
The Climate Change Advisory Committee will hold this meeting
in person and using a virtual, Zoom webinar platform

Members of the public will be able to attend at City Hall
or by calling in to the Zoom webinar

Please click the link below to join the webinar:

<https://bainbridgewa.zoom.us/j/91390380790>

Or Telephone: 1-253-215-8782

Webinar ID: 913 9038 0790

AGENDA

- 5:30 Call Meeting to Order/Roll Call/Accept of Modify Agenda/Conflict of Interest Disclosure
- 5:35 Approve Minutes from April 17, 2024 meeting
- 5:40 Public Comment
- 5:45 Zero Emissions Hand Tools (Blair King, City Manager)
- 6:05 Updates (Ellen Schroer, Deputy City Manager)
 - Solar PV/carbon offset project update.
 - Heat pump pilot program update.
 - Climate Officer hiring process
- 6:15 Review Recommendations on Implementation of ETIPP Report (Steve)
- 6:30 Review Recommendations on the City EV Code (Sanjay and Steve)
- 6:45 Discuss Options for Equity and Self-Awareness Training for CCAC Members (Jens)
- 7:00 Additional Updates from CCAC
 - Electrification Expo (Kevin)
 - Metrics and Dashboards (All)
- 7:10 Assess Potential CCAC Options for STO Trails Grant Application (Kevin)

7:15 Scheduling Conflict with CCAC Meeting on June 19; Check Committee Availability for Upcoming Meetings in July and August

7:30 Adjourn

Materials

Meeting minutes from April 17, 2024

Ordinance No. 2024-XX, Regarding Small Landscaping Tools

Background information on gasoline-powered equipment

Lawn Care rebate program

Climate Change Advisory Committee
Meeting Minutes
April 17, 2024

Meeting called to order at 5:33 PM by Kevin.

Roll call

- Committee members: Steve Richard, Derik Broekhoff, Sanjay Bhat, Michael Cox, Kevin Thomas, Jens Boemer (online)
- City Staff liaison: Ellen Schroer
- City Council liaisons: Kirsten Hytopoulos, Leslie Schneider

Accept or Modify the Agenda

No amendments

Conflicts of Interest

- Sanjay disclosed he is marketing director at Kitsap Transit, which has a contract with COBI to promote transit, which is managed by Autumn's group at the city. He also serves on the Board with Courtyards on Madison, working with Department of Energy on community solar grant projects.
- Jens disclosed he is an employee of EPRI, a research institute that does work with PSE, but is not currently involved in any work with PSE.

Minutes for March meeting

Kevin motioned for approval, Michael seconded, unanimously adopted.

Public Comment

Maria Williams from Helpline House inquired about assistance from committee in considering amendments to BI EV charger requirements for new buildings.

City Liaison Updates

- Thanked committee members for presenting work plan to City Council.
- City is in process to hire a new climate office.
- Cascadia consulting hired to help with implementation of near-term projects, including solar PV offset project, the heat pump pilot program (working with Kicking Gas), and developing a sustainability and equity lens for the city budget and city projects. Cascadia will also help with updating the island's greenhouse gas inventory (in summer).
- Ebike voucher program to be picked up in summer.
- Several CCAC member terms are expiring. Deadline is April 27 deadline for reapplying.
- EV charging code – City Council would like CCAC to review the code & recommend any changes. Sanjay summarized for the committee issues that were discussed by the Council.
 - o A subcommittee was formed (Steve and Sanjay) to review and report back recommendations in May.

Review of recommendations on ETIPP implementation

- Committee members discussed proposals from committee related to implementing ETIPP report recommendations (as presented in agenda packet), including reaching target of 10% on-island renewable generation goal.
- Related to item #6 (taking advantage of grant opportunities), Sanjay suggested the addition of establishing a revolving loan fund program to support solar deployment on the island.
- Other possibilities for solar development (including designating future sites and ensuring sufficient incentives) were also discussed.
- Members also discussed recommendations related to resiliency and reiterated the importance of applying a “climate lens” tool to evaluate climate resilience in city projects.

Discussion of dashboard

- Committee members discussed a framework for a climate change action dashboard, indicating goals, metrics, and potential data sources, etc.
- Members agreed the framework is a sound basis for moving forward, and discussed how to strike a balance between “ideal” metrics and pragmatic ones (for which data can be easily obtained and updated).

CCAC updates

- Mike and Kevin presented CAP update to council.
- Also presented recommendations on solid waste program objectives, to be incorporated into council update to waste program.
- Updates were also provided on the planned home electrification expo (later in summer) and discussions of the city groundwater committee.

Meeting was adjourned at 7:10PM. Sanjay motioned; Mike seconded.

ORDINANCE 2024-

AN ORDINANCE of the City of Bainbridge Island, Washington, adding a new chapter 16.14 to the Bainbridge Island Municipal Code prohibiting the use of landscaping tools powered by internal combustion engines and regulating the use of electric-powered landscaping tools.

WHEREAS, use of small landscaping tools that are powered by internal combustion engines contributes to noise, toxic emissions, particulate matter, vibration, and greenhouse gases that negatively impact human health and the environment; and

WHEREAS, electric-powered alternatives for small landscaping tools are widely available in the market; and

WHEREAS, the Bainbridge Island City Council desires to limit the use of certain small landscaping tools that are powered by internal combustion engines in furtherance of the City's commitment to reducing greenhouse gases and providing a safe, healthy and sustainable environment.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BAINBRIDGE ISLAND, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. Small Landscaping Tools. A new chapter 16.14 is hereby added to the Bainbridge Island Municipal Code to read as follows:

SMALL LANDSCAPING TOOLS

<u>16.14.010</u>	<u>Purpose.</u>
<u>16.14.020</u>	<u>Definitions.</u>
<u>16.14.030</u>	<u>Use of Small Landscaping Tools.</u>
<u>16.14.040</u>	<u>Exception for Emergency Responders.</u>
<u>16.14.050</u>	<u>Penalty.</u>

16.14.010 **Purpose.**

The purpose of this chapter is to control dust and other airborne pollution, reduce health hazards, and minimize noise pollution resulting from the use of leaf blowers and other small landscaping tools that are powered by internal combustion engines.

16.14.020 **Definitions.**

As used in this chapter, the following terms have the meanings set forth below:

- A. “Hedge trimmer” means a powered gardening tool used for trimming and cutting back bushes, shrubs, and hedges.
- B. “Internal combustion engine” means an engine within which fuel (typically gasoline or diesel) is combined with an oxidizer and ignited, thereby producing hot gases that drive a piston or perform other work as they expand.
- C. “Lawn edger” means a powered cutting tool used to form distinct boundaries between a lawn, typically consisting of grass or other botanical ground cover, and another ground surface feature such as paved, concreted or asphalted area, or a granular material such as sand or uncovered soil.
- D. “Leaf blower” means a tool that propels air out of a nozzle to move debris, such as leaves or grass cuttings.
- E. “Non-riding lawn mower” means a tool that uses one or more revolving blades to cut grass or other landscape material to an even height and that is not designed to be ridden by the operator.
- F. “Small Landscaping Tools” means hedge trimmers, lawn edgers, leaf blowers, non-riding lawnmowers, and string trimmers.
- G. “String trimmer” means a tool that uses a rapidly spinning flexible monofilament line or plastic line to cut grass or other landscape material.

16.14.030 Use of Small Landscaping Tools.

- A. Use of the following small landscaping tools is prohibited in the City of Bainbridge Island:
 - 1. Hedge trimmers powered by internal combustion engines;
 - 2. Lawn edgers powered by internal combustion engines;
 - 3. Leaf blowers powered by internal combustion engines;
 - 4. Non-riding mowers powered by internal combustion engines that are rated at 25 horsepower or less; and
 - 5. String trimmers powered by internal combustion engines.
- B. The use of electric-powered small landscaping tools is permitted in residential zones subject to the requirements of this section, provided, that hours of operation are limited to 8:00 a.m. to 5:00 p.m. weekdays and Saturdays. Operation is prohibited on Sundays and on federal, state, and City holidays.

- C. The use of electric-powered small landscaping tools is permitted in non-residential zones subject to the requirements of this section, provided, that hours of operation are limited to 8:00 a.m. to 6:00 p.m. Operation is prohibited on federal, state, and City holidays.
- D. Cuttings, refuse, and debris shall not be blown or deposited onto neighboring properties, into critical areas (such as streams, ravines, and wetlands), into storm facilities (such as gutters, catch basins, rain gardens and dispersion trenches), or into a street.
- E. After small landscaping tool use, all debris and waste materials shall be disposed of in yard waste receptacles (if available from the local solid waste hauler), at a transfer station (if yard waste is accepted for disposal separate from garbage), or retained on site for compost or other uses. Debris and waste materials shall not be disposed of in containers designated for trash or garbage.

16.14.040 **Exception for Emergency Responders.**

Notwithstanding any contrary provision of this chapter, small landscaping tools powered by internal combustion engines may be used by police, fire, and public works emergency responders for the purpose of responding to emergency situations, including but not limited to, the clearing of downed trees and brush in areas needing expedient clearing for the safety of the public.

16.14.050 **Penalty.**

Any person or firm violating any of the provisions of this chapter for the first time shall be issued a warning by the City. A second violation by the same person or firm shall be a Class 2 civil infraction and, upon a finding that the infraction has been committed, the violator shall be required to pay a monetary penalty in the amount of \$125.00. A third or subsequent violation shall be a Class 1 civil infraction and, upon a finding that the infraction has been committed, the violator shall be required to pay a monetary penalty in the amount of \$250.00 for each such violation,

16.14.070 **Education and Outreach.**

As necessary, the city manager, or their designee, and pursuant to BIMC 16.14, shall provide, or contract for the provision of, education and outreach activities to inform residents, landscaping professionals and other interested individuals about the requirements of this chapter. Education and outreach will be designed to promote natural yard care practices, effectively convey the policies underlying

this chapter, describe the actions necessary to gain compliance with its provisions, and minimize the need for formal enforcement action. The city will emphasize education and outreach rather than enforcement to achieve compliance with the requirements of this chapter.

Section 2. Severability. Should any section, paragraph, sentence, clause, or phrase of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this ordinance be preempted by state or federal law or regulation, such decision or preemption shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

Section 3. Effective Date. This ordinance shall take effect and be in full force July 1, 2026, which is more than five (5) days from its passage and publication as required by law.

PASSED BY THE CITY COUNCIL this ____ day of _____, 2024.

APPROVED BY THE MAYOR this ____ day of _____, 2024.

Joe Deets, Mayor

ATTEST/AUTHENTICATED:

Christine Brown, MMC, City Clerk

FILED WITH THE CITY CLERK:
PASSED BY THE CITY COUNCIL:
PUBLISHED:
EFFECTIVE DATE:
ORDINANCE NUMBER:

Health Hazards from Gasoline-Powered Lawn and Garden Equipment

- The California Air Resources Board (CARB) staff conducted a study, and preliminary findings indicate elevated exposures to criteria and toxic air pollutants for operators of gasoline-powered devices compared to electric devices and background levels. The increased exposures to benzene and 1,3-butadiene from gasoline-powered equipment could lead to possible additional cancers per million workers exposed. They concluded that moving towards zero-emission technologies may help reduce operators' exposure and associated health risks.¹
- The EPA concluded that landscaping contributes 5 to 10% of all toxic air pollution. These emissions have been designated as “probable carcinogens.”²
- A report in the Journal of the American College of Cardiology stated that epidemiological studies have found that environmental noise is associated with an increased incidence of arterial hypertension, myocardial infarction, heart failure, and stroke.³
- The Icahn School of Medicine at Mount Sinai acknowledges children are highly susceptible to these hazards because they breathe more air per pound of body weight per day than adults and thus inhale more of any pollutants thrown into the air by this equipment. Children's vulnerability is further magnified by the fact that their lungs, ears, eyes, and other organ systems are still developing, making them inherently more sensitive to environmental hazards than the organs of adults.⁴
- Gasoline-powered lawn equipment is inefficient. The California Air Resources Board (CARB) estimates that the operation of a gasoline leaf blower for one hour releases emissions equivalent to driving a car for 15 hours or 1100 miles. The air released from gasoline leaf blowers can reach speeds of 200 mph, sending dust, pollen, pesticides, mold, and heavy metals in soil into the air where they can be breathed in. Lastly, exposure to fine particulates like those emitted from GLBs was associated with an increase in COVID-related deaths. For these reasons, the American Lung Association recommends using hand-powered or electric lawn care equipment instead of gas-powered.⁵

¹ Research Division. (2018). Operator Exposure to Emissions from Lawn and Garden Equipment.

https://ww2.arb.ca.gov/sites/default/files/2023-08/Exposure%20Study%20Summary%202010-12-2018_0.pdf

² FACT SHEET: Final rule to reduce toxic air emissions | US EPA. (2024, January 2). US EPA.

<https://www.epa.gov/stationary-engines/fact-sheet-final-rule-reduce-toxic-air-emissions>

³ Münzel, T., Schmidt, F. P., Steven, S., Herzog, J., Daiber, A., & Sørensen, M. (2018). Environmental noise and the cardiovascular system. *Journal of the American College of Cardiology*, 71(6), 688–697.
<https://doi.org/10.1016/j.jacc.2017.12.015>

⁴ Sinaixposomics. (2023, October 17). Gas Leaf Blowers are Health Hazards. Institute for Climate Change, Environmental Health, and Exposomics. <https://mountsinaixposomics.org/gas-leaf-blowers-are-health-hazards/>

⁵ Sinaixposomics. (2023, October 17). Gas Leaf Blowers are Health Hazards. Institute for Climate Change, Environmental Health, and Exposomics. <https://mountsinaixposomics.org/gas-leaf-blowers-are-health-hazards/>

Bainbridge Island Lawn Care Rebate Program Proposal

Last Updated: May 7, 2024

Purpose

The City Council will be considering an electric landscaping tool ordinance. The potential ordinance would prohibit gas engines for leaf blowers, hedge trimmers, lawn edgers, string trimmers, and non-riding mowers with less than 25 horsepower. Equity concerns have been raised at the possibility of this ordinance. Staff are proposing the following equity-driven Lawn Care Rebate Program.

Program Funding Request

Staff request \$50,000 be allocated to rebates to eligible residents. Staff also requests \$2,000 for program outreach. This \$52,000 would come from funding allocated to the Climate Action Plan. This does not include any funding dedicated to staff time.

Process

1. A resident purchases an eligible tool from participating retailers.
2. Within 30 calendar days from the date of purchase, the resident takes their old lawnmower to Bainbridge Disposal. They must ensure all fluids have been removed from the machine to be accepted. Bainbridge Disposal has offered to for-go the resident drop-off cost for program participants.
3. A resident would then complete the online rebate application and submit it to the City. The form would require the submittal of a receipt or invoice for the lawn care equipment, proof of income eligibility, and a copy of a drop-off form designed by the City and handed out by Bainbridge Disposal.
4. Staff review and either approve or deny the application. Once approved, a check would either be mailed to the resident, or they can pick up at City Hall.

Income Qualification

Income qualification will be based on [US Department of Housing and Urban Development \(HUD\) Income Limits](#) for the Bremerton-Silverdale metropolitan statistical area (MSA). The income thresholds for income-qualified incentives are 80% area median income (AMI) and below. Income thresholds will be adjusted for household size and will follow HUD 2023 Income Limits methodology. Income thresholds are shown in the table below.

Bainbridge Island Lawn Care Rebate Program Income Limits								
Household Size	1	2	3	4	5	6	7	8
80% AMI	\$61,000.00	\$69,700.00	\$78,400.00	\$87,100.00	\$94,100.00	\$101,050.00	\$108,050.00	\$115,000.00

According to Census data, the average family size is 2.84 on Bainbridge Island. Rounding up to three and based on these income qualifications, this program could assist up to 1,500 families. However, not all families live on a parcel of land that requires them to maintain their lawn, nor do all families own gas-powered lawn care equipment, thus this number is a conservative estimate.

Rebate Options

Staff researched West Coast governments that currently implement a lawn care rebate program. Based on the review, staff recommend modeling Bainbridge Island's program off of the San Joaquin Valley Air Pollution Control District's *Clean Green Yard Machines* program.

The program would offer the following rebates:

- Up to \$100 for a purchase of \$200 or less¹
- \$150 for a purchase of \$201-\$350
- \$250 for a purchase of \$351+

If all 1,500 families were to participate in this program, the estimated rebate amount that would be distributed would range from \$150,000² to \$375,000,³ however, staff expect this to be a conservative estimate based on factors mentioned in the previous section.

Per the funding request, the budget would allow up the following:

Voucher Amount	Maximum Number of Vouchers Available
Up to \$100	500
\$150	333
\$250	200

Program and Eligibility Requirements

The City would implement the following program and eligibility requirements:

- Submittal of an application does not guarantee a rebate. Program eligibility is determined at the sole discretion of the City. The participant will be notified if their application is deemed ineligible.
- Applicant must be a resident at the address identified in the application.
- Limit one (1) rebate per address for every two (2) consecutive years.
- Combo kit with one power unit and multiple attachments is considered one equipment type.
- For bundle purchases of two or more pieces of eligible equipment, separate applications must be submitted for each piece of equipment. Equipment purchased as part of a bundle are eligible for separate rebates only if each piece of equipment has a separate power unit. For the first piece of eligible equipment, the rebate amount is based on the current individual retail price of that specific equipment. The rebates for subsequent eligible pieces of equipment in the bundle with a separate power unit are based on the remaining balance of the purchase price of the bundle, less the current individual retail price of the first piece of equipment for which the rebate was applied.
- Applicant must submit a rebate application within three (3) months of the purchase date of the new equipment.

¹ Applicant will be responsible for a minimum of 50% of the purchase price for equipment priced \$200 or less.

² 100% participation on the \$100 rebate

³ 100% participation on the \$250 rebate

- The new electric equipment must be purchased with a power unit and from a manufacturer-authorized retailer or dealer.
- Applicant must turn in a fully functional old gas- or diesel-powered lawn care equipment to Bainbridge Disposal for permanent recycling.
- Applicant must maintain ownership of the new lawn care equipment for a minimum of two (2) consecutive years following the purchase date.
- New equipment must:
 - o Be new, not used, or previously owned
 - o Be electric (corded or battery-powered)
 - o For mowers, be push or self-propelled under 25 horsepower (or equivalent) for residential use
 - o Have a minimum one-(1) year manufacturer warranty
- Lawnmowers that are not eligible:
 - o Reel mowers
 - o Riding lawn mowers
 - o Tractors used to pull mowing equipment
 - o Tow-behind mowers
- The rebate period would begin upon passage of the ordinance and end when the mandate for electric lawn care equipment begins.