

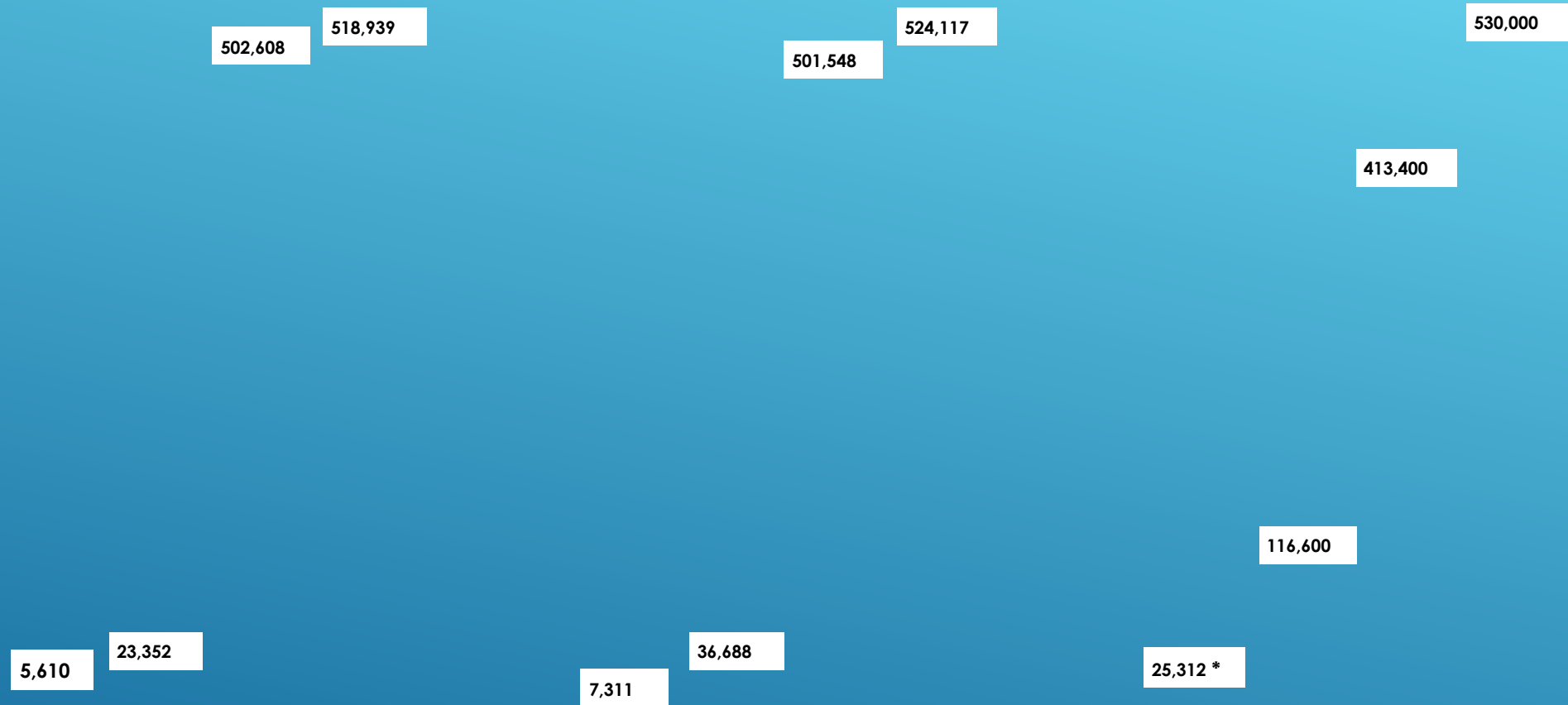
NEW JERSEY'S CLEAN ENERGY FUTURE: WHAT'S NEXT WITH ELECTRIC VEHICLES?

DECEMBER 13, 2019

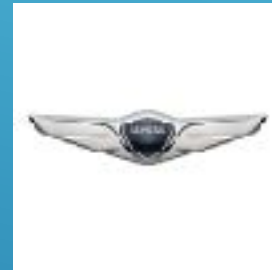
James B. Appleton, President



Vehicle Sales- Traditional vs. Alternative Powertrain



* Based on 23% year-over-year growth from 2019 through 2025



EV MODELS COMING TO MARKET

(SOURCES: AUTOMOTIVE NEWS, BUSINESSINSIDER.COM, ELECTREK.COM, MYEV.COM)

2020

- Acura MDX/ RDX/ TLX
- Aston Martin Rapide E
- Audi A6/ A7/ Q6/ Q8/ RS7/ S7
- Bentley Flying Spur
- BMW iX3
- Chevrolet Bolt crossover
- Chrysler Pacifica/ Portal
- Fiat 500e
- Ford Mustang Mach E SUV
- Ford Escape/ Model E
- Genesis GV80
- Honda Civic
- Jaguar XJ
- Lamborghini Urus
- Lincoln MKC

2021

- Maserati Alfieri
- Mazda EV
- Mercedes Benz EQA/ EQC/ EQS
- Mercedes Benz Esprinter
- Mini Countryman
- Mitsubishi Eclipse Cross
- Mitsubishi EV
- Nissan IDS/ Imx
- Polestar 3
- Porsche Mission E
- Smart ForTwo
- Volkswagen ID Crozz
- Volkswagen ID.3
- Volvo XC 40

- Audi e-tron GT
- BMW i4/ iNext
- Cadillac EV crossover
- Chevrolet compact crossover
- Genesis EV sedan
- Infiniti Q50
- Mercedes Benz EQS
- Subaru EV crossover
- Volkswagen EV sedan

2022

- BMW i*
- Cadillac EV
- Lincoln crossover
- Maserati Levante/ Quattroporte
- Mercedes Benz EQGLE
- Volvo XC60
- Volkswagen I.D. Buzz

Coming Soon

- Toyota SUV
- Subaru SUV
- Ford F-150

IMPEDIMENTS TO GREATER EV ADOPTION

- **PRICE**
- **RANGE ANXIETY**

PRICE GAP BETWEEN ICE & ELECTRIC VEHICLES

- 2019 Honda Civic LX- \$22,500
- 2019 Nissan Leaf S- \$38,550
+\$16,050

- 2019 Toyota RAV4 XLE- \$28,650
- 2019 Hyundai Kona- \$44,900
+\$16,250

- 2019 Subaru Legacy- \$26,945
- 2019 Chevrolet Bolt- \$41,020
+\$16,745

- 2019 Audi A3- \$34,500
- 2019 BMW i3- \$51,500
+\$17,000

PRICE GAP BETWEEN ICE & ELECTRIC VEHICLES

NJ Sales Tax

• 2019 Honda Civic LX-	\$22,500	+\$1,490	=	\$23,990
• 2019 Nissan Leaf S-	<u>\$38,550</u>	+\$0	=	<u>\$38,550</u>
	+\$16,050			+\$14,560
• 2019 Toyota RAV4 XLE-	\$28,650	+\$1,898	=	\$30,548
• 2019 Hyundai Kona-	<u>\$44,900</u>	+\$0	=	<u>\$44,900</u>
	+\$16,250			+\$14,352
• 2019 Subaru Legacy-	\$26,945	+\$1,785	=	\$28,730
• 2019 Chevrolet Bolt-	<u>\$41,020</u>	+\$0	=	<u>\$41,020</u>
	+\$14,075			+\$12,290
• 2019 Audi A3-	\$34,500	+\$2,285	=	\$36,785
• 2019 BMW i3-	<u>\$51,500</u>	+\$0	=	<u>\$51,500</u>
	+\$17,000			+\$14,715

PRICE GAP BETWEEN ICE & ELECTRIC VEHICLES

Federal Tax Credit

• 2019 Honda Civic LX-	\$23,990	-\$0	=	\$23,990
• 2019 Nissan Leaf S-	<u>\$38,550</u>	-\$7,500	=	<u>\$31,050</u>
	+\$14,560			+\$7,060
• 2019 Toyota RAV4 XLE-	\$30,548	-\$0	=	\$30,548
• 2019 Hyundai Kona-	<u>\$44,900</u>	-\$7,500	=	<u>\$37,400</u>
	+\$14,352			+\$6,852
• 2019 Subaru Legacy-	\$28,730	-\$0	=	\$28,730
• 2019 Chevrolet Bolt-	<u>\$41,020</u>	-\$3,750	=	<u>\$37,270</u>
	+\$12,290			+\$8,540
• 2019 Audi A3-	\$36,785	-\$0	=	\$36,785
• 2019 BMW i3-	<u>\$51,500</u>	-\$7,500	=	<u>\$44,000</u>
	+\$14,715			+\$7,215

PRICE GAP BETWEEN ICE & ELECTRIC VEHICLES

\$5,000 State
Incentive

• 2019 Honda Civic LX-	\$23,990	-\$0	=	\$23,990
• 2019 Nissan Leaf S-	<u>\$31,050</u>	-\$5,000	=	<u>\$26,050</u>
	+\$7,060			+\$2,060
• 2019 Toyota RAV4 XLE-	\$30,548	-\$0	=	\$30,548
• 2019 Hyundai Kona-	<u>\$37,400</u>	-\$5,000	=	<u>\$32,400</u>
	+\$6,852			+\$1,852
• 2019 Subaru Legacy-	\$28,730	-\$0	=	\$28,730
• 2019 Chevrolet Bolt-	<u>\$37,270</u>	-\$5,000	=	<u>\$32,270</u>
	+\$8,540			+\$3,540
• 2019 Audi A3-	\$36,785	-\$0	=	\$36,785
• 2019 BMW i3-	<u>\$44,000</u>	-\$5,000	=	<u>\$39,000</u>
	+\$7,215			+\$2,215

REGULATORY & LEGISLATIVE ROLE

- Current law says that EVs and other alternative fuel vehicles need only be “delivered for sale” for the manufacturer to earn clean car credits.
- NO requirement that the vehicle be SOLD.
- Changing the “delivered for sale” requirement to “put in service” before clean credits could be earned would incentivize manufacturers to price and equip vehicles that consumers want (and can afford) to buy.

ADDRESSING RANGE ANXIETY

- Average driver puts about 40 miles on their vehicle each day.
- ICE vehicle gets anywhere from 300-400 miles on a full tank of gas.
- Some hybrids get as much as 500 miles.
- Fully charged EV gets 200-250 miles; models that can reach 300-400 miles on a full charge coming in 2020.

ADDRESSING RANGE ANXIETY

- **ONLY** about 400 electric charging stations in New Jersey with 1,000 outlets
- **Approximately 3,500 gas stations with 20,000+ gas pumps**

HOW DO WE GET MORE EVS ON NEW JERSEY ROADS?

- **Cash-on-the-Hood incentives to encourage consumers to purchase vehicles that are being mandated.**
- **A much more robust and extensive charging infrastructure.**
- **Force manufacturers to price and equip vehicles that consumer want (and can afford) to buy.**