David Baake

On behalf of the Rio Grande Chapter of the Sierra Club, we write to respectfully offer additional technical comments on the above-referenced permit application ("Application") for Project Jupiter's Power Plant (the "Project"). We join comments that Center for Biological Diversity, et al., are filing today, in full. These comments discuss an additional reason the permit application should be denied: Bloom Energy (Bloom), the company that makes the fuel cells the Applicant wants to use in its power plant, has identified two ways to substantially reduce emissions from its fuel cells. The first option is to use exhaust gas from its fuel cells to generate hot water, steam, or chilled water. The second option is carbon capture and sequestration (CCS). Bloom states that its "fuel cell platform is inherently suited" for CCS, because the waste stream is nearly pure CO2. Although a 100% renewable option would be far superior, any applicant that proposes to use fossil fuels must analyze every possible method for mitigating its climate impact. The Applicant failed to identify pollution control strategies identified by its own manufacturer. Accordingly, the application must be denied.

See the attachment for the full comment.

Respectfully,

David Baake
Counsel for the Rio Grande Chapter of the Sierra Club

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Explore, enjoy and protect the planet

Rio Grande Chapter

New Mexico and West Texas

New Mexico Environment Department
Air Quality Bureau
Permitting Section

July 6, 2026

Filed electronically through NMED's online portal

Re: Air Quality Construction Permit Application 10883 for Project Jupiter Power Plant by Yucca Growth Infrastructure, LLC

Dear New Mexico Environment Department:

On behalf of the Rio Grande Chapter of the Sierra Club, we write to respectfully offer additional technical comments on the above-referenced permit application ("Application") for Project Jupiter's Power Plant (the "Project").[1]

The Application must be denied. If approved, the Project would be the single largest source of CO_2 pollution in the state of New Mexico. Its emissions would render it impossible for the state to achieve its goal of reducing greenhouse gas (GHG) emissions by 45% by 2030. The Project would also emit hundreds of tons of other air pollutants, including volatile organic compounds (VOCs), nitrogen oxides (NOx), carbon monoxide, and particulate matter (PM).

Bloom Energy (Bloom), the company that makes the fuel cells the Applicant wants to use in its power plant, identifies two ways to substantially reduce emissions from its fuel cells. The first option is to use exhaust gas from its fuel cells to generate hot water, steam, or chilled water. Implementing this technology would reduce emissions of all pollutants related to fuel use, because it would allow the Applicant to use less fuel to perform the same amount of work. The second option is carbon capture and sequestration (CCS). Bloom states that its "fuel cell platform is inherently suited" for CCS, because the waste stream is nearly pure CO_2.

Although a 100% renewable option would be far superior, any applicant that proposes to use fossil fuels must analyze every possible method for mitigating its climate impact. The

[1] We join comments that Center for Biological Diversity, et al., are filing today, in full.

Applicant has failed to analyze either of the options identified by its own manufacturer. Accordingly, NMED must deny the Application.

A. New Mexico Cannot Meet its Climate Targets if the Applicant is Permitted to Dump its Carbon Pollution into the Atmosphere

As explained in New Mexico's Climate Action Plan:

> New Mexico, a land rich in natural beauty and cultural diversity, faces significant and undeniable risks from a changing climate. New Mexicans recognize the threats posed by rising temperatures, prolonged and severe droughts, increasingly frequent wildfires, deadly flash flooding, and decreasing freshwater availability to the livelihoods and futures of all who call this place home, and to New Mexico's environment and economy.
>
> In recognition of these threats, New Mexico set a target six years ago to reduce greenhouse gas emissions 45% by 2030 (compared to 2005 emissions) in Executive Order 2019-003. New Mexico subsequently set a goal to achieve net-zero emissions by 2050, while building the workforce to support transformative clean and advanced energy and investing in infrastructure development to make communities more resilient during these transformative times.[2]

Reducing emissions from the electricity generation sector has been a core part of the state's strategy for fighting climate change. Between 2005 and 2023, the state made significant progress, reducing emissions from this sector by 9.73 million metric tons (MMT) per year, from 16.33 MMT in 2005 to 6.6 MMT in 2023.[3]

Approving this Project in its current form would almost completely undo the state's progress to reduce emissions from the electricity sector and render it impossible to achieve the state's goal of reducing emissions by 45% by 2030. The Project would emit 10,144,115 short tons of CO_2 equivalent per year—or 9.2 MMT. In other words, this project would increase electric sector emissions in New Mexico by a staggering 140%. The Project's emissions are greater than the total emissions from Albuquerque, Las Cruces, and Santa Fe combined.

The state will not meet its 2030 climate targets if this Project is approved in its current form. To achieve the state's goal of reducing emissions by 45% relative to 2005 levels, the state

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[2] Climate Action Plan: State of New Mexico

[3] *Id.* at 24, tbl. 4.

can emit no more than 55 MMT per year in 2030.[4] The Climate Action Plan indicates that, under a business as usual scenario, the state will emit 64.34 MMT per year in 2030—9.3 MMT ***more*** than the target.[5] Approving this project would ***double*** the distance we have to travel to meet our goal, putting the state on a trajectory to miss its 2030 target by 18.5 MMT. (And this is not even including upstream emissions associated with the production of the methane used at the facility, or the impact of methane leakage at the facility itself). Even aggressive measures to eliminate emissions from other sectors would not be enough to compensate for the massive amount of pollution from this Project.

B. NMED Must Allow the Next Governor and the Legislature to Weigh in Before Approving the Project

For questions of "great economic and political significance," there is a presumption that an administrative agency is not authorized to resolve the question unless the legislature has "clearly conferred on th[e] agency the authority to act." *See Dolan v. Fed. Emergency Mgmt. Agency*, 760 F. Supp. 3d 1200, 1225 (D.N.M. 2024) (discussing major question doctrine in federal context, and citing *W. Virginia v. EPA*, 597 U.S. 697 (2022)). The issue presented by the Application—whether to effectively repeal the climate goals adopted by Executive Order in 2019 and move forward with a fossil-fuel-based option, notwithstanding the Energy Transition Act's (ETA) policy transitioning the state's electricity mix to 50% renewable energy by 2030 and 100% zero-carbon energy by 2045—presents a question of "great economic and political significance." Legislation to require Project Jupiter and other large data centers to comply with the ETA's targets passed the state Senate in 2026, and is expected to be reintroduced in 2027.[6] Other legislation related to the Project will be introduced in 2027.[7] Deb Haaland, the Democratic candidate for Governor, has stated that Project Jupiter and other data centers "must follow the state's existing clean energy goals and could not rely on gas-powered microgrids."[8] NMED must allow the next Governor and the legislature to weigh in before approving a Project with massive implications for state policy.

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[4] This is equal to the state's 2005 emissions (96.44 MMT per year) times 0.55.

[5] *See* Climate Action Plan at 24, tbl 4. To achieve the states' 45% reduction target, 2030 emissions must not exceed 55.04 tons per year, which is equal to the state's 2005 emissions (96.44 MMT per year) times 0.55.

[6] *See* https://www.koat.com/article/microgrid-oversight-act-passes-senate-floor/70361582

[7] *See* https://sourcenm.com/briefs/new-mexico-lawmakers-announce-proposed-statewide-moratorium-on-data-centers/ (noting that four state legislators intend to introduce legislation in next year's legislative session to create a statewide moratorium on 'large-scale' data centers).

[8] *See* https://navajotimes.com/reznews/haaland-bregman-split-on-energy-and-environment-in-only-democratic-debate/ (in response to a question about Project Jupiter, Deb Haaland "said data centers must follow the state's existing clean energy goals and could not rely on gas-powered microgrids.").

C. The Applicant Must Evaluate All Technological Options for Eliminating the Project's Carbon Emissions

Under the Air Quality Control Act and its implementing regulations, NMED may require a source to "install and operate control technology, determined on a case-by-case basis, sufficient to meet the standards, rules and requirements of the Air Quality Control Act," as a condition to the issuance of any permit. N.M. Stat. Ann. § 74-2-7. The core requirement of the Act is "to prevent or abate air pollution." N.M. Stat. Ann. § 74-2-5. Accordingly, NMED may require a permit applicant to install and operate control technology where necessary to prevent emissions "in quantities and of a duration that may with reasonable probability injure human health or animal or plant life or as may unreasonably interfere with the public welfare, visibility or the reasonable use of property." N.M. Stat. Ann. § 74-2-2 (defining "air pollution").

Executive Order 2019-003 directs NMED (and all other state agencies) to "support the 2015 Paris Agreement Goals," including "New Mexico's objective … to achieve a statewide reduction in greenhouse gas emissions of at least 45% by 2030 as compared to 2005 levels." Further, NMED must "evaluate the impacts of climate change on [its] programs and operations and integrate climate change mitigation and adaptation practices into their programs and operations." NMED is thus obligated, by the Governor's order, to consider climate change mitigation as part of its case-by-case determination regarding what air pollution control technology should be required for this Project. NMED also has clear authority to require the Applicant to study potential emission control options that could be implemented for the Project. *See* N.M. Stat. Ann. § 74-2-5(D)(6).

There are two key pollution reduction technologies that the Applicant must carefully evaluate before any permit issues. First, the Applicant must consider using the waste heat generated by the fuel cells to generate steam, hot water, or chilled water, thereby reducing the overall emission-intensity of the project. Second, the Applicant must consider the option of capturing carbon emissions from the fuel cells and transporting them to a sequestration site by rail, truck, or pipeline.

D. NMED Should Require the Applicant to Implement Bloom's Heat Capture System to Reduce Emissions of *All* Air Pollutants

Anything the applicant can do to reduce its use of fossil fuels and increase the efficiency of electricity generation at the plant will reduce the Project's emissions of air pollutants linked to fuel use, including CO_2, carbon monoxide, NOx, VOCs, and PM. One option that must be carefully considered is the use of exhaust gases from the fuel cell to generate additional electricity. Bloom states that its fuel cells release exhaust gas at temperatures of 350 °C,[9] which

[9] While Bloom's materials indicate that the temperature of exhaust gas is 350 degrees ***Celsius*** (662 degrees Fahrenheit), the Applicant states that the temperature of this gas will be 350 ***Fahrenheit***. *Compare* Energy Server®

"can be channeled and integrated with Combined Heat and Power (CHP) systems, increasing overall system efficiency and improving economics. By adding Heat Capture, the total system efficiency can reach a lifetime average of >90%."[10]

Bloom states that waste heat from its fuel cells can also be used to assist with a data center's extensive cooling needs. It states: "Using the exhaust heat from an Energy Server, the thermal energy in the exhaust can generate chilled water via an absorption chiller or a Vapor Absorption Machine (VAM). If not for a VAM, the facility would have to resort to conventional cooling systems such as an electric chiller, increasing energy consumption."[11]

While Bloom highlights the use of exhaust to generate hot water, steam, or chilled water for industrial uses, the Applicant must also evaluate whether steam generated by the fuel cells can be used to generate additional electricity—for example, by passing the steam through a turbine as occurs at combined cycle power plants.

Improving the project's efficiency from 53% (the electrical conversion efficiency reported by Bloom for its fuel cells) to 90% would allow the Project to perform the same amount of work while reducing its fuel consumption from 4.62 GW to 2.72 GW.[12] If such an improvement in efficiency were achieved, the project would reduce its carbon emissions by about 3.7 MMT per year. Emissions of other pollutants linked to fuel use would also see reductions of about 41%. Improving efficiency would also reduce the waste heat vented to the atmosphere, partially mitigating the urban heat island effect and the associated contribution to ozone formation.

E. The Applicant Must Analyze CCS

According to Bloom Energy, the manufacturer of the fuel cells, "Bloom's fuel cell platform is inherently suited to be a key part of the Carbon Capture, infrastructure for [CCS]."[13] The Climate Action Plan states that CCS is likely to play an important role in achieving the state's emission reduction goals, explaining that the oil and gas sector in particular "is well positioned to institute meaningful controls and reductions … through … carbon capture and

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with Heat Capture Brochure, with YGI Application, Table 2-H: Stack Exhibit Conditions. The Applicant must explain this discrepancy.

[10] Energy Server® with Heat Capture Brochure.

[11] Energy Server® with Heat Capture Brochure.

[12] To generate 2.45 GW of electricity at an electrical conversation efficiency of 53% requires 2.45/0.53 = 4.62 GW of fuel input. To generate the same amount of electricity at a 90% conversion efficiency requires 2.45/0.9 = 2.72 GW of fuel input. A reduction in fuel use would result in a proportional reduction in emissions (e.g., about 41%).

[13] Advanced Carbon Capture Technology for a Sustainable Future - Bloom Energy

sequestration … and reuse of captured CO_2 for enhanced oil recovery (EOR)."[14] Companies in New Mexico have decades of experience sequestering carbon dioxide in oil reservoirs.[15] New Mexico's Oil Conservation Division recently "unveiled a sweeping proposal … that could dramatically accelerate approval of underground carbon storage wells once bogged down in years of federal review," by seeking primacy for regulation of Class IV injection wells.[16]

Railroad companies assert that it is possible to safely transport CO_2 by rail. Notably, the Project is located about 10 miles from the Union Pacific Intermodal Terminal. On its website, Union Pacific touts its ability to facilitate carbon capture:

> Union Pacific Railroad provides a safe, sustainable and cost-effective way to ship carbon by rail. Tank cars hold nearly 80 metric tons of CO_2 which offers the perfect solution for businesses. CO_2, which is compressed into a liquid-like substance prior to shipping, is an inert, non-flammable gas, which railroads have a long history of safely transporting."
>
> Adding rail to your supply chain reduces greenhouse gas (GHG) emissions by up to 75% compared to truck, and our Carbon by Rail program leverages existing infrastructure to provide customers an unmatched transportation solution," said Beth Whited, president of Union Pacific. "Union Pacific's network aligns geographically with permanent storage formations, and we are actively working with industry partners to develop future solutions."[17]

Tax credits for CCS remain in place under the Trump Administration's so-called "One Big Beautiful Bill Act," with a credit of $85 per ton available for point-source capture, regardless of whether the carbon is stored geologically or used for EOR.[18] Other data centers operators have implemented CCS. For example, Google has agreed to purchase most of the power generated by a 400 MW power plant in Decatur, Illinois, which is using CCS to reduce carbon emissions from its gas-power plant by 90%.[19]

We strongly believe that it would be more cost-effective and environmentally sound to require the Project to use 100% renewable energy and battery storage for its electricity needs,

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[14] Climate Action Plan: State of New Mexico at 34.

[15] Carbon Sequestration and Hydrogen in New Mexico: Subsurface Resources for a Low Carbon Economy, New Mexico Earth Matters (Summer 2023) at 1.

[16] https://carbonherald.com/new-mexico-moves-to-slash-carbon-sequestration-approval-times/

[17] https://www.up.com/news/service/shipping-carbon-by-rail-it-240919 .

[18] https://www.globalccsinstitute.com/u-s-preserves-and-increases-45q-credit-in-one-big-beautiful-bill-act/

[19] https://blog.google/company-news/outreach-and-initiatives/sustainability/first-carbon-capture-storage-project/

and do not believe CCS has a place in the electric generation sector, given the availability of effective and cost-competitive zero-emission alternatives.[20] But if the Applicant intends to use fossil fuels, it must study every available option to eliminate its climate impact. NMED cannot authorize the Applicant to dump 9.2 MMT tons of CO_2 into the atmosphere every year—thereby dooming any chance of meeting the state's climate targets—when the Applicant has failed to even consider a pollution control technology its own vendor indicates is "inherently" viable.

F. Conclusion

For the foregoing reasons, we respectfully request that the Application be denied.

/s/ David R. Baake

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[20] https://www.sierraclub.org/federal-and-state-policies-intended-result-installation-carbon-capture-generation-facilities ("Sierra Club believes that policies intended to result in the installation of carbon capture projects at energy generation facilities, rather than policies intended to result in clean, renewable energy, are not a climate solution.").

Bloomenergy

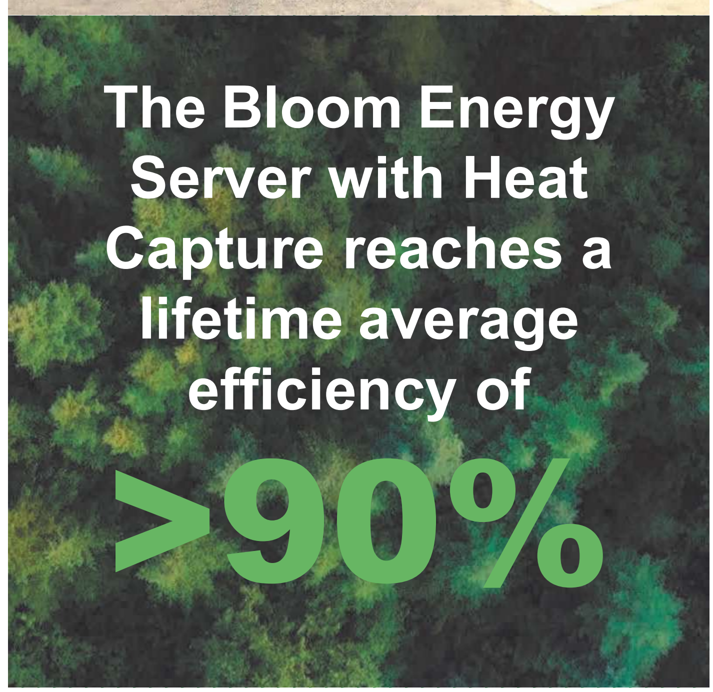
BROCHURE

Energy Server® with Heat Capture

Resilient. Predictable. Sustainable.

Bloom Energy is a world leader in fuel cell-based power generation. With a platform based on solid oxide fuel cell (SOFC) technology, the Bloom Energy Server uses an electrochemical reaction to convert fuel to energy. The Energy Server is hydrogen ready and fuel flexible, able to operate on Natural Gas, Biogas, Hydrogen, or a blend of fuels. The Energy Server can be configured as a primary power solution – operating in parallel with the grid, as a microgrid to increase the power system's resiliency, or as an off-grid load following system.

The Energy Server produces clean energy at one of the highest efficiencies in the market today. Its internal operating temperature is above 800 °C, and the resulting exhaust is available at above 350 °C. The exhaust of the Energy Server can be channeled and integrated with Combined Heat and Power (CHP) systems, increasing overall system efficiency and improving economics. By adding Heat Capture, the total system efficiency can reach a lifetime average of >90%.



The Energy Server is available in block sizes of 325 kW and is scalable to hundreds of MW. The installation can be on the ground level or stacked in a power tower. While operating on carbon-based fuels, the power generated by the Energy Server has a low CO_2 footprint, negligible NOx, Sox, and no particulate emissions.

Bloom Energy's Heat Capture Offering

The Bloom Energy Server has a modular design consisting of modules that look alike but have unique functions. A key component is the Power Module, which houses the high-temperature SOFCs that generate power. The Bloom Energy Server with Heat Capture offering consists of mechanical exhaust adapters installed on the back of the Power Modules (see *Figure 1*) that harness the high-temperature exhaust at two connection points for easy integration to heat capture systems. The heat from Power Modules can be aggregated for installations with multiple Energy Server systems before supplying it to the heat recovery equipment.

Bloom Energy offers an installation guide for heat recovery process experts to make necessary connections, share reference architectures, and provide best practices for the design of the full CHP system. Bloom Energy can also provide full turnkey solutions for CHP applications for customer convenience.

Figure 1:
Power Module Options

Power Module without Heat Capture

Power Module with Heat Capture enabled

Typical Applications for the Bloom Energy Server with Heat Capture

The Bloom Energy Server produces waste heat at an average temperature of >350 ℃. The three most common Energy Server exhaust heat applications are hot water production, steam generation, and chilled water generation. Without a CHP system, the facility would have used additional natural gas or electricity to meet heating and cooling needs. Applications utilizing CHP realize benefits in terms of sustainability, increased overall efficiency, and a significant reduction in operational costs. Below is a brief description of some of the CHP applications.

Hot water generation: Industrial processes use hot water in applications such as food processing, space heating, and miscellaneous facility hot water needs. The energy required to generate this hot water is usually derived from burning fossil fuels such as natural gas or electricity needed to power boilers. With a CHP solution to facilitate hot water generation, waste heat from the Energy Server can be passed through a heat exchanger to generate the hot water required by the facility. Using a CHP system results in significant overall efficiency improvements and reduces carbon emissions per MWh of energy generated and savings in the facility's natural gas/electricity consumption.

Steam generation: Steam is used in industrial processes and applications across industries from healthcare and pharmaceuticals to electronics and petrochemicals. The energy required to generate steam comes from burning fossil fuels such as natural gas or electricity to power steam boilers. With an Energy Server based CHP solution, the exhaust from the Energy Server can power a steam boiler to generate the steam required by the facility. Furthermore, economizers may heat the incoming water and extract more heat from the flue gas. Using a condensing economizer, in turn, increases the CHP system's overall efficiency by capturing the exhaust's latent heat. Depending on the yield of steam needed, this solution could be the sole source of process steam generation in many applications. In the standard offering, steam can be dry-saturated or superheated, ranging in operating pressure from 5 barg to 15 barg.

Chilled water generation: Industrial applications such as data centers have extensive cooling needs that can be greatly reduced by leveraging waste heat. Using the exhaust heat from an Energy Server, the thermal energy in the exhaust can generate chilled water via an absorption chiller or a Vapor Absorption Machine (VAM). If not for a VAM, the facility would have to resort to conventional cooling systems such as an electric chiller, increasing energy consumption. In addition to increasing the overall efficiency of energy conversion, VAMs do not use CFC refrigerants that are part of conventional electric chillers providing benefits beyond carbon savings and adding to the sustainability benefits. *Figure 2* below shows a typical application of a Bloom Energy Server working with an absorption chiller to generate chilled water

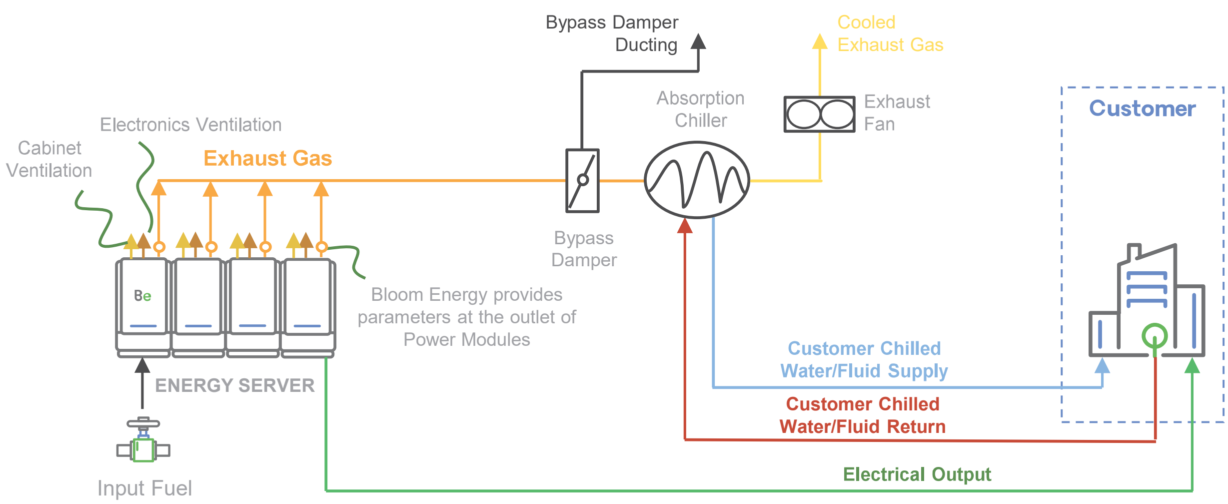


Figure 2: Bloom Energy Server Delivering High Temperature Heat for a Cooling Application

Benefits of the Bloom Energy Server with Heat Capture

By harnessing heat and repurposing it, the system's overall efficiency increases, and more energy is utilized per unit of fuel. With the Bloom Energy Server with Heat Capture, the system can reach a lifetime average efficiency of >90%. This efficiency advantage equates to considerable savings compared to less efficient systems, especially if fuel prices are high. Depending on the application, the efficiency advantage also reduces scope 1 and/or 2 emissions. Table 1 illustrates the yield and sustainability benefits of using a 1 MW Energy Server with Heat Capture to produce hot water, steam, and chilled water.

Table 1: Yield and sustainability benefits using a 1 MW Energy Server

	Hot Water	Steam	Chilled water (VAM)
Yield	13,000 – 16,500 kg/h[1] @ 80 °C	540 – 675 kg/h[2] @ 10 barg	175 – 200 tons[3]
System-wide Emission Reductions	500 – 650 MT CO_2e/year[4]	580 – 740 MT CO_2e/year[5]	665 – 830 MT CO_2e/year + HFCs[6]

Notes:

Yield calculations are based on the following parameters:

1. Hot water: Outlet hot water temp.: 80 ℃, feed water temp.: 50 ℃, CHP equipment efficiency: 93.5%, temperature at exhaust of stack: 100 ℃;
2. Steam: Steam parameters 10 barg (dry saturated), feed water temp.: 90 ℃, CHP equipment efficiency: 93.5%, temperature at exhaust of stack: 155 ℃;
3. Chilled water: Water supply temp.: 7 ℃, return water supply temp.: 12 ℃, temperature at exhaust of stack: 120 ℃.

Emission reduction calculations are based on the following parameters:

4,5. Calculated in MT CO_2e/year by avoiding using 90% efficient natural gas-powered boilers for hot water and steam generation.

6. An electric chiller with a COP of 4

The lower end of the yield range indicates operation under ISO conditions (15 °C) and the upper end at an ambient temperature of 40 °C. Additional thermal energy can be extracted from the exhaust by using a condensing economizer in series to pre-heat or generate additional hot water. This will provide a minimum efficiency boost of 5% and is applicable for all utility generation, i.e., steam, hot water, and cooling.

Table 2 illustrates the operational and performance parameters for a 1 MW Energy Server installation. The exhaust air values scale linearly for larger installations. *Figure 3* below shows field installations of the Energy Server with heat capture.

Table 2: Expected Operating Parameters and Performance Highlights - 1 MW Energy Server Installation

	Lifetime Average			
Electrical Efficiency	54%			
Heat Recovery Efficiency	>36%			
Total CHP Efficiency	>90%			
Minimum Allowed Static Pressure at Power Module Outlet	-5.0 mbar			
Maximum Allowed Static Pressure at Power Module Outlet	7.5 mbar			
Maximum Allowed Pressure Drop across Heat Recovery Unit(s)	60 mbar			
	Units	**Min**	**Avg**	**Max**
Exhaust Air (Thermal Recovery Condition) – Mass	kg/h	4,595	5,968	6,850
Exhaust Air (Thermal Recovery Condition) – Flow rate	SLPM - 0 ˚C	60,445	78,255	89,782
Exhaust Air (Thermal Recovery Condition) – Volume	m^3/h	8,303	12,924	10,969
Exhaust Air (Thermal Recovery Condition) – Temperature	˚C	356	367	384

Notes:
1. Values are for reference only; system performance depends on site and system specifics. All values in the table are +/- 5% accurate estimations compared to actual field data.
2. Data assumes pipeline natural gas as fuel and ISO conditions with an ambient air temperature of 15 ˚C.
3. Temperature and flow rate measurements are made at the exhaust adapter of the Energy Server.
4. Exhaust parameters are linearly scalable for larger installations.
5. Values calculated at 95% Total Maximum Output (TMO).
6. Maximum exhaust temperature and flow rate predicted to occur approximately 2 years after commissioning of the Energy Server.

Figure 3: Bloom Energy's heat capture installations

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Flexible. Future Proof.
Accelerate your path to a zero-carbon future.

Bloom energy

Contact Us

EN

Carbon Capture Technology

Bloom's fuel cell platform is inherently suited to be a key part of the Carbon Capture, infrastructure for carbon capture, utilization, and storage (CCUS)

What is Carbon Capture Technology?

Carbon capture and storage (CCUS) is a groundbreaking technology designed to significantly reduce carbon dioxide (CO_2) emissions from industrial sources and the atmosphere to help foster net zero power goals. By capturing CO_2 emissions before they reach the atmosphere and permanently storing them underground, CCS addresses one of our time's most pressing environmental challenges. Recognized as a vital strategy in the fight against climate change, CCS holds the potential to cut greenhouse gas emissions and mitigate global warming drastically, making it an essential tool for building a sustainable future.

The Startling Facts about Carbon Capture Technology:

Carbon capture utilization and storage is critical in reaching net-zero climate targets. Globally, over 90 countries have committed to a net-zero target. Major utilities around the world have committed to zero carbon by 2050. However, despite the constant proliferation in power demand from consumers, industries, and the growth of data centers, a clear pathway to reach such commitment remains unclear. Bloom's solution is ready and available to help customers achieve decarbonized power today. Moreover, Bloom fuel cells operating on biogas paired with carbon capture technology can provide negative-carbon power for customers.

NOx/SOx

Highly Concentrated CO_2 Stream

Negligible NOx, SOx, Particulate Matter

Meet Sustainability Targets

Bloom's Carbon Capture Solution

Bloom Energy's solid oxide fuel cells use an electrochemical process to generate clean, reliable, and highly efficient power. Because no combustion is involved, Bloom's Energy Server systems avoid the emissions of harmful air pollutants that come with a burning process, such as NOx, SOx, and particulate matter–simplifying the complexity of the carbon capture system.