

STATE OF MARYLAND
BEFORE THE
PUBLIC SERVICE COMMISSION OF MARYLAND

In Re:

PETITION OF THE OFFICE OF)	
PEOPLE’S COUNSEL FOR NEAR-)	
TERM, PRIORITY ACTIONS AND)	
COMPREHENSIVE, LONG-TERM)	CASE NO. 9707
PLANNING FOR MARYLAND’S)	
GAS COMPANIES)	

DIRECT TESTIMONY OF EMILY KENT

ON BEHALF OF
THE SIERRA CLUB

MAY 4, 2026

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1 **1. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q Please state your name and occupation.**

3 **A** My name is Emily Kent. I am a Vice President for Clean Energy at David Gardiner and
4 Associates. My business address is 2425 Wilson Blvd., Arlington, VA 22201.

5 **Q What is your educational background and professional experience?**

6 **A** I hold a Master in Public Policy from the Harvard Kennedy School and a Bachelor of
7 Arts in Environmental Policy from Washington University in St. Louis, with minors in
8 Mathematics and Economics. I have a decade of experience working in clean energy and
9 climate policy, including conducting greenhouse gas (“GHG”) inventories and analysis
10 for U.S. federal agencies, leading the U.S. clean hydrogen program at an environmental
11 nonprofit, and currently consulting at David Gardiner and Associates on a diverse set of
12 decarbonization topics. My complete professional experience is detailed in my resume,
13 which is attached as Exhibit EK-1.

14 **Q Which questions in Order No. 91791 are you responding to?**

15 **A** I will be responding to four questions posed by the Maryland Public Service Commission
16 (“Commission”) in Order No. 91791 throughout my testimony, as follows:

- 17
- Question 3. What policies, guidelines, or regulations, if any, should be adopted to
18 ensure that future natural gas company planning practices adequately address the
19 State’s climate goals?
 - Question 4. What policies, guidelines, or regulations, if any, should be adopted
20 with respect to natural gas company planning practices related to a reduced
21 greenhouse gas emissions future?
22

- 1 • Question 8. How should non-pipeline alternatives (NPAs) be evaluated and
2 incorporated into gas company planning, if at all?
- 3 • Question 12. How should future technological innovations, demand response
4 programs, more efficient appliances, and other mechanisms, be addressed in gas
5 company planning?

6 **2. FINDINGS AND RECOMMENDATIONS**

7 **Q Please summarize your findings.**

8 **A** My primary findings are the following:

- 9 • Maryland has codified ambitious decarbonization policies, including the Climate
10 Solution Now Act’s mandate to achieve “net-zero statewide greenhouse gas
11 emissions by 2045.”¹
- 12 • The Commission is charged with considering “the achievement of [Maryland’s]
13 climate commitments for reducing statewide greenhouse gas emissions,” as well
14 as “the preservation of environmental quality, including protection of the global
15 climate from continued short-term and long-term warming based on the best
16 available scientific information recognized by the Intergovernmental Panel on
17 Climate Change,” when “supervising and regulating public service companies.”²
18 In order to achieve this goal, the Commission must take steps to support
19 Maryland’s progress toward net-zero GHG emissions.

¹ MD. CODE ANN., ENV’T § 2-1204.2 (2025).

² MD. CODE ANN., PUB. UTIL. § 2-113(a)(2) (2025).

- 1 • Natural gas consumption by residential, commercial, and industrial consumers
2 accounted for 9.08 million metric tons (MMT) of carbon dioxide equivalent
3 (CO₂e) in Maryland in 2020.³ This natural gas consumption constituted
4 approximately 14% of the state’s total net GHG emissions.⁴
- 5 • In 2020, fuel use from industrial natural gas customers alone comprised 1.43% of
6 Maryland’s net total GHG emissions and 10.19% of the state’s total emissions
7 from fuel use of natural gas.⁵

8 **Q Please summarize your recommendations.**

9 **A** Based on my findings, I offer the following recommendations:

- 10 • It is within the scope of the Commission’s authority to consider how gas is being
11 used, as the Commission regulates gas companies’ service to their customers,
12 which includes their industrial customers. In order to fulfill its directive to help
13 meet Maryland’s net-zero mandate, the Commission must assess how gas
14 customers—including industrial consumers—can transition to lower-carbon
15 resources.
- 16 • Thus, industrial gas customers need to be considered in the Commission’s future-
17 of-gas proceedings and processes. If the Commission fails to consider industrial
18 customers, it will be ignoring a significant portion of gas use in Maryland—
19 which, as noted above, accounts for about 10% of the GHG emissions from fuel

³ Maryland Dep’t of the Env’t (“MDE”), *Maryland 2020 GHG Emissions by Sector* (Sept. 24, 2022), https://mde.maryland.gov/programs/air/ClimateChange/Documents/VIMAL/MD_2020_GHG_Inventory_2022-09-24.xlsx [hereinafter “MD 2020 GHG Spreadsheet”].

⁴ *Id.*

⁵ *Id.*

1 use of natural gas. This oversight will undercut the value of the future-of-gas
2 docket and impede compliance with Maryland’s statutory climate goals.

3 **3. BACKGROUND ON INDUSTRIAL GAS USE IN MARYLAND**

4 **Q Please describe how gas is used by industrial gas customers in Maryland.**

5 **A** Industrial facilities use gas for on-site thermal energy generation—typically with the use
6 of an industrial boiler—and occasionally for on-site electricity generation as well.
7 Industrial boilers produce steam and hot water that is required for manufacturing
8 processes. Maryland is home to facilities that cover a variety of industrial subsectors,
9 including facilities that manufacture chemicals, food, transportation equipment, and
10 plastics.

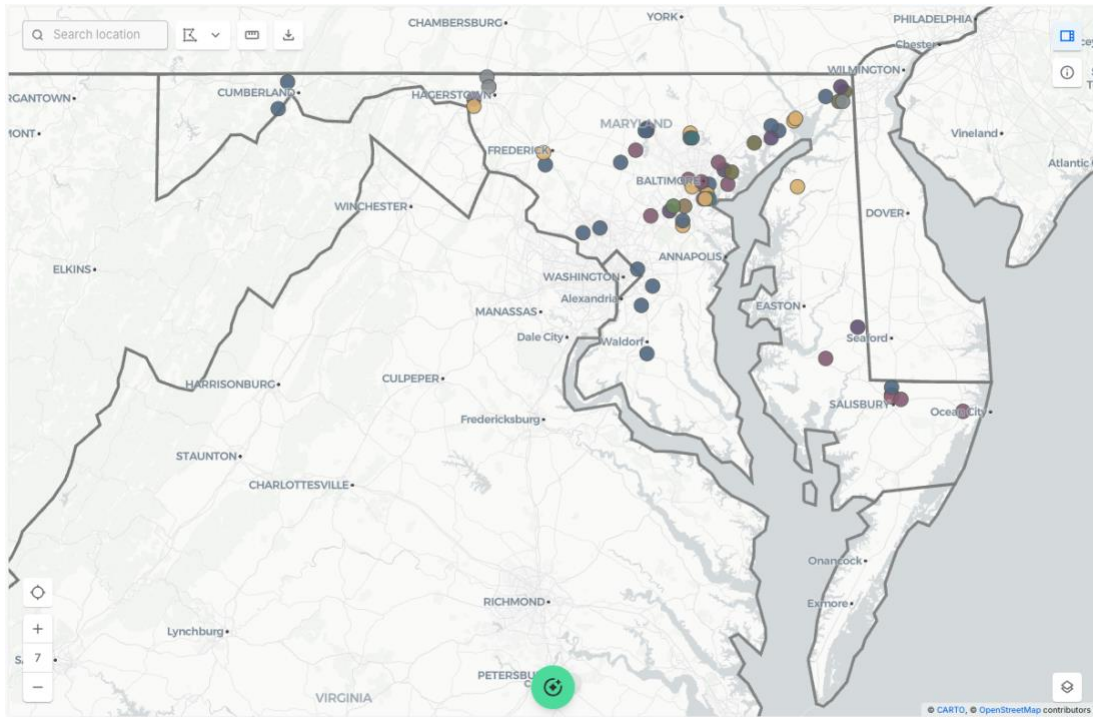
11 **Q How many industrial facilities use gas boilers in Maryland?**

12 **A** While this list does not include all industrial boilers in the state, there are 221 industrial
13 boilers in Maryland that report their emissions to the National Emissions Inventory
14 (“NEI”) because their point source emissions exceed the NEI’s thresholds. Of these 221
15 industrial boilers, approximately 70% utilize natural gas as their primary fuel. These
16 boilers span a variety of industrial subsectors: 53 are used in chemical manufacturing
17 processes, 42 are used in food manufacturing, and around 30 boilers each are used for
18 transportation equipment, plastics manufacturing, and petroleum and coal production.⁶
19 Figure 1 below illustrates the physical locations of the industrial boilers in Maryland

⁶ Evergreen Action, *National Map of Industrial Boilers (2020 Emissions Data)*,
https://clausa.app.carto.com/map/07d7be74-69f7-4a7f-9cd7-bb92a84b5db3?lat=39.793382&lng=-79.292132&zoom=6&widget_bfb40e7b-dc2f-4051-b09a-ba624644450a=Maryland&widget_92d24b43-6b54-4095-aacf-7f450658cea6=Chemical+Manufacturing%2CFood+Manufacturing [hereinafter “Evergreen Action Boilers National Map”].

1 (different colors signify different subsectors, and each circle can represent a single boiler
2 or multiple boilers in one location).

3 **Figure 1. Locations of Gas Boilers in Maryland.**



4
5 *Source: Evergreen Action Boilers National Map.*

6 In addition to the GHGs they emit, industrial boilers also produce nitrogen oxide (“NO_x”)
7 emissions, which contribute to ozone formation. Ozone is a type of air pollutant that can
8 cause adverse health impacts, such as respiratory diseases, for the surrounding
9 community.⁷ Problematically, there are nearly 300 small industrial boilers (some of
10 which may be included in the 221 boilers noted above, if large enough to require
11 reporting) located in counties in Maryland that are not attaining federal air quality

⁷ ACEEE, *Small Industrial Boilers and Ozone Pollution Across the United States* (Feb. 6, 2025), <https://www.aceee.org/small-industrial-boilers-and-ozone-pollution-across-united-states> [hereinafter “ACEEE Boilers Map”].

1 standards for ozone pollution.⁸ A number of these boilers are in environmental justice
2 communities, which already bear a disproportionate burden of pollution.⁹

3 **Q How does Maryland’s industrial sector impact the state’s overall GHG emissions?**

4 **A** Maryland’s most recent GHG inventory details emissions in the state in 2020. In 2020,
5 the state’s net total emissions were 64.94 MMT CO₂e.¹⁰ As shown in Table 1 below, the
6 use of natural gas in the residential, commercial, and industrial sectors emitted 9.08
7 MMT CO₂e (or about 14% of the state’s total net emissions).¹¹ Of this 9.08,
8 approximately 0.93 MMT CO₂e came from natural gas that was specifically used in the
9 industrial sector—making up 10.19% of the state’s emissions from natural gas fuel use,
10 and 1.43% of the state’s total net emissions.¹²

⁸ *Id.*; see also U.S. Env’tl. Prot. Agency, *Maryland Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants* (Apr. 30, 2026), https://www3.epa.gov/airquality/greenbook/anayo_md.html.

⁹ *Id.*

¹⁰ MDE, *Greenhouse Gas Inventory*, <https://mde.maryland.gov/programs/air/climatechange/pages/greenhousegasinventory.aspx>. The net total emissions number is from the 2020 Excel file, “MD_2020_GHG_Inventory_2022-09-24.xlsx” [hereinafter “MD 2020 GHG Inventory”] and based on a 100-year global warming potential.

¹¹ Using the MD 2020 GHG Inventory, the 9.08 MMT CO₂e is a sum of the data in this Excel file in F51 on the Residential tab; G61 on the Commercial tab; and I122 on the Industrial tab.

¹² MD 2020 GHG Spreadsheet.

1

Table 1. GHG Emissions Related to Use of Natural Gas in Maryland

Maryland Sector or Subsector	GHG Emissions (MMT CO₂e)	Percentage of Emissions from Natural Gas Fuel Use	Percentage of Maryland’s Total Net Emissions
Natural Gas for Fuel Use	9.08	-	13.99%
Residential Use	4.28	47.12%	6.59%
Commercial Use	3.88	42.70%	5.97%
Industrial Use	0.93	10.19%	1.43%
Total Net Emissions	64.94	-	-

2

3

Source: MD 2020 GHG Inventory.

4

Q Have any industrial companies in Maryland indicated their willingness to decarbonize their gas usage?

5

6

A Yes, nine prominent manufacturing companies that have facilities in Maryland are members of the Renewable Thermal Collaborative (“RTC”), indicating a dedicated interest in decarbonizing their facilities’ thermal energy needs with renewable energy.¹³

7

8

9

4. OPTIONS FOR DECARBONIZING INDUSTRIAL GAS USE

10

Q What options do industrial customers have for transitioning away from gas?

11

A Numerous technologies exist for industrial customers to use in place of gas boilers, thereby transitioning their processes away from gas and reducing their GHG emissions and air pollution. In place of traditional natural gas boilers, industrial facilities can generate thermal energy on-site using technologies such as electric boilers, heat pumps,

12

13

14

¹³ Information provided by the Renewable Thermal Collaborative in May 2026.

1 thermal energy storage, waste heat recovery (e.g., using heat from their own operations),
2 or combined heat and power (“CHP”) systems.

3 Industrial facilities could also connect to district heating systems or thermal energy
4 networks that distribute low-carbon heat, including waste heat sourced from existing and
5 planned data centers or other industrial facilities. In this case, there could be a role for gas
6 utilities to play in providing thermal energy to industrial customers. Incumbent gas
7 utilities could transition their services to developing these thermal energy networks,
8 under the regulation of the Commission.

9 Industrial facilities can also electrify their thermal energy with heat pumps and electric
10 boilers. Industrial facilities can even utilize their own waste heat through the use of heat
11 pumps. These technologies are commercially available and can meet low-to-moderate
12 heat needs. Industrial heat pumps can generate heat up to 130°C, while electric boilers
13 can generate heat and steam up to 350°C.¹⁴ About 44% of industrial process heat demand
14 is low-temperature (at or below 150°C).¹⁵ This heat is particularly common in food
15 processing and chemical manufacturing—two dominant industrial subsectors in
16 Maryland.¹⁶ In the future-of-gas proceeding, the Commission should consider how to
17 encourage industrial customers to electrify boilers that are employed for steam generation
18 and other low-heat processes.

¹⁴ Renewable Thermal Collaborative, *Electrification Action Plan* at 6, 8, https://www.renewablethermal.org/wp-content/uploads/2018/06/01.19.24_Final_RTC-Electrification-Action-Plan_Updated.pdf.

¹⁵ See ACEEE, *Net-zero industry by 2050: a scenario analysis of boiler replacement with industrial heat pumps* at 2 (Dec. 2024), https://www.aceee.org/sites/default/files/pdfs/net-zero_industry_by_2050_-_a_scenario_analysis_of_boiler_replacement_with_industrial_heat_pumps.pdf [hereinafter “ACEEE Industrial Heat Pumps”].

¹⁶ Evergreen Action, *Maryland State Boiler Map*, <https://clausa.app.carto.com/map/75b3824c-f54b-4eb4-b6f2-ffa1190bc7ac>.

1 Thermal energy storage systems refer to numerous technologies that store thermal
2 energy—produced from clean electricity, solar thermal energy, or recovered waste heat—
3 for later use. These technologies can produce temperatures up to 1,000°C, displacing the
4 need for natural gas to produce heat in many industrial subsectors.¹⁷

5 Industrial facilities that continue to use gas could also transition to CHP systems (also
6 known as “co-generation”) to achieve higher rates of efficiency. These systems produce
7 electricity and useful thermal energy simultaneously, operating at approximately 65% to
8 90% efficiency, compared to only 45% to 55% efficiency when electricity and thermal
9 energy are generated separately.¹⁸ CHP systems are common in the industrial sector, and
10 111 facilities in Maryland (including industrial facilities in food and beverage and
11 chemicals manufacturing) already use CHP systems.¹⁹

12 **Q Should the Commission encourage or require Maryland’s gas companies to**
13 **facilitate their industrial customers’ usage of these efficient, cleaner technologies?**

14 **A** Yes. Given the commercially available clean technologies that can reduce emissions from
15 the industrial sector, the Commission should ensure parity between industrial customers
16 and residential and commercial customers. If gas companies are required to reduce
17 emissions from residential and commercial uses of natural gas, the same should be
18 required for industrial use.

¹⁷ Renewable Thermal Collaborative, *Thermal Energy Storage (TES)*, <https://www.renewablethermal.org/thermal-energy-storage-tes/>.

¹⁸ Combined Heat and Power Alliance, *What is CHP?*, <https://chpalliance.org/what-is-chp/>.

¹⁹ Onsite Energy Installation Database, <https://www.onsite-energy-installations.ornl.gov/?page=4&size=20>.

1 As an example, incumbent gas utilities could transition their current services (i.e., gas
2 distribution and delivery) to developing and managing thermal energy networks. These
3 networks provide low-emissions heat to residential, commercial, and industrial facilities,
4 reducing the need for on-site gas combustion. Thermal energy networks can source their
5 heat from geothermal systems and waste heat recovered from industrial processes and
6 commercial facilities such as data centers. The Commission should encourage
7 Maryland’s gas companies to support thermal energy network pilot projects that take
8 advantage of the waste heat generated by industrial and commercial facilities. Other
9 states have passed legislation and regulations aimed at developing thermal energy
10 networks, including by directing incumbent utilities to create pilot projects. For example,
11 New York’s Utility Thermal Energy Networks and Jobs Act directed gas utilities to
12 develop thermal energy network pilot projects under the regulation of the New York
13 Public Service Commission.²⁰ Many states are considering thermal energy networks as a
14 future business model for gas utilities, both through these pilot projects and in their own
15 future-of-gas proceedings.²¹

²⁰ S. 9422 2021–2022 LEG. SESS. (N.Y. 2021).

²¹ Thirteen states have introduced or passed legislation focused on thermal energy networks. *See* Building Decarbonization Coalition (“BDC”), *Thermal Energy Networks (TENs) State Legislation*, <https://buildingdecarb.org/resource-library/tens-state-leg>. For example, Minnesota’s Natural Gas Innovation Act encouraged gas utilities to consider alternatives to gas, including electrification, district thermal energy, carbon capture and storage, hydrogen, renewable natural gas (“RNG”), and others (MINN. STAT. § 216B.2427 (2025)). Eversource, a Massachusetts utility, deployed the first utility-operated thermal energy network in 2024 using geothermal energy (BDC, *BDC Celebrates Utility Geothermal Network Launch* (Mar. 5, 2025), <https://buildingdecarb.org/bdc-celebrates-geothermal-network-launch>).

1 **5. SEVERAL OTHER STATES HAVE BEGUN DEVELOPING SIMILAR POLICIES**

2 **Q Are any other states thinking about how to decarbonize industrial gas use?**

3 **A** Yes, state agencies in California, Colorado, Illinois, New York, and Pennsylvania all
4 have programs and initiatives focused on decarbonizing industrial gas use. Most notably,
5 the Illinois Commerce Commission (“ICC”) is already including the industrial sector in
6 its Future of Gas proceeding. Each of these states, like Maryland, has set ambitious
7 policies calling for net-zero GHG emissions. These examples show that inclusion of
8 industrial gas consumers in these proceedings and related policies is both technically
9 feasible and important for effectuating meaningful reductions in states’ GHG emissions.

10 First, New York currently administers programs focused on industrial decarbonization.

11 For example, the New York State Energy Research and Development Authority
12 (“NYSERDA”)’s Commercial and Industrial Carbon Challenge provides grants totaling
13 \$15 million to industrial and commercial facilities to reduce emissions through a number
14 of strategies, including thermal electrification, installation of ground-source or air-source
15 heat pumps, and low-carbon fuel use.²² The award that a project can receive is based on
16 the size of its carbon savings goal—the financial incentive increases as the carbon
17 savings increase—with a minimum required reduction of 25,000 metric tons of CO₂e.²³

18 As another example, Colorado’s Clean Air Program offers grants for industrial and
19 manufacturing facilities to undertake emission reduction projects, including fuel
20 efficiency, fuel switching, and electrifying their fossil fuel-powered equipment or

²² NYSERDA, *NYSERDA Commercial and Industrial (C&I) Carbon Challenge*,
<https://portal.nyserdera.ny.gov/servlet/servlet.FileDownload?file=00P8z000002kFouEAE>.

²³ *Id.*

1 processes.²⁴ The program has \$25 million to support projects and has dispersed
2 (including projects under contract negotiations) approximately \$23 million to selected
3 projects, including numerous projects for existing industrial and manufacturing facilities
4 to transition away from natural gas.²⁵ During the first round of funding, Anheuser-Busch
5 received \$1.5 million to install a steam-generated heat pump at its brewery and a
6 semiconductor manufacturer received the same amount of funding to replace three
7 natural gas heating water boilers with two heat pump chillers at its facility.²⁶ The sixth
8 round of Clean Air Program funding focused on scaling up the necessary technology for
9 industrial decarbonization.²⁷ For example, AtmosZero, a producer of high-efficiency heat
10 pump boilers that can replace natural gas boilers at industrial facilities, received \$1.8
11 million in funding during this round.²⁸

12 Pennsylvania’s Reducing Industrial Sector Emissions (“RISE PA”) program also
13 provides incentives for industrial electrification, using \$396 million in federal funding
14 from Climate Pollution Reduction Grants.²⁹

15 The California Energy Commission established the Industrial Decarbonization and
16 Improvement of Grid Operations (“INDIGO”) Program following the passage of
17 Assembly Bill 209 in 2022. The legislature appropriated \$40 million for the program to

²⁴ Jamie Friedman, et al., *State Efforts to Decarbonize Key Industrial Sectors* (Nov. 14, 2024), Center for American Progress, <https://www.americanprogress.org/article/state-efforts-to-decarbonize-key-industrial-sectors/>.

²⁵ *Id.*

²⁶ Colorado Energy Office, *Clean Air Program Report: FY25-26 Annual Report* (Dec. 2025), <https://drive.google.com/file/d/15pi3Zi1LehC2ZaFCByUpvuKsSYF1da3u/view>.

²⁷ *Id.*

²⁸ *Id.*

²⁹ Penn. Dep’t of Env’tl. Prot., *Reducing Industrial Sector Emissions in Pennsylvania (RISE PA)*, <https://www.pa.gov/agencies/dep/programs-and-services/energy-programs-office/rise-pa>.

1 provide cost sharing for existing industrial facilities to implement decarbonization,
2 energy-saving, and/or grid enhancement projects.³⁰

3 Finally, in addition to these programs, the Colorado Energy Office; the Michigan
4 Department of Environment, Great Lakes, and Energy; the Minnesota Pollution Control
5 Agency; and the Wisconsin Office of Energy Innovation are all members of the RTC,
6 indicating an interest and engagement in decarbonizing their state’s industrial thermal
7 energy use.³¹

8 **Q Can you provide further details on Illinois’ Future of Gas proceeding and its**
9 **consideration of industrial customers?**

10 **A** In November 2023, the ICC “directed Commission staff [] to develop a plan for a Future
11 of Gas proceeding, including a timeline for workshops and a formal proceeding.”³² In its
12 Orders, the ICC referenced Public Act 102-0662, which codifies Illinois’ goal of
13 economy-wide clean energy by 2050. While this Act does not mention the ICC’s
14 authority to pursue decarbonization of the gas sector, the ICC reasoned that in order to
15 achieve this goal, “the gas distribution system must change.”³³

16 The Illinois Future of Gas proceeding seeks to “initiate discussions to identify the
17 technologies, data, legislation, regulation, and investments necessary to adapt” the gas

³⁰ Andrew Hoffmeister, et al., *Effective State and Utility Programs to Accelerate Industrial Electrification* (Sept. 2025), ACEEE, https://www.aceee.org/sites/default/files/pdfs/effective_state_and_utility_programs_to_accelerate_industrial_electrification.pdf.

³¹ Renewable Thermal Collaborative, *Members* (last accessed May 4, 2026), <https://www.renewablethermal.org/our-members/>.

³² Illinois Comm. Comm’n, *Order 24-0158* at 1 (Mar. 7, 2024), <https://www.icc.illinois.gov/docket/P2024-0158/documents/347887/files/607586.pdf>.

³³ *Id.* at 2.

1 distribution system to Illinois’ clean energy future, which will “inform any potential
2 [ICC] action or legislation.”³⁴ The ICC identified numerous issues for discussion in the
3 proceeding, including the “[p]otential for decarbonization of the existing gas system,
4 including identification of technical constraints, hard to decarbonize end-uses, and
5 methodologies for achieving decarbonization;” as well as “[t]he role and scope of energy
6 efficiency retrofits, *for both residential and Commercial and Industrial end-users*, to
7 facilitate decarbonization.”³⁵

8 The ICC, as part of Phase 2C of its Future of Gas Workshops, collected legislative,
9 regulatory, and policy proposals to decarbonize the state’s gas distribution system.

10 Numerous proposals focused on industrial gas use. For example, the American Council
11 for an Energy Efficient Economy (“ACEEE”) proposed that the ICC design electricity
12 rates to encourage greater deployment of electric clean heat technologies in the industrial
13 sector. ACEEE recommended that the Commission design rates to allow for time-of-use
14 pricing and flexibility for industrial customers. ACEEE also proposed the establishment
15 of a financing program focused on industrial electrification to reduce the high capital
16 requirements for these projects.³⁶ Similarly, the RTC proposed that the ICC should open
17 a proceeding directing utilities to incorporate industrial electrification into their beneficial
18 electrification plans.³⁷ The ICC has not yet issued a ruling in Phase 2C, but these

³⁴ *Id.* at 4.

³⁵ *Id.* at 2 (emphasis added).

³⁶ ACEEE, *ICC Future of Gas Proposal: Industrial Clean Heat Rates - Use existing authority to design electric rates that enable greater deployment of clean heat technologies in the industrial sector* (Dec. 3, 2025), https://icc.illinois.gov/api/web-management/documents/downloads/public/future-of-gas/Phase%202C%20Proposals_ACEEE_12-3-25.pdf.

³⁷ Renewable Thermal Collaborative, *ICC Future of Gas Proposal: Incorporating Industrial Electrification into Utility Beneficial Electrification plans* (Dec. 1, 2025), https://icc.illinois.gov/api/web-management/documents/downloads/public/future-of-gas/ICC%20FOG%20Phase%202C%20Proposals_Renewable%20Thermal%20Collaborative_12-1-25.pdf.

1 electricity and industrial sector policy recommendations would be relevant and
2 appropriate to pursue in the Maryland future-of-gas proceeding as well.

3 Other states—namely, Colorado, Massachusetts, New York, Rhode Island, and
4 Washington—are also holding proceedings focused on the future role of gas utilities as
5 these states pursue their respective decarbonization goals.³⁸

6 **6. CONCLUSION**

7 **Q Please summarize your recommendations for the Commission.**

8 **A** My primary recommendation is that the Commission should declare that industrial
9 customers fall within the scope of Maryland’s future-of-gas docket, given industrial
10 customers’ significant gas usage and the Commission’s clear directive to help meet
11 Maryland’s net-zero mandate. Just as the Commission will be assessing how gas
12 companies should reduce emissions from their residential and commercial customers, the
13 Commission should assess how gas companies’ industrial customers can reduce gas
14 usage by transitioning to lower-carbon processes and technologies.

15 **Q Does this conclude your testimony?**

16 **A** Yes.

³⁸ Dan Aas, *Future of Gas Proceedings: Motivations, process, accomplishments and barriers* (Aug. 28, 2024), E3, https://icc.illinois.gov/api/web-management/documents/downloads/public/future-of-gas/E3_IL_FoG_Proceedings_Other_States.pdf; Massachusetts Dep’t of Pub. Utils., *Vote and Order Opening Investigation*, D.P.U. 20-80 (Oct. 29, 2020), <https://fileservice.eea.comacloud.net/V3.1.0/FileService.Api/file//fdajdaje?tZdTYEQrUqp+OWN8aeB17cEmiDhMBXK0ednWT8WFP5Ok9v9pxUxyG6LkaCeWBSjqbmMINqhcSkxPf0qUr1gASPKrYE1qejvebf677PtCVStUdHoHpEGELGLGjR+ZpYgt>.

Exhibit EK-1: Curriculum vitae

EMILY L. KENT

emily@dgardiner.com

WORK EXPERIENCE

David Gardiner & Associates, Washington, DC

2024–Present

Vice President for Clean Energy (2025–Present); Senior Director for Clean Energy (2024)

- Leads a small consulting team on projects relating to climate and clean energy policy research, analysis, and advocacy, including leading projects and managing and mentoring three staff.
- Developed or expanded subject matter expertise on specific project topic areas, including: best climate-beneficial use-cases for clean hydrogen; transmission policy and cost tracking in the PJM region; medium- and heavy-duty vehicle electrification; and data center heat reuse.
- Conducts marketing and business development to bring in new clients and projects.
- Directs projects from ideation through completion, including managing client relationships, leading development of research and deliverables, communicating results of projects, and managing project logistics such as budgets and timelines.
- Engages in decisions relating to the firm as part of the Senior Management Team.

Clean Air Task Force, Washington, DC

2021–2024

U.S. Director, Zero-Carbon Fuels (2022–Present); Policy Manager, Zero-Carbon Fuels (2021–2022)

- Led CATF's national program on Zero-Carbon Fuels, working across regions to analyze and promote a realistic view of hydrogen's role in climate change mitigation.
- Managed a team of 8 employees, including hiring, mentoring, work planning, and supervising.
- Was responsible for a program budget of \$2 million, including fundraising and grant management.
- Regularly coordinated with executive leadership team to design and implement strategy.
- Acted as a thought leader on clean hydrogen technology and policy, including developing technical comments on policy implementation and leading public and private sector collaboration.
- Led program's work on policy design and advocacy; communication and education; and technical analysis on clean hydrogen's potential and limitations.
- Changed the narrative on and influenced direction of the federal clean hydrogen production tax credit (section 45V) and the Regional Clean Hydrogen Hubs Program.
- Served as CATF's leading hydrogen expert in the U.S. for media interviews and presentations.

ICF, Greenhouse Gas (GHG) Mitigation & Sustainability, Washington, DC

2015–2019

Climate Change Specialist (2018–2019); Analyst (2017–2018); Research Assistant (2015–2017)

Consulted for public sector agencies on climate change mitigation efforts. Specific projects included:

U.S. Agency for International Development (USAID): Resources to Advance LEADS (Low Emission Development Strategies) Implementation (RALI)

- Managed the Clean Energy Emission Reduction (CLEER) Tool, a website and Excel tools that calculate GHG emissions benefits from clean energy. Managed annual budget of \$250,000, provided technical support and training, and led team of eight part-time subject matter experts and IT developers.
- Led development of progress reports and workplans for over \$1,000,000 of annual activities.
- Supported capacity building in developing countries for low emissions development strategies through creation of tools, case studies, trainings, and white papers; led RALI outreach and training.

Department of Homeland Security (DHS): Sustainability Performance Management System (SPM)

- Provided subject matter expertise for DHS SPM, a sustainability data warehouse with dashboards and reports that enable informed agency-wide decision-making on energy and sustainability.
- Developed technical requirements; analyzed electricity and utility data; and led client coordination.

Other GHG and Sustainability Analysis and Management Experience

- Analyzed GHG data, contributed to climate change and GHG mitigation plans, and developed GHG inventories for clients such as the National Park Service, County of Arlington, VA, and U.S. EPA.
- Led monitoring and evaluation activities such as indicator and strategic plan development for additional \$40 million, 5-year contract to support environmental compliance across USAID.

Holland & Knight, LLP, Washington, DC

June–August 2014

Intern with Beth Viola, Public Policy & Regulation Group

- Helped to develop and coordinate a coalition to convince government officials to make climate change a key pillar of the national agenda for the upcoming U.S. chairmanship of the Arctic Council.
- Drafted a briefing book on permafrost and methane in the Arctic for White House officials.
- Wrote issue briefs for the Advanced Biofuels Association and tracked federal funding for biofuels.

White House Council on Environmental Quality, Washington, DC

January–May 2014

Intern with Office of the Federal Environmental Executive

- Developed the 2014 Strategic Sustainability Performance Plan template for Federal agencies and created agency-specific templates in the Office of Management and Budget's online system.
- Designed communications to Federal employees for the 2014 GreenGov Presidential Awards.

Sierra Club, Washington, DC

June–August 2013

Intern with Beyond Coal Campaign

- Aided Eastern Region state teams with research and regular campaign strategy planning meetings.
- Evaluated Renewable Portfolio Standards to quantify states' proposed renewable energy projects.

EDUCATION

Harvard University, John F. Kennedy School of Government

Cambridge, MA

Master in Public Policy

May 2021

Washington University in St. Louis

St. Louis, MO

Bachelor of Arts, major in Environmental Policy, minors in Economics & Mathematics

May 2015

Phillips Academy, Andover

Andover, MA

High School Diploma

June 2011

PUBLICATIONS

- **State Strategies to Advance Medium- and Heavy-Duty Electric Vehicle Charging Infrastructure** (David Gardiner & Associates with the Energy Foundation, 2025)
- **Encouraging Clean Hydrogen Uptake in Key Sectors: A Policy Handbook for Practitioners** (David Gardiner & Associates for the Natural Resources Defense Council, 2025)
- **The Next Frontier of Tax Policy Solutions for a Clean Economy** (David Gardiner & Associates for the Sustainable Energy & Environment Coalition, 2025)
- **The Value of Federal Incentives and Greenhouse Gas Emission Standards for Hydrogen Production** (David Gardiner & Associates for the Center for Applied Environmental Law and Policy, 2024)
- **Hydrogen can play a role in decarbonization, but Treasury needs to get 45V right** (Clean Air Task Force, 2024)
- **Hydrogen in your Hulu ads: Here's why it matters** (Clean Air Task Force, 2023)

- **U.S. hydrogen hubs: What comes next?** (Clean Air Task Force, 2023)
- **Low- and zero-carbon fuels are critical to meeting aviation energy demand while decarbonizing the aviation sector** (Clean Air Task Force, 2022)
- **What makes for a good clean hydrogen hub?** (Clean Air Task Force, 2022)
- **CATF urges Senate to promote clean hydrogen and accelerate deployment** (Clean Air Task Force, 2022)
- **Equitable & Effective Climate Change Mitigation: Policy Analysis in Denver, Colorado** (Harvard Kennedy School Master's Capstone Project, 2021)
- **Clean Energy Emission Reduction (CLEER) Protocol: Guidelines for Quantifying GHG Emission Reductions from Clean Energy Actions Conducted under the USAID Global Climate Change Initiative** (ICF Project, 2019)
- **Inventory of U.S. Greenhouse Gas Emissions and Sinks, Semiconductor Manufacture Chapter** (ICF Project, 2016, 2017, and 2018)