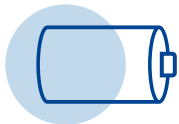


# California's Clean Energy Future

In 2018 California set a bold goal to achieve carbon neutrality and 100 percent clean energy by 2045. No clear path exists today to get us to that goal. Currently, most of the conversation focuses on an electric generation system that uses solar, wind and batteries. However, those technologies cannot do it alone. To date, natural gas has played an important role in achieving California's clean air goals and reducing greenhouse gas (GHG) emissions. To achieve California's 2045 goals, an inclusive and balanced approach is needed – one that is technology-neutral and welcomes all ideas.

To create a clean, affordable and sustainable energy future, three critical questions will need to be successfully answered:



## Reliability

How will we store energy when the sun isn't shining, or the wind isn't blowing?

Wind and solar don't provide a reliable, continuous power supply; often the power is not available when needed the most. California already produces excess solar and wind energy that can't be used. As we increase the use of these resources, we will need to figure out long-term storage options to deliver energy when and where people need it.



## Affordability

How do we keep energy affordable for all Californians?

The total cost of reaching the 2045 target, as well as the full implications to California's consumers, is unknown. Success depends on using all technologies and resources that can help create a realistic and affordable pathway. We don't want to create an energy system that deepens the state's affordability crisis, continues to widen income disparity, or has businesses leaving the state.



## Consumer Behavior & Choice

How do we inspire consumer adoption?

The slow adoption of clean transportation options shows consumer adoption is a critical challenge to meeting our goals. To inspire consumers to reduce their emissions, we must preserve consumer choice and maintain energy options that are affordable and minimize disruption to Californians.

Natural gas will continue to play an important role in our sustainable clean energy future by:

### Reducing Waste

Using waste streams from our food, sewers and dairy farms to create renewable natural gas (RNG) reduces GHG emissions that would otherwise go into the atmosphere.

### Utilizing Current Infrastructure

Using technology to convert excess solar and wind energy into renewable gas that can be stored in our existing pipeline system and solve long-term storage challenges.

### Capturing and Using Carbon

Capturing carbon dioxide (CO<sub>2</sub>) from industrial and manufacturing processes before it releases into the air and using it to create solid carbon or RNG.

Working together to advance California's energy goals.

Making California's vision a reality will take business leaders, non-governmental organizations, and policymakers working together to re-imagine how California's energy infrastructure can operate as an interconnected system that maximizes emissions reductions and minimizes waste.

