



CLASS & INEQUALITY

Rooting for Elon

A public-private partnership in the green economy sounds great, so why isn't it working?

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ANDREW ELROD

Image: [SpaceX](#)

Over the past year, in pursuit of his ambitious goals to transform U.S. auto and energy markets, Elon Musk has met critics from all directions: customers, stockholders, and workers. After Tesla recently missed its Model 3 production quotas for the third time in three quarters, the South African playboy entrepreneur offered a rare glimpse of contrition: the “car biz is hell,” he **tweeted**, adding that he was sleeping in the Tesla factory to overcome production shortfalls.

The week before, a Delaware court allowed a class action suit against the company to move ahead. Shareholders are alleging Tesla management engaged in a “self-dealing” breach of fiduciary duty. From a historic peak of \$360, Tesla share prices fell by nearly a third to \$250 in April. The *New York Times* **ran** the headline “Tesla Looked Like the Future. Now Some Ask if It Has One,” while *The Economist* **warned** that “Tesla is heading for a cash

crunch.”

For those condemned to life on Earth, Musk represents the possibility of a ‘renewable,’ ‘sustainable’ capitalism. And yet Musk’s success still hasn’t materialized.

This is a hard pill for many to swallow. For years now, Musk has come to stand in for something more than each of his three manufacturing companies: Tesla, the plug-in electric car manufacturer; SolarCity, the solar-panel and battery manufacturer that merged with Tesla in 2016; and SpaceX, the federally financed private rocketry firm. In his heroic gleam and boyish daring, many Americans see something as close to a leader as they are likely to have experienced in recent memory.

Frank Bruni, for instance, thinks Musk’s experimental mega projects have come to fill a moral vacuum. They serve as evidence we live in times when business corporations are “**more high-minded**, forward-thinking and solutions-oriented than the federal government.” At the *Financial Times*, Brooke Masters **wrote** that “Elon Musk is the Robert F. Kennedy of transportation”—the audacious dreamer whose hopes remain untested.

Andrew Ross Sorkin, the leading business reporter for the *New York Times*, echoes the sentiment. Musk, he **wrote** at the beginning of the Trump administration, was “arguably the one person in the nation more responsible than anyone else for generating a vision for the re-emergence of manufacturing in the United States en masse.”

But what is the substance of this vision? With Musk entering a new phase in his manufacturing career, it is a question worth considering. While the headlines, stock prices and investor ratings (Moody’s just **downgraded** Tesla) follow the production numbers and profit margins, the rest of us should examine just what it is we expect Musk to do.

What would success look like? Can it be done within the constraints of a private business firm? And, if so, as the debts come due, who is willing to sacrifice to help Musk achieve it?



What we often mean when we root for Musk is that we want to hasten the coming business-directed energy transition of our industrial system away from fossil fuels. In this, he embodies both a widely-popular yearning for social transformation and the businessman's stolidity restraining it.

For those condemned to life on Earth, what Musk represents above all is the possibility of a “green” or “renewable”—and therefore “sustainable”—capitalism.

Species survival is one way of putting it, but this elides all the details relevant to our political lives. That ambiguity is precisely why the vision is so appealing: it can be both revolutionary and ostensibly consensual. For the past fifty years, after all, among the easiest and most widely accepted formulas for people to work together to change their futures has been through patterns of personal consumption. We invest our savings, purchase private equipment, place our bets in the enthralling spectator sport that is the clash of powerful personalities and organizations—and then we wait.

It is this sleek, efficient temple of opportunity and security that Musk has cultivated and we have bought in to that justifies the massive government spending behind his projects. Indeed, the most potent collective action behind Musk's success has come from the state. In today's political climate, projects such as his, which promise a return on investment and private-management practices, are the only ones deemed worthy of public investment. The states of California, Nevada, New York, and Oregon, have all joined the federal government in offering direct grants and loans to Musk's companies, and hundreds of millions of dollars in consumer rebates are ultimately paid into Tesla through consumers (the federal government, for example, pays a \$7,500 tax credit to purchasers of electric cars; California pays a further \$2,500). As early as 2015, the *Los Angeles Times* attempted to sum the total public aid to Musk's operations and arrived at **\$4.9 billion**.

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toward prospecting.

Yet Musk's profitability—his success by the conventional standard—still hasn't materialized. Tesla was run at a \$671 million loss in the third quarter of 2017—\$117 million paid in interest on the company's debts alone. In fiscal year 2017, losses summed to \$2.2 billion, about three times what the company lost in 2016.

Moreover, Tesla has repeatedly missed every deadline promised to its customers and is currently under investigation by the National Labor Relations Board for denying employees the right to collective bargaining. The company faces numerous shareholder lawsuits alleging managerial violations of fiduciary duty, with a raft of class-action suits following a recent investigation by the Securities and Exchange Commission.

Musk's career thus illustrates the central challenge of U.S. industrial planning. Because of taboos against government ownership and income-tax financed public services, the public must find ways of persuading businessmen to manage private property to meet public objectives. Often this leaves us choking at an ideological and political impasse. Rather than have government authorities spend billions to own and operate their own plant under public oversight and administration, we are trapped debating which private profit-making groups the government should support in pursuit of its public-interest goals.

If there is a coherent strategy, it is to underwrite the financing of uncertain companies that operate largely to generate capital gains for insiders, while unloading risk to savers on the outside. But when these companies threaten savers, the vainglory of businessmen loses much of its utility as an instrument of public policy.

Meanwhile, the effect of this style of industrial policy in the labor market is palpably unpleasant. To avoid becoming Ponzi schemes, companies such as Tesla and SolarCity must compete in product markets by undermining existing, middle-class jobs. The brazen fact here is that the assemblage of jobs and green-energy programs behind Tesla use public expenditure, but they guarantee little employment income and no production targets.



Consider the story of Tesla's auto factory in Fremont, California. Until 2010, the plant operated for six decades as a union shop. General Motors completed construction in 1962, and the UAW, then at the height of its power, bargained the wages of the entire U.S. auto industry.

Then, in the pit of the Reagan recession, with the industry operating at less than half capacity, GM closed the facility for two years. In 1984, Toyota agreed to take a 70 percent stake in the beleaguered factory to continue selling in the U.S. market as protectionism echoed through Congress. The operation reopened as National United Motors Manufacturing Incorporated, or NUMMI, and produced Corolla sedans, Tacoma pickup trucks, and the Pontiac Vibe.

It was a new, experimental venture, both praised and attacked for its "Japanese-style" management, but NUMMI continued to employ people under a UAW contract. Over the next three decades, however, Toyota learned it could access U.S. consumers more cheaply with factories in the non-union states of Kentucky, Texas, and Alabama. The opportunity to shutter the single U.S. plant where it engaged in collective bargaining came in 2009, when General Motors went into government ownership. Toyota closed the plant, putting over 20,000 people at the facility and in the area's supplier shops out of work.

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Musk bought the plant in 2010, and although his role in this saga of U.S. manufacturing is novel, it fits within broader political trends. Increasingly, policy makers have been trying to restore some of the wastage of globalization through product taxes and subsidies, without encroachments on property or income that, after all, would only frighten capital away. Since the 1990s, the federal government and the state of California have issued a number of such taxes and subsidy programs in pursuit of a market-based energy

transition. But the profits were not there, and few investors have been willing to take a risk on a U.S. green-energy sector.

Enter Musk. To obtain his financing for the Fremont plant, Musk, according to the *Wall Street Journal*, used “a political kludge of **the murkiest order**.” Arnold Schwarzenegger’s state Treasurer Bill Lockyer arranged the deal: Musk bought the factory from Toyota using a crisp \$465 million federal loan guarantee from the Obama Administration. But in order to qualify for his federal loan, Musk needed private financial commitments, so Toyota bought \$50 million in shares at Tesla’s pending IPO. Tesla could then take the plant off Toyota’s hands, all while the State of California was offering “undisclosed state incentives.”

The Alameda County Assessor’s office had last appraised the factory at \$1 billion; Musk paid \$42 million. Yet getting the factory for a bargain was only the beginning. To pay back the government, not to mention his private creditors, Musk would have to make it profitable. This meant cutting workers’ wages, and the Fremont financing came with no obligations to hire former UAW workers. Autoworkers in the South Bay, where Fremont is located, once averaged \$30 an hour. Today, they start around \$18 an hour.

Among the 10,000 auto-workers laboring in Tesla’s Fremont plant, many remember a time with higher wages and better work conditions. Michael Sanchez, Jonathan Galescu, and Richard Ortiz, for example, have all complained about **work-related injuries** and the corresponding lower pay, and there were **vocal calls** for unionizing in 2017. In October of last year, however, Tesla fired a reported 1,200 employees, hundreds from the Fremont factory. Some say the firings were **in retaliation** for attempts to organize. Rather than organize a work stoppage in response to the firings, however, the UAW, which is in disarray following two failed organizing campaigns in Chattanooga, Tennessee, and Canton, Mississippi, appears unwilling to challenge any employer in North America. Instead, the union filed charges of labor-law violations with the National Labor Relations Board.



Where workers have been more successful standing up to the company, and where consumers are less willing to absorb his high prices, Musk and his fellow directors have used far less prudent strategies to finance their debts. The Building and Construction Trades Council of Northern Nevada, for example, **successfully organized** a work stoppage at SolarCity's "Gigafactory" in February 2016. The 350 carpenters, painters, electricians, and plumbers were demanding local hiring, which raised SolarCity's costs. After the factory was completed, Musk began accusing subcontractors in the plant of squeezing a crucial bottleneck in his supply chain, but in reality, SolarCity's obligations were mounting for other reasons.

Between 2013 and 2016, as SolarCity expanded operations in Reno, Nevada, and in Buffalo, New York, SolarCity's debt increased thirteen-fold, totaling \$3.56 billion. This debt was accumulated even despite the \$1.3 billion in state property-tax breaks the Nevada legislature paid the corporation, and, most astonishingly, despite the fact that the State University of New York was the sole financing for the company's plant in Buffalo. Under a "build-to-suit" lease agreement between SolarCity and the state of New York, the university has invested over \$1 billion in constructing the plant, and the state—which will own the plant for ten years after full production begins—charges a rent to SolarCity of \$2 per year. In exchange, SolarCity pledged \$5 billion of private investment to the people of the state of New York.

So, given such generous deals, why the huge debt?

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In a nutshell, the SolarCity business plan collapsed. As the price of photovoltaics plummeted in the face of Chinese capacity expansion, managers expected the "installed cost per watt" of their product to be twenty cents above what customers might get elsewhere. The machines the company had installed in Buffalo sat idle. With Tesla cars, the aura of responsibility and the absence of competition has meant consumers pay a higher price; but home solar panels are a different market. (The Trump administration's

recent tariff increases on solar panels, in a rare concession to job-conscious working-class voters, will help U.S. producers in this industry, if not their customers.)

Faced with such business failings, unable to continue slashing worker pay in Nevada, and with obligations to the people of New York on the books, Musk came up with a Plan B. As SolarCity grew ever more precarious, Musk repeatedly asked the Tesla board to buy SolarCity. At least four of Tesla's seven board members were involved in SolarCity as directors or chief officers, and in November of 2016, Tesla completed the acquisition of SolarCity's property and obligations, paying \$25 per share, or \$2.6 billion.

Tesla stockholders have **since sued**, charging that Tesla directors who owned SolarCity planned to bail themselves out, exchanging their bad SolarCity stock for Tesla cash, while simultaneously loading up the corporation with SolarCity's obligations. Shareholders allege that Musk has built his three companies as a "pyramid" and that it is "important that there not be some sort of house of cards that crumbles if one element of the pyramid . . . falters."

The conflicts of interest certainly seem problematic—and not just for the shareholders. Consider the following: as the two companies, SolarCity and Tesla, were delaying operations and refusing to bargain with workers, Brad W. Buss received \$4.95 million as a Tesla director in 2015 alone, on top of his \$32 million as the Chief Financial Officer at the insolvent SolarCity. Antonio J. Gracias, founder and CEO of the private equity firm Valor Management, sits on Tesla's board and owned 211,854 SolarCity shares at the time of the merger. Steve Jurvenston, another Silicon Valley venture capitalist, earned over \$6 million as a Tesla board member in 2016 and owned over 417,450 shares of SolarCity during the merger. His investing firm, Draper Fisher Jurveston, put \$18.9 million in SolarCity. Nancy Pfund, a venture capitalist at DBL investors, another equity firm, owned over 1.5 million shares of SolarCity at the time of the merger, and Pfund's partner at DBL is Ira Ehrenpreis, who owns the map software firm MapBox and is also a Tesla director. (In 2015, he secured an agreement with the auto company to use his software, at a \$5 million fee on top of sales.)

Whether the people of Buffalo will see their \$5 billion investment remains uncertain; the factory has been mostly empty, and recently Musk invited **Panasonic** into the space.



Wealth in the United States has demonstrated a willingness to sacrifice for experimental engineering, but not for much else. Musk's entire career has been plied with the liberal credit of the world of secular stagnation—a world in which capital for want of returns is increasingly driven toward prospecting. In this world private equity can run concerns at a loss indefinitely, as some claim is done with Uber, while protecting their wealth through bidding up asset values, as with Twitter or Tesla—all without the firms generating enough revenue to consistently pay down principle.

The tragedy of this model is that while companies such as Tesla embody real potentialities for transforming U.S. energy and labor markets, they also embody the ideological barriers to attempting those changes. Musk's manufacturing companies seem appealing because they are public-private partnerships between high finance and organized environmentalists. But what many expect from Musk has come into conflict with what his operations are: business firms. He is constrained by pressure from creditors to at least present the façade of future profitability. And while it is customary for start-ups to lose money for a few years, the decision of self-seeking financiers to prolong the convention for over a decade—Tesla was founded in 2003—seems like irrational vanity at best, especially in a moment when the public interest in reducing income inequality and responding to climate change are increasingly urgent.

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In the end, a project as grandiose as transitioning the nation's manufacturing plants into renewable-energy product markets—all while narrowing the inequalities of the contemporary business firm—will require coordination and oversight beyond the disorganized profit-seeking of short-sighted fund managers. With directors coming from the banks and from Silicon Valley, it appears unlikely such a project will deliver anything more than the looting of public funds and a handful of idle factories.

An obvious alternative would be to formalize the relationship between Tesla and the government. Imagine, for instance, if the purchasers of Tesla securities had instead purchased Treasury notes, and the federal government then brought Musk and his employees onto the public payroll. Returns would be secured by tax revenues. Heightened scrutiny of public budgets would dissuade corporate malfeasance. Wages could be raised, and if the concern was run at a loss, this could be subsidized out of the public budget. Most importantly, the discretion to do so would be left to elected officials, rather than to Musk's creditors at Goldman Sachs.

Versions of such models are easy to find abroad. The German state of Lower Saxony owns 20 percent of Volkswagen, for example, and is guaranteed voting rights in board decisions. Moreover, under German corporation law, any stock-issuing business with more than 2,000 employees must reserve half the seats on its board of directors for worker-elected representatives.

Examples also abound in the history of the United States: the last great energy transition—out of woodstoves and coal plants and into hydroelectric power—was only completed with the vast public enterprise of the Tennessee Valley Authority, the Lower Colorado River Authority, and the Columbia River Project, among others.

These kinds of arrangements would allow another version of Musk to emerge—Musk-as-government engineer. And it would ensure that those actually building our future are paid a decent wage. For this to happen, those currently making production and employment decisions would have to relinquish some control to the other constituencies in our national life who are neither purchasers of new cars nor financiers of risky start-ups. Leaders such as Andrew Cuomo or Jerry Brown, careers spent in the pecuniary embrace, can hardly be expected to force the issue. But those of us who keep public enterprise in mind when we root for Elon Musk and the business acumen of green engineers can.

Until we do, the future is something for which most people will be told to wait.

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