

PG&E's Renewable Portfolio Standard & Greenhouse Gas Compliance

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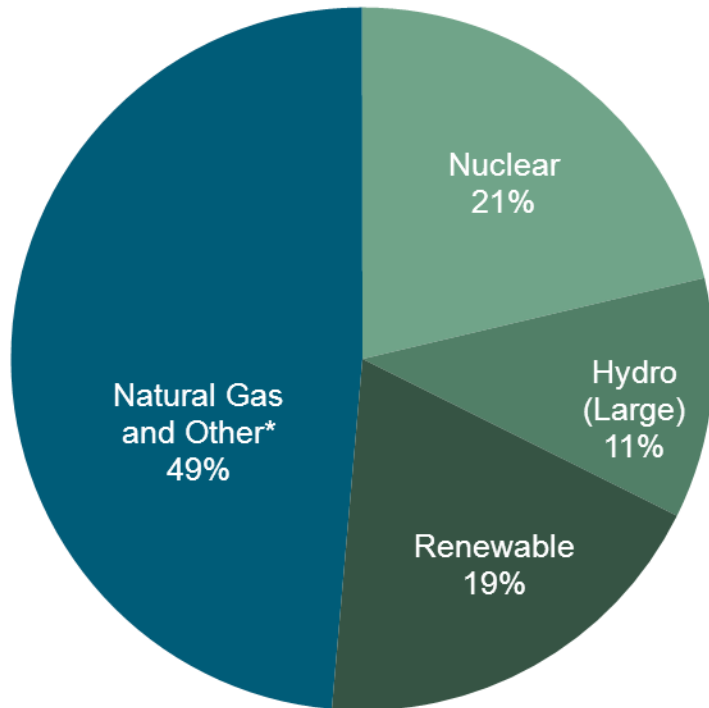


1. PG&E Renewable Portfolio Standard
2. AB32 and Greenhouse Gas Legislation



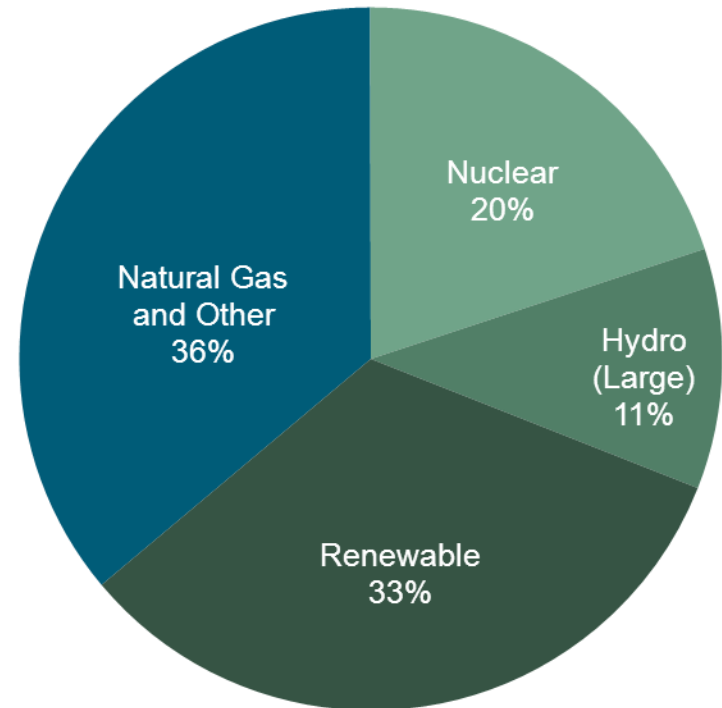
PG&E's Electric Generation Portfolio

2012 Preliminary Data



Total GWh: 76,000

2020 Projected Portfolio



Total GWh: 81,000

***Note:** Other includes market purchases, other fossil resources

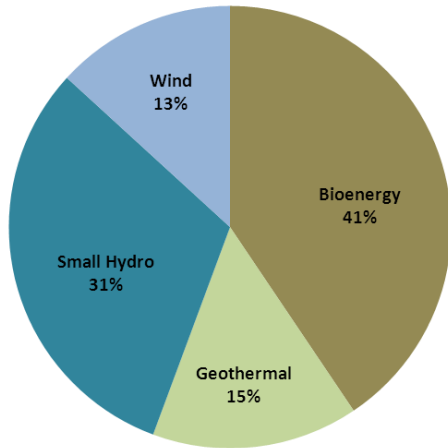
Data Sources: 2012 Power Content Disclosure Report and PG&E's 2013 IEPR Forecast. The 2012 data is subject to an independent audit and verification that will not be completed until October 1, 2013



Renewable Portfolio: Past, Present and Future

2002 Actual

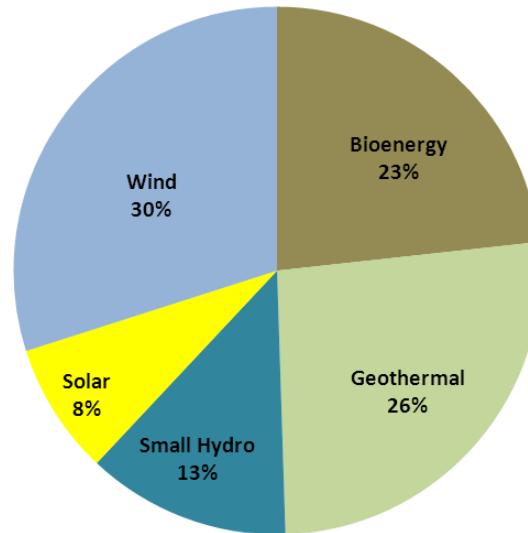
11% of total bundled retail sales



Total RPS-Eligible Procurement
7,504 GWh

2012 Preliminary Actual

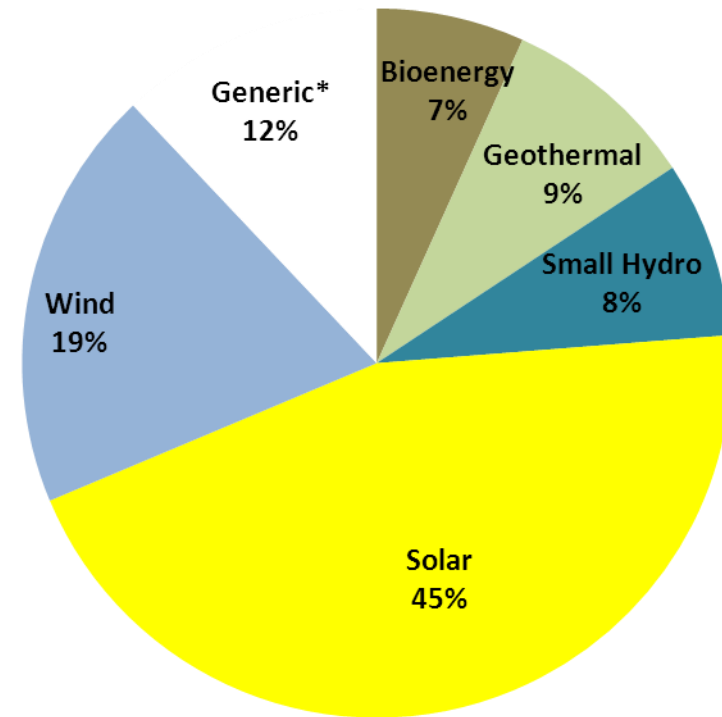
19% of total bundled retail sales



Total RPS-Eligible Procurement
~14,500 GWh

2020 Projected

33% of total bundled retail sales



Projected RPS-Eligible Procurement
~26,500 GWh

Note: Generic means PG&E will procure from to be determined resources. Some of these resources will be procured through mandated programs such as: RAM, AB 1969, and ReMAT.

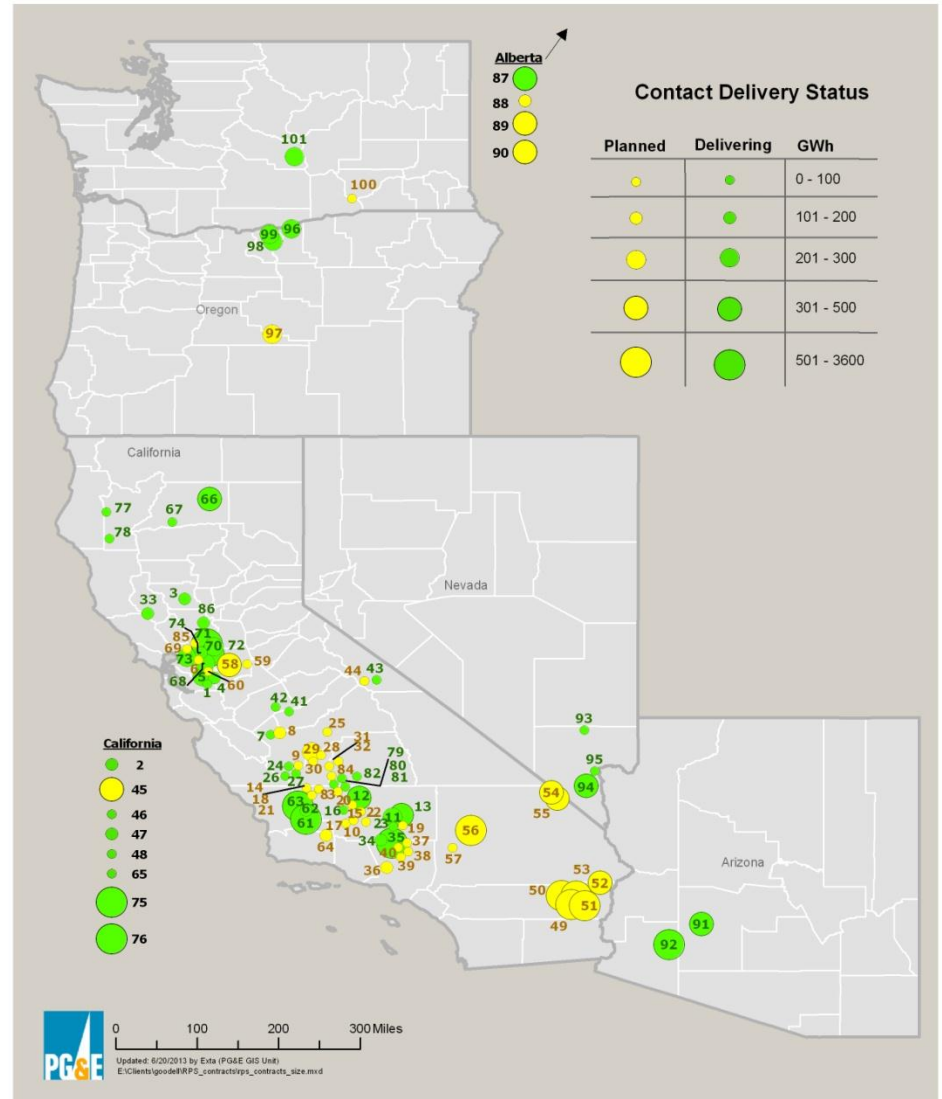
Data Sources: PG&E's 2002 Corporate Environmental Report, PG&E's Preliminary 2012 RPS Volumes Report and PG&E's 2013 IEPR Forecast. Last updated June, 2013.



Renewable Energy Delivery Statistics

TYPE	#	MW
New Facilities	99	8,298
Online	35	3,350
Under Construction	9	1,108
Under Development	29	1,411
Terminated	26	2,429

Existing Facilities (includes Repowered/Restarts)	#	MW
Existing Facilities	48	2,237
Online	26	989
Under Construction	1	45
Under Development	1	58
Terminated/Expired	20	1,146



Note: Data tables current as of June 27, 2013; map current as of June 27, 2013. 1) Large solar photovoltaic projects are built in increments (aka, “blocks” or “phases”) and may deliver energy while still under construction. PV projects delivering energy while still under construction are “online” for the purpose of this slide

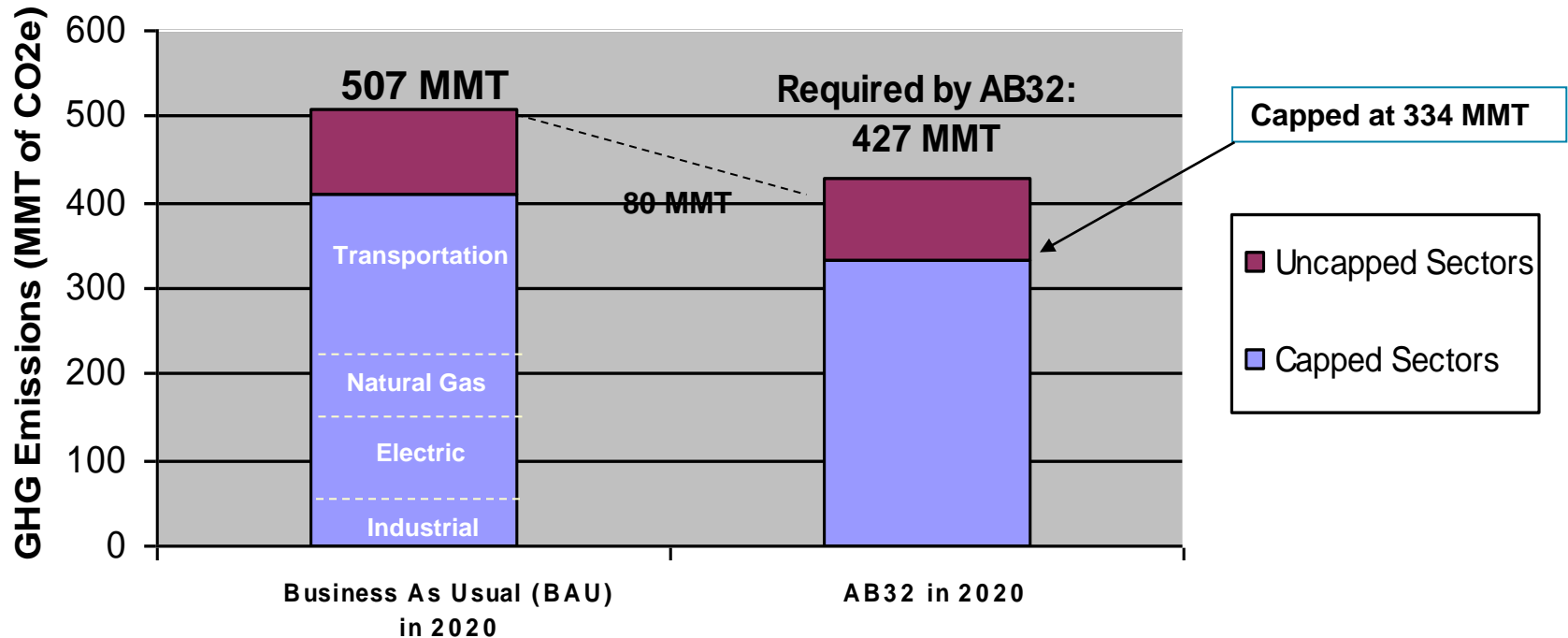


AB32 & Greenhouse Gas Overview

- **AB32 signed into law on September 27, 2006**
- **Law mandates GHG emissions to 1990 levels by 2020**
- **Regulations implementing cap-and-trade approved by ARB on October 20, 2011**
- **The first cap-and-trade compliance period began January 1, 2013**
- **Cap-and-trade regulation changes to be decided in Fall 2013**



Reductions from “Capped” and “Uncapped” Sectors



- **Per AB32, emissions from all sources cannot exceed 1990 levels in 2020.**
- **Per ARB regulation, 1990 emissions are deemed to be 427 MMT. This is 80 MMT below “Business-As-Usual” 2020 emissions.**
- **The four capped sectors are responsible for the majority of AB32 mandated reductions.**
- **If uncapped sector emissions do not achieve reductions, or increase, it is uncertain whether the capped sectors will need to achieve additional emission reductions.**



ARB Scoping Plan Emissions Reductions

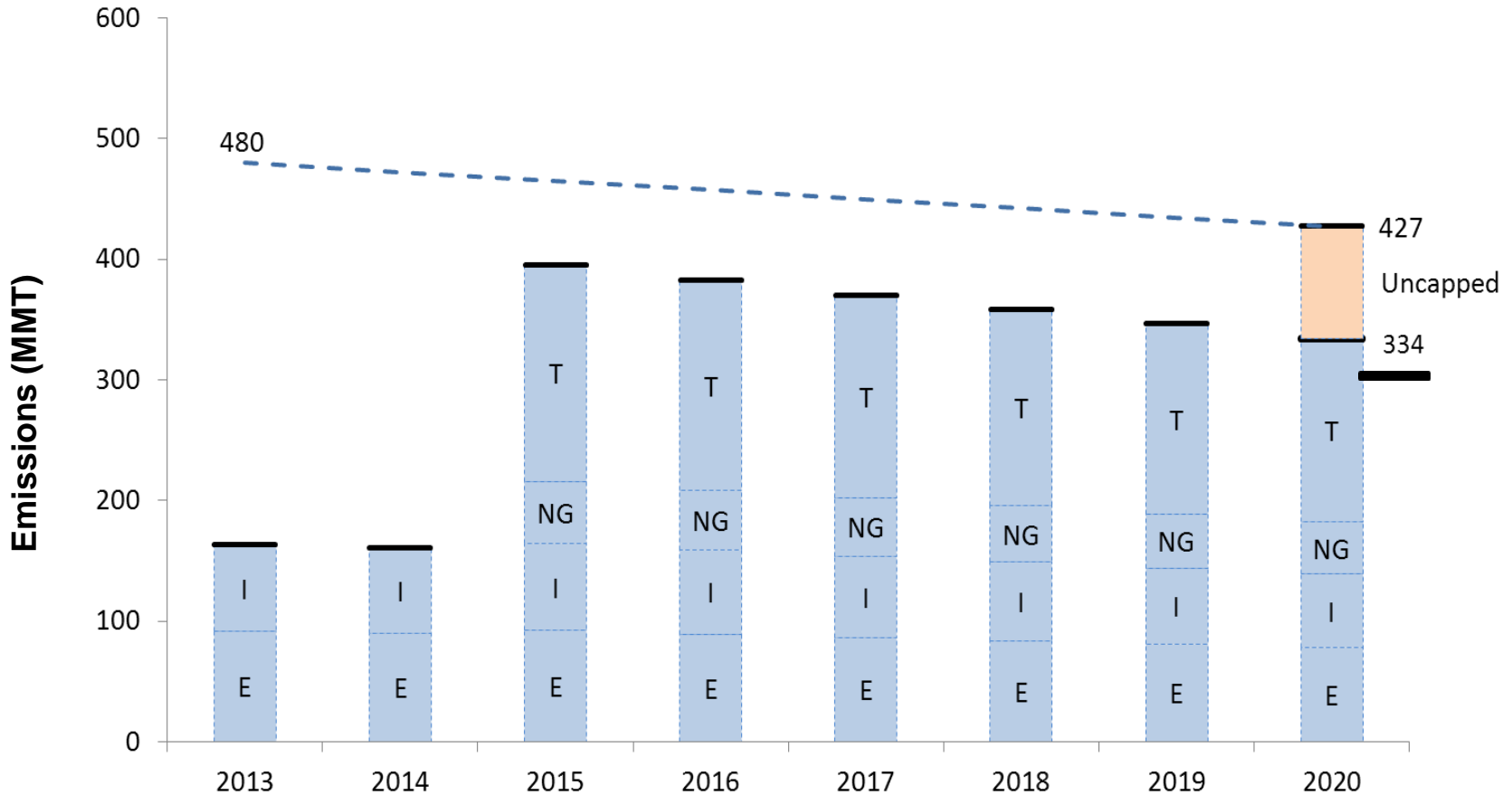
	MMT CO ₂ e
Business as Usual – 2020	507
1990 Emissions Level	427
Expected Total Reductions	80

Statewide Program Measures	CO ₂ e Reductions
Electric and Natural Gas Sectors	
Energy Efficiency	12
Renewables	11
Other	2
Transportation	
Low Carbon Fuel Standard	15
Advanced Clean Cars	5
Other	4
Uncapped Sectors (Forestry, Refrigerants, etc)	13
Cap and Trade Reductions	18

ARB anticipates that program measures will deliver most of the emissions reductions; cap-and-trade is the backstop to meet 1990 emissions levels.



Path to 2020 Emissions Mandate



- **Note: 1st Compliance Period (2013-14), 2nd Compliance Period (2015-17), 3rd Compliance Period (2018-20)**
- **Source: *ARB California GHG Emissions Forecast, Updated October 28, 2010.**