

We hope this timeline of Oregon's energy history will serve as a useful reference for readers as they review sections of this report, especially where we discuss energy data over time.

There are six notable entries from just the last two years — what will be added by the time we publish the 2022 *Biennial Energy Report*?

Energy history is being made.



OREGON
DEPARTMENT OF
ENERGY

Introduction

Oregon's energy system has evolved based on the state's natural resources and in response to events like technology development and energy crises. Native American tribes, as the original inhabitants of Oregon, have had their land base significantly diminished or completely removed – this altered the way natural resources were traditionally managed and has resulted in an enduring change in the landscape that influences the options for our energy system today. Over time, deliberate policy choices helped create not only our energy system but also shaped our society. In order to help shed light on how we got to where we are today, this timeline includes a number of events that unfolded over time and policy choices that Oregon's leaders and citizens have made in response to these events. A better understanding of how we got to where we are can help us more effectively manage the energy opportunities and challenges of today and tomorrow.

Indigenous tribes and bands have been with the lands that we inhabit today in the Willamette Valley and throughout Oregon and the Northwest since time immemorial. It is impossible to understand Oregon or U.S. history, geography, or government without having essential understandings of the rich culture and contributions of Native peoples. We would like to express our respect to the First Peoples of this land, the nine federally recognized tribes of Oregon: Burns Paiute Tribe, Confederated Tribes of Coos, Lower Umpqua & Siuslaw, Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation, Coquille Indian Tribe, Cow Creek Band of Umpqua Tribe of Indians, and Klamath Tribes. ODOE's office is in Salem, Oregon, the land of the Kalapuya, who today are represented by the Confederated Tribes of the Grand Ronde and the Confederated Tribes of the Siletz Indians, and whose relationship with this land continues to this day.

Timeline of Oregon's Energy History



Event



Energy policies enacted at state and federal levels



18,000 to 15,000 years ago – During the last ice age, the Missoula Floods, possibly the largest discharges of water in the history of the earth, shape the Columbia River Gorge and the Willamette Valley.¹



16,500 years ago – Archeological remains and artifacts – the oldest radiocarbon dated evidence of humans in North America – are found where Cooper's Ferry, ID, now stands. This region is also known to the Nez Perce Tribe as the site of an ancient village named Nip.²

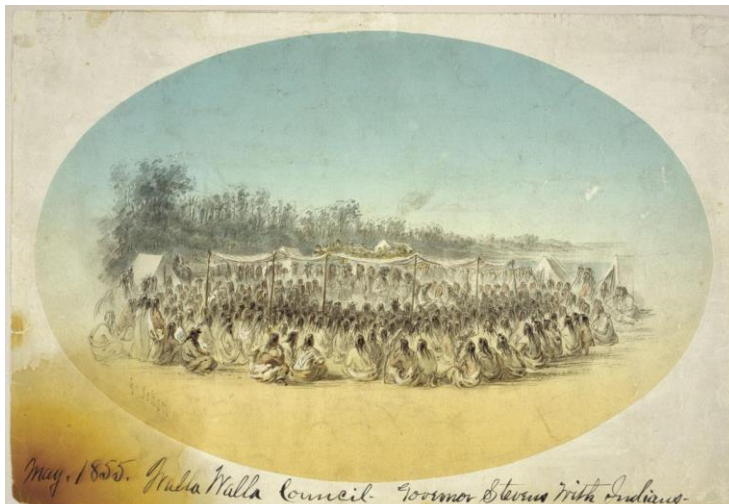


Missoula Flood Paths, courtesy of Washington Geological Survey.

Over 6,000 years ago – Archeological evidence shows Northwest Indians fishing for salmon at Kettle Falls on the upper Columbia River.³

1700 – On January 26th, a magnitude 8+ earthquake occurs along the Cascadia Subduction Zone, causing a tsunami that floods coastal communities in Oregon. Knowledge of these events appears in Tribal oral history. This is the most recent Cascadia earthquake, which have happened about 234 years apart on average over the last 10,000 years.⁴

1855 – U.S. Government signs Treaty of Wasco, Columbia River, Oregon Territory with the Taih, Wyam, Tenino, & Dock-Spus Bands of the Walla-Walla and the Dalles, Ki-Gal-Twal-La, and the Dog River Bands of the Wasco who are forcibly removed to reservations.⁵ The Treaty of 1855 reserved and guaranteed the right to continue to take fish on both their reservations and at all “usual and accustomed fishing places.” This Treaty continues to provide legal foundation for securing and furthering fishing rights for contemporary members of the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes and Bands of the Yakama Nation, and the Nez Perce Tribe.⁶



“The exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians; and at all other usual and accustomed stations, in common with citizens of the United States.”⁷ - *Excerpt from the Warm Springs treaty*

Left- Gustav Sohon's depiction of the 1855 treaty gathering, courtesy of the Washington State Historical Society.

1859 – Oregon becomes the 33rd state.⁸

1860 – Portland Gas Light Co. lights up part of downtown with gas streetlights from coal gas. It becomes Northwest Natural Gas Company in 1958.⁹

1878 – The Wadatika Band of Northern Paiutes abandon the Malheur Reservation to escape conflict. Upon return, the reservation becomes “Public Domain” and tribal members establish a makeshift encampment on the outskirts of the town of Burns, OR. The Burns Paiute Tribe, descendants of the Wadatika Band, regains reservation land in Harney County in 1972.¹⁰

1879 – Thomas Edison invents the light bulb.¹¹

1883 – American inventor Charles Fritts creates the first working selenium solar cell – the ancestor of modern solar cells.¹²

1889 – The first long-distance transmission line in North America is energized between the generating station at Willamette Falls in Oregon City and Portland.¹³ Three years later, the Willamette Falls Electric Company becomes Portland General Electric (PGE).¹⁴

1889 – McMinnville Water and Light becomes Oregon's first municipally-owned utility.¹⁵

1890-1910 – Coal mining occurs in Coos Bay area, the only area in Oregon to produce coal commercially.¹⁶

1910 – Pacific Power & Light is formed from the merger of several financially troubled utilities in the Pacific Northwest. PP&L eventually becomes PacifiCorp.¹⁷



1911 – Public Utility Act of 1911 in Oregon extends the jurisdiction of the existing Railroad Commission to utilities and transportation regulation.¹⁸

1914-1918, World War I – Newly electrified industries in the northwest, including shipbuilding, lumber, machinery, and woollens, help fuel America's contribution to the allied victory in World War I.¹⁹

1919 – Oregon passes the first per-gallon tax on gasoline, at a rate of one cent per gallon.²⁰

1920 – Congress passes the Federal Water Power Act, which creates the Federal Power Commission to regulate the construction, operation, and maintenance of non-federal hydroelectric power projects. The Federal Power Commission becomes the Federal Energy Regulatory Commission (FERC) in 1977.²¹

1935 – President Roosevelt establishes the Rural Electrification Administration by Executive Order. The next year, Congress passes the Rural Electrification Act, providing funding to bring electricity to farms.²² In a speech two years later at the dedication of a new electric cooperative (or co-op), Roosevelt states, "Electricity is a modern necessity of life, not a luxury."²³ At the time, only 27 percent of Oregon farms have electricity. By 1940, 59 percent of farms in Oregon have electricity.²⁴



Milk machine exhibit as part of OAC Extension Service's Farm Electrification Exhibit, 1950-1959, courtesy of OSU.



1937 – Congress passes the Bonneville Project Act and creates a temporary agency, the Bonneville Power Project, to market and transmit power from federal hydropower projects and “give preference and priority” to public bodies and cooperatives. Construction of Bonneville Dam is completed in 1938.²⁵ The Bonneville Power Project is renamed the Bonneville Power Administration in 1940.²⁶



1940 – First aluminum smelter in the northwest, owned by the Aluminum Company of America (Alcoa) near Vancouver, WA becomes operational. Attracted by an abundance of low-cost electricity, more than a dozen aluminum plants across the northwest support the production of warplanes for World War II. Aluminum smelters buy electricity directly from Bonneville, becoming known as direct service industries or DSIs.²⁷



1941 – Grand Coulee Dam, the largest concrete structure ever built at the time, begins operation. It is estimated that electricity from this dam provides enough power to produce the aluminum in about one-third of the planes built during World War II.²⁸ The construction inundates an important, historic fishing ground at Kettle Falls under Lake Roosevelt in Washington state. The three-day gathering before the falls are flooded is called the Ceremony of Tears. A First Salmon Ceremony, to call salmon back, continues to be held at Kettle Falls even though construction of the dam ended migration of salmon.²⁹



Left- Colville women, Ceremony of Tears, 1939, courtesy of UW Special Collections. Above- Modern day salmon ceremony at Kettle Falls, courtesy of The Nelson Daily.



1944 – The world's first plutonium production reactor begins operations at the Hanford site, near Richland, Washington, as part of the Manhattan Project. This site is approximately 30 miles from Oregon along the Columbia River. Plutonium production ended in 1989, and the Hanford site is now one of the largest and most expensive cleanup sites in the country.³⁰



1946 – Congress passes the Atomic Energy Act of 1946, establishing the Atomic Energy Commission. The AEC would take over responsibility of United States nuclear development from the Manhattan Engineer District. The purpose of the AEC is to promote the use of atomic energy for peaceful purposes.³¹



1954 – The Western Oregon Indian Termination Act terminates federal recognition of 61 tribes. The Klamath Termination Act terminates federal recognition of the Klamath Tribes.³² After many years of work by tribal members, federal recognition of these tribal governments is restored: Confederated Tribes of Siletz Indians (1977), Cow Creek Band of Umpqua Tribe of Indians (1982), Confederated Tribes of Grand Ronde (1983), Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians (1984), the Klamath Tribes (1986), and Coquille Indian Tribe (1989).³³

1954 – Two Oregonians, Daryl Chapin and Gerald Pearson, both graduates of Willamette University, help invent the first solar cell using silicon.³⁴

Solar technology inventors Gerald L. Pearson, Daryl M. Chapin, and Calvin S. Fuller, courtesy of solarcellcentral.com

1954 – Congress passes the Atomic Energy Act of 1954, permitting private ownership of nuclear materials and the sale of nuclear power.³⁵

1957 – Construction of The Dalles Dam is completed. While the project contributes to flood control, navigation, power generation, and irrigation, it also submerges Celilo Falls, an important Native American fishing area with settlements and trading villages in the oldest continuously inhabited place in the region.³⁶



1959 – An amendment to the Federal Atomic Energy Act allows states to control radiation hazards. Oregon subsequently enters into an agreement with the federal government under which the state assumed certain regulatory authority.^{37 38}



1961 – Nick Holonyak Jr., employed at General Electric, develops the first light-emitting diode that emitted light in the visible part of the frequency range. It was a red LED.³⁹

1964 – The United States and Canada implement the Columbia River Treaty to provide flood control and optimize hydropower generation within the Columbia River Basin.⁴⁰

1969 – In *U.S. v. Oregon* the U.S. District Court rules that the Nez Perce, Umatilla, Warm Springs, and Yakama tribes that negotiated the Treaty of 1855 have “an absolute right” and are entitled to “a fair share” of the fish produced by the Columbia River system.⁴¹ This continues to be an on-going Federal court proceeding and fisheries in the Columbia River have been managed subject to provisions under the jurisdiction of the federal court.⁴²

1969 – Governor McCall establishes the Nuclear Siting Task Force of the Nuclear Development Coordinating Committee by Executive Order. The Task Force is created to approve the location of nuclear power plants consistent with Oregon’s environmental protections.

1970 – Congress passes the Clean Air Act to protect public health and welfare from air pollution from power plants, motor vehicles, and industrial facilities.⁴³

1971 – The Oregon Legislature creates the Nuclear and Thermal Energy Council to regulate the siting of nuclear and coal-fired generating plants larger than 200 megawatts. This Council eventually becomes Energy Facilities Siting Council (EFSC) in 1975.⁴⁴

1971 – The 1,130 MW Trojan Nuclear Power Plant proposed by PGE in Columbia County receives a site certificate from the Nuclear and Thermal Energy Council.⁴⁵

1973 – Arab oil embargo leads to a quadrupling of oil prices, rationing of gasoline, and eventually efforts by U.S. policymakers to reduce the country's dependence on foreign oil.⁴⁶



Portland during the early morning hours of pumping when gas was limited to five gallons per car on a first-come, first served basis, courtesy of David Falconer/EPA/US National Archives.

"The 1973 Oil Embargo acutely strained a U.S. economy that had grown increasingly dependent on foreign oil. The efforts of President Richard M. Nixon's administration to end the embargo signaled a complex shift in the global financial balance of power to oil-producing states and triggered a slew of U.S. attempts to address the foreign policy challenges emanating from long-term dependence on foreign oil." - *U.S. Department of State, Office of the Historian*.⁴⁷

1973 – President Nixon establishes the Federal Energy Office within the Office of the President to help coordinate the American response to the Arab oil embargo. This office evolved into the Federal Energy Administration the following year, before becoming part of the newly established U.S. Department of Energy in 1977.⁴⁸

1973 – The Oregon Legislature passes SB 100 creating a comprehensive land use planning system in the state.⁴⁹ Land use planning shapes the development of Oregon's landscape, affecting everything from transportation patterns to how energy facilities are sited in Oregon.

1973 – Congress passes the Endangered Species Act to provide for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend.⁵⁰



1973 – The Oregon Office of Energy Research and Planning writes the first Biennial Energy Plan (now known as the Biennial Energy Report), called “Transitions: A Book on Future Energy.”⁵¹



In his introduction to the 1977 reprint of this report, Governor McCall wrote, “As governor of Oregon at the time this document was prepared, I believed that there was a role in state government for bold new ideas and for innovative, long-range planning. I was aware of the controversy which would surround this report, but I also knew that Oregon had just experienced its first dramatic energy crisis and that we needed new planning tools that would help us better understand and modify the relationships between energy and our natural and human systems... Transition is a bold document. It challenges the people of this state to create their own future rather than having it arbitrarily imposed upon them, by special interests and external events. I knew the people of Oregon could respond to such a challenge. They had already responded gallantly with dramatic conservation achievements during the energy crisis of 1973-74.”⁵²

1974 – Oregon Uniform Building Code first includes thermal insulation requirements for buildings.⁵³

1974 – In *U.S. v Washington* the U.S. District Court rules in Washington that the Nez Perce, Umatilla, Warm Springs, and Yakama tribes’ “fair share” means half of the harvestable fish in the Columbia River. The Ninth Circuit Court of Appeals later upheld this decision in 1975.⁵⁴

1975 – Congress passes the Energy Policy Conservation Act (EPCA), creating the Strategic Petroleum Reserve, Corporate Average Fuel Economy (CAFE) standards for cars and light trucks (18 mpg for model year 1978), state energy conservation programs, and energy efficiency targets for consumer products. To reduce U.S. dependence on oil, the law also creates incentives for coal mining and calls for conversion of oil and gas facilities to coal.⁵⁵

1975 – Lower Granite Dam on the Snake River and Libby Dam on the Kootenai in Montana, the last of the mainstem dams on the Federal Columbia River Power System, are constructed.⁵⁶

1975 – Oregon Legislature creates the Oregon Department of Energy and the Energy Facility Siting Council. EFSC is charged with overseeing the siting, construction and operation energy facilities in a manner consistent with the protection of public health and safety and in compliance with the energy policy while protecting Oregon’s environment. The department is formed to promote energy conservation and development of renewable energy sources and to provide staff support for EFSC.



Current day Oregon Department of Energy offices and the Energy Facility Siting Council visiting the Boardman Solar Energy site.

Emerging from the energy shortages of the early 1970s, Oregon policymakers were focused on energy scarcity, energy independence, and the influence that Oregonians could have over their energy futures. The themes of scarcity, sustainability, energy efficiency, and energy education are embedded in ODOE's authorizing statute (ORS 469.010), passed in 1975. The two findings contained in the statute are: "The Legislative Assembly finds and declares that:

- Continued growth in demand for nonrenewable energy forms poses a serious and immediate, as well as future, problem. It is essential that future generations not be left a legacy of vanished or depleted resources, resulting in massive environmental, social and financial impact.
- It is the goal of Oregon to promote the efficient use of energy resources and to develop permanently sustainable energy resources. The need exists for comprehensive state leadership in energy production, distribution, and utilization."⁵⁷

1975 – EFSC approves the 550 MW Boardman Coal Plant proposed by PGE in Morrow County. The Plant is eventually constructed and placed into service in 1980.⁵⁸

1976 – Commercial operation begins at PGE's Trojan Nuclear Power Plant; at 1,100 MW it is the largest plant of its kind at the time. The plant is licensed to run for 30 years.⁵⁹

1977 – The Yakama, Umatilla, Warm Springs, and Nez Perce tribes form the Columbia River Inter-Tribal Fish Commission (CRITFC) for the purpose of reversing the decline of salmon, lamprey, and sturgeon, protecting fishing rights, sharing salmon culture, and providing fishery services.⁶⁰



Yakama Chairman Watson Totus signed the CRITFC constitution on behalf of his tribe in 1977, courtesy of www.critfc.org.

1977 – Congress passes the Department of Energy Organization Act, creating the U.S. Department of Energy and bringing together federal energy activities under one agency.⁶¹



1978 – Congress passes National Energy Conservation Policy Act, which establishes the federal Residential Conservation Service, requires large electric and natural gas utilities to provide residential energy audits to their customers, creates a matching grant program providing funding for energy audits and energy saving retrofits in nonprofit institutional buildings (colleges, schools, and hospitals), requires that some appliance efficiency targets become mandatory, and encourages lending institutions to offer extended mortgage credit for the purchase of energy efficient homes.⁶²



1978 – Oregon's Residential Energy Tax Credit begins. The following year, the Business Energy Tax Credit begins.⁶³



1979 – Accident at Three Mile Island nuclear plant in Pennsylvania draws worldwide attention and focus on nuclear power and its potential safety issues.⁶⁴



1980 – Oregon voters pass an initiative 53-47 percent that prohibits the licensing of a new nuclear power plant unless it is approved by the voters and only if there is a permanent repository licensed by the federal government for disposal of high-level radioactive waste. There is still no permanent repository for disposal of high-level radioactive waste in the US.⁶⁵



1980 – Congress passes the Pacific Northwest Electric Power Planning and Conservation Act (also known as the NW Power Act). The Act establishes the Pacific Northwest Electric Power and Conservation Planning Council (later named NW Power and Conservation Council), and directs the Council to adopt a regional energy conservation and electric power plan, as well as a program to protect, mitigate, and enhance fish and wildlife affected by hydropower on the Columbia River and its tributaries. It also establishes provisions that the BPA Administrator must follow in selling power, acquiring resources, implementing energy conservation measures, and setting rates.⁶⁶

According to the NW Power and Conservation Council, a critical factor to passing the NW Power Act was the region's "disastrous" efforts, led by the Washington Public Power Supply System (WPPSS, or "Whoops") and Bonneville Power Administration, to build five nuclear power plants in the 1970s. "Utilities based their decision in part on inaccurate Northwest electricity load forecasts. Only one of the plants, the currently operating Columbia Generating Station, was ever completed. Due to exorbitant cost overruns, utilities abandoned or mothballed the other four plants prior to completion. Two of the unfinished plants were responsible for one of the largest bond defaults in the history of the nation, while the Bonneville Power Administration backed the financing for the other three plants. And, from 1978 to 1984, BPA was forced to raise its rates by 418 percent (adjusted for inflation) to pay for the cost of these plants. Even today...BPA pays millions of dollars a year on debt service for two of the unfinished plants."⁶⁷



Unfinished WPPSS Unit 5 near Satsop, WA, courtesy of www.historylink.org.



1983 – EFSC approves its first renewable energy project, a 40 MW (850 40-80 kW turbines) proposal by Wind Energy Specialist for a site in Curry County. This facility was never constructed.

1983 – Northwest Power Planning Council produces Model Conservation Standards for the region, including guidance for energy efficiency codes and conservation programs. The model asserts that “to ensure that the region captures all regional cost-effective savings, utilities should secure proportional savings from hard to reach populations.”⁶⁸



1984 – Through a ballot measure, voters in Oregon create the Oregon Citizens' Utility Board (CUB) to advocate on behalf of residential customers of investor-owned utilities in Oregon.⁶⁹

1984 – Columbia Generating Station nuclear power plant, located on the Hanford site near Richland, Washington, becomes operational.⁷⁰

1985 – The Hood River Conservation Project, funded by Bonneville Power Administration and operated by Pacific Power, helps prove that conservation was a viable energy resource that could be considered on equal ground with supply-side options in the Northwest.⁷¹



1986 – Oregon voters approve a ballot measure finalizing a three-person, Governor-appointed Public Utility Commission of Oregon to replace the single commissioner system previously in place.⁷²

1986 – Chernobyl nuclear plant meltdown and steam explosion releases radioactivity into the atmosphere and becomes the worst nuclear accident in history.⁷³

1988 – NASA climate scientist James Hansen testifies before Congress and warns about the dangers of global warming.⁷⁴ Meanwhile, the Intergovernmental Panel on Climate Change (IPCC), an intergovernmental body of the United Nations, is established to provide objective scientific information about climate change.⁷⁵

1989 – Oregon requires investor-owned utilities (IOU) to conduct Integrated Resource Plans (IRPs), putting energy efficiency on equal footing with traditional generation resources.⁷⁶

1990 – Congress passes the Clean Air Act Amendments of 1990 to curb acid rain, urban air pollution, toxic air emissions, and stratospheric ozone depletion.⁷⁷ Two-thirds of the sulfur dioxide emissions that cause acid rain come from fossil fuel power plants.⁷⁸ By 2019, the acid rain program had reduced SO₂ emissions from power plants by 92 percent and NO_x by 85 percent.⁷⁹



1991 – Snake River Sockeye Salmon are listed as an endangered species pursuant to the Endangered Species Act.⁸⁰ Between 1991 and 2005, 13 species of salmon or steelhead and four other fish within the Columbia River Basin, are listed for protection under the Endangered Species Act.⁸¹

1992 – Congress passes Energy Policy Act of 1992. Considered in the wake of the Persian Gulf War, the bill promotes energy efficiency and alternative fuels.⁸²

1993 – After a series of mechanical problems, PGE permanently shuts the Trojan Nuclear Power Plant.⁸³

1994 – The Hermiston Generating Project becomes the first natural gas facility to receive a site certificate from EFSC. The 468 MW plant begins operation in 1996.



The Hermiston Generating Plant provides power for nearly 500,000 households in the Pacific NW, courtesy of Perennial Power.

1997 – Portland General Electric, the utility with the most Oregon ratepayers, is bought by Enron for \$2.1 billion and the assumption of \$1.1 billion in debt.⁸⁴

1997 – World powers, including the U.S., sign the Kyoto Protocol, committing industrialized countries, and economies in transition, to limit and reduce GHG emissions in accordance with individual targets. The Protocol goes into effect on 2005.⁸⁵

1997 – Oregon becomes the first state in the country to establish a price on carbon with the EFSC CO₂ standard. It requires power plants to avoid, displace, or sequester a portion of their CO₂ emissions; applicants can pay a fee to offset these emissions.⁸⁶ The fees are used by The Climate Trust to purchase offsets.

1997 – Northwest Energy Efficiency Alliance (NEEA) is formed to promote energy efficiency through market transformation.⁸⁷

1997 – Released in Japan in 1997 and worldwide in 2000, the Toyota Prius becomes the world's first mass-produced hybrid electric vehicle.⁸⁸



1999 – EPA issues the Regional Haze Rule to reduce the pollution that causes visibility impairment in national parks and wilderness areas. EPA requires states to submit regional haze plans in 2007.⁸⁹ The expense of complying with this plan contributes to the early closure of the Boardman Coal Plant, which is shuttered in 2020.

1999 – Oregon legislature passes SB 1149, creating the Public Purpose Charge for energy efficiency, renewable and low-income energy programs and partially deregulating the electric sector by authorizing long-term direct access for certain large retail customers of IOUs.⁹⁰

1999 – Oregon legislature passes HB 3219, requiring electric utilities to allow net metering so that customers can generate onsite renewable resources and reduce their electricity bills.⁹¹

2001 – The Western Energy Crisis of 2001 causes power shortages in California and skyrocketing electricity prices across the west, including Oregon. Wholesale energy prices in the PNW briefly jumped to over \$1,300 per megawatt hour, much higher than the typical price of under \$50 per MWh. New efforts at deregulation, combined with historic drought conditions and market manipulation contributed to the crisis.⁹²

2001 - Enron engages in criminal market manipulation, exacerbating the energy crisis. Enron's collapse leads to many PGE employees losing their jobs and much of their retirement savings.⁹³

2001 – By the end of the year, 10 aluminum smelters in the NW are shutdown. This direct service industry goes from using a high of about 3,000 aMW in 1995 to about 300 aMW by 2006.⁹⁴

2001 – The EFSC-approved Stateline Wind Project in Umatilla County becomes first utility-scale wind energy facility built in Oregon. The 222 MW facility has 229 turbines, each 440' tall.⁹⁵

2002 – Oregon becomes the first state to install solar panels on its state capitol building.⁹⁶

2002 – Energy Trust of Oregon begins operation to administer energy efficiency and renewable energy programs for investor owned utilities.⁹⁷



Wind turbine construction in Oregon.

2004 – Decommissioning of the Trojan Nuclear Power Plant is completed. The spent nuclear fuel remains onsite and is expected to stay onsite until there is a federally-approved repository for this material. The cooling tower is demolished two years later.⁹⁸

2005 – Congress passes the Energy Policy Act of 2005. Among other things, this bill gives FERC explicit and “exclusive” authority to approve onshore LNG terminal siting applications.⁹⁹

2006 – Jordan Cove and Pacific Connector pipeline are proposed as an LNG import terminal in Coos County, OR.¹⁰⁰

2007 – Oregon legislature establishes Oregon’s first greenhouse gas reduction goals and creates the Oregon Global Warming Commission.¹⁰¹



2007 – Oregon legislature passes SB 838, requiring the state’s largest utilities to provide 25 percent of retail sales from eligible renewable sources by 2025.¹⁰²

2008 – Ratepayer concerns contribute to an agreement by PGE to close the Boardman Coal Plant, which had been scheduled to operate until 2040, by the end of 2020. This is the first time a utility agrees to voluntarily close a coal plant in the U.S.¹⁰³

2009 – Congress passes the American Recovery and Reinvestment Act, investing millions of dollars in states for clean energy and energy efficiency.¹⁰⁴



2010 – Klamath Hydroelectric Settlement Agreement that is signed by PacifiCorp, several tribes, Oregon, California, and stakeholders. Through a surcharge, Oregon customers will help pay for Oregon’s share of dam removal costs. Timing of the dam removal is uncertain.¹⁰⁵

Signing the Klamath agreements, from left, PacifiCorp Chairman and CEO Greg Abel, Interior Secretary Ken Salazar, Governor Arnold Schwarzenegger and Governor Ted Kulongoski. Photo courtesy Office of Governor Schwarzenegger and ENS.

2011 – Fukushima nuclear power plant accident in Japan is caused by a 9.0 earthquake and subsequent 40-foot tsunami that knocks out the electrical generation for the coolant pumps, resulting in core meltdowns at three units, the release of radioactive material, the evacuation of thousands of people, and the establishment of an uninhabitable exclusions zone.¹⁰⁶ Cleanup is expected to cost at least \$75 billion and as much as \$660 billion and take 30-40 years.¹⁰⁷

2011 – Drive Oregon (now known as Forth) is incorporated by local business leaders and receives \$1.2 million in seed funding from the Oregon Legislature via the Oregon Innovation Council to grow Oregon's electric vehicle industry.¹⁰⁸

2012 – Obama Administration finalizes agreement with 13 large automakers to increase CAFE standards to 54.5 miles per gallon for cars and light-duty trucks by model year 2025.¹⁰⁹

2012 – Jordan Cove and Pacific Connector pipeline revises plans to build an LNG import terminal in Coos County, and instead proposes an *export* terminal.¹¹⁰

2014 – Sunset of Oregon's Business Energy Tax Credit. Under this program, ODOE certified almost 25,000 projects that helped save energy, displace conventional energy sources, or generate renewable energy.¹¹¹

2015 – 195 countries join the Paris Agreement, bringing together developed and developing nations in committing to keep global temperature rise well below 2°C (3.6°F).¹¹²

2015 – Volkswagen pleads guilty to emissions-cheating scandal.¹¹³



Volkswagen created Electrify America with \$2 billion in funding as part of its emissions scam settlement with the U.S. and California. Pictured above, an Electrify America EV charging bank in Hood River, OR, courtesy of Columbia Insight. Photo by Jurgen Hess.

2016 – After years of planning, DEQ launches the Oregon Clean Fuels Program to reduce the carbon intensity of Oregon's transportation fuels by 10% over 10 years.¹¹⁴

2016 – Oregon adopts a 50 percent renewable portfolio standard and becomes the first state to legislatively mandate an end to coal in the state's electricity mix by 2030 with the passage of SB 1547, the Clean Electricity and Coal Transition Plan. This law also created a community solar program with requirements for low-income customer participation.¹¹⁵

2017 – Oregon's Residential Energy Tax Credit expires. Over the lifetime of this program, more than 15,000 solar projects are approved, with a production estimate of about 75 million kWh/year.¹¹⁶



2017 – With the passage of the Keep Oregon Moving Act (HB 2017), Oregon adopts an Electric Vehicle Rebate program that includes a “Charge Ahead” component for low-income participants.¹¹⁷ Oregon Governor Kate Brown issues Executive Orders 17-20¹¹⁸ and 17-21¹¹⁹ to reduce greenhouse gas emissions by accelerating energy efficiency in Oregon’s built environment and accelerating zero emission vehicle adoption.



2017 – The first utility-scale solar PV project larger than 50 MW in Oregon, the 56 MW Gala Solar project in Crook County, begins commercial operation. Just one year later, the Boardman Solar Project, with a capacity of 75 MW, receives a site certificate from EFSC. The project has not yet begun construction.¹²⁰



2019 – Oregon legislature passes HB 2618 creating ODOE’s Solar + Storage Rebate Program. The program issues rebates for solar electric systems and paired solar and solar storage systems. At least 25 percent of available rebate dollars are set aside for low- or moderate-income residential customers and low-income service providers.¹²¹



2019 – For the first time since 1952, U.S. domestic production of primary energy surpasses consumption and the country exports more energy than it imports.¹²²



2020 – Oregon Governor Kate Brown issues Executive Order 20-04 Directing State Agencies to Take Actions to Reduce and Regulate Greenhouse Gas Emissions.¹²³



2020 – Oregon has 31,977 registered electric vehicles as of July 1.¹²⁴



2020 – The Boardman Coal Plant, Oregon’s only coal power plant, closes on October 15.¹²⁵



2020 – Construction underway on multiple large utility-scale wind and solar energy projects, including the Wheatridge Renewable Energy Facilities in Morrow County, the Montague Wind and Solar Projects in Gilliam County, and the Golden Hills Wind Facility in Sherman County.¹²⁶

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