

**CALIFORNIA AIR RESOURCES BOARD**  
**Potential Scoping Plan Actions**  
**Existing Actions, New/Proposed Actions, and Concepts for Discussion**  
**April 1, 2016**

**Energy, Water and Green Buildings Sectors**

This document provides a summary of existing actions that must be considered in the 2030 Target Scoping Plan update, actions in plans currently under development, and potential new concepts for consideration by the Environmental Justice Advisory Committee (EJAC).

ARB staff is soliciting the following feedback from the EJAC:

1. Are there other actions that should be considered?
2. For the Existing Actions, does the EJAC have thoughts on the process for implementation to date?
3. For New Actions, does the EJAC support those actions in their current form (for example, should we be trying to achieve a greater than 50% RPS by 2030?) Does the EJAC have proposals on how to implement these actions?
4. For Proposed and Concepts for Discussion, is there any concern or support for considering these actions?
5. For New, Proposed, and Concepts, should these actions be supported through incentives, prescriptive regulations, other?
6. Are there specific local actions that should be promoted in disadvantaged communities?

Existing Actions: These actions were identified in the original 2008 Scoping Plan and/or the 2014 1<sup>st</sup> Scoping Plan Update and have a specific action number is associated with it.

New Actions: These actions have been adopted since the 2014 Scoping Plan Update.

Proposed Actions: These actions have been proposed in California agency public documents, but not formally adopted yet.

Concepts for Discussion: These represent concepts from various sources but have not yet been endorsed in any California agency public documents related to the 2030 Target Scoping Plan.

<b>Energy Sector</b>		
<b>SP No.</b>	<b>Electricity and Natural Gas Actions</b>	<b>Status of Action</b>
E-1	Building Energy Efficiency – Electricity <a href="http://www.energy.ca.gov/title24/">www.energy.ca.gov/title24/</a>	2016 Building standards adopted and begin implementation January 1, 2017
	Appliance Energy Efficiency Standards – Electricity <a href="http://www.energy.ca.gov/appliances/">www.energy.ca.gov/appliances/</a>	CEC adopted and implemented standards for many types of appliances. Most recently for residential/public lavatory faucets, showerheads, water closets, and urinals, with effective dates from September 2015 to July 2018.
	Utility Energy Efficiency Programs – Electricity	Programs being implemented

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	CA Energy Efficiency Statistics: <a href="http://www.eestats-beta.com/">www.eestats-beta.com/</a>	
CR-1	Building Energy Efficiency – Natural Gas <a href="http://www.energy.ca.gov/title24/">www.energy.ca.gov/title24/</a>	2016 Building standards adopted and begin implementation January 1, 2017
	Appliance Energy Efficiency – Natural Gas <a href="http://www.energy.ca.gov/appliances/">www.energy.ca.gov/appliances/</a>	CEC adopted and implemented standards for many types of appliances. Website: <a href="http://www.energy.ca.gov/appliances/">http://www.energy.ca.gov/appliances/</a>
	Utility Energy Efficiency Programs – Natural Gas	Programs being implemented
CR-2	Solar Water Heating (CSI Thermal Program) <a href="http://www.csithermal.com/">www.csithermal.com/</a>	Program being implemented. About 3,800 installed and pending system projects to date.
E-2	Combined Heat and Power <a href="http://www.cpuc.ca.gov/General.aspx?id=5432">www.cpuc.ca.gov/General.aspx?id=5432</a>	AB 1613, enacted in 2007, being implemented. CPUC adopted standard contracts for CHP systems and set targets for CHP procurement.
E-3	33% Renewables Portfolio Standard <a href="http://www.cpuc.ca.gov/renewables/">www.cpuc.ca.gov/renewables/</a> <a href="http://www.energy.ca.gov/portfolio/index.html">www.energy.ca.gov/portfolio/index.html</a>	SBx1 2 enacted in 2011, being implemented by CPUC, CEC, and publicly-owned utilities.
E-4	SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and earlier solar programs <a href="http://www.gosolarcalifornia.ca.gov/">www.gosolarcalifornia.ca.gov/</a>	More than 3,500 MW installed to date
Existing	SB 1368 Emissions Performance Standard (2006) <a href="http://www.energy.ca.gov/emission_standards/">www.energy.ca.gov/emission_standards/</a>	Regulation adopted 2007
Existing	Energy Storage Target/AB 2514 (2010) <a href="http://www.energy.ca.gov/assessments/ab2514_energy_storage.html">www.energy.ca.gov/assessments/ab2514_energy_storage.html</a>	Target of 1,325 MW for IOUs by 2020 (installed by 2024)
Existing	SB 1122 Bioenergy Feed-in Tariff (2012) <ul style="list-style-type: none"> <li>▪ 110 MW – biogas from wastewater treatment, municipal organic waste diversion, food processing, and codigestion</li> <li>▪ 90 MW – dairy and other agricultural bioenergy</li> <li>▪ 50 MW – bioenergy using byproducts of sustainable forest management</li> </ul> <a href="http://www.cpuc.ca.gov/RPS_Feed-In_Tariff/">www.cpuc.ca.gov/RPS_Feed-In_Tariff/</a>	Being implemented
Existing	Biomethane Pipeline Injection/AB 1900 (2012) <a href="http://www.arb.ca.gov/energy/biogas/biogas.htm">www.arb.ca.gov/energy/biogas/biogas.htm</a>	On January 16, 2014, CPUC issued Decision D.14-01-034 adopting health and safety standards that limit amount of certain constituents determine to be harmful to either human health or pipeline integrity in pipeline injected biomethane.

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Existing/ New	SB 1037 (2005), AB 2021 (2006), SB 1414 (2014) – Continues advancement of demand response  SB 1414: <a href="http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB1414">http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB1414</a>	
New	Electricity Rates: Time of Use Pricing/SB 1090 (2014)  <a href="http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB1090">http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB1090</a>	
New	Clean Energy and Pollution Reduction Act of 2015/SB 350 (2015) <ul style="list-style-type: none"> <li>1) 50% Renewables Portfolio Standard by 2030</li> <li>2) CEC to establish annual targets for statewide EE savings and demand reduction to achieve doubling of savings by 2030</li> <li>3) Process for CAISO to transform into a regional organization</li> </ul> CEC Order Instituting Rulemaking Proceeding: <a href="http://www.energy.ca.gov/business_meetings/2016_packets/2016-01-13/Item_05_OIR-SB_350/Item%205%20OIR%20SB350_final_1-4-16.pdf">www.energy.ca.gov/business_meetings/2016_packets/2016-01-13/Item_05_OIR-SB_350/Item%205%20OIR%20SB350_final_1-4-16.pdf</a> CAISO Regional Integration Studies: <a href="http://www.aiso.com/informed/Pages/BenefitsofaRegionalEnergyMarket.aspx">www.aiso.com/informed/Pages/BenefitsofaRegionalEnergyMarket.aspx</a>	Under development
New	Energy Efficiency/AB 802 (2015)  <a href="http://www.energy.ca.gov/benchmarking/documents/">www.energy.ca.gov/benchmarking/documents/</a>	Under development
Proposed	Evaluate potential for carbon capture and storage (CCS) to reduce CO2 from energy and industrial sources  <a href="http://www.arb.ca.gov/cc/ccs/ccs.htm">www.arb.ca.gov/cc/ccs/ccs.htm</a>	

<b>Green Buildings Sector</b>		
<b>SP No.</b>	<b>Green Building Actions</b>	<b>Status of Action</b>
GB-1	State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)  <a href="http://www.green.ca.gov/">www.green.ca.gov/</a>	Green Buildings Executive Order B-18-12, signed April 2012. Ongoing.
	Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)  <a href="http://www.bsc.ca.gov/home/calgreen.aspx">www.bsc.ca.gov/home/calgreen.aspx</a>	California Building Standards Commission (BSC) adopted the 2010 CALGreen Code. Building codes are published every 3 years, with Intervening Code Adoption Cycles half-way into each triennial period. 2015 CALGreen Code will be effective January 1, 2017. See also Water Sector AB 2282.
	Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and	Over 100 local governments have adopted green building standards

<b>Green Buildings Sector</b>		
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	Commercial Buildings) <a href="http://www.arb.ca.gov/cc/greenbuildings/beyondcode.htm">www.arb.ca.gov/cc/greenbuildings/beyondcode.htm</a>	that are more stringent than State standards
	Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	Over 500 buildings have been certified to LEED-EB: O&M green building rating system
Concept	Zero Carbon Buildings: Propose actions that expand the long-term focus of green buildings towards zero carbon buildings	Identified at October 1, 2015 Scoping Plan kick-off workshop
Concept (see also GB-1)	Urban Forestry and Green Roofs	CalGreen Code Section A4.106.6 recognizes using vegetated roof >50% as a voluntary green action
Concept	Link Buildings to Land Use Planning: Propose actions that address building energy use, transportation demand management, and other strategies that link buildings to land use planning to achieve maximum reductions in GHG emissions	

<b>Water Sector</b>		
<b>SP No.</b>	<b>Water Actions</b>	<b>Status of Action</b>
Existing	Water Conservation Act of 2009/SBX7-7 <a href="http://www.water.ca.gov/wateruseefficiency/sb7/">www.water.ca.gov/wateruseefficiency/sb7/</a>	Urban Water Conservation goal to reduce per capita use by 20% by 2020, with 10% by 2015 incremental goal. Agricultural water suppliers adopted water management plans by 2012, updated them in 2015, and every 5 years thereafter.
Existing	Recycled Water Policy – Policy moves the state towards sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse, and use of stormwater <a href="http://www.swrcb.ca.gov/water_issues/programs/water_recycling_policy/index.shtml">www.swrcb.ca.gov/water_issues/programs/water_recycling_policy/index.shtml</a>	Ongoing
W-1	Water Use Efficiency (see also E-1 and GB-1 regulations establishing efficiency standards for water and energy use in buildings, appliances and equipment) <a href="http://www.water.ca.gov/wateruseefficiency/sb7/">www.water.ca.gov/wateruseefficiency/sb7/</a>	State agency actions to reduce water usage
W-2	Water Recycling DWR Integrated Regional Water Management: <a href="http://www.water.ca.gov/irwm/grants/">www.water.ca.gov/irwm/grants/</a> Investing in Innovative Water & Energy Saving Tech: <a href="http://www.energy.ca.gov/wet/">www.energy.ca.gov/wet/</a>	SWRCB is funding recycled water development projects
W-3	Water System Energy Efficiency California Water Plan: <a href="http://www.waterplan.water.ca.gov/">www.waterplan.water.ca.gov/</a> CPUC's Water-Energy Nexus: <a href="http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Water-Energy+Nexus+Programs.htm">www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Water-Energy+Nexus+Programs.htm</a>	CEC has adopted standards for water efficiency. CPUC has ordered IOUs to invest in energy and water efficiency.

<b>Water Sector</b>		
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W-4	Reuse Urban Runoff  <a href="http://www.waterboards.ca.gov/water_issues/programs/low_impact_development/index.shtml">www.waterboards.ca.gov/water_issues/programs/low_impact_development/index.shtml</a>	SWRCB is funding numerous stormwater reuse projects
W-5	Renewable Energy Production	DWR is contracting from renewable energy projects. CEC is researching biogas technologies.
W-6	Water Public Goods Charge	Program has been evaluated but is not being implemented at this time
New	2014 Sustainable Groundwater Management Act (SGMA) /AB 1739, SB 1318, SB 1168	DWR has developed a Draft Strategic Plan (March 2015) for carrying out the SGMA. It outlines actions over the next several years to support local agencies to achieve sustainable groundwater management.
New	Building Standards: Recycled Water Systems/AB 2282 (2014), also applies to GB-1 CALGreen Code	BSC and California Dept. of Housing and Community Development are in early stages of work on AB 2282 (2014), which directs them to do research to help develop mandatory regulations for recycled water systems in newly constructed buildings. Changes are possible for 2016 Intervening Code Adoption Cycle.
Proposed	Assess feasibility and benefits of requiring capture and use of methane generated from wastewater treatment (to produce onsite renewable electricity, transportation fuel, or pipeline biomethane) and maximize digestion of organic materials	Identified in September 2015 Draft SLCP Strategy. Strategy to Board for adoption late summer 2016.