



INTELLIGENTLY ELECTRIFYING THE PLANET
| 2022 Q4 UPDATE

NUVVE.COM



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COMPANY OVERVIEW



NUVVE SITS AT THE INTERSECTION OF TRANSPORT & ENERGY

We are introducing a new model for electrification through our intelligent energy platform by increasing the utilization of electric vehicles (EVs) and turning them into valuable earning assets, thereby reducing their total cost of ownership (TCO). This helps the grid become more resilient while accelerating the world's transition to clean energy.



OUR PURPOSE

To intelligently electrify the planet, beginning with transportation.

OUR VISION

Intelligently connecting the world's batteries so everyone has an opportunity to share in the benefits of an electrified world.

WHAT WE DO

Combining the world's most advanced vehicle-to-grid (V2G) technology and our ecosystem of partners, we dynamically manage power among EV batteries and the grid.



THE NUVVE V2G PROMISE



Drivers always have enough energy to drive



Customers enjoy cost savings and revenue generation opportunities

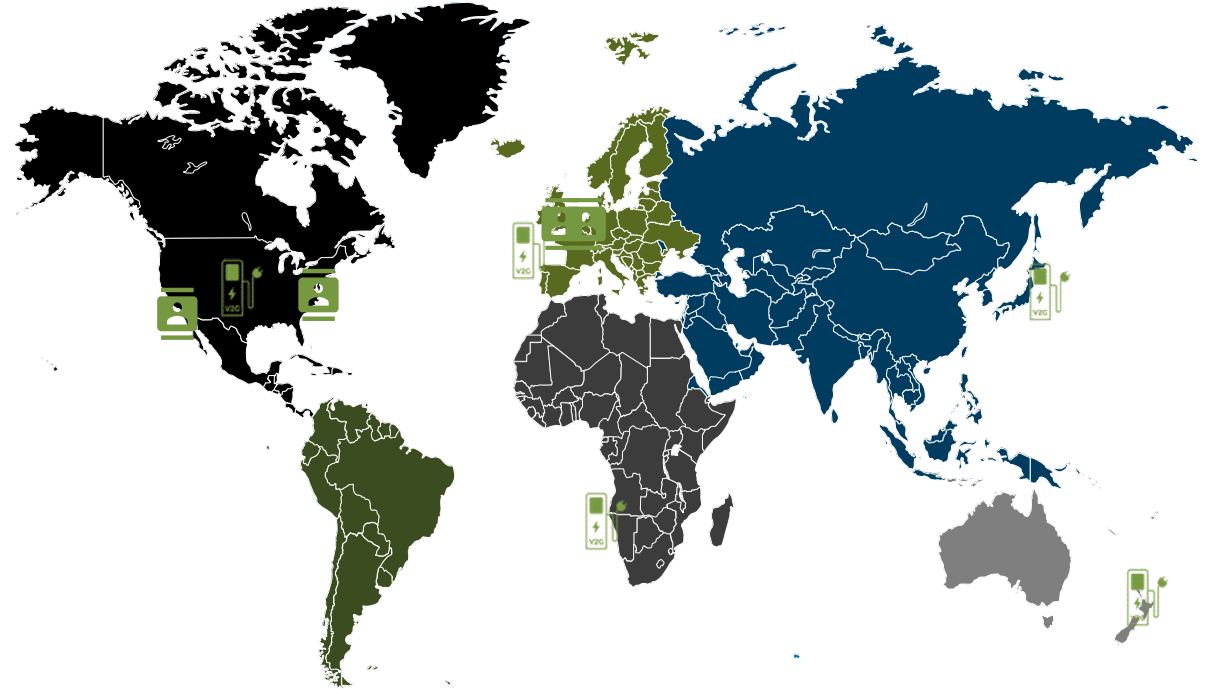


We work within OEM battery warranty limits



OUR GLOBAL FOOTPRINT

- Headquarters in San Diego, CA
- Offices in Newark (Delaware), London, UK, and Copenhagen, Denmark
- 55+ employees and growing
- 25+ years of V2G R&D
- 17+ MW under management across the world
- 6+ years of continuous V2G commercial operations in Denmark





LEADERSHIP TEAM



Gregory Poilasne

Co-Founder,
Chairman & CEO



Ted Smith

Chief Operating Officer



David Robson

Chief Financial Officer

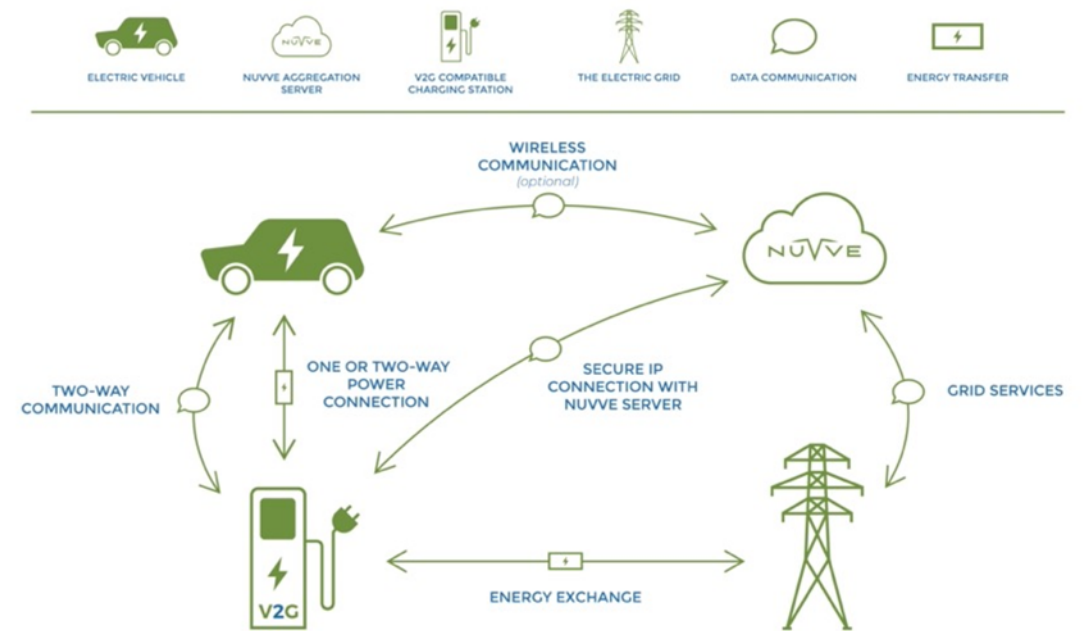


V2G MARKET LANDSCAPE



WHAT IS VEHICLE-TO-GRID (V2G)?

- Allows EVs to serve as distributed energy resources (DERs) by enabling EVs to charge *and* discharge energy from their batteries
- Stored energy from EV batteries is then used to add capacity to the grid and/or perform services that help stabilize the grid and prevent blackouts



*In markets where this is allowed/applicable

EV & POWER DEMAND FORECAST

Explosive growth:

- By 2040, an estimated 550 million EVs will be on the road
- Globally, EVs will represent more than two-thirds of passenger vehicle sales by 2040

Increased power demand:

- By 2040, EVs are projected to make up 10% of total electricity demand in the U.S. and Europe

Figure 3: Electric vehicle fleet forecast by vehicle type, base-case

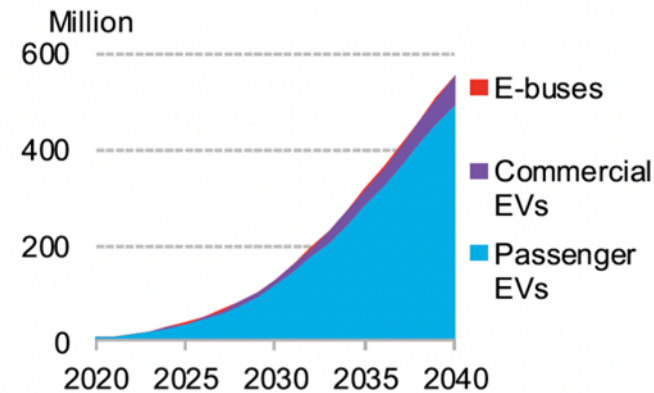
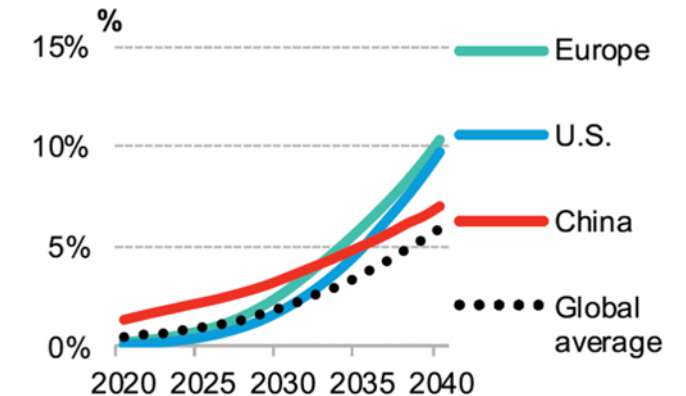


Figure 4: Electric vehicle electricity demand as a percentage of total electricity demand



Source: BloombergNEF Note: Analysis from BNEF's Electric Vehicle Outlook. The EV fleet represents 29% of all vehicles on the road in 2040. Commercial EVs includes vans and trucks.

**V2G helps solve the grid issues
EV growth creates**

NUVVE'S V2G SOLVES HIGH-LEVEL ISSUES & CREATES VALUE ACROSS THE ECOSYSTEM



REDUCES RELIANCE ON FOSSIL-FUELED POWER



INCREASES GRID STABILITY



ACCELERATES THE ADOPTION OF EVs

NUVVE

PAVES THE PATH TO A SUSTAINABLE FUTURE

CONNECTS THE ENERGY ECOSYSTEM

LOWERS THE TOTAL COST OF OWNERSHIP

KEY INVESTMENT CONSIDERATIONS



FIRST MOVER ADVANTAGE



IP: key patents and 25+ years R&D



TSO Qualification: Qualified by multiple TSOs around the world, making it easier to expand



Data: Years of data accumulation allows Nuvve to move rapidly and accurately for future developments



V2G Experience: 10+ years of energy market participation; experience with multiple auto OEMs, charging station manufacturers, and utilities



Financing: Custom, turnkey electrification solution with 100% financing options through joint venture, Levo, with \$750M in committed capital



SCHOOL BUSES ARE THE IDEAL USE CASE FOR V2G

- Largest fleet in the U.S.
- Consistent route-based transport with known energy needs
- Parked and unused most of the time
- 95%+ are diesel today – bad for student, driver, and community health
- Reduction of ~88mm tons of carbon emissions with the electrification of the entire U.S. school bus fleet – equivalent to planting ~108 million acres of trees

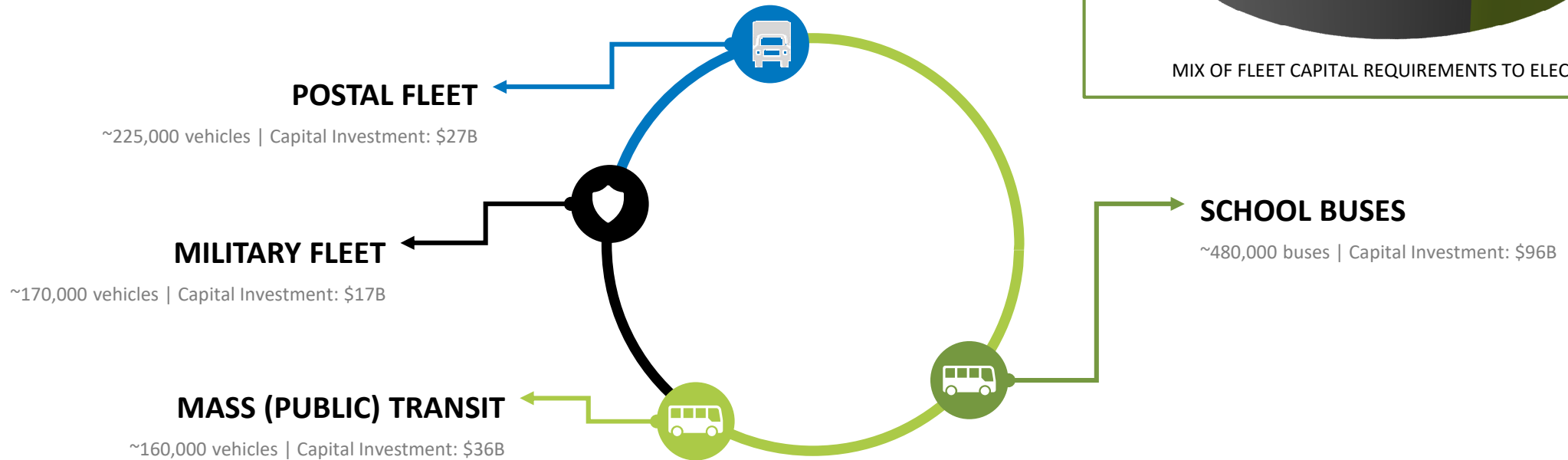
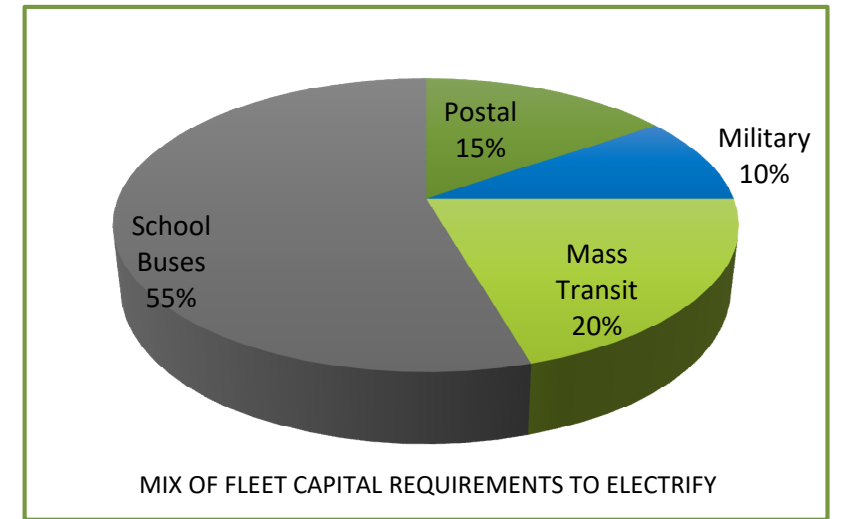
Source: EPA. (1) Assumes 12-year asset life.

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U.S. FLEET ELECTRIFICATION CAPITAL NEEDS


- Fleet Electrification Capital Requirements: ~\$176B+
- Passenger Vehicle Electrification Capital Requirements: ~\$6.4T



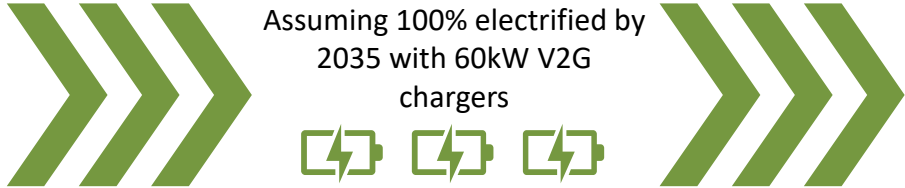
Sources: New York School Bus Contractors Association, U.S. Postal Service, American Public Transit Association, other public records. TAM figures assume an average approximate cost per electric vehicle type.

MARKET OPPORTUNITY: U.S. SCHOOL BUSES

Yellow School Buses in the US⁽¹⁾




480,000



Electric School Bus Power Capacity

~29 GW



Less than 1% are electric today

100% electrification of school buses could increase U.S. electric power generation capacity by nearly 3%⁽²⁾

Assuming all electric buses are powered by Nuvve's proprietary V2G



29 GW


Assumed Monthly Value of Energy Storage ⁽³⁾	Storage Annual Revenue
\$120 / kW-year	\$3.5B
\$240 / kW-year	\$6.9B

Nuvve's experience and intellectual property make us uniquely qualified to capture this massive market opportunity

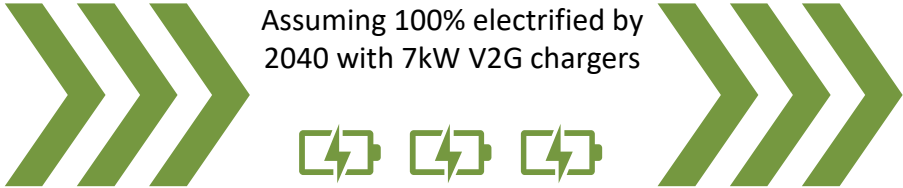
(1) Source: World Resources Institute. (2) Source: EIA; US power generation capacity as of the end of 2020. (3) Assumed value based on company estimates.



MARKET OPPORTUNITY: PASSENGER VEHICLES

Global Electric Vehicles⁽¹⁾ 

500M by 2040



Global Electric Vehicle Power Capacity

~3500 GW

100% electrification of school buses could increase U.S. electric power generation capacity by nearly 3%⁽²⁾

Assuming all electric buses are powered by Nuvve's proprietary V2G

V2G
POWERED BY
NUVVE

**3,500
GW**

Assumed Monthly Value of Energy Storage ⁽³⁾	Storage Annual Revenue
\$120 / kW-year	\$420B
\$240 / kW-year	\$840B

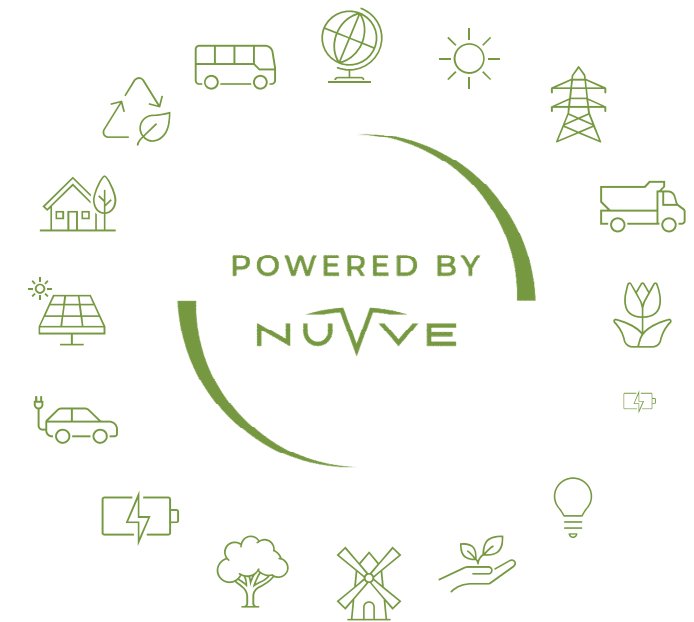
(1) Source: BloombergNEF Long Term Electric Vehicle Outlook 2020; Estimated number of electric passenger vehicles. (2) Source: EIA; US power generation capacity as of the end of 2020. (3) Assumed value based on company estimates.



ESG: THE MULTIPLIER EFFECT

Environmental, Social, Governance

- Developing solutions for a scalable and sustainable green society
- Enables increased penetration of renewables
- Increases grid resiliency and reduces need for costly grid upgrades to integrate EVs
- Creates “energy equity” – increasing capacity for grid benefits for everyone
- Committed to increasing diversity and inclusion of team
- Working with schools in disadvantaged communities



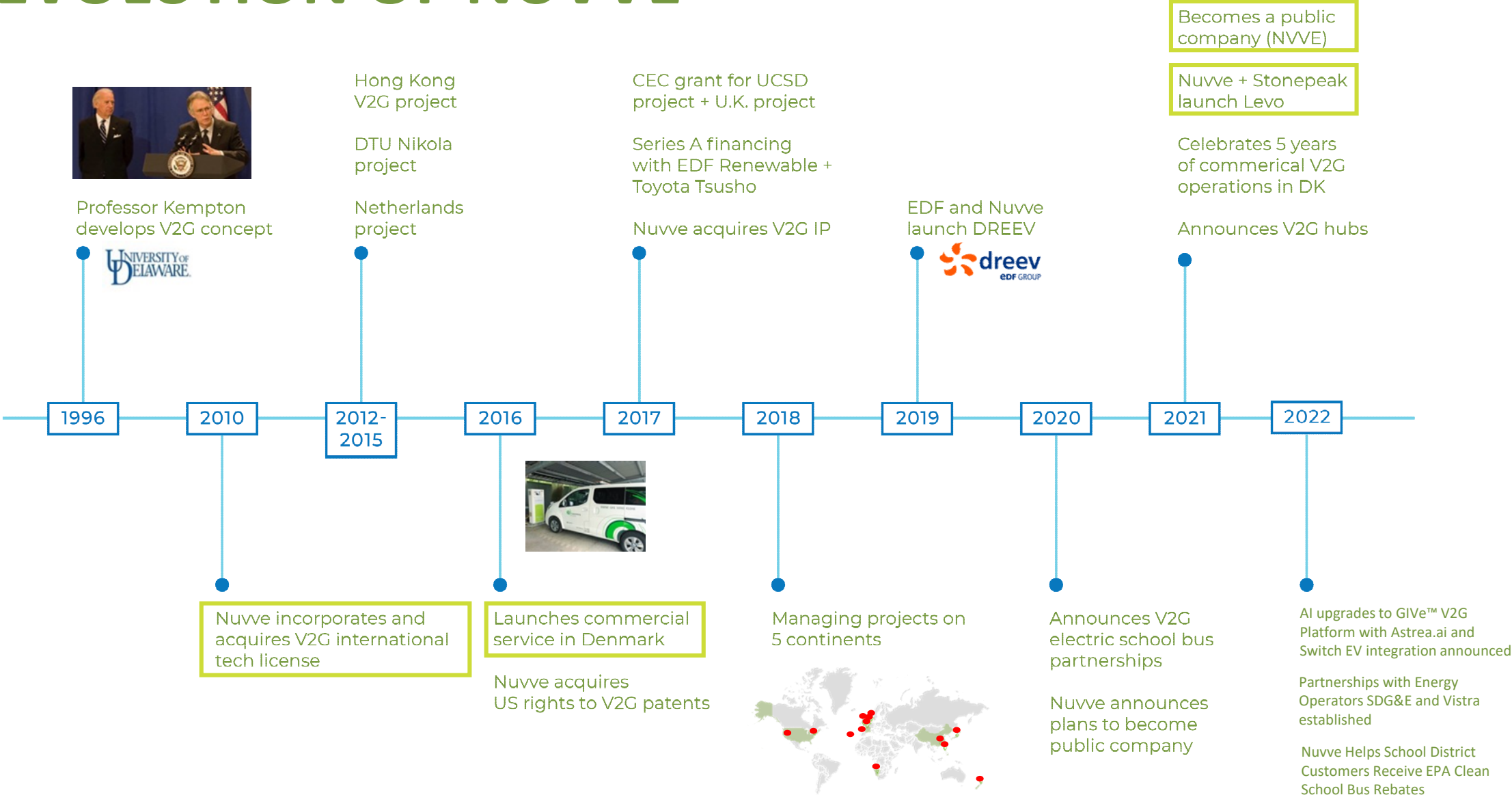
ESG leaders have enhanced access to funds and margins



BUSINESS OVERVIEW



EVOLUTION OF NUVVE



THE POWER OF NUVVE'S INTELLIGENT ENERGY PLATFORM



INCREASES THE UTILIZATION OF EVs



TRANSFORMS EVs INTO VALUABLE EARNING ASSETS



CONTRIBUTES TO A MORE RESILIENT GRID



INTEGRATES RENEWABLE ENERGY IN A MORE RELIABLE WAY



REDUCES TCO

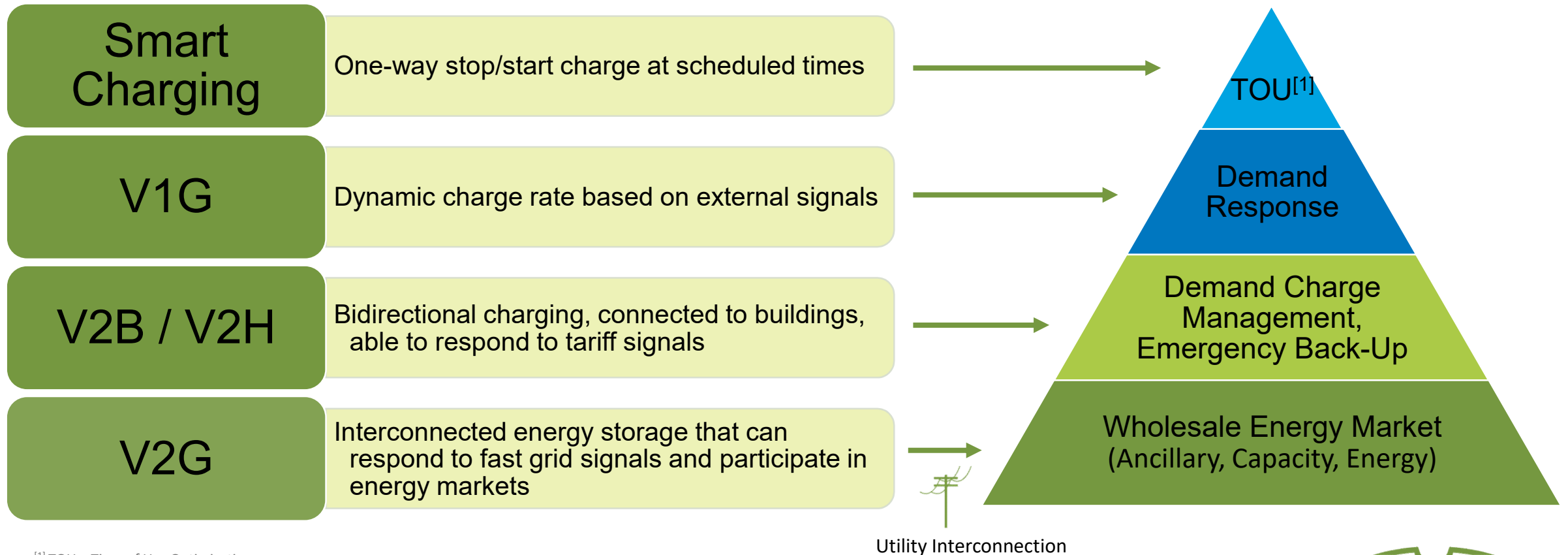


CREATES ENERGY EQUITY



SAVING & REVENUE OPPORTUNITIES

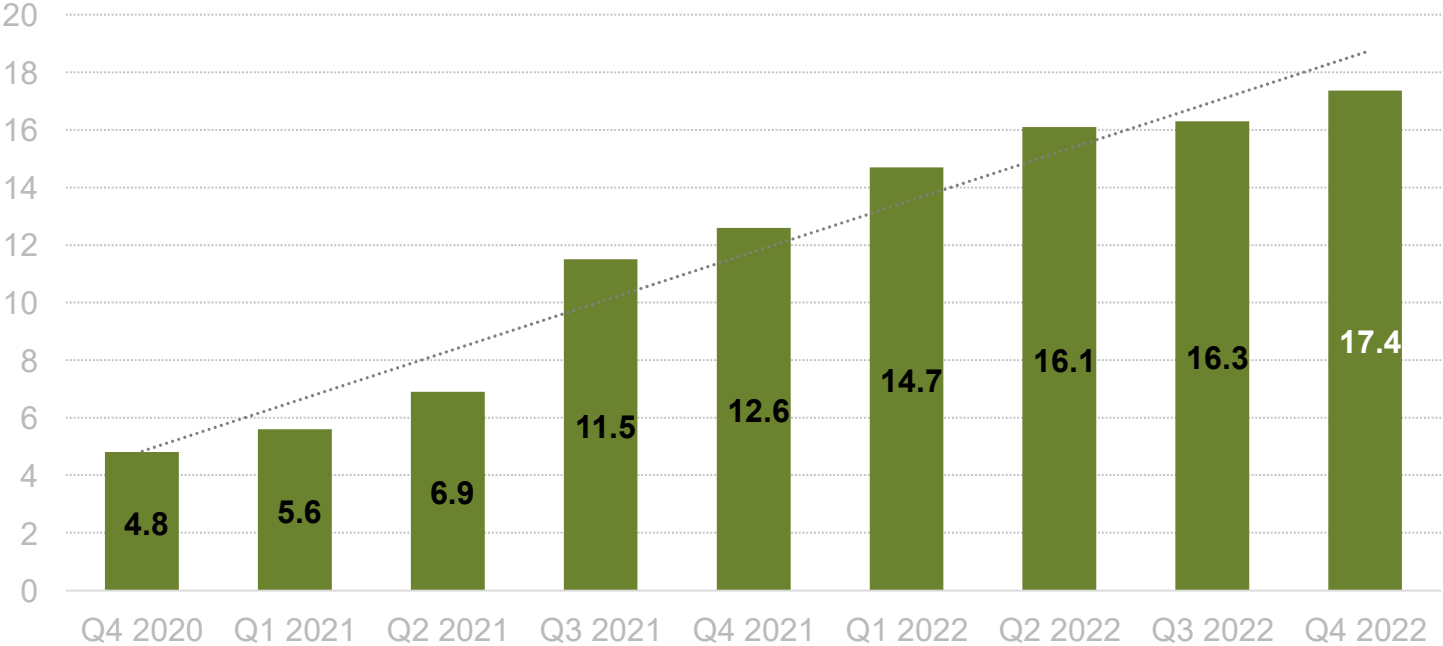
Nuvve is capable of providing all levels of Vehicle Grid Integration, including V2G, providing revenues from grid services and utility bill savings behind the meter.



^[1] TOU = Time of Use Optimization

COMPANY GROWTH TREND

MW Under Management*



Megawatts under management grew 7% in 2022 Q4 compared to 2022 Q3 and 261% from the end of 2020 through Q4 2022

**Megawatts under management refers to the potential available charging capacity Nuvve is currently managing around the world*



COMPETITIVE LANDSCAPE



		NUVVE	chargepoint+	THE MOBILITY HOUSE	enel x	Shell	dvc energy	FERMATA ENERGY	HIGHLAND ELECTRIC TRANSPORTATION
Transportation	Fleet Charge	✓	✓	✓	✓	✓		✓	✓
	TOU	✓	✓	✓	✓	✓	✓	✓	
Behind-The-Meter	Demand Charge	✓	✓	✓	✓	✓	✓	✓	✓
	V2H	✓							
Grid Services	Demand Response	✓	✓	✓	✓	✓		✓	
	Voltage Control	✓							
	Reactive Power	✓							
	Energy Arbitrage	✓		✓					
	Frequency Regulation	✓							
	Bidirectional	✓	✓	✓			✓	✓	✓
			✓						

Note: Competitor services as advertised or promoted through press

REVENUE STREAMS



Charging Station Hardware

- White labeled from EVSE partners integrated with Nuvve software



Grid Services Revenue

- Agreements with customers and/or directly with utilities for % share of revenue earned through grid services



Fleet-as-a-Service

- All-in-one electrification solution for a flat monthly fee



EXPANDING OUR PARTNERSHIPS



- OEM integration; all Blue Bird electric buses come standard with Nuvve V2G
- OEM partner for Levo to offer as leasing option to school districts



- OEM integration underway to be used across vehicle types – transit buses and coaches, yard tractors, drayage and refuse trucks, last mile delivery vehicles, and school buses.



- Formed joint venture, “Astrea AI” to integrate AI to Nuvve’s platform to broaden and optimize services offered today



- Combine battery storage, solar, and smart EV charging into a comprehensive home energy system for residential and commercial markets



- Adds Nuvve’s patented V2G platform to Switch’s standardized software solution for EVSE management, operations and maintenance, improving interoperability among charging stations, EVs and the grid

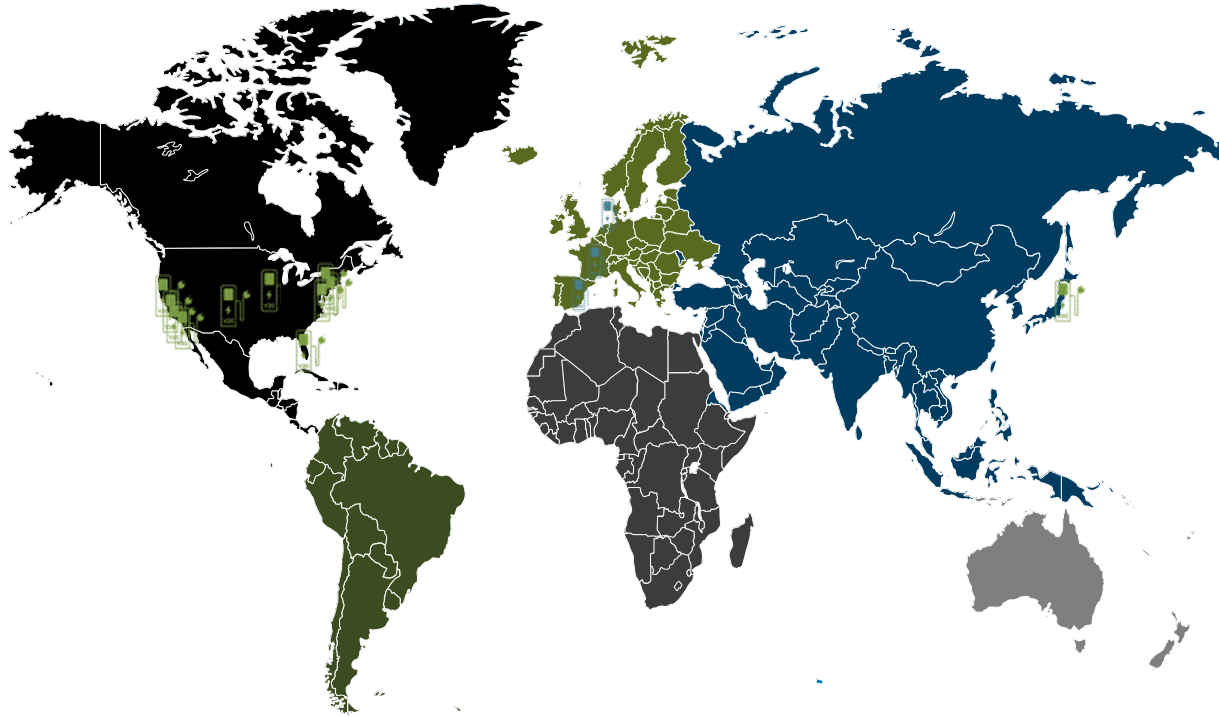


- Nuvve and Circle K deploy large-scale grid services to manage an initial 40 megawatts of EV fast charging and stationary storage capacity across Norway and Denmark

UTILITY & ENERGY PARTNERS AROUND THE WORLD

United States:

- PGE
- PG&E
- SCE
- SDG&E
- La Plata Energy Association
- Ameren
- New Hampshire Electric Co-Op
- Con Edison
- FPL
- Vistra



Europe:

- GALP
- EDF
- Energinet

Asia:

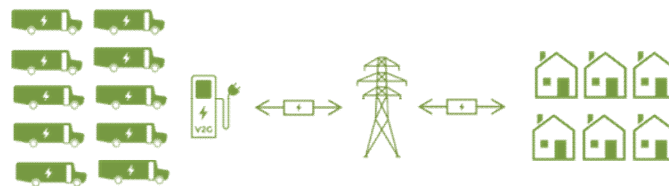
- Chubu Electric Power

V2G HUBS: TURNING EVs INTO POWER PLANTS

- Nuvve's platform aggregates energy and power capacity from multiple EV batteries to form a virtual power plant (VPP)
- The VPP can provide services to the grid that add capacity, help stabilize it, and prevents blackouts

The Power of V2G Hubs:

- If you have 200 buses connected at 125kW = 25MW of capacity
- 25MW would be capable of reducing peak consumption of 10,000 homes by 50%



FLEET-AS-A-SERVICE FROM LEVO

- Levo combines Nuvve's V2G technology and energy management expertise with Stonepeak's capital (up to \$750M committed to Levo) and sustainable infrastructure experience
- Offers an all-in-one solution including the EVs, associated charging infrastructure plus site upgrades, and intelligent energy management
- 100% financing, no upfront costs, fixed monthly fee



2022 Q4 FINANICALS & UPDATES



CONDENSED CONSOLIDATED BALANCE SHEETS

(unaudited)

	December 31, 2022	December 31, 2021
Assets		
Current Assets		
Cash	\$ 15,753,896	\$ 32,360,520
Restricted cash	480,000	380,000
Accounts receivable, net	1,121,694	1,886,708
Inventories	11,551,831	11,118,188
Prepaid expenses and other current assets	2,942,145	1,036,645
Total Current Assets	31,849,566	46,782,061
Property and equipment, net	636,944	356,194
Intangible assets, net	1,341,640	1,481,077
Investment in equity securities	1,670,951	670,951
Investment in leases	97,054	—
Right-of-use operating lease assets	5,305,881	3,483,042
Financing receivables	288,872	138,161
Security deposit, long-term	8,682	3,057
Total Assets	\$ 41,199,590	\$ 52,914,543
Liabilities, Mezzanine Equity and Stockholders' Equity		
Current Liabilities		
Accounts payable	\$ 2,390,422	\$ 5,738,873
Accrued expenses	3,347,399	2,874,018
Deferred revenue	1,221,497	719,771
Operating lease liabilities - current	824,326	41,513
Other liabilities	113,844	110,574
Total Current Liabilities	7,897,488	9,484,749
Operating lease liabilities - noncurrent	5,090,170	3,441,642
Warrants liability	220,884	9,543,000
Derivative liability - non-controlling redeemable preferred shares	359,225	511,948
Other long-term liabilities	393,179	18,860
Total Liabilities	13,960,946	23,000,199
Commitments and Contingencies		
Mezzanine equity		
Redeemable non-controlling interests, preferred shares, zero par value, 1,000,000 shares authorized, 3,138 shares issued and outstanding at December 31, 2022 and December 31, 2021; aggregate liquidation preferences of \$3,464,606 and \$3,200,760 at December 31, 2022 and December 31, 2021, respectively	3,547,765	2,901,899
Class D Incentive units, zero par value, 1,000,000 units authorized, 250,000 units issued and outstanding at December 31, 2022	445,479	—
Stockholders' Equity		
Preferred stock, \$0.0001 par value, 1,000,000 shares authorized; zero shares issued and outstanding at December 31, 2022 and December 31, 2021, respectively	—	—
Common stock, \$0.0001 par value, 100,000,000 and 30,000,000 shares authorized; 24,270,956 and 18,861,130 shares issued and outstanding at December 31, 2022 and December 31, 2021, respectively	2,427	1,888
Additional paid-in capital	144,073,505	122,336,607
Accumulated other comprehensive income	76,182	113,446
Accumulated deficit	(116,956,528)	(92,937,863)
Nuvve Holding Corp. Stockholders' Equity	27,195,586	29,514,078
Non-controlling interests	(3,950,186)	(2,501,633)
Total Stockholders' Equity	23,245,400	27,012,445
Total Liabilities, Mezzanine equity and Stockholders' Equity	\$ 41,199,590	\$ 52,914,543

CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS

(unaudited)

	Three Months Ended December 31,		Years Ended December 31,	
	2022	2021	2022	2021
Revenue				
Products and services	\$ 1,104,325	\$ 1,159,308	\$ 4,913,956	\$ 2,920,627
Grants	42,611	90,519	459,427	1,270,138
Total revenue	1,146,936	1,249,827	5,373,383	4,190,765
Operating expenses				
Cost of product and service revenue	743,395	1,124,729	4,196,788	2,002,197
Selling, general, and administrative	7,189,826	6,544,104	30,115,571	22,896,125
Research and development	1,955,033	1,949,442	7,976,568	6,524,245
Total operating expenses	9,888,254	9,618,275	42,288,927	31,422,567
Operating loss	(8,741,318)	(8,368,448)	(36,915,544)	(27,231,802)
Other income (expense)				
Interest income (expense)	87,026	7,188	134,579	(585,157)
Financing costs	—	—	—	(46,754,794)
Change in fair value of warrants liability	772,762	(952,000)	11,986,462	(312,400)
Change in fair value of derivative liability	172,032	(2,163)	152,723	(14,342)
Other, net	3,619	(39,731)	85,074	282,183
Total other income (expense), net	1,035,439	(986,706)	12,358,838	(47,384,510)
Loss before taxes	(7,705,879)	(9,355,154)	(24,556,706)	(74,616,312)
Income tax expense	800	—	800	1,000
Net loss	\$ (7,706,679)	\$ (9,355,154)	\$ (24,557,506)	\$ (74,617,312)
Less: Net loss attributable to non-controlling interests	(78,978)	(78,405)	(538,841)	(2,138,272)
Net loss attributable to Nuvve Holding Corp.	\$ (7,627,701)	\$ (9,276,749)	\$ (24,018,665)	\$ (72,479,040)
Less: Preferred dividends on redeemable non-controlling interests	67,933	62,760	263,846	101,856
Less: Accretion on redeemable non-controlling interests preferred shares	161,466	161,466	645,866	261,505
Net loss attributable to Nuvve Holding Corp. common stockholders	\$ (7,857,100)	\$ (9,500,975)	\$ (24,928,377)	\$ (72,842,401)
Net loss per share attributable to Nuvve Holding Corp. common stockholders, basic and diluted	\$ (0.33)	\$ (0.51)	\$ (1.19)	\$ (4.37)
Weighted-average shares used in computing net loss per share attributable to Nuvve Holding Corp. common stockholders, basic and diluted	23,955,356	18,800,005	20,971,896	16,654,495

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

(unaudited)

	Years Ended December 31,	
	2022	2021
Operating activities		
Net loss	\$ (24,557,506)	\$ (74,617,312)
Adjustments to reconcile to net loss to net cash used in operating activities		
Depreciation and amortization	289,536	167,558
Share-based compensation	5,234,878	4,219,989
Financing costs	—	46,771,276
Beneficial conversion feature on convertible debenture	—	427,796
Accretion of discount on convertible debenture	—	116,147
Change in fair value of warrants liability	(11,986,462)	312,400
Change in fair value of derivative liability	(152,723)	—
Loss on disposal of asset	—	1,326
Gain on extinguishment of PPP Loan	—	(492,100)
Noncash lease expense	421,183	3,636
Change in operating assets and liabilities		
Accounts receivable	763,302	(887,697)
Inventory	(433,644)	(10,065,710)
Prepaid expenses and other assets	(2,072,001)	(693,756)
Accounts payable	(3,346,937)	2,780,890
Accrued expenses	1,340,918	2,138,574
Deferred revenue	417,481	626,265
Net cash used in operating activities	<u>(34,081,975)</u>	<u>(29,190,718)</u>
Investing activities		
Proceeds from sale of property and equipment	—	7,649
Purchase of property and equipment	(438,045)	(273,124)
Investments in equity securities	(1,000,000)	—
Net cash used in investing activities	<u>(1,438,045)</u>	<u>(265,475)</u>
Financing activities		
Proceeds from Newborn Escrow Account	—	58,184,461
Redemption of Newborn shares	—	(18,629)
Issuance costs related to reverse recapitalization and PIPE offering	—	(3,970,657)
Proceeds from PIPE offering	—	14,250,000
Repayment of Newborn sponsor loans	—	(487,500)
Repurchase of common stock from EDF	—	(6,000,000)
Newborn cash acquired	—	50,206
Purchase of stock from investor	—	(2,000,000)
Payment of financing costs	—	(1,000,000)
Payment of finance lease obligations	(9,691)	(5,839)
Proceeds from forward option put exercise	1,994,073	—
Proceeds from exercise of pre-funded warrants related to Direct Offering	185	—
Proceeds from Direct Offering of common stock, net of offering costs	13,069,815	—
Proceeds from common stock offering, net of offering costs	3,763,494	—
Proceeds from exercise of stock options	245,748	576,528
Issuance Costs Related to Preferred Stock	—	(2,956,248)
Issuance of Redeemable Preferred Stock	—	3,138,000
Payment of Preferred Stock dividends	—	(39,096)
Net cash provided by financing activities	<u>19,063,624</u>	<u>59,721,226</u>
Effect of exchange rate on cash	<u>(50,228)</u>	<u>199,592</u>
Net increase in cash and restricted cash	<u>(16,506,624)</u>	<u>30,464,625</u>
Cash and restricted cash at beginning of year	<u>32,740,520</u>	<u>2,275,895</u>
Cash and restricted cash at end of year	<u>\$ 16,233,896</u>	<u>\$ 32,740,520</u>

2022 Q4 + RECENT HIGHLIGHTS

San Diego School District, Blue Bird and Nuvve Unveil 8 New V2G-Enabled and Qualified Electric School Buses

Vehicles are qualified to generate revenues for the school district through SDG&E's Emergency Load Reduction Program (ELRP) by selling energy stored in the vehicles' batteries back to the grid

Nuvve Helps 10 School Districts Receive 61 EPA Clean School Bus Rebates Totaling \$24.2M

Nuvve and its school district customers began activating their site design / development plans, procurement of Nuvve V2G-capable DC fast chargers and partner electric school buses (ESBs)

Nuvve Vehicle-to-Grid Tech Receives IEEE Certification for Utility-Scale Communications

IEEE Certification is the most widely adopted communications standard between DERs and enables Nuvve's GIVE V2G platform to connect and communicate with leading DERMS

Nuvve Accepts Purchase Order from Los Angeles Unified School District (LAUSD) For 24 V2G Capable DC Fast Chargers

Fast chargers to be installed across two LAUSD school sites, with all chargers expected to be deployed by the middle of 2023

Nuvve and Circle K Deploy Large-Scale Grid Services Using EV Fast Chargers in Norway and Denmark

Project brings grid services to electric vehicle fast chargers at 50 of Circle K's service stations and three to five stationary storage sites in Norway and Denmark



APPENDIX



\$1.2T BIPARTISAN INFRASTRUCTURE BILL

Nuvve Opportunities

\$7.5B



Electric Vehicle Chargers

\$2.5B



Electric Buses

\$3B



Tech to Enhance Grid
Flexibility

Specific V2G Mentions in Bill

- **Sec. 11109:** adds the installation of electric vehicle and vehicle-to-grid (V2G) infrastructure as eligible grant funding categories.
- **Sec. 40107:** “smart grid functions” that qualify include those that facilitates the integration of V2G technologies, renewables, and EV charging infrastructure



\$965M – EPA Clean School Bus Rebates

EPA announcement that Biden-Harris Administration will double clean school bus rebates Awards from \$500M to nearly \$1B

Nuvve Opportunities

- Nuvve Helps **10** School Districts Receive **61** EPA Clean School Bus Rebates Totaling \$24.2M
- The total amount of clean school bus rebates equate to:
 - \$1.2M for EVSE
- School District States:
 - California - 6
 - Texas - 2
 - Arizona - 2



Inflation Reduction Act (IRA) – August

The Inflation Reduction Act is the most significant legislation in U.S. history to tackle the climate crisis and strengthen American energy security.

\$369 billion investment in clean energy over 10 years.

Nuvve Opportunities

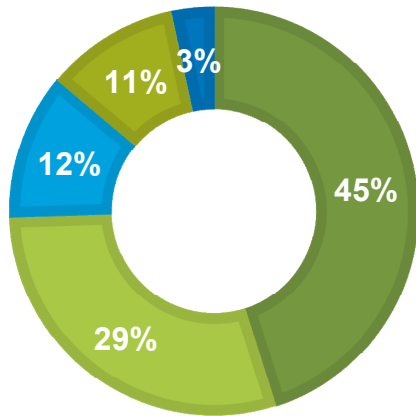
- Commercial EV credits
- Charging infrastructure tax credits
- Clarifies that bidirectional chargers are eligible for the alternative refueling tax credit
- Funding for transportation electrification programs through federal agencies

VEHICLE ELECTRIFICATION

POSITIVE IMPACT



ICE vehicles account for ~45% of global CO₂ emissions



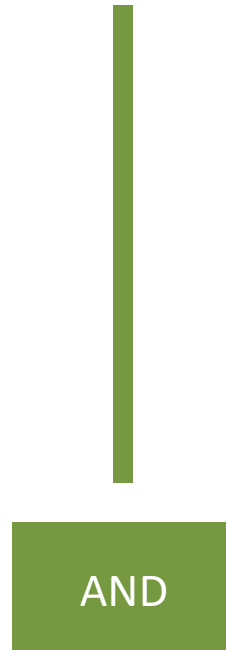
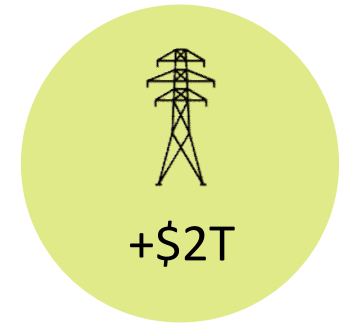
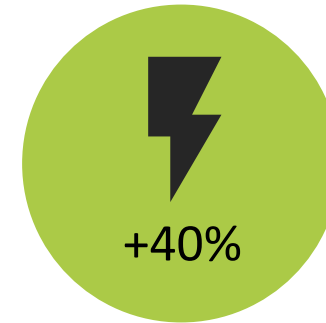
■ Road (Passenger) ■ Road (Freight) ■ Aviation

Transport accounts for 24% of CO₂ emissions from energy

NEGATIVE IMPACT

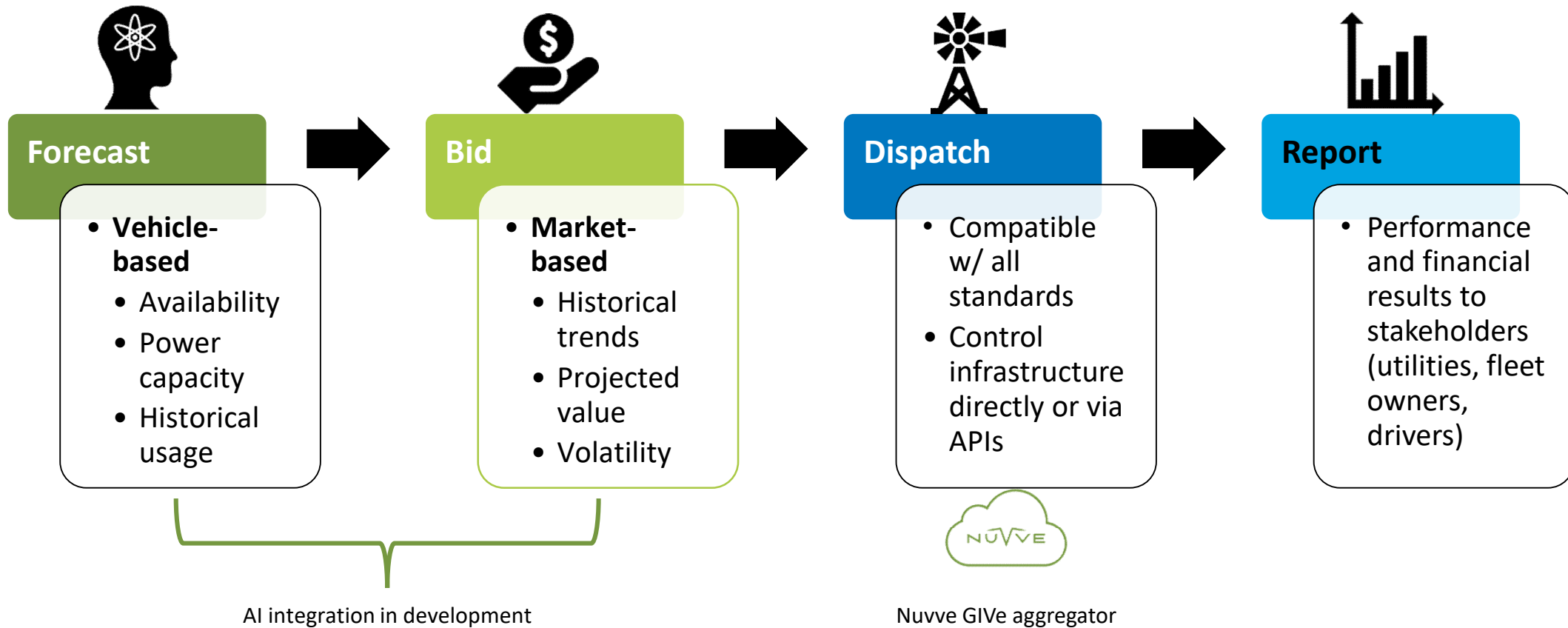


EVs are projected to create a 40% increase in power demand^[1] requiring a \$2T investment in grid upgrades^[2]



Sources: 2018 global CO₂ stats by sector from ourworldindata.org. (1) US Department of Energy, forecast through 2050. (2) Global grid investment requirement implied based upon grid upgrade costs per EV added to the California vehicle fleet implied by SCE "Reimagining the Grid" Dec. 2020 whitepaper

NUVVE PLATFORM: HOW IT WORKS



Nuvve's platform simultaneously meets the needs of drivers, batteries, and the grid on a second-by-second basis



BATTERY HEALTH PAPER

- Learn about the factors that affect EV battery health and how intelligent energy management can help improve it
- Download the paper at nuvve.com/battery-health



Battery Health and V2G

PREPARED BY

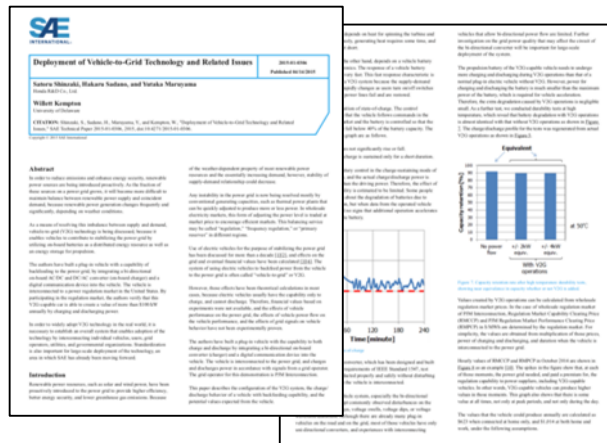
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V2G & BATTERY HEALTH

V2G has minimal impact on the battery

- Main factors that impact capacity are driving and age (calendar life)
- Studies show small percentage impact from V2G

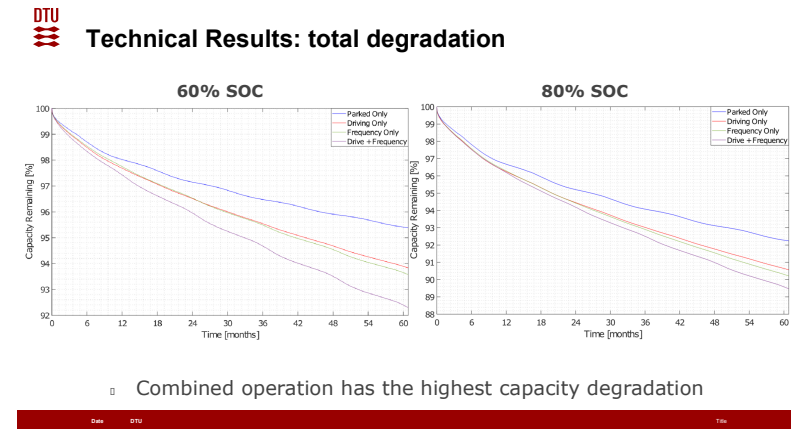
2% impact over 8 years



“Deployment of Vehicle-to-Grid Technology and Related Issues”
2016

SAE Research Paper: Satoru Shinzaki, Hakaru Sadano, and Yutaka Maruyama, Honda R&D Co., Ltd

1-2% impact over 5 years



Combined operation has the highest capacity degradation

“Techno-economic characterization of EV battery considering degradation” 2019 Lisa Calearo, PhD Student , Center for Electric Power and Energy DTU Risø Campus

THANK YOU



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