Proposed Budget Threatens to Cut Funding for Important Programs that Benefit Combined Heat and Power and Waste Heat to Power

The industrial and commercial sectors, which represent nearly three-quarters of U.S. energy use,[1] hold great potential for efficiency improvements. Encouraging manufacturers and commercial property owners to generate power onsite with technologies like combined heat and power (CHP) and waste heat to power (WHP) can create jobs, strengthen America's competitiveness, and make our grid more resilient. President Trump's proposed FY2018 budget includes large cuts to programs that support these technologies, including cuts to the:

- Environmental Protection Agency (EPA) by 31%, and eliminating EPA's CHP Partnership,[2] a voluntary program with strong business support;[3] and
- Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) by 70%.[4] This would slash resources for DOE's Advanced Manufacturing Office and eliminate the CHP Technical Partnership and supporting technical activities within DOE's Advanced Manufacturing Office's Technical Partnership Program.

This budget approach further focuses support to innovative technologies that are "too far from market realization to merit sufficient industry focus and critical mass,"[5] overlooking proven technologies and innovative approaches that need assistance to overcome energy market failures to make manufacturers more competitive and reduce emissions right now.

DOE and EPA Help Overcome Market Barriers to CHP and WHP Deployment

CHP and WHP face barriers in the marketplace, especially a lack of information for businesses who might host these facilities and state and local governments who might include them in their energy plans. DOE and EPA support the CHP and WHP industry by helping businesses, government and other potential hosts understand the potential and benefits of CHP and WHP. Among other things:

- DOE's CHP TAPs and the agency's supporting technical activities help end-users and policymakers understand the benefits of CHP and overcome market failures that limit its use in many critical markets;
- DOE's CHP TAPs conduct screenings to determine if facilities are candidates for CHP. These screenings included a comprehensive assessment of Army military bases, which led to a federal goal of tripling deployment on Army property by 2020;
- DOE maintains a 50-state database of CHP installations,[9] and CHP success stories;[10]
- EPA provides resources about different technology options, including a Catalog of Technologies with data on costs and emissions;[6]
- EPA maintains a database of state policies that support CHP deployment,[7] and routinely authors reports about the treatment of CHP in state regulations;[8]
- DOE and EPA support critical research identifying technical potential for CHP and WHP, and evaluating market, policy and technology needs and trends.[11]

Congress Should Support a Budget that Advances these Programs

While CHP is already fueling many of America's factories, potential remains to increase deployment and make U.S. businesses and institutions more competitive and resilient. In 2016, the Department of Energy identified 149 gigawatts of remaining CHP and WHP technical potential – the equivalent of nearly 300 conventional power plants.[12] Deploying only a fraction of this potential could save US businesses $141 billion on their energy bills from 2016-2030.[13] Support from DOE and EPA is needed to help identify and overcome barriers to market realization. Accordingly, we urge Congress to:

1. Provide $12 million in FY2018 funding for the CHP TAPs and supporting technical efforts within DOE's Advanced Manufacturing Office's Technical Partnership Program;
2. Maintain language in the Senate report that delineates and recognizes the value of these programs; and
3. Provide full funding for EPA's CHP Partnership.

Sources

[1] U.S. EIA, Apr. 2015, "Annual Energy Outlook 2015, https://www.eia.gov/forecasts/aeo/section_deliveredenergy.cfm. Note that these projections are from the reference case.
[2] Office of Management and Budget, May 23, 2017, "Budget of the U.S. Government: A New Foundation for American Greatness," at 42, https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/budget.pdf
[3] Alliance for Industrial Efficiency, May 9, 2017, Press Release, "Over 100 businesses urge Congress to continue funding critical energy efficiency programs," http://alliance4industrialefficiency.org/100-businesses-urge-congress-continue-funding-critical-energy-efficiency-programs/
[4] Alliance to Save Energy, May 2018, "FY 2018 Federal Energy Efficiency Programs— Presidential Budget Request," http://www.ase.org/sites/ase.org/files/resources/Media%20browser/ee_funding_chart_fy2018_presidential_request_2.0.pdf
[5] U.S. Office of Chief Financial Officer, May 2017, DOE FY2018 Congressional Budget Request, https://energy.gov/sites/prod/files/2017/05/f34/FY2018BudgetinBrief_0.pdf ("This budget focuses DOE resources toward early-stage R&D.… All EERE programs will focus on research that industry either does not have the technical capability to undertake or is too far from market realization to merit sufficient industry focus and critical mass.").
[6] EPA, March 2015, "Catalog of CHP Technologies," https://www.epa.gov/chp/catalog-chp-technologies
[7] EPA, CHP Policies and Incentives Database, https://www.epa.gov/chp/dchpp-chp-policies-and-incentives-database
[8] *See, e.g.,* EPA, March 2016, "Portfolio Standards and the Promotion of Combined Heat and Power," https://www.epa.gov/chp/portfolio-standards-and-promotion-combined-heat-and-power
[9] DOE, ICF, U.S. DOE Combined Heat and Power Installation Database, https://doe.icfwebservices.com/chpdb/
[10] DOE, Combined Heat and Power Project Profiles Database, https://www1.eere.energy.gov/manufacturing/distributedenergy/chp_database/
[11] *See, e.g,* DOE, March 2016, "Combined Heat and Power Technical Potential in the US," https://www.energy.gov/eere/amo/downloads/new-release-us-doe-analysis-combined-heat-and-power-chp-technical-potential
[12] DOE-EPA, 2012, "Combined Heat and Power: A Clean Energy Solution," at 14 (at http://www.epa.gov/chp/documents/clean_energy_solution.pdf),
[13] Alliance for Industrial Efficiency, Sept. 2016, "State Ranking of Potential Carbon Dioxide Emission Reductions through Industrial Energy Efficiency," http://alliance4industrialefficiency.org/wp-content/uploads/2016/09/FINAL-AIE-State-Industrial-Efficiency-Ranking-Report_9_15_16.pdf (limits analysis to "economic potential" – i.e., projects that can be paid back in less than ten years).