This copy is for your personal, non-commercial use only. Distribution and use of this material are governed by our Subscriber Agreement and by copyright law. For non-personal use or to order multiple copies, please contact Dow Jones Reprints at 1-800-843-0008 or visit www.djreprints.com.

https://www.wsj.com/business/energy-oil/wall-street-wants-in-on-americas-battery-storage-boom-861f5f1f

EXCLUSIVE ENERGY & OIL Follow

Wall Street Wants In on America's Battery Storage Boom

Solar surge lets battery companies charge up when power prices are low, sell when high

By Amrith Ramkumar Follow

July 17, 2024 12:01 am ET



Intersect Power is installing Tesla Megapack batteries to store and dispatch electricity in Scurry County, Texas. PHOTO: INTERSECT POWER

Sheldon Kimber sees a lucrative opportunity in bottling sunshine.

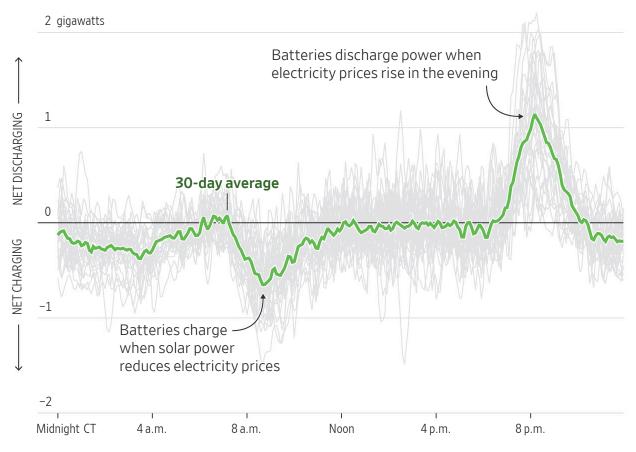
The 46-year-old entrepreneur is installing hundreds of giant batteries the size of shipping containers around sun-soaked Texas and California. The batteries <u>charge up during the day</u> when solar power is abundant. When electricity demand rises in the evening, straining the power grid, Kimber sells that stored energy at higher prices.

Kimber is betting that <u>surging power demand</u> and extreme weather events will make it an increasingly profitable trade.

"The only thing we can guarantee in the <u>energy transition</u> is that volatility will increase," said Kimber, chief executive of renewable energy developer Intersect Power.

Kimber is part of a nationwide race to profit from battery storage, which helps
stabilize the outdated power grid and smooth out intermittent electricity sources
such as wind and solar. It is a rapidly growing sector that is being fueled by a boom in
solar energy and billions of dollars from Washington and Wall Street.

Net power output for batteries in the Texas power grid, each day in June



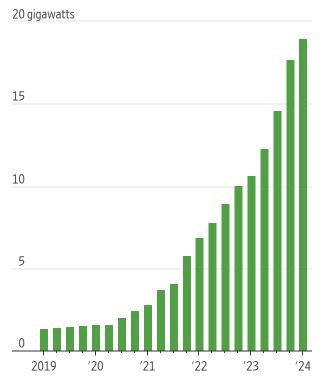
Note: Five-minute intervals Source: Grid Status Nate Rattner/WSJ

In one of the largest battery storage deals, Intersect is raising \$837 million in debt and equity tied to tax credits from Morgan Stanley, Deutsche Bank and HPS Investment Partners.

The money will fund three giant battery storage projects in Texas. Together, the 258 Tesla Megapack batteries will be able to provide enough power for nearly 400,000 homes for two hours when they begin operating in the coming months, Intersect says.

The sector's potential has been in the spotlight after Hurricane Beryl left <u>millions of Houston residents without power</u>. Many homeowners and businesses have been installing batteries to provide power during blackouts, as well as for other grid disruptions that are more common in the summer.

Cumulative large-scale U.S. energy storage installations, quarterly



Notes: Includes standalone and co-located storage projects; excludes pumped hydro storage; minimum project size for inclusion in data is 200 kilowatts Source: S&P Global Market Intelligence

Storage capacity in the U.S. has grown enough in recent years to be able to power many millions of homes, according to S&P Global Market Intelligence. California and Texas dominate the industry, but projects are in the works in Nevada, Arizona and elsewhere to help meet growing power demand from artificial-intelligence data centers and manufacturing plants.

Private-equity firm Cerberus Capital Management recently agreed to a \$315.5 million debt investment in Eos Energy Enterprises, a startup producing zinc batteries that could store energy for longer periods. A developer called rPlus Energies just raised over \$1 billion for a big solar and storage project in Utah.

"It definitely feels like there's a bit of a

gold rush," said Jacob Mansfield, a former power trader and CEO of Tierra Climate, a startup developing a financial product that would let battery companies get paid more for charging and discharging clean energy.

Founded in 2016, Intersect Power has raised <u>billions of dollars</u> to build solar projects for <u>Apple</u>, Morgan Stanley and others. Now the company is setting its sights on battery storage.

The company has agreed to buy billions of dollars worth of Tesla Megapack batteries to accelerate installations in California and Texas. <u>Tesla</u> TSLA -1.79% ▼ is known for making electric cars, but its <u>newer, smaller energy storage business</u> is expected to grow faster.



Sheldon Kimber is CEO of Intersect Power, part of a nationwide race to profit from battery storage. PHOTO: INTERSECT POWER/REUTERS

Having a domestic battery supplier lets Intersect qualify for more <u>subsidies in the</u> <u>2022 climate law</u>. Tax credits are expected to cover roughly half the cost of the Texas battery projects.

Instead of the long-term customer contracts with <u>low, fixed prices</u> that are used by most clean-energy companies, Kimber prefers shorter deals with more flexible pricing. The strategy is riskier but boosts revenue if prices surge.

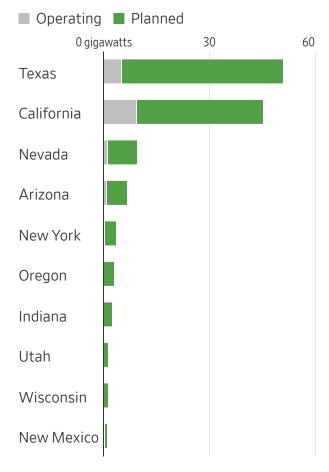
The payoff could be especially rich in Texas, where power traders play a big role in the state's <u>deregulated electricity market</u>. It is one of the markets where the difference between electricity prices during the day and evening has <u>gotten so consistent</u> that Intersect can include fixed prices in contracts with utilities and other customers.

Traders have guaranteed the company a minimum payment for its battery projects, based on the spread of electricity prices between when companies typically charge and discharge batteries. When the spread climbs above that level, Intersect keeps more of the money.

In states with more tightly regulated electricity markets, storage companies rely more heavily on other types of revenue, such as payments from utilities when their batteries are used.

The sector still faces speed bumps. Other types of batteries that might potentially store energy for longer could make some projects relying on today's lithium-ion batteries obsolete.

States with the most large-scale energy storage



Notes: Includes standalone and co-located storage projects; excludes pumped hydro storage; minimum project size for inclusion in data is 200 kilowatts; data through late May

Source: S&P Global Market Intelligence

The rush of storage installations could also make electricity prices less volatile—and battery projects less profitable.

Permitting snags and challenges hooking projects up to power grids in some states could hamper growth.

Investors are betting the surge in solar and falling costs for storage will make their bets pay off.

"It has been the hot topic over the last 24 months," said Michael Bonafide, director on the infrastructure and energy financing team at Deutsche Bank, which has invested in six storage deals over the last two years.

Write to Amrith Ramkumar at amrith.ramkumar@wsj.com

Appeared in the July 18, 2024, print edition as 'Battery Storage Draws Wall Street'.

Videos