

The Health Effects Institute

Energy Research Program

A Brief Overview with Emphasis on Year 1

Scoping Meeting for Human Health Study Critique
Boston, MA
January 17, 2018



Health Effects Institute's Energy Research Program

Why a new research program? To fill knowledge gaps left by past and ongoing research about potential population exposures and health effects from unconventional oil and natural gas development (UOGD) across the United States

Approach? A national multi-year research partnership between industry and government to leverage costs, gain access to UOGD sites, and foster a supportive environment to enable quality science

Who will benefit? Regulators, community groups, the oil and natural gas industry, environmental organizations, public health experts, and others who can use the research to inform policy development



HEI's Energy Research Program

ORIGIN OF THE PROGRAM





HEALTH
EFFECTS
INSTITUTE

October 2015

Strategic Research Agenda on the Potential Impacts of 21st Century Oil and Natural Gas Development in the Appalachian Region and Beyond

HEI Special Scientific Committee on Unconventional Oil and Gas Development in the Appalachian Basin

Funding provided by:

- Richard King Mellon Foundation
- Henry L. Hillman Foundation
- Claude Worthington Benedum Foundation
- Henry C. and Belle Doyle McEldowney Fund of The Pittsburgh Foundation

101 Federal Street, Suite 500
Boston, MA 02210, USA
+1-617-488-2300
www.healtheffects.org

Strategic Research Agenda

- Released in 2015 after extensive stakeholder consultation and expert review
- The Committee identified key research questions as a foundation for moving forward
- Building on this effort, the HEI Energy Research Program will fill knowledge gaps about potential population exposures and health effects across the US



HEI's Energy Research Program

GOVERNANCE STRUCTURE AND FUNDING

HEI: a Public-Private Partnership for Research since 1980

- An independent, nonprofit corporation
- Chartered to provide policy-relevant high-quality and impartial, science on the effects of air pollution on health (original research, including accountability studies, reanalyses of key studies, and critical reviews).
- Funded jointly by government and industry and, frequently, other public and private organizations in the United States and around the world



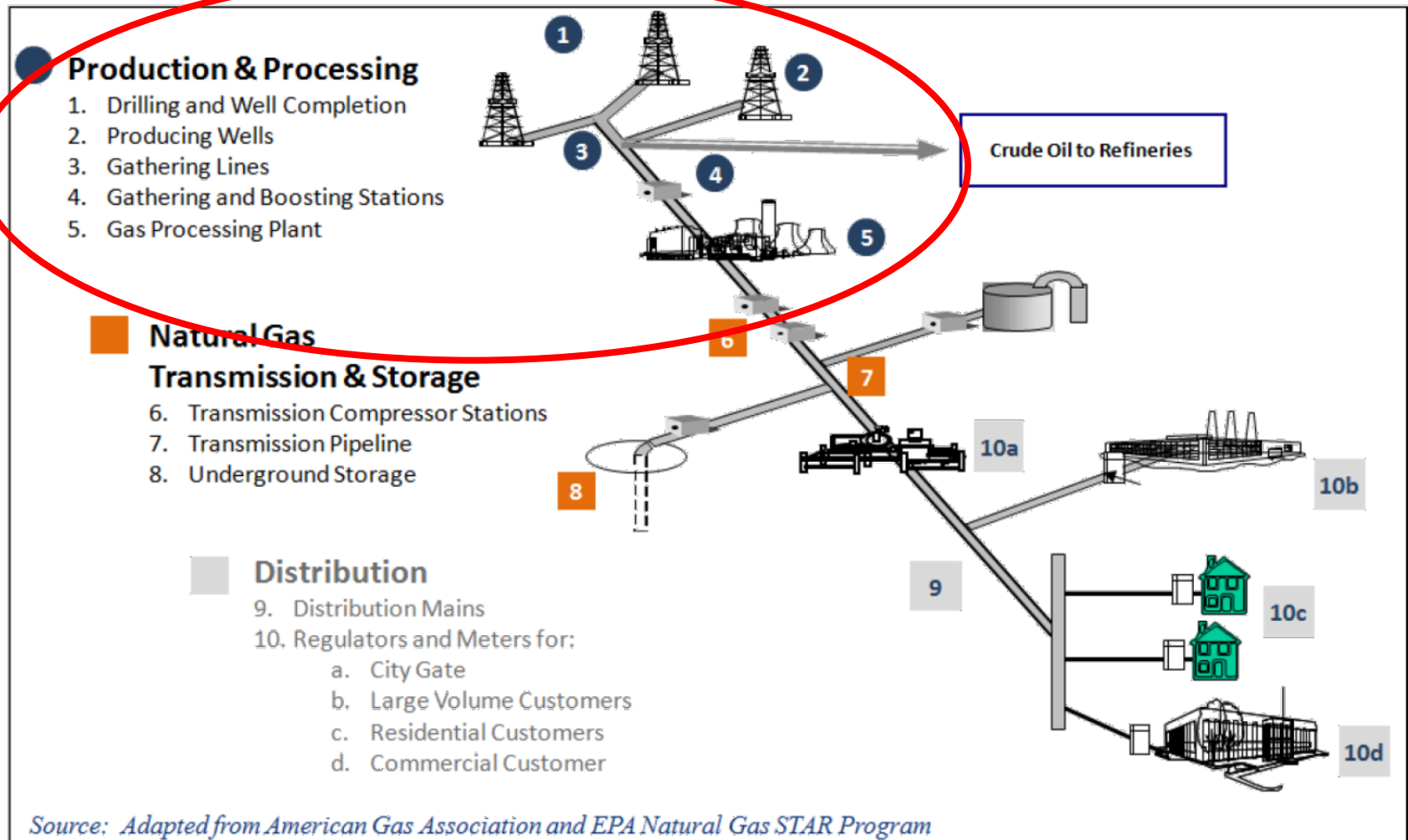
Energy Research Program Governance

- Modeled directly after the one HEI has used for 35 years to answer questions about air quality and health
- Key elements:
 - Initial Energy Research Committee oversees impartial, policy-relevant literature reviews, research planning, and original research
 - An Energy Advisory Committee provides expert guidance to the Research Committee
 - All work is conceived, implemented, and peer-reviewed independently from sponsors of the research program
 - HEI effectively engages and shares data (all + and – results) with stakeholders

HEI's Energy Research Program

TECHNICAL SCOPE WITH EMPHASIS ON YEAR 1 GOALS

Overview of Oil and Gas Operations



HEI's New Energy Research Program

Goal: Answer questions about *potential human exposure and health effects* from UOGD

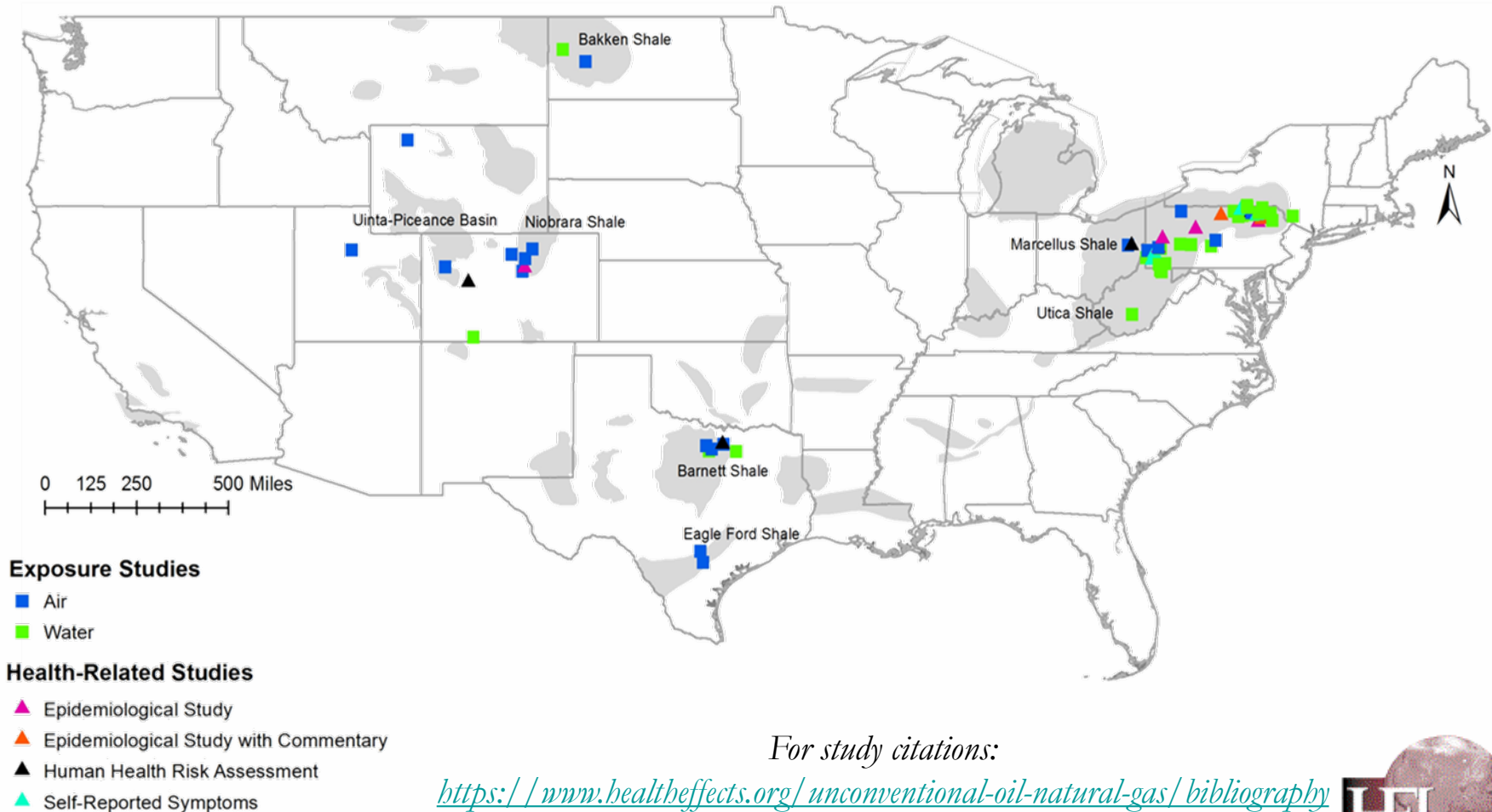
How: Using the same model that HEI has used for 35 years to answer questions about air quality and health



Throughout the research program, HEI engages with a broad range of stakeholders at key decision points

As we begin the program, peer-reviewed literature about potential exposures and effects continues to be published

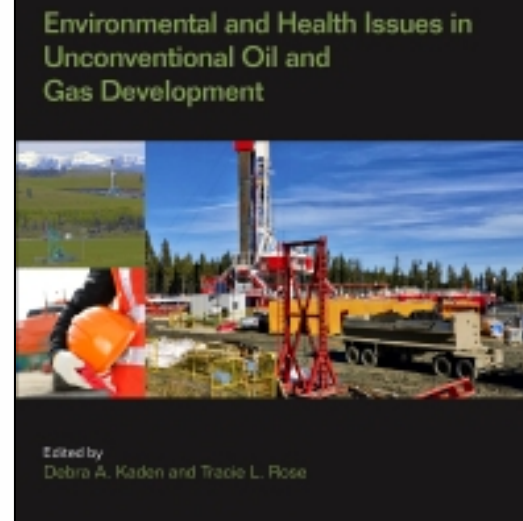
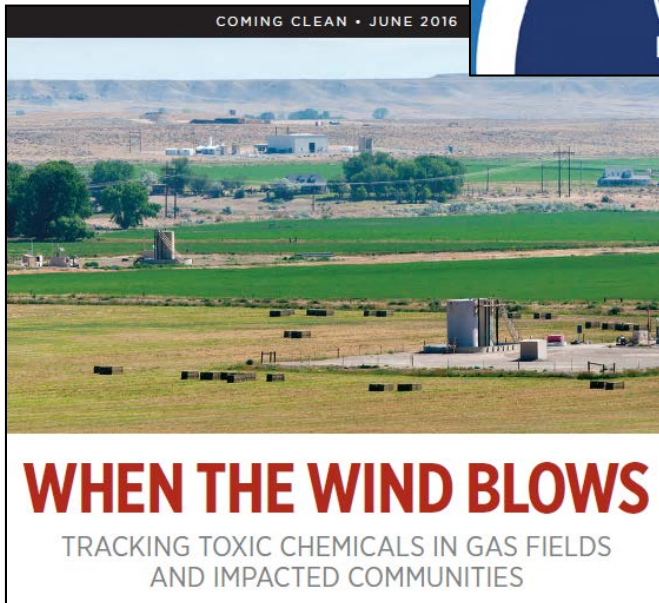
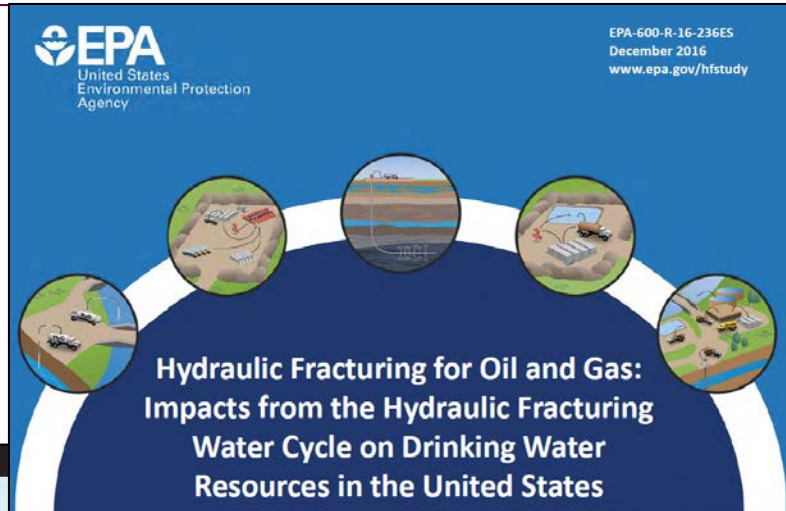
Unconventional Oil and Gas Peer-Reviewed Exposure and Health Study Locations



For study citations:

<https://www.healtheffects.org/unconventional-oil-natural-gas/bibliography>

Also much work beyond the peer-reviewed scientific literature



Year 1 Products

HEI's Initial Energy Research Committee will prepare:

- Report that summarizes (1) its review of the human health literature and what it does and does not tell us and (2) research recommendations
- Report that summarizes (1) its review of the exposure, toxicological, and risk literature and what it does and does not tell us and (2) research recommendations
- An HEI Solicitation based on research recommendations from the Committee, with research beginning in Year 2

HEI's Energy Research Program

THE PATH FORWARD

Next Steps

- Announce HEI's Energy Research Program and Introduce the Initial Energy Research Committee – TODAY
- Post brief summary of today's meeting at HEI's website (February 2018)
- Release the Initial Energy Research Committee's human health literature critique – following peer review (Summer 2018)
 - The Committee will consider comments received at this meeting as well as any sent to HEI by February 5, 2018
- First of two *Exposure and Risk Screening Workshops* (May-June 2018)

Thank you for joining us today

WE WELCOME YOUR QUESTIONS,
COMMENTS, AND RECOMMENDATIONS