Building Decarbonization 2019 plan

The work will be carried out across 5 work streams: Market Transformation, Consumer Inspiration, Public Policy, Research and Governance.

- **Market Transformation**: The Coalition will develop and implement a series of initiatives aimed at developing the marketplace for building decarbonization through electrification. These efforts include transforming the state’s workforce through builder and installer support and training, providing recognition to qualified professionals and high quality, all-electric buildings, driving technological change through leadership specifications and procurement, assisting local governments in adopting reach codes, and establishing a project finance landscape to attract investment.

- **Consumer Inspiration**: The Coalition will engage in initiatives to uncover consumer preferences, test messaging and implementing campaigns that will give consumers and supply-side market players information to understand building decarbonization and tools to take the initiative for action. The Coalition will focus on a wide ranging consumer education campaign and an induction cooking campaign.

- **Public Policy**: The Coalition does not lobby government agencies. Instead, its public policy activities are focused on convening stakeholders to advance the field on key issues, producing studies and white papers that can inform stakeholders who are taking part in policy forums, and assisting entities in their own inquiry. In 2019 the Coalition will provide research support geared toward aligning state policy, adjusting the state’s building code, implementing SB 1477, as well as on public procurement opportunities, rate design and local government assistance.

- **Research**: The Coalition will define a medium-term (1-5 year) research agenda to address the leading unanswered questions holding building decarbonization back. The coalition will not be conducting all of this research alone; instead, it will promote the agenda throughout the research community and work to ensure that relevant questions are addressed by various members and partners.

- **Governance**: The Coalition formed in 2018 and adopted its Roadmap on a consensus basis without a governance structure, membership system or staffing beyond its director. As the activity of the Coalition will substantially increase in 2019, so to must its governance and organizational systems. To this end the Coalition will be forming an Advisory Board, adopting governance policies and procedures, instituting a membership program including dues, and bringing on staff to oversee key initiatives.

**Timeline and Deliverables**

**Market Transformation**

I. **Builder Support and Project Recognition**

The Coalition will investigate builder and contractor needs for future programmatic development and develop recognition programs for quality contractors and all-electric projects.
Builder Needs Assessment

- Market assessment of production home and commercial builders in California and what their preferences, opinions and needs are regarding building and promoting all-electric.
- Recommendations for policies, programs, permitting and other solutions to support builders to build all-electric developments.

All-electric Development and Building Recognition Program

- Scoping study of what an All-electric development and building recognition program (such as Gold Medallion or LEED) could include. Scoping would include, types of projects, forms of recognition, builder and designer appeal, administration of recognition, ownership of the program, market interaction and other considerations.
- Study would recommend a proposed recognition program and components.

Contractor Needs Assessment, Support and Accreditation Program

- Market assessment of residential and commercial contractors in California and what their preferences, opinions and needs are regarding replacing gas end uses with electric.
- Recommendations for policies, programs, permitting and other solutions to support contractors to install electric heating.
- Create and maintain a centralized resource for contractors to access information on best practices, technology, programs and other information critical for their installation of electric heating.
- Assessment of needed skills, abilities and experience for building electrification professionals.
- Criteria for recognition of a building electrification professional through a professional designation.
- Rules, policies, and initiatives needed to start and promulgate a successful building electrification professional accreditation program.

II. Technology Transformation

The Coalition will work with OEMs and other stakeholders to develop specifications for key electrification technologies to help drive innovation and overcome current market failures through policy, procurement, program and permitting interventions.

Electrification Technology Needs Assessment

- Assessment of the current key electrification technology models and their market applications.
- Identification of technical and market problems with current offerings.
- Proposed improvements to current model portfolios that can lead to specification

Leadership Specifications

- Convene stakeholders to discuss two of the technologies identified from the Needs Assessment that show greatest opportunity for emissions reductions to develop leadership specifications that can be used by policy-makers and program administrators to drive technology change.
- Programmatic frameworks for the two chosen technologies that can be used by policy-makers, program administrators and permitting agencies to advance the installation of high quality models of the technology.

Electrical Panel Innovation Report
Building Decarbonization 2019 plan

- Research the issues related to electrical panels and service and the barriers they present for electrification.
- Convene stakeholders for a one-day Electrical Panel Summit to discuss challenges, solutions, innovations and other issues regarding electrical panels and service.
- Produce a white paper on the state of the electrical panel and service and opportunities for upgrading, innovation, considerations for market players and analysis of policy needed.

Procurement

- Explore opportunities with the State Department of General Services to use purchasing power of state government to award master contracts for technologies to lower costs, improve quality and open access to low-income programs, local governments and other installers.
- Work with procurement aggregators, co-ops, partnerships and other platforms to spread the use of the leadership specifications to increase depth of use and benefits.

III. Finance

The Coalition will work with stakeholders to investigate innovative approaches to building electrification finance that can assist California in developing an attractive investment environment. The Coalition will work to implement the solutions through policy and program partners.

Building Electrification Investment

- Conduct research into best practices and possible directions California could take to attract private investment at scale.
- Hold no less than two convenings of stakeholders from policy, finance, energy and other sectors to discuss how to develop California’s electrification progress in a way that encourages private investment.
- Produce a report summarizing the research and findings from the convenings to guide policy and programs seeking to encourage investment.

Consumer Inspiration

The Coalition will develop two statewide campaigns to educate consumers about the benefits of building electrification and induction cooking respectively, and inspiring them with tools to take action and inspiration to do so. The campaigns will roll-out in late 2019/early 2020 as funding is secured over the course of 2019. The campaigns will include traditional and social media, a one-stop website and collateral to be used to co-brand with Coalition members and other stakeholders.

I. Consumer Market Research and Campaign Development

Consumer education campaign market assessment and campaign development – RFP released February 15th.

The contractor will:

- Review existing and develop new research to help determine the target audiences, prominent barriers and opportunities, and the key messages.
- Develop profiles for target audience groups, barriers that exist for each group, group values and the types of messages that will help move these groups.
Building Decarbonization 2019 plan

- Develop messaging, creative and branding and execute a testing plan.
- Develop a campaign strategy rollout plan, timeline and budget.

II. Induction Cooking Market Research and Campaign Development

Resistance to electric cooking is often presented as the greatest challenge to greater adoption of building electrification technologies. Part of this resistance stems from consumer dislike of traditional electric ranges in comparison to gas. However, induction cooking technology (which uses electromagnets to heat cookware directly) offers an alternative to traditional ranges that heats faster, provides more control, and is more efficient.

The opportunity for partnerships with manufacturers, chefs, food media and building electrification stakeholders to educate commercial and residential consumers on the benefits of induction cooking is great. The Coalition will develop a campaign to leverage food media, celebrity chefs, manufacturer and retail partners to drive demand.

Induction cooking campaign market assessment and campaign development

The contractor will:
- Review existing and develop new customer research to help determine the target audiences, prominent barriers and opportunities, and the key messages and messengers.
- Develop profiles for target audience groups, barriers that exist for each group, group values and the types of messages that will help move these groups.
- Develop messaging, creative and branding and execute a testing plan.
- Develop a campaign strategy and rollout plan, timeline and budget.

Public Policy

The Coalition does not lobby public officials on legislation, policies, rules or regulations. Instead it explores issues and ideas relevant to public policy and publishes materials that can be used by participants in public policy forums. In 2019 the Coalition will focus on identifying how the state can align its policies around building decarbonization and research that will support key policies that will be active during the year.

I. State alignment
- Coalition will identify all state policies that are either hindering building decarbonization or ones that could be modified to accelerate building decarbonization. The Coalition will then suggest how each policy could be adjusted to better support building decarbonization. The findings will be published and promulgated to interested parties.

II. SB 1477 Implementation
- The Coalition will develop a white paper examining possible pathways that the state and other jurisdictions could take in implementing programs like those called for under SB 1477. The Coalition will follow the proceeding to identify other times that it can assist in moving the collective knowledge-base forward.

III. Title 24
• The Coalition will monitor the California Energy Commission’s 2022 State Building Energy Efficiency Code (Title 24, Part 6) proceeding for opportunities to craft research and analysis that could be considered by stakeholders as they participate.

IV. Local Government Leadership

Locals governments are well positioned to push decarbonization through their local land use and permitting powers. The Coalition will help local governments do this through coordination, best practice development and regulatory advice.

Local Government Decarbonization Campaign

• The Coalition will develop a centralized resource for communities to access and share information on building decarbonization.
• The Coalition will coordinate regular online and in-person meetings between leadership communities to share progress and build a community of momentum.

Codes

The Coalition will assist local governments in navigating the rule-making process and stakeholder engagement locally so they are able to adopt local building decarbonization reach codes.
• The Coalition will host a regular set of in-person and remote meetings of a local government reach code coordinating group to trade best practices, build community and mark progress.
• The Coalition will develop an assessment of local government and builder barriers to building decarbonization reach code adoption.
• The Coalition will support local governments in the development of rules, policies, and initiatives needed to help local governments and builders support adoption of building decarbonization reach codes at city and county level.

Permitting

The Coalition will assist communities in exploring with outside experts the range of possible regulatory discretion local agencies possess over natural gas infrastructure and use.
• The Coalition will convene a working group of communities and experts to develop guidance for local government’s on regulatory approaches to natural gas regulation.

V. Rate Design

• The Coalition will publish research on electrical rate design options that could encourage building electrification.

VI. Existing Building Planning

The pace and scale necessary to achieve California’s deep decarbonization goals will require performance standards for existing buildings. There needs to be exploration and discussion of the options the state has in evolving its benchmarking policies to include retrofit requirements so that policy makers can begin to plan their efforts.
• The Coalition will produce a report on options the state could consider for existing building standards.
Research
The Coalition will develop a Building Decarbonization Research Agenda that describes the outstanding research topics important to the advancement of the sector. The agenda will be focused on research that can be completed in the 1-5 year time frame. The Agenda will then be shared with outside stakeholders to encourage a broad community of contributors to help fulfill it.

I. Building Decarbonization Research Agenda
   - The Coalition will survey members for most pressing unanswered questions and areas needing research.
   - The Coalition will publish the draft Agenda and ask for comments and additions from other organizations and individuals involved in research in this sector.
   - The Coalition will host a Building Decarbonization Research Summit to release the Agenda and explore the latest research and unanswered questions.

Governance
The Coalition will establish leadership, membership and governance structures to guide its efforts moving forward

I. Advisory Board
The Coalition will form an Advisory Board from key members and outside influencers. The Board will advise the Coalition on strategic issues but will not have fiduciary responsibility.

II. Governance
The Advisory Board will craft and oversee a system of governance for the Coalition.

III. Membership Program
The Advisory will adopt a membership program for the Coalition. The membership program shall govern the behavior of members of the Coalition, outline benefits of membership and impose a dues system. The Program shall have tiers based upon fee amount with corresponding benefits.