



**Ford Motors plans to spend \$11.5 billion on vehicle electrification through 2022.**

*(Photo by: Craig James, 2020 Ford Mustang Mach-E taken at the 2020 London Classic Car Show, Olympia London, Source)*

## Follow the Leaders

### EV Investments of Select Vehicle Manufacturers and Energy Companies

Several countries have announced eco-friendly initiatives this year as part of their economic stimulus plans. Most notable is China, which is rolling out a \$2 trillion, high-tech infrastructure plan that includes EV charging infrastructure.<sup>1</sup> Germany updated its program as part of a €130 billion stimulus package that includes discounts on new EV purchases and, in addition, will increase taxes on more polluting vehicles starting in 2021.<sup>2</sup> The French government announced

an €8 billion rescue plan for its auto industry, which includes €1 billion in grants to encourage citizens to purchase electric vehicles.<sup>3</sup> While purely electric vehicle manufactures, such as Tesla, are natural beneficiaries of these eco-friendly initiatives, many traditional vehicle manufacturers, along with oil companies, have been preparing for an electric, zero-emissions future, too. Following are select companies and their investments aimed at garnering a larger piece of the growing EV pie.



## Select Vehicle Manufacturers' EV Plans

<b>Ford Motors</b>	Plans to spend \$11.5 billion on vehicle electrification through 2022. <sup>4</sup>
<b>Toyota</b>	Plans to progressively increase investment to \$2 billion in Indonesia from 2019 to 2023. Aiming for half its global sales to be from EVs by 2025. <sup>5</sup>
<b>Volkswagen</b>	Plans to spend €60 billion on switch to electric cars. Over the next decade, VW plans to roll out 75 completely electric models and 60 hybrid vehicles. <sup>6</sup>
<b>Nissan</b>	By the end of fiscal year 2023, the company forecasts EVs will account for 60% of its sales in Japan, 23% in China, and 50% in Europe, resulting in sales of more than 1 million units. <sup>7</sup>
<b>General Motors</b>	Plans to invest more than \$20 billion in its next generation of all-electric and autonomous vehicles through 2025. <sup>8</sup>
<b>Daimler</b>	Investing more than €10 billion in the development of its EQ vehicle portfolio alone: highly efficient high-tech combustion engines, systematic hybridization and battery-electric or fuel-cell drive systems. <sup>9</sup>

## Select Energy Companies' Recent Charging-Related Investments

<p><b>Royal Dutch Shell</b></p>	<p>Acquired Greenlots, a charging network company that provides quick chargers and software to manage charging.</p> <p>Funded Ample, a startup seeking “a solution for the energy delivery challenge for electric cars.”</p> <p>Also installed their own charging stations and purchased other charging networks, like NewMotion, a network in Europe with over 30,000 chargers.<sup>10</sup></p>
<p><b>Chevron</b></p>	<p>Invested in ChargePoint Inc., one of the largest operators of electric vehicle charging networks.<sup>11</sup></p> <p>Partnered with EVgo to bring EV charging stations to its gas stations.<sup>12</sup></p>
<p><b>Total</b></p>	<p>Battery manufacturer Saft, a subsidiary of Total acquired microgrid solutions provider Go Electric.</p> <p>Deal with Green Flex, a sustainability company.</p> <p>Deal with Iconic materials, a battery developer.<sup>13</sup></p>
<p><b>ExxonMobil</b></p>	<p>Said in early 2019 that “they are actively considering investments into EV charging infrastructure.”<sup>14</sup></p>
<p><b>BP</b></p>	<p>Invested \$5 million in FreeWire, manufacturer of mobile rapid charging systems for electric vehicles.</p> <p>Invested \$20 million in StoreDot, an ultra-fast-charging battery start-up company.</p> <p>Invested in PowerShare, a leading integrated hardware and software solutions provider for EV charging in China.<sup>15</sup></p> <p>Owens the Aral fuel station network, which is piloting ultra-fast 150kW chargers.<sup>16</sup></p>

(1) <https://asia.nikkei.com/Business/China-tech/China-bets-on-2tn-high-tech-infrastructure-plan-to-spark-economy>

(2) <https://electrek.co/2020/06/04/germany-boost-ev-incentives-9000-euros-helping-tesla-model-3-vw-id-3/>

(3) <https://www.bbc.com/news/business-52814074>

(4) <https://www.cnbc.com/2020/03/03/ford-confirms-us-built-electric-cargo-van-under-its-11point5-billion-plan.html>

(5) <https://www.reuters.com/article/us-toyota-indonesia/toyota-to-invest-2-billion-in-developing-electric-vehicles-in-indonesia-idUSKCN1TS1SL>

(6) <https://www.dw.com/en/volkswagen-to-spend-60-billion-on-switch-to-electric-cars/a-51270701#:~:text=News-Volkswagen%20to%20spend%20%E2%82%AC60%20billion%20on%20switch%20to%20electric,into%20expanding%20its%20electric%20fleet.&text=The%20company's%20supervisory%20board%20approved,spent%20between%202020%20and%202024.>

(7) <https://electrek.co/2020/05/28/nissan-will-add-only-one-new-ev-in-the-us-through-2023/>

(8) <https://www.cnbc.com/2020/03/04/gm-to-spend-20-billion-on-new-electric-autonomous-vehicles.html>

(9) <https://media.daimler.com/marsMediaSite/en/instance/ko/Plans-for-more-than-ten-different-all-electric-vehicles-by-2022-All-systems-are-go.xhtml?oid=29779739>

(10) <https://electrek.co/2019/01/30/shell-acquires-greenlots-major-ev-fast-charging-infrastructure-installer/>

(11) <https://www.bloomberg.com/news/articles/2019-05-20/oil-giant-chevron-offering-electric-car-charging-at-stations>

(12) <https://electrek.co/2019/05/20/chevron-ev-charging-gas-stations/>

(13) <https://www.utilitydive.com/news/french-oil-giant-total-expands-into-us-microgrid-market-with-go-electric-ac/557163/>

(14) <https://www.axios.com/exxon-mulling-investing-electric-vehicle-charging-bfb2d09b-94ff-481e-a0b5-09bd4cde273e.html>

(15) Company press releases

(16) <https://www.fleeteurope.com/en/new-energies/europe/analysis/bp-aims-key-role-ev-charging-maas-and-leasing?a=JMA06&t%5B0%5D=Charging&t%5B1%5D=EV&t%5B2%5D=Aral&t%5B3%5D=MaaS%20Global&t%5B4%5D=BP&curl=1>