
INVESTOR
DAY

Certain statements in this presentation, including, but not limited to, statements relating to the future development, ramp, production capacity and output rates, supply chain, demand and market growth, cost, pricing and profitability, deliveries, deployment, availability and other features and improvements and timing of existing and future Tesla products and technologies such as Model 3, Model Y, Model X, Model S, Cybertruck, Tesla Semi, Robotaxi, our next generation vehicle platform, our Autopilot, Full Self-Driving and other vehicle software and our energy storage and solar products; statements regarding operating margin, operating profits, spending and liquidity; and statements regarding expansion, improvements and/or ramp and related timing at existing or new factories are "forward-looking statements" that are subject to risks and uncertainties. These forward-looking statements are based on management's current expectations, and as a result of certain risks and uncertainties, actual results may differ materially from those projected. The following important factors, without limitation, could cause actual results to differ materially from those in the forward-looking statements: uncertainties in future macroeconomic and regulatory conditions arising from the current global pandemic; the risk of delays in launching and manufacturing our products and features cost-effectively; our ability to grow our sales, delivery, installation, servicing and charging capabilities and effectively manage this growth; consumers' demand for electric vehicles generally and our vehicles specifically; the ability of suppliers to deliver components according to schedules, prices, quality and volumes acceptable to us, and our ability to manage such components effectively; any issues with lithium-ion cells or other components manufactured at Gigafactory Nevada and Gigafactory Shanghai; our ability to ramp Gigafactory Shanghai, Gigafactory Berlin-Brandenburg, Gigafactory Texas and new factories in accordance with our plans; our ability to procure supply of battery cells, including through our own manufacturing; risks relating to international expansion; any failures by Tesla products to perform as expected or if product recalls occur; the risk of product liability claims; competition in the automotive and energy product markets; our ability to maintain public credibility and confidence in our long-term business prospects; our ability to manage risks relating to our various product financing programs; the status of government and economic incentives for electric vehicles and energy products; our ability to attract, hire and retain key employees and qualified personnel and ramp our installation teams; our ability to maintain the security of our information and production and product systems; our compliance with various regulations and laws applicable to our operations and products, which may evolve from time to time; risks relating to our indebtedness and financing strategies; and adverse foreign exchange movements. More information on potential factors that could affect our financial results is included from time to time in our Securities and Exchange Commission filings and reports, including the risks identified under the section captioned "Risk Factors" in our annual report on Form 10-K filed with the SEC on January 31, 2023. Tesla disclaims any obligation to update information contained in these forward-looking statements whether as a result of new information, future events or otherwise.

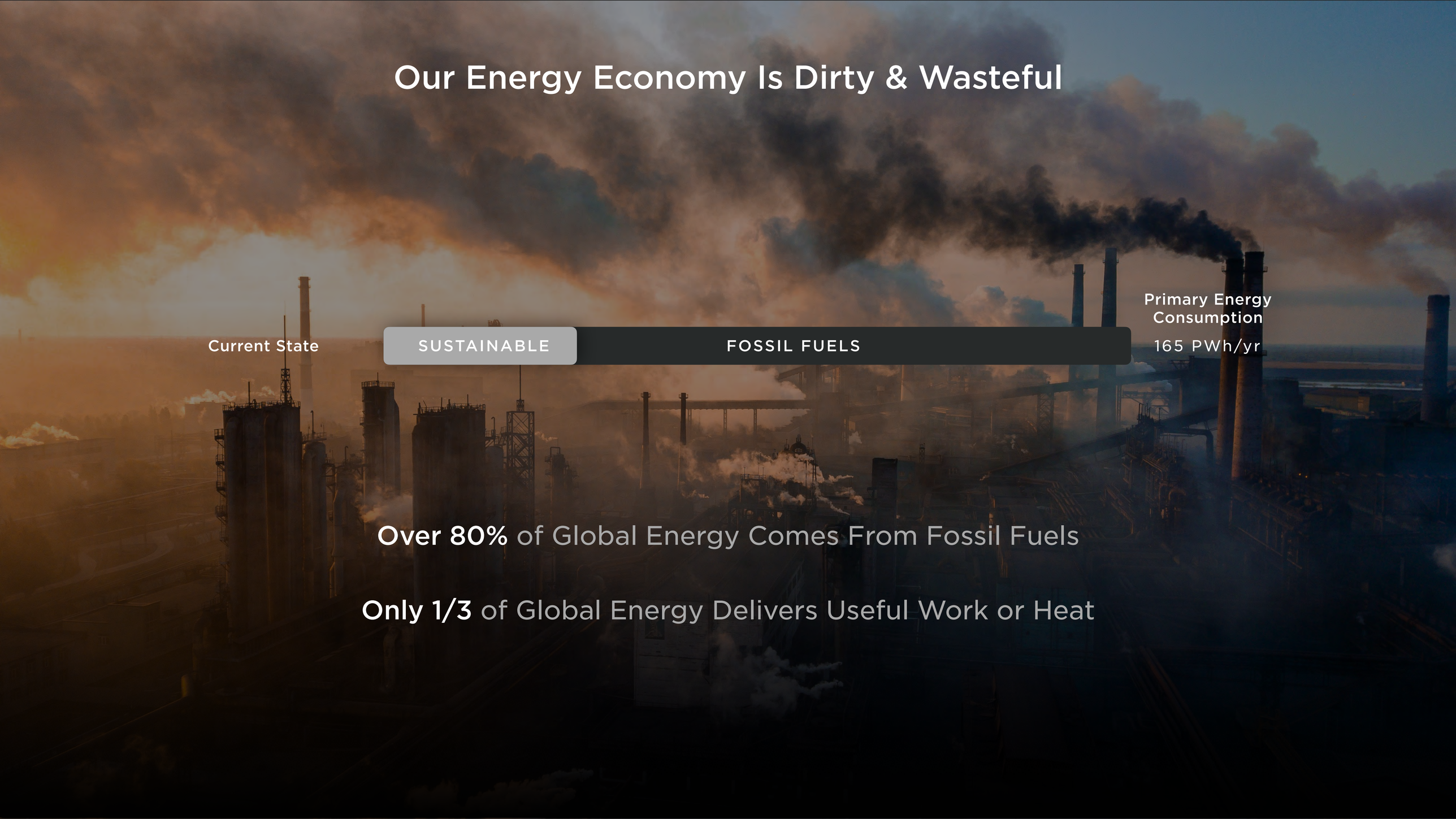

INVESTOR
DAY

Master Plan 3

Master Plan 3

Sustainable Energy For All of Earth

Our Energy Economy Is Dirty & Wasteful

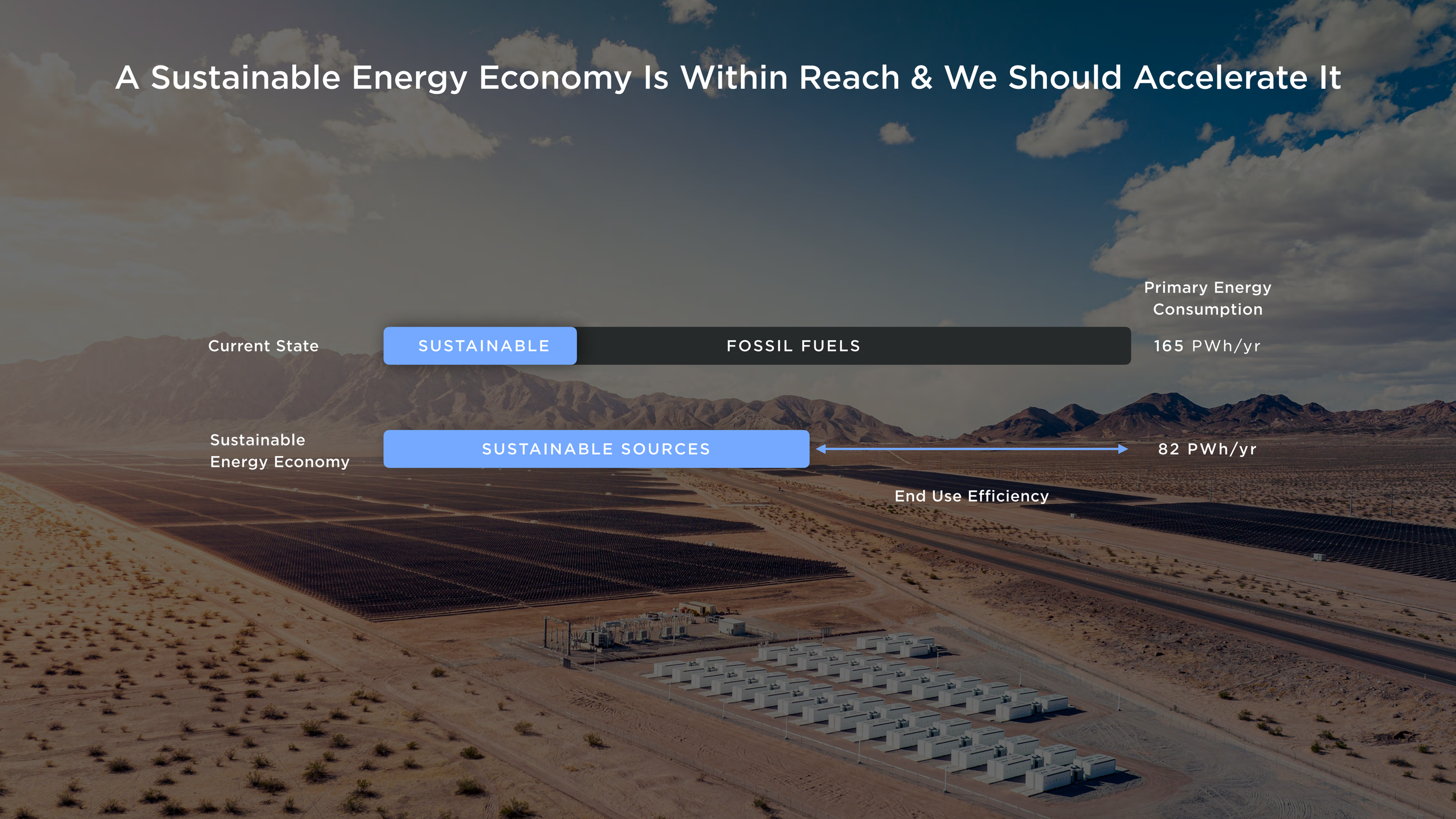


Over 80% of Global Energy Comes From Fossil Fuels

Only 1/3 of Global Energy Delivers Useful Work or Heat


But there’s a better way

A Sustainable Energy Economy Is Within Reach & We Should Accelerate It

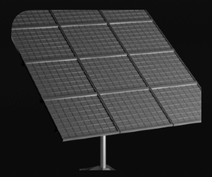


A Sustainable Energy Economy Is Within Reach & We Should Accelerate It

HOW THE MASTER PLAN WORKS

240TWh	30TW	$10T	1/2	<0.2%	10%	ZERO
Storage	Renewable Power	Manufacturing Investment	The Energy Required	Land Area Required	2022 World GDP	Insurmountable Resource Challenges

The Plan To Eliminate Fossil Fuels

Reduction In Fossil Fuel Use	35%	21%	22%	17%	5%
					
	Renewably Power The Existing Grid	**Switch to Electric Vehicles**	**Switch to Heat Pumps**	**High Temp Heat Delivery & Hydrogen**	**Sustainably Fuel Planes & Boats**
Displaced Fossil Fuels	46 PWh/yr	28 PWh/yr	29 PWh/yr	22 PWh/yr	7 PWh/yr

1. Repower the Existing Grid With Renewables

35%
Reduction In
Fossil Fuel Use

Full
Sustainability

24TWh
Stationary
Storage

10TW
Solar + Wind

$0.8T
Manufacturing
Investment

2. Switch to Electric Vehicles

21%
Reduction In
Fossil Fuel Use

Full
Sustainability

115TWh
Vehicle Batteries
& Stationary Storage

4TW
Solar + Wind

$7.0T
Manufacturing
Investment Needs

2. Switch to Electric Vehicles

21%

Reduction In
Fossil Fuel Use

Full
Sustainability

Global Electric Fleet

40M

380M

20M

300M

700M

115TWh

Vehicle Batteries
& Stationary Storage

4TW

Solar + Wind

$7.0T

Manufacturing
Investment

EVs Use Energy Far More Efficiently

21%

Reduction In
Fossil Fuel Use

Full
Sustainability

Tesla Model 3

4x

More Efficient
Oil Well to Wheel

Toyota Corolla

3. Switch To Heat Pumps in Homes, Businesses & Industry

22%

Reduction In
Fossil Fuel Use

Full
Sustainability

6TWh

Stationary
Storage

5TW

Solar + Wind

$0.3T

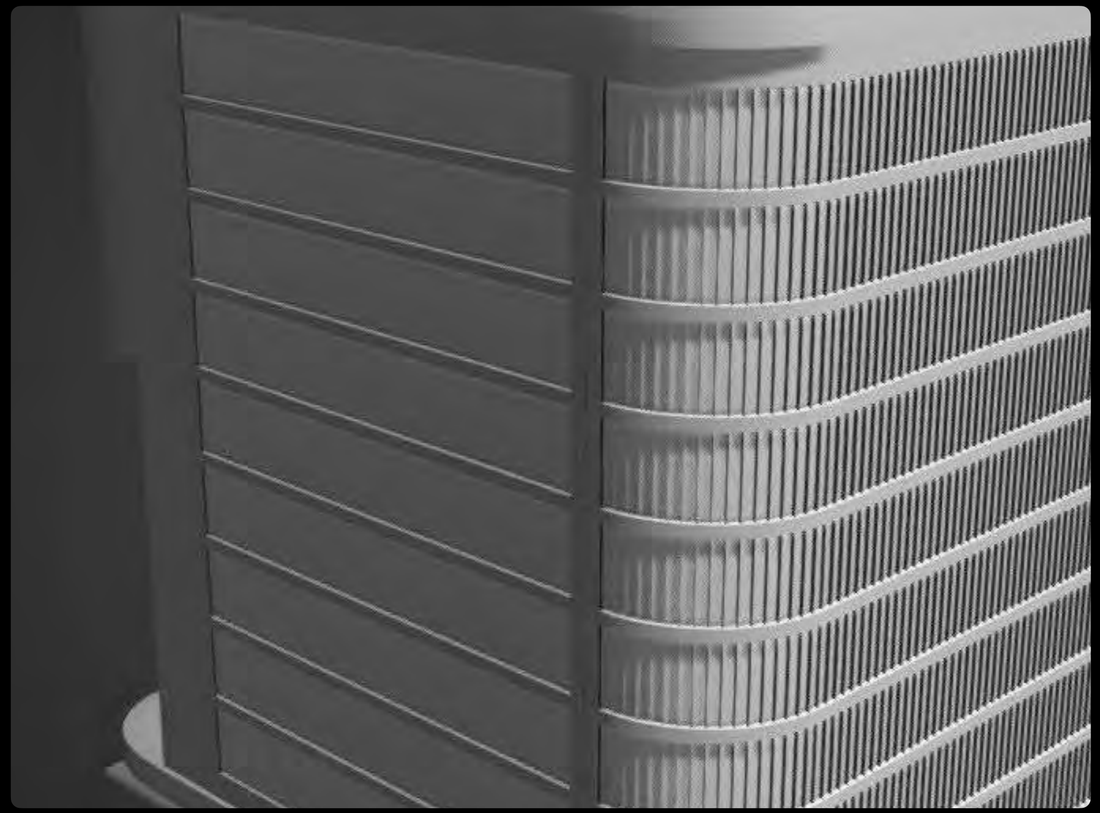
Manufacturing
Investment

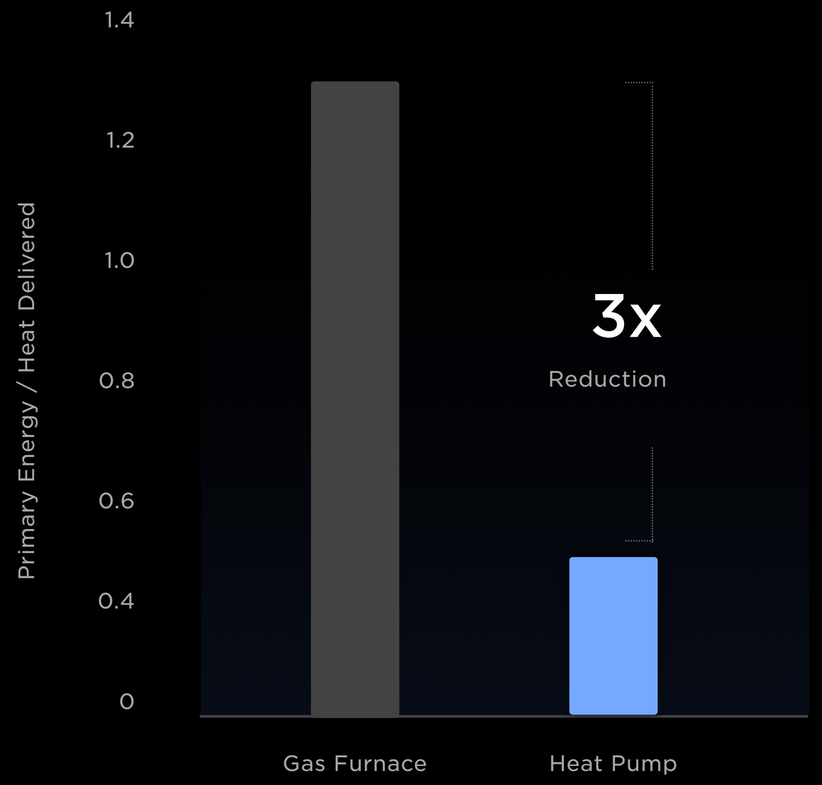
Heat Pumps Move Heat, They Don’t Create It

22%

Reduction In
Fossil Fuel Use

Full
Sustainability





4. Electrify High Temp Heat Delivery & Hydrogen

17%
Reduction In
Fossil Fuel Use

Full
Sustainability

48TWh
Stationary
Storage

6TW
Solar + Wind

$0.8T
Manufacturing
Investment

4. Electrify High Temp Heat Delivery & Hydrogen

17%
Reduction In
Fossil Fuel Use

Full
Sustainability

48TWh
Stationary
Storage

6TW
Solar + Wind

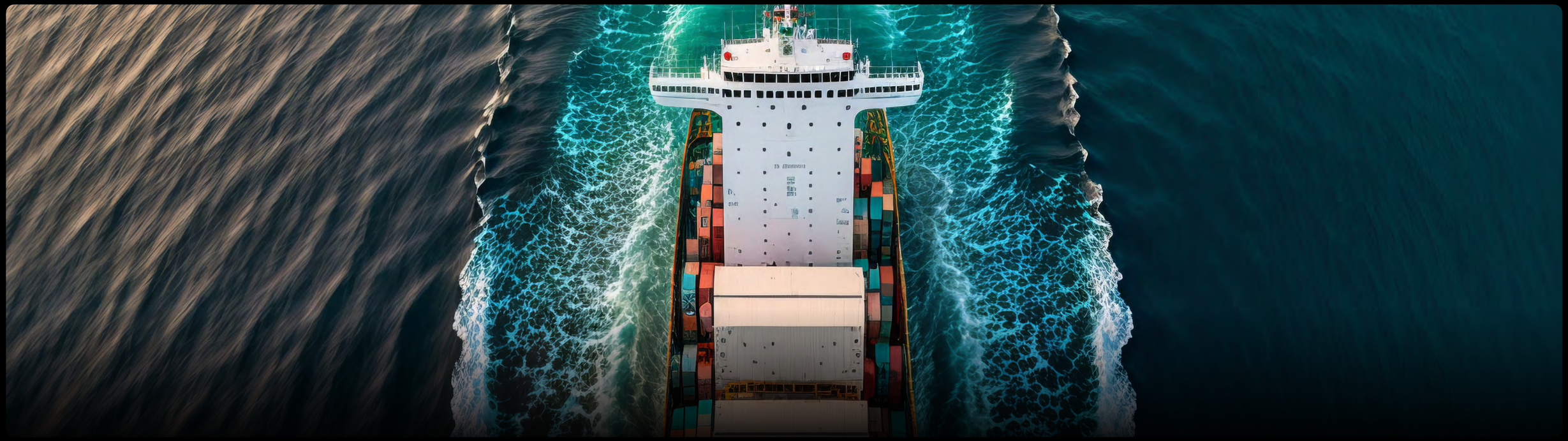
$1.0T
Manufacturing
Investment

5. Sustainably Fuel Planes & Boats

5%

Reduction In
Fossil Fuel Use

Full
Sustainability



44TWh

Vehicle Batteries
& Stationary Storage

4TW

Solar + Wind

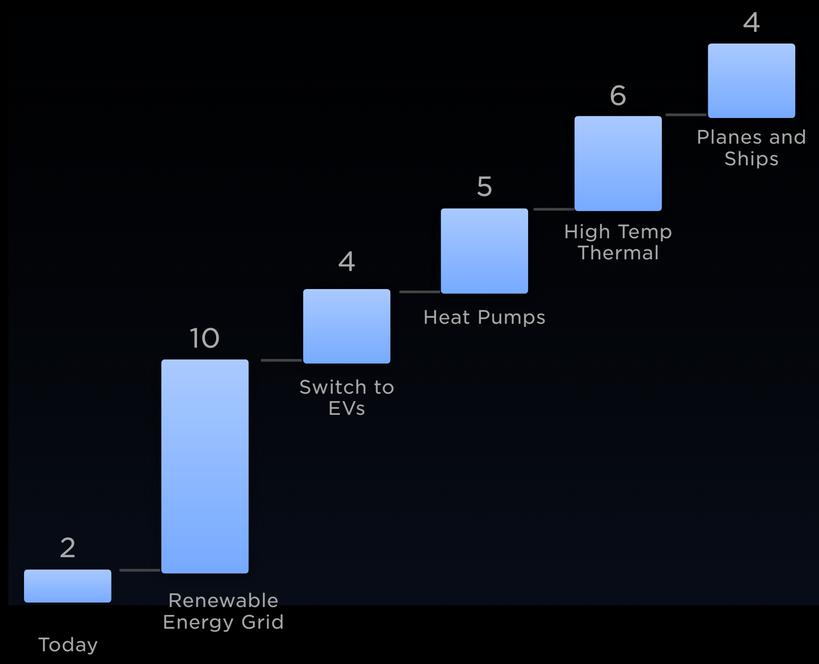
$0.8T

Manufacturing
Investment

Stacking Up the Investments in Our Sustainable Future

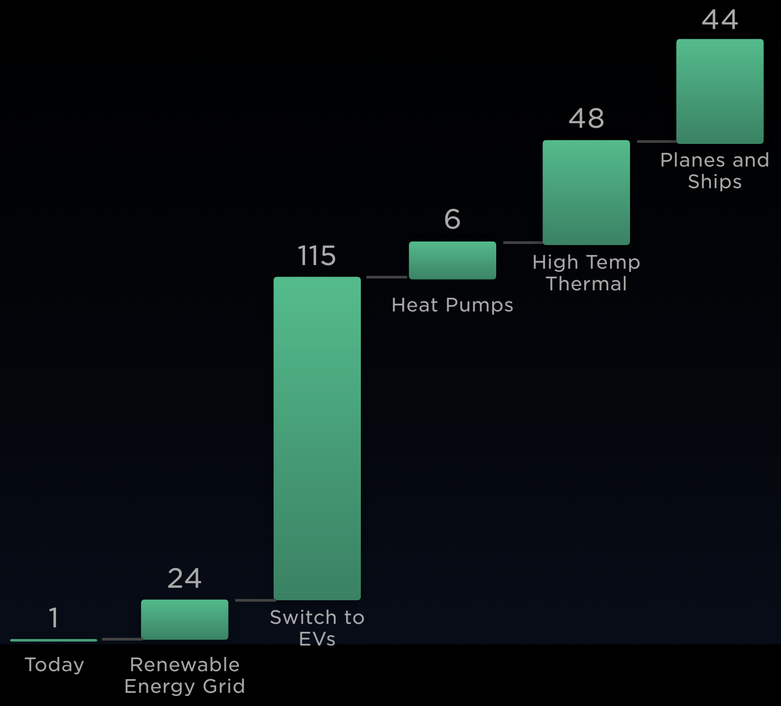
Solar & Wind Farms

30TW



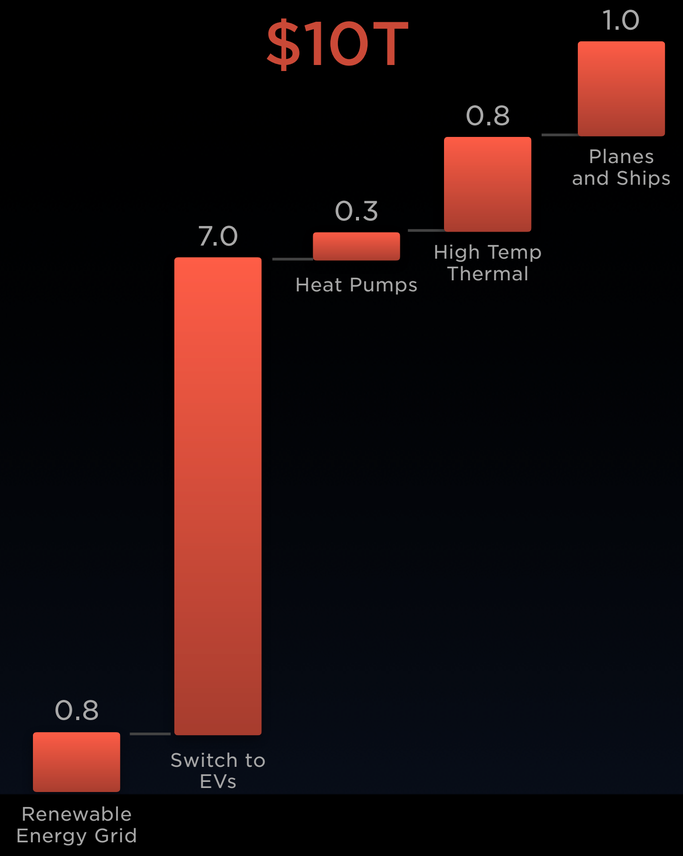
Vehicle & Stationary Batteries

240TWh



Manufacturing Capex

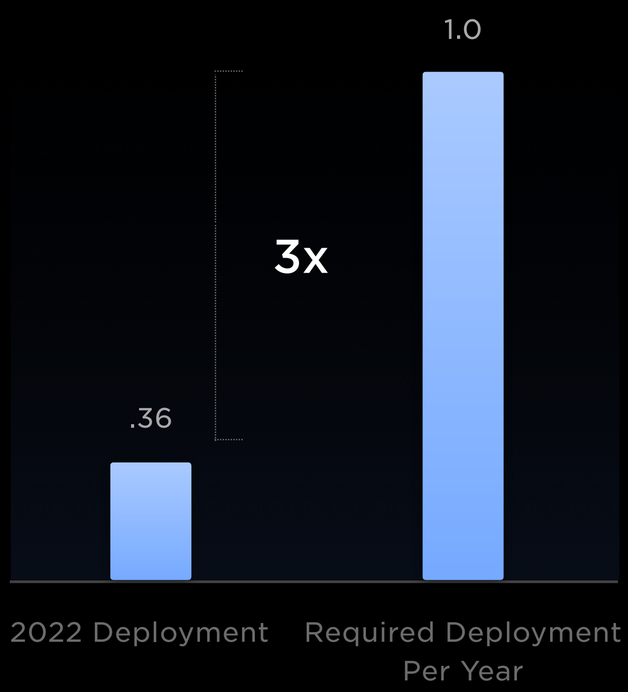
$10T



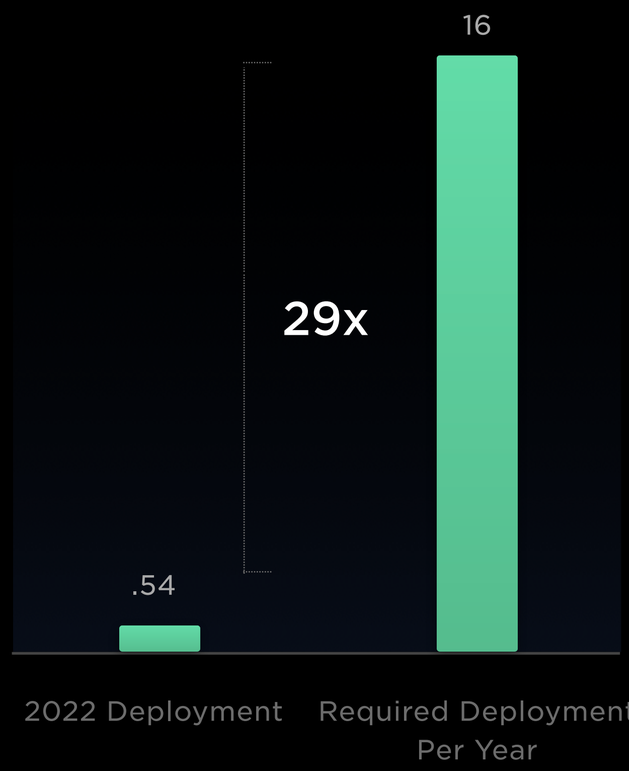
It’s Entirely Feasible

If We Grow our Production Capacity as Shown by 2030
We Can Be 100% Sustainable by 2050

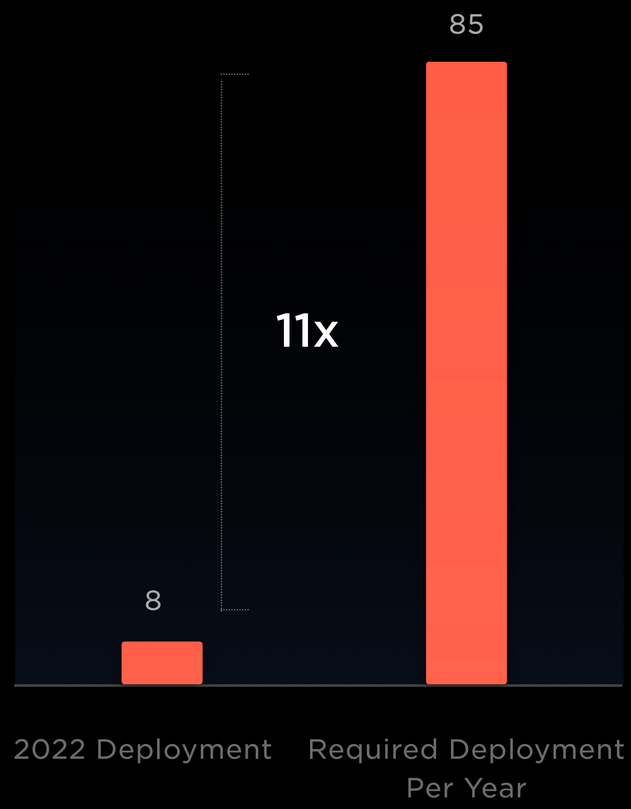
Solar & Wind Deployment (TW/Yr)



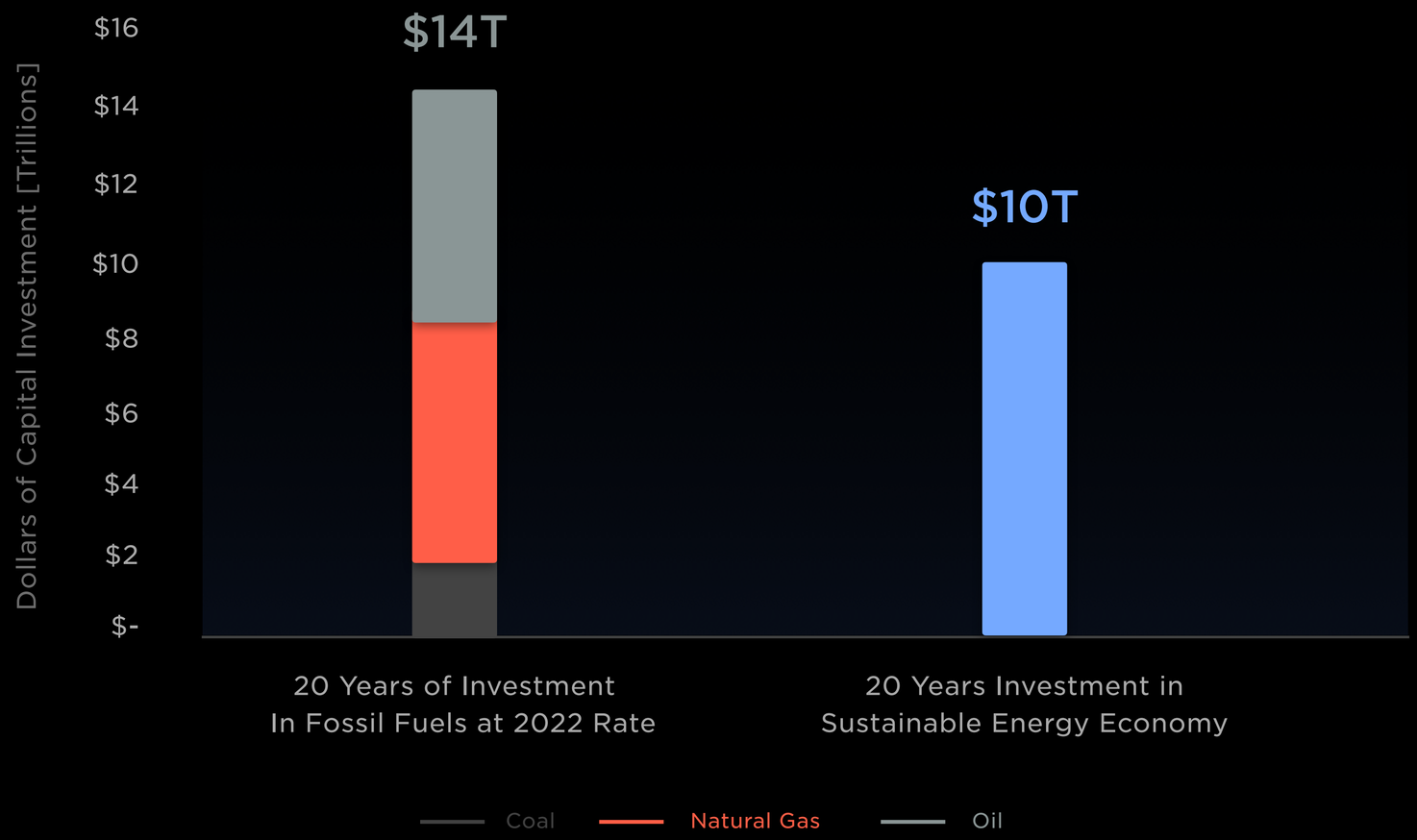
Vehicle, Stationary, & Thermal Battery Production TWh/Yr



Electric Vehicle Production Millions/Yr



A Sustainable Energy Economy Is 60%
The Cost of Continuing Fossil Fuel Investments



More Than Enough Renewable Resources Available

Solar Direct Land Area
0.14% of Land

Wind Direct Land Area
0.03% of Land

More Than Enough Renewable Resources Available

Solar Direct Land Area
0.14% of Land

Wind Direct Land Area
0.03% of Land

Total Earth Land Area = 32,111,167,147 Acres
12.5% of Land Use for Agriculture = 4B Acres
= 2x Contiguous US

A Sustainable Energy Economy Involves *Less* Mineral Extraction

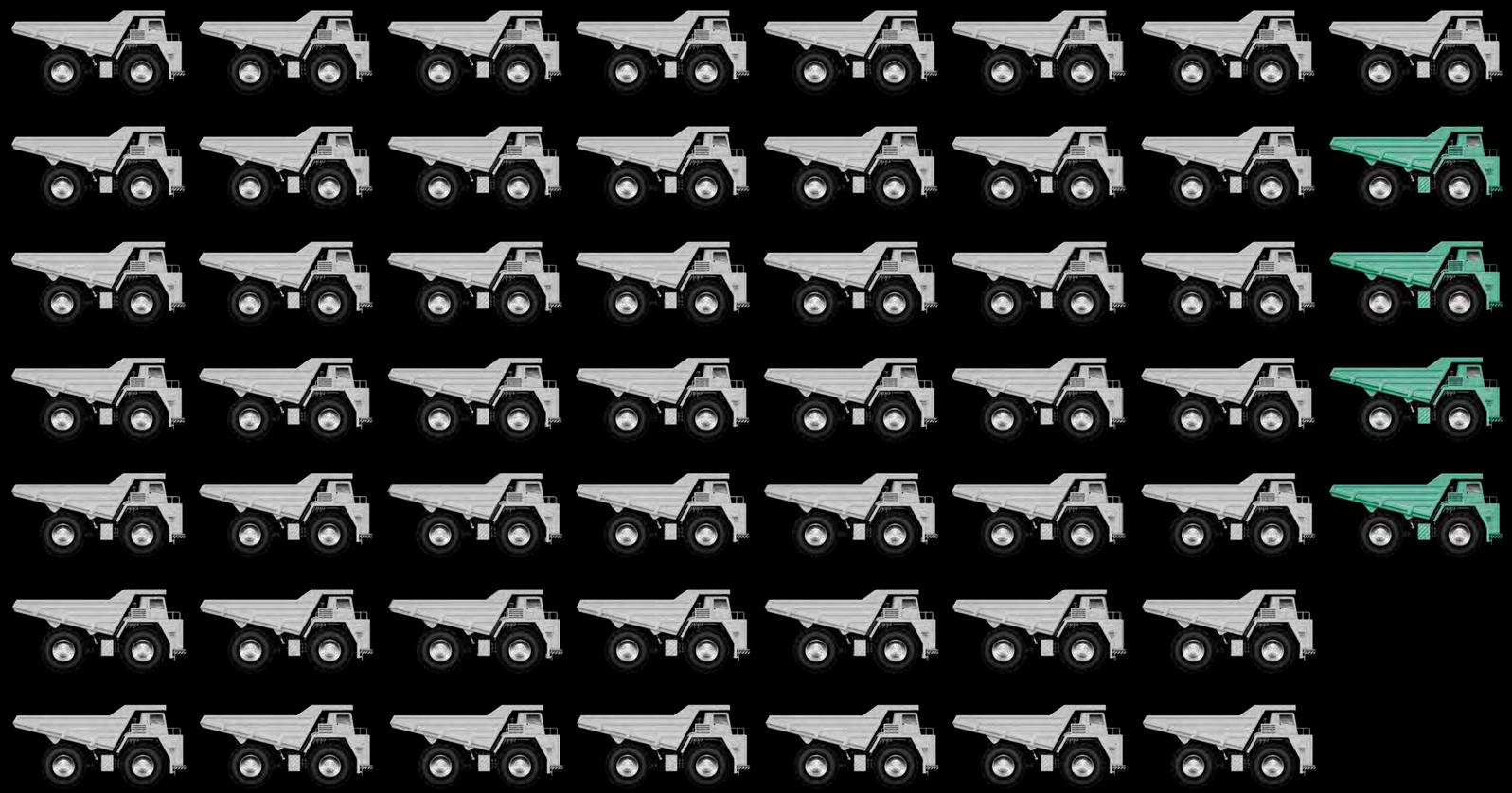
EACH TRUCK IS 1 GIGATON

Everything Else

Fossil Fuel Extraction

A Sustainable Energy Economy Involves *Less* Mineral Extraction

EACH TRUCK IS 1 GIGATON

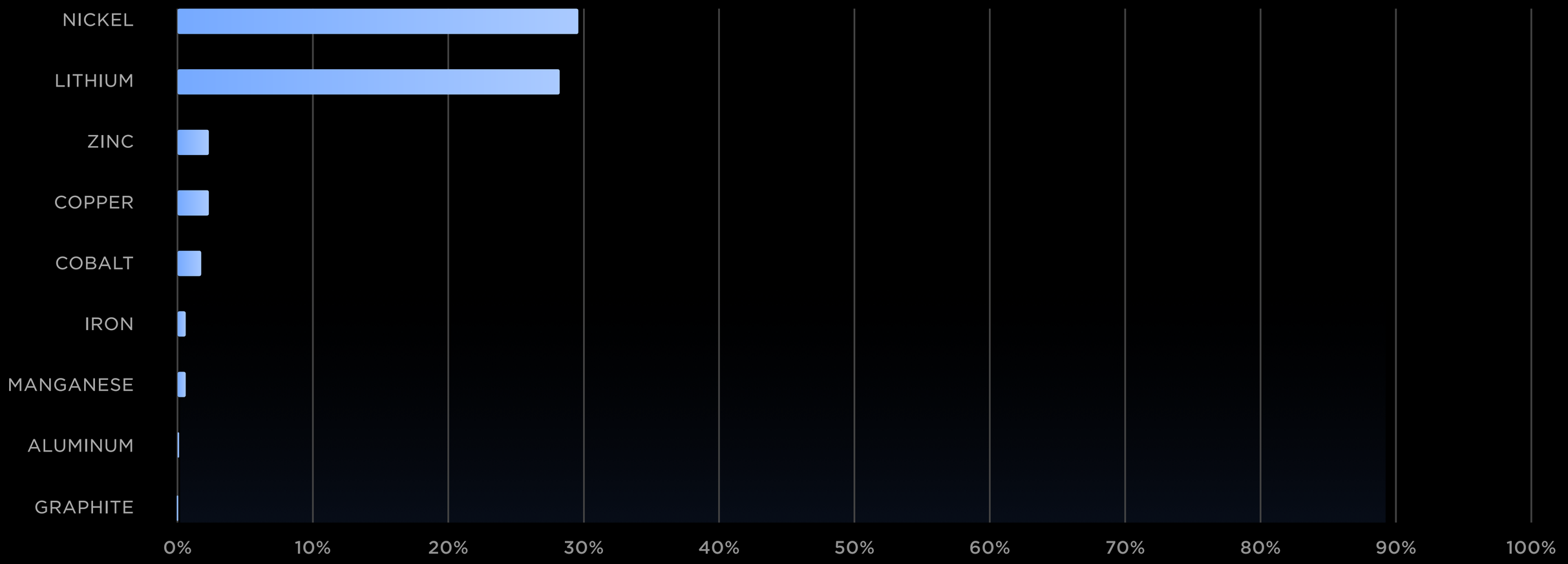


Everything Else

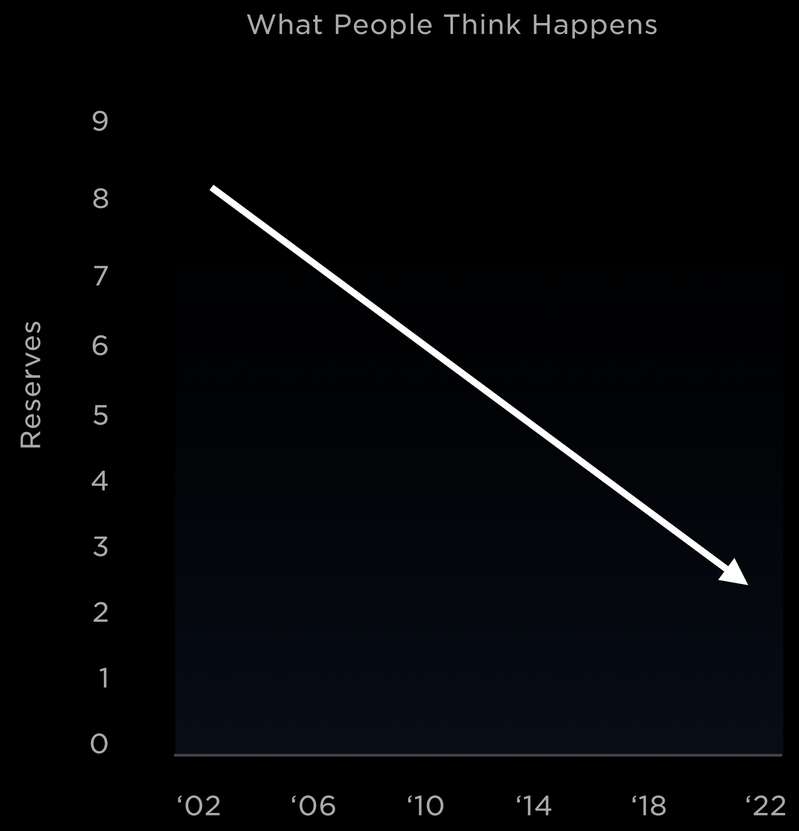
Sustainable Economy Materials

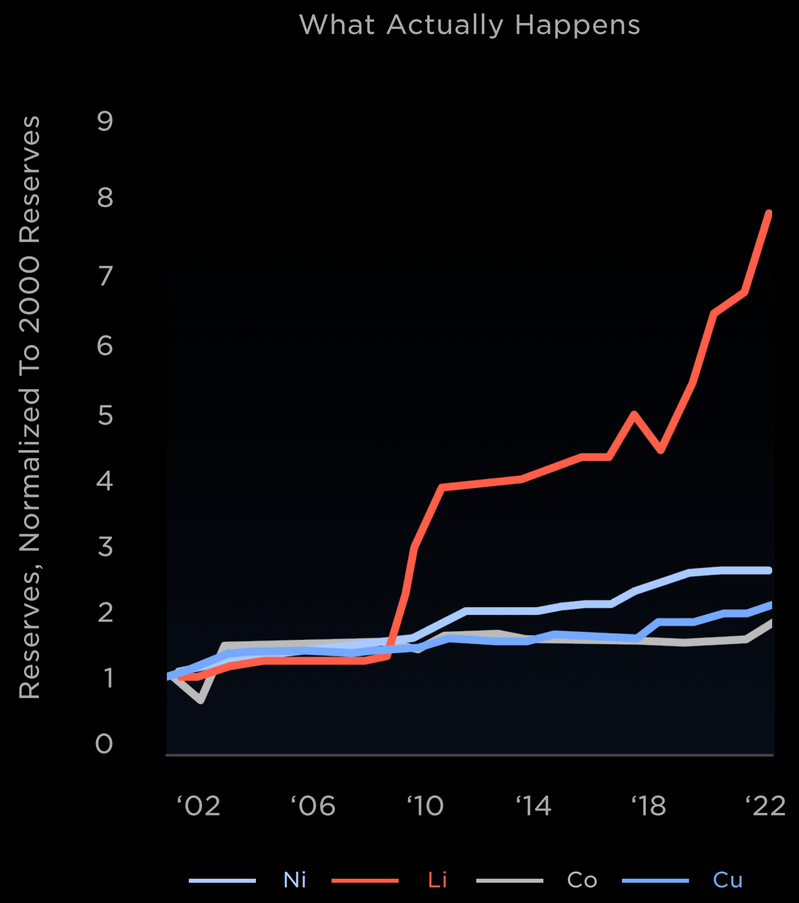
The Resources Are There To Support the Transition

Cumulative Demand Until 2050,
Relative to 2023 USGS Estimated Resources

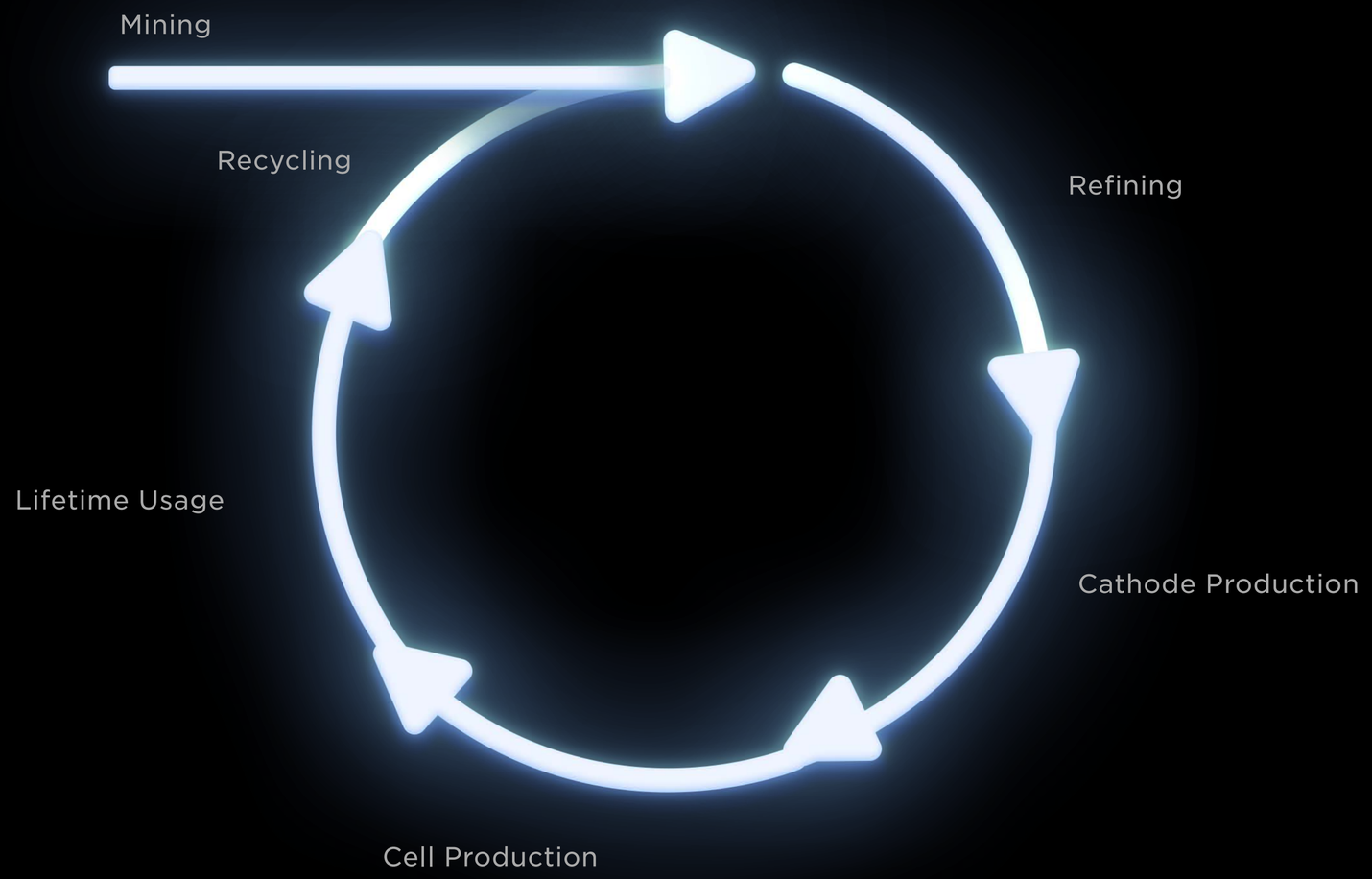


And History Teaches: The More We Look, The More We Find



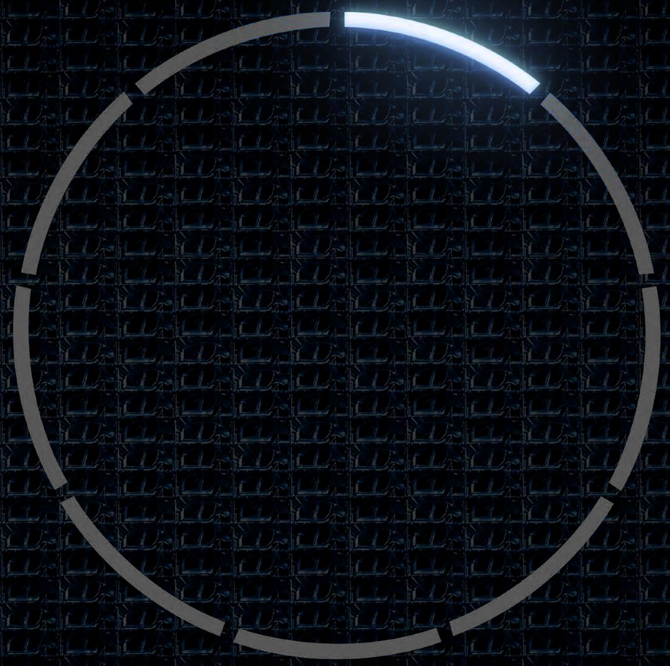


Recycling Will Further Reduce Mineral Demand



A Sustainable Energy Economy Is Within Reach & We Should Accelerate It

HOW THE MASTER PLAN WORKS



01 Vehicle Design

Franz von Holzhausen, Lars Moravy

The Early Days

MODEL S

2012 Model S

1 DESIGN

2 ENGINEERING

3 MANUFACTURING

Model 3

1

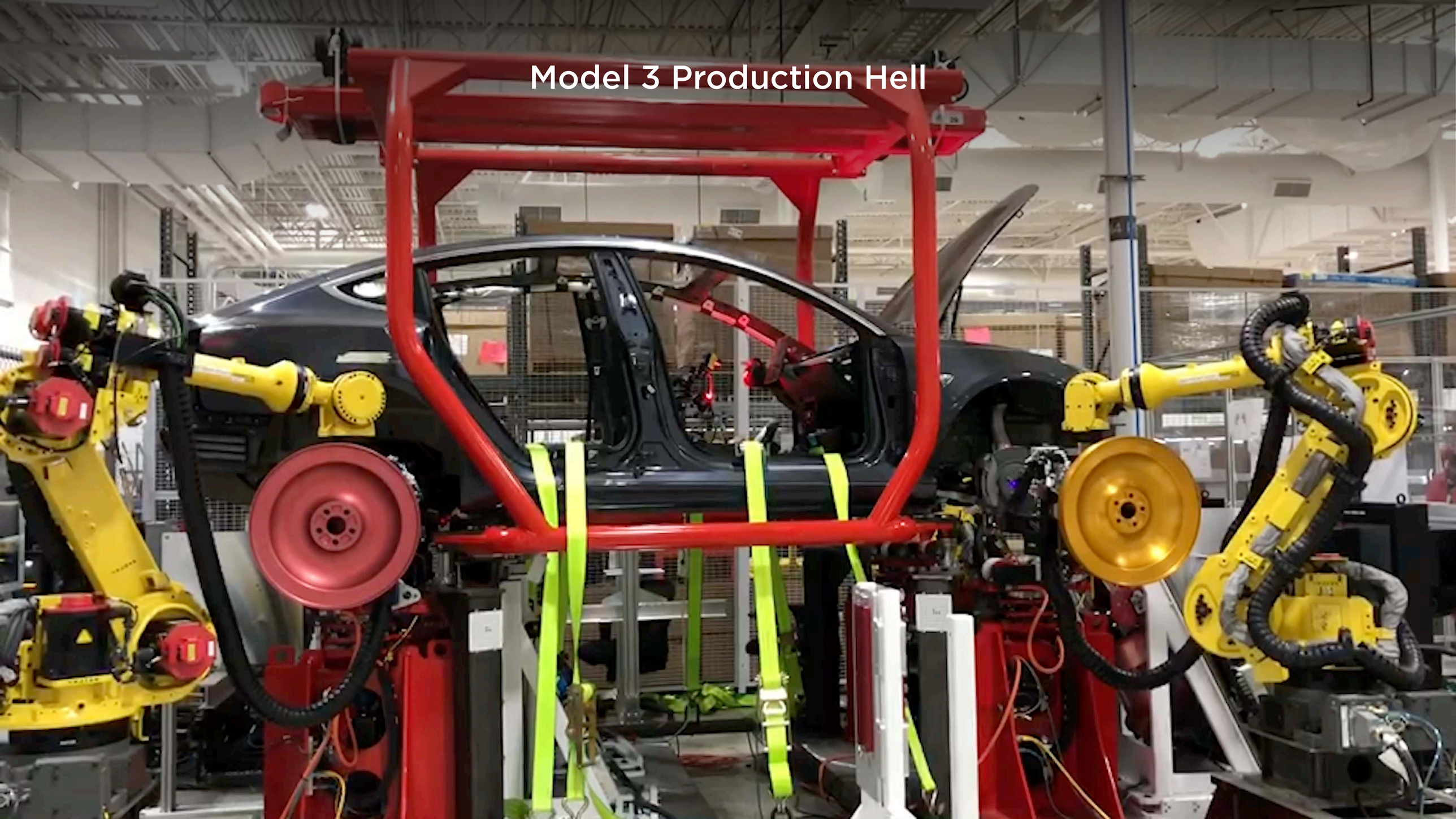
DESIGN

ENGINEERING

MANUFACTURING

2

AUTOMATION


Model 3 Production Hell

Cybertruck

STEEL EXOSKELETON

Combining the Processes for the Future

1

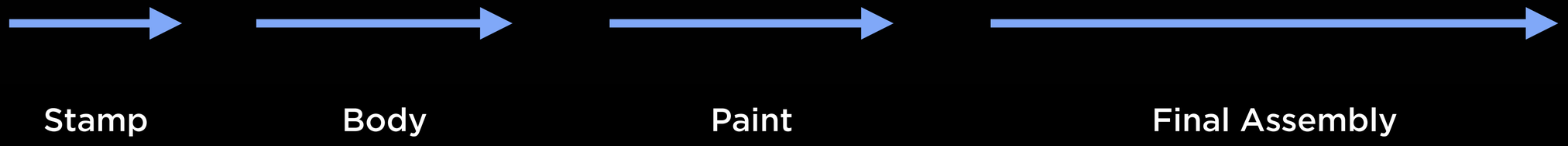
DESIGN

ENGINEERING

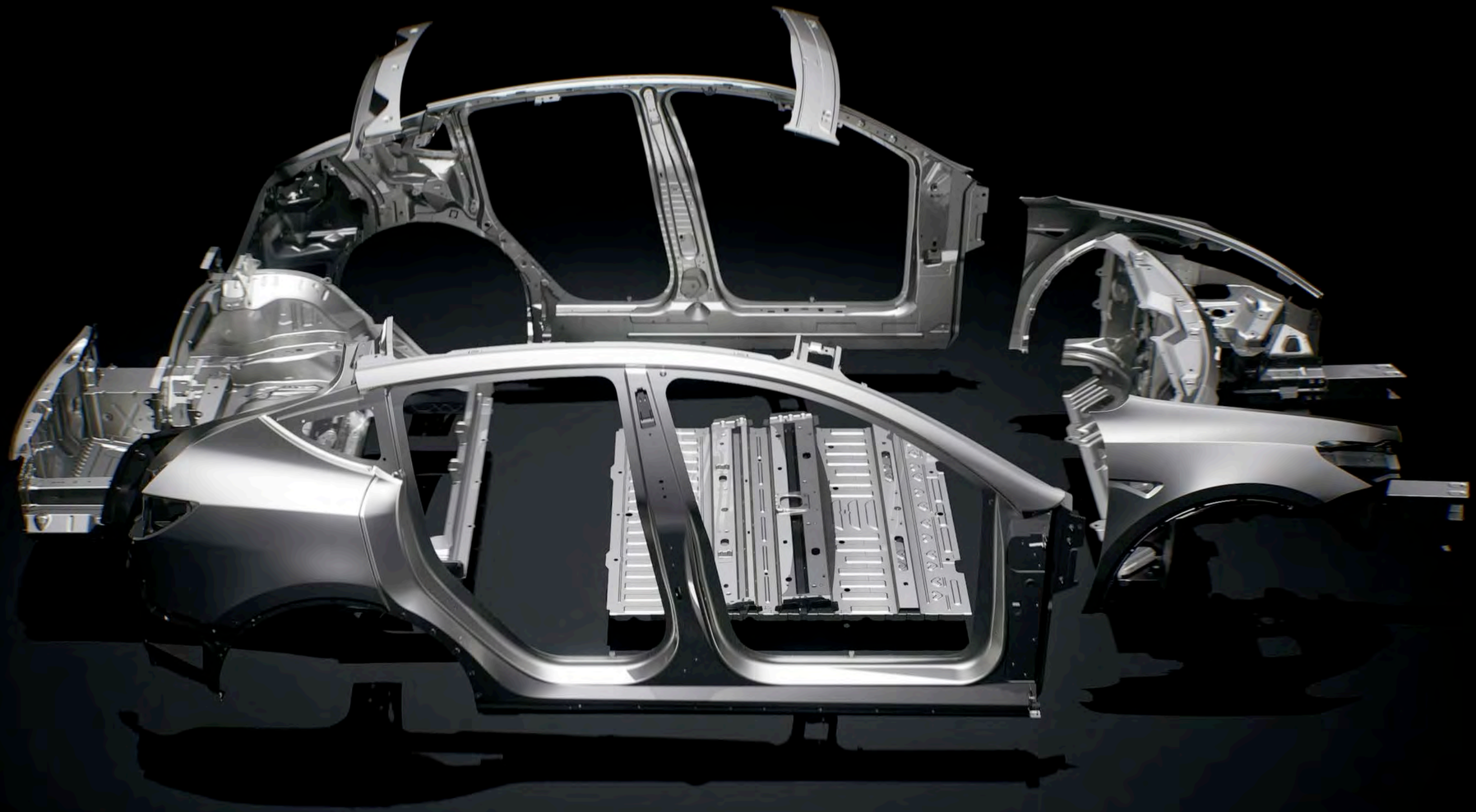
MANUFACTURING

AUTOMATION

Current Way of Assembling a Vehicle



Current Way of Assembling a Vehicle

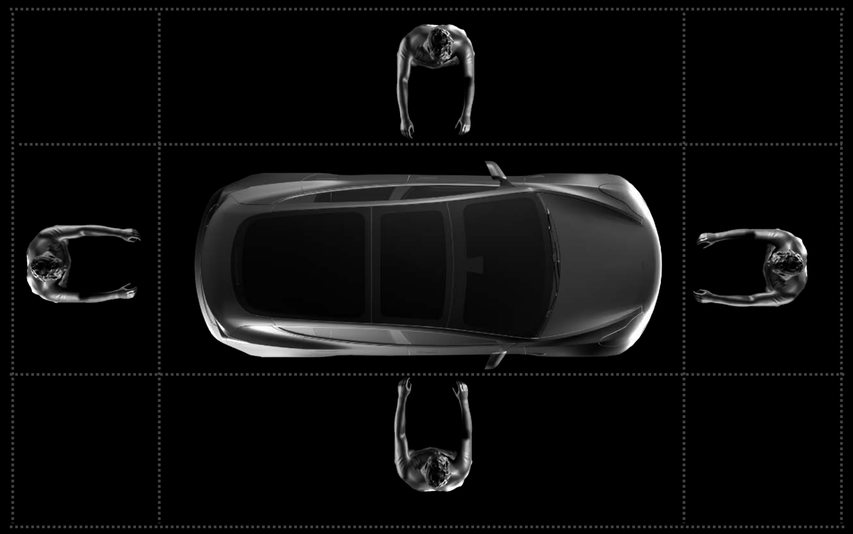


Current Way of Assembling a Vehicle

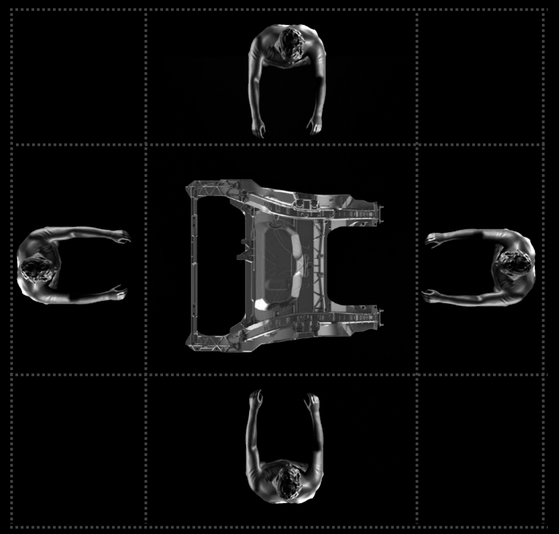
Structural Pack Sub-Assembly

More People Can Work Simultaneously on Next Generation Vehicle

Model 3



Next Gen Vehicle



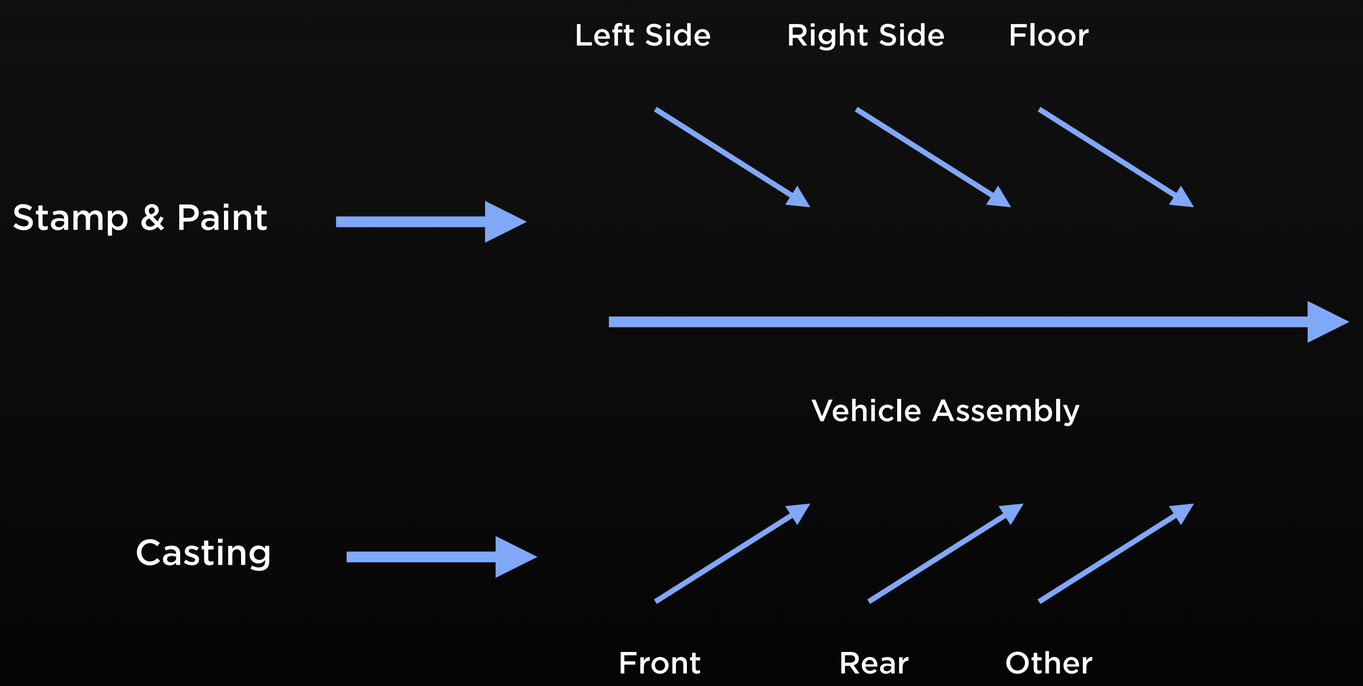
44%

Operator Density Improvement

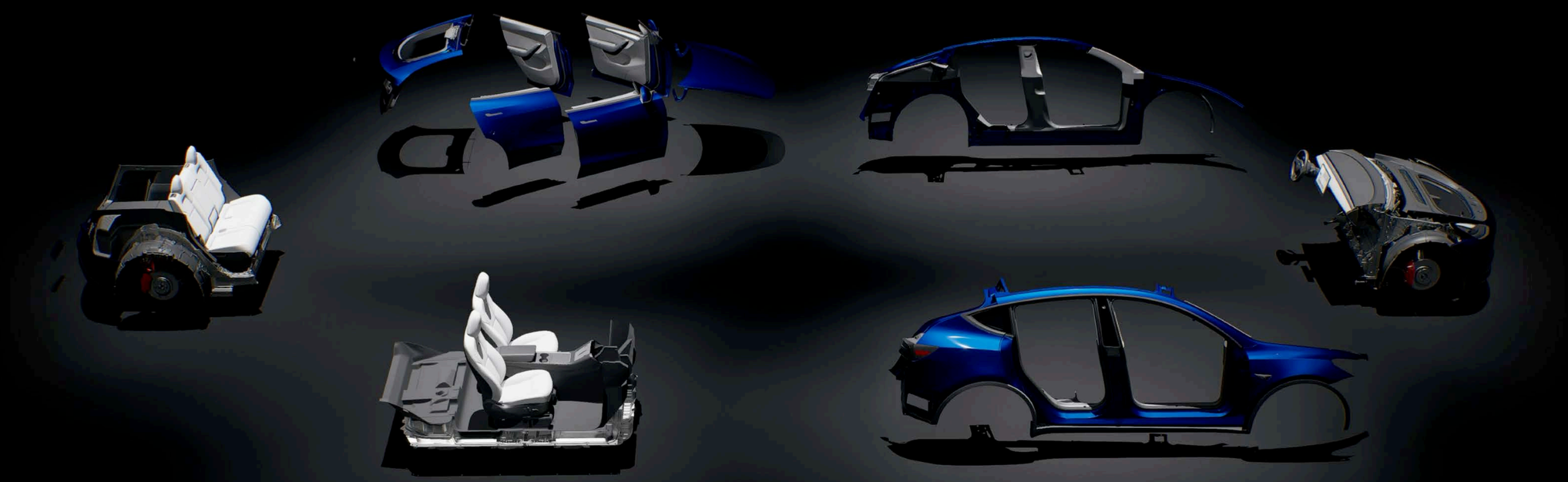
30%

Space Time Efficiency Improvement

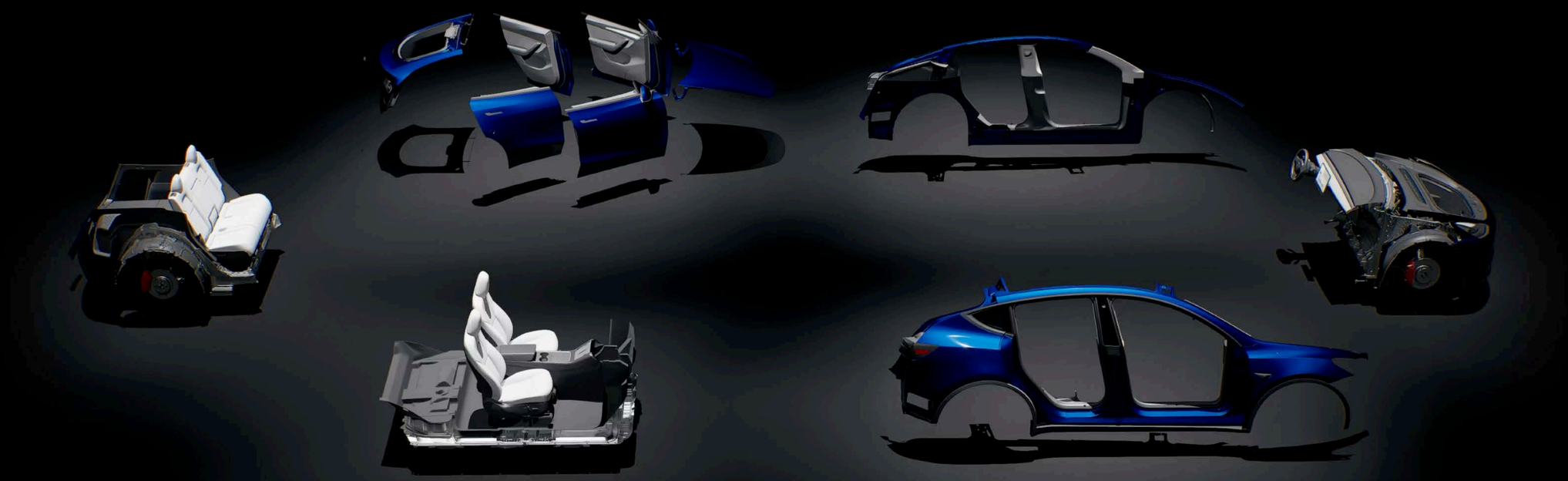
Parallel & Serial Assembly



Unboxed Process



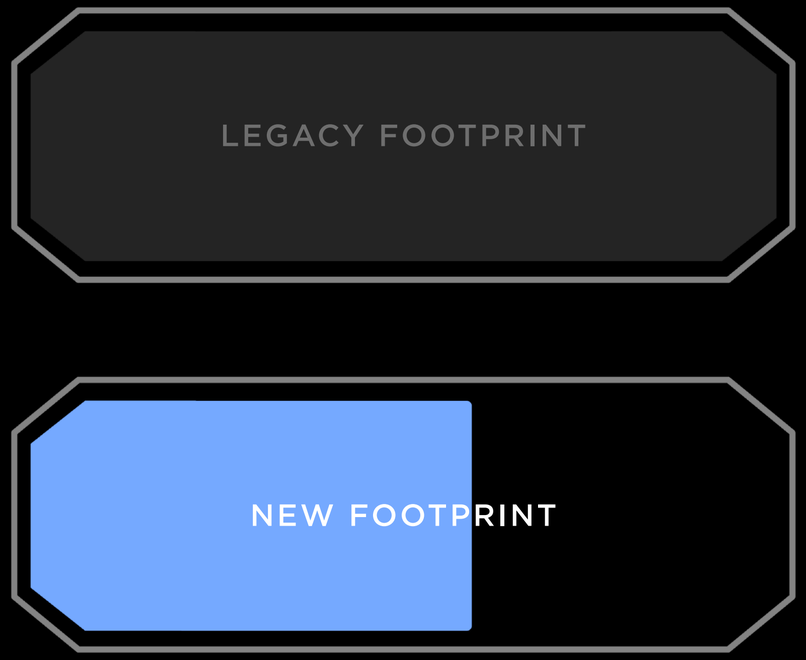
Unboxed Process

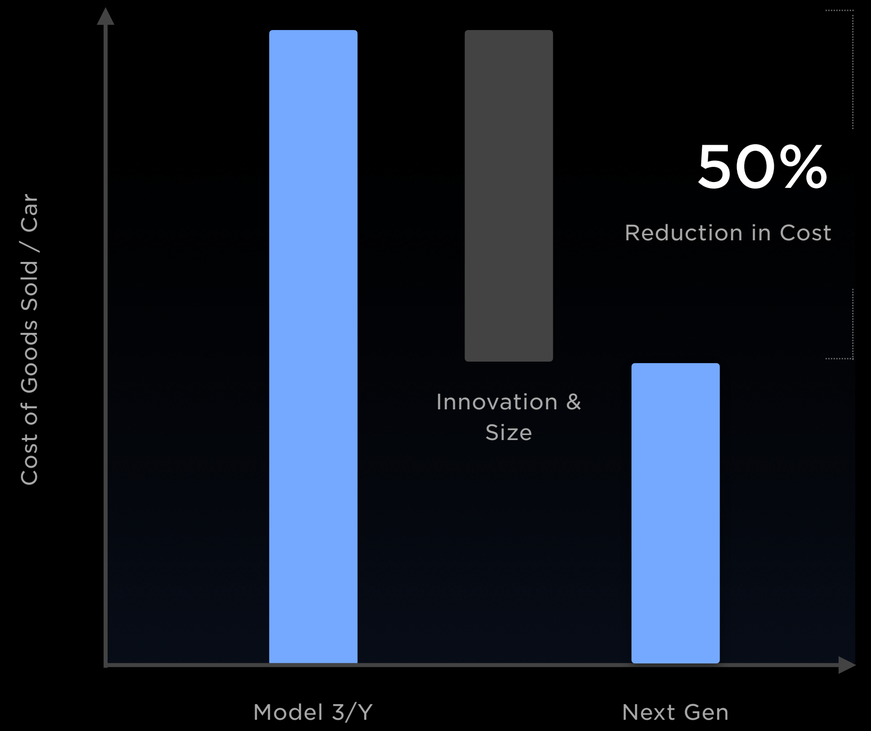


Next Generation Vehicle Manufacturing Efficiencies

>40%

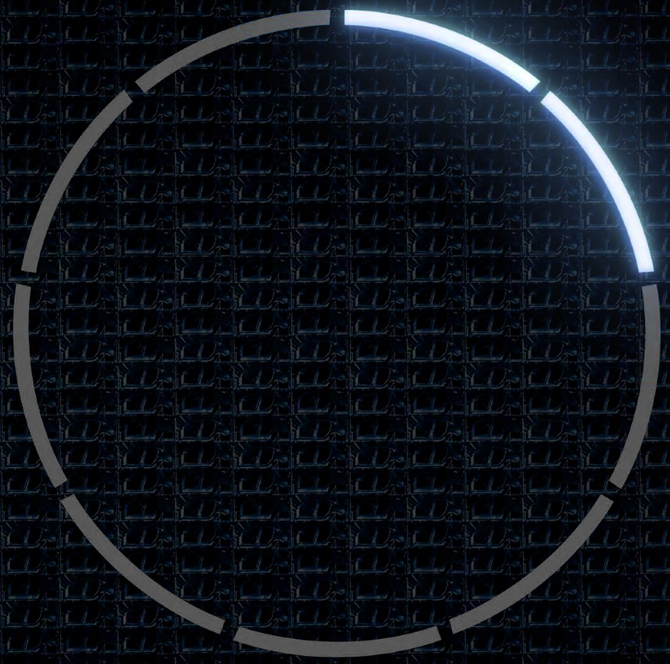
Reduction In Manufacturing Footprint





50%

Reduction in Cost

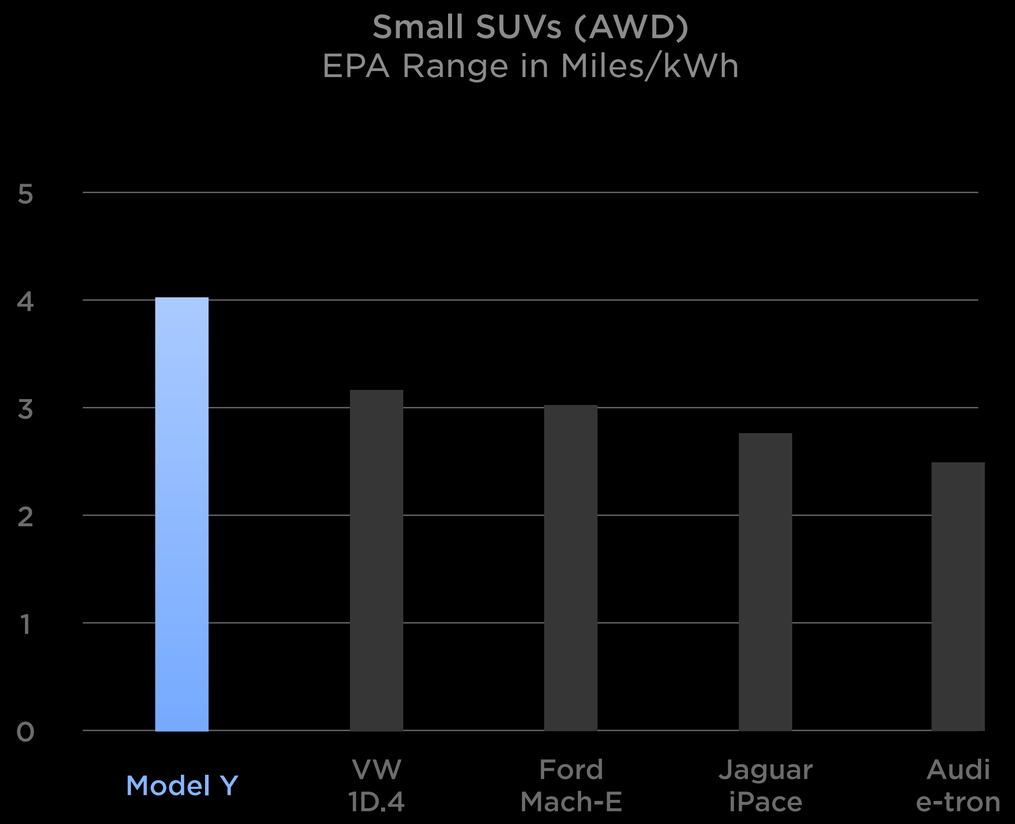


02 Powertrain

Colin Campbell

Faster Than a Porsche, More Efficient Than a Prius

Relentless Focus on Efficiency



Source: OEM Websites & Other Publicly Available Sources

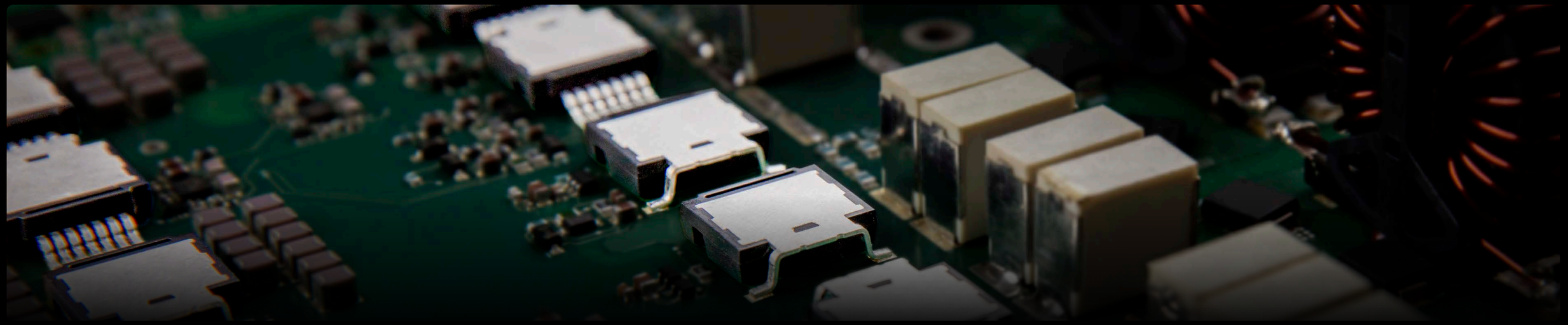
Efficiency Helps Us Scale

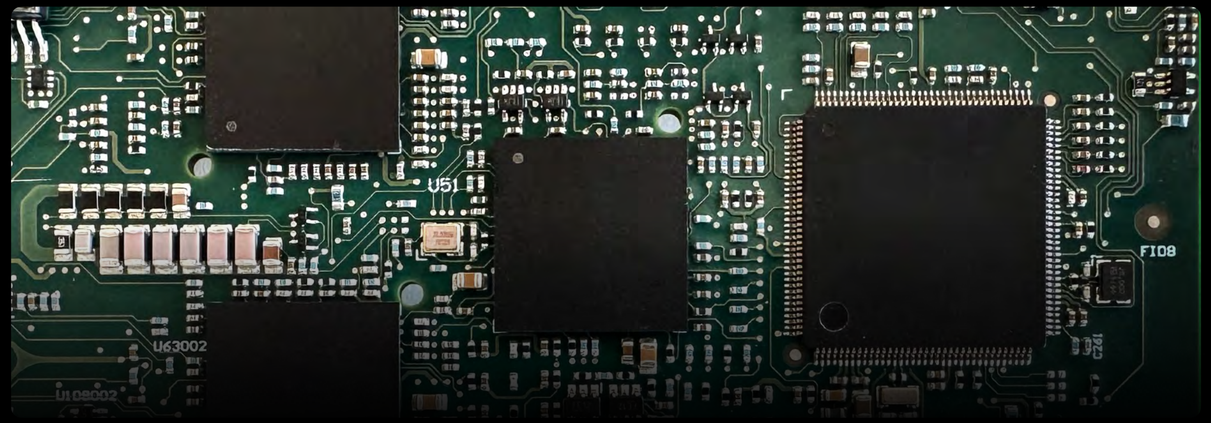
MODEL 3 POWERTRAIN FROM 2017-2022

20%	25%	75%	65%
Lighter Drive Unit	Less Rare Earth Materials	Smaller Powertrain Factory	Cheaper Powertrain Factory

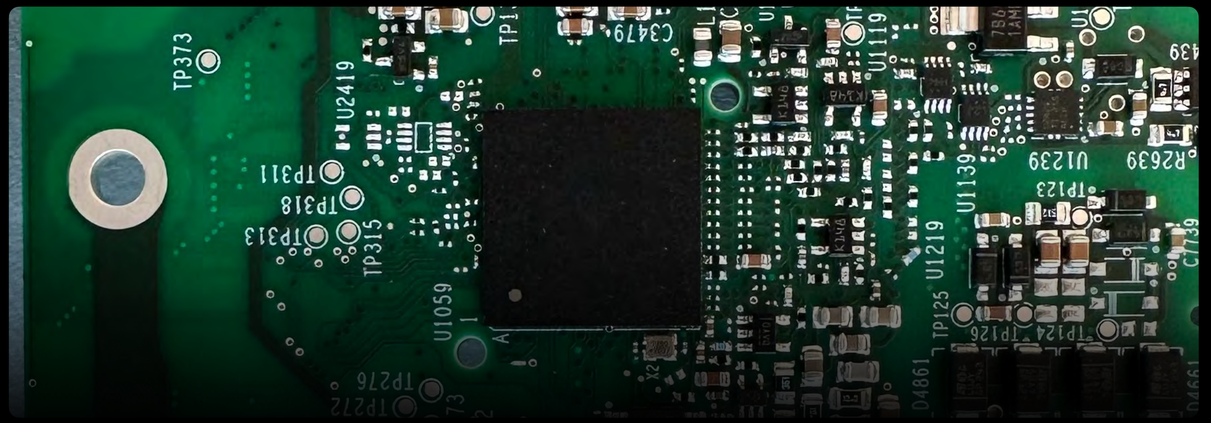
The Key: Holistic Thinking

Custom Designed Packages & Microprocessors for Power Electronics





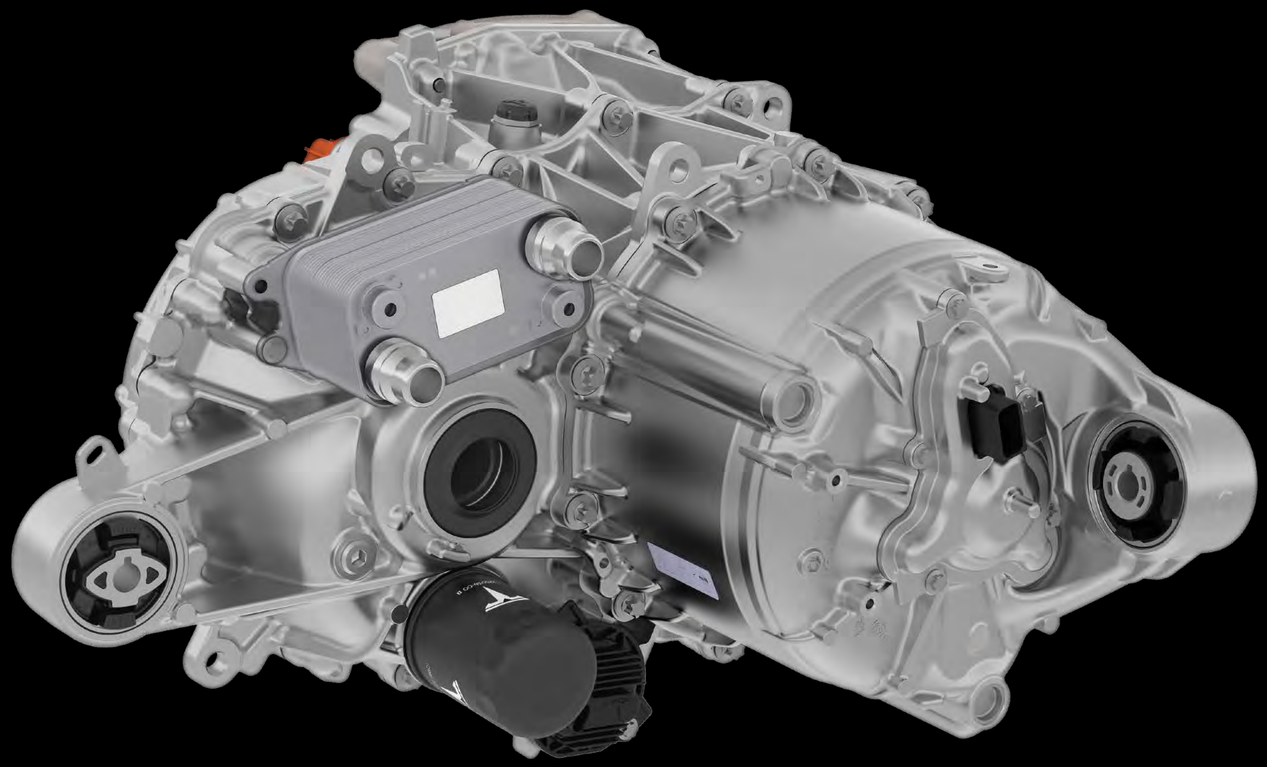
BEFORE



AFTER

Powerful In-House Software

KEY SIMULATION TOOLS DEVELOPED BY TESLA

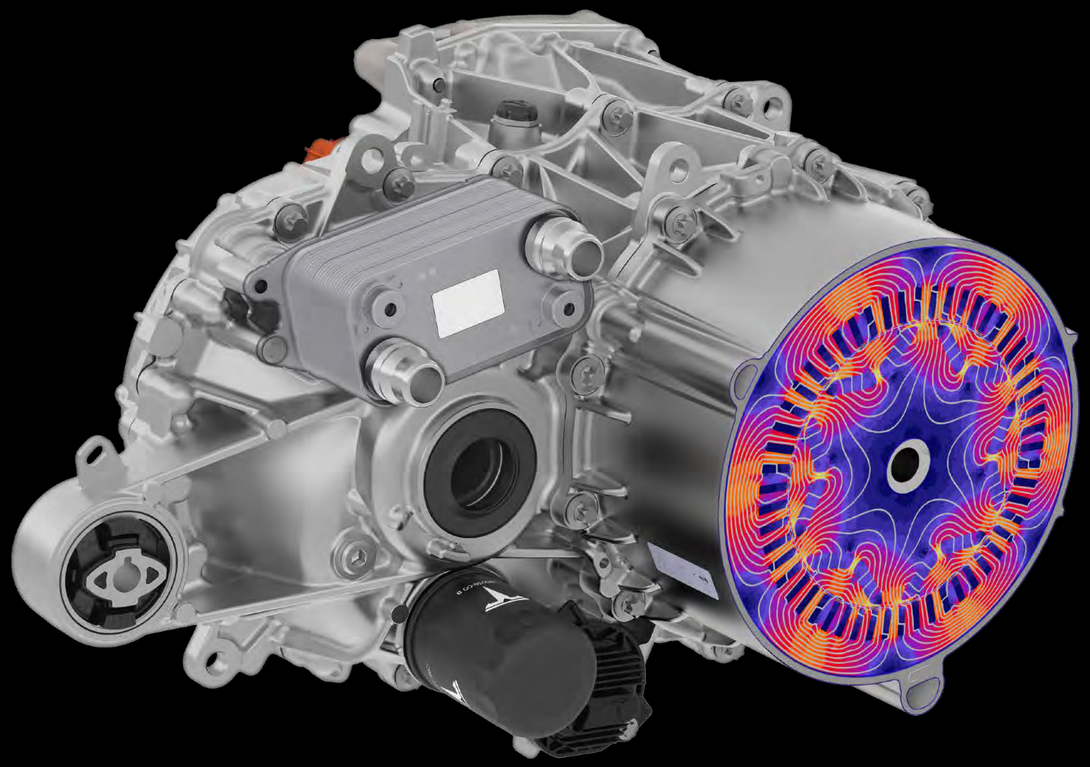


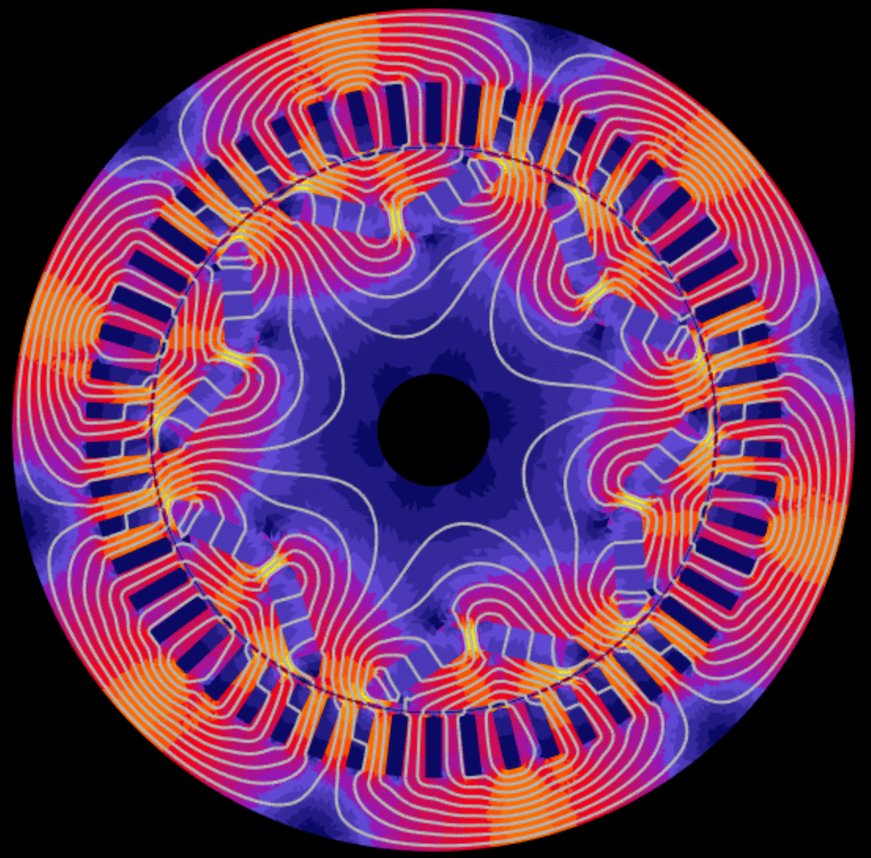
Powerful In-House Software

KEY SIMULATION TOOLS DEVELOPED BY TESLA

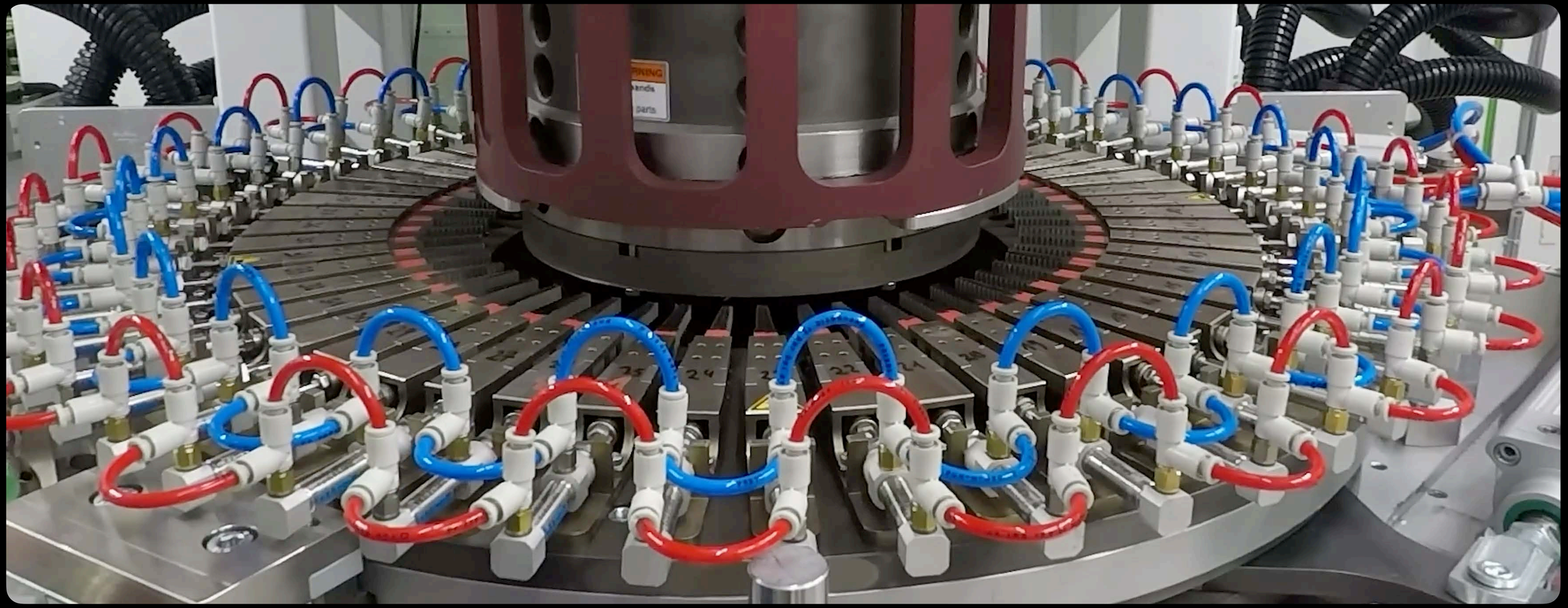
Powerful In-House Software

KEY SIMULATION TOOLS DEVELOPED BY TESLA





In-House Manufacturing Line & Automation Design

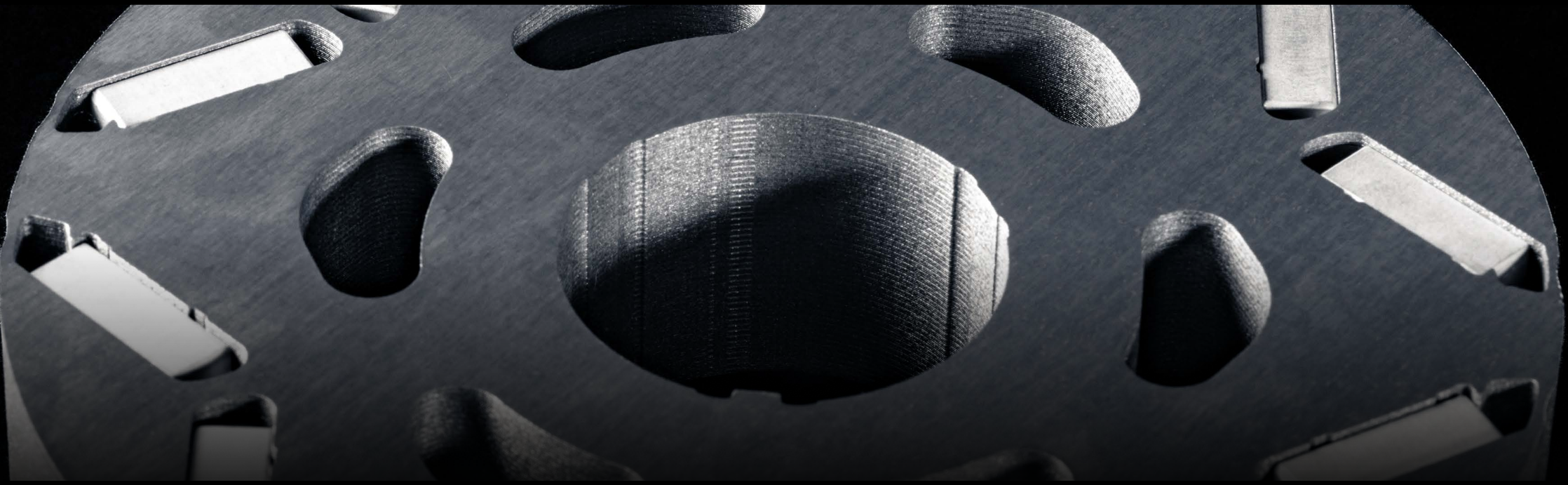


Our Next Drive Unit Will Be Even More Scalable

75%	ANY	50%	~$1,000
Reduction In Silicon Carbide	Battery Chemistry Accepted	Reduction In Factory Footprint	All-In Cost

Rare Earths Required

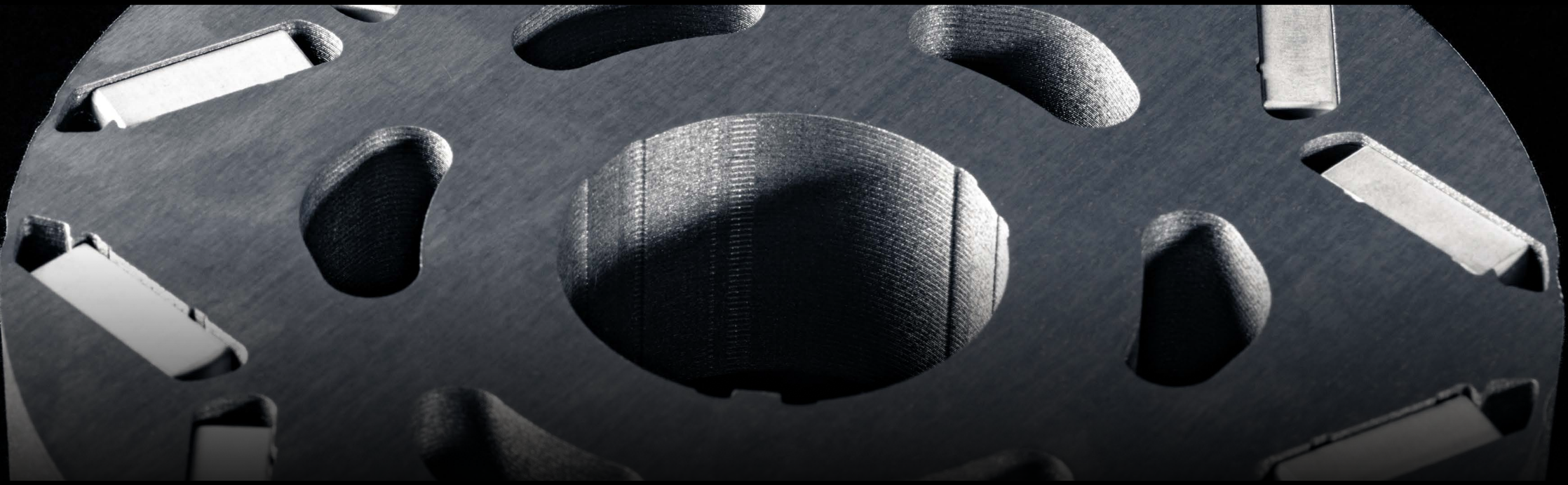
MODEL Y



~500g	~10g	~10g
Rare Earth 1	Rare Earth 2	Rare Earth 3

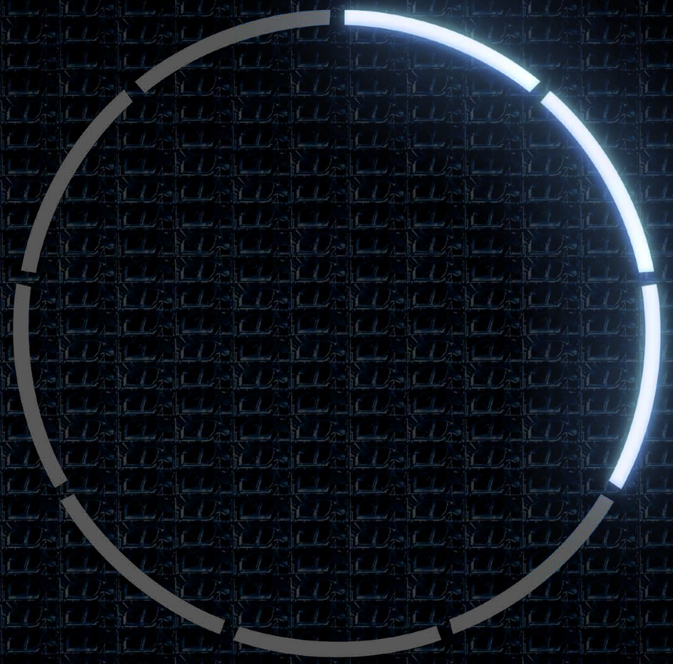
Rare Earths Required

NEXT GENERATION PERMANENT MAGNET MOTOR



0g	0g	0g
Rare Earth 1	Rare Earth 2	Rare Earth 3

Lower Cost & Higher Efficiency Drive Units Using Zero Rare Earths

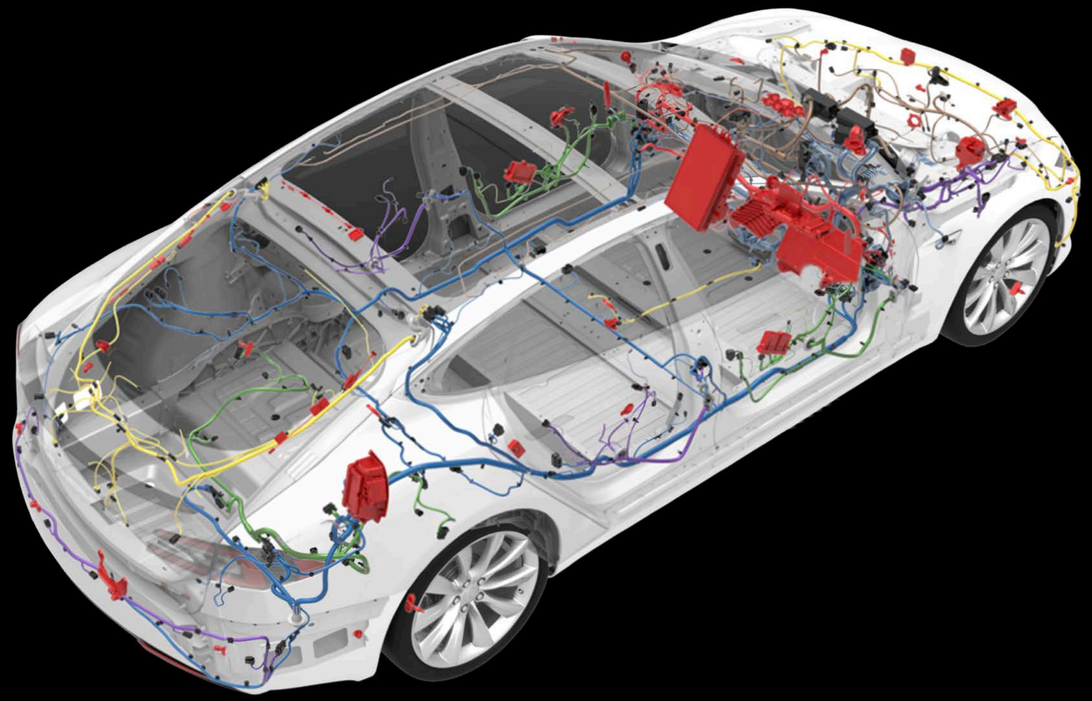


03 Electronic Architecture

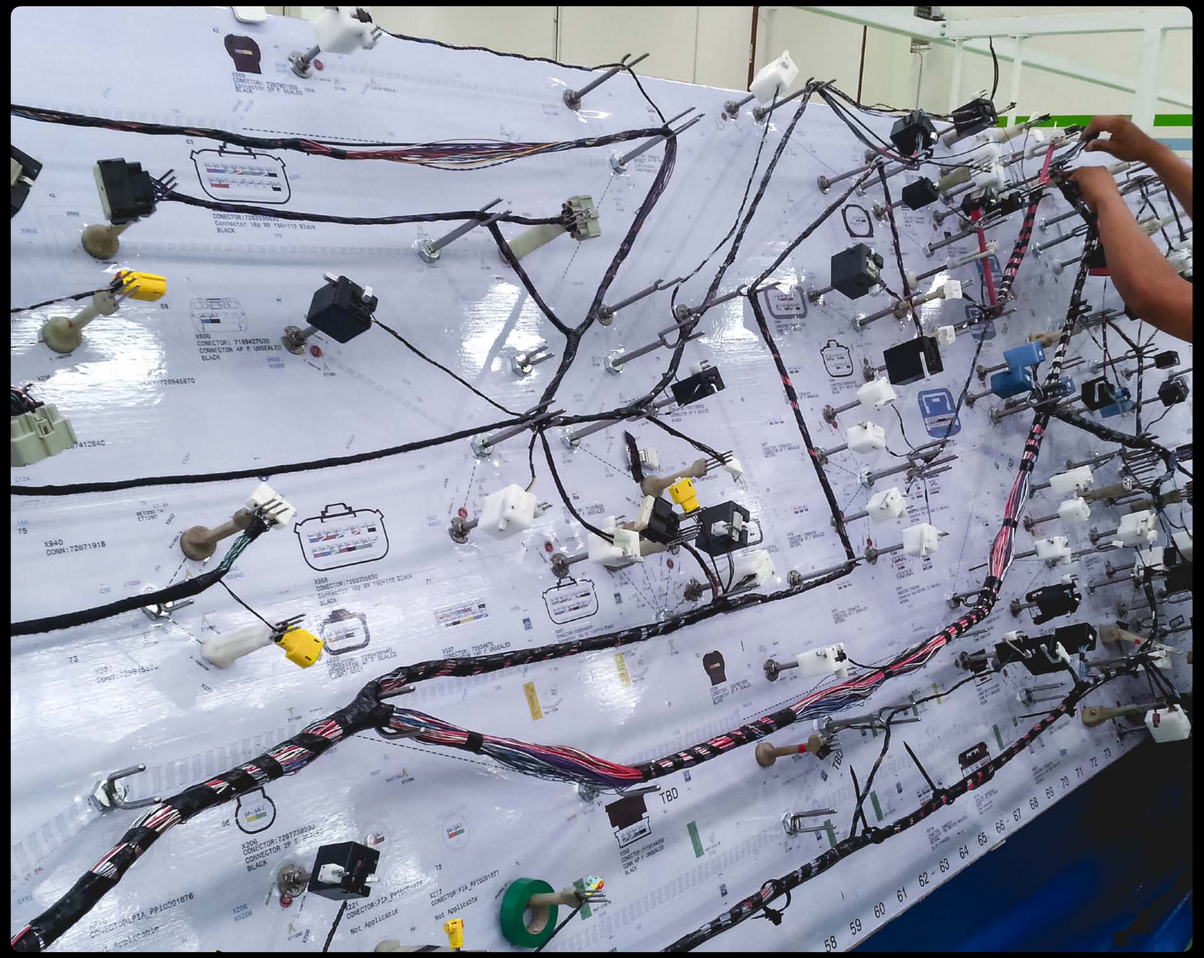
Pete Bannon

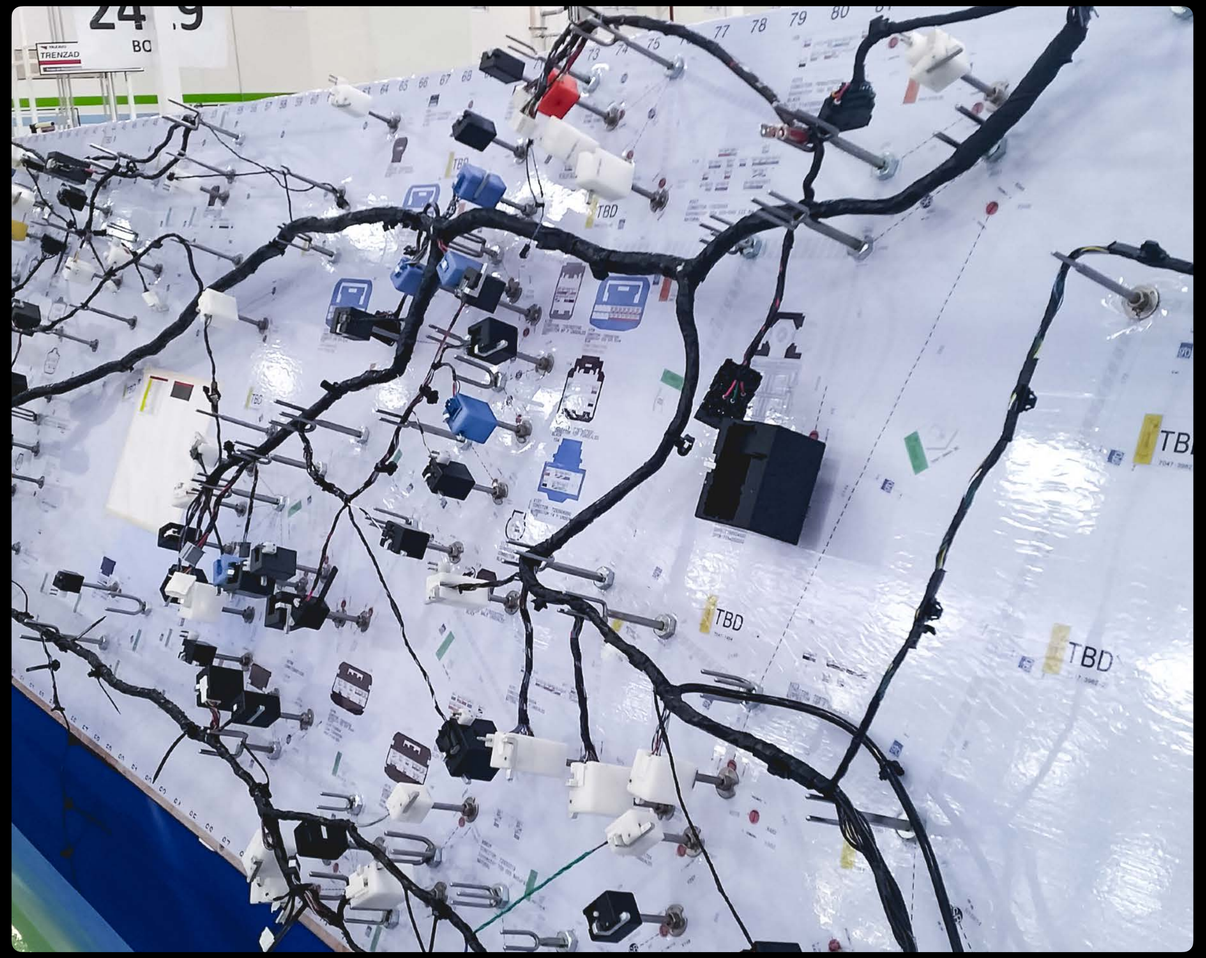
Model S 2012

COMPLEX LOW VOLTAGE ARCHITECTURE



It’s Been Messy

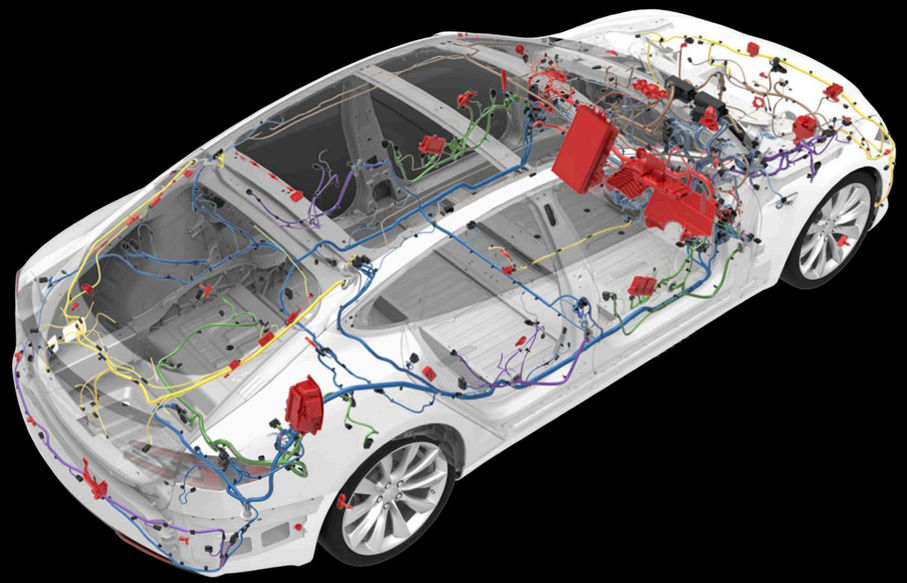




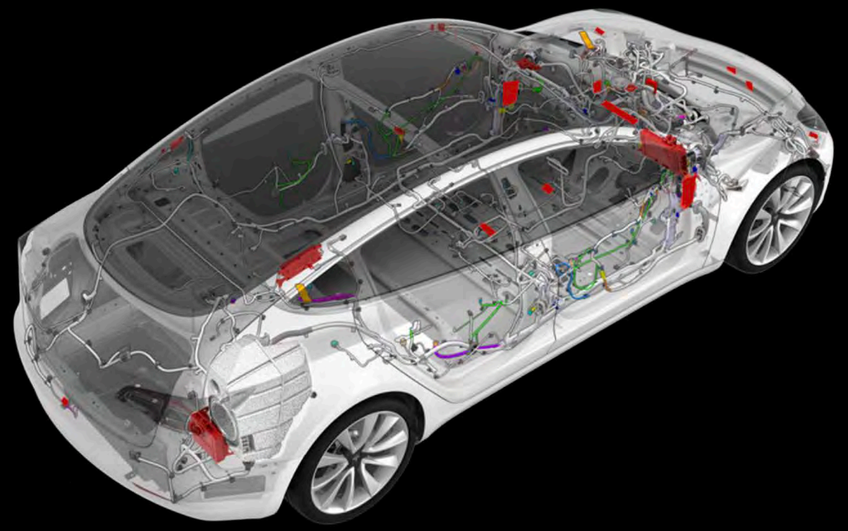
Progress So Far

From Model S to Model 3

IMPROVED LOW VOLTAGE ARCHITECTURE

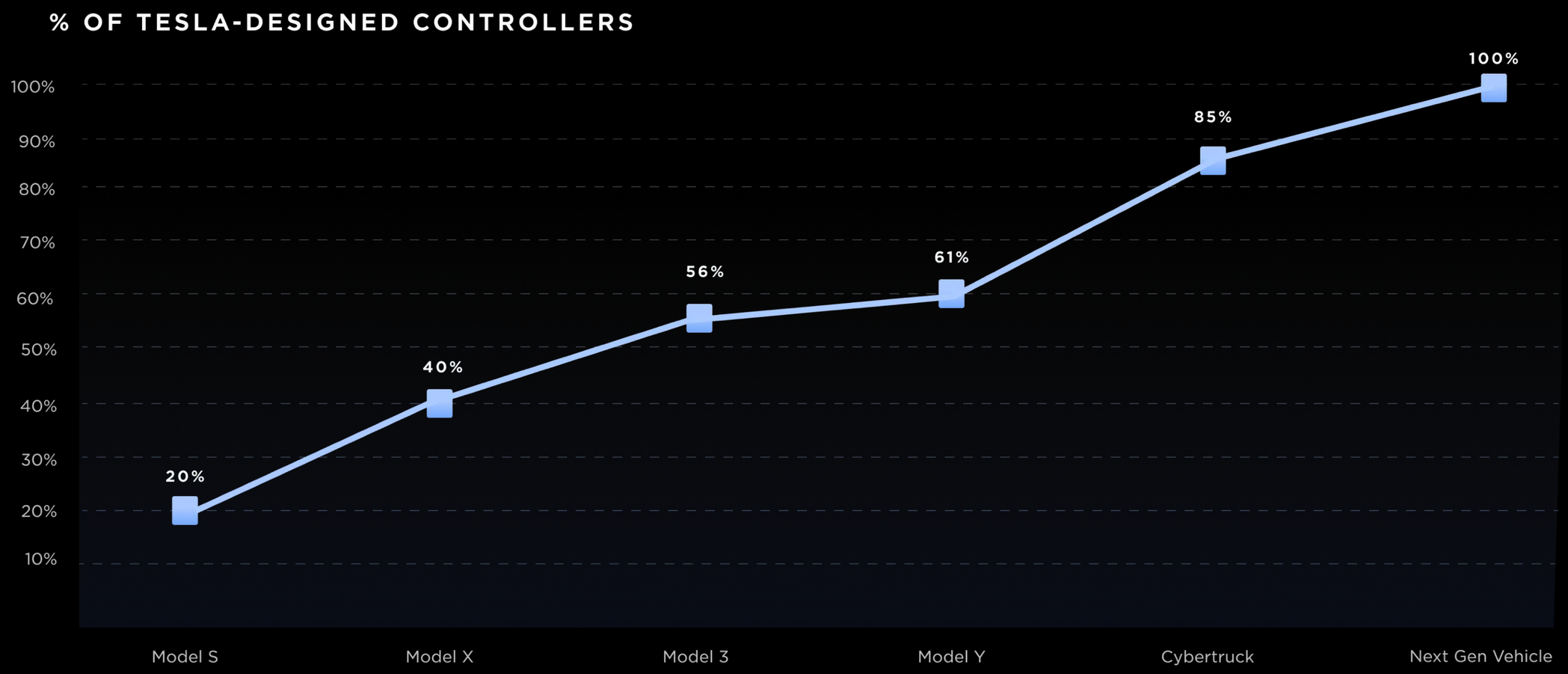


MODEL S



MODEL 3

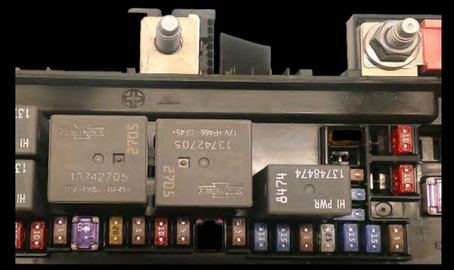
Designed Our Own Controllers, With More To Come



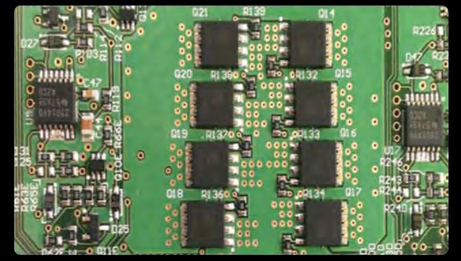
Switched From Fuse & Relay to Electronic Fuses

METRIC	FUSE + RELAY	E-FUSE
FAULT REACTION TIME	SECONDS	< 1 MILLISECOND
MOVING PARTS	YES (RELAYS)	NO (SOLID STATE FETs)
CONTROL & DIAGNOSTICS	COARSE	GRANULAR
FIRMWARE RESETTABLE	NO	YES

FUSE + RELAYS

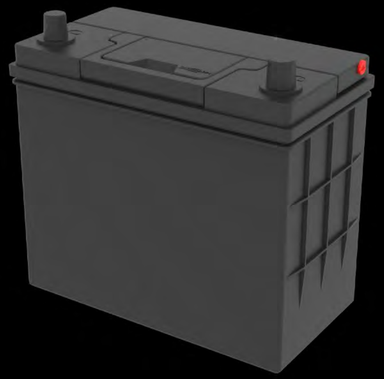


ELECTRONIC FUSES



Replaced Lead Acid With Lithium Ion Batteries

LEAD-ACID BATTERY

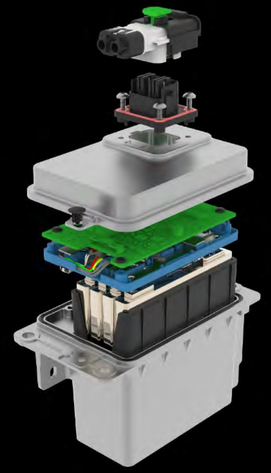


4-YEAR REPLACEMENT

87%

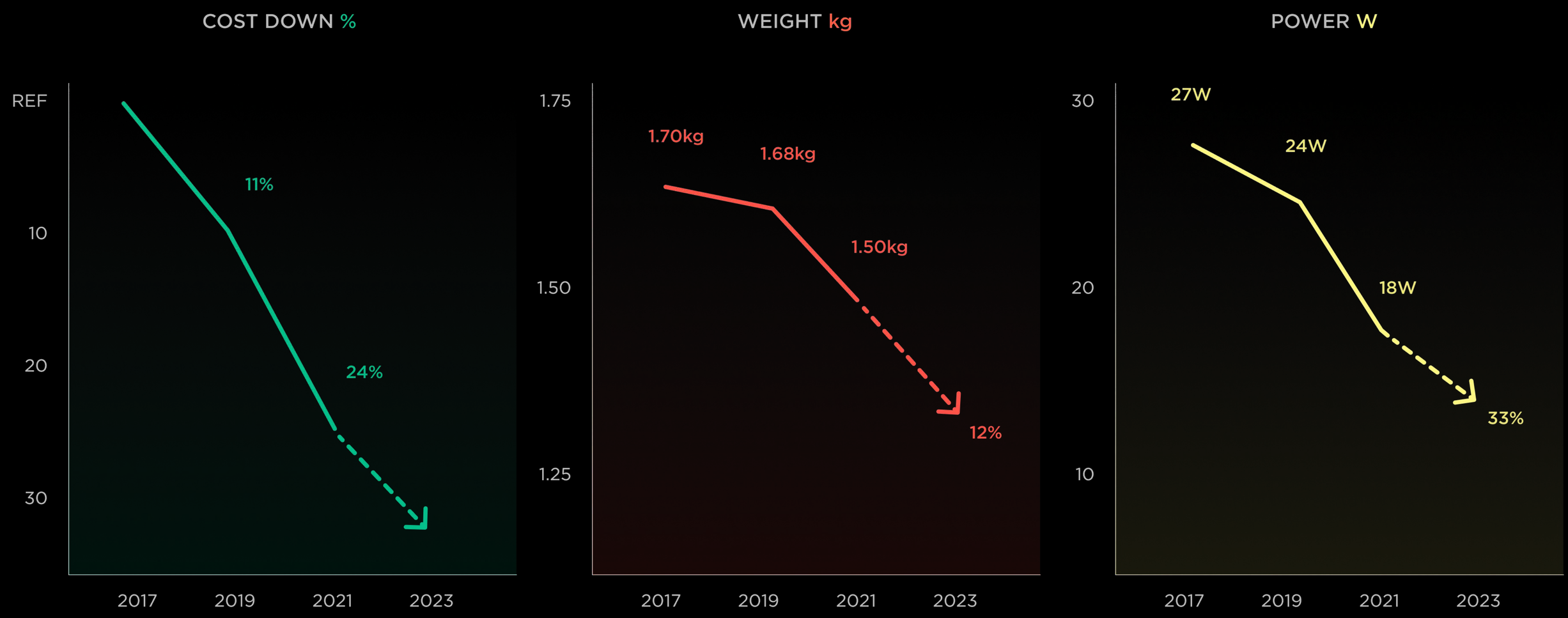
Mass Reduction

LITHIUM ION BATTERY



LIFETIME

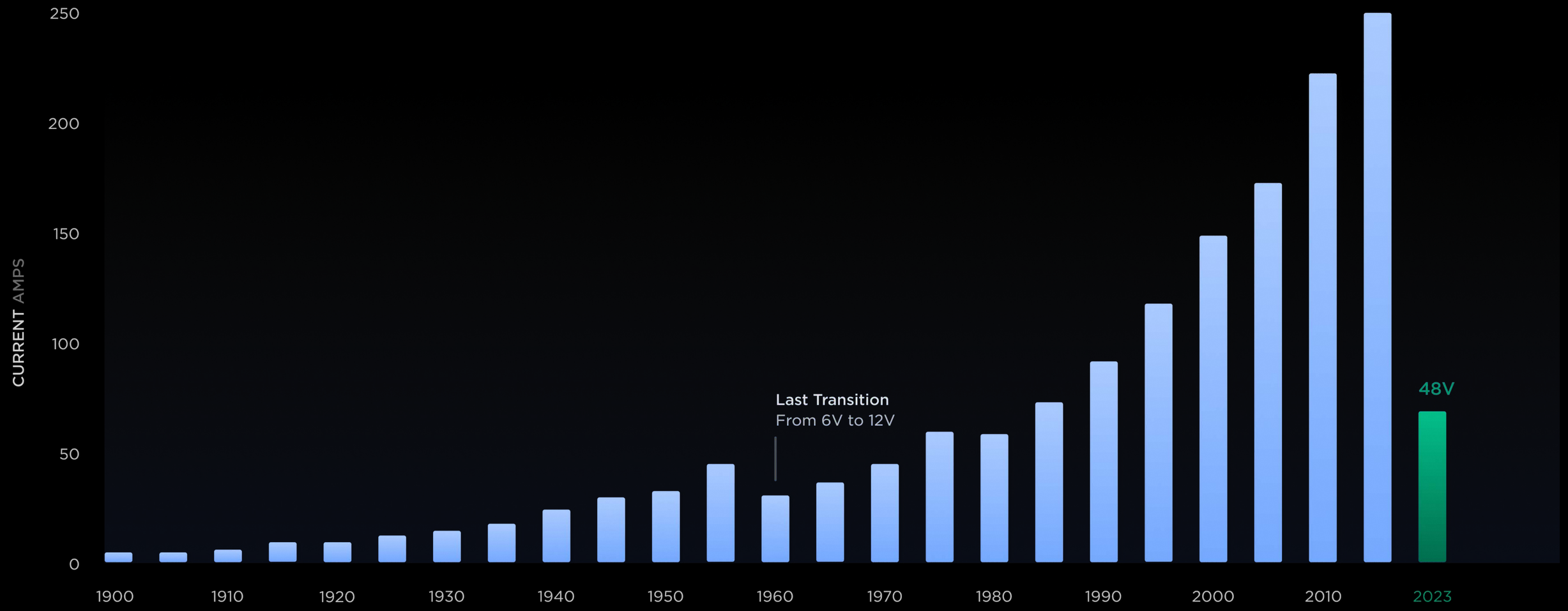
Reduced Costs of Model 3/Y Center Display



What’s Next

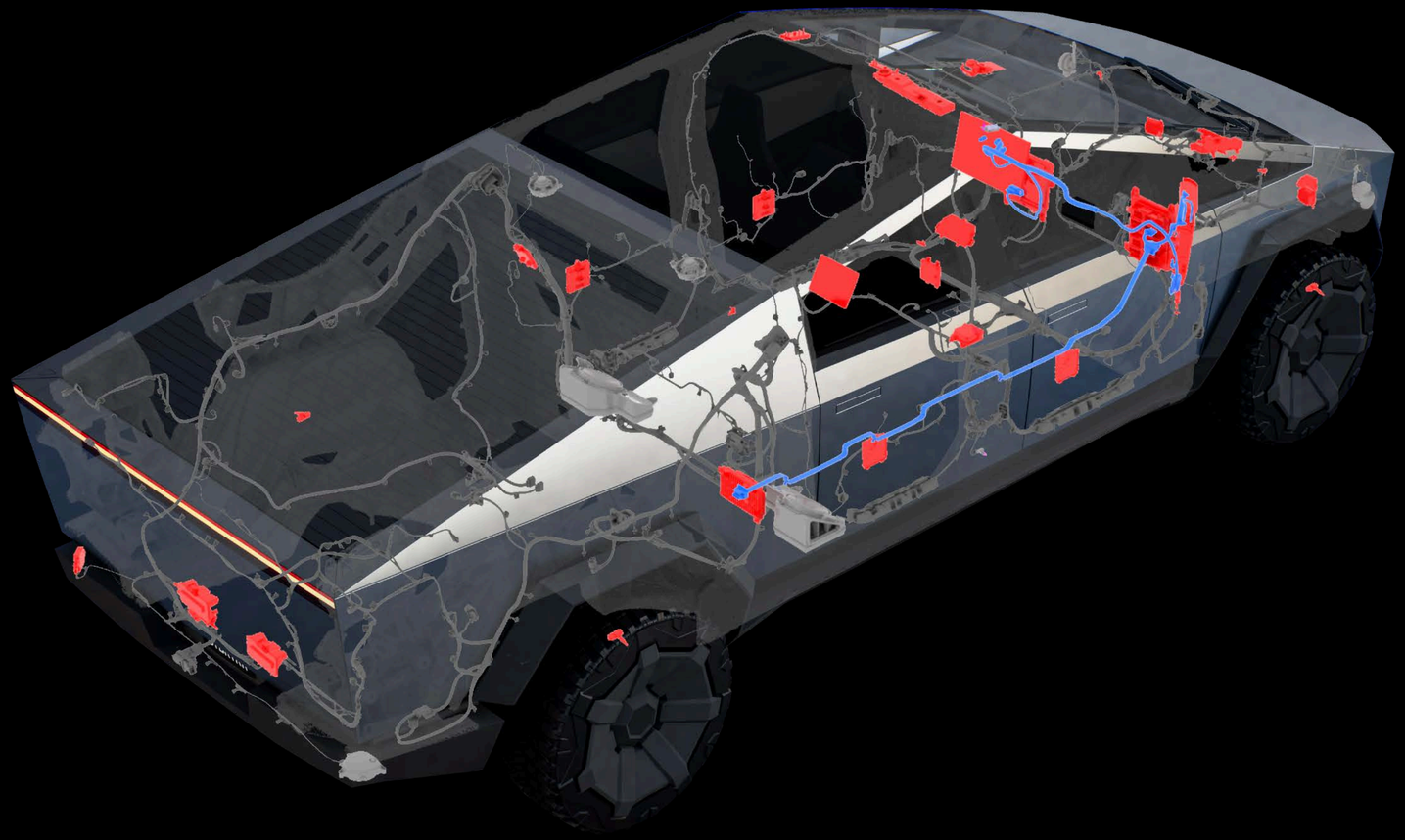
The Future of Low Voltage Architecture

CYBERTRUCK, OPTIMUS, & FUTURE VEHICLES ALL 48V



Cybertruck

FURTHER IMPROVING LOW VOLTAGE ARCHITECTURE

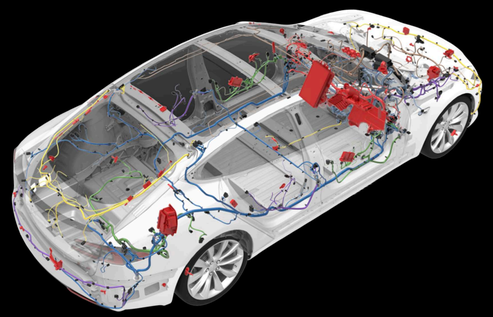


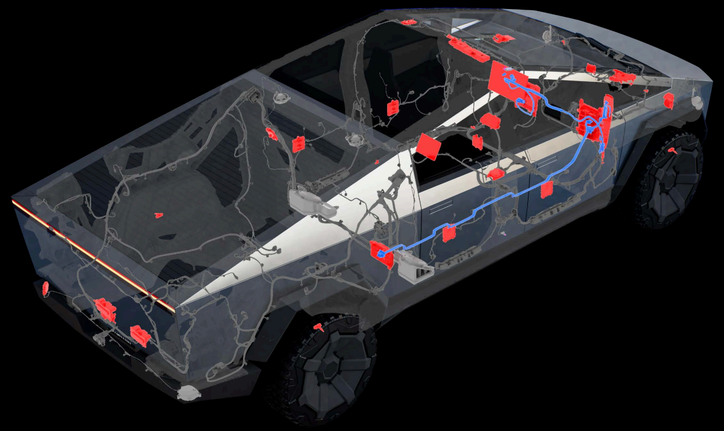
Future of Tesla Low Voltage

2012 MODEL S

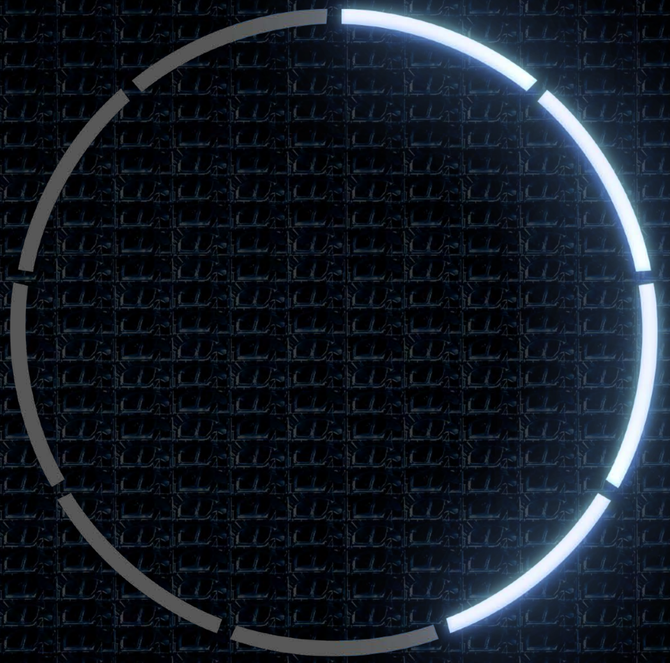
CYBERTRUCK

NEXT GENERATION VEHICLE





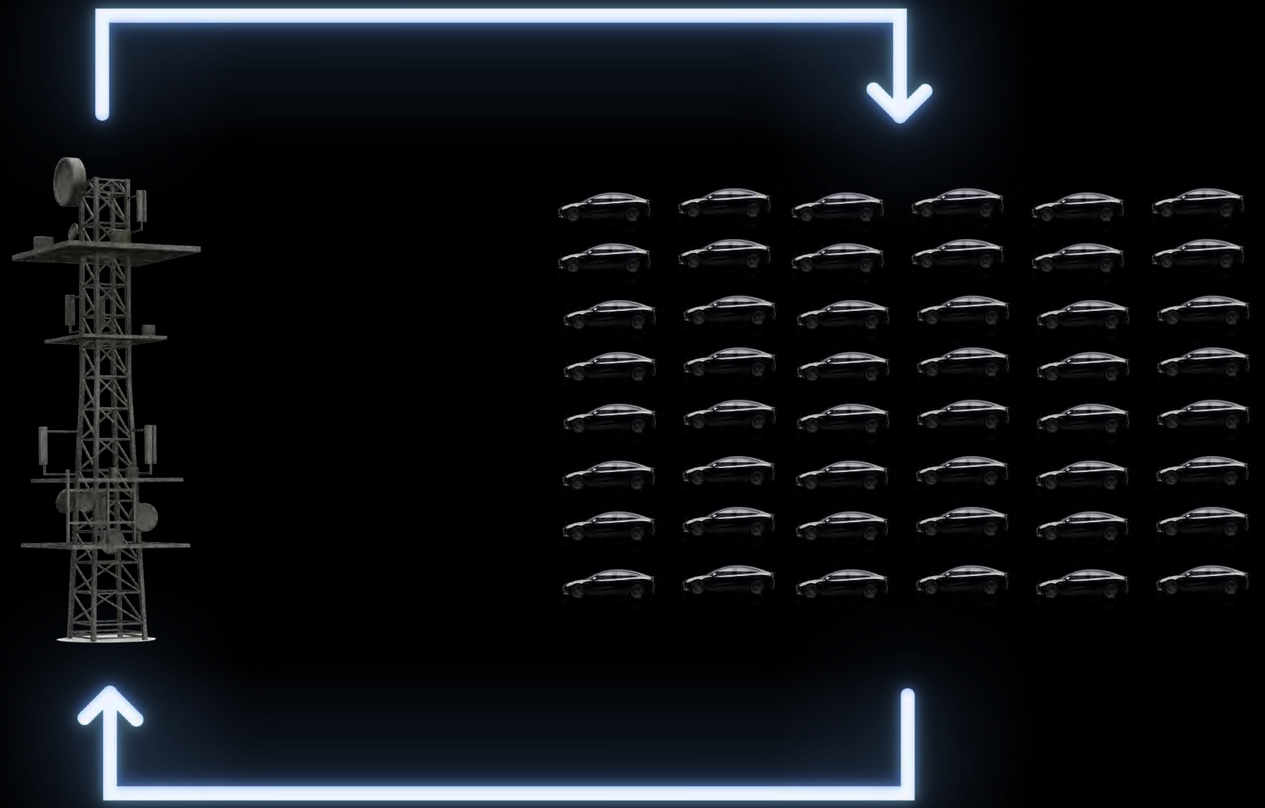
Simpler & Cheaper Electronic Architecture, With 100% of Controllers Designed In-House



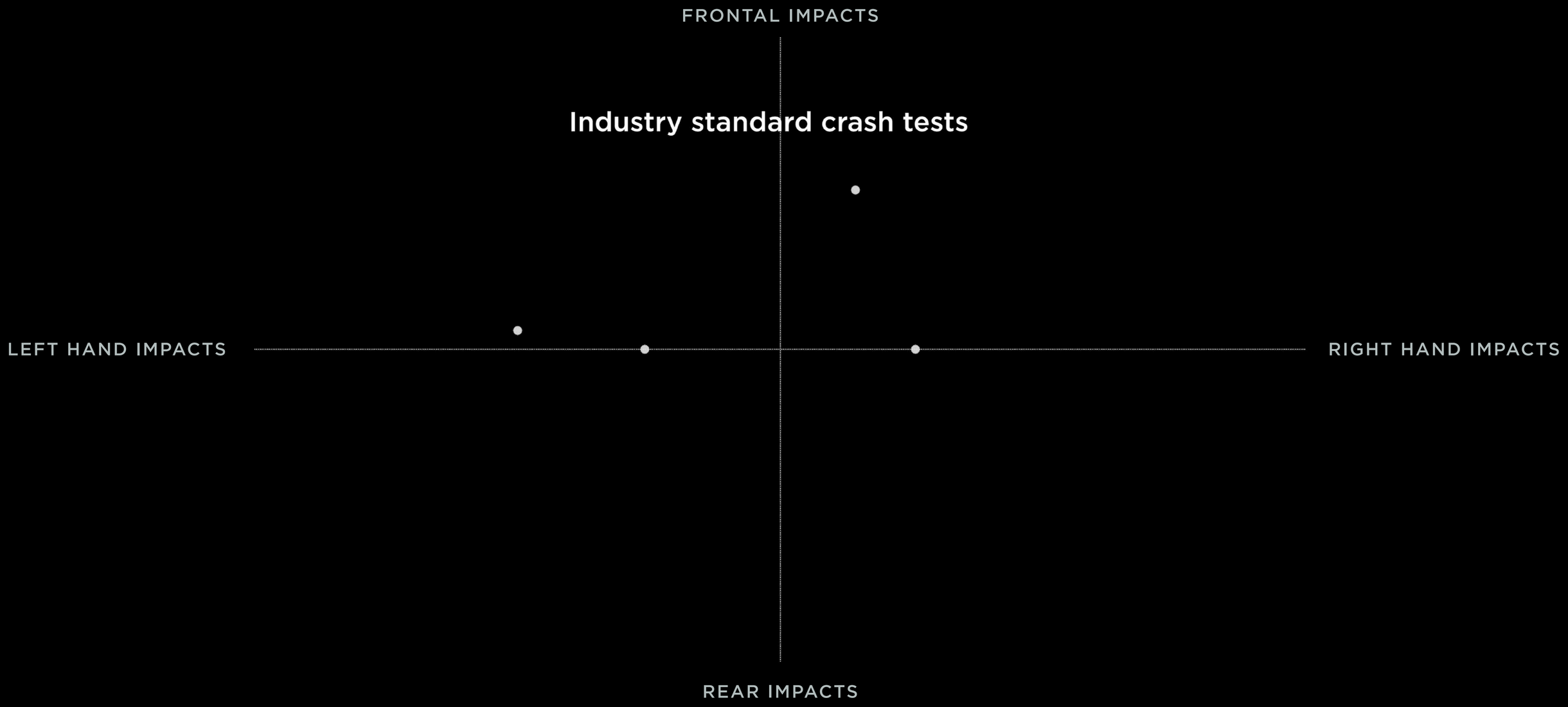
04 Software

David Lau

Relentless Improvement Via Updates & Data Insights

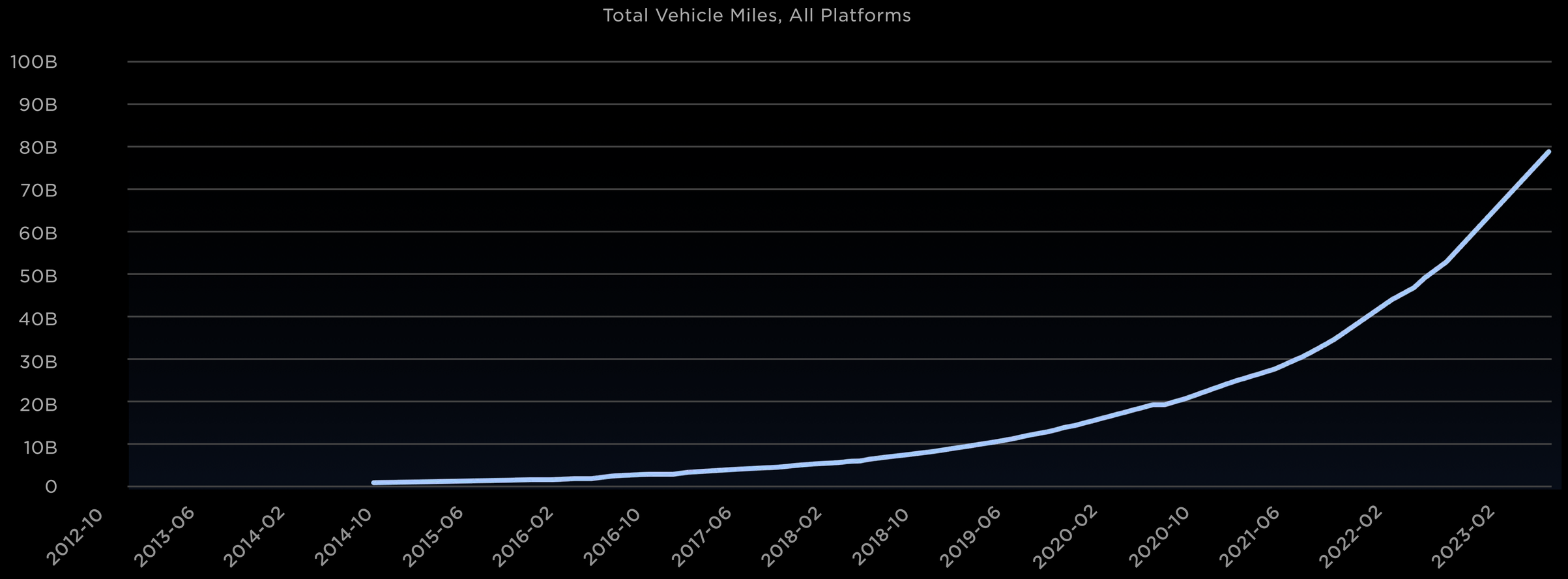


Real World Crash Tests: Fewer Dummies, More Smarts

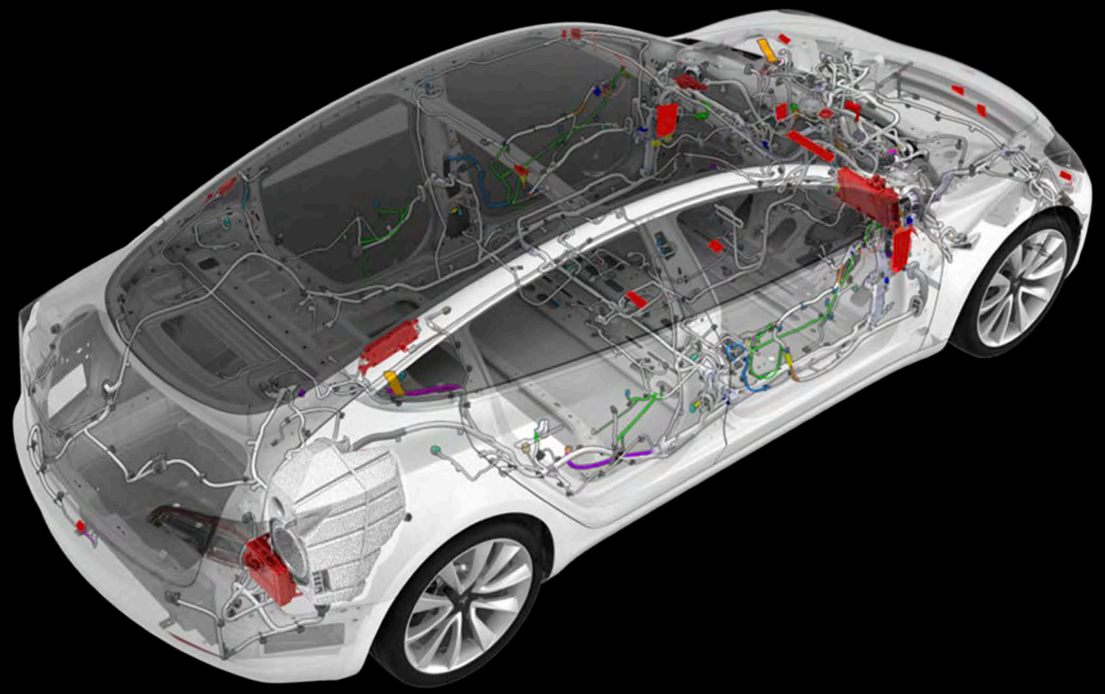


Enabling Plaid-Speed Product Development

123M MILES DRIVEN PER DAY | 1.9M CHARGE SESSIONS EVERY DAY

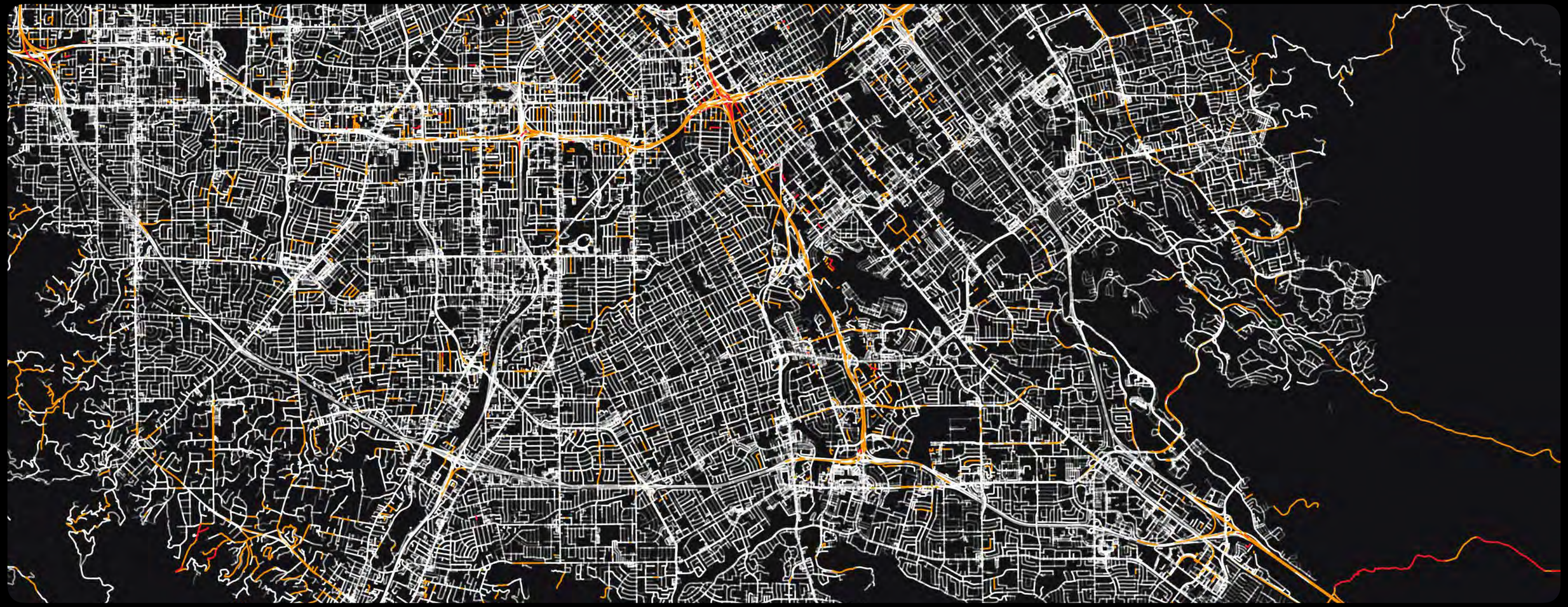


Software That Spans the Entire System



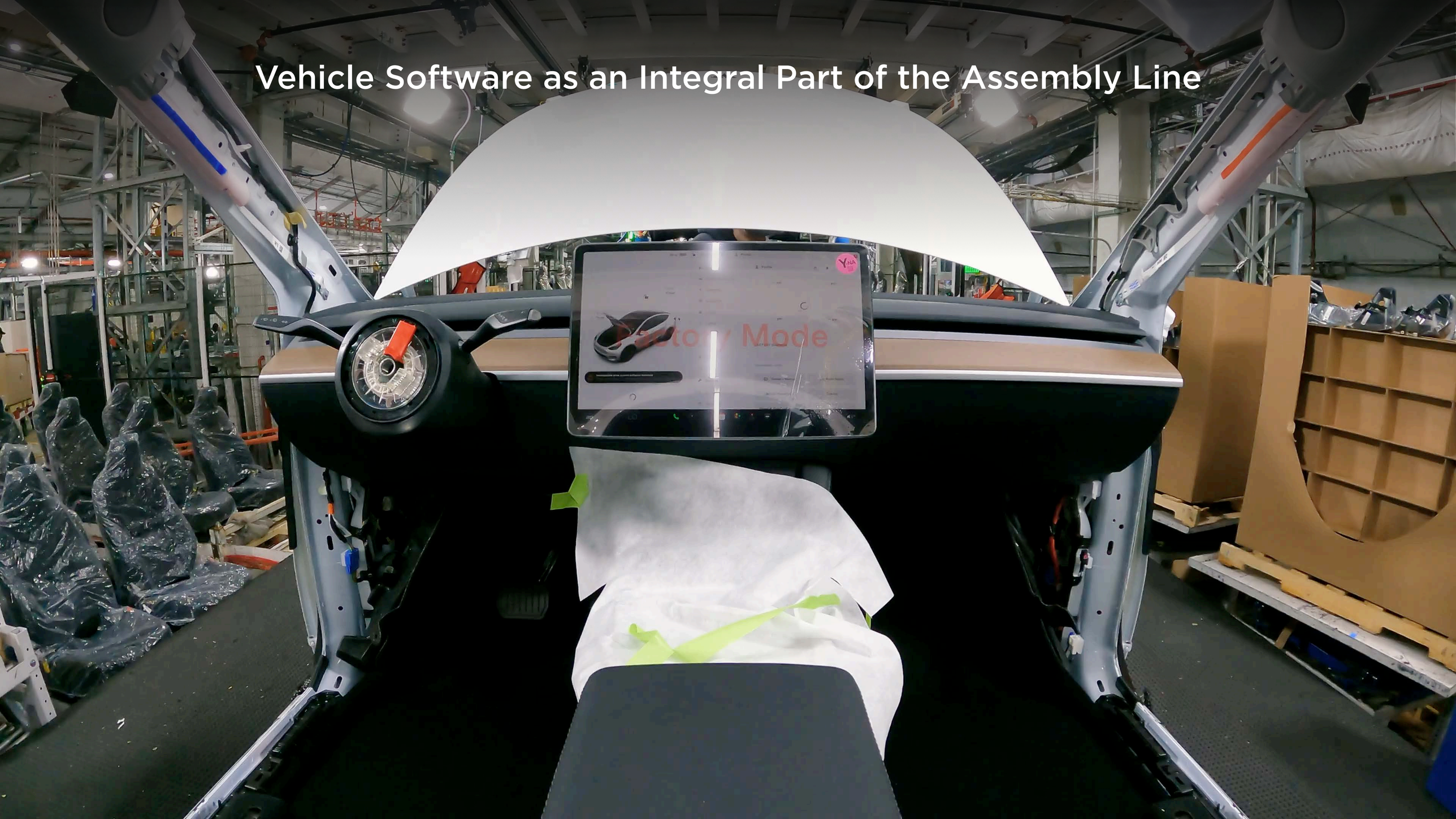
Leveraging Vertical Integration

PREDICTIVE AIR SUSPENSION



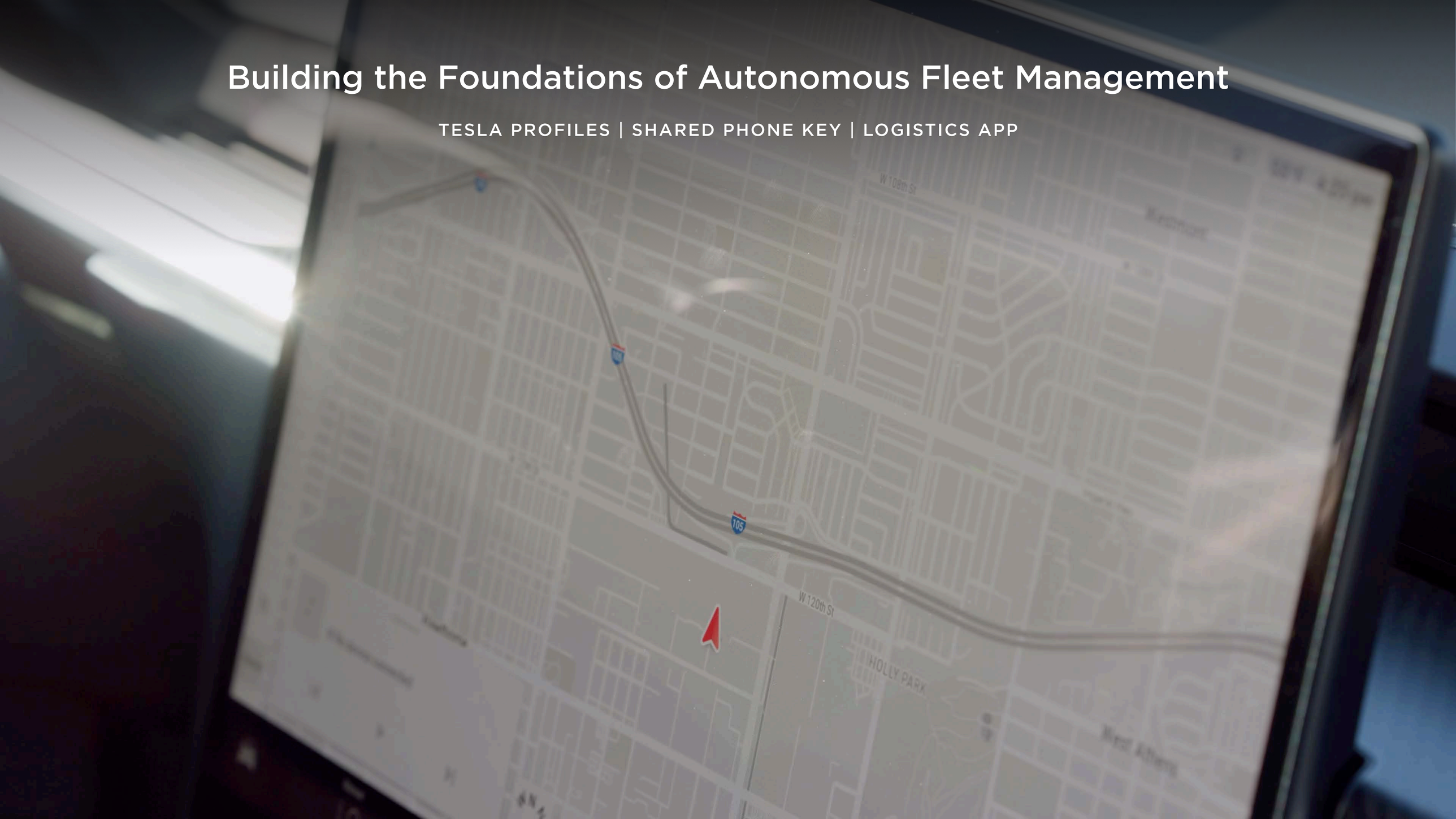
— Rougher Road

Vehicle Software as an Integral Part of the Assembly Line

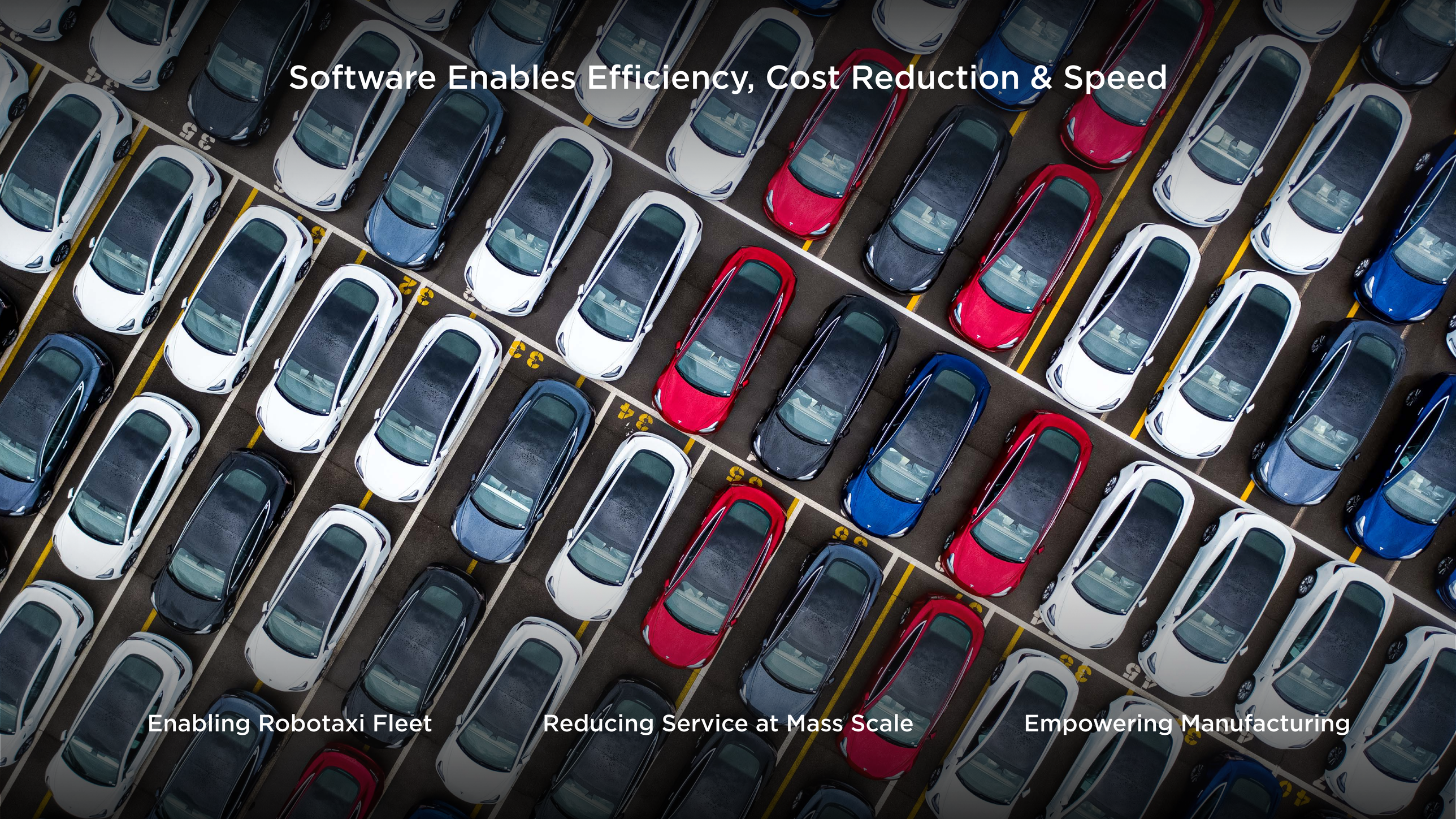


Building the Foundations of Autonomous Fleet Management

TESLA PROFILES | SHARED PHONE KEY | LOGISTICS APP



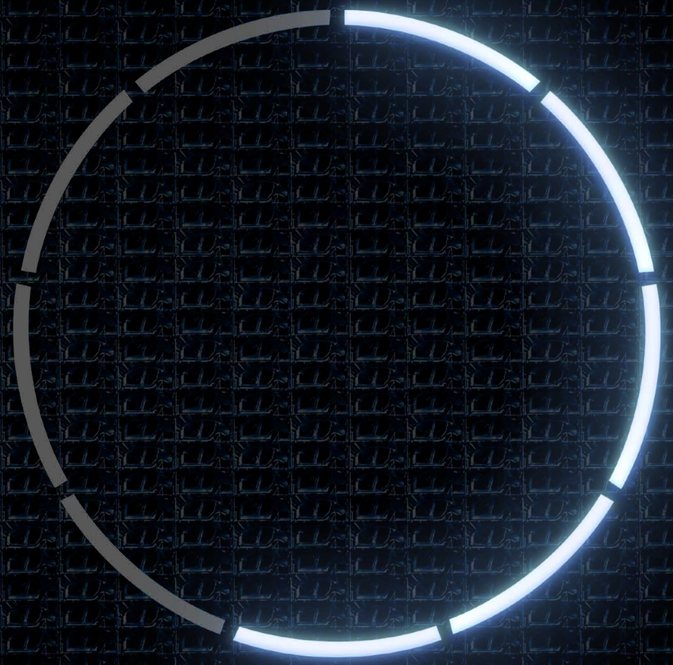
Software Enables Efficiency, Cost Reduction & Speed



Enabling Robotaxi Fleet

Reducing Service at Mass Scale

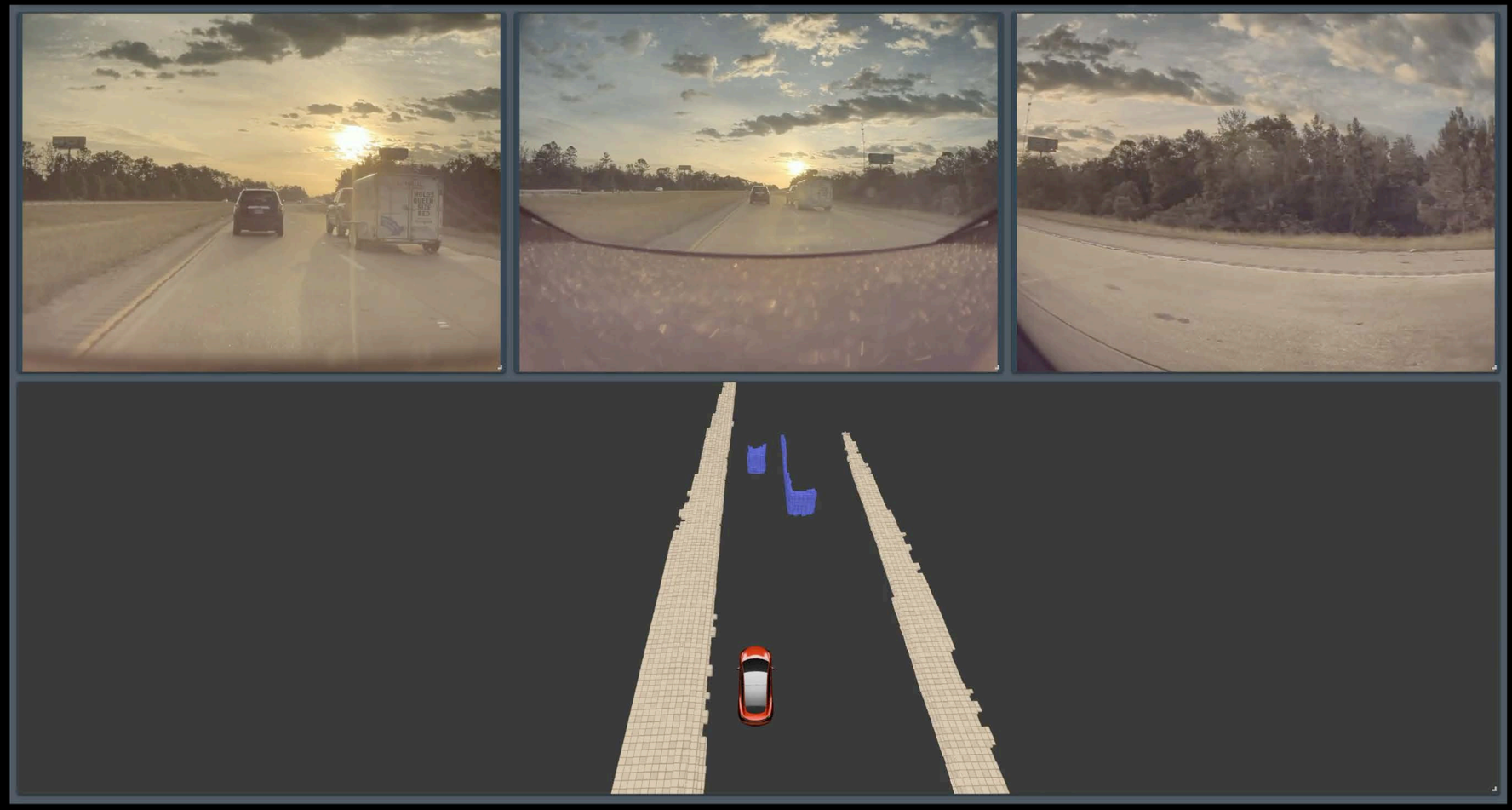
Empowering Manufacturing



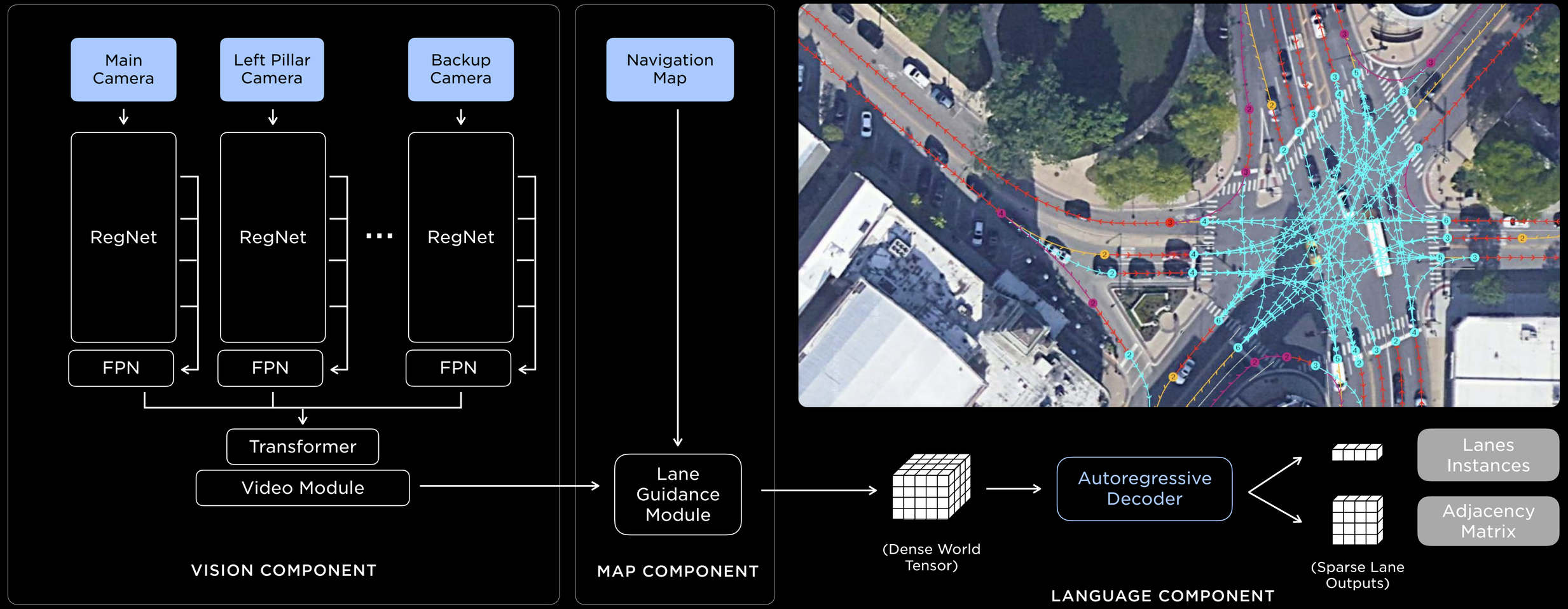
05 Full Self-Driving

Ashok Elluswamy

Architecture for a Generalized Vision System



Using State-of-the-Art AI for Modeling



Also Solve Complex Planning Problems Using AI

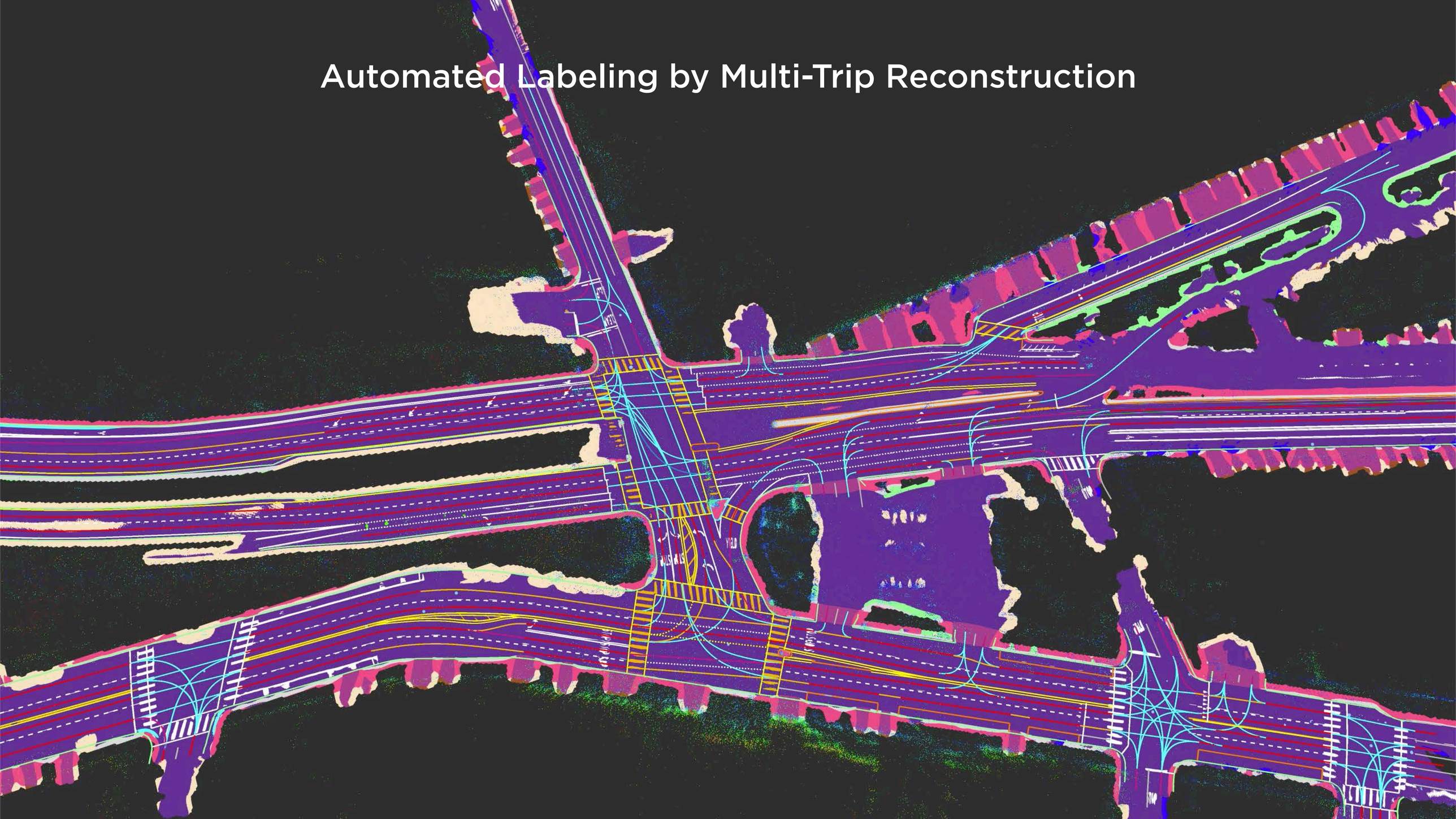
10ms

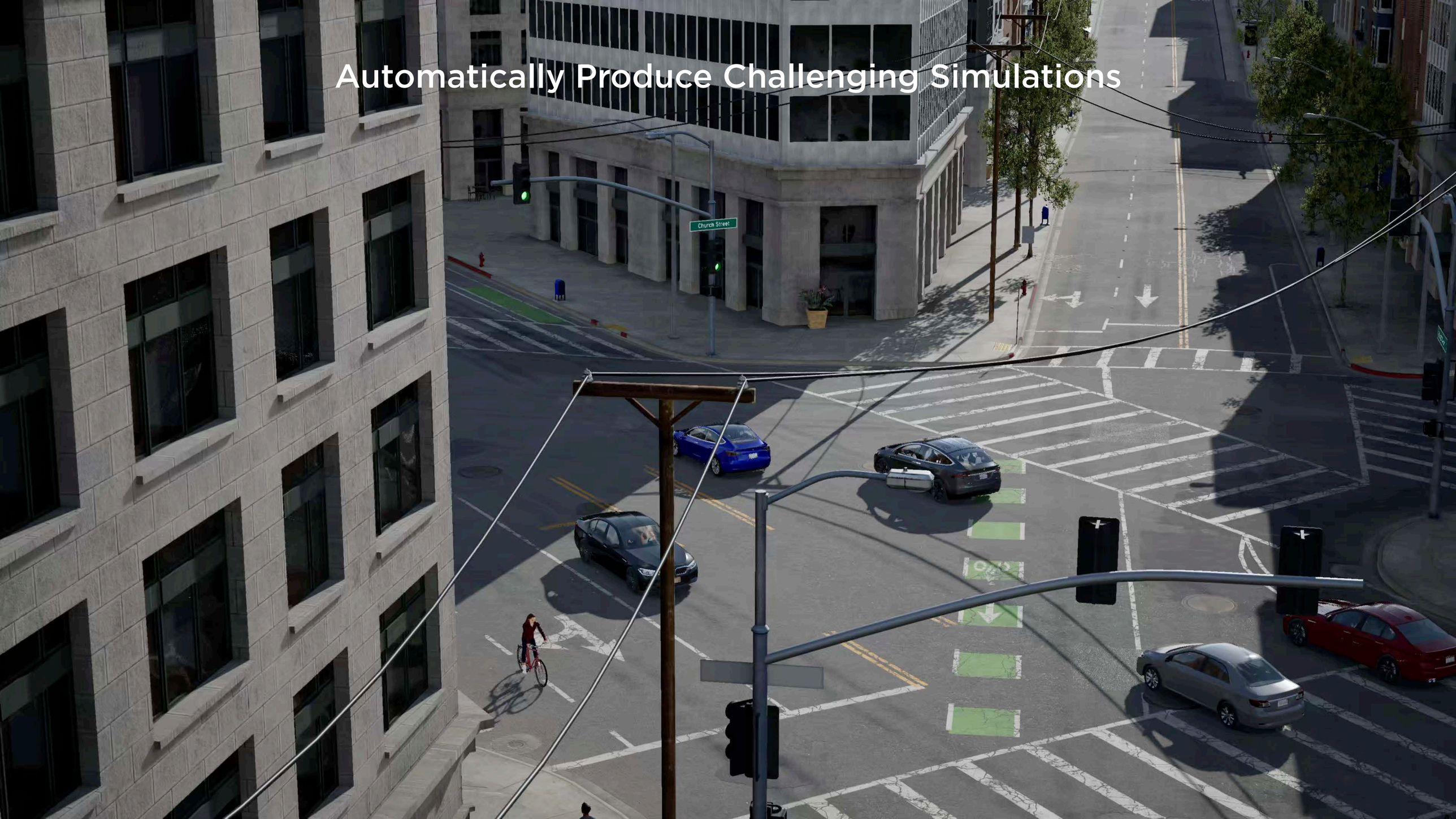
Joint Planning for Each Configuration

50ms

Desired Planner Execution Time

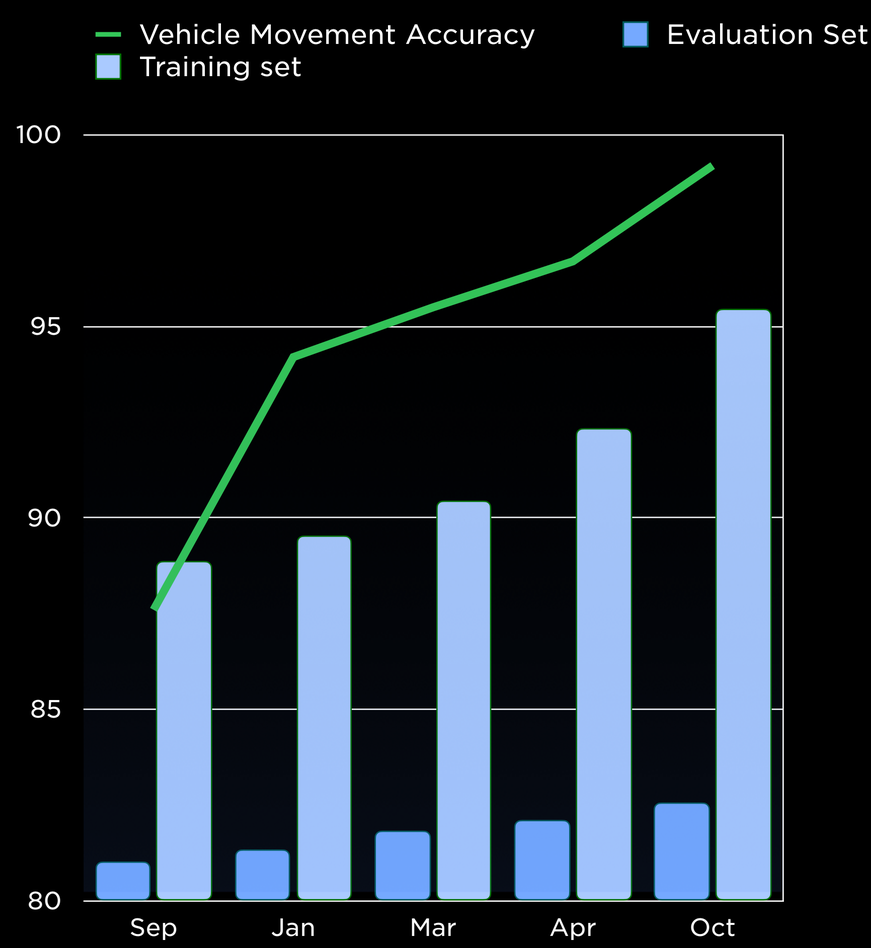
Automated Labeling by Multi-Trip Reconstruction





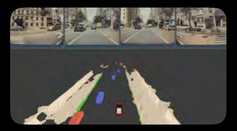
Automatically Produce Challenging Simulations

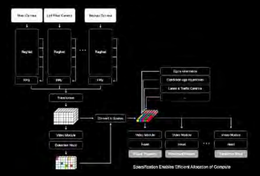
Data Alone Can Improve Corner Cases

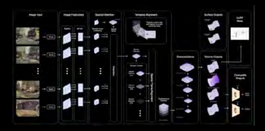


Tesla Fleet

Deploy

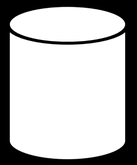




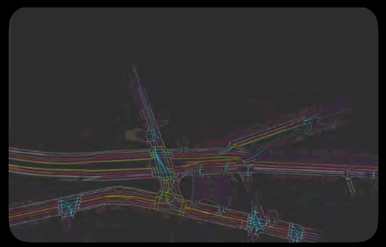


Train Online Model

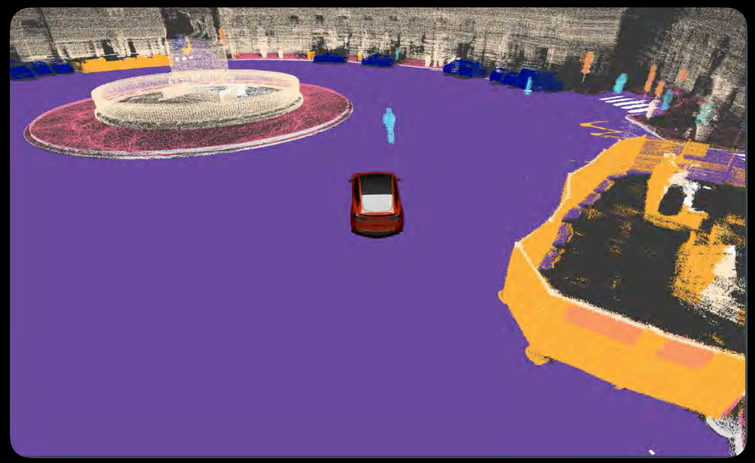
Training Set



Train Offline Model



Triage Shadow Testing



DATA ENGINE

Simulation Auto Label
Human Label

Mine Fleet

Corrrect Inaccuracy

Evaluation Set

Large Networks Need Large Clusters

14K GPUs

4K For Auto Labeling

10K for Training

30PB DISTRIBUTED VIDEO CACHE

160B Frames

500K Videos Rotating Through Cache/Day

400K Video Instantiations per Second:

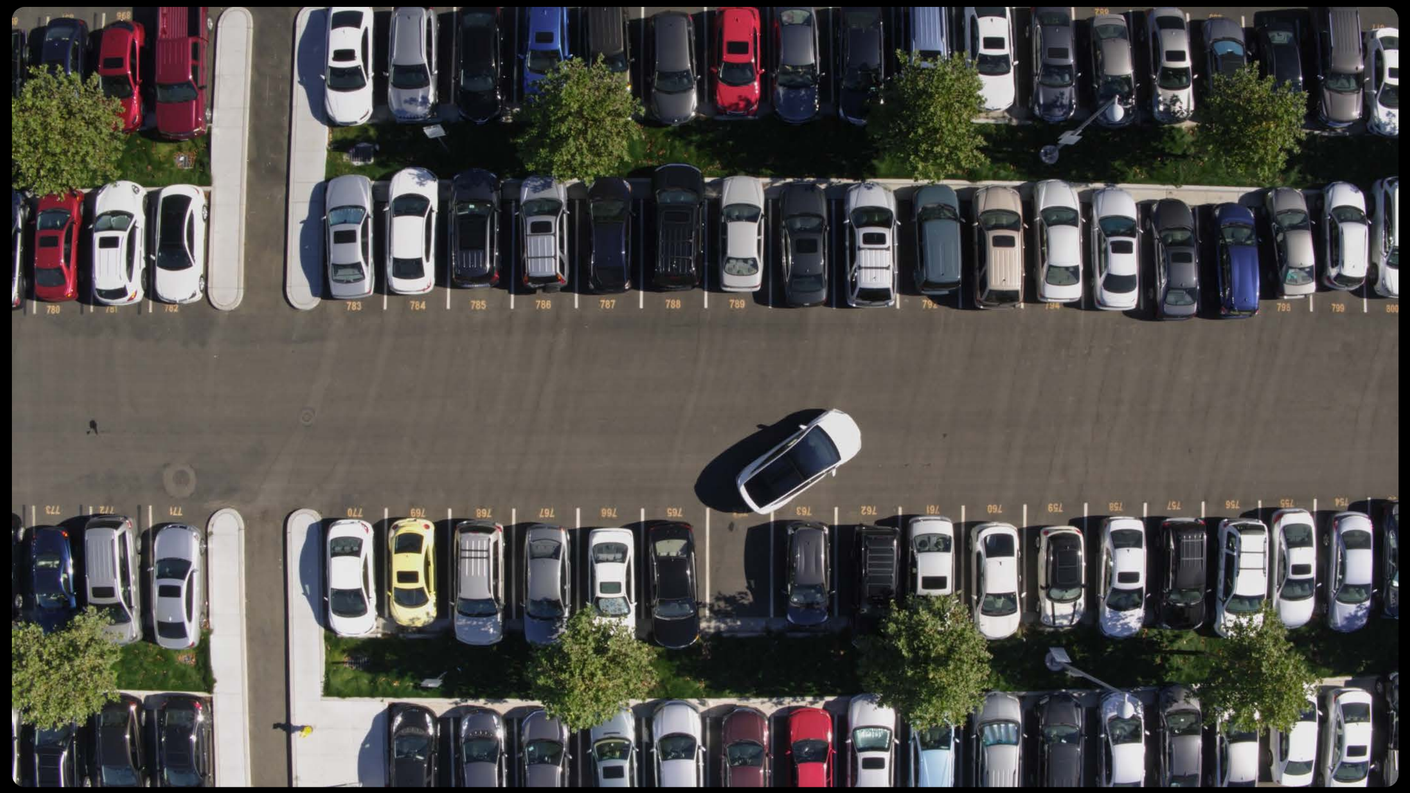
OCCUPANCY NETWORK RECIPE

Pick 1.44B frames

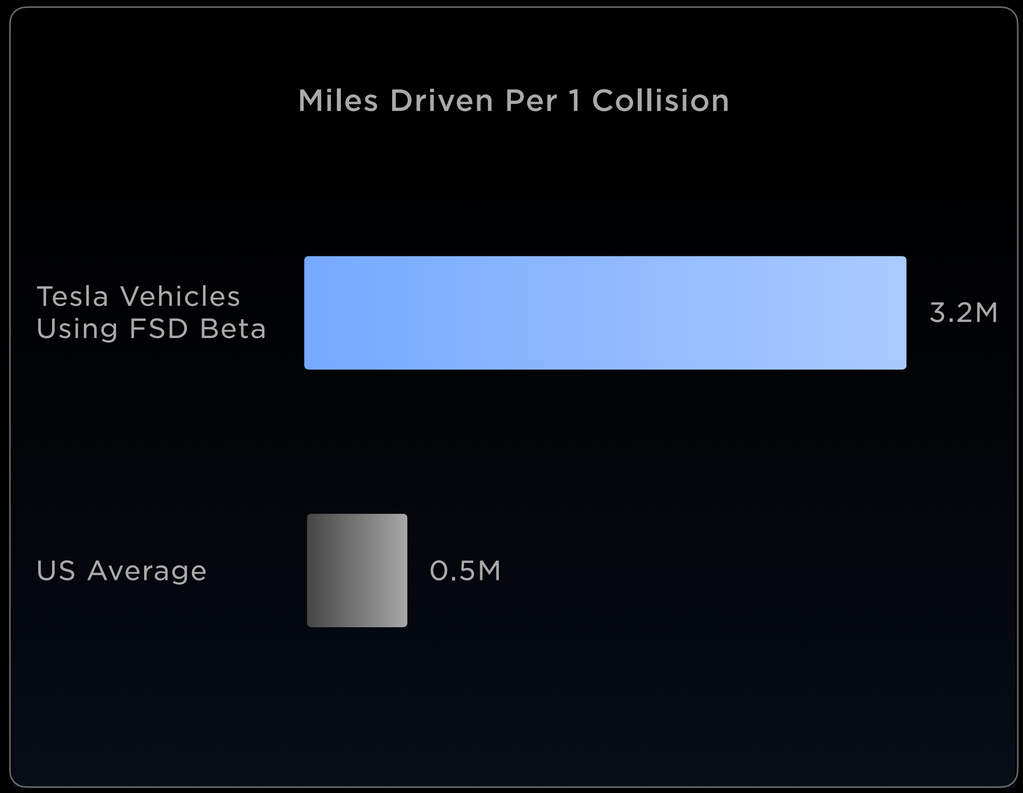
Train for 100.000 GPU-hours at 90 C•

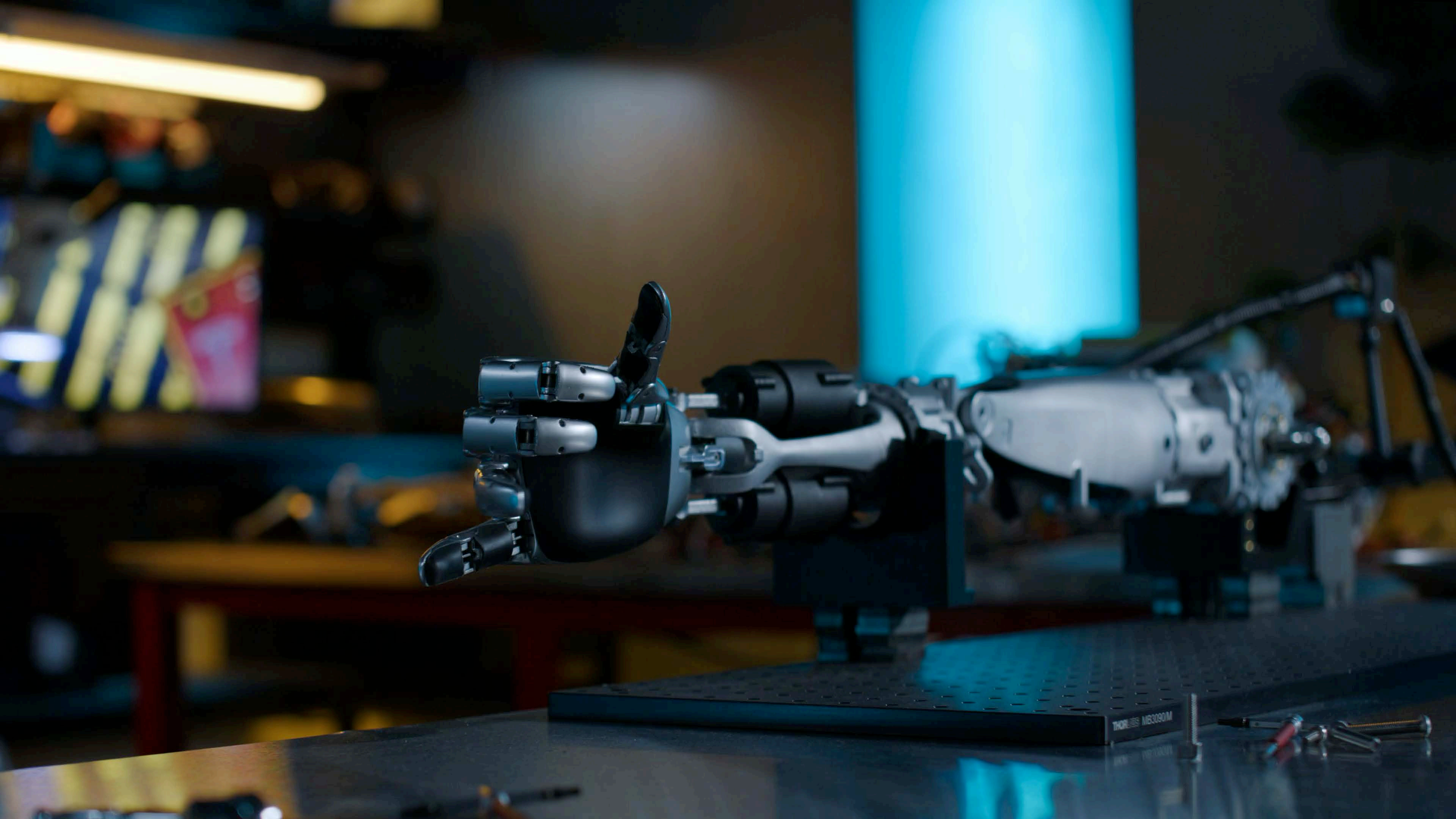
Scalable FSD = AI + Data + Compute

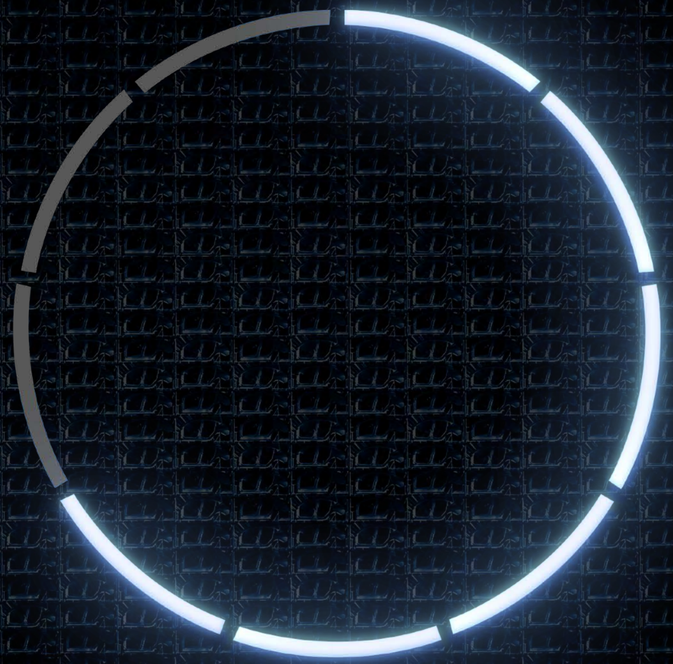
Higher Utilization



Higher Safety




THORLABS MB3090/M

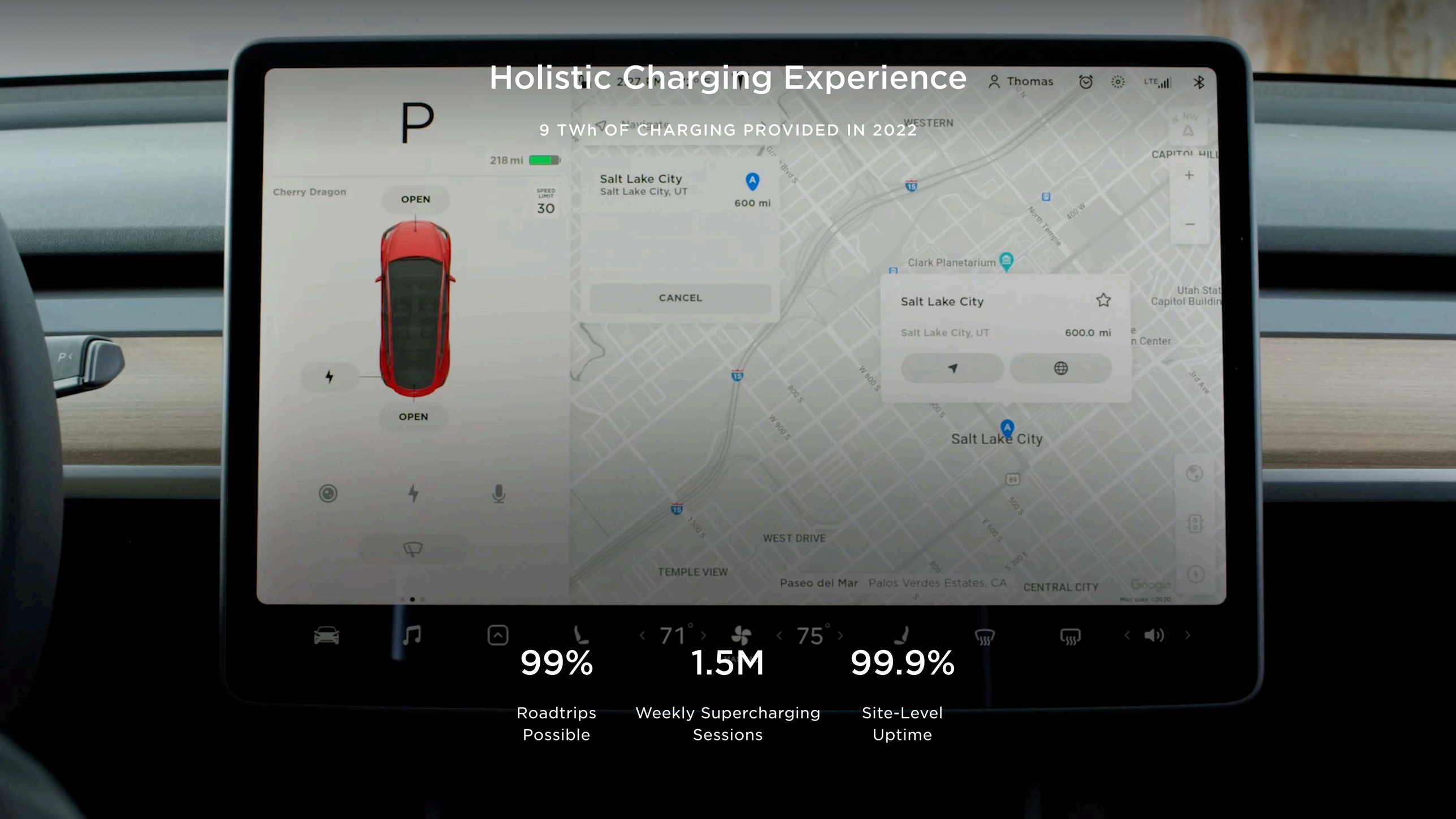


06 Charging

Rebecca Tinucci

Holistic Charging Experience

9 TWh OF CHARGING PROVIDED IN 2022



99%

Roadtrips Possible

1.5M

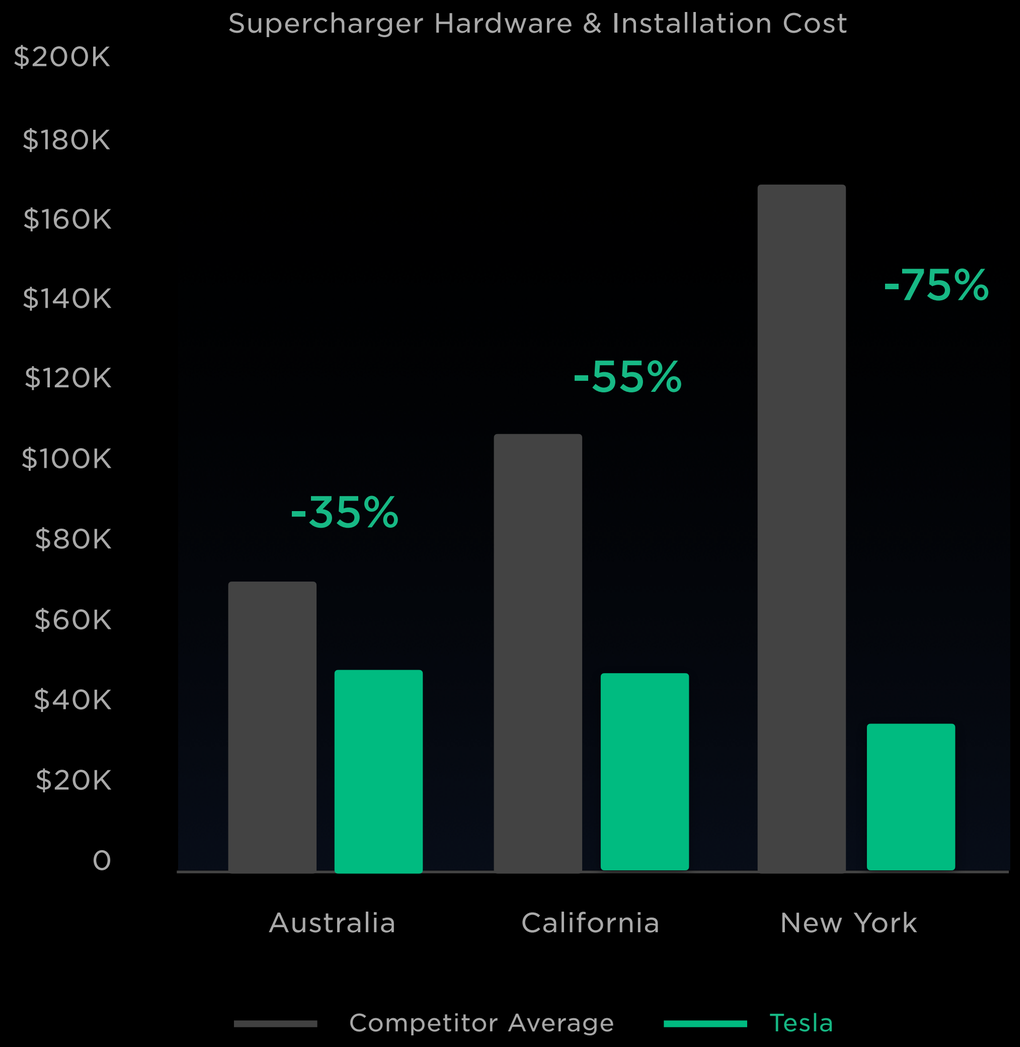
Weekly Supercharging Sessions

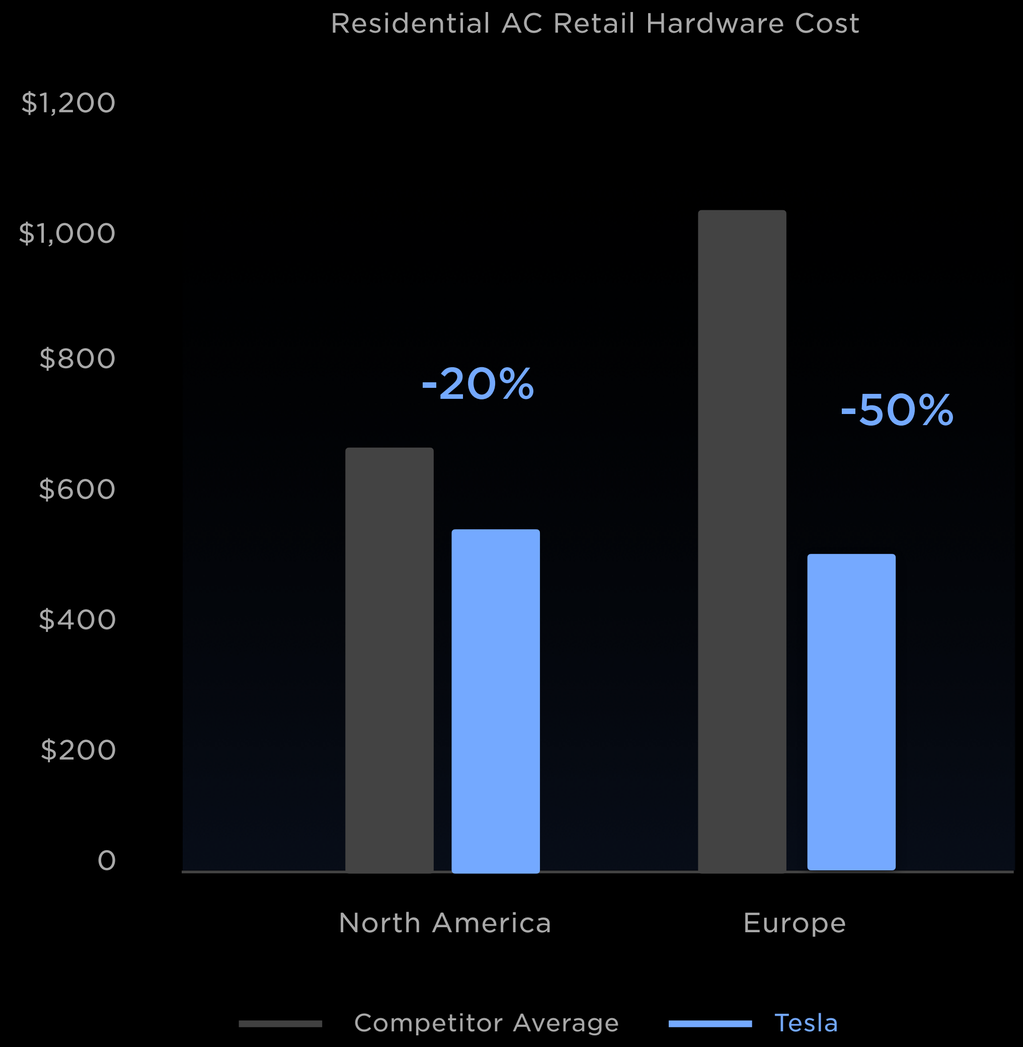
99.9%

Site-Level Uptime

How We Got Here

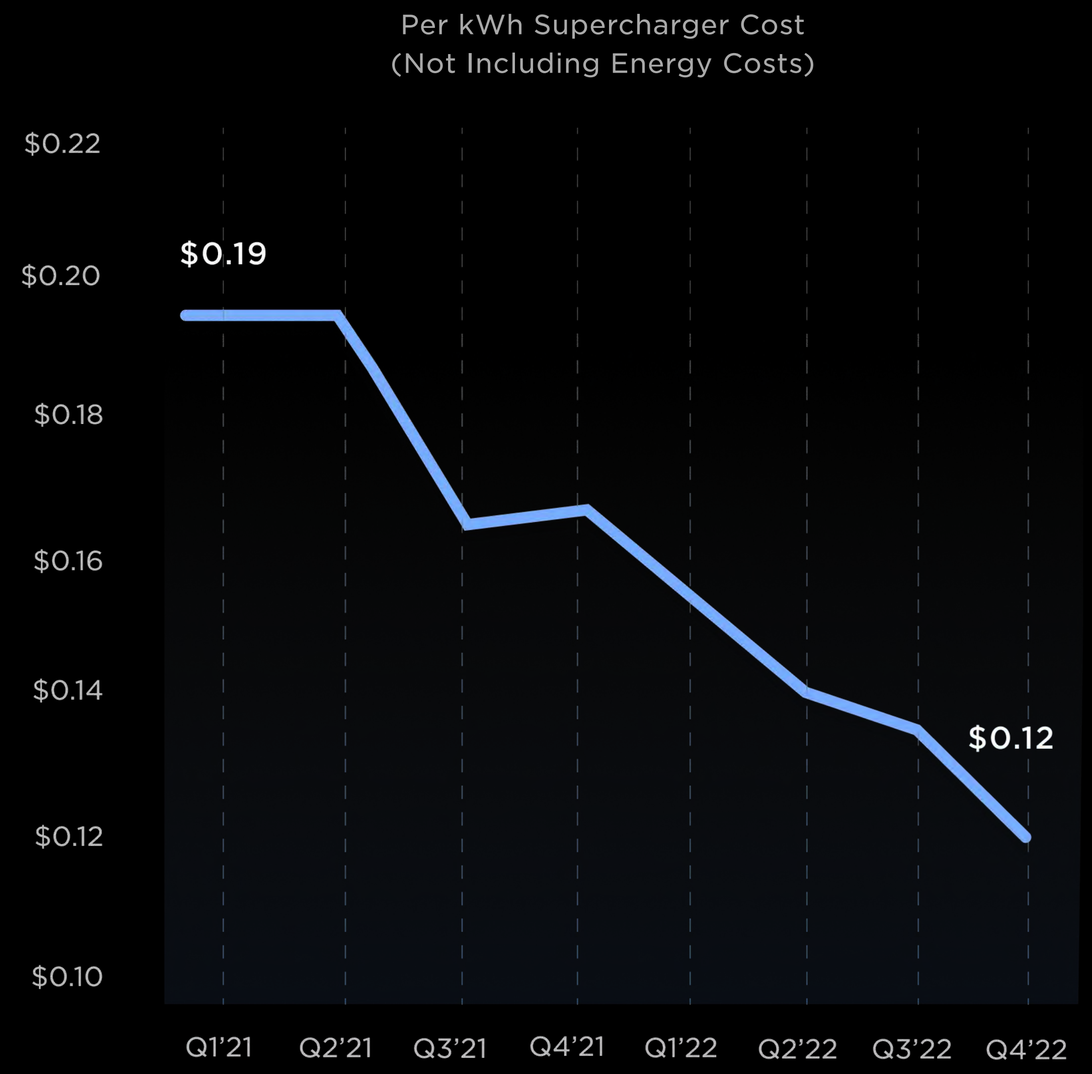
Industry's Lowest Deployment Costs



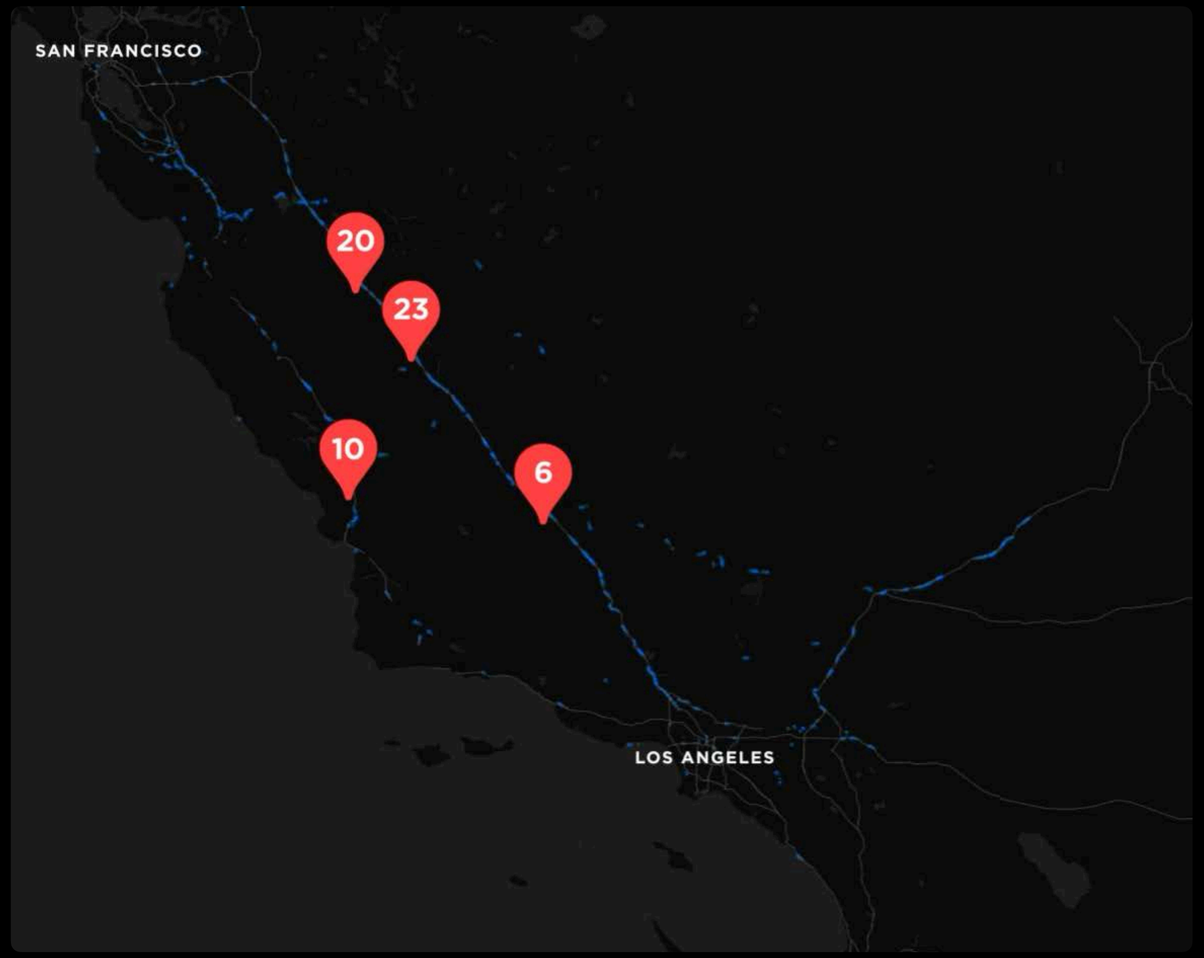


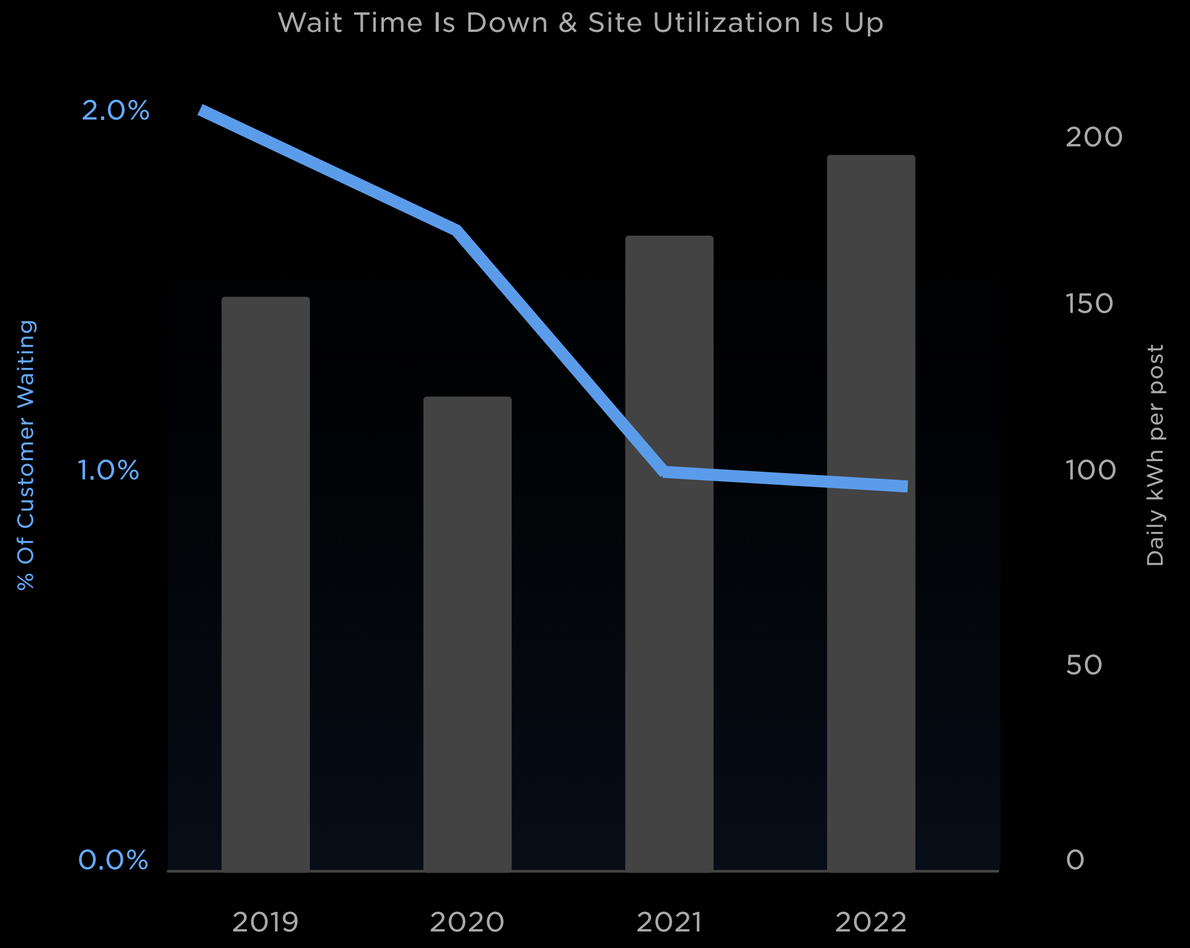
Pre-Built Superchargers Save Weeks of Install Time & Cost

40% Improvement in Per kWh Costs



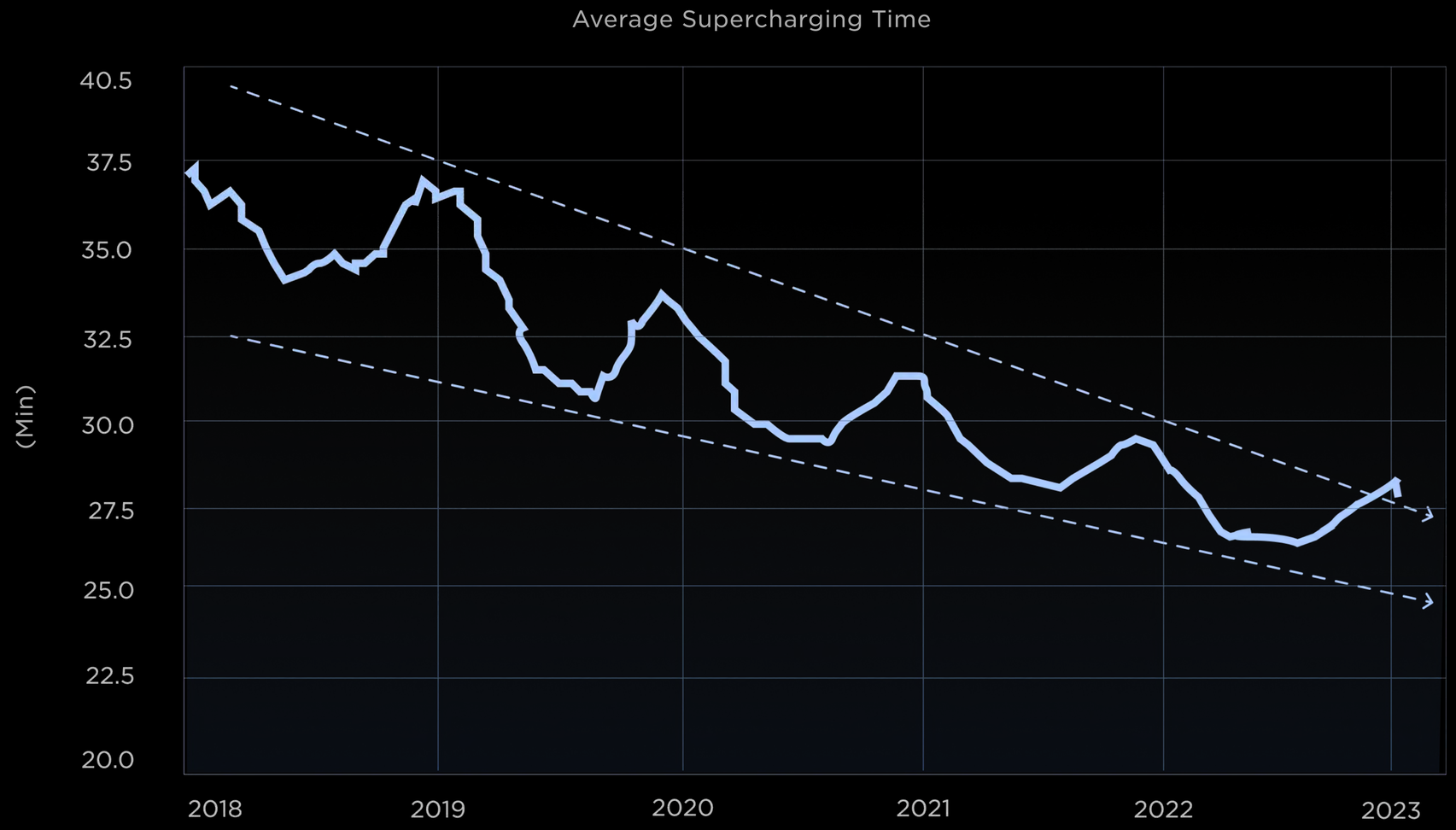
Trip Planner Powers Efficient Routing





30% Quicker Charge Times

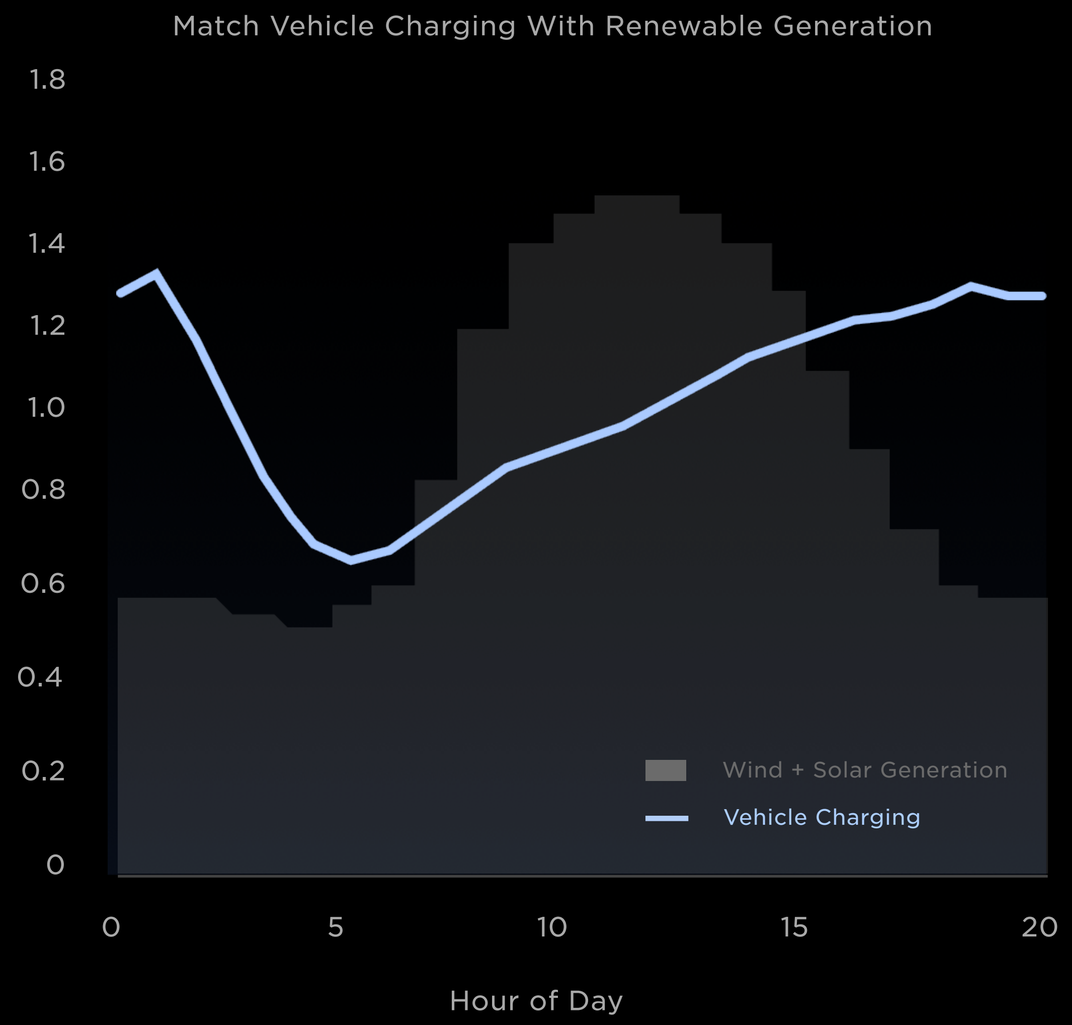
- Transition to V3
- Efficient Routing With Trip Planner
- Supercharger Density Increasing
- Vehicle Efficiency
- Battery Pre-Heating
- Customer Education



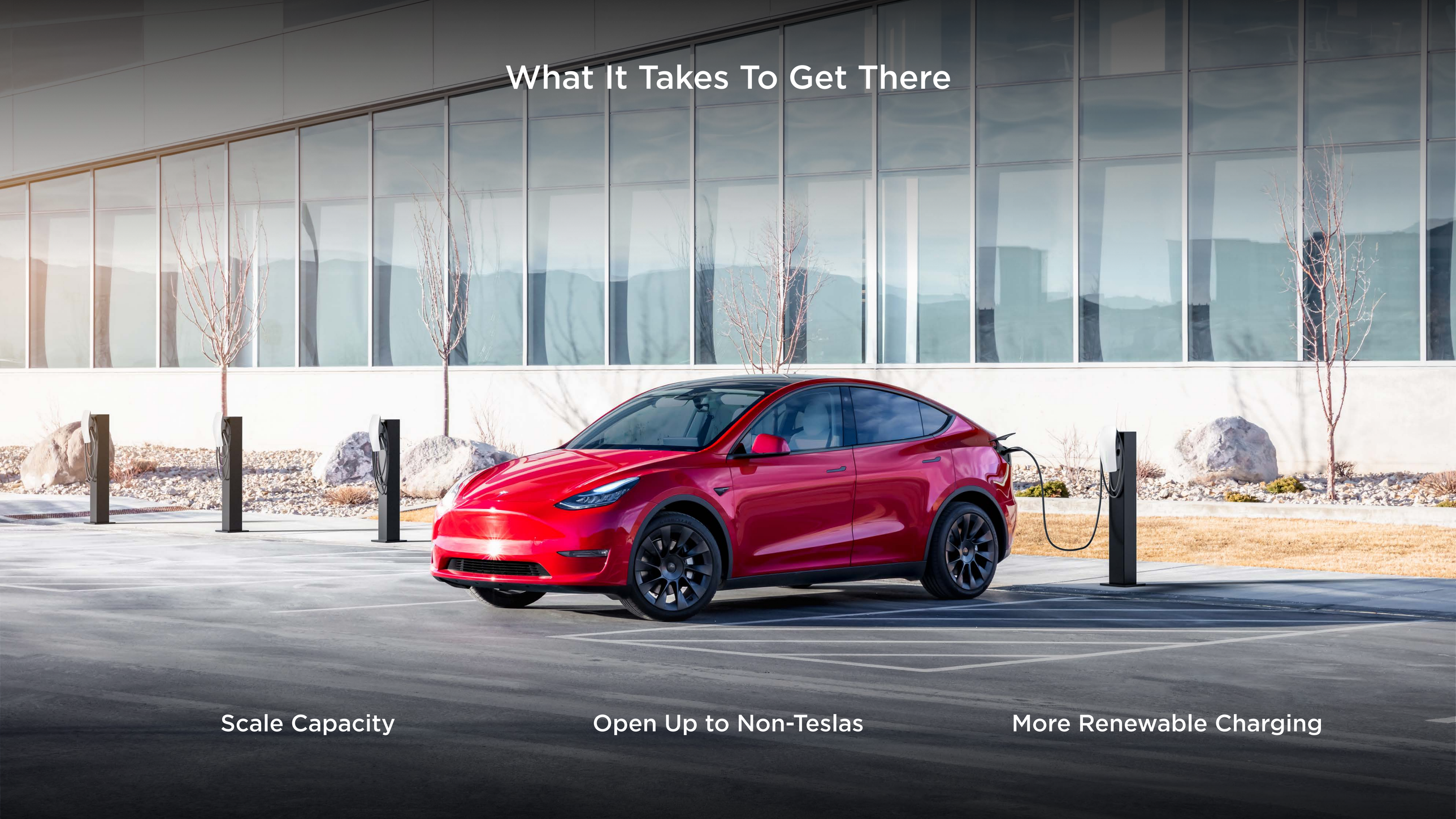
Charging the Fully-Electrified Fleet

Ready To Serve All Vehicles

Maximize Convenient, Renewably-Powered Daytime Charging



What It Takes To Get There

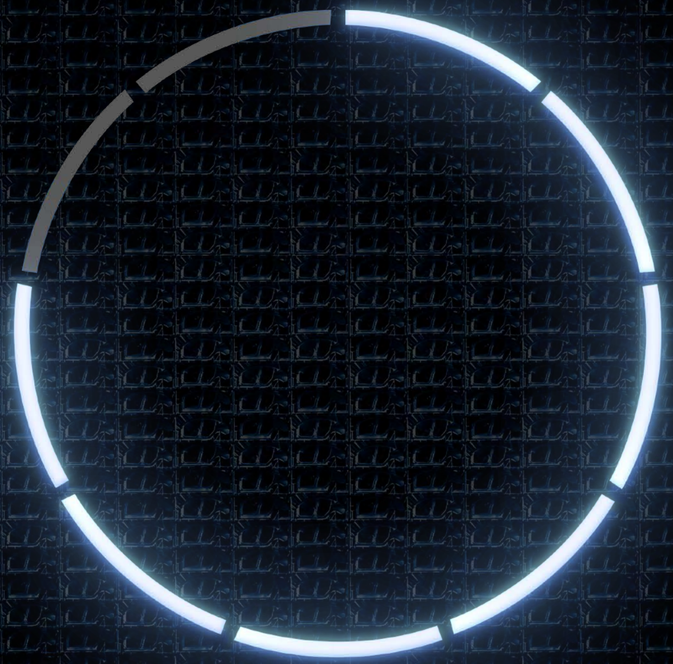


Scale Capacity

Open Up to Non-Teslas

More Renewable Charging

Can’t Forget To Do Cool S***



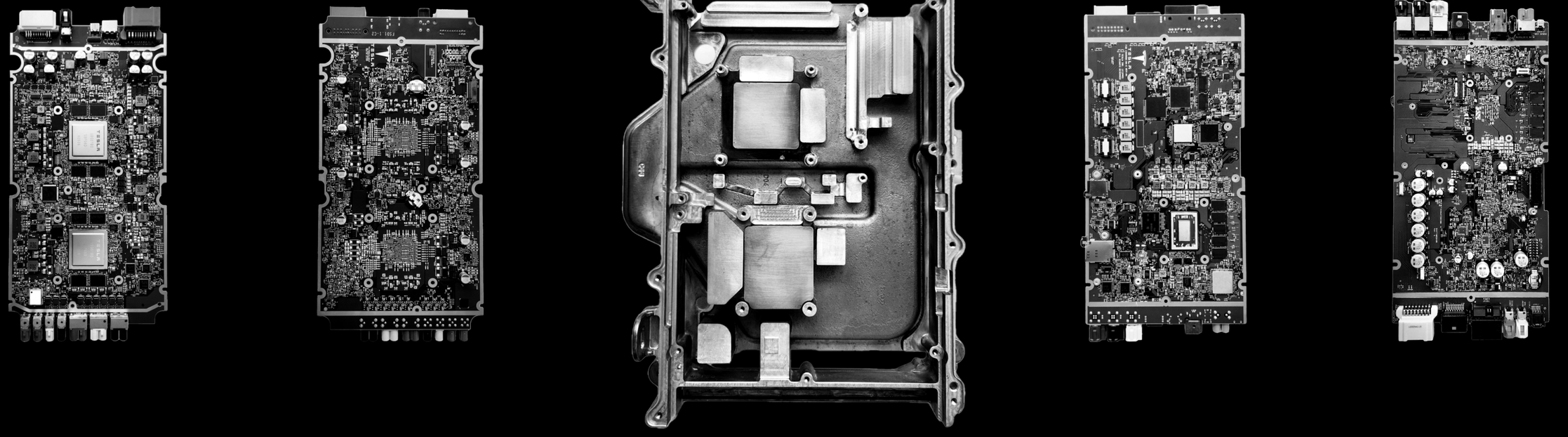
07 Supply Chain

Karn Budhiraj, Roshan Thomas

Tesla Supply Chain

	TIER 1 PARTS	TIER 2 PARTS
	3.4K	21K
	2.1K	19K
	2.8K	7K

The Most Powerful In-Vehicle Computer



7K+

Components

1.4ms

Between Each Component Assembled Into a Car Computer

95%

Reduction in Labor

Inbound Complexity

16M
Pallets & Racks
Received in 2022

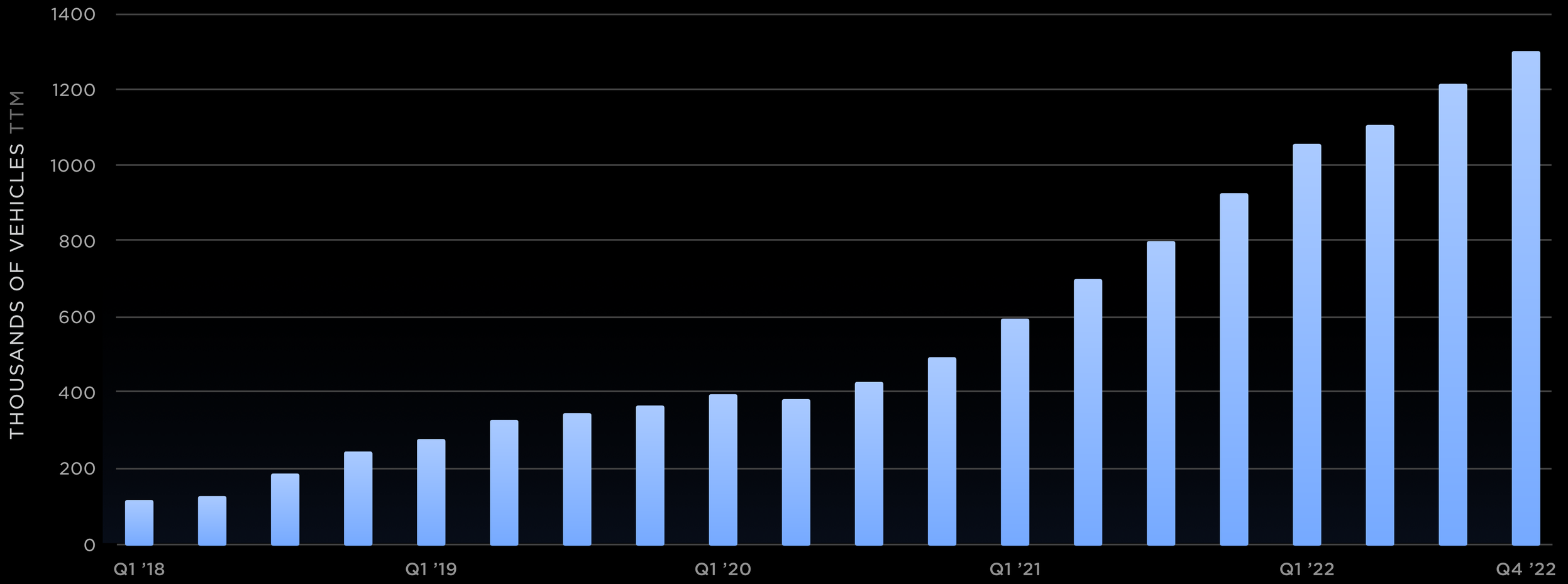
1B
Electronic Components
Shipped Each Week

685
Global Service Locations

45
Countries

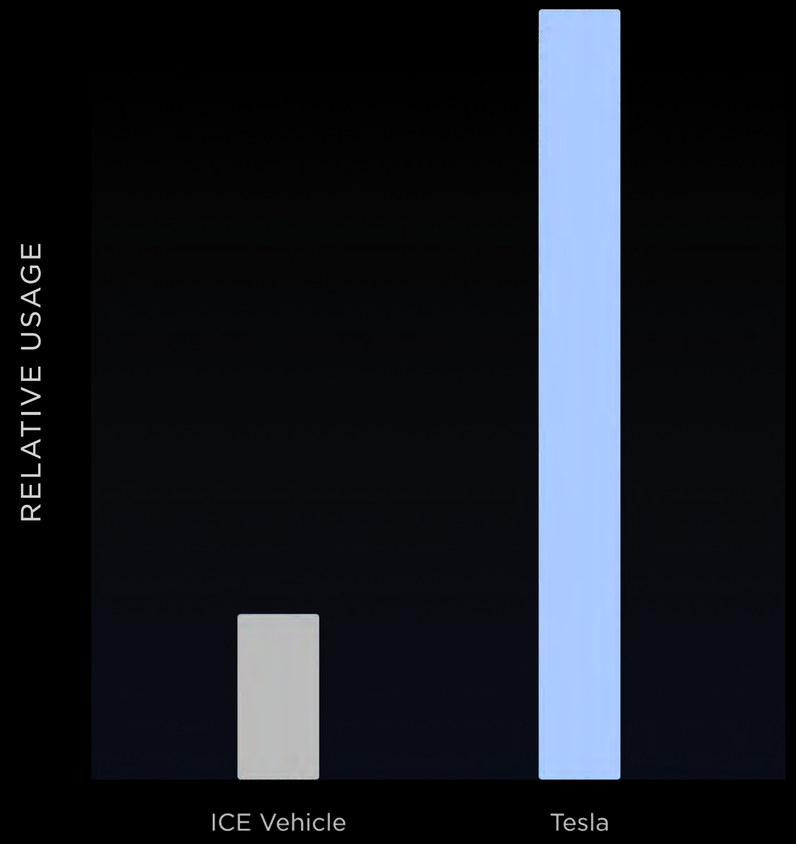
Supply Chain Hell

Scaling Against the Odds



Semiconductor Industry Can Support Our Growth

Tesla with FSD Hardware Uses More Semiconductors Than an ICE Vehicle

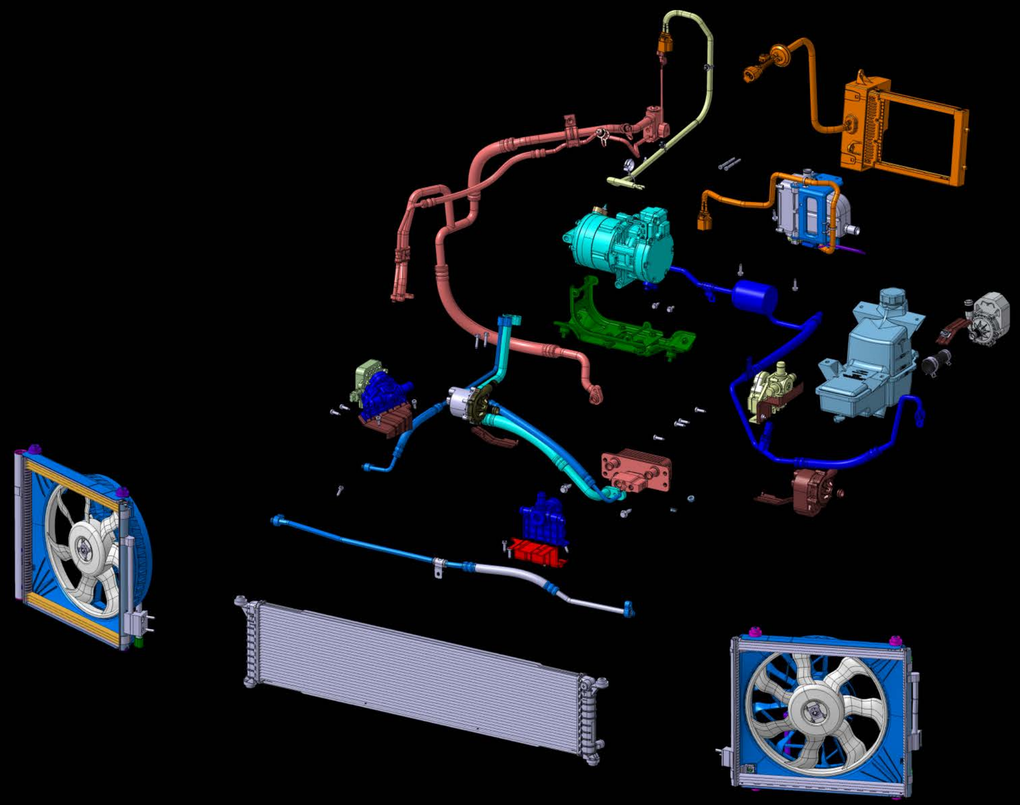


	2023	FUTURE
VEHICLES	1.8M+	20M
SILICON WAFERS USED 12” EQUIVALENT	0.7M	8M
GLOBAL WAFER CAPACITY	~135M	200M
TESLA SHARE	0.5%	<5%

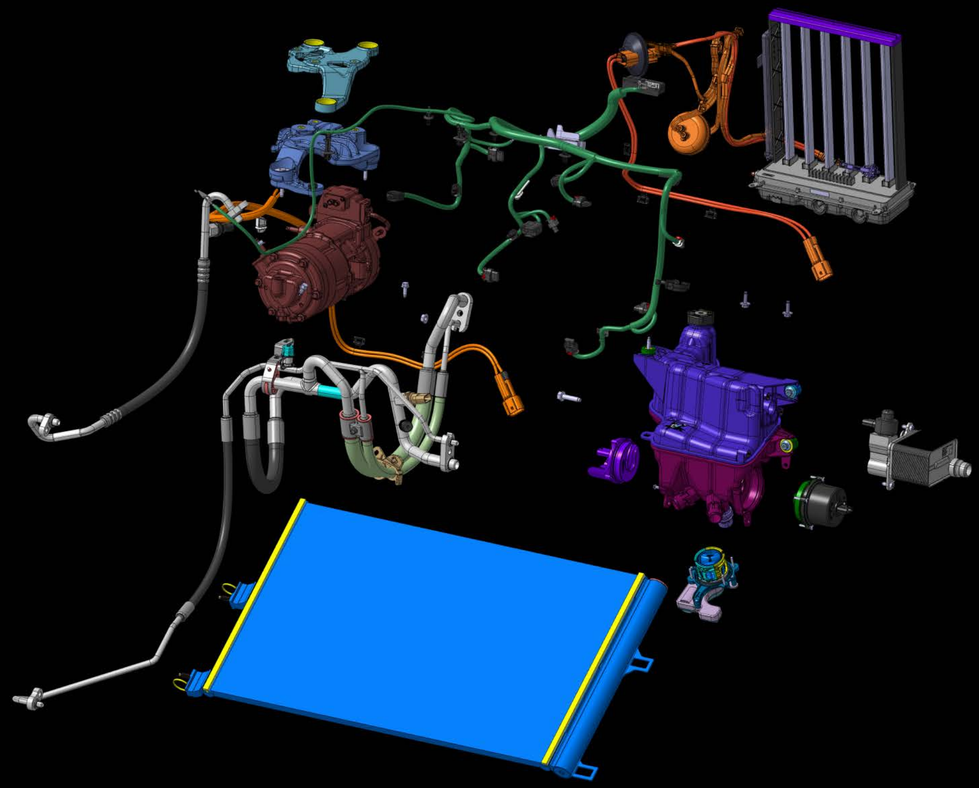
Source - ASML.com for Global Wafer Capacity

Before Heat Pump

Legacy Model S/X

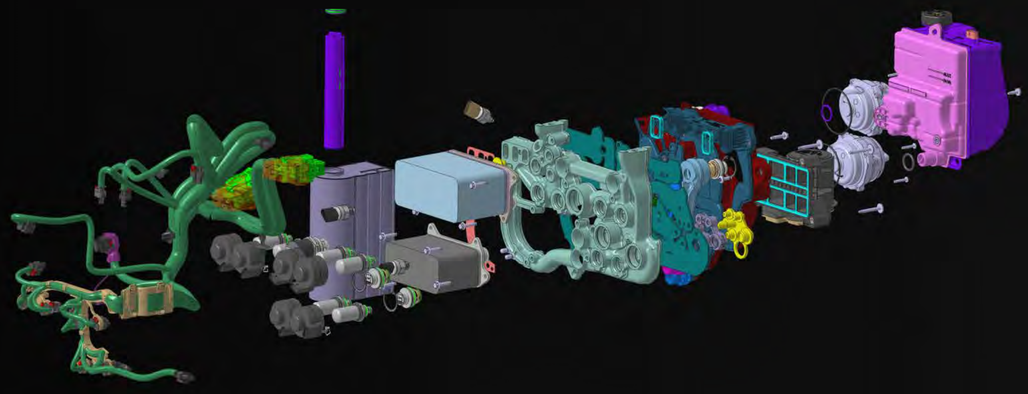


Legacy Model 3



Next Generation Thermal Architecture

HEAT PUMP



100+

SUBCOMPONENTS

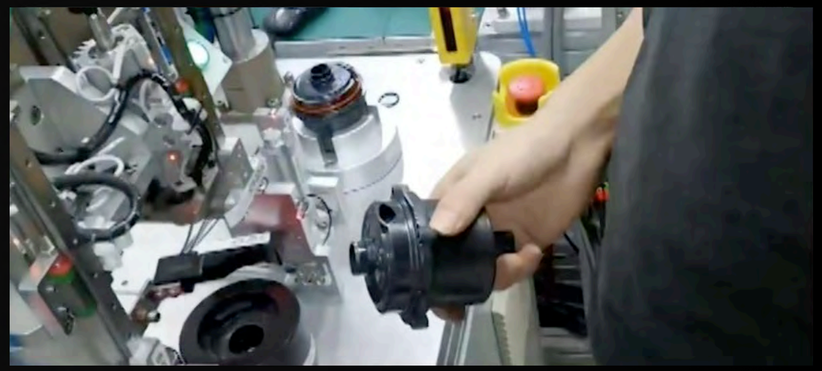
Numerous Manufacturing Processes:

Forging, Stamping, Injection Molding, Brazing, Heat Treatment, Plastic Welding, Water Jetting, Machining, Ultrasonic Cleaning, Air Flushing, Soldering, Leak Testing, Complex Assembly

Evolution of the Heat Pump Line

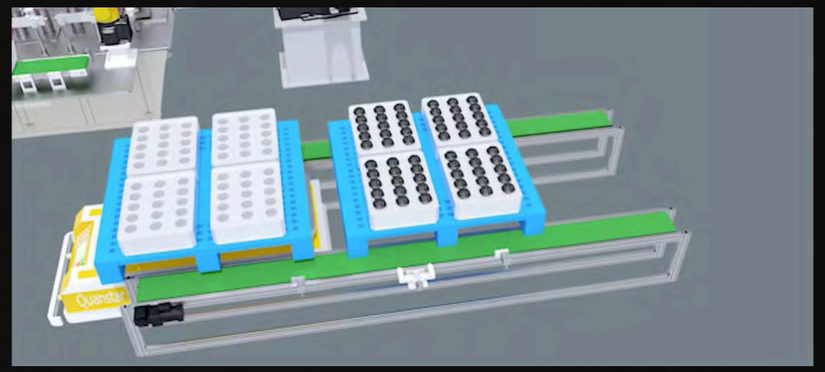
WHERE WE **STARTED**

MANUAL



SEMI-AUTOMATED

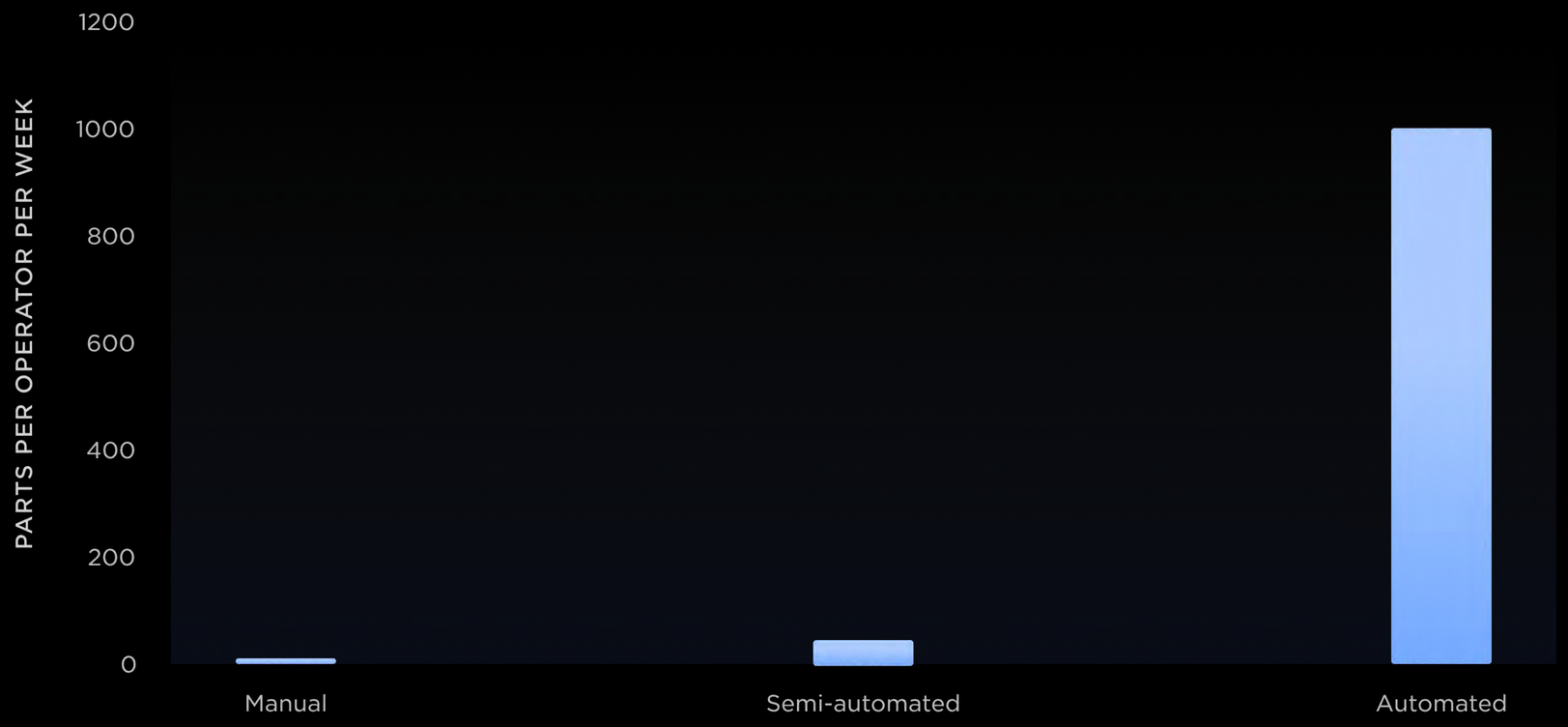
WHERE WE ARE **NOW**



SIMULATED

AUTOMATED

Doing More With Less



99%

Reduction in labor

99.995%

Of heat pumps received at Tesla are of high quality

7 sec

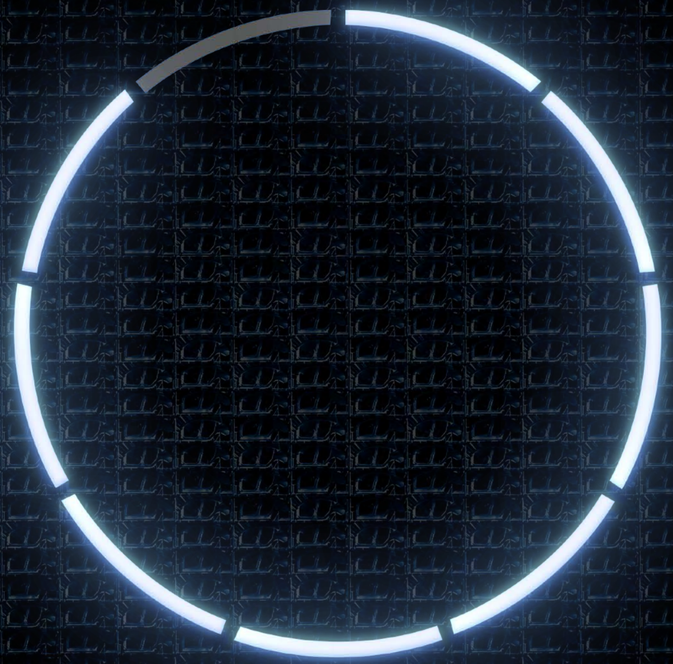
Between each heat pump rolling off a supplier line

Efficiency, Automation & Cost

Fewer Parts, Fewer Components

Do More With Less

Deep Involvement With Suppliers



08 Manufacturing

Tom Zhu, Drew Baglino

We Build Ultra High Volume Factories

4	65K	~2M
Vehicle Factories	Manufacturing Employees	Total Annual Build Capacity

Completed Gigafactory Shanghai in 9.5 Months

Hitting New Milestones in 2023

FOR TOTAL VEHICLE PRODUCTION

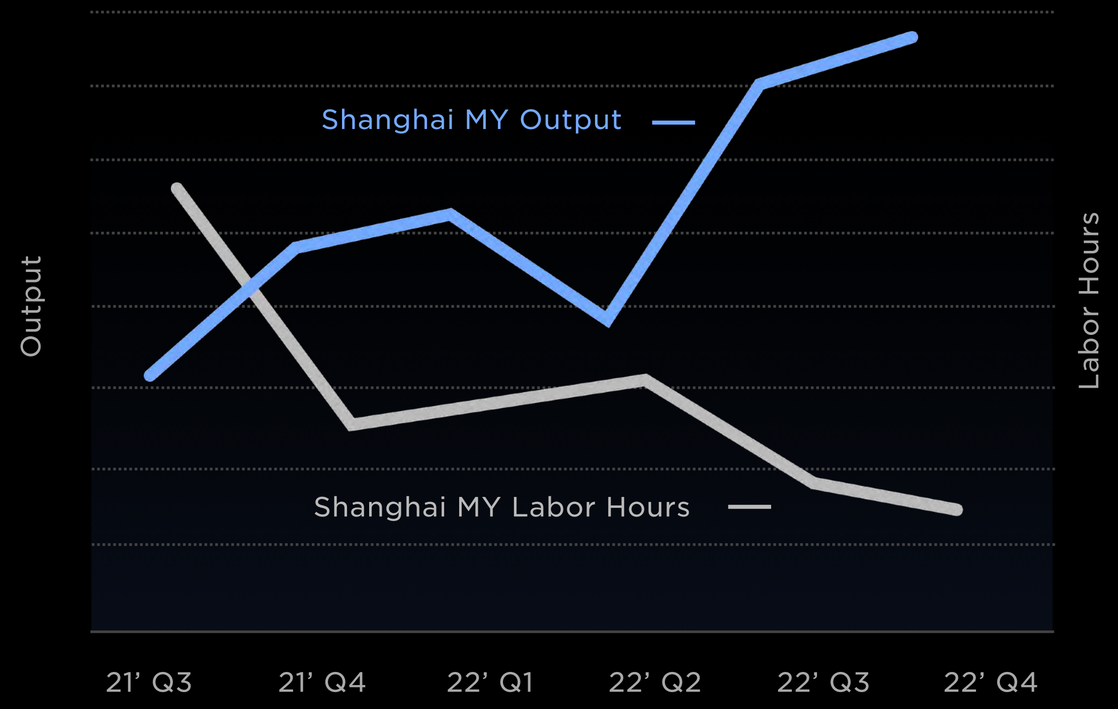
First Million
12 Years

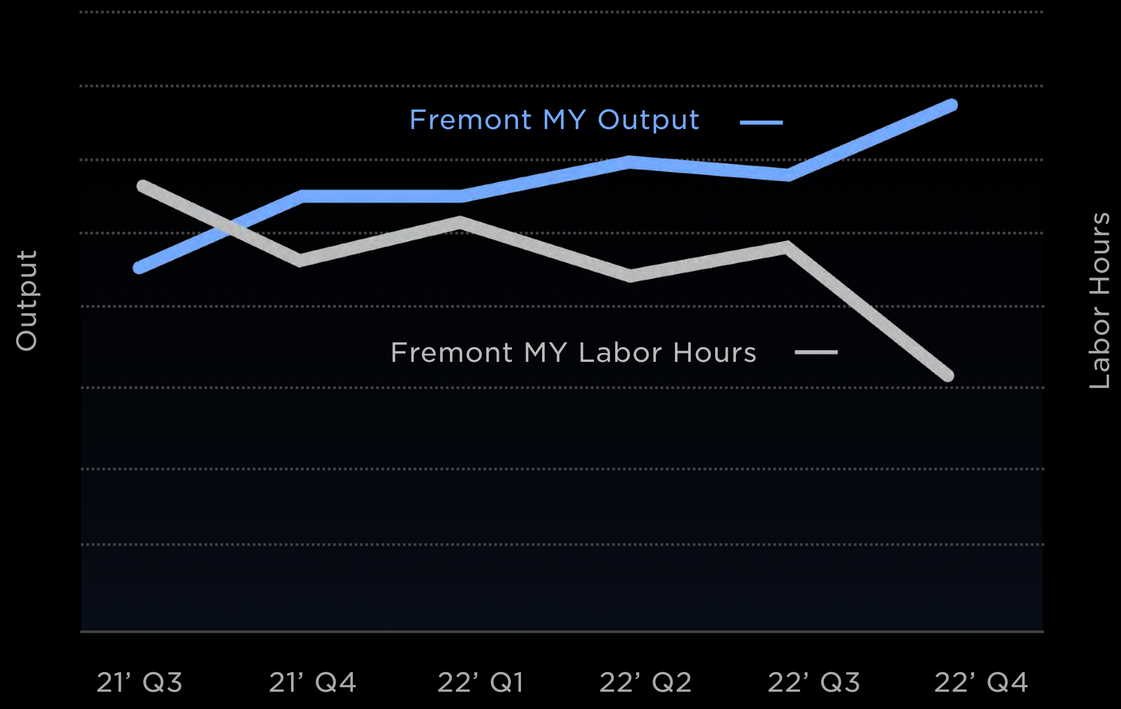
4,000,000

Fourth Million
7 Months

What It Takes To Ramp a Gigafactory

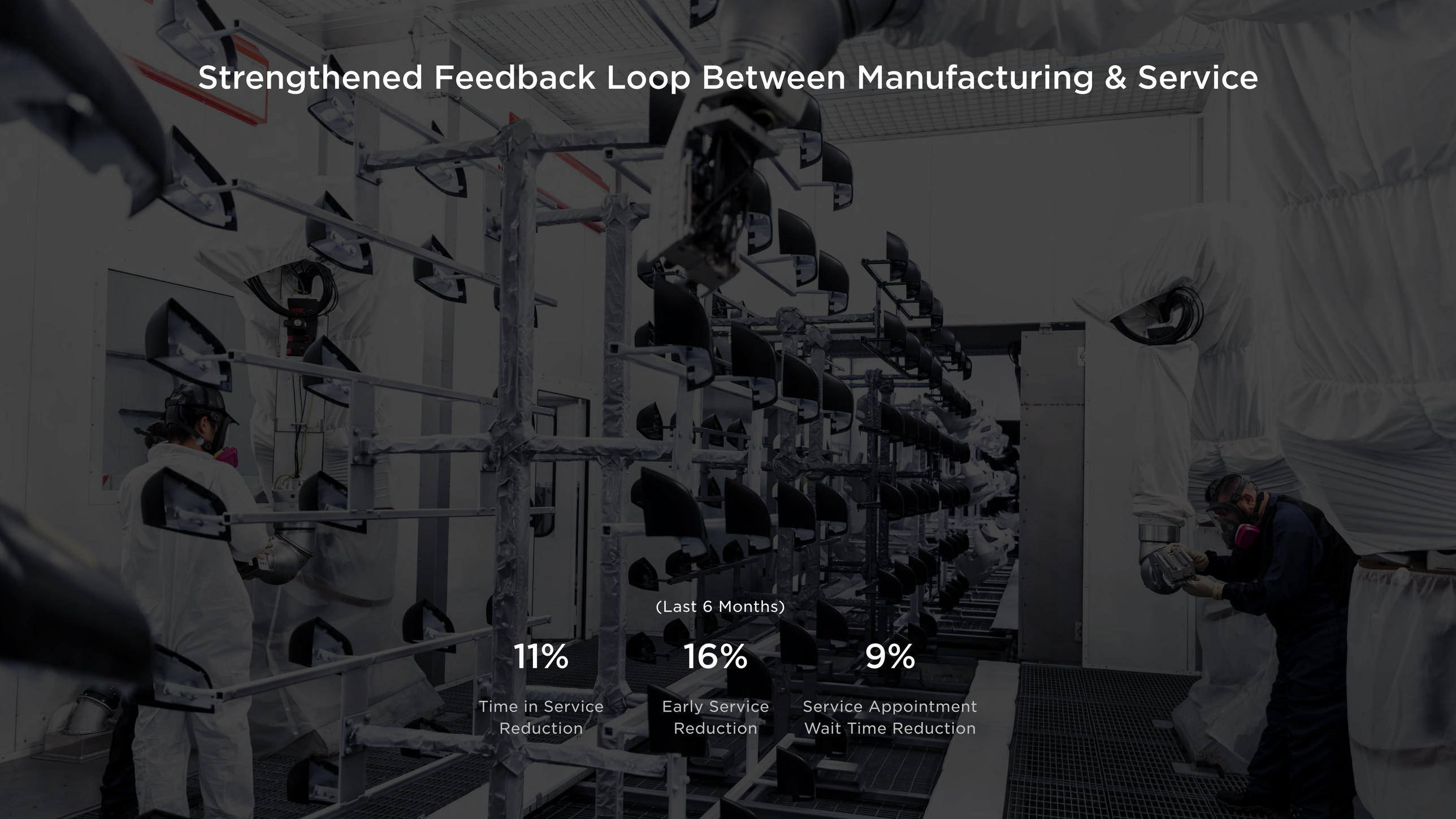
90% OVERALL EQUIPMENT EFFECTIVENESS & 45 SECOND CYCLE TIME






Question
Delete
Simplify
Accelerate
Automate

Strengthened Feedback Loop Between Manufacturing & Service



(Last 6 Months)

11%
Time in Service Reduction

16%
Early Service Reduction

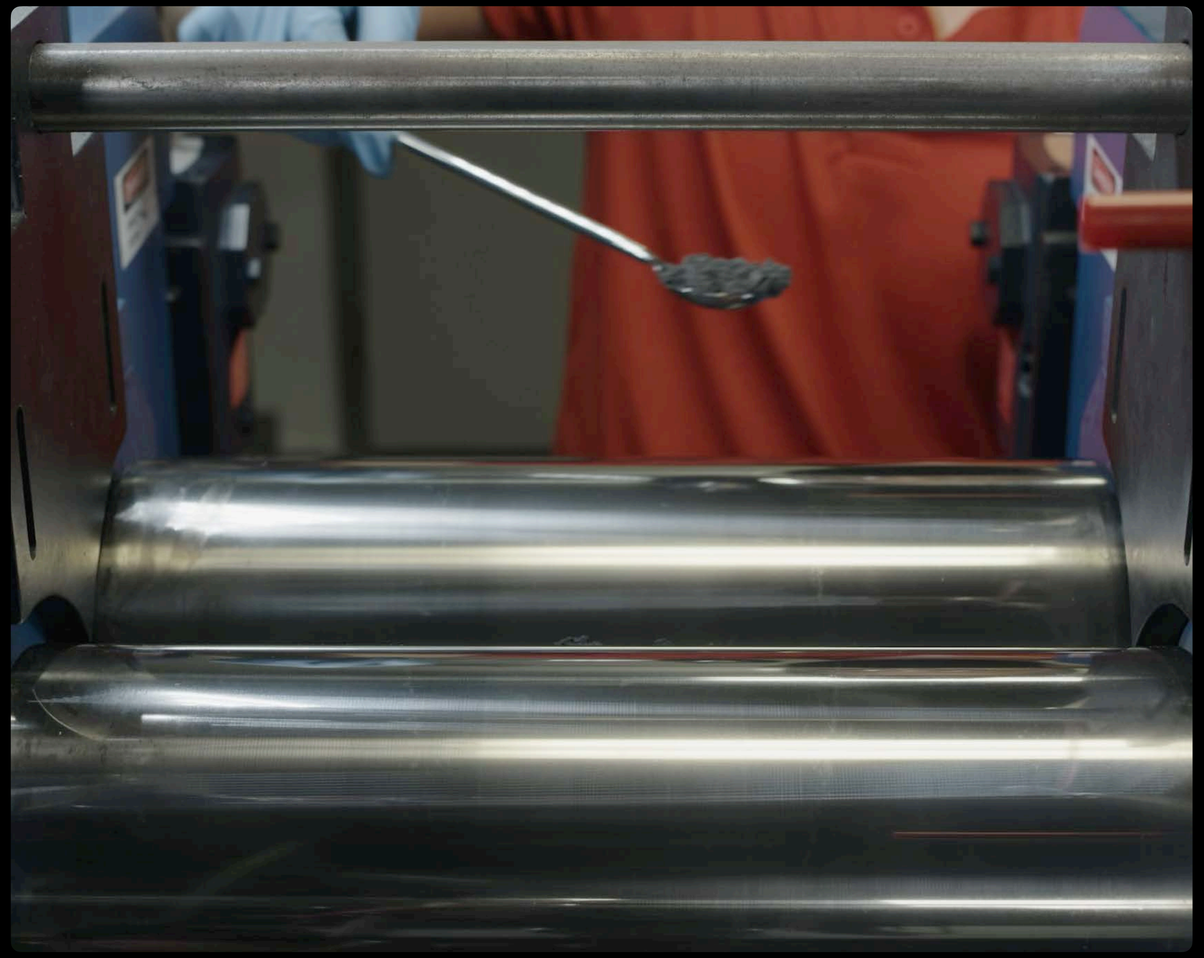
9%
Service Appointment Wait Time Reduction

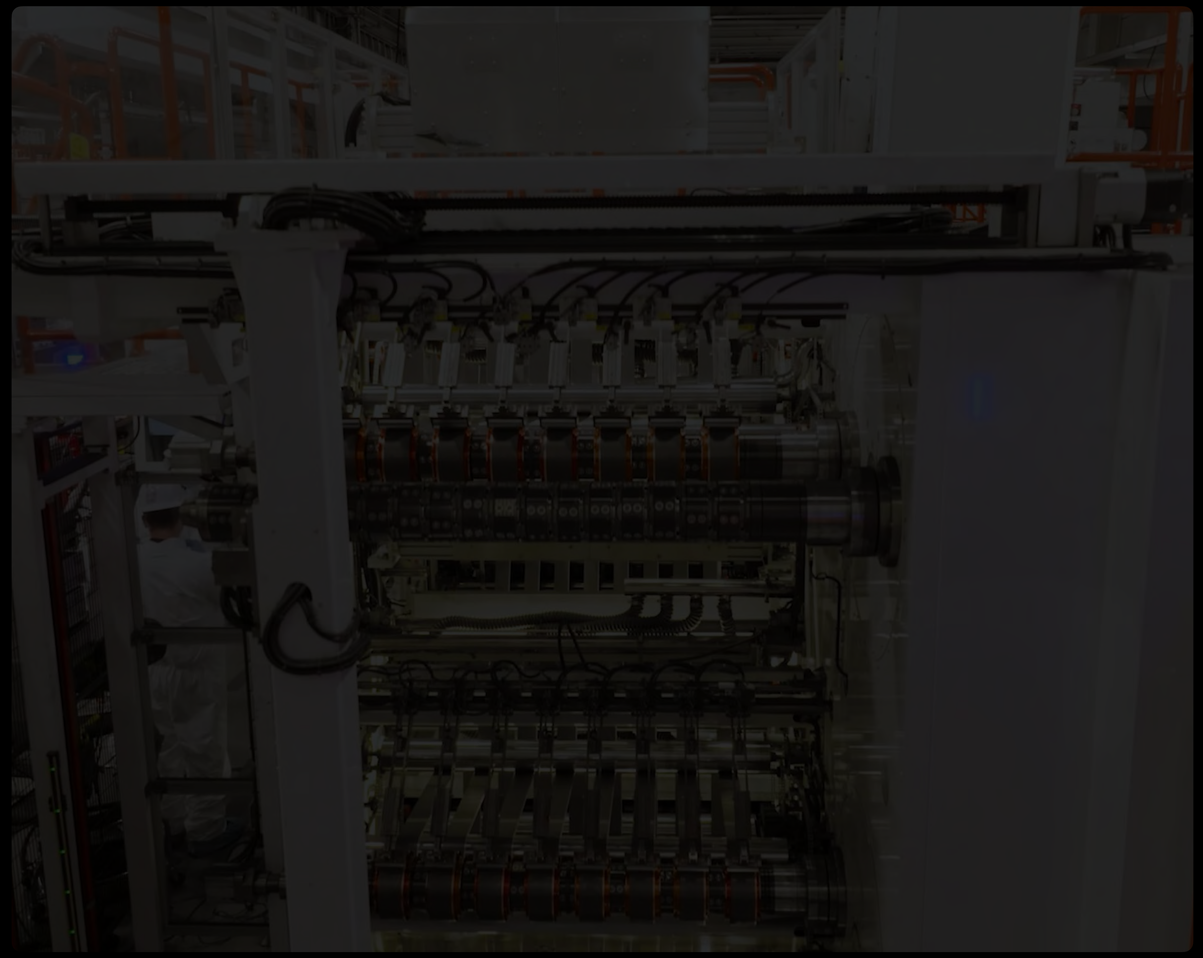
Tesla Vehicle Footprint

& MORE TO COME ;)

Future Cell Factories, Too

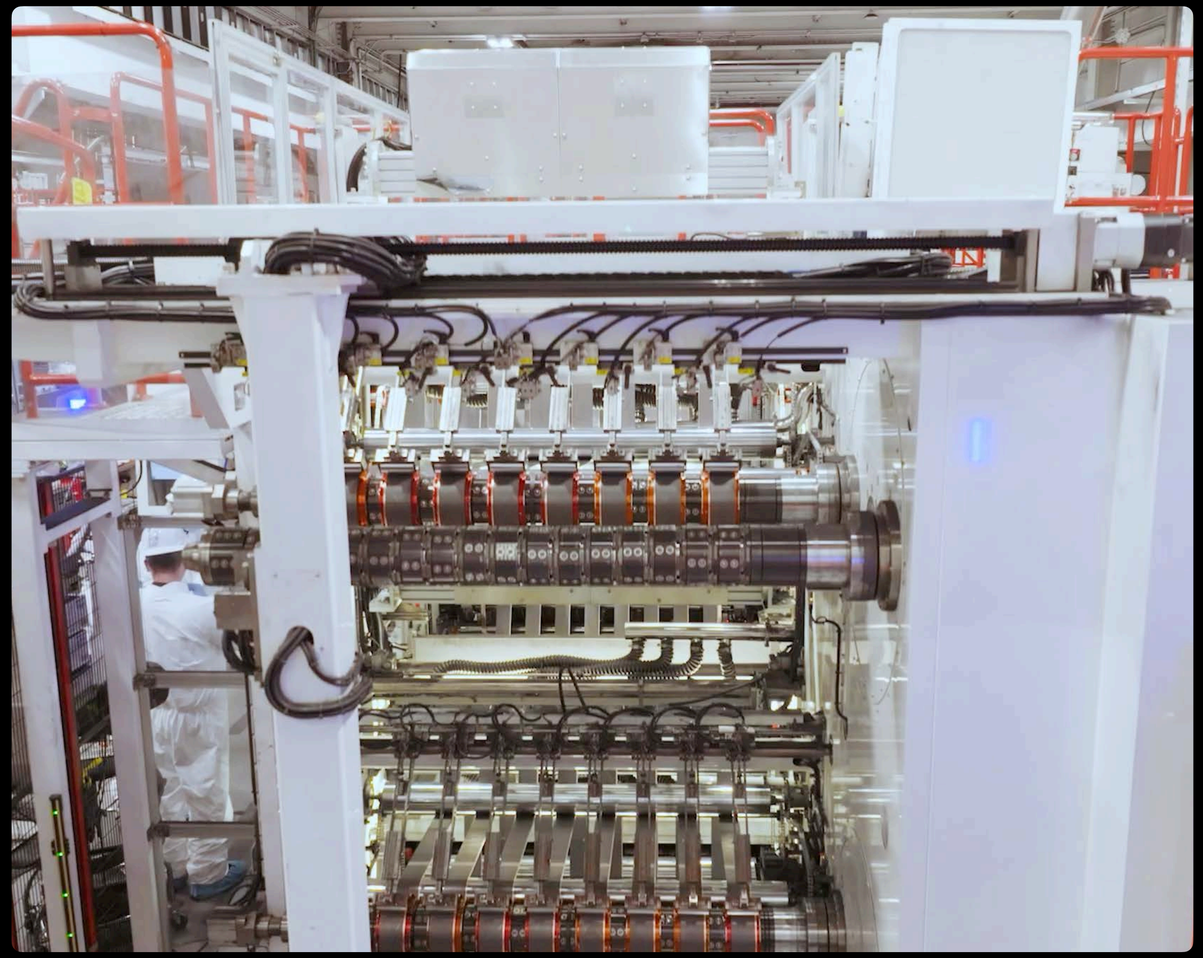
THERE IS NO SPOON



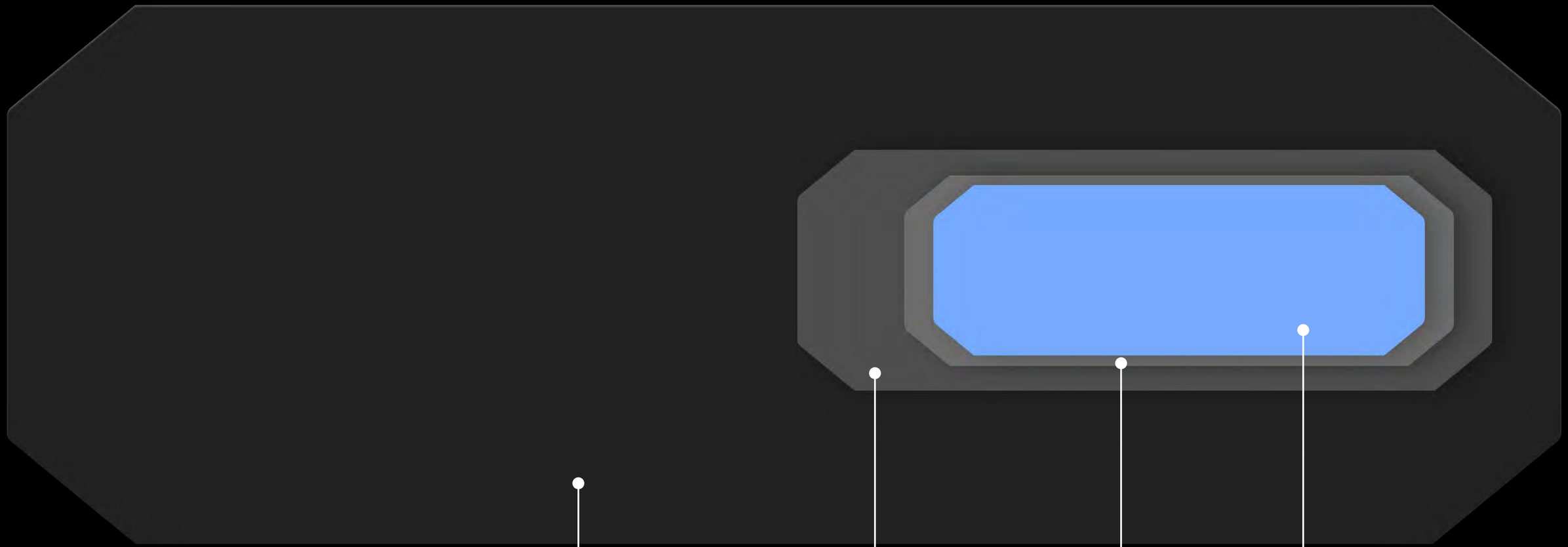


Future Cell Factories, Too

THERE IS NO SPOON



Simplicity Up, Investment Down, Scale Up



	Typical 2170 Cylindrical	**Fremont** 4680	**GFTX** 4680	**GFNV** Future 4680
Parts	17	16	15	15
Processes	33	23	21	21

And Upstream Materials Where Necessary

50 GWh/Year Corpus Christi Lithium Refinery

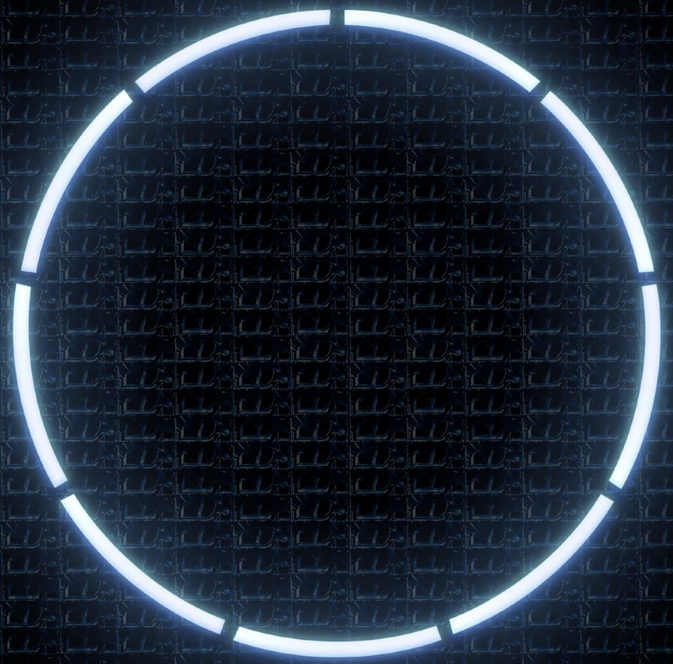
STARTS COMMISSIONING END OF 2023

Manufacturing is the Cornerstone of a Sustainable Future

Build Production Lines Faster

Ramp Faster Through Learnings

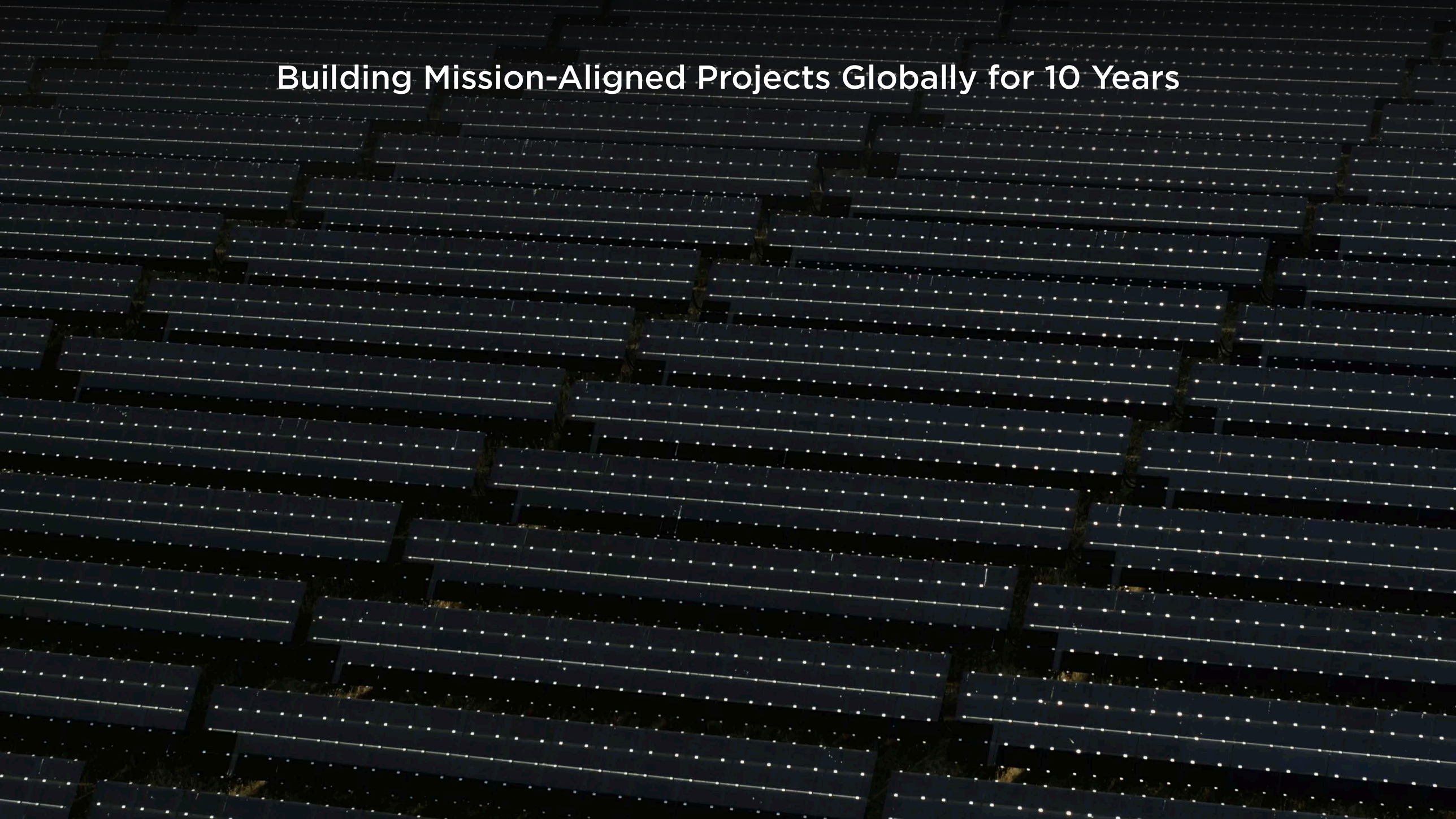
New Waves of Production Lines Incoming



09 Energy

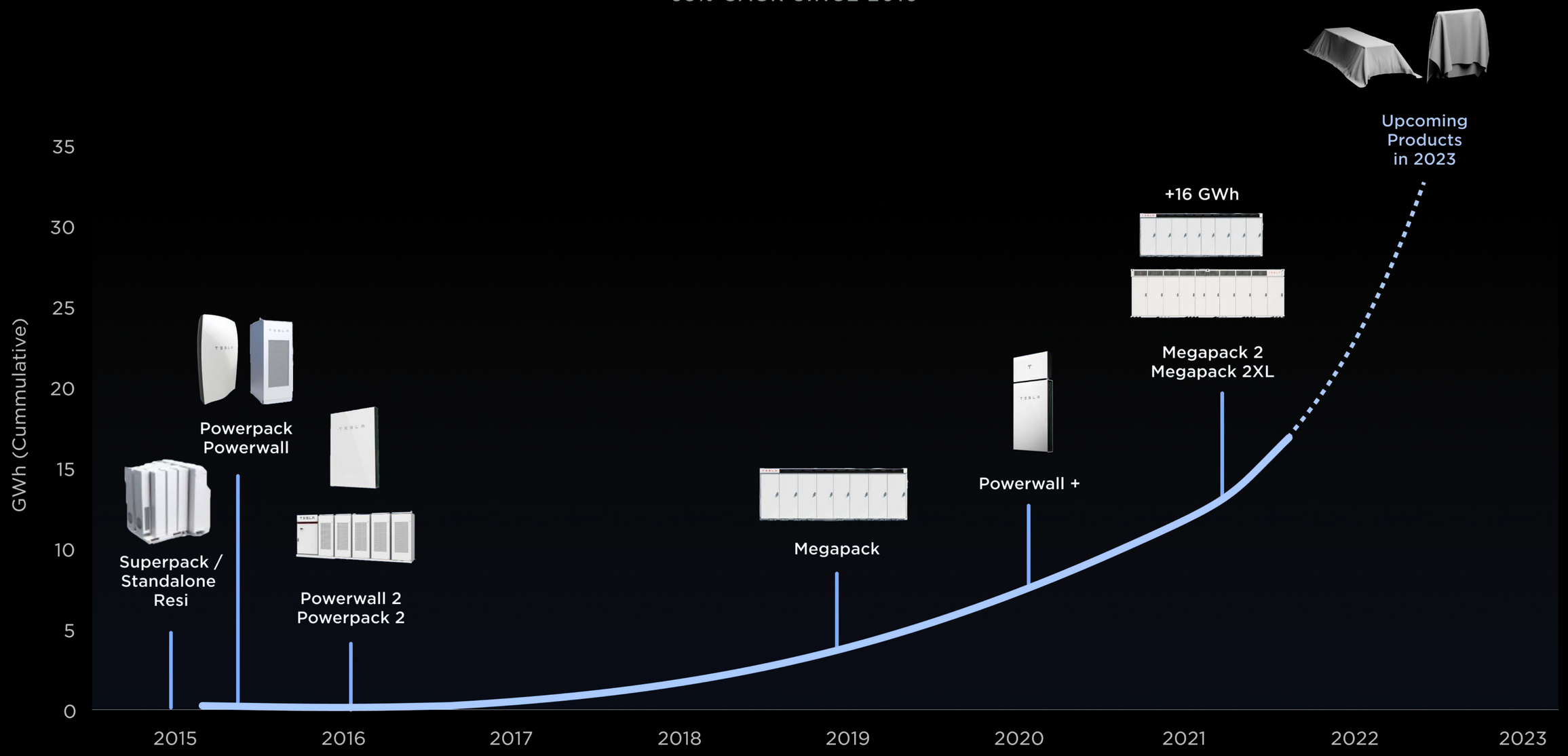
Drew Baglino, Mike Snyder

Building Mission-Aligned Projects Globally for 10 Years



Growth Is Accelerating

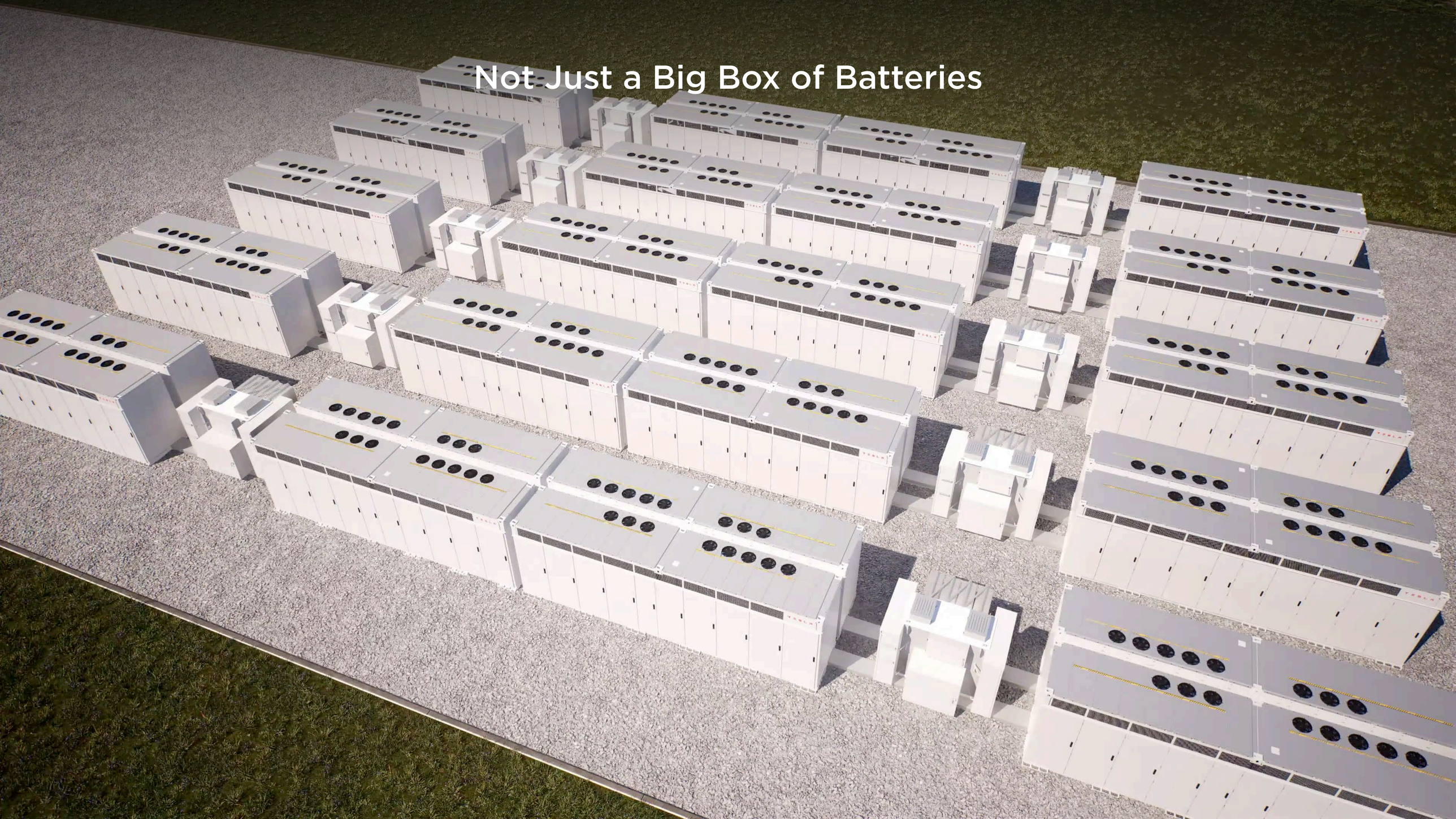
65% CAGR SINCE 2016



How Did We Get Here

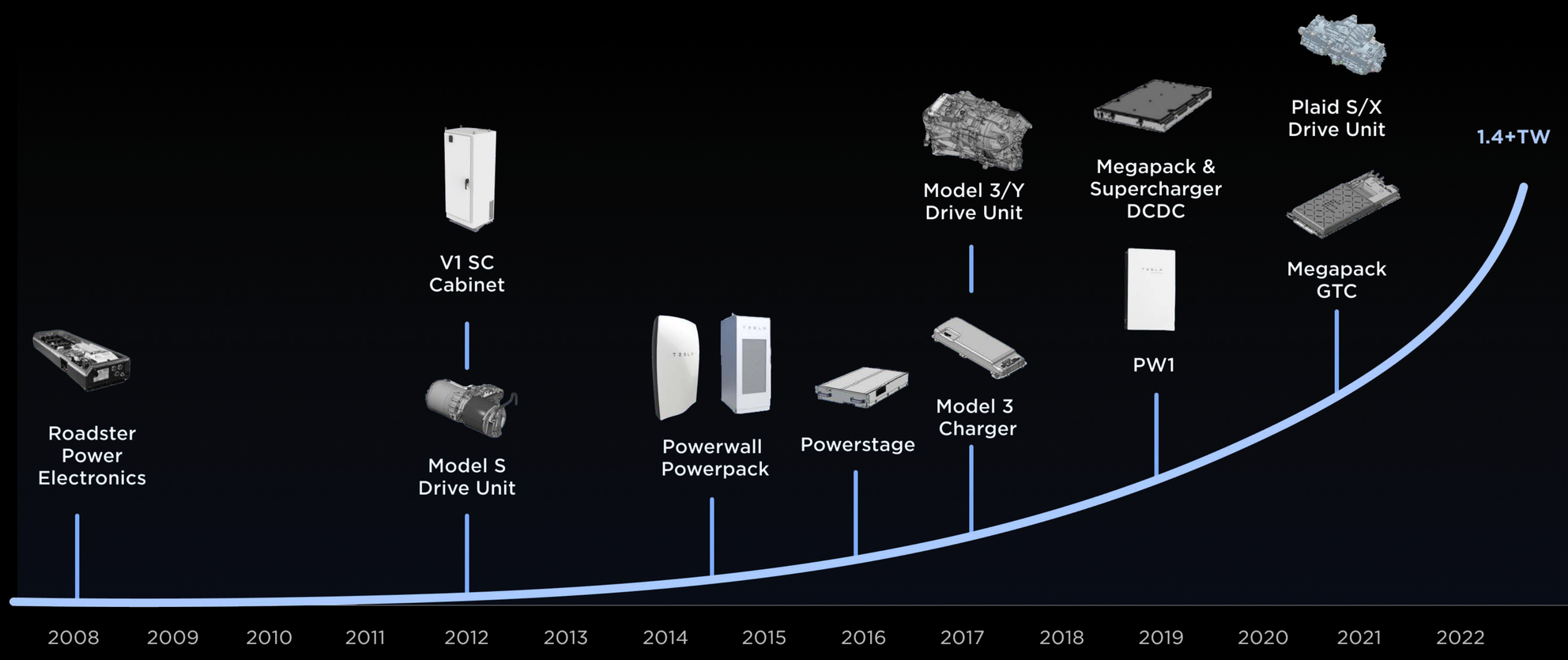
MANIACAL FOCUS ON ALL ASPECTS OF DELIVERING STATIONARY STORAGE VALUE

Not Just a Big Box of Batteries



14 Years of in-House Power Electronics Expertise

1.4+ TW DEPLOYED



Retiring Fossil Fueled Power Plants With Software

World 1st: Tesla Batteries Providing Inertia Services At Scale

By Zachary Shahan Published August 1, 2022 21 Comments

Let's start with the ABCs: what are inertia services on an electricity grid? Even before that, what is inertia in a grid setting? Most of us should remember "inertia" from our younger years in primary school. Inertia is an object's natural inclination to just keep moving (if it weren't for friction) or just keep sitting still if that object is not moving. But on the surface, that's confusing in terms of

Tesla has a new product called 'Virtual Machine Mode' coming to its 'Big Battery'

Fred Lambert | Jul 27 2022 - 9:12 am PT | 0 Comments

Energy Storage NEWS

Advertising Contact

Home News Commercial Residential Grid Scale Off Grid Market Watch Connected Tech

ARCHIVE NEWS

'Undeniable success': South Australia's 129MWh Tesla battery

By Andy Colthorpe

December 6, 2018

Asia & Oceania, Southeast Asia & Oceania | Grid Scale | Market Watch, Policy, Technology

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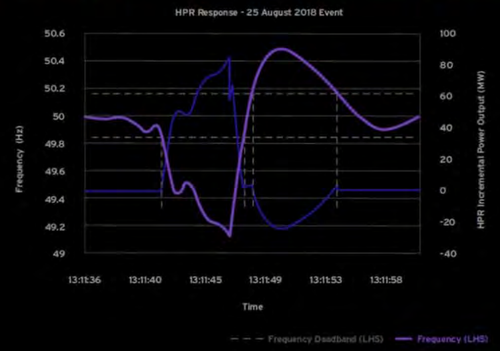

Bloomberg

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A photograph taken on March 4 by a drone shows the Gambit Energy Storage Park in Angleton, Texas. The utility-scale battery project is owned by a Tesla subsidiary.Photographer: Mark Felix/Bloomberg

Green | Hyperdrive

Tesla Is Plugging a Secret Mega-Battery Into the Texas Grid

The utility-scale battery located outside of Houston will connect to the same grid that faltered in February's freeze

By Dana Hull and Naureen S Malik

March 8, 2021 at 3:00 AM PST *Updated on March 8, 2021 at 12:23 PM PST*

From **Hyperdrive**

Share this article

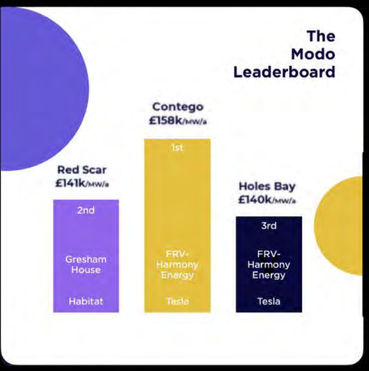
Elon Musk is getting into the Texas power market, with previously unrevealed construction of a gigantic battery connected to an ailing electric grid that nearly collapsed last month. The move marks Tesla

Modo Energy
@ModoEnergy

10/ Congratulations to Contego ESS - 34MW/68MWh! 👑

The Harmony Energy-FRV project, operated by @Tesla's Autobidder software pocketed £158k/MW/a in 2021.

Contego utilised its 2-hour duration to capitalise on those high day-ahead spreads in addition to providing symmetric DC!



6:33 AM · Dec 22, 2021 · Twitter Web App

1 Like

How Did We Get Here

RELENTLESS FOCUS ON SPEED OF EXECUTION

Build Megafactories Faster

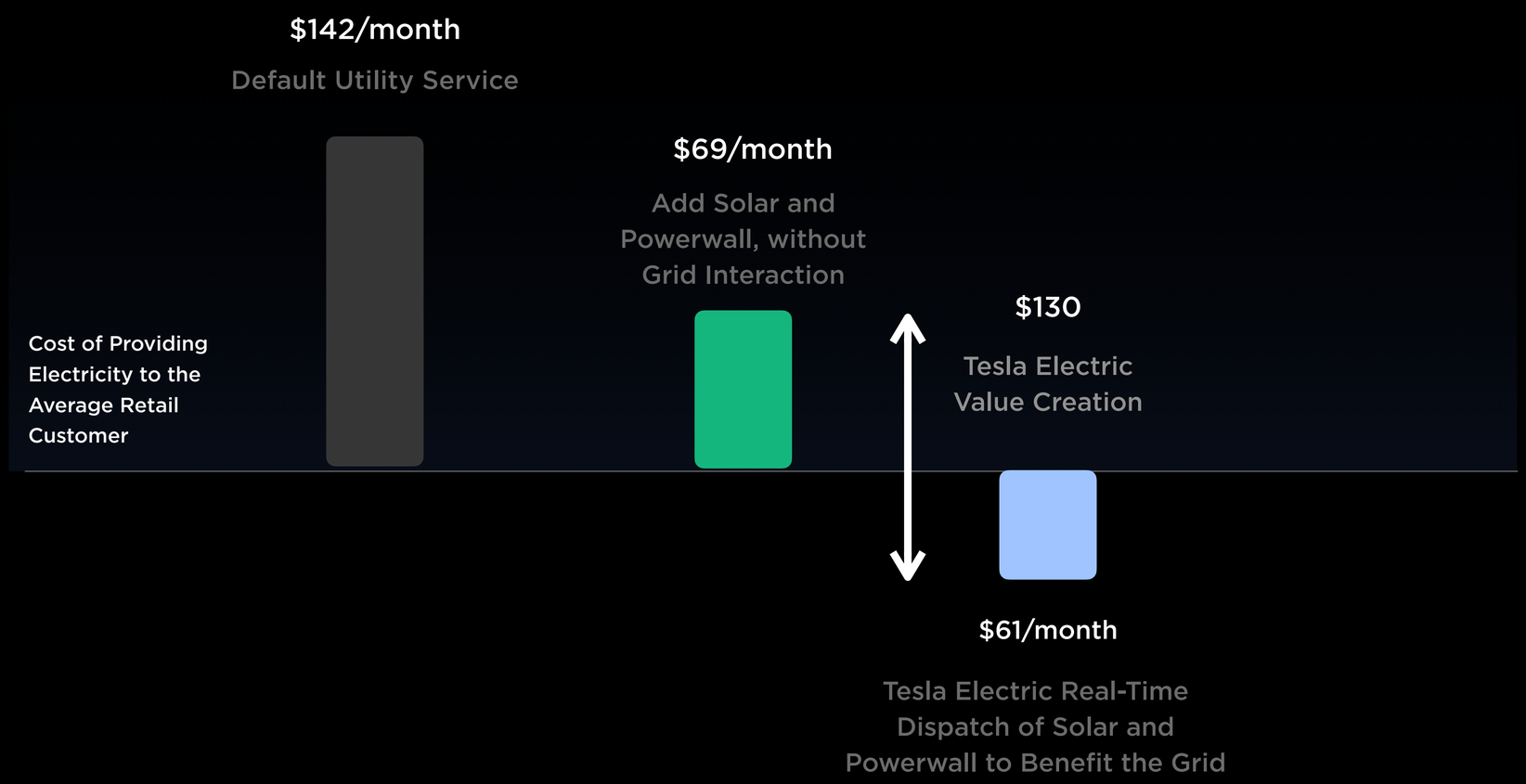
FIRST MEGAFACTORY BUILT IN LESS THAN ONE YEAR

Install Projects Faster

4X INSTALLATION & COMMISSIONING SPEED SINCE 2019

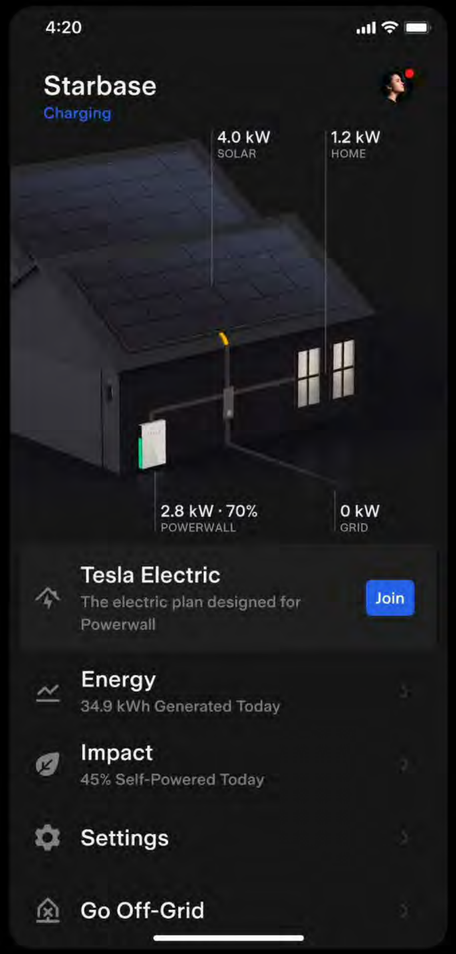
Tesla Electric Unlocks the Full Value of Distributed Energy & Storage

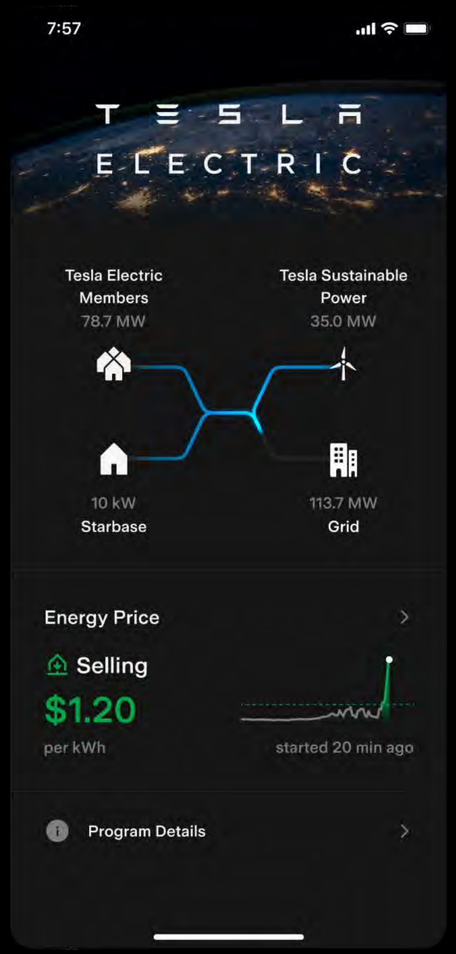
ENABLING OUR CUSTOMERS TO BECOME THEIR OWN UTILITY



Based on 5,000 Australia Customers in 2022

Tesla Electric Rollout Plan





Available Today

For homes with Powerwall in competitive retail electricity markets in Texas

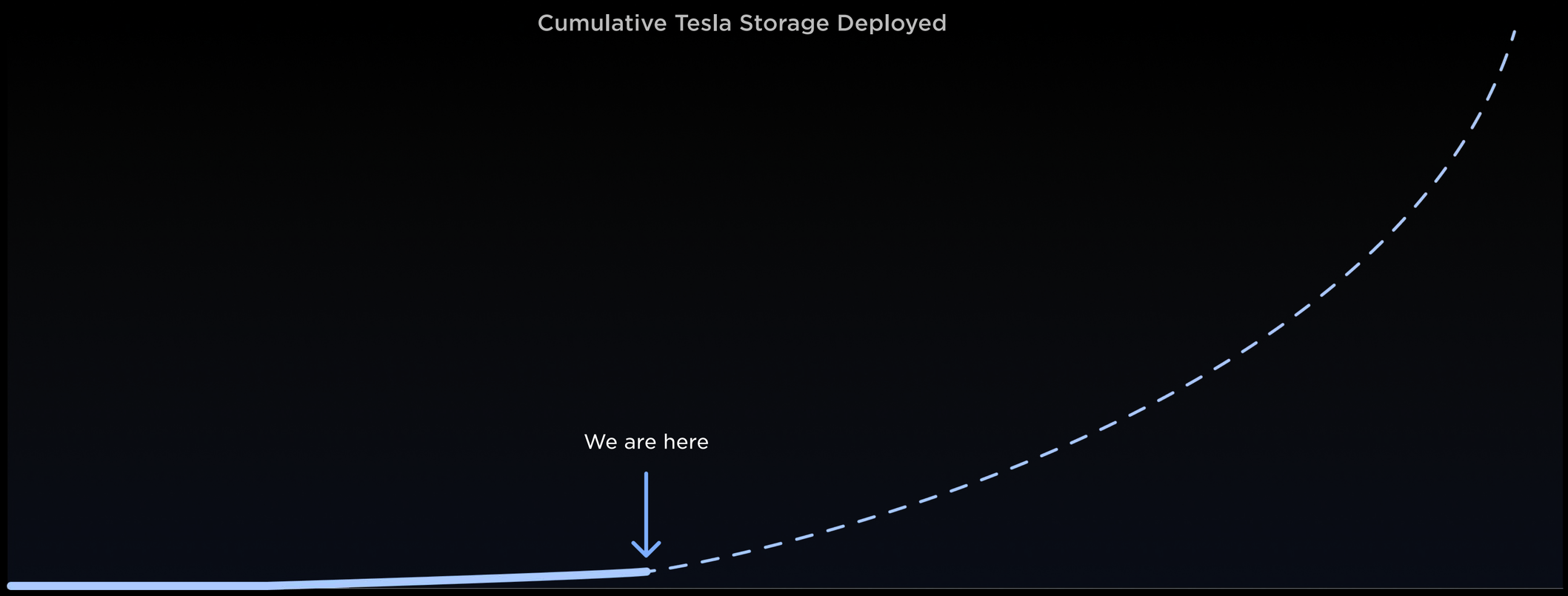
Tesla Electric Rollout Plan

Coming in July to Texas

Unlimited overnight home charging

$30/month

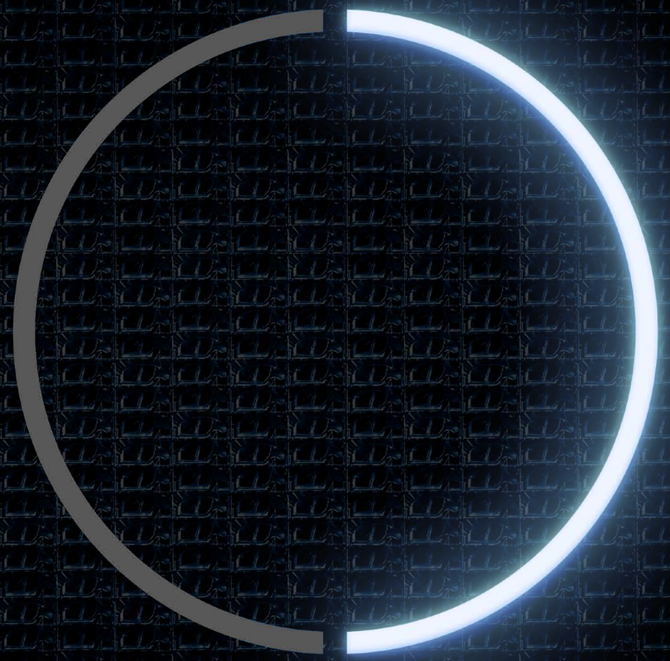
This Is Just the Beginning



Focus on Building Capacity & Ramping Fast

Tesla Is an Electricity Retailer

Impact at Tesla



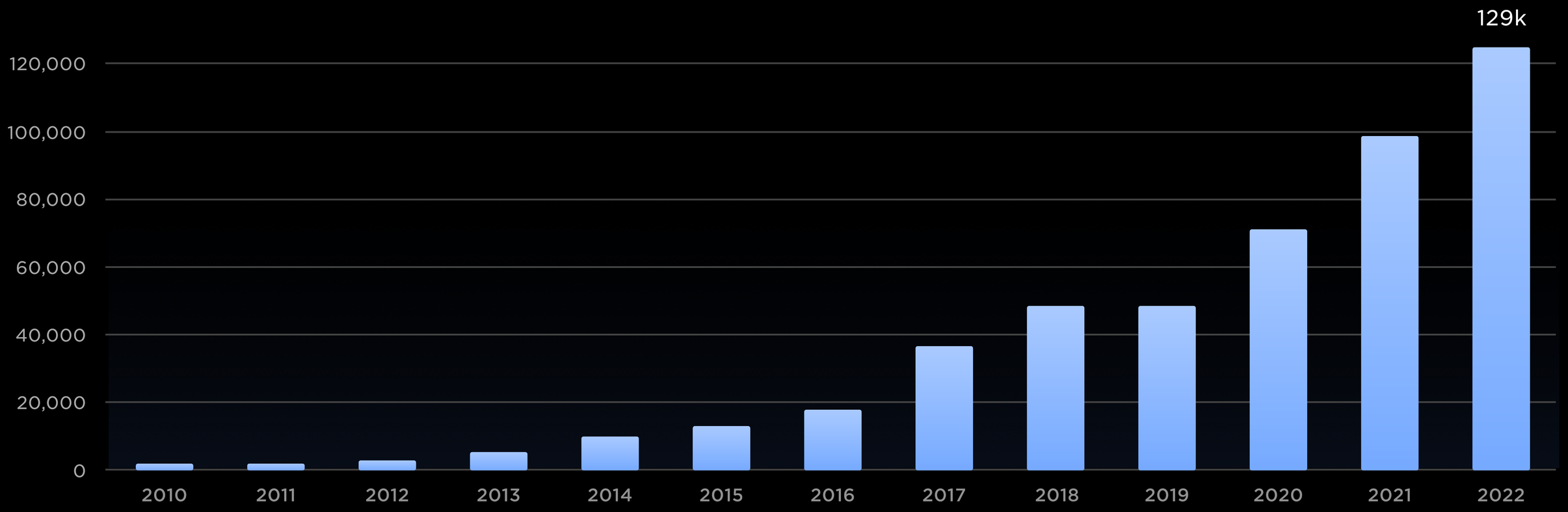
01 Impact

Laurie Shelby, Brandon Ehrhart

Who We Are

The Team is Growing Rapidly

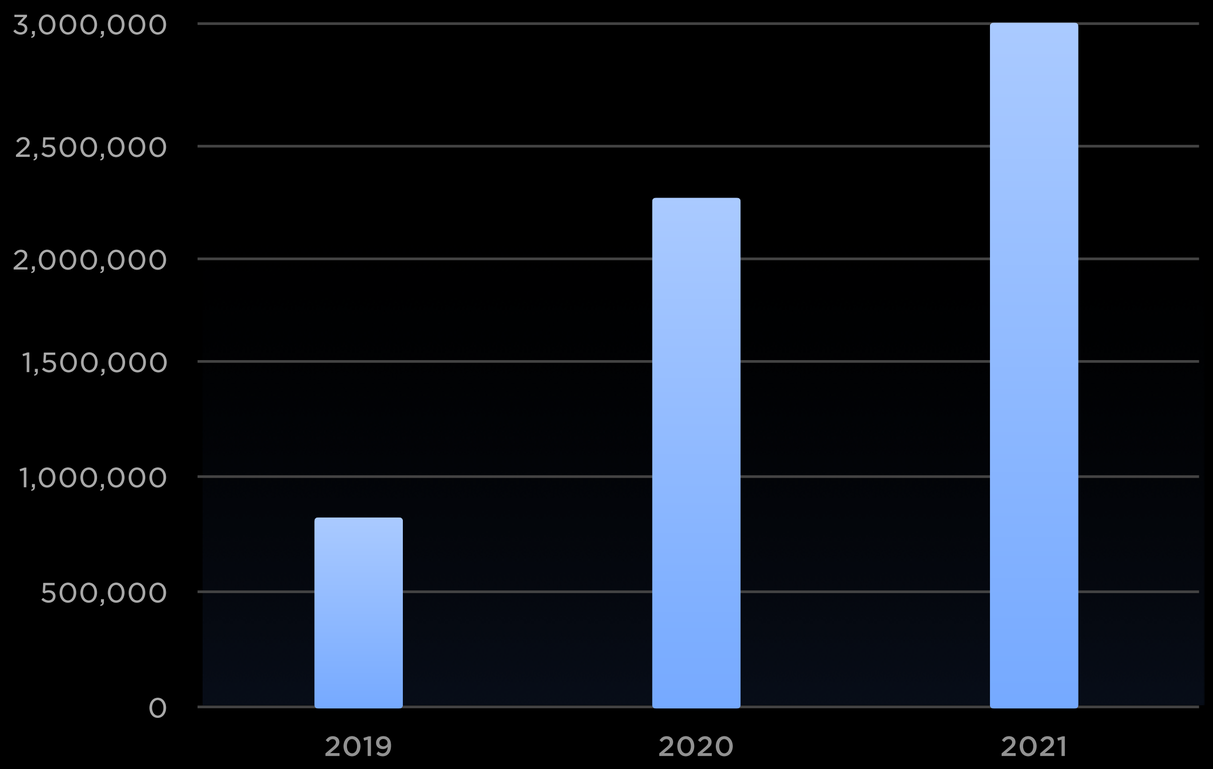
1/2 WORK IN MANUFACTURING



Tesla Global Employee Count

Engineers Want to Work Here

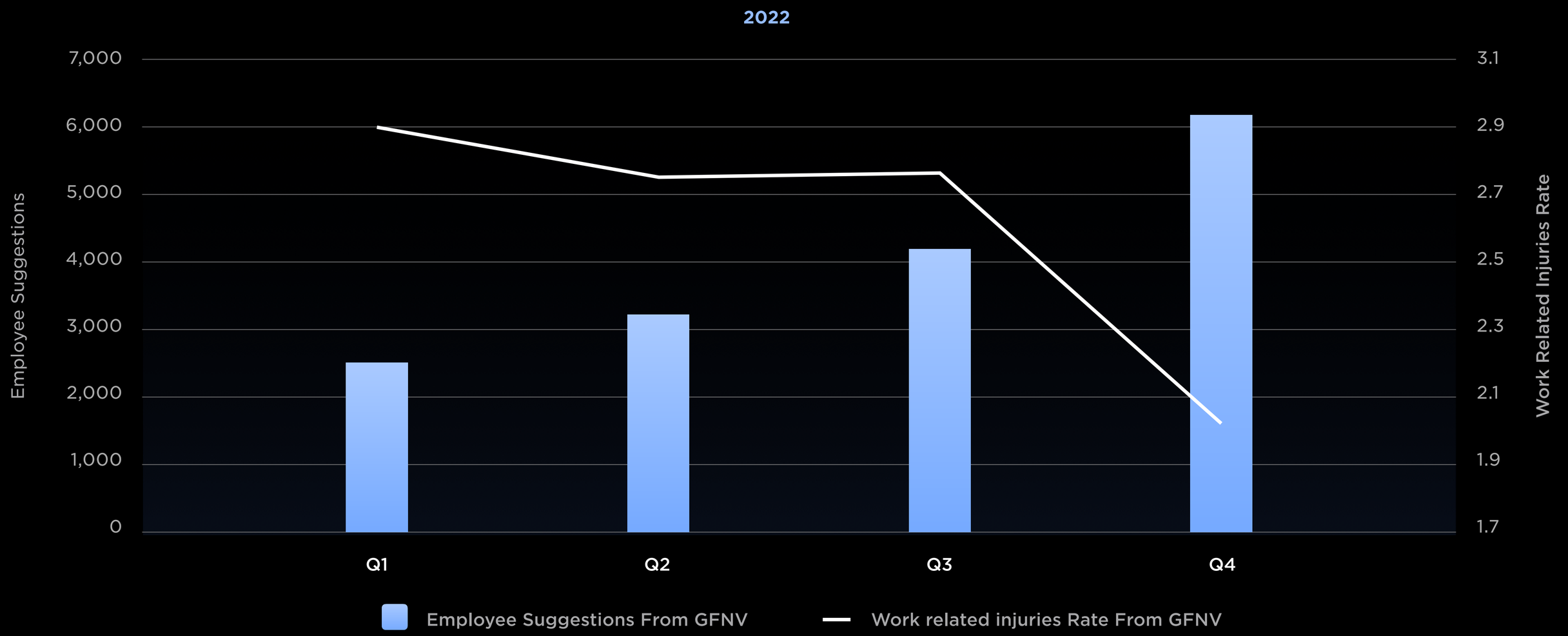
Total Applicants



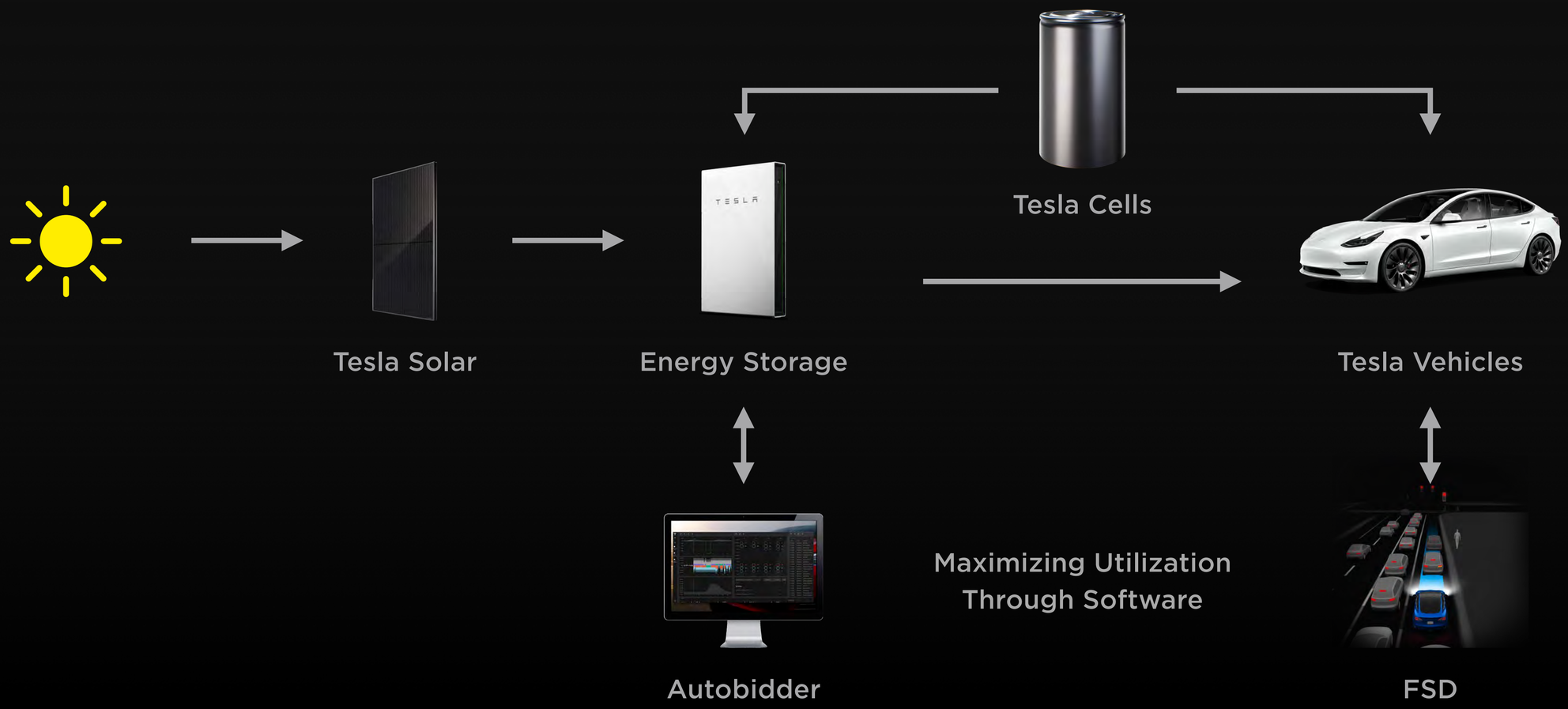
US Engineering Students' Rankings

Employer	2022 Ranking
SpaceX	1
Tesla	2
NASA	3
Lockheed Martin	4
Boeing	5
Apple	6
Google	7
Microsoft	8
Northrop Grumman	9
Raytheon Technologies	10

As Employee Engagement Increases, Safety Improves



Sustainability & Impact is Everything We Do



Our Products Generate More Energy Than Our Products & Factories Consume

Tesla Cumulative Net Energy Impact: 2012-2021

Energy Produced

Tesla Solar Panels

25.39 (TWh)

Energy Consumed

Tesla Factories & Other Facilities

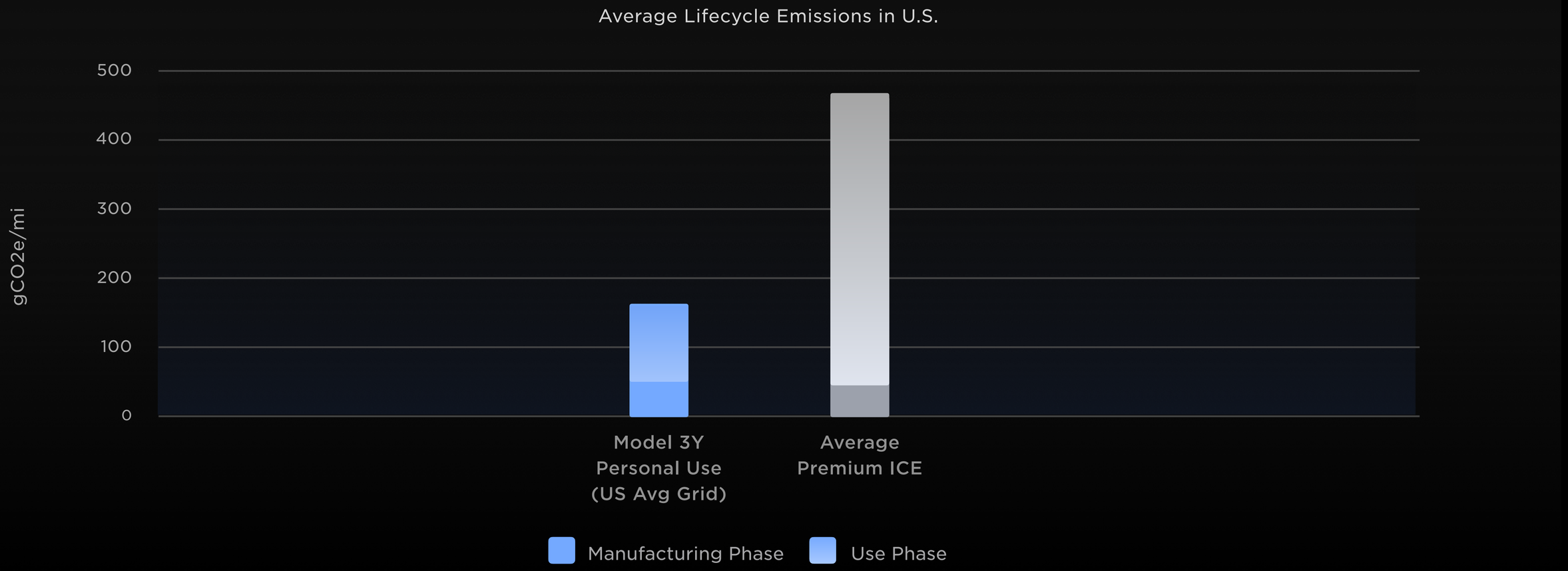
25.27 (TWh)

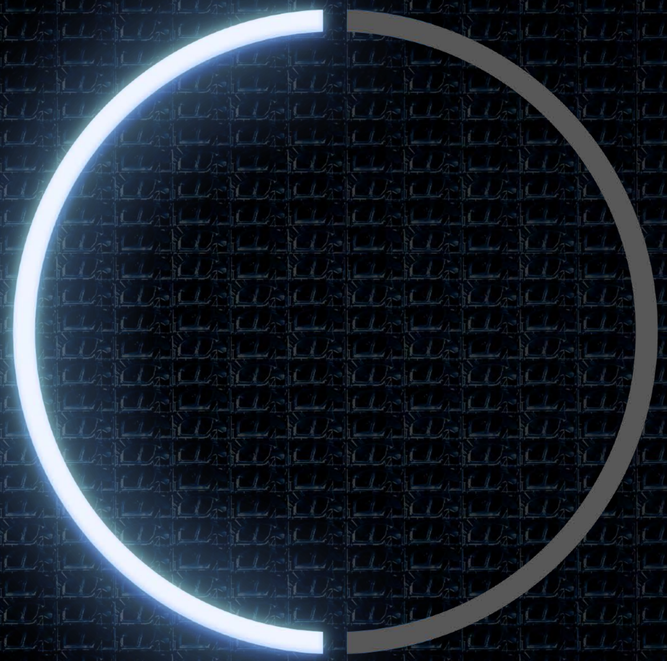
Energy Used at Tesla Factories & Other Facilities

Energy Used to charge all Tesla vehicles

Our Vehicles Emit Less Emissons Than Gas Vehicles

INCLUDING BOTH MANUFACTURING & USE

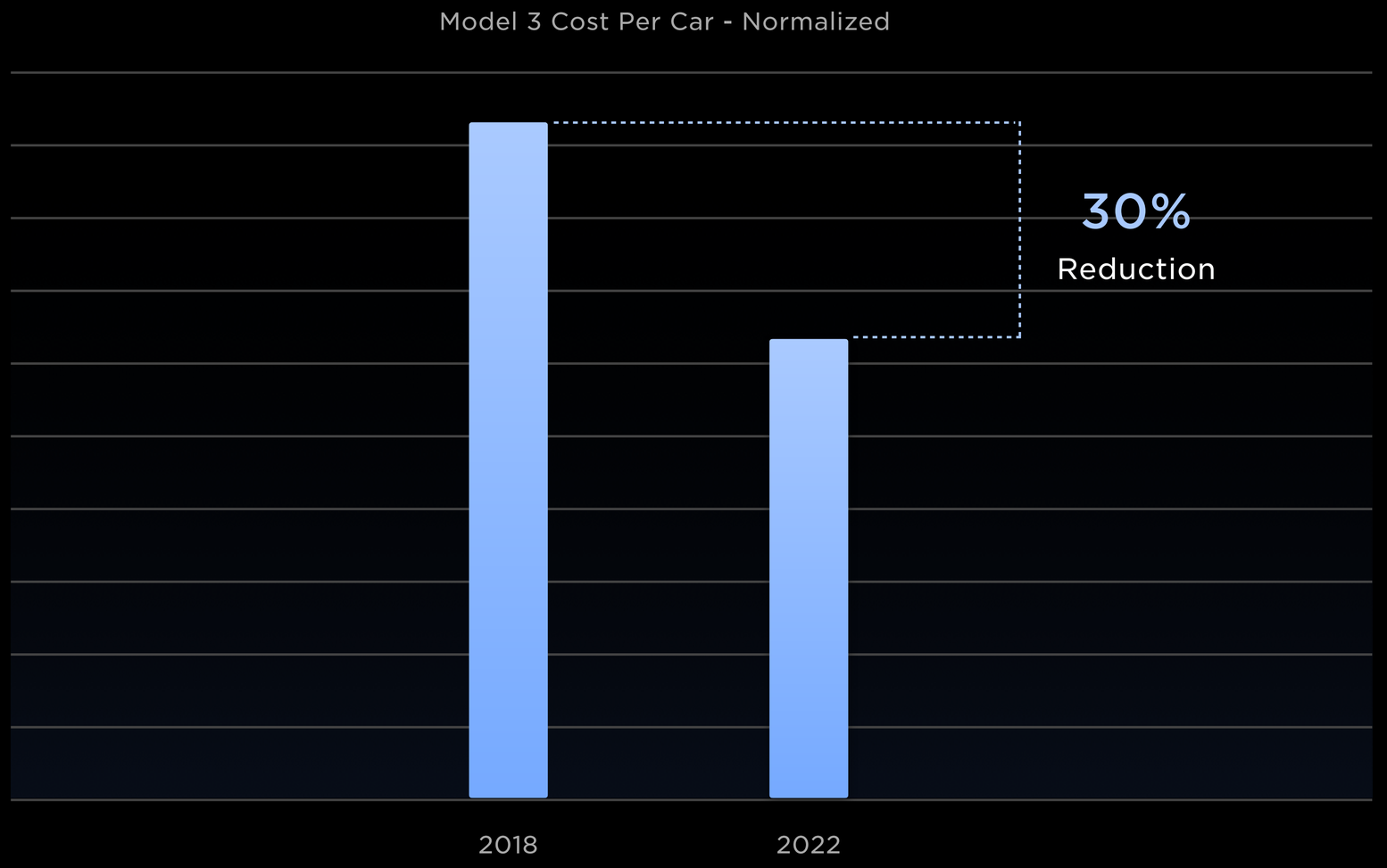




02 Financials

Zach Kirkhorn

We Continue To Reduce Cost of Our Existing Products



Includes material costs, manufacturing costs, inbound and outbound logistics, warranty Normalized for changes in market rates of lithium, nickel, steel and aluminum

Cost Reductions Come From Everywhere

Volume Growth

Productivity

Overhead Efficiency

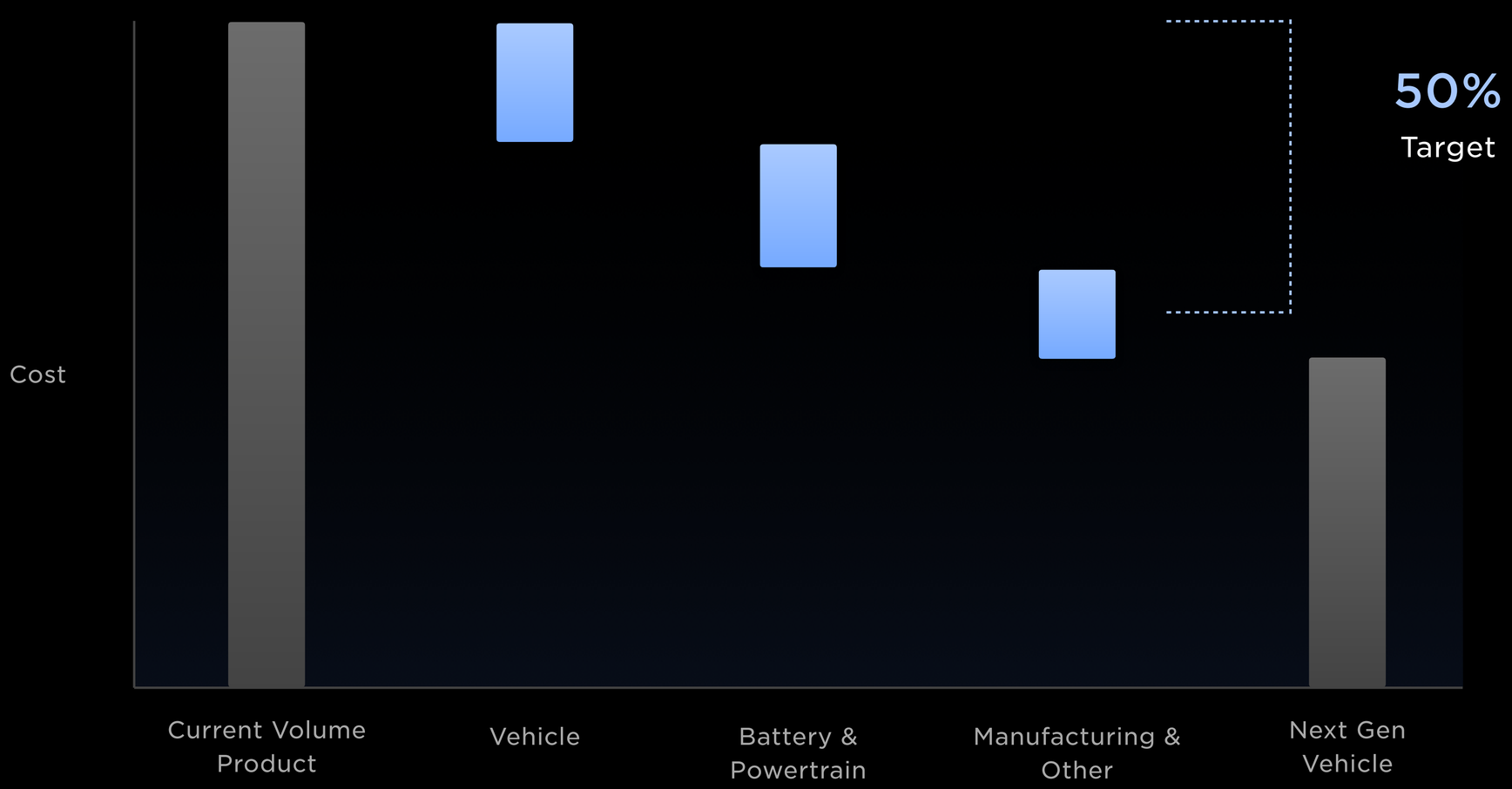
Product Improvements

Engineering Changes

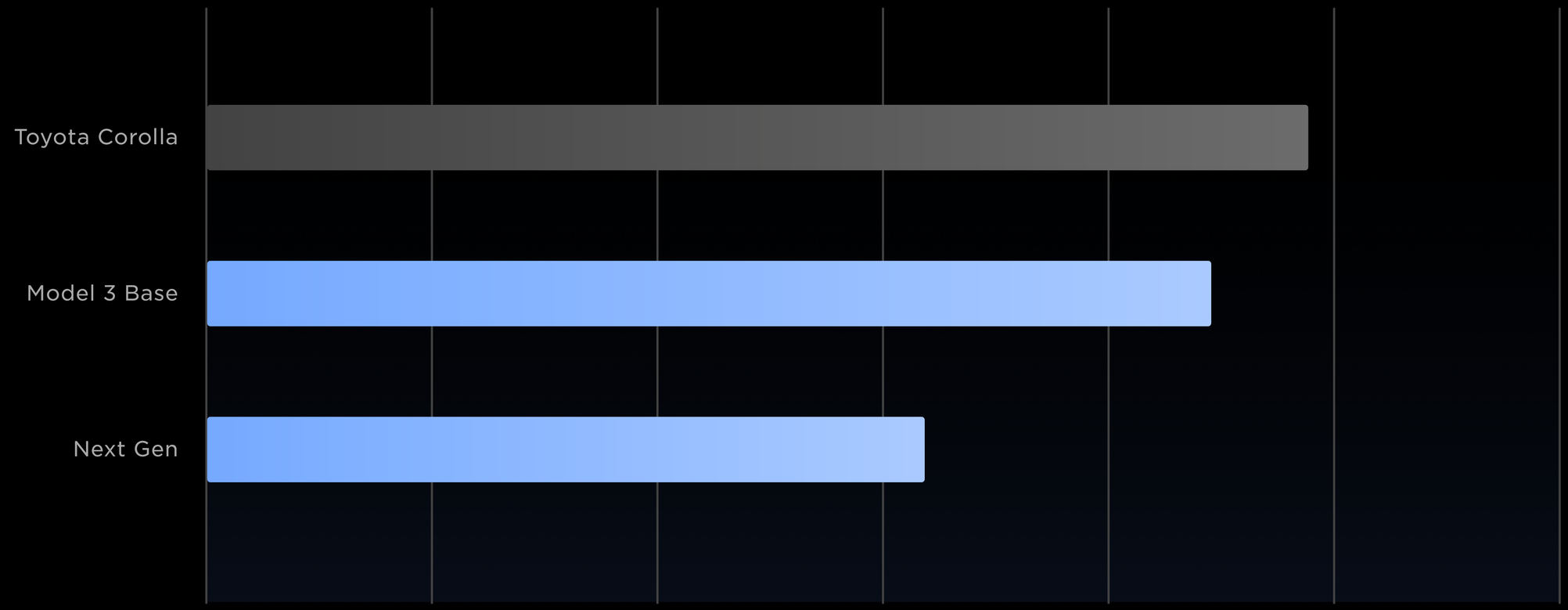
Localization

Supplier Scale

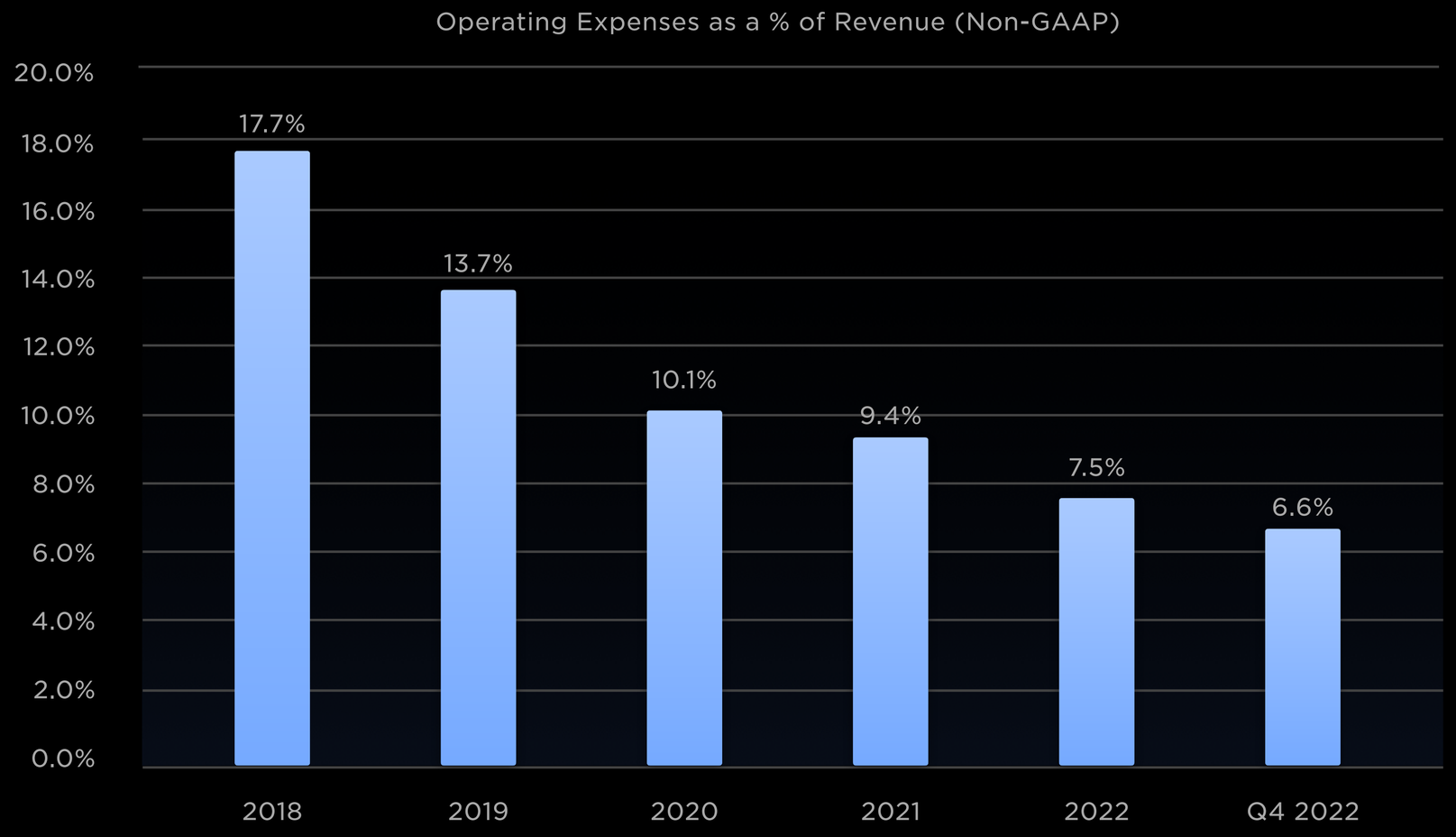
New Gen Vehicle Will Enable Step Change in Cost & Volume



Total Cost of Ownership per Mile Over 5 Years

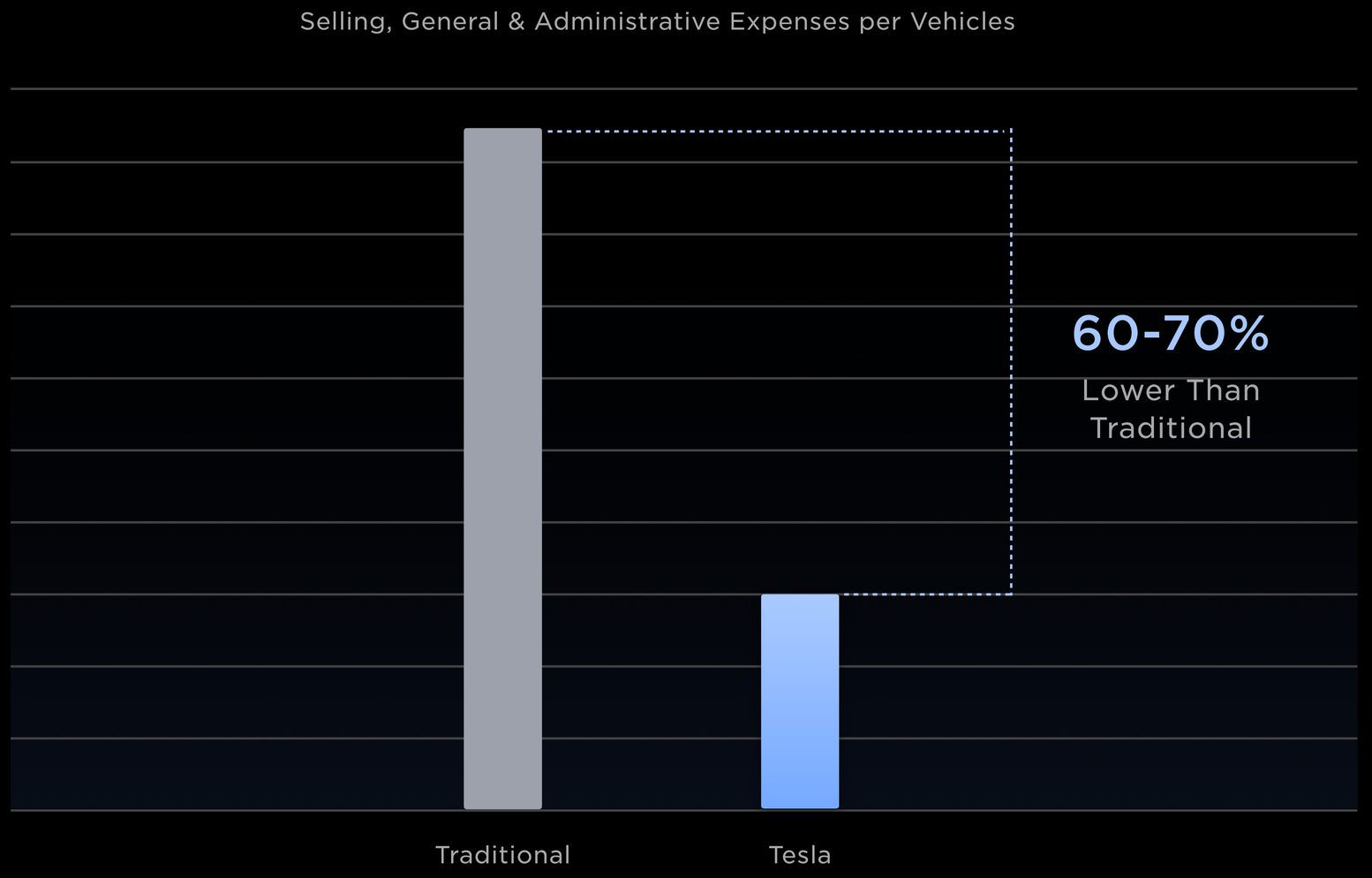


Tight Operating Expense Control To Enable Operating Cash Flow



Excludes digital assets gain/loss, stock-based compensation, material one-time items
2021 figure excludes $340M payroll tax on CEO award option exercise

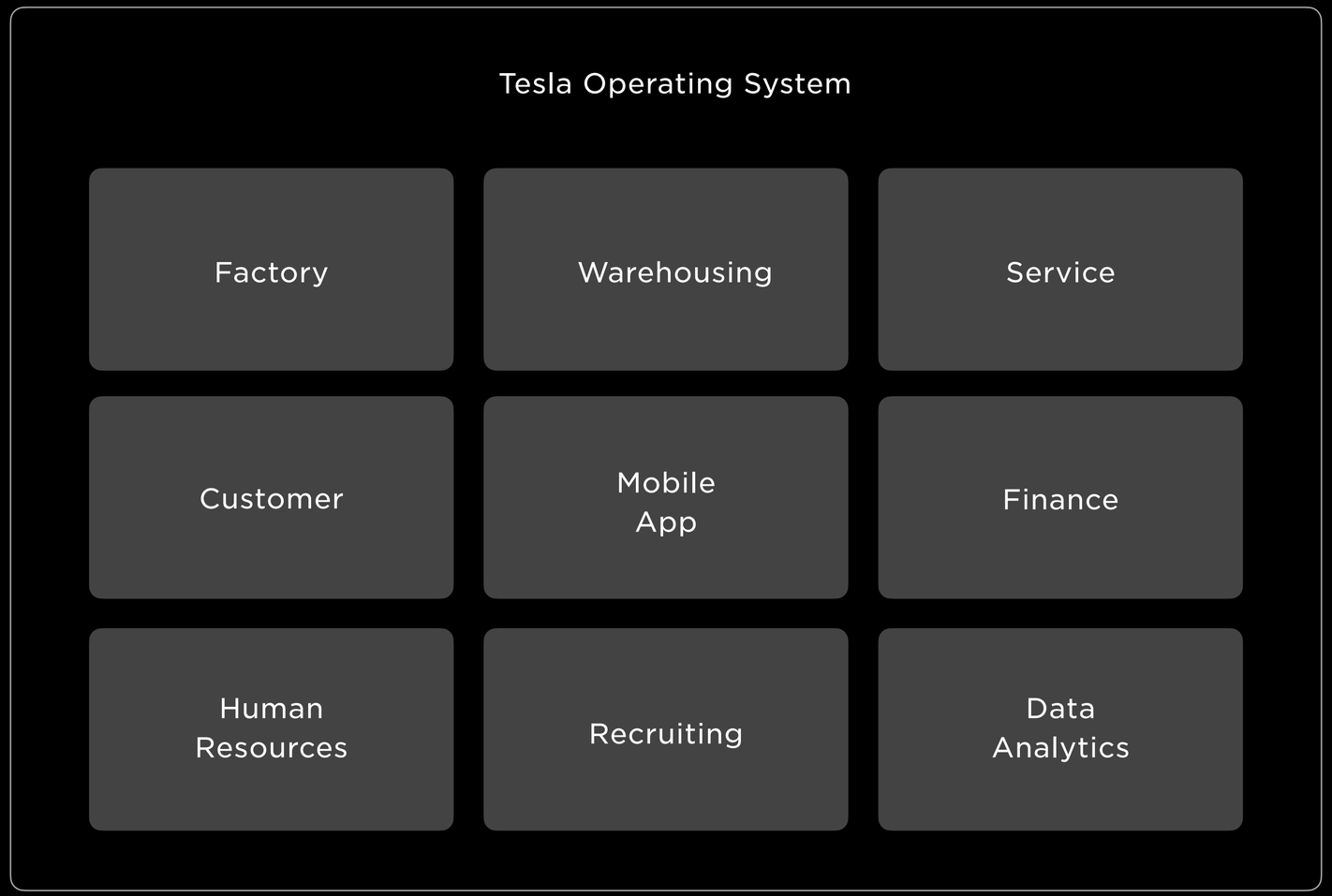
Industry Leading SG&A per Car Enabling Improved Affordability



Benchmark: GAAP Operating Expenses, publicly traded OEM SG&A per vehicle + dealer SG&A per vehicle
Publicly traded OEM SG&A includes average of GM, Ford, BMW, Toyota, Volkswagen, Mercedes Benz
Dealer SG&A per car includes average of Autonation, Lithia, Group 1 Automotive, Sonic Automotive, Asbury Automotive

Efficiency Improvements

FINANCE CASE STUDY



Continued Improvement in Internal Process Efficiency

Efficiency Improvement

4x
North American Sales

4x
Order Operations

5x
Financial Services

6x
Accounts Payable

7x
Document Generation

Performance & Capabilities

Order Modification

Captive Lease /
Loan Servicing

Captive Insurance

Real Time Data Visibility

10Q & 10K Timeline

We Expect our Pace of Investment to Scale With Operating Cash Flow Growth

20M Annual
Vehicle Production

1 TWh Annual Energy
Storage Production

Expand Cell Production,
Service and Charging

~$150-175B

Estimated
Total Investment

~$28B

Investment to Date

Funded by Operating
Cash Flow

Capital Allocation

1. Daily Operations

- Working Capital
- Captive Financing (Market Gaps)
- Downside Protection

2. Growth

- R&D
- Capital Expenditures (Growth)

3. Opportunistic

- Capital Expenditures (Elective)
- Captive Financing (Elective)
- Acquisitions
- Debt Reduction

4. Excess

- Buyback / Dividend

Achieving the Master Plan

Innovation Driven Cost & Efficiency

Improved Affordability

Reinvest to Achieve Unprecedented Scale

Accelerate the World's Transition to Sustainable Energy

Gigafactory Mexico

MANUFACTURING NEXT GEN VEHICLE

Q&A


INVESTOR
DAY