

Client Focus

Sustainable Energy Is a Growth Story for Decades

Demand for clean sources of energy like wind and solar drives economic growth and job creation

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William Blair



A New Decade, Looking Ahead

We have experienced incredible changes over the past decade—expanding to serve more clients in the U.S. and overseas, seeing our annual revenues push past \$1 billion, and moving into our new global headquarters, to name just a few of our milestones.

As the firm heads into the next decade and our 85th year serving clients and the communities where we live and work, we are looking ahead to a bright future.

In 2019, we revisited our mission, vision, and values to ensure the firm is prepared to serve clients in the coming decade. Based on input from employees worldwide, we agreed our mission to empower colleagues, deliver client success, and engage in our communities is key to our future.

This past year has also been marked by a strong market performance, with U.S. stock markets posting double-digit gains through late in the fourth quarter. Analysts cited optimism that the U.S. and China will eventually

reach a trade deal. They see a generally strong economy despite the Fed's three rate cuts on concerns of slowing global growth.

Of course, there are plenty of unknowns ahead for 2020, including whether a final U.S.-China trade deal will be announced, a U.S. presidential election, corporate earnings, and consumer confidence.

Part of delivering client success is focusing on the long-term, finding companies and industry sectors that have growth potential. With that in mind and in wrapping up our year-long look at the sustainability theme, we are spotlighting renewable energy in this issue of *Client Focus*.

Demand by investors, businesses, and government worldwide to find ways to lower CO2 emissions has spurred innovation over the past 10 years. Renewable sources like solar and wind are not just the cheapest but also the fastest growing sources of electricity today. Innovative companies are leading the expansion.

The year and decade ahead will undoubtedly mean change. We are here to help you navigate through periods of growth and uncertainty.

On behalf of everyone at William Blair, I'd like to extend my wishes to you and your loved ones for 2020. Thank you for your trust in the firm and opportunity to serve you.

Sincerely,

John Ettelson
President and CEO

Sustainable Energy – A Growth Story for Decades to Come

Renewable energy is now a long-term growth story.

Investors, businesses, governments worldwide—alarmed by the effects and costs of climate change—are embracing clean energy solutions as a path to lower CO2 emissions.

That demand has spurred innovation in the U.S. renewable energy sector over the past 10 years, so much so that renewable sources like solar and wind are not just the cheapest but also the fastest-growing sources of electricity today.

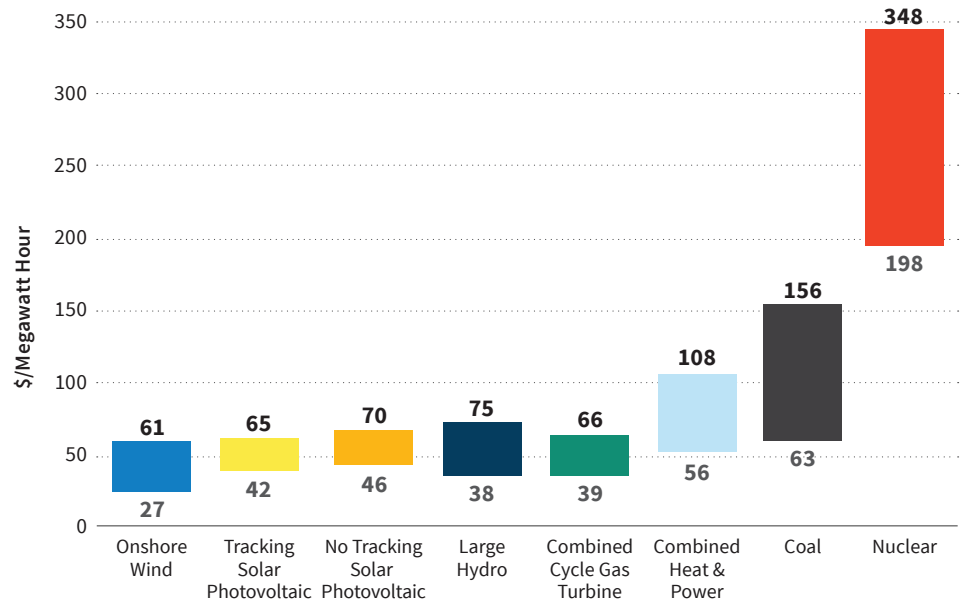
“Renewables are a growth engine for the economy,” said Alaina Anderson, a research analyst with William Blair’s investment management group who specializes in renewables.

“It’s jobs, it’s technology,” she adds. “The technology has developed so rapidly in the U.S. that generally the cost of generating electricity from onshore wind and solar is lower than generating electricity from coal.”

Renewables have accelerated their inroads in the energy complex in the last decade. In electricity production, renewable sources accounted for 17% of total U.S. output in 2018, according to the U.S. Energy Information Administration. Coal, which accounted for half of American electric output in 2008, is down to a 28% share a decade later.

The fastest-growing jobs in the U.S. are installers of solar panels and wind

U.S. Levelized Cost of Electricity



Source: BloombergNEF, November 2018. Levelized cost of electricity (LOCE) is a method to compare different sources of electricity generation on a consistent basis. The LOCE range represents a range of costs and capacity factors. All LOCE calculations are unsubsidized.

turbines, according to the Bureau of Labor Statistics in September. Starting 2018 pay for these were in the \$40,000-\$50,000 range with full benefits for applicants with just high school diplomas.

Moreover, most of these opportunities can be found in rural America. Texas is now the No. 1 wind energy state while Oklahoma and Iowa derive more than 30% of their electric power from wind.

Jobs, market economics, and greener lifestyle choices of boomers to millennials also suggest that the deep roots renewables have spread from

coast to coast are growing even as the Trump administration rejects the landmark 2015 Paris Climate Accord’s goals to cut CO2 emissions.

“The cat is already out of the bag in the U.S.,” said Anderson. “States, the public and private sectors have galvanized around decarbonizing the energy mix.

“There’s every indication that America will still meet the Paris agreement’s targets by 2030 despite the lack of commitment from Washington—driven by the will of the people.”

Cheap energy reshaping expectations

As renewable energy has become more efficient and competitive more and more companies—NextEra, Neste, Enel, Orsted to name a few—say they’ll continue to expand their renewable energy business because it’s good for their bottom lines as well as the environment.

For example, Denmark-based offshore wind developer Orsted transformed itself from one of Europe’s most coal-intensive power utilities into a renewable energy powerhouse in less than a decade. It plans to phase out coal by 2023 and is now moving into the U.S. wind market after buying Deepwater Wind, an offshore wind developer with projects along the Eastern Seaboard, last year.

Meanwhile consumers of energy—big and small—are weaning themselves off fossil fuels.

Amazon CEO Jeff Bezos announced in September a goal to have 80% of the company’s energy sourced from renewable by 2024, up from 40%

“Renewables are a growth engine for the economy.”

—Alaina Anderson, CFA, William Blair Investment Management Research Analyst and Portfolio Manager

today. Amazon plans to buy 100,000 electric delivery vans, with the first vans on the road by 2021. Bezos also challenged other companies to join Amazon in pledging to have net zero carbon emissions by 2040, a decade ahead of the Paris Accord’s goal.

A Bloomberg New Energy Finance study released in June projected that at present trends the world will move from sourcing two-thirds of its energy from fossil fuels in 2018 to two-thirds zero-carbon energy by 2050, with wind and solar supplying nearly half the world’s electricity by then. Coal-fired energy will fall by 51%, the study estimates, supplying just 12% of world electricity.

While the U.S. is a hive of renewable energy it is no longer the world leader. China is the top investor in clean

energy today while Europe leads in adopting renewable initiatives. Of the nearly \$290 billion invested in renewable energy in 2018 worldwide, China accounted for most of it at \$91 billion, according to a 2019 study published by REN21, a global renewable-energy think tank.

“There are days in Germany when the cost of wind power is zero because of how efficient the wind farms have gotten and how much supply there is when it’s windy,” Anderson said. In the UK, she says, there are even days when the country uses no coal-based power. The UK is also implementing policies where only electric vehicles will be allowed in certain parts of the nation.

Already, London has banned petrol, diesel and older hybrid cars from

Fed Conference Highlights Climate Change Threats

The Federal Reserve held its first conference on November 8 to discuss climate risks to the financial system, economy, and society.

The meeting, hosted by the San Francisco Fed, spotlighted the “current and future risks” of weather-related catastrophes on everything from the Fed’s cash payments system and dependence on reliable electric power to climate-linked migrations and disruptions of whole communities.

“Climate change is an economic issue we can’t afford to ignore,” San Francisco Fed President Mary Daly said at the meeting, citing estimates of \$50 billion in weather-related losses paid by insurers in 2018 alone—an amount that nearly doubled if uninsured losses are included.

“Sea level changes are disrupting communities from San Diego to Alaska. Preemptive power outages and wildfires in populated areas of California are a new way of life,” Daly said. “We have to understand climate risks if we’re going to effectively serve the public.”

The 10 economic studies presented during the day-long conference included a discussion of “carbon risk” and carbon taxes as a way of reining in fossil fuel emissions and hastening the transformation of world energy consumption to renewable energy.

“This just isn’t a concern for the 12th district or just the United States,” Daly said. “Countries around the world are dealing with the economic impacts of climate change.”

nine streets during morning and evening rush hours in the city's first "ultra-low emissions zones." The UK went through a two-week coal free period in May where no coal was used to generate electricity. Renewables generated a record 65% of the electricity in Germany, Europe's No. 1 industrial nation, during one week in March.

Reshaping the future for investors

The accelerating growth story of renewables is changing the way investors are evaluating companies as well as the energy sector itself.

"The energy sector in its current incarnation has gone from say 15% of the S&P 500 to under 6%," Anderson said. "If we continue on this path, energy will continue to decline in relevance while utilities will continue to increase because that's where renewables live."

Anderson said the shape of the renewable energy sector will keep evolving, including the role of governments and of the existing powerful fossil-fuel companies.

"In that context we should be thinking about what energy is to us as growth investors," she says. "For us, energy sector investments are less and less about fossil and more and more about onshore/offshore wind, solar, and hydro."

"This is going to be an ongoing thought process for our investment team," Anderson adds.

"Our contention is that when considering the investable universe in the energy sector, we need to move past the traditional silos of energy and utilities in acknowledgement of the large-scale energy transition that is taking place."

Generac's Off-the-Grid Solar Opportunities

More U.S. power outages caused by an aging electrical grid, increased stress from solar and wind energy generation, and worsening weather events are creating greater demand for backup power systems. Traditionally, consumers have turned to emergency generators powered by diesel or natural gas. But a growing trend is to turn to photovoltaic systems—a combination of solar panels and cutting-edge batteries that can provide electricity when the power goes out.

Generac Power Systems, a Midwest manufacturer of fuel-powered generators, has jumped on the renewables opportunity—evolving from being solely focused on fossil-fuel generators into a global provider of solar power and energy storage, monitoring, and management solutions.

In early 2019 Generac entered the residential solar market with its purchase of Neurio Technology and Pika Energy. Pika offers solar storage batteries and Neurio has a system that monitors how much electricity home appliances use so consumers can reduce energy use and costs. In December, Generac launched a new line of solar products that will allow homeowners to capture, conserve, and store their solar power.

"These are really good strategic decisions the company is making," said William Blair analyst Brian Drab, who covers industrial technology companies including Generac. "They want exposure to these important long-term trends of solar-power generation and whole-home energy management."

Demand for solar storage is expected to grow as many consumers generate more home energy than what they can use. Such customers have been selling their overflow power back to local utilities.

"But an interesting trend is taking place where utilities are becoming less willing to buy back all the excess energy consumers are producing," Drab said. "So they're paying less—driving consumers to look more for battery solutions."

The local solar power markets also are bound to keep growing, making their own demands to reshape the existing grid. For example, in 2020 California will become the first to require all newly constructed homes to include solar panels.

"The company's opportunities in California and clean energy markets are providing a long runway for growth," Drab adds.

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William Blair's Community Partnership Program Goes Global

Heading into a new decade, William Blair has decided to expand its popular community partners program to its global offices. In December, the firm announced 11 new partnerships that continue a nine-year-old initiative that began in Chicago.

The community partnerships expand and support—both financially and in employees' volunteer time—local nonprofits that work to strengthen their communities.

“This year we are thrilled to expand the program globally,” William Blair CEO John Ettelson said at a firm-wide celebration at Chicago headquarters in December when the new community partners were announced. “We started in 2011 as a way to channel investments into our communities to complement the general broad initiatives that we undertake across the board.”

Selected from nearly 80 nominations made by employees worldwide, organizations from London to San Francisco were selected as William Blair 2020-2021 community partners.

The groups have all made clear their commitment to the long-term vitality of their communities. Their activities include educating underserved youth; helping the homeless, refugees and immigrants; feeding the hungry; empowering teenage girls; supporting



“One hundred percent of our philanthropy is employee inspired.”

—Laura Coy, William Blair philanthropic strategist, speaking at the community partnership event in December.

children with incurable diseases; and strengthening urban families.

Employee engagement

William Blair invites employees every two years to nominate organizations that align with the firm's commitment and mission to engage in local communities.

Since the program began in Chicago, William Blair employees have helped start a middle school leadership program; initiated a college career program; helped distribute thousands of books to underserved youth; and mapped community assets in the city's South and West sides. Community grants through the program have amounted to nearly \$3 million.

The partners are scaling up their efforts over the next two years with

programs ranging widely. For example, in Chicago there are plans to reach more Latinx students by creating a neighborhood choir in Gage Park, a challenged intercity neighborhood. Across the pond, the London office is supporting a refrigerated van to deliver food throughout the city to eliminate hunger.

Investing in the community

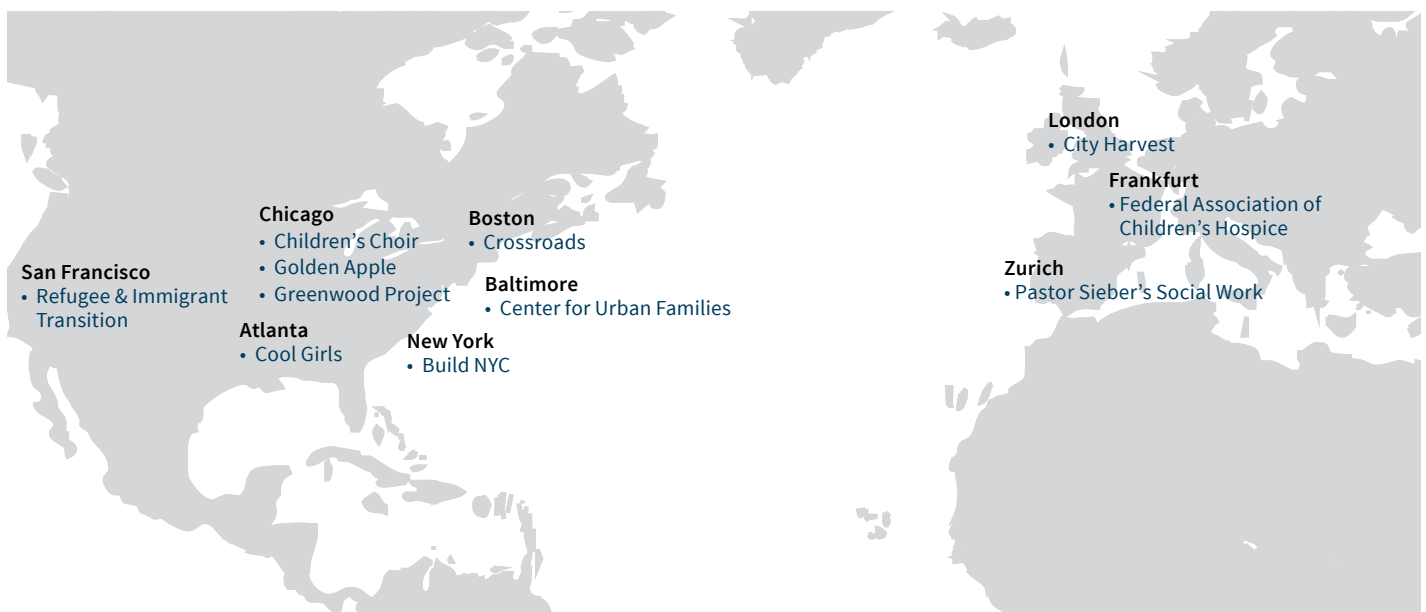
Investing in the community has always been part of the William Blair culture, a tradition that began 85 years when William McCormick Blair founded the firm. Mr. Blair was a civic leader, serving as president of the Art Institute of Chicago, as a trustee of the University of Chicago, and as a member of the Chicago Historical Society Board, to name just a few of his many leadership roles.

Other William Blair executives have carried on the same tradition throughout the decades. But as the firm has grown beyond its Chicago headquarters to establish offices in Boston, Baltimore, Atlanta, Charlotte, San Francisco, New York, and overseas, a wide range of employees wanted to participate. So the community partnership initiative became a way to involve firm-wide human capital as well as to expand targeted financial resources to make a larger community impact.

"One hundred percent of our philanthropy is employee inspired," says Laura Coy, William Blair's philanthropic strategist. "We are proud of the innovative ideas our employees have set forth to help create catalytic change in our communities."

Community Partners 2020–2021

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Tax Strategies for Year-End Planning Available Now



Every year, there are steps that high-net-worth individuals, families, and business owners can take before December 31 to strengthen their wealth management strategies and lower taxes.

William Blair's 2019 year-end tax planning guide is now available, highlighting 10 tax and wealth planning strategies stemming from the landmark tax reform law.

The Tax Cuts and Jobs Act made a host of changes to the deductions that many high-income taxpayers claimed in the past. The net result is that significantly fewer taxpayers will itemize their deductions, and will instead take the standard deduction. But there still are many year-end planning opportunities related to deductions that high-income individuals and families should consider, particularly when it comes to charitable giving.

10 tax and wealth planning strategies

1. Maximize your deductions
2. (Re)consider a Roth conversion
3. Don't overlook an HSA
4. Understand the laws for establishing residency in a low-tax state
5. Take full advantage of new lifetime giving opportunities
6. Review your estate plan in light of major tax law changes
7. Review and update your beneficiary designations
8. Maximize the after-tax value of your business equity
9. Look into opportunity zone investments and their potential tax breaks
10. Check your withholding amount to avoid unpleasant surprises

To learn more about these and other strategies, schedule time to talk with your William Blair representative or contact the firm at pwm@williamblair.com.



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