April 12, 2024

The Honorable Chuck Fleischmann Energy & Water Appropriations U.S. House of Representatives Washington, DC 20515

The Honorable Marcy Kaptur Energy & Water Appropriations U.S. House of Representatives Washington, DC 20515 The Honorable Patty Murray Energy & Water Appropriations U.S. Senate Washington, DC 20510

The Honorable John Kennedy Energy & Water Appropriations U.S. Senate Washington, DC 20510

Dear Leadership of the House and Senate Appropriations Subcommittees on Energy and Water Development:

I am writing on behalf of the 40+ businesses, trade associations, nonprofits and other organizations undersigned to request <u>robust funding for Fiscal Year 2025 Energy and Water Appropriations for the several programs pertaining to combined heat and power (CHP) technology within the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE). CHP is the most efficient way to produce both electrical and thermal energy, saves consumers money, increases economic competitiveness, strengthens our nation's energy security, and reduces harmful emissions by increasing the adoption of clean fuels such as renewable natural gas and hydrogen.</u>

The Energy Efficiency and Renewable Energy FY25 Congressional Justification (<u>DOE FY2025</u> <u>Budget Request Vol. 4 EERE</u>) provides funding under the Industrial Efficiency & Decarbonization Office (IEDO) that the undersigned fully support including:

- \$45,000,000 in FY25 funding for the *Technical Assistance and Workforce Development* subprogram of IEDO which states "provide screenings and resources for a broad range of onsite energy technologies (such as battery storage, bioenergy, combined heat and power, district energy, photovoltaics, solar thermal, geothermal, distributed wind, thermal energy storage, etc.) to assist manufacturers in navigating which energy resources are most cost effective for their specific energy needs." (p. 148)
- \$15,000,000 in FY25 funding for the *Enabling Technologies for Low Carbon Fuels and Feedstocks* activity under the Cross-Sector Technologies subprogram of IEDO which states "development of flexible combined heat and power (CHP) systems that rely on low carbon fuels." (p. 144)

Technical Assistance and Workforce Development Justification - \$45,000,000

For nearly two decades, DOE has supported a regional network of technical assistance providers, known as the CHP Technical Assistance Partnerships (CHP TAPs). The CHP TAPs play a critical role in transforming the market for CHP, waste heat to power, and district energy technologies throughout the United States. To meet the evolving needs in the industrial sector, IEDO broadened the TAP program with the goal of providing similar services for a wider range of technologies that include renewable energy and storage through a new Onsite Energy TAP Program.

In FY23 the House and Senate both recommended up to \$15,000,000 in funding to provide ongoing support for the CHP TAPs and related CHP activities (<u>Division D – Energy & Water Development Statement FY23</u>, p. 58). In FY24, this funding remained consistence (<u>Extension of Continuing Appropriations and Other Matters Act</u>, 2024).

To maintain consistent with prior years funding levels, not only do we fully support the FY25 funding request of \$45,000,000 for the Technical Assistance and Workforce Development program, but we strongly urge the Energy and Water Appropriations Subcommittee to provide not less than \$15,000,000 in FY25 funding to support CHP-related activities within the Onsite Energy TAPs program.

With robust FY25 funding, the Onsite Energy TAPs program would enhance engagement with policymakers, utilities, and other key stakeholders to accelerate pathways for integration of onsite energy technologies and provide further support to accelerate the transition to decarbonized fuels and improve facility resilience against increased grid disruptions.

Additional research, development and analysis should focus on resiliency benefits for critical infrastructure: assessing the market for onsite energy technologies deployment at facilities including hospitals and nursing homes, colleges and universities, military bases, multi-family buildings, schools, food processing and distribution facilities, wastewater treatment plants, lodging, police and fire stations, prisons, supermarkets, pharmaceutical plants, airports, data centers, and critical manufacturing facilities. The program should also expand upon the March 2016 DOE Combined Heat and Power Technical Potential in the U.S. Report and assess the technical potential of CHP use with clean fuel sources, identifying and analyzing both the resource location of clean fuel sources and the demand for onsite clean energy technologies at industrial and commercial facilities.

We have benefited from this valuable program in its current form as the CHP TAPs and support its continuation and expansion at the FY25 EERE funding level to cover other clean onsite energy technologies to ensure that end users save money, reduce their energy use, lower overall emissions, and increase their reliability and resiliency in the face of extreme weather events that may compromise the grid.

Enabling Technologies for Low Carbon Fuels and Feedstocks Justification - \$15,000,000

In September 2022 DOE published its Industrial Decarbonization Roadmap, a comprehensive report identifying pathways to significantly reduce industrial emissions in American manufacturing and identified low carbon fuels and feedstocks as one of the four key pillars for decarbonization. Within the report, DOE explicitly mentions the role CHP can play in achieving significant decarbonization (DOE Industrial Decarbonization Roadmap, p. 14) including:

- "CHP systems utilizing clean fuel sources can enhance energy security and resilience
 for industrials and distributed microgrids. The use of nuclear energy for electricity and
 heat, renewable and synthetic fuels, and clean sources of energy as the prime movers
 for CHP systems can avoid the use of fossil fuels, which will support the integration of
 CHP into a fully decarbonized energy economy."
- "CHP has long used digester and biogas as fuel sources and systems deployed today can operate on increasing percentages of RNG as availability increases."
- "Engine and gas turbine manufacturers are currently testing and operating CHP systems on high percentage hydrogen fuels, in preparation for increasing use of RNG and hydrogen in the future."
- "RNG and hydrogen-fueled CHP systems can be a long-term path to decarbonizing industrial thermal processes resistant to electrification because of technology or cost barriers, and for critical operations where dispatchable onsite power is needed for resilience and reliability."

With robust FY25 funding, the enabling technologies for low carbon fuels and feedstocks activity under the Cross-Sector Technologies subprogram of IEDO would accelerate the transition to CHP utilization of decarbonized fuels by supporting further research and development in the following areas:

Decarbonized fuels.

- Biomethane and renewable natural gas (RNG)
 - Assess the biomethane potential for CHP for both direct use applications and for pipeline quality RNG.
 - Evaluate the potential for CHP in controlled environment agriculture greenhouses with CO₂ recovery for crop growth.
- Green hydrogen, blue hydrogen
 - Analysis of production, storage, and transportation capabilities, including utilization of existing gas pipeline infrastructure.
 - Assess the state of hydrogen fuel capability of CHP prime movers and identify ongoing research activities including the general nature of the research and predicted dates for the ability to run on 100% hydrogen.

Conclusion

We urge that the House and Senate Energy and Water Appropriations Subcommittees continue to support these funding levels for DOE's efforts to help businesses, developers, end users, and other interested parties identify opportunities and overcome barriers to CHP and other onsite energy technologies deployment and to make American manufacturers more competitive.

Respectfully,

2G Energy

American Gas Association

American Public Gas Association

Array Industries Inc.
Batten Consulting LLC
Capstone Green Energy

CarbonQuest
City Tech CUNY
Clarke Energy

Cogen Power Technologies

Colusa Indian Energy

Combined Heat and Power Alliance

Dalkia Aegis
DE Solutions, Inc.

Distributed Global Computing DT Energy Consultants, LLC

Energy and Water Development LLC

("EnWaDev")

Energy Investment Systems Inc.

Energy Pathways, LLC

Engie ENRGISTX

Firm Power Solutions
Force Energy Corporation
Heat is Power Association

Innio Jenbacher

Integrated Energy Concepts

Engineering PC

International District Energy Association

Knauf Shaw LLP

Kraft Power / Kraft Energy Systems

Lathrop Trotter
Lima Company
Martin Energy Group

Northeast-Western Energy Systems

USA

Rain CII Carbon LLC RENEW Energy Partners

Sheet Metal and Air Conditioning Contractors National Association

(SMACNA)

Shoreline Energy Advisors, LLC Sterling Energy Group, LLC

Tedom USA Inc

The Pennsylvania State University

Thermax Inc.

Turbine Inlet Cooling Association
Turkish Cogeneration Association

Turner Construction Washington Gas

West Texas Data Coalition LLC