

# Green Dollars Equal Green Schools: Sustainable and affordable – New and renovated Green schools



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**Panel Discussion**

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# GREEN VALUE, GREEN VALUES



The essence of both the CHPS and the LEED for Schools programs are the same, saving energy and improving our learning environments. The byproducts are, if managed properly, money and better educated children. Every dollar not spent on gas, water or electricity can be banked for facility maintenance, staffing, or expanding educational programs.

# GREEN VALUE, GREEN VALUES



## Basic elements of CHPS and LEED

- District commitment
- Site selection
- Quality indoor environments
- Responsible material selection
- Water conservation
- Energy conservation
- Training
- Commissioning
- Innovation.

These are not the exact categories of either but represent the overall thrust of both programs. You will find both to be very similar to the point of almost complete overlap. Making a commitment to the CHPS or LEED principles as a district or as a facilities team, much like saving for retirement is easier the sooner you start.

# GREEN VALUE, GREEN VALUES



## Basic elements of CHPS and LEED

- Both programs are points based and the score that you achieve is dependent on a number of factors relating to the categories listed. Just like in school the harder you work the higher your test score is likely to be. Unfortunately, like in life, high test scores do not always determine your ultimate success.
- Both CHPS and LEED can be viewed as a menu and responsible district administrators, Facilities staff and Designers need to be aware of the cost of each menu item and what value it provides.
- Make the first step of any project deciding on the green values that will be pursued. Once the values are laid out, informed decisions can occur.

# COMMODITAS, FIRMITAS



## **The simple stuff, Commodity**

- Use the land you need and no more.
- Minimize energy and water usage.
- Know the cost of operating everything.
- Select sites that minimize auto and bus trip generation.
- Select materials for durability.

## **The less simple stuff, Firmness**

- Make your own power. (Grid neutral now! Ask me how!)
- Everyone should know how the buildings work and how they work best.
- Plan your sites, buildings and maintenance budgets for 100 years.

# & VENUSTAS



## **The Complicated stuff, Delight**

- Learning and work spaces should be well lit. A combination of daylight and controllable scene, task lighting is best.
- Learning and work spaces should be able to be quiet and acoustically neutral.
- Learning spaces should be a comfortable temperature for the activities of the space and adaptable to varying activities and external temperatures.
- Learning and work spaces should be free of materials that degrade over time in a harmful way or require maintenance that introduces toxins.
- Buildings should address the specific needs of educational programs but retain a measure of adaptability.
- Understanding the green values employed by your school or school district should be part of the curriculum at all ages.

# SHOPPING LIST



## Steps for future project planning

- Establish your District energy use goals.
- Establish a goal for grid neutrality.
- Establish a district wide monitoring standard for energy use and person to oversee the program.
- Test your classrooms for acoustic properties.
- Survey all your equipment for Energy star ratings and life costs.
  
- Make your roofs white.
- Use more insulation, and better weather stripping, windows and doors.
- Get the most efficient HVAC equipment available.
- Determine how you will use the HVAC and stick to it.
- Change all your light bulbs and fixtures to high efficiency models.
- Change bathroom fixtures to multi-flush or no-flush models.

# ToolBox



## Other information

- [www.anovaarchitects.com](http://www.anovaarchitects.com)  
(this presentation available under “what’s new”)
- [www.chps.net](http://www.chps.net)  
(Collaborative for High Performance Schools web site)
- [www.usgbc.org](http://www.usgbc.org)  
(Leadership in Energy Efficient Design (LEED) web site)