3 Opportunities to Expand Your Business in the New Energy Landscape

New revenue streams, customers, and partnerships are here — the moment is now.

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Life Is On | Schneider Electric

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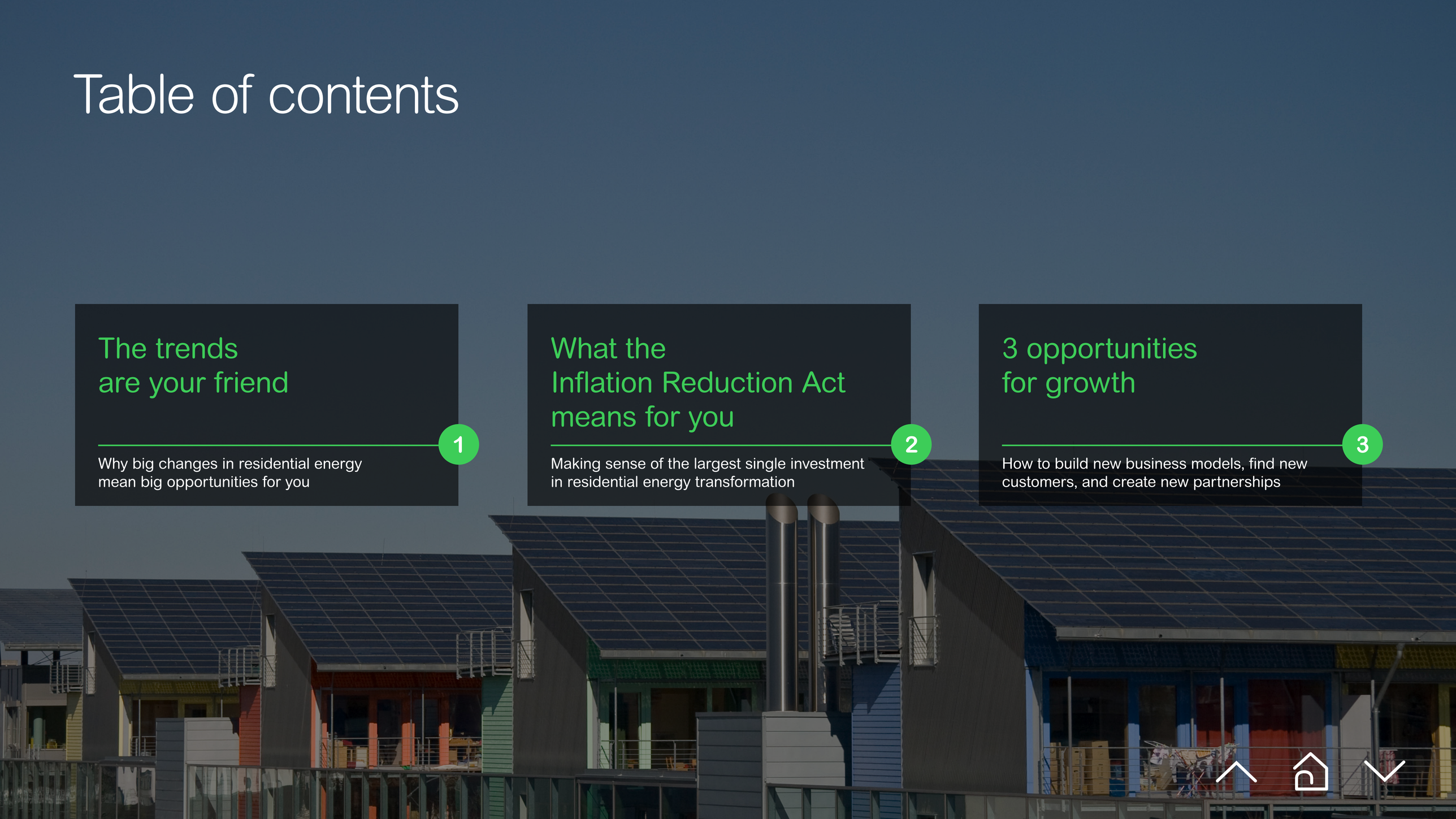
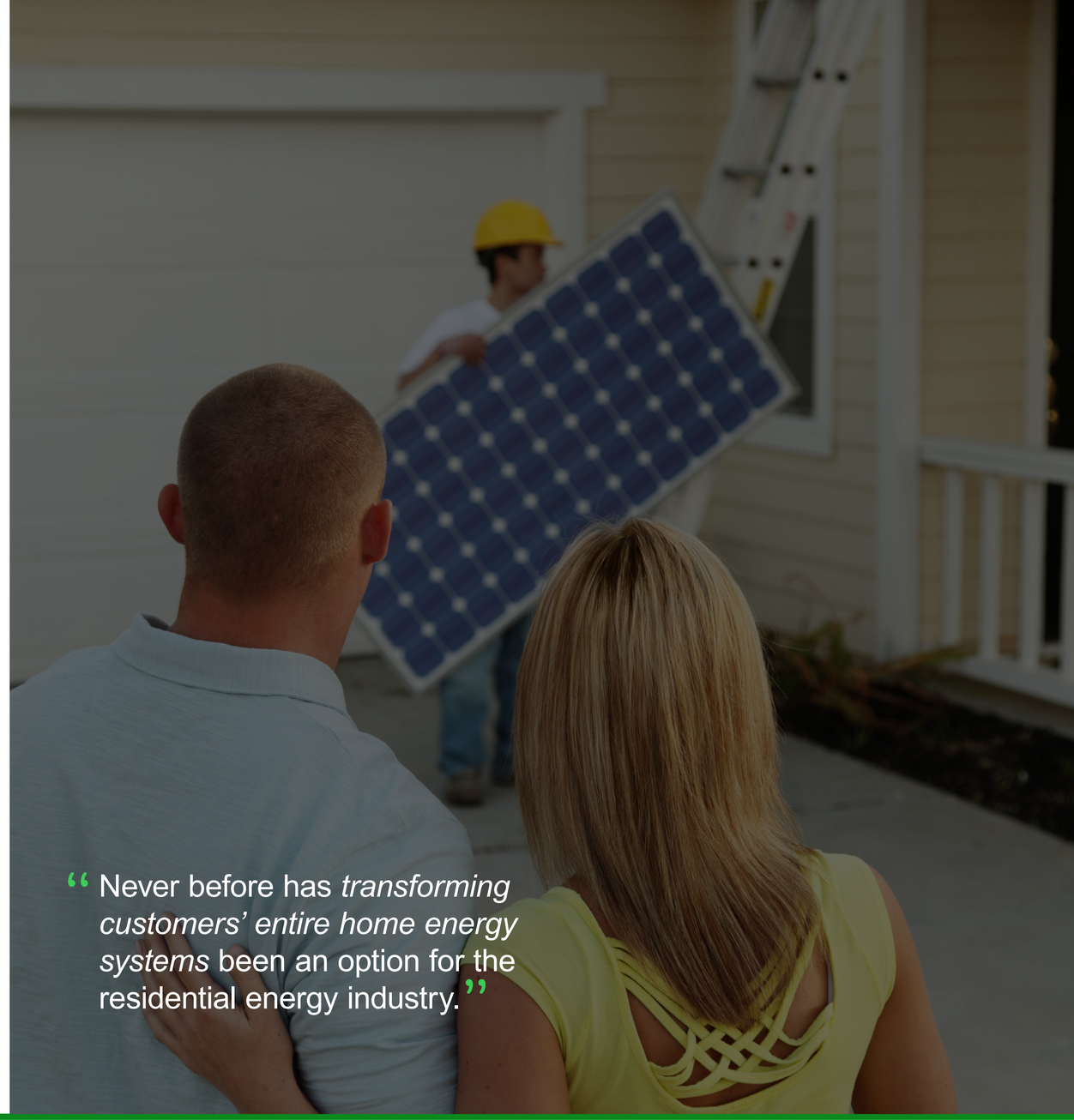


New energy landscape, new you

The residential energy industry has seen its fair share of change over the decades. Knob-and-tube transitioned to modern wiring in the 1940s. Load centers became standard in the 1950s. Central air in the 1970s. Mass-market home generators in the 1990s.

Each of these advances will pale in comparison to what the new energy landscape will bring. That may sound like an overstatement, but consider that each of those industry-altering innovations affected only one step of the electron's journey — its sourcing, transmission, or consumption. The new energy landscape will transform the full journey, from grid to plug. For the first time, electrons will flow in two directions.

This e-guide will share three key opportunities the new energy landscape poses for your business. Along the way, it will cover important macro trends and federal funding opportunities accelerating consumer demand.



Changing how homes source, transmit, and consume energy

Fundamentally, the Home of the Future is about combining digital and electrical technologies. **Digital** intelligence makes energy smart, while **electrification** makes it green. We call this **Electricity 4.0**.

Benefits of Homes of the Future over traditional homes

2 – 3x
lower total energy demand

10 – 30%
lower electricity spend

4 – 10x
lower carbon emissions[1]

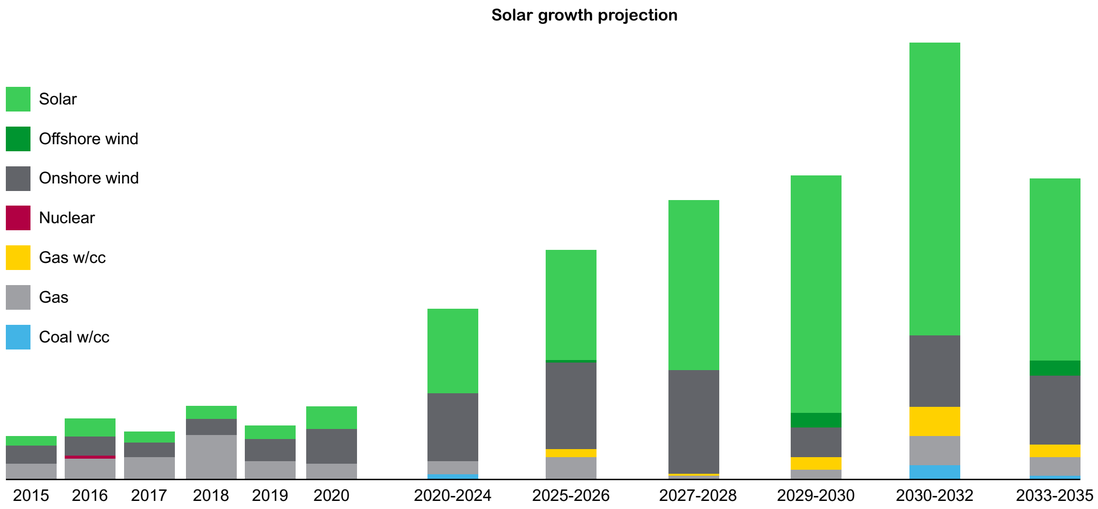
	Traditional Homes	Homes of the Future
Sourcing energy	• Powered by both electricity and fossil fuels (e.g., heating oil, propane, natural gas) • A one-way ticket for electrons from grid to plug	• Mass electrification • A two-way (i.e., bidirectional) flow of electricity between the grid and battery storage, electric vehicles (EVs), or rooftop solar — with digital intelligence determining optimal sourcing
Transmitting energy	• A one-way ticket from main feeder to load center to receptacles and switches, with zero visibility into real-time consumption at the plug level	• Dynamically shifting around energy sources and loads to optimize carbon and cost
Consuming energy	• Plug-level energy consumption invisible and hard to manage, especially for fossil fuel-based energy systems for heating, cooking, and laundry	• Real-time monitoring down to the device level, minimizing energy waste and maximizing cost savings for EV charging and peak time-of-use pricing • Dynamic load shifting during grid outages to optimize battery life

1. All statistics sourced from Schneider Electric Sustainability Research Institute, 2021.

6 statistics that explain the new energy landscape

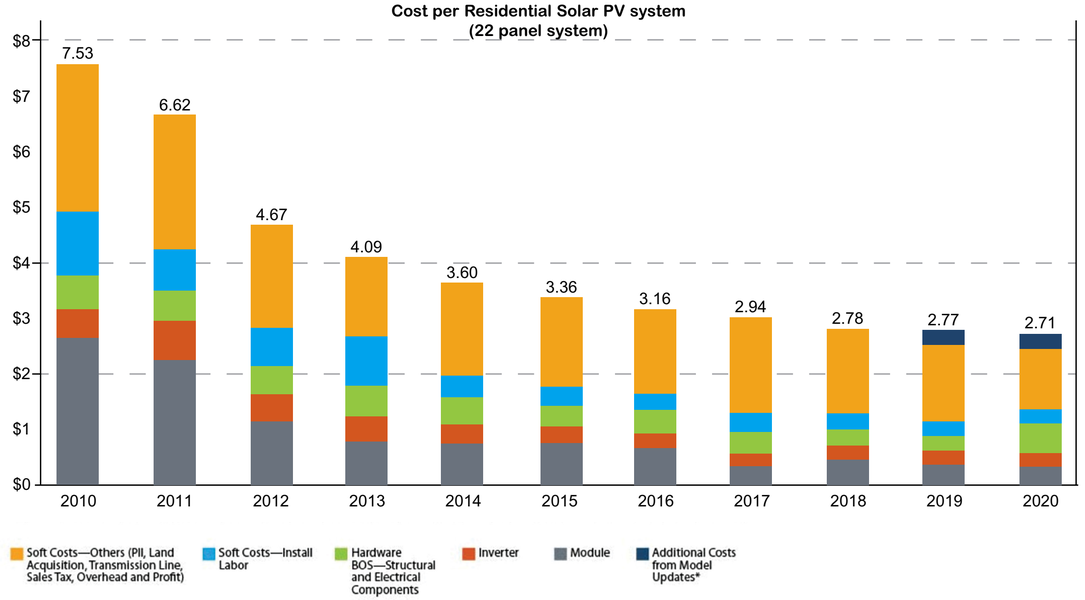
Stat 1

5x **Thanks to the 2022 Inflation Reduction Act (IRA), total solar panel deployment is projected to quintuple by 2026 over 2020 levels**. According to a Princeton-led analysis, utility solar capacity will climb from 10 gigawatts (GW) in 2020 to 49 GW between 2025 – 2026, and will only accelerate from there.



Stat 2

64% **The cost of purchasing and installing a solar system *already* dropped by two-thirds between 2010 – 2020, per the National Renewable Energy Lab**. Over the next decade, IRA funding will likely lead to even steeper declines for residential and commercial customers.

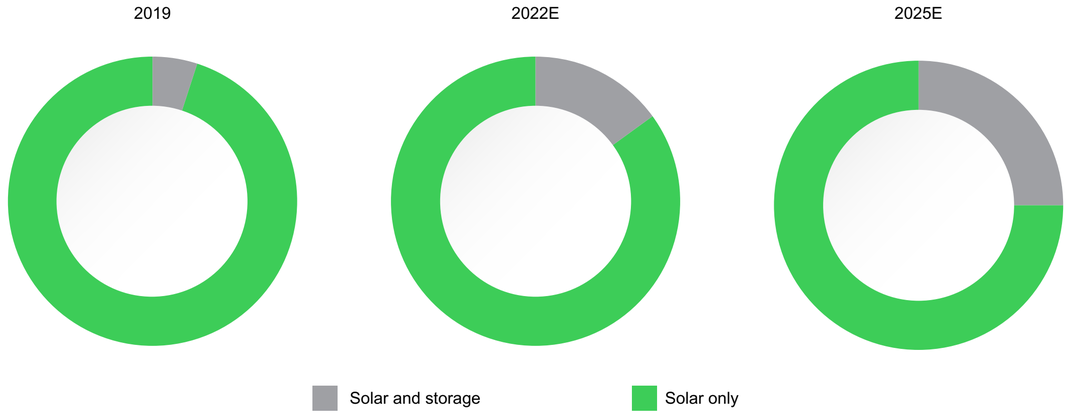


6 statistics that explain the new energy landscape

Stat 3

25% **It's not just solar that will go gangbusters, it's solar-plus-storage.** About 25% of all U.S. behind-the-meter solar systems will include storage by 2025, per the Solar Energy Industries Association. Keep in mind, this analysis was done *before* new IRA funding.

Percentage of distributed solar systems paired with energy storage

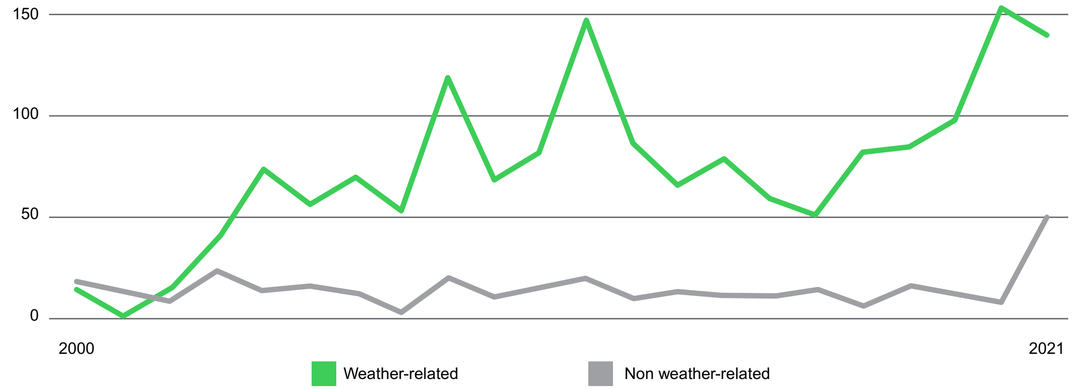


Source: SIEA/Wood Mackenzie Power & Renewables U.S. Solar Market Insight 2020 Year in Review

Stat 4

78% **Weather-related power outages are on the rise in the U.S.** According to a Climate Central analysis, in the decade spanning 2011 – 2021, the country saw 78% more weather-related power outages than the preceding decade. The increasing risk of power outages is fueling more homeowners to seek back-up energy sources.

Major U.S. Power outages



Number of outages affecting more than 50k customers.
Source: U.S. Department or Energy Form OE-417

6 statistics that explain the new energy landscape

Stat 5

35.7% **By winter 2023, the average U.S. aggregate price for all home heating fuels (i.e., electricity, natural gas, heating oil, and propane) will increase 35.7% over winter 2021 levels.** According to the National Energy Assistance Directors Association, prices are dramatically increasing across the board for energy this winter — but electricity is only up a fraction of fossil fuel prices. That's going to make electrified heat systems (that aren't space heaters) much more attractive to homeowners.

Winter heating season	Natural gas	Electricity	Heating oil	Propane	All fuels
2020-21	$573	$1,191	$1,212	$1,162	$890
2021-22	$724	$1,233	$1,859	$1,587	$1,031
2022-23	$931	$1,359	$2,354	$1,668	$1,208
% Difference, 22-23 vs 21-22	28.6%	10.2%	26.6%	5.1%	17.2%
% Difference, 22-23 vs 20-21	**62.5%**	**14.1%**	**94.2%**	**43.6%**	**35.7%**

Table 1: Estimated winter heating costs: 2020-2021 to 2022-2023

Stat 6

52% **Thanks to the IRA, over half of all vehicles sold in 2030 are projected to be EVs.** According to BloombergNEF, the IRA accelerated projections from 43% to 52%, and that number may only increase. Many of the homes you're building or working on today will almost certainly be charging EVs in the next few years. Are they ready for that?

The IRA: A good deal for homeowners, a huge deal for you

The 2022 Inflation Reduction Act provides tax incentives and direct rebates for EVs and EV charging, home electrification, electrical upgrades, rooftop solar, energy-efficient appliances, and battery storage.

Overall, moderate- to low-income households can access up to $7,500 in funding over 10 years for purchasing an EV, and up to $14,000 for making home energy efficiency and electrification upgrades.

For a full breakdown of each incentive, check out EnergySage's analysis.

Tens of millions of American households just got the tax-incentive equivalent of $15,000+ in stimulus checks, *but they can only spend it on goods and services your industry provides*.

New consumer incentives at a glance[1]

Home electrical upgrades: $4,000 for upgrades to electrical panels and service; $2,500 for electrical wiring; and $1,600 for insulation, air sealing, and ventilation

Solar, storage, or both: 30% tax credit on total cost of purchase and installation

Heat pumps: $2,000 or 30%, whichever is less, annually, off the full price (additional state incentives up to $1,750 possible for water heaters and $8,000 for space heating and cooling)

Efficient household appliances: Up to $840 for certain ENERGY STAR® washers, dryers, and stoves

Electric vehicles: $7,500[2] off for new EVs, $4,000 or 30% off for used EVs, whichever is lower

By harnessing the full suite of IRA programs, the average American family could save between $1,000 – $1,500 on energy costs per year.

[1] Note, incentives vary based on individual homeowners' income levels. Many homeowners may not qualify for the full level of funding. According to EnergySage, eligibility for the Energy Efficient Home Improvement (EEHI) credit is as follows:
- Fully eligible: your *household* income is less than 80% of your state's median household income.
- Eligible for 50% of the rebates: your *household* income is 80 – 150% of your state's median income.
- Ineligible: your household income is over 150% of your state's median income

[2] According to EnergySage, eligibility for EV incentives are different than the EEHI credit. Here are criteria to receive the $7,500 credit for a new EV purchase:
- Income:
  - Joint tax return less than $300,000
  - Head of household tax return less than $225,000
  - Single taxpayer return less than $150,000
- Vehicle cost aka manufacturer's suggested retail price (MSRP):
  - Vans, SUVs, and pickup trucks less than $80,000
  - Cars less than $55,000

For used EV purchases, the criteria is as follows:
- The model must be at least two years earlier than the calendar year in which you're buying it
- The EV must cost less than $25,000
- It must be the first resale of the EV, i.e., the first time selling it as a used vehicle

Homes of the Future, by the numbers

Rising energy prices, coupled with rising concern around climate change, were already galvanizing consumer demand for EVs, solar, and storage technologies. After all, these technologies had shown demonstrable returns on investment via energy efficiency and energy cost savings. The new IRA funding will only accelerate these trends.

But just how much carbon and cost savings will Homes of the Future deliver overall? The Schneider Electric™ Sustainability Research Institute studied that question, and released an analysis that found the following benefits were possible *today*:

Retrofits

60% drop in carbon emissions

50% decline in energy spend

New builds

80% drop in carbon emissions

70% decline in energy spend

Opportunity #1: New revenue streams and business models

Until recently, the home electrical infrastructure that's available on the market hasn't changed much in the last few decades. You had your load center, breakers, switches and outlets, wiring, and lighting. Now, there are new technologies and solutions coming down the pipeline that can help land and expand your brand.

Solving complexity

New energy landscape technologies are, well, new. Even savvy DIYers who can wire a light switch likely won't feel comfortable upgrading load centers or installing EV chargers. And ordinary homeowners need a trusted advisor to help them make sense of different options, whether it's solar-only vs. solar-plus-storage, or batteries vs. generators.

Recurring revenue

Home electricity is going the way of home security and HVAC, both of which require ongoing maintenance contracts. Whether it's new homes or simply new installations, new energy landscape technologies require different standards of care than the typical load center setup. You now have the chance to build recurring revenue models via preventive maintenance offerings.

Long-term consulting

New energy landscape technologies are a system-level solution, with many puzzle pieces. Homebuilders and homeowners alike don't want to deal with four different subcontractors for four different installations — they want a single point of contact who can deliver EV charging, solar, battery, and electrical service upgrades. Consolidated solution providers beat piecemeal offerings any day.

Consider: The typical home built today will almost certainly charge EVs at some point over the life of the 30-year mortgage. Are your current projects ready for that eventuality?

Opportunity #2: New customers

To accommodate EVs, batteries, and solar, homes will need new switchgear and inverters. They'll need to upgrade 200-amp service to 400 amps. In this time of disruption, many customers will shake free of their go-to electricians.

More buyers

Until now, solar, storage, EVs, and modern appliances were only accessible to affluent Americans. By design, the IRA will make these technologies far more accessible to lower- and middle-income households. For the first time, lower- and middle-class households will realistically be able to invest in their home electrical systems. The new energy landscape is expanding the pie — the total addressable market.

EV charging

Over the next few years, millions of Americans will buy an EV for the first time. That means millions of homes will need electrical service upgrades, charger installations, or both. How are you going to capture this new business? Savvy contractors are getting connected to customers earlier in the buying process — via the car dealerships. Companies like Qmerit are leading the charge, pun intended, on connecting contractors to new EV owners.

Systems, not products

By the same logic as the EV charging example, every offer in the new energy landscape connects to everything else. That's a big opportunity to cross-sell. Perhaps you win a job to install new heat pumps — could you pitch rooftop solar to offset higher electricity consumption? Perhaps you install a solar system — could you then add on a smart device that shows them their real-time solar productivity? All these new possibilities are opening up.

Opportunity #3: New partnerships

Navigating the new energy landscape could be a bumpy ride. In a time of disruption, there's safety in partnership, and there's wisdom in diversification. As you look for a long-term partner to forge ahead into the new energy landscape with you, evaluate your choices on these three criteria:

Future-ready technology

Most of your customers won't go out and buy an EV, a solar system, and a battery all at once. They'll add it incrementally. Adding each new technology might require custom re-wiring and quite a few extra gray boxes on the wall — or it might not. Ask yourself: Does your partner's technology platform scale easily with your customers' needs?

Proximity to customers

Your customers don't find solar or EV charger installers the same way they find a traditional electrician. There are now sophisticated online marketplaces where customers can shop around for quotes, read reviews, and educate themselves on competing options. How do you stand out in this new market? Look for a partner who has a strong presence in these marketplaces and a clear strategy in mind.

Systems thinking

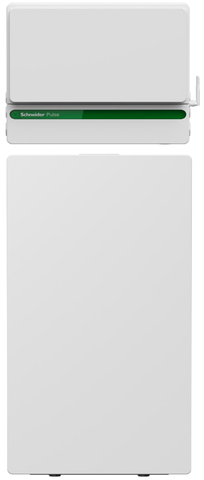
The "next big thing" isn't a new product; it's a new system of sourcing, transmitting, and consuming energy. That creates plenty of complex interactions with utility grids and automakers. Does your partner have expertise across these different areas? Are they actively working with the other big players? Will its systems "play nice" with others?

Introducing Schneider Home

About 100 years ago, we launched the first residential circuit breaker. Today, Schneider Electric is already partnering with leading homebuilders, electrical contractors, and solar installers to forge a path in the new energy landscape. And now, we're launching the first, fully integrated Home Energy Management solution with a unified app experience.

Smart Panels: With a variety of award-winning smart panels and options, we have the right level of energy management and control for new construction, retrofits and more

Schneider Home app: Home automation and energy management combined into a single app



Schneider Inverter and Schneider Boost: Home battery and solar inverter that keep the power on even when the grid is down

Schneider wiring devices For manual, remote, and automated control

Schneider Charge: The electric vehicle charger that automates affordable and solar-powered charging

3 reasons to partner with us

Here are three reasons why partnering with Schneider Electric presents a decisive opportunity to expand your business.

1 Our technology

The centerpiece of our connected home solution is our intelligent Square D™ Energy Center load center. It's designed to integrate incremental additions easily — solar one year, an EV charger the next — without requiring custom wiring or more gray boxes on the wall. It also connects digitally through a unified app experience across our full connected home solution: smart circuit breakers, control relays, wiring devices, EV chargers, batteries, whole-house surge, and the Wiser Energy™ home monitor. It's a single platform fit for any home.

2 Our vision

The way we all use energy is growing more decentralized, digitized, and decarbonized — whether because of consumer demand or state regulation. We've positioned ourselves for this future. Our core vision is about combining electrification with digitization — electricity makes energy green, while digital makes it smart. That's what we call Electricity 4.0, and it's key to a net-zero future.

3 Our ecosystem

We partner with startups building marketplaces for solar installers and EV charging installers. We partner with tech companies building smart home devices and EV chargers. And we partner with major U.S. automakers to deliver charging infrastructure that will power millions of EVs. These partnerships, along with our core expertise, positions us at the forefront of the new energy landscape. No one innovates alone. And that's why we want to partner with you.

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Partner with us

Whether it's due to increasing power outages, record-high energy prices, or unprecedented IRA funding, the residential energy industry is on the cusp of change. Let's navigate it together.

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