



2026

IMPACT REPORT





Blackhorn Ventures is an early-stage venture capital firm investing in applied intelligence for physical industries

“At Blackhorn, we invest in technologies that make the industrial economy more efficient, resilient, and—critically—more affordable as cost pressures intensify across every layer of the physical world. We’re now faced with a new set of highly dynamic variables: surging energy demand from AI infrastructure, tightening power availability, fragmented supply chains, and rising geopolitical risk that is reshaping how and where production happens.

Against this backdrop, our impact approach remains grounded in four enduring themes: resource efficiency, system resilience, affordable access, and workforce enablement. What is changing is the urgency—and the context. Energy has become front-page news and a first-order constraint, affordability a competitive advantage, and resilience a strategic imperative. We see accelerating momentum in industrial AI and automation tools that help enterprises do more with less—optimizing energy use, extending asset life, and increasing throughput without proportional increases in labor or capital.

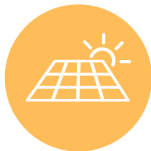
This report highlights the companies building for this new reality: portfolio solutions are modernizing industrial systems while directly addressing cost, energy, and reliability constraints. From grid-aware infrastructure to AI-enabled operations, these solutions are delivering measurable gains in productivity, safety, and resource efficiency.”



Manufacturing



Built
Environment



Energy



Transportation
and Logistics

Phil O’Connor and Melissa Cheong
Managing Partners



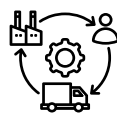
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The Blackhorn team pairs deep operating and investing experience with a shared commitment to transforming core industrial sectors through technology in ways that deliver meaningful, measurable impact.

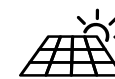
BLACKHORN AT A GLANCE



Manufacturing



Built Environment



Energy



Transportation and
Logistics

	Manufacturing	Built Environment	Energy	Transportation and Logistics
Formic				
Tristar AI				
Datch				
Circuit Mind				
Atomscale				
Hyperframe				
Toggle				
Artic				
Tekton				
Briq				
Alice				
Foresight				
Drawboard				
Safe Hub				
CoFi				
Resilience				
Ecoworks				
King Energy				
Coral				
Layer 9				
ThinkLabs				
Buzz Solutions				
Lemurian Labs				
Electric Era				
Sustainment				
Vecna				
Gridraster				
Aperia				
Rail Vision				
Ride Panda				
Sway				
Latent AI				
Fero Labs				

2017 → 2019 → 2022

Blackhorn
founded
Seed fund
launched

Industrial
Impact
Fund I

Industrial
Impact
Fund II

38

Active Investments

\$242M

Committed Capital

\$2.5B

Enterprise Value

43%

Founder Diversity

8,000+

Employess + Contractors

Data only reflects active investments in IIF 1 and IIF 2.

A portfolio company is considered founder-diverse if it has at least one founder who is female, LGBTQ+, and/or from an underrepresented ethnic background.

BLACKHORN'S IMPACT MANDATE

Blackhorn portfolio companies modernize core industrial sectors—making them more affordable, resource efficient, resilient, and safer

AFFORDABILITY & EQUITY

Expand access to technologies that lower costs for consumers and businesses

RESOURCE EFFICIENCY

Reduce emissions, material waste, and costs by increasing productivity and performance

SYSTEM RESILIENCE

Strengthen infrastructure, supply chains, and energy system integrity & adaptability

WORKFORCE ENABLEMENT

Improve net job quality, safety, and wages for frontline workers and pathways to upskilling

Blackhorn supports companies with go-to-market, capital and financing networks, and hands-on help building stronger teams, governance, and long-term strategic capacity

ILLUSTRATIVE METRICS FROM ACROSS OUR PORTFOLIO COMPANIES

AFFORDABILITY & EQUITY

\$153M

Value of clean energy projects deployed into LMI communities



KING ENERGY

\$2.4M

Direct rebates for families in LMI communities

CORAL

RESOURCE EFFICIENCY

716,000+

Metric tons of CO2 emissions avoided since inception



2,500+

MWhs of energy delivered to EVs

Electric Era

SYSTEM RESILIENCE

\$10.5M

Annual avoided power outage cost for consumers (per mid-size utility)



3,500

MW of renewable capacity added to the grid



WORKFORCE ENABLEMENT

1,920

Avoided employee injuries (equal to \$69M of injury settlements)



6,000+

Commuters travel up to 2 millions hours a year (instead of sitting in traffic)

RIDEPANDA

2025 VALUE CREATION

86%

Of IIF 1
companies
have had a
follow-on
investment
round

59%

Of IIF 2
companies
have had a
follow-on
investment
round

200+

Co-investor
introductions
made for
Blackhorn
portfolio
companies in
2025

12,848

Individuals
directed to
jobs within
Blackhorn's
portfolio in
2025

CORE IMPACT THEMES



ACCESS & AFFORDABILITY

Blackhorn invests in solutions that expand access to critical infrastructure, housing and internet connectivity. Portfolio company solutions help lower costs for low- and moderate-income households and other hard-to-serve communities.

Why does this matter? A May 2026 study by Pew Research Center found that 75% of Americans say their home energy costs have gone up, and a quarter of Americans now consider utility bills unaffordable.

SAMPLE PORTFOLIO COMPANIES TACKLING THIS ISSUE

The logo for Coral, featuring the word "CORAL" in a bold, black, sans-serif font.

AI native financing platform making energy-efficient upgrades affordable for every building in America



Distributed solar and storage platform expanding rooftop solar access, predominantly in LMI communities

The logo for Layer 9, featuring the word "Layer" in a bold, black, sans-serif font, followed by a square icon containing the number "9".

Network automation platform expanding internet access and reducing cost of service in rural and hard-to-serve regions



Automation software enabling lower-cost, carbon-neutral single family homebuilding at scale

RESOURCE EFFICIENCY

Blackhorn invests in solutions that materially improve energy, asset, and industrial productivity. Reducing emissions + material waste and improving compute efficiency + industrial process optimization reduces operating costs: highly valuable in a volatile economic environment.

Why does this matter? ~77% of global greenhouse gas emissions are tied to electricity, heat, transportation, manufacturing, and buildings, making these sectors the primary lever for emissions reduction.

SAMPLE PORTFOLIO COMPANIES TACKLING THIS ISSUE



Tire management platform improving fleet fuel efficiency and extending tire life



AI-first chip compiler increasing compute throughput without proportional energy growth



Tech-enabled retrofit platform delivering carbon-negative energy upgrades for multifamily housing



Machine learning platform optimizing heavy manufacturing processes to reduce emissions, energy input costs and waste

SYSTEM RESILIENCE

Blackhorn invests in solutions that strengthen critical infrastructure, supply chains, and housing infrastructure by improving reliability, extending asset life, and increasing preparedness for disruption. These technologies help critical systems withstand extreme weather, capacity constraints, and other systemic shocks.

Why does this matter? The average US customers' single longest power outage has risen from 8.1 hours in 2022 to 12.8 hours in mid-2025, reflecting a new normal of frequent system disruptions.

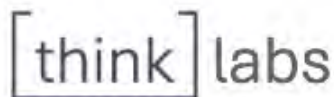
SAMPLE PORTFOLIO COMPANIES TACKLING THIS ISSUE



Visual AI platform for predictive grid inspection and maintenance helping extend asset life and reliability



Residential energy platform turning homes into dispatchable clean power networks that improve grid resilience and expand access to lower-cost clean energy



Physics based digital twin for the grid improving utility and ISO planning, reliability, and interconnection speed



Supply chain world model platform predicting disruptions, ioptimizing inventory, service levels and working capital for multinationals

WORKFORCE ENABLEMENT

Blackhorn invests in solutions that improve worker safety, job quality and productivity. By equipping teams with better tools, robotics, automation, and physical AI, portfolio companies are working to close structural labor gaps and improve retention, safety and real wage growth for frontline workers.

Why does this matter? In 2024, private sector employers in the US reported 2.5 million occupational workplace injuries and illnesses; an injury incidence rate of 2.2 cases per 100 workers.

SAMPLE PORTFOLIO COMPANIES TACKLING THIS ISSUE



Robotics-as-a-service platform reducing safety incidents and automating hard-to-fill workflows for manufacturing customers



Computer vision platform speeding operator training and reducing error and rework for manufacturing customers



Real-time building safety insights helping teams avoid high-risk sites and respond faster after disruptive events



Safety technology and coaching platform reducing injuries, improving workflows and lowering losses in industrial settings

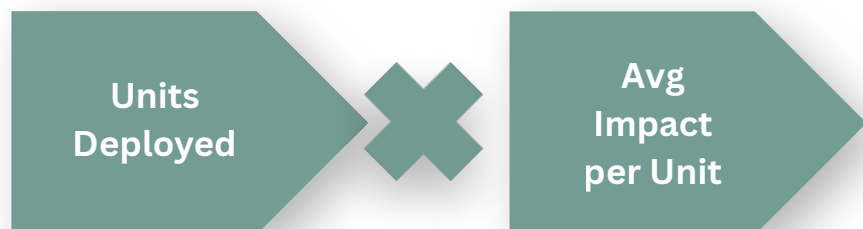
IMPACT METHODOLOGY



WHY OUR IMPACT METHODOLOGY NEEDED TO EVOLVE

Blackhorn leverages Project Frame's Potential Impact Assessment, which uses a per-unit approach to measure and forecast impact. While this works well for hardware, it often understates or misses the impact of AI-powered software companies who require a more nuanced approach to impact measurement, and whose value stems from workflow acceleration and avoided system friction.

THE BASIC FORMULA



UPGRADED FOR SOFTWARE



The result is a repeatable framework Blackhorn will use across AI-native software while preserving transparency on assumptions, scenario ranges, and confidence levels.

UPDATED IMPACT METHODOLOGY FOR AI-NATIVE SOFTWARE

We adapted Blackhorn's impact framework for AI-native software by translating company operating KPIs into material, auditable impact outputs through a four-step process:

1. **Define Deployment Node:** Identify the company's operational unit that best represents how software creates value—such as a deployment event or workflow node—rather than a physical hardware unit.
2. **Map Impact Pathway:** Link that deployment node to the most material downstream outcomes by identifying relevant interim effects and other necessary inputs
3. **Model Scenarios:** Apply conservative, base, and upside cases using company-reported inputs plus external benchmarks and clearly defined system boundaries and assumptions
4. **Report Outputs:** Produce a set of transparent impact metrics

WHAT WE BUILT FOR THINKLABS AI



- ThinkLabs is building the physics-based AI foundation model for the grid, automating planning and interconnection studies from months to minutes, driving an indirect impact for the deployment of renewables
- A traditional impact framework could not capture the full climate and operational value created by compressing interconnection timelines and freeing engineering capacity
- We built a multi-pathway model linking ThinkLabs' operating inputs to four key outputs:

DEPLOYMENT NODES

1. # of distribution feeders modeled
2. # of transmission circuits modeled

IMPACT PATHWAYS

1. Feeders modeled → renewables unlocked → GHG avoided
2. Feeders modeled → study compression → engineer hours saved → labor cost avoided

MODEL SCENARIOS

Each external assumption and industry benchmark includes a range based on a conservative, base, and optimistic scenario

MODEL SCENARIOS

1. GHG emissions avoided (tCO₂e/yr)
2. Renewable capacity enabled (MW)
3. Engineer hours saved (hrs/yr)
4. Labor cost avoided (\$)

PORTFOLIO CASE STUDIES





formic.co

CURRENT STAGE::Series B



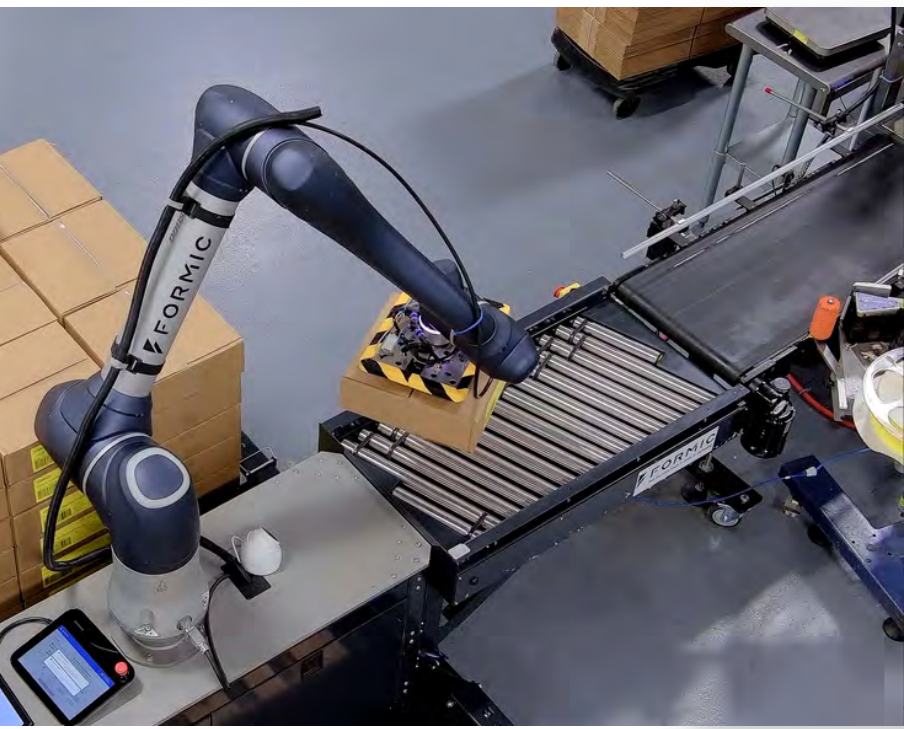
HQ: Chicago, IL



Formic makes industrial automation accessible by providing robots as a service, helping manufacturers overcome chronic labor shortages while reshoring production. By increasing utilization of existing manufacturing infrastructure and reducing reliance on long-distance shipping, Formic cuts transportation-related emissions. Formic automation solutions remove workers from repetitive, injury-prone tasks and create higher-quality, better-paid roles, improving job safety and strengthening the competitiveness of American manufacturing.

Formic's system delivered an immediate 25% increase in output, with 100% uptime since deployment, while eliminating injury risk, shipping errors, and turnover in the palletizing operation. "With Formic, there is no stress," the manufacturing director noted.

Kari-Out customer story



18M

lbs processed annually
via Masters Gallery
with 0 new injuries

99%

reduction in safety
incidents

In 2025, Formic helped prevent at least
1,920 injuries, equal to eliminating
~\$69M in injury settlements



kingenergy.com

CURRENT STAGE::Series A



HQ: Durango, CO



John Witchel

Co-Founder & CEO, King Energy

King Energy unlocks distributed solar at underutilized multi-tenant commercial properties, turning rooftops into sources of affordable, on-site clean energy. Its model lowers energy costs for small businesses, increases property income for owners, and expands solar access in communities historically overlooked by traditional deployment. By localizing generation, King strengthens grid resilience while accelerating equitable clean energy adoption.

"Where we install matters as much as how we install. Every system we put up sits in a neighborhood, serves local businesses, and affects real people. When 58% of our systems are located in LMI communities, that's not a stat we take lightly. It means cleaner air, lower energy bills, and long-term investment in places that have historically had the least access to renewable energy. That's the impact that drives us."



58%

of King Energy systems serve LMI communities, with \$153M+ invested in these communities

167M+

cumulative kWh of clean energy produced since 2021

112,000+

metric tons of CO2 emissions avoided since 2021

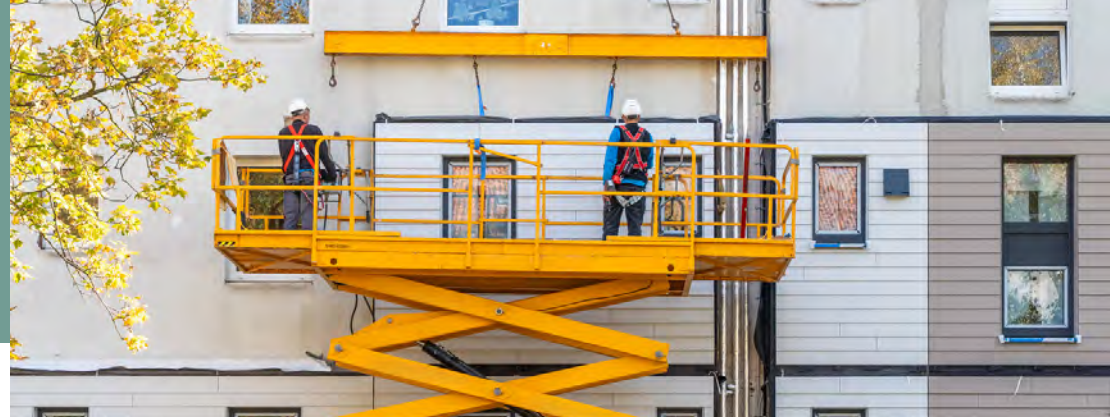


[Ecoworks.tech](https://ecoworks.tech)

CURRENT STAGE::Series A



HQ: Berlin, GER

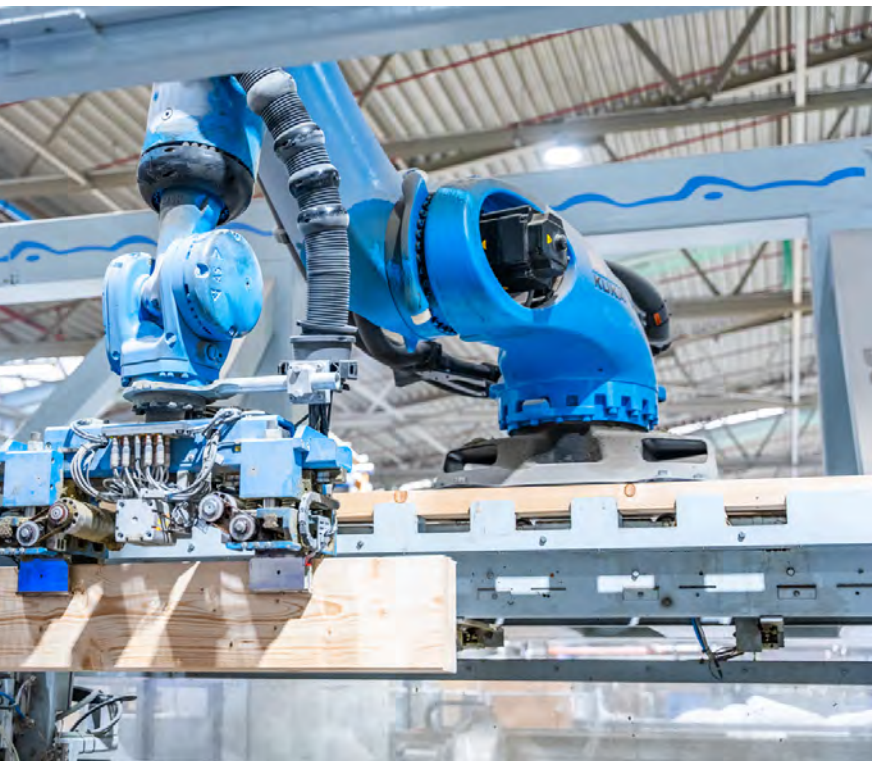


ecoworks industrializes building retrofits to deliver fast, cost-effective upgrades to net-zero standards, predominantly within overlooked LMI multifamily communities. By shifting construction from on-site work to highly automated prefabrication, the company reduces project timelines, material waste, and labor intensity while improving quality and safety. Its end-to-end software and standardized approach make deep energy renovations scalable, supporting affordable, climate-neutral housing and a more resilient built environment.

“Energy-efficient modernizations are the key to CO₂-neutral building stock. By using serial renovation from ecoworks, we are consistently implementing our sustainability strategy. This allows us to make our portfolio fit for the future and tangibly reduce both CO₂ emissions and heating costs for our tenants.”

**Sebastian Greese
(Customer)**

**Ecoworks’ current projections indicate a cumulative impact of
>1 gigaton of CO₂ savings by 2045.**



915.4

metric tons of greenhouse gas emissions avoided annually by projects already completed

737

metric tons of greenhouse gas emissions avoided annually by projects currently in construction

3.5

metric tons of greenhouse gas emissions sequestered per project on average each year after renovation

Electric Era

electricera.tech

CURRENT STAGE::Series A



HQ: Seattle, WA



Electric Era accelerates EV adoption by enabling fast charging deployment without costly grid upgrades. Their modular battery-backed charging systems allow convenience stores and fuel retailers to install high-speed chargers quickly and affordably, expanding access to reliable charging infrastructure. By lowering energy costs and easing grid constraints, Electric Era supports transportation electrification while improving system flexibility and resilience.

“At a location with a strained grid and high demand charges, our battery-backed charging solution with intelligent energy management software enables Love’s Travel Stop to operate a profitable EV fast charging station delivering up to 600 kW - with only 350 kW from the grid - significantly reducing peak power draw. In the first six months of operation, we mitigated an average of \$6,000/month in demand charges and shifted about 8,000 kWh/month from Peak to Super Off Peak, saving about \$2,000/month—all with no impact to driver experience.”

Electric Era



2.5

Gigawatt hours of energy delivered to EVs (~9 million zero emission miles)

73K

charging sessions across 30 active EV charging stations

CORAL

startcoral.com

CURRENT STAGE::Seed



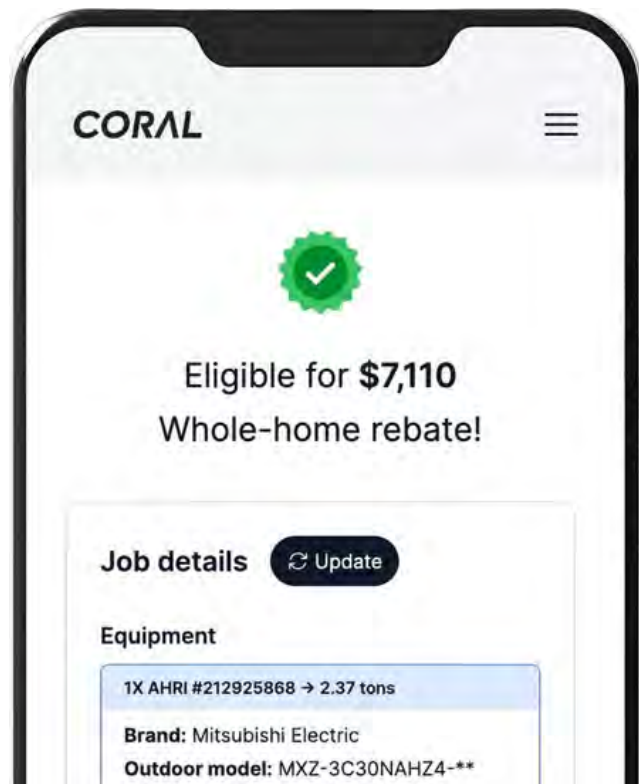
HQ: New York, NY



“Coral has been an integral part of our business. It helps our customers move forward with installs without an upfront deposit, so we can get jobs done right away. We’re using it for people with no heat, elderly customers, and those who can’t afford the upfront cost, and it allows us to complete the install, handle the paperwork, and truly take care of them. Coral has been amazing for us. We couldn’t live without it.”

**Landry Mechanical
(Customer)**

Coral is making home energy upgrades more affordable by turning complex rebate programs and financing options into instant, upfront discounts at the point of sale. Their AI-native platform helps contractors offer heat pumps and other efficiency technologies with low- or no-money-down options, lowering the biggest barrier to adoption for homeowners. By expanding access to heat pumps and reducing energy bills, Coral advances equity in the energy transition while accelerating building decarbonization - the single largest source of US emissions.



9,279 metric tons of greenhouse gas emissions avoided in 2025

2026 Forecast

32,000 metric tons of greenhouse gas emissions avoided

\$2.4 Million in rebates provided to families in LMI communities in 2025

\$250 Million in rebates forecast to be provided to families in LMI communities by 2030



thinklabs.ai

CURRENT STAGE::Series A



HQ: Toronto, CA.



ThinkLabs AI helps utilities plan for, connect, and operate clean energy projects faster by using a physics-based digital twin of the transmission and distribution grid. By compressing grid study timelines from months to days, their software unlocks more renewable capacity on existing infrastructure and reduces the need for costly, grid upgrades. The platform frees up engineering time and shortens interconnection queues, improving workforce productivity and reliability while accelerating the deployment of low-carbon power.

4,165,000

Metric tons of
GHG emissions
avoided in 2025

3,500

MW of renewable capacity
added in 2025

17,240

Engineer hours saved in 2025

\$1.25

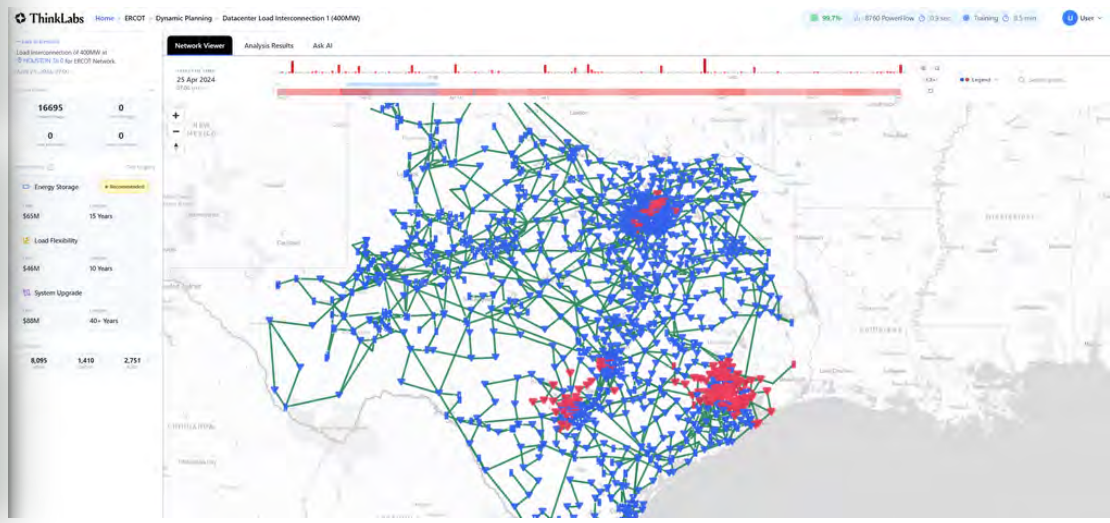
Million in labor cost avoided in
2025



“As California’s energy demands continue to increase, we need disruptive solutions to mitigate persistent challenges with current grid planning and operations. Innovative AI-driven power flow technology such as that developed by ThinkLabs, will be a key enabler for our grid digitalization efforts, supporting more efficient planning and operations for the feasibility, timeliness and affordability of the future grid.”

Shinjini Memon

Senior Vice President - System Planning & Engineering
Southern California Edison





buzzsolutions.co

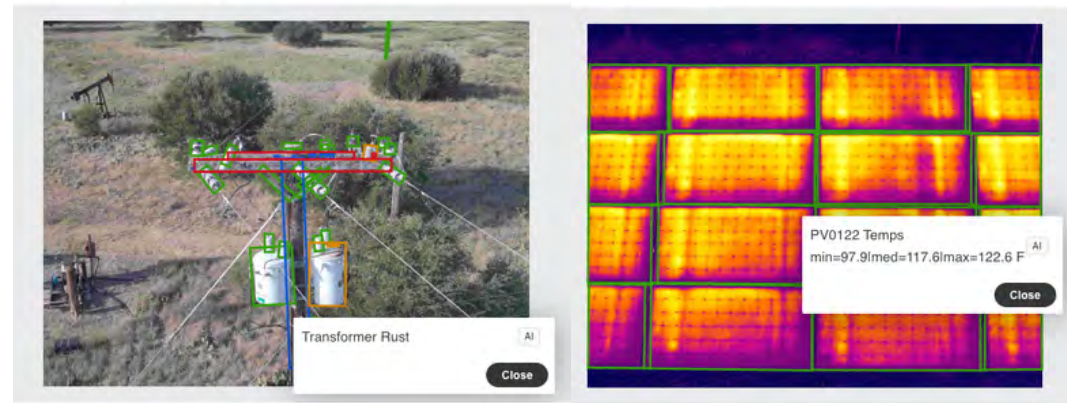
CURRENT STAGE::Series A



HQ: San Francisco, CA



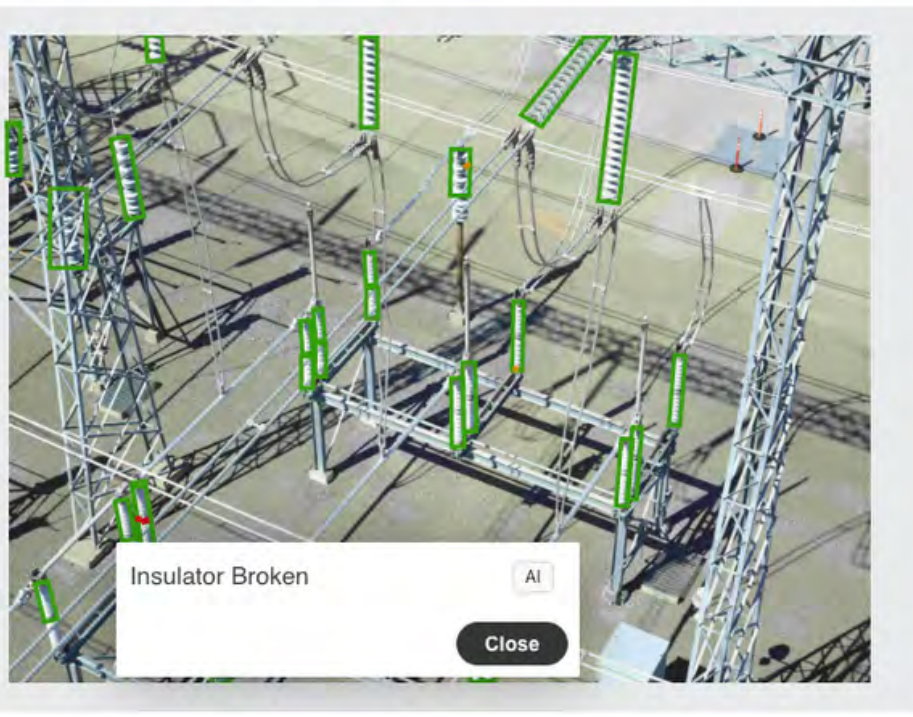
Buzz Solutions uses AI-driven image analytics to proactively identify risks across electric grid infrastructure. By detecting faults, vegetation encroachment, and fire hazards from aerial imagery, the platform enables utilities to prioritize maintenance, reduce outage risk, and prevent catastrophic events such as wildfires. This improves grid reliability and resilience while enhancing worker safety by minimizing dangerous manual inspections.



“Once utilities scale their aerial inspection programs, they are swimming in data. With Buzz’s PowerAI, we can eliminate this bottleneck to accelerate progress on improving reliability, reducing wildfire risk, and building storm resilience.”

Patrick Rackley

Continuous Improvement Manager, AEP Texas



654 avoided outage minutes per customer per year for each mid-size utility Buzz serves

\$10.5M annual savings for each mid-size utility Buzz serves (estimated)



shipsway.com

CURRENT STAGE::Series A



HQ: Los Angeles, CA

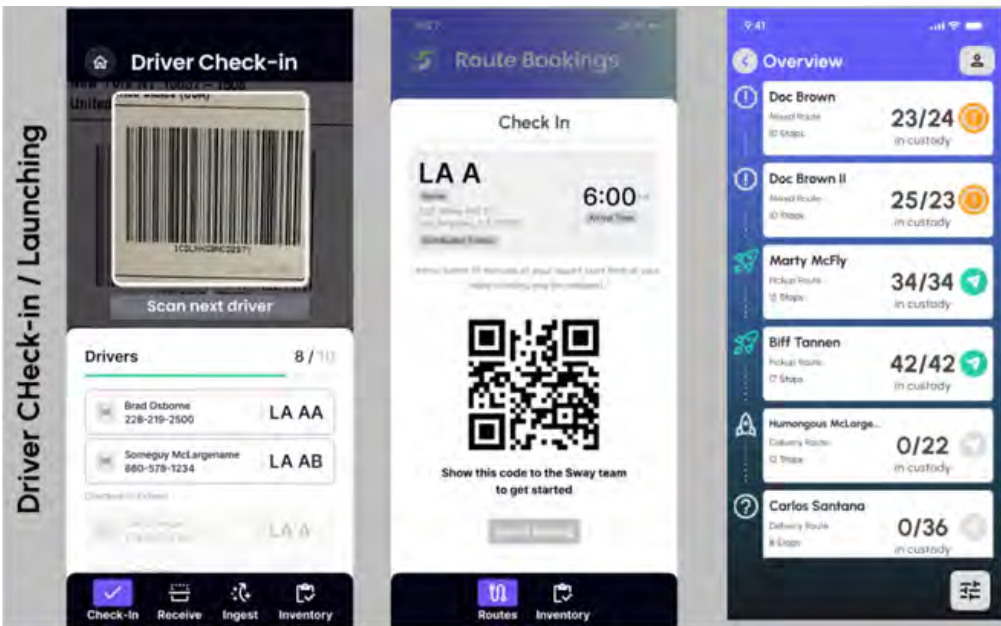
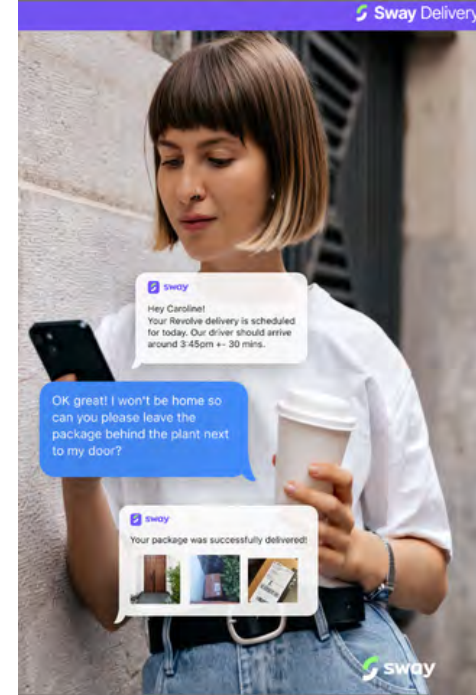


Sway modernizes last-mile logistics with an integrated platform for delivery and box-less, label-free returns. By optimizing two-way fulfillment and reducing packaging waste, Sway improves resource efficiency while delivering a faster, more transparent customer experience. Their model lowers operational costs for retailers and reduces friction for consumers, helping make e-commerce more efficient and sustainable.

“We spent the last 6 months incorporating AI into our workflows to make our teams and products more efficient. Our AI Photo Auditing tool has reduced our loss package rate to 0.005%, an industry best. This significantly lowers costs for both our team and the customer, reducing the need for a reattempt while enhancing the shopper experience. Our failure rate dropped to 2.4% from nearly 5% after implementing this new workflow.”



Eric Wimer
CEO / Co-Founder



9 million delivery miles reduced in 2025
→ 3,600 metric tons of CO2 emissions avoided

90 million delivery miles reduced by
2030 → 36,000 metric tons of CO2 emissions avoided

Ridepanda

ridepanda.com

CURRENT STAGE::Series A



HQ: New York, NY



Ridepanda expands access to zero-emission electric micromobility for large employers through a curated marketplace bundled with financing, insurance, and maintenance support. By lowering upfront costs and simplifying ownership, they enable employees of some of the biggest companies in the world to adopt low-carbon transportation options. The Ridepanda platform helps reduce congestion and emissions while promoting more equitable access to clean, affordable mobility.

"Ridepanda has completely changed the way I get around. The ride is smooth, effortless, and makes every trip feel enjoyable instead of rushed. Whether it's for commuting, exploring, or just clearing my head, it's become my favorite way to move through the day. Simple, reliable, and genuinely fun."

Karandeep Ghuman,
County of San Mateo employee



Most commuters sit. Ridepanda's **6,000+** riders ride — up to 2 million hours a year in motion instead of stuck in gridlock.

621

metric tons of CO2 emissions avoided in 2025

49,855

pounds of material waste diverted from landfills in 2025



tektonos.co

CURRENT STAGE::Seed



HQ: Phoenix, AZ



Tekton enables affordable, carbon-neutral starter homes by bringing advanced manufacturing and robotics into residential construction. Their system turns slow, labor-intensive, low-margin processes into high-throughput, highly automated production lines, cutting build time and site labor requirements while maintaining customization and quality. By helping homebuilders overcome skilled labor shortages, improve margins, and ensure the integrity of their supplychain, Tekton makes it possible to deliver more energy-efficient, factory-precise homes that typical American families can actually afford.

Electrical Product Evolution



V1 – Attic Panels
\$6,000/house



V2 – Pre-wired Circuits
\$5,500/house



V3 – Prewired Panels/ Circuits
\$4000/house

"Meritage, one of the top five U.S. homebuilders, is partnering with us on our ONEBuild solution. Re-designed for mass-market attainable housing, it's the industry's first offsite multi-trade product to provide cost-parity with legacy site-built construction."



Garrett Moore
CEO / Co-Founder

Roof Product Evolution



V1 – "Truss Mod"
\$20,00/house



V2 – "2D Planar Truss"
\$7,000/house



V3 – "3D Truss"
\$6,000/house (projected)

Field labor time dropped **20%** in H1 '26 pilots

400 labor hours saved in 2025

Patents: Serial No 63/798,899



datch.io

CURRENT STAGE::Series A



HQ: New York, NY

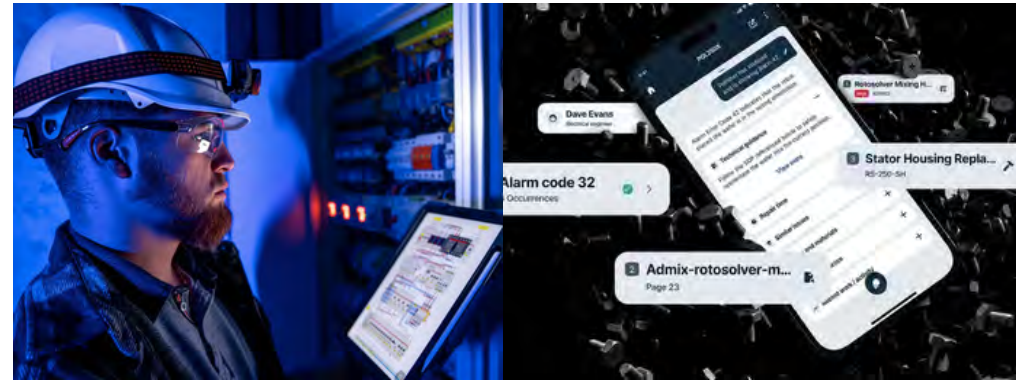


Datch uses an AI-powered voice interface to capture and structure frontline workers' knowledge in real time, transforming unstructured field conversations into actionable operational data. By reducing documentation burdens and improving data accuracy, Datch boosts labor productivity, enhances worker safety, and reduces mean time to repair. The platform helps industrial organizations digitize workflows without disrupting how work actually gets done.

"Asset availability is the largest variable cost in manufacturing. For decades it has run on tribal knowledge. That generation is retiring as more than half of the industry's labor vacancies go unfilled by 2030. The cost shows up in lost production, and in energy and materials burned during every hour of unplanned downtime.



Mark Fosdike
CEO, Datch



30%

increase in 'first-time right' fix rates

194

MWh of electricity saved in 2025

6,200

Projected MWh of electricity saved in 2030

resilience.

resilience.energy

CURRENT STAGE::Seed



HQ: San Francisco, CA



"Resilience deploys rooftop solar and battery storage on low-income housing in the same communities where data centers are located - giving hyperscalers access to clean, dispatchable peak power while eliminating energy bills for residents who need it most. The AI energy buildout is creating an unprecedented infrastructure demand problem; we believe the solution has to benefit the communities it depends on, not just the companies building it."



Ameet Konkar
CEO, Resilience

Resilience Investments partners with institutional portfolio owners and communities to unlock distributed residential energy at scale, turning American homes into a dispatchable clean power network. By deploying solar and storage on homes, then aggregating and dispatching that capacity, they help power energy-intensive demand from AI data centers while reducing or eliminating energy bills for working families. With community benefit built into the operating model—lower bills, local jobs, and grid revenue that stays local—Resilience Energy converts opposition into durable support, strengthening energy system resilience and expanding equitable access to affordable clean power.



1,960

Metric tons of greenhouse gas emissions avoided in 2025

10,000

homes can provide 50MW of peak-coincident dispatchable clean energy to data centers



CIRCUIT MIND

circuitmind.io

CURRENT STAGE::Seed



HQ: London, England

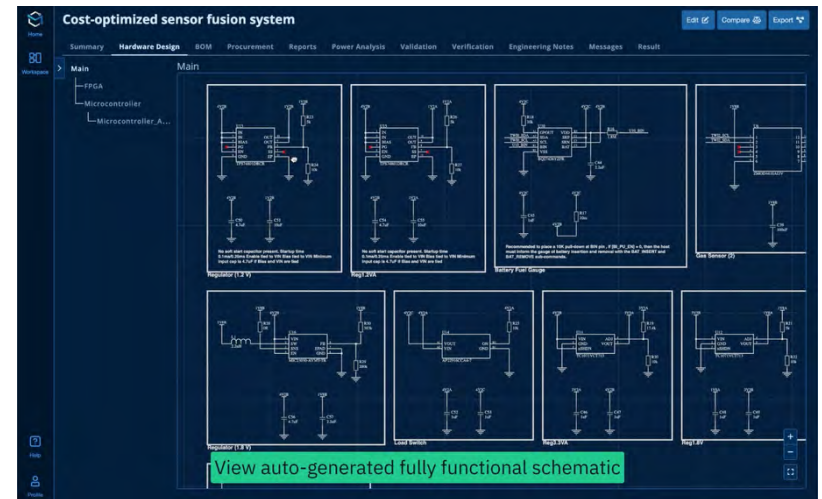
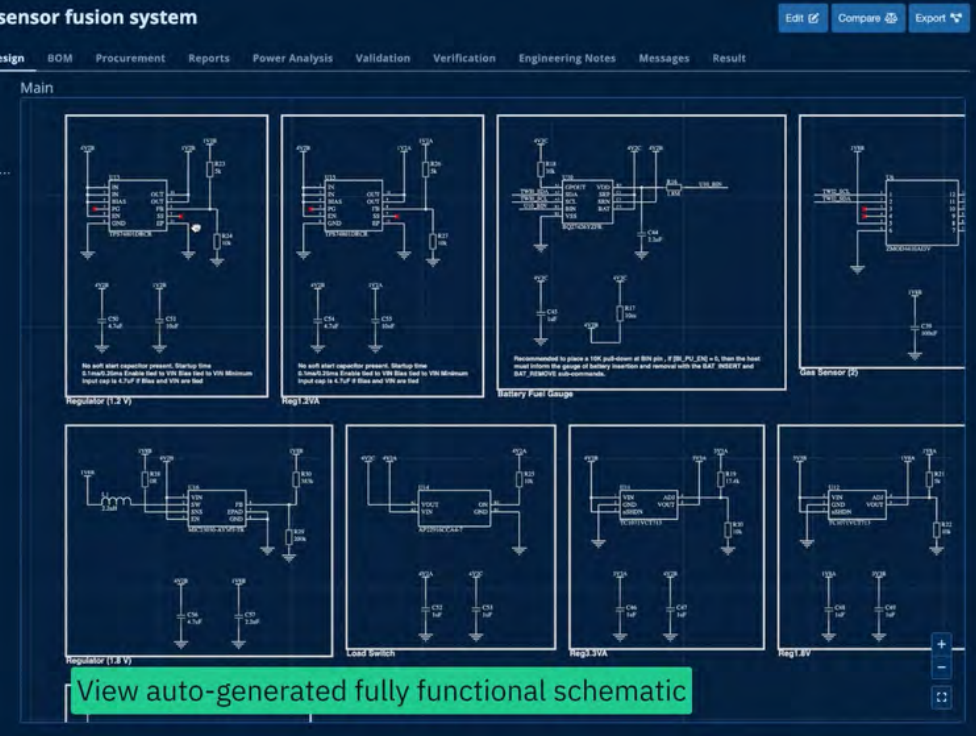


“Our clients demand fast-paced innovation, with zero margin for error. We envisioned harnessing AI and automation as a way to enhance our leadership in product design. Circuit Mind is helping turn that vision into a reality.”

Donovan Wallace

VP Electronics, Design 1st

Circuit Mind uses AI to automate electronics design, generating optimized schematics and bills of materials in minutes instead of weeks. By selecting components for optimal power use, material efficiency, cost, and availability, their platform enables electronics to consume less energy and require fewer resources across their lifecycle. This combination of speed and efficiency helps teams bring connected, energy-efficient devices to market faster, supporting both resource productivity and system resilience.



In a Los Alamos National Lab peer-reviewed case study, Circuit Mind saved 60 - 80 hours of manual design time by completing the total design in just 4 hours and 13 minutes

Components designed with Circuit Mind yield a 23% boost in power efficiency vs. the status quo