

Group 5 - Information for Discussion Leaders

PROGRAM PLANNING for the year - June 1, 2022 - May 31, 2023

Monday, January 24, 2022, at 6:30 pm on Zoom

Discussion Leaders: **Robin Tokmakian** and **Marnie Lonsdale**

ENVIRONMENTAL SUSTAINABILITY

Topics for discussion:

- **Climate change**
- **Clean Energy (electric vehicles, charging station, nuclear reactors)**
- **Water resources, water management**

On January 24, 2022, your group will look at the following LWVUS and LWVPDX positions regarding the 3 topics for discussion and will then make recommendations to retain as is, drop the position, update the position, restudy it or recommend for a new study of it. Your group will also recommend topics, if any, for Civic Education forums, for formation of an Interest Group and for Acteion Committee consideration.

Definitions of League terms used and a **Report Form** on which to put your group's recommendations and comments were included with this information. Please complete and return the Report Form to units@lwvpdx.org after the meeting.

LWVUS positions

Natural Resources

Resource Management and Protection

Environmental Protection and Pollution Control (energy, water, nuclear)

Climate Change

LWVPDX positions

Planning (City of Portland)

Regional Planning and Governance

If you have a topic for which there is no LWVUS or LWVOR or LWVPDX, the League cannot advocate for public policy or legislative changes on that topic. If your group believes we need a position on a topic, you may recommend a study or a concurrence with a position from another state or local League. Your recommendation must be approved by the League membership before it is adopted.

Here is the link to the most recent LWVUS positions:

<https://www.lwv.org/sites/default/files/2020-12/LWV-impact-2020.pdf>

To read more about the history of each position and other positions, click on this link to the LWVUS Impact on Issues; then click on the page # of the LWVUS position you want to see.

LWVUS POSITIONS

Natural Resources

The League's Position Statement of Position on Natural Resources, as affirmed by the 1986 Convention, based on positions reached from 1958 through 1986:

The League of Women Voters of the United States believes that natural resources should be managed as interrelated parts of life-supporting ecosystems. Resources should be conserved and protected to assure their future availability. Pollution of these resources should be controlled in order to preserve the physical, chemical, and biological integrity of ecosystems and to protect public health.

Environmental Protection and Pollution Control The League's Position

The League supports the preservation of the physical, chemical, and biological integrity of the ecosystem and maximum protection of public health and the environment. The League's approach to environmental

protection and pollution control is one of problem solving. The interrelationships of air, water, and land resources should be recognized in designing environmental safeguards. The League's environmental protection and anti-pollution goals aim to prevent ecological degradation and to reduce and control pollutants before they go down the sewer, up the chimney, or into the landfill. The League believes that although environmental protection and pollution control are responsibilities shared by all levels of government, it is essential that the federal government provide leadership and technical and financial assistance. The federal government should have the major role in setting standards for environmental protection and pollution control. Other levels of government should have the right to set more stringent standards. Enforcement should be carried out at the lower levels of government, but the federal government should enforce standards if other levels of government do not meet this responsibility. Standards must be enforced in a timely, consistent and equitable manner for all violators in all parts of society, including governmental units, industry, business, and individuals. Environmental protection and pollution control, including waste management, should be considered a cost of providing a product or service. Consumers, taxpayers and ratepayers must expect to pay some of the costs. The League supports policies that accelerate pollution control, including federal financial assistance for state and local programs.

The League supports:

- Regulation of pollution sources by control and penalties;
- Inspection and monitoring;
- Full disclosure of pollution data;
- Incentives to accelerate pollution control; and
- Vigorous enforcement mechanisms, including sanctions for states and localities that do not comply with federal standards and substantial fines for noncompliance.

Position statement re water resources, page 99

Position statement re water management, page 100

Position statement re energy, page 101

Position statement re nuclear issues, page 101

Resource Management

The League's Position Resource management decisions must be based on a thorough assessment of population growth and of current and future needs. The inherent characteristics and carrying capacities of each area's natural resources must be considered in the planning process. Policy makers must take into account the ramifications of their decisions on the nation as a whole as well as on other nations. To assure the future availability of essential resources, government policies must promote stewardship of natural resources. Policies that promote resource conservation are a fundamental part of such stewardship. Resources such as water and soil should be protected. Consumption of nonrenewable resources should be minimized. Beneficiaries should pay the costs for water, land, and energy development projects. Reclamation and reuse of natural resources should be encouraged. The League believes that protection and management of natural resources are responsibilities shared by all levels of government. The federal government should provide leadership, guidance, and financial assistance to encourage regional planning and decision making to enhance local and state capabilities for resource management.

The League supports comprehensive long-range planning and believes that wise decision-making requires:

- Adequate data and a framework within which alternatives may be weighed and intelligent decisions made;**
- Consideration of environmental, public-health, social, and economic impacts of proposed plans and actions;**

- **Protection of private property rights commensurate with overall consideration of public health and environmental protection;**
- **Coordination of the federal government’s responsibilities and activities;**
- **Resolution of inconsistencies and conflicts in basic policy among governmental agencies at all levels;**
- **Regional, interregional, and/or international cooperation when appropriate;**
- **Mechanisms appropriate to each region that will provide coordinated planning and administration among units of government, governmental agencies, and the private sector;**
- **Procedures for resolving disputes;**
- **Procedures for mitigation of adverse impacts;**
- **Special responsibility by each level of government for those lands and resources entrusted to them;**
 - **Special consideration for the protection of areas of critical environmental concern, natural hazards, historical importance, and aesthetic value; and**
 - **Special attention to maintaining and improving the environmental quality of urban communities.**

Climate Change

The League’s Position Statement of Position on Climate Change Policy, as announced by the National Board, January 2019:

The League believes that climate change is a serious threat facing our nation and our planet. The League believes that an interrelated approach to combating climate change—including through energy conservation, air pollution controls, building resilience, and promotion of renewable resources— is necessary to protect public health and defend the overall integrity of the global ecosystem. The League support climate goals and policies that are consistent with the best available climate science and that will ensure a stable climate system for future generations. Individuals, communities, and governments must continue to address this issue, while considering the ramifications of their decision, at all levels—local, state, regional, national, and global.

Here is the link to the most recent LWVPDX positions:

<https://lwvpdx.org/wp-content/uploads/2021/09/LWVPDX-Positions-Sept-2021.pdf>

LWVPDX positions

Planning (2009, 1974, 1973)

The League of Women Voters of Portland supports comprehensive long-range city planning based on:

- Citizen involvement at all stages of the planning process;
- Communication and coordination among citizens, citizen advisory groups, and city and regional planning agencies;
- Consideration of environmental, social and economic impacts of proposed plans and actions;
- Determination of long-range goals and priorities.

Goals should include:

- Area-wide orderly growth and development;
- A visually attractive urban community with a sustainable and healthful environment and a healthy economy;
- Quality infrastructure and public facilities designed to meet the needs of residents and businesses;
- Fair distribution of tax burdens and government investment.

Regional Planning and Governance (1996)

The Leagues of Women Voters of Portland and Clackamas County believe the following issues are of regional concern:

- Growth management - affordable housing, long-term planning, parks/open space, urban growth boundaries/densities, economic development
- Natural systems management - water, air quality, solid waste/recycling
- Regional infrastructure - transportation including ports and airports, sewers, storm water drainage

- **Human services and amenities - arts, libraries, education, health service, mental health**
- **Public safety corrections, police, emergency preparedness**

We believe that efficiency, political feasibility, and economy should be determining factors in cooperative efforts among local governments.

Intergovernmental agreements are one method of resolving issues that local governments cannot solve by themselves. We believe that the entire area benefits from having regional attractors for arts, sports, and recreation. User fees and hotel-motel taxes should be part of the funding for these facilities.

THE PORTLAND STRATEGY AT A GLANCE re ELECTRIC VEHICLES

- 1. Adopt and update policies to facilitate the transition to the use of electric vehicles (EVs) in Portland:**
 - a. Streamline electrical permitting.**
 - b. Provide limited use of the right-of-way for EV charging.**
 - c. Adopt consistent signage and parking enforcement standards.**
 - d. Reduce vehicle miles traveled by continued education about using transit, walking or biking for trips of 3 miles or less.**
 - e. Continue to research best practices regarding EV-friendly development regulations and policies.**
- 2. Promote State and Federal EV tax incentives for Portland residents and businesses**
- 3. Create a new program to serve EVs in garage-free homes**
- 4. Develop strategic relationships and economic development initiatives to support regional job growth within the clean-tech cluster**

- 5. Create the most sustainable municipal fleet in the country**
- 6. Partner with the freight community to facilitate adoption of EVs and plug-in-hybrid technology in the trucking industry**
- 7. Work with carshare companies and transit agencies to ensure affordable access to EV technology**
- 8. Foster existing public and private relationships and look for new partnerships that support EV infrastructure deployment, promote EV adoption and explore progressive technologies**

ELECTRIC VEHICLES: THE PORTLAND WAY - INTRODUCTION

The purpose of this document is to identify and outline the policies, programs and strategies being adopted by the City of Portland (City), as part of a regionally coordinated effort to promote and integrate electric vehicles (EVs) into our transportation system and to capitalize on local economic development opportunities from this emerging industry. This strategy has been developed by an inter-bureau team that meets regularly, with representatives from Mayor Sam Adams' Office, the Portland Development Commission, the Portland Bureau of Transportation, the Bureau of Planning and Sustainability, the Bureau of Development Services and CityFleet.

A SUSTAINABLE APPROACH TO ELECTRIC VEHICLES The City embraces new approaches and innovations in transportation electrification because these technologies have the potential to significantly reduce transportation related carbon emissions in Portland. The thoughtful use and promotion of EVs is one of several key strategies that will help the City achieve its climate action targets while also achieving our complementary goals of reducing local air pollution and vehicle miles traveled, and increasing the share of trips done by walking, biking, and transit. In 2009, the City adopted a Climate Action Plan committing itself to delivering a transportation system that supports the goal of reducing local greenhouse gas emissions.

Specifically relevant to EVs, the Climate Action Plan establishes several goals and proposes actions to achieve those goals (see below) aimed at reducing the carbon emissions from fossil fuels used to power our vehicles. In order to achieve these goals, it is estimated that 13 percent of all non-commercial vehicle miles traveled on Portland's roads in 2030 will need to be in EVs. This translates into as many as 50,000 EVs in the metro area, based on average per capita vehicle miles traveled.

CLIMATE ACTION PLAN GOALS

Reduce carbon emissions:

- 40 percent from 1990 levels by 2030
- 80 percent from 1990 levels by 2050

Reduce transportation-related carbon emissions:

- 10 percent from 1990 levels by 2015
- 25 percent from 1990 levels by 2020
- 30 percent from 1990 levels by 2030

Reduce vehicle miles traveled:

- 30 percent from 2008 levels by 2030

increase the average fuel efficiency of passenger vehicles to 40 miles per gallon by 2030. Reduce the lifecycle green-house gas emissions of transportation fuels by 20 percent by 2030.

2012 Action: Accelerate the transition to plug-in hybrids and electric vehicles by supporting the installation of a network of electric car charging stations.

The Climate Action Plan can be found at: www.portlandclimateaction.org

EVs emit no tailpipe pollutants, providing significant local air quality benefits (see below). However, pollutants emitted from coal and natural gas electrical power plants and other upstream operations must be accounted for. According to the Argonne National Laboratory, EVs substantially reduce all of the emissions that cause adverse health conditions in urban settings, where those emissions are often concentrated and do the most harm to human health. Compared to a gasoline powered vehicle, an EV reduces lifecycle greenhouse gas emissions by 19 percent. EVs nearly

eliminate petroleum use and can reduce fossil fuel use by 28 percent, even though the electricity used in the Portland area is largely generated by fossil fuels¹. The City seeks to further reduce upstream greenhouse gas emissions associated with EVs by strongly encouraging the deployment of both public and private charging stations powered by renewable electricity.

EV BENEFITS

Switching from traditional combustion engines to electric vehicles in urban areas will:

- Reduce volatile organic compounds (VOC) and carbon monoxide (CO) by 100 percent
- Reduce sulfur oxide (SO_x) by 75 percent
- Reduce nitrous oxide (NO_x) by 69 percent
- Reduce particulate matter (PM₁₀) by 31 percent, and • Saving millions of gallons of gas and keeping money in the local economy.

Source: Argonne National Laboratory

Portland's average electricity mix is 44% coal and 27% hydroelectric, 25% natural gas, 4% wind and 1% other.

Source: Oregon Department of Energy for overall resource mix of each utility; Bureau of Planning and Sustainability for weighted average mix based on electricity supplied by Portland General Electric and Pacific Power to customers in Multnomah County

No operating nuclear reactors or fuel cycle facilities are located in

Oregon. ... Oregon is an Agreement State. More information about Oregon's role in ensuring the safe use of radioactive materials can be obtained from the NRC Office of State Program's Directory of State Regulations, Legislation, and Web Sites.

<https://www.nrc.gov> › [info-finder](#) › [region-state](#) › [oregon](#)

The Nuclear Waste Policy Act of 1982 established both the federal government's responsibility to provide a place for the permanent disposal of high-level radioactive waste and spent nuclear fuel, and the generators' responsibility to bear the costs of permanent disposal

US Nuclear Power Policy

(Updated August 2021) to read the whole article, go to world-nuclear.org

- While the USA has more private sector participation in the production of civilian nuclear power than any other nation, the government is heavily involved through safety and environmental regulations, R&D funding, and setting national energy goals.
- Beginning in the late 1990s, US government policy and funding decisions have encouraged the development of greater civilian nuclear capacity.
- The commitment to nuclear power as part of the USA's long-term energy strategy continues, but there has been a reduction in some nuclear programs as a result of greater emphasis on alternative sources of energy and the economics of gas-fired power.
- The disposal and storage of high-level nuclear waste remains a major unresolved issue.
- Over the last 30 years public opinion has steadily grown more positive towards nuclear energy.

Government policy is central to any discussion of nuclear power in the USA. The development of nuclear power began as a government program in 1945 following on from the Manhattan Project to develop the wartime atomic bomb. The first nuclear reactor to produce electricity did so at the National Reactor Testing Station (NRTS) in Idaho in December 1951, as the US government reoriented significant resources to the development of civilian use of nuclear power. In the mid-1950s, production of electricity from nuclear power was opened up to private industry. The world's first large-scale nuclear power plant at Shippingport, Pennsylvania, was owned by the US Atomic Energy Commission, but built and operated by the Duquesne Light and Power

Company on a site owned by the utility company near Pittsburgh. Today, almost all the commercial reactors in the USA are owned by private companies, and nuclear industry as a whole has far greater private participation, and less concentration, than any other country.

Advanced Reactor Demonstration Program (from the same article as above)

In May 2020 the DOE launched the \$3.2 billion Advanced Reactor Demonstration Program (ARDP) offering funds, initially \$160 million, on a cost-share basis for the construction of two advanced reactors that could be operational within seven years. The ARDP will concentrate resources on designs that are "affordable" to build and operate. The programme would also extend to risk reduction for future demonstrations, and include support under the Advanced Reactor Concepts 2020 pathway for innovative and diverse designs with the potential to be commercial in the mid-2030s. Testing and assessing advanced technologies would be carried out at the Idaho National Laboratory's National Reactor Innovation Center (NRIC). The NRIC was launched in August 2019 as part of the DOE's Gateway for Accelerated Innovation in Nuclear (GAIN) initiative, which aims to accelerate the development and commercialisation of advanced nuclear technologies.

The DOE announced two initial grants in October 2020: \$80 million each to TerraPower and X-energy to build demonstration plants. X-energy will build four units of its Xe-100, a 75 MWe high-temperature gas-cooled small modular reactor, and a TRISO fuel plant. TerraPower will build the Sodium fast neutron reactor developed with GE Hitachi and based on its 345 MWe PRISM reactor, with added heat storage. Key criteria for selecting applicants included innovative reactor design and a credible management team able to supply the required 50-50 match in resources and deliver the projects within seven years.

In December 2020 the DOE announced initial \$30 million funding under the ARDP for five US-based teams developing affordable reactor technologies to be deployed over 10-14 years: Kairos Power for the Hermes Reduced-Scale Test Reactor, a scaled-down version of its fluoride salt-cooled high-temperature reactor (KP-FHR); Westinghouse for the eVinci microreactor; BWXT Advanced Technologies for the BWXT Advanced Nuclear Reactor (BANR); Holtec for its SMR-160; and Southern Company for its Molten Chloride Reactor Experiment, a 300 kWt reactor project to provide data to inform the design of a demonstration molten chloride fast reactor (MCFR) using TerraPower's technology.

In April 2021 X-energy signed an agreement with Energy Northwest and a public utility to set up the Tri Energy Partnership with a view to building an Xe-100 plant near the Columbia nuclear power plant in Washington state. The \$2.4 billion project would be half-funded by the ARDP and take seven years.

In June 2021 TerraPower announced plans to build a demonstration Sodium unit in Wyoming at a retired coal plant site. It plans to submit a construction permit application in 2023 and an operating licence application in 2026. The plant is expected to cost under \$1 billion apart from financing. Bechtel joined the TerraPower-GEH consortium in October 2020 to provide design, licensing, procurement and construction services to the project.

Under Oregon law, all water belongs to the public. With some exceptions, cities, irrigators, businesses, and other water users must obtain a permit or license from the Water Resources Department to use water from any source - whether it is underground, or from lakes or streams.

City of Portland Oregon Water Management and Conservation Plan

As part of the Water Bureau's mission to serve excellent water every minute of every day, we adhere to the value of careful stewardship of natural resources. This means using water as efficiently and sustainably as possible.

To this end, every ten years the bureau prepares an update to its Water Management and Conservation Plan to fulfill the requirements of [Oregon Administrative Rule Chapter 690, Division 86](#) of the Oregon Water Resources Department. Focusing on conservation programs, the draft plan

describes how the Water Bureau meets state rules and the drinking water needs of Portlanders. Here are some highlights of the report:

- Plans for encouraging Portlanders to use water efficiently. This report contains a look back and a look forward. It includes information about how the bureau met previous conservation commitments and a list of commitments for the next ten years. In that span, we'll work on everything from education to rebates to tools for low-income Portlanders. The report also describes efforts to conduct conservation work equitably.
- Plans for a potential water shortage. Even though we haven't had to restrict water use since 1992, we always want to be prepared in case of a serious drought or emergency. This plan describes how we will address water shortages.
- Plans for using water rights. This report is part of the state's requirement for cities requesting or maintaining water rights. Portland has a "bank" of groundwater rights we can tap to meet future demand, and every ten years the bureau is required to analyze whether we need access to more water. We must also demonstrate that it we're using the water we have as efficiently as possible. We analyzed supply and demand and concluded that we have enough water supply to meet projected demand and we are not asking for more water from the "bank" of rights.

Read the full plan at the link below:

Download PDF file

Water Management and Conservation Plan

Contact - Water Efficiency Services

conserve@portlandoregon.gov

503-823-4527

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