Communitywide Assessed Actions List

May 28, 2020 – Steering Committee Review

Overview

The Thurston Climate Mitigation Plan will include a list of communitywide actions to reduce greenhouse gas emissions in order to meet the adopted emissions reduction target. The actions included in this list were assessed as part of the scenario analysis completed in May 2020. They were identified based on the results of a multi-criteria analysis, and with direction from the project's Steering Committee, Climate Advisory Workgroup, and project staff.

Assessed Actions

The consultant team assessed the following 71 actions for their ability to reduce locally produced greenhouse gas emissions, using a scenario analysis tool.[1] This list includes all actions that received a Total Priority Score of 3.5 or higher in the multi-criteria analysis, as well as top-ranking actions that address key strategies identified as important by stakeholders and Steering Committee members.

B1. Reduce energy use in residential buildings.

- **residential energy performance ratings.** Require energy performance ratings and disclosures for homes at time of sale, lease, or rent so that owners, tenants, and prospective buyers are informed before making purchasing or rental decisions.
- **residential energy audits.** Develop and adopt policies that require residential properties to undertake an energy audit at the time of sale or during a substantial remodel. Work with financial institutions to develop mortgage products that incorporate audited energy efficiency recommendations.
- **rental housing EE incentives.** Provide property tax breaks for landlords who install energy conservation measures in rental housing.
- **property tax credit.** Create a property tax credit for property owners who participate in energy efficiency.
- **rental housing EE baseline.** Pass an ordinance to require rental units to meet baseline levels of energy efficiency and make more stringent over time.

B2. Reduce energy use in existing commercial/industrial buildings.

- **commercial energy benchmarking & disclosure.** Require energy performance ratings for commercial structures be disclosed so that owners, tenants, and prospective buyers are informed before making purchasing or rental decisions.
- **LED lighting.** Install LED lighting in public-sector buildings and infrastructure (e.g., street lights, traffic signals).

---

[1] The scenario analysis tool was developed by Hammerschlag LLC, a subconsultant for the Thurston Climate Mitigation Plan. The results of the scenario analysis using this list of actions are documented in the case study section of a memo provided by the consultant: "Scenario Analysis Tool User's Guide," May 21, 2020. Document no.: TH-015(c).

- **cool roofs.** Create an incentive program for the installation of reflective roofs on commercial buildings to reduce building energy consumption and the urban heat island effect.
- **performance standard.** Set energy efficiency performance standards for commercial buildings with gross floor areas smaller than 50,000 square feet.

B3. Reduce energy use across building types.

- **energy education.** Provide educational resources and technical assistance to industry professionals, building owners and managers on all aspects of energy efficient building design, retrofits, and operations for new and existing buildings.
- **exemplary buildings.** Create a Zero-Energy Building Challenge by partnering with public, private, non-profit and faith-based organizations. Facilitate rapid deployment and public awareness of high-profile demonstration buildings that use innovative energy efficiency and/or technology.
- **green building tracking.** Develop data methodology to monitor use and impacts of green building incentives, to inform future incentives and develop recommendations for policy or programs.

B4. Reduce energy use in new buildings or redevelopment.

- **green public buildings.** Require that new local government facilities (e.g., the new Olympia City Hall and LOTT building) demonstrate green building technologies and practices.
- **permitting incentives.** Offer streamlined permitting, lower fees, or other incentives for projects that meet green building certification standards.
- **Energy efficiency tax exemptions.** Create a local property tax reduction or credit for new buildings that meet an energy efficiency performance standard.
- **land use incentives.** Provide land use incentives (floor area ratio, density bonus, height bonus, parking reductions) for zero-net carbon buildings or other applications that dramatically increase energy efficiency.
- **permit counter technical assistance.** Hire or contract with dedicated green building specialists to provide technical assistance through the permitting and development process.
- **grid-connected appliances.** Require smart appliances in new construction, especially water heaters that control timing of demand.
- **multifamily submetering.** Require submetering for new multifamily buildings so residents can track energy use.

B5. Increase the production of local renewable energy.

- **public building solar.** Install solar photovoltaics on all available and feasible municipal sites, including building rooftops, city hall, schools, police and fire stations, community centers, municipal water pump sites, and transit depots.
- **solSmart.** Pursue SolSmart designations and adopt solar friendly practices.
- **solar-ready.** Amend local development code to require solar-ready construction for all building types.
- **group purchasing.** Develop/support a city-sponsored group solar purchasing program.

B6. Convert to cleaner fuel sources.

- **natural gas to electric conversions.** Educate business owners and residents on the options for electric appliances and the benefit of pairing electrification with the installation of renewable energy. Create incentives to support fuel switching.

- **electric appliances in new construction.** Update municipal code to require electric appliances in new construction.
- **natural gas ban.** Ban all new natural gas connections in new buildings.

T1. Set land use policies that support increased density and efficient transportation networks.

- **coordinated long term planning- future infill.** Coordinate long-term plans with transit agencies to project where increased density would support more transit corridors. Then change zoning/density that would support new transit corridors and variety of household incomes. Promote long-term equity and healthy communities by developing incentives such as density bonuses for development where a percentage of the units will be permanently affordable for household incomes.
- **middle-density housing.** Reevaluate and change zoning as needed to allow for a range of housing types to promote social economic integration of housing near the region's urban centers or moderate-density zones. Promote long-term equity and healthy communities by developing incentives such as density bonuses for development where a percentage of the units will be permanently affordable for household incomes that can no longer afford to live in these areas.
- **Eco districts.** Identify potential Eco districts to advance innovative district-scale urban development, sustainability, and neighborhood equity. Then make necessary code/zoning changes to support their development and set ambitious performance outcomes to ensure their long-term success.
- **20-minute neighborhoods.** Increase the number of 20-minute neighborhoods (walkable environment, destinations that support a range of basic living needs and a residential density). Identify key infrastructure components needed to grow the number of 20-minute neighborhoods, then change zoning and codes if needed and coordinate with other jurisdictions to make public investments where necessary.
- **ADUs.** Amend development codes to allow for attached and detached ADU's in urban residential areas.
- **land use efficiency.** Set integrated goals to consider network efficiency in land use decisions, including how density in certain areas supports transit, increases efficiency of utility service, and other support facilities. Consider VMT in identifying locations for large employment facilities.

T2. Increase efficiency of the transportation system.

- **Congestion mitigation.** Develop congestion mitigation programs to increase transportation efficiency, reduce delay, and reduce emissions such as signalization coordination improvements along with application of speed harmonization techniques (ex. reevaluate speed limits, roundabouts vs signalized intersection, street connectivity). Added benefits are decrease idling time (pollution) and improve fuel efficiency (cost savings to driver).
- **vehicle efficiency outreach.** Develop educational campaigns about benefits (reduced GHG emission, increase fuel efficiency, safety) of properly inflated tires, including signage at gas stations and local businesses and partnering with schools.
- **teleworking/flex work.** Government agencies increase opportunities for employee teleworking options and staggering work days to reduce employees driving during peak traffic times.

T3. Increase adoption of electric vehicles.

- **EV parking new construction.** Require large commercial and residential buildings to dedicate a percentage of parking spots for electric vehicle charging.
- **free EV parking.** Allow free parking for all electric vehicles at local government buildings and in city centers to encourage the adoption of all electric vehicles. Increase cost of parking for Non-EV vehicles.

- **EV ready building code.** Require all new residential construction be built EV ready. Create a simple and consistent residential charging station permitting process to reduce costs and time to development.
- **EV integration.** Reevaluate regulations and make necessary changes to ensure charging stations are able to be permitted in locations where they are needed.
- **convert to EV fleets.** Set policies and timetable for electrification of municipal and other governmental fleets. Require replacement of public fleets with cleaner, energy-efficient vehicles to reduce long term fuel costs, improve air quality and reduce greenhouse gas emissions.
- **EV education.** Partner with environmental and other agencies to increase consumer awareness about EV options and incentives for use and purchase.
- **EV mass purchase discounts.** Create a group purchase program for residents to get deep discounts on EVs, other fuel efficient and alternative fuel vehicles.
- **EV purchase incentives.** Partner with car sale and lease dealerships to provide incentives for purchase of electric vehicles by Thurston County residents. Pilot with those neighborhoods, individuals with greatest VMT potential.

T4. Increase the use of public transit.

- **increase transit.** Increase local public transit routes/frequency with a focus on expanding transit service before and after traditional business hours and on weekends.
- **rural transit.** Identify and implement first/last mile solutions for rural ridership (engage rural home owners associations for representation and feedback). Present this plan to TRPC with direction to explore pilot programs and secure funding sources.
- **fareless system.** Develop a fareless system for public transit.
- **rider education/benefits.** Maintain and expand a regional online page that lists all the mode shift education efforts and employer benefits opportunities (Thurston Here-To-There). Include a comments section for suggestions to further transit education and ridership.
- **promote transit benefits.** Work with employers and transit agencies to develop ways to incentivize employee ridership (ex. rebates for employees who give up use of employer parking facilities).

T5. Increase use of active forms of travel and more efficient commute modes.

- **walk/bike infrastructure.** Coordinate cities of Thurston Counties Master Bicycle and Pedestrian plans into a large regional plan to expand walking and biking infrastructure, including separated and protected opportunities. Coordinate efforts to maximize funding mechanisms and opportunities.
- **barriers to transportation alternatives.** Develop a regional inventory to identify gaps in connectivity for safe cycling and walking. Then develop a strategy to prioritize projects and a plan for funding.
- **school drop-off alternative modes.** Maintain and expand a walking/biking incentive program with safety education for families.
- **car-free zones.** Reevaluate long term plans and update to prioritize pedestrians and people riding bikes. Set goals for mode shift and plans on how to achieve those goals like developing car-free corridors in commercial and mixed use areas to encourage mode shift.
- **telecommuting infrastructure.** Develop grants and provide financial resources for installation of infrastructure necessary to support telecommuting.

W1. Increase the efficiency of water and wastewater infrastructure.

- **municipal energy efficiency.** Conduct efficiency improvements to municipal water and sewage treatment systems. Prioritize components that consume the most energy and have high GHG emissions.

W2. Reduce water consumption.

- **water audits.** Conduct water audits of city and county facilities to determine prioritization of capital improvements.

W3. Reduce emissions from wastewater treatment operations.

- **nitrous oxide capture.** Research and implement nitrous oxide mitigation strategies and strategies to avoid or reduce nitrous oxide emissions. Present findings and cost vs benefits analysis to policy makers to determine what changes should be made.

W4. Divert more solid waste from landfills.

- **waste audits.** Provide waste audits for business owners and education on practices that decreate waste (ex. Compost, recycling, reuse).
- **waste less food program.** Expand Thurston County's “Waste Less Food” program.

W6. Reduce consumption of carbon-intensive goods and services.

- **supply chain.** Provide free technical assistance to local businesses in reducing the carbon intensity of their supply chains.

A1. Reduce emissions from agricultural practices.

- **nutrient management.** Provide education and incentives (e.g., grants, loans, technical assistance) reduce nitrous oxide emissions when managing fertilizer.

A2. Support agricultural practices that sequester carbon.

- **regenerative agriculture.** Expand regenerative agricultural practices (ex. low-till, no-till education programs) among farmers that aim for a "whole farm" approach. Provide education on how to increase organic matter content and water retention in soils within urban and agricultural settings.

A5. Manage forests to sequester carbon.

- **reforestation & afforestation program.** Develop a coordinated reforestation/afforestation program. Begin by identifying priority areas where reforestation and afforestation may have carbon reduction benefits.

A6. Reduce emissions from the urban landscape.

- **municipal canopy.** Maximize tree canopy on City-owned or City-controlled land, where appropriate in balance with other City goals.
- **tree canopy preservation.** Develop a tree canopy ordinance that establishes a baseline for current urban canopy and sets goals for future canopy to increase cities' resilience. Combine direct cooling value (urban heat island mitigation) with carbon sequestration value when evaluating urban tree management.

G1. Conduct education and outreach across climate mitigation areas.

- **social research and behavior change campaigns.** Work with higher education institutions to research effective behavior change through marketing and educate. Use this information in developing campaigns to reduce high emissions GHGs.

G4. Enhance monitoring and evaluation of climate mitigation measures and outcomes.

- **emissions inventory.** Prepare and publish an annual emissions inventory that tracks greenhouse gas emissions by jurisdiction and source category. Review and update emissions inventory methodology as

necessary to address improvements to data or methodologies, improve consistency, incorporate changes to state or federal policies, or report on issues of local interest.

- **performance measures.** Develop community GHG reduction goals and performance measures. Regularly update and publicize for community to track their progress.
- **other emission sources and sinks.** Expand sources and sectors in future emissions inventories to inform future regulatory policy to reduce GHG emissions.
- **vulnerable populations.** Develop a data and monitoring mechanism that is specific to marginalized groups and their needs related to climate change and climate reality (e.g., access to transportation, access to A/C, proximity to cooling centers) and develop a plan to address these vulnerabilities with solutions that help reduce GHG emissions.
- **social cost of carbon.** Develop and adopt policies that require the use of a "social cost of carbon measure" in zoning, development, construction, and transportation decisions.

G5. Advocate for climate-mitigating state and federal policy.

- **legislative agenda.** Prioritize combating climate change in the municipality's legislative agenda each year. Instruct municipal lobbyist to track and report on climate bills, and to advocate for those bills that will help reduce local emissions. Work with other cities to add this to the AWC priorities.

Background Timeline

- *May-September 2019:* TRPC and the consultant team gathered ideas from the Climate Advisory Workgroup, Steering Committee, stakeholder focus groups, general public, and other planning efforts to develop a list of over 300 potential actions to reduce greenhouse gas emissions.
- *July-October 2019:* The Climate Advisory Workgroup and Steering Committee reviewed various options for criteria, suggested by the consultant team and results of a public survey. The Steering Committee approved four criteria to use for the multicriteria analysis at their October 24 meeting.
- *October-December 2019:* TRPC and the consultant team evaluated the full list of actions, with input from expert stakeholders at five focus group meetings. Each action received a qualitative ranking for how it met each of four criteria: greenhouse gas reduction potential, speed of deployment, control, and co-benefits.
- *January 2020:* The consultant team used the criteria rankings to develop a Total Priority Score (TPS) for each action. The Climate Advisory Workgroup reviewed the scores (January 16) and the Steering Committee (January 23) approved an approach to weighting different criteria and including a boost for actions identified as a high priority by youth.
- *January 23, 2020:* The Steering Committee directed staff to develop a list of approximately 50 priority actions that includes actions that appear repeatedly when evaluated with different approaches (lists), using their Total Priority Score:
    - Top TPS scores among all actions
    - Top TPS scores for each sector (Buildings & Energy, Transportation & Land Use, Agriculture & Forestry, Water & Waste, Cross-Cutting)
    - Top TPS scores for each strategy
    - Top actions for Youth
    - Top actions for stakeholders
- *February-March 2020:* Staff drafted two approaches to developing a list of priority actions:

  - **Option A:** Actions on all 3 prioritization approaches or "lists" (top by total priority score, top by sector, top by strategy), PLUS additional actions by Total Priority Score up to a total of 50 actions.
  - **Option B:** Compared to Option A, adds actions that address key sectors or strategies with stakeholder interest (sequestration, water, solid waste, agriculture, education, data and monitoring); removes lower-ranking actions in strategies with lots of actions (transportation and land use, energy use in new buildings).
- *March 12, 2020:* The Climate Advisory Workgroup reviewed the draft Priority Action List, and provided feedback and recommendations to the Steering Committee. There was not a consensus recommendation.
  - Some CAW members preferred Option A, because it focuses on the highest impact actions. Some had concerns that Option B directs resources to actions that are less effective or can't be measured.
  - Some CAW members preferred Option B, because it includes a wider variety of partners and sectors, and includes topics of interest to the community, such as sequestration and solid waste, that are important, but currently lack data and are not measured in the greenhouse gas inventory.
  - Some CAW members provided comments on individual actions, and preferred a hybrid approach that minimized actions they felt have lower impact (actions focused on municipal operations, water, agriculture) but included others they felt were important for various reasons (including actions focused on fuel switching, sequestration, energy efficiency, education and outreach).
  - Some CAW members expressed concerns that picking and choosing specific actions, irrespective of their ranking, would undermine the broader community input provided through the multicriteria analysis process.
- *April 23, 2020:* Staff updated the Priority Action options, incorporating Workgroup feedback, particularly Option B. The Steering Committee reviewed updated versions of the two options for priority Action Lists at their April 23rd meeting[2], as well as an initial analysis from the Consultant Team of how the Option B actions would reduce greenhouse gas emissions. The initial scenario analysis indicated that the Option B actions would not achieve the adopted emission reduction targets. The Steering Committee provided direction to staff and consultants to develop a list of actions that would be sufficient to achieve the targets using the approach identified in Option B (include actions from a wider range of strategies), but that also included some actions from Option A that focused on municipal operations and other jurisdiction priorities.
- *May 2020*: Staff provided an updated list of priority actions to the consultant team, based on the Steering Committee's direction. The list in this memo combines the Option A and B approaches; it includes all actions that received a Total Priority Score of 3.5 or higher in the multi-criteria analysis, as well as top-ranking actions that address key strategies identified as important by stakeholders and Steering Committee members, including actions related to carbon sequestration, fuel switching, water use, solid waste, agriculture, education and outreach, and data and monitoring. The consultant team presented an updated scenario analysis using this list of actions to the Steering Committee at their May 28 meeting.
- *Upcoming*: The Project Team will identify initial implementation steps for the Assessed Actions, including leads, partners, and general timeline. This information will be used to develop implementation plans for each of the four partner jurisdictions.

[2] The March 26th Steering Committee meeting was canceled as jurisdictions focused on the community response to COVID-19.