

This brief discusses findings that emerged through a series of interviews held in the spring of 2021, and a virtual workshop held in June 2021, in which over 115 stakeholder participants discussed Pathways to Carbon Neutrality in California.

Broaden the Conversation to Broaden the Impact.

The transition to net zero carbon will touch virtually every aspect of California's economy and day-to-day life in every corner of the state. Broad engagement and support will be critical to success. However, several participants shared perceptions of lack of consultation, not being heard, or their opinions simply not mattering. Many participants indicated that they valued the interview and workshop process as an opportunity to be more fully heard. Some participants opined that "we need more workshops like this", indicating they value a venue where people from a multiplicity of backgrounds could share information, perspectives, and concerns.

INSUFFICIENT BROAD-BASED INVOLVEMENT from a variety of constituencies may pose a risk of making net zero more difficult to achieve. This brief considers the following question: ***How can all Californians be substantively engaged in planning the changes for the transition?***

We discuss constituencies where participants perceived there may be insufficient inclusion in the vision or planning for achieving net zero¹.

RURAL CALIFORNIA

California's government, regulators, higher education institutions, and nexuses of professional employment, as well as the main body of state decision-makers are centered in urban or suburban areas with relatively mild winters. Some participants perceived that there is insufficient focus on rural areas of the state. In rural areas, distances are greater and services are fewer. As one participant put it, "things look different if I'm in the country on a gravel road a mile from my mailbox with propane heat". ***Might the perspective of California's rural population be better incorporated into planning?***

HOME HEATING

Californians in (mostly rural) less-temperate climates experience sustained frost and snow in the winter, so reliable heat is critical. Participants expressed skepticism about 100% electrification of home heating in remote areas.

TRANSPORTATION

Participants raised concern about transportation reliability, in particular cars (due to the paucity of rural transit), especially in cold weather. Participants pointed out that a sudden wildfire evacuation makes transportation reliability a life-safety issue. ***How does the need for reliable heat and transportation affect prospects for rural electrification?***

RELIABILITY

Participants pointed out that California's rural areas can lose electrical service due to public-safety power shutoffs, grid damage caused by wildfires, and other reasons. Participants recognized that this increases rural concern about the electrification. ***How does the challenge of electrical reliability affect prospects for electrification in rural areas?***

¹ In addition, we have identified that the interview and workshop process would have benefited from participation from rural government, and the fire service.

RURAL LOW-INCOME

Energy and air-quality regulators in California have long understood that they have a duty to ensure that the needs of low-income people are met. Some participants perceived that the focus tends to be on low-income people in urban and suburban areas, and that the challenges faced by low-income people in rural areas may be overlooked. ***What are the particular transition challenges faced by low-income people in rural areas?***

SOCIAL JUSTICE

Many participants recognized the importance of addressing social justice considerations as California moves to net zero carbon. This constituency was not well represented in the interviews or workshop. Several participants pointed out the challenge of understanding what this means, and in particular, it is difficult to identify who speaks for social justice. Some participants perceived that air quality is a greater concern than carbon, and raised concerns about the siting of gas-fired power stations (perceived as disproportionately located in low-income areas) that may be needed to bridge the transition to 100% renewables. ***How can social justice concerns inform planning for the transition to net zero carbon?***

BUSINESSES

LIVESTOCK INDUSTRY

Participants involved with the livestock industry indicated that they want to be part of the solution, but they feel unsupported in making certain beneficial changes. In particular, the process for funding, permitting, building, and connecting manure digesters to the natural gas infrastructure is perceived to be too complicated. Concerns were expressed about premature claims for feed additives, and a need for R&D to better deal with dry manure. ***Is there an opportunity to better engage with the livestock industry to find workable solutions?***

SMALL BUSINESS

Participants indicated that small businesses can struggle with complex regulations, grants or subsidies, or to address legal and regulatory measures. This can be because they lack the people or money to figure out how to deal with the technical issues associated with these regulations. The fragmentation of programs and requirements is a contributing factor in this difficulty.

REGULATORY OVERLOAD

Almost all participants were clear that they want to be part of the solution. Participants shared experiences and frustrations with multiple regulatory bodies imposing burdens, seemingly without regard to the cumulative impact. One example is in trucking, where participants reported having to change out perfectly good diesel trucks for expensive natural gas trucks. They are then told to replace the perfectly good natural gas trucks with expensive electric trucks due to changing standards with regards to warehouses. Participants also expressed frustration that “we can’t do things that other jurisdictions do”. ***Is there opportunity for regulation and subsidies to be re-engineered, and/or integrated across agencies to streamline adoption by businesses?***

People are the Key

Net zero carbon will require that every person in the state make changes. As one participant put it, “normal people are the key, and we have to get them to change”. For example, participants said that “people want to run their dishwashers after dinner”, or “drive their ICE car until it fails”. Some people will either have to be incentivized to change, or the net zero carbon system will have to accommodate their desires. ***Are there opportunities for better engagement with the general public?***