

Introduction

Large bills posted in February 1837 throughout New York City read: “BREAD, MEAT, RENT, AND FUEL! *Their prices must come down!* The VOICE of THE PEOPLE shall be heard and will prevail.”¹ Fuel as in *energy*—a necessity alongside food and shelter.

In response to an energy supply crunch in 2022, the head of U.S. Department of Energy stated: We are on a war footing—an emergency, and ... that means *you* producing more *right now*, where and if you can.”² It was, the International Energy Agency (IEA) declared, “the first truly global energy crisis.”³

These entreaties, 185 years apart, underscore the importance of dependable, affordable energy in all seasons, good times and bad, war or peace. Any cutoff or prolonged price spike—for wood, charcoal, and coal centuries ago; oil, gas, coal, and electricity today—constitutes an emergency, a *crisis*.

Energy, the resource of resources, the *master resource*, is not to be compromised. But can a genuine free market deliver—or must government intervention save private property and voluntary exchange from itself? That is the central question of this primer on the political economy of energy.

Political Economy

Economics, for most of its history, was called *political economy*. Today, with the highly theoretic turn of the former, the latter term has re-emerged to denominate a separate discipline. Economics studies human action in production and trade intended to improve well-being; political economy studies the interactions between government and the marketplace.

Political economy centers on government in the economy, blending history, economics, and political science. It is a discipline in the humanities, not the hard sciences. As such, it requires a reliable worldview to properly interpretate events.

The political economist recognizes *government as a process*, flowing from the supply-and-demand of political favor. What is the role of policy reformers, business

¹ Quoted in Fitzwilliam Byrdsall, *The History of the LOCO-FOCO or Equal Rights Party* (New York: Clement & Packard, 1842), p. 100.

² Jennifer Granholm, “Remarks as Prepared for Delivery by Secretary of Energy Jennifer Granholm at CERAWEEK 2022,” Houston, Texas, press release, U.S. Department of Energy, March 9, 2022. Available at

<https://www.energy.gov/articles/secretary-granholm-ceraweek-keynote-luncheon-and-11-fireside-chat-sp-globals-dan-yergin>.

³ Emily Chow and Muyu Xu, “World is in its ‘first truly global energy crisis’—IEA’s Birol.” Reuters, October 25, 2022. Available at

<https://www.reuters.com/markets/commodities/global-lng-markets-further-tighten-next-year-ieas-birol-2022-10-25/>.

profit-seekers, and public-interest groups in government policy? How might the personality of a politician or bureaucrat affect the process? And what are the results, as opposed to the intentions, of such activism?

Richard Vietor has defined political economy as “that interaction between business and government aimed at bringing order to the market economy.”⁴ This progressivist understanding of political economy thus assumes the prominence of market shortcomings in need of government correction.

A more neutral revision of Vietor’s definition is simply *the interaction between business and government*. Politicians, bureaucrats, business interests, and public-interest groups are self-interested and fallible, their actions not necessarily (per Vietor’s definition) “bringing order to the market economy.” This recharacterization also allows debate over what is a “market failure,” why the problem exists, and what is the solution. Did the “failure” actually emerge from the free market? Did prior government intervention distort a true market? Or did the lack of a properly defined market—or subtle government intervention—create the problem? And, prospectively, will “government failure” spoil the attempted correction?

Substituting “stability” for “market order,” political economy can be defined as *interaction between business and government aimed at bringing stability to private-sector production and trade*. It reflects bountiful evidence that government-business interaction has often benefitted businesses, not “the market economy” as an institution.

This definition is more in line with America’s actual socio-economic system of *political capitalism*, defined as “an economic and political system in which the economic and political elite cooperate for their mutual benefit.”⁵ Today, however, the elites may include public-interest groups and non-governmental organizations, as well as the more familiar political and economic actors.

§§

Progressivism sees market failure under capitalism as inherent, socially costly, and correctable by government. *Classical liberalism* evaluates free markets as orderly, sustainable, even salutary. Unhampered market processes are seen as informationally rich, self-correcting, pro-consumer, and preferable to politicization. While imperfect, market processes are seen as better than the political alternatives.

Big government under political capitalism has resulted primarily from business-to-government lobbying for special favor—and less from reformer-driven government edicts. At a minimum,

⁴ Richard H. K. Vietor, *Environmental Politics and the Coal Coalition* (College Station: Texas A&M University Press, 1980), p. 6. Vietor’s definition applies to some situations better than others, such as the rise of air and water quality standards in the U.S., where a lack of property rights created a lack of market order.

⁵ Randall G. Holcombe, *Political Capitalism: How Economic and Political Power is Made and Maintained* (Cambridge, UK: Cambridge University Press, 2018), p. 1.

business interests have shaped government intervention, sometimes in compromise with other businesses and political opponents.⁶ Defensive or preemptive business lobbying is captured by the adage: “If you’re not at the table, then you’re probably on the menu.”

The “gales of creative destruction” in free markets prompted systematic business demand for stability or new opportunity, too often being special government favor via a public grant, tax break, or strategic regulation. Because such lobbying was legal and culturally accepted, it was easily rationalized by the arguments of the beneficiaries.

A firm likes competition for its inputs, far less so for its outputs. Given the vertical structure of production with businesses providing inputs and outputs to each other, many and varied commercial tiffs have resulted in political lobbying.

Winners under political capitalism are the firms receiving special government favor; the losers are those who pay for or suffer from the favors: taxpayers, consumers (ratepayers), or rival firms or industries.

§§

In the last half-century, government and business have been increasingly driven by nongovernmental, nonbusiness organizations. Environmental organizations (many focused on energy) have been among the largest and most effective, with limited-government groups having to educate and lobby for economic liberty as a special interest.

Business and non-business interest groups are not necessarily opposed. Cooperative lobbying of for-profit and nonprofit groups—desiring the same ends for different reasons—has become increasingly common, even required. The term for such collaboration, *Bootleggers and Baptists*, captures the sociological dynamics of this legislative force.

Political economy analyzes governments and markets in the real world. It pertains most clearly to capitalistic countries that have private property and voluntary exchange under the rule of law. The U.S. mixed-economy experience prominently applies to perceived or real crises. Energy has been no exception.

Crisis and Leviathan

Government intervention has been most pronounced and consequential during abnormal periods or crises, mostly during military conflict but also in peacetime. What constitutes an energy crisis? Did it occur from Acts of God or institutional shortcomings? What has been the role of markets vis-à-vis government in America’s major energy challenges, from World War I until the present?

⁶ “There are as many objections [to the regulation] as there are differing economic interests.” *State of Louisiana v. FPC*, 503 F. 2d 844 at 869 (1974).

Business and government are the two most identified drivers of America's political capitalism.⁷ But intellectuals, experts, nonprofit advocacy groups, and mega-philanthropists—the *reformers*—have shaped the energy-policy debate during crises. Influential thought leaders have recommended the visible hand of government in place of the invisible hand of markets to address “unfair competition,” natural monopoly,” “national security,” “energy security,” and “negative externalities.” How have these complaints squared with reality and affected public policy?

How have non-profit groups interacted with business interests in times of crisis, real or perceived? In the last half-century, in particular, environmental activists have opposed and supported business groups (and vice versa) in shaping legislation and administrative regulation relating to energy.

What has been the role of preexisting government intervention in creating emergencies or hampering policy response to the new challenges? Did further intervention rescue—or worsen—prior involvement? The answers bring into play *analytic failure* and *government failure*, not only *market failure*, in the U.S. energy experience.

§§

“That politicians and commentators dub the situation a ‘crisis’ means it is important, of national or global significance, and should be taken very seriously—like a war, an epidemic, or an earthquake.”⁸ Peter Grossman goes on to define an energy crisis as “a market disruption that causes a sudden price spike or a longer-term price surge, or leads to a transitory shortage.”⁹

Grossman's insight invites a free-market definition of *political-economic crisis*, defined by Robert Higgs as when “certain conditions...call forth extensions of governmental control over or outright replacement of the market economy.”¹⁰ Grossman adds:

A crisis may be a logistical problem, a financial issue, or, most likely, a political failure that gives producers and consumers the wrong signals, leading producers to deliver too little of an, or the wrong, energy product, or consumers to demand more than current market conditions warrant.¹¹

Time and again, public policy error is found at the bottom of energy emergencies. Three MIT-associated specialists, with the 1970s energy saga in mind, noted:

⁷ In addition to “political capitalism,” another term for the “middle way” between capitalism and socialism is *American state corporatism*. Robert Bradley Jr. and Roger Donway, “Capitalism, Socialism, and the ‘Middle Way’: A Taxonomy,” *Independent Review* 15, no. 1 (Summer 2010), p. 82.

⁸ Peter Grossman, *U.S. Energy Policy and the Pursuit of Failure* (New York: Cambridge University Press, 2013), pp. 6–7.

⁹ Grossman, *U.S. Energy Policy and the Pursuit of Failure*, p. 6. Jay Hakes in *Energy Crises: Nixon, Ford, Carter, and Hard Choices in the 1970s* (Norman: University of Oklahoma Press, 2021) does not define his key term, taking an I-know-it-when-I-see-it approach toward oil-import interruptions, price spikes, and shortages.

¹⁰ Robert Higgs, *Crisis and Leviathan: Critical Episodes in the Growth of American Government* (New York: Oxford University Press, 1987), p. 17.

¹¹ Grossman, *U.S. Energy Policy and the Pursuit of Failure*, p. 7.

Just as the term embargo misled us, so has the term crisis. In common parlance, a crisis is a relatively short-term phenomenon from which one either dies or recovers. We now know that the energy phenomenon does not fit this description.¹²

Their subtle point: energy crises are not inherent to the natural workings of markets but governmental and thus preventable.

Crisis is differentiable from *disaster*. “Crisis is defined here as a period of heightened danger that presents urgent challenges to decision makers,” explained John Singleton in *Economic and Natural Disasters since 1900*. “Disaster is defined as an event or process that generates heavy costs and severe disruption.”¹³ The Great Texas Blackout of February 2021, a public-policy-related event, was a disaster in every sense of the word. Catastrophe, a term employed by the alarmist wing of the climate-change debate, is synonymous with disaster.

Accidents, such as the partial meltdown of a reactor at Three Mile Island Nuclear Generating Station in 1979, a turning point against this energy source in the U.S., would be subsumed under *potential disaster* rather than crisis. Hurricane Katrina was a “classic natural disaster,” but it was governmental, resulting from engineering flaws by the U.S. Army Corps of Engineers regarding the protective levees around New Orleans. America’s Great Depression was policy-made by two Presidents substituting intervention for natural market correction.

Incidents in industrial life are “gradually to be solved” with “ever-developing answers.”¹⁴ This term, in contrast to emergency or crisis, invites “the beginnings of a flexible and developing economic program.”¹⁵ But should that program involve government intervention, even central planning? Or rededicated market reliance?

§§

Robert Higgs’s *Crisis and Leviathan* (1987) documented how episodes of war mobilization and business emergencies created Big Government—not just bigger government—with authorities assuming entirely new functions. Higgs also documented a *ratchet effect*, whereby the new intervention outlived the crisis to become a new, higher baseline for government activism.¹⁶ He also identified *ideological change* from emergency planning that facilitated the politics of expansive government going forward.¹⁷

¹² Thomas Lee, Ben Ball, and Richard Tabors, *Energy Aftermath: How We Can Learn from the Blunders of the Past to Create a Hopeful Energy Future* (Boston, MA: Harvard Business School Press, 1990), p. 21.

¹³ John Singleton, *Economic and Natural Disasters since 1900* (Northampton, MA: Edward Elgar, 2016), p. 7.

¹⁴ Walton Hamilton, “The Problem of Control in Industrial Society,” in *Current Economic Problems*, ed. Hamilton (Chicago, IL: University of Chicago Press, 1919), p. 15.

¹⁵ Hamilton, “The Problem of Control in Industrial Society,” p. 16.

¹⁶ Higgs, *Crisis and Leviathan*, chapter 4. He notes, “where the political economy was likely to go depended on where it had been” (p. 58). Milton Friedman’s “the tyranny of the status quo” is akin to Higgs’s ratchet effect.

¹⁷ “Each time the government expands its effective authority over economic decision-making, it sets in motion a variety of economic, institutional, and ideological adjustments whose common denominator is a

Higgs's chronology dates from the 1890s, thus excluding the Civil War (1861–65) in the growth of government. He covers World War I, the Great Depression, and World War II, leaving three more crises of energy import (for a total of six) for analysis:

- The Korean War, briefer and less sweeping than prior wartime planning
- The 1970s Energy Crisis, centered on petroleum and natural gas
- The (ongoing) Green Energy Crises, from Texas and California to Europe and beyond

Secondary sagas involved the mid-1980s oil-industry depression; the First Gulf War of 1990–91; the Great Recession of 2007–09; and the Pandemic of 2020–21. These events fueled special-interest lobbying from rival organizations, as well as opportunistic politicians and bureaucrats regulating and otherwise influencing private decision-making.

These episodes, cumulatively covering approximately 30 of 165 years of energy history, receive in-depth treatment in this book. Each involved preexisting and subsequent intervention—hence the more complete chronology of government and energy presented in chapters 1, 2, 4, 8, and 12.

§§

An evolving, fitful, location-specific emergency concerned air and water pollution, the focus of chapters 7 and 9. The problem came from growing energy combustion—wood, coal, and oil—in urban areas, as well as unconstrained oil discharges.

Outdoor smoke was a long-recognized nuisance, blackening surfaces and irritating health. Tort litigation and city ordinances in the nineteenth century addressed obvious problems. Air pollution emergencies decades later from industrial combustion and automobile exhaust led to county, state, and federal regulation.¹⁸

What began with case-by-case or class remediation fell behind—and required brute governmental measures. Even defining what was an air pollutant at what concentration was an open issue. Even tobacco smoking was not thought to be particularly dangerous.

Was the prevention/restitution delay the result of a lack of government organization and of industry controlling the narrative? Or did festering problems occur from a demotion of (free market) tort law? This will be explored in later chapters.

Water pollution also outraced nongovernmental solutions. A tipping point came around World War I with ships switching to fuel oil from coal, leaving ballast discharge in the water. Increased oil tanker activity to and from the U.S. created handling spillage. Later, offshore oil drilling mishaps would become major ecological markers for water pollution abatement and regulation.¹⁹

§§

“You never want a serious crisis to go to waste,” stated Rahm Emanuel, President Obama’s incoming White House chief of staff in 2008.

diminished resistance to Bigger Government.” Higgs, *Crisis and Leviathan*, p. 261.

¹⁸ See chapter 7, pp. 000 and chapter 9, pp. 000.

¹⁹ See chapter 4, pp. 000 and chapter 9, pp. 000.

[It is] an opportunity to do things that you think you could not do before... What used to be long-term problems, be they in the health care area, energy area, education area ... are now immediate and must be dealt with.²⁰

The financial crisis of 2008/09, the Pandemic of 2020–21, and a declared “climate crisis” by the Biden State increased government intervention and swelled federal spending to add to the budget deficit and national debt. Chapter 13 details these energy ratchets—and the “magical thinking” (a term of Vaclav Smil) behind forced energy transformation.

Saul Alinsky’s social-change primer, *Rules for Radicals*, has been in evidence in modern energy policy. “The eighth rule: *Keep the pressure on.*” Never let up is evident in the Biden administration’s all-of-government approach to climate activism. “The thirteenth rule: *Pick the target, freeze it, personalize it, and polarize it*” has been applied to fossil fuel companies, executives, and advocates.²¹ The result is what today in the U.S. is a growing Energy Leviathan.

Central Planning Reconsidered

“[T]he planners have so far been allowed to have it very much their own way,” observed F. A. Hayek on the eve of World War II. “It has been taken almost for granted that the only conceivable method of allocating resources for the arms programme is by an elaborate superstructure of Government controls.”²²

Mainstream economics *had* accepted the wartime-emergency economics of interventionism and central direction. The “abnormal circumstances of the war,” stated Arthur Pigou in 1920, justified government price ceilings to prevent windfall profits for “fortunately situated sellers.”²³ Another prominent economist of the day justified the same policy to protect the “poorer classes” from high-priced “necessary commodities.”²⁴ A generation later, Paul Samuelson defended World War I’s command economy as necessary, even as the margin between victory and defeat.²⁵

World War II planning was similarly excused. “Clearly the price system which directs production and consumption in peacetime could not alone effect this transition, although capitalist nations

²⁰ “Shaping the New Agenda,” televised interview with Rahm Emanuel on the *Wall Street Journal's* broadcast of its CEO Council conference, November 19, 2008. Available on YouTube: [“Rahm Emanuel on the Opportunities of Crisis.”](#) Quoted in Walter Rosenbaum, *American Energy: The Politics of 21st Century Policy* (Los Angeles, CA: Sage, 2015), p. 1.

²¹ Saul D. Alinsky, *Rules for Radicals: A Practical Primer for Realistic Radicals* (New York: Random House, 1971), pp. 128, 130.

²² F. A. Hayek, “Pricing versus Rationing” (1939) in *Socialism and War: Essays, Documents, Reviews*, vol. 10 of *The Collected Works of F. A. Hayek*, ed. Bruce Caldwell (Chicago, IL: University of Chicago Press, 1997; repr. in paperback, Indianapolis, IN: Liberty Fund, 1997), p. 151.

²³ A. C. Pigou, *The Economics of Welfare* (London: Macmillan and Co., 1920), pp. 199, 210. World War I’s command economy, he concluded, did not injure “the national dividend.”

²⁴ Gustav Cassel, *The Theory of Social Economy*, trans. S. L. Barron, from the 5th German edition (New York: Augustus M. Kelley, [1932] 1967), p. 87.

²⁵ Paul Samuelson, *Economics: An Introductory Analysis* (New York: McGraw-Hill Book Company, [1948] 1998), p. 165.

rely on it to some extent,” John Ise wrote in his 1946 text, *Economics*.²⁶ Samuelson did not opine on World War II in his 1948 textbook, leaving his verdict for World War I extant.

Yet planning’s results challenge these cavalier views. World War I’s forced centralization was a response to preexisting intervention, which hampered private-sector coordination under changed conditions (chapter 3). World War II’s more rigorous command-and-control effort created a large margin for error compared to the forgone alternative of market reliance (chapter 6). The Korean War’s quasi-planning was superfluous and counterproductive (chapter 7).

Erudite voices rejected wartime planning, whether *administered* as in English-speaking nations or *war socialism* in Germany. During World War I, Ludwig von Mises lamented “the verbal fetish ‘war economy’” wherein “all economic thought was put aside.”²⁷ The market process, driven by scarcity pricing and profit/loss accounting, he argued, efficiently coordinated resources in war and in peace. The same economics, *one economics*, applied.

Militarizing a peacetime economy “did not require the establishment of controls and priorities,” Mises noted.²⁸ Taxation and borrowing, even inflation finance, made government “the most solvent buyer on the market.”²⁹ Civilian demand, with less income and capital, would naturally yield.

Government price controls, replete with “systems of priorities and rationing,” distorted free-market economic calculation.³⁰ What did not work in normal times did not alleviate emergencies either. Mises’s verdict about wartime emergency planning finds support in the U.S. energy experience.

Why were inappropriate policies followed under a new pretense? “The planners and interventionists regard [wartime] profits as a scandal,” Mises explained.

As they see it, the first duty of government in time of war is to prevent the emergence of new millionaires. It is, they say, unfair to let some people become richer while other people are killed or maimed.³¹

While calling for “a radical change in ideologies and economic policies” to quell nationalistic hostilities, Mises championed unhampered markets.³² “Nothing is fair in war,” he added. But “[t]he worst enemies of a nation are those malicious demagogues who would give their envy precedent over the vital interest of their nation’s cause.”³³

²⁶ John Ise, *Economics* (New York: Harper & Brothers, 1946), p. 676.

²⁷ Ludwig von Mises, *Nation, State, and Economy* (New York: New York University Press, [1919], 1983), p. 140. “War socialism” and “war communism” were terms applied to German and Russian wartime economic planning, respectively. Mises, *Nation, State, and Economy*, pp. 141–42.

²⁸ Ludwig von Mises, *Human Action: A Treatise on Economics* (New Haven, CT: Yale University Press, 1949), p. 821. Mises’s views first appeared in the 1940 edition, “Nationalökonomie,” which later became *Human Action*.

²⁹ Mises, *Human Action*, p. 822.

³⁰ Mises, *Human Action*, p. 822.

³¹ Mises, *Human Action*, p. 823.

³² Mises, *Human Action*, p. 821.

³³ Mises, *Human Action*, p. 823.

Peacetime Intervention

Outside of wartime, market critics have concluded that government must improve the status quo and protect the future via instruction, regulation, taxation, subsidization, even requisition.

“Market failure” has been pinned on oil, gas, coal, and electricity for more than a century. Four classic areas have been:

1. The *natural monopoly* argument against competition in gas and in electric distribution, implying that one company be granted an exclusive franchise and subject to rate-and-service regulation (chapters 2, 4, 5). This *regulatory covenant* remains the basis for public-utility regulation today.
2. The *overproduction* (conservation) problem of petroleum relative to future societal needs, necessitating government limits on wellhead output (chapters 4 and 5). Ditto for bituminous coal: too much, too soon, too many firms (chapter 2). The Great Depression and New Deal brought these matters to a head with federal activism in the attempt to resurrect prosperity (chapter 5).
3. The imminent *exhaustion* of economical oil and gas deposits (the *limits to growth*), requiring a transition to renewable energies, particularly wind and solar (chapter 10).
4. The *energy security* threat of oil-import dependence, necessitating a tariff or quota at the international border to increase private costs and lessen social costs (chapters 8 and 10).
5. Air and water pollution of unowned or unownable assets (chapters 1, 4, 7, and 9).

The rationales of depletion and energy security encouraged a government-led turn toward renewable energy and conservationism—the *soft energy path*. The 1980s return to oil and gas abundance demoted this argument (chapter 12), but another rationalization for government activism took over—anthropogenic climate change, chiefly associated with carbon-based energy emissions (chapter 13). This mother-of-all-market-failures drives energy policy today.

“Markets are an excellent servant, a bad master, and a worse religion,” stated Amory Lovins, a guru of the new energy thinking.³⁴ “Never again will we embrace a free market—it’s too expensive,” added S. David Freeman, another influential energy advisor. “The marketplace is blind to the need for cleaner air, it is blind to the needs of consumers in a shortage, and it produces a shortage with its volatility.”³⁵ But does this harsh verdict of free markets and classical liberalism involve *analytical failure*—and how does *government failure* impact is-versus-ought in the policy process?

§§

³⁴ Quoted in Alex Robbins, “Lovins Praises Capitalism,” *The Stanford Review*, April 26, 2001, p. 3.

³⁵ S. David Freeman, chief energy advisor to California Governor Gray Davis. Quoted in Don Thompson, “State Energy Crisis May Imperil Future of Deregulation, Consumer Choice,” *Associated Press Newswires*, June 27, 2001.

Government idealism toward energy problems has prominently involved *neo-Malthusianism*, an intellectual doctrine attributing insurmountable resource problems to a growing population.³⁶ Originally, the problem was running out of food relative to growing demand. In the last third of the 20th century, neo-Malthusianism declared an inevitable, systemic shortfall of agricultural, mineral, and energy resources. Peak Oil and Peak Gas were catchwords in the 1970s—and again a few decades later.

Other doctrines questioned business-as-usual, particularly in the U.S., which with less than 5 percent of the world’s population consumes more than 15 percent of global primary energy. Small is Beautiful espoused local, simple living and less reliance in place of mass consumption and globalization. Deep Ecology questioned the impacts of humankind on an optimal, fragile nature. The *resource curse* was tied to mineral-rich nations squandering wealth and leaving the economy to price swings of a few commodities. All these doctrines questioned modernism in support of a simple, steady-state past.

Most recently, with resources in abundance, the posited scarcity is the eradication of a *livable climate* under high-energy business as usual. “[W]e are running out of environment—that is, out of the capacity of the environment to absorb energy’s impacts without risk of intolerable disruption,” stated John Holdren, President Obama’s two-term science advisor.³⁷ Dating from the late 1980s, climate angst is the latest iteration of what Paul Ballonoff termed *the never-ending energy crisis*.

“A primary function of government is to repair crises,” Ballonoff observed. “The finite resource model continually predicts that, no matter what the present conditions, energy crises will soon occur that government might help postpone, with just a little more planning now.”³⁸ And today, the government-led “energy transition” has brought forth a crisis of affordability and availability at home and abroad, by requiring the forced substitution of dilute, intermittent energies (wind and solar, in particular) for stock energies in electrical generation.

Chapter 13 will review the ongoing Green Energy Crises, from Texas’s statewide electricity shortage in February 2021 through Europe’s “net zero” energy shock of the next year. Ayn Rand’s *Atlas Shrugged* dystopia of inferior parasites crowding out superior producers applies to energy—with dire results. The terms “energy crisis” and “energy security” have reemerged in the so-called *energy transition* era, or just Energy Leviathan era.

§§

³⁶ See, generally, Pierre Desrochers and Joanna Szurmak, *Population Bombed!* (London: Global Warming Policy Foundation, 2019).

³⁷ John Holdren, “The Quest for Affordable Energy,” *Scientific American*, 289 No. 6 (December 2003), p. 119. Holdren and others also saw air and water pollution as intractable, growing by-products of fossil-fuel usage.

³⁸ Ballonoff, *Energy: Ending the Never-Ending Crisis* (Washington, DC: Cato Institute, 1997), p. 124.

Intellectual pressures have played a role in government policies in peace and war. But beyond ideology has been business demand for government favor, sometimes to preserve a free market but more often to hamper the market for pecuniary advantage.

The most prominent areas of intervention are:

- Price interference, usurping free-market scarcity values (ceilings or floors)
- Allocation controls, directing supply outside of free market price reliance (prohibitions, rationing)
- Rate and profit regulation (public utility regulation)
- International trade barriers, whether blocking/subsidizing imports or exports at the U.S. border (tariffs, quotas)
- Directives to, or requisition of, private property (mandatory open access)
- Licenses or franchises awarded to companies to reduce/eliminate competition from other firms (public utility regulation)
- Prohibitions against cooperative private arrangements (antitrust law)
- Credit controls for capital allocation
- Currency inflation (general price inflation) to cover budget deficits
- Preferential tax treatment for certain firms or industries
- Research and development funding from the public treasury
- Subsidies for favored technologies (synthetic fuels, wind power, solar power, biomass, electric vehicles)
- Ownership (municipalization, federal power marketing agencies, Strategic Petroleum Reserve)
- Operation of assets (public land leasing for mineral development)
- End-use requirements (conservationism)

Today, in bootlegger-and-Baptist fashion, business firms benefitting from the “energy transition” have joined the environmental lobby, citing a negative human influence on global climate.³⁹ Politicians have gladly wielded more power based on a “green” mandate.

The Energy Industries

The energy industry can be disaggregated in terms of function, lobbying positions, and government policy. Four distinct industries, each with its own subsectors, are oil, natural gas/LNG, coal, and electricity.⁴⁰ Electricity itself is generated from fossil fuels and nuclear. So-called renewables are led by hydro and include wind, solar, geothermal, and biomass.

³⁹ Bruce Yandle, “Bootleggers and Baptists in Retrospect,” *Regulation* 22, no. 3 (Fall 1999), pp. 5–7.

⁴⁰ A fifth primary energy industry would be fuel ethanol. Made from corn and other farm products, ethanol can be considered an agricultural product as well.

In political terms, fossil fuels “were viewed as separate industries, each with its own problem and each with its own impact upon society.”⁴¹ While having its own tailored intervention, oil, gas, and coal have been lumped together as one in the politics of climate change.

“The twentieth century rightly deserves the title ‘the century of oil,’” stated Daniel Yergin in *The Prize*.⁴² But until mid-century, coal was America’s energy leader. All were important in the political economy of war, with coal and oil being the most regulated and natural gas and electricity less so.

Coal was the first global energy stock for mass usage. Oil and gas were manufactured from coal; *crude* oil and *natural* gas would emerge later to create three distinct branches of the fossil-fuel industry.

Coal producers integrated forward into transportation, but most sold their commodity at the mine to transporters (primarily railroads) to deliver to utility-owned power plants. “Captive mines” were those owned by the distributors or consumers of that coal.

Coal was America’s leading energy source from the late 18th century (supplanting biomass) through the first half of the 20th century. It was prominent in World War I and during the New Deal, but less so relative to oil and gas in World War II. During the 1970s energy crisis, coal made a comeback as the most plentiful and reliable fossil fuel. Today, a half-century later, global coal usage has rebounded globally as an affordable and reliable substitute for intermittent, costly energies.

Oil captured the illumination market before becoming the energy of choice for all forms of transportation. Petroleum is one of the world’s largest and most essential industries.⁴³

Independents have competed against vertically integrated firms in all three phases: upstream (wellhead), midstream (transportation, storage), and downstream (refining, wholesaling, retailing).

Rivalries between independent and integrated firms have resulted in lobbying rifts both within and between these sectors, a major theme in the political economy of oil. The politics of firms and trade associations have been dictated by the math of profitability, far less by a philosophical position of less or more government.

Natural gas overlaps with petroleum at the wellhead—but little more. Integrated natural gas “majors” do not exist (as they do for petroleum), owing to a long history of government

⁴¹ John Clark, *Energy and the Federal Government: Fossil Fuel Policies, 1900–1946* (Urbana: University of Illinois Press, 1987), p. 34. He adds: “Governmental authorities treated them discretely, thinking not of national energy needs but of national needs for coal, for oil, or for natural gas.”

⁴² Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (New York: Simon & Schuster, 1991), p. 15.

⁴³ Michael Economides and Ronald Oligney, *The Color of Oil* (Katy, TX: Round Oak Publishing, 2000), p. 100.

intervention. This has produced three distinct segments with different lobbying priorities in production, transmission, and distribution.⁴⁴

Natural gas achieved federal planning status after World War II and again during the 1970s energy crisis. Methane for home uses was joined by gas-fired power generation in the Sixties. Vehicular use never gained traction against petroleum.

Electricity has been a vertically integrated industry for most of its history, with generation, transmission, and distribution under common management. Scale economies with the parts was complemented by reliability economies of the whole. Under statewide public-utility regulation, utilities avoided federal planning and dodged shortages with ratebase incentives. That has changed with a new generation of government intervention, resulting in grid instability from (government-driven) intermittent energies, the subject of chapter 12.

Political Economy Eras

Each U.S. energy industry has its own history, political timeline, and major episodes. But six general political-economy eras can be identified, two noncontiguous.

The *free-market era* can be dated until the 1880s, the decade when independent oil firms resorted to using the political means against John D. Rockefeller's Standard Oil Company, as well as when the integrated manufactured (coal) gas industry turned to public utility regulation.

The *competition-intervention era* covers approximately 40 years before and after World War I, from 1885 until 1916, and from 1919 until 1929. Federal intervention involved land and water policy; interstate transportation involving railroads and oil pipelines; oil-land set-asides; and an antitrust prosecution dissolving Standard Oil. The oil states, meanwhile, grappled with "too much" competition at the wellhead, while electric utilities turned to public-utility commission control of "cutthroat" competition.

The *federal planning era* groups together World War I, the New Deal, World War II, the Korean War, and the 1970s energy crisis, the commonality being price and allocation edicts from Washington, D.C. for important energies.

Post-World War II until the early 1970s was the *oil-protection era*, when complementary state and federal intervention protected the domestic industry from growing imports and flush output at home. Mandatory wellhead proration in the oil states (except California) was itself protected by oil tariffs in 1932 and an import quota program in 1959.

A mixed-economy era, at best a *quasi-free market era*, came out of the 1970s energy crisis. Wellhead deregulation of oil and natural gas was significant, but surviving agencies and

⁴⁴ Robert Bradley Jr., *Oil, Gas, and Government: The U.S. Experience* (Lanham, MD: Rowman and Littlefield, 1996), pp. 445, 1797.

demand-side programs (conservationism) continued into the 1980s until today—a ratchet effect never before seen in U.S energy history.

The current era, the sixth, is the *climate-alarm era* dominated by growing climate-related intervention. The policies involved the Great Texas Blackout of February 2021, the greatest single economic debacle in U.S. energy history.

The fifth and sixth eras coexist today, with strong free market forces hampered by growing climate-alarm intervention.

Summarizing by year, the six were:

- Free-market era (inception–1885)
- Competition intervention era (1885–1916, 1919–32)
- Federal planning era (1916–19; 1932–40; 1941–45, 1951–53, 1971–80)
- Oil-protection era (1946–1971)
- Mixed-economy/quasi-free-market era (1981–present)
- Climate-policy era (1993–present)

Interpreted another way, when was government policy generally *neutral*, *protectionist*, or *punitive* toward the energy industries? The free-market era would be the most neutral, despite scattered intervention that hurt some or helped others within the sector. In the case of oil, the protectionist (pro-industry) era is distinct, spanning several of the above eras that date from the late 1920s until the early 1970s, excluding wartime planning. The 1970s was a punitive decade for the oil industry with the politics reversed from the oil states to the consumer Northeast.

The vertically integrated gas and electric utilities enjoyed a protectionist period via franchise protection and friendly state regulators. For power companies, the easy era came to a halt with nuclear cost overruns that led to uncompleted projects, large writeoffs, and rate increases. The 1970s/1980s experience helped open the door to a new regulatory regime, the mandatory open access era, discussed in chapter 12.

A National Energy Policy?

Outside of wartime, government energy activism has been *piecemeal*, loosely coordinated at best, contradictory at worst. Competing federal agencies—as well as state and local jurisdictions with powers to regulate, tax, and grant—explain the variety and scope of government in energy.

Industry-wise, the temptations of the mixed economy have resulted in numerous and competing lobbying positions within and between different energy sectors, such as independents versus majors on the oil side. The rise of nongovernmental organizations (NGOs) in the last half-century has added more complexity and has put pressure on the Founders’ vision of a constitutional republic with a few delimited powers.

In the face of this policy potpourri, sentiment has risen for a *coordinated national energy policy*. In 1939, the energy section of FDR’s National Resources Committee recommended “a

coordinated policy function for the energy resources ... lodged solely in one Federal agency.” A “broadening of the Federal interest” was necessary to oversee, if not assume outright, the functions of 20 federal agencies and bureaus—and work with nearly 100 state agencies with energy responsibilities.⁴⁵

In *A National Policy for the Oil Industry* (1948), Eugene Rostow complained about “a fantastic and inordinately complicated patchwork of State and federal regulation, and of industrial self-regulation” of a monopolistic industry. The Yale University law professor’s “public control policy” centered around a federally reorganized industry through prohibitions on integration (forced dismemberment) and unitization requirements at the wellhead.⁴⁶

“Men like Mises and Hayek, and their followers, who fear and distrust the modern growth of the state and its powers,” stated Rostow, “should especially favor measures to increase the importance of competitive influences in the organization of industry.” A competitively restructured industry would preserve economies of scale, while eliminating “important wastes associated with excessive size and monopoly.”⁴⁷

Progressivists sought more, not less, government for the holy grail. The coal industry too was subject to calls for a government-led restructuring, to reduce waste, discussed in chapter 2.

§§

The Truman-appointed President’s Materials Policy Commission (Paley Commission) assessed the nation’s energy and mineral resources out to 1975. *Resources for Freedom* (1952) called for “a comprehensive energy policy,” wherein “the Nation’s energy problem must be viewed in its entirety and not as a loose collection of independent pieces involving different sources and forms of energy.”

So numerous and vital are the interrelations among all sectors of the energy field, that problems in any one sector must be dealt with always in full consideration of the side effects on all other sectors. The aim must be to achieve a constant pattern of policies and programs throughout the entire energy field.⁴⁸

Still, tailored intervention would be necessary:

Public utility regulations apply to electricity but not to coal; natural gas is a more regulated industry than petroleum.... Government engages in substantial technical research programs in some parts of the energy field but not in others; the Federal

⁴⁵ [*Energy Resources and National Policy*](#). Report from the Energy Resources Committee to the National Resources Committee (Washington, D.C.: GPO, 1939), pp. 30, 32. Also see chapter 6, p. 000.

⁴⁶ Eugene V. Rostow, *A National Policy for the Oil Industry* (New Haven, CT: Yale University Press, 1948), pp. xv, 145.

⁴⁷ Rostow, *A National Policy for the Oil Industry*, p. xiii. The lawyer did not recognize economies of scope via integration or recognize that the oil majors were more disciplined at the wellhead than their independent rivals.

⁴⁸ President’s Materials Policy Commission, [*Resources for Freedom: A Report to the President*](#), 5 vols. (Washington, D.C.: U.S. Government Printing Office, 1952), vol. 1, p. 129.

Government builds hydropower projects and fosters atomic development but does not enter to the same extent into other energy sectors.⁴⁹

Holistic, integrative policy required a central nexus. The “hydra heads of energy policy must be reined together” with a “comprehensive understanding” provided by “one central agency of the Government.” Once established, this agency must take “a comprehensive and continuing review of the long-term energy outlook and an appraisal of the adequacy of public and private policies and programs for coping with the problems that such a review may reveal.”⁵⁰

§§

A decade later, and not with free markets in mind, Robert Engler called for “public planning, not just of oil, but of all energy resources,” with an “integrated national policy ... replac[ing] the current legally archaic, administratively irresponsible and politically contradictory approach to oil and other resources.” He continued:

Long-range plans must be formulated for the related use and conservation of all energy resources—coal, oil, gas, hydroelectric power, atomic and solar energy.... Such planning would offer the opportunity to guide the profound physical and social changes occasioned by the accelerated pace of technological innovation.⁵¹

Comprehensive, or just coordinated, energy policy would be rechristened in the next decades as Project Independence (Nixon, Ford); National Energy Plan (Carter); Energy Security (Reagan); National Energy Strategy (Bush I); Green Energy I (Clinton); All-of-the-Above (Bush II); Green Energy II (Obama); and Energy Transition (Biden).

Consistency and coordination via *consistent free-market reliance* was not on the table. The political establishment sought a continued or expanded federal role based on grand outcome-based visions, expected-or-hoped-for technological breakthroughs, and idealized government.

A Free Market Vision

Private property rights. Voluntary exchange. Legal prohibition and redress against fraud or force. Low taxation and sound money. A culture of achievement. Decentralized, constitutionally limited government. These time-honored requisites for human betterment represent a coordinated, sustainable national energy policy led by decentralized markets, not the visible hand of government.

The U.S. energy experience offers numerous case studies about how a thoroughgoing free market would (and often did) work. Interpretation and normative implications reflect the classical-liberal

⁴⁹ President’s Materials Policy Commission, vol. 1, p. 129.

⁵⁰ President’s Materials Policy Commission, vol. 1, p. 130.

⁵¹ Robert Engler, *The Politics of Oil: A Study of Private Power and Democratic Directions* (New York: Macmillan Company, 1961), p. 488.

worldview, consisting of natural rights philosophy, market-process economics, and Public Choice and Austrian-school political economy.

Classical liberal thought not only elucidates the natural order of unhampered markets. It warns against government intervention, particularly expanding intervention to address growing problems of its own making. “The wealth and poverty of nations is at stake: the length and quality of life turns on the economic conditions individuals find themselves living within.”⁵²

The standard narrative of U.S. energy and government requires modification, even substantial revision. The simplistic market-failure interpretation must be judged alongside analytic failure and government failure. Leviathan has not only been the problem but also the false solution. In this regard, theory meets history coming and going in a reinterpretation of U.S. energy policy.

⁵² Peter Boettke, *Living Economics: Yesterday, Today, and Tomorrow* (Oakland, CA: Independent Institute, 2012), p. 383.