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U.S. Data Centers to See \$29 Billion in Fourth-Quarter Kickoffs

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Join Industrial Info for a Webinar on the Outlook for Oil & Gas Project Spending

Industrial Info is pleased to be presenting a complimentary webinar on the spending outlook for the global Oil & Gas sector on Wednesday, September 18, at 10 a.m. CDT (11 a.m. EDT).

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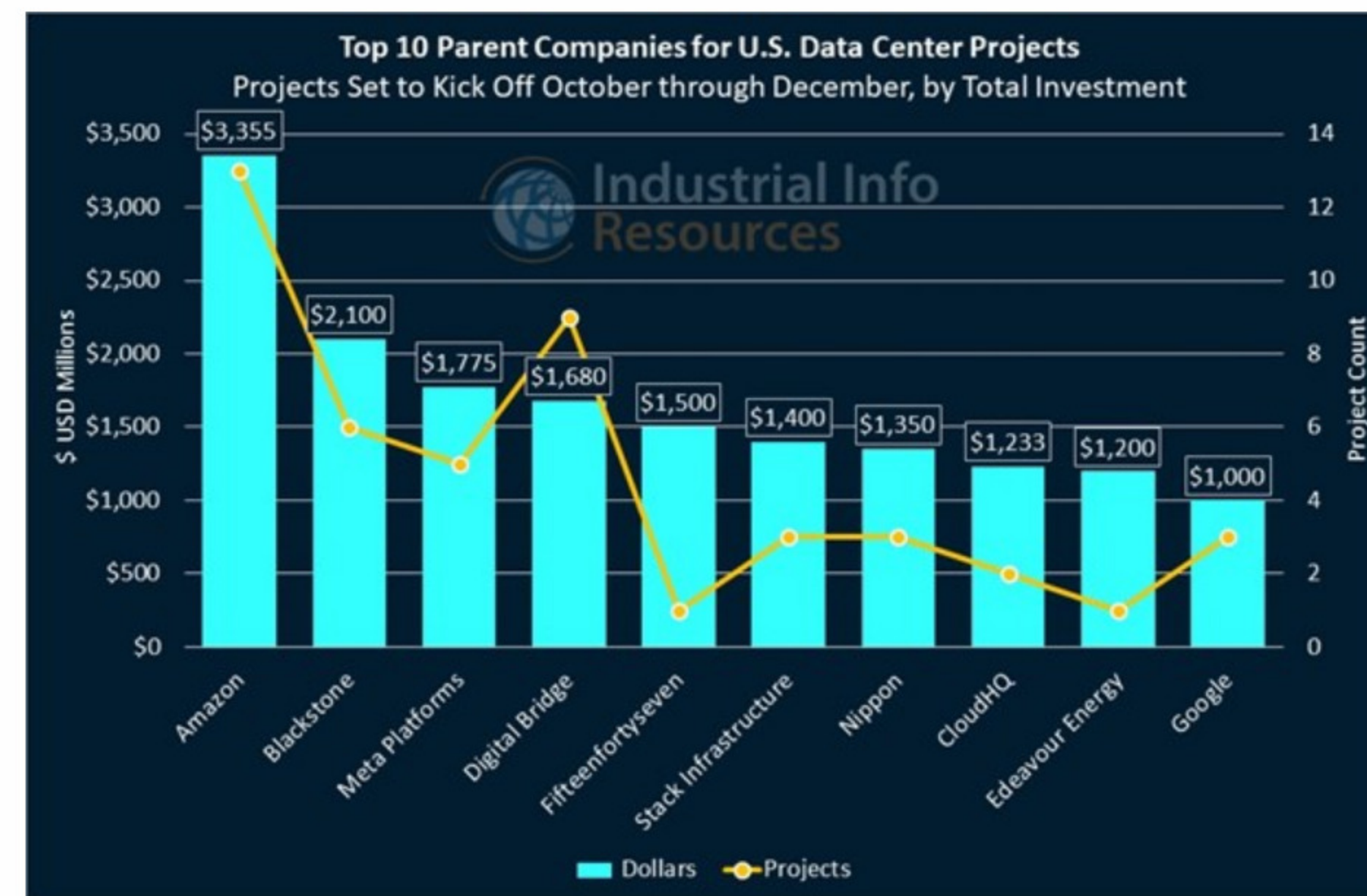
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Published By **Industrial Info Resources**

U.S. Data Centers to See \$29 Billion in Fourth-Quarter Kickoffs

The seemingly endless growth in data centers across the U.S. is changing landscapes across multiple industries. The storehouses for internet services, artificial intelligence and cryptocurrency are expected to be a major driver in energy demand for years to come, and likely will become crucial hubs for American business. Industrial Info is tracking \$29 billion worth of U.S.-based data center projects that are set to begin construction in the fourth quarter, more than 40% of which is attached to projects in Arizona, Virginia or Georgia.



Earlier this summer, Industrial Info presented a complimentary webinar regarding the outlook for the global data center and semiconductor sectors, led by David Pickering, IIR's vice president for the Industrial Manufacturing Industry. For more information, see June 27, 2024, article - [IIR Webinar: Rapid Growth in Data Center & Semiconductor Sectors Brings Strong Spending, New Challenges](#).

Few would be surprised to learn [Amazon.com Incorporated \(NASDAQ:AMZN\)](#) (Seattle, Washington) leads in both the project count and total investment value of fourth-quarter data center kickoffs. Most are expansions at existing facilities, such as the **\$400 million Phase IV at the Johnstown Data Center Campus in New Albany, Ohio**, which is part of a broader, \$1.1 billion effort to enhance cloud services in the region.

The Amazon Web Services business also is bolstering its regional footprint in the Mid-Atlantic, where it expects to begin construction on a major grassroots project: the **\$300 million Phase I of the Cosner Tech Data Center Campus in Fredericksburg, Virginia**. Ohio and Virginia account for more than 80% of Amazon's \$3.35 billion in fourth-quarter data center kickoffs. Subscribers to Industrial Info's Global Market Intelligence (GMI) Industrial Manufacturing Project Database can read detailed reports on the [Johnstown](#) and [Cosner](#) projects.

Virginia also is home to one of the largest projects from [Blackstone Group Incorporated \(NYSE:BX\)](#) (New York, New York), which is second only to Amazon in its total investment in upcoming project kickoffs: the **\$300 million Phase III for its D.C. Data Center Campus in Manassas**, which is part of the metropolitan statistical area that includes the District of Columbia. Quality Technology Services, which Blackstone acquired in 2021, completed the first two phases in 2019 and 2022, and is considering two additional expansions that could begin as early as 2026. Subscribers can read more in a detailed [project report](#).

Other tech titans with looming kickoffs include Google's parent company [Alphabet Incorporated \(NASDAQ:GOOGL\)](#) (Mountain View, California), which is building out its presence in the Great Plains region with a **\$300 million data center in Lincoln, Nebraska**. Growing populations and business in the Mid-Atlantic and Great Plains states have made them a popular destination for data center developers, accounting for more than \$15.5 billion in project completions over the past five years, according to Industrial Info's GMI database. Subscribers can learn more about the Nebraska project in a detailed [project report](#).

But it's not just the big names that are staking out territory. [Novva Data Centers](#) (West Jordan, Utah), a privately held company founded in 2018, already has started engineering work on its **\$550 million Tahoe Reno Data Center in McCarran, Nevada**, while [Prime Data Centers LLC](#) (Dallas, Texas), founded in 2017, is in a similar stage developing its **\$420 million Hermosa Ranch Data Center in Avondale, Arizona**.

Despite their relatively young ages, Novva and Prime already have a total of five operational data centers across the U.S., with another 15 in various stages of development. Subscribers to Industrial Info's GMI database can read detailed reports on the [Tahoe Reno](#) and [Hermosa Ranch](#) projects.

Foreign-based developers also are adding to the data center landscape. NTT Global Data Centers Americas, a subsidiary of [Nippon Telegraph and Telephone Corporation](#) (Tokyo, Japan), is preparing for a **\$250 million Phase III expansion of its campus in Hillsboro, Oregon**. NTT Global already has nine operational data centers across the U.S., with another three grassroots projects in development. Subscribers can learn more about the Oregon project in a detailed [project report](#).

Data centers play a leading role in the energy transition, but are creating ethical headaches for their developers, who often source their materials from nations with poor records on human rights and environmental concerns. For more information, see August 12, 2024, article - [Big Tech, Energy Transition and Conflict Minerals: A Growing Concern](#).

The rapid growth of data centers--which typically consume heavy amounts of energy--also is a contributing factor in the decision to keep several U.S.-based coal-fired power plants alive. For more information, see July 15, 2024, article - [Power Plant Owners Continue to Delay Closure of Coal-Fired Generation](#).

Subscribers to Industrial Info's GMI Project and Plant databases can [click here](#) for a full list of detailed reports for projects mentioned in this article, and [click here](#) for a full list of related plant profiles.

Subscribers can [click here](#) for a full list of reports for U.S.-based data center projects that are set to begin construction in the fourth quarter.



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U.S. Renewable Hydrogen Projects to Use Variety of Feedstocks

Although green hydrogen, made from the electrolysis of water using renewable energy, is sometimes referred as renewable hydrogen, Industrial Info's definition of "renewable hydrogen" is hydrogen manufactured from waste such as agricultural residues, foods wastes and more. While the concept hasn't received quite the buzz that green hydrogen has, the production of renewable hydrogen generated from waste accounts for more than \$900 million in active U.S. projects. Plants use a variety of technologies and feedstocks to create the renewable fuel.

Both stages of one of the country's largest renewable hydrogen projects are expected to be in service by the end of this year. [Raven SR Incorporated's](#) (Pinedale, Wyoming) plant in Richmond, California, will manufacture 2,400 tons per year of renewable hydrogen from 99 wet tons per day of green and food waste sourced from the West Contra Costa Sanitary Landfill. California's mandate SB1383, passed in 2016, calls for a 75% reduction in organic waste disposal by 2025. Raven says its system will contribute toward fulfilling SB1383 and potentially divert up to 7,200 metric tons per year of carbon dioxide emissions from the landfill. Subscribers to Industrial Info's Global Market Intelligence (GMI) Project Database can learn more by viewing the related [project reports](#).

Another project that could start construction toward the end of this year in New Iberia, Louisiana, will produce hydrogen from another waste source: plastics and old tires. [FusionOne Energy Corporation's](#) Hydroplas system shreds and grinds plastics to an optimum size to put into a high-temperature, zero-emissions reactor that results in the creation of hydrogen-rich gas, which is then purified to nearly 100% hydrogen. The plant will process 16 million pounds per year of plastic and tire waste. Construction is expected to be completed in 2026. Subscribers can [click here](#) to learn more about the project.

Tire waste also will be used at [Tin Thanh Group's](#) (Ho Chi Minh City, Vietnam) planned renewable hydrogen plant in Allendale County, South Carolina. Tin Thanh will first construct a tire retread and recycling facility that will be able to retread 200,000 tires per year and recycle 488,000 tons of tires per year. Waste from the recycling center will be used to feed a nearby renewable hydrogen plant. Construction on the tire plant could begin later this year, followed by the hydrogen plant in 2025, putting both plants on track for 2026 completions, with the tire plant finished some months before the renewable hydrogen plant. Subscribers can learn more by viewing the reports on the [tire plant](#) and [renewable hydrogen](#) projects.

Yet another type of feedstock will be used for [SGH2 Energy's](#) plant in Lancaster, California, construction of which is set to begin soon. The plant is expected to be completed toward the end of 2025 and will use SGH2's technology to gasify mixed paper waste to produce 3.8 million kilograms (4.2 million tons) per year of renewable hydrogen. Subscribers can [click here](#) to learn more.

[Proteum Energy LLC](#) (Phoenix, Arizona) plans to construct a California plant using ethanol feedstock to create renewable hydrogen. The plant will process ethanol from Calgren Renewable Fuels' plant in Pixley, California, where the renewable hydrogen plant will be located. Calgren uses waste from dairy farms to produce its ethanol. The facility is expected to be commissioned in 2026, when it will begin ramping up to full production of 30 metric tons per day of renewable energy and 1,800 million British thermal units a day of renewable natural gas. Proteum also is considering adding a 23-megawatt solar plant with battery storage for the facility. Subscribers can learn more by viewing the [project report](#).



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U.S. Heavy Manufacturing Set for More than \$11 Billion in 4Q Kickoffs

Industrial Info is tracking more than \$11 billion worth of projects in the U.S. heavy-manufacturing sector set to begin construction in the fourth quarter, including two major projects involving [Cummins Incorporated \(NYSE:CMI\)](#) (Columbus, Indiana). The heavy-manufacturing sector serves a variety of industrial markets, including those for storage batteries and aircraft components.

Cummins provides engine and power-system products for markets across the globe.

The highest-valued project is attributed to a joint venture (“Amplify Cell Technologies”) featuring Cummins’ [Accelera](#) business—which develops zero-emissions solutions across multiple industries—as well as [Daimler Trucks & Buses](#) (Leinfelden-Echterdingen, Germany), and [PACCAR \(NASDAQ:PCAR\)](#) (Bellevue, Washington).

The joint venture held a groundbreaking ceremony on July 1 for its 2 million-square-foot **manufacturing plant in Byhalia, Mississippi**, which aims to produce 21 gigawatt-hours’ worth of lithium-iron-phosphate (LFP) battery cells for electric commercial vehicles and industrial applications. LFP batteries have a lower energy density than lithium-ion batteries, making them ideal for shorter-range applications.

First production is targeted for 2027, and there is potential for further plant expansion as demand grows. Subscribers to Industrial Info’s Global Market Intelligence (GMI) Industrial Manufacturing Project Database can [click here](#) to read a detailed project report.

Also next quarter, Cummins plans to begin a **\$580 million upgrade project at its diesel engine-manufacturing plant in Rocky Mount, North Carolina**. As Cummins aims to reach net-zero carbon emissions across its product portfolio, the project involves installing new equipment and upgrading assembly lines to produce a new fuel-agnostic engine platform. Cummins’ fuel-agnostic engines are heavy-duty engines that can run on different fuel types, including low-to-zero carbon fuels such as natural gas and hydrogen. [Click here](#) to read more information on the project, which also is expected to wrap up in 2027.

In Cummins’ second-quarter earnings conference call on August 1, Chief Financial Officer Mark Smith said he expects the company’s capital investments for full-year 2024 to be in the range of \$1.2 billion to \$1.3 billion, “unchanged from three months ago, as we continue make critical investments in new products and capacity expansion to support future growth.”

But Cummins’ activity only represents a portion of the total investment value of U.S. heavy-manufacturing projects planned to kick off in the fourth quarter.

[Textron Incorporated](#) (Fort Worth, Texas), through its aerospace-manufacturing division Bell Textron, is gearing up for a **\$429 million renovation of its aircraft part-manufacturing plant in Fort Worth**. Work entails renovation and structural modifications to the 447,373-square-foot facility, as well as the construction of a new 5,400 square-foot building. According to local news media reports, the investment will include \$272 million for manufacturing equipment and \$157 million in real estate and allow Bell Textron to manufacture components for its newest attack helicopter for the U.S. Army. Industrial Info is tracking a completion date of late 2028. Subscribers can read a detailed [project report](#).

Another aircraft-related project set to kick off next quarter is attributed to [GE Aerospace \(NYSE:GE\)](#) (Boston, Massachusetts), which was spun off from General Electric earlier this year.

GE will be expanding its 3.4 million-square foot **engine-manufacturing plant in Essex County, Massachusetts**, where it also performs engine testing, to support production of U.S. and allied military helicopters and fighter-jet engines. The project is expected to wrap up in 2025. [Click here](#) to read more project information.

Other heavy-manufacturing projects are related to machinery and equipment for a variety of industrial markets. [Toyota Material Handling](#), which manufactures, distributes, and sells material handling vehicles and industrial equipment for Toyota, broke ground earlier this year on a **\$100 million grassroot manufacturing plant in Columbus, Ohio** solely devoted to the production of electric forklifts. [Click here](#) to read more information on construction of the plant, which Toyota expects to open in June 2026.

Toyota’s electric forklifts can either run on lead-acid or lithium-ion batteries. They are made with fewer moving parts than traditional gas-powered forklifts, making them easier to maintain and less likely to experience wear and tear.

Subscribers to Industrial Info’s GMI Project Database can [click here](#) for a full list of detailed reports for projects mentioned in this article, and [click here](#) for a full list of related plant profiles.

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Join Industrial Info for a Webinar on the Outlook for Oil & Gas Project Spending

Industrial Info is pleased to be presenting a complimentary webinar on the spending outlook for the global Oil & Gas sector on Wednesday, September 18, at 10 a.m. CDT (11 a.m. EDT). The webinar will be repeated later for audiences in Europe and the Asia-Pacific region. We hope you are able to join us as our industry experts provide insight into both what is happening now and what is expected to occur in the future for this industrial sector.

Given an ever-increasing worldwide focus on decarbonization and lower emissions, what does the short- to medium-term outlook look like for the Oil & Gas Industry? The reality is the energy transition is a long journey and demand for oil and gas remains robust. All indications are that the industry will continue to play a key role in the global energy mix for some time to come. Our industry experts will discuss among other things which world regions will headline the anticipated capital expenditures over the next 24 months and will include a deeper dive into niche areas including, but not limited to, liquefied natural gas production and regasification, as well as natural gas liquids production.

We hope that you are able to join us for this timely and informative webinar. [Click here](#) to learn more or to RSVP.