



The grid-free electrical energy backbone for US trucking





Electrification reduces Total Cost of Ownership (TCO) of long-haul semi trucks

-21%



But only a small portion of all US Class 8 truck sales are EVs

0.3%



Why? Increased costs from lack of suitable infrastructure and operational limitations due to charging time

+33%



THREE TRENDS ARE MAKING THIS WORSE — SIMULTANEOUSLY

+30%

Diesel prices following US military intervention in Iran, the pressure to electrify has never been higher

24/7

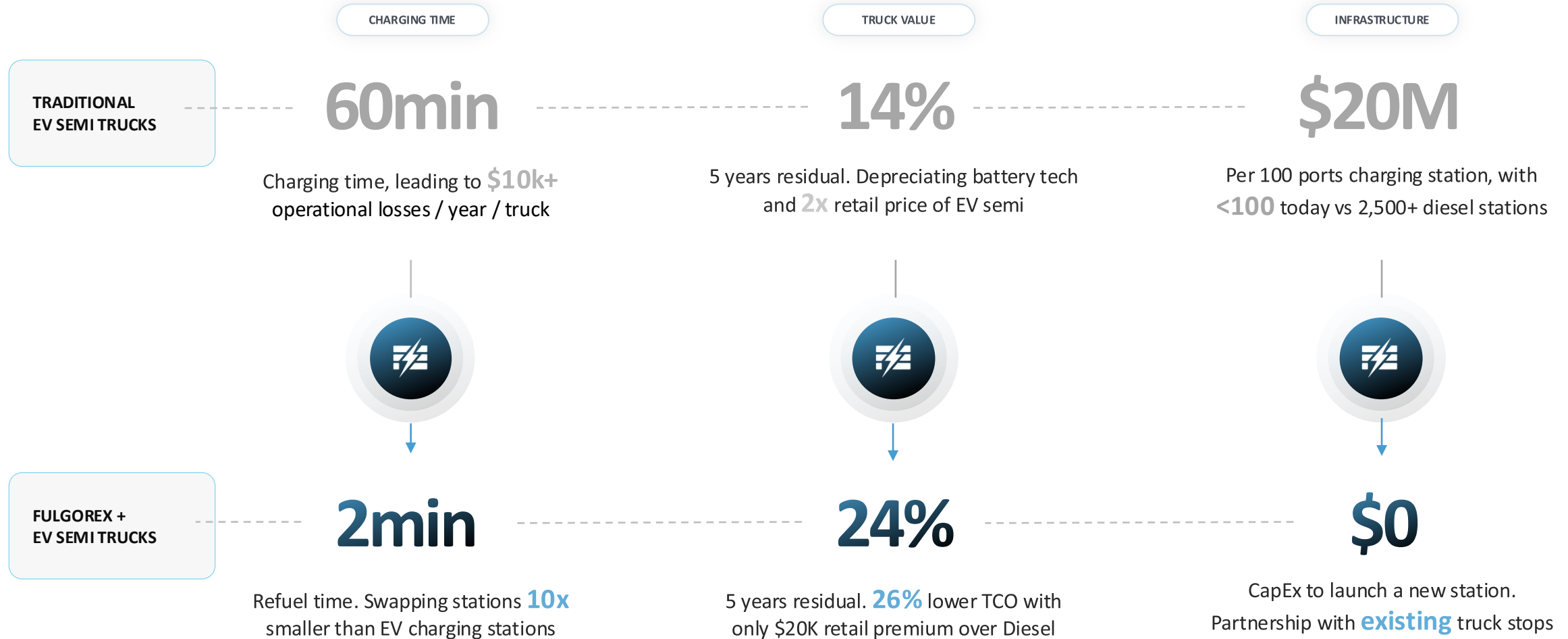
Autonomous trucks launched commercially in 2025. Without driver rest breaks, every minute charging is pure revenue loss

+40%

Expected increase in electricity prices due to AI data center demand — grid-dependent charging is getting more expensive



Fulgorex is a game changer for electric trucking

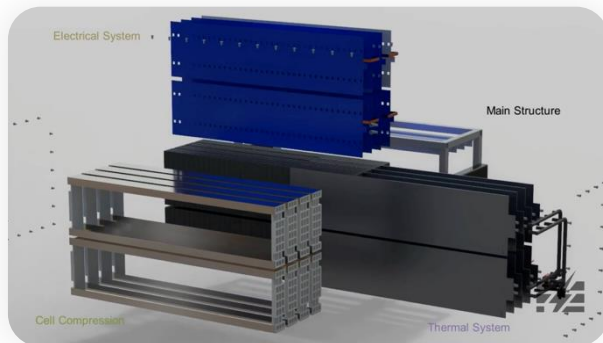




Energy-as-a-Service explained

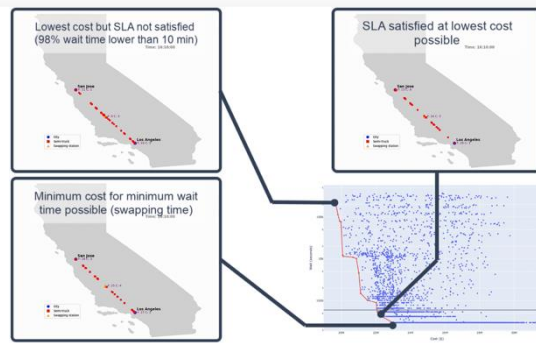
Fulgorex delivers Energy to trucks as a Service: we own the packs, operate the swapping, and charge a subscription plus per-mile fee. Fleets pay for energy delivered, not infrastructure owned.

SWAPPABLE ENERGY PACKS



- Standardized 250kWh modular packs
- Universal electrical and data interface
- OEM-specific chassis adapters
- 250+ mile range per swap — carries only the energy needed for the next leg, preserving payload capacity vs full-range EV packs.

SMART OPERATIONS



- AI-driven station, inventory & routing
- 5 min total wait time SLA 98% of time
- Pack health monitoring & optimization
- Simulation-validated network design
- Inventory scales sub-linearly with customers (network effects)



AUTONOMOUS SWAPPING



- Robotic systems swap depleted packs
- Fully charged pack installed in <2 min
- Co-located at existing truck stops
- Operational cost per bay halved vs initial forklift operations.





Case study: California TCO for long haul trucks

	Diesel-Powered	Electric	EaaS Electric
Retail Price	\$150,000	\$250,000	\$170,000
Maintenance (5Y, includes tires)	\$120,000	\$75,000	\$75,000
Resale Value (5Y)	\$40,000	\$30,000	\$35,000
Owner Charging Station (initial cost / truck)	\$0	\$50,000	\$50,000
Fulgorex Subscription (5Y)	\$0	\$0	\$225,000*
Fuel/Energy (5Y)	\$525,000**	\$262,500	\$75,000*
Total Cost of Ownership	\$755,000	\$607,500	\$560,000
\$ USD/mile	\$1.51	\$1.22	\$1.12
Fleet Owner Saving	-	20%	26%
Driver Wage Losses (charging time)	\$0	\$11,250	\$0
Refueling Time Operational Losses	\$0	\$20,250	\$0
Maintenance Time Operational Losses	\$50,000	\$0	\$0
Operational Losses	\$50,000	\$31,500	\$0
Loss-adjusted Total Cost Ownership	\$805,000	\$639,000	\$560,000
Loss-adjusted \$ USD/mile (truck)	\$1.61	\$1.28	\$1.12
Loss-adjusted Fleet Owner Saving	-	21%	30%

38%

Maintenance Cheaper

EaaS easier than owning EV chargers, while enabling same resale value but lower acquisition price.



26%

TCO cheaper

Despite \$20K higher retail price: fuel and operational savings recover the premium in the first year.



31%

Operationally much cheaper

TCO advantage grows to 42% with autonomous trucks: lost charging time has no offsetting rest break to mask it.



*\$45k per year subscription + 15c per mile

**\$6.30 per gallon, TCO advantage is 20% at \$5 per gallon (pre-Iran)



Market & Industry insights

T A M

\$500Billion



Global Diesel as a Fuel for transportation

S A M

\$243Billion



Diesel Fuel US Market for commercial trucks above 10,000 lbs.

S O M

\$1.2Billion



Energy Market at truck stops for long hauling class 8 electric trucks by 2027

Less than 2% of all class 8 trucks

2M long haul trucks in US, spending \$70k+ in diesel fuel per year

1/3rd of newly registered electric trucks in China use battery swapping. Model is proven at scale, US market is wide open.

California ACF and EPA Phase 3 create mandatory transition to zero-emission Class 8 by 2035. Electrification is a regulatory inevitability.

INDUSTRY FEEDBACK

“Any time a driver must be paid while the truck is charging is lost money for the operator. If battery swapping saves on this then there is high value”

Fleet Electrification Manager, DHL

“If Fulgorex can help us with extending the reach of our 100% electric motor carrier business, we want to leverage this solution”

COO, Motor Carrier

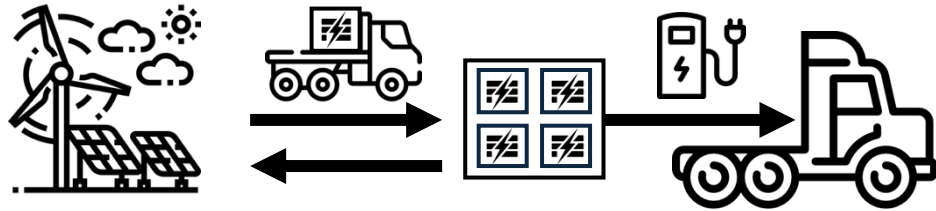
“Frequent double shifts enable us to deliver perishable goods on long distances and bypass HOS rules. It won't work with electric trucks. Ubiquitous swapping would work”

Fleet Manager, lamfr8

Revenue and derisking at every stage

PHASE 1: Truck charging network – pack swapping for chargers

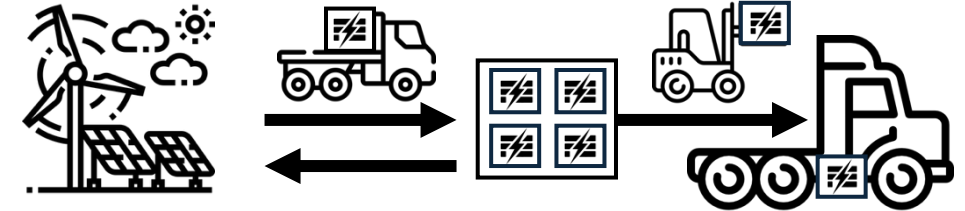
- Proves energy logistics without OEM dependency (existing EV trucks)
- First revenue, target customers (electrified fleet owners, motor carriers)



Includes pilot with mobile battery trailer than transition to pack swapping. Phase 1 stations are profitable at pilot scale with 35% margins. Detailed unit economics available on request.

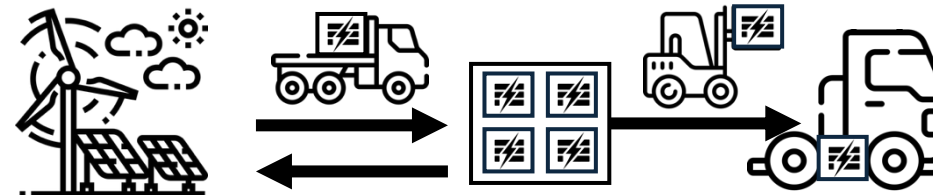
TARGET: EaaS for swappable pack-equipped semi-trucks

- Scales proven technology to semi-trucks via OEM partnership
- Scaling revenue, as customers scale electrification + autonomous



PHASE 2: EaaS for swappable pack-equipped terminal tractors

- Proves swap operations in controlled environment (e.g. port, distribution center) with existing swap-enabled terminal tractor OEMs (off-highway)
- Meaningful revenue from growing Phase 1 + starting Phase 2



Each phase generates revenue while proving the technical capability required for the next.

OEM integration becomes the destination once we've proven we're the only credible partner.



Business plan and milestones

MARKET

PRODUCT

2027

\$1M ARR

5 charging stations

Initial ideal customers: fleet owners with strong sustainable objectives, operating long hauling class 8 trucks limited by existing infrastructure in CA, AZ or TX

2028

\$7M ARR

20 charging stations

New logistics services providers as customers: with operations in ports, as a partner to evaluate in real world swapping energy packs technology, on path to achieve certification

2029

EBITDA positive

2031

\$40M ARR

200 charging stations / 110 trucks

Existing customers: private fleet owners, logistics services provider, and motor carriers on Fulgorex corridors, driven by TCO advantage adopting autonomous trucking

2033

\$200M ARR

400 charging stations / 675 trucks

Grow our footprint targeting all fleet owners operating long hauling class 8 trucks on Fulgorex's expanding charging network

2035

\$1B ARR

500 charging stations / 3,000 trucks

Expanding to all trucking US routes and targeting lower class trucks (3-8)

2028-2030

WHAT

Off-grid charging stations powered by Fulgorex Energy Packs
Prove the supply chain

2028-2030

Retrofitted OEM EV terminal tractor + Fulgorex Energy Packs
Prove on-truck swapping

2031-2032

Partner OEM truck + Fulgorex Energy Packs. Main stations add forklift swapping
Deploy on-truck swapping

2033-2034

OEM trucks + standardized OEM Packs or Fulgorex Energy Packs. Autonomous swapping
Scale Energy-as-a-service

2035+

Energy-as-a-Service generalized to heavy duty vehicles, verticals
Reach new markets

HOW

Commercial pilots; Energy-as-a-Service on underserved routes

Truck-as-a-Service + Fulgorex owns and operates Energy Packs

Fulgorex owns and operates Fulgorex Energy Packs

Fulgorex owns and supplies standard Energy Packs

Partnerships: OEMs, energy providers, truck stops, tier 1 manufacturing

Partnerships: OEMs, logistics services, ports

Partnerships: OEMs, tier 2 manufacturing

Partnerships: OEMs, tier 3 manufacturing

PHASE 2: EaaS for swappable pack-equipped terminal tractors

TARGET: EaaS for swappable pack-equipped semi-trucks

PHASE 1: Truck charging network – pack swapping at chargers





Fulgorex's competitive landscape



Who are we displacing?

The \$243B US diesel fuel market for commercial trucks. Refiners and distributors with zero end-customer lock-in, fleet operators buy on price and availability. As electrification mandates accelerate and diesel prices spike, these players face structural demand decline. Some are already hedging into EV infrastructure (Shell, BP) and could become partners for co-located swap stations or strategic investors.



Why can't existing EV charging solve this?

Current approach to truck electrification: plug in and wait. Physics permanently limits fast charging to 30+ minutes even at Megawatt scale, creating \$10K+ operational losses per truck per year. Building ubiquitous Megacharging infrastructure would cost over \$100B. Direct charging alone cannot solve the long-haul problem, especially with autonomous trucking.



Who else is doing battery swapping?

Battery swapping for heavy trucks is proven at scale outside the US. 1/3rd of newly registered electric trucks in China since 2023 use battery swapping. CATL is expanding to 140 cities, Aulton operates 500+ stations, and Germany is developing DIN standardization for truck swap systems. No heavy-duty player is building for the US market, which has a fundamentally different OEM ecosystem, regulatory framework, and corridor infrastructure. Fulgorex is purpose-built for the US.



Who do we need to partner with?

Truck OEMs can be partners for Energy-as-a-Service or compete with their own battery/hydrogen solutions. Fulgorex's Phase 1 builds the supply chain before OEM integration is required, positioning us as the credible partner when swap-enabled trucks launch. Truck stop operators provide swap station locations: Fulgorex co-locates at existing sites, avoiding real estate CapEx while delivering EV fleet traffic to partners.



Fulgorex's defensibility: Grid-free energy supply chain · Truck stop corridor lock-up · Operational before OEMs need us



Who we are



Adrien Mann

CEO, FOUNDER



Built and scaled digital products for **heavy-duty equipment**. Understands customers, **enterprise sales** cycle, and operational pain points Fulgorex solves

Led multiple zero-to-one B2B products to multi-million dollars revenue streams. Data, AI and Digital Twin expert for Heavy Vehicle industry



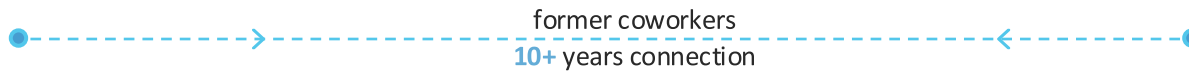
Jaime Ocampo, PhD

CTO, CO-FOUNDER



Designed **battery architecture** for autonomous electric vehicles at **Zoox**, the exact intersection of energy systems and autonomous trucking that Fulgorex targets

Led architecture at Zoox, Form, and Peak Energy resulting in 15+ patents. Startup veteran with deep hardware commercialization experience



Advisors/Consultants



Balthazar Lechene, PhD

OPERATION ADVISOR

EV charging & solar operations expert
ex-Startup founder



Doug Hatfield

IND USTRY CONSULTANT

Sales expert facilitating **truck OEM partnership** conversations



Pierre-Emmanuel Evreux

HARDWARE STARTUP ADVISOR

Founder at LEIA (\$325M total funding), **Co-founder and COO** at Claryo



Bruce Stockton

IND USTRY ADVISOR

Past executive at **XPO Logistics, Wilson Logistics**, facilitating entire ecosystem conversations

Legal Team



Andrew Zeif

LEGAL COUNSEL

Corporate Law
Partner at Paradigm Counsel LLP



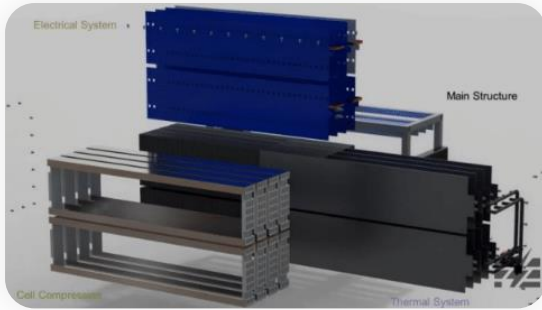
Glen Liu

LEGAL COUNSEL

Intellectual Property Law
Partner at One LLP



Traction since August 2025



Product & Engineering

Simulation-ready **digital prototype** of 250kWh modular energy pack, integrating electrical, thermal, and manufacturing design.

Manufacturing pathway identified: Lonestar SV confirmed capability to produce heavy-duty battery packs from modules. 3 provisional patents filed with IP counsel.



Supply Chain & Infrastructure



Swap station co-location validated: Love's Travel Stops and a second national truck stop operator confirmed space availability on key corridors.

Strategic advisory relationship with **battery swapping operator** scaling across India and Africa; informing Fulgorex's US deployment playbook.



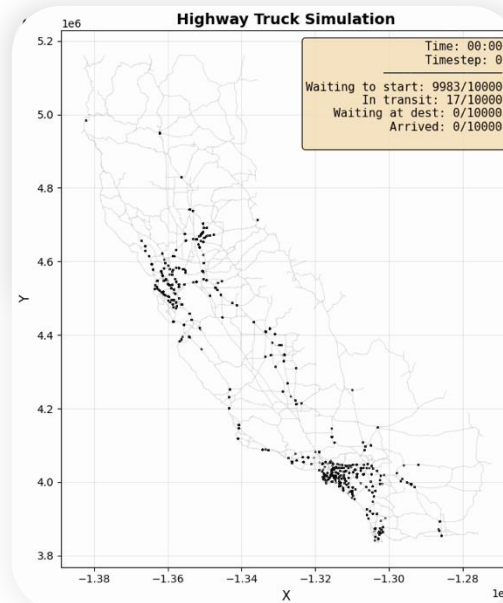
Customer & Commercial



In early commercial discussions with a **California-based Class 8 motor carrier** as potential first customer.

Interviewed 7 fleet operators across long-haul trucking; all **confirmed the product** would solve their charging infrastructure problem.

Revenue model validated: subscription + per-mile pricing delivering 20%+ TCO savings versus diesel.



Operations & Software



Highway truck traffic simulation software generating realistic synthetic data along specific lanes, validating network financial viability per corridor.

Introductory discussions with **Volvo Trucks North America**.

Delaware C-Corp **incorporated**, bootstrapped to date.



We have documented inventions to support the filing of our first provisional patents (3) with our IP lawyer



Our Ask

5% Go To Market

Customer acquisition & partnership (LOIs and contracts)
Industry community building (conferences, social media)
Commercial partnerships with OEMs (e.g. Windrose)

10% Legal Activities

Filing of 3 patents
Incorporation, advisor & consulting contracts, corporate law

10% HR & Administration

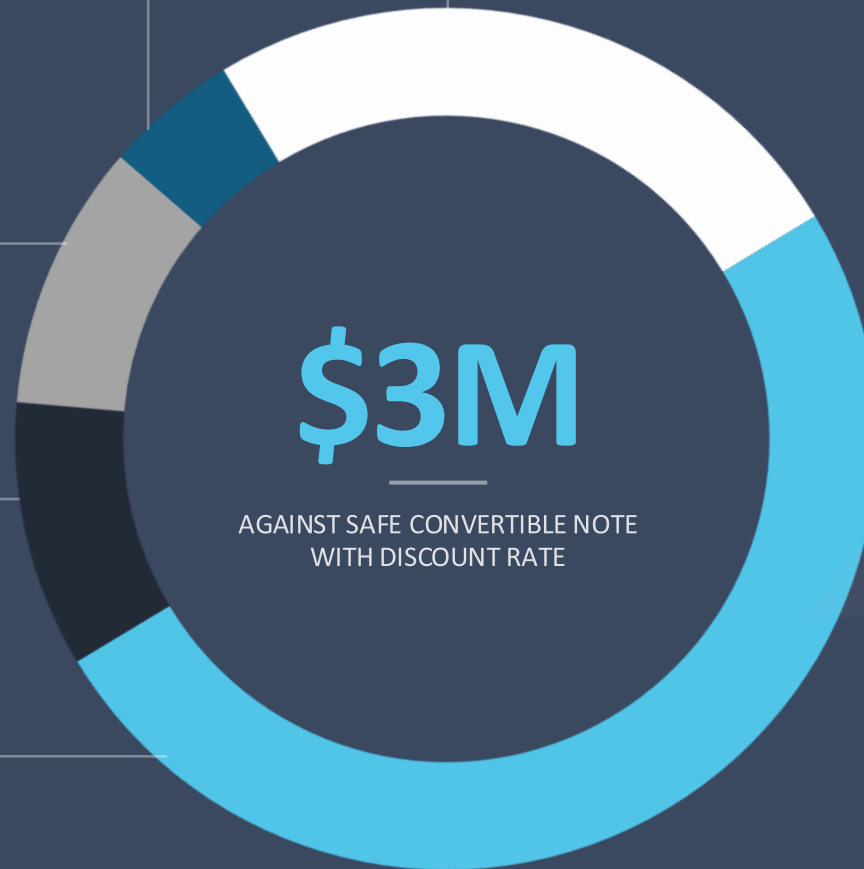
Engineering facility / office
Business software, accounting
First hires: Electrical Engineer, Head of Operations.

50% Energy Packs Design, Engineering & Inventory

Virtual validation of energy packs (design, modeling & simulation), Tractor + energy packs initial prototypes
First hire (electrical engineer), Mobile charging unit pilots, pack-operated charging unit pilots, initial pilot inventory

25% Operations + Software for Logistics

Supply chain operations
Logistics modeling & simulation
Cloud services for operational data capture & processing
Fleet owner/driver & Fulgorex apps



18 Months Milestones

+ Terminal tractor + energy pack prototype, supply chain validated

+ First paid engagement with fleet operator for charging

+ Regulatory pre-consultation completed with CARB.



These milestones position Fulgorex for a Seed round to deploy the first operational charging stations on CA/AZ corridors and begin generating revenue.



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Haul more.

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Book a meeting [here](#)