

# **Energy Research Program**

### **Motivation for HEI's Energy Research Program**

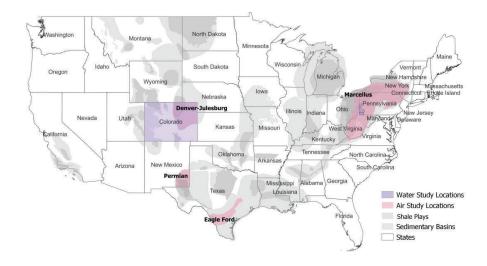
With leaders in regions across the country engaged in the critical task of planning for the best mix of energy sources to promote energy security, cultivate strong economies, and enhance operational efficiencies through emission reductions, there is an opportunity to simultaneously improve public health. HEI created its Energy research program to provide impartial science that helps to answer questions about population exposures and health effects associated with oil and gas development. The Energy program is now expanding its research to other forms of energy production.

### **Unique Funding Model**

Joint funding by industry and government ensures independence and impartiality of the program and its research.

### **Research Highlights**

Everybody wants clean air, clean water, and healthy people. Achieving these goals requires the scientific knowledge and understanding that HEI provides. Ten research studies are underway to assess human exposures arising from air emissions, noise, and releases to water from oil and gas development in multiple US oil- and gas-producing regions. This research is improving our understanding of potential population exposures and provides the impartial science needed to inform decisions about how best to protect human health.



Study locations for HEI Energy's initial program of exposure research

#### **MISSION**

HEI's Energy research program provides high-quality, impartial, and policy-relevant science on the potential human population exposures and health effects associated with the production of energy.

## **Looking Ahead**

In the next few years, the Energy program will continue to advance understanding of population exposures and effects associated with emissions of criteria air pollutants and air toxics from oil and gas operations and the health co-benefits associated with efforts to reduce emissions and enhance production efficiency. At the same time, the program will expand to include population exposures and effects associated with other forms of energy production. Given the rapidity of technological change and uncertainty about future energy choices, the Energy research program will pursue the development of decision frameworks for energy choices that benefit human health, starting with a proofof-concept case study involving industrial decarbonization.

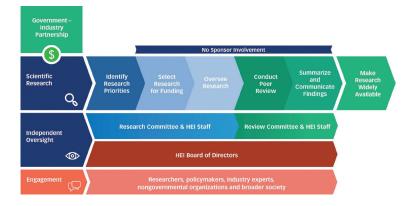
### **About the Health Effects Institute**

With joint funding from government and industry, HEI funds, oversees, and evaluates research with a rigorous model that has yielded credible research for informing important technology and policy decisions. Over the last several decades, HEI-funded research has played a prominent and critical role in informing US air quality standards and industry decisions on technology development and adoption.

HEI was founded in 1980 as an independent nonprofit organization jointly funded by government and industry to address a need for trusted impartial science to inform policy, technology, and other decisions concerning motor vehicle emissions. Over time, while remaining committed to its foundational air quality work, HEI has expanded its scope to bring the same scientific integrity to inform decisions about our changing world amid evolving transportation technology and energy systems. HEI is fully prepared to support government and industry leaders seeking the best mix of transportation and energy technologies to cultivate strong economies and achieve energy security while simultaneously benefiting people's health.

# HEI's Rigorous Model for Delivering Impartial Scientific Knowledge Designed to Inform Real-World Decisions

HEI implements a rigorous model of selecting, overseeing, and reviewing credible science for decision making and public understanding. Thorough quality control and quality assurance by independent auditors and detailed study oversight and peer-review by expert scientific committees promote the accuracy and reliability of HEI's funded research.



## **HEI's Programs**

HEI's programs, Environment and Health, Energy, and Global Initiatives, achieve their mission with different but complementary scopes of work. The programs provide a cohesive body of highly credible environmental health research and interpret the research in the context of current science and policy decisions. This work helps guide government and industry actions and inform the broader public about the health effects of air pollution and other environmental health issues.

Our work offers direct and powerful evidence for policy setting and other changes that lead to a healthier environment and better health for all.

