

CALIFORNIA ENERGY COMMISSION (CEC) DECOMMISSIONING CALIFORNIA'S GAS PIPELINES

To most accurately represent the scope of this project and concepts related to a data-driven tool development for prioritizing gas pipeline decommissioning, this factsheet contains technical language that best characterizes the relevant scope and concepts. The project team members will make ourselves available to provide any clarification on information in this factsheet.

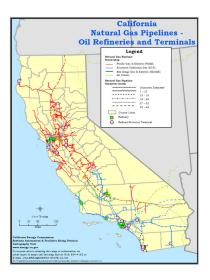
FACTSHEET

To help meet its clean energy goals, California is considering selective decommissioning of gas pipelines, prioritizing equity and community interests and needs.

A significant step towards realizing the State of California's goal of decarbonization of energy by 2045 is to strategically decommission natural gas infrastructure. Many cities in California have already adopted building codes that limit the utilization of natural gas in new developments.

However, natural gas transmission and distribution lines presently provide service to more than 11 million meters and span more than 100,000 miles. The process of decommissioning must be safe, intentional, environmentally just, and cost-effective. At present there is no integrated decision-making tool that balances the concerns of the state's IOUs, cities and municipalities, community stakeholder groups, developers, regulators, and technology vendors.

Tools need to be developed for collecting, analyzing, and integrating data required by decision-makers to bring about this energy transition efficiently, effectively, and equitably. This tool will need to be inherently interdisciplinary and have the ability to combine diverse data types and sources including technological, engineering, financial and social.



Challenges facing decision makers include:

- · Scope, diversity, security and processing of data
- Engaging subject matter experts from natural gas, grid services, and communities
- A lack of metrics that descriptively and evocatively capture total risks
- Methods to estimate the benefits related to economics, environment, health, safety and equity

Key priorities for the decommissioning process.



Safety



Strategic



Environmentally just and equitable



Cost-effective

The CEC has funded DNV and the UCLA's Center for Sustainable Communities to conduct a research project (Mindful Decommissioning Project) and create a data-driven tool that can be used to screen for promising candidate decommissioning sites.

The DNV-UCLA team will conduct this research to collect and present critical information, focused on three decision-making areas to meet the key priorities of decommissioning: (a) assessment of gas assets (e.g., physical condition, age), (b) assessment of decommissioning readiness (e.g., how ready is the state's infrastructure for alternatives to gas such as clean energy, heat pumps), and (c) assessment of community impacts. Engagement with state agencies, IOUs, municipalities, and community stakeholders will ensure that costs and benefits are understood from these diverse points of view and the most critical elements prioritized. The tool will include the relevant data collected as layers on a map to show a comprehensive picture for the state to prioritize when, where and how to decommission gas pipeline segments.

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To form an understanding of communities needs and interests beyond the statistical data and ensure that they have a meaningful voice in the gas decommissioning decision-making process, the DNV-UCLA team is conducting community and stakeholder engagement process to include as much representation of California communities as feasible. To meet the challenge of reaching California communities and stakeholders, and recognizing how overstretched community serving organizations currently are, we are planning a multi-layered outreach and engagement process that tailors to busy schedules, lack of resourcing and accessibility needs. Since October 2022, we have been having one-on-one informational conversations and briefings with community-based organizations, faith-

CEC Mindful Decommissioning Community + Stakeholder Engagement Schedule 12025 Final (Spring) PAC 2 Resource Hub

based organizations, school districts, local governments, and other groups representing community interests. We have also formed technical and policy advisory groups to discuss gas decommissioning in those respective contexts.

We are conducting a series of community workshops over the next two years focused on hearing and including community concerns, the energy and financial resources available in communities, and how to accurately measure energy security and burdens. The information gathered in these workshops will help put the technical, socioeconomic and non-energy (e.g., housing, health, jobs) metrics into a real-life context and identify which metrics are more or less relevant to a particular area. We plan to demonstrate several versions of the tool to confirm with communities that we heard and incorporated your feedback accurately.

CEC Mindful Decommissioning Resource Hub and Accommodations. The DNV-UCLA team is also setting up an online resource hub to provide a central place where all project information can be found and where communities can access a team member for questions and to hear feedback, for the duration of this project (expected until mid-2025). We strive to make this hub useful and accessible, considering language, disability, technology and other needs.

We need your partnership and support to ensure equitable participation and feedback. A small budget (commensurate with the research funding) is set aside to compensate community-based organizations that partner with us to support and deepen our outreach and engagement efforts. To ensure meaningful participation at the community workshops and engagement broadly, we are hoping organizations can spare a few hours to host satellite gatherings, get the word out and conduct grassroots community outreach for each round of workshops and at other project milestones. We can in turn facilitate community participation by accommodating basic accessibility needs, and any unique needs upon request.



Some key benefits and risks of gas pipeline decommissioning are listed below. Learn more as you participate in the process.

Benefits	Concerns
Decrease greenhouse gas pollution that is contributing to poor air quality and climate change	Requires replacement of gas appliances (e.g., stoves, ovens, furnaces, fireplaces, water heaters, laundry machines) and possible electrical panel upgrades
Improved indoor air quality with replacement of gas appliances	Could increase energy costs and impact energy resilience
Less risk of pipeline ruptures due to earthquakes and leaks due to pipeline ageing or third party damage (e.g. construction works)	Households that cannot afford to replace gas-using appliances could face higher and higher gas utility bills
Cost savings to gas users as the net size of the pipeline network will adapt to only the sections of pipe still being used	

You can learn more about the gas decommissioning effort in California through a short list of references below.

- The CEC's Gas R&D Program invests in technologies and solutions that help the gas sector support California's energy and environmental goals
- Strategic Pathways and Analytics for Tactical Decommissioning of Portions of **Natural Gas Infrastructure**
- Strategic Pathways and Analytics for Tactical Decommissioning of Portions of Gas Infrastructure in Northern California
- Mindful Decommissioning: A Data-Driven Tool for Prioritizing Strategic Gas Asset Decommissioning | CEC (energizeinnovation.fund)
- Staff Proposal on Gas Distribution Infrastructure Decommissioning Framework in Support of Climate Goals
- California Natural Gas Pipelines (Detailed) Map
- **CPUC Gas Infrastructure Equity Workshop**
- CPUC Webinar on Natural Gas 101 and Policies for a Just Transition

Mindful Decommissioning Community Resource Hub www.mindfuldecommissioning.dnv.com

 ${\rm **This}\ {\rm Resource}\ {\rm is}\ {\rm here}\ {\rm for}\ {\rm you}\ {\rm to}\ {\rm access}\ {\rm throughout}\ {\rm the}\ {\rm project}.\ {\rm You}\ {\rm can}\ {\rm review}\ {\rm information}\ {\rm on}\ {\rm the}\ {\rm Project},$ including updates, workshop presentations, notes and recordings, links to related efforts in California. You can also provide feedback and request accommodations for any needs, such as language translation, technology, accessibility etc. If you require translation of any resource provided, please complete an Accommodations Request.

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