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Ford Model e

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On February 6, 2024, the press release announcing Ford Motor Company's 2023 fourth-quarter and full-year financial results had just been released, and CFO John Lawler was preparing for the follow-up investor conference call to be held later that day. On the call, he would present the first full-year financial results under Ford's new segment reporting structure, in which the performance of its electric vehicle (EV) business, known as Ford Model e, was reported separately. Ford's decision to break out the performance of its EV business was unique among legacy automotive companies, who otherwise included EVs within their internal combustion engine operations.

The 2023 performance of Ford Model e was not particularly encouraging, with a loss before interest and taxes of $4.7 billion. Comparative data from prior periods showed that this loss had increased from $0.9 billion in 2021 and $2.1 billion in 2022. These losses starkly contrasted with the healthy profits from Ford's sales of conventional cars, trucks, and vans.

Company History of EVs

Influenced by his friend Thomas Edison's experiments with battery technology, Henry Ford began working on a low-cost electric car shortly after founding his namesake company in 1903.

"Within a year, I hope, we shall begin the manufacture of an electric automobile," Ford told *The New York Times* in 1914. "The problem so far has been to build a storage battery of light weight which would operate for long distances without recharging."[1]

[1] Bradley Berman, "Ford Electric Cars: Past, Present and Future," *INSIDEEVs*, January 22, 2019, https://insideevs.com/features/342330/ford-electric-cars-past-present-and-future/ (accessed July 2024).

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Despite building a couple of prototypes capable of traveling between 50 and 100 miles on a single charge, Ford shelved his EV plans for undetermined reasons. This pattern repeated over the next century, with the company occasionally restarting work on EVs only to cancel the projects shortly thereafter.

One notable example occurred in 2009 with the introduction of the Focus Electric, an electric version of Ford's popular compact car. This vehicle stood out as the first electric car from any automobile manufacturer that looked and drove like a conventional car. However, in 2018, Ford discontinued the entire Focus product line along with many of its other car models as part of a broad restructuring to streamline operations and improve efficiency.

Notwithstanding numerous prior false starts and stops with EVs, Ford committed to investing $4.5 billion in this area from 2016 through 2020.[2] In 2018, the company increased this planned investment to $11.5 billion through 2022,[3] and in 2021, further increased it to $30 billion through 2025.[4] In 2022, Ford announced it would spend $50 billion through 2026, with the goal of increasing EVs' share of its global production to 50% by 2030.[5]

In 2021, Ford unveiled three new EVs targeting different segments of its vehicle portfolio. The Mustang Mach-E provided a luxury, sports car experience while the F-150 Lightning introduced an all-electric option to the F-Series, America's best-selling pickup. The E-Transit was an all-electric version of America's best-selling commercial van.

By the end of 2021, customers had ordered or reserved 275,000 Ford EVs, making the company the No. 2 seller of EVs in the U.S.[6] President and CEO Jim Farley described this achievement as "an important early step toward eventually being the true EV leader."[7] Excitement around Ford EVs continued into the following year, with the production of the 150,000th Mustang Mach-E in November 2022, less than two years after its launch.[8] Additionally, the F-150 Lightning was honored as the *MotorTrend* Truck of the Year in December 2022.[9]

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[2] Christina Rogers, "Ford to Spend $4.5 Billion in Electric Vehicle Development," *The Wall Street Journal*, December 11, 2015.

[3] Mike Colias, "Ford Increasing Electric Vehicle Investment to $11 Billion by 2022," *The Wall Street Journal*, January 14, 2018.

[4] Michael Wayland, "Ford ups EV investments, targets 40% electric car sales by2030 under latest turnaround plan," *CNBC*, May 26, 2021, https://www.cnbc.com/2021/05/26/ford-ups-ev-investments-targets-40percent-electric-car-sales-by-2030-under-latest-turnaround-plan.html (accessed July 2024).

[5] Aishwarya Nair, Abhijith Ganapavaram, and Paul Lienert, "Ford boosts EV spending to $50 billion, sets up new Model e unit," *Reuters*, March 2, 2022.

[6] "Strategic Progress of Ford+ Growth Plan, Solid Financials in '21 Position Company for Connected EV Leadership in 2022 Beyond," *Ford Motor Company Press Release*, February 3, 2022.

[7] Ibid.

[8] "People, Plan, Products Position Ford Well for 'Pivotal' 2023 Despite Effect of Volume Shortfall on Q4, Full-Year 2022 Results," *Ford Motor Company Press Release*, February 2, 2023.

[9] Scott Evans, "The Ford F-150 Lightning Is the 2023 MotorTrend Truck of the Year," *MotorTrend*, December 13, 2022, https://www.motortrend.com/news/ford-f-150-lightning-2023-truck-of-the-year/ (accessed July 2024).

However, Ford's momentum in EVs quickly began to fade. In October 2023, facing declining consumer enthusiasm and pricing pressures from competitors, the company decided to delay $12 billion in planned investment on EVs.[10] Striking a cautious tone about avoiding overbuilding if demand continued to cool, CFO Lawler commented, "There's a lot that's going to change between now and '26 and '30. We're going to adjust appropriately."[11]

Accounting for Research & Development: U.S. GAAP vs. IFRS

Accounting for research and development (R&D) costs differs between U.S. GAAP and International Financial Reporting Standards (IFRS).[12] Under U.S. GAAP, R&D costs are expensed as incurred. Under IFRS, while research costs are expensed just like U.S. GAAP, development costs may be capitalized if specific conditions are met.

Research costs pertain to investigations conducted with the aim of gaining new scientific or technical knowledge. In contrast, development costs involve applying research findings to create plans for new or improved materials, devices, products, processes, systems, or services. Under IFRS, development costs are capitalized only after technical and commercial feasibility has been established. This means that a company must be able to demonstrate how the costs will generate future economic benefits.

Capitalizing and subsequently amortizing a development cost allows a company to initially record the cost as an intangible asset on the balance sheet and expense it in future periods. This treatment delays the recognition of the expense even though the money has already been spent. It is analogous to depreciation expense for property, plant, and equipment (PP&E).

Lawler was well aware that development costs were accounted for differently outside the U.S. Having spent many years working in Ford's European and Asian operations before becoming CFO, he became familiar with the accounting practices of the company's international competitors. These competitors, unlike those in the U.S., capitalized a portion of their development costs. **Exhibit 1** provides data from the 2023 fiscal year financial statements of select German and Japanese automobile manufacturers regarding their research and development activities.

As he reviewed Ford's 2023 full-year financial results in preparation for the upcoming investor conference call, Lawler paused at the company's R&D expense of $8.2 billion, which was 50% higher than Ford's $5.5 billion consolidated profit before interest and taxes. Although Ford's annual R&D expense had increased only modestly over the prior decade (**Exhibit 2**), a greater share was being dedicated to EVs. Lawler couldn't help but feel a bit envious of the company's international competitors who were able to capitalize a portion of their development costs.

[10] Nora Eckert, "Ford Retrenches Further on EVs Amid Demand Uncertainty," *The Wall Street Journal*, October 26, 2023.

[11] Ibid.

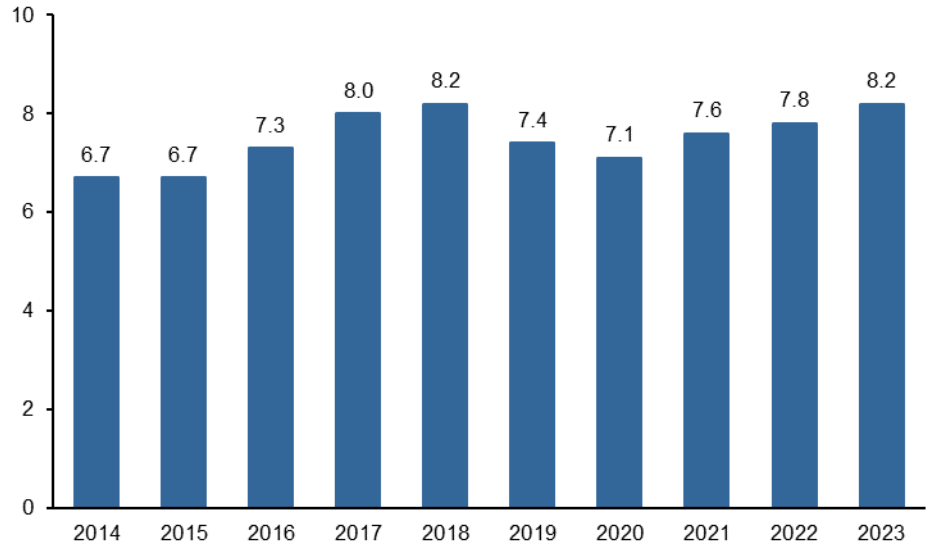
[12] For a concise synopsis of the different treatment of R&D costs under U.S. GAAP versus IFRS, see https://kpmg.com/us/en/articles/2023/ifrs-vs-us-gaap-rd-costs.html (accessed July 2024).

Exhibit 1 Select Foreign Automobile Manufacturer R&D Data (Millions)

	R&D Expense	Research Expense	Capitalized Development Costs	Amortized Development Expense	Accumulated Capitalized Development Costs
Volkswagen	€21,779	€16,592	€11,142	€5,187	€62,544
Mercedes	€9,996	€7,857	€3,766	€2,139	€21,733
BMW	€7,755	€5,368	€2,604	€2,387	€21,576
Toyota	¥1,202,373	¥1,041,687	¥124,788	¥160,686	¥1,159,435
Honda	¥976,366	¥821,586	¥207,519	¥154,780	¥1,014,266
Subaru	¥113,508	¥74,316	¥56,694	¥39,192	¥260,051

Notes: Data are from fiscal year 2023. Accumulated capitalized development costs are measured as of the beginning of the fiscal year.
Source: Company financial statements.

Exhibit 2 Ford Motor Company R&D Expense ($ Billions)



Source: Ford Motor Company, 10Ks, December 31, 2014-23.