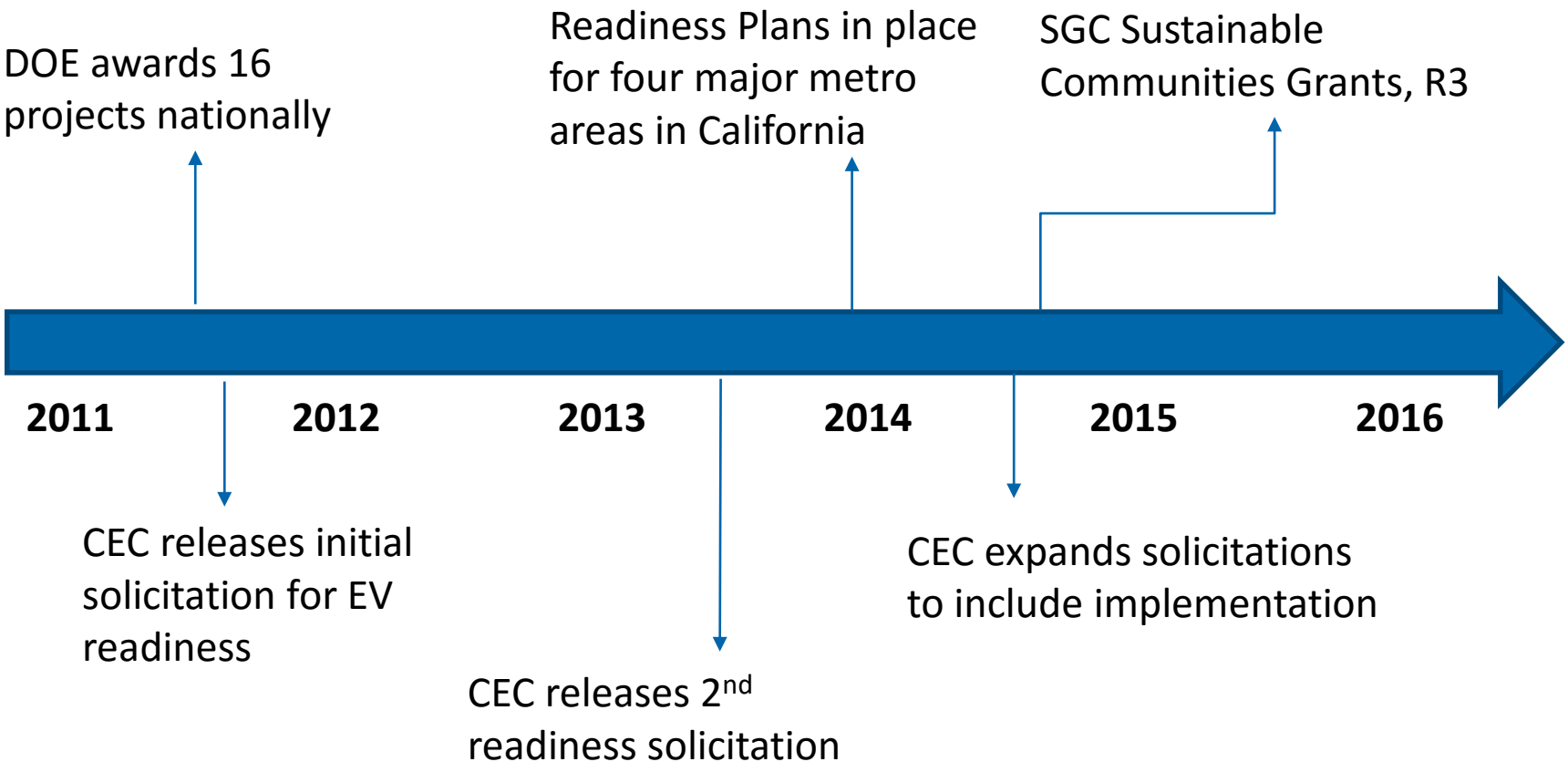
Readiness Planning & Implementation Activities in California

Session 1

STEPS Workshop: Critical Barriers and Opportunities for PEV Commercialization in California

April 26, 2016

History of Readiness Planning



Project Engagements

- **ICF is actively engaged in many projects at the local and regional level related to EV readiness and readiness implementation**
  - Driving to Net Zero, County of Santa Clara
  - Solano EV Transition Program, Solano Transportation Authority
  - Transportation Fuel Shift Plan, Sonoma County Transportation Authority
  - Tahoe-Truckee PEV Readiness Plan, Tahoe Regional Planning Authority
- **Previously completed plans:**
  - Bay Area PEV Readiness Plan, Bay Area Air Quality Management District
  - Coachella Valley PEV Readiness Plan, Coachella Valley Association of Governments
- **Extra credit for planning outside of California**
  - Delaware Valley (Philadelphia)
  - New Jersey

Apart from the shameless plug, this slide is more of a disclaimer: The views expressed are ICF's alone; further, they are neither reflective of any single engagement nor should they be misconstrued to represent those of an agency listed above.

Why Planning / Readiness Matters

- **ICCT White Paper: Assessment of leading electric vehicle promotion activities in United States cities**
  - Policy is driving accelerated EV deployment
  - Cities are leading on EVs in diverse ways
  - Best practices are starting to emerge
  - Cities are an important focal point for collaboration among govts, industry, utilities, and advocacy
- **Idaho National Labs, *How Does Utilization of Non-Residential EVSE Compare Between those Installed in Oregon in Planned versus Unplanned Locations?***
  - Charging equipment deployed in areas that fell within a planning process experienced nearly 90% greater utilization (as measured by charging events per week) compared to charging equipment deployed in so-called unplanned locations.

Review of Core Elements of Readiness Planning

- Zoning and Land Use
- Permitting & Inspection
- Building Codes
- Incentives
- Local Government Fleet Adoption
- Stakeholder Training & Education
- Consumer Education & Outreach

What are the real challenges in planning? (1 of 2)

- **Aligning long-term planning efforts with rapid changes in technology is difficult**
  - Which way is the vehicle market going to break? PHEVs vs BEVs?
  - How can planning be nimble enough to respond to those market shifts?
- **ADA compliance is costly and the need is uncertain**
  - Illustrative point: Assume 3% of spaces are dedicated to EVs, then 10% of those are ADA-accessible. And then let's assume 20% of charging is away-from home.
  - Drastically increasing the cost for a very small part of the population (this should **not** be interpreted as some knock on ADA requirements)
  - Burden of compliance falls on property owners, who are already trying to "do the right thing" by providing charging infrastructure
- **Progressive agencies are interested in prioritizing other modes of transportation**
  - You need parking to create charging, but many local govts are trying to reduce the amount of parking

What are the real challenges in planning? (2 of 2)

- **Local governments can have an impact on EV adoption, but it is small compared to the influence of the market – thereby creating a "wait-and-see" mentality**

- **Local governments have a mandate to serve everyone, and EV owners tend to be higher income constituents**
  - Local and regional governments certainly want to support electric vehicle readiness, particularly those agencies with whom we have worked directly.
  - However, there is always a part of the planning process that faces the question of "why are we doing this?" and the underlying premise is often linked to equity.

- **Electric vehicles are not a perfect fit for all government fleets**
  - Fleets are often mentioned as a good fit for EV adoption; but local government fleets often have unfavorable economics for EV adoption (e.g., via low mileage) or cannot find vehicles that will fulfill their requirements (e.g., four wheel drive or towing)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