



Moving in the Right Direction:



Putting
Transportation
Efficiency
to Work
for You



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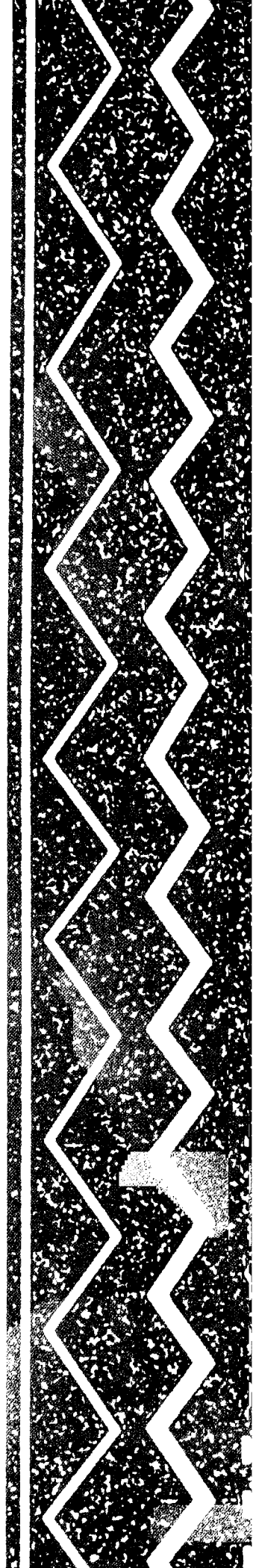
Climate Wise and Transportation Partners

The EPA **Climate Wise** and **Transportation Partners** programs are combining efforts to encourage current and new Climate Wise partners to consider and implement exciting transportation efficiency measures. This collaboration will leverage the resources and expertise of both programs to reduce transportation-related greenhouse gas emissions in the industrial sector. This brochure provides an overview of some of the leading transportation efficiency measures used today.

If you are currently a Climate Wise partner, talk with Wise Line staff or your Account Representative about including transportation projects in your next Action Plan update.

If you are not a partner, joining the Climate Wise program is easy. Simply complete the attached Partnership agreement, check the "Transportation Efficiency" box to indicate your interest in these initiatives, and submit the form. By getting involved, you will open the door to information and technical tools that will help your company achieve energy savings, while providing more efficient transportation options for your employees!

Climate Wise is a partnership initiative sponsored by the U.S. EPA that helps manufacturing companies across the country turn energy efficiency and pollution prevention into a corporate asset through the development of comprehensive action plans that reduce emissions and save money. **Transportation Partners** works to reduce the growth in the number of vehicle miles traveled (and resulting greenhouse gas emissions) by promoting projects that provide transportation alternatives to the one person per car commute.





Why Transportation Efficiency?

When it comes to getting to and from work, employees too often have only one choice: their cars. By relying solely on cars, particularly by driving alone, our daily commute becomes congested and our lives become stressful. More cars on the road means more time wasted in traffic and less time spent at work and at home. People want to have choices and appreciate a working environment in which they have transportation options. By offering your employees flexible transportation benefits, including a variety of alternatives to car travel, your company will be better equipped to retain quality staff and increase their job satisfaction.

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Moving goods and services more efficiently is also good for your bottom line. Technical improvements such as engine tune ups and switching to lower carbon fuels, as well as operational changes such as trip reductions and backhauling, can result in cost savings for your company. In addition, initiatives such as developing a telecommuting program at your company can also help you reduce overhead costs (e.g., rent for office space no longer needed).

In this case, what is good for your employees and your bottom line is also good for the environment. Cars and trucks contribute significantly to global climate change by producing greenhouse gases, most importantly carbon dioxide. Vehicle-related pollu-

Cars and trucks contribute significantly to global climate change by producing greenhouse gases, most importantly carbon dioxide.

tants also result in adverse and sometimes fatal human health effects (e.g., respiratory disease), destructive ground level ozone and haze, and water contamination from roadway runoff. Other impacts of automobile use on the environment include the loss of wetlands and habitats to highway construction, and the strain on landfills and hazardous waste facilities from tire

and vehicle parts disposal. Transportation efficiencies in the forms of ridesharing, public transit, biking, walking, and other initiatives can help slow the growth of vehicle travel and reduce the severity of these kinds of environmental problems.

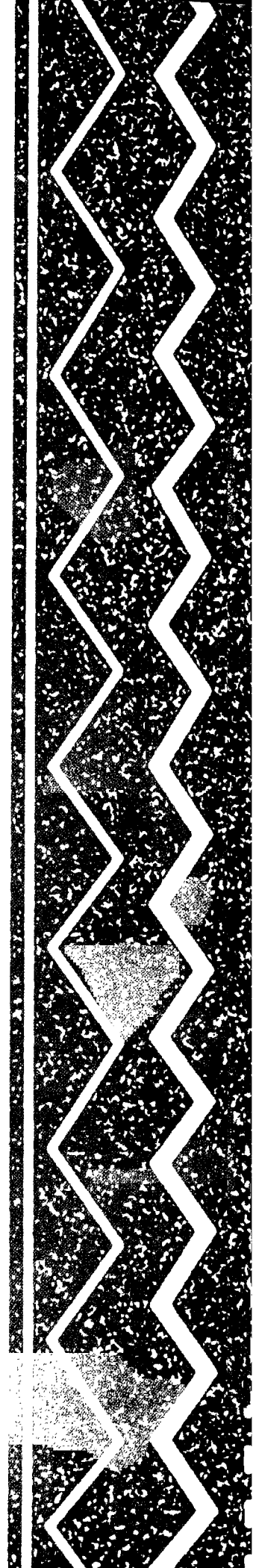
U.S. EPA
OPPTS Chemical Library
401 M St. SW. MC740
Washington, D.C. 20460
(202) 260-3944

Efficiency Roadmap

There are three ways you can put transportation efficiency to work for you:

- ✧ **Getting Employees in the Door** — Offer a flexible employee benefits package to attract and retain high quality professionals in your workforce. Now there is more to offer your prospective employees than just a parking space!
- ✧ **Helping Employees Commute More Efficiently** — Help your employees get to work efficiently and with minimal stress, including offering your employees a “no stress” healthful commuter alternative such as biking, walking, or jogging.
- ✧ **Moving Goods and Services** — Move goods and intermediate products efficiently with fewer trips and using more efficient fuel.

More detailed descriptions of each of these three initiatives are contained in the pages that follow. Keep reading to identify the programs that are right for your company!





Getting Employees in the Door: A Whole New Way to Consider Employee Benefits

As an employer, one way to attract and retain high-quality employees is to offer benefits — such as free or subsidized parking, parking cash-out, or other transportation benefit options. Here are some basic questions to discuss:

What is Parking Cash-Out?

In a parking cash-out program, businesses offer their employees a choice between the free/subsidized parking, and a cash amount similar to what it has cost the employer to provide parking. Employees may continue driving to work, or they may exchange their parking subsidy for cash and buy a transit pass, bicycle supplies, or pay rideshare costs. Any money left over is theirs to keep. The employer benefits by reducing its cost of providing parking, and by giving more attractive and flexible options to employees.

What are the advantages of implementing a parking cash-out program?

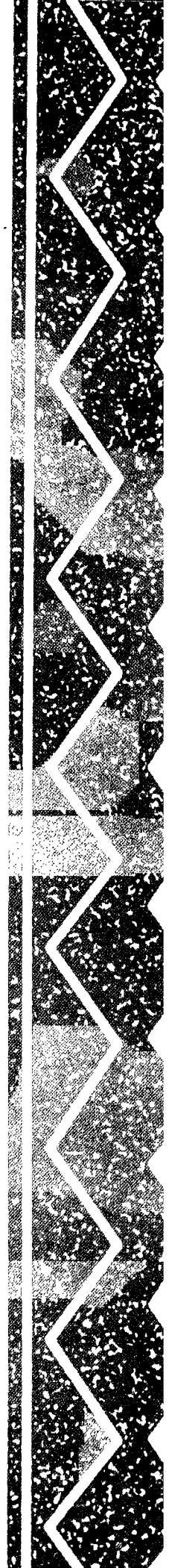
In addition to relieving demand on parking spaces and potentially decreasing rent or lease payments for garage space, parking cash-out, transit benefits, and other employee transportation benefits can be cost-effective ways to broaden commute alternatives. Allowing employees to see their parking subsidy in the form of cash allows them to make more informed commute decisions that better reflect employer costs.


Recent Federal legislation has brought powerful new tools that can dramatically improve the effectiveness of employer commuter transportation programs. These new tools facilitate employers in offering and expanding transit subsidies and other programs that provide employees very significant financial benefits and more freedom in choosing ways of getting to work. Federal laws (especially the Transportation Equity Act for the 21st Century, or TEA-21) have made it easier to offer employees cash or transit passes instead of parking as a benefit, whether given in lieu of or in addition to salary or wages. For more information, contact the Climate Wise Line at (800) 459-WISE, or check the Transportation Partners web site (<http://www.epa.gov/tp>) and click on "Research and Publications."

Getting Employees to Work Efficiently: A Menu of Transportation Options

A parking cash-out program is one example of a flexible benefit that you can offer potential hires. Once on board, it is in the employer's own interest to help its employees get to work in an efficient, less stressful, and more healthful way. What follows are examples of programs employers and governments have used throughout the country in their efforts to reduce inefficient, stressful rush hour travel demand and work trips.

- ✧ **Incentives to Bike, Blade, Run, or Walk to Work.** Businesses can promote healthy, non-motorized modes of travel to their employees by offering shower and locker room facilities and by facilitating free rides home (many cities now offer subsidized Guaranteed Ride Home programs) if their non-car-commuting employees face personal emergencies, darkness, or inclement weather.
- ✧ **Telecommuting.** Allowing employees to work from home reduces the need for daily, peak-hour travel. This may ease traffic congestion and reduce auto mileage for the individuals participating in telecommuting programs.
- ✧ **Compressed/Flexible Work Schedules.** Employers can ease peak hour travel demand by allowing employees to work on flexible schedules (e.g., allowing employees to work ten-hour days four days a week). Congestion can be mitigated, and individuals using the flexible schedule will save time and reduce stress in their daily commute.
- ✧ **Ridesharing.** Carpooling or vanpooling are potentially very effective auto mileage savings strategies because the avoided trips are often long-distance. Ridesharing can be coordinated through a third party, by employers, or through transportation management associations (typically formed by several private organizations).



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- ✧ **Transit Passes.** Employers can provide a pre-tax benefit of up to \$65 per month for their employees (federal legislation has increased this amount to \$100 beginning in 2002). Providing transit passes can be a strong incentive to leave automobiles at home. In addition, working with local transit agencies to promote programs such as Guaranteed Ride Home can make transit even more attractive to employees.
 - ✧ **Proximate Commute/Job Switching.** Employees working in jobs that are interchangeable (e.g., chain retail store clerks or bank tellers), may be amenable to switching job locations with other employees to work closer to their homes. Employers can assist efficient switching by providing a mechanism for communicating job vacancies or potential employee trades.
 - ✧ **Location Efficiency and Development Planning and Pricing.** Locating businesses in areas accessible to multiple modes of transportation is one way to attract professionals who have different commuting preferences and help support innovative transportation benefit programs. Land-use decisions for office and commercial development (e.g., choosing locations for new businesses or branches) ultimately shape transportation patterns and thus strongly influence both congestion and the need for infrastructure — and corresponding commute delays and tax burdens.
 - ✧ **Parking and Leasing Arrangements.** Firms that enter into longer-term parking arrangements or leases limit their flexibility to provide a range of choices to their employees. By making more adaptable arrangements and implementing incentives that encourage employee choice, firms can match parking supply and demand more closely, saving the firm money while giving more flexibility to employees. Firms that own parking space can consider leasing the space to someone else or converting it to a different use.

Moving Goods and Services Efficiently

There is a wide range of options for improving the efficiency of delivery and freight movements and minimizing the environmental impacts from work-related employee trips. By introducing changes in the characteristics of the company fleet and in the way it is maintained and operated, fleet and freight efficiency can be raised, fuel savings achieved, and vehicle emissions lowered.

Technical Improvements

- ✧ **Vehicle Maintenance.** Preventive maintenance, engine tune ups, and timely oil changes can increase vehicle efficiency and reduce unexpected failures. Lower fuel consumption is achieved by ensuring proper tire inflation.
- ✧ **Fuel Options.** Vehicle emissions can be reduced by switching to lower carbon, more environmentally friendly, fuels such as natural gas. Another alternative is the use of electric vehicles that are charged with on-site renewables or "green power."
- ✧ **Purchase of Efficient Vehicles.** Buying the most efficient vehicles when expanding or replacing the fleet can result in significant financial and environmental benefits. Fuel savings also can be achieved with the use of aerodynamic components.
- ✧ **"Climate Neutral" Gasoline or Fuel.** This gasoline/fuel is called "Climate Neutral" because manufacturers invest part of their revenue from its sale to offset the greenhouse gas emissions that result from its use.

Operational Changes

- ✧ **Efficient Vehicle Operation.** Encouraging drivers to accelerate gradually and drive at optimal speeds reduces fuel consumption and vehicle emissions, as well as saves on vehicle maintenance.
- ✧ **Backhauls, Travel Reduction, and Right Sizing.** Vehicles are more efficiently utilized if their travel can be arranged so they are loaded on their return trips. Similarly, schedules can be modified to use vehicles only when it is necessary. Larger vehicles can consolidate several trips, while smaller vehicles can move small loads more efficiently.
- ✧ **Modal Choices.** Rail, barge, or intermodal truck-rail combinations should be considered where possible. Consideration of multiple modes can reduce costs and diversify risks.
- ✧ **Teleconferencing and Videoconferencing.** Conducting "electronic" meetings instead of transporting employees to one location can save time, money, and reduce vehicle emissions.





Corporate Success Stories

These case studies illustrate how companies have put transportation efficiency to work for their employees, their bottom line, and the environment.

AT&T began allowing many of its employees to work from home in the company's Alternative Workplace program, initiated in 1992. Today, approximately 36,000 AT&T managers telecommute at a relatively high average of six days per month. In 1997, AT&T teleworkers reduced carbon dioxide emissions by an estimated 80,000 tons. By implementing telework arrangements, AT&T saves an average of \$3,000 per teleworker annually in real estate and associated costs. Working at home also translates into increased time for the employee. In one AT&T unit, the average teleworker gained almost five weeks per year by eliminating a 50-minute daily commute.

Bank of America has created a unique incentive system that ties the size of financial rewards to the contribution that employees make in reducing commute emissions. Participants earn points based on the number of days they use an alternative commute mode, such as telecommuting, carpools, vanpools, rail, bus, walking, or bicycling. Alternatives that eliminate emissions (e.g., walking or cycling) earn more points than alternatives that reduce emissions (e.g., carpooling or transit). Through an electronic recording system, earned points are translated into dollar values and placed into a personalized MasterCard DebitCard account that can be used at over 14 million locations worldwide for dining, shopping, travel, and entertainment. Employees can opt to earn tax-exempt TransitChecks — vouchers that are redeemable for bus and rail passes. Employees who use an alternative commute mode each day can earn between \$20 and \$60 per month. The collective efforts of the 3,900 employees participating in Bank of America's Employee Alternative Transportation (BEAT) program have reduced vehicle miles traveled by over 10.6 million miles per year.

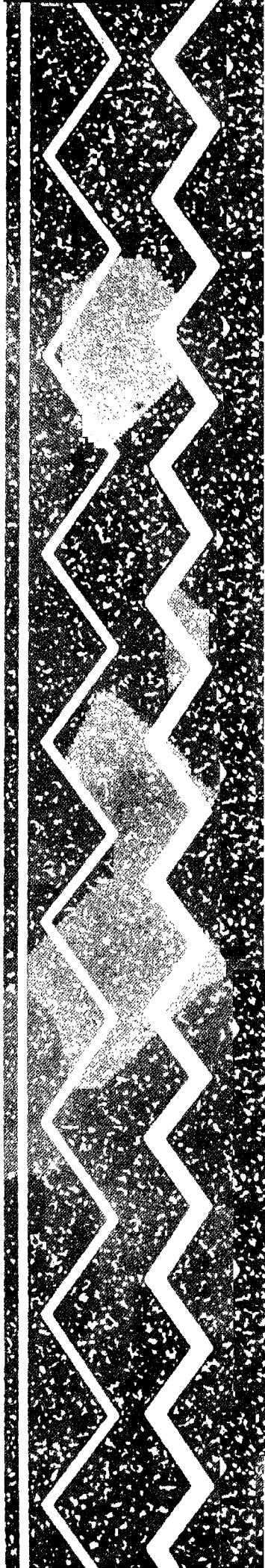
Essential Foods has replaced refrigerated delivery vans with fuel-efficient trucks and "Frigi-top" insulated boxes, saving the gasoline used to power the heavy vans and run the additional refrigeration components. These new light trucks consume about 50 percent less gasoline, save 3,600 gallons of gasoline and diesel fuel and \$4,284 annually, and help reduce CO₂ emissions by 32 metric tons per year.

Corporate Success Stories

Hewlett-Packard Company (HP) has been providing incentives to its employees to choose commute alternatives since the 1970's. Through its "On the Move" U.S.-wide program, HP has provided transportation services to its workers, as well as established policies for allowing them to work from home and to use compressed work schedules (working a full week's hours in fewer days). Transportation services offered to over 53,000 HP employees include: ridematching for employees interested in carpooling; preferential parking for carpoolers and vanpoolers; shower/locker facilities, bike racks, and bike lockers for those who bike or walk to work; and free passes and subsidized fares for public transit.

Quad/Graphics decided to locate its new facility in an existing structure at a "brown-field" site. This keeps jobs in the city and avoids the expense of constructing a new facility. Because the facility is in an urban location, the average commuting distance of each of the facility's 700 employees was reduced by 20 miles less than it otherwise would have been. Each year, this conserves about 160,000 gallons of gasoline, avoids 1,450 metric tons of CO₂ emissions, and saves employees \$180,000. In addition, since 1971, Quad/Graphics has maintained a schedule of 12-hour shifts for its employees. By eliminating an extra shift and thus reducing commute trips, this program led to a reduction of approximately 10,000 tons of CO₂ in 1997.

Stonyfield Farm has developed several programs to reduce or offset carbon emissions. Its transportation measures include changing the scheduling of inbound raw milk to maximize the size of trailers and minimize trips; joining the local transportation management association (TMA) to promote employee carpooling; and running a pilot program to coordinate employee lunch orders. In addition to these and other reduction measures, Stonyfield Farm has implemented an offset program, investing in a reforestation project in Oregon, which will result in CO₂ offsets of approximately 2,000 tons.





Climate Wise Partnership Agreement

Climate Wise is
a partnership between
EPA and U.S. industries,
with support from DOE,
that can help companies
turn energy efficiency
and environmental
performance into
a corporate asset.

Participants agree
to identify and implement
cost-effective energy
efficiency and pollution
prevention measures
that reduce greenhouse
gas emissions and to
annually report on
their reductions.

To get started,
complete this
Partnership Agreement
and mail or fax it to

Climate Wise
c/o ICF Kaiser
Consulting Group
9300 Lee Highway
Fairfax, VA 22031

Fax: (703) 934-3968

As a Partner in the Climate Wise program, _____ (company name)
will identify and implement cost-effective energy efficiency and pollution prevention measures.
As part of our partnership agreement, we will:

- Establish a process for identifying and subsequently implementing cost-effective energy efficiency and pollution prevention actions.
- Submit a *Climate Wise Action Plan* within 6 months. The Plan will describe in detail our Climate Wise commitments and implementation timelines.
- Annually report the result of our actions to EPA and DOE through the Voluntary Reporting of Greenhouse Gases Program.

We also understand that we have the option to annually update and resubmit our Action Plan. This will provide a forum for continuous improvement, benchmarking, reevaluation, and revision while ensuring a flexible approach to meeting our overall emissions reduction targets.

Our Climate Wise contact is _____ (Name) _____ (Title)

He/she can be reached at (____) _____ (Phone) (____) _____ (Fax)

_____ (Signature)	_____ (Date)
_____ (Name in Print)	_____ (Company Name)
_____ (Title)	_____ (Street Address)
	_____ (City, State, Zip)

Climate Wise will provide:

Access to technical resources

Climate Wise will provide technical assistance by connecting your organization with U.S. Federal agencies; trade associations; and state and local energy, pollution prevention, and economic development offices that can help you meet your goals.

Business-to-business exchanges

Climate Wise will give you the opportunity to participate in regional business-to-business exchange workshops to find out how other leading companies have improved their profitability, productivity, and environmental performance.

Positive public recognition

Climate Wise-sponsored national and local signing ceremonies and recognition programs, participant-sponsored media events, and other promotional activities provide an opportunity for you to receive recognition for your achievements.

Access to financial resources

Climate Wise can link your company to financial resources such as Small Business Administration (SBA) guaranteed loans, low-interest buy-downs through state providers, state tax credits, utility programs, and private-sector financing opportunities.

A Climate Wise representative will be contacting you to discuss your enrollment and technical assistance needs. You'll also be receiving a *Climate Wise Opportunities Assessment Guide*. We look forward to working with you.

Please attach any information that is relevant to your Partnership Agreement and/or technical assistance needs. Number of attachments _____. If you've already spoken with a Climate Wise representative, please identify them here. _____

☐ **Transportation Efficiency.** Check the "Transportation Efficiency" box to open the door to information and technical tools that will help your company achieve energy savings, while providing more efficient transportation options for your employees!



Stay Informed!

For more information contact:

The Climate Wise Wise Line:

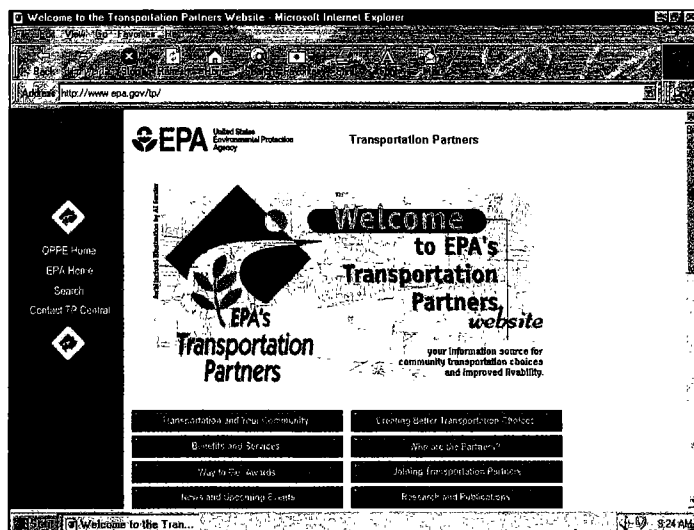
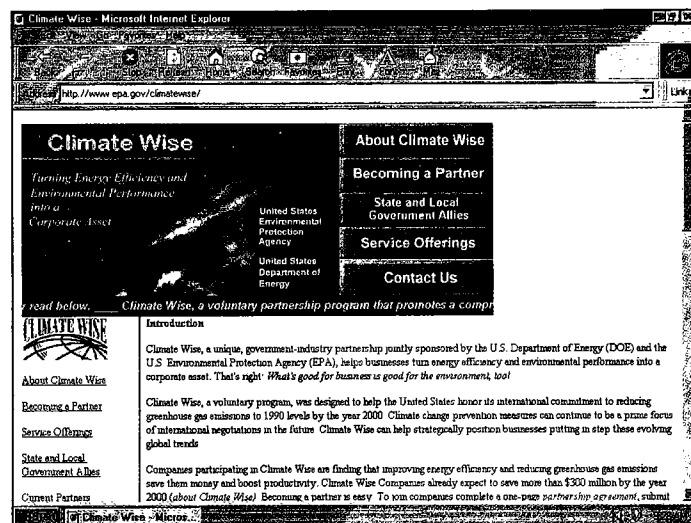
Phone: (800) 459-WISE

Fax: (703) 934-3968

E-mail: WiseLine@ICFKaiser.com

You can also learn more through the Climate Wise and Transportation Partners web sites:

<http://www.epa.gov/climatewise>



<http://www.epa.gov/tp>



United States
Environmental Protection Agency
Office of Policy (2126)
Washington, DC 20460

Official Business
Penalty for Private Use
\$300

We hope that the information in this brochure has provided you with some ideas on how your company can save money, benefit employees, and protect the environment through transportation efficiency. Joining the Climate Wise program is easy. Simply complete the attached Partnership agreement, check the "Transportation Efficiency" box to indicate your interest in these initiatives, and submit the form. By getting involved, you will open the door to information and technical tools that will help your company achieve energy savings, while providing more efficient transportation options for your employees!



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