

MISSISSIPPI STATE
UNIVERSITY™

EcoCAR



EcoCAR Communications Plan

Year Two

Mississippi State University
October 16, 2009

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I. Year One Planned Achievements and Results

For Year One of the EcoCAR competition, we set forth several goals in six main areas (Community Events, Public Awareness and Education, Media Relations, Kids Education, Social Marketing and Website, and Marketing Research). We are proud to report that we met (and in some cases exceeded) almost all of these goals. From small events to large ones, we set out to utilize any and all resources to promote the key messages of the EcoCAR competition. We effectively communicated these messages as set out in our initial plan and look forward to accomplishing our goals for Year Two. This section contains a brief summary of the goals we set and our achieved results in Year One.

A. Community Events

During Year One, we planned to hold multiple events for our campus and community to spread EcoCAR's key messages. This included visits to car shows and our community market, to hold events on our campus to raise awareness, and to help develop a community garden. While our plans to partner with a local restaurant to build a menu based off of vegetables grown in this community garden fell through, we met every other community event goal we set.

We held a total of 25 community outreach events. Please see Appendix 1 for an exhaustive list of events held during Year One. From car shows, to festivals, to farmer's markets, we took the opportunity to communicate with the public about the EcoCAR competition. We displayed our posters, gained media attention, and passed out brochures from August until May. Reaching nearly 100,000 people, our team members canvassed our community well. Being located in a rural area, we reached out to audiences not only in our tri-county community, but across our state and into other surrounding states.

B. Public Awareness and Education

During Year One of the competition, we made plans to educate the public about EcoCAR's key messages. We wanted to include community leaders, groups, and clubs. We planned to speak to the Starkville area Rotary club and other active leaders in our region.

Our public awareness and education goals were accomplished through many means. While we did not visit the Starkville Rotary Club, we did present to various other public leaders. We spoke to the Starkville Women's Club, which is composed of our market research identified target audience of middle-aged women, the group our research indicated are most likely to purchase a hybrid SUV. We spoke to the Day One Leadership classes at MSU; these classes are made up of 280 of our University's top student leaders. We presented at the Everything Garden Expo. We even gained awareness by participating in "Dudy Gras," a parade that various groups join in to march through the town to celebrate the beginning of baseball season. Our community

events, relationships with the media, and education plans in schools all crossed over to help us accomplish our goals in these areas. Please refer to Appendix 1 for more examples.

C. Media Relations

While media relations were a focus for us in Year One, we did not plan to reach out to media as much during this year as we planned to in Years Two and Three. We planned to use our Challenge X car to help reach out to the media, but since we did not yet have an actual car for the EcoCAR competition, we planned to wait until Year Two to really focus on gaining media attention.

Although media relations were not a main focus for us during Year One of the competition, Mississippi State University received 26 media hits from a wide variety of media outlets. These outlets included television, newspaper, magazine, web, radio, press release, media advisory, conference program guide, podcast, and a LCD display. From May 2008 (at the end of the Challenge X competition) until April 2009 of Year 1, we were featured in outlets such as the Mississippi Business Journal, the Starkville Daily News, and Saturn 360°. Please see Appendix 2 for a complete listing of these media hits.

D. Children's Education

Mississippi State University's Communications Plan set out a goal for the team to visit at least fifteen classrooms in each year of the competition. We planned to create PowerPoint presentations and handouts to aid in the teaching of our "New Generation, New Energy" themed lessons. We also planned to take Boy and Girl Scout Troops to help in a local garden.

During Year 1, 19 children's education events were conducted. The team decided to keep the name of the program "New Generation, New Energy" from Challenge X, because of its success. Our youth activities included school visits, field trips, volunteering at a science fair, and an EcoCAR poster contest. While we did not take a Boy/Girl Scout troop to the local garden, we did present to them. PowerPoint presentations for different grade levels were developed. For elementary students we have created a handout to help kids understand how hybrid cars are different from others. We also have promotional items to pass out such as stickers and pencils. Topics to be discussed include: the competition, hybrid vehicles, alternative fuels, environmental impacts, how the project is helping to strengthen our educational experiences, how it is training us for future employment opportunities, and how the sponsors make it all possible. Please see Appendix 3 for a detailed list of events from Year One.

E. Social Marketing and Website

During Year One of the competition, we planned to limit our social marketing to Facebook and our EcoCAR website. We planned to upload videos to our Facebook page and keep it updated and to have a website that is easy to use and informative.

We established a website to be the centerpiece of our cyber marketing. Here, our sponsors, team members, events, and stories could be viewed. We additionally established a Facebook page that could be joined in order to stay even more abreast of EcoCAR happenings. It was not, however, updated as frequently as we intend to in the future.

F. Marketing Research

We planned to have a senior marketing class help distribute surveys and collect data for our marketing research to discover the knowledge and interest of people in our area about hybrids and similar technologies. The class was taught by Dr. Jason Lueg, our team's Outreach Advisor.

We have collected data for our marketing research and these are a crucial element in determining who are target audiences are. This survey was conducted of citizens state-wide to give us an understanding of who are audience is as well as what the perceptions of our area are towards hybrids.

II. Year Two Modifications

The Mississippi State University team will be implementing an extended-range electric vehicle (EREV). The vehicle will plug in to a standard household outlet, have a significant all electric range, and be capable of achieving greater than 100 miles per gallon.

Year Two presents new opportunities for growth in our Outreach efforts. In this section we outline our goals and modifications for Year Two.

A. Public Perception of EcoCAR

In order to gain a better understanding of how EcoCAR is perceived by the public, the Mississippi State team has partnered with a marketing-management class to conduct marketing research on the public's opinions, attitudes, and concerns about hybrid vehicle technology. The market research, focusing on the southeastern United States, will help us tailor our communications plan to our region. We are defining the southeastern region as the states of Mississippi, Alabama, Louisiana, Tennessee, Arkansas, Georgia, and South Carolina. Florida's demographic is substantially different than the rural populations of the rest of the Southeast.

Previous class research concluded that 48.7 percent of the 155 people surveyed chose gas mileage as the most important feature when purchasing a new car. In the study, 80 percent of those surveyed indicated that their average daily commute is less than 40 miles. This is significant because the Mississippi State team's design calls for the capability to run solely on electric energy for at least 40 miles on one charge. Another survey will be conducted during both this year and Year Three of the competition to collect new data and to track changes in public perceptions. They will include research about the public's perception of hybrids, their driving habits, how much more they are willing to pay for a hybrid and how far they expect a PHEV to drive on electricity alone.

B. Communication Goals

In Year One we were very pleased with our accomplishments and do not intend to "backslide" in Year Two. We intend to continue with our outreach activities in a similar manner in Year Two; however, we do intend to modify the messages that we deliver during specific events based on 1) who the target audience is (i.e., elementary school children versus college students) and 2) the fact that we now have a visible and tangible vehicle that can be used in events to better showcase and illustrate the technical aspects of our engineering design. Our outreach communication goals include the following.

1. Continue to announce Mississippi State University's and EcoCAR's roles as an explorer of solutions for sustainable mobility and to the energy crisis.

2. Educate our area on our sponsors' roles in both providing students with opportunities and making an investment in the future of automobile technology
3. Increase public understanding of hybrid vehicles and their benefits.
4. Inform and demonstrate to the public our hybrid architecture that runs on biodiesel and electricity from renewable sources.
5. Educate youth on hybrid vehicle technology and alternative fuels.
6. Improve attitudes toward hybrid vehicles in our region.

C. Measurable Communication Objectives

The following measurable objectives are designed to determine the effectiveness of the MSU EcoCAR communications plan. The communication strategies and tactics are designed to establish:

1. Reach at least 1,000,000 people nationwide through all outreach activities, including media, to inform them about MSU's participation in EcoCAR as well as the competition's goals. This will be tracked by recording all outreach activities.
2. Raise public awareness of EcoCAR in the southeastern region by 5% and in Mississippi by 25% based off of survey data collected at the beginning and end of EcoCAR.
3. Improve public understanding of hybrid vehicles and their benefits in the southeastern region by 3% and in Mississippi by 15% based off of survey data collected at the beginning and end of EcoCAR.
4. Demonstrate and discuss in person our hybrid vehicle to over 20,000 people to be determined by recording all outreach activities that the car is displayed at.
5. Reach over 1,500 youth through children's education events. Audience numbers will be tracked by recording all children's education activities. We will conduct surveys before and after the educational lessons to gauge the effectiveness.
6. Improve favorable attitudes toward hybrids in Mississippi by 10% based off of primary research conducted throughout the competition.

D. Target Audiences

Although the team is reaching out to every audience possible whenever possible, we have determined target audiences for each year of the competition to which we will tailor our communication methods. For Year 2 our target audience shifts to emphasize not only youth, technical audiences, and the general public but also local and state media. Year 3 activities will target all of the above, plus consumers, influential persons and national media.

Figure 1 Summary of Target Audiences

			Audience	Interest
Year 1	Year 2	Year 3	Youth	How hybrids work, environmental benefits & car design
			Technical Audience	Latest technology accomplishments & architecture selection/design process
			General Public	Economics of hybrids & sponsor/student involvement
			Local Media	University research in energy conserving technologies
			State Media	University, student & sponsor involvement
			Consumers	Economics of hybrids, mpg of car & plug-in concept
			Influential Persons	Latest technology achievements, environmental benefits & student involvement
			National Media	Sponsor involvement & student design improvements

The team's primary objectives are to promote the idea of hybrids, the EcoCAR competition, and our sponsors' roles in promoting development. Our intent in targeting youth is to expose young people to hybrid concepts so that hopefully in the future they will consider purchasing one. Youth are interested in learning about how hybrids work, their positive effect on the environment and the benefits student team members receive for participating in the competition. The technical audience is consistently interested in learning about the latest technology and engineering accomplishments. They will also be interested in the architecture selection, design and implementation processes. We will also target our outreach efforts to the general public. They will be interested in the University's involvement with leading sponsors like GM and the DOE as well as the economics of hybrids. We also intend to pursue media attention in outlets such as online media, print, and television.

During Year 2 we will target local and state media. Local media will play a crucial role in informing the general public about EcoCAR. They will be interested in covering the University's research in energy conserving technologies. We will aim to collaborate with agricultural, automotive, engineering and technological related media outlets in addition to the general media. Since our community is smaller in population than many others, we will also target state media to bring our message to a wider-spread audience.

In Year Three, the MSU team will continue to target the previously mentioned audiences in addition to consumers, influential persons and the national media.

E. Communication Tactics and Strategies

The outreach team plans to accomplish our communication goals and objectives by attending local events with our EcoCAR vehicle, giving presentations to interested organizations, reaching out to influencers, going to local schools in our area, establishing social marketing networks, providing information on our website, seeking media relations, and publishing technical research papers. As the demand for more fuel efficient vehicles increases, the need to relate the team's purpose to our surrounding community also increases. Therefore an important part of the EcoCAR team is letting the community know about critical energy and transportation related issues, and how the EcoCAR competition is addressing them. The success of the EcoCAR competition depends on how well we inform, educate, and involve citizens of our community. Below we outline our approaches.

Community Events

Many of our communication goals will be accomplished at community events. Our plan for Year Two is to emphasize the useful features of hybrid vehicles, such as being environmentally friendly, fuel efficient and superior in performance compared to stock vehicles. The events that MSU EcoCAR attends will appeal to our target audiences.

Already in Year Two we have attended the 20th Annual Central Mississippi Alumni Extravaganza. Here, alumni from around our state's capital gathered to hear about the goings-on of our University. This group of people falls in our target age range, and since they do not live in such a rural area, they are not likely to drive more than 40 miles at a time often. Our technologies greatly appealed to this group. We have also attended our Business School's Leadership Summit, where we participated in a program called "Peace, Love, and Leadership." Here, Jerry Greenfield, one of the founders of Ben and Jerry's Ice Cream, spoke on his commitment to the green initiative and sustainability.

We recently took the EcoCar to our state's capital for the annual celebration of Renewable Energy Day. Here, students from across the state gathered at the Agriculture and Forestry Museum. We assisted in the education of these youths on sustainability and renewable energy and the work that our students have done through our partnership with our sponsors.

During Year 3, the team will reach out to technical audiences at the IEEE 2010 Supercomputing Conference in New Orleans, LA. Attendance is expected to be well over 10,000. The team will attend local events that interest not only environmentalists and technical experts, but also those who may be curious about hybrid concepts and benefits.

Throughout the competition, numerous outreach events will be organized to involve our community in unique ways. Brochures and other promotional materials will be passed out to familiarize the public with hybrids. Professional posters and the MSU EcoCAR vehicle will also be on display at outreach events. Our ultimate goals are to promote EcoCAR, appeal to our target audiences and achieve a great deal of media attention for our sponsors and our cause.

Public Awareness and Education

During Year Two, we want to involve community leaders, groups and clubs to help promote EcoCAR and hybrid vehicle technology. We hope to partner with local government officials, as well as the Mississippi Development Authority's Energy department, to influence our state from the top down. We also plan to contact successful Mississippians to educate them and ask for their help in promoting EcoCAR. The outreach team plans to continue giving many other presentations about hybrid vehicle technology, alternative fuels, and the competition to a wide variety of active leaders both this year and in Year Three.

Media Relations

The team has already begun receiving a significant amount of media attention for Year Two. This exposure is crucial to increasing public awareness of hybrid technology and our role as explorers for sustainable mobility and to the energy crisis. We recently hosted a press conference to announce the arrival of our vehicle provided by GM. Several local and state-wide TV stations and newspapers were invited to attend, and already we have seen some of the results from this event. Relationships are also being built between university media outlets and the team. We work closely with the Bagley College of Engineering to reach related outlets.

Over the three year competition, we plan to utilize regional and national media outlets that appeal to our target audiences. As previously mentioned, this includes agricultural, automotive, engineering and technological related media in addition to the general media. We will target not only state and local outlets, but national ones as well. A wide variety of media types will be utilized including newspapers, magazines, television, radio, the internet and more. Media will be contacted by using the comprehensive media list for our region, which was provided by competition organizers. We will also utilize press releases, media advisories, fact sheets and press kits.

Children's Education

The youth program "New Generation, New Energy" will be continued during Year Two because of its prior success. We believe for a new concept to be accepted, we should focus on young people. Today's youth will be the next generation of vehicle owners, and we want them to be familiar with hybrid technology and the environmental benefits. In the past we have focused on reaching as many classrooms as possible, and while we will continue to reach as many students as we can, we will pursue a greater focus on the quality of our educational materials.

Rather than just provide one day's worth of material for a teacher, we will work with them to prepare a week's worth of activities to reinforce the EcoCAR ideas in the students. PowerPoint presentations for different grade levels will be given. For elementary students we have created several handouts to help kids understand what hybrid cars look like, and how they are different

from others. We also have novelties to pass out such as stickers that say “New Generation, New Energy,” and pencils made out of recycled newspaper that say “Mississippi State EcoCAR.” Another handout has been created detailing easy ways to save energy. Topics to be discussed include the EcoCAR competition, hybrid vehicles, alternative fuels and the importance of energy conservation. By providing teachers with a week’s worth of activities for the kids, we will be reinforcing the ideas to the children and making a longer-lasting impact. The surveys we will conduct before and after the presentations will help us gauge how much they are learning. The team hopes to continue involving children in as many future events as possible, because the Earth’s future lies in their hands.

Social Marketing and Website

Year Two presents many changes for our team’s focus on social marketing. We are taking a much more active approach to reaching our audience through this outlet. Our team applies social marketing techniques to promote social change in energy dependency on our website. Our website has recently been revamped and will continue to see many improvements in the coming weeks. It will be regularly updated and provide information on our team, our sponsors, hybrid technologies, and newsworthy events.

In addition, social forums and blogs are being constructed to further pursue social marketing on the web. We will blog regularly to keep the public informed on our progress and the progress of related work. We offer an open group on the social network Facebook. The group is entitled *Mississippi State EcoCAR*, and it allows members to post pictures, videos, discussions and comments about EcoCAR and related issues. This Facebook site will also be regularly updated.

Additionally, we have created a twitter account to follow and be followed by EcoCAR-related groups and people. All of these online sources will be linked to each other and to the main EcoCAR website and Green Garage blog.

Marketing Research

As already mentioned, we will be employing a senior marketing-management class to function as a market consulting firm. The class will conduct marketing research and assist with organizing outreach events. The class is taught by Dr. Jason Lueg, who is the team’s Outreach Advisor. Dr. Lueg’s classes will help us throughout the EcoCAR competition as 30 percent of their final grade. This program gives the marketing majors the opportunity to be involved in a real world business setting.

Technical Publications

Our team will also make use of technical papers to promote our research in scientific journals. We are presently working on a technical success publication which will document how we work with a competition sponsor to develop a solution to one of our engineering needs. It will also

be a graduate students' thesis and dissertation, which will present research gathered from the EcoCAR competition.

F. Communication Materials

To help accomplish our goals and reinforce the hybrid technology concept, the following is a list of materials to aid us in reaching out to our community:

- Brochures
- Posters
- PowerPoint Presentations
- Children's activity handouts
- Novelties (pencils, stickers, cups, key chains, etc.)
- Website
- Twitter Account
- Facebook Group
- Surveys
- Photos
- Media Advisories
- Press Releases
- Fact Sheet
- Q & A Handout
- Media Kits
- YouTube video
- Online blogs
- Online social marketing networks

G. Budget

The Mississippi State team is fortunate enough to have a very supporting school behind us. The Center for Advanced Vehicular Systems (CAVS) is part of MSU's High Performance Computing Collaboratory (HPC²). HPC²'s publishing department creates and prints our brochures, posters, and other graphic communication needs. The Mississippi State EcoCAR budget will provide the funds for any material needs that may arise during the competition per a written request to the team's Faculty Advisor, Dr. Marshall Molen. In addition, the next section contains estimated budget costs for our Year Two Work Plan.

H. Evaluation

The following outlines ways to measure the success of the communications plan:

1. Conduct surveys at the beginning, midway point, and end of the competition to obtain the southeastern region's understanding and perception of hybrid vehicles, of the most

important feature when purchasing a hybrid, which audiences are the most likely to purchase a hybrid vehicle, and other topics.

2. Monitor secondary research regarding acceptance of hybrids, hybrid sales, battery technology, climate change, alternative fuels and other related issues.
3. Monitor website activity by tracking visitor count, page history and most commonly requested page.
4. Distribute to students a survey which will measure the child's understanding of the topics discussed during presentations of the children's education program, "New Generation, New Energy."
5. Record attendance, literature distribution and perceived interest at outreach events.
6. Perform informal interviews between project participants and attendees of outreach events to examine the current perception of hybrid vehicles.

III. Year Two Work Plan

Matrix for EcoCAR Teams Communications						
Year Two Work Plan						
ACTIVITY	COMMUNICATIONS GOAL	AUDIENCE	MESSAGES	BUDGET	EVALUATION METHOD	STATUS
Education in the Classroom	Develop week-long activities to be utilized in the classroom to teach our children-- tomorrow's drivers-- about hybrids, sustainability, and alternative fuels	Elementary, middle school, and high-school aged students in our local area and state.	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$200	Surveys to be completed before and after the educational activities	The beginning of Year 2 to the end of Year 2
Education through Influencers	Reach influencers in our state and region with our messages who will in turn influence many others throughout an even greater area	Government officials, public figures, leaders of organizations, or any person who may serve as an influencer to a potential consumer	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$10	Track attendance, literature distribution, informal interviews and perceived interest	The beginning of Year 2 to the end of Year 2
Community Events	Reach our community-- our local towns, state, and southern region-- in an enthusiastic and exciting way with the key messages of EcoCAR	Residents of our local towns, college campus, state, and southern region	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$100	Track attendance, literature distribution, informal interviews and perceived interest	The beginning of Year 2 to the end of Year 2
Campus Events	Work together with various campus organizations to reach our study body with our key messages	Students and faculty at Mississippi State	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$100	Track attendance, literature distribution, informal interviews and perceived interest	The beginning of Year 2 to the end of Year 2

Media Relations	Reach out to local, state, and regional media workers to influence them to spread the word about our messages	Media workers in our local area, state, and region	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$50	Track media involvement and hits	The beginning of Year 2 to the end of Year 2
Website	Frequently reach a large number of people nationally with our messages	General public	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$0	Track visitor count and comments on website	The beginning of Year 2 to the end of Year 2
Social Media	Reach an even larger number of technologically savvy people with our messages and allow them to interact with comments	General public	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$0	Track number of comments and followers of outlets such as Twitter and blog postings	The beginning of Year 2 to the end of Year 2
Marketing Research	Understand our region's perception of hybrids	General public	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$20	Primary and secondary research	The beginning of Year 2 to the end of Year 2
Technical Publications	Reach a more technical audience with a more in-depth look at our messages	Technical audience	EcoCAR, hybrids, sustainability, alternative fuels, environmental responsibility, student and sponsor involvement	\$0	Track number of publications that publish our work	The beginning of Year 2 to the end of Year 2

IV. Appendixes

APPENDIX 1 – Outreach Events

Activity	Date	Location	Audience	Team Participants
1. The Drill	August 19, 2008	MSU Campus	3,000-4,000 attendees	Ryan Williams, Michael Barr; Team Members
2. EcoCAR Interest Meeting	August 26, 2008	MSU Campus	More than 100 students	All team members
3. Presentation to Marketing- Management class	September 9, 2008	MSU Campus	21 students and 1 professor	Lauren Cobb, Outreach Coordinator; Dr. Marshall Molen, Faculty Advisor; Bill Beggs, GM mentor
4. Visit from the deputy head of the European Commission	October 2, 2008	MSU Campus	4 visitors	Matthew Doude, Team Leader; Dr. Marshall Molen, Faculty Advisor; Bob Kirkland, CAVS mentor
5. Starkville Women’s Club	October 3, 2008	Starkville, MS	Approximately 75 women	Matthew Doude, Team Leader; Dr. Marshall Molen, Faculty Advisor
6. Starkville Community Market	October 4, 2008	Starkville, MS	Approximately 200 attendees	Matthew Doude, Team Leader; Lauren Cobb, Outreach Coordinator
7. Cruisin’ the Coast	October 10, 2008	Biloxi, MS	Attendance unknown, over 4,300 registered vehicles	Julian McMillan, Team Member; Ryan Williams, Team Member; Michael Barr, Team Member
8. Johnny Cash Festival	October 18, 2008	Starkville, MS	Approximately 4,500 attendees	Lauren Cobb, Outreach Coordinator; Phillip Cranford, Team Member
9. MSU Homecoming Banner Contest	October 23, 2008	MSU Campus	Number of viewers unknown	Lauren Cobb, Outreach Coordinator; Liza Sisson, Team member
10. MSU Engineering Day	October 25, 2008	MSU Campus	More than 275 attendees	Lauren Cobb, Outreach Coordinator; Liza Sisson, Tom Goddette, Steve Wren, Bruce Clay, Mike Trcalek, Josh Hoop, Team Members

11. Presentation to Day One Leadership class	December 1, 2008	MSU Campus	275 students and 1 professor	Lauren Cobb, Outreach Coordinator; Jenna Grantham, Team Member
12. Presentation to the Women Society of Engineers	January 14, 2009	MSU Campus	20 female Engineers	Matthew Doude, Team Leader; Jenna Grantham, Team Member
13. NAIAS Education Day	January 21, 2009	Detroit, MI	Over 5,000 high school students	Lauren Cobb, Outreach Coordinator; Bruce Clay, Team Member
14. Dudy Gras 3.5 Parade	February 6, 2009	Starkville, MS	Approximately 400 participants	Matthew Doude, Team Leader; Lauren Cobb, Outreach Coordinator; Jenna Grantham, John Robbins, and Michael Sofferin; Team Members
15. MSU Transportation Workshop	February 6, 2009	MSU Campus	Approximately 100 attendees and exhibitors	John Robbins, Team Member; Travis Danis, Team Member, Steve Wren, Team Member
16. 24th IEEE Applied Power Electronics Conference	February 15-19, 2009	Washington D.C.	Over 3,000 attendees and exhibitors	Marshall Molen, Faculty Advisor
17. Presentation to Environmental Science Class	February 18, 2009	MSU Campus	15 students and 1 professor	Lauren Cobb (Outreach Coordinator)
18. Everything Garden Expo	March 7-8, 2009	Starkville, MS	Estimated 2,700 participants	Lauren Cobb (Outreach Coordinator), John Robbins (Controls Team Leader), Michael Barr (Mechanical Team Leader), Emily Mitchell, Josh Hoop, and Bruce Clay (Team Members), Jason Knight
19. Visit from Marketing-Management Class	March 10, 2009	MSU Campus	24 students	Dr. Marshall Molen, Dr. Jason Lueg (Faculty Advisors), Matthew Doude (Team Leader), Lauren Cobb (Outreach Coordinator), John Robbins (Controls Team Leader) Bob Kirkland and Marshall Crocker (CAVS mentors)

20. Green Day	March 11, 2009	MSU Campus	Approximately 2,000 passerby's	Matthew Doude (Team Leader), Lauren Cobb (Outreach Coordinator), John Robbins, (Controls Team Leader), James Felkins (Electrical Team Leader), Mike Trcalek (Mechanical Team Leader), Travis Danis, AJ Wilson, Michael Sofferin, Hyo Jeong Park, Kyle Myers, Emily Donald, and Steve Wren (Team Members), Kellum Oliver, Heath Serio, Caroline Harkins, Caroline Edward, and Chris Pitts (Marketing Class Team Members)
21. 5 th Annual Innovation Conference	March 12, 2009	Nashville, TN	250 Management Level I.T. Professionals	Dr. Marshall Molen (Faculty Advisor), Josh Hoop (Team Member)
22. St. Paddy's Day Parade	March 21, 2009	Jackson, MS	Over 50,000 attendees	Matthew Doude (Team Leader), Lauren Cobb (Outreach Coordinator), John Robbins (Controls Team Leader), Jenna Grantham, Liza Sisson, John Bradley, AJ Wilson (Team Members), Shannon Metcalf, Meghan MacMillian (Marketing Class Team Members)
23. Earth Day	April 22, 2009	MSU Campus	Approximately 4,000 students, faculty, staff, and Starkville community members	AJ Wilson, Kyle Myers, Steve Wren, John Bradley, Julian McMillan, Jenna Grantham (Team Members), Lauren Cobb (Outreach Coordinator), Shannon Metcalf, Antoyne Brooks, Quentin White, Lindsay Bean, Brian Gladney, Jessica Reedy, Mallory Herndon, Caroline Edwards, Chris Pitts, Ashley Ray, Janna Courtney (Marketing Class Team Members)
24. Tupelo Blue Suede Cruise	May 1 & 2, 2009	Tupelo, MS	Over 2,000 attendees and exhibitors	John Bradley, James Felkins, Steve Wren Jenna Grantham, John Robbins, Josh Hoop, and Phillip Cranford
25. Tradeshow Display Press Event	May 21, 2009	MSU Campus; CAVS	Approximately 50 media, CAVS employees, and guests	Matthew Doude (Team Leader), Dr. Marshall Molen (Faculty Advisor), John Robbins, Susan Salkeld, Jenna Grantham, James Felkins, Josh Hoop, AJ Wilson, Michael Barr, Ryan Williams

APPENDIX 2- Media Hits

Media Type	Media Outlet and Reporter's Name	Date	Location	Coverage Origin
1. Online & Newspaper	Starkville Daily News	May 30, 2008	Starkville, MS and Online at: http://www.starkville-dailynews.com/content/view/61100/60/	General Coverage of Challenge X & EcoCAR
2. Newspaper	"The Reflector," Lawrence Simmons	September 5, 2008	MSU campus and Starkville, MS	General Coverage and team Interest Meeting event
3. Web	"Test & Measurement World," Jessica MacNeil	September 11, 2008	Online at: http://www.tmworld.com/blog/30000403/post/1160033116.html	General Coverage of EcoCAR
4. Web	"Our People," Mississippi State University	September 15, 2008	Online at: http://www.msstate.edu/web/people/Doude_Matthew/	Team Leader was honored for exemplary student performance
5. Web	"State Snapshot," Photo by Kenny Billings	October 2, 2008	Online at: http://www.msstate.edu/web/phototemplate.php?id=2005	Coverage of visit from the deputy head of the EU to the U.S. event
6. Television	WLOX News	October 10, 2008	Biloxi, Gulfport, and Pascagoula, MS	Coverage of Cruisin' the Coast event
7. Web	"Electronics Design Strategy News," Rick Nelson & Jessica MacNeil	November 13, 2008	Online at: http://www.edn.com/article/CA6608527.html?industryid=23439	General Coverage
8. Radio	WMSV 91.1, anchor Anthony Craven	December 10, 2008	Starkville, MS	General Coverage

9. Magazine	"Saturn 360°," by Dennis Staszak	Fall 2008 Issue	National	General Coverage
10. Magazine	"Momentum," by Susan Lassetter	Fall 2008 Issue	Southeastern region and online at: http://www.bagley.msstate.edu/media/momentum/index.php	General Coverage
11. LCD display	HPC ² and CAVS lobby	Continuously	MSU Campus	General Coverage
12. Web	Bagley College of Engineering website	Continuously	Online at: http://www.engr.msstate.edu/	Coverage of Engineering Day
13. National Public Radio Podcast	"The Road to Building Greener Cars," Ira Flotaw	January 30, 2009	Online at: http://www.npr.org/templates/story/story.php?storyId=100056973	Coverage of environmental impact of competition
14. Web	"Mississippi State Headlines," Robbie Ward	February 4, 2009	Online: http://www.msstate.edu/web/media/detail.php?id=4465	Coverage of Team Architecture Selection
15. Newspaper	"Starkville Daily News"	February 6, 2009	Starkville, MS and online at: http://www.starkville-dailynews.com/content/view/122569/	Coverage of Team Architecture Selection
16. Web	APEC Conference Website	Continuously	Online at: http://www.apec-conf.org/content/view/159/215/	Coverage of APEC Conference and Plenary Presentation
17. Program Guide	APEC Conference Program Guide	February 15- 19, 2009	Online at: http://www.apec-conf.org/2009/images/PDF/2009/apec_2009_preliminary_program.pdf	Coverage of APEC Conference and Plenary Presentation
18. Web	"Mississippi Business Journal"	February 17, 2009	Online at: http://www.msbusiness.com/article.cfm?ID=7599	Coverage of APEC Conference and Plenary Presentation

19. Newspaper	"The Reflector," Brittany Steer	March 31, 2009	MSU Campus and Starkville, MS	Coverage of EcoCAR's impact on other student's environmental efforts
20. Press Release	Sabrina Armstrong	April 14, 2009	7 local media; see Children's education events 5 and 18 for more details.	Announcemen t of Children's Education Event at Oak Hill Academy
21. Media Advisory	Jason Knight	April 20, 2009	7 local media; see Children's education 5 and 18 for more details.	Details of Children's Education Event at Oak Hill Academy
22. Newspaper	"The Reflector," Rachael Smith	April 21, 2009	MSU Campus and Starkville, MS	Coverage of Earth Day Fair
23. Newspaper and Web	"Starkville Daily News," Kelly Daniels	April 22, 2009	Starkville, MS	Coverage of Earth Day Fair
24. Web	Facebook; Green Starkville group page	Continuous; Began April 23, 2009	Online at: http://www.facebook.com/home.php#/photo/.Php?pid=1587717&id=5606464563	Coverage of Earth Day Fair
25. Web	Facebook; Mississippi State group page	Continuous; began Fall 2008	Online at: http://www.facebook.com/home.php#/group.php?gid=31111338665&ref=ts	Coverage of Team activities
26. Web	Press Release on Bagley College of Engineering website, Susan Lassetter	June 3, 2009	Online at: http://www.bagley.Misstate.edu/media/news/index.php?newsID=493	Coverage of tradeshow display and competition finals

APPENDIX 3-Children's Education

Activity	Date	Location	Audience	Participants
1. Presentation to 4 th grade students	January 28, 2009	East Oktibbeha County Elementary School	22 students and 1 professor	Emily Mitchell, Julian McMillan, Hyo Jeong Park
2. Presentation to 3 rd grade students	February 6, 2009	Starkville Academy Elementary School	17 students and 1 professor	Jenna Grantham, Julian McMillan, Hyo Jeong Park
3. Presentation to Girl Scout Troop 320	March 10, 2009	First United Methodist Church of Starkville	9 girl scouts and 1 troop leader	Susie Salkeld, Bruce Clay, Josh Hoop, and Tom Goddette
4. Presentation to Tupelo Middle School students	March 26, 2009	MSU Campus; McCain Hall	50 students and 4 teachers	Lauren Cobb, Phillip Cranford, and Jenna Grantham
5. Presentation to 5 th grade students	April 3, 2009	Oak Hill Academy; West Point, MS	35 students and 2 teachers	Sabrina Armstrong and Kelly Gaskow (marketing class members)
6. Presentation to 5 th and 6 th grade students	April 13, 2009	Jackson Academy; Jackson, MS	14 students	Lauren Cobb, Emily Mitchell, Julian McMillan
7. Presentation to 3 rd and 4 th grade students	April 13, 2009	Jackson Academy; Jackson, MS	13 students	Lauren Cobb, Emily Mitchell, Julian McMillan
8. Presentation to 1 st and 2 nd grade students	April 13, 2009	Jackson Academy; Jackson, MS	16 students	Lauren Cobb, Emily Mitchell, Julian McMillan
9. Presentation to Kindergarten students	April 13, 2009	Jackson Academy; Jackson, MS	19 students and 2 teachers	Lauren Cobb, Emily Mitchell, Julian McMillan
10. Mississippi Region V Science & Engineering Fair	April 15, 2009	MSU Campus	48 elementary and 32 secondary schools; over	Steve Wren and Phillip Cranford

			1,100 students	
11. Presentation to 4 th grade students	April 16, 2009	Pearl Upper Elementary; Pearl, MS	24 students and 1 teacher	John Robbins and Jenna Grantham
12. Presentation to 4 th grade students	April 16, 2009	Pearl Upper Elementary; Pearl, MS	23 students and 1 teacher	John Robbins and Jenna Grantham
13. Presentation to 5 th grade students	April 16, 2009	Pearl Upper Elementary; Pearl, MS	25 students and 1 teacher	John Robbins and Jenna Grantham
14. Presentation to 5 th grade students	April 16, 2009	Pearl Upper Elementary; Pearl, MS	24 students and 1 teacher	John Robbins and Jenna Grantham
15. Presentation to 5 th grade students	April 16, 2009	Pearl Upper Elementary; Pearl, MS	25 students and 1 teacher	John Robbins and Jenna Grantham
16. Presentation to 4 th grade gifted students & 5 th grade students	April 16, 2009	Pearl Upper Elementary; Pearl, MS	32 students and 2 teachers	John Robbins and Jenna Grantham
17. Presentation to 2 nd grade students	April 16, 2009	Northside Elementary; Pearl, MS	20 students & 1 teacher	John Robbins and Jenna Grantham
18. Celebration with 5 th grade students	April 17, 2009	Oak Hill Academy; West Point, MS	35 students & 2 professors	Sabrina Armstrong, Kelly Gaskow, Jason Knight (marketing class team members), Lauren Cobb, James Felkins, Julian McMillan
19. Presentation to 1 st grade students	April 24, 2009	East Oktibbeha County Elementary School	16 students & 5 teachers	Matthew Doude, AJ Wilson, & Emily Mitchell
20. Presentation to 6 th grade students	April 24, 2009	East Oktibbeha County Elementary School	21 students & 1 teacher	Matthew Doude, AJ Wilson, & Emily Mitchell