

Clean Energy Predictions

For those of us in the energy space, we're all familiar with the big trends and imperatives we experience every day — electrification, decarbonization, the potential impact of all those IRA dollars, and others. We put our experts in a room and asked, "yeah, but what will *actually* happen this year?" Presenting our first annual official clean energy predictions.

Chat more with our experts →



Could we BE more wrong?

MACRO TREND: ELECTRIFICATION

"Experts" will continue to be really bad at forecasting the adoption of renewable energy sources. Historically, people have been bad at predicting the adoption of new technologies, and the energy space is no exception. [McKinsey](#) found that projections for 2030 in 2021 were 30 times higher compared with projections in 2006. So don't put too much weight on what we said last year.

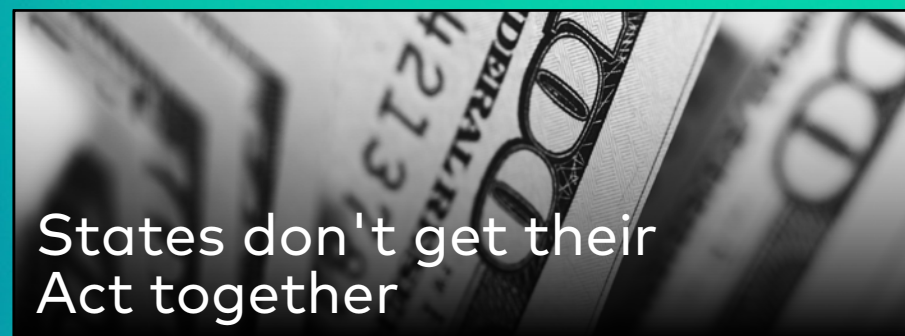
- The anti-prediction: the energy space is really bad at predictions.
- New year, new predictions? The energy space tends to eat its own words (prepared of course on an induction stove).



2024 is the year of the prosumer

MACRO TREND: RISE OF THE PROSUMER

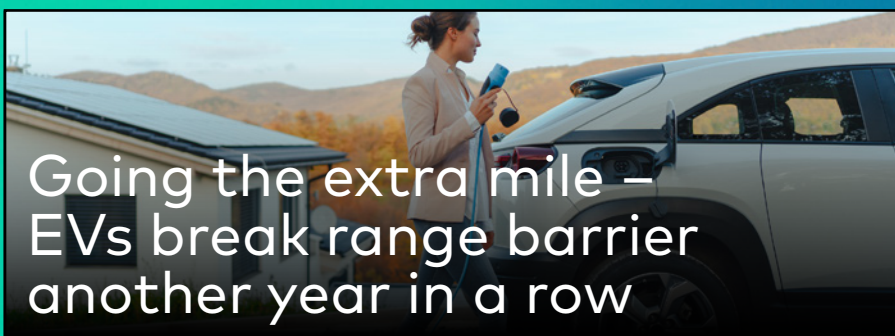
2024 will be the year of the prosumer, in a couple of ways. We predict that in this next year, we will see a large community go off-grid in their own microgrid and create a micro economy around monetizing their energy. These prosumers will be significant contributors to the grid, not just around the edges. This will be driven by not just a desire for the financial benefits, but an increased desire from consumers looking for ways to live sustainably and give back.



States don't get their Act together

MACRO TREND: IRA CLEAN ENERGY FUNDING

The deployment of IRA rebate programs will be a state-by-state, haphazard affair. Each of the state energy offices (SEOs) will create their own unique Home Electrification and Appliance Rebate program, and we predict that most SEOs will unfortunately not require the program to align with utility energy efficiency or grid plans. Spoiler alert: 2025 will be very different as we pay the price for not being coordinated.



Going the extra mile – EVs break range barrier another year in a row

MACRO TREND: EV ACCELERATION

This year, a car company will launch the first EV with over 600 miles of range. The [2023 Lucid Air](#) redefined the range record with just over 500 miles. We predict that other EV makers will be putting in the work to quickly claim the top spot in an industry where range is king.



Energy angels find themselves living in EV halos

MACRO TREND: EV ACCELERATION

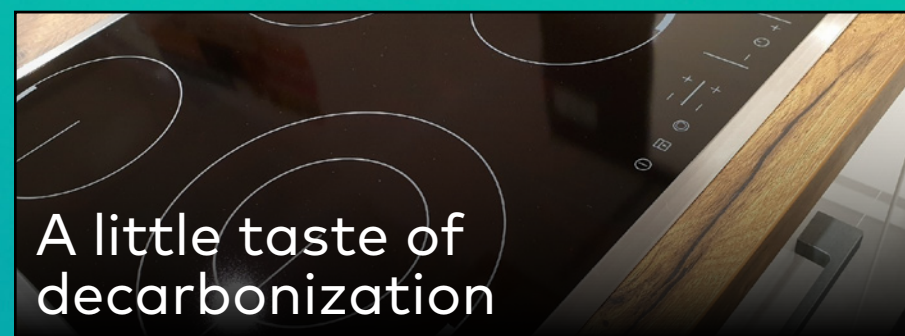
2024's trendiest cities will be those with the EV Halo. As EV adoption starts to take off, we start seeing the prevalence as "halos" around the cities – not in downtown areas that lack car- & home-owners, nor the outer suburbs where people are typically more middle class and not early adopters, but the wealthy homes in between with higher incomes. The Halo is the circle around the downtown where these adopters of EVs exist.



We're gonna (heat) pump you up!

MACRO TREND: ELECTRIFICATION

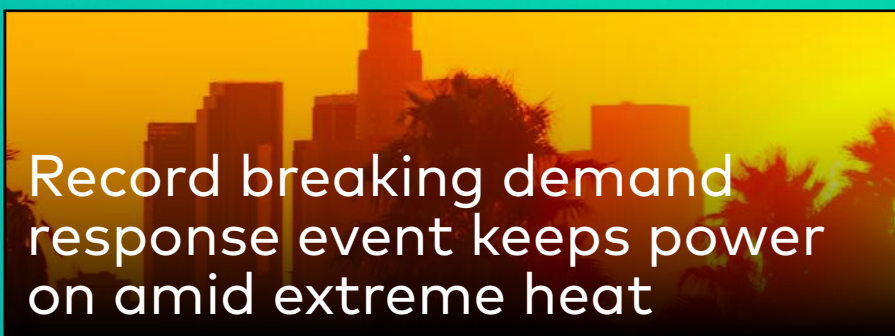
In [2023](#), heat pumps overtook gas furnace sales by 3%, after years of parallel growth. In 2023, heat pumps will beat gas furnace sales again, this time by 5%. 81% of customers are considering adopting at least one energy-related product and service in the future. We predict the most popular of those devices will be heat pumps, EVs and induction stoves.



A little taste of decarbonization

MACRO TREND: ELECTRIFICATION

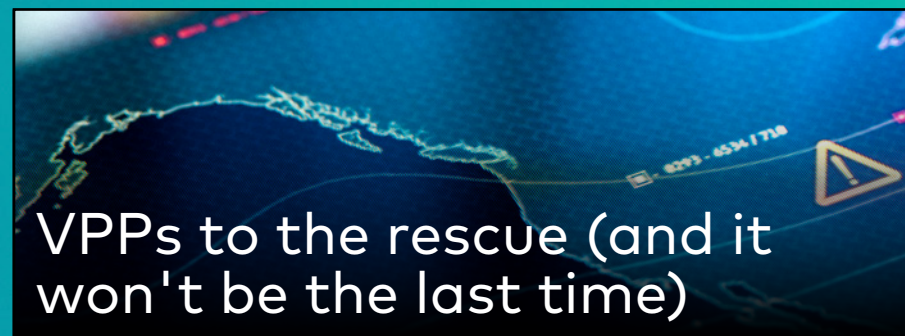
In 2024, there will be a continued push against gas stoves from a policy level. But don't worry chefs — induction cooking is better anyway. We interact with our stoves every day and switching away from gas in kitchens will be a catalyst for other appliance switches. Policy can be the biggest driver or hindrance to electrification (and decarbonization). In this case, it will propel the adoption of these eco-friendlier appliances.



Record breaking demand response event keeps power on amid extreme heat

MACRO TREND: VPP LIFTOFF

2024 will see the first 100MW DR event offset. Uplight's best event in summer '23 was 70.7 MW, up from 55.4 in 2022. With this rate of increase, a 100MW event will be easily achievable in 2024. We also predict it will occur in the summer when, due to extreme heat, DR events are especially critical.



VPPs to the rescue (and it won't be the last time)

MACRO TREND: VPP LIFTOFF

Thinking longer term, 10-20% of U.S. peak demand will be served by VPPs by 2030. This will save the US \$10B. More immediately, in 2024 we predict at least one instance of a VPP saving the day during a grid emergency.



Energy transition a hot button issue in this year's election

MACRO TREND: ELECTRIFICATION

Energy will be a top-of-mind concern going into this year's presidential election. Decarbonization will be a central issue in various state elections, but not just for democrats. Red states, which are among the most prolific adopters of clean tech, will focus on the economic development of the energy transition.