

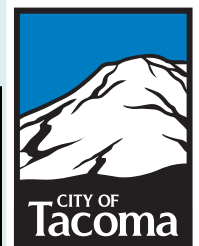


TACOMA COMMUNITY CLIMATE ACTION PLAN

Actions for a Better & More Just
Tacoma 2021



TACOMA PUBLIC UTILITIES



This Plan describes a pathway for Tacoma to reach its target of net-zero emissions by 2050. It describes the importance of taking transformative climate action now, our people-first approach centering equity and anti-racism, Tacoma’s climate action progress, climate strategies to guide us through 2030, and critical actions for 2024 to start us on our path.

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Why Tacoma Needs a Climate Action Plan

Our climate has reached a point of crisis. Here we are living through unprecedented heat, extreme downpours, wildfire smoke, and other impacts, with their severity increasing year-by-year. In 2019, Indigenous and youth climate strikes demanded more City climate action. In response to community concerns, the Tacoma City Council declared a climate emergency. This Plan sets climate strategies and actions that get us on track to address the climate emergency by 2030. The science is clear - we need to act urgently.

Climate change is not the only crisis our community is facing. Therefore, City Council asked staff for climate solutions that advance other community priorities – like public health, economic opportunities, social justice, and recovery from the COVID-19 pandemic. On top of these needs, our community is growing – we need to accommodate more people and offer more services. This is the context we are living in, and so it is the context we are planning in.

WHAT DO WE MEAN BY 'NET ZERO EMISSIONS'?

Net zero emissions are achieved by eliminating GHG emissions from activities carried out within the city. The goal is to first get as close to zero emissions as possible, and then to offset any emissions that are left with an equivalent amount of carbon removals. Carbon can be removed from the atmosphere through direct capture and storage technologies, or from reclaiming and restoring natural lands.

In Tacoma, net zero emissions will be achieved by improving the systems and technologies for moving people around, building and operating buildings, producing and manufacturing goods, and disposing of waste.

Working toward a better Tacoma in 2030 and net-zero emissions in 2050, we plan to do our part to solve the climate crisis with strong investments in the immediate and long-term future while improving community health, safety, job opportunities, and equity. That's news we're happy to share: climate action can have many different benefits.

WHAT DO WE MEAN BY EQUITY?

Equity is when everyone has access to the opportunities necessary to satisfy their essential needs, advance their well-being, and achieve their full potential. ([Racial Equity Alliance](#))

Puyallup Tribal Leadership and Local Stewardship

The Puyallup Tribe has existed since creation as the aboriginal people who are the guardians of their lands and waters and is an independent sovereign nation. The Puyallup Tribe “is committed to a high quality of life for all its tribal members, seven generations and beyond, described by access to healthy, affordable housing, environmentally friendly transportation options, access to sustainable jobs, a rich cultural community that honors [their] ancestors and culture, and thriving ecological environment to sustain our salmon, orca, and other threatened wildlife.” The City of Tacoma “strive[s] to achieve an exceptional quality of life for every generation and leave a legacy of stewardship. We work together to achieve lasting and equitable prosperity; build safe, healthy, vibrant communities; and minimize our negative impacts in order to conserve the natural resources that sustain us.” Climate change threatens both organizations’ visions. We must act together to ensure a safe future together. This Tacoma Climate Action Plan commits the City to our shared community and a future that is more sustainable, just, and collaborative between the City of Tacoma and Puyallup Tribe of Indians.

In December 2019, the Puyallup Tribal Council demonstrated its continued vision, leadership, and commitment to protecting our Earth and future generations in declaring a climate emergency in coordination with Tacoma City Council. In its resolution, the Tribal Council emphasized reducing its greenhouse gas emissions, preparing for and managing climate impacts, and facilitating a just transition away from fossil fuels. The Puyallup Tribe acknowledges what is at stake with worsening climate impacts -- hotter average temperatures threaten our communities, air, lands, soil, waters, and all other life as well as traditional Puyallup hunting, gathering, and fishing grounds and historical village sites. In these and other ways, climate change threatens the material, cultural, and spiritual well-being of our communities.

A History of Local Pollution and Lessons for Future Regeneration

For thousands of years, indigenous communities stewarded Tacoma’s lands and waters. The natural environment thrived, species were abundant, food was available, and the air, soils, and waters were clean. In just the last 150 years, the colonization, development, and industrialization of Tacoma has seriously degraded our day-to-day life support systems, marginalized indigenous peoples, and resulted in extreme short-term gains for some people at great cost to most other people, animals, and plants. Industries and transportation have polluted and continue to pollute our air, soils, and waters, affecting culturally and economically important species like salmon as well as the health of our communities. A history of logging and lack of environmentally-conscious City policies have contributed to an unhealthy, underdeveloped tree canopy, particularly in Tacoma’s South End and East-side. Wintertime wood smoke pollution once affected all of Tacoma-Pierce County until public sector intervention facilitated widespread wood stove change-outs less than a decade ago. While we have made some progress addressing pollution, other pollution continues to worsen.

“For future generations to meet their needs... we need to think about the economy in terms of environment and social needs... to include non-human and life-giving entities like bodies of water, mountains, watersheds...”

- Tacoma community member

Today, greenhouse gas (GHG) pollution threatens the well-being of our interdependent web of life - for generations. Climate-warming gases are causing and worsening “natural” disasters. We must face the facts and strengthen our path towards environmental regeneration and restorative justice. Black, Indigenous, and People of Color (BIPOC) communities are valued role models and collaborators as we improve our stewardship and seek this new path for our communities.

ENVIRONMENTAL REGENERATION AFTER MORE THAN 100 YEARS OF CONTAMINATION

After more than 100 years of industrial pollution, Tacoma’s Thea Foss and Wheeler-Osgood waterways were burdened with more than 1 million cubic yards of contaminated sediments, to the point that they were categorized by the Environmental Protection Agency (EPA) as heavily polluted Superfund sites. In 2006, the City of Tacoma and our community decided to shoulder much of a \$105 million clean-up of these waterways. With help from the State of Washington and others, the City made great progress in cleaning these waters and continues to protect them from pollution today. (City of Tacoma).



COVID Recovery and the Just Transition

In 2020, the COVID-19 pandemic nearly halted Tacoma’s economy. Since the initial shutdown, there have been waves of economic and health impacts blunted by public health and social welfare interventions. It has become clear that the pandemic-recession disproportionately harms communities of color, low-income families, small business owners, and other frontline communities – the very same communities which have been historically underserved by the City. COVID-19 teaches us important lessons for the climate crisis: that we must prioritize frontline communities; that we must be well prepared for and invest appropriately for crises we see coming; that government has a unique and central role in crisis planning and response; and that, amid crisis, government and communities can and must act urgently, collectively, innovatively, and transformationally to promote our community’s welfare.

We think these lessons can inform a community resilience- and equity-focused approach to climate action. We can decrease our emissions to enjoy many other benefits, like good jobs, less traffic, cleaner air, more quality housing, and community health and safety. Indeed, these are opportunities we need now more than ever as we recover from COVID-19. Our approach to anti-racism, through a just transition away from fossil fuels, must bring greater benefits to and reduce burdens for our BIPOC and other frontline communities. This Plan lays out a path to realize these outcomes.

“...food forests and community gardens... electric buses and rail... jobs programs, and affordable housing... as a start”

- Tacoma community member

JUST TRANSITION

Shifting our economy away from fossil fuels and other extractive practices without leaving anyone behind. A new, just economy prioritizes living wage jobs in green sectors, human rights, and protection of our life-giving natural systems.

MAYOR WOODARDS CALLS FOR A GREEN AND EQUITABLE RECOVERY FROM COVID-19

In 2020, Mayor Woodards joined hundreds of other U.S. mayors to call for “bold action [from Congress] to protect our planet and build a more just economy in the wake of the COVID-19 pandemic”

- Climate Mayors

TACOMA'S ANTI-RACIST SYSTEMS TRANSFORMATION POLICY

Resolution 40622 affirms [Tacoma] City Council's dedication and commitment to comprehensive and sustained transformation of all of the institutions, systems, policies, practices, and contracts impacted by systemic racism. It also expresses the City Council's commitment to a comprehensive transformation process that will establish new practices based on community and expert opinion as well as past reform efforts, centering the voices of those most impacted by systemic racism (RES 40622).

Climate Action and Social Justice

Tacoma has not been a place of equal opportunity in the past. For our climate work, it has been important to acknowledge and work from the knowledge that some communities have been denied socio-economic opportunities, made more vulnerable to climate impacts, and underrepresented in City decision-making processes. Our Climate Action Plan intends to be a tool to serve **overburdened** and **frontline communities'** needs and priorities, beyond reducing emissions and building resilience against climate impacts.

"I think preparing workers and investing in green jobs will make Tacoma a location where those businesses can come and thrive."

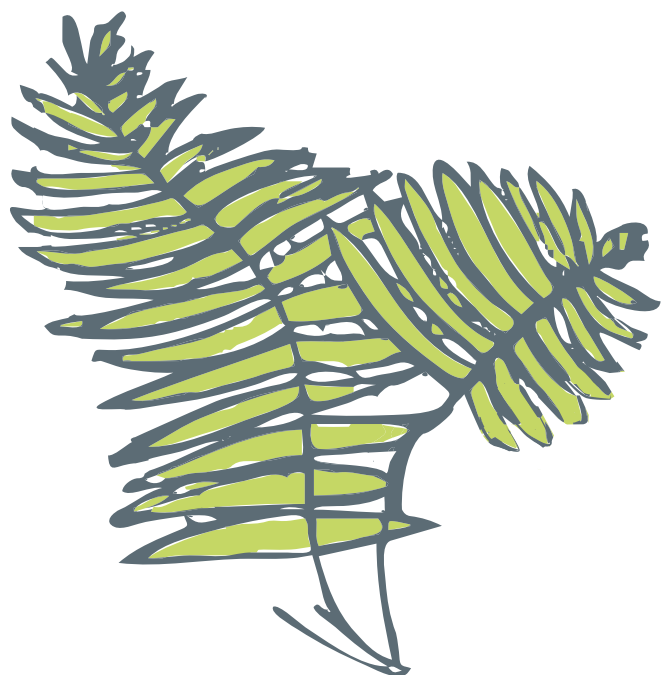
- Tacoma community member

OVERBURDENED COMMUNITIES

The EPA describes overburdened communities as "Minority, low-income, tribal, or Indigenous populations or geographic locations in the United States that potentially experience disproportionate environmental harms and risks. This disproportion can be as a result of greater vulnerability to environmental hazards, lack of opportunity for public participation, or other factors." (U.S. Environmental Protection Agency)

FRONTLINE COMMUNITIES

Frontline communities tend to experience inequity in multiple ways. They tend to be underrepresented, underserved, or made vulnerable; experience lower quality of life outcomes before COVID-19; or now experience worse impacts from the COVID-19 economic and health crisis. Frontline communities also include those expected to experience the first and worst consequences of climate damage. We prioritized frontline communities in our engagement and plan development processes. Frontline



community members include individuals from one or more of the following backgrounds:

- Black, Indigenous, and People of Color (BIPOC)
- Speak English as a second language
- Living with a low household income
- Ages 16-26
- LGBTQIA+
- Living with three or more generations in one home
- Living with more than one family in one home
- Living with a disability
- Immigrant or refugee
- Experiencing homelessness
- Completed formal education up to a high school/GEDI

Our Journey So Far: A Brief History of Tacoma Taking Action

With support and leadership from our community, the City of Tacoma formally started its climate journey in 2006 by forming a Green Ribbon Task Force to produce our first Climate Action Plan in 2008. Mayor Baarsma then joined a movement of over 1,000 cities across the country to pledge to reduce emissions in line with the international Kyoto Protocol.

To date, Tacoma-Pierce County communities have implemented meaningful climate action projects. During the Environmental Action Plan (EAP) from 2016-2020, we rescued over a hundred thousand pounds of food and added over 20% more community gardens in low income communities and communities of color; conducted public education about waste prevention, electric vehicles, and biking; increased home comfort while reducing energy bills for 1,833 households through energy efficiency assistance programs; and expanded urban forests across Tacoma's hottest neighborhoods by over 4,500 trees. However, the EAP goals and investments were not aggressive enough to get us onto a path for a net-zero emissions future. The City must significantly accelerate its efforts to reach the transformational pace and scale required to avoid a climate disaster.

WHAT DO WE MEAN BY TRANSFORMATIONAL?

Transformational can be described as causing a major change to something or someone, especially in a way that makes it or them better. In the context of climate action, it means quickly and drastically changing our value systems, behaviors, governance structures, financial practices, and technologies so that our society can thrive without disrupting our climate or destroying our natural world.

Figure 1. History of climate action milestones and events in Tacoma.



Local Climate Impacts & Costs

As our climate warms, we must prepare for many [local impacts](#). In the summertime, we will experience more very hot days, longer dry periods without rain, less snowpack, lower stream levels, and more wildfire smoke. In the wintertime, we will see more extreme rainfall, contributing to flooding and landslides. These impacts can be particularly intense for our unhoused neighbors, outdoor workers, kids, seniors, pregnant people, low-income households, BIPOC community members, people with breathing or heart issues, as well as other species, like salmon and orcas. Sea level rise may also cause flooding, especially during high tides and storm surges, or damage important infrastructure near water's edge. The following graphic depicts these effects:

GLOBAL WARMING vs CLIMATE CHANGE

Global warming is the increase in the Earth's average temperature due to an excess of greenhouse gases trapping heat in the atmosphere. Climate change is the resulting "side effects" of this extra heat causing changes our natural systems. Climate change can look like more intense storms, melting glaciers, changes to rainfall patterns, or changes to agricultural growing seasons.



TACOMA'S FUTURE CLIMATE

Flooding from extreme precipitation and storm surges

Coastal communities at high risk

Risk release of hazardous materials in vulnerable areas

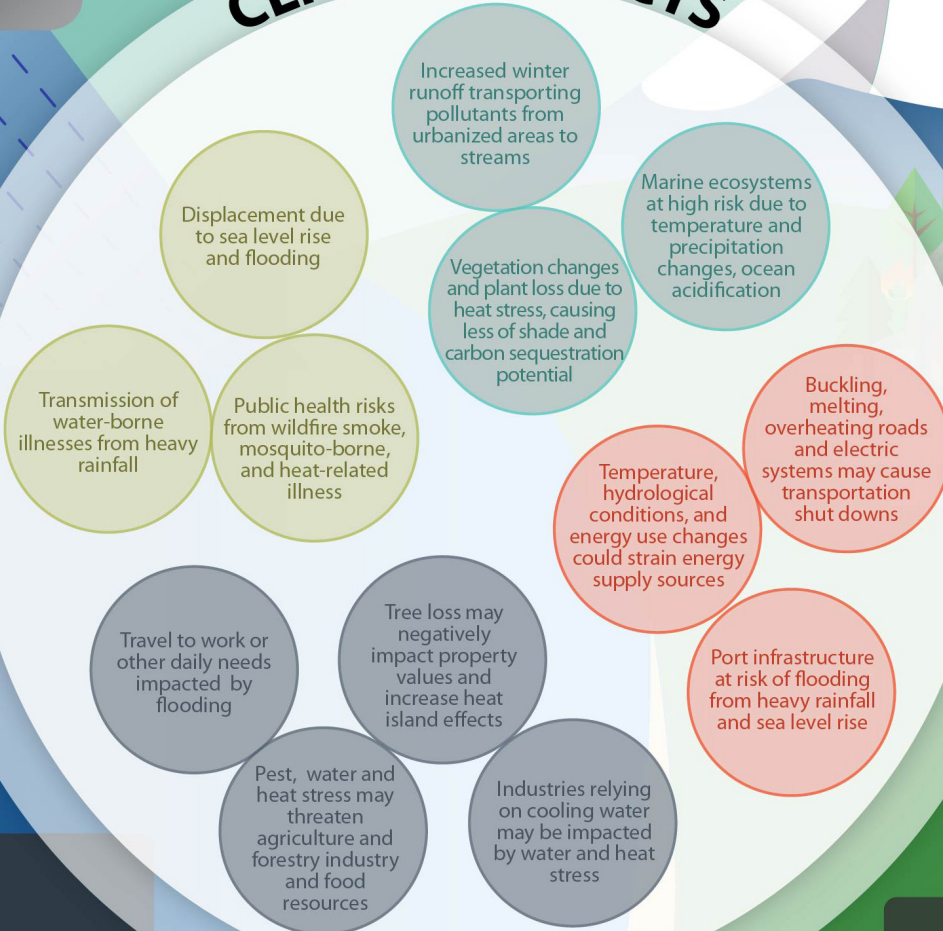
Extreme heat and drought

Increased heat-related illness in vulnerable groups

Greater urban heat island effect in areas with low canopy cover

Strain on electrical supply systems, causing outages

CLIMATE IMPACTS



Sea Level Rise

Low altitude sites at risk for saltwater intrusion, including Central Wastewater Treatment Plant

Roads in tideflat areas at high risk due to lack of protection from dikes or levees

Wildfires and smoke

Poor air quality of special concern for sensitive groups

Damage to critical infrastructure

Changes in water availability for water systems

Landslides

Areas along coastlines at higher risk

Damage to critical conveyance infrastructure, causing system failures

Figure 1. Tacoma's Future Climate, Cascadia Consulting Group, City of Tacoma Adaptation Strategy

An Example of Inequitable Climate Impacts: Urban Heat in Tacoma

Extreme heat – made worse by the “urban heat island” effect and climate change – is one of the deadliest climate related challenges in the United States. Urban heat islands occur in areas with large amounts of impervious surface with little green space, such as streets, sidewalks, parking lots, and buildings.

In Tacoma, urban heat islands increase maximum temperatures by as much as 6.2°F above the local baseline. Neighborhoods in Central and South Tacoma may be as much as 14 °F hotter than neighborhoods in North Tacoma. Temperatures above 82°F significantly increase the risk of cardiovascular diseases, respiratory illnesses, and heat stroke.

As our climate warms, we can expect more extreme heat days in Tacoma. Neighborhoods burdened with the worst extreme heat tend to also suffer from the worst economic and health inequality. In particular, we are concerned about seniors, kids, pregnant people, people with breathing or heart issues, low-income and BIPOC community members, outdoor workers, and our unhoused neighbors. This map shows how urban heat islands correlate with [Tacoma’s Equity Index](#). Low equity neighborhoods are those that have experienced a history of disinvestment and race- and income-based segregation. The City of Tacoma and other institutions, like the federal government, supported practices like [redlining and racial covenants](#) to control neighborhood development. This history has caused gaps in generational wealth, educational attainment, health, and access to essential, life-saving technologies and services like air conditioning, health care, and public transit. We must serve these neighborhoods first. ([Earth Economics](#))

“I believe focusing on reducing heat and the negative impacts of climate change on the most vulnerable communities is crucial.”

- Tacoma community member

Costs of Inaction

While taking action to reduce emissions seems expensive, inaction is significantly more costly, to our economies, ecosystems, and human welfare.

Based on an incomplete analysis, our community faces \$250 million or more in potential economic costs of lost ecosystem services by 2080 due to climate change impacts, including worsening wildfires, reduced food production, lost recreational opportunities, and increased health and energy related expenses.

A benefit-cost analysis conducted as part of Tacoma’s Climate Adaptation Strategy work further estimates a cost of inaction of \$2.9 billion between now and 2080 related to human mortality and illness, as well as damage and loss to natural systems, utilities, commercial and residential buildings, and agriculture.

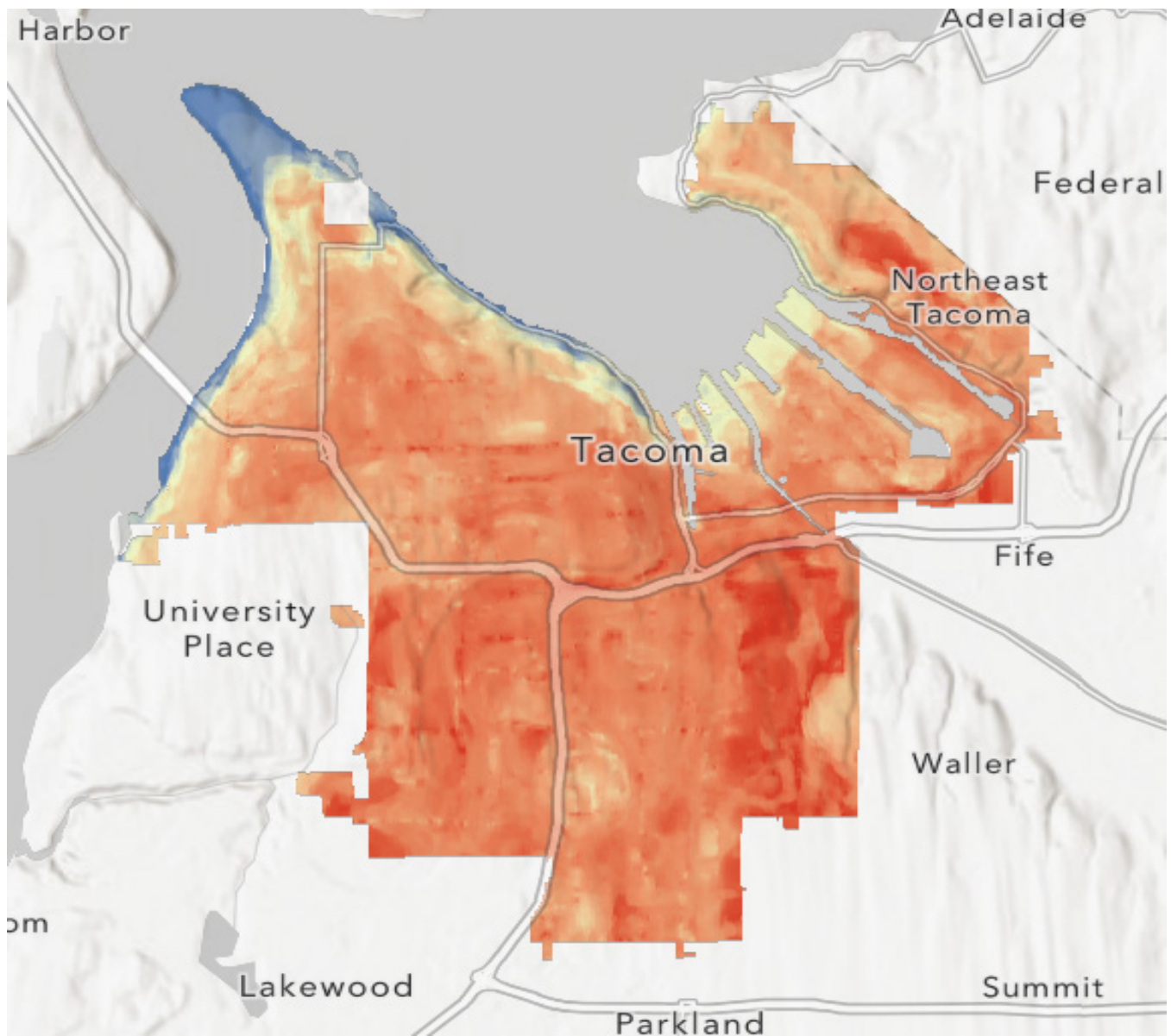


Figure 2. 3pm Temperatures in Tacoma in July 2018, [Tacoma Community Forestry storymap](#)

“The price of not taking action, both in economic terms and in the potential cost of human health and life, particularly for Tacoma’s most vulnerable populations, is not only fiscally irresponsible but morally unacceptable.”

- Source: *The Cost of Climate Change Inaction: An Examination of Outdoor Tourism & Recreation in Tacoma-Pierce County*, Shayla Miles and Abby Perry-Johnson, Evergreen State College, May 2021.

Past and Current GHG Emissions

CURRENT EMISSIONS IN TACOMA

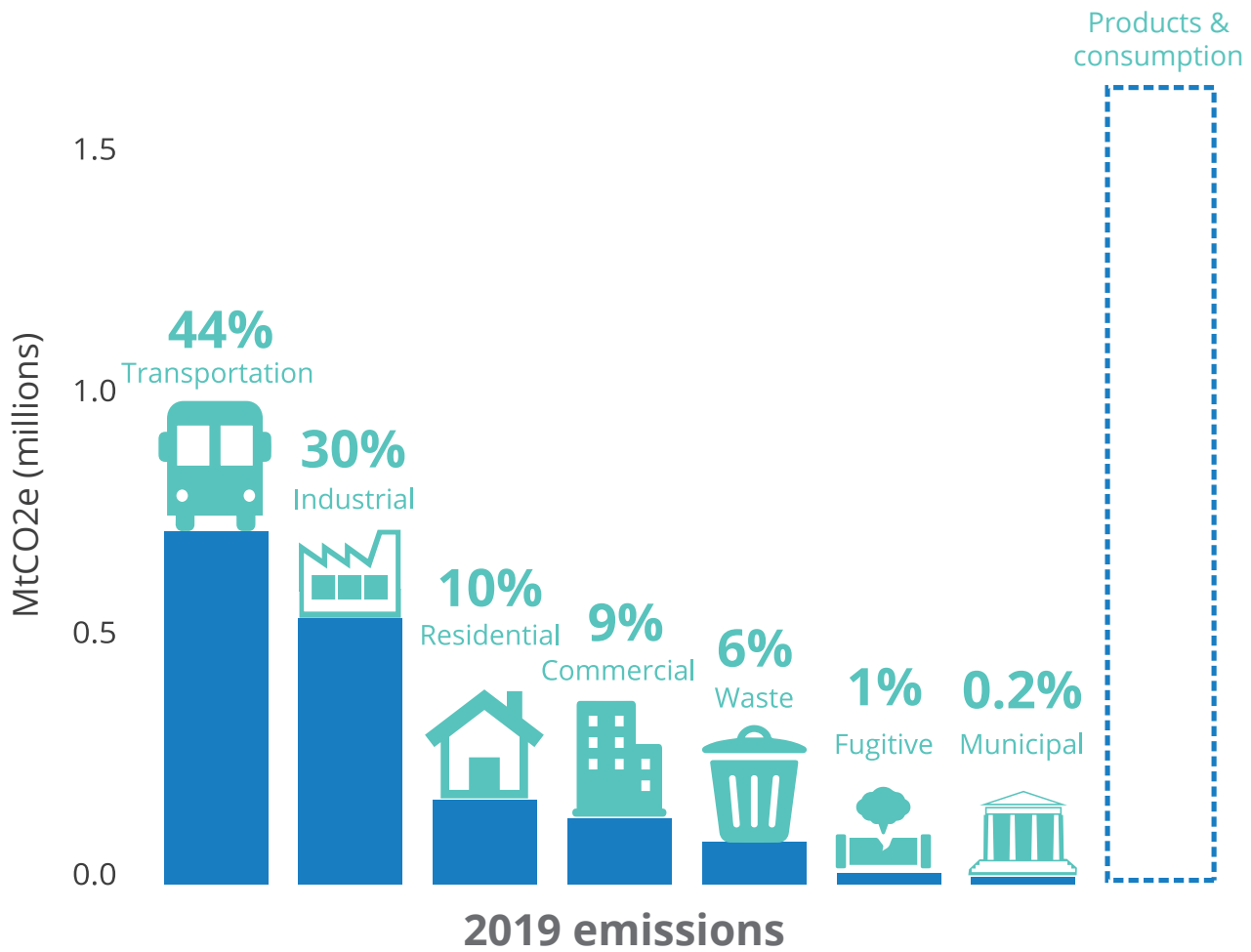


Figure 3. Emissions by sector for Tacoma, 2019

For 2019, Tacoma's GHG pollution amounted to approximately 1.7 million metric tons of carbon dioxide equivalent emissions (MtCO₂e), or 7.8 MtCO₂e per person. The figure above shows that 30% of emissions came from industrial processes. 44% of GHG pollution resulted from transportation – fossil fuels burned by cars, buses, trains, and trucks. Natural gas used to heat commercial, residential, and municipal buildings and their water accounted for 19% of the city's emissions. By comparison, [Tacoma's electricity is nearly carbon-free](#) (97%) now and working towards being 100% carbon-free by 2045. 6% of Tacoma's GHG pollution came from the decomposing organic materials at landfills, and 1% from leaks in natural gas and oil pipelines and systems (also known as fugitive emissions).

This assessment is only the GHG pollution that was created within the city of Tacoma. If we were to include GHG pollution from items produced outside Tacoma that we buy to eat or use, our GHG pollution would nearly double (Products & Consumption portion of bar graph).

Choosing a New Path

For a climate-safe and socially just future for Tacoma, we are committed to reaching net-zero emissions by 2050. This is in line with targets being set by many other communities across the U.S., and the global target needed to increase our chances of avoiding catastrophic climate change. Analysis shows that our current climate plans and policies don't get us nearly as far as we need to go, and that if no new action is taken we will only reduce our GHG pollution by 14% by 2050. We need to forge a new path that reduces our emissions by 33% by 2030 on our way to zero emissions in 2050.

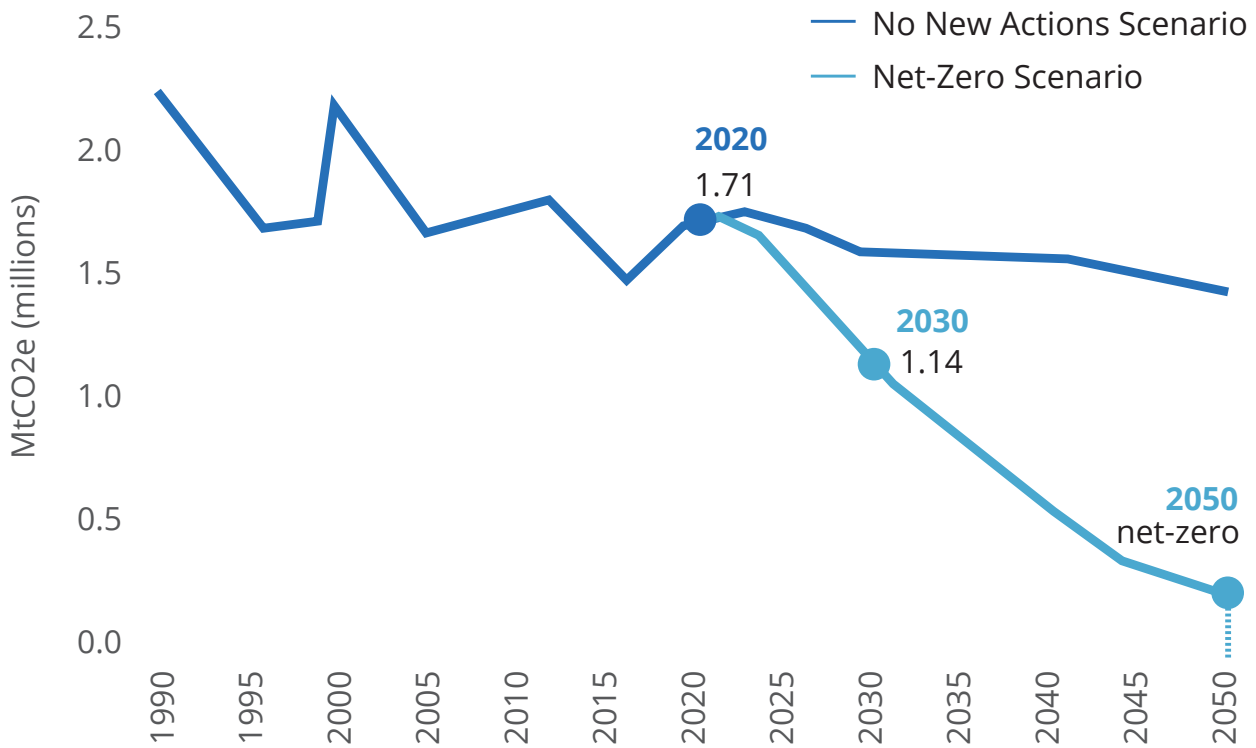


Figure 4. Tacoma's No New Action versus Net-Zero pathways

The Opportunity

Building a Sustainable, Equitable, and Prosperous Tacoma

What's New for 2021 Climate Action Planning

This is the City's 3rd climate action plan and much has changed since the first plan was released in 2008. Climate impacts that seemed distant then are ones we are experiencing now. Our ability to take action and make a meaningful impact also seemed distant. But there is [increasing evidence](#) that we can make investments to reduce vehicle miles traveled, encourage active transportation, and increase affordable housing. Technology is changing fast – there are now over 80 makes and models of electric vehicles and more jobs in clean energy than in fossil fuel across the country.

Much has also changed in how we plan for action. We have learned that:

- We can make big changes quickly. Investing time and resources in transformational work cannot wait.
- Communities are willing to participate in climate change actions when they understand how impacts and benefits contribute to a better Tacoma.
- Accountability and transparency are important. Specific actions and measurable targets and outputs make accountability possible.
- The science and the moral cases are clear. Public leaders must make appropriate investments or risk hurting public confidence in institutions.
- Centering frontline communities must be a part of every strategy and action or else we risk worsening socio-economic inequalities. To be anti-racist, every policy, program, and practice must seek to reduce racial inequality.
- All actions provide opportunities to inform, educate, and engage with our communities. We must use these and other tools available to us, like regulations and incentives, to be effective.
- We cannot do this work alone. Tacoma must share resources and collaborate with local, regional, and national partners to achieve the pace and scale of transformation required.

“We need to support frontline communities, but that doesn’t mean leaning on them to provide all of the answers. That’s a lot to ask. We need everyone involved.”

Tacoma community member

Process Matters

Our climate action planning work took risks to break with past practices, diverging from traditional public input approaches onto a new path. We attempted new engagement methods with some success, and some shortcomings. We tried new models, including compensating community participants and partner organizations, particularly from frontline communities, in various roles. This contributed to a new, participatory and people centered process in the hopes of creating a more equitable and anti-racist climate action plan. Recognizing the limits of this process and Plan to transform our community, we are committed to continuous learning and advancing anti-racism in all of our work. In this Plan, from the design stage through implementation, all climate action policies and programs must prioritize affordability and equity outcomes, especially for communities most impacted by climate change.

SUMMARY OF ENGAGEMENT ACTIVITIES/CONTRIBUTORS

As an organization composed primarily of white staff members, we recognize the need to address power dynamics that can subtly or overtly shape engagement and planning processes.

To put people first during our planning process, we used three rounds of community engagement and prioritized input from frontline communities. We recruited 10 Environmental Justice Leaders to form a workgroup that met monthly to provide guidance and feedback on the Plan and even write their own section. We also recruited and trained 33 Climate Justice Ambassadors who helped us reach frontline community members through their personal networks to provide interviews, personal stories, and survey responses. Finally, we partnered with frontline organizations to host gatherings with their communities to learn more and provide input. Hosts, Ambassadors, and EJ Leaders were paid a stipend for their contributions.



WHAT WE HEARD – PHASE I & II COMMUNITY ENGAGEMENT REPORTS

Our first round of community engagement focused on envisioning a sustainable, socially just Tacoma in 2030. Phase II engagement focused on community priorities and feedback for draft climate actions. Detailed information about community engagement can be found in Appendix 7.

Overall, we engaged a diverse group of Tacoma community members and partners during Phases I and II, built new connections, and collaborated to build community climate knowledge. What we heard reinforced past community calls for affordable housing, good transportation options, economic opportunities, community health, ecosystem restoration, other basic needs, and an intersectional climate action plan that serves social justice for the benefit of both current and future generations.

It is important to note that, despite our best efforts to reach frontline community members, it is clear from the demographic data we collected that we are often still hearing from a disproportionate number of white, high-income community members. By partnering with frontline serving community organizations to host workshops we were able to prioritize in-depth discussion feedback from frontline community members. 74% of workshop attendees who were able to participate in a short survey self identified as frontline community members. To center historically underrepresented community members, we have reviewed responses by demographic groups to focus on the priorities of BIPOC, low-income, youth, and other frontline communities. You will find community input in Appendix 7 as well as reflected in our climate actions in coming pages.

Implementing the Plan – Putting it All Together

The planning process is about centering frontline involvement, honoring their contributions, and getting to an equitable plan. Implementation of the Plan is how we actually deliver benefits to our community.

To best implement this Plan, we need to spend our time and resources on designing policies, programs, and projects with an equity lens and that address multiple community priorities. Our Plan's actions strive not only to reduce GHG pollution but also improve community health, safety, housing, transportation, and access to other essential services. Since climate change interacts with every part of our lives and community, we must work at these intersections.

With an ambitious and intersectional plan, we need to partner – regionally, nationally, and internationally – with trusted community leaders, prioritize actions in neighborhoods that have been made most vulnerable, and build community capacity and access to decision-making. Within and beyond city limits, we will rely on community,

“Make sure to get all neighborhoods involved, not just the most vocal ones. Seek out community leaders in all communities and ask THEM how to make [climate action] equitable.”

Tacoma community member

public, nonprofit, and private partners to share information and expertise, offer funding and other resources, and deliver services that make our communities better off. We strive to approach these partnerships with a spirit of humility and collaboration.

We approach this work with clear eyes and determination in our hearts: the pace and scale of action required will not be easy. Trying to balance City budgeting across our current emergencies while making long-term investments to ensure a sustainable future is challenging. By working together, acknowledging the tensions in our work, and changing systems that limit our capacity, we can avert the climate crisis and achieve the many community benefits that come with taking action.

“Action needs to happen at all levels by all departments at the government, local, state, and federal levels.”

- Tacoma community member



Drawing by Mickey Godfrey

The Work We Need to Do to Achieve a Better Tacoma by 2030

High Impact Actions

The following section lists a series of **2030 Strategies for a Better Tacoma**, based on the themes for better: togetherness, living, breathing, resource use, opportunities, and preparedness. The strategies are each supported by a set of high-impact, near-term mitigation and adaptation climate Actions to complete by the end of 2024. These Actions were developed based on input from community members, staff, and practitioners from numerous local organizations and judged based on the best available facts and science. There is no one solution to reducing our emissions. We need to implement all of these actions to achieve our emissions goal and improve the lives of our communities. Implementing all actions will require the rapid mobilization of significant amounts of resources. However, immediate action will also mean that the city will begin to see the many co-benefits and cost-savings from taking action sooner (for example, cleaner air and lower energy bills). To help jump-start the implementation of the full Plan, ten priority actions have been highlighted in bold below.

The actions in this section are considered **High Impact** because they:

1. Contribute to significant GHG reductions and/or climate resilience;
2. Center historically underserved voices in policy design, development, and implementation;
3. Deliver significant co-benefits, such as improved health, safety, economy and jobs, and affordable housing, that lead to greater prosperity and endure for the long term.

More details on all actions can be found in Appendix 2 (action numbers are matched to the ones listed here).

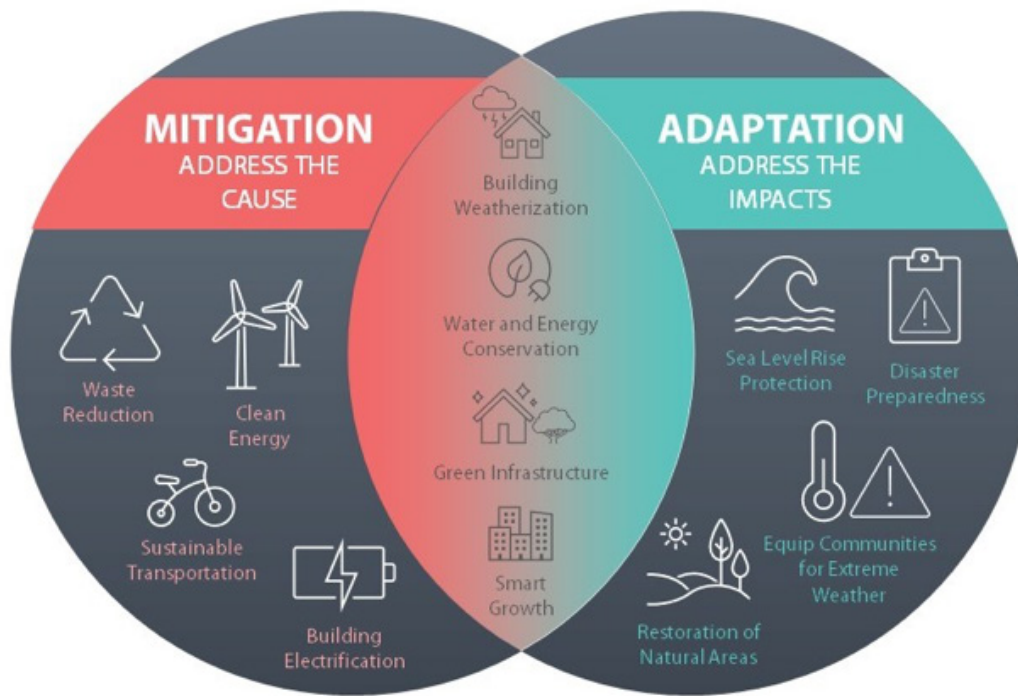


Figure 4. Climate Mitigation and Adaptation: What's the Difference?, City of Tacoma Adaptation Strategy

BETTER TOGETHER

By 2030, City of Tacoma, partners, and communities are equally invested in taking leadership on climate action to build resilient and connected neighborhoods.

Actions by 2024:

1. Prioritize engaging frontline communities in climate work.
2. Fund community participation and partners in waste prevention.
3. **Fund 10 community food access projects like community gardens, food forests, orchards, farms, food rescue efforts, or farmers markets.**
4. **Support community organizers to share expertise and promote climate action engagement.**
5. Increase advocacy for climate action at the State and Federal level.
6. Support development of a collaborative workgroup to help industries decarbonize through efficiency and clean fuels.
7. Partner to tackle cross-jurisdictional, adaptation opportunities, including river management and flooding.

~Ensure that community food projects funded are within or in partnership with organizations with a track record of equitability in Tacoma and/or are BIPOC-led.~

- Tacoma community member

BETTER LIVING

By 2030, Tacoma has abundant healthy, affordable, emissions free housing, abundant quality local food, and safe, efficient, reliable transportation. We are all able to meet our daily needs without having to travel far.

Actions by 2024:

8. Improve regulations to make it easier to grow, make, and sell food.
9. **Build a complete, citywide network of sidewalks, safe and ADA-accessible intersections, bike connections and Safe Routes to School improvements by 2050.**
10. Increase staff capacity to collaborate on low carbon transit projects.
11. Increase partnerships and funding for active transportation and public transit programs and events that reduce barriers to using these modes and encourage their use.
12. Update street design guidelines and processes to make walking, biking, rolling, and riding transit easy and safe.
13. Actively implement the City's 2018 Affordable Housing Action Strategy by maintaining housing and making it affordable and resilient for residents to promote livability and avoid displacement.
14. **Support and create single and multi-family low carbon, healthy retrofit solutions**
15. **Improve energy codes to make commercial buildings efficient, low carbon, and healthy.**
16. Research and pilot home and commercial building energy scores to be shared with buyers.
17. **Incentivize green buildings, land use density, and mixed-use development with affordable housing near transit.**

~Focus on densifying neighborhoods without gentrifying them. Keep people in place! Especially BIPOC, and maintain cultural integrity of neighborhoods so community members do not become strangers in or are priced out of their own neighborhoods.~

- Tacoma community member

BETTER BREATHING

By 2030, we are stewards of healthy natural spaces and honor our relationship with the land. Through increasing the use of active transportation and transit, and use of electrification and renewable energy, our air is free of pollution and healthy for our human and nonhuman residents.

Actions by 2024:

18. Preserve and expand healthy tree canopy.
19. Support Pierce Transit in developing a zero emission public transit plan.
20. Incentivize active transportation, transit, car sharing, and electric

~We need more public transportation, more routes, and more frequently run.~

- Tacoma community member

vehicles, and reduce parking minimums in new developments.

- 21. Fund electric vehicle and bicycle programs.
- 22. Partner to support zero emission innovation in marine, rail, and truck transportation.
- 23. Increase Tacoma's Urban Forestry team to care for more trees.

BETTER RESOURCE USE

By 2030, Tacoma is home to a thriving circular economy where materials are reused, and products are built to last and are repaired. We share with our neighbors and eliminate waste.

Actions by 2024:

- 24. **Develop and support programs for food waste prevention, rescue, and diversion to keep food out of the landfill and improve local food security.**
- 25. Reduce per-person water use during summer months.
- 26. Recognize green business achievements.
- 27. Increase commercial and industrial reuse and recycling through a marketplace.
- 28. Reduce construction and demolition waste through permit requirements.
- 29. Divert more clean wood waste and other materials at the Recycling and Transfer Center.
- 30. Add or improve low carbon and sustainability requirements in City investments and contracts.
- 31. Build GHG impact analysis into City budgets, projects, and plans.

~There needs to be better accountability on the waste stream.~

- Tacoma community member

BETTER OPPORTUNITIES

By 2030, the community supports a healthy, innovative local economy with new opportunities for all people and businesses to thrive within our ecosystem.

Actions by 2024:

- 32. Partner to train nature stewards for employment and to restore green spaces.
- 33. Partner to retrain the workforce for well paying jobs in the green economy sector.
- 34. Research how to develop a community food hub, with space for food training, sharing, and business.

- 35. Use business taxes to encourage businesses to create more green job opportunities.
- 36. Amend zoning codes to encourage low carbon, resource-efficient, resilient, and just businesses.
- 37. Research, identify, and prepare to recruit green industries and jobs that fit Tacoma.
- 38. Increase City staff capacity to grow green economy partnerships and resources.**

~At the city level, I think preparing workers and investing in green jobs will make Tacoma a location where those businesses can come and thrive~

- Tacoma community member

~Focus on job training in neighborhoods/ schools that are low income and minoritized. Ensure that there is a job pathway for trainees with entry level work and a clear path to careers/ education.~

- Tacoma Community Member

BETTER PREPARED

By 2030, we are not only preventing carbon emissions but preparing our communities made most vulnerable for expected climate change impacts.

Actions by 2024:

- 39. Protect and restore biodiversity and habitat to be climate change ready.
- 40. Plant and maintain right-of-way trees to reduce heat and support neighborhoods and local businesses.**
- 41. Establish cooling/warming/clean air shelters in every neighborhood.
- 42. Partner to distribute clean air kits, including filter fans.**
- 43. Make communication materials and trainings about climate impacts and emergency preparedness accessible.
- 44. Assess, monitor, and prepare natural systems, infrastructure, and habitat for sea level rise.
- 45. Study flooding impacts and improve services, codes, and planning efforts.
- 46. Plan for future clean energy needs with adequate and equitable electricity distribution and transmission

~Part of what the city needs to do is coordinate efforts to ensure that the most vulnerable are protected against the worst impacts of climate change-excessive heat, wildfire smoke exposure, etc.~

- Tacoma community member

A Better Tacoma: Stories from 2030

What does taking action on climate change mean for our daily lives? To illustrate what achieving climate actions and working towards our 2030 Strategies will mean for our communities, the following Stories are snippets of 2030 life in Tacoma. Sprinkled throughout the Stories are references to Actions by 2024.

These Stories are fictional. While we hope you find characters in the Stories relatable, any resemblance to real people is accidental. For more information about specific actions, visit the linked action reference numbers.

STORY 1: MORNING COMMUTE

Dolores is just clearing the breakfast plates into the compost bin (24) when she checks the clock. The school bell will ring in 15 minutes, it's time to get Nadine on her way to class. Dolores helps her wheel her bike off of the porch and down the front path, gives a quick hug, and watches her

ride down the block to meet her friends. The trees planted (18) by a crew of forest stewards (33) cast a cool shade on Nadine and her classmates as they take the path to school (9).



Assured her grand-daughter will make it safely there on time, Dolores heads back inside to prepare for her own commute. Double-checking to make sure she has loaded cash onto her reduced fare ORCA card, she heads out the back door of their duplex.

At the end of the alley, Dolores crosses the protected bike lane (12) and joins several others at the bus stop (11). She missed her usual bus this morning but the next one arrives in 8 minutes (10) so she won't be late to work. While she waits, Dolores sees her neighbors cross the road heading towards the car share station (20, 21). She calls out and waves.

They hold up their picnic gear in response and call back, "We're heading to the mountains!" Dolores starts to reply, wondering which trail they will be hiking this time, but is cut off by the noiseless arrival of her bus (19). Dolores guides her walker up the bus ramp and finds her seat.

STORY 2: LUNCH WITH FRIENDS

Andrea sets the last box of apples down on the counter, wipes their brow, and peels off their work gloves. They have spent the morning gleaning fruit from right-of-way trees (40) around town and delivering them to restaurants (24). This is the last stop and Andrea is ready for lunch. They

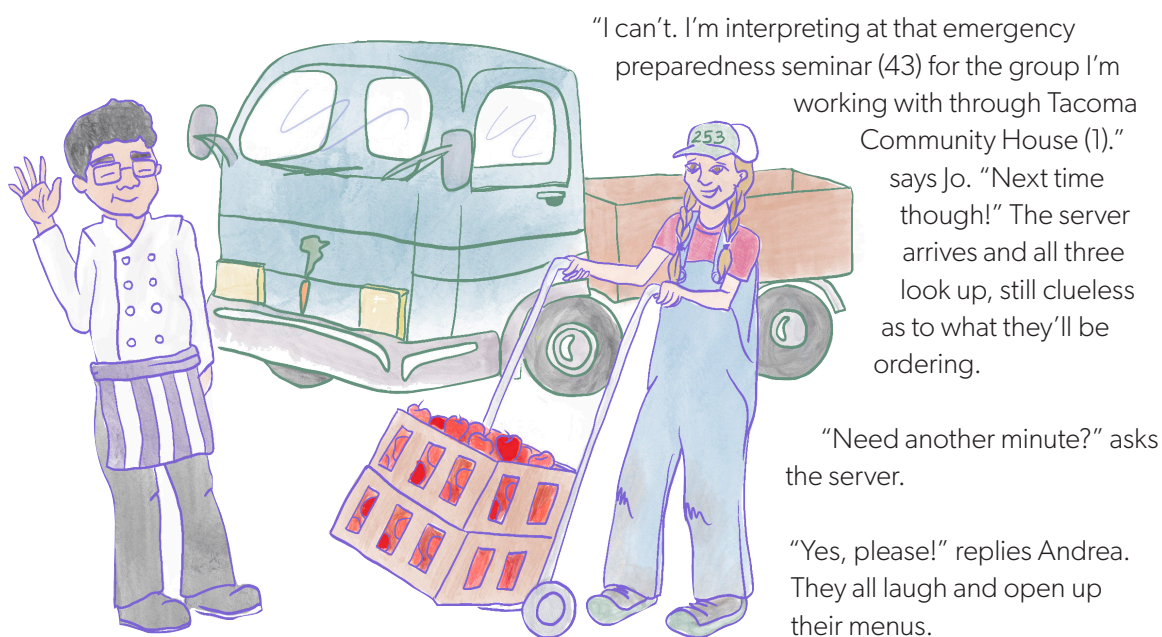
peek out into the dining room and smile. Jo is already seated at a table for their lunch date!

“María will be here in a minute, she’s just getting off the Link (11) from campus,” says Jo as they pick up their menus. “How’s your new apprenticeship (32) going?”

“Honestly, so great! I’m learning so much about tree care (23). And I dropped off fresh apples and plums at the community food hub (34) today. I hadn’t been there before. Whatever they were making in the cooking class smelled delicious. I’m so hungry now!”

“Well, perfect timing!” replies Jo, seeing María walk in.

“Sorry I’m late,” María apologizes, “I was trying to get a few more sign-ups for tomorrow’s beach clean-up (4) after class. Are you coming?”



“I can’t. I’m interpreting at that emergency preparedness seminar (43) for the group I’m working with through Tacoma Community House (1).” says Jo. “Next time though!” The server arrives and all three look up, still clueless as to what they’ll be ordering.

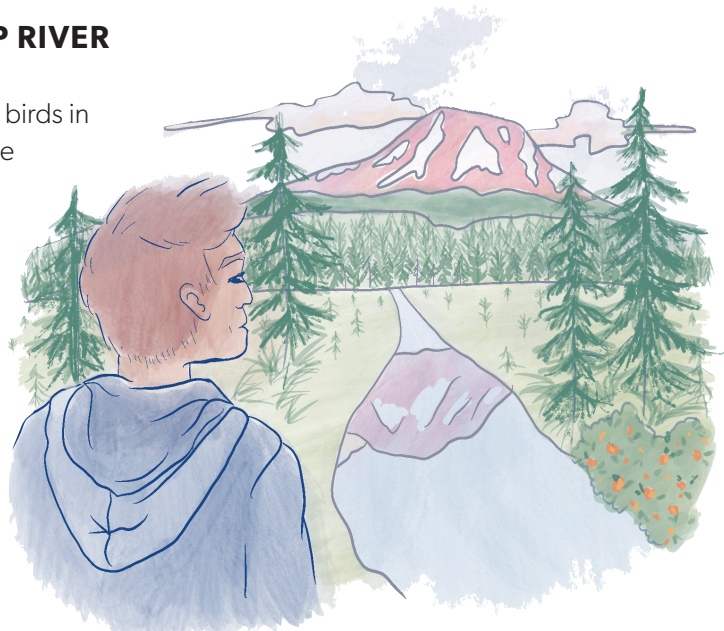
“Need another minute?” asks the server.

“Yes, please!” replies Andrea. They all laugh and open up their menus.

STORY 3: WORK DAY BY THE PUYALLUP RIVER

Carlos shuts the back of the truck closed, stirring the birds in the fir tree nearby. It’s cold out but it’s his favorite time of the day – prepping the crew trucks just as the sun is starting to rise. Today is a special day too. They have new crew members joining them, recent grads from the TCC landscaping and restoration program (32, 33). Julia, the crew manager, was able to hire more members due to the new green jobs incentive the City is offering (35).

It’s been almost 10 years since Julia and Carlos first visited the site as new crew members themselves. Julia will lead the new crew through a tour of the site and get them started planting



salmon berry and sedge along the river bank (39). Carlos is most excited for their Puyallup Watershed restoration partners (7) to join him to talk about water management and flood and erosion control (45). He wants his new crew to understand the land they are on. Just beyond their site is an organic farm (3, 8). They benefit from clean water for irrigation from the river and are protected from winter floods by the habitat restoration and bank stabilization the crew is working on (44). Last year Carlos worked with the farm owner to make sure their nutrient runoff isn't affecting the river ecosystem downstream and so now they're a recognized green business (26).

Carlos tosses Julia a set of keys. The trucks pull out of the lot and head to the river. Carlos watches Mount Tahoma turn pink with the rising sun and feels ready for the day ahead.

STORY 4: COFFEE AT THE COMMUNITY CENTER

Ray has moved his usual Tuesday morning coffee with friends to the Peoples Community Center, a cooling center (41), on this hot and smoky 94°F August day. He chats with Leilani and Rob over a game of cards. They discuss their weeks. Ray's grandchildren were just visiting from across town. Conversation keeps returning to the heat and the wildfires in the region. Ray shares that his grandson, Osmar, has asthma as he pats the filter fan (42) beside him. City staff were handing them out to homes that don't have air filters. They said this building was retrofitted a few years ago to be a space with clean air and an all-electric heating and cooling system (15). They also said that with his fixed income he could qualify for a ductless heat pump, which can provide home heating, cooling, and air filtration. He might just do it, since summers are hotter than they used to be.



Leilani shares they have a barbecue planned this weekend if the weather improves and the burn ban is lifted by then. With the heat and smoke, they plan to stay overnight in the cooling center. In a way, it reminds Rob of the summer camps he used to attend – food, social activities, and a recent blockbuster will be playing on the big screen in the community hall after dinner.

STORY 5: FIRST DAY ON THE JOB

Akash arrives to his first day on the job at Evergreen Container Services with a mix of excitement and anxiety. His mom worked in the tideflats for years, serving on teams that moved countless containers from the huge oceangoing vessels anchored in the bay. He takes pride in the idea that he will help bring food and cargo to and from Tacoma and the wider region.

His supervisor, Theresa, explains that the organization had been around since 1939. It values not only its reputation as a reliable business partner, but as a responsible company with its roots in Tacoma. It has accomplished big reductions in emissions through innovation in its trucking and rail transportation services (22), which moves cargo inland. And, it has a commitment to reduce emissions another one-third by the end of the decade. To meet their goal, Theresa represents Evergreen as part of a Tacoma sustainable manufacturing and industry collaborative (37, 38), which is a group of Tideflats businesses developing a cooperative approach to clean fuels (6, 46) and delivering port services to build their competitive edge internationally. Evergreen, in partnership with the City and other regional organizations, is helping shape national green port policy now (5). She expects that Akash can follow in her footsteps someday, helping to maintain and improve Evergreen's services into the next generation. Working at Evergreen means Akash can go home at the end of the day with good pay and satisfaction that he helped deliver the day-to-day goods everyone depends on. "This work is profitable without sacrificing fair pay and responsible environmental practices, and we want you to hold us to it"(37). Akash nods and smiles.



STORY 6: SATURDAY'S HOME PROJECTS

Sam is around the house for the weekend. There's plenty to get done, and truth be told she likes home projects. The to-do list: add a garden bed, plant giant sequoia and blueberry seedlings from the Lincoln High School plant sale, and walk the contractor through the house energy audit. Sam begins with the garden bed. Reusing old wooden fence boards (29), she digs into the soil using a shovel from the Tacoma Tool Library (2). Topping the new bed off with TAGRO soil amendments she moves onto places marked yesterday around the yard for the seedlings: two sunny spots with plenty of root space away from the fenced property line and other structures for the sequoias, and a place with partial sun near one of the cherry trees for



the blueberry bush. With all the potential new produce, she might sell some of her extra fruits and veggies to neighbors (8).

Right on time at 1:00pm, the contractor, LaTasha, rings the doorbell. LaTasha asks about the insulation in the ceiling and walls, and then about the old cadet heaters. After touring the house LaTasha shares her notes on potential energy efficiency improvements and the additional comfort and bill savings they would bring. She provides a website where Sam can find affordable City loans and incentives for them (14). “If you’re thinking of selling some day, improving your home’s energy score (16) would really add some value” LaTasha explains. Sam says she’ll think about LaTasha’s recommendations, but that she loves living in Lincoln and isn’t thinking about selling soon. “Those upgrades will help keep you happy and comfortable here for years, too! By the way, I was trained in home energy audits while still in high school at Lincoln!” LaTasha responds. After chatting about the neighborhood, it’s time for LaTasha to leave. Thanking her, Sam returns to the backyard. She sets her drip irrigation lines (25) on a short timer, glances at the young beans, strawberries, and tomatillos in the old garden bed, and then sits back in a lawn chair. With everything done, Sam is ready for a lazy Saturday evening in what is left of the springtime sun.

STORY 7: WORKING TOWARD OPENING DAY

AJ is the property manager at Pacific Avenue Station. With its 4 floors of housing above street-level businesses, Pac Ave Station is the tenth building they have managed since graduating from UWT in 2017. It’s also the one AJ is most excited about. To develop this building, the regional company asked AJ to explore the latest construction standards and opportunities in Tacoma. He recommended durable, low-carbon green building materials (28), efficient technologies, and the inclusion of affordable housing units (13), which helped the company access financial incentives and better serve the neighborhood. Working closely with the City and Spaceworks, some of the commercial space downstairs has been set aside for local start-ups (36). Sitting on the #1 bus line, residents will be able to ride right into downtown for work, school, and weekend fun (17). This location means easy connections across town for residents and business tenants, and consistent interest in the units will mean low turnover costs for the company.

Pac Ave Station is on track to open in two months. AJ watches from the window of a nearly finished unit as



construction trucks carry away recyclable construction materials (27) that will be sold and reprocessed into new construction materials. A team of City contractors works across the street. Beside a cement truck, they pour a new low-carbon concrete mix into place for a new sidewalk and transit stop (30, 31). AJ heads downstairs and into the bustle of the neighborhood – it's lunch time.

Holding Ourselves Accountable – Tracking Our Progress

In order to ensure transparency and accountability, each year we will develop a progress report and track **2030 Indicator Targets** (Appendix 3). These indicators are often easier to relate to than measurements of tons of GHG pollution and often show more immediate community impact. They are not perfect outcome measures, but they are currently trackable and more noticeable in our community. We will be tracking things like trees planted in neighborhoods, public electric vehicle charging stations installed, and miles of sidewalks built or repaired.

The [Sustainable Tacoma Commission](#) was established in 2009 to bring “accountability, transparency and vigilance to the long-term implementation of Tacoma’s Climate Action Plan”. This volunteer group meets monthly and provides a watchdog function and forum for the Plan’s implementation by monitoring progress on equitable implementation and engaging in regular communication with the City Council.

To implement each climate action, we will work with and empower communities using a range of engagement methods. At the same time, we must hold ourselves and other institutions accountable – those who have benefited most from a history of pollution and have the means to support our just transition must take the lead. It is our goal to both rebuild relationships and remain results-oriented to make good on promises to our community. We will also share our progress at an annual community meeting, focus on expanding our on-going relationships, and support the influence and leadership of youth and other frontline communities in climate action planning.

The 2030 Strategies for a Better Tacoma and 2030 Indicator Targets will guide our work over the next nine years. In addition to our yearly progress reports, we will update Actions every 3-4 years and check in with our stakeholders and implementation partners to make sure we are still prioritizing actions that are true to the community’s vision for a Better Tacoma and on track for net-zero emissions by 2050.

Financing Tacoma Climate Action

To achieve our climate action goals, residents, businesses, property owners, and all levels of government will need to make substantial investments in new infrastructure, programs, and incentives over the next 30 years. Making these investments helps everyone save in the long-run including, for example, through lower energy bills and lower maintenance costs on electric vehicles.

While it will likely take about \$2.5 billion to achieve Tacoma’s 2050 climate goal, the total savings could easily exceed \$6.6 billion, resulting in a net savings of \$4.18 billion (Appendix 4). With the savings, businesses and the City will have more money available to expand operations, hire employees, and develop other innovations to improve their energy and emissions performance. Those investments will lead to hundreds of new jobs, making Tacoma part of the transition to a green economy.

Additionally, spending on electricity keeps money in our local economy, since our electric utility is publicly owned. Dollars spent on fossil fuels, on the other hand, go to oil and gas companies outside the city’s borders. If our community invests in a zero carbon pathway, by 2050 Tacoma could spend around \$66 million more per year with its local electric utility, and save \$643 million each year not paid to outside fossil fuel companies for a net savings of \$577 million annually.

“It’s time to start acting: do some pilots, some projects based on data and research available to get results, then adjust and continue accordingly.”

- Tacoma community member

What You Can Do For Tacoma Climate Action

There are many individual choices we can make as consumers and community members to help reduce our GHG emissions. For Tacomans, it is particularly impactful to buy less stuff if we don’t need it; limit air travel; carpool, walk, bike, or take public transit instead of driving alone; eat a more plant-based diet and buy from local farmers; and choose electric, efficient options when changing our homes and vehicles. All of these actions add up and help encourage others to do the same.

That being said, the pace and scale of climate action that Tacoma needs ultimately depends on transformational changes to our institutions and systems. The previous sections have outlined what transformational steps the City and our community needs to take to mitigate and prepare for climate change. Indeed, this change also relies on all of us, as members of an engaged community.

“Again, and always, involve those directly affected. Take the time and effort.”

- Tacoma community member

Here are a few ways you can help implement the Tacoma Climate Action Plan:

1. **Hold the City accountable.** Show up at City Council meetings or contact your Tacoma City Council representative to let Council know that climate action is important to you and ask them to prioritize funding for climate action.

Find your Council representative here: www.cityoftacoma.org/government/city_council

2. **Get involved in City decision-making and budgeting.** Participate on a City committee, board, commission, neighborhood council, or future participatory budgeting process.

Find open positions on committees, boards, and commissions:

www.cityoftacoma.org/commissions

Get involved in your neighborhood council:

www.cityoftacoma.org/neighborhoodcouncils

3. **Connect with local public organizations to advocate** for more aggressive climate action, dense affordable housing, electrification, public transit, and pollution prevention.

Learn more about and engage with: Pierce County, Tacoma-Pierce County Health Department, Tacoma School District, Pierce Transit, Metro Parks Tacoma, Port of Tacoma, Washington State

Learn about local environmental events and opportunities by joining the EnviroNews email list:

www.healthybay.org/get-involved/environews-listserv/

“Make sure funding is available. Make sure personnel and resources are available to carry out identified programs.”

- Tacoma community member

4. **Talk to your friends, family members, and neighbors** about climate change, the local impacts we are experiencing, and the solutions available to us. Simple, everyday conversations can go a long way in increasing awareness and action on climate change.

Find resources on local climate change impacts: www.cityoftacoma.org/climate

5. **Bring partners and resources to our shared cause** by engaging at the regional, state, and national level:

- County Council: [Representatives](#)
- State and national representatives: [Find Your District](#)

Conclusion

This Plan charts Tacoma’s path towards net zero GHG emissions by 2050. Our city has much to gain by implementing its Climate Plan, including more than \$4 billion in potential net savings, decreased vulnerability to climate disasters and impacts, attracting innovation and new businesses interested in taking part in the transition to a green economy, and more. Most of all, this Plan puts Tacoma’s community members at its center, focusing on how the City’s climate action efforts and investments can also help to improve the health and quality of life of Tacomans. It seeks to ensure that no community member is left behind in this transition, prioritizing efforts that will protect the most vulnerable to climate impacts and improve the living conditions of and create opportunities for marginalized groups.

“Our future has trees in every neighborhood... [and] healthy, vibrant, and cohesive communities... Neighbors helping neighbors to grow a greener, healthier, and more connected Greater Tacoma.”

- Tacoma community member



Appendices

APPENDIX 1 ENERGY AND EMISSIONS MODELING RESULTS (BASE YEAR, NO NEW ACTIONS AND LC SCENARIOS, INCLUDING MILEPOSTS)

APPENDIX 2 IMPLEMENTATION ACTIONS

APPENDIX 3 2030 INDICATOR TARGETS

APPENDIX 4 FINANCIAL ANALYSIS

APPENDIX 5 FUNDING OPTIONS

APPENDIX 6 PLAN CONTRIBUTORS

APPENDIX 7 COMMUNITY ENGAGEMENT SUMMARY

APPENDIX 8 MUNICIPAL CARBON NEUTRALITY STRATEGY