#### SOUTHERN CALIFORNIA



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## REGIONAL COUNCIL, COMMUNITY, ECONOMIC & HUMAN DEVELOPMENT ENERGY & ENVIRONMENT AND TRANSPORTATION COMMITTEES

<u>PLEASE NOTE TIME</u> Thursday, November 7, 2013 10:30 a.m. – 12:00 p.m.

SCAG Main Office 818 W. 7<sup>th</sup> Street, 12<sup>th</sup> Floor Board Room Los Angeles, CA 90017 (213) 236-1800

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Lillian Harris-Neal at (213) 236-1858 or via email at <u>harris-neal@scag.ca.gov</u>. In addition, regular meetings of the Regional Council may be viewed live or on-demand at <u>www.scag.ca.gov/scagtv</u>

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. SCAG is also committed to helping people with limited proficiency in the English language access the agency's essential public information and services. You can request such assistance by calling (213) 236-1858. We request at least 72 hours (three days) notice to provide reasonable accommodations. We prefer more notice if possible. We will make every effort to arrange for assistance as soon as possible.

The Regional Council consists of 84 elected officials representing 191 cities, six counties, six County Transportation Commissions, one representative from the Transportation Corridor Agencies, one Tribal Government representative and one representative for the Air Districts within Southern California.

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## JOINT MEETING AGENDA REGIONAL COUNCIL AND POLICY COMMITTEES (Community, Economic & Human Development Committee; Energy & Environment Committee; Transportation Committee) NOVEMBER 7, 2013

## **CALL TO ORDER & PLEDGE OF ALLEGIANCE**

(Hon. Greg Pettis, President)

<u>PUBLIC COMMENT PERIOD</u> – Members of the public desiring to speak on items on the agenda, or items not on the agenda, but within the purview of the Council, must fill out and present a Public Comment Card to the Assistant prior to speaking. Comments will be limited to three (3) minutes per speaker. The President has the discretion to reduce the time limit based upon the number of speakers. The President may limit the total time for all public comments to twenty (20) minutes.

| <u>CON</u> | <u>SENT CALENDAR</u>   |            | <u>Page No.</u> |
|------------|--|------------|-----------------|
| App        | proval Item  |            |                 |
| 1.         | Minutes of the June 6, 2013 Joint Meeting of the Regional Council<br>and Policy Committees   | Attachment | 1               |
| Dis        | cussion Items  |            |                 |
| 2.         | AB 32 Scoping Plan First Update - Discussion Draft for Public<br><u>Review and Comment</u><br>(Hasan Ikhrata, Executive Director)  | Attachment | 5               |
| 3.         | <u>Panel Discussion Regarding Climate Change</u><br>(Dr. Louise Bedsworth, California Governor's Office of Planning<br>and Research; Warren Duffy, Founder, Duffy and Company; and<br>Dr. Robert J. Lempert, Senior Scientist, RAND Corporation) | Attachment | 17              |

## **ADJOURNMENT**



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## MINUTES OF THE JOINT MEETING OF THE REGIONAL COUNCIL; COMMUNITY, ECONOMIC & HUMAN DEVELOPMENT (CEHD) COMMITTEE; ENERGY AND ENVIRONMENT COMMITTEE (EEC); AND THE TRANSPORTATION COMMITTEE (TC) OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS JUNE 6, 2013

# THE FOLLOWING MINUTES ARE A SUMMARY OF ACTIONS AND/OR DISCUSSIONS THAT OCCURRED AT THE JOINT MEETING. A DIGITAL RECORDING OF THE ACTUAL MEETING IS AVAILABLE AT <u>www.scag.ca.gov/scagtv</u>.

### **EEC Members Present:**

## Hon. James Johnson, Chair Hon. Lisa Bartlett, Vice Chair Hon. Jordan Ehrenkranz Hon. Larry Forester Hon. Ed Graham Hon. Judy Mitchell Hon. Mike Munzing Hon. David Pollock Hon. Lupe Ramos Watson Hon. Jack Terrazas Hon. Cheryl Viegas-Walker Hon. Diane Williams Hon. Dennis Zine

### **CEHD Members Present**

Hon. Margaret E. Finlay, Chair Hon. Bill Jahn, Vice Chair Hon. Carol Chen Hon. Steven Choi Hon. Debbie Franklin Hon. James Gazeley Hon. Joseph J. Gonzales Hon. Tom Hansen Hon. Jon Harrison Hon. Steven Hofbauer Hon. Paula Lantz Hon. Larry McCallon Hon. Kathryn McCullough Hon. Carl Morehouse Hon. Ray Musser Hon. Edward Paget Hon. Ed P. Reves Hon. Deborah Robertson Hon. Sonny R. Santa Ines Hon. Becky Shevlin

### Representing

Long Beach

Canyon Lake Signal Hill Chino Hills Rolling Hills Estates Aliso Viejo Moorpark Indio

El Centro Rancho Cucamonga Los Angeles

## Representing

Duarte **Big Bear Lake** *Cerritos* Irvine **Banning** WRCOG Lomita District 39 South El Monte SGVCOG Paramount GCCOG Redlands District 6 Palmdale District 43 Pomona **District 38** Highland District 7 Lake Forest District 13 Ventura District 47 **SANBAG** Upland Needles SANBAG Los Angeles District 48 Rialto District 8 **Bellflower** GCCOG *Monrovia* Page 1 SGVCOG

District 30 TCA WRCOG Gateway Cities District 10 District 40 District 12 VCOG District 66 Imperial County District 1 SANBAG District 50

District 66 Imperial County District 1 SANBAG District 50 District 35 District 11 GCCOG District 14

### Hon. Alan Wapner, Vice Chair

Hon. John Addleman Hon. Michael D. Antonovich Hon. Bruce Barrows Hon. Glen Becerra Hon. Russell Betts Hon. Robert "Bob" Botts Hon. Art Brown Hon. Gene Daniels Hon. Jeff DeGrandpre Hon. Frank Gurulé Hon. Bert Hack Hon. Matthew Harper Hon. Carol Herrera Hon. Bill Hodge Hon. Jim Hyatt Hon. Trish Kelley Hon. Randon Lane Hon. Michele Martinez Hon. Ryan McEachron Hon. Marsha McLean Hon. Dan Medina Hon. Barbara Messina Hon. Leroy Mills Hon. Jim Morton Hon. Brett Murdock Hon. Pam O'Connor Hon. Micheál O'Leary Hon. Gary Ovitt Hon. Linda Parks Hon. Gregory Pettis Hon. Teresa Real Sebastian Hon. Mark Rutherford Hon. David Spence Hon. Tim Spohn Hon. Barb Stanton Hon. Jeff Stone Hon. Jess Talamantes Hon. Brent Tercero Hon. Donald Voss

### Representing

| Ontario               | SANBAG                |
|-----------------------|-----------------------|
| Rolling Hills Estates | SBCCOG                |
| 0                     | Los Angeles County    |
| Cerritos              | District 23           |
| Simi Valley           | District 46           |
| Desert Hot Springs    | CVAG                  |
| Banning               | RCTC                  |
| Buena Park            | District 21           |
| Paramount             | District 24           |
| Eastvale              | District 4            |
| Cudahy                | District 27           |
| Laguna Woods          | OCCOG                 |
| Huntington Beach      | District 64           |
| Diamond Bar           | District 37           |
| Calexico              | ICTC                  |
| Calimesa              | District 3            |
| Mission Viejo         | OCCOG                 |
| Murrieta              | WRCOG                 |
| Santa Ana             | District 16           |
| Victorville           | SANBAG                |
| Santa Clarita         | District 67           |
| Gardena               | District 28           |
| Alhambra              | District 34           |
| Cypress               | District 18           |
| Lynwood               | District 26           |
| Brea                  | District 22           |
| Santa Monica          | District 41           |
| Culver City           | WSCCOG                |
|                       | San Bernardino County |
|                       | Ventura County        |
| Cathedral City        | District 2            |
| Monterey Park         | SGVCOG                |
| Westlake Village      | District 44           |
| La Cañada/Flintridge  | Arroyo-Verdugo Cities |
| City of Industry      | SGVCOG                |
| Town of Apple Valley  | SANBAG                |
| Riverside County      | Riverside County      |
| Burbank               | District 42           |
| Pico Rivera           | GCCOG                 |
| La Cañada/Flintridge  | District 36           |

### **Regional Councilmembers Present who are not appointed at the time to a Policy Committee:**

Hon. Tri Ta, Westminster, District 20 Hon. Andrew Masiel Sr., Pechanga Band of Luiseño Indians, Tribal Government Representative Hon. Carmen Ramirez, Oxnard, District 45

### Staff Present

Hasan Ikhrata, Executive Director Sharon Neely, Chief Deputy Executive Director Joe Silvey, General Counsel Debbie Dillon, Deputy Executive Director, Administration Joann Africa, Chief Counsel Basil Panas, Chief Financial Officer Rich Macias, Director of Transportation Planning Huasha Liu, Director of Land Use & Environmental Planning Darin Chidsey, Acting Director of Strategy, Policy and Public Affairs Lillian Harris-Neal, Clerk of the Board Tess Rey-Chaput, Office of Regional Council Support

## CALL TO ORDER AND PLEDGE OF ALLEGIANCE

President Greg Pettis, Cathedral City, District 2, called the meeting to order at approximately 11:08 a.m. Councilmember Deborah Robertson, Rialto, District 8, led the Pledge of Allegiance.

## PUBLIC COMMENT PERIOD

President Pettis opened the Public Comment Period.

Arnold Sachs, resident of Lennox, provided comments regarding a discussion item on the Transportation Committee meeting agenda; the Green Line; the Crenshaw Line; and the Ontario Airport and its ground transportation plan.

President Pettis closed the Public Comment Period.

## CONSENT CALENDAR

## Approval Item

1. Minutes of the May 3, 2013 Joint Meeting of the Regional Council and Policy Committees

A MOTION was made (Martinez) to approve the Minutes of the May 3, 2013 Joint Meeting of the Regional Council and Policy Committees. Motion was SECONDED (Morton) and APPROVED BY A MAJORITY VOTE with one (1) ABSTENTION (Ta).

## **Information/Discussion Items**

## 2. <u>Overview and Update of the 2040 California Transportation Plan (CTP 2040)</u>

President Pettis welcomed and introduced Pam Korte, Chief, Office of State Planning Division of Transportation Planning, Caltrans. Ms. Korte provided background on CTP 2040; discussed the California

Interregional Blueprint; and reported that due to the passing of SB 391 (Liu) and SB 375 (Steinberg), Caltrans was required to look at the overall greenhouse gas reductions for the entire system and attain 80% reduction from 1990 by 2050. Ms. Korte stated that efforts are being coordinated such that all legislative requirements that affect the CTP are achieved in order to produce a Final CTP 2040 in 2015. She discussed the CTP 2040 Policy Framework, scenarios, modal plans and next steps. In closing, Ms. Korte reported on the schedule of the draft CTP, future advisory meetings, tribal meetings, workshops and focus group meetings timeline for the submission of the Final CTP 2040 to the legislature by December 2015.

Discussion ensued with comments provided by several councilmembers (Rutherford, Robertson, Hack, Spohn, Mitchell, McLean, and L. Parks).

## 3. <u>Cap-and-Trade FY 14 Funding Update</u>

Hasan Ikhrata, Executive Director, reported that there will be no Cap-and-Trade funding for FY 2013-14 for the region and stated that Governor Brown proposed to loan approximately \$500 million of cap-and-trade proceeds to the General Fund to be paid back with interest and appropriated in FY 2014–15.

4. <u>2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Growth</u> <u>Forecast: Planning & Policy Implications</u>

President Pettis welcomed and introduced Steve Levy, Director and Senior Economist, Center for Continuing Study of the California Economy (CCSCE). Mr. Levy gave a presentation on the Planning and Policy of Growth Forecast in the SCAG region and the impacts of demographic changes and the aging population in the areas of housing, transportation, land use and workforce. Mr. Levy stated that the job forecast depends on the success of implementing the 2012-2035 RTP/SCS and the development of regional and state economic prosperity strategies. In closing, Mr. Levy announced an upcoming 'Aging Population and Policy Implications Conference' scheduled for September 2013. The conference attendees will include experts from around the world who will provide their insight as SCAG begins development of the 2016-2040 RTP/SCS plan and policies.

Discussion ensued with comments provided by several councilmembers (Mitchell, Morehouse, McCullough, Messina, Robertson, Harper, Rutherford, Munzing, and Mills).

## **ADJOURNMENT**

There being no further business, the Joint Meeting of the Regional Council and Policy Committees adjourned at 12:05 p.m.

Lillian Harris-Neal, Clerk of the Board

## REPORT

DATE: November 7, 2013

TO: Regional Council (RC) Community, Economic, and Human Development (CEHD) Committee Energy and Environment Committee (EEC) Transportation Committee (RC)

FROM: Hasan Ikhrata, Executive Director, (213) 236-1944, <u>ikhrata@scag.ca.gov</u>

SUBJECT: AB 32 Scoping Plan First Update - Discussion Draft for Public Review and Comment

formastehult **EXECUTIVE DIRECTOR'S APPROVAL:** 

## **RECOMMENDED ACTION:**

Receive and File - No Action Required

## **EXECUTIVE SUMMARY:**

On October 1, 2013, the California Air Resources Board (ARB) released the public discussion draft of the required update to the AB 32 Scoping Plan (Update). The draft Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. A public workshop was hosted by ARB on October 15, 2013. Future steps include a revised draft to be presented to the ARB at its December meeting and consideration of approval of the Update in Spring of 2014.

## STRATEGIC PLAN:

This item supports SCAG's Strategic Plan Goal #3 (Optimize Organizations Efficiency and Cultivate an Engaged Workforce), Objective c (Define the roles and responsibilities at all levels of the organization).

## **BACKGROUND:**

AB 32 requires the Scoping Plan to be updated every five (5) years. The original Plan, first released in 2008, was developed on the principle that a balanced mix of strategies is the best way to cut emissions and grow California's economy in a clean and sustainable direction. The draft Update continues with the same approach and focuses on three (3) questions:

- How have we done over the past five years?
- What is needed to continue the prescribed course of action to 2020?
- What steps must California now take to meet the state's climate goals beyond 2020?

Specifically, the Update defines ARB's climate change priorities for the next five (5) years and sets the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012. In addition to the statutory 2020 emissions target, Executive Order S-3-05 (06/01/2005) and Executive Order B-16-2012 (03/23/2012) establish long-term climate goals for California to reduce greenhouse gas (GHG) emissions to 80 percent below 1990 levels by 2050 (Executive Order B-16-2012 is specific to the transportation sector).

California's strategy to meet the goals of AB 32 is based on the continued implementation of adopted

## REPORT

actions including Advanced Clean Cars; the 33% Renewables Portfolio Standard; statewide energyefficiency initiatives; Cap-and-Trade; the Low Carbon Fuel Standard; and other programs. They are designed to achieve significant reductions of greenhouse gases in every sector of California's economy through improved energy efficiency and will provide consumers with cleaner fuel choices.

An important highlight of the draft Scoping Plan Update is the recommendation of a midterm 2030 AB 32 target be adopted to guide ongoing and future policy decisions and provide a clear market signal for continued investment in low-carbon technologies. A 2030 target was not in the original Scoping Plan or in the Executive Orders. The draft Update indicates that the State needs to help regions implement their Sustainable Communities Strategies (SCSs) and achieve the 2035 target emission reductions. It also says continued improvement in land use and transportation planning is necessary to meet the 2050 goal, but it does not change the regional SB375 targets or sets targets past 2035.

The draft Update recognizes the work Metropolitan Planning Organizations have done with the Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS), and includes a recommendation for the transportation and land use sectors to "support regional planning, local leadership, and implementation of adopted SCSs to help ensure that the expected GHG reductions are achieved."

Further, the Update indicates that technology will be a major strategy to reduce emissions from the transportation sector. The draft Update indicates that changing California's current transportation sector to one dominated by zero-emission vehicles, powered by electricity and hydrogen, is essential to meeting federal air quality standards and long-term climate goals, and seeks to dramatically improve vehicle energy efficiency, widespread electrification of on-road vehicles, and development of low carbon liquid fuels.

A public workshop regarding the Update was held on October 15, 2013. Future steps include a revised draft to be presented to the ARB at its December meeting and consideration of its approval in spring of 2014.

The discussion draft Scoping Plan may be accessed on-line at: http://www.arb.ca.gov/cc/scopingplan/2013\_update/discussion\_draft.pdf

## FISCAL IMPACT:

Activities related to AB 32 are included in the SCAG budget under 020.SCG00161.04 and 065.SCG02663.02.

ATTACHMENT: AB 32 Update Discussion Draft – Executive Summary



## Climate Change Scoping Plan First Update

**Discussion Draft for Public Review and Comment** 

## October 2013

Pursuant to AB 32 The California Global Warming Solutions Act of 2006

> Prepared by: California Air Resources Board for the State of California

Edmund G. Brown, Jr. Governor

Matt Rodriquez Secretary, California Environmental Protection Agency

> Mary D. Nichols Chairman, Air Resources Board

Richard W. Corey Executive Officer, Air Resources Board

## **Table of Contents**

| ΕX   | ECUT          | IVE  | SUMMARYE  | S-1  |
|------|---------------|------|---|------|
| ١.   | Introduction1 |      |   | 1    |
|      | Α.            | Са   | lifornia's 2020 and 2050 Climate Goals                        | 1    |
|      | В.            | Init | tial Scoping Plan   | 2    |
|      | C.            | Pu   | rpose of Update   | 3    |
|      | D.            | Pro  | ocess for Developing the Update                               | 4    |
| II.  | Lates         | st U | nderstanding of Climate Science                               | 7    |
|      | Α.            | Со   | ntinuing Evidence of Climate Change                           | 8    |
|      | В.            | Ac   | hieving Climate Stabilization                                 | 9    |
|      | C.            | Pre  | eparing for Climate Change in California                      | . 10 |
|      | D.            | Sh   | ort-Lived Climate Pollutants                                  | . 11 |
|      |               | 1.   | Black Carbon  | . 13 |
|      |               | 2.   | Methane   | . 15 |
|      |               | 3.   | Hydrofluorocarbons  | . 17 |
|      | Ε.            | Ad   | justing the 2020 Target                                       | . 18 |
| III. | Prog          | ress | s Toward the 2020 Goal  | . 19 |
|      | Α.            | Ke   | y Accomplishments   | . 20 |
|      | В.            | Pro  | ogress by Scoping Plan Sector                                 | . 20 |
|      |               | 1.   | Transportation Sector   | . 22 |
|      |               | 2.   | Energy Sector (Electricity and Natural Gas)                   | .25  |
|      |               | 3.   | Water Sector  | . 31 |
|      |               | 4.   | Green Buildings   | . 32 |
|      |               | 5.   | Industry Sector   | . 35 |
|      |               | 6.   | Cap-and-Trade Regulation                                      | . 37 |
|      |               | 7.   | Recycling and Waste Management Sector                         | .40  |
|      |               | 8.   | Forests Sector  | . 42 |
|      |               | 9.   | High Global Warming Potential Gases                           | .44  |
|      |               | 10   | Agricultural Sector   | . 46 |
|      | C.            | Im   | pacts   | . 48 |
|      |               | 1.   | California Environmental Quality Act Environmental Assessment | 48   |
|      |               | 2.   | Meeting the Target  | . 48 |
|      |               |      | a. GHG Emissions Trends                                       | . 48 |

1

|      |       |       | b. Emission Reductions to Meet the 2020 Target                     | 52  |
|------|-------|-------|--|-----|
|      |       |       | c. Climate Change and Public Health Impacts                        | 53  |
|      |       |       | d. Environmental Justice and Disadvantaged Communities             | 59  |
|      |       |       | e. Economic Impacts  | 61  |
| IV.  |       |       | , Interstate, Federal, and International Climate Change Mitigation |     |
|      |       |       |  |     |
|      |       |       | te Government Efforts  |     |
|      |       |       | al and Regional Government Efforts                                 |     |
|      | C.    |       | erstate, Federal, and International Policy Coordination            |     |
|      |       | 1.    | Interstate   |     |
|      |       | 2.    | Federal  |     |
|      |       | 3.    | International  | -   |
| V.   |       |       | g Progress Beyond 2020   |     |
|      |       |       | st-2020 Progress to Date   |     |
|      |       |       | apshots from 2050  |     |
|      |       |       | 0 Emissions Target   |     |
|      | D.    | Ove   | erarching Needs for a Post-2020 Transition                         |     |
|      |       | 1.    | Technology Refinement, Development, and Deployment                 | 78  |
|      |       | 2.    | Transportation, Land Use, and Housing Planning and Development     | t79 |
|      |       | 3.    | Supporting Sustainable Choices by Households and Businesses        | 80  |
|      | E.    | Rec   | commendations to Transition Beyond 2020                            |     |
|      |       | 1.    | Energy   | 83  |
|      |       | 2.    | Transportation, Land Use, Fuels, and Infrastructure                | 86  |
|      |       | 3.    | Agriculture  | 91  |
|      |       | 4.    | Water  | 94  |
|      |       | 5.    | Waste Management   | 97  |
|      |       | 6.    | Natural and Working Lands  | 99  |
|      | F.    | Cap   | o-and-Trade Post 2020  | 103 |
|      | G.    | Pos   | st-2020 Considerations   | 104 |
| VI.  | Fundi | ing ( | GHG Emission Reduction Strategies                                  | 106 |
|      | Α.    | Mee   | eting the 2020 Climate Goal  | 106 |
|      | В.    | Fut   | ure Funding Opportunities  | 108 |
|      | C.    | Red   | commendations for Near- and Long-Term Funding Priorities           | 108 |
| VII. | Conc  | lusic | ons  | 111 |

| Discussion | Draft |
|------------|-------|
|------------|-------|

2

## Appendices

- Appendix A: AB 32 Text
- Appendix B: CEQA Environmental Assessment (under development and will be in final report)
- Appendix C: Status of Scoping Plan Measures (under development and will be in final report)
- Appendix D: Focus Group White Papers (under development and will be in final report)
- Appendix E: AB 32 Environmental Justice Advisory Committee Initial Recommendations to Inform Development of the 2013 Update to the AB 32 Scoping Plan, August 6, 2013

3

## **EXECUTIVE SUMMARY**

This document is the draft Update to the initial Scoping Plan, which was built on the principle that a balanced mix of strategies is the best way to cut emissions and grow the economy in a clean and sustainable direction. This Update, required by AB 32, the California Global Warming Solutions Act of 2006, continues with that approach and focuses on three key questions: How have we done over the past five years? What is needed to continue the prescribed course of action to 2020? And what steps must we take in the coming years to continue cutting emissions and growing the economy to meet our long-term climate goals?

California's plan for reducing emissions is comprised of strategies to encourage efficiency in the use of energy and resources, decarbonize our energy and fuel supply, and reduce our demand for greenhouse gas (GHG) emissions-intensive goods. This Update builds upon the initial Scoping Plan with new strategies and expanded measures. The Update identifies opportunities to leverage existing and new funds to drive GHG emission reductions through strategic planning and targeted program investments.

This Update was developed by ARB in collaboration with the Climate Action Team and reflects the input and expertise of a range of state and local government agencies. The Update also reflects public input and recommendations from business, environmental, environmental justice, and community-based organizations. This draft initially will be presented to the Air Resources Board at its October 2013 public meeting.

## Progress to Date: A Transformation Under Way

California is on track to meet the goals of AB 32, which envisioned a more efficient California with a vibrant clean economy and attractive investment opportunities. To this end, the State has implemented a comprehensive suite of strategies across sectors that are moving California toward a clean energy future.

## Cleaner and More Efficient Energy

California has made tremendous strides in harnessing its abundant renewable energy resources. Currently, about 23 percent of the State's electricity comes from renewable resources. This will increase to at least 33 percent by 2020 under new requirements set in place by Governor Brown in 2011. Renewable energy is rapidly coming down in cost and is already cost-effective in California for millions of homes and businesses, and in certain utility applications. Once thought of as exotic and alternative, renewable energy technologies have now become an integral part of California's energy mix.

California also continues to be a global leader in energy efficiency. Since energy efficiency efforts began 40 years ago, Californians have saved \$74 billion in reduced electricity costs. New green building standards now in effect for homes and businesses, and new standards for appliances, are also continuing to drive ever-greater efficiency

gains. For example, over the next 10 years more efficient televisions and other "plug loads" will save enough energy to power more than one million homes.

## Cleaner Transportation

California has taken a number of innovative actions to cut emissions from the transportation sector.

California's Low Carbon Fuel Standard (LCFS) is beginning to drive the production of a broad array of cleaner fuels. Since its launch in 2011, the regulation has generated a multitude of unique approaches for cleaner fuels. The LCFS has helped to displace 2 billion gallons of gasoline and diesel; the equivalent of taking half a million vehicles off the road. Companies in California and elsewhere are rising to the challenge by finding innovative ways to produce cleaner, low carbon fuels.

The cars on California's roads are also undergoing a transformation. California's first GHG vehicle standards, adopted in 2004, are delivering both carbon dioxide (CO<sub>2</sub>) reductions and savings at the pump. Now the federal GHG emissions standard, California's policies paved the way to deliver these benefits nationwide. The transition to a fleet of lower-emitting, more-efficient vehicles in California will continue beyond 2020 as the result of a package of advanced clean car regulations adopted by ARB in 2012, covering model years 2017–2025. These regulations will ultimately drive down GHG emissions by about half, compared to today's average vehicle.

California's pioneering zero emission vehicle (ZEV) regulation is also driving a transformation of the fleet. As a result of ARB's 2012 ZEV program and Governor Brown's Executive Order B-16-12, California will see 1.5 million zero emission vehicles on the state's roads by 2025. Each day, more and more zero emission vehicles and cleaner, more efficient cars are driving on our streets and highways—visible signs of the transformation of California's transportation sector.

California is also making major strides toward reducing the number of miles vehicles are driven, through more sustainable transportation, land use, and housing planning. The state is leading those efforts with programs and plans that encourage a change in land use patterns and a shift to cleaner modes of transportation, including expanded transit, passenger rail, and high-speed rail service. To date, seven Metropolitan Planning Organizations have adopted Sustainable Community Strategies. In addition to helping drive GHG reductions, these plans will help create more livable communities that offer greater housing and transportation options; improved access to resources and services; safer, more vibrant neighborhoods; and healthier lifestyles where people can live, work, and play without having to get into a car.

## Cap-and-Trade Program

Last year, California successfully launched the most comprehensive Cap-and-Trade Program in the world. As the cap is gradually reduced over time, this program will play a key role in ensuring that California remains on track to meet its 2020 reduction target, and will play an important role in achieving cost-effective reductions beyond 2020. The program is also sending a clear signal to California businesses that investment in clean, low carbon technologies will be rewarded.

In 2014, California will link its Cap-and-Trade Program with Québec's. By demonstrating one way to link cap-and-trade programs and increase opportunities for emission reductions, this linkage will represent another important step in California's efforts to collaborate with other partners to address climate change.

## **Facing the Future**

Despite the progress CA has made, it is clearer than ever that additional action to cut greenhouse gas emissions is needed. Scientific evidence indicates that global emissions must be reduced 80 percent below 1990 levels by 2050 to achieve climate stabilization. Reaching this goal will require California to accelerate the pace of emission reductions that we achieve over the coming decades.

A midterm target should be adopted that will drive continued progress toward meeting the 2050 goal. A target that reflects the scientifically-based level of emission reductions the state needs to achieve by 2030 will help guide ongoing and future policy decisions and provide a clear market signal for continued investment in low-carbon technologies.

The actions we have already taken provide a solid foundation to build from. However, reaching our longer-term targets will require continued commitment to changing how we generate, transmit, and consume electricity; how we transport people and goods throughout our state; how we plan, design, and build our communities; the way we use water, energy, and other resources in our homes, businesses, and industries; and how we manage and protect our natural and working lands.

As we continue this transformation, we must work to ensure our efforts simultaneously support a healthy economy, improve air quality, and protect and improve public health— especially for our most vulnerable communities. And we must do so in the face of a growing population, while simultaneously adapting to the climate change impacts we are already facing. This will require careful coordination among policymakers at all levels of government.

Meeting these challenges will not be easy, but failing to continue on the current path to reduce emissions will have grave consequences. Increasingly dangerous heat waves, more frequent and prolonged drought, diminished snowpack, continued sea level rise, extreme wildfires—and the devastating economic impacts associated with these changes—are some of the realities California will continue to face from unchecked climate change.

While California is working aggressively to reduce its GHG emissions, we recognize that climate change is a global problem with global impacts. The reality is that California alone cannot effectively avert the impacts of global climate change. California will need

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Discussion Draft
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to continue to be a global leader in addressing climate change, helping drive critically needed actions in other states, provinces, and nations around the world.

## Meeting the Challenge Ahead

This Update charts the path that California must continue to take in a number of key sectors to steadily drive down GHG emissions as we approach 2020 and begin to look further into the future.

The sectors highlighted in this Update comprise the majority of California's economy. Each sector provides unique opportunities to achieve emission reductions while achieving long-term economic and environmental sustainability. Important interconnections among the sectors exist and can be seized upon to produce synergistic approaches to cutting emissions.

## Energy

California's energy sector is responsible for about 40 percent of the GHG inventory. California has already identified numerous opportunities to reduce emissions in this sector, through efficiency, decarbonization, and conservation. The Update details a strategy to continue efficiency improvements through new small appliance standards; increased use of renewable electricity generation; increased distributed efficient generation sources, including expanded combined heat and power (CHP) generation; and a commitment to zero net energy homes and commercial buildings.

Looking beyond 2020, California will need to continue to transform the energy sector with wholesale changes to its current electricity and natural gas systems. Developing a near zero emission strategy for the energy sector will require efficient next-generation technology; vast new low carbon generation resources; a robust transmission and distribution infrastructure; and carbon capture, utilization, and sequestration for the remaining fossil generation.

## Transportation, Land Use, Fuels, and Infrastructure

The transportation sector is the largest source of GHG emissions in California. It is also the primary source of smog-forming and toxic air pollution. Changing California's transportation sector to one dominated by zero emission vehicles, powered by electricity and hydrogen, is essential to meeting federal air quality standards and long-term climate goals. Achieving the 2050 target will require dramatically improving vehicle energy efficiency, widespread electrification of on-road vehicles, development of low carbon liquid fuels, and smarter, more integrated land use planning and development.

## **Agriculture**

The agriculture sector is a key economic driver for California. The state provides food to support local, national, and global populations. There are a range of opportunities to achieve emission reductions in the sector in ways that will enhance the long-term sustainability of the state's valuable agricultural resources. To provide a foundation for

## **Discussion Draft**

taking action to cut emissions in the agriculture sector, it will be necessary to develop a comprehensive plan that identifies potential reduction goals, emission reduction and sequestration opportunities, and needs for additional research and incentives.

## <u>Water</u>

As the lifeblood of our state, water serves a range of critical purposes in California. To ensure this precious resource is managed as effectively as possible, the state needs to employ a range of creative approaches that will cut GHG emissions, maximize efficiency and conservation, and enhance water quality and supply reliability, while also addressing growing climate adaptation needs.

A greater focus on integrated policy design in the water sector is needed as California implements strategies that will support our state's longer-term climate goals. State policy and regulatory frameworks must be developed that allow for and incentivize effective regional integrated planning and implementation. Pricing policies will also need to be utilized to maximize efficiency and conservation efforts in the water sector.

## <u>Waste</u>

California's goal of reaching 75 percent recycling and composting by 2020 provides an opportunity to achieve substantial GHG reductions across the waste sector, while providing other significant economic and environmental co-benefits. Much of what is traditionally considered "waste" can be a resource for other uses. California must take advantage of waste materials to generate energy to power our homes and cars, and to improve our working lands.

The primary source of GHG emissions from the waste sector is the direct emission of methane from the decomposition of organic material in landfills. The waste sector plan will provide a new organics management approach for California that will divert this material to minimize emissions at landfills and provide feedstock for critically needed alternatives to agricultural amendments and for low carbon fuel manufacturing.

Achieving the 75 percent goal will require substantial growth in the collection, recycling, and manufacturing industries within California. This Update sets forth a series of actions to support this industrial growth, including the State's procurement of recycled-content products, and calls on California to manage its waste at home. Developing this industry here helps ensure that the GHG emission reductions, environmental cobenefits, and job growth all benefit California.

## Natural and Working Lands

Three-quarters of California's landmass is comprised of natural and working lands, such as forests, rangelands, and wetlands. These lands provide a multitude of economic and environmental benefits. They will also play an increasingly important role in California's efforts to prepare for and adapt to the impacts of climate change.

California needs a comprehensive strategy to protect, manage, and conserve these lands in ways that maximize opportunities to achieve GHG reductions and carbon sequestration. A "Forest Carbon Plan" should be developed to describe the actions necessary to ensure that California's forests are managed to optimize emission reduction and sequestration opportunities.

## Short-lived Climate Pollutants

Over the past several decades, California's actions to improve air quality and protect public health have resulted in significant reductions in short-lived climate pollutants (SLCP) like black carbon, methane, and hydrofluorocarbons. Though these pollutants remain in the atmosphere for relatively short lifetimes compared to carbon dioxide, they have an outsized contribution to warming relative to their concentrations and are key ingredients in the formation harmful air contaminants. In addition to furthering goals to protect public health, actions to cut SLCPs can deliver immediate benefits to California's climate.

California needs to build on its progress of reducing SLCPs by taking a comprehensive approach to further cutting these emissions, particularly where efforts will result in air quality and public health co-benefits. In addition to pursuing existing strategies already under way, ARB will develop a short-lived climate pollutant strategy by 2016 that will include an inventory of sources and emissions, the identification of research gaps, and a plan for developing necessary control measures.

## Courage, Creativity, and Boldness

Climate change has presented us with unprecedented challenges—challenges that cannot be met with traditional ways of thinking or conventional solutions. As Governor Brown has recognized, meeting the challenge of climate change will require "courage, creativity, and boldness." It will require California to continue to lead the world in pioneering bold and creative strategies to create a cleaner, more sustainable economy. It will depend on continuing to partner and collaborate with other state, national, and global leaders as we work toward common goals. And it will require the engagement of California's citizens in creating and supporting low carbon, high-quality lifestyles.

We are on the right path. Our actions are driving down GHG emissions; spurring innovation across a range of clean and advanced technology sectors; improving the air Californians breathe; and creating more livable communities. By continuing down this path, California will do its part to meet the challenge of global climate change, and in the process, continue to build the clean, sustainable future all Californians deserve.

## REPORT

## **DATE**: November 7, 2013

- TO:Executive/Administration Committee (EAC)<br/>Regional Council (RC)<br/>Community, Economic and Human Development Committee (CEHD)<br/>Energy and Environment Committee (EEC)<br/>Transportation Committee (TC)
- **FROM**: Huasha Liu, Director of Land Use and Environmental Planning, (213) 236-1838
- SUBJECT: Panel Discussion Regarding Climate Change

## EXECUTIVE DIRECTOR'S APPROVAL: Horas Hehult

## **RECOMMENDED ACTION:**

For Information Only - No Action Required.

## **EXECUTIVE SUMMARY:**

At the request of the Regional Council members, SCAG invited a panel of speakers to present and discuss a wide range of views on global climate change and associated policy responses. This discussion is prompted by the recent release of the United Nations International Panel on Climate Change (IPCC) Fifth Assessment Report, which was released on September 26, 2013 in Stockholm, Sweden. The Joint Regional Council and Policy Committees' meeting will begin at 10:30 AM.

## **STRATEGIC PLAN:**

This item supports SCAG's Strategic Plan Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies; and Goals

## **BACKGROUND:**

On September 26, 2013 the IPCC released its Fifth Assessment Report on climate change concluding that the warming of the earth's climate is unequivocal and that human influence on warming is clear. At the same time, the State of California has clearly established policies related to climate change including AB 32 passed in 2006 and SB 375 passed in 2008 which creates direct requirements and responsibilities for SCAG to incorporate climate change considerations in transportation planning. The California Air Resources Board has recently released a draft AB 32 Scoping Plan Update which delineates the State's greenhouse gas emission reduction program by emitting sectors.

These recent actions have prompted interest and discussion on broad scientific and policy issues related to climate change. At the request of Regional Council members, SCAG has sought and invited speakers to present a broad range of viewpoints on the subject matter. The joint meeting of the Regional Council and Policy Committees will feature a panel discussion, followed by a brief question and answer period by the following speakers:

• **Dr. Louise Bedsworth, Governor's Office of Planning and Research**: Louise Bedsworth is the Deputy Director of the Governor's Office of Planning and Research (OPR). Prior to joining OPR in 2011, she was a Research Fellow at the Public Policy Institute of California where she focused on climate action at the local level; adaptation to

## REPORT

climate change; and transportation and air quality. She has also held positions at the Union of Concerned Scientists, Redefining Progress, and the International Institute for Applied Systems Analysis. Dr. Bedsworth served on the Advisory Council for the Bay Area Air Quality Management District from 2003 through 2011. She holds a BS in Earth, Atmospheric and Planetary Sciences from MIT; an MS in Environmental Engineering; and a PhD in Energy and Resources from UC Berkeley.

- Warren Duffy, Founder, Duffy and Company: A radio broadcaster and author. He has written a book *The Green Tsunami: A Tidal Wave of Eco-Babble Drowning Us All* and several articles on the subject of climate change, seeking to educate the public that the current environmental policies and programs can create negative economic impacts for California. Mr. Duffy and his wife formed two foundations focused on California-specific climate change policy issues CFACTSoCal and Friends for Saving California Jobs. Mr. Duffy travels and speaks extensively on the topic.
- Dr. Robert Lempert of the Rand Corporation: A senior scientist at the RAND Corporation and Director of the Frederick S. Pardee Center for Longer Range Global Policy and the Future Human Condition. His research focuses on risk management and decision-making under conditions of deep uncertainty, with an emphasis on climate change, energy, and the environment. His research group assists agencies including the U.S. Bureau of Reclamation, the California Department of Water Resources, the Metropolitan Water District of Southern California, the Coastal Protection and Restoration Authority of Louisiana, and the World Bank incorporate climate change in their resource management plans. Dr. Lempert is a Fellow of the American Physical Society, a member of the Council on Foreign Relations, a lead author for Working Group II of the United Nation's Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, and a member of numerous study panels for the U.S. National Academies, including the Transportation Research Board's *Climate Change and U.S.* Transportation, and the National Research Council studies America's Climate Choices and Informing Decisions in a Changing Climate. Dr. Lempert was the Inaugural EADS Distinguished Visitor in Energy and Environment at the American Academy in Berlin. A Professor of Policy Analysis in the Pardee RAND Graduate School, Dr. Lempert is an author of the book Shaping the Next One Hundred Years: New Methods for Quantitative, Longer-Term Policy Analysis.

## **FISCAL IMPACT:**

The costs to facilitate this panel discussion are included in the FY 13-14 OWP Budget.

## **ATTACHMENT:**

[Presentations from guest speakers to be distributed under separate cover.]

