

# Environmental Justice and the Clean Power Plan

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# Webinar Logistics

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- The webinar is being recorded and will be circulated to all attendees, along with the slides
- All attendees have been muted on entry and will remain muted throughout the webinar
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# Synapse Energy Economics

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- Research and consulting firm specializing in energy, economic, and environmental topics
- Leader for public interest and government clients in providing rigorous analysis of the electric power sector
- Services include economic and technical analyses, regulatory support, research and report writing, policy analysis and development, representation in stakeholder committees, facilitation, trainings, and expert witness services
- Develops resources such as the Synapse Clean Power Plan Toolkit to promote transparent decision-making
- All non-confidential publications and open-source tools available for free at [www.synapse-energy.com](http://www.synapse-energy.com)

# Agenda

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1. What Is Environmental Justice (And Why Does EPA Care About It?)
2. State Plan Requirements: Summary
3. EPA Tools and Resources
4. California Air Resources Board's EJ Initiatives
5. Key Dates for Input
6. Synapse Resources

# **What Is Environmental Justice (And Why Does EPA Care About It)?**

# Environmental Justice Definitions

- EPA defines environmental justice as: “the ***fair treatment*** and ***meaningful involvement*** of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies”
  - “Fair treatment” means that “no group of people should bear a disproportionate burden of environmental harms and risks” (accounts for negative AND positive consequences of regulations)
  - “Meaningful involvement” requires that:
    1. Potentially affected populations have an opportunity to participate in decisions about a proposed activity that will affect their environment and/or health
    2. The public’s contribution can influence the regulatory agency’s decision
    3. The concerns of all participants involved will be considered in the decision-making process
    4. Decision-makers seek out and facilitate the involvement of those potentially affected

Source: EPA’s Guidance on Considering Environmental Justice During the Development of Regulatory Actions, p. 4, at <http://www3.epa.gov/environmentaljustice/resources/policy/considering-ej-in-rulemaking-guide-final.pdf>

# A Brief History

- Late 1970s and Early 1980s:
  - First prominent instances of environmental justice activism and litigation
- October 1991:
  - First National People of Color Environmental Leadership Summit produces *Principles of Environmental Justice*
- February 1994:
  - President Clinton signs Executive Order 12898
    - Requires each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States”

Source: Executive Order 12898, at <http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>



Source: U.S. CDC

# Why Is This a Clean Power Plan Issue?

- “Climate change is an environmental justice issue”  
(*Clean Power Plan Final Rule, 80 Fed. Reg. at 64670*)
  - Communities of color and low-income populations especially vulnerable to climate impacts
- EPA’s concept of “fair treatment” includes the distribution of *positive* environmental and health consequences of regulations
  - Decreased climate damages
  - Decreased local air pollution impacts
- Clean Power Plan may negatively impact some vulnerable communities
  - Some power plants may emit more
  - Potential negative economic impacts



# State Plan Requirements: Summary

# EPA Emphasizes EJ in CPP State Planning

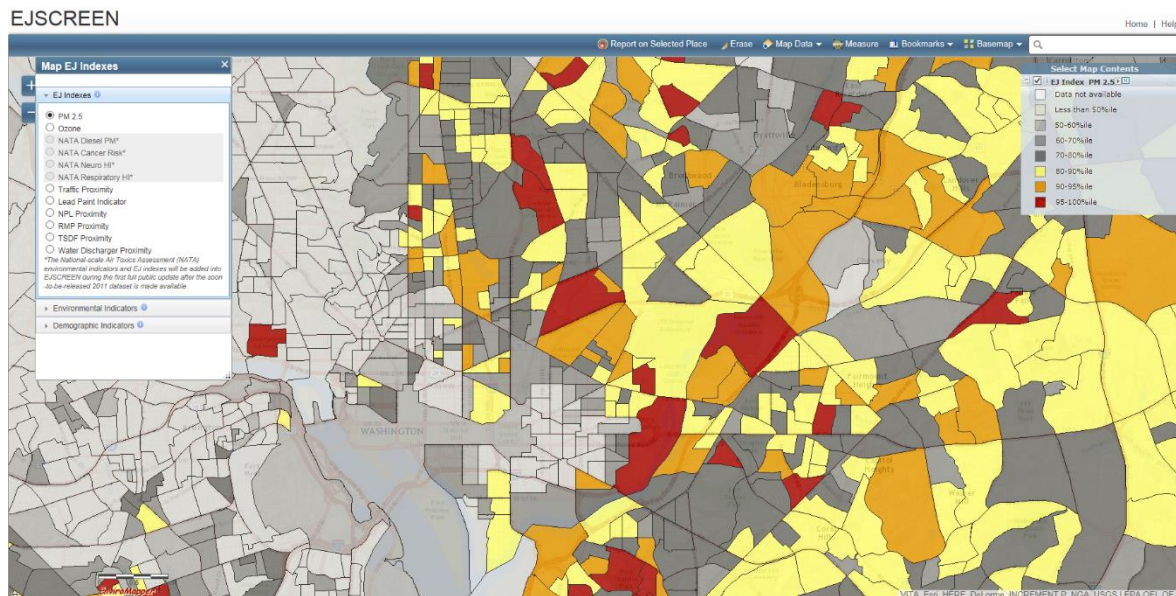
Phase 1: Preparation of Initial Plan	States should conduct environmental justice analyses:	<ul style="list-style-type: none"> <li>✓ Air quality monitoring</li> <li>✓ Generation modeling</li> <li>✓ Health data evaluation</li> </ul>
	States <i>must</i> conduct outreach to vulnerable communities, including:	<ul style="list-style-type: none"> <li>✓ Information sharing</li> <li>✓ Solicitation of input on environmental justice analysis and initial plan</li> <li>✓ Sharing of financial and technical resources</li> </ul>
Phase 2: Submission of Initial Plan	Plans <i>must</i> include demonstrations of engagement:	<ul style="list-style-type: none"> <li>✓ Description of community engagement to date</li> <li>✓ Methodology for identification of vulnerable communities</li> </ul>
	Plans <i>must</i> report future steps and include:	<ul style="list-style-type: none"> <li>✓ Description of plan for involvement of vulnerable communities in final plan process</li> </ul>
Phase 3: Preparation of Final Plan	States <i>must</i> conduct public hearings in which:	<ul style="list-style-type: none"> <li>✓ Translators should be provided</li> <li>✓ Responses should be given to all comments</li> </ul>
	States <i>must</i> conduct continued outreach:	<ul style="list-style-type: none"> <li>✓ Solicitation of and response to comments on initial plan submission is <i>required</i></li> <li>✓ Translation of information into appropriate languages is recommended</li> </ul>
Phase 4: Submission of Final Plan	Final filings <i>must</i> include:	<ul style="list-style-type: none"> <li>✓ Information on public hearings, and how they were made accessible</li> </ul>
	Requests for extension <i>require</i> :	<ul style="list-style-type: none"> <li>✓ Demonstration of meaningful engagement with vulnerable communities</li> </ul>

# EPA Tools and Resources

# EJSCREEN

EJSCREEN is EPA's environmental justice mapping and screening tool that:

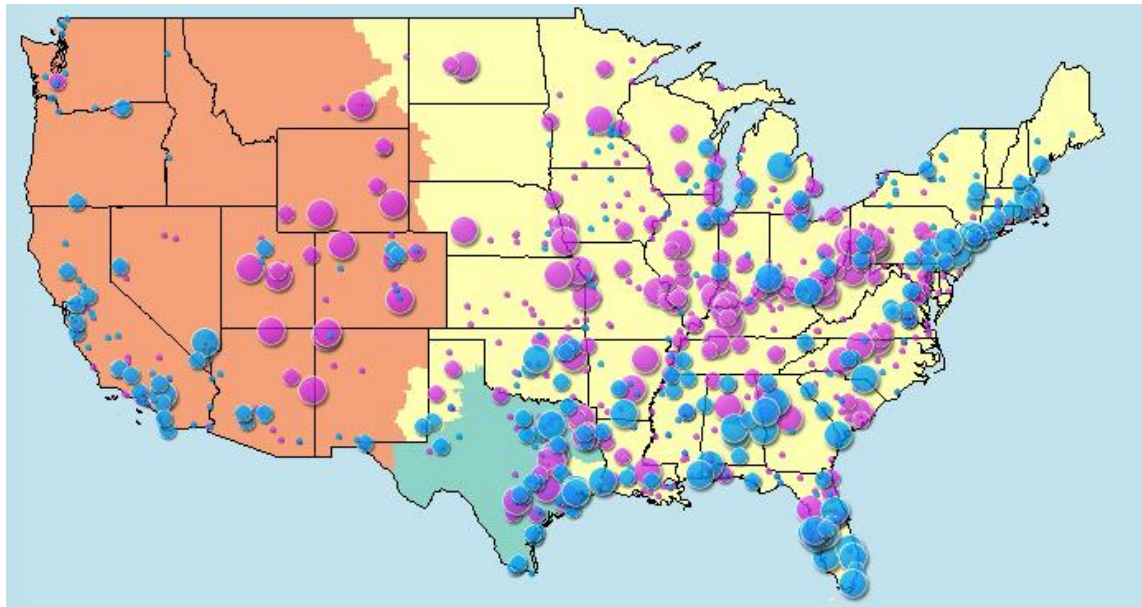
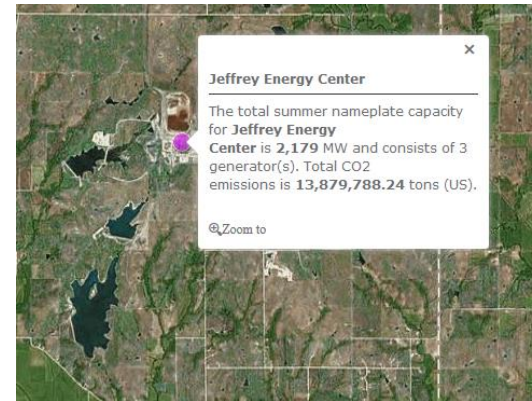
- Combines environmental and demographic indicators
- Enables identification of environmental justice areas of concern
- Allows users to select geographic study area
- Shows how a selected area compares to its state, EPA region, or nation



Source: EPA EJSCREEN, at <http://www2.epa.gov/ejscreen>

# EPA Power Plant Mapping Tool

- Contains 2012 capacity and emissions data for all units regulated by the Clean Power Plan
- Enables the user to zoom in to a specific location or zoom out to a national view



Source: EPA's Power Plant Mapping Tool, at  
<http://cleanpowerplanmaps.epa.gov/CleanPowerPlan>

# EJ Screening Report for the Clean Power Plan

- Uses EJSCREEN to provide demographic information on communities located within a 3-mile radius of each regulated power plant
- Shows areas around plants have higher percentages of low-income populations and people of color than national averages
- Outlines an approach that states can use to help ensure that the Clean Power Plan will not have disproportionate impacts on vulnerable communities



## State Demographic Summary

State/ Tribe	# of Study Areas	Study Area Totals							State Averages					
		Population	Minority	Low Income	Linguistically Isolated	Less than HS Education	Under Age 5	Over Age 64	Minority	Low Income	Linguistically Isolated	Less than HS Education	Under Age 5	Over Age 64
AK	5	152,743	43%	26%	4%	9%	8%	7%	36%	26%	2%	8%	8%	8%
AL	21	86,658	57%	54%	1%	23%	6%	14%	33%	39%	1%	17%	6%	14%
AR	19	47,857	41%	49%	1%	19%	6%	14%	26%	42%	2%	17%	7%	14%
AZ	20	747,518	55%	45%	8%	20%	8%	8%	42%	37%	5%	15%	7%	14%
CA	77	5,345,885	65%	38%	12%	22%	7%	11%	60%	35%	10%	19%	7%	12%
CO	20	752,443	46%	44%	6%	19%	7%	10%	30%	30%	3%	10%	7%	11%
CT	12	788,671	58%	39%	11%	20%	6%	11%	29%	22%	5%	11%	6%	14%
DC	1	216,582	82%	37%	1%	16%	6%	12%	65%	32%	3%	12%	6%	11%
DE	5	202,712	61%	44%	2%	17%	7%	13%	35%	28%	2%	12%	6%	15%
FL	56	1,081,496	43%	42%	7%	16%	6%	14%	42%	37%	7%	14%	6%	17%

Source: EPA's EJ Screening Report for the Clean Power Plan, at <http://www3.epa.gov/airquality/cppcommunity/ejscreencpp.pdf>

# EJ Regulatory Guidance Document

EPA has encouraged states to consult its *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*, which:

- Lists core environmental justice questions to address
- Identifies information to consider in determining whether there are environmental justice concerns
- Provides strategies for achieving meaningful involvement



Source: EPA's *Guidance on Considering Environmental Justice During the Development of Regulatory Actions* at <http://www3.epa.gov/environmentaljustice/resources/policy/considering-ej-in-rulemaking-guide-final.pdf>

# EPA's Supporting Role Going Forward

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EPA has expressed intention to:

- Provide training and other resources to help states and communities understand environmental justice requirements and options for plan development and implementation
- Provide catalog of state and local programs that have helped communities adopt clean energy measures
- Engage in ongoing assessment of the environmental justice impacts of Clean Power Plan implementation

*Source: Clean Power Plan Final Rule, 80 Fed. Reg. at 64916-17*

# **California Air Resources Board's EJ Initiatives**

# CARB EJ Initiatives and the Clean Power Plan

*“The EPA recommends that states consider CARB’s approaches and other programs as models for conducting ongoing assessments of the impacts of their state plans on overburdened communities.”*

*- CPP Federal Register p. 64919*

- California’s implementation of EJ and community initiatives around its greenhouse gas emission reduction programs can be used as a *model* for Clean Power Plan state planning
- Individual states have different levels of implementation for some/most of these activities, but can adopt those portions most relevant
- The following slides provide an overview of CARB’s EJ activities, focusing on its work to identify localized impacts from California’s cap-and-trade program
- More detail on CARB’s EJ efforts can be found at:  
<http://www.arb.ca.gov/cc/capandtrade/adaptivemanagement/adaptivemanagement.htm>

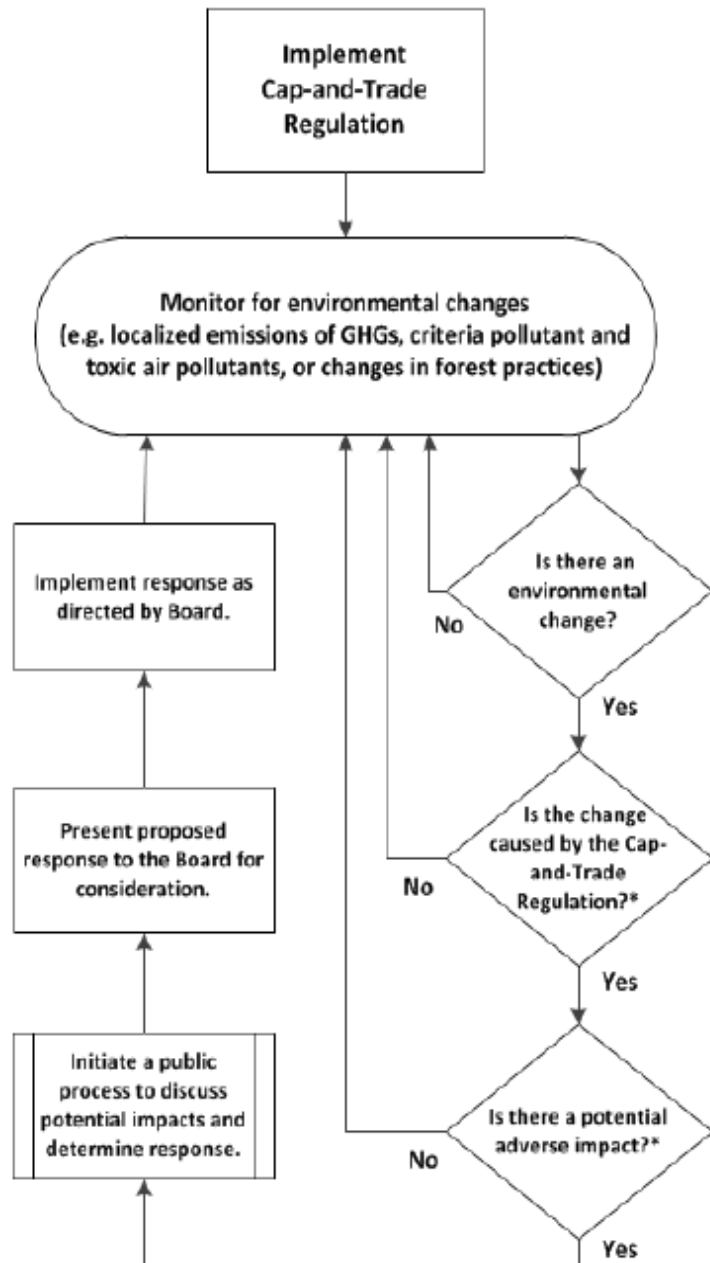
# CARB's EJ Initiatives: A Brief Timeline

- **2001: Policies and Actions for Environmental Justice (Policies)** provides a framework for incorporating EJ and fair treatment of all Californians into CARB programs
- **2006: Assembly Bill 32 (AB 32) “Global Warming Solutions Act of 2006”** requires California to reduce its greenhouse gas emissions to 1990 levels by 2020
  - Directs CARB to develop a “Scoping Plan” to outline the state’s strategy for meeting the goal (to be updated every five years)
- **2007: CARB appoints the first Environmental Justice Advisory Committee** to advise it on the Initial Scoping Plan (and other programs) (reconvenes in 2013 for First Update)
- **2008: Initial Scoping Plan is approved by the governor**
  - Identifies a cap-and-trade program as one of California’s greenhouse gas reduction strategies
- **2011: CARB releases its recommended “Adaptive Management Plan,”** which focuses on localized air quality impacts from the proposed cap-and-trade program; October—cap and trade program is approved.
- **2012: SB 535 on the Greenhouse Gas Reduction Fund** requires CalEPA to identify disadvantaged communities as recipients of cap-and-trade auction proceeds
  - At least 25% of cap-and-trade program proceeds must be allocated to projects that benefit these communities
  - At least 10% of the proceeds must go to projects located in these communities
- **2014: CARB releases its first update to the “Scoping Plan,”** identifying:
  - Continued work with CAPCOA on cap-and-trade Adaptive Management process design
  - Multi-phase inter-agency project (CARB, CalEPA, OEHHA, and others) to develop a quantitative mechanism to assess the effectiveness of AB 32 programs with respect to disadvantaged communities.

# CARB Cap-and-Trade Adaptive Management Plan

- The plan focuses on the unintended localized air quality impacts of California's cap-and-trade regulation
  - This was an area that was specifically identified as being of special concern in public comments
- CARB uses an adaptive management process because it promotes flexibility in decision-making
  - Adaptive management as a process of “information gathering, review and analysis, and response”
- **Key Objectives of CARB's Adaptive Management Plan:**
  1. Identify potential localized emission increases caused by the cap-and-trade regulation
  2. Establish a process to address unanticipated adverse local air quality impacts
  3. Keep the public and board informed of impacts attributed to the cap-and-trade regulation

## CARB Adaptive Management Flow Chart



Updated, detailed version of this process chart can be found at:

[http://www.arb.ca.gov/cc/capandtrade/adaptivemanagement/meetings/finalam\\_discussionguide.pdf](http://www.arb.ca.gov/cc/capandtrade/adaptivemanagement/meetings/finalam_discussionguide.pdf)

*Source: CARB Adaptive Management Plan for the Cap-and-Trade Regulation (October 10, 2011)*

\* These questions will be addressed based on the evaluation of a range of data sets and will involve technical judgment and other available tools and methods.

# CARB Adaptive Management Community Analysis

Using California's Greenhouse Gas Emissions Mapping Tool (developed in state), the community analysis first involves:

1. "Positioning a defined shape, such as a circle, in a California community with multiple Cap-and-Trade facilities;
2. Collecting the most recent report year aggregate greenhouse gas emissions for the specific area; and
3. Comparing the aggregate emissions collected above with the previous report year cumulative emissions for the same specific area."



If Yes to Emissions Change

4. Assess whether changes can be related to policy (i.e., Cap and Trade)

*Source: Cap and Trade Adaptive Management Discussion Guide (2015), Available at:  
[http://www.arb.ca.gov/cc/capandtrade/adaptivemanagement/meetings/finalam\\_discussionguide.pdf](http://www.arb.ca.gov/cc/capandtrade/adaptivemanagement/meetings/finalam_discussionguide.pdf)*

# Linking Emissions Changes to Policy Changes: Example Indicators

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- Tier 1 “Screening” Indicators
  - Covered facility annual greenhouse gas emissions
  - Fuel volume, or new fuel used
  - New construction or modification air permit applications
  - Compliance instrument “holdings”
- Tier 2 Indicators – linking emissions change to specific policy
  - Forecasted economic growth
  - Technology availability/business model changes
  - Electricity demand
  - Meteorology (In California, affect on hydroelectric power production)
- Tier 3 Indicators – linking emissions change to adverse health impacts
  - Criteria vs. toxic air pollutant emissions
  - Ambient air quality monitor changes
  - Finer resolution emissions data (via stack CEMS)

*Source: CARB Adaptive Management Plan for the Cap-and-Trade Regulation (October 10, 2011)*

# Current California Inter-Agency EJ Project

- CARB, in conjunction with CalEPA, OEHHA, and other state agencies, is involved in a project to identify the benefits and potential impacts of AB 32 programs on disadvantaged communities
- The project focuses on identifying indicators that could be tied to the specific programs in AB 32, and a method for assessing the indicators
  - This goes beyond CalEnviroScreen, which was developed to evaluate a community's vulnerability to the adverse effects of pollutants
- A multi-phase project:
  1. Study of changes in emissions of multiple air pollutants at individual facilities (+ a publicly available visualization tool)
  2. Expanded study of changes (from facilities *and* mobile sources) in entire disadvantage communities
  3. Later phases aim to incorporate the impact of directed funding of projects in disadvantaged communities
- The effort is part of the cap-and-trade Adaptive Management Plan

# Current California Inter-Agency EJ Project

## Project Phases for Assessing the Effects of AB 32 Programs on Disadvantaged Communities

Phase	Description
<b>Phase 1</b> Collect and Make Available Facility Data	The focus will be on facilities that are required to report consistent with ARB's Mandatory Reporting Regulation. We will compile several years of climate, criteria pollutant, and air toxics emissions data for these facilities. We will also make this information available for review and analysis by the public, including communities, academics, and government.
<b>Phase 2</b> Evaluate Facility Emissions Data	Analyze the information collected in Phase 1. We intend to utilize the data evaluation process developed for the Cap-and-Trade Adaptive Management Plan and annually provide a summary of findings for public review.
<b>Phase 3</b> Collect and Make Available Community Data	The focus will be on disadvantaged communities as defined by CalEPA under SB 535. We will integrate "community-level" mobile source emission data and investment data from Cap-and-Trade auction proceeds. In this phase, we will also quantify trends and provide data biennially for public review and analysis.
<b>Phase 4</b> Evaluate Community Data	Conduct a detailed analysis of the information collected in Phase 3. We will summarize our findings and biennially release results for public review.
<b>Phase 5</b> Respond to Evaluations in Scoping Plan	Respond to Phase 4 results and discuss project progress in the next Update to the Climate Change Scoping Plan.

*Source: First Update to the Climate Change Scoping Plan (May 2014)*

# CARB Environmental Justice Advisory Committee

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- CARB appointed the first Environmental Justice Advisory Committee to advise the Initial Scoping Plan and other climate change programs in 2007
- CARB reconvened a new Committee in 2013 for the First Update, appointing members that were nominated by environmental justice organizations and community groups
- Committee's final recommendations included:
  - Need for monitoring and assessing program impacts
  - Longer-term emission reduction targets, 2030, 2040
  - Increases in energy efficiency and renewable energy
  - Financial support for disadvantaged communities
- Who is on the current EJ Advisory Committee?

# California Environmental Justice Advisory Committee Membership

Name	Organization	Region
Martha Dina Argüello	Physicians for Social Responsibility	Los Angeles
Gisele Fong	End Oil	Los Angeles
Tom Frantz	Association of Irrigated Residents	Central Valley
Kevin Hamilton	Clinica Sierra Vista	Central Valley
Rey León	Valley LEAP	Central Valley
Luis Olmedo	Comite Civico Del Valle	Imperial Valley
Kemba Shakur	Urban Releaf	Bay Area
Mari Rose Taruc	Asian Pacific Environmental Network	Bay Area
Monica Wilson	Global Alliance for Incinerator Alternatives	Bay Area
<b><i>New Members Appointed September 25, 2015</i></b>		
Sekita Grant	The Greenlining Institute	Statewide
Eleanor Torres	The Incredible Edible Community Garden	Inland Empire
Colin Bailey	The Environmental Justice Coalition for Water	Sacramento
Katie Valenzuela Garcia	Oak Park Neighborhood Association	Sacramento

Source: <http://www.arb.ca.gov/cc/ejac/ejac.htm>

# Key Dates for Input

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## Dec. 15 – Docket Submission Deadline for CEIP

- Deadline to submit comments to Docket ID Number EPA-HQ-OAR-2015-0734
- Comments can be submitted at [www.regulations.gov](http://www.regulations.gov), by e-mail to [a-and-r-Docket@epa.gov](mailto:a-and-r-Docket@epa.gov), faxed to (202) 566-9744, or mailed.

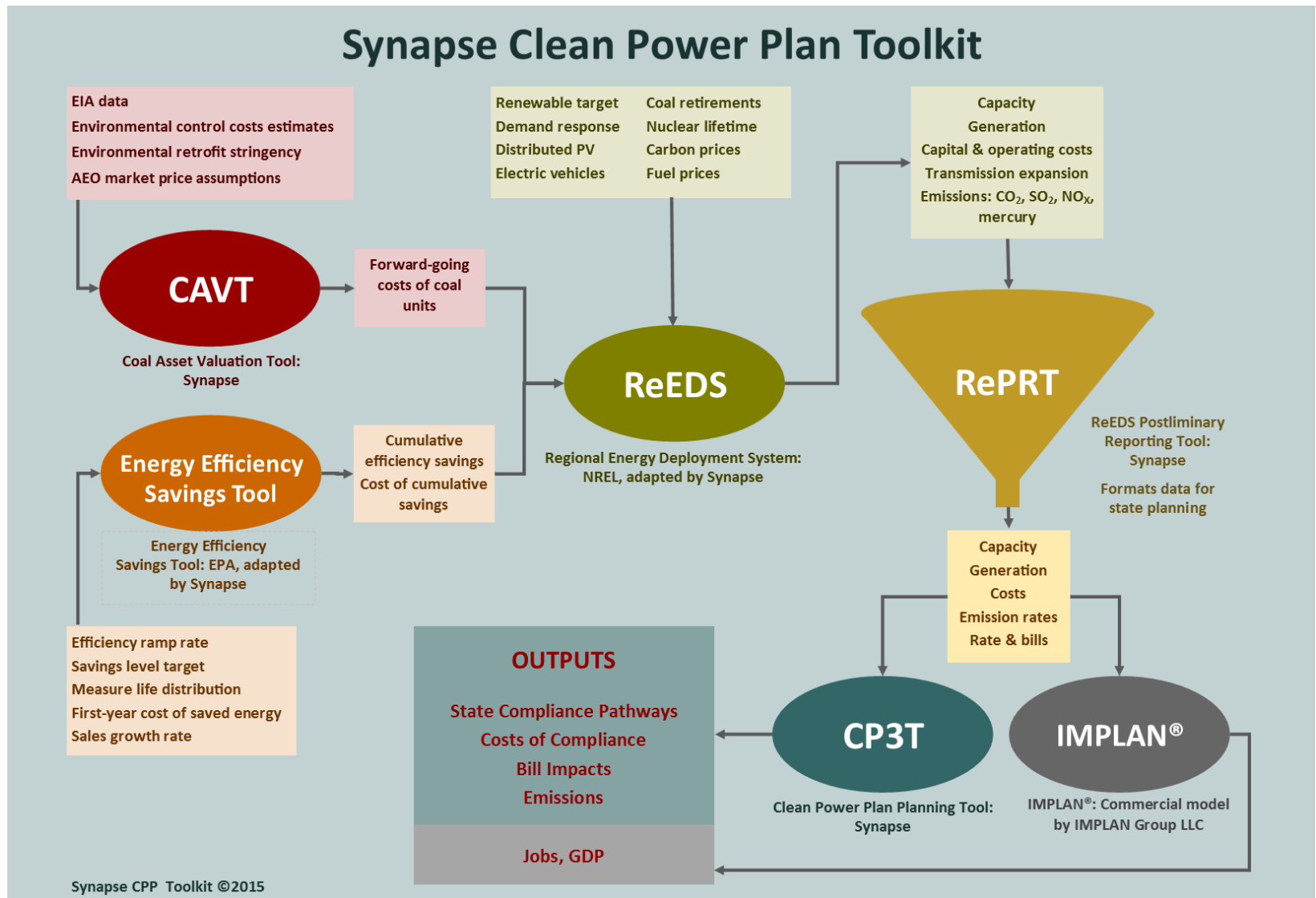


## Dec. 15-16 – EPA Workshop for Environmental Justice Communities on the Clean Power Plan

- Location: Crystal Gateway Marriott Hotel, 1700 Jefferson Davis Highway Arlington, VA 22202
- Register at <https://goo.gl/yX1Pwy>
- Participate in person or remotely

# Synapse Resources

# Synapse Clean Power Plan Toolkit



# Related Resources

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**Environmental Justice and the Clean Power Plan factsheet:** <http://synapse-energy.com/EJFactsheet>

**Synapse Clean Power Plan Toolkit:** <http://synapse-energy.com/CleanPowerPlan>

**Past Clean Power Plan Webinars:** <http://synapse-energy.com/synapse-projects-and-webinars-related-clean-power-plan>

**Clean Power Plan Reports and Outreach for National Association of State Utility Consumer Advocates:** <http://synapse-energy.com/project/clean-power-plan-reports-and-outreach-national-association-state-utility-consumer-advocates>

**Synapse Blog Posts on Clean Power Plan:** <http://synapse-energy.com/tags/clean-power-plan>

**Consumer Costs of Low-Emissions Futures Briefs and Reports:** <http://synapse-energy.com/project/consumer-costs-low-emissions-futures>

# Stay Tuned!

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Synapse will be presenting more webinars on issues related to the Clean Power Plan.

**December 15, 2015 (tentative):** “Energy Efficiency in the Clean Power Plan”

**January 12, 2016 (tentative):** “Bill Impacts of the Clean Power Plan”

# Contact Information

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