1. Seek Opportunities for Combined Heat and Power (CHP)

Combined heat and power refers to any system that simultaneously or sequentially generates electricity and sues thermal energy that is normally wasted. The CAP is considering creating incentives (subside, tax credits) and reducing barriers (net metering policies, permitting) to CHP and distributed generation. There may be limited opportunities for CHP projects to be implemented in Fort Collins by 2010.

2. Fund Pickle Plant Solar Sculpture

An effort is underway to build a 200kWatt "Solar Sculpture" at the old Pickle Plant. "Art in Public Places" funding is available for the artwork, but additional funds are needed for the solar component. This measure would seek additional funding to complete this unique community demonstration project.

3. Implement a "Smart Meter" program

A Smart meter generally refers to a type of advanced meter that identifies consumption in more detail than a conventional meter; and communicates that information via some network back to the local utility for monitoring and billing purposes. It can aid the utility by allow remote meter reading and pinpointing outages. The customer can (via a Web site) track hourly energy usage and reduce their bill by reducing and shifting energy use. Available for electricity, natural gas, and water. Denver has estimated that smart meters are can increase conservation by 10%.

4. Energy Efficiency Education in Utility Bill

Provide information in utility bill about the carbon footprint, how to reduce it, etc.

5. Energy Education Hotline

Provide a free telephone resource for answers to FAQ and other resources to conserve energy.

6. Increase Xcel Franchise Fee to Encourage Natural Gas Conservation

The city would levy a franchise fee on Xcel Energy for the opportunity to sell natural gas to citizens/businesses. The fee would be passed on to customer in the form of higher natural gas rates and would provide an incentive for natural gas efficiency. Revenue from the fee could fund GHG reducing programs. Currently, the City levies a Gas Company Occupation Tax to natural gas providers of \$445,000/year (See Chapter 25, Article VI of the Code http://www.colocode.com/ftcollins/municipal/chapter25.htm#articleVI) Natural gas is 17% of the 2005 FC GHG emission inventory.

7. Improve Accessibility and Expand Scope of ZILCH

Currently ZILCH has \$30,000 annually for residential weatherization/ EE projects that can demonstrate a 10 year or better payback, and \$30,000 for water conservation projects, and only ~ \$5k is used each year. This measure could expand the Zero Interest Loans for more RE projects like PV (Solar hot water is currently covered) and/or to businesses, perhaps Climate Wise businesses.

8. Tax Incentive Financing for Energy Efficiency in New Buildings

Tax incentive financing for energy efficiency in new buildings and retrofitting existing building to meet LEEDS standards.

9. Expand rebate programs for natural gas conservation

These programs should offset the costs of implementing natural gas efficiency measures (e.g. solar hot water systems, weather stripping) and the purchase of energy efficient appliances (e.g. washing machines, dryers). Publicizing these programs well to residential, commercial, and institutional users is important. Provide rebate preference or increased amount for use of local vendors/contractors.

10. Offer Free Residential Energy Assessments

FCU currently offers free energy assessments to businesses. This measure would offer them for residences. 2005 residential GHG emissions from electricity and natural gas are 22% of the whole emissions inventory. Free home energy assessment is an important component of Boulder's Climate Plan, in their case funded by the carbon tax.

11. Enhanced energy efficiency and consumption reduction above Electric Energy Supply Policy (EESP)

The EESP calls for 10% reduction in per capita demand by 2012. Increase the City's DSM goals. Provide a preference for use of local vendors/contractors.

12. Expand residential weatherization programs (e.g. potential partnership with Habitat)

13. 20% EE for State/Local Buildings With Zero- Interest Loans

The CAP (RCI-2) is considering a goal to achieve 20% reduction in energy use by buildings owned by state and local governments through the use of a revolving fund providing zero interest loans. Reductions would start in 2008, with a goal of achieving 50% implementation by 2015. This measure would lobby the state to obtain more zero interest loan funding sooner for Fort Collins entities.

14. Lobby for Priority Funding from SB246's Clean Energy Fund

SB246 creates a Clean Energy fund with limited gaming funds. \$56 million dollars will be appropriated to the Governor's Energy Office for the purpose of advancing EE and RE throughout the state by the end of 2009.

15. Lobby for Priority Funding from HB1037 (EE Program incentives)

HB1037 Directs distributors of natural gas to develop and implement cost-effective energy efficiency programs and directs the PUC to promulgate rules regarding funding and cost-recovery mechanisms. Rule detail to be completed by 9/1/07, including 0.5% of revenue for DSM programs. Natural gas is 17% of the 2005 FC GHG emission inventory.

16. Tiered Electric Rates

Charge proportionally more for increasing electricity use to simultaneously provide a source of funding for EE programs and an incentive for EE. (The CAP has a proposal calling for tiered electric rates to start in 2010.) Electricity is 45% of FC 2005 GHG inventory. Revenue neutral.

17. Lobby for Tiered Natural Gas Rates

Encourage PUC or Xcel to charge proportionally more for increasing electricity use to simultaneously provide a source of funding for EE programs and an incentive for EE. Natural gas is 17% of the 2005 FC GHG emission inventory. Revenue neutral.

18. Time-of-Sale Energy Conservation Ordinance

<u>Residential:</u> Require basic energy efficiency measures at time of sale of residential property as a way to improve the efficiency of older housing stock (consider minimum threshold for adoption). Denver's proposal calls for providing incentives to plant shade trees and install meters to enhance program effectiveness to reduce 1-4% of their GHG inventory with 25% of homes participating by 2010. Successful examples: Berkeley and San Fran, not Seattle. <u>Commercial:</u> Some estimates suggest 40% of energy is lost through leaky air barriers. Could include requiring a blower door test on new and resold commercial buildings with mandatory repair if > XX% leaky.

19. Wasting Energy Ordinance (Night Light Pollution)

Madison, WI has standards for any outside lighting > 1,000 lumens as does Eatontown, NJ http://www.starastronomy.org/LightPollution/1.%20Article%20for%20Astronomers.html

20. Phantom Load Control

Phantom loads are small scale energy consumption, generally from electronics, that are only "waiting" and provide no useful benefit while waiting. One study of a home w/ 90% CF lighting found that 25% of electric energy consumption could be cut by addressing phantom loads through appliance selection, and automatic turn-off devices. Typical sources are door-bell transformer, garage door openers, cable TV recorder (DVR) boxes.

21. Incentive for participation in green building labeling system for existing, leased, and new buildings (e.g. ENERGY STAR, LEED, Built Green, NAHB, etc.)

Many suggestions were made about incentivizing Energy Star and/or LEED for buildings.

22. Increase Urban Forestry

Trees sequester carbon. Portland planted 750,000 trees in ~ 10 years to help reduce GHG. Denver and Boulder new plans do not include urban forestry.

23. Climate Wise Growth

<u>Expand</u> the growth of the Climate Wise program beyond the status quo growth levels. Ideas to enhance Climate Wise growth above existing levels:

- 1. Offer Zero Interest loans to Climate Wise partners
- 2. Develop a grant programs (funded in part by landfill tipping fee) for carbon offsets for proven projects

24. Trash Districting

Trash collection in Fort Collins is currently privatized, with six private haulers competing to provide services. Formation of City-contracted trash districts received serious consideration from City Council in the late '90's, but the Council has chosen not to pursue the idea for now. Trash districting would provide some greenhouse gas-reducing benefits by decreasing the number of miles driven by trash trucks. In addition, a districted system would allow the City to

recover some of the costs of street damage and to expand recycling programs. If funded in 2008, the City may implement a trash districting feasibility study.

25. Buy Local Campaign

Promote purchases of locally produced goods by setting up a program to publicize the benefits of purchasing locally produced goods. In addition to promoting a healthy local economy, the purchase of locally produced goods results in less carbon emissions due to decreased transportation requirements.

26. Establish GHG Reduction Goal for Municipal Emissions

This measure would require the City of Fort Collins to set a GHG reduction goal for municipal operations and develop a plan to meet it. The City would strive to do this through its participation in Climate Wise. In 2004, municipal GHG emission were 2.27% of community-wide emissions: buildings (36%), water (30%), fleets (195) and lighting (14%). Specific suggestions to reduce municipal GHG emissions suggested through this process include:

- City building energy efficiency improvement
- Competition between City departments/buildings on energy efficiency
- Carbon neutral requirement for city buildings
- High performing green concrete policy ??
- Purchase high efficiency light duty vehicles (FCSG)

The CAP process is considering a recommendation that Colorado state and local governments set GHG reduction goals for their own emissions.

Colorado State University and Larimer County, both members of the Climate Wise program, have the opportunity to achieve the Climate Wise platinum level by setting organizational GHG reduction goals.

27. Carbon Concierge to Reduce Individual Carbon Footprints

"Carbon Concierge, Your Personal Carbon Keeper" http://www.carbonconcierge.com/ provides information about carbon emissions, how to calculate a carbon footprint and how to offset carbon emissions. The "Carbon Concierge" program could be operated by a full or part-time city employee or employees, and could rely heavily on on-line resources. Feedback devices such as the "Kil-a-Watt" meter could be incorporated into this program to assist people in reducing energy use. This program could promote efforts to reduce carbon emissions at the neighborhood level, including car pooling and community gardening. For more information, see http://svn.org/index.cfm?fuseaction=Page.viewPage&pageId=646&parentID=513.

28. Educational outreach position providing service to all sectors including PSD

Hire a fulltime person devoted to developing educational programs to reach all segments of the population. They could have programs in the schools, from Pre-school through college. It is vitally important to educate the younger generations because they are the ones who can make such a difference. Kids can get their parents and grandparents to do things they wouldn't otherwise do. Get youth groups, scouts, sports groups, church groups, community service groups, etc. involved. It could involve poster contests through the schools or FC MOCA, a TOP TEN THINGS YOU CAN DO TO SAVE THE PLANET list with a slogan like One Million Tons by 2010 - Get Involved!. People in the community have to become just as involved as the

Fort Collins City government. Advertising works and it could be used to great advantage in this campaign.

29. Employee Education Programs

Implement Climate Wise's GreenPoints program or the Walmart Personal Sustainability Plan (PSP) approach to motivate behavior change in employees. GreenPoints sets up contest among employees to implement and document sustainable actions, and rewards winners (short time frame?). 84% of Denver Walmart employees developed PSP since 11/06.

30. Carbon Tax

Would assess a tax on energy use. Could be done by government or via utility bills. Tax revenue could fund GHG reduction activities. The CAP is considering a carbon tax or cap n trade approach. Boulder's carbon tax is assessed by Xcel Energy based on electricity used. It will increase residential energy bills by \$1.33/month, and business energy bills by \$3.80/month and will raise \$1 million annually.

31. Communitywide Climate Challenge

This measure would develop a Fort Collins climate challenge for citizens and businesses that would promote best-practices relating to energy conservation, purchase of RE, support for multimodal transportation, and waste reduction.

Denver has proposed a similar program that they believe will achieve 28% of their GHG goal. Denver's example includes "smart meters" that enable families to see real-time energy use and cost. Denver estimates that smart meters are can increase conservation by 10%. Denver provides awards in the business sector.

Burlington, VT has the "10% Challenge, a voluntary program to raise public awareness about global climate change and to encourage households and businesses to reduce their greenhouse gas emissions by at least 10 percent. See <u>http://www.10percentchallenge.org/</u> and http://www.eesi.org/programs/Smartgrowth/cs.stdy.burl.vt.htm

32. New Small Hydro

PRPA's assessment of the practical potential of small hydro in the Fort Collins region is 8 MW. At the state level, studies have suggested that could be 1000 MW or more of hydroelectric potential in Colorado at existing site such as impoundments, diversions, and water conveyance structures. Depending on location, small hydro can be cost competitive with other energy sources.

33. Power Plant Fuel Switch

Substitute up to 20% wood chips for coal in all power plants that produce power for Fort Collins citizens. The Clark Generating Station in Canon City is partnering with GEO and DOE to replace part of the coal with biomass from local forest thinning operations. The plant plans to sell the environmental benefits achieved by this project by issuing Renewable Energy Certificates (RECs). This is the first time that forest-derived biomass is used in RECs that are sold in a voluntary market. (See <u>http://www.state.co.us/oemc/programs/waste/biomass/canoncity.htm</u>)

PRPA's has assessed that it might be feasible to fuel switch up to 10MW, assuming the use of wood from thinning and forestry management. An implementation issue would include the need to develop of the supply chain for this wood. There may be air pollution issues with fuel-switching at the Rawhide plant and other environmental concerns to be addressed with this approach.

34. Purchase Additional RECS (Third-party certified)

This measure proposed to purchase additional RECs, beyond those already purchased through the FCU Green Power Program. Renewable energy credits (RECs) can offset non-renewable sources currently used to generate much of the electricity used by customers of Ft. Collins Utilities. Ensure that any RECs purchased are actually used for the construction and/or operation of renewable energy projects.

35. Create a local REC option above and beyond the existing REC program

The measure would create a mechanism to allow the FC Utility through PRPA to purchase RECs from local (certified) carbon-reducing projects. It would require developing local, certified carbon-reducing projects. These locally purchased RECs would be above and beyond the RECs that PRPA is currently under contact to buy.

36. Expand Net Metering

FCU currently has a pilot net metering project that offers residential electric customers generous full retail buy-back provisions for electricity generated by solar photovoltaic (PV) systems connected to the electric grid. In 2006 the program had nine residential customers and two commercial customers whose solar PV systems have been inspected and are operational. The total peak capacity of these systems is 24.4 kilowatts. The pilot allows up to 25 participants. Expand this to encourage more RE projects. (Xcel incentive programs provide \$4.50/Watt for net metered power and only raised customer utility rates 0.6%, according to a comment from the Open House.)

37. Renewable Energy Growth Above Existing EESP

New state legislation (HB07-1281) increases the percent of RE muni utilities must provide to 20% by 2020, including muni's serving > 40K customers. (Current FC goal is 15% by 2017) The Cap is considering a proposal to further increase the percent of RE required to be provide by FCU to 30% by 2010. The Electric and Natural Resources Boards are beginning to consider possible updates to the existing EESP.

38. Incentives for residential and commercial Renewable Energy (e.g. tax credits, rebates) Give preference to local contractors.

39. Encourage Local Purchase of RECs from the CSU Green Power Project

In March 2007, CSU committed to generating all its power from wind energy. Wind Holding LLC will develop the facility on the university's 11,000-acre Maxwell Ranch near the Wyoming border. Wind Holding LLC has two years to begin construction and up to eight years to complete the CSU Green Power Project, which would include a minimum of 65 megawatts or about 25 wind turbines with the potential of up to 200 megawatts. At peak demand, Colorado State currently uses about 16 megawatts of power. It has not yet been determined who will purchase the RECs from this wind energy.

40. Require all new homes to have solar hot water

Introduce energy standards that require all new homes to produce domestic hot water from active solar systems. This might add \$50 to the cost of a monthly mortgage loan (assuming a \$10K upfront cost and a 6% range loan for 30yrs) This cost however would be offset by reduced energy bills for hot water.

41. Require new homes about \$300k/\$400k to have 50%/100% of energy from onsite generation

Introduce energy standards that require all new homes above \$250K in value to produce 50% of their total energy needs through on site generation. (This could take the form of photovoltaic generation, domestic hot water from solar panels and or winter heating thru solar panels, mini wind generators, geothermal systems or the like). This might add \$100 to the cost of a monthly mortgage loan (assuming a \$20K upfront cost and a 6% range loan for 30 yrs) This cost however would be offset by reduced energy bills that average a least that much for home of this size.
And/or Introduce energy standards that require all new homes above \$400K in value to produce 100% of their total energy needs through on site generation. This might add \$200 to the cost of a monthly mortgage loan (assuming a \$40K upfront cost and a 6% range loan for 30 yrs) This cost however would be offset by reduced energy bills that average a least that much for home of this size.

42. Composting Program

This measure could offer yard waste composting and/or food composting programs. Yard waste represents 22% and food waste represents 15% of FC trash. According to a recent FC survey, yard waste appears to be an area of particular potential for recycling. A total of 39 percent of respondents report putting yard waste out with the garbage. About 1/3 of respondents report that they would use a community composting facility even if there was a small fee. Demand is greater for curbside pickup of yard waste; over half would be "very likely" or "somewhat likely" to use the service, even if there was a small fee.

43. Push to meet city's 50% diversion goal for waste

Many successes and improvements to recycling have occurred in recent years, yet only 25-30% of Fort Collins' waste stream is being diverted from landfill disposal. According to a recent study, examples of programs that produced cost effective carbon reduction include: -residential single stream

-required recycling bin for commercial users producing more than 10 cubic yards of waste -enhancements to the pay-as-you-throw rate structure for residential

-construction and demolition deposit

-construction and demolition wood waste drop-off

44. Landfill Methane Capture

Some communities have achieved significant GHG reductions by installing a system to capture and convert landfill methane to energy. This measure encourages installation of a gas-to-energy system prior to when it would be mandated under the Clean Air Act.

45. More public sites for recycling

As part of the waste reduction strategic planning process, the City of Fort Collins commissioned a statistically valid, community-wide public opinion survey covering a wide variety of garbage and waste diversion topics. Key findings include: There is high interest in, and support of, recycling. In terms of importance, respondents were more likely to state that the ability to recycle conveniently, and the ability to recycle many materials, is more important than inexpensive services. Additionally, 98 percent of respondents believe that recycling is "good for the city of Fort Collins", and 89 percent believe that the City should pursue additional means of recycling and diversion. Use of the Rivendell site has grown since its opening in 2002.

46. Engage CSU in recycling more materials

Opportunity to engage the university in recycling other materials (e.g. beet waste) and get added value.

47. Up-Cycling

Upcycling is the practice of taking something that is disposable and transforming it into something of greater use and value. The term was coined by <u>William McDonough</u> and <u>Michael</u> Braungart, authors of <u>Cradle to Cradle: Remaking the Way We Make Things</u>.

48. Zero Waste Events

Make all City sponsored events be held as zero waste events and use 100% Compostable plates, utensils and cups as well as table cloths and etc. Ensure that the material is properly collected and delivered to a composting company for proper processing. Make all events held by others on city land to be the same. Provide education for the public on how to make this happen for other events. Provide education and training (perhaps thru Climate Wise and other venues) such that companies do the same. This would be especially focused on restaurants.

49. Single Serving Water Bottle Reduction Program

This concept is based on the idea that millions of plastic bottles are recycled or thrown out after a single use. Fort Collins tap water quality is excellent. Citizens could be encouraged/required to use reusable water containers. San Francisco has just banned the use of city funds to purchase bottled water, even for water coolers. More than 40 million gallons of oil are needed to make the plastic water bottles Americans purchase each year, according to data cited in the mayor's announcement. Like other uses of fossil fuels, the process of making plastic bottles releases carbon dioxide.

50. Deposit fund for beverage containers

Bottle bills are a proven, sustainable method of capturing beverage bottles and cans for recycling. The refund value of the container (usually 5 or 10 cents) provides a monetary incentive to return the container for recycling. Eleven states currently have bottle bills. LC landfill waste characterization shows 3.2% glass/ceramic.

51. HB1288Waste Reduction and Recycling Incentives

HB1288 increases solid waste disposal and waste tire fees to fund recycling opportunities and waste management programs in CPDHE and DOLA (Dept of Local Affairs). It will provide ~ \$3+ million in 2007/12008 and again in 2008/2009 to fund for grants, loans and rebates.

52. Signs at railroad crossings requesting drivers to turn off vehicles and indicating approximate time until end of train

53. Redirect trains outside of Fort Collins to reduce traffic stalls and congestion

54. Replace vehicle commuting for high schools students with alternatives

Replace Fort Collins high school student automobile commuting with walking, biking, and mass transit, or develop incentives to encourage such.

55. Reinstate SmartTrips program

In 2003 and 2004, SmartTripsTM programs helped more than 250 businesses, schools and organizations make a difference in how their employees and students travel. Those participants reduced more than 6 million miles of vehicle travel, taking more than 860,000 trips off Fort Collins roads. They prevented 344,309 pounds of carbon monoxide from polluting the air.

56. Favorable financing for neighborhood electric vehicle (NHEV) and plug-in hybrids with charging stations to support

Neighborhood Electric Vehicles (NEV's) and several upcoming vehicles run without emissions, weigh a much more reasonable; several hundred pounds and have a much smaller profile thus allowing for a much smaller amount of energy consumption and emission output than conventional cars. These vehicles also come with a much smaller price tag and a lower annual cost of ownership. Promote the use of NEV transportation by

- Eliminating local tax on this purchase,
- Designating routes by which these vehicles can be used that are off the main roadways thus providing a safer environment.
- Assigning parking spaces for these vehicles at all public buildings complete with charging (daytime and or time limit parking
- Requiring parking at businesses and retail locations close in (right behind handicap parking) for these vehicles
- Encouraging the federal and state governments to force these vehicles into mass production by requiring a certain percent of sales to be of this category from manufacturers and dealers
- Encouraging legislation change that allows these vehicles to go up to 40 mph versus the current 25 mph
- Encouraging the state to eliminate license tax on this type of vehicle

Plug-in hybrid electric vehicles (PHEV) are hybrid vehicles with batteries that can be recharged by connecting a plug to an external power source. While PHEVs are usually passenger vehicles, they can also be commercial passenger vans, utility trucks, school buses, scooters, and military vehicles. There are no PHEV in production yet but there are hybrid vehicle conversion kits.

57. Point of Sale fee-based facilities shortfall tax

Assess a fee when residential or commercial buildings are sold to generate revenue to establish and fund transit. Assessed fees would be scaled and based on property value and location.

58. Enhance Fort ZED to include Zero Emission Vehicles

The UniverCity Connection Sustainable Energy Group is developing a recommendation to create a "Zero Energy District" in downtown Fort Collins. This could occur through a combination of distributed energy sites and renewable energy that can put energy back into the grid during peak production. (see <u>www.univercityconnections.org/</u> and <u>www.univercityconnections.org/final-reports.html</u> (click on Sustainable Energy Technology for full report). This proposal is to make the FortZED into "Fort ZED-ZEV" - an area in which only zero-emissions vehicles are allowed (Elec. Vehicles/Bicycles/etc.) with park-n-ride facilities around the perimeter. Combine with city shuttle (ala Denver 16th St. Mall) within the district.

59. Modern Roundabouts for New or Major Redeveloped Intersections

Cuts co2 emissions by 1/3, MUCH safer with fewer fatalities

60. School Transport Management Program

These programs encourage parents, students, and staff members to reduce automobile trips and use alternative modes for travel to and from schools. These programs generally include walking, cycling, and ridesharing encouragement. School transport management programs are generally implemented by individual schools, often with the support of local governments (for pedestrian and cycling improvements around schools), school districts (which set policies and allocate funds for services such as crossing guards and busing), and parent groups. School transport management programs often reduce automobile trips by 10 to 30 percent, depending on type of program and geographic conditions. Since school trips typically represent 5 to 15 percent of peak-period trips, this can reduce 1 to 2 percent of total trips, and much more in certain areas. In addition, these programs may have significant long-term impacts by helping children establish more multi-modal travel habits that continue later in life.

(from Mobility Mgmt Report at http://fcgov.com/airquality/pdf/mm-best-practices06.pdf

Campus Mobility Management Programs

Campus Transport Management encourages students and employees at college, university, research, and industrial campuses to use alternative modes. These programs generally include strategies that encourage walking, cycling, ridesharing, and public transit. Transit service improvements, transit fare discounts, and parking pricing reforms tend to be particularly effective. Campus transport management programs generally are implemented by campus administrations, often with encouragement from and support of student organizations and local governments. Campus transport management programs often reduce automobile trips by 10 to 30 percent, depending on the type of program and geographic conditions. (from Mobility Mgmt Report at http://fcgov.com/airquality/pdf/mm-best-practices06.pdf

61. Transit Service Innovations and Improvements

Transfort, which operates 15 fixed bus routes in the city plus foxtrot. The majority of the transit routes currently serve the Downtown/University area. Several routes serve areas outside of the Downtown/University area, such as the College/US-287 Corridor where 60 percent of the employment is located in Fort Collins. Transfort just added 3 new routes to the Harmony,

Timberline, and East Prospect corridors, which are home to many large employers. This measure cold include ideas such as extend bus service hours and/or frequency; plan for transitioning to a grid-based bus system to allow for more efficient use of buses and may provide better service that will increase ridership.

62. Parking Management

Parking Management includes a variety of strategies that encourage more efficient use of existing parking facilities, improve the quality of service provided to parking facility users, and improve parking facility design. Current parking planning practices (such as generous minimum parking requirements and public provision of on- and off-street parking) tend to result in abundant and generally free parking at most destinations. This subsidizes automobile travel and encourages lower-density land use patterns. More efficient parking management can address these problems, helping to achieve a variety of transportation, land use development, economic, and environmental objectives. Examples of parking management programs include:

- Install parking meters and increase parking fees in city-owned garages
 - Increased parking costs will promote use of other transportation modes and pay for programs (measures C.2 – C.8 below) to further promote use of other transport modes
- Provide free parking spaces for vehicles designated as ULEV, SULEV, PZEV, and AT-PZEV to encourage people to use or purchase low emissions vehicles.
- Parking fees as a function of vehicle emissions (London example)
- Parking cash out parking cash out is a program that allows employees to opt out of having a parking space and instead receive compensation. The employer who leases (or owns) a space pays the employee not to park. In 1992, California enacted legislation (AB 2109, KATZ) that requires many employers to offer employees the option to choose cash in lieu of any parking subsidy offered. A later study of eight employers (one gov, 7 private, from 120 to 300 employees where the price of parking at the worksites ranged from \$36 to \$165 a month) found: solo driving to work fell by 17 percent, carpooling increased by 64 percent, Transit ridership increased by 50 percent, walking and bicycling increased by 33 percent, Commuter parking demand fell by 11 percent. In summary, this reduced total vehicle miles traveled for commuting by 12 percent, but appears dependent on having a price for parking to begin with.

63. Walking and Cycling Improvements

Walking and cycling programs improve non-motorized conditions (sidewalk, crosswalk, and path improvements; traffic calming and streetscaping to create more pedestrian-friendly streets, etc.) and encourage nonmotorized travel. According to some estimates, 5 to 10 percent of automobile trips can reasonably be shifted to non-motorized transport in a typical urban area, and nonmotorized improvements can have leverage effects that increase their importance. Examples of programs to increase cycling include:

- Conduct an 18-month capital fundraising campaign to complete missing links in the bike system to make it a viable commuter system.
- Provide additional bicycle parking
 - Provide additional bicycle parking, including covered parking, to increase bicycle use.
- Provide additional bicycle lanes and improve existing bicycle lanes

- Provide bike lanes on College Avenue and other heavily traveled streets to increase bicycle use.
- Develop a program to improve existing commuter bike lanes and paths.
- Implement rebate program to promote bicycle ownership
 - Provide a rebate to residents of Ft. Collins to purchase bicycles in order to increase bicycle use. Publicizing this program well is important.
 - Consider tiered rebates (with local purchases offering higher rebates) for the purchase of bicycles from shops located within city limits.

64. Car Sharing

Carsharing is a system where a <u>fleet</u> of cars (or other <u>vehicles</u>) is jointly-owned by the users in distinction from <u>car rental</u> or cars in <u>private ownership</u>. The users are organized as a democratically-controlled <u>company</u>, public agency, <u>cooperative</u>, *ad hoc* grouping. The fleet is made available for use by members of the carshare group in a wide variety of ways. The costs and troubles of vehicle purchase, ownership and maintenance are transferred to a central organizer (the Carshare Operator or more familiarly CSO). It has been around in various forms for more than half a century, but it is only in the last decade that it has begun to gather force as a viable alternative to car ownership—for some people and some places. Today there are more than six hundred cities in the world where people can carshare.^[1]

65. Expand Trolley Service

Expand the trolley to Lee Martinez Farm. Make the trolley a real route with destinations: Farm & Lee Martinez Park, New Discovery Center, North Transit Center, Courthouse Park, City Park. See http://davegrahamorg.blogspot.com/2007/07/light-rail-in-fort-collins-first-step.html This expansion would enhance the overall connectivity of the entire transit system and provide a more multi-modal, walkable downtown. While perhaps small itself, the synergy of this measure with the transit system is large and could lead to higher net benefits.

66. Commute Trip Reduction Programs

Commute trip reduction (CTR) (also called employee trip reduction or vehicle trip reduction) programs give commuters resources and incentives to reduce their automobile trips. These programs typically include company policies that support flextime and telework, facilities located and designed for access by alternative modes (including proximity to transit services, priority parking for vanpools, and bicycle parking and changing facilities), parking cash out (employees who are offered a subsidized parking space can choose to receive the cash equivalent instead), or other commuter financial incentives and various marketing campaigns.

67. NuRide

NuRide is the nation's first ride network that rewards people for sharing rides. It's fun, free, flexible and most of all - rewarding. Use NuRide to find just the right person going your way and then share the ride. Ride with friends or meet new people - you're in control at all times. It's just like frequent flyer miles - you earn reward points every time you share a ride. You can redeem your points for gift cards, gift certificates, tickets and other special rewards from <u>NuRide</u> <u>sponsors</u>. (see http://www.nuride.com/nuride/Public/Overview.jsp)

68. Incentives for Electric and Push Lawn Mowers

Small engines, in particular 2-stroke engines used in conventional lawn care equipment, contribute to 10-12% of the nation's air pollution. Gas lawn mowers consume 580 million gallons of gasoline annually and 25-35% of this fuel escapes unburned. The City could sponsor a program much like the appliance replacement policy to provide incentive for individuals and small lawn service businesses to convert to electric lawn mowers.

69. Voluntary travel offset program

A measure proposed in Denver's draft climate plan is to provide the opportunity to pay a small voluntary fee, at the time of air ticket purchase or motor vehicle registration, to offset the carbon emissions related to travel. Funds would be used for carbon-absorbing or carbon-reducing activities. Explore potential partnership with the Governor's Energy Office to develop local offset investment opportunities. Estimated to achieve 20% of Denver's GHG reduction goal.

70. Incentives for Low Emission Vehicles

Provide incentives for purchase of low GHG-emission vehicles. Note that the CAP is considering a goal of implementing state-wide, revenue neutral feebate on all vehicle registration by 2010, at time of initial vehicle registration, and extending existing tax credits for hybrid, alt fuel and LEV vehicles beyond 2010.

71. Relocate truck weigh station to I-25 just S of WY border

Moving the truck weigh station farther North on I-25 would require/motivate (?) truckers to use I-25 N to I-80W, instead of taking 287 N to Laramie, right through Fort Collins, thereby reducing diesel VMT in Fort Collins and associated GHG emissions. A *1995 Fort Collins Truck Issues Report* indicates that the I-25, I-80 route is 17 miles longer than the 287 route to Laramie, from Fort Collins, so there would be a net emissions increase, but a decrease in Fort Collins.

72. Variable Priced Insurance

Pay-As-You-Drive Insurance is an innovative concept that links insurance polices to an odometer rather than just a date on the calendar. PAYD provides financial incentive for driving less; it is expected to reduce driving and congestion by 10 to 12%.

Pay-As-You-Drive pricing is implemented by individual insurance companies, although legal or administrative changes may be needed to remove regulatory barriers. Governments can implement incentives or regulations to encourage insurers to offer Pay-As-You-Drive pricing, and public-private projects can help pilot and promote this pricing option. Eleven states have already applied for funding to study or pilot PAYD insurance policies. As one example, in the UK, Norwich Union offers "Pay As You Drive". Customers pay variable costs based on when and where and how far you drive plus a fixed monthly fee. A GPS is fitted to the car; those who drive < 6K miles/year can reduce their bills by 30%.

Oregon passed legislation in 2003 to encourage insurers--through a tax credit--to offer pay-asyou-drive insurance. OR and WA are piloting PAYD programs; EPA is considering a national campaign. However, Victoria Transport Policy Institute rates PAYD as "Low" on implementation feasibility by local government.

73. Heavy Duty Vehicle Idle Reduction

The CAP is considering a proposal to adopt statewide regulation to reduce extended heavy duty diesel idling by 2009. The cities of Denver and Greeley already have restrictions on heavy duty diesel idling.

74. Enforce Odd/Even Day Driving Restrictions

Enforce Odd/Even days for vehicle transportation where odd/ending license plates drive only on odd days (carpool or bike on opposing days). Volunteer program for those who wish to participate.