landfill Gas Collection & Energy Recovery, Fleet Fuel Switching
- Community New Measures: Improved

Bike Infrastructure & Compact Development, RECO/CECO, Local Green Power Purchase (Res/Com/Ind), User Defined – Waste & Waste Water

Monitoring Module

Release of Module in Dec 2014

Reports

- Monitoring Reports
 - Progress/efficacy/Projects to Actual Details and Actual Summary
- GPC Reports



Development Path Forward



Default Factor Sets Clone an Inventory & Recalculate

Fuel Price &
Cost Outputs to
Inventory
Calculations

Automatic data uploads for Vehicle Fleet, Buildings & Facilities

Add Validation Warnings

More GPC relateded calculators & 1-Click API to Carbonn

Resource
Portal & Online
Community

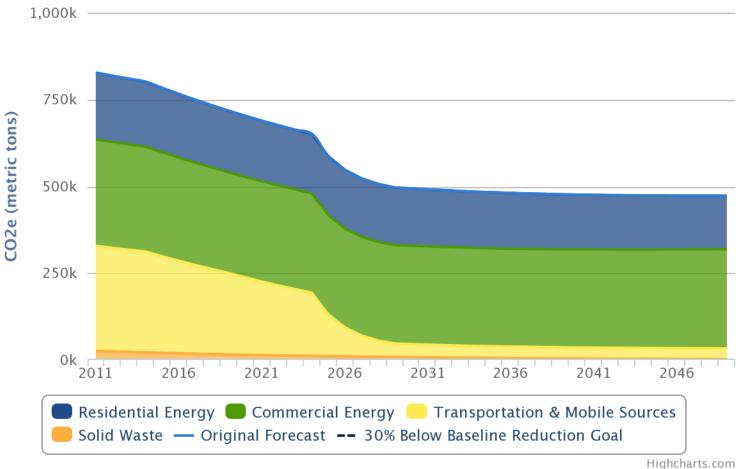
Santa Monica, CA "Communicating Progress"



	1990	2000	2007	2011 estimate	2015 Business as usual
Population	86,905	85,084	90,379	90,850	93,700
Residential	188,687	202,453	169,425	168,232	168,759
Commercial	329,295	326,164	273,377	241,806	245,506
Industrial	32,227	25,907	53,157	43,412	42,131
Transportation	299,538	300,824	327,923	306,160	319,541
Waste	74,546	47,534	38,779	38,143	38,524
TOTAL	924,293	902,882	862,660	797,753	814,461
% below 1990 levels		2.3%	6.7%	13.7%	11.9%

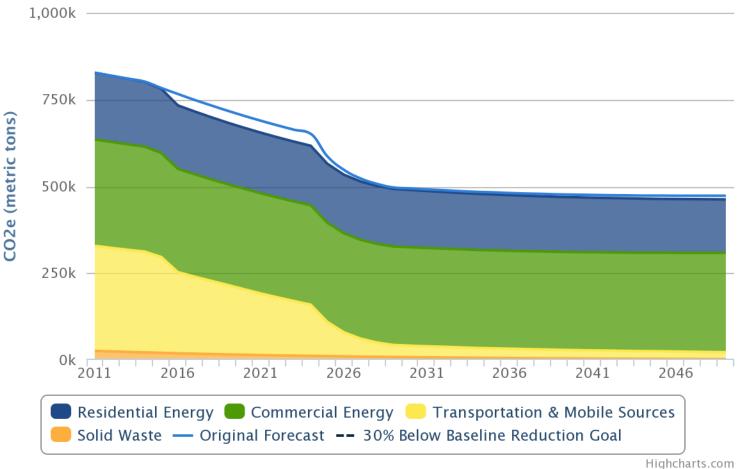
Santa Monica, CA "Envisioning Carbon Neutrality"





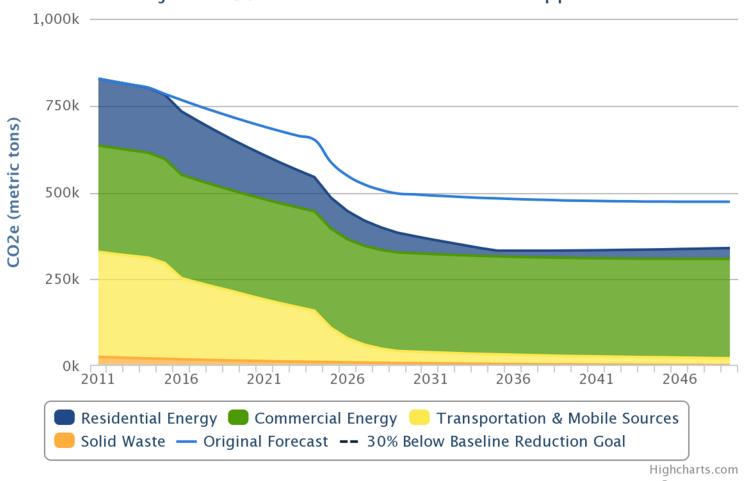
Santa Monica, CA "Increase Active Transportation"





Net Zero Homes "Existing Buildings and New Construction"

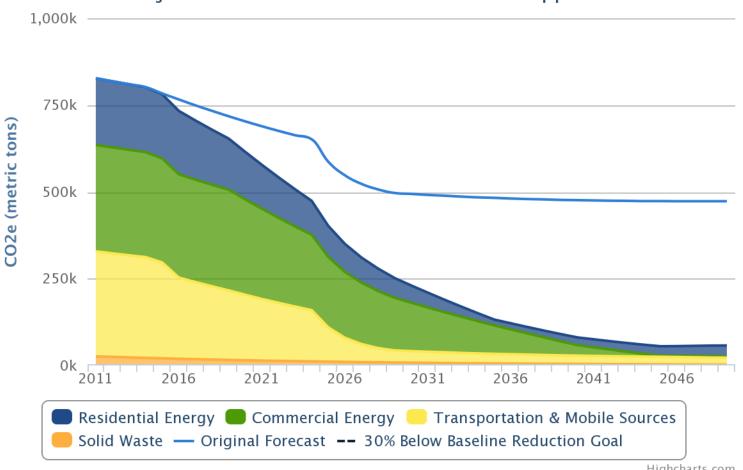




Net Zero Commercial



"Existing Buildings and New Construction" Supporting California local governments



Measuring Overall Progress with ClearPath



Absolute Changes

Regular Re-Inventory

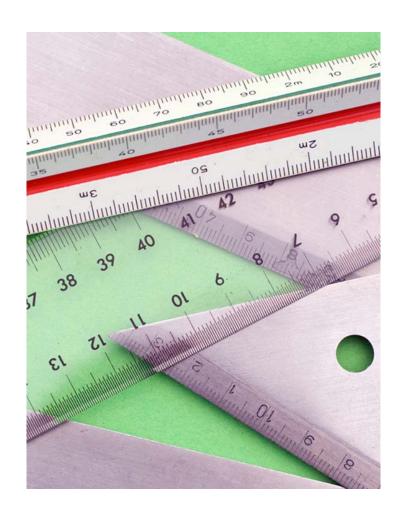
Changes Against a Hypothetical

- Business As Usual
- Plan
- Projected Measure Savings

Understanding Drivers

- Population (Indicator)
- Economic Activity (Indicator)
- Weather (Model)
- Fuel Prices (Model)

Future?



Monitoring Module



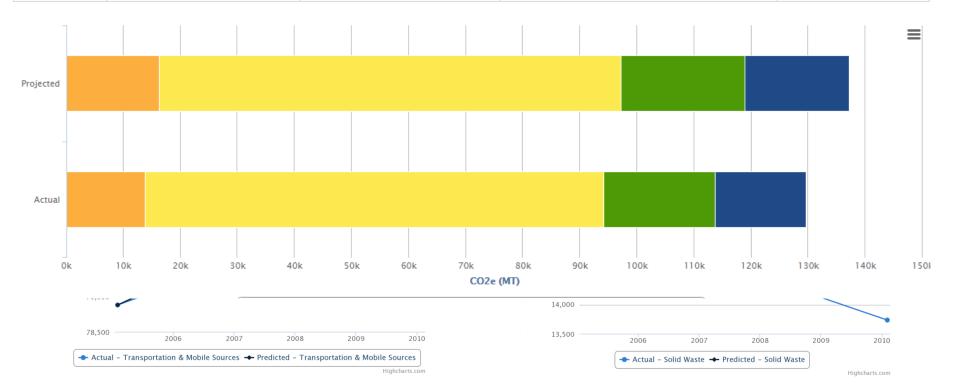
"Communicating Progress vs. Forecast"

Projected to Actual Details Projected to Actual Summary

Comparison of a single inventory to projected total for the same calendar year, summarized by sector.

Comparing SEEC Field Training Planning Demo to SEEC Demo 2010 Community Inventory (2010)

Series Name	Residential Energy (MT CO2e)	Commercial Energy (MT CO2e)	Transportation & Mobile Sources (MT CO2e)	Solid Waste (MT CO2e)
Projected	18251	21656	80888	16289
Actual	16000	19463	80430	13741
Difference	-2251	-2193	-458	-2548



Monitoring Module



Supporting California local governments

"Communicating Community Progress"

* Name	* Name	
	Name	
Community Generated Waste		

Indicator Report

Comparison of indicators across years grouped by record name.

Grouping Tag	Calculator Name	Record Name	Scope	Output Name	2005	2010
Community Waste	Waste Generation	Community Generated Waste	Scope 3	Waste per Household	5.0	4.0
Community Waste	Waste Generation	Community Generated Waste	Scope 3	Waste per Business	6.0	5.0
Community Waste	Waste Generation	Community Generated Waste	Scope 3	CO2e per Household	1.0	0.8328
Community Waste	Waste Generation	Community Generated Waste	Scope 3	CO2e per Business	1.0	1.0
Residential Electricity	Emissions from Grid Electricity	Residential Electricity Consumption		MMBtu per Household	10.0	9.0
Residential Electricity	Emissions from Grid Electricity	Residential Electricity Consumption		CO2e per Household (MT)	0.88608	0.76368
Residential Electricity	Emissions from Grid Electricity	Residential Electricity Consumption		MMBtu per Person	2.0	2.0
Residential Electricity	Emissions from Grid Electricity	Residential Electricity Consumption		CO2e per Person (MT)	0.17722	0.15089
Commercial Electricity	Emissions from Grid Electricity	Commercial Electricity Consumption		MMBTU per Employee	10.0	8.0
Commercial Electricity	Emissions from Grid Electricity	Commercial Electricity Consumption		CO2e per Employee (MT)	0.85443	0.69906
Commercial Electricity	Emissions from Grid Electricity	Commercial Electricity Consumption		MMBtu per Establishment	0.0	0.0
Commercial Electricity	Emissions from Grid Electricity	Commercial Electricity Consumption		CO2e per Establishment	0.0	0.0
Community Transportation - Gasoline	On Road Transportation	Community On-Road Gasoline VMT		Emissions per Capita (MT CO2 per Person)	0.84069	0.77308

Waste Generated (wet tons)	75000
CH4 (MT) ②	738
CO2e (MT) ②	15498
Waste per Household	5
Waste per Business	6
CO2e per Household	1
CO2e per Business	1

Name	Value
Waste Generated (wet tons) ③	66500
CH4 (MT) ②	654
CO2e (MT) ②	13741
Waste per Household	4
Waste per Business	5
CO2e per Household	0.83280
CO2e per Business	1

Monitoring Module



"Communicating Progress & Efficacy"

Implementation Progress

Comparison of Implementation of Monitoring Records to linked Reduction Measure Records

		2011	2012	2013	2014
Residential PV Promotion / Increased Solar Capacity	Planned	500	500	500	500
	Achieved	450	468	560	600
	Impact Gap	-50	-32	60	100

Implementation Efficacy

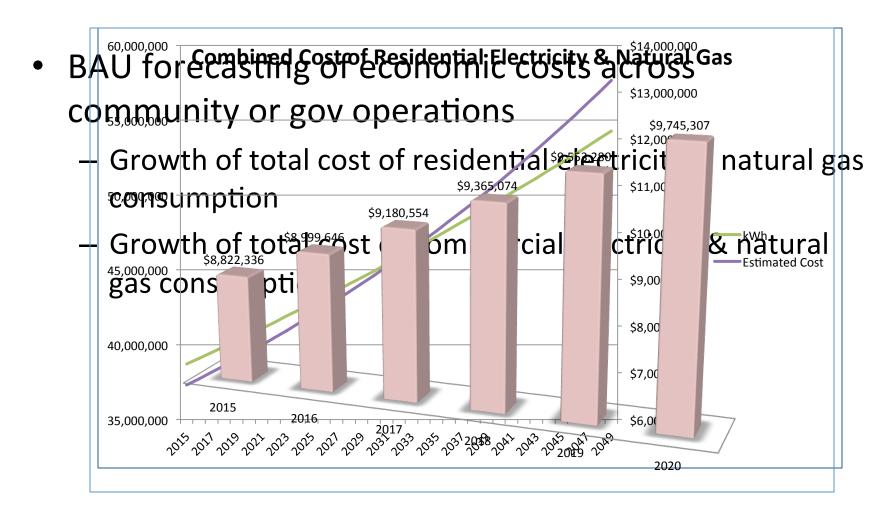
Comparison of CO2e reductions of Monitoring Records to linked Reduction Measure Records

		2011	2012	2013	2014
Residential PV Promotion / Grid Electricity Energy Reduced (MMBtu / Year) - CO2e	Planned	-232	-222	-212	-202
	Achieved	-228	-230	-233	-238
	Impact Gap	4	-8	-21	-36

Economic Forecasting in SEEC ClearPath ClearPath

SEEC







SEEC ClearPath Resources



SEEC ClearPath Tool - http://clearpath.californiaseec.org

PDF Instructions for 4 modules and New SEEC ClearPath 101 guide (located on home page of SEEC ClearPath)

On-demand e-trainings via California SEEC website for each module and CACP data migration -

http://californiaseec.org/resourcesguidance#b start=0&c4=ondemandtraining

Office Hours every 2nd and 4th Thursday of the Month via GoTo Meeting





Questions

For General SEEC Questions:

seecapps@ICLEI.org

J.R. Killigrew
ICLEI USA

Jr.killigrew@iclei.org