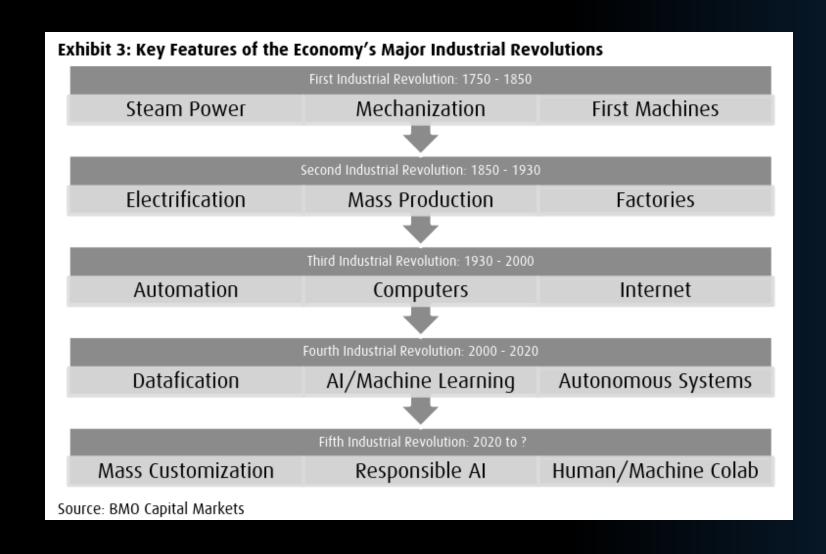




Science & Engineering Advances - The Macro Picture

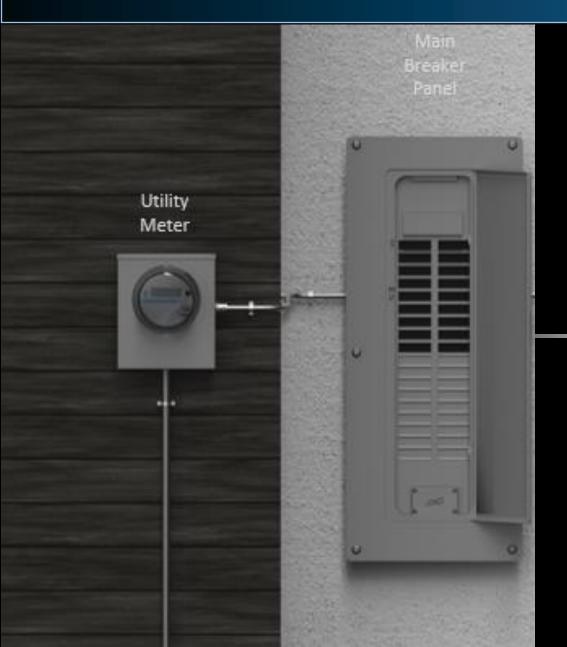


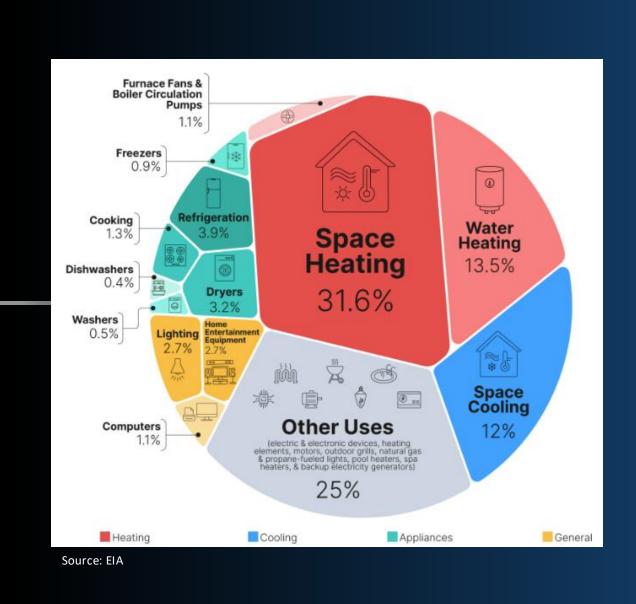
Automation is associated with higher levels of efficiency and productivity, lower costs, higher return on investment, enhanced quality, greater flexibility and improved safety.

Combining automation with Gen AI to further drive efficiencies is at the bleeding edge of science and engineering.



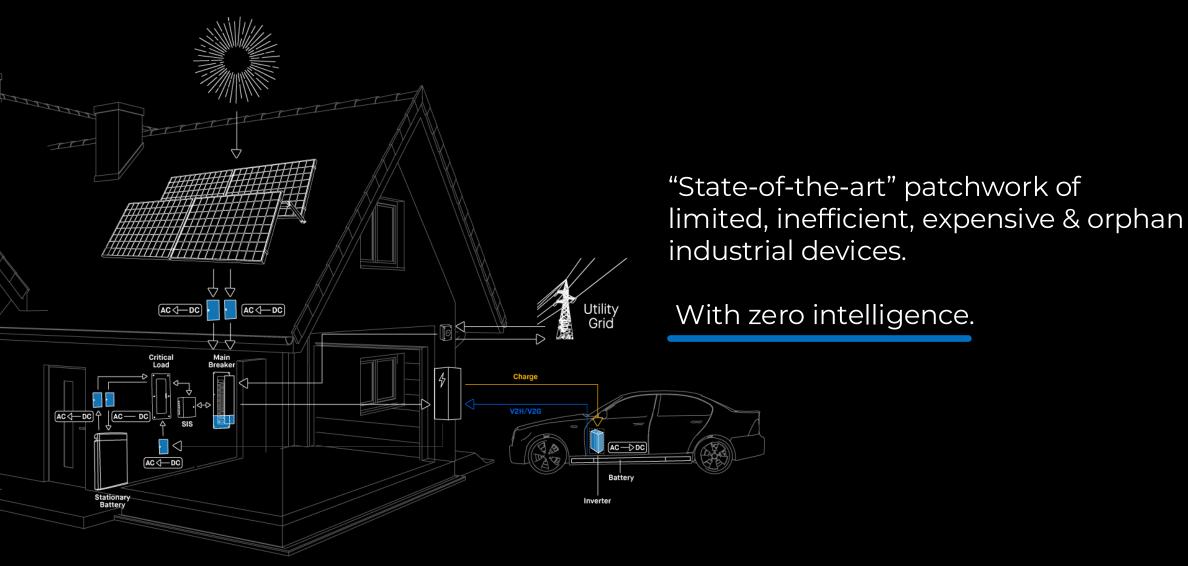
Majority of Homes Today are Still Just Consumers of Electricity







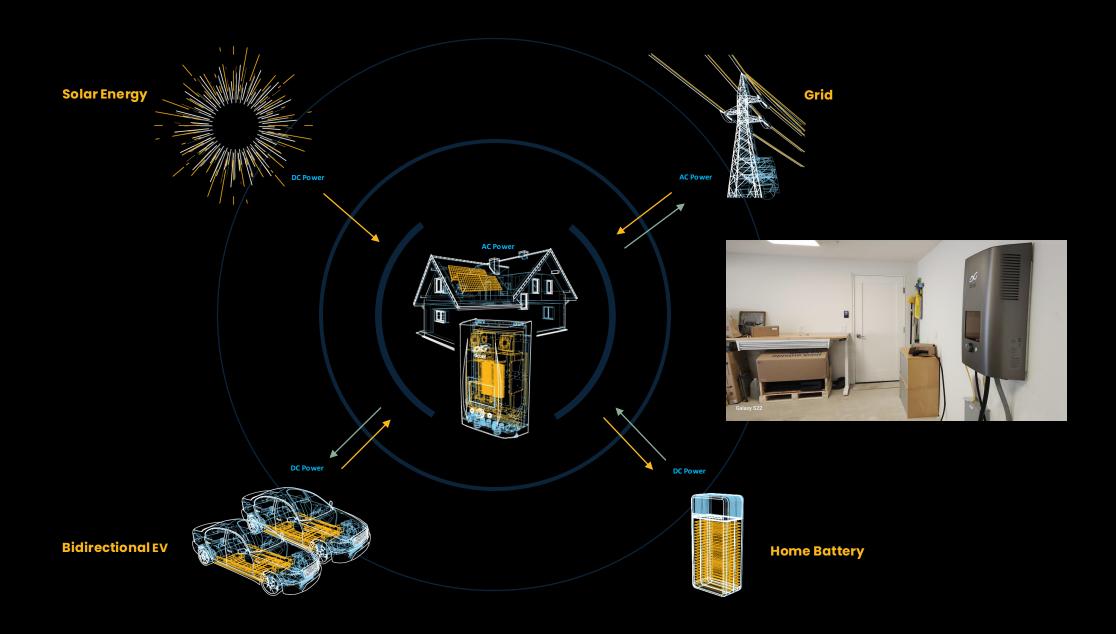
Starting in the 1990's – Residential DERs begin to emerge



>25% Energy loss and waste

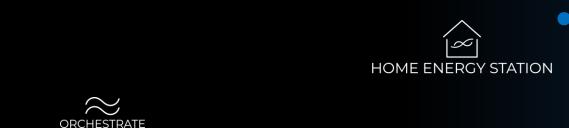


2024 - Introduction of the Next Generation Integrated Home Energy Manager





First-of-a-Kind, Multi-Functional, Automated Home Energy Station



Forecast when to use, store or sell energy

Personalize your energy experience

Charge two cars at once

Harness the sun's renewable energy

Power your home during blackouts

Earn money while decarbonizing the grid

Store low-cost energy for peak periods

Use your EV's energy during high demand

Super charge your EV more efficiently in pure DC



Solar Power



Home Monitoring



Energy Storage



Blackout Power





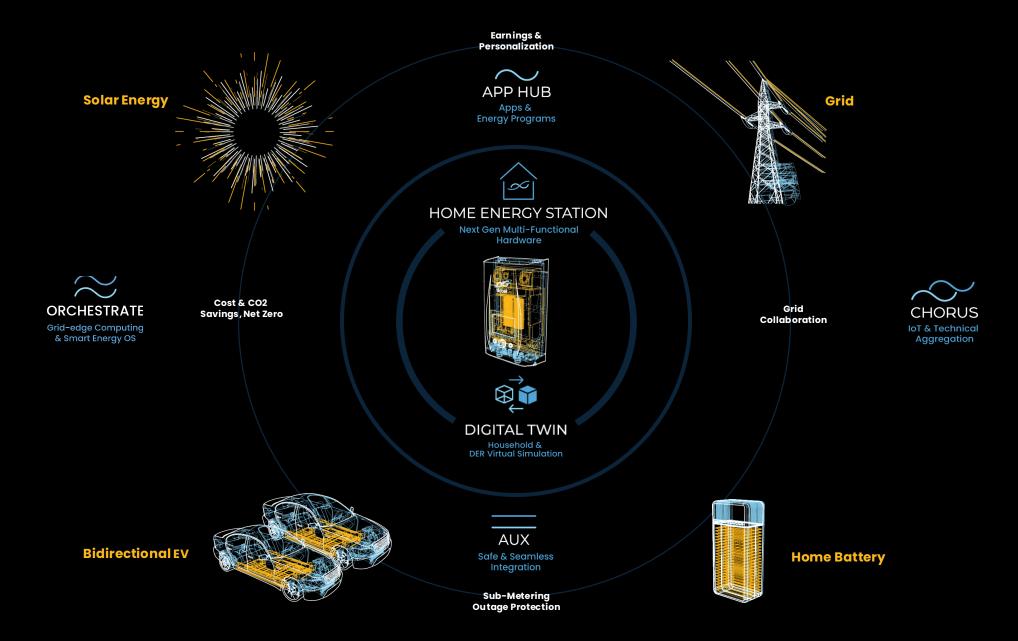
Home Energy

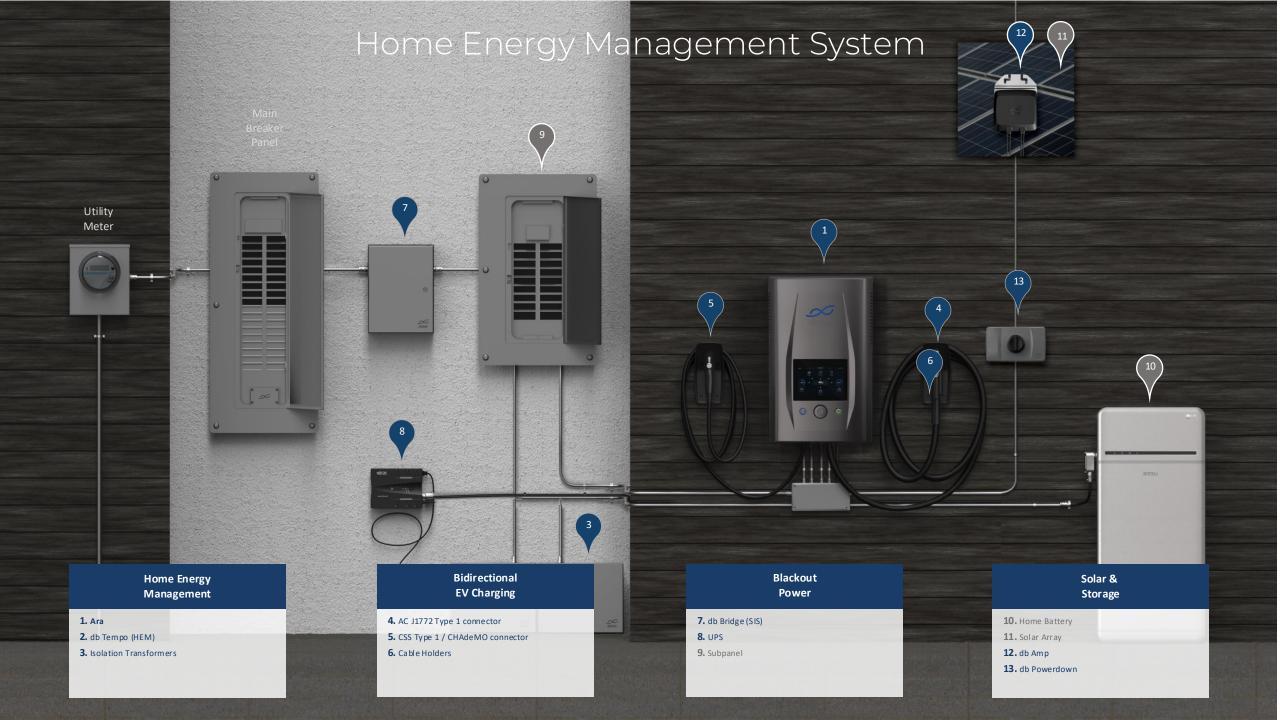
Management

Bidirectional DC & AC Charging



New State-of-the Art Home Energy Ecosystem







The "Benefits Stack"

For the Homeowner

automated control of power expenses and revenues, greater autonomy, reduced carbon footprint, increased resilience in the face of extreme weather events

For Load Serving Entities

(Utilities, Community Aggregators, VPP Operators, etc.)

the many benefits of sharply increased distribution grid digitization and operating data including more accurate feeder load forecasting, more data driven asset investment planning, A.I. generated digital twins and machine learning

For the Communities We Live In

new pathways and more granular data essential to fairly providing affordable power to everyone, especially the disadvantaged, in a community or region

For Our Planet

grid decarbonization, boosted use of electric mobility + enabling the scale of investment and the speed of deployment needed to "move the needle" on climate change in a timely way

