MEETING NOTICE AND AGENDA

REGIONAL ENERGY WORKING GROUP
The Regional Energy Working Group may take action on any item appearing on this agenda.

Thursday, January 26, 2017
11:30 a.m. to 1 p.m.
SANDAG, 7th Floor Conference Room
401 B Street, Suite 800
San Diego, CA 92101

Please take the elevator to the 8th floor to access the meeting room.

Staff Contact: Anna Lowe
(619) 595-5603
anna.lowe@sandag.org

AGENDA HIGHLIGHTS

• REGIONAL ENERGY WORKING GROUP MEMBERSHIP AND CHARTER
• NEW AIRPORT GREENHOUSE GAS REGULATIONS FOR TRANSPORTATION NETWORK COMPANIES
• SAN DIEGO REGIONAL PARTNERSHIP UPDATE

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Public comments regarding the agenda can be sent to SANDAG via comment@sandag.org. Please include the agenda item, your name, and your organization. Email comments should be received no later than 12 noon, two working days prior to the meeting. Any handouts, presentations, or other materials from the public intended for distribution at the meeting should be received by the Clerk of the Working Group no later than 12 noon, two working days prior to the meeting.

In order to keep the public informed in an efficient manner and facilitate public participation, SANDAG also provides access to all agenda and meeting materials online at www.sandag.org/meetings. Additionally, interested persons can sign up for e-notifications via our e-distribution list at either the SANDAG website or by sending an email request to webmaster@sandag.org.

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请在会议前至少72小时打电话(619) 699-1900 提出请求。
## REGIONAL ENERGY WORKING GROUP
Thursday, January 26, 2017

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>1.</td>
<td>WELCOME AND INTRODUCTIONS</td>
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</table>
| +2.      | APPROVAL OF MEETING MINUTES  
+2A. September 22, 2016, Meeting Minutes  
+2B. November 10, 2016, Meeting Minutes |
| 3.       | PUBLIC COMMENTS/COMMUNICATIONS/MEMBER COMMENTS |

Members of the public shall have the opportunity to address the Regional Energy Working Group (EWG) on any issue within the jurisdiction of SANDAG that is not on this agenda. Anyone desiring to speak shall reserve time by completing a “Request to Speak” form and giving it to the EWG coordinator prior to speaking. Public speakers should notify the EWG coordinator if they have a handout for distribution to EWG members. Public speakers are limited to three minutes or less per person. EWG members also may provide information and announcements under this agenda item.

### CONSENT

<table>
<thead>
<tr>
<th></th>
<th>2017 MEETING SCHEDULE AND MEMBERSHIP ROSTER</th>
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Attached are the 2017 calendar year meeting dates and Membership Roster for the EWG.

<table>
<thead>
<tr>
<th></th>
<th>SAN DIEGO REGIONAL ELECTRIC VEHICLE STATISTICS</th>
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<td>INFORMATION</td>
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The electric vehicle market in the San Diego region is rapidly growing. Updates from the Clean Vehicle Rebate Program on regional vehicle growth are attached.

### REPORTS

|   | REGIONAL ENERGY WORKING GROUP MEMBERSHIP  
AND CHARTER (Anna Lowe, SANDAG) |
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<td>APPROVE</td>
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The EWG has not reviewed its Membership and Charter since 2013. Staff will highlight both of these items and discuss with the EWG any potential questions, comments, revisions, or updates identified.
<table>
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<tr>
<td>7.</td>
<td>NEW AIRPORT GREENHOUSE GAS REGULATIONS FOR TRANSPORTATION NETWORK COMPANIES (Brendan Reed, San Diego Airport Authority)</td>
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</table>

The San Diego Airport Authority is one of the few airports in the nation to address greenhouse gas (GHG) emissions from Transportation Network Companies (TNCs). Brendan Reed will present on the framework the airport will now be using to incentivize TNCs to reduce their GHG emissions and improve local air quality.

| 8.      | SAN DIEGO REGIONAL PARTNERSHIP UPDATE (Jennifer Green, Center for Sustainable Energy) |

The San Diego Regional Energy Partnership (SDREP) helps support regional energy efficiency programs and opportunities that complement the Energy Roadmap Program. The Center for Sustainable Energy will present SDREP benchmarking assistance opportunities for municipalities and their businesses to reach state and local energy efficiency and renewable energy goals.

| 9.      | UPCOMING MEETINGS |

The next meeting of the EWG is scheduled from 11:30 a.m. to 1 p.m. on Thursday, February 23, 2017.

+ next to an item indicates an attachment
Action Requested: APPROVE

SEPTEMBER 22, 2016, MEETING MINUTES

1. WELCOME AND INTRODUCTIONS

The meeting of the Regional Energy Working Group (EWG) was called to order by Chair Chris Orlando (City of San Marcos) at 11:33 a.m.

2. MEETING MINUTES (APPROVE)

+2A. May 26, 2016, Meeting Minutes

Action: Upon a motion by Councilmember Carrie Downey (City of Coronado) and a second by Brendan Reed (San Diego County Regional Airport Authority), the EWG approved the minutes from the May 26, 2016, meeting. Yes – Chair Orlando, Vice Chair Scott Anders (Energy Policy Initiatives Center), Councilmember Downey, Dr. Don Mosier (City of Del Mar), Supervisor Dave Roberts (County of San Diego), Mr. Reed, Thomas Brill (San Diego Gas & Electric), Mike Evans (San Diego Regional Chamber of Commerce), Renee Yarmy (Unified Port District of San Diego), and Dave Weil (University of California, San Diego). No – None. Abstain – None. Absent – Center for Sustainable Energy, City of San Diego, City of Santee, Cleantech San Diego, Metropolitan Transit System, North County Economic Development Council, San Diego Regional Clean Cities Coalition, and Sierra Club.

+2B. June 23, 2016, Meeting Minutes

Action: Upon a motion by Councilmember Downey and a second by Mr. Reed, the EWG approved the minutes from the June 23, 2016, meeting. Yes – Chair Orlando, Vice Chair Anders, Councilmember Downey, Dr. Mosier, Supervisor Roberts, Mr. Reed, Mr. Brill, Mr. Evans, Ms. Yarmy, and Mr. Weil. No – None. Abstain – None. Absent – Center for Sustainable Energy, City of San Diego, City of Santee, Cleantech San Diego, Metropolitan Transit System, North County Economic Development Council, San Diego Regional Clean Cities Coalition, and Sierra Club.

3. PUBLIC COMMENTS/MEMBER COMMENTS

John Wotzka (member of the public) submitted written comments and spoke about energy-related news, which included nuclear power generation and associated issues, renewable energy, traditional fossil fuel and power plant issues, alternative fuels and shale gas, climate change impacts and greenhouse gas emissions, and renewable and energy financial matters.

Mr. Evans informed the EWG about an E3 report that recommends an increase in hydrogen fuels and de-carbonization of the electric sector.
Mr. Reed reported that construction of a new smart parking plaza has begun and will be completed in about a year and a half. In addition to the smart parking feature, the parking structure will have electric vehicle charging locations and rainwater capture.

Allison Wood (SANDAG) informed the EWG that there will be two upcoming Climate Action Plan workshops, hosted by the County of San Diego, on September 26 and 27.

REPORTS

4. UPDATE: CLEAN VEHICLE REBATE PROJECT AND ELECTRIC VEHICLE ADOPTION (INFORMATION)

Brett Williams (Center for Sustainable Energy) presented the item.

Chair Orlando introduced the item. The Clean Vehicle Rebate Project (CVRP) offers electric vehicle rebates for the purchase or lease of new, eligible plug-in and fuel-cell electric vehicles (EVs). CVRP is administered by the Center for Sustainable Energy on behalf of the California Air Resources Board. Mr. Williams provided an update on the latest program changes and use, program and market data to characterize EV consumers, and adoption in the San Diego region and throughout the state. More information is available at https://cleanvehiclerebate.org/

Action: This item was presented for information.

5. ROLL-OUT OF ENERGY ROADMAP SERVICES (INFORMATION)

Anna Lowe (SANDAG) and Katie Hentrich (SANDAG) presented the item.

The SANDAG Local Government Partnership with San Diego Gas & Electric was awarded additional funding for calendar years 2016 through 2020. Staff provided an update on the roll-out of Energy Roadmap Program services and highlighted the new and continuing resources available for energy engineering and climate planning support.

Action: This item was presented for information.

6. STATE ACTIVITIES ON ENERGY AND CLIMATE CHANGE (DISCUSSION)

Ms. Lowe and Ms. Wood presented the item.

Staff provided an update on pending energy and/or climate legislation, activities related to the California Public Utilities Commission proceeding on energy efficiency, and a summary of state policies/programs. EWG members were asked to comment and share information on any additional state energy/climate activities their organizations find important.

Action: This item was presented for discussion.
PUBLIC COMMENTS/MEMBER COMMENTS

Due to extra time, Chair Orlando allowed for extra comments.

Councilmember Downey requested that the EWG continue to update the EWG about the number of charging stations within the San Diego region.

Dr. Mosier reported that the City of Del Mar was awarded a Beacon Award.

Vice Chair Anders informed and invited EWG members to attend two upcoming events:

  [www.sandiego.edu/law/school/events/detail.php?_focus=57086](http://www.sandiego.edu/law/school/events/detail.php?_focus=57086)

- Climate and Energy Law Symposium
  [www.sandiego.edu/law/school/events/detail.php?_focus=55840](http://www.sandiego.edu/law/school/events/detail.php?_focus=55840)

Mr. Reed reported that the San Diego Regional Airport Authority’s emissions inventory and emissions reductions were certified by the Carbon Accreditation Program and will be recognized in Montreal.

Jon Gardner (Arriba Energy and Water) informed EWG members about an aqueduct evaporation and security cover system by Arriba Energy and Water that would save an estimated 15 percent of aqueduct water from evaporation.

7. UPCOMING MEETINGS (INFORMATION)

The next meeting of the EWG is scheduled for Thursday, October 27, 2016, from 11:30 a.m. to 1 p.m.

Chair Orlando adjourned the meeting at 12:57 p.m.
### REGIONAL ENERGY WORKING GROUP

#### MEETING ATTENDANCE FOR SEPTEMBER 22, 2016

<table>
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<tr>
<th>REPRESENTATION</th>
<th>JURISDICTION/ORGANIZATION</th>
<th>NAME</th>
<th>MEMBER/ALTERNATE</th>
<th>ATTENDING</th>
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<tbody>
<tr>
<td>North County Inland Subregion</td>
<td>City of San Marcos</td>
<td>Hon. Chris Orlando, Chair</td>
<td>Member</td>
<td>Yes</td>
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<td></td>
<td>City of Vista</td>
<td>Hon. Amanda Rigby</td>
<td>Alternate</td>
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<td></td>
<td>City of Del Mar</td>
<td>Dr. Don Mosier</td>
<td>Member</td>
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<td>City of Solana Beach</td>
<td>Hon. Lesa Heebner</td>
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<td>City of Chula Vista</td>
<td>Hon. Pamela Benoussan</td>
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<td>Michelle White</td>
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<td>Energy Non-Profit</td>
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<td>Len Hering</td>
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<td>Energy Policy Initiatives Center (University of San Diego School of Law)</td>
<td>Scott Anders, Vice Chair</td>
<td>Member</td>
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<td>Paul Webb</td>
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<td>Business</td>
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<td>OTHER ATTENDEES LISTED BELOW</td>
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<tr>
<td>Eric Engleman (member of the public)</td>
<td>Katie Hentrich (member of the public)</td>
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<td>Jaleh Firooz (Advanced Energy Solutions)</td>
<td>Anna Lowe (member of the public)</td>
<td>Steve Furguson (Siemens)</td>
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<td>Jon Gardner (Arriba Energy and Water)</td>
<td>Sarah Pierce (member of the public)</td>
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<td>Cesar Rios (consultant)</td>
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<td>Katie Wilson (TRC Solutions, Inc.)</td>
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<td>John Wotzka (member of the public)</td>
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<td>Jeff Wyner (City of Escondido)</td>
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1. WELCOME AND INTRODUCTIONS

The Joint Meeting of the Regional Planning Technical Working Group (TWG) and Regional Energy Working Group (EWG) was called to order by EWG Chair Chris Orlando (City of San Marcos) and TWG Chair Brad Raulston (National City) at 1:15 p.m.

2. PUBLIC COMMENTS AND COMMUNICATIONS

John Wotzka (member of the public) submitted written comments and spoke about energy-related news, which included nuclear power generation and associated issues, renewable energy, traditional fossil fuel and power plant issues, alternative fuels and shale gas, climate change impacts and greenhouse gas (GHG) emissions, the regional energy strategy, and renewable and energy financial matters.

Allison Wood (SANDAG) informed TWG and EWG members about an upcoming webinar on the role of codes and permitting in zero net energy buildings.

REPORTS

3. REGIONAL FRAMEWORK FOR CLIMATE ACTION PLANNING (DISCUSSION)

Ms. Wood presented the item.

SANDAG is beginning development of a Regional Framework for Climate Action Planning that will offer guidance to local jurisdictions on regionally consistent approaches to climate action plan development, implementation, and monitoring. The Regional Framework also will guide climate planning resources from the Energy Roadmap Program through 2020. TWG and EWG members were asked to provide initial feedback and input on key elements of the Regional Framework.

TWG and EWG members commented on the Regional Framework and suggested that it include a component on ways to track GHG reduction benefits from behavior change programs and provide a website for the public to access the information. They also highlighted that it is important for jurisdictions to know the timing for updated GHG emissions inventories and monitoring reports so that they can align with internal budget timelines.

Action: This item was presented for discussion.
4. **PLUG-IN SD: RESOURCES AND NEW CALIFORNIA ENERGY COMMISSION GRANT FUNDING OPPORTUNITY (DISCUSSION)**

Ms. Wood and Andy Hoskinson (Center for Sustainable Energy [CSE]) presented the item.

Staff from SANDAG and the CSE provided an update on Plug-in SD and highlighted resources on electric vehicle charging available to local jurisdictions, workplaces, and multi-family properties. Staff also encouraged input from TWG and EWG members on a new grant funding opportunity from the California Energy Commission to continue regional plug-in electric vehicle readiness efforts. TWG and EWG members suggested the new grant application include activities related to medium and heavy duty vehicles as well as air quality considerations.

**Action:** This item was presented for discussion.

5. **CLEANTECH SAN DIEGO SMART CITIES INITIATIVE (INFORMATION)**

Jason Anderson (Cleantech San Diego) presented the item for information.

Mr. Anderson described Cleantech San Diego’s Smart Cities Initiative and efforts underway with the cities of San Diego and Chula Vista, the Port of San Diego, and the San Diego International Airport. Opportunities for other cities to take part were discussed.

**Action:** This item was presented for information.

6. **SAN DIEGO AIRPORT DRAFT STRATEGIC ENERGY PLAN (INFORMATION)**

Brendan Reed (San Diego County Regional Airport Authority) presented the item for information.

Mr. Reed presented the Draft Strategic Energy Plan. The purpose of the Strategic Energy Plan is to provide a framework for rethinking how the San Diego County Regional Airport Authority manages their energy resources while preparing to accommodate passenger growth, development projects, and the added variability of a changing climate.

**Action:** This item was presented for information.

7. **STATE CAP-AND-TRADE: TRANSFORMATIVE CLIMATE COMMUNITY PROGRAM (DISCUSSION)**

Robyn Wapner (SANDAG) presented the item.

Staff provided an update on the Transformative Climate Community Program, a competitive grant program administered by the Strategic Growth Council for GHG emission reduction projects that provide local economic, environmental and health benefits to disadvantaged communities. TWG and EWG members suggested submitting comments that would take into consideration the identification of a project in the San Diego region that starts/ends in a disadvantaged community in our region.

**Action:** This item was presented for discussion.
8. ADJOURNMENT AND NEXT MEETING (INFORMATION)

The next meeting of the TWG is scheduled for Thursday, December 8, 2016, from 1:15 to 3:15 p.m. The next meeting of the EWG is scheduled for Thursday, January 26, 2017, from 11:30 a.m. to 1 p.m.

TWG Chair Raulston and EWG Chair Orlando adjourned the meeting at 3:15 p.m.
# REGIONAL ENERGY WORKING GROUP
## MEETING ATTENDANCE FOR NOVEMBER 10, 2016

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<tbody>
<tr>
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<td>City of San Marcos</td>
<td>Hon. Chris Orlando, Chair</td>
<td>Member</td>
<td>YES</td>
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<td></td>
<td>City of Vista</td>
<td>Hon. Amanda Rigby</td>
<td>Alternate</td>
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<td>North County Coastal Subregion</td>
<td>City of Del Mar</td>
<td>Hon. Don Mosier</td>
<td>Member</td>
<td>NO</td>
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<td>City of Solana Beach</td>
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<td>Alternate</td>
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<td>South County Subregion</td>
<td>City of Coronado</td>
<td>Hon. Carrie Downey</td>
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</tr>
<tr>
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<td>Hon. Pamela Bensoussan</td>
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<tr>
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<td>City of Santee</td>
<td>Hon. Rob McNelis</td>
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<td>Vacant</td>
<td>Vacant</td>
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<td></td>
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<td></td>
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<td>Susan Freed</td>
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<td>Other Public Agencies</td>
<td>San Diego County Regional Airport Authority</td>
<td>Brendan Reed</td>
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<td></td>
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<td>Brett Caldwell</td>
<td>Alternate</td>
<td>NO</td>
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<tr>
<td></td>
<td>Unified Port District of San Diego</td>
<td>Renee Yarmy</td>
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<td>YES</td>
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<td></td>
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<td>Rachel Stern</td>
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<td>Universities</td>
<td>University of California, San Diego</td>
<td>Dave Weil</td>
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<td>San Diego State University</td>
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<td>Len Hering</td>
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<td></td>
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<td>Hanna Grene</td>
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<td></td>
<td>Energy Policy Initiatives Center (University of San Diego School of Law)</td>
<td>Scott Anders, Vice Chair</td>
<td>Member</td>
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<td></td>
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<td>Nilmini Silva-Send</td>
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<td>Greg Newhouse</td>
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<td>Environment/ Social Justice</td>
<td>Environmental Health Coalition</td>
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<td>N/A</td>
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<tr>
<td></td>
<td></td>
<td>Paul Webb</td>
<td>Member</td>
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<td></td>
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<td>Dave Grubb</td>
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<tr>
<td></td>
<td>Sierra Club</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>San Diego Regional Chamber of Commerce</td>
<td>Mike Evans</td>
<td>Member</td>
<td>YES</td>
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<tr>
<td></td>
<td></td>
<td>Sean Karafin</td>
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<td></td>
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<td>Sophie Barnhorst</td>
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<td>David Lloyd</td>
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<td>Jason Anderson</td>
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<td>Marty Turock</td>
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<td>SANDAG STAFF MEMBERS LISTED BELOW</td>
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<tr>
<td>Lynn France (Chula Vista)</td>
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<td>Susan Baldwin</td>
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<td>Cameron Celeste (City of Chula Vista)</td>
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<td>Coleen Clementson</td>
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<td>Bill Chopyk (City of Solana Beach)</td>
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<td>Katie Hentrich</td>
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<td>Russ Cunningham (City of Oceanside)</td>
<td></td>
<td>Carolina Ilic</td>
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<td>John Wotzka (member of the public)</td>
<td></td>
<td>Anna Lowe</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Sarah Pierce</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>Rob Rundle</td>
<td></td>
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<td></td>
<td></td>
<td>Hector Salgado</td>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>Muggs Stoll</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allison Wood</td>
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2017 MEETING SCHEDULE AND MEMBERSHIP ROSTER

Introduction

This report outlines the Regional Energy Working Group (EWG) meetings for calendar year 2017 and provides the Membership Roster.

EWG Meetings for 2017

EWG meetings are generally held at SANDAG on the fourth Thursday of each month, from 11:30 a.m. to 1 p.m. in the 7th Floor Conference Room. The EWG is scheduled to meet on the following days in 2017:

- January 26
- February 23
- March 23
- April 27
- May 25
- June 22
- July 27
- August 24
- September 28
- October 26
- November 16*
- December 21*

*One week early due to national holiday.

EWG Membership Roster

The EWG Membership Roster is attached (Attachment 1). Any updates or corrections to the roster should be forwarded to SANDAG staff.

Attachment: 1. Regional Energy Working Group Membership Roster

Key Staff Contact: Anna Lowe, (619) 595-5603, anna.lowe@sandag.org
REGIONAL ENERGY WORKING GROUP

MEMBERSHIP

The Regional Energy Working Group (EWG) advises the Regional Planning Committee on issues related to the coordination and implementation of the Regional Energy Strategy and tasks of the Regional Energy Planning Program. The EWG consists of elected officials from the City of San Diego, County of San Diego, and the four subareas of the region. In addition to elected officials, the EWG includes stakeholders representing business, energy, environment, economy, education, and consumer interests.

The Energy Working Group generally meets at 11:30 a.m., on the fourth Thursday of the month.

Key Staff Contact: Anna Lowe, (619) 595-5603; anna.lowe@sandag.org

CHAIR

Chris Orlando
Councilmember, City of San Marcos

VICE CHAIR

Scott Anders
Energy Policy Initiatives Center, University of San Diego School of Law

MEMBERS

Chris Orlando
Councilmember, City of San Marcos

Vacant
North County Coastal Subregion

Carrie Downey
Councilmember, City of Coronado

Rob McNelis
Councilmember, City of Santee

Vacant
Councilmember, City of San Diego

Vacant
Supervisor, County of San Diego

Sharon Cooney
Metropolitan Transit System

Brendan Reed
San Diego County Regional Airport Authority

Renee Yarmy
Unified Port District of San Diego

Dave Weil
University of California, San Diego

Kendall Helm
San Diego Gas & Electric

ALTERNATES

Amanda Rigby
Councilmember, City of Vista

Vacant
North County Coastal Subregion

Vacant
South Bay Subregion

Vacant
East County Subregion

David Alvarez/Jack Clark
Councilmember, City of San Diego

Charles Marchesano
County of San Diego

Vacant
North County Transit District

Brett Caldwell
San Diego County Regional Airport Authority

Rachel Stern
Unified Port District of San Diego

Heather Honea
San Diego State University

Cameron Durckel
San Diego Gas & Electric
Len Hering
Center for Sustainable Energy

Scott Anders
Energy Policy Initiatives Center, University of San Diego School of Law

Debra Kelley
San Diego Regional Clean Cities Coalition

Vacant
Environmental Health Coalition

Paul Webb
Sierra Club

Mike Evans
San Diego Regional Chamber of Commerce

Vacant
North County Economic Development Council

Jason Anderson
Cleantech San Diego

Hanna Grene
Center for Sustainable Energy

Nilmini Silva-Send
Energy Policy Initiatives Center, University of San Diego School of Law

Jennifer Case
San Diego Regional Clean Cities Coalition

Vacant
Environmental Health Coalition

Dave Grubb
Sierra Club

Sean Karafin
San Diego Regional Chamber of Commerce

Vacant
South County Economic Development Council

Alyssa Gutner-Davis
Cleantech San Diego
Filter by:

Consumer Type
All

Vehicle Category
All
Make
All

Air District
All

Electric Utility
All

County
San Diego

California Senate District
All

California Assembly District
All

Disadvantaged Community
(All)

Funding Source
All

Grant Number
All

CVRP Rebate Statistics

Rebates Issued or Approved to Date

PHEV
32.8%

BEV
66.6%

FCEV
0.0%

Other
0.5%

Percent of Filtered Total Rebates

Rebates & Rebate Funding Issued or Approved to Date - Life of Project

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<th>Category</th>
<th>Rebates</th>
<th>Funding</th>
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<tbody>
<tr>
<td>PHEV</td>
<td>67,026</td>
<td>$101,294,976</td>
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<td>BEV</td>
<td>102,953</td>
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<td>FCEV</td>
<td>775</td>
<td>$3,823,000</td>
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<tr>
<td>Other</td>
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<td>Grand Total</td>
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Rebates & Rebate Funding Issued or Approved to Date - Filtered

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<td>Grand Total</td>
<td>13,571</td>
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Data is updated monthly. Last updated: January 03, 2017

Vehicles:
-BEVx is a regulatory vehicle category that refers to qualifying plug-in hybrid vehicles that operate predominately on electric fuel. Specifically, they must have an all-electric range of at least 75 miles, they must fully deplete that range before using their combustion engine, and their fossil-fuel range must be shorter than their all-electric range. In the CVRP, they are treated identically to all-battery electric vehicles (BEVs), receive the same rebate amount, and, unless noted otherwise, are included in BEV totals. As of March 2015, the BMW i3 REx is the only BEVx eligible for a CVRP rebate.
-Although the Chevrolet Volt was commercially available in California as of December 2010, it was not eligible for a rebate until February 2012. At least 1,861 Volts were sold in California prior to February 2012.
-Commercial BEVs were eligible FY 2009-2010, during which 49 vehicles were rebated, but now are covered by the HVIP Program (http://californiahvip.com).

Application Date / Rebate Date:
Rebate and funding totals include issued (paid) rebates and approved applications (check forthcoming), grouped by the date on which the application was received. The data typically take a month or more to "settle."

Disadvantaged communities:

Legislative districts:
Legislative district data are based on 2014 boundaries. Assembly member and senator names were last updated January 3, 2017.

Funding Source:
Rebates are funded by the following sources:
ARB: California Alternative and Renewable Fuel, Vehicle Technology, Clean Air and Carbon Reduction Act of 2007 (Assembly Bill (AB) 118; Núñez, Chapter 750, Statutes of 2007) and reauthorized by AB 8 (Perea, Chapter 401, Statutes of 2013).
CEC: California Energy Commission’s Alternative and Renewable Fuel and Vehicle Technology Program and Fund, authorized by AB 118/AB 8, via interagency agreements between the Energy Commission and the Air Resources Board and budget appropriations.
GGRF: Cap-and-Trade auction proceeds appropriated to the Air Resources Board from the Greenhouse Gas Reduction Fund for Low Carbon Transportation investments.

Grant Number:
The transition between funding periods is marked by the point at which rebate funding authorized by a given grant agreement is fully disbursed, and the allocation and disbursement of funding authorized by the subsequent grant agreement begins.

Citation
Please cite use of these data and images:
PURPOSE
The Regional Energy Working Group (EWG) provides input to the Regional Planning Committee (RPC) and the SANDAG Board of Directors on issues related to the coordination and implementation of the Regional Energy Strategy (RES), including measures to reduce energy consumption and greenhouse gas emissions related to electricity, natural gas, and transportation fuels. The EWG serves as a forum to discuss regional energy issues in order to build consensus among diverse stakeholders.

BACKGROUND
The EWG was formed based on the recommendations of the Energy Task Force, which had been established to advise the Board of Directors on the best way to implement the RES. The Energy Task Force recommended SANDAG as the most appropriate agency to implement the RES and recommended that an Energy Working Group, comprised of a diverse group of stakeholders, be formed to provide input and comments to the RPC and Board of Directors on energy issues.

LINE OF REPORTING
The EWG reports to the RPC, which in turn reports to the SANDAG Board of Directors. The RPC approves changes to the EWG Charter.

RESPONSIBILITIES
The EWG provides input and comments to the RPC related to the development and implementation of the RES and regional energy planning as prioritized by the Board of Directors in the Overall Work Program (OWP). The EWG may be asked to provide input on a variety of energy issues to the RPC and the Board of Directors.

The EWG will ensure that regional energy planning activities align with the objectives of San Diego Forward: The Regional Plan (which merges the Regional Comprehensive Plan, Regional Transportation Plan, and Sustainable Communities Strategy), and the Regional Economic Prosperity Strategy (REPS).

The EWG will bring stakeholders together to develop ideas on state and federal energy matters and bring them forward through the RPC and the Board. The EWG also will work with various stakeholders at the local level to discuss the best ways to provide energy-saving programs and services as they relate to the implementation of the Regional Energy Strategy, and then provide feedback to the RPC.

MEMBERSHIP
The EWG will have a maximum of 20 voting members. Membership is voluntary and will include a diverse group of regional stakeholders. Members are selected by the bodies they represent and serve at the discretion of the RPC. Members are allowed to have alternates which, like members, are selected by the bodies they represent.
Elected officials serving on the EWG are appointed by the six subregions they represent: North County Coastal, North County Inland, East County, South Bay, the City of San Diego, and the County of San Diego. In the event that an elected official cannot serve, a subregion may appoint a non-elected government employee to serve as either a primary or alternate member.

MEETING TIME AND LOCATION
The EWG generally meets from 11:30 a.m. to 1:00 p.m. on the fourth Thursday of the month. Meetings are normally held in the 7th Floor Conference Room at SANDAG offices.

SELECTION OF THE CHAIR
The EWG chair is selected by the RPC and should be rotated on a periodic basis unless otherwise determined by the Chair of the Board of Directors. The vice-chair is elected by the members of the EWG.

DURATION OF EXISTENCE
EWG status is that of a standing working group. An evaluation of the group’s work will be conducted annually as part of the SANDAG Executive Committee’s annual committee/working group review process.
New Transportation Network Company (TNC) Greenhouse Gas Emissions Program

Brendan Reed
Director of Environmental Affairs

January 26, 2017

Transportation Emission Reduction Strategies

- Cleaner Fuels
- Higher MPG
- Carpooling/Ridesharing
SAN & GHG Emissions

2006: AB32 Global Warming Solutions Act
- 1990 levels by 2020 goal

2008: Attorney General MOU
- GHG reduction commitments

2009: SAN Air Quality Management Plan

2010: SAN GT Conversion Incentive Program

2012: Taxi fleet begins converting to hybrids

2016: Airport Carbon Accreditation Program
- SAN certified at Level 2

Vehicle Conversion Incentive Program

• Goal: 100% conversion to Alternative Fuel Vehicles by 2017

• Applies to all public commercial ground transportation providers (except Limousines)

• Requirements:
  - Standardized Age Replacement
  - Hotel-Motel Shuttle Consolidation Incentive
  - Conversion Discount
  - Non-Conversion Premium
### Vehicle Conversions*

<table>
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<tr>
<th>Mode</th>
<th>Conversion Incentive Program Applicable</th>
<th>Fleet Conversion Percentage</th>
<th>GHG Reduction 2010-2015</th>
<th>Average gCO₂ per Vehicle Mile</th>
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<tbody>
<tr>
<td>Taxicabs</td>
<td>Yes</td>
<td>97%</td>
<td>86%</td>
<td>217g</td>
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<tr>
<td>Vehicle for Hire (VFH)</td>
<td>Yes</td>
<td>71%</td>
<td>29%</td>
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<td>Limousine/Charter &amp; Livery</td>
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<td>Courtesy Vehicles</td>
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<td>Hotel Motel</td>
<td>Yes</td>
<td>21%</td>
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<td>Off Airport Parking</td>
<td>Yes</td>
<td>93%</td>
<td>Unknown</td>
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<td>Airport Rental Car Buses/Shuttles</td>
<td>Yes</td>
<td>100%</td>
<td>48%</td>
<td>1,930g - Buses 530g - Shuttles</td>
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<td>TNCs</td>
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*As of 10/1/2016

---

### SAN Solution

- **Flexible Program**
  - Cleaner alternative fuel vehicles
  - Higher efficiency vehicles
  - Ridesharing of passengers (trip reduction)

- **Performance-Based Parameters**
  - Vehicle GHG emissions intensity (gCO₂/mile)

- **TNC Fleet Emissions Targets**
  - Average Greenhouse Gas Rating of 9 by 2020 (equivalent to 2016 hybrid taxi fleet’s emissions)

- **Non-Compliance Penalty**
  - Measurable targets with escalating consequences
SAN Solution: Example

GREENHOUSE GAS RATING (GGR)

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<th>Rating</th>
<th>MPG (gas)</th>
<th>CO₂ (g/mile)</th>
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<td>10</td>
<td>≥ 44</td>
<td>0-204</td>
</tr>
<tr>
<td>9</td>
<td>38-43</td>
<td>205-237</td>
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<tr>
<td>8</td>
<td>33-37</td>
<td>238-273</td>
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<td>7</td>
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<td>540-613</td>
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<tr>
<td>1</td>
<td>≤ 14</td>
<td>≥ 614</td>
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</table>

www.fueleconomy.gov
### SAN Solution: Example

<table>
<thead>
<tr>
<th>Vehicle Id.</th>
<th>MPG</th>
<th>GGR</th>
<th>CO₂ (g/mile)</th>
<th>Monthly Mileage</th>
<th>Total GHG Emissions (grams)</th>
<th>TNC Fleet Average GGR</th>
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<td>353</td>
<td>150</td>
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<td>Taurus</td>
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<td>404</td>
<td>440</td>
<td>177,760</td>
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<td>Fleet Summary</td>
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<td>875</td>
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*"Miles Avoided" credit will be given to rideshare trips

---

### SAN Solution

#### GHG Reduction Targets & Fees

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<th>Calendar Year (CY)</th>
<th>Greenhouse Gas Rating (GGR)</th>
<th>Performance Targets</th>
<th>Trip Fees</th>
<th>GHG Reduction Fees (Assessed quarterly to TNC Permit Holder)</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>Baseline data GGR 6 (313 - 349 g CO₂)</td>
<td>FY17 - $2.32 FY18 - $2.35</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>GGR 7 (274 - 312 g CO₂)</td>
<td>FY18 - $2.35 FY19 - TBD</td>
<td>$2.35 per Trip (100% of the Total Trip Fee)</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>GGR 8 (238 - 273 g CO₂)</td>
<td>TBD</td>
<td>100% of the Total Trip Fee</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>GGR 9 (205 - 237 g CO₂)</td>
<td>TBD</td>
<td>100% of the Total Trip Fee</td>
<td></td>
</tr>
</tbody>
</table>

*Authority Board will re-evaluate targets & fees annually
Questions?
Making the Case for Tracking Building Consumption
SANDAG Energy Working Group
January 26, 2017
Jennifer Green, Project Manager

CSE Mission

Accelerate the transition to a sustainable world powered by clean energy
1. What is Benchmarking?

2. The Business Case for Benchmarking

3. Benchmarking Legislative Context

4. Introducing Benchmarking Coach

5. Questions & Answers
This is a project of the San Diego Regional Climate Collaborative, which is partially funded by California utility customers and administered by San Diego Gas & Electric Company (SDG&E®) under the auspices of the California Public Utilities Commission. Trademarks are property of their respective owners.

What is Benchmarking?
**What is Benchmarking?**

<table>
<thead>
<tr>
<th>Measure Consumption</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Energy</td>
<td>Water</td>
</tr>
</tbody>
</table>

**Input Data**

ENERGY STAR® Portfolio Manager®

**Compare Performance**

Historical | Similar Buildings
ENERGY STAR Background

- Established by Environmental Protection Agency (EPA) in 1992
  - Identify and promote energy efficiency products and buildings
  - Reduce energy consumption, improve energy security and reduce pollution through labeling and standards

- ENERGY STAR Portfolio Manager allows you to track energy and water usage of your properties, as well as your waste and materials

ENERGY STAR Portfolio Manager

<table>
<thead>
<tr>
<th>Management Tool</th>
<th>Metrics Calculator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess whole building consumption</td>
<td>Water consumption</td>
</tr>
<tr>
<td>Track changes over time</td>
<td>Energy consumption</td>
</tr>
<tr>
<td>Share and report data with others</td>
<td>Waste and materials tracking</td>
</tr>
<tr>
<td>Generate reports</td>
<td>Greenhouse gas emissions</td>
</tr>
<tr>
<td>Apply for ENERGY STAR certification</td>
<td>ENERGY STAR score</td>
</tr>
</tbody>
</table>
The Business Case for Benchmarking

Best Practice for Managing Building Energy Use

- What are the impacts of retrofit projects on my energy use?
- How much energy do I use on a per-square foot basis?
- Are my properties more or less energy efficient than similar properties across the nation?
The average commercial building wastes 30% of its energy.

By simply measuring your building’s consumption, you could reduce energy use an average of 2.4% per year.

Economic Impacts of Benchmarking

A survey of hundreds of facility managers found that:

- 70% used Portfolio Manager to inform energy efficiency upgrade plans
- 67% used Portfolio Manager to help justify the cost of an energy efficiency project
Economic Impacts of Benchmarking

**Philadelphia**
- Found 7,000 buildings have energy upgrade potential. Retrofits would generate $600 million and 23,000 jobs.

**New York City**
- Newly adopted policy anticipated to create 17,000 new jobs by 2030.

**Minneapolis**
- Saved $6 million in energy costs in just three years since passing policy.

**Washington, D.C.**
- Average Source EUI decrease of 10% and ENERGY STAR Score increase by 5 pts over last four years.
California Sets Ambitious Energy Goals

- **AB 758 (2009)**
  - Requires the Energy Commission (CEC), in collaboration with the California Public Utilities Commission (CPUC) and stakeholders, to develop a comprehensive program to achieve greater energy efficiency in the state’s existing buildings.

- **SB 350 (2015)**
  - Increases California’s renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030.
  - Requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.

- **SB 32 (2016)**
  - Requires the state to cut emissions at least 40 percent below 1990 levels by 2030.
AB 802: Benchmarking

- California Energy Commission is establishing a benchmarking program expected to require:
  - Owners of buildings larger than 50,000 sq ft to benchmark
    - Commercial
    - mixed-use, and
    - multifamily
  - Public reporting of benchmarking metrics annually using ENERGY STAR Portfolio Manager
- Anticipated to start in Spring 2018

AB 802: Data Access

- Utilities must provide aggregated whole-building energy use data to building owners upon request starting Jan 1, 2017
- Building owner does NOT need permission from tenant when there are:
  - 3 or more accounts (all commercial)
  - 5 or more accounts (1+ residential accounts)
- For buildings with fewer tenants, utility may be asked to verify it has tenant permission to provide the building owner data
Proposed Timeline for Benchmarking Program

- **January 1, 2017**: Utilities begin to provide data upon request [Statutorily required]
- **April 1, 2018**: Commercial reporting to the CEC beings
- **April 1, 2019**: Multifamily reporting to CEC begins
- **September 1, 2019**: Commercial data publicly disclosed
- **September 1, 2020**: Multifamily data publicly disclosed

Source: AB 802 Draft Regulations Initial Staff Proposal July 22 2016 Workshop
Need Help Benchmarking Your Building?

CSE Benchmarking Coaches provide

no-cost,
one-on-one technical support

to building owners and operators in San Diego County.

We Help Property Managers:

- Create an Portfolio Manager account
- Add properties and buildings
- Create meters and add data
- Set-up automated benchmarking
- Share consumption information
- Generate reports on property data
Takeaways

• Benchmarking will help you and/or your constituents better understand their building’s consumption

• CSE has a benchmarking coach ready to provide no-cost assistance from start to finish of your benchmarking process

• Benchmarking is a growing trend with municipalities—consider adding an ordinance to get out ahead of state mandates

• Please tell your constituents about the NO Cost benchmarking coach program

Questions & Answers
Thank You!

Questions?

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Rebecca Sappenfield *(Benchmarking Coach)*
Benchmarking@EnergyCenter.org

More Information:
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PortfolioManager.EnergyStar.gov