

BLUE SKYWAYS COLLABORATIVE

WORK PLAN

August 11, 2006





EXECUTIVE SUMMARY

The overarching goal and mission of the Blue Skyways Collaborative (BSC) is to improve the quality of life in North America's Heartland, including the border areas with Canada and Mexico, by reducing air pollution through voluntary collaboration and innovations in fuel and energy use. Objectives envisioned to help achieve this goal include: (1) develop Federal, tri-national, State, and local partnerships, (2) market the Collaborative's message, (3) promote the sharing of new renewable energy technologies and innovations, (4) leverage resources, and (5) implement projects that utilize both proven and innovative technologies for diesel engines, alternative fuels and renewable energy. To execute this mission, six subcommittees were developed to identify priorities, and establish and implement goals. The six subcommittees include: (1) On-Road, (2) Non-Road, (3) Air/Water/Rail, (4) Fuels, (5) Energy, and (6) Communications and Outreach.

The On-Road Subcommittee work plan is highlighted by five projects:

- Encourage idle reduction policies from 25 private and public sector partners
- Increase truck stop electrification sites to 40 by 2008
- Target 50 retailers/shippers to take an On-Road Challenge
- Increase 2007 Clean School Bus funds from \$1.2 million to \$3 million
- Retrofit 100 vehicles on the U.S./Mexico border

Work plan details of the Non-Road Subcommittee entail two major areas of emphasis:

- Decrease diesel emissions from metropolitan area construction projects
- Establish a variety of agriculture sector projects pertaining to biodiesel and agricultural practices to reduce diesel air emissions

Previously successful projects are targeted by the Air/Water/Rail Subcommittee, in addition to new projects such as:

- Voluntary Airport Low Emission project for Houston airports
- "Green Goat" rail project
- An innovative Entry/Exit pre-check project with the Port of Houston Authority
- Several future project opportunities are also highlighted

The Fuels Subcommittee focuses on several project areas:

- Introduction of E85 into the fuel supply in collaborative areas where it does not exist
- Showcasing a biodiesel project within the agriculture community
- Encouraging the use of hybrid vehicles for greater fuel efficiency
- Sharing of information about alternative renewable fuels

Six project areas are identified by the Energy Subcommittee include:

- Funding for energy efficiency loan programs
- Development of GIS-based wind and renewable energy resource maps
- Templates for ground source heat pumps and solar hot water heaters
- Biomass/CAFO/Landfill methane to energy project
- Installation of renewable energy at E85 and truck stop electrification sites
- Facilitation of new wind farms

The Communications and Outreach Subcommittee work plan is highlighted by:

- Development of the BlueSkyways.org website
- Recruitment of 100 BSC Communities
- Establishment of a sponsorship program and marketing of the BSC message



On-Road Subcommittee

The On-Road Subcommittee will facilitate timely implementation of road and highway related projects to improve public health in the collaborative region, plus the border areas with Canada and Mexico. Projects and tasks are focused on participation, strategies, projects and funds to achieve emission reductions from on-road sources.

1. Idle reduction - Network with BSC communities so that a minimum of 25% of the communities are implementing idle reduction regulations or policies by June of 2007

Encourage BSC private and public sector partners to have idle reduction policies. The BSC Outreach subcommittee has a goal to recruit 100 BSC communities, so 25 of these will be encouraged to commit to idle reduction policies/requirements - beyond those that already have existing idle reduction provisions.

Tasks/Milestones

Identify BSC communities with existing idle reduction regulations	July 2006
Identify BSC communities with existing idle reduction policies	July 2006
Target additional BSC communities	Monthly
Identify BSC lead to recruit specific communities	Monthly
Contact/Speak/Meet with target communities	As needed
Confirm new BSC communities with idle reduction policies	Quarterly

Measures of Success/Environmental Results: Number of new communities with idle reduction measures. Environmental results of emissions reduced are to be determined.

Estimated Cost: Minimal - some travel costs to recruit specific communities.

Potential Funding Mechanisms

BSC/EPA/State/Local funds
Other Federal agency efforts
Private sector efforts

Responsibility: On-Road Subcommittee

2. Truck Stop Electrification - Increase truck stop electrification (TSE) sites in the BSC area to 40 by 2008

The On-Road Subcommittee believes TSE to be one of the most attractive and promising activities to reduce diesel emissions from the on-road vehicle sector. The Environmental Protection Agency (EPA) and BSC participants have communicated with suppliers of truck stop idle reduction technologies to help determine a realistic goal for the BSC area. Suppliers tend to target areas and companies with the most revenue generating potential, including areas where there may be other financial contributions (e.g., Department of Transportation – Congestion Mitigation and Air Quality, EPA, state/local funds) to provide incentives and support for installation of additional TSE sites. Feedback from suppliers was that 25 additional TSE sites is a reasonable goal. EPA and BSC continue to communicate with suppliers to promote TSE and to achieve the TSE goal.

In addition, the Texas Transportation Institute (TTI), a member of the BSC and the On-Road Subcommittee, received a \$3 million grant from the EPA SmartWay Transport Partnership to promote reductions in fuel use, costs and air pollution. Under this grant, TTI is working with EPA to develop a national deployment strategy for TSE sites, which targets promising areas for TSE installations and focuses on where and how many TSE sites will likely achieve the most significant local emissions reductions. The report will facilitate progress toward the TSE goal.

Tasks/Milestones

Identify existing TSE sites	6/19/06
Target promising additional TSE companies	Monthly
Identify potential funding assistance	Monthly
Connect interested parties to funding opportunities	Ongoing
Confirm agreements/locations and schedules to install TSE sites	Quarterly

Measures of Success/Environmental Results: Number of additional TSE sites/contracts. Approximately 35 additional TSE sites per year are targeted by 2007, 40 by mid-2008. Environmental results of emissions reduced are to be determined.

Estimated Cost: \$1 million per site x 40 sites = \$40 million (assumes \$20K per lane/50 lanes).

Potential Funding Mechanisms

- BSC/EPA request for proposals
- State/local matching funds for EPA dollars
- Other Federal agency funds
- EPA SmartWay/TTI
- Supplemental Enforcement Projects (SEPs)
- Other State/local funds
- Private sector sponsorships/contributions

Responsibility: On-Road Subcommittee

3. BSC On-Road Challenge - Target 50 retailers/shippers headquartered in the BSC area to take the BSC On-Road Challenge

The On-Road Subcommittee desired to promote the EPA SmartWay Transport Partnership and its fuel cost and emission reduction technology options to companies in the BSC area. To accomplish this result, the “On-Road Challenge” for carriers/shippers was developed. The “On-Road Challenge” is attached at the end of the On-Road work plan.

As current co-chair of the On-Road Subcommittee representing the private transportation sector, Wal-Mart has encouraged their truck and rail carriers to reduce air emissions and overall fuel consumption by participating in both the national EPA SmartWay Transport Partnership and the BSC. The SmartWay program promotes reduced air pollution, by helping trucking companies become more fuel efficient and improve their environmental performance. Through the BSC On-Road Challenge, cargo trucking transport carriers and shippers can sign up for the SmartWay and BSC programs if they agree to integrate diesel emission reduction measures into their freight vehicle fleet operations.

The BSC On-Road Challenge

Tier 1 - Join SmartWay Transport Program within 1-year, and

Tier 2 - As part of the SmartWay program, implement and measure a combination of on-road emissions reduction strategies, including an idle reduction component and installation of truck-related emissions reduction equipment (Target: within 2 years).

Tasks/Milestones

Identify existing SmartWay partners in BSC area	6/19/06
Target additional companies for the BSC On-Road challenge	Ongoing
Identify BSC lead to contact/recruit specific companies	Ongoing
Identify companies that choose to take the BSC On-Road challenge	Monthly
Confirm progress of companies that take the BSC On-Road challenge	Quarterly

Measures of Success/Environmental Results: Number of new SmartWay partners and BSC On-Road Challenge participants. Contact a minimum of 2 companies per month to take the challenge. Environmental results of emissions reduced are to be determined.

Estimated Cost: Minimal - some travel costs to recruit specific companies.

Potential Funding Mechanisms

EPA SmartWay funding/assistance
BSC/EPA/State/Local funds
Other Federal agency efforts
Private sector efforts

Responsibility: BSC members and On-Road Subcommittee

4. Clean School Bus - Increase 2007 Clean School Bus funds from \$1.2 million to \$3 million by leveraging funds from other agencies and partners

Identify and share information on other school bus retrofit funding sources and opportunities.

The goals of national, regional, state and local clean school bus efforts are to reduce children's exposure to diesel exhaust and the amount of air pollution created by diesel engine school buses.

- 24 million children ride the school bus every day.
- On average, students spend an hour and a half each weekday in a school bus.
- School buses drive more than 4 billion miles each year.

School buses are the safest way for children to get to school. However, pollution from diesel vehicles has health implications for everyone, especially children. By working together, we can reduce pollution from public school buses making sure that school buses are also a very clean way for children to get to school. Clean school bus efforts are bringing together partners from business, education, transportation, and public health organizations to work toward these goals:

- Encouraging policies and practices to eliminate unnecessary school bus idling.
- Upgrading (retrofitting) buses that will remain in the fleet with better emission control technologies and/or fueling them with cleaner fuels.
- Replacing the oldest buses in fleets with new, less polluting buses.

Tasks/Milestones

Report potential funding source for school bus retrofit/replacements	Monthly
Connect interested parties to funding opportunities	Ongoing
Report progress toward Clean School Bus funding goal	Monthly

Measures of Success/Environmental Results: Amount of funding increased for Clean School Bus efforts. Environmental results of emissions reduced are to be determined.

Estimated Cost: \$3 million.

Potential Funding Mechanisms

- State/Local/matching funds
- Supplemental Environmental Projects for school bus retrofits/new buses
- Private sector sponsorships/contributions
- Other Federal agency funds

Responsibility: BSC members, local agencies, school districts, and On-Road Subcommittee

5. U.S./Mexico Border - Retrofit 100 vehicles on the U.S./Mexico border

Because the BSC is a tri-national coalition of industry and federal, state and local governments committed to improving air quality across the BSC area including the border areas with Canada and Mexico, EPA and other BSC members have relationships and funding associated with international efforts that can be leveraged to reduce diesel emissions in communities along the U.S./Mexico border. EPA Region 6 has funding allocated to border environmental efforts and is cooperating with the national EPA SmartWay Transport Partnership as well as other BSC members, including the Texas Transportation Institute, who specialize in international efforts to work with Mexico to identify, fund and conduct diesel emission reduction projects on the border.

EPA and other BSC members are building relationships to promote and achieve diesel emissions reductions on the U.S./Canada border with Minnesota and to address emissions related to international transport issues through the Blue Skyways Collaborative area to and from Canada.

Tasks/Milestones

Announce EPA Region 6 U.S./Mexico border funds	Summer 2006
Report progress of TTI/SmartWay on U.S./Mexico border	Monthly
Report actual/potential funding for border projects	Monthly

Connect interested parties to funding opportunities

Monthly

Target Timeline: Retrofit 50 vehicles by mid-2007 and 50 more by mid-2008.

Measures of Success/Environmental Results: Number of retrofits on US/Mexico border and reporting on other border diesel emissions reduction efforts. Environmental results of emissions reduced are to be determined.

Estimated Cost: Average cost per retrofit is about \$5,000 x 100 = \$50,0000.

Potential Funding Mechanisms

EPA U.S./Mexico Border funds

EPA SmartWay/TTI funding

State funds

Other Federal agency funds

Private sector sponsorships/contributions

Responsibility: On-Road Subcommittee

On-Road Subcommittee Attachment

Retailer/Shipper On-Road Challenge

Blue Skyways Collaborative Retailer and commits to:

- Join both the Blue Skyways and SmartWay programs.
- Determine the percentage of freight shipped by SmartWay Transport Partnership carriers
- Increase the percentage of freight shipped by SmartWay Transport Partnership carriers to at least 50%
- Measure the greenhouse gas emissions of their freight facility operations using EPA's FLEET Performance Model for Shippers
- Identify a goal to reduce the greenhouse gas emissions from freight facility operations
- Develop an action plan detailing how each of these goals will be achieved
- Report progress toward achieving each of these goals to EPA annually

In return, EPA commits to:

- Increase public awareness of your participation in the Blue Skyways and SmartWay Transport Partnership through national and regional events, articles, and awards. Use of Blue Skyways logo on company brochures, letters, etc.
- Provide technical assistance to help you quantify the emissions from your shipping operations
- Assist you in developing and achieving your goals, working to address challenges, create incentives
- Recognize retailers who become Blue Skyways Partners and of their commitment to utilize shippers/carriers who are SmartWay Partners.
- Increase public awareness of Partner participation in the Blue Skyways and SmartWay Transport Partnership by listing Partners on the EPA SmartWay Transport Partnership Web site and in related educational, promotional, and media materials.
- Publicize the actual performance data of Partners only with a Partner's express permission, except as otherwise required by law.
- Assist Partners in achieving goals by working to address challenges, create incentives, and provide technical assistance and support (subject to appropriations).

Blue Skyways Challenge for On-Road Carriers

Blue Skyways is challenging all carriers headquartered or with regional terminals in the Blue Skyways Collaborative area to join the SmartWay program and at a minimum complete one project from the **Engine Retrofit Group**, and one project from the **Truck Related Strategies** list. Other proposals from carriers will also be considered.

Engine Retrofit Group

- Install certified Diesel Particulate Filter System, or
- Diesel multistage filter system, or
- Install certified Diesel Oxidation Catalyst

- Re-power pre-1998 engines with 2004 or newer engines

Truck Related Strategies

Idle Reduction Strategies

- Install truck electrification at headquartered or regional carrier terminals to minimize idling of fleet.
- Install mobile Auxiliary Power Units (APU) as idle reduction technology.
- For trucks without APUs, commit to using Truck Stop Electrification (TSE) with signed contract for on-road truck or fleet.
- Membership in Fast and Secure Trade (FAST) on U.S./Mexico/Canada border.

Aerodynamic Retrofit Group:

- Aerodynamic tractor
- Integrated cab/roof fairing/cab extenders
- Cab side fairing reducing trailer gap
- Cab side fairing covering the fuel tanks
- Cab front air dam bumper
- Aerodynamic mirrors
- Single wide tires

Mixed Retrofit

- Advanced lubrication (synthetics)
- Side skirts on trailers
- Trailer gap reducers/gap seals
- 38-inch or less trailer gap
- Replace filters at proper intervals and retain maintenance records.
- Single wide tires

Fuels Selection

- Switch to biodiesel or biodiesel blend, ethanol/diesel blend, or
- Switch to natural gas (CNG or LNG), propane, or
- Commitment for accelerated/voluntary use of ultra low sulfur diesel fuel.

Incentives

- Press opportunities
- Website, newsletter, etc. acknowledgement
- Use of Blue Skyways logo on company brochures, letters, etc.

Non-Road Subcommittee

The Non-Road Subcommittee will facilitate timely implementation of construction and agriculture diesel emission reduction projects to improve public health in the collaborative region, plus the border areas with Canada and Mexico. Projects and tasks are focused on implementation of retrofit/re-power of construction equipment used in construction projects, and biofuel education and use in both the construction and agriculture sectors.

1. Metropolitan Area Construction Projects Emissions Reduction - Initiate and/or complete development of at least 3 requests for proposals for model communities/cities on construction projects that use funding to retrofit, re-power, rebuild or replace construction equipment and/or use biodiesel fuels to reduce diesel emissions

Tasks/Milestones (placed in approximate order of which should occur first to last)

1. Provide outreach information, including examples of financial incentives, on programs that help encourage clean contractors and develop building contracts that achieve diesel emissions reductions, like the Texas Emissions Reduction Program (TERP), to collaborative area Departments of Transportation (DOT), Environmental Agencies, and Metropolitan Planning Organizations (MPO).

[April through August 2006]

2. Accumulate data on the impacts of diesel emissions from the construction sector on the quality of air.

[April through June 2006]

3. Identify an inventory of contractor fleet needs on equipment that could be retrofitted, re-powered, rebuilt, or replaced in different areas of the collaborative.

[May 2006 through May 2007]

4. Initiate and/or complete development of at least 3 request for proposals for model communities/cities on construction projects that use funding to retrofit, re-power, rebuild, or replace construction equipment and/or use biodiesel fuels to reduce air toxics.

[April 2006 through February 2008]

5. Identify potential funding sources and leverage distributors and manufacturers for the 3 projects.

[April 2006 through February 2008]

6. Model the financial impacts on a small, medium, and large fleet level and provide information to contractors and communities about the results of the projects and financial models.

[April 2006 through February 2008]

7. Reach all of the State DOT's and Environmental Agencies, and at least 20 MPO's with the outreach information on TERP, the Clean Contractor Program, and other model contracts.

[April 2006 through February 2008]

8. Reach at least 9 major contractors with information on BSC and the possibilities of construction demonstration projects and recruit them to become BSC Partners.

[April 2006 through February 2008]

9. Develop a list of contractor equipment retrofit, re-power, rebuild, or replacement needs to help focus manufacturer efforts on the highest priority equipment.

[April 2006 through February 2008]

10. Provide model financial impacts for contractors of small, medium and large sizes to show the feasibility of conducting fleet retrofits, re-powers, rebuilds, or replacements, or in using biodiesel fuel. Then encourage competitive bidding for "green construction" practices.

[April 2006 through February 2008]

Measures of Success/Environmental Results: Amount of NO_x, VOC, PM, CO₂, and air toxics avoided by the retrofitted, re-powered, rebuilt, or replaced equipment and/or the use of biodiesel fuels in the three model communities/cities.

Estimated Cost: Unknown.

Potential Funding Mechanisms

EPA National Clean Diesel Grants

FHWA CMAQ

DOE Clean Cities

TERP

Responsibility: Non-Road Subcommittee.

2. Establish a Variety of Agriculture Sector Projects/Incentives to Reduce Diesel Related Emissions

Tasks/Milestones

1. Provide outreach information on the BSC to agricultural groups such as Farm Bureaus, State Agriculture Departments, USDA, state/local agencies, agriculture co-op associations, major agriculture product transporters, crop associations, sustainable agriculture groups, etc.

[May through October 2006]

2. Develop data on the impacts of the agriculture sector on air quality.

[May through August 2006]

3. Identify and work with appropriate agriculture contacts on the Non-Road Subcommittee and begin promoting BSC community and partnership opportunities.
[August 2006]
4. Develop data on the many projects and behavior changes that are reducing the amount of diesel emissions such as the production and use of biodiesel, no-till, and precision farming.
[May through August 2006]
5. Identify potential funding sources, especially from the USDA and agricultural organizations for demonstration projects.
[May 2006 through February 2008]
6. Leverage resources to fund at least three agriculture related diesel emission reduction demonstration projects that could include:
 - a. Provision and expansion of outreach of the fuel savings and emission reduction of no-till farming.
[May 2006 through February 2008]
 - b. Work with agriculture machinery manufacturers and dealerships to use biodiesel.
[May 2006 through February 2008]
 - c. Work with agriculture machinery dealers to offer incentives for engine Tier level upgrades (when major engine work is being done on a piece of machinery) or towards the cost of replacing machinery with new equipment.
[May 2006 through February 2008]
 - d. Work on biofuels promotion with the Fuels Subcommittee.
[May 2006 through February 2008]
7. Reach at least four major agriculture related groups in the BSC area with outreach information on funding, current projects, and future BSC project possibilities.
[May 2006 through February 2008]
8. Reach at least two crop production groups in the BSC area with no-till outreach information.
[May 2006 through February 2008]
9. Identify one agriculture machinery manufacturer to use biodiesel fuel on-site in at least two of their plant locations.
[May 2006 through February 2008]
10. Identify one agriculture machinery dealership to offer incentives to offset the costs for engine upgrade or machinery replacement.
[May 2006 through February 2008]

Measures of Success/Environmental Results: Amount of NO_x, VOC, PM, CO₂, and air toxics avoided through three agriculture related projects.

Estimated Cost: Unknown.

Potential Funding Mechanisms

EPA National Clean Diesel Grants

USDA/NRCS - Environmental Quality Incentive Program, Conservation Security Program, and Conservation Innovation Grants

USDA/Rural Development – business programs

Responsibility: BSC members and Non-Road Subcommittee.

Air/Water/Rail Subcommittee

The Air/Water/Rail Subcommittee will facilitate timely implementation of air, water, and rail diesel emissions reduction projects to improve public health in the collaborative region, plus the border areas with Canada and Mexico. Projects and tasks are focused on identifying previously successful projects that can be transferred to other airports, marine ports and railroads.

1. Model Projects - Develop a list of previously successful, cost effective projects (with cost and emissions reductions) that can be used as example projects for promotion and duplication for up to 2 facilities per BSC state per year

Tasks/Milestones

1. Obtain TERP information from the Texas Council on Environmental Quality (TCEQ) and forklift replacement data from the Texas Rail Road Commission (RRC). Information received April – June 2006. Clarification of some data has been requested.
2. Develop model projects for each sector. Draft projects are completed. Additional information has been requested.

Measures of Success/Environmental Results: The model projects will include environmental measures that will allow easier calculation of emissions reductions from similar types of projects. A menu of the model projects was presented to ExxonMobil on May 2, 2006 with initial reaction that the projects were informative and they may implement a marine re-power project based on the information that was presented.

Estimated Cost: None.

Potential Funding Mechanisms: None.

Responsibility: Barry Feldman, EPA; Brian Christian, TCEQ; Heather Ball, RRC.

2. Voluntary Airport Low Emission Project – Facilitate an increase in utilization of FAA’s VALE funds for diesel emissions reduction and renewable energy projects at eligible airports

Utilize the Federal Aviation Administration’s (FAA) Voluntary Airport Low Emission (VALE) Program for hybrid vehicle acquisition at George Bush Intercontinental (IAH) and Hobby (HOU) Airports in Houston, Texas.

Tasks/Milestones: The Houston Airport System has applied to the FAA for VALE funding to acquire seven 2005 Toyota Prius hybrid electric vehicles. Four of these vehicles are for use at IAH and three will be located at HOU. The FAA has received a May 17, 2006 letter providing Air Emission Reduction Credit assurances from TCEQ and has begun processing the grant application. The Houston Airport System intends to acquire the vehicles as soon as possible upon receipt of the grant.

Measures of Success/Environmental Results: Three of the new vehicles will replace a 1991 Chevrolet Lumina, a 1997 Ford Taurus, and a 1998 Ford Taurus from the airport fleets. The other four vehicles will be added to the existing fleet in place of traditionally fueled vehicles. Use of these vehicles versus traditional-fueled vehicles will reduce emissions by approximately 0.139 tons of NOx and 0.038 tons of HC over the 10-year life of the vehicles.

Estimated Cost: The total cost of the project is \$145,471. The airports will fund \$101,138 and have requested \$46,333 in VALE funds.

Funding Mechanism: Houston Airport System and VALE.

Responsibility

Houston Contact: Jerry L. Crenshaw, Airport Superintendent
City of Houston - Houston Airport System, Operations Services Div.
16930 J. F. Kennedy Boulevard
Houston, Texas 77032
Phone (281) 233-1683

FAA Contact: Ben Guttery, Senior Program Manager
Texas Airports Development Office
Airports Division, Federal Aviation Administration
2601 Meacham Boulevard
Fort Worth, Texas 76137-4298
Phone (817) 222-5650

3. Green Goat Project - Dow Chemical and RailServe will convert two older diesel locomotives into 2000 horsepower “Green Goat” switch engines in 2007

Fuel consumption will be reduced by 30 to 50%, and diesel emissions will also be reduced. This is a pending project for BSC until official confirmation is obtained from Dow Chemical and RailServe.

Tasks/Milestones

RailServe to obtain a letter of support from Dow Chemical	Completed
Obtain funding from TERP	Completed
Rebuild old locomotives and place into service	March 2007

Measures of Success/Environmental Results: Projected reduction of 200+ tons per year of NOx, and reductions in PM and hydrocarbon.

Estimated Cost: The cost is estimated at \$2.3 million.

Funding Mechanism: TERP.

Responsibility: DOW Chemical and RailServe.

4. Implement an Entry/Exit Pre-check and Inspection Facility at the Port of Houston's Barbours Cut Container Terminal (and utilize as model at other ports)

In an effort to improve gate operations and efficiencies, the Port of Houston Authority (PHA) has developed a state-of-the art gate processing system for the Barbours Cut Container Terminal (BCT). The Entry/Exit Pre-check and Inspection Facility will take the 30-year old terminal from a paper documentation process to a computerized system and process trucks in two phases, data collection and inspection/documentation.

Tasks/Milestones: The construction phase of this project will start in July 2006 and be complete in August 2007. The new entry/exit gates will become operational prior to the end of construction, as the terminal will remain open and fully operational during construction.

Measures of Success/Environmental Results: The current gate process for a truck is approximately 22 minutes through the system, while the new process will take approximately 6 minutes. The terminal will process the trucks more efficiently resulting in less idle time and a reduction of NO_x, VOC, and PM. Based on throughput and emission estimates for 2006 at BCT, this project at full build out will provide an approximate reduction of 70% of all emissions evaluated, NO_x, VOC, and PM.

Estimated Cost: The total cost of this project is estimated at \$21.3 million.

Funding mechanism: PHA will solely fund this project.

Responsibility:

Dana Blume, Environmental Program Coordinator
Port of Houston Authority
111 East Loop North
Houston, Texas 77098
713-670-2805
dblume@poha.com

5. Future Project Opportunities

Identify opportunities to work with facilities that can apply emission reduction strategies to their air/water/rail operations. In some cases the Air/Water/Rail Subcommittee has been working with larger ports and railroads while neglecting private industry that if made aware of available opportunities to reduce emissions may participate in the BSC.

1. Facilitation of an ExxonMobil Marine Re-power Project. Exxon has agreed to contribute \$250,000 toward diesel reduction Supplemental Environmental Projects (SEP) and to consider re-powering their push/tugboats with less polluting engines. Exxon will submit a SEP plan to EPA for approval in December 2006.

2. By 2007, work with Chevron Phillips to consolidate 3 rail yards into one to reduce moving and storage costs. The consolidation will also reduce idling emissions from switch locomotives, as they will be able to more efficiently move tanker cars. Learning of this project early on gave the BSC an opportunity to talk to Chevron about using hybrid switch engines that could reduce diesel emissions by 100 tons per year of NOx per engine. While this project is still in the engineering phase, the BSC will continue to work with Chevron to implement reduction technologies. The estimated time frame is 2007.

3. The goal for Intermodal Railway Facilities is to develop 1 diesel emissions reduction project in 2007 and 2 in 2008 to achieve emissions reductions. Extended truck idling is related to facilities handling intermodal containers, which include; marine containers, rail containers, and truck-rail operations (loading a truck trailer directly onto a railcar). Extended wait times can develop when transferring intermodal containers due to the room required to stage the containers and containerized units are expensive, “just in time” deliveries requiring a fast turnover. There is an opportunity for emission reductions at intermodal facilities by addressing both truck and rail traffic. The Air/Water/Rail Subcommittee will pick 2-3 facilities and visit them to learn about their operation. Recommendations would then be made based on the results of the visit and presented to the intermodal facility.

4. Develop an Emission Reduction Project at the Port of Brownsville with a goal to work with the Port to identify at least one project that the Port could implement in 2007 either through independent funding or border funding. The Port of Brownsville apparently does not have an environmental employee and it has been difficult to determine what kind of emission reduction projects may have been implemented or planned. The Port’s location on the border would allow them to apply for EPA border funds, competed each year, if a suitable project were developed.

5. Develop an inventory of maritime ships that call on the major ports in the BSC area with a goal to obtain funding for a marine inventory and/or encourage owner/operators to implement emission reductions on marine vessels that routinely call on U.S. ports. The inventory would include the ports (both public and private) called on in the U.S., where they stopped, and who contracted/owned them. The inventory would serve to identify shipping patterns along the Gulf Coast so the BSC would know who accounts for the largest share of marine traffic and therefore who should be contacted to work towards reduced emissions. It will also identify other areas of the country and BSC that should join forces to more effectively implement emission reduction strategies and to seek increased EPA headquarters funding. TCEQ is interested in developing an inventory that identifies vessels that remain in or routinely visit the Houston region. Potentially, this review could also identify other ports where these ships routinely call. The TCEQ inventory can serve as a guide to collect the same type of information at other ports.

6. Develop an inventory of idle reduction projects and major rail hubs where idle reduction technology could be applied. The inventory would be used as an outreach tool to show those not using idle reduction measures the cost effectiveness of reducing emissions by using one of the available idle reduction techniques. The use of Auxiliary Power Units (a smaller power unit) can reduce “main engine” usage and reduce idling/operating emissions. The Air/Water/Rail Subcommittee will also promote the use of Smart Idle technology to turn off railroad engines when not in use. Both of these technologies are very cost effective and can often justify the cost of the equipment through reduced fuel usage and maintained costs.

Fuels Subcommittee

The Fuels Subcommittee will facilitate timely implementation of alternative, renewable fuels programs in the Collaborative region. Programs are focused on reducing diesel emissions as well as expanding the use of renewable fuels along the I-35 corridor for both light and heavy-duty vehicles and non-road equipment.

1. Introduce E85 into the Fuel Supply in Areas Where it Does Not Exist

This project will expand E85 (Ethanol 85%) into the National Fuel Supply by using the I-35 corridor as a demonstration area for implementation. The project will showcase how E85 can be effectively distributed to existing fueling stations along a major interstate highway. I-35, the NAFTA Highway, runs through six of the Collaborative's ten states from Canada to Mexico. E85's reduced volatility leads to reduced VOC emissions. Use of E85 is also linked to reductions in greenhouse gases and toxic air pollutants. We will use experience in Texas to create a template for a process to implement E85 into areas where this fuel is not a part of the fuel supply.

Tasks/Milestones

1. Resolve perceived safety issues with the use of ethanol-blended gasoline, especially E85.
[Ongoing]
2. Conduct a Stakeholder meeting, to assess interest and establish the potential market for E85 in the Austin area.
[May 16, 2006]
3. Identify funding sources for Texas projects.
[May 2006]
4. Add E85 fueling capability to existing fueling facilities. H-E-B, a large grocery chain in Texas, will add tanks and pumps to 5 existing fueling stations in the central and southern parts of Texas beginning this summer. Upon completion of these sites, H-E-B will add 5 or 6 more sites. Eventually, H-E-B hopes to have E85 at most of its 100+ fueling station sites in Texas.
[Summer 2006]
5. Build new E85 facility(s). Large grocery chains are planning to make E85 fueling stations a part of new store construction.
[Ongoing]
6. Provide temporary refueling facilities (skid packs). A propane company in Monterrey, Mexico, is interested in putting skid pack E85 refueling equipment in a parking lot.
[Undetermined]
7. Assess use of publicly accessible E85 facilities.
[Quarterly after first facility is operational]

8. Initiate discussions with stakeholders in the Tulsa area that are interested in bringing E85 to the Tulsa area.

[Completed]

- Work with EPA's Office of Transportation and Air Quality to remove the requirement for E85 dispensers to use Stage II Vapor Recovery in moderate and above nonattainment areas. On-going.
- U.S. Army E-85 Challenge. Make E85 available outside each of its installations in the Blue Skyways Collaborative states. Timeline: Assess the need for additional E85 facilities and evaluate how to approach initiating new facilities by the end of 2006. Then set a new timeline.

Measures of Success/Environmental Results: At a minimum, 5 fueling sites will be converted, constructed, or provided with a portable fueling kit. Number of fueling sites will be tracked. Environmental results will be calculated based on usage data obtained quarterly from the company, if available, or estimates of emission reductions based on the number of flex fuel vehicles in the area of each fueling site.

EPA's Office of Air Quality Planning and Standards will need to issue a policy memo that exempts E85 dispensers in nonattainment areas from Stage II Vapor Recovery requirements. No measurable emission changes are anticipated from this policy change.

The E85 challenge from the Army will initially measure its success by simply comparing the list of Army facilities to the list of E85 fueling sites. We will set new goals once the evaluation is complete.

Estimated Cost: Funding for the first 5 stations will come from a combination of grant funds and H-E-B funds. Application has been made for Department of Energy (DOE) grant funds for between \$150,000 and \$200,000. The estimated cost per site will range from \$100,000 to \$130,000 for installation of new equipment at existing sites. A skid pack costs about \$50,000. Funding for the Army E85 Challenge will come from these and any other conventional sources.

Funding Mechanism: DOE Clean Cities, H-E-B, and other large grocery chains.

Responsibility: The project leads for all Austin tasks are the Curtis Donaldson, National Vehicle Coalition; Stacy Neef, Austin Clean Cities; and Don Lewis, Texas Department of Transportation; with assistance from Sandra Rennie, EPA Region 6. The company has several contacts that can be reached through the leads listed here.

- In Tulsa, the lead is Nancy Graham, Indian Nations Council of Governments.
- Stage II Vapor Recovery: Rebecca While, OTAQ, and Sandra Rennie, Region 6.
- The U.S. Army E85 Challenge will be conducted by Ron Diehl, U.S. Army, the National Ethanol Vehicle Coalition, and Sandra Rennie, EPA Region 6.

2. Showcase a Biodiesel Project in the Agriculture Community

This project will promote biodiesel to the BSC states by showcasing a biodiesel project in the agriculture community. This project will be implemented in cooperation with the Non-Road Subcommittee. Potential projects could demonstrate how a farmer can grow a feedstock product, process the feedstock to produce biodiesel, or use it in his farm equipment.

Tasks/Milestones

1. Use outreach documents developed by Communications and Outreach Subcommittee or EPA Regions 6 and 7, and coordinate with the Non-Road Subcommittee to provide information on the BSC and opportunities for fuels and non-road equipment diesel emission reduction projects.
[Initiated June 2006]
2. Identify inventory of existing/potential projects in agriculture sector concurrent with outreach.
3. Identify and communicate potential funding sources for projects/demonstration projects.
4. Expand agriculture sector participation on Fuels and Non-Road Subcommittees and begin promoting community and partnership opportunities. Continue expanding subcommittee membership and provide information on community and partnership opportunities when available.
5. Provide data on fuels benefits to be gained from agriculture sector use of renewable fuels.
6. Leverage resources to fund agriculture related renewable fuels projects resulting in diesel emission reductions.
7. Encourage states that have not adopted ASTM D6751 to adopt it as the standard for B100 (100% biodiesel) in their laws or regulations until a national biodiesel fuel standard is established. This will promote uniformity in the biodiesel fuel supply.
8. Work with interested farmers who grow a biodiesel fuel source to also manufacture biodiesel for their own use, and sell it to neighbor farms.

Measures of Success/Environmental Results: Reach at least four major agriculture related groups in each state with outreach information on funding, current projects and future project opportunities for renewable fuels and non-road diesel emission reductions. Start one biodiesel demonstration project. Biodiesel use can reduce hydrocarbons by 20-67%, PM by 12-47%, and toxics by 13-90%.

Get at least one biodiesel demonstration project underway.

Amount of pollutants reduced through agriculture sector projects. Biodiesel use can reduce Hydrocarbons by 20-67%, Particulates by 12-47%, and Toxics by 13-90%.

Estimated Cost: Unknown.

Potential Funding Mechanisms

EPA

USDA/NRCS and Rural Development

DOE

State agencies (Agriculture/Commerce/Environment)

Responsibility: Fuels and Non-Road Subcommittees.

3. Encourage the use of hybrid vehicles for greater fuel efficiency.

Hybrid technology improves vehicle fuel efficiency, thereby reducing emissions, through changes to the drive-train rather than to the engine or the fuel being combusted. Electric hybrids are the most common hybrids currently available. EPA scientists have recently announced the success of hydraulic hybrid technology, which is more cost-effective and gets more emission reductions than other hybrid technologies.

Tasks/Milestones

Work with EPA's Office of Transportation and Air Quality to speed acceptance of hydraulic hybrid technology in the marketplace. In coordination with OTAQ, craft a strategy to accomplish this task. Encourage the City of Dallas to focus on using this technology for its waste hauler trucks.

Find opportunities to promote electric hybrid technology that may fall outside the scope of the Clean Cities programs.

Measures of Success / Environmental Results

Using today's diesel engine technology, the hydraulic hybrid is expected to improve fuel economy by 70% over today's diesel vehicles. Greenhouse gases are reduced by 40%. Success of this objective is measured by the documentation of a strategy for gaining acceptance of this technology in the marketplace. Timeline: by the end of 2006.

The task associated with promoting electric hybrids will be accomplished through outreach in appropriate public forums. On-going.

Estimated Cost

Cost of promoting hydraulic hybrids is unknown. Suitable funding mechanisms might be the TERP program or a venture capitalist.

Cost of promoting electric hybrids is minimal and may not need outside funding.

Responsibility

Responsibility for the hydraulic hybrid technology promotion will be divided between Sandra Rennie (Fuels), Ruben Casso (On-road), and Jim Yarbrough (Energy Efficiency). We will work with Charles Gray (OTAQ), and perhaps representatives from Eaton Industries. In addition we will be identifying persons associated with a funding source. Every member of the Blue Skyways Collaborative will encourage the use of electric hybrids.

4. Share Information on Alternative Renewable Fuels

Education about renewable fuels will be a large part of the acceptance process for integrating these fuels into the marketplace. Not only will the environmental benefit of renewable fuels be publicized, but also the economic costs and benefits will be provided to producers, distributors, and end users. The BSC has already partnered with EPA's Refueling America initiative that focuses on encouraging the use of E85 and biodiesel.

Tasks/Milestones

1. Make at least one site visit to each of the BSC states. At a minimum, all visits will include the State Energy Offices.
[September 2006]
2. Other site visits may be to MPO's or other government, non-government, or quasi-government organizations. These will continue as interest develops and site visits can be arranged in clusters to maximize travel opportunities.
[Ongoing]
3. Develop outreach documents in cooperation with the Communications and Outreach Subcommittee.
[As needed]
4. Participate in the first BSC E85 fueling station grand opening event in Texas.
[Summer 2006]
5. Work with the EPA Office of Transportation and Air Quality to update Fact Sheets on all alternative fuels, with an emphasis on the renewable fuels. The Fact Sheets will contain information on the benefits as well as the emissions from these fuels as they compare to gasoline or diesel.
[Drafts expected by end of July 2006]
6. Work with state Departments of Transportation, Clean Cities programs, the National Ethanol Vehicle Coalition, and the National Biodiesel Board to get E-85 and biodiesel, as well as other alternative fuel options, posted on Interstate Highway signs.
[Will set timeline goals after making initial contacts with DOTs]
7. Network with General Services Administration (GSA) to consider alternatively fueled vehicles for federal fleets whenever possible.
[On-going]

8. Encourage GPS software companies that are providers for vehicle manufacturers to include locations of E85 and biodiesel fueling stations in their databases.
[The National Ethanol Vehicle Coalition will set up a timeline for this task]

Measures of Success/Environmental Results: Number of visits and type of organization visited will be tracked along with pertinent contact information. Environmental results will be measured by the activities generated under the other projects. The H-E-B E85 station grand opening in Killeen, TX will take place on August 15, 16, or 17. All 5 locations will have grand opening ceremonies during this time.

Sandra Rennie is coordinating activities with Rebecca White (OTAQ) to get the Fact Sheets completed in a timely way. Links to the fact sheets will be available on the Fuels Subcommittee Website once they are finalized. Sandra will also coordinate with the Texas Department of Transportation and the National Ethanol Vehicle Coalition regarding labeling of road signs. Kenlon Johannes is working with the Kansas DOT and the National Biodiesel Board on the sign-labeling project as well. Sandra has already been working with Region 6 Management Division on which type of vehicles the Region Office should be requesting. GSA is working under Presidential mandates to use flex-fuel vehicles as required by EPCACT 2005.

Sandra will contact the National Ethanol Vehicle Coalition to have them work with the GPS software manufacturers to include renewable fueling site locations in their on-board system databases.

Estimated Cost: Unknown.

Potential Funding Mechanisms: Funding for all outreach material and travel will come from BSC funds administered by CenSARA, and some EPA Regional office funds. Funding for all non-local travel will come from the BSC travel funds administered by CenSARA, and some Region Office travel funds. Funding for the outreach materials is covered by BSC funding.

Responsibility: Fuels, Non-Road, and Communications and Outreach Subcommittees. EPA Region 7 staff will coordinate with the Outreach and Communications Subcommittee to develop the appropriate outreach documents. Other responsibilities are outlined in Part B. of this Project.

5. Outreach to agriculture sector

Tasks/Milestones

1. Use outreach documents developed by Outreach and Communications Subcommittee or R6/R7 coordinated with Non-Road Subcommittee provide information on Blue Skyways Collaborative and opportunities for fuels and non-road equipment diesel emission reduction projects.

[Initiate August 2006]

2. Identify inventory of existing/potential projects in agriculture sector.

[Concurrent with outreach]

3. Identify and communicate potential funding sources for projects/demonstration projects.

4. Expand agriculture sector participation on Fuels and Non-Road Subcommittees and begin promoting community and partnership opportunities (e.g., 25 by 25 and RARE). Continue expanding subcommittee membership and provide information on community and partnership opportunities when available.

5. Provide statistics on fuels benefits to be gained from agriculture sector use of renewable fuels. OTAQ is working with National Biodiesel Board on biodiesel emissions evaluation.

6. Leverage resources to fund agriculture related renewable fuels projects resulting in diesel emission reductions.

7. Expand consideration of alternative fuels beyond ethanol and biodiesel. Suggestions include: Network with General Services Administration (GSA) to look at alternative fueled vehicles; work with state DOTs and Clean Cities coordinators for alternative fuel road/highway signs; Address Phase II vapor recovery at biodiesel refueling stations in nonattainment areas; outreach information on benefits of all alternative fuels; and encourage GPS software (on-board or other) to show alternative fueling stations.

8. EPA, National Biodiesel Board and others are participating on the ASTM committee to develop biodiesel standards. This effort is proceeding. National Biodiesel Board has requested support in identifying biodiesel standard information for BSC states.

Measures of Success/Environmental Results

Reach at least four major agriculture related groups in each state with outreach information on funding, current projects and future project opportunities for renewable fuels and non-road diesel emission reductions.

Get at least one biodiesel demonstration project underway.

Amount of pollutants reduced through agriculture sector projects.

Estimated Cost: Cost unknown

Potential Funding Mechanisms: EPA, USDA NRCS and USDA Rural Development, DOE, State Agencies (Agriculture/Commerce/Environment)

Responsibility: Non-Road and Fuels Subcommittees and agriculture groups.

Energy Subcommittee

The Energy Subcommittee will facilitate timely implementation of energy efficiency, energy conservation, and renewable energy projects to improve public health in the collaborative region, plus the border areas with Canada and Mexico. Projects and tasks are focused on reducing diesel emissions in conjunction with renewable energy and energy efficiency.

1. Direct Funding to Existing State Energy Efficiency Loan Programs

Most BSC states have low-cost loan programs for their municipalities, school districts, and other government-affiliated institutions. In some cases these are oversubscribed, and additional funding is needed to ensure meritorious projects get implemented.

Tasks/Milestones

Discuss potential assistance program with CenSARA and State Energy Offices	Begin May 1
Identify specific projects in the State queues	May 15-August 15
Identify specific, additional funds for projects at EPA, DOE, and others	Begin May 1
Work with States to complete applications for funds:	
EPA border funding	Appx. June 15
EPA special projects	Appx. June 15
DOE funding	As identified
Other EPA funds	As identified
BSC partner assistance	As identified

Measures of Success/Environmental Results: Number of project applications filed by States. Number of State projects funded. Total kWh and gas usage reduced or avoided and tons/year of NOx, VOC, PM, and CO2 reduced or avoided.

Estimated Cost: Unknown.

Potential Funding Mechanisms

EPA - multiple sources
DOE
BSC Partners

Responsibility: Energy Efficiency Measures Emphasis Group of the Energy Subcommittee

2. Development of GIS-based Wind Resources and Renewable Energy maps

States have varying numbers of renewable resources catalogued, but databases that integrate the various renewable resources and supply ancillary information such as locations of potential customers, transmission lines, and potential environmental hazards are missing. This project will attempt to integrate these databases into a customer-friendly GIS format. The current EPA Region 6 waste-to-energy pilot project will provide valuable information.

Tasks/Milestones

1. Hold initial conference calls with EPA OAQPS and National Renewable Energy Laboratory (NREL) to determine level of interest and current tools.

[Completed April 11, 2006]

2. Discuss with BSC States whether their wind resources/renewable energy information is GIS-compatible.

[September 1, 2006]

3. Finalize with BSC States, wind power developers and NREL the highest priority data that is GIS-compatible to include in the database; confirm that State-specific databases are preferable, rather than a CenSARA-wide database (include NREL and EPA OAQPS on calls).

[September 30, 2006]

4. Discuss with EPA OAQPS, NREL, and other potential partners their roles in organizing the States' data into GIS databases. If these partners can perform the work, translation of data into GIS systems will begin (if a contractor will be required, a Statement of Work and funding will be necessary, which probably could be completed by December 31, 2006).

[October 15, 2006]

5. Hold call/meeting to demonstrate and discuss EPA Region 6 waste-to-energy GIS tool and determine interest level for this in other States and localities (NREL, EPA LMOP and OAQPS, CenSARA States, EPA Regions 6 and 7).

[October 15, 2006]

6. If waste-to-energy GIS tool is desirable for other States/localities, choose the next project area within the BSC.

[November 30, 2006]

7. If positive on desirability, hold calls with EPA, DOE, and other groups to identify possible funding mechanism.

[December 15, 2006]

8. Apply for funding, secure funding, and begin effort.

[Begin January 2007]

Measures of Success/Environmental Results: Number of renewable energy projects facilitated as a result of GIS database. Number of tons/year of NO_x, VOC, PM, and CO₂ reduced or avoided.

Estimated Cost: To be determined.

Potential Funding Mechanisms

DOE
EPA Landfill Methane Outreach Program, OPEI
DOD
BSC Partners

Responsibility: Landfill/CAFO/Biomass Methane Emphasis Group of Energy Subcommittee, with participation by the Wind Power/Solar Power Emphasis Group.

3. Develop Templates for Ground Source Heat Pumps and Solar Hot Water Heaters

EPA has had considerable success in effecting SEPs among violators when specific technical information about a potential project is presented. Ground source heat pumps and solar hot water heaters are highly cost-effective alternatives to conventional systems. Providing templates for use by agency environmental enforcement staffs in BSC states and EPA Regions 6 and 7 is expected to significantly increase the number of such energy-efficient systems installed and more fully demonstrate these technologies.

Tasks/Milestones

Write proposal for funding	Completed February
Circulate proposal to EPA RGI, OAR, OAP, and OAPQS	March-May
Secure funding	ASAP
Select contractor and contact States about specific applications	After funding secured
Contractor finishes templates	6 months after funded
Templates shared with enforcement personnel for SEPs in all States, and EPA Regions 6 and 7	2 months after templates completed

Measures of Success/Environmental Results: Number of templates to which a violator agrees to in a Supplemental Environmental Project. Number of tons/year of NOx, VOC, PM, and CO2 reduced or avoided.

Estimated Cost: \$60,000.

Potential Funding mechanisms

EPA – multiple sources
BSC Partners

Responsibility: Energy Efficiency Emphasis Group of Energy Subcommittee.

4. Effect of Biomass/CAFO/Landfill Methane Projects

Methane capture from biomass/CAFO/landfill sites can provide fuel for nearby industry or fuel to run operations at the host facility or, when refined, gas to be sold for other use. BSC states have many additional site opportunities for methane capture. This effort will prioritize locations and find funding to leverage implementation of such methane projects.

Tasks/Milestones

1. Hold meeting or calls through CenSARA with waste-to-energy staff in EPA Regions 6 and 7, States, and locals, to identify best locations of possible producers and potential customers. Include participation by NREL and USDA.

[July 31, 2006]

2. Develop a 1-page information sheet for local citizens and media to explain projects and provide contacts on some previously completed projects.

[August 15, 2006]

3. CenSARA, EPA Regions 6 and 7, States, and locals prioritize projects based on meetings/calls, and select leads/champions for selected projects.

[September 30, 2006]

4. Project leads/champions prepare technical Statements of Work for BSC assistance (expected assistance will include, but not be limited to, items such as technical consulting hours for those considering projects, money for meetings/conferences, demonstration project funds, personnel to track and push projects ahead).

[September 30, 2006]

5. EPA Regions 6 and 7, with partners, identify funding sources for prioritized projects (public, private sources).

[October 31, 2006]

6. Applicants make applications, receive funding, and start projects.

[April 2007]

Measures of Success/Environmental Results: Number of projects funded. Amount of grid power (kWh) or purchased gas avoided by burning captured methane. For grid power avoided, amount of NO_x, VOC, PM, and CO₂ emissions avoided or reduced.

Estimated Cost: Price of individual projects is unknown, but likely less than \$50,000 per project.

Possible Funding Mechanisms

DOD

DOE

EPA – multiple sources

Responsibility: Landfill/CAFO/Biomass Methane Emphasis Group of Energy Subcommittee.

5. Install Renewable Energy in E85/TSE Stations

E85 and TSE stations are expected to greatly expand in BSC states in order to provide alternative fuels and truck idle reduction, respectively. It may be very cost-effective for many of these new locations, particularly in rural areas, to employ renewable energy (e.g., wind and/or solar) to power these facilities. The object of this project is to prioritize and find funding sources to effect renewable power at appropriate E85 and TSE sites.

Tasks/Milestones

1. Meet with On-Road and Fuels Subcommittees and EPA OTAQ to determine power requirements and costs to supply energy to E85 and TSE stations.

[July 31, 2006]

2. Seek out utility companies that would support purchase of power from small businesses that establish wind or solar power for E85 pumps and TSEs (include NREL).

[July 15, 2006]

3. Draft business plan to share with potential funding sources and small businesses.

[October 15, 2006]

4. Identify potential funding sources to link up small businesses or for demonstration project (possibilities include USDA-Rural Development, State loan programs, DOE, and EPA OPEI).

[October 15, 2006]

5. Outreach with small businesses that are potentially in economically viable areas for renewable energy for E85/TSEs, introducing these opportunities.

[November 30, 2006]

6. For projects that get underway, track them and provide guidance as appropriate to ensure they are put in place.

[Ongoing]

Measures of Success/Environmental Results: Amount of NO_x, VOC, PM, and CO₂ avoided by not using grid power.

Estimated Cost: Unknown.

Potential Funding Sources

USDA-Rural Development

State loan programs

DOE

EPA Office of Policy, Economics, and Innovation

BSC Partners

Responsibility: Wind Power/Solar Power Emphasis Group of Energy Subcommittee.

6. Facilitate Development of New Wind farms

Windpower potential is huge in the BSC area, with commercial finance companies and investor-owned utilities actively engaged in implementing large-scale wind farms. However, there is a demand for additional power from the community-scale and individual-scale (farmer/rancher). The purpose of this project is to prioritize the best such sites in the BSC area and to provide technical assistance and funding. The successful deployment of these smaller-scale wind farms will further reduce demand on conventional power plants.

Tasks/Milestones

1. Contribute to EPA OAP Interagency Agreement with NREL to get hours from NREL to pinpoint best opportunities for community-scale and smaller-scale wind turbines in BSC area.
[June 15, 2006]
2. Work with NREL, and other partners, such as Mid-American Energy (pledged to buy 40 MW of smaller-scale wind power), to pinpoint locations with highest potential for success for new community-level and smaller-scale wind farms.
[September 30, 2006]
3. Evaluate opportunities for use of tribal grant money for wind farm construction on tribal lands in the BSC area (with NREL).
[September 30, 2006]
4. Work with DOD and General Services Administration (GSA) to evaluate opportunities for federal contracting for electrical power with small wind farms, and prioritize areas with partners such as NREL and others.
[October 15, 2006]
5. Purchase technical hours from a consultant for community and smaller-scale (farmer) applicants to development technically proficient applications for aid to purchase wind turbines.
[November 15, 2006]
6. Hold directed workshops, perhaps in partnerships with DOE, USDA, DOD, NREL, and Mid-American Energy to interest applicants in those geographic areas deemed as potentially successful.
[January 2007]
7. Based on above, develop templates for wind farms for SEP funding; share with EPA enforcement personnel.
[March 31, 2007]
8. Track and advise on projects that are implemented.
[Ongoing]

Measures of Success/Environmental Results: Number of applications filed using wind data from BSC consultants. Number of wind turbines funded and completed. Amount of NOx, VOC, PM, and CO2 reduced or avoided.

Estimated Cost: Approximately \$80,000 for combination of NREL and technical consultant hours.

Possible Funding Mechanisms

EPA – multiple sources

DOE

BSC Partners

Responsibility: Wind Power/Solar Power Emphasis Group of Energy Subcommittee.

7. Capitalize on Developing Opportunities

Currently, developing opportunities include green power purchases, hydrogen fuel cells, and establishing commercial-government financing mechanisms. The object of this project is to take advantage of emerging opportunities to reduce demand on conventional electrical power systems. Green power purchases are becoming more cost-effective and popular among commercial firms, and the recent 2005 Energy Policy Act should encourage U.S. federal facilities to consider green power purchases. Niche applications of hydrogen fuel cells are already cost-effective and can be piloted through SEPs. Establishing partnerships with the private financing sector may enable an expansion of the Energy Service Contracting (ESCO) model to more broadly finance alternative energy implementation.

Tasks/Milestones

1. Sponsor international energy efficiency/renewable energy finance workshop in El Paso, including opportunities for Clean Development Mechanism financing of projects in Mexico (funded with EPA FY2005 U.S.-Mexico border funds).

[Scheduled for May 24, 2006]

2. Contact GSA about possibilities of partnering to promote green power purchases or direct purchase of renewable power by federal agencies and pursue this if practicable (e.g., workshops).

[September 1, 2006]

3. Obtain results from Houston Advanced Research Center (HARC) on applications of small-scale fuel cells in the Houston area (with option of pursuing possible partnership on use of fuel cells in auxiliary power units on trucks).

[October 1, 2006]

4. If practicable, hold workshops or meetings with federal agencies and GSA to promote green power purchases or direct purchase of renewable energy.

[October 1, 2006]

5. Share fuel cell template results with BSC states and EPA Regions 6 and 7 air enforcement personnel for SEP possibilities.

[November 15, 2006]

6. Hold workshops with critical State staffs and NREL to share effective ways to combine public financing with private financing for State energy efficiency/renewable energy programs for schools and municipalities.

[April 15, 2007]

Measures of Success/Environmental Results: Number of fuel cell templates that a violator agrees to with a SEP. Number of green power purchases facilitated for federal agencies. Number of new or modified State energy financing programs initiated. Number of energy efficiency/renewable energy projects initiated in northern Mexico as a consequence of workshops. Number of tons/year of NOx, VOC, PM, and CO2 reduced or avoided.

Estimated Cost: \$30,000 for HARC fuel cell project (already funded by EPA-RGI funds). Funding is needed for green power conferences and State energy financing workshops.

Potential Funding Sources:

EPA – Multiple Sources

DOE

DOD

GSA

BSC Partners

Responsibility: Hydrogen Fuel Cells/Green Power Purchase Emphasis Group of Energy Subcommittee and Energy Efficiency Measures Emphasis Group of Energy Subcommittee.

Communications and Outreach Subcommittee

Communication and marketing is key to success of any program. The BSC Communication and Outreach Subcommittee was established to facilitate promotion of the overarching Collaborative goal and to facilitate needs of the five individual sector subcommittees. The BSC is made up of committee members, partners, communities, and sponsors. Partners can be individual businesses, school districts or other entities voluntarily implementing or sponsoring projects to reduce air emissions beyond regulatory requirements. Communities, including cities, counties and university campuses, contribute to reduced air emissions through projects or legislation.

1. Develop Blue Skyway Website by July 2006

The Communications and Outreach Subcommittee will work with a contractor to establish a BSC website. The website will be hosted through CenSARA. The site will include general information about the BSC including applications to become collaborative communities, partners and sponsors. The website will feature a home page that will include a “What is Blue Skyways Collaborative?” section and a mission statement. The links will take users to a contacts page with information how to reach the BSC Outreach Coordinator and local contacts for each state. Visitors to the site can fill out partner and community applications. Information from those applications will be sent directly to the outreach coordinator. A link will be devoted to recognition of current BSC partners, communities and sponsors.

Other website features include: (1) Press releases highlighting member activities will be available on a “news” link, (2) A calendar of BSC meetings and speaking engagements will be posted to keep members and subcommittee members up to date, (3) Reports on progress from each of the six collaborative committees will be available, (4) One page with links to the CenSARA website and the Environmental Protection Agency website, (5) A clearinghouse for technical information along with links to funding opportunities will be available, and (6) As a special service to BSC members, automatic send-outs of notices or new items will be sent directly to individual partners, communities and sponsors. Members will also receive special, direct mailing updates on EPA and local government requests for proposals.

Tasks/Milestones

Write and send out a request for proposals to create website The request will be a set aside for minority or woman owned business.	April 3
Proposals due and review process begins	April 17
Committee hears candidate proposals and awards a contractor	May
Coordinator and review committee work with contractor to determine what is included on the website	May/June
Mock website ready for committee review	June
Draft online website completed	June
Website draft presented to the Task Force for comment	June
Website up and running	July
Keep website updated on requests for proposals and other funding opportunities for members	Ongoing
Update calendar and press information	Ongoing

Measures of Success/Environmental Results: The website will affect the number of people informed about the BSC. This will be evident in the number of new applicants, especially those who fill out partner and community applications directly from the site. Visits to and downloads from the website will be tracked, along with BSC media attention through a newspaper clipping service.

Estimated Cost: The website should cost between \$5,000 and \$8,000 to create and implement.

Potential Funding Mechanisms: The funds will come directly from the EPA Region 6 and Region 7 BSC grant. Website support has also been offered by Wal-Mart.

Responsibility: Communications and Outreach Subcommittee.

2. Sign on 100 BSC Communities for Emission Reduction Projects by June 2007

A. Create Application Forms

The Communications and Outreach Subcommittee will create application forms for those interested in becoming BSC communities, partners or sponsors. The forms will describe the eligibility of potential members. The application will outline the incentives available for BSC entities, including but not limited to decals for fleets involved in projects, flags, highway signs, and media attention. The forms will have a list of categories for projects separating out Highway Vehicles (On-Road), Equipment (Non-Road), Fuels, Air/Water/Rail Transportation, and Energy along with definitions of each.

Suggestions will be included concerning the types of projects considered for inclusion as a BSC community, partner, or sponsor. Applications will outline the review process. The forms will state guidelines for projects, including the dates a project must be completed and the necessity of a project to go above and beyond regulatory requirements.

Applicants will fill out a section of the forms that includes information concerning the chosen projects. The forms will have a section for applicants to include contact information, a project description, the category a project will fall under, the potential air pollution reduction, a time line and where they heard about the BSC. Corporate sponsorship applications will include a section where sponsors can specify a targeted project. Sponsorship funds from different sources can be pooled to apply towards larger projects. Each application will include a return address and BSC personnel contact information.

Tasks/Milestones

Determine forms needed – community, partner, and sponsor and define each – community, partner and sponsor	March
Draft forms	March
Submit forms to committee for questions, comments, and approval	April
Ensure drafts are reviewed by EPA attorneys	April/May
Make application forms available to the public via informational	May

CDs, paper copies, and the BSC website

Measures of Success/Environmental Results: Not applicable.

Estimated Cost: Costs include hours spent drafting the forms and copies of the application forms. CDs created to include application data area \$1 each, but forms on BSC website are no cost.

Potential Funding Mechanisms

CenSARA

Responsibility: Communications and Outreach Subcommittee.

B. Develop Incentives for BSC Partners and Communities

The Communications and Outreach Subcommittee will provide incentives for partners and communities. Incentives will include BSC logo items. Decals will be provided for corporate or government fleets deemed by the Communications and Outreach Subcommittee as BSC project partners. The decals for trucks will be window decals or bumper stickers with the BSC insignia. Signs, plaques, or certificates will be handed out to BSC Communities. These will designate the community as a partner because of participation in a pollution reduction project that exceeds regulatory requirements. Use of the BSC logo for letterhead and advertising will be available to qualifying members. An annual recognition ceremony is being considered to offer awards for partners and communities.

Retailers partnering with the BSC may offer incentives to other members. For example, car companies can offer discounts on hybrid vehicles. Members will have access to a network of funding opportunities. Along with corporate connections, each partner, community, and sponsor will be notified as EPA and local requests for proposals are issued. Other notices of opportunities will be sent directly to members.

The BSC will recognize partners, sponsors, and communities on the website and in materials sent to the media. The website will contain a regularly updated all-inclusive list of members. When each entity joins, a press release/event will be sent out to local print, radio, and television media and throughout the BSC area. Members will receive a quarterly newsletter containing updates on the progress of the group and individual communities and partners and financial grant opportunities. Along with general news, the BSC Coordinator will research and write newsletter feature articles on handpicked entities each quarter.

Tasks/Milestones

Decide what types of incentives would be beneficial to businesses and communities interested in partnership. Gather input from corporate committee members concerning what they want from partnership.	March
Research incentives – determine price, availability and feasibility	April

Create graphics to use on bumper stickers and signs	May
Begin distributing incentives to communities, sponsors and partners	May/June
Research and write first newsletter	June
Seek Communications and Outreach Subcommittee approval before mailing the newsletter. Send graphics to committee members for approval	Ongoing
Identify and target retail opportunities	Ongoing

Measures of Success/Environmental Results: Not applicable.

Estimated Cost: Costs include hours spent creating graphics and BSC Outreach Coordinator time. Aluminum BSC community highway signs will cost \$1,600 for 10, window decals and press materials are variable. Media contact lists are \$500. Costs are variable for news distribution services.

Potential Funding Mechanisms

CenSARA

Responsibility: Communications and Outreach Subcommittee.

C. Reach Out to Communities/Partners to Sign Up for BSC

The BSC will hold meetings and conferences throughout the BSC area to promote emission-reducing technology. A media campaign will be launched to introduce the BSC to each state. An initial Kick-Off meeting will be held to announce the formation of the BSC. The meeting will include a press event introducing the collaborative to local and national media. Subsequent meetings, including a Task Force meeting in June 2006, will have media components. Talks with State Air Directors will be held to ensure participation from each state. Meetings with congressional representatives will be held to provide national attention to the BSC.

A media campaign will include a news release along with a media kit sent to all major press outlets in the BSC area. The campaign will be launched one state at a time to allow personnel to meet demand for more information and requests for speaking engagements. BSC representatives will be trained to form a speakers' bureau. These members will use identical presentations to introduce the collaborative to potential partners and communities.

Conferences will give potential communities and partners a chance to better understand new emission reducing technology. Pollution control retail representatives will have opportunities to sell their products and promote cleaner air. Conferences will allow networking and sharing of ideas to determine what will work for each future BSC member. BSC brochures will be created to coordinate with the style of the website. General information pamphlets will be available along with specific brochures requested by other subcommittees. The Communications and Outreach Subcommittee will coordinate with other subcommittees to determine all of the collaborative's outreach needs. Brochures, press attention, speaking engagements, and other subcommittee-specific outreach materials will be arranged through the Communications and Outreach Subcommittee.

Tasks/Milestones

Initial meeting and BSC launched	February
Planning begins for June meeting	March
Brochure designs requested along with website design	April
Contractor hired for brochures and website design	May
Speakers' bureau will be created to meet speaking engagement needs (10, 20, 30 and 50 minute presentations will be created to allow individuals in each state to publicize the BSC message)	May
Media campaign launched	May
Coordinate with subcommittees to determine outreach needs	May
Encourage Task Force members to each hold 5 BSC related press events	Ongoing
Speaking engagements requested and arranged	Ongoing
Congressional and State Air Directors meetings arranged and attended by BSC representatives	Ongoing
Follow-up with the communities, partners, and congressional and state air directors two or three weeks after meetings to ensure participation	Ongoing
Brochure design completed and ready for use/possibly ordered (Orders taken from subcommittees on topic-specific brochures)	June
Additional meetings and conferences scheduled	Ongoing

Measures of Success/Environmental Results: The number of attendees at conferences and meetings will determine success. The number of speaker requests will verify a successful media campaign. More communities and businesses will become interested in the BSC and become members. Success on the congressional and air director level will be measured by the amount of funding that is directed towards all areas. A key marker will be the number of communities, partners, and sponsors who join the BSC. The Communications and Outreach Subcommittee goal is to incorporate 100 BSC communities by June 2007. Tons of emissions reduced will be determined.

Estimated Cost: Total meeting costs will be approximately \$82,000. Brochures will cost \$500 to be designed and \$600 to print 500. CDs for media campaign will cost roughly \$1 each to produce.

Potential Funding Mechanisms

CenSARA

Responsibility: BSC members and Communications and Outreach Subcommittee.

D. Establish Sponsorship Program

While individual projects are encouraged, some businesses and communities will not be capable of reducing emissions. Those members will be offered a chance to become BSC Sponsors. Sponsors will be allowed to earmark their contributions towards projects that will affect air quality improvement in their own communities or choose for the funds to be pooled with resources from federal, state, and other sponsors for even bigger projects. The committee will research and maintain a list of potential projects for sponsors to reduce air emissions. The cost of each project will be provided as examples to potential sponsors. Wherever possible, the chosen project should pertain to the sponsor's field of business. Funding will be channeled through the CenSARA office. A contribution will be sent to the office and CenSARA will issue awards to project organizers. Sponsors will be eligible for the same incentives given to BSC partners and communities.

Tasks/Milestones

Sponsorship application forms created		April
Forms reviewed by EPA attorneys	May	
Establish a fiscal system to route funds through CenSARA		May
Organize an incentive program for sponsors		May
Determine hours worked by CenSARA Executive Director and bill the private (non-government) funds accordingly		Ongoing
Distribute funds to emission-reducing projects		Ongoing

Measures of Success/Environmental Results: Success will be determined by the amount of sponsorship money raised and channeled back into projects. Tons of emissions reduced will vary based on projects.

Estimated Cost: CenSARA Executive Director time. Time spent by CenSARA accountant.

Potential Funding Mechanisms

BSC Sponsors

Responsibility: CenSARA.

3. Develop a System to Coordinate and Track Press Exposure and Emission Reductions

To determine the effectiveness of outreach efforts, the Communications and Outreach Subcommittee will develop a system to track and coordinate BSC press coverage. The BSC will contract with a newspaper clipping service to receive BSC related articles from the BSC area. Keywords for the service will be used to capture the maximum number of related articles. Electronic and paper copies of the newspaper articles will be housed at the CenSARA offices. Members of the collaborative will be asked to keep the coordinator informed about ongoing projects in their states. Websites, including EPA and state air programs sites, will be monitored. Partner and community applications will be monitored and evaluated on a routine basis to verify emission reductions. A tracking form for decal use will be developed to identify/track specific activities. Monitor collaborative projects and air quality to ensure intended results are reached.

Tasks/Milestones

Clipping services will be researched and compared	April
A list of keywords will be identified for newspaper clippings (The list could include words like BSC, biodiesel, ethanol, retrofit, emissions, etc)	April
The clipping service will be implemented	May
Review number and quality of clips and adjust keywords accordingly	Ongoing
Use data gathered for more targeted media relations	Ongoing
Monitor application forms and track emission reduction projects	Ongoing
Coordinate with air monitoring entities to track emission reduction	Ongoing

Measures of Success/Environmental Results: Success of other outreach projects is determined by evidence of newspaper clippings. Keywords for the clipping service will be manipulated based on number of clippings received. Tons of emissions reduced will be determined.

Estimated Cost: The clipping service costs roughly \$60 per month for the keyword search in all newspapers in the BSC area and \$0.70 for each article that is clipped and mailed.

Potential Funding Mechanisms

CenSARA

Responsibility: BSC Outreach Coordinator and all other BSC members to keep the coordinator informed of any new developments or projects

4. Develop and Implement a Strategy in Coordination with BSC Subcommittees to Obtain a Significant Increase in Funding for BSC Projects

To promote greater air emission reduction, the collaborative must find financial incentives for potential partners and communities. Funding sources include the EPA, private contributors, and other federal, state, and local government programs. Charitable foundations are another source of funding for BSC members. The Communications and Outreach Subcommittee will research available grants from charitable foundations and report back to committees, partners, sponsors, and communities. The BSC will develop strategies that result in a significant increase in funding for BSC projects that benefit attainment as well as non-attainment areas. While federal funds often are directed towards non-attainment areas, the BSC will work to make financial resources available to projects in attainment areas. The Communications and Outreach Subcommittee will distribute funding opportunity information to partners, communities, and other subcommittees. Automatic notices will be sent from the BSC website to members regarding requests for proposals and other funding sources.

Tasks/Milestones

Conduct targeted meetings and calls in regard to existing funding mechanisms	Ongoing
Identify new sources of funding through research and networking (Working with members of each subcommittee will determine connections for grant sources)	Ongoing
Send a mail out to potential sources including charitable foundations	Ongoing
Establish a system for distributing funding information	Ongoing
Provide request for proposals to BSC communities and partners	Ongoing

Measures of Success/Environmental Results: Success will be determined by the amount of increased funds and the number of additional projects completed. Tons of emissions reduced will be determined.

Estimated Cost: Conference calls and member time spent on research and communication.

Potential Funding Mechanisms: Not applicable.

Responsibility: Communications and Outreach Subcommittee.