Sustainable Schools

A holistic approach to how Virginia Beach City Public Schools is addressing environmental sustainability.

87 schools

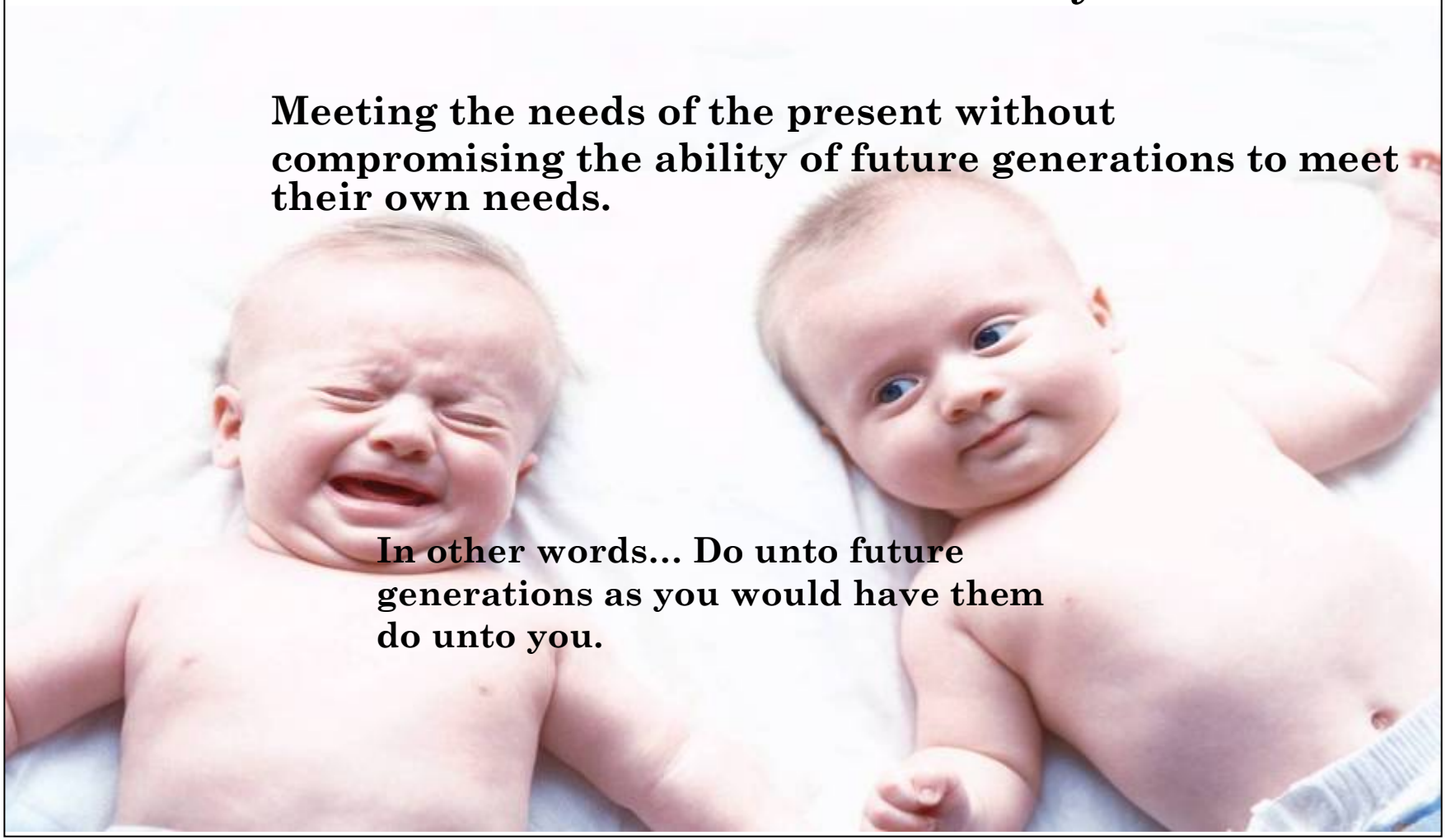
15,000 employees

71,000 students

Before we get started …

Define Environmental Sustainability

Meeting the needs of the present without compromising the ability of future generations to meet their own needs.



In other words… Do unto future generations as you would have them do unto you.

Environmental

VBCPS Goals

1. **Build green buildings.**
2. **Integrate environmentally sustainable practices throughout the school division.**
3. **Educate the public about the importance of environmental sustainability.**

1. Build Green Buildings

Buildings consume:

12% of potable water

39% of primary energy

40% of raw materials

48% of U.S. carbon emissions

70% of U.S. electricity

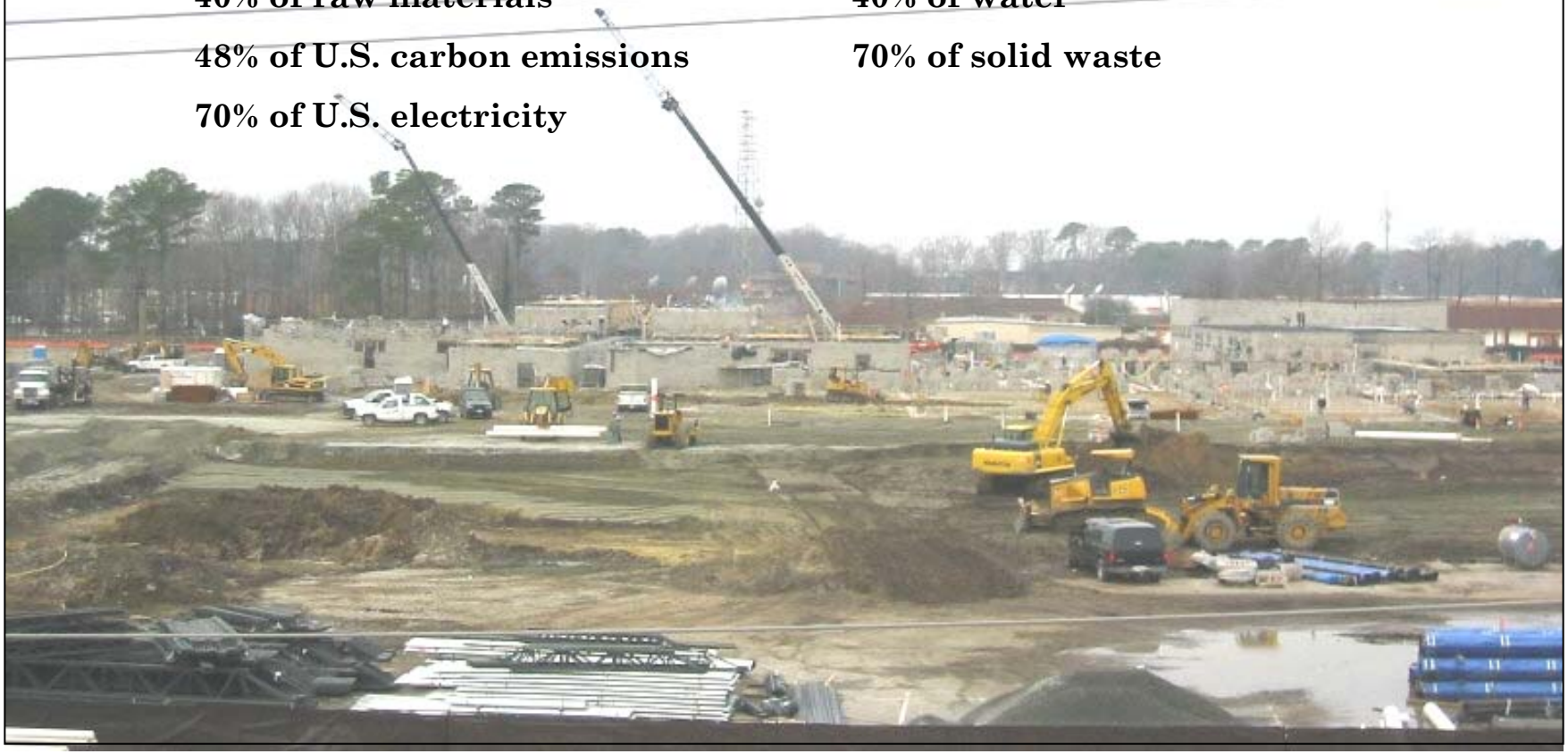
Green buildings save:

30-50% of energy

35% of carbon emissions

40% of water

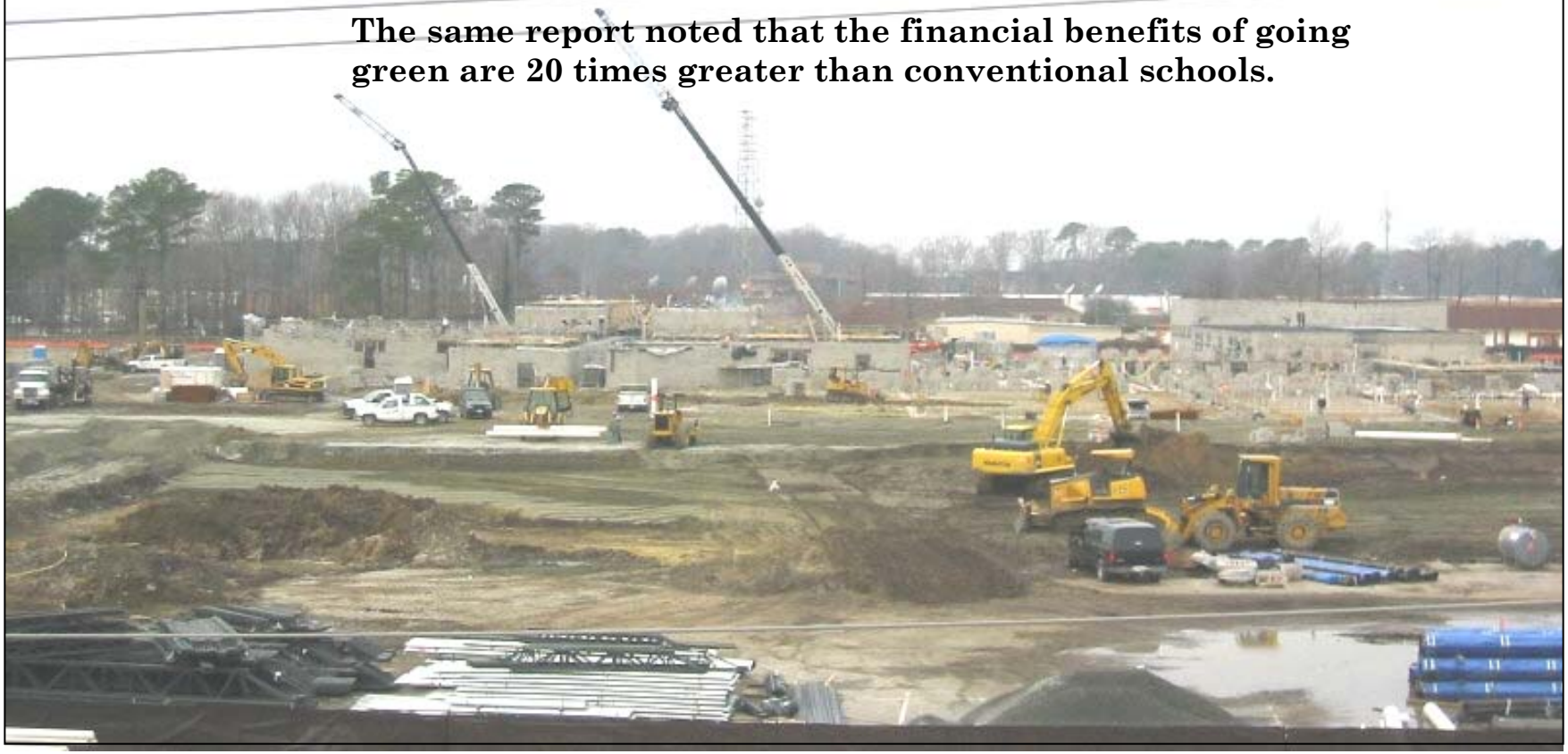
70% of solid waste



1. Build Green Buildings

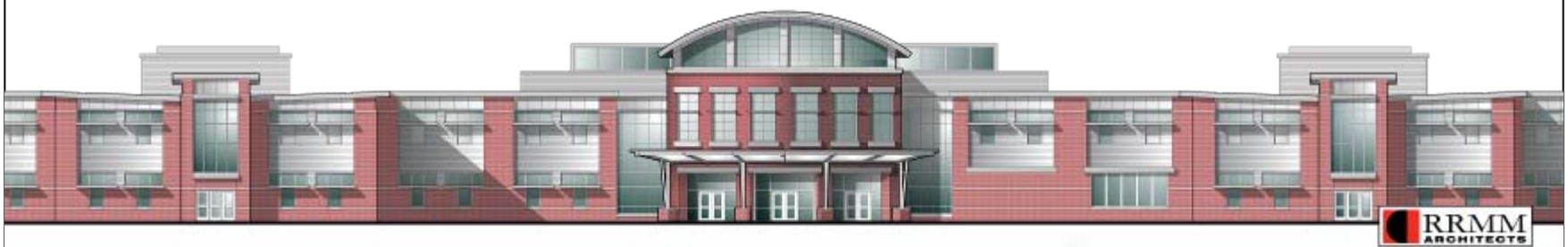
The 2006 report titled "Greening America's Schools – Costs and Benefits" reviewed 30 green schools in the U.S and determined that the average increase in construction costs was less than 2% more than conventional schools.

The same report noted that the financial benefits of going green are 20 times greater than conventional schools.



Hermitage Elementary
Virginia Beach Middle
Great Neck Middle
Renaissance Academy

- Geothermal heat pumps will provide heating and cooling throughout the 285,000 square foot building.
- A rainwater collection system will collect water from the roof and store it in a 50,000 gallon cistern so water can be used to flush toilets. This will allow the school to save approximately 1 million gallons of treated water per year.
- Solar collectors will be used to heat hot water for the kitchen.
- Photovoltaic cells (PV's) will be used to collect energy and feed that back to the grid in the form of electricity.
- 16,000 square feet of green roof will decrease heating and cooling costs while reducing the amount of runoff that is channeled into the cities storm water system.



Renaissance Academy

2. Integrate Environmentally Sustainable Practices.

The SSC (Sustainable Schools Committee) was formed in September of 2006.

The main function of the SSC is to monitor and make recommendations regarding sustainability within the school division.

The committee is comprised of representatives from the following departments:

- Facilities Planning and Construction
- School Plant
- Custodial Services
- Supply Services
- Transportation
- Technology
- Food Services
- Curriculum and Instruction
- Media and Communications
- Safe Schools
- Landscape Services
- Parks and Recreation

3. Educate the Public

- **Designation of the Sustainable School Liaison (SSL)**
- **Green news greennews@vbschools.com**
- **Web Page www.vbschools.com/greenschools**
- **Bike Share**

Spread the Word

- Executive Order 48
- 26 States
- 110 Cities
- The 2030 Challenge