BLUEGREEN® ALLIANCE POLICY BRIEF

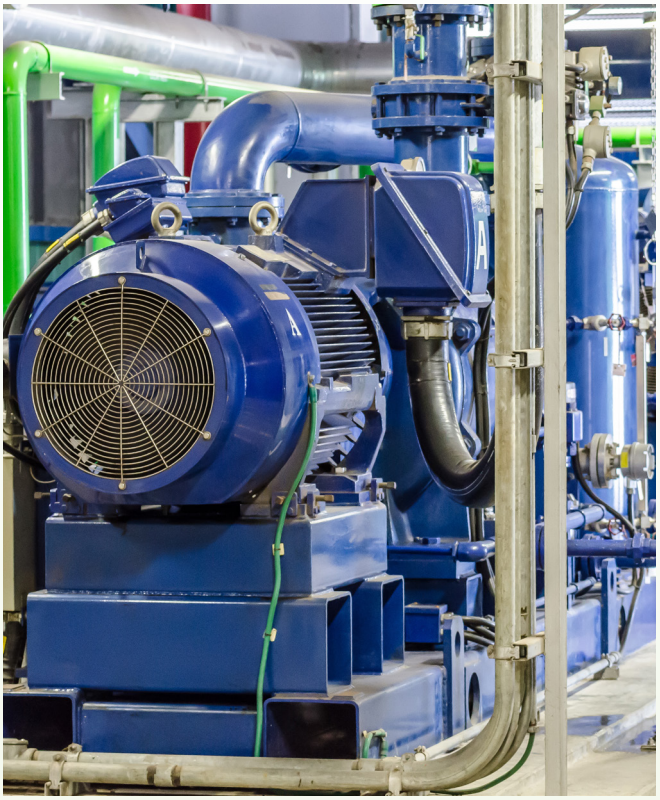
Platform on Industrial Energy Efficiency

The U.S. manufacturing sector forms a cornerstone of our nation's economy, providing nearly 12 million good-paying jobs for middle-class families across the country in 2011[1] and $1.8 trillion in gross domestic product.[2] The sector remains the world's largest, manufacturing 18.2 percent of global manufactured products,[3] with China's rapidly growing manufacturing sector accounting for 17.6 percent.[4]

The economic downturn took a significant toll on American manufacturers and the crisis facing American firms and workers extends well beyond the recent recession. Weathering the storm requires support for the efficient use of energy resources in American manufacturing.

Global competitiveness requires a broad range of medium- and long-term actions be brought to bear to ensure the continued prosperity of our industrial sector — including a focus on infrastructure, America's workforce, access to capital, and trade policies that level the playing field for domestic manufacturers. One immediate step to protect U.S. manufacturing that shares the diverse support of the labor, business, and environmental communities is to make significant, nationwide improvements in industrial energy efficiency. Measures to help reduce energy costs and boost productivity and efficiency within the industrial sector will support U.S. manufacturers and go a long way to maintaining our competitive edge — keeping jobs and supply chains operating here in the U.S.

As McKinsey & Company noted in a July 2009 report, we can reduce primary industrial energy consumption by 21 percent by 2020 — saving U.S. industry $47 billion per year — just by unlocking the potential for energy efficiency in the industrial sector.[5] Some leading U.S. industrial facilities are already taking advantage of the huge savings that energy efficiency improvements can provide to their bottom lines. These investments are adding value to their companies, freeing up capital that would otherwise be spent on energy inputs, preserving existing jobs, and creating new jobs in the construction and retrofitting of their facilities. By decreasing energy demand, these facilities are also decreasing exposure to energy price fluctuations, a significant concern in energy-intensive, trade-exposed industries. However, a number of barriers, including a lack of awareness and senior level commitment, the need for rapid return on investment and access to capital, and regulatory uncertainty continue to make cost-effective efficiency projects difficult to get off the ground.



Over the longer term, access to financing, supporting technology development and driving demand are needed to significantly advance broad-based industrial energy efficiency improvements.

In order to progress toward these long-term goals, the BlueGreen Alliance recommends a dedicated focus on the following short-term proposals to help America's manufacturing sector begin to implement industrial energy efficiency projects:

Financing

While industrial efficiency projects save money over time, they may require a significant up-front investment. By improving tax policy and providing strategic financial support for projects through low-interest loans, direct grants, and other mechanisms, we can help industrial efficiency projects clear the financing hurdle. Some proposals that could be immediately implemented include:

Improve the existing Investment Tax Credit (ITC) for combined heat and power (CHP) at industrial facilities.

- Apply the existing 10 percent ITC to a project's first 25 megawatts (MW), rather than the first 15 MW, as is currently the law;
- Remove the current 50 MW size limitation;
- Allow waste heat recovery (WHR) projects to qualify and;
- Increase the ITC to 1) 30 percent for highly efficient CHP achieving efficiencies of 70 percent or greater and 2) highly efficient WHR projects. WHR projects may offer zero incremental emission energy production, and they should benefit from the same tax credit as the cleanest technologies.

Revitalize the 48C Advanced Energy Manufacturing Tax Credit.

This successful, but oversubscribed, tax credit — first funded in the American Recovery and Reinvestment Act (ARRA) — should be reinvigorated and $5 billion should be invested in its continuation. The $2.3 billion program leveraged $5.4 billion in private sector funding for over 180 manufacturing facilities and drove job creation and economic growth in states across the country.

Appropriate additional funds in the amount of $150 million for the U.S. Department of Energy's Industrial Efficiency Grant Program.

This program originally received $155 million as part of the American Recovery and Reinvestment Act of 2009, and it should receive continued support. The awards supported combined heat and power and district energy projects that will provide an estimated 14 million Btu in energy savings and leveraged $634 million in private industry capital. The grant program also supported technical and financial assistance to local industry.

Establish a revolving loan fund.

Particularly for small and mid-sized manufacturers, access to affordable capital can pave the way for industrial energy efficiency projects. Revolving loan funds can help provide that access to capital for borrowers who may not have other resources, reduce borrowing costs, and create jobs. A number of states have established revolving loan programs to great success to spur deployment of technologies and drive growth. A revolving loan fund focused on industrial energy improvements would produce similar benefits.

Extend Master Limited Partnerships to energy efficiency projects.

Master Limited Partnerships (MLPs) allow energy investors to lower their tax liability. Currently, only the fossil fuel industry has access to MLPs. Energy efficiency investments including CHP and WHR projects should be given this status to facilitate their development.

Technology Development

In order to ensure that industries have the most productive processes and equipment available to improve their energy use and competitiveness, our manufacturing sector needs a more robust research, development, and deployment partnership between the federal, state, and local governments, industry, and other experts. We can begin to achieve this by encouraging more public-private partnerships and by fully funding the Department of Energy's Advanced Manufacturing Office.

Appropriate sufficient funding in the amount of $365 million for the U.S. Advanced Manufacturing Office (AMO).

The AMO supports key research, development, and deployment on innovative technologies and processes, and has achieved significant results despite its limited budget. It has the potential to be an even greater resource for technical

assistance and industrial energy improvements if given sufficient funding.

Breaking Down Barriers and Fostering Demand

It should be easy for utilities and manufacturers to finance and implement industrial energy efficiency gains and programs to produce energy from waste heat recovery and combined heat and power projects.

Build on President Obama's industrial energy efficiency Executive Order by working to double CHP and WHR use.

The Administration's goal, set forth in its August 2012 Order, to build out 40 gigawatts of new, industrial CHP by 2020 represents a good first step toward promoting greater deployment of industrial energy efficiency. As a next step, creating a legal standard to double the production of electricity from CHP and WHR in industrial facilities from the current level of 85 gigawatts (GW) to 170 GW by 2020 would provide even greater economic benefits for manufacturers and the larger economy.

Include industrial energy efficiency in EERS and cleaner energy standards.

As efficiency and clean or renewable standards are debated federally and in the states, we should strive to incorporate industrial energy efficiency in a manner that maximizes the benefit of these technologies to the manufacturers, utilities, and consumers without diluting existing standards or pushing out traditional renewables.

Incorporate industrial energy efficiency into Clean Air Act compliance.

Technology advancements have the double benefit of making industry more competitive and reducing emissions.

The Environmental Protection Agency (EPA) has incorporated industrial energy efficiency into the compliance path for a number of air quality regulations.

For instance, the EPA launched a technical assistance program to encourage facilities that are regulated under the Industrial Boiler Rule to fuel switch and add CHP. The EPA also incorporated output-based standards in a variety of regulations (Boiler MACT, NSPS for new utilities, Utility MATS), which provides credit for both the thermal and electric output from regulated sources. In addition, a one-year compliance extension is available for companies that undertake a CHP project. Industrial energy efficiency should continue to be treated as a prime option for assisting compliance with Clean Air Act regulations.

Allow rate basing to help achieve return on investment.

When utilities invest in new generation, they often earn a return on that investment through ratepayers, a practice referred to as rate basing. In many states, utilities do not have this option for investments in large-scale energy efficiency projects, like CHP at industrial facilities —cement kilns for example — that may not have other avenues to improve efficiency. Laws prohibit the practice, or make the incentives almost meaningless. These barriers must be removed to allow utilities to rate base investments in industrial efficiency projects, like CHP, that provide enhanced energy efficiency.

Stimulate demand for CHP and WHR through Federal procurement policy.

By deploying industrial energy efficiency technology in federal facilities and by purchasing electricity from efficient sources that include CHP and WHR as part of their portfolio, the federal government — as the largest user of electricity in the nation — can drive demand for these energy resources.

Support Davis-Bacon protections.

Funding legislation for publicly financed public works projects should include Davis-Bacon prevailing wage provisions.

Support local hiring provisions.

The use of local hiring initiatives for industrial energy efficiency projects should be supported and encouraged.

References

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BLUEGREEN® ALLIANCE

The BlueGreen Alliance is a national, strategic partnership between labor unions and environmental organizations dedicated to expanding the number and quality of jobs in the clean economy.

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