# RIDE THE \$16 TRILLION INFINERGY REVOLUTION

## Strategic Fortunes

### **Ride the \$16 Trillion Infinergy Revolution**

By Ian King, Editor of Strategic Fortunes

NE of my favorite outdoor actives is kayaking on the lake near my house. I've been drifting out there on weekends since I moved to Florida from New York. It's my happy place and gives me an opportunity to get exercise, fresh air and solitude.

It's the perfect place for social distancing — except for the random fishing boat or jet skier that buzzes by every so often.

I've recently noticed more and more houses along the lake sporting dark mirrored solar panels on the rooftops. It's interesting that Florida is known as the "Sunshine State," yet only 1% of homes have solar.

Florida and many other states have been slow to adopt renewable energy because of its high cost and inefficiencies. But this is about to change...

After all, it always takes time for life-changing innovations to catch on.

We can look back at history for just such an example.

On December 31, 1879, a crowd of revelers gathered in the small town of Menlo Park, New Jersey. With the new year just hours away, they witnessed history when Thomas Edison revealed the incandescent lightbulb for the first time.

Although the incandescent lamp was invented 40 years prior, the lightbulb only needed an electric current and could burn for hours.

The crowd stood in amazement as the streetlight lit up the small village. Edison knew this was just the beginning...

Afterward, he turned to reporters and uttered the now infamous statement: "We will make electricity so cheap that only the rich will burn candles."

Although the lightbulb ignited an electricity rollout across the nation, it wasn't an immediate revolution — it took several decades to see the full impact.

In fact, it wasn't until a half-century later that Edison's proclamation of accessible electricity came to fruition. By 1930, most American households in larger towns and cities had access to affordable electricity.

By then, a wave of new electric appliances had already hit the market — the dishwasher in 1886, the washing machine and vacuum in 1908, and the refrigerator in 1913.

These electric-powered inventions had profound impacts on society. Productivity increased as people started working at night. For the first time, people had free time from chores thanks to these new appliances.

Electricity arrived — but there was an environmental cost.

Back then, 51% of these new devices' energy came from coal-burning power plants. Traditional biofuels, such as vegetable oil, accounted for 36.4%, while crude oil and natural gas made up the remainder.

Although we've moved beyond dishwashers and washing machines to Roomba vacuums and Ring doorbell cameras, electricity generation still comes from these same sources.

In 2020, 61% of our power came from the same old fossil fuels. That's an even bigger percentage of "old economy" fuels than we used in 1930.

Of course, the alternative to burning fossil fuels is renewable energy, which is derived from solar, wind, geothermal and hydroelectric sources. It currently accounts for only 38% of total electricity generation.

But the pace of technology adoption is accelerating. Mega trends like e-commerce and working from home are rapidly changing the way we live and the way we do business.

The future is all about doing more with less. Less trips to the grocery store, less visits to the office and even less spending on energy.

But in order for that to happen, the renewable energy market will need to expand rapidly. Renewables will be the ultimate way of doing more with less. Our homes, business, and vehicles will be powered with abundant renewables, such as wind and solar.

In fact, the International Energy Agency has laid out a roadmap that would take renewable energy's global market share to 90% by 2050. They are calling the plan "Net Zero."

Many people think this estimate is unrealistic. But as I'll explain in a moment, we always underestimate the impact of new technology.

For instance, the smartphone didn't even exist 16 years ago. However, this 150-gram pocket computer revolutionized the way we communicate and the way we do business almost overnight.

We often forget how technology advances exponentially, but our brains continue to think linearly.

This time will be no different.

That's why my team and I found the perfect company to capitalize on the growth in renewable energy...

#### Say Goodbye to "Old-School" Energy Companies

While we've been using the same old fossil fuels for over a century, I think we're finally about to see a dramatic shift to renewable energy — specifically, solar power.

The renewable energy market is set to grow exponentially. But within it, solar is expected to grow even faster.

Currently, it only accounts for 8% of renewable energy generation globally. But its share is expected to grow to 35% of renewable energy by 2050.

Just as every other technology improves and becomes more efficient with time, so does solar.

Shortly, the cost of harnessing energy from the sun will be cheaper than the energy we pull out of the earth. (And maybe the Sunshine State will finally harness its greatest resource, and I'll see more panels around my neighborhood!)

That's why solar energy is the next tipping-point trend — more specifically, photovoltaic (PV) solar. These are the solar panels you see on rooftops that use semiconductor materials to convert the sun's rays into electricity.

This tipping point will have massive implications for the entire energy industry. I see a world where fossil fuel plants are shut down, causing oil and gas companies to file bankruptcy. But on the bright side, everyone will have access to cheap, renewable energy to power our homes and electric vehicles.

A combination of three key factors will allow the solar market to shine:

- 1. Solar is cheap and getting even cheaper. Bloomberg estimates the cost of solar energy has dropped 89% since 2010. It's expected to fall another 34% in the next decade and 63% by 2050 due to robotics dropping labor costs.
- **2. Solar efficiency is improving.** The number of solar panels a house needs is determined through "conversion efficiency." This measures how much of the captured sunlight will turn into electricity. A higher percentage of conversion efficiency means you need fewer solar panels to power your home. In 2018, the average solar panel was around 17.7%.

Analysts estimate that by 2025, the average conversion efficiency will jump to 21%, and to 24.4% by 2040. So buildings would need fewer panels. However, this only tells part of the story...

Newer, light-sensitive materials — like Perovskite — have the potential to get a conversion efficiency of up to 66%. This would double what's theoretically possible and lead to an even faster shift toward solar.

3. Upgrades to battery storage. There's another phenomena happening...

The race to build the electric vehicle created an 82% drop in prices for lithium-ion batteries in the past decade. Batteries are a game-changer for solar.

They solve the No.1 issue — the sun isn't shining when households consume the most energy (in the mornings and evenings).

Batteries allow both residential and commercial installations to store the sun's energy and then use it when needed.

When you combine the potential growth surge of solar, U.S. energy battery storage capacity (in gigawatts [GW]) is expected to grow ALMOST 40-FOLD over the next two decades. That's an astounding annual growth rate of 19.8%!

These three factors have brought solar to a tipping point. The sun is abundant across twothirds of the world. In these areas, it makes sense (economically and environmentally) to build solar power plants instead of new coal or gas ones.

Solar is also outpacing other forms of alternative energy — not just coal and gas. For instance, geothermal energy is problematic because it's expensive to dig deep into the earth, and it can potentially cause earthquakes. And the major disadvantage of wind energy is that wind is not constant throughout the world, making it less efficient.



As I mentioned earlier, global solar energy only accounted for 8% of renewables last year. However, it's expected to be almost half of renewables in the next few decades.

That's why now is the time to invest in the solar boom — before the market catches on.

#### The Solar Boom: Cheaper Prices Lead to Higher Demand

While solar started as an environmentalist's dream, the next phase will be an economist's dream, as cheaper prices lead to higher demand and more supply.

In the U.S., solar capacity is expected to skyrocket sixfold over the next three decades, growing from 47.6 GW in 2020 to 309.3 GW in 2050.

That means powering up our electric vehicles (EVs) and running our central air conditioning won't break the bank or damage the environment. We'll be doing more with less resources.

Some forecasts see solar growing from 3% of global electricity generation today to 29% in 2050. But I think this outlook is too conservative...

As I mentioned earlier, technology grows exponentially. And if we apply that theory to solar power, we will see a faster growth in conversion efficiency and cheaper, denser battery storage.

These two factors will lead to a solar boom and change the world in the same way that cheap electricity brought about massive growth in the early 20th century.

But there's one more factor I've yet to mention — the suburban housing boom.

Pandemic-weary urban dwellers are already flocking to larger houses in the suburbs. (Yours truly contributed to this trend a few years ago, moving from the crowded streets of New York City to the beach 'burbs of Florida.)

There are several dynamics in place that will set the course for a suburban housing boom: a prolonged period of low interest rates and the desire for bigger living quarters given the new "work-from-home" reality.

The pandemic accelerated this trend. According to data from real estate consultancy Otteau Valuation Group, families are ditching their \$3 million NYC apartments in search of much larger homes in New Jersey. In fact, new homes bought in New Jersey jumped 69% from 2021.

This will have a big impact on the future of solar, as new homeowners opt to add solar panels. And we are already seeing this trend in certain states...

In California, it's now required for every new-home construction to include solar.

Other states are California dreamin' too. In the wealthy suburb of Montgomery County, Maryland, the council proposed legislation that would require all new single-family houses to include rooftop solar panels starting in 2022.

And that means solar's boom is likely to continue.

#### **Solar Is Spreading Like a Virus**

Residential U.S. solar PV installations have steadily increased over the past decade. From 2010 to 2021, more than 3 million residential solar panels were installed, supported in large part by the 30% federal investment tax credit.

It's important to understand where solar has already flourished and where it's headed next.

States such as California and New York have led the way with state-level tax credits and incentives. But this dynamic is now changing as states begin to phase out their incentive programs.

According to consulting firm Wood Mackenzie, 2019 was the first time that no Northeast states ranked within the top five states for residential installations. That is a significant change as the Northeast usually dominated the market.

Instead, solar is moving into new states with huge opportunities for growth. States like Florida, Texas and Nevada are witnessing solar growth surges like never before. This foreshadows a big uptick in solar for three reasons:

1. Unlike the Northeast, these emerging markets don't have statewide incentive programs. Further, while these states allow net metering (the ability to sell unused energy back to the grid), Texas varies by utility provider.

Florida is the only one of these three emerging markets with a statewide retail rate net metering policy. Remarkably, these states are witnessing growth despite limited incentives and a less favorable solar policy environment.

- 2. Electricity is cheaper in the states of these newcomers than in the legacy Northeast markets. This is an important point because solar adoption occurs when it's cost competitive. One thing to note is that labor costs of installations are cheaper in the newcomer states.
- 3. Lastly, these emerging markets have very low penetration rates relative to their Northeast elders. For instance, nearly 20% of the total addressable market in California has adopted solar.

The legacy markets of the Northeast range from 3.5% to 10.5% market penetration. On the other hand, Florida and Texas are only at 1% market penetration. This leaves plenty of room for the new states to become big drivers of growth.

As you can see from this chart, Texas and Florida have very low market penetration but are expanding rapidly.

A new set of states will drive growth where solar becomes economically competitive, even without subsidies. With 1% market penetration, there is tremendous upside in these emerging states — which means we're buying in at the perfect time.

## The No.1 Superior Leader of the Solar Industry

A future where we only use renewable energy will take time. But throughout the years, public sentiment about solar has improved. In a 2020 Pew Research Center poll, 46% of U.S.



homeowners have "given serious thought to adding solar panels at their home in the past year." That's a 6% increase from when the same question was posed just three years ago.

While 6% doesn't seem like a high number, it equates to 7.7 million potential new customers.

As solar and homebuying surge, many of these new homeowners will add solar to their new homes. That's why I believe the solar industry will surge higher than the forecasts in the next few years.

And that brings us to our recommendation — SunPower Corporation (Nasdaq: SPWR).

It's an American company that designs and manufactures crystalline silicon PV cells and solar panels (or the black panels you see on roofs).

Like General Electric, which traces its roots back to Edison's "Edison Lamp Company," SunPower Corp. was started in the research lab of Professor Richard "Dick" Swanson at Stanford University in 1985.

Dick Swanson is an icon in the solar industry. He led groundbreaking solar research in the '70s, experimenting with different types of solar cells. He also took SunPower from a research lab startup to a global manufacturer.

SunPower got a boost in the early '90s when it received a research and development contract from the Electric Power Research Institute and the U.S. Department of Energy.

After raising venture capital funding, the company began manufacturing and shipping solar panels to customers.

In the three decades since SunPower's debut, the company has achieved major scientific milestones:

- In 1993, Honda's "Dream" solar car, powered by SunPower solar cells, raced to victory in the annual World Solar Challenge race. It beat the second-place winner by a full day.
- In 2001, SunPower solar cells powered the NASA Helios high altitude aircraft. It set an altitude record of 96,800 feet and a world record for sustained horizontal flight by a winged aircraft.

All this research has led to a superior product. SunPower uses the world's most efficient monocrystalline panels available with a 22.8% efficiency. With that high efficiency percent, clients need even less panels to power their homes.

The company went public in 2005 and is 51% owned by French energy giant TotalEnergies. That means TotalEnergies has complete control over the company's decision-making.

If you aren't already a SunPower customer, you might have spotted one of its solar panels on top of your

neighbor's house. By our estimates, the company has installed panels on approximately 420,000 U.S. homes to date, creating a 14% residential market share.

The company has a solid foothold in the new-home market, where over 50% of new-home solar installations have SunPower panels.

In California, the most lucrative market after the state legislature mandated solar for new homes, SunPower is in contract with 18 of the top 20 housing builders. These include mega homebuilders such as Pulte, Beazer and Toll Brothers, which contribute to a backlog of 33,000-plus homes.

As I've mentioned, cheaper prices and increased efficiency are putting solar power at a tipping point. When we were looking through possible investment ideas, SunPower offered another catalyst: a corporate spinoff.

In May 2020, SunPower spun off its manufacturing business, Maxeon Solar Technologies, to its Chinese partner. This allows the company to focus on the more profitable installation business and transform into an energy services provider.

If Maxeon can improve its technology more effectively as a stand-alone entity, Sunpower greatly benefits from the continued exclusivity agreement from the spinoff.



The move will increase SunPower's gross profit margin and earnings on every sale by over 35% in the next four years. In 2021, gross margins were 17.5%, but by 2025 they are expected to jump to 23.5%.

In October 2021, SunPower announced plans to restructure its business model to focus exclusively on the residential solar market. SunPower acquired Blue Raven Solar for \$165 million in October 2021. The acquisition strengthens SunPower's presence in 14 states that only account for 5% of its sales. In early 2022,

SunPower shed its commercial and industrial solar business completely. SunPower sold it to its largest Shareholder, TotalEnergies, for \$250 million.

#### This X-Factor Powers SPWR Into Exponential Growth

For each *Strategic* recommendation, my team and I look for an X-factor. This makes the business stand out and gives us a shot at better-than-expected growth.

SunPower's X-factor is a big one. It now offers storage solutions (aka batteries) to residential and commercial solar customers. This makes solar more efficient as the energy is stored in the home for when it's needed.

As I've noted earlier, technological breakthroughs in electric vehicles are causing the cost of lithium-ion batteries to dramatically decline.

Moreover, the U.S. government is focused on making the country a world leader in energy storage by 2030. At the beginning of 2020, the Department of Energy launched the Energy Storage Grand Challenge, designed to accelerate the development, commercialization and utilization of next-generation energy storage technologies.

This is creating a boom in the U.S. energy storage market. As a result, Wood Mackenzie expects this market to skyrocket 38 times in the next 10 years, from \$4.2 billion in 2021 to \$160 billion in 2031. This is an astounding compound annual growth rate of 44%!

SunPower has an edge here. It's the only company that offers an all-in-one solution that can design, install and offer a warranty on an entire system.

This all-in-one offering, called the SunPower Equinox Storage, provides an opportunity to increase revenue per customer by 30% to 50%. It's also an immediate upsell to 420,000 existing and future customers.

In states with frequent outages, like California, adding a battery is a no-brainer. In third-quarter 2021, 23% of customers have added a battery.

In the next four years, revenue is expected to double from \$1.3 billion this year to \$2.8 billion in 2026. Mainly due to increased profit margins from the spinoff and focus on residential solar, earnings will swing from a loss of -\$0.07 last year to a gain of \$1.23 in 2026.

Cheap, efficient solar will disrupt the energy markets this decade, and SunPower is wellpositioned to capitalize on this growth.

If Edison could see today's outlook for the solar industry, he might have said: "We will make solar so cheap that only the rich will burn candles."

### Action to Take: Buy SunPower Corporation (Nasdaq: SPWR).



SPWR's battery solution is a game changer.



**Note:** You might notice SunPower already in the portfolio with a previous gain. That doesn't mean you missed out! I believe SunPower has plenty more room to grow and is a great addition to our portfolio.

Regards,

Inky

Ian King Editor, *Strategic Fortunes* 



Banyan Hill P.O. Box 8378 Delray Beach, FL 33482 USA USA Toll Free Tel.: (866) 584-4096

Email: http://banyanhill.com/contact-us

#### Website: www.banyanhill.com

LEGAL NOTICE: This work is based on what we've learned as financial journalists. It may contain errors and you should not base investment decisions solely on what you read here. It's your money and your responsibility. Nothing herein should be considered personalized investment advice. Although our employees may answer general customer service questions, they are not licensed to address your particular investment situation. Our track record is based on hypothetical results and may not reflect the same results as actual trades. Likewise, past performance is no guarantee of future returns. Certain investments carry large potential rewards but also large potential risk. Don't trade in these markets with money you can't afford to lose. Banyan Hill Publishing permits editors of a publication to recommend a security to subscribers that they own themselves. However, in no circumstance may an editor sell a security before our subscribers have a fair opportunity to exit. Any exit after a buy recommendation is made and prior to issuing a sell notification is forbidden. The length of time an editor must wait after subscribers have been advised to exit a play depends on the type of publication.

(c) 2023 Banyan Hill Publishing. All Rights Reserved. Protected by copyright laws of the United States and treaties. This report may only be used pursuant to the subscription agreement. Any reproduction, copying, or redistribution, (electronic or otherwise) in whole or in part, is strictly prohibited without the express written permission of Banyan Hill Publishing. P.O. Box 8378, Delray Beach, FL 33482 USA. (TEL: 866-584-4096)