

STRATEGY		Total Cost		Total Reductions	
		2012	2020	2012	2020
Proposed New Strategies					
Number	Strategy	Total Cost		Total Reductions	
		2012	2020	2012	2020
				goal: 55106	398,166
	City lead by example: B-12 Environmentally Preferable Purchasing B-14 Double-sided printing policy for all City documents B-15 Product Stewardship Policy B-16 LEED Standards for City buildings	\$125,000	\$125,000	1,200	22,000
T-10	City Fleet Policy for fuel-efficient and alternate fuel vehicles	\$175,000	\$0	250	500
T-6	Via one to one outreach to all Tacoma employees increase the use of all public transportation modes; carpool, vanpool, bus	\$375,000	\$1,500,000	3,600	18,000
B-33	Tacoma shall study and implement additional recycling programs and policies with a goal of increasing <i>overall</i> recycling to 100% for the traditional recyclable materials by 2020.	\$0	\$2,700,000	-	140,000
T-18	Prioritize the monitoring of traffic signal synchronization in the City.	\$37,500	\$150,000	200	800
B-3	Increase tree planting requirements or incentives for all developments, including transportation projects	\$225,000	(\$750,000)	1	300
T-12	Provide a bidding preference for City contractors who use B-20 or better in their equipment	\$0	\$0	25	75
T-2	Promote online ridesharing program	\$175,000	\$525,000	1,000	12,000
T-1	Bring CarShare Service to Tacoma	\$175,000	\$525,000	4,000	12,000
B-32	Explore home composting programs, including subsidizing the sale of home composting units.	\$40,000	\$120,000	550	1,650
T-7	Create and implement a comprehensive City-wide bicycle and pedestrian network plan	\$200,000	\$600,000	225	3,000
Totals	Sum of	\$1,527,500	\$5,495,000	11,051	210,325

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E-1	In City of Tacoma buildings and facilities, reduce climate emissions through electricity energy savings.	NA*	NA	NA	NA
T-13	Encourage telecommuting and other flexible/alternate work schedules for all public and private sector employees in Tacoma*	\$600,000	\$1,500,000	1,200	7,500
T-9	Provide incentives (financial and use) for more fuel-efficient vehicles for City residents	\$0	\$0	750	7,500
T-16	Provide free or reduced parking to carpools and vanpools	\$0	\$0	3,200	12,800
B-10	Require sellers to have an energy audit completed prior to sale on any building to inform buyers of potential energy savings.	\$1,200,000	\$5,000,000	15,000	60,000
T-8	Adopt an anti-idling ordinance by 2012	\$10,000	\$30,000	5,000	10,000
B-17	Support the Open Space Habitat Plan underway by the City of Tacoma to preserve public undeveloped open spaces.	\$3,500,000	\$30,000,000	850	8,500
T-19	Working with the Puget Sound Clean Air Agency and the Puget Sound Regional Council set annual per capita vehicle miles travelled goals that will encourage residents to drive less.	\$0	\$0	No Short Term Impacts	200,000
T-20	Investigate the potential to locate a Cascades Sierra Solutions station in the Tacoma/Pierce County area to carry out the retrofits of APU's and other emission reducing devices.	\$0	\$0	10,000	125,000
B-38	New City Transfer Station constructed to separate recyclables	\$10,000,000	\$2,000,000	25,000	35,000
B-2	Increase tree planting (establish a numeric goal tied to carbon sequestration – One proposed goal – 200,000 trees), including funding for additional City trees, maintenance of City trees and enforcement of tree planting requirements	\$750,000	(\$25,000,000)	90	2,500
E-2	In City of Tacoma buildings and facilities, reduce climate emissions through natural gas energy savings.	NA*	NA	NA	NA
Totals	So Far	\$17,587,500	\$19,025,000	72,141	679,125

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E-7	Green Building for City Facilities, Green Building Advocate, Green Building for Private Facilities (Optional). 1. Adopt the Leadership in Energy and Environmental Design (LEED) green building rating system, Silver Certification level, or appropriate green building rating system for all new and renovated City of Tacoma major buildings or facility projects. 2. Establish a new City staff position (Green Building Advocate) to provide green building design assistance and technical resources to both public and private developers, designers, homebuilders, and residents. 3. Provide expedited permit application review for private projects proposing use of the LEED green building rating system for commercial and BuiltGreen program for residential, or appropriate alternative green building rating systems, for all new and renovated buildings or facility projects.	\$400,000	\$1,200,000	10,000	50,000
B-1	Begin a regional Transfer of Development Rights program with Pierce County.	\$25,000	\$300,000	1,500	6,000
E-9	Exceed Washington State Energy Code. 1. Implement minimum levels of achievement beyond the Washington State Energy Code for both commercial and residential construction.	NA	NA	NA	NA
T-15	Encourage all Tacoma employers to offer parking cash out programs to their employees	\$750,000	\$2,000,000	10,000	75,000
T-4	Increase frequency of bus service on City arterials to every 15 minutes during morning and evening commuting hours	\$0	\$0	2,500	8,000
B-26	Reduce parking minimums required for residential developments to encourage non motorized transportation or transit.	\$0	\$0	4,500	22,000
B-30	Identify and implement additional residential and commercial organic diversion programs for Tacoma customers (Total of 56,000 tons for food and yard waste).	\$15,000	\$30,000	1,100	2,600
Totals	So Far	\$18,775,000	\$22,555,000	100,700	842,725

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B-22	The City should implement "smart growth" principles to promote mixed-use developments and affordable housing; green building and green site development; and bike- and pedestrian-friendly neighborhoods. City policies should increase the mobility of the city while decreasing the dependence of private vehicles	\$0	\$0	1,000	10,000
E-8	Solar and other renewables - Encourage local installations of renewable energy including solar electric, solar domestic hot water, biogas, biomass and other viable renewable energy technologies as they are available.	NA	NA	NA	NA
T-17	Encourage compact/transit oriented development within the City's mixed use centers to increase supply of affordable housing and reduce VMT in the region	\$0	\$0	6,000	24,000
E-10	Residential and commercial oil conservation - Acquire oil savings with programs focused on building efficiency and furnace improvement,	NA	NA	NA	NA
T-5	Construct the initial phase of the City streetcar system	\$0	\$0	No Short Term Impacts	1,000
B-5	Adaptive reuse of historic or older buildings should be encouraged through City policy.	\$0	\$0	750	8,000
B-9	An alternative standard to LEED could be developed in the form of a policy and checklist or similar standard that would identify minimum sustainability requirements for built structures.	\$0	\$0	180	2,200
B-50	Significantly expand reuse and waste reduction efforts. Tacoma should continue to explore ways to partner with existing agencies and businesses to increase reuse and waste reduction opportunities. Goal is to reduce waste generation 16,000 tons by	\$ 37,500	\$ 450,000	1,500	12,000
B-40	Rate Structure - The City should explore if a change in its Solid Waste Rate structure could further encourage recycling and waste reduction, with cost incentives to use smaller garbage containers. Some jurisdictions use larger fee differentials for can sizes in an attempt to further reduce the amount of garbage generated.	\$80,000	\$320,000	12,000	37,500
B-43	The City should review other cities efforts and recommend methods to encourage deconstruction and recycling of structures to be demolished in the City of Tacoma.	\$250,000	\$1,000,000	30,000	90,000
Totals	New Strategies Total	\$19,145,000	\$24,325,000	153,171	1,027,425
	Duplicate Counting			10,425	145,800
	Net Cumulative Totals	\$19,145,000	\$24,325,000	142,746	881,625

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Calculation Notes -Energy Committee

Carbon reduction numbers are for calendar years 2012 and 2020 only. They are not cumulative, meaning in the case of 2012, they are not the sum of all the savings achieved 2008 - 2012.

However, to reflect real budgets and an accurate cost per ton of carbon, the costs are cumulative. The total 5 year \$ spending - total 5 year cost - is divided by the total 5 year carbon reductions resulting in a cost / ton number reflecting the correct cost / ton number for the entire period.

The same methodology is used for the 2020 time

Electricity cost per ton methodology

The value - \$50/ton - is calculated using the Levelized Life Cycle Cost methodology from Tacoma Power's Conservation Potential Assessment (CPA).

Calculation Notes-Built Unbuilt and

Carbon reduction numbers are cumulative or calendar year depending on the strategy and implementation.

Some strategies are assumed to be phased in over time or have increasing impacts over time. The final impact will then be the reduction achieved in 2020.

Other strategies are assumed to not have an

Costs are cumulative as can best be estimated.

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Unquantifiable Strategies					
	STRATEGY	Description			
	The design standards for Public Works projects should be evaluated to incorporate applicable "complete streets" principles.	Policy Statement in support of Smart Growth			
	Encourage and incentivize the development of the existing and future mixed use centers to increase density. Density at the Mixed Use centers should be a minimum of 25 units per acre, and have amenities that could reduce the need for additional offsite trips.	Policy Statement in support of Smart Growth			
	The City's codes and development process should apply a holistic approach to the project, including the balancing of the carbon emission impacts and benefits in the immediate area as well as region.	Policy Statement in support of Smart Growth			
	Inventory and map existing affordable housing options to identify gaps in availability and target those areas for more affordable housing.	Policy Support for Mixed Use Centers/ Reduce VMT			
	Create web-based housing match program for Tacoma area employees to find housing close to their place of employment.	Policy Support for Mixed Use Centers/ Reduce VMT			
	Promote amenities that make high density living more attractive.	Policy Support for Mixed Use Centers/ Reduce VMT			
	Develop data bases or inventories of urban trees and existing open space / green space.	Trees sequester carbon, especially trees older than 10. Currently the City does not know how many trees or what type are in the City. Developing a database of trees will help the City to quantify the impacts of our urban forests on our carbon			
	Develop and implement plan for establishing trees on streets and city rights of way."	Funding for ongoing maintenance of street trees has been the problem with street tree programs in Tacoma in the past. The City should bring together the various City department and personnel with a current or historic role in tree planting and maintenance to design a cohesive, holistic system to plant and maintain City street			
	Perform an analysis of the City's current codes, policies and administrative processes to determine if there are institutional barriers to green building in the Code.	Policy Statement and Support Strategy			
	Identify and report to the City council methods to provide incentives for green building in Tacoma, including such items as quicker review times for permits, reduced permit fees, tax abatements, etc.	Policy Statement and Support Strategy			

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Research and identify ways to partner with existing and future private and NGO green building programs such as Built Green and the upcoming National Association of Home Builders Standards. Methods to leverage City and Private sector efforts to streamline these efforts should be explored.	Policy Statement and Support Strategy			
Tax abatements for the buyer if energy conservation upgrades are performed.	Potential funding method for energy audit program.			
Develop and implement, pending Council Approval, a plan for acquisition, ongoing management and funding to accomplish this recommendation. This plan shall address funding mechanisms, ongoing maintenance of open space properties owned by the City and partnerships required to efficiently implement this recommendation.	Policy Statement and Support Strategy for Open Space Acquisition			
The Goal of all City Open Space Programs should be no net loss or an increase of open space in Tacoma	Open Space Support Strategy			
Use a transfer of development rights (TDR) to increase growth in the urban area and preserve additional high quality lands in the City and County (See TDR Recommendation)	Policy Statement in support of the TDR recommendation			
Work with Pierce County and the private sector to secure and encourage additional organic material processing capacity in the area.	Policy Statement and Support Strategy. A major barrier to additional composting in the region is the lack of composting facility			
Identify and implement public education and other programs to reduce the amount organic material generated and increase the volume recycled.	Policy Statement and Support Strategy.			
Programs such as Natural Yard Care can be implemented as a pilot to determine if they provide sufficient benefit.	Natural Yard Care covers water conservation, alternatives to pesticides and other toxic lawn and garden chemicals, composting, mulch			
Tacoma Public Works shall ensure that its new facilities to handle garbage also have the capability of separating and processing recyclable materials.	Long term recycling costs and transfer station costs will be determined by scope of programs and actual design of facilities.			
Work with the GIS system to identify existing bus stops in Tacoma and evaluate potential locations for new stops or routes to bring a stop within ¼ mile of	Support strategy			
Develop a map of biodiesel locations and electric plug-in stations.	Make it easier for drivers to find stations and show that adequate infrastructure exists to make			
Work with DOT to initiate a highway planting program along the interstate.	Trees sequester carbon			
Analyze the potential for shared parking throughout the City	Studies show shared parking can reduce the need for parking spaces by 10-30% Victoria			
Adopt parking maximums rather than parking minimums for new developments and major remodels	Studies show parking maximums can reduce the need for parking spaces by 10-30% Victoria			

**City of Tacoma
Green Ribbon Climate Action Task Force**

Implementation Committee Recommendation:

1) Office of Sustainability

City of Tacoma office reporting to the City Manager or his/her designee.

Purpose: Implements Tacoma's Climate Action Plan, provides leadership, coordinates and integrates implementation efforts, houses information for City and external stakeholders to implement Tacoma's Climate Action Plan, and monitors progress for Tacoma's Climate Action Plan.

Collaborates with City agencies, City Department Heads (Tacoma Green Team), business and residential groups and organizations, citizen commission, and other partners to complement and help implement programs that promote the goals of Tacoma's Climate Action Plan.

Tasks and Functions:

- Responsible for GHG emission measurement with periodic reports to the community.
- Accountable for the implementation of Climate Action Plan strategies and CO2 reduction efforts.
- Coordinates education and training on sustainability for City staff.
- Identifies barriers to and incentives for implementation.
- Organizes marketing, outreach and educational programs targeting the residential community.
- Organizes marketing, outreach, seminars and educational programs targeting the business community. Establishes the "Tacoma Climate Partnership" to analyze and reduce the carbon footprint in business and industry.
- Recruits candidates for City's green-sector jobs; helps identify City jobs with responsibilities related to sustainability.
- Reports on financial savings and reinvestment from Climate Action Plan strategies.
- Minimizes duplication and maximizes synergy with state, regional and national climate action efforts.
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and

2) Tacoma Green Team

Purpose: To be as effective and efficient as possible in implementing Tacoma's Climate Action Plan, eliminating duplicative efforts and maximizing communication and best practices.

Representatives from each department within the City of Tacoma and local agencies (to include Tacoma Public Utilities, Tacoma Public Schools, Metro Parks Tacoma, and Port of Tacoma) to work on a variety of related tasks as recommended by Tacoma's Climate Action Plan (coordinated by the Office of Sustainability). Examples include energy efficiency programs, environmentally responsible office practices, expanded recycling programs and green design for new construction projects. Proper implementation of this effort should result in cost-saving measures, consistency in messaging with limited confusion and leveraging of multiple entities' efforts.

and

3) Citizen Oversight Commission on Climate Change

Purpose: To bring citizen accountability, transparency and vigilance to the long-term implementation of Tacoma's Climate Action Plan as developed by the Green Ribbon Climate Action Task Force.

Representatives from various stakeholders in the Tacoma community should be appointed to oversee implementation of Tacoma's Climate Action Plan strategies. Appointments to be made by the City Council Appointments Committee.