

CleanPowerSF Environmental Impact Analysis



**Department of Environment Presentation to
Environment Commission Policy Committee
September 10, 2012**



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Guiding Climate & Energy Policies in San Francisco

- 2002: Greenhouse Gas Emissions Reduction Resolution
 - Board of Supervisors passes resolution committing the City to a GHG reduction goal of 20% below 1990 levels by 2012 (Resolution 158-02)
- 2004: SF Climate Action Plan
 - Inventories emissions from waste, transport & energy
 - Outlines strategies to meet local, state & Kyoto targets
- 2008: Climate Change Goals Ordinance
 - Set aggressive citywide GHG reduction targets →
 - Encouraged pursuit of GHG-free electricity by 2030
- 2010: 100% Renewable Electricity Goal
 - Mayor Newsom announces goal to be 100% renewably-powered city; in 2011, Mayor Lee convenes Task Force to provide recommendations to achieve goal
- 2011: SF Electricity Resource Plan
 - Outlined recommendations for achieving GHG-free power by 2030
 - Endorsed by BoS in 2011 (Resolution 349-11)

SF GHG Targets

20% reduction by 2012
25% reduction by 2017
40% reduction by 2025
80% reduction by 2050
vs 1990 levels

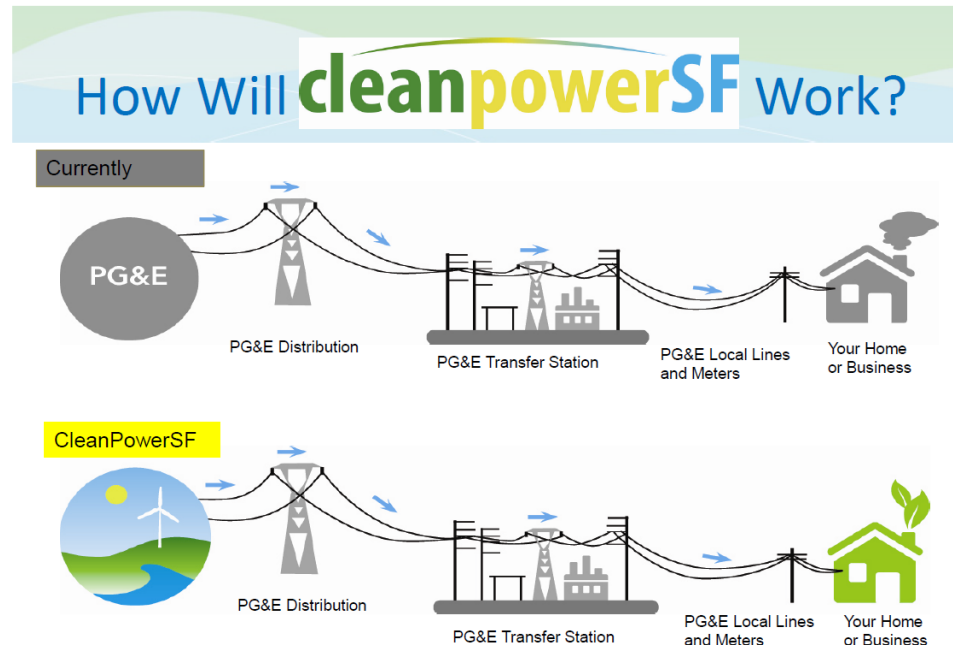


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CleanPowerSF: Phase I

- 30 MW program serving approximately 50-90,000 households in SF
- 100% renewable power
- 269,472 MWh reduction in demand from PG&E, including:
 - 32,105 MWh of energy conservation due to higher cost of green power
 - 237,367 MWh of renewable power supplied by CleanPowerSF
- Commercial and industrial customers may enroll on an opt-in basis



CleanPowerSF: GHG Impact Scenarios

Residential Scenarios			
Participation rate in CleanPowerSF	Load reduction from PG&E (MWh/yr)	Average Annual GHG Emissions Reduction (tonnes)	% reduction vs. 1990 total SF emissions
19%*	269,472	48,505	0.8%
25%	354,527	63,815	1.0%
50%	709,055	127,630	2.1%
80%	1,134,488	204,208	3.3%
100%	1,418,110	255,260	4.1%

Commercial Scenarios			
Participation rate in CleanPowerSF	Load reduction from PG&E (MWh/yr)	Average Annual GHG Emissions Reduction (tonnes)	% reduction vs. 1990 total SF emissions
0%*	0	0	0.0%
10%	205,000	36,900	0.6%
20%	409,999	73,800	1.2%
50%	1,024,998	184,500	3.0%
80%	1,639,996	295,199	4.8%

**19% residential and 0% commercial rows corresponds to the size of the Phase I program*

CleanPowerSF: Environmental Impact Analysis

	GHG Reduction from CCA (tonnes/year)		GHG Emissions Reductions vs 1990 baseline	Percent of SF Total Electricity Supply from Renewable Energy
	<i>PG&E Methodology</i>	<i>MEA Methodology</i>		
Business As Usual (2010 actuals)	0	0	14.5%	41%
Phase I (19% Res, 0% Comm)	48,505	83,267	15.3%	50%
Hypothetical Full Rollout (100% Res, 80% Comm)	550,459	944,955	23.4%	80%

Questions?

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