

The background of the entire page is a photograph of an industrial facility, likely a natural gas processing plant. A large, bright yellow and orange flame is visible in the upper right quadrant, rising from a stack. The sky is a clear, pale blue. In the foreground, there are dark, silhouetted industrial structures, including a large cylindrical tank on the left and various pipes and valves on the right.

Center for
**Climate
Integrity**

Appendices

The Fraud of “Clean” Natural Gas

July 2026

Appendix A:

Glossary of Organizations and Companies

The natural gas industry is comprised of a network of upstream (producers) and downstream (pipeline and utility) companies. Each of the gas industry sectors has distinct means of generating profit and is subject to different regulatory structures, but the sectors have a shared interest in promoting demand for and production of natural gas. This is a glossary of key groups, companies, and programs referred to in the report.

American Gas Association

American Gas Association (AGA), founded in 1918, represents private investor-owned transmission and utility companies and their parent corporations that deliver gas. The vast majority of gas utilities in the U.S. are investor-owned, and gas utility executives make up the entirety of the governing board of AGA.¹ The trade organization's expenses are in part covered by fees investor-owned utilities pass onto consumers' bills.² Powerful players within AGA for the period covered in this report (through the 1990s) included Southern California Gas Co. (SoCalGas), the largest gas utility in the nation, and Enron, a prominent electric and gas company that declared bankruptcy in 2001.³

1 American Gas Association, “About AGA,” <https://www.aga.org/about/>.

2 Energy and Policy Institute, “AGA Uses Millions of Dollars from Utility Customers to Promote a Fossil Fuel Agenda,” February 17, 2022, <https://energyandpolicy.org/gas-utilities-greenwashing-to-expand-fossil-fuels-rng-hydrogen/aga-uses-millions-of-dollars-from-utility-customers-to-promote-a-fossil-fuel-agenda/>.

3 Robert L. Bradley, Jr., *ENRON Ascending: The Forgotten Years, 1984-1996* (Wiley-Scrivener, 2018), 332; “Board of Directors 1988” *American Gas Association Monthly* (July 1988), <https://legacy.www.documentcloud.org/documents/26044219-aga-monthly-july-1988/#document/p5/a2773815>, 5.

American Petroleum Institute

American Petroleum Institute (API), founded in 1919, is the most prominent trade association for the fossil fuel industry, covering “all segments of America’s natural gas and oil industry.”⁴ API represents some of the largest gas producers in the U.S. It was one of the earliest trade associations involved in promoting climate deception.⁵

Business Council for Sustainable Energy Future

Business Council for Sustainable Energy Future (BCSEF, today named BCSE), founded in 1992,⁶ was a political coalition formed around the Rio Earth Summit that aimed to advance “alternative energy” with an emphasis on natural gas.⁷ At its founding it represented gas producers, utilities, pipeline companies, trade associations, and alternative energy associations.⁸

4 American Petroleum Institute, “About API,” <https://www.api.org/about>.

5 Jie Jenny Zou, “The United States of Petroleum: Government’s Secret Alliance with Big Oil,” *Center for Public Integrity* (December 12, 2017), Internet Archive, <https://web.archive.org/web/20190308195332/https://apps.publicintegrity.org/united-states-of-petroleum/>.

6 Environmental and Energy Study Institute, “A Q&A with the Business Council for Sustainable Energy Lisa Jacobson,” <https://www.eesi.org/articles/view/solutions-spotlight-a-qa-with-the-business-council-for-sustainable-energy>.

7 Rhonda Lucas Donald, “A Green Thumbs Up,” *American Gas* (June 1993), U.S. Library of Congress, <https://www.documentcloud.org/documents/26047852-aga-monthly-june-1993/?mode=document#document/p24/a2677286>, 24.

8 Business Council for Sustainable Energy Future, “Organizational Meeting Minutes and Documents,” (December 11, 1992), <https://legacy.www.documentcloud.org/documents/26047410-bcse-organizational-meeting-minutes-and-docs-december-11-1992/#document/p1/a2666418>, 1, <https://legacy.www.documentcloud.org/documents/26047410-bcse-organizational-meeting-minutes-and-docs-december-11-1992/#document/p8/a2666455>, 8-9.

First chaired by Enron CEO Kenneth Lay,⁹ its leadership in its first years drew heavily from AGA and SoCalGas.¹⁰

Chemical Manufacturers Association

Chemical Manufacturers Association (CMA), founded in 1872, known as the American Chemistry Council since 2000, is a longstanding trade organization representing companies across the chemicals industry. Major oil and gas companies, such as ExxonMobil, Shell, Chevron, and BP, have been represented both in its membership and leadership. CMA sponsored early research that found atmospheric methane levels were rising at a “substantial rate.”¹¹

Edison Electric Institute

Edison Electric Institute (EEI), formed in 1933, is a trade association representing investor-owned electric utilities.

Electric Power Research Institute

Electric Power Research Institute (EPRI) is a research group formed in 1972 as the research and development arm of the electric utility sector.¹² The gas industry used EPRI as a model for the Gas Research Institute’s formation in 1976.¹³

Gas Research Institute

Gas Research Institute (GRI), formed in 1976, was the research and development arm of the gas industry.¹⁴ GRI’s priorities were initially directed by the utility and pipeline sector, particularly AGA.¹⁵ The Interstate Natural Gas Association of America was also a partner at its launch.¹⁶ The Institute incorporated in 1978, with a budget that drew from customer levies and taxpayer-funded federal agencies.¹⁷ In 1987 and 1988, GRI expanded its membership and board of directors to gas producers, including major oil and gas companies.¹⁸ GRI merged with another gas research group, Institute of Gas Technology, in 2000 to form the Gas Technology Institute, based in Illinois.¹⁹

Global Climate Coalition

Global Climate Coalition (GCC) was launched in 1989 by industries working to challenge government action on climate change. Its early membership included API, AGA,²⁰ Chevron, Exxon, Shell Oil, Texaco, Amoco, the

9 Robert R. Bradley Jr., “Roots of the Paris Agreement Part III: Ken Lay and Enron,” (Institute for Energy Research, June 13, 2017), <https://www.instituteforenergyresearch.org/uncategorized/roots-paris-agreement-part-iii-ken-lay-enron/>.

10 Donald, “A Green Thumbs Up,” <https://www.documentcloud.org/documents/26047852-aga-monthly-june-1993/?mode=document#document/p24/a2677286>, 24.

11 R. A. Rasmussen and M. A. K. Khalil, “Increase in the Concentration of Atmospheric Methane,” *Atmospheric Environment* 15 (1981), [https://doi.org/10.1016/0004-6981\(81\)90298-5](https://doi.org/10.1016/0004-6981(81)90298-5). Also available at <https://www.documentcloud.org/documents/26158386-increase-in-the-concentration-of-atmospheric-methane-ra-rasmussen-ma-khalil-1981-atmospheric-environment/#document/p3/a2672478>, 3.

12 Nils Randlev Hundedbøl and Kristian H. Nielsen, “Preparing for Change: Acid Rain, Climate Change, and the Electric Power Research Institute (EPRI), 1972–1990s,” *History and Technology* 31, no. 2 (2015), <https://doi.org/10.1080/07341512.2015.1121577>.

13 W.J. Bowen, “Gas Research Institute Formed By Natural Gas Industry,” *American Gas Association Monthly* (November 1976), U.S. Library of Congress, <https://legacy.www.documentcloud.org/documents/23728253-197611-aga-monthly/#document/p1/a2234097>, 1.

14 William M. Burnett, et al., “How the Gas Research Institute (GRI) Helped Transform the US Natural Gas Industry,” *Interfaces* 23, no. 1 (1993) <http://www.jstor.org/stable/25061702>.

15 Gas Industry Research Plan 1974–2000 (American Gas Association, January 1974), University of Maryland Library, <https://www.documentcloud.org/documents/26174903-aga-gas-industry-research-plan-1974-2000/#document/p2/a2673071>, 2.

16 “Gas Research Institute and its Initial Five-Year R&D Program Plan,” (Gas Research Institute, October 1976), Box 361, National Audubon Society Records, New York Public Library, Manuscripts and Archives Division, <https://www.documentcloud.org/documents/25992083-audubon-b361-igt-gri-76/?mode=document#document/p30/a2773814>, 30.

17 James M. Evans, “Overview of Gas Research Institute Environmental Research Programs,” (Gas Research Institute, May 1991), <https://www.documentcloud.org/documents/23592306-overview-of-gas-research-institute-environmental-research-programs-by-j-m-evans-gas-research-institute-chicago-illinois-1991/#document/p3/a2207156>, 3; Bowen, “Gas Research Institute Formed by Natural Gas Industry,” <https://legacy.www.documentcloud.org/documents/23728253-197611-aga-monthly/#document/p1/a2234097>, 1.

18 “Gas Research Institute Annual Report 1987: Confronting Change,” (Gas Research Institute), Louis H. Roddis papers, 1823–1990, Box 96, David M. Rubenstein Rare Book & Manuscript Library, Duke University, <https://www.documentcloud.org/documents/25511582-gri-1987-annual-report-box-96-rod-dis-papers/?mode=document#document/p8/a2623716>, 8; “Gas Research Institute Annual Report 1988: Benefits, Balance, Broad Industry Cooperation” (Gas Research Institute), Louis H. Roddis papers, 1823–1990, Box 96, David M. Rubenstein Rare Book & Manuscript Library, Duke University, <https://www.documentcloud.org/documents/25511664-gri-1988-annual-report-box-96-rod-dis-papers/?mode=document#document/p4/a2622441>, 4.

19 “GRI and IGT Form GTI,” *Natural Gas Intelligence*, June 19, 2000, <https://naturalgasintel.com/news/gri-and-igt-form-gti/>.

20 “1989 GCC Membership,” *Climate Files*, November 16, 1989, <https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1989-membership/>.

U.S. Chamber of Commerce, and other companies and trade associations.²¹ It promoted climate disinformation and denial until it disbanded in 2002.²²

Hill & Knowlton and Burson-Marsteller

Hill & Knowlton and Burson-Marsteller were global public relations companies that represented oil, gas, and tobacco interests. In the period covered in this report, they were separate companies, but in 2024 were brought under one name, Burson, as part of a series of mergers.²³ Both firms advised AGA in the 1970s on forming a proactive strategy for counteracting critics of gas. Richard Darrow, chairman and chief executive of Hill & Knowlton, was a longtime consultant to the oil and gas industry, as well as a PR strategist for tobacco, who in the 1970s advised AGA on how to handle the public’s perception of pollution and gas.²⁴

International Chamber of Commerce

International Chamber of Commerce (ICC), founded in 1919, is a global business lobby based in Paris.²⁵ Oil and gas companies, including Exxon, Shell, and BP, exercised their influence over the United Nations Environmental Program (UNEP) and the 1992 Rio Summit through this trade group, using the ICC to advocate for self-regulation of business on environmental and climate issues. Presently, the U.S. chapter plays an active role in lobbying for and promoting natural gas as beneficial for the environment and climate.²⁶

Interstate Natural Gas Association of America

Interstate Natural Gas Association of America (INGAA), founded in 1944, represents pipeline companies engaged in the interstate transmission of natural gas.²⁷ It is made up of 28 members today, including Pacific Gas & Electric, Enbridge Energy, and Cheniere Energy.²⁸ INGAA, alongside AGA, commissioned research about the public’s attitudes toward gas and pollution in the 1970s.²⁹ INGAA also played a key role in partnership with AGA in forming GRI.³⁰

J. Walter Thompson

J. Walter Thompson (JWT), hired by AGA in 1966, was one of the largest advertising firms globally at the time.³¹ By the early 1970s, AGA moved all its advertising to the firm, at which point JWT developed an advertising campaign for AGA positioning natural gas as clean energy.³² Shell, Chevron, API, and tobacco companies were also clients of JWT.³³

Natural Gas Council

Natural Gas Council (NGC) was launched in 1992 to bring together trade groups representing all sectors of the gas industry “from the wellhead to the burner

21 “Global Climate Coalition Background,” *DeSmog*, <https://www.desmog.com/global-climate-coalition/>.

22 Robert J. Brulle, “Advocating inaction: a historical analysis of the Global Climate Coalition,” *Environmental Politics* Vol. 32 Issue 2 (2023), <https://doi.org/10.1080/09644016.2022.2058815>.

23 “WPP Unites BCW and Hill & Knowlton to Create Burson,” *WPP*, January 25, 2024, <https://www.bursonglobal.com/newsroom/global/wpp-unites-bcw-and-hill-knowlton-to-create-burson-a-global-leader-built-for-a-new-era-of-communications>.

24 Richard W. Darrow, “How To Communicate In A Crisis,” *Critical Issues in Public Relations* (Hill & Knowlton, 1975), <https://www.documentcloud.org/documents/23795870-how-to-communicate-in-a-crisis/?mode=document>.

25 International Chamber of Commerce, “Our Mission, History and Values,” <https://iccwbo.org/about-icc-2/our-mission-history-and-values/>.

26 U.S. Chamber of Commerce, “Natural Gas: Natural Advantage,” <https://www.uschamber.com/major-initiative/natural-gas-natural-advantage>.

27 Interstate Natural Gas Association of America, “About INGAA,” <https://ingaa.org/about-ingaa/>.

28 Interstate Natural Gas Association of America, “INGAA Member Companies,” <https://ingaa.org/ingaa-member-companies/>.

29 “1971 Residential Advertising Plans & Recommendations for American Gas Association,” J. Walter Thompson Review Board Records, Box 4, David M. Rubenstein Rare Book & Manuscript Library, Duke University, https://www.documentcloud.org/documents/25511673-aga-minutes-1971-pt-1-box-4_jwt-review-board-records-consult-library-for-copyright-information/?mode=document#document/p38/a2623126, 39.

30 “Gas Research Institute and its Initial Five-Year R&D Program Plan,” (Gas Research Institute, October 1976), Box 361, National Audubon Society Records, New York Public Library, Manuscripts and Archives Division, <https://www.documentcloud.org/documents/25992083-audubon-b361-igt-gri-76/?mode=document#document/p30/a2773814>, 30.

31 Duke University Libraries, “J. Walter Thompson Company (JWT) Timeline,” David M. Rubenstein Rare Book & Manuscript Library, <https://library.duke.edu/rubenstein/collections/creators/corporations/jwt>.

32 Philip H. Dougherty, “Advertising: Gasoline Games,” *The New York Times* (April 24, 1972), <https://www.nytimes.com/1972/04/24/archives/gasoline-games.html>.

33 Duke University Libraries, “J. Walter Thompson Company (JWT) Timeline Part 2,” David M. Rubenstein Rare Book & Manuscript Library, <https://library.duke.edu/rubenstein/collections/creators/corporations/jwt2>.

tip.”³⁴ It included AGA, API, INGAA, the Independent Petroleum Association of America (IPAA), and the Natural Gas Supply Association (NGSA).³⁵ NGC reportedly had a \$15 million budget devoted to advertising alone at its founding with a mission to promote a positive image and greater use of gas.³⁶ Chevron was heavily represented among NGC’s initial leadership,³⁷ and SoCalGas representatives were among NGC’s early leadership as well.³⁸

Natural Gas Star Program

Natural Gas Star Program was announced at an AGA Conference in October 1992,³⁹ and launched by the gas industry and EPA in early 1993. “Companies from across the gas industry were eligible to participate in this voluntary program, which entailed participants sharing best practices for cost-effective emissions reductions and reporting progress in implementation to the EPA.⁴⁰ Companies were under no obligation to implement the emissions reduction measures.”⁴¹

The partnership ended in 2022 and has been replaced by other voluntary initiatives.⁴²

Natural Gas Supply Association

Natural Gas Supply Association (NGSA), founded in 1965, represents major gas producers.⁴³ Its membership includes major multinational oil and gas companies, like ExxonMobil, Chevron, Shell, and BP.⁴⁴

National Petroleum Council

National Petroleum Council, created in 1946, is an influential oil advisory council to the federal government that has reported to the Department of Energy since 1977.⁴⁵ It has served as a vehicle for industry lobbying and advocacy for oil-friendly policy,⁴⁶ and its leadership rotates among oil companies.⁴⁷ NPC’s appointed members work for major oil and gas companies and trade associations.⁴⁸

National Industrial Pollution Control Council

National Industrial Pollution Control Council (NIPCC), operating from 1970-1974, was an all-industry advisory council that reported to the U.S. Department of Commerce.⁴⁹ It contained 30 subcouncils representing

34 “Natural Gas Council, <https://naturalgascouncil.org/>.

35 “Natural Gas Council Statement on NERC Retirements Report,” (December 19, 2018), <https://ingaa.org/natural-gas-council-statement-on-nerc-retirements-report/>; Robert Johnson, “Gas Industry Unites to Form Marketing Unit — Utilities, Pipeline Companies And Gas Producers Work To Improve Demand,” *Wall Street Journal* (June 19, 1992), page B8A.

36 Bradley, Jr., *ENRON Ascending: The Forgotten Years, 1984-1996*, 332.

37 Jeffrey Share, *The Oil Makers*, (Rice University Press, 1995) <https://archive.org/details/oilmakers0000share/page/84/mode/2up?q=%22natural+gas+council%22>; Michael Baly III, “Becoming a United Industry” *American Gas* (October 1992), U.S. Library of Congress, <https://legacywww.documentcloud.org/documents/26047822-aga-monthly-october-1992/#document/p4/a2676707>, 4.

38 Bradley, Jr., *ENRON Ascending: The Forgotten Years, 1984-1996*, 332; Michael Parrish, “Energy Coalition Pushes an ‘Alternative Future,’” *Los Angeles Times* (May 1, 1992), <https://www.latimes.com/archives/la-xpm-1992-05-01-fi-1497-story.html>.

39 “Natural Gas Star” Plan Endorsed By A.G.A.” *American Gas* (December 1992/January 1993), U.S. Library of Congress, <https://www.documentcloud.org/documents/26047817-aga-monthly-december-1992january-1993/?mode=document#document/p26/a2677251>, 26.

40 Cate Barnett Alexander, “Star Power,” *American Gas* (May 1996), U.S. Library of Congress, <https://www.documentcloud.org/documents/26047900-aga-monthly-may-1996/?mode=document#document/p22/a2677229>, 22; U.S. Environmental Protection Agency Office of Inspector General, “Improvements Needed In EPA Efforts To Address Methane Emissions From Natural Gas Distribution Pipelines,” Report No. 14-P-0324 (U.S. EPA, July 25, 2014), https://www.epa.gov/sites/default/files/2015-09/documents/20140725-14-p-0324_0.pdf, 14.

41 Alexander, “Star Power,” <https://www.documentcloud.org/documents/26047900-aga-monthly-may-1996/?mode=document#document/p24/a2677232>, 24.

42 U.S. Environmental Protection Agency, “Celebrating 30 Years of Voluntary Partnerships: Natural Gas STAR Program,” <https://www.epa.gov/natural-gas-star-program/celebrating-30-years-voluntary-partnerships>.

43 Interstate Natural Gas Association of America, “About Us,” <https://ingaa.org/about-inga>.

44 Natural Gas Supply Association, “Members Page,” <https://www.ngsa.org/about-us/#our-members>.

45 National Petroleum Council, “About,” <https://www.npc.org/about.html>.

46 Connor Gibson and Robert J. Brulle, *Koch and Climate Obstruction: Interim Research Report* (Brown University, November 2024), https://cssn.org/wp-content/uploads/2024/11/GibsonBrulle-KochandClimateObstruction_2024.pdf; Jim Morris, “A Pipeline of Influence,” *Center for Public Integrity* (October 9, 2017) <https://publicintegrity.org/environment/a-pipeline-of-influence/>.

47 National Petroleum Council, “About NPC,” <https://www.npc.org/about.html>.

48 Jie Jenny Zou, “The Unlikely Partnership between Big Oil and the White House,” *Center for Public Integrity*, December 12, 2017, <https://apps.publicintegrity.org/united-states-of-petroleum/century-of-influence/>.

49 Richard Nixon Presidential Library and Museum, “FG 278 National Industrial Pollution Control Council,” National Archives and Records Administration, <https://www.nixonlibrary.gov/finding-aids/fg-278-national-industrial-pollution-control-council-white-house-central-files-subject>.

different polluting industries,⁵⁰ and produced a series of reports, including a paper promoting the expansion of gas to achieve environmental benefits while omitting earlier gas industry discussion of the NOX problems associated with gas.⁵¹

Stanford Research Institute

Stanford Research Institute (SRI, now SRI International), is a private research institute founded to “serve industry.”⁵² SRI was commissioned by the oil industry to analyze early greenhouse gas research, including a 1968 API-commissioned report about atmospheric pollutants that included discussion of methane.

50 Richard Nixon, “Remarks to the National Industrial Pollution Control Council and Subcouncils,” February 10, 1971, *The American Presidency Project*, <https://www.presidency.ucsb.edu/documents/remarks-the-national-industrial-pollution-control-council-and-subcouncils>.

51 “Minutes, Meeting of the NIPCC Utilities Sub-Council,” (National Industrial Pollution Control Council, September 28, 1970) Records of the Department of Commerce RG 40; United States National Archives and Records Administration, https://www.documentcloud.org/documents/23690658-1970928_minutes_of_nipcc_utilities_sub-council/?mode=document#document/p4/a2215438, 4.

52 Stanford Research Institute, “Stanford Research Institute booklet on air pollution research (1951-1952),” *Inside Climate News*, <https://insideclimatenews.org/documents/sri-booklet-1951-1952/>.

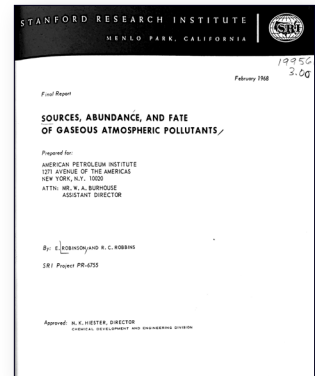
Appendix B:

Key Events Timeline

1968 (Section 1.1)

A private lab alerts API to the presence of methane from the oil and gas industry in the atmosphere

In 1968, the oil and gas industry was notified that its **pollution was contributing to the presence of both carbon dioxide and methane (CH₄)** in the atmosphere. An API-commissioned report from the private lab, Stanford Research Institute, on “Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants,” contains a discussion of the sources of methane. A portion of these emissions, the report noted, could be linked to “oil fields” and “[gas] distribution system leakage.” Though the researchers stated the effect of rising methane emissions on the atmosphere warranted further study, they warned that Earth’s natural cycles could **“be overburdened by excessive emissions.”**



1972 (Section 1.4,1.5)

The myth of clean gas is born with the marketing campaign “Gas, Clean Energy for Today and Tomorrow,” aided by a wider strategy that drew on industry-funded studies to cast doubt on the harmful impacts of gas

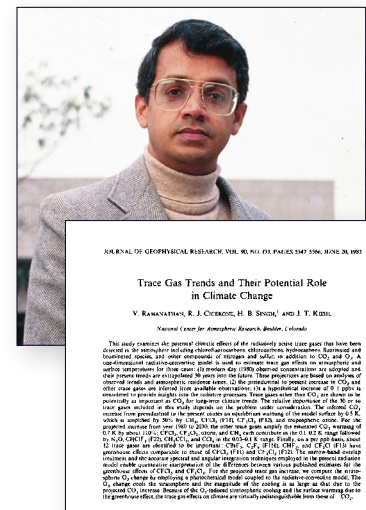
Internal polling and reporting from the American Gas Association (AGA) and Interstate Natural Gas Association of America (INGAA) show the two trade associations were worried their market was shrinking as they lost residential gas customers to electricity. Part of the problem was that the public saw gas as polluting. AGA responded with a **PR strategy**, hiring J. Walter Thompson, an advertising firm that worked with oil and tobacco companies, to create a communications plan. J. Walter Thompson’s campaign branded natural gas as “clean” energy, emphasizing that gas **“burns with no smoke and virtually no emissions,”** that it **“is clean energy,”** that it **“does not ruin the air we breathe,”** and **“can help us have a cleaner world.”** On the advice of PR consultants Hill & Knowlton, AGA aided this campaign with a strategic research program that AGA used to cast doubt on the harmful impacts of gas.



1976-85 (Section 2.4,3.2)

A series of studies spell out methane as a problem for climate change

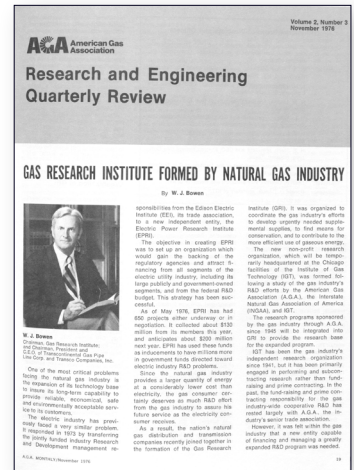
The oil and gas industry followed many of the scientific developments from 1976 through 1985 that established **manmade methane emissions as a clear driver of climate change**. The first of these was a 1976 paper by NASA scientists that demonstrated methane’s climate risk, linked the atmospheric concentration of methane and other trace gases to human activities, and urged that methane be “accurately monitored” in a manner similar to the global monitoring underway for carbon pollution. Federally funded papers published over the next few years confirmed that methane was rising at a substantial rate and would **“significantly enhance” future global warming**. A 1985 study concluded that increasing levels of trace gases **“are as important as that of CO₂ increase** in determining the climate change of the future or the past 100 years.” Though the 1985 study also named other sources of methane, the authors pinpointed “exploration and gas transmission” as a growing source of atmospheric methane.



1976 (Section 2.2,2.3)

The Gas Research Institute is formed to centralize industry research and messaging efforts

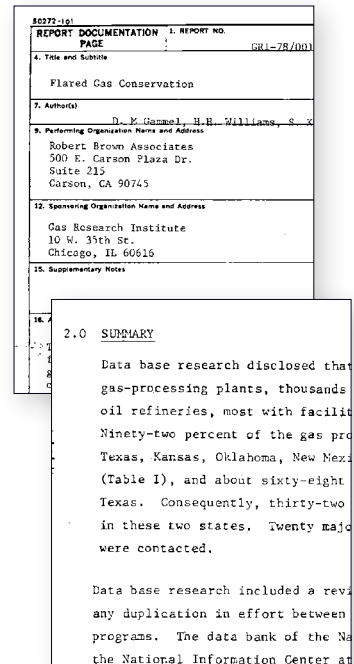
Following Hill and Knowlton's PR advice, AGA and INGAA saw the need for a new institute to centralize the gas industry's research and development. The groups consolidated the joint research programs of the industry's utility and pipeline sectors under a single banner, and also functioned as “an active part of the marketing arm of the gas industry.” Although GRI took over the majority of AGA's research program, its status as a separate organization created the appearance of distance from the industry, allowing GRI to present itself **“not as a lobbying group but as an objective and reliable information source.”** GRI's chief focus was to “ensure the greatest supply possible for natural gas,” and in support of that mission, GRI blended practical business research with the industry's aims to promote gas as “clean.”



1979 (Section 2.4)

A GRI-funded study reports “off-the-record” methane emissions

Early in its formation, GRI funded a study to identify “flared and vented gas sources” in gas fields and processing plants in order to quantify “the amount of gas lost” with a view to reducing losses and finding economic uses for the wasted gas. The authors found a “significant quantity” of gas being legally flared or vented nationally but also evidence of **“off-the-record”** and **“unverifiable field estimates,”** indicating the **“unreported amounts may be much more;”** the venting of methane was regarded as a routine feature of operations rather than an irregular or unplanned occurrence.



1987-88 (Section 3.8)

Major oil and gas producers join GRI, uniting the gas industry in communicating “the benefits of gas to end users”

GRI expanded to unite a third industry segment, the gas producers, under its banner. This gave major oil and gas companies increased control of GRI's priorities and another funding stream for GRI's activities. In 1988, GRI added the producers Amoco, Chevron, Texaco, Conoco, Phillips, Mobil, and Shell to its ranks, signaling **major fossil fuel companies'** increasingly proactive role in **shaping public perception** of natural gas. Tenneco Gas CEO Robert C. Thomas explained that producers would be helpful **“on the advertising side—communicating the benefits of gas to end users,”** since the industry's top priority was expanding markets. “[W]e simply must work closer together in market development,” Thomas explained. “That's got to be one of the key things in the future—getting the industry working even more closely together. You can call it cooperation or whatever you like, but it's working together for the benefit of the total industry.”

1990 (Section 3.10)

The oil and gas industries introduce gas as a “bridge fuel” to the public

The gas industry had been promoting gas as “clean” and beneficial for the environment for nearly 20 years when it adapted this messaging to climate change in the late 1980s. The industry, **omitting its knowledge** of methane emissions and their effect on climate change, **began promoting gas as a “bridge fuel”** in the transition from coal and oil to renewables. An AGA vice president, for example, introduced gas as a “bridge fuel” in a *Washington Post* article. Paraphrasing his message, the article reported that gas could be **“the least harmful alternative while the world looks for other, longer-lasting solutions to the ‘greenhouse’ effect.”** Industry-funded materials, events, and outreach reinforced the bridge fuel narrative. A report from 1989, funded by 28 company sponsors from all three segments of the gas industry, also adopted the bridge fuel framing, claiming that enough gas could be supplied to “serve this country as an important ‘bridging fuel’ to 2010 ... by which time even more environment-friendly renewable sources might be nearly ready for widespread and economical use.”

1990 (Section 3.10)

Gas industry downplays the seriousness of its methane emissions

Concerns about the fossil fuel industry's contributions to rising methane levels threatened to upend the industry's messaging about gas as a bridge fuel and environmental solution. Among industry audiences, gas executives acknowledged a lack of data surrounding methane leakage rates. The *Toronto Star* reported that GRI's Howard Reiquam told an audience of gas executives “we don't know what methane emissions are for the natural gas industry.” Reiquam cautioned that the leakage rate identified by industry-affiliated studies was uncertain. “[T]here's room for error in both directions. It could be substantially more or less,” he explained. “Many people in the natural gas industry think the systems are already tight and [that] the losses are so small we don't need to worry. But none of us really knows that.” However, with external partners, whose endorsements were crucial to boost natural gas usage, the industry downplayed these problems. The *Natural Resource*, the newsletter AGA published for environmental groups, showed these sleights of hand in action, with an article printed under the **inaccurate headline: “Studies Suggest Methane Is Not a Major Greenhouse Gas.”**



1990-1992 (Section 4.6)

The gas industry attempts to counteract concerns by launching a methane study and the voluntary STAR program, in partnership with the EPA

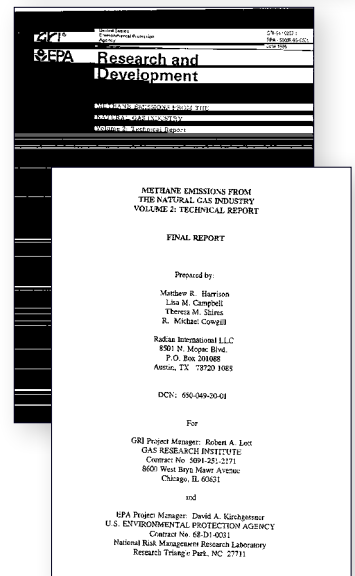
While promoting gas as a bridge fuel to the public, the industry took another concrete step to define gas as a climate solution rather than a problem. Through GRI, the **industry funded a major study** in partnership with the EPA. At the study's launch in 1990, GRI promised it would provide “a scientifically valid understanding of the implications of increased gas use on the global climate.” Though the 15-volume GRI/EPA study was not published until 1996, industry leaders seemed confident the results would **“ease the concerns some have expressed with respect to methane emissions from the natural gas system,”** as Enron CEO Kenneth Lay said in 1992. At an AGA conference that same year, AGA and EPA launched the Natural Gas STAR program, an entirely voluntary, market-based methane-reduction effort run by the EPA. The program's oil and gas industry members implemented only voluntary, cost-effective “best management” practices for reducing emissions, reporting these and their estimated emissions reductions to the EPA. Program participants noted how little the program required of them in exchange for positive publicity. In return for industry participation, EPA assisted industry partners by advocating against “regulatory barriers” to natural gas expansion.



1996 (Section 4.7,4.8)

A landmark study produces results that reinforce the gas myth

The major GRI/EPA study was published in 1996 and reported an estimated methane emissions rate of 1.4 percent (with a margin for error). The oil and gas industry used this figure as their key reference point to support the claim that expanded gas use could help reduce greenhouse gas emissions. It was not publicly disclosed at the time that, in addition to partially funding and heavily influencing the study, the gas industry also wielded control over the final technical review of the study's findings. New documents show that **EPA published the study without conducting its own technical review**, effectively removing a final opportunity for independent scrutiny. David Kirchgessner, the EPA project manager for the study, noted in internal notes: **“It is going to be difficult to obtain a conscientious and competent technical review for this many detailed reports within the lab. We simply do not have the expertise.”** The GRI/EPA study has had a lasting legacy as a benchmark for evaluating and undercounting methane emissions from the U.S. oil and gas industry for decades — right up to the present day.



This report is available at climateintegrity.org/projects/natural-gas-fraud.

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