

**PROPOSAL  
STATE OF FLORIDA**

2004 STATE ENERGY PROGRAM NOTICE  
SPECIAL PROJECTS FINANCIAL ASSISTANCE  
DE-PS26-04NT43068-00  
CLEAN CITIES COALITION SUPPORT CC-01D

**SPACE COAST CLEAN CITIES COALITION SUPPORT**  
FSEC-PR-04-040, February 10, 2004

Federal Funding applied for: \$20,000  
FSEC Cost Share: \$ 20,000  
End Date: May 31, 2005  
Congressional Districts: 8,15

This project will provide funding to support National and local Clean Cities Program goals for Space Coast Clean Cities Coalition. The Coalition organizes, promotes, and directs local alternative fuel vehicle (AFV) activities in east central Florida. Some of the activities the coalition conducts are Advancing the AFV Choice events, organize and host stakeholder meetings, hold public education and outreach campaigns, develop training programs on AFVs, and develop fund-raising strategies and training materials for a financially sustainable coalition while facilitation the sale of AFVs.

Submitted to:  
**Florida Energy Office**  
2555 Shumard Oak Boulevard  
Tallahassee, Florida 32399-2100

Submitted by:  
**University of Central Florida**  
Office of Sponsored Research  
4000 Central Florida Blvd.  
Orlando, Florida 32816-0150  
Contractual Contact: Mary Stanley  
Phone (407) 823-2836, Fax (407) 823-3299  
mstanley@mail.ucf.edu  
Budgetary Contact: Mary Huggins  
Phone (407) 638-1480, Fax (407) 638 - 1010  
mary@fsec.ucf.edu  
Technical Contact: William Young, Project Director  
Phone (407) 638-1443, Fax (407) 638-1010  
young@fsec.ucf.edu

**STATE OF FLORIDA PROPOSAL  
DE-PS26-04NT42068-00  
STATE ENERGY PROGRAM 01D CLEAN CITIES COALITION SUPPORT  
SPACE COAST CLEAN CITIES COALITION SUPPORT  
Florida Solar Energy Center/UCF  
FSEC-PR-04-040**

**1.0 TECHNICAL SUMMARY**

The University of Central Florida/Florida Solar Energy Center (FSEC) is pleased to submit this proposal to the U.S. Department of Energy (DOE) in response to the program solicitation number DE-PS26-04NT42068-00. This proposal provides an answer to the need for support of Space Coast Clean Cities Coalition under the Special Projects section of the State Energy Program for 2004, Program Category 01D titled "Clean Cities Coalition Support"

The Florida Solar Energy Center (FSEC) is well qualified to implement the Clean Cities Coalition Support program objective to "provide organize, motivate and staff to direct and sustain local Clean Cities program activities for the Florida Space Coast Coalition". In 1997, FSEC joined the U.S. DOE Clean Cities program and formed the Florida Space Coast Clean Cities Coalition for east central Florida. On October 1, 1999, the Coalition was designated and authorized as the 75th Clean Cities Coalition under the administration of FSEC, under which it continues operation.

The overall efforts of this project will be to facilitate the sales of alternative fuel vehicles by interacting with prospective fleet customers and AFV dealers. This will be accomplished by

- organizing and holding "Advancing the AFV Choice" events
- holding public education and outreach campaigns
- organizing and hosting stakeholder meetings
- developing legislative strategies
- developing and promoting training programs on maintenance of AFV's
- developing fund raising strategies for coalition sustainability and
- writing grant proposals for the Space Coast Coalition.

This funding will continue the progress made in implementing AFVs into local industry and government fleets. Participation in the Six Cities program has promoted implementation within the General Services Administration as well as with the general public. The Clean Fuels Florida Advisory Board has published recommendations for State and local government that are in process of implementation. The Coalition has published a Financial Sustainable Plan that is being implemented to fund future efforts of the coalition. An Education and Outreach Plan is being implemented which completes development of training tools, educational materials and course curricula on maintenance and operations of AFV and corresponding infrastructure.

The benefits of continued funding of the Coalition will be realized when these programs and plans are fully implemented. The momentum started by these key activities will accomplish the needed performance goal of increased purchase of AFVs greater than 17% per year. These efforts will also result in reduction of vehicle emissions and gasoline and diesel fuel consumption in our Coalition area.

**STATE OF FLORIDA PROPOSAL**  
**DE-PS26-04NT42068-00**  
**STATE ENERGY PROGRAM 01D CLEAN CITIES COALITION SUPPORT**  
**SPACE COAST CLEAN CITIES COALITION SUPPORT**  
**Florida Solar Energy Center/UCF**  
**FSEC-PR-04-040**

**2.0 TECHNICAL NARRATIVE**

The University of Central Florida/Florida Solar Energy Center (FSEC) is pleased to submit this proposal to the U.S. Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy (EERE) in response to the program solicitation number DE-PS26-04NT42068-00. This proposal provides a plan to meet the need for support of Space Coast Clean Cities Coalition under the Special Projects section of the State Energy Program for 2004 for the Program Category 01D titled "Clean Cities Coalition Support".

**2.1 Introduction**

The Florida Solar Energy Center is well qualified to implement the Clean Cities Coalition Support program objective to provide organization, motivation and staff to direct and sustain local Clean Cities program activities for Florida Space Coast Coalition. In December of 1996, the Florida Solar Energy Center (FSEC) joined the U.S. Department of Energy (DOE) Clean Cities program and to form the Space Coast Clean Cities Coalition for east central Florida. On October 1, 1999, the newly formed Space Coast Coalition under the administration of FSEC was designated and authorized as the 75th Clean Cities Coalition. The Space Coast Coalition now consists of nine east central Florida counties: Brevard, Indian River, Lake, Osceola, Okeechobee, Orange, Seminole, St. Lucie, and Volusia.

Bylaws for the Coalition were adopted on December 9, 1999 and the first Board of Directors (BOD) and Officers were elected on February 8, 2000. On June 8, the state of Florida identified us as the Florida Space Coast Clean Cities Coalition, Inc. and the U.S. Internal Revenue Service approved the non-profit status. The coalition became a member of the National Clean Cities, Inc non-profit corporation in Washington, DC. Since the idea was first conceived, FSEC has administrated the activities of the coalition.

**2.2 Approach**

Space Coast Coalition has worked diligently to facilitate the sales of alternative fuel vehicles and the infrastructure to support those vehicles. The coalition maintains a comprehensive

Program Plan and Memorandum of Understanding defining the National Clean Cities Program and Space Coast Coalition goals for alternative fuel vehicle and infrastructure deployment in our designated area. The structure and operating procedures of the coalition are defined in the Bylaws to help meet these program goals. These living documents describe and direct the activities desired from the coalition and the National Clean Cities Program. FSEC, through the Coalition Coordinator and other staff members, performs the day to day operations to organize, motivate, direct and sustain Space Coast Coalition activities. The mission of the National Clean Cities program and Space Coast Coalition are accomplished annually by the following activities:

- Interact with prospective fleet customers and AFV dealers.
- Organize and hold "Advancing the AFV Choice" events.
- Hold public education and outreach campaigns, .
- Organize and host stakeholder meetings.
- Develop legislative strategies.
- Develop and promote training for maintenance of AFVs.
- Develop fund raising strategies for coalition sustainability.
- Write grant proposals for the Coalition and stakeholders.
- Provide project management services to AFV projects.

This funding will continue the progress made at implementation of AFVs into local industry and government fleets and increase future deployment to meet national goals. Participation in the Six Cities Federal Fleet program has promoted deployment within General Services Administration as well as with vehicles owned by the general public. The Clean Fuels Florida Advisory Board has published recommendations for State and local government that are in process of implementation. A new Financial Sustainable Plan will be produced and implemented to fund future efforts of the coalition. An Education and Outreach Plan is being implemented which completes development of training tools, educational materials, and course curricula on maintenance and operations AFV and corresponding infrastructure. These plans and projects are the key mechanisms to accomplish the activities and meeting the results requested by DOE.

FSEC will assistance coalition members to develop, coordinate, and find funding for various AFV projects and activities. Partnerships will be developed between coalition members to implement AFV projects and technologies to share resources and individual reduce cost. Coordinated efforts will extend to other coalitions with similar projects to share resources, reduce cost and gain experience to promote successful completion of project.

Innovative funding-raising strategies will be developed to make the coalition self-sufficient and sustainable. A search will be made for other programs with similar missions for additional or joint funding.

Alternative fuel workshops will be conducted as Advancing the Choice (ATC) Workshops focusing on manufacture products and AFV educational workshop will be conducted that provides instruction on alternative fuel vehicles and related infrastructure with an overview of the Clean Air Act and Epact requirements. The AFV educational workshop addresses the educational needs of government organizations, decision makers, fleet managers, and administrators and the educational needs of automotive technicians, instructors, and mechanics about alternative fuel technologies and available choices of alternative fuel vehicles.

Training goes beyond workshops as the coalition is an associate member of the National Alternative Fuels Training Consortium Program (NAFTC) administered by West Virginia University (WVU). Also, FSEC joined Brevard Community College (BCC) to develop and administer a new technology degree program in Alternative Fuels and Electric Vehicles funded by the National Science Foundation. The latest educational program is to develop curriculum on alternative fuel technology for community college technology programs for use nationally. The first course of four courses, EST-1820, will be offered the spring of 2004 and will be an overview of AFV technologies. This AFV degree program integrates with present Coalition and NAFTC mission and activities, in addition FSECs responsibility as a research institute of the University of Central Florida. Much is done on the web at [www.clean-cities.org](http://www.clean-cities.org).

FSEC will implement and coordinate educational programs on alternative fuel transportation technologies. Public schools and colleges have vast resources for education already in place that can be used for expanding Clean Cities exposure to the greatest number of people by educating future drivers and their parents. The local community colleges offer automotive technology programs as part of their normal curriculum. FSEC will encourage local colleges to incorporate alternative fuels technology training into existing programs through the new degree program on AFVs. Partnerships between industry, colleges and the coalition will be developed to meet the needs of each organization. Information on existing programs, (such as with WVU and BCC), will be made available to the various partnerships based on their education and technology needs. The benefit of this effort is that local government, industry, and the general public will have peace of

mind, knowing that capable alternative fuel automotive technicians are trained and reside within the coalition area. Future job opportunities will be available to teachers, students, and industry personnel as more technologies become part of our community.

One aspect of the Space Coast Coalition Program Plan is to provide information and tools to enhance education and produce energy literate citizens. This is achieved through the public school system. Florida has produced a set of guidelines for teaching called the Sunshine State Standards. Within those standards, strands or themes exist that must be addressed by every public school teacher. One of these is energy. This is a perfect opportunity to provide resources, training and technical assistance to teachers in order to help them meet their teaching requirements and also inform and educate students about alternative fuels. Completed is the science teaching unit titled Alternative Fuel Matters, compiled and created through the Space Coast Clean Cities efforts. This unit explores alternative fuels while meeting teaching and learning standards. By implementing transportation into math and science activities school curriculums will introduce more real life information into student learning. Also, produced a coloring book for elementary students titled "Take a Trip to Clean Air". FSEC has been conducting Junior Solar Sprint and Electrathon events since 1992 with great success and have expanded the programs educational value.

The coalition members are on a speakers list where presentations for over 30 groups are completed each year. FSEC regularly conducts tours of their facilities to students, industry and government organizations and exhibits the coalition display and vehicle charging stations. The AFV Coordinator loan program has provided a Toyota Rav4 EV that is displayed at many events hosted by FSEC and other organizations throughout the year.

### **2.3. Activities**

The extensive resources, diverse talents and expertise available through FSEC and coalition stakeholders will successfully accomplish the activities defined as follows:

#### **2.3.1 Educational Events**

The coalition will organize and host at least two targeted niche market events, such as Advancing the AFV Choice" events, in partnership with an auto or truck manufacture with the intent to sell AFVs. FSEC has been organizing and conducting AFV educational workshop since before the coalition started. One of

FSEC missions, as part of the University of Central Florida, is to conduct education and public outreach activities. Auto and truck manufactures have always been part of these events. In the past, manufactures displayed information on their products and exhibited AFV vehicles at the educational workshops and events, but now they will be focusing on sales of AFVs. The coalition usually conducted two events each year, with one event an educational workshop and the other event associated with another activity or local event. Last years events were the National AFV Odyssey event held on April 11, 2002 and participation in NASA's Kennedy Space Center Energy Awareness Week.

Plans are being made to conduct two Advancing the AFV Choice events for next year. There are three niche markets being considered: airport vehicles for the Melbourne or Daytona Beach, vehicles related to marine operations at Port Canaveral and military support vehicles at Patrick Air Force Base at Cape Canaveral. Fleet managers at each site will participate and vehicle manufactures will be invited that provide the type of vehicle need by the fleet managers. The one event will be held in the spring and the other in the fall and be supported by coalition funds and vehicle manufactures sponsorships. These event are part of coalition funding efforts to be financial sustainable.

The coalition members are on a speakers list where presentations for over 30 groups are completed each year. FSEC regularly conducts tours of their facilities to students, industry and government organizations and exhibits the coalition display and vehicle charging stations. The AFV Coordinator loan program has provided a Toyota Rav4 EV that is displayed at many events hosted by FSEC and other organizations throughout the year.

### 2.3.2 Heavy duty fleets involvement

The coalition already corresponds with national and local fleet associations to provide awareness of AFVs to local members within our coalition area, such as NAFA. This effort has produced contacts with organizations that have heavy duty fleet vehicles.

A few organizations have joined and participated in coalition activities and have been introduced to AFVs. There are many more organizations that have not participated in any coalition activities. Coalition information will be provided to their organizations newsletters for distribution to their members. The coalition will attend local fleet association meetings and conduct presentations on AFVs and personally invite all of the heavy duty fleet managers to our next AFV workshop and to join the coalition. Two of the most responsive contacts will be invited to a project committee meeting to review past AFV

proposals for ideas and opportunities for them to participate in projects next year and more learn about AFVs. Key chains with the coalition web site will be given away at their meetings to promote future involvement.

#### 2.3.3 Fleet attendance at conference

The coalition already corresponds with national and local fleet associations to provide awareness of AFVs to local members within our coalition area, such as NAFA. This effort has produced contacts with many fleet managers. A few fleet managers have attended the National Clean Cities Conference in the past, but many more organizations that have not. Coalition and Conference information will be provided to these organizations for their newsletters for distribution to their members. The coalition will attend local fleet association meetings and conduct presentations on AFVs and personally invite all of the fleet managers to our next AFV workshop and to join the coalition. Key chains with the coalition web site will be given away at their meetings to promote future involvement. Next years conference will be hosted by Gold Coast Coalition in Florida, which should promote local fleet attendance. Therefore, the coalition will provide incentives to fleet managers to encourage attendance at the national conference such as provide transportation in an AFV to the conference or host one night in the conference hotel to obtain at least one first time conference attendees that may join the coalition.

#### 2.3.4 Collect sales data

The present process is to mail to members a survey sheet requesting data on their fleets that is need for the coalition annual report. Many members do not initially respond to the survey and must be called.

Membership forms will be modified to request this information, thereby providing the data when joining or renewing membership. A page will be added to our web site for anyone to provide their fleet data at any time. College students in education programs and other technologies programs require community service hours or internship. These student will be offered work programs with the coalition and will contact all of the fleets in our area by mailing surveys or phone calls to collect missing data, while at the same time be educated about AFVs in a summer workshop conducted for them.

#### 2.3.5 Financial sustainability

FSEC has completed the full cycle of activities in the establishing the Coalition and now strives for financial sustainability. Previously, FSEC was funded by the Florida

Energy Office, the Clean Fuels Florida Advisory Board and DOE, but present funding ends on April 1. FSEC has developed a plan for Space Coast Coalition to become financially sustainable and documented their findings in a report published on December 14, 2000.

Present focus, will be to complete a new financial sustainability plan. The new requirements for and demands of achieving financial sustainability will be analyzed and recommendations presented in the new report. The completed plan will be used to develop training tools, educational materials, and course curricula for assisting coalition members in understanding the requirements and demands of achieving sustainability. Education and outreach are key factors to the growth and financial sustainability of our coalition. As officers change and new members join, the coalition's financial sustainability plan and related training materials will accelerate the orientation process and enhance coalition participation while insuring successful operation of the coalition.

Several activities are already in process to achieve sustainability. The coalition is incorporated as a non-profit, which allows the coalition to participate in funding opportunities offered by Foundations. The coalition is partnering with member county governments to develop AFV implementation plans for their fleet and receive consultant fees for our efforts. The coalition already has incorporated dues as part of membership.

#### 2.3.6 Stakeholder meetings

For the first three year of operation, the coalition met monthly. The coalition has established a newsletter, web site, calendar of events, mailing services, and notice distribution system which helps to inform stakeholders, coordinate activities and maintains operation of the coalition. The coalition now has an established operating process that effectively helps administers the coalition activities. Last year, the coalition approved Bylaw changes to establish quarterly meetings of the stakeholders. The coalition meets regularly on the third Wednesday of the month starting in January and meeting quarterly thereafter. Meetings are held in the afternoon at the Florida Solar Energy Center unless otherwise determined by the stakeholders. This process will continue until changed by the stakeholders. Over the years, the regular meeting has been held at three other locations at the request of various members. The Board of Directors meets two Wednesdays before the regular meeting. Our web page maintains a schedule of the four regular meetings.

### 2.3.7 Policy meetings

FSEC will provide technical assistance to government, industry and the general public on transportation related energy and emission technologies. Bringing new technologies to the market place and assisting industry with technical support for commercialization of their products are typical activities being performed. The Clean Fuels Florida Advisory Board (CFFAB) and the Six-City Federal AFV USER programs are an example of the type of new partnerships that will promote the implementation of AFVs that the coalition participates in. This project will assist the coalition as it strives to accelerate and expand the use of alternative fuel vehicles and provide refueling and maintenance facilities for their operation in the communities throughout the Coalition area.

Clean Fuels Florida Advisory Board was established by state legislator to make recommendation to the Governor on the use of AFV in Florida. Our coalition has three members on the Board that interact with policy makers. Also, CFFAB and FSEC has produced several information documents that provide the benefits of AFVs. These documents and other Clean Cities documents will be used to meet with at least two local or state policy staff members on the benefit of AFVs. Meeting will be arranged with Commissioners of all nine counties and all five state legislators in our area. All local and state representatives will be invited to our AFV workshops and will receiving our newsletter. We have participated in the National Washington Day in the past will do so in 2005. Brevard County Commissioners meet every Tuesday and state legislator meets from February to June.

### 2.3.8 National Clean Cities events

The coalition coordinator will attend at least two national Clean Cities events as done before. Previously, the coordinator attended at least one regional coordinator workshop each year conducted by the Atlanta Regional Office of DOE. The regional office set the date and location of the workshop and provided accommodations, while the coordinator covered travel expenses funded by the coalition. As previously done, the coordinator will arrange to attend the next regional coordinator workshop when announced and fund the activity through coalition funds accordingly.

The Coordinator has attended all of the National Clean Cities Conferences held from the start of the coalition. This travel expanse has been funding by the coalition in the past and will continue into the future. The coordinator will arrange their schedule to attend the next National Clean Cities Conference planned for Miami with Gold Coast Coalition.

#### 2.3.9 Meeting performance goals

The coalition will meet the National Clean Cities performance goals of 17% increase in AFVs each year by completing all of the activities defined in this proposal. Conducting niche markets events, contacting fleet managers, increasing membership, and meeting with local and state policy makers will do the most to increase AFV acquisitions. Education of and involvement with fleet managers and policy makers will be an important coalition focus. Incentives need to be provided by local and state policy makers will be pursued to assist with equalizing AFV cost in order to increase AFV deployment within our coalition. Fleet managers need to be encouraged to response to the benefits AFV bring to our transportation sector to promote addition vehicle sales.

#### 2.3.10 New members

The coalition already corresponds with national and local fleet associations, such as NAFA, to provide awareness of AFVs to local members within our coalition area. This effort has produced many contacts with fleet managers. A few organizations have joined and participated in coalition activities and have been introduced to AFVs from this effort. There are many more organizations that have not participated in any coalition activities. Coalition information will be provided to their newsletters for distribution to their members. The coalition will attend local fleet association meetings and conduct presentations on AFVs and personally invite all of the fleet managers to our next AFV workshop and to join the coalition.

Also, other organizations, such as churches, social groups, and clubs, will be contacted through the local Chamber of Commerce. These organizations will have information provided to their leadership and newsletters for AFV awareness and be provided with information to join the coalition. At least 25 organizations will be personally contacted to join.

#### 2.3.11 Benefits

The benefit of continued funding of the coalition will be realized when these programs and plans are completed. The momentum started by these excellent activities will produce the needed performance goals of increased purchase of AFV greater than 17% per year. This effort will provide a greater reduction of vehicles emissions and greater reduction of gasoline and diesel fuels consumption in our coalition area.

### **3.0 PROGRAM WORKPLAN**

The Florida Solar Energy Center (FSEC) is will administer this

project with the U.S. Department of Energy (DOE) for the State Energy Program for 2004 to provide support for Space Coast Clean Cities Coalition. The Florida Solar Energy Center will continue to coordinate the mission of the US DOE Clean Cities Program and meet the needs of the Space Coast Coalition for alternative fuel vehicle (AFV) technologies with local area governments organizations, utilities, business, students and general public. The overall efforts of this project will be to organize and hold "Advancing the AFV Choice" events, hold public education and outreach campaigns, organize and host stakeholder meetings, develop legislative strategies, develop and promote training programs on maintenance of AFV's, and develop fund raising strategies and writing grant proposals for Space Coast Coalition. Also, continue supporting GSA Six City AFV Program. FSEC will support the Coalition in following the mission of the Clean Air and Energy Policy Acts, maintain membership in the US DOE Clean Cities program and National Clean Cities non-profit organization. The major focused of the project will be to obtain financially sustainable while working to meet National Clean Cities performance goals.

### **3.1 Statement of Work**

The Florida Solar Energy Center will coordinate and support the Space Coast Coalition chairperson, members, and other related organizations to promote the use of alternative fuel technologies as defined by U.S. DOE Clean Cities Program and the coalition Program Plan. FSEC will implement the program through the task defined in the Statement of Work. The Florida Solar Energy Center will implement the Clean Cities Program objectives and to provide support for Space Coast Coalition.

#### **3.2.0 Task Description**

The Coalition support project will be completed in 3 major tasks.

##### **3.2.1 - TASK 1 - Coordinate US DOE Clean Cities Program Efforts.**

FSEC will administer Space Coast Clean Cities Coalition, provide support for coalition activities and provide a coalition coordinator to implement this project effort. Activities to be preformed for this project are as follows:

1. Organize and host two targeted niche market events with manufacturers to sell AFVs with events held in October 2003 and May 2004.
2. Make contract with two new heavy duty fleets for AFV awareness at NAFA conference in May 2004.
2. Bring one new fleet representative to the National Clean Cities conference in May 2004.
3. Develop and implement a process to collect AFV sales data by January 2004.
4. Develop a plan for coalition financial sustainability for this project period by September 2003.
5. Organize and host at least four stakeholders meetings on
  - 1 - July 16, 2003
  - 2 - October 1, 2003
  - 3 - January 21, 2004
  - 4 - April 21, 2004
7. Meet with two local or state policy staff members on AFVs
  - 1 - Brevard County Commissioners meeting July 15, 2003
  - 2 - State legislator Tom Fenny meeting February 2004.
8. Attend at least two national Clean Cities events.
  - 1 - Atlanta Regional Office Coordinator workshop in September 2003.
  - 2 - National Clean Cities Conference in May 2004 in Miami.
9. Extend invitation to 25 new organizations to join the coalition at Florida Government Expo in August 2003 and NAFA meeting in May 2004.

3.2.2 - TASK 2 - Meeting National Clean Cities performance Goals. The coalition will meet the National Clean Cities performance goals of 17% increase in AFVs each year by completing all of the activities defined in this proposal. Conducting niche markets events, contacting fleet managers, increasing membership, and meeting with local and state policy makers will do the most to increase AFV acquisitions. Education of and involvement with fleet managers and policy makers will be an important coalition focus. Incentives need to be provided by local and state policy makers will be pursued to assist with equalizing AFV cost in order to increase AFV deployment within our coalition. Fleet managers need to be encouraged to response to the benefits AFV bring to our transportation sector to promote addition vehicle sales.

.

### 3.2.3 - TASK 3 - Project Management and Reports.

This task will provide the project management necessary to support the project task as defined above. This will include staff to direct and sustain local activities, preparation of reports, technical and financial management of project efforts, and travel associated with program meetings.

#### Subtask 3.2.3.1 - Progress Reports

Progress Reports will be provided six months after issuance of the award and in six-month intervals thereafter until award expiration. The report should include event attendees list, contact list, financial plan, minutes of meetings, and document deployment performance. The FSEC will submit a Final Progress Report describing the extent of accomplishments and providing full disclosure of all major developments by the contractor within sixty (60) calendars days of completion or termination of the contract.

### 4.0 DELIVERABLE AND PROJECT SCHEDULE

The program will be divided into defined TASKS, with each TASK given a period of completion. The program will be complete in 12 months after start. The suggested start of the program is June 1, 2004 with an ending date of May 31, 2005 for Coalition support. There will be three payable deliverables for this program provided per schedule. Completion dates for activities defined in Section 3.2 are provided in that section under that activity description. The schedules give the time and completion of each task and deliverable as follows:

#### 4.2 Schedule of Deliverables

<u>Items</u>	<u>Finish</u>
Financial Sustainability Rpt	9/30/04
Progress report 1	12/15/04
Final Progress Report	7/31/05

### 8.0 PROJECT COST

Budget estimates have been developed for the performance of the Task outlined in the Statement of Work. Funding will be used for administration, labor, materials and travel.

Coalition cost share	In-kind \$ 10,000/ cash \$10,000
DOE funding to FSEC	\$20,000
Total Project Cost	\$40,000

Cost share will be provided by the Space Coast Clean Cities Coalition and FSEC. Cost share may be greater than 50 %, if industry sponsorship and workshops sponsorships are received. Cash items are dues, sponsorships, and consulting fees. In-kind

items are site usage, equipment donation, labor, materials, print and others forms.

**STATE OF FLORIDA PROPOSAL  
DE-PS26-04NT42068-00  
STATE ENERGY PROGRAM 01D CLEAN CITIES COALITION SUPPORT  
SPACE COAST CLEAN CITIES COALITION SUPPORT  
Florida Solar Energy Center/UCF  
FSEC-PR-04-040**

**3.0 STATEMENT OF OBJECTIVES/COST INFORMATION**

Space Coast Coalition and FSEC will work facilitate the sales of alternative fuel vehicles and the infrastructure to support those vehicles. The coalition maintains a comprehensive Program Plan and Memorandum of Understanding defining the National Clean Cities Program and Space Coast Coalition goals for alternative fuel vehicle and infrastructure deployment in our designated area. These living documents describe and direct the activities desired from the coalition and the National Clean Cities Program.

FSEC, through the Coalition Coordinator and other staff members, and the coalition, through the Chair, Board of Directors and stakeholders members, will perform the day to day operations to organize, motivate, direct and sustain Space Coast Coalition activities and the task and objectives defined in the Statement of Work. The mission of the National Clean Cities program and Space Coast Coalition are accomplished annually by the following activities:

**3.2.0 Activities and Task Description**

The Coalition support project will be completed by FSEC in a one-year period.

Activities to be preformed for this project are as follows:

1. Organize and host two targeted niche market events with auto and truck manufacturers to sell AFVs with events planned to be held in October 2004 and May 2005.  
Coordinator, secretary, Board, Stakeholders for 80 hours,  
cost \$6,703.
6. Make contract with two new heavy duty fleets to introduce them to AFVs at NAFA conference in May 2005.  
Coordinator, secretary, Board, Stakeholders for 24 hours,  
cost \$1,265.
7. Bring one new fleet representative to the National Clean Cities conference in May 2005.  
Coordinator, secretary, Board, Stakeholders for 25 hours,  
cost \$1,787.

8. Develop and implement a process to collect all regional AFV sales information by January 2004.

Coordinator, secretary, Board, Stakeholders for 75 hours, cost \$4,078.

9. Develop a plan for coalition financial sustainability that describes what will be done during this project period by September 2003.

Coordinator, secretary, Board, Stakeholders for 60 hours, cost \$2,870.

10. Organize and host at least four stakeholders meetings per year on

- 1 - July 14, 2004
- 2 - October 6, 2004
- 3 - January 20, 2005
- 4 - April 21, 2005

Coordinator, secretary, Board, Stakeholders for 60 hours, cost \$2,870.

7. Meet with two local or state policy staff members on benefits of AFVs

- 1 - Brevard County Commissioners meeting August 2004
- 2 - State legislator Bob Allen meeting January 2005.

Coordinator, secretary, Board, Stakeholders for 50 hours, cost \$2,604.

8. Attend at least two national Clean Cities events.

1 - Atlanta Regional Office Coordinator workshop in September 2004.

2 - National Clean Cities Conference in 2005 in San Diego.

Coordinator, secretary, Board, Stakeholders for 35 hours, cost \$2,996.

9. FSEC and the Coalition will meet National Clean Cities performance Goals for the coalition of increased AFV deployment by 17% per year by conducting market events, attend fleet meetings, increase membership, and provide incentives.

Coordinator, secretary, Board, Stakeholders for 114 hours, cost \$6,925.

10. Extend invitation to 25 new organizations to join the coalition at Florida Government Expo in August 2004 and NAFA meeting in May 2005.

Coordinator, secretary, Board, Stakeholders for 55 hours, cost \$2,759.

11. The project will be managed by FSEC at coordinator that will include staff to direct and sustain local activities, preparation of reports, technical and financial management of project efforts, and travel associated with program meetings and other activities. Progress Reports will be provided six months after issuance of the award and in six-month intervals thereafter until award expiration. The report will include event attendees list, contact list, financial plan, minutes of meetings, and document deployment performance. Also, a Final Progress Report will be submitted describing the extent of accomplishments and providing full disclosure of all major developments by the contractor upon completion or termination of the contract.

Coordinator, secretary, Board, Stakeholders for 110 hours, cost \$5,135.

#### Project Cost:

There is no equipment cost over \$5,000 and travel costs do not exceed \$30,000 or 25% of total budget.

Total Cost of Project is \$40,000, with \$20,000 from the funding agency (DOE) and \$20,000 as cost share from FSEC and the Coalition in the form of in-kind and cash of \$10,000.

**STATE OF FLORIDA PROPOSAL**  
DE-PS26-04NT42068-00  
STATE ENERGY PROGRAM 01D - CLEAN CITIES COALITION SUPPORT  
**SPACE COAST CLEAN CITIES COALITION SUPPORT**  
Florida Solar Energy Center/UCF  
FSEC-PR-04-040

ADMINISTRATION and PERSONEL

The Florida Solar Energy Center (FSEC) will develop, conduct and administer the program. FSEC is a Type I non-profit research institute of the State University System of Florida and is administratively under the University of Central Florida in Orlando, Florida. FSEC contracts are administered by the University of Central Florida Office of Sponsored Research. FSEC administers Space Coast Clean Cities Coalition which will work in conjunction with FSEC in the administration of the coalition.

The following key FSEC personnel are intended to be involved with the proposed project along with key the Board of Directors and Stakeholder members of Space Coast Clean Cities Coalition. FSEC Project Engineer and/or Principal Investigator will be Bill Young, who will be responsible for completion of the project and be assigned as Clean Cities coordinator.

Bill Young, Research Engineer, joined FSEC in 1990. He has a B.S. in Engineering Sciences with a major in electrical engineering from the University of Central Florida (UCF) in Orlando. He is currently working towards an M.S. in Computer Science at UCF. He previously worked for General Electric as an Electronic Engineer. At General Electric he worked on the thermal dish collector controller design of the electric generator for the U.S. Department of Energy for the Shenandoah, Georgia Steam Generator Plant Project. He has been Principal Investigator for electric vehicle projects contracted by the Department of Defense, ARPA, which includes vehicle construction, monitoring electric vehicles, testing of electric vehicle air conditioning systems, and developing low energy lighting. He is actively involved in constructing and maintaining electric vehicles, including the design and construction of a CNG hybrid electric vehicle. Presently, Bill, is the coordinator for Space Coast Clean Cities Coalition and is one of the charter coordinators. He has written and presented several papers on alternative technology transportation, has developed training programs and served as an instructor in various workshops. Also, he owns a Sebring Citi-car electric vehicle.

Space Coast Clean Cities Coalition has 78 Stakeholder members and many have more than ten years of experience with alternative fuel vehicles. The Coalition has members who work for and represent auto manufactures and infrastructure providers. The Board of Directors has 10 members and is led by a Chair, Vice-Chair, Secretary and Treasure.

The coalition Chair is Paul Schott who has 15 years owning and operating a limousine service. He has used ethanol fueled vehicles in his business and has been involved with solar and electric vehicles for the past four years.

The Coalition Vice-Chair is Addison Bain who retired from NASA as the Program Manager of their hydrogen program at Kennedy Space Center. He has 15 years experience with CNG and hydrogen fueled vehicles. In the early 1990s, his team developed, designed, constructed and tested two CNG vehicles and two CNG/hydrogen vehicles. One of the CNG/hydrogen vehicles he developed he purchased from a government auction in 2001.

Roberta Sirmons is the Coalition Secretary and presently works for Technology Research and Development Agency. She has 10 years experience with CNG vehicles and infrastructure and worked on the installation of two CNG fueling station at Kennedy Space Center.

Presently, she manages the installation for two projects to install five ethanol fueling station at Kennedy Space Center.

The coalition Treasure is Randy Harris who has been working for NUI Cities Gas for 20 years and manages executive accounts. He was teamed with other coalition members in the construction of the Titusville CNG fueling station last year.

#### RELATED WORK

The Florida Solar Energy Center (FSEC) has researched, developed and monitored energy systems since 1974. The Center has years of experience in the area of energy development and evaluation of products for vehicles, buildings, appliances, and utilities. In 1989, FSEC started research in transportation related technologies and has participated in projects with the U.S. Department of Defense, U.S. Department of Energy, NASA, Florida Energy Office, Florida Department of Transportation and other organizations. Projects the Center has worked on include:

- Clean Cities Coordinator/facilitator
- Electric/hybrid vehicle monitoring for ARPA
- Photovoltaic equipment testing, monitoring, and analysis
- Passive design techniques for Florida model energy code
- Design, construction and racing electric and hybrid vehicles
- Sunday Challenge, an annual Alternative Energy Vehicle Rally
- Power quality testing of commercial air conditioners
- Training for various energy technologies, including electric vehicles
- Design and construction of hydrogen/natural gas vehicles

FSEC own and operates an on-site enclosed multi-bay service facility complete with tools, compressed air, replacement parts stock, charging stations and ample electrical service for several hybrid electric vehicles.