

BOARD MEETING DATE: July 7, 2017

AGENDA NO. 33

REPORT: California Fuel Cell Partnership Executive Board Meeting Agenda and Quarterly Updates

SYNOPSIS: This report provides the California Fuel Cell Partnership Executive Board Agenda for the meeting held April 25, 2017, and provides updates for quarters beginning October 2016 and January 2017.

COMMITTEE: Technology, June 16, 2017, Reviewed

RECOMMENDED ACTION:

Receive and file the attached Executive Board meeting agenda and quarterly updates.

Clark E. Parker, Sr., Ph.D.
SCAQMD Representative to CaFCP
CaFCP 2017 Executive Board Chair

MMM:FM:NB:LHM

The next California Fuel Cell Partnership (CaFCP) Executive Board meeting is scheduled for October 17, 2017, in Sacramento.

Additional information about the CaFCP can be found at <http://www.fuelcellpartnership.org>.

Attachments

- 1) CaFCP April 25, 2017 Executive Board Meeting Agenda
- 2) CaFCP Quarterly Update (October–December 2016)
- 3) CaFCP Quarterly Update (January–March 2017)

April 25th Public Forum Agenda
Accelerating Commercialization in California
UCLA Meyer & Renee Luskin Conference Center – Legacy Room
425 Westwood Plaza, Los Angeles, CA 90095

30 minutes

8:45am–9:15am
CaFCP Chair, C Parker
CaFCP Exec Director, B Elrick

1. Welcome and opening remarks

CaFCP is crafting the vision for market acceleration of FCEVs and hydrogen stations, deployment of fuel cell electric buses, and introduction of fuel cell electric trucks. Today's meeting will help guide the direction of the next CaFCP roadmap.

75 minutes

9:15am–10:30am
Progress (GO-Biz)

2. 100 stations and Beyond

California has a milestone of 100 stations that will be co-funded through the CEC ARFVTP, and 65 stations are currently funded. After a review of where we are today and the next short-term goals and an overview of the common image of early market success, we'll discuss building upon lessons learned and mechanisms that may be most useful for reaching a sustainable market.

30 minutes

10:30am–11:00am

Break

60 minutes

11:00am–12:00pm
Renewable H2 (UC Irvine)
H2@Scale (NREL)
Grid integration (Nel)

3. Opportunities for Renewable Hydrogen

Renewable hydrogen plays an important role in mobile and stationary applications, and supporting the electrical grid. Leveraging these other markets may help increase the amount of renewable hydrogen in the transportation system. After learning about the market factors and opportunities for renewable H2 in other applications, we'll discuss how hydrogen stations might benefit.

60 minutes

12:00pm–1:00pm

Lunch *(on own)*

120 minutes

1:00pm–3:00 pm
Europe (Intelligent Energy)
Japan (HySUT)
H2USA (General Motors)
H2 Mobility (Daimler)
H2 Council (Air Liquide)

4. Perspectives on Commercialization

Commercial rollout is occurring across the globe, and each region is developing a slightly different approach to deployment. We'll take a close look at the different approaches and talk about how they can help the globalization of hydrogen, and which ideas and experiences California can use to accelerate deployment.

30 minutes

3:00pm–3:30pm

Break

60 minutes

3:30pm–4:30pm
CaFCP, B Elrick

5. Executive Board Business Meeting

- 2016 program plan review and progress on 2017 plan
 - 2018 meeting dates
 - New member proposals
 - Public comment period*
-

15 minutes

4:30–4:45pm
CaFCP Chair, C Parker

6. Meeting Wrap up

* **Public comment period** : The public comment period provides an opportunity for members of the public to address the executive board on subject matters within the interest of CaFCP. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak.

Agenda items may be taken out of order and times may vary from those listed in the agenda. The board may choose to limit public comment at the chair's discretion.

This meeting is open to the public and will not be available by phone. This facility is accessible to persons with disabilities. Deadline for requesting ADA modification is **April 12, 2017**. Meeting materials will be posted at www.caftp.org.

CaFCP Quarterly Update
October – December 2016**Background**

The California Fuel Cell Partnership is a unique collaborative of auto manufacturers, energy companies, fuel cell technology companies and government agencies, including SCAQMD. This report summarizes CaFCP activity in or related to Southern California for January to March 2016.

In its fourth phase, 2013-2016, CaFCP members, individually or in groups, will focus on meeting these goals to achieve market launch:

- Prepare for larger-scale manufacturing, which encompasses cost reduction, supply chain and production.
- Work on the customer channel, including identifying and training dealers and service technicians.
- Reduce costs of station equipment, increase supply of renewable hydrogen at lower cost, and develop new retail station approaches.
- Support cost reduction through incentives and targeted RD&D projects
- Continue research, development and demonstration of advanced concepts in renewable and other low-carbon hydrogen.
- Provide education and outreach to the public and community stakeholders on the role of FCVs and hydrogen in the evolution to electric drive.

CaFCP and members' activities fall within three main strategic directions:

1. Support hydrogen station and vehicle deployment to enable commercial market launch in 2015 timeframe
2. Show feasibility and a clear value proposition to consumers, businesses and communities
3. Focus existing resources, engage new groups and pursue innovative concepts to overcome early market challenges

To successfully implement the vision, CaFCP activities must focus on technical, communications and business operations/strategies that require convening, collaborating and communicating.

2016 Program Plan
Q4 accomplishments



1. Develop Infrastructure	
<i>Develop the necessary infrastructure and processes to support early commercial launch and expanded vehicle rollout.</i>	
Support the construction and commissioning of current California hydrogen stations by participating in codes, standards and regulation processes; facilitating station commissioning processes; and supporting station openings.	<ul style="list-style-type: none"> SAE J2601-2016 Fueling Protocols for Light Duty Gaseous Hydrogen Surface Vehicles was published in December 2016. Supported ribbon cutting at Campbell hydrogen station. SOSS was successfully added to 4 additional stations in Q4 bringing the total of stations on SOSS to 25 Open-retail and 6 non-retail stations. Stations added to SOSS in Q4 include Woodland Hills (10/5/2016), Hollywood (11/10/2016), Anaheim (11/29/2016), Del Mar (12/2/2016). ANSI/CSA HGV 4.3 <i>Test methods for hydrogen fueling parameter evaluation</i> Published August, 2016 SAE J2719/1 Application Guideline for Use of Hydrogen Quality Specification in committee- comments being addressed.
Prepare for future funding through outreach and education with fueling retailers and hydrogen industry.	<ul style="list-style-type: none"> Staff held discussions/briefings with fuel retailers throughout the state regarding the potential integration of hydrogen into their existing operations - located both inside and beyond targeted areas identified by CEC.
Work with stakeholders to identify potential future station locations.	<ul style="list-style-type: none"> Keith and other staff have been talking with Caltrans about their needs for hydrogen station locations to support their 20 Toyota Mirai.
Develop Road Map 2.0 with strategies for a sustainable network in California.	<ul style="list-style-type: none"> Discussed and identified action items for achieving the “at least 100 publicly accessible hydrogen stations” (AB8) goal and beyond during the December 7-8 CaFCP Working Group meeting
2. Share and Synchronize Experience	
<i>Provide forums and opportunities for members to advance group collaboration and progress within CaFCP and among stakeholders.</i>	
Build and expand trust among members through open communication and forums.	<ul style="list-style-type: none"> Organized and executed the publicly accessible October 18 CaFCP Executive Board meeting at the California Energy Commission. Organized and completed the December 7-8 in-person CaFCP Working Group meeting Conducted sub-group meetings (OEM and Station Developer/Operator Groups) to address issues related to




	SOSS, station implementation, dispenser integration, station availability/reliability, data collection and the implementation of the temporary fueler.
Communicate with stakeholders nationally and internationally to share learnings and amplify market launch efforts.	<ul style="list-style-type: none"> Organized and executed “International HRS Implementation Lessons Learned Exchange” on December 6 between CaFCP, CARB, CDFA DMS, Smart Chemistry and the Clean Energy Partnership (Germany) to discuss global challenges and common needs, including the need for global definitions. Staff participated in H2USA workgroup meetings to provide California input on commercialization efforts in the Northeast. Staff coordinated CAFCP member participation in the November Osaka Chamber of Commerce and Industry business delegation event in Los Angeles.
4. Expand Markets	
<i>Restructure CaFCP to be more inclusive and capable of meeting the expanding commercial market needs and opportunities, broadening the member base, and being the voice of all stakeholder participants</i>	
Establish new structure and expand membership.	<ul style="list-style-type: none"> Reaching out to recommended new members and staff continue to identify potential members.
Support deployment of fuel cell bus Centers of Excellence and the Bus Team.	<ul style="list-style-type: none"> Continued participation in background meetings with Sierra Club ZEB coalition. CaFCP and CHBC developed a letter together for LA Metro regarding the Rambol Environ report: “Zero Emission Bus Options: Analysis of 2015-2055 Fleet Costs and Emissions” and M.J. Bradley & Associates APTA webinar presentation: “Zero and Near Zero Bus Options”. The letter addressed a number of inaccuracies and issues regarding the assessment of fuel cell electric bus options in the report and presentation. Published the “CaFCP Fuel Cell Electric Bus Fact Sheet” for outreach. Participated in the California Transit Association’s annual fall conference on November 17 - Breakout 2 Maintenance: zero-emission bus sessions Participated as an invited panel member at the International Zero Emission Bus Conference and 10th Edition Fuel Cell Bus Workshop, Nov 30-Dec 1 in London, UK. For more information, go to: http://www.gofuelcellbus.com/index.php/workshops/2016-workshop/
Publish and implement the Medium- and Heavy-Duty Road Map document.	<ul style="list-style-type: none"> On October 20, shared about fuel cell electric trucks at the public CARB Board meeting in Fresno. Shared an overview of the FCET Action plan with the staff of the San Joaquin Valley Air Pollution Control District. Presented a high level overview of the FCET Action Plan at

	<p>the October 5 CHBC Hydrogen & Fuel Cell Summit.</p> <ul style="list-style-type: none">• Published CaFCP's <i>"Fuel Cell Electric Truck Action Plan for California"</i>• Held public webinar on Tuesday November 8 to provide an in-depth overview of the content of the FCET Action Plan• Participated in the November 14 CARB Heavy-Duty Transportation Electrification Workgroup Meeting.
Support activities outside of California, as directed by members	<ul style="list-style-type: none">• None in Q4

3. Reach Target Audiences

Communicate, educate, inform and promote H2 & FCEVs benefits and opportunities to key outside stakeholders and general public for increased and continued support. Become readily recognized as the face of the industry for trustworthy information and assist.

Activity	Description	Picture
Science In The Park STEAM Event, Oct. 1, 2016, Fremont, CA.	Juan C. - Static display, Mirai, Supporting Assemblymember Bill Quirk's district	 <p>~Over 500 in attendance. Spoke close to 150 attendees.</p>
CHBC Fall Summit, October 5-6, 2016, Sacramento, CA	Juan C. - Static display. Member support Honda Clarity and Toyota Mirai	<p>~150 CARB employees stopped to check out the new 2017 Honda Clarity and 2016 Toyota Mirai</p>
League of California Cities Conference and Expo, October 5-6, 2016, Long Beach, CA	Keith M and Joe G – Exhibit display, Toyota Mirai	 <p>~50 city officials</p>

Fleet Week, October 7, 2016. San Francisco, CA.	Juan C and Keith M – Exhibit display, Member support (Linde) and Toyota Mirai	 <p>~200 attendees</p>
Charge Across Town, October 7-9, 2016, San Francisco, CA	CaFCP staff – Exhibit display, Test Ride and Drive, Honda Clarity, Toyota Mirai, Hyundai Tucson, MB B-Class F-Cell	 <p>Over 100 test drives. 500 in attendance</p>
League of Cities & Young Professionals, October 11, 2016, Sacramento, CA	Juan C and Bill Elrick – Speaker, Static display	CaFCP Presentation – 65 attendees
Campbell Ribbon Cutting Event, October 21, 2016, Campbell, CA	Juan C and Keith M – Ribbon event, member support Toyota, FE	

		25 guests – Mayor’s Office, Local chamber of commerce,
CaFCP MD/HD Fuel Cell Truck Action Plan for California, November 8, 2016, CaFCP HQ’s.	Nico B. Webinar Presentation	Registration: 200 ppl. Actual Participation: 105 ppl.
California Desert Air Working Group Annual Conference, November 15-17, Las Vegas, NV	Keith M. Presentation	100 Attendees
Ca. Transit Association Conference, hosted by AC Transit, November 17-18, 2016, Oakland, CA	Nico B. Member support	700+ attendees
Zero Emission Bus Conference and Fuel Cell Bus Workshop, November 30- December 1, 2016, London, UK	Nico B. Speaker, presenter	~250 in attendance Presentations posted at: http://www.cte.tv/zebc_presentations/

Legislative, NGO & Policy

Conduct one-on-one meetings with California state and federal elected officials and their staff in district and capitol offices. Conduct one-on-one meetings with influential NGOs at the local, state and national levels. Emphasize California's commitment to hydrogen and provide information about progress and plans. Provide education and information to policy makers.

2016 Q4 Statistics – Meetings and encounters

Elected officials: **14 and 5** (2016 total and Q4 total)

Legislative staff: **82 and 12** (2016 total and Q4 total)

NGOs: **8 and 4** (2016 total and Q4 total)

Event name	Meeting Date	Meeting with (Names and titles of all persons)
Ribbon cutting	10/21/2016	Assembly Member Evan Lowe and district director and Campbell Mayor Jason Baker
District office briefing	10/24/2016	Julia Juarez, Tonya Martin and Suely Saro
Capitol meeting	12/6/2016	Senator Transportation Committee: Randy Chin and Erin Riches
Capitol meeting	12/6/2017	Assembly Transportation Committee: Vicky Alvarez
Capitol meeting	12/6/2016	Office of Assembly Member Jacqui Irwin (D-Camarillo): Brett Williams and Ryan Van Zuylen
Capitol meeting	12/6/2016	Office of State Senator Ben Hueso (D-San Diego) Aaron Brieno and Alexis Castro
Capitol meeting	12/6/2016	Office of State Senator Toni Atkins: Sarah Boot
Western Governors Association	12/13/2016	Governor Jerry Brown
Western Governors Association	12/13/2016	Governor John Hickenlooper (Colorado)
Western Governors Association	12/13/2016	Governor Butch Otter (Idaho)
Community event	12/18/2016	Congressman Ami Bera (D-Sacramento)

Website and Social Media

We provide outreach and education through events, materials, video, web and social media that increase awareness in the general public, build support in early market communities and support other projects' specific goals. Our online strategy is to deliver real-world information about FCEVs and hydrogen stations to early adopter audiences. We use email, blogs, Twitter, YouTube and Facebook to share messages about FCEV commercialization and technology with different audience types.

www.cafcp.org	Oct-16	Nov-16	Dec-16
Number of visits	10,199	9,821	11,991
Average time users spent on site	1:59	2:19	1:54
Most visited pages	Home page Station map Stations Cars Woodland Hills Station	Station map Home page Stations Cars UC Irvine Station	Station map Home page Stations Cars Hydrogen Station Webinar Blog
Most searched keywords on Google to land on CaFCP website	hydrogen filling station south river road sacramento ca california fuel cell partnership cafcp hydrogen fuel stations in california website buttons sharebutton.to	hydrogen filling station south river road sacramento ca california fuel cell partnership cafcp hydrogen fuel stations in california website buttons sharebutton.to	california fuel cell partnership truck cafcp soss hydrogen fuel stations hydrogen fueling stations
Most referred websites	google m.cafcp.org automobiles.honda.com roadandtrack.com bing	google automobiles.honda.com m.cafcp.org popularmechanics.com bing	google automobiles.honda.com m.cafcp.org yahoo bing

FACEBOOK	Oct-16	Nov-16	Dec-16
New likes			

	22	26	17
Lifetime likes	2,820	2,835	2,838
Lifetime Post Total Reach	13,158	8,520	7,038
Lifetime Engaged Users	462	511	289

TWITTER	Oct-16	Nov-16	Dec-16
Tweets for the month	153	57	52
Tweet Impressions	73,900	37,200	31,600
Profile visits	1,836	1,155	1,015
Mentions	288	212	307
New Followers	72	61	83
Total Followers	3,028	3,183	3,266

E-blast – National Hydrogen Day is Coming!	
Sent Oct 4, 2016	
Contacts:	11,643
Opened:	11.9% - 1,384 contacts
Bounced:	3.2% - 369 contacts
No Info:	84.9% - 9,890 contacts
Clicked:	1% - 133 contacts
Unsubscribed:	13

E-blast – 2016 ZEV Action Plan from the State of California	
Sent Oct 12, 2016	
Contacts:	11,573
Opened:	13.3% - 1,543 contacts
Bounced:	2.8% - 326 contacts
No Info:	83.9% - 9,704 contacts
Clicked:	2% - 267 contacts
Unsubscribed:	10

E-blast – Campbell H2 station ribbon cutting - Friday, October 21	
Sent Oct 19, 2016	
Contacts:	355
Opened:	32.7% - 116 contacts
Bounced:	1.4% - 5 contacts
No Info:	65.9% - 234 contacts
Clicked:	1% - 3 contacts
Unsubscribed:	0

E-blast – Medium & Heavy-Duty Fuel Cell Electric Truck Action Plan, November 8	
Sent Oct 21, 2016	
Contacts:	11,566
Opened:	13% - 1,505 contacts
Bounced:	2.8% - 328 contacts
No Info:	84.2% - 9,733 contacts
Clicked:	2% - 222 contacts
Unsubscribed:	24

E-blast – Webinar Q&A: Medium & Heavy-Duty Fuel Cell Electric Truck

E-blast – CaFCP Members Only Newsletter, November 2016	
Sent Nov 7, 2016	
Contacts:	384
Opened:	19.5% - 75 contacts
Bounced:	0.8% - 3 contacts
No Info:	79.7% - 306 contacts
Clicked:	1% - 3 contacts
Unsubscribed:	0

Action Plan 11/8	
Sent Nov 10, 2016	
Contacts:	200
Opened:	46.0% - 92 contacts
Bounced:	1.0% - 2 contacts
No Info:	53.0% - 106 contacts
Clicked:	18% - 36 contacts
Unsubscribed:	0

E-blast – Hydrogen Stations Webinar, December 15: Update on Network Development Status in California	
Sent Dec 5, 2016	
Contacts:	11,434
Opened:	11.3% - 1,291 contacts
Bounced:	3.3% - 372 contacts
No Info:	85.5% - 9,771 contacts
Clicked:	2% - 187 contacts
Unsubscribed:	10

E-blast – CaFCP Members Only Newsletter, December 2016	
Sent Dec 6, 2016	
Contacts:	381
Opened:	23.9% - 91 contacts
Bounced:	0.5% - 2 contacts
No Info:	75.6% - 288 contacts
Clicked:	6% - 24 contacts
Unsubscribed:	1

E-blast – December 15 Hydrogen Stations Update Webinar Questions and Answers	
Sent Dec 19, 2016	
Contacts:	350
Opened:	54.6% - 191 contacts
Bounced:	2.3% - 8 contacts
No Info:	43.1% - 151 contacts
Clicked:	19% - 67 contacts
Unsubscribed:	0

CaFCP Quarterly Update

January – March 2017

Background

The California Fuel Cell Partnership is a unique collaborative of auto manufacturers, energy companies, fuel cell technology companies and government agencies, including SCAQMD.

CaFCP members, individually or in groups, will focus on meeting these goals to achieve market launch:

- Prepare for larger-scale manufacturing, which encompasses cost reduction, supply chain and production.
- Work on the customer channel, including identifying and training dealers and service technicians.
- Reduce costs of station equipment, increase supply of renewable hydrogen at lower cost, and develop new retail station approaches.
- Support cost reduction through incentives and targeted RD&D projects
- Continue research, development and demonstration of advanced concepts in renewable and other low-carbon hydrogen.
- Provide education and outreach to the public and community stakeholders on the role of FCVs and hydrogen in the evolution to electric drive.

CaFCP and members' activities fall within three main strategic directions:

1. Support hydrogen station and vehicle deployment to enable commercial market launch
2. Show feasibility and a clear value proposition to consumers, businesses and communities
3. Focus existing resources, engage new groups and pursue innovative concepts to overcome early market challenges

To successfully implement the vision, CaFCP activities must focus on technical, communications and business operations/strategies that require convening, collaborating and communicating.

2017 Program Plan
Q1 accomplishments



1. Develop Infrastructure	
<i>Develop the necessary infrastructure and processes to support early commercial launch and expanded vehicle rollout.</i>	
Support the construction and commissioning of current California hydrogen stations by participating in codes, standards and regulation processes; facilitating station commissioning processes; and supporting station openings.	<ul style="list-style-type: none"> • SAE J2601 re-opened and a new document, SAE J2601/4 started for ambient temperature, fixed orifice fueling. • CSA HGV 4.3 opened to harmonize with J2601-2016. • J Hamilton is the new chair of the ASTM D03.14 subcommittee for Hydrogen and Fuel Cells. Three documents at ballot (1 new work item and 2 revisions); Interlaboratory Study for ASTM D7941_D7941M - Test Method for Hydrogen Purity Analysis Using a Continuous Wave Cavity Ring-Down Spectroscopy Analyzer • SAE J2719/1 Application Guideline for Use of Hydrogen Quality Specification in committee- comments being addressed. • Members and SAE committees increasingly identify the need for developing SAE J2601/2 “HD gaseous hydrogen fueling protocol” (TIR) to the level of full standard and include 70MPa fueling. • Participated in Jan 30 CEC Workshop on Implementation Strategies for Production of Renewable H2 in CA and shared about LCFS context and options for expanded inclusion of RH2. • Served as reviewer of DOE H2 infra related projects in US DRIVE Hydrogen Delivery Tech Team and Codes and Standards Tech Team meetings.
Prepare for future funding through outreach and education with fueling retailers and hydrogen industry.	<ul style="list-style-type: none"> • CAFCP had a booth exhibit at the WPMA conference in February. Staff held discussions with fuel retailers located both in California and neighboring states about the status of the hydrogen fueling network development in California and the growing number of FCEVs on the road. • Staff held numerous educational discussions with companies already involved in the industry and those interested in moving into the hydrogen FCEV market (e.g. NICE, WireTough, H2SG Energy, etc.). • Staff held educational discussions with companies interested in potentially investing in the hydrogen infrastructure market (RE2H2 Energy Development and others) and energy industry analysts (Bloomberg)
Work with stakeholders to identify potential future station locations.	<ul style="list-style-type: none"> • Keith and other staff continue to talk with Caltrans about their needs for hydrogen station locations to support their 20 Toyota Mirai. Staff is encouraging Caltrans staff to present to the CaFCP membership at the June 2017 Working Group meeting.



	<ul style="list-style-type: none"> Through meetings and conversations with fuel retailers, staff have referred interested companies to hydrogen station developers to further evaluate potential new locations for hydrogen refueling stations.
Develop Road Map 2.0 with strategies for a sustainable network in California.	<ul style="list-style-type: none"> Ongoing discussions about draft at in-person member meetings and through direct member feedback.
2. Share and Synchronize Experience	
<i>Provide forums and opportunities for members to advance group collaboration and progress within CaFCP and among stakeholders.</i>	
Build and expand trust among members through open communication and forums.	<ul style="list-style-type: none"> Organized and completed the March 15-16 in-person CaFCP Working Group meeting Conducted sub-group meetings (OEM and Station Developer/Operator Groups) to address issues related to SOSS, station implementation, dispenser integration, station availability/reliability, data collection and the implementation of the temporary fueler.
Communicate with stakeholders nationally and internationally to share learnings and amplify market launch efforts.	<ul style="list-style-type: none"> Staff coordinated CAFCP member participation in a visit by Norwegian representatives of Akershus County. Staff held meetings with industry representatives from Canada to provide feedback on the Canadian effort to establish an organization similar to the California Fuel Cell Partnership. Staff conducted its quarterly Hydrogen Station Network Development Update webinar in March. Attendees included industry and government officials from the US, Europe, Latin America and Asia.
4. Expand Markets	
<i>Maintain CaFCP to be more inclusive and capable of meeting the expanding commercial market needs and opportunities, broadening the member base, and being the voice of all stakeholder participants. Support the rollout of FCEBs in revenue service and MD/HD FCETs in freight movement operations in California.</i>	
Maintain strong organization through new structure and expand membership.	<ul style="list-style-type: none"> Reaching out to recommended new members and staff continue to identify potential members. Prepared new member recommendations for Executive Board meeting in April.
Support deployment of fuel cell bus Centers of Excellence and the Bus Team.	<ul style="list-style-type: none"> Staff continue to participate in background meetings with Sierra Club ZEB coalition. Provided support to SunLine Center of Excellence implementation where necessary. Participated in CARB workgroups that provide input in development process of Innovative Clean Transit regulation.
Publish and implement the Medium- and Heavy-	<ul style="list-style-type: none"> Met with Truck and Engine Manufacturers Association in Chicago to share key points of FCET Action Plan.


Duty Action Plan document.	<ul style="list-style-type: none">Planned Q2 workshop with DOE to discuss updates on published MD/HD FCET Action Plan and FCET technical targets.
Facilitate support for needed MHD fueling infrastructure and support SAE J2601-2 to level of a standard	<ul style="list-style-type: none">Supported CTE and SCAQMD in assessment of temporary fueling solution for six DOE/SCAQMD/CEC funded drayage/short haul fuel cell trucks for Port of Long Beach/LA.Discussed need for update SAE J2601-2 document with SAE Fueling Interface Committee lead and need for update of J2600 (related fueling interface standard).
Support activities outside of California, as directed by members	<ul style="list-style-type: none">On March 22, participated in workshop titled “Learning from California: Alternative Fuels, Vehicles, and Infrastructure” organized by Oregon DOT, Caltrans & FHWA, with state DOT participants from 10 different states.

3. Reach Target Audiences

Communicate, educate, inform and promote H2 & FCEVs benefits and opportunities to key outside stakeholders and general public for increased and continued support. Become readily recognized as the face of the industry for trustworthy information and assist.

Activity	Description	Picture
Signal Hill Sustainability Committee, Signal Hill, Feb. 2	Speaker: Keith	No picture available.
SAE 2017 Hybrid and Electric Vehicle Tech Symposium, San Diego, Feb. 7-9	Speaker: Bill	No picture available.
Akershus Delegation Tour of bay area hydrogen stations and stationary, Feb. 15	Network: Keith	
WPMA Conference and Expo, Las Vegas, Feb.	Exhibitor: Joe and Juan	

Fuel cell vehicles presentation, Santa Barbara, Feb. 22	Presentation: Keith	
Clean, Low Carbon Fuels Summit, Sacramento, Feb. 28	Network: Bill	No picture available.
Harvey Mudd College Event, SoCal, Feb. 28	Static display: Keith	No picture available.
ER Training – Linde/San Ramon Fire, San Ramon, March. 6-10		

Environmental Justice & Corporate America's Responsibility to Protecting the Communities They Serve, Inglewood, March 16	Network: Keith	
Hydrogen Station Network Development in California Webinar, Sacramento, March 22	Presenter: Joe and Ben	Registered: 302 Attended: 168
South African Delegates, CaFCP HQ, March 27	Meeting: Chris	Attended: 4 delegates

Legislative, NGO & Policy

Conduct one-on-one meetings with California state and federal elected officials and their staff in district and capitol offices. Conduct one-on-one meetings with influential NGOs at the local, state and national levels. Emphasize California's commitment to hydrogen and provide information about progress and plans. Provide education and information to policy makers.

The contacts listed here do not include elected officials and staff reached through mass emails or basic email communications with staff.

2017 Q1 Statistics – Meetings and encounters

Elected officials: **1**

Legislative staff: **12**

NGOs: **1**

Event name	Meeting Date	Meeting with
Meeting	1/24/2017	Will Barrett, American Lung Association
District Office	2/7/2017	Marisol Barajas, office of Assembly Member O'Connell (D-Long Beach)
District Office	2/14/2017	Reina Lopez, office of Assembly Member Bonta (D-Oakland) and Tasha Henneman, office of State Senator Nancy Skinner
District Office	2/22/2017	Allegra Roth, office of Assembly Member Monique Limon (D-Santa Barbara)
District Office		Brad Hudson, office of State Senator Hannah-Beth Jackson (D-Santa Barbara)
Conversation	2/27/2017	State Senator Tony Mendoza (D-Cerritos)
Capitol office	3/20/2017	Kellie Smith, Chief Consultant, Assembly Utilities and Energy
Capitol office	3/21/2017	Alex Soto, office of Assembly Member Marc Berman (D-Palo Alto)
Capitol office	3/21/2017	Priscilla Quiroz, office of State Senator Nancy Skinner (D-Oakland)
Capitol office	3/21/2017	Paco Torres, legislative director for Assembly Member Sabrina Cervantes (D-Corona)
Capitol office	3/22/2017	Don Wilcox, chief of staff, State Senator Josh Newman (D-Brea)
Capitol office	3/22/2017	Anthony Molina, legislative director, State Senator Anthony Portantino (D-La Canada Flintridge)
Capitol office	3/23/2017	Marla Cowan, legislative director, Assembly Member Juan Arambula (D-Central Valley)

Website and Social Media

We provide outreach and education through events, materials, video, web and social media that increase awareness in the general public, build support in early market communities and support other projects' specific goals. Our online strategy is to deliver real-world information about FCEVs and hydrogen stations to early adopter audiences. We use email, blogs, Twitter, YouTube and Facebook to share messages about FCEV commercialization and technology with different audience types.

www.cafcp.org	Jan-17	Feb-17	Mar-17
Number of visits	10,592	19,274	22,941
Average time users spent on site	2:06	1:49	1:50
Most visited pages	Station map Home page Stations Cars Buses & Trucks	Station map Home page Stations Cars Buses & Trucks	Station map Home page Stations Cars Buses & Trucks
Most searched keywords on Google to land on CaFCP website	california fuel cell partnership truck hydrogen fueling stations hydrogen stations website buttons sharebutton.to	truck california fuel cell partnership hydrogen fueling stations www.m.cafcp.org hydrogen fuel stations	truck california fuel cell partnership hydrogen fueling stations trucks www.cafcp
Most referred websites	google.com automobiles.honda.com bing yahoo t.co (Twitter)	google.com automobiles.honda.com yahoo bing blog.caranddriver.com	google.com automobiles.honda.com bing yahoo t.co (Twitter)

FACEBOOK	Jan-17	Feb-17	Mar-17
New likes	24	29	33
Lifetime likes	2,849	2,870	2,889
Lifetime Post Total Reach	14,016	13,216	13,421

Lifetime Engaged Users	695	605	626
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TWITTER	Jan-17	Feb-17	Mar-17
Tweets for the month	13	14	22
Tweet Impressions	10,600	16,900	20,100
Profile visits	901	1,232	1,261
Mentions	323	356	254
New Followers	50	64	68
Total Followers	3,299	3,299	3,299

E-blast – CEC and ARB Release Joint Staff Report	
Sent January 24, 2017	
Contacts:	11,278
Opened:	13.0% - 1,462 contacts
Bounced:	3.0% - 343 contacts
No Info:	84.0% - 9,473 contacts
Clicked:	2% - 193 contacts
Unsubscribed:	13

E-blast – CaFCP Annual Report to Members 2016	
Sent January 26, 2017	
Contacts:	380
Opened:	22.9% - 87 contacts
Bounced:	0.5% - 2 contacts
No Info:	76.6% - 291 contacts
Clicked:	8% - 32 contacts
Unsubscribed:	0

E-blast – CEC Announces Proposed Hydrogen Station Awards	
Sent February 17, 2017	
Contacts:	812
Opened:	18.3% - 149 contacts
Bounced:	12.6% - 102 contacts
No Info:	69.1% - 561 contacts
Clicked:	5% - 43 contacts
Unsubscribed:	0

E-blast – Hydrogen Stations Webinar, March 22: Update on Network Development Status in California	
Sent February 28, 2017	
Contacts:	11,205
Opened:	13.8% - 1,544 contacts
Bounced:	2.8% - 311 contacts
No Info:	83.4% - 9,350 contacts
Clicked:	2% - 229 contacts
Unsubscribed:	18

E-blast – California Proposes 16 Additional Hydrogen Stations	
Sent March 13, 2017	
Contacts:	11,175
Opened:	14.2% - 1,590 contacts

E-blast – Fuel cell buses clear the air in California, every day	
Sent March 6, 2017	
Contacts:	11,184
Opened:	13.0% - 1,458 contacts
Bounced:	2.6% - 294 contacts
No Info:	84.3% - 9,432 contacts
Clicked:	1% - 123 contacts
Unsubscribed:	12

Bounced:	2.6% - 293 contacts
No Info:	83.1% - 9,292 contacts
Clicked:	3% - 364 contacts
Unsubscribed:	9

E-blast – March 22 Hydrogen Stations Update Webinar Questions & Answers	
Sent March 28, 2017	
Contacts:	302
Opened:	52.3% - 158 contacts
Bounced:	1.0% - 3 contacts
No Info:	46.7% - 141 contacts
Clicked:	25% - 77 contacts
Unsubscribed:	0