

# UPRM Green Campus

## General Support and Funding Proposal



Campus Verde– UPRM

**University of Puerto Rico  
at Mayagüez**

## TABLE OF CONTENTS

PROPOSAL LETTER	3
EXECUTIVE SUMMARY	4
CAMPUS VERDE COLEGIAL BACKGROUND	5
ORGANIZATIONAL CHART	6
ECOLOGICAL HOUSE (ECO-CASA)	7
ECO-HOUSE BUDGET	9
GREEN HIGHLIGHTS	12
GREEN EVENTS	14
OTHER EXPENSES	15
CONTACTS	17

January 23<sup>th</sup>, 2013

Dear Corporate Executives,

Campus Verde Colegial (CVC) is a multi-disciplinary initiative that leads projects and activities in sustainability topics and also serves as an umbrella for green student chapter organizations. Each year, Campus Verde organizes hundreds of activities including outreach to teachers and K-12 students outside our campus. We have been featured several times by the press, on television and the radio, and in newspapers and magazines. Our website offers resources used internationally by persons interested in sustainability topics, including from Mexico, Argentina, Colombia, and from within the U.S. (Texas and Florida).

To expand our outreach, we are developing a *Green Living Showcase*, starting with the 2005 Solar Decathlon House (UPRM **Eco-Casa** or in English, **Eco-House**). This facility will receive hundreds of visitors annually and will include visitors from off-island. It will serve to implement sustainability demos and projects from several interrelated disciplines.

To reach our goals and to continue offering academic, professional, and social activities for our sustainability community, we need your support. We hope your company will become a major sponsor given your history of environmental awareness. Each type of sponsor is described below:

**Platinum Sponsor** – Donation of \$10,000.00 or more. With this donation your company logo will be displayed on the largest size in Eco Casa Sign in front of the structure.

**Gold Sponsor** - Donation of \$5,000.00 to \$9,999. With this donation your company logo will be displayed in medium size in Eco Casa sign in front of the structure.

**Silver Sponsor** - Donation of \$2000.00 to \$4,999. With this donation your company logo will be displayed on the small size in Eco Casa sign in front of the structure.

**Copper Sponsor** - Donation of \$500 to \$1,999. With this donation your company name will be displayed on the Eco Casa sign in front of the structure.

All sponsors will receive our students' **Resume Book**. This book contains the resume of all CVC student members. In addition your company logo will be displayed on the Campus Verde website under the given Category and you will be invited to the Eco-House Inauguration next year. Donations are accepted online at <http://campusverde.uprm.edu/donate>. Campus Verde does not necessarily endorse the sponsors.

Cordially,

Dr. Sandra Cruz-Pol,  
Campus Verde Director

Jorge Bencosme  
Campus Verde Co-Director

Dr. Dallas Alston  
Campus Verde Co-Director

## EXECUTIVE SUMMARY

The Campus Verde Collegial (Green Campus) initiative was created at the University of Puerto Rico at Mayagüez Campus and is a multi-disciplinary association that aims to increase opportunities for our academic and general community to learn about sustainability practices and technology. You can learn more about our work within our previous years Annual Reports and search for more information at <http://campusverde.uprm.edu>.

## Vision

Our vision is to create the infrastructure where people can learn how to live in harmony with nature and acquire sustainable practices to reduce our ecological footprint. We are focusing in seven different areas entitled Seven Green Resolutions, which include:

1. The 3 R's (Recycling, Reducing, Reusing)
2. Energy Efficiency and Conservation
3. Greener Transportation
4. Nature Appreciation, Conservation and Restoration
5. Green Acquisitions and Infrastructure
6. Water Resource Conservation
7. Education and Outreach.

## Mission

Campus Verde strives to integrate environmental knowledge into all relevant disciplines; to improve environmental-studies course offerings; provide opportunities for students to study campus and local environmental problems; conduct environmental audits of its practices; promote environmentally responsible purchasing policies; reduce campus waste; maximize energy efficiency; make environmental sustainability a top priority in land-use, transportation, and building planning; establish a student environmental center; and to support students who seek environmentally responsible careers.

## CAMPUS VERDE BACKGROUND

### CAMPUS VERDE HISTORY

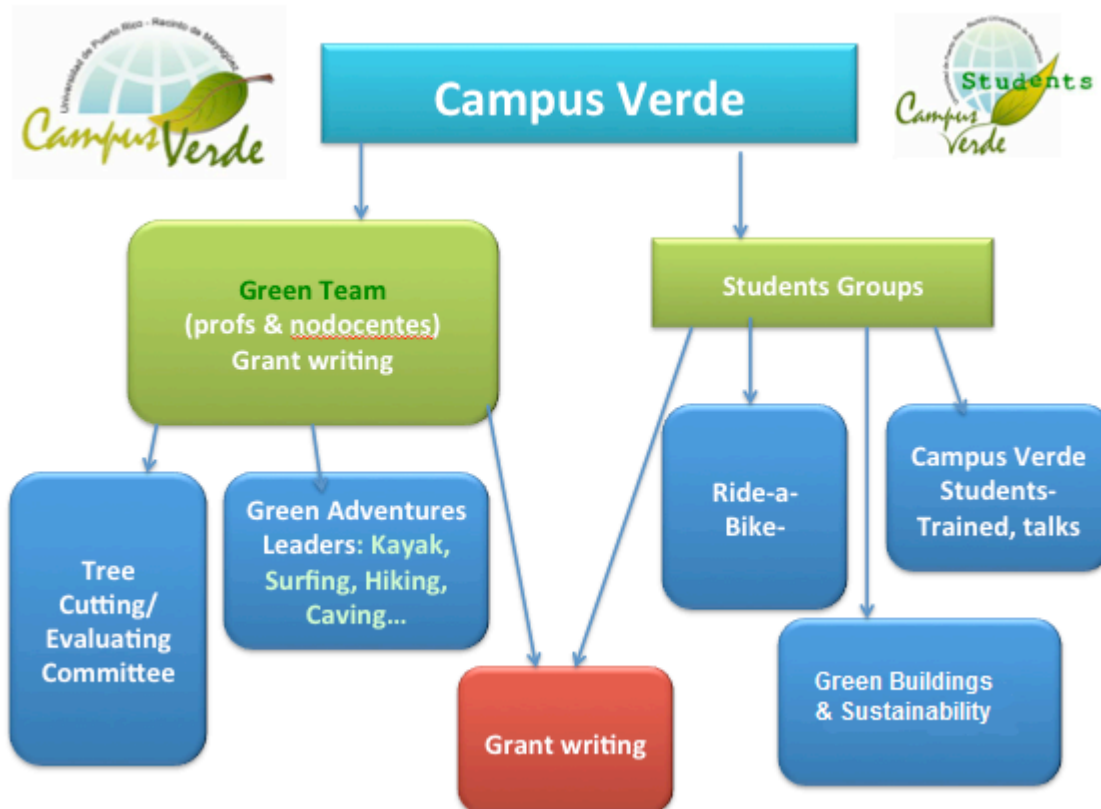
- This initiative was founded in October 2007 by Dr. Sandra Cruz-Pol in collaboration with the UPRM Recycling Program led by Mr. Roberto Torres (chemist with expertise in toxic-waste disposal) and the Campus Verde Colegial (CVC) Student Chapter.
- The CVC Green Team has grown to include UPRM faculty and personnel from multiple disciplines, including from Chemistry, Civil Engineering, Computer Center, Marine Sciences, Agriculture, Biology, and many more. See <http://campusverde.uprm.edu/contact.html>
- Additional **student chapters** have been added under CVC, including a Green Buildings and Sustainability Chapter, Unicef and the Ride-a-Bike chapter.

Dr. Dallas E. Alston, a co-director of Campus Verde Colegial is currently seeking support at the Pontifical Catholic University of Puerto Rico at Ponce Campus to initiate an extension of the UPRM Campus Verde Colegial entitled PUCPR “Campus Verde Pionero”. Possible initial activities being considered include an Eco-Cine during the universal hour, kayaking trips, eco-excursions to Sor Isolina Ferré Key, hiking adventures, distribution of practical tips of sustainable practices, and short-term recycling activities. Dr. Sandra Cruz-Pol may be invited to train undergraduates to give sustainable presentations at local schools and other events. The Student Affairs office has been contacted to possibly provide a free La Católica t-shirt for the first 25 members during the first meeting. You can contact Dr. Alston at [dalston@pucpr.edu](mailto:dalston@pucpr.edu) for more information



Fig. 1. UPRM student chapters under the Campus Verde Colegial initiative

## ORGANIZATIONAL CHART



### Green Adventures

- Leaders for Kayak, Surfing, Hiking, and Cave Exploration. See web for list of people.
- Tree cutting/evaluation committee with expert faculty in related areas.

### Other Green Events

- Eco-cine, Beach cleanup, Waterfall Cleanups, Tree Planting, Conferences, Concerts, and many Global Activities such as the International Climate Action Day (350.org), Earthweek, EarthHour, LEED Course and more.
- Collaboration in research student teams from Project Courses in topics such as recycling, vertical agriculture, renewable energy and more.



## ECOLOGICAL HOUSE (ECO-CASA)



**Fig. 2. Current state of the UPRM 2005 Solar Decathlon House being reconstructed to become the UPRM Eco-Casa.**

The Ecological House (Eco-Casa) will be a showcase of green living that will provide current knowledge about sustainability, the environment, green technologies and conservation practices for the academic and general community.

The USGBC UPRM chapter, in collaboration with faculty/students from several disciplines, will have the opportunity to work hands-on with the continuous development of the house, which will involve education, research and sustainability technologies. They will acquire the practical knowledge of each systems' function to be implemented within the Ecological House. These systems involve solar panels technology; water recycling system, eco-friendly construction materials, and sustainable practical training.



**Fig. 3. Artistic Concept of final product: the new Eco-House**

The Eco-House, once completed will be used as an educative structure to demonstrate projects that help decrease greenhouse gas emissions in the planet and therefore showcase a low ecological impact living unit.

- It will receive visits from private and public schools from all over the island.
- The house will have a small museum of ecofriendly equipment and products, with handouts and books concerning sustainability topics related to renewable energy, organic agriculture, climate change, water and other resources conservation, pollution control, recycling, and others.
- It will also be accessible to our academic community (~16,000 students employees, and professors).
- It will be used as base to develop graduate projects in sustainable technologies with potential collaboration from other university campuses and new environmental initiatives.
- It will be used to build an adjacent organic garden in collaboration agricultural sciences and the USGBC

Students and visitors will benefit greatly from this facility where they can learn about the benefits of green buildings.



## ECO-HOUSE BUDGET

Green Buildings UPRM has as its main goals to provide activities for its members in the following areas: Sustainability, Professionalism, Leadership, Community Outreach, and Environmental Aid. This way, your company will have the option of sponsoring particular events or categories, depending on your projected ideas or goals with our chapter and its members.

### Materials and Equipment Cost Estimates

Activity	Cost	Description	Target Date
<b>Net-metering Connection</b>	<b>\$4,000</b>	The solar house was originally designed to be off-the-grid, i.e. independent of the electrical companies. The net-metering connection will allow for the extra electricity generated with the photovoltaic system to be fed to the electrical grid. This is especially useful during Holiday breaks and weekends.	<b>May 2014</b>
<b>Handicap ramp</b>	<b>\$3,000</b>	The original design had stairways and ramp to the balcony and entrance. We will make this facility accessible to all members of the community.	<b>Jan 2014</b>
<b>Compost toilet</b>	<b>\$2,500</b>	This will serve to demystify the pre-conception that this type of toilet is not feasible or suitable for regular housing units and will avoid the connection to the sewage system.	<b>Jun 2014</b>
<b>Furniture</b>	<b>\$26,000</b>	Includes furniture made with eco-friendly materials for the living room, bathroom and the rest of the house.	<b>Mar 2014</b>
<b>Energy-efficient appliances</b>	<b>\$7,000</b>	These include appliances typical in a house, such as a refrigerator, stove (for ecofriendly food demonstrations), projectors (each with an efficient Energy Star rating).	<b>Apr 2014</b>

General Support and Funding Proposal

Campus Verde– UPRM

<b>Gray-water distribution system</b>	<b>\$3,000</b>	The system will recycle water used from sink and other faucets to be used for a garden adjacent to the Eco-Casa.	<b>Aug 2014</b>
<b>Balcony and stairway</b>	<b>\$1,500</b>	Balcony and stairs construction materials, including a connection from the nearby sidewalk.	<b>Nov 2013</b>
<b>Electrical system</b>	<b>\$3,000</b>	Installation of the electric circuitry inside the house.	<b>Oct 2013</b>
<b>Photovoltaic System installation</b>	<b>\$5000</b>	Installation of solar panels, inverter, batteries and PV system.	<b>Nov 2013</b>
<b>LEED Certification</b>	<b>\$6,000</b>	US Green Building Council (USGBC) Silver Certification fee.	<b>Feb 2015</b>
<b>High Efficiency water systems</b>	<b>\$1,000</b>	Installation of the water efficient shower head, water sinks, and others inside the house.	<b>Jan 2014</b>
<b>Hands-on exhibits concerning sustainability practices</b>	<b>\$55,000</b>	Hands-on exhibits that will provide fun ways to entertain K-12 visitors, while demonstrating concepts about sustainability, energy and water efficiency, green chemistry (hygiene, cleaning products), eco-ecology, and more.	<b>Dec 2014</b>
<b>SUBTOTAL=</b>	<b>\$117,000</b>	Eco-House Materials and Equipment [much of the labor will be provided by students, faculty and UPRM staff.]	

## Why invest in the Eco-Casa?

- ✓ This ecological house will be a model of green living that will serve as a showcase of green technologies and practices.
- ✓ It will receive visitors from K-12 schools from all over the island and from tourists off-island. This, in-turn, will promote more tourism for Western Puerto Rico, especially for those seeking educational and fun activities for their children.
- ✓ It will present a multidisciplinary platform to implement projects from students and faculty from areas such as green chemistry, organic agriculture, green buildings, and much more.
- ✓ It will provide facilities for research and education in multi-disciplinary teams in the latest sustainable technologies and practices, and will attract the best students.

## GREEN HIGHLIGHTS

**For the first time on our campus**, green and sustainable organizations will **join forces** for the common goal of making our campus **greener**. This will provide a huge influence for all of the UPRM academic community to work together toward a sustainable future. **Today, we have more than 7 hands-on faculty members who are part of our Green Team!** See the complete Green Team at <http://campusverde.uprm.edu/contact.html>



**Fig 4.** Above from left to right: Activities related to recycling, kayak trips, recycling, biking, 350.org Day, solar circuit educational outreach to K-12 schools, beach cleanup, tree planting, eco-Rock concert.

**A complete photo album of our past activities can be found at**  
<http://campusverde.uprm.edu/album.html>

## Online Events Page (uprm.edu/eventosverdes)

Our online events calendar is up to date on the events planned for the semester and also holds a history of the events held since its creation. Through it students can see and register to participate in upcoming events. There is also a link to it in the university webpage which generates new visitors frequently.



## Online Webpage (campusverde.uprm.edu)

Our webpage at is full of resources accessible to anyone and is frequently visited and used by local teachers, community leaders and also people from all over the world who use it as a sustainability education page.





**GREEN EVENTS**

UPRM Campus Verde Colegial strives to promote knowledge about sustainability through several activities. Some of the green events planned for this academic year are listed below.

**External**

<b>Activity</b>	<b>Cost</b>	<b>Description</b>	<b>Due Date</b>
<b>Green Training</b>	<b>\$1,000</b>	This annual 1-day workshop is will train our students in sustainability topics in multidiscipline green issues, including chemistry, agriculture, cleaning, recycling, and many other sustainable practices. Our students will then <b>reach out to K-12 schools</b> and civic centers and provide free talks in some of these topics.	<b>Nov 2013</b>
<b>Earth Week</b>	<b>\$2,000</b>	During this week, we hold an initial parade including the university band and concert and fundraising activities. We also invite experts in the areas of green design and leaders in sustainable initiatives to give free conferences to students. Giveaways are held and local artists and farmers are invited to an eco-fair at the student center.	<b>April 2014</b>
<b>Eco-Cines</b>	<b>\$300</b>	Held every month at the university, these documentaries are meant to inform students of local and international sustainability issues and relevant advances. Discussion groups are held and giveaways and snacks are given when available.	<b>All Year</b>
<b>Kayak trips and other green adventures</b>	<b>\$7,500</b>	Buy new equipment: additional kayaks, spare life preservers, bike helmets, lights, emergency blankets, bungee cords, replacement brackets and handles, ropes (painters and tethers), and other materials as necessary.	<b>Nov 2012</b>
<b>Sub-Total =</b>	<b>\$10,500</b>		

## Internal

Activity	Cost	Description	Due Date
<b>Recruitment</b>	<b>\$700</b>	USGBC UPRM, Ride-a-Bike, and Campus Verde Colegial Students will recruit new members at the beginning of August, 2012. Students from any discipline can apply during the year. This includes promotional goodies.	<b>August 1<sup>st</sup> through May 2014</b>
<b>LEED GA Review Course</b>	<b>\$1,800</b>	This event will meet the requirement that is needed for any member in order to take the test for the Green Associate Certificate of LEED. To be held on.	<b>Oct 2013</b>
<b>General Assemblies</b>	<b>4 X \$120 = \$480</b>	Two assemblies per semester. Funds intended for food, and recognitions.	<b>All year</b>
<b>Sub-Total =</b>	<b>\$2,980</b>		

## OTHER EXPENSES

UPRM Campus Verde Colegial relies on financial support to achieve our goals. However, other donations count towards sponsorship and could satisfy the actual needs to support the upcoming schedule. Other expenses are:

Equipment	Cost	Description	Due Date
<b>Polo Shirts Directive Members</b>	<b>6 X \$42 = \$242</b>	To be used as official student directive uniform for our most important activities.	<b>Fall</b>
<b>Polo Shirts Ride-a-Bike &amp; Green Campus T-Shirts</b>	<b>10 X \$42 = \$420</b>	To be used as official student president and vice-president uniform for our most important activities.	<b>Fall</b>
	<b>200 X \$8 = \$1,600</b>	To be given to the members when they become part of our Chapter.	<b>Fall</b>
<b>Sound System</b>	<b>\$700</b>	To be used for each recruiting event and other activities that require a sound system.	<b>April 2013</b>
<b>Sub-Total =</b>	<b>\$2,720</b>		



## In-Kind:

Throughout the year, we need additional resources to successfully carry out our activities. Some of them can also qualify as support from your company:

Resources	Description
<b>Spokesmen &amp; Lectures</b>	Providing people to lead seminars, workshops, and speeches for our events.
<b>Snacks</b>	Supplying <b>eco-friendly</b> refreshments for meetings and events.
<b>Materials</b>	Supplies such as <b>eco-friendly</b> notepads, cups, tote bags, books and others.
<b>Company goodies</b>	Supplies such as company <b>eco-friendly products</b> , and company promoting materials.

This type of sponsoring will showcase and expose your company to students, potential candidates, campus representatives, other professionals, and to the general society. No cost has been provided for these items, as it will depend on your company's willingness on giving such. Any help will be appreciated.

**Approximate Gross Expenses amount of scheduled activities for 2013-2014:**

**\$133,200**

**For any sponsorship, we will appreciate if it is processed through our university's account:**

**UFIS 30270.502 000 xxxx 210 3397 4006 0101 00 (FRS 538029)**

**Payable also online to *Campus Verde*:**

**<http://campusverde.uprm.edu/donate>**

\*Further information can be provided upon request or interest shown by your company on any events.

**Thank you for taking the time to read our Proposal. It's an honor for us to know that you are interested in our organization. Companies like yours provide the foundations we need to make ensure that we produce extraordinary professional leaders that will guide us to a new and sustainable future.**

**We look forward on your support!**

**CONTACTS**

**DR. SANDRA CRUZ-POL**

Campus Verde Colegial Director

(787) 832.4040 Ext. 5822, CEL. (787) 360-2803

CampusVerde@uprm.edu

---

**DR. DALLAS ALSTON**

Campus Verde Pionero Co-Director

DAIston@pucpr.edu

---

**JORGE BENCOSME**

Ride-a-Bike Advisor, Campus Verde Co-Director

Jorge.Bencosme@upr.edu

---

**ANTHONY PEREZ SANTIAGO**

Green Buildings and Sustainability Chapter President

Anthony.Perez2@upr.edu

---

**ANGELICA ABREU**

Campus Verde Students President

Angelica.Abreu@upr.edu