



WHAT IS SUSTAINABILITY?

In 1969, the U.S. National Environmental Policy Act declared as its goal a national policy to “create and maintain conditions under which [humans] and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of Americans.” Per the EPA, the most widely quoted definition internationally is the “Brundtland definition” of the 1987 Report of the World Commission on Environment and Development: Sustainability means **“meeting the needs of the present without compromising the ability of future generations to meet their own needs.”**

STUART DEAN AND SUSTAINABILITY

For 75 years, the Stuart Dean Company has dedicated itself to excellence in the maintenance and restoration of building surfaces — metal, stone, wood and glass — to help enhance and extend the life span of the finest buildings in America and the world. In actual practice, Stuart Dean has been in the sustainability business its entire existence by working daily to preserve fine buildings for the enjoyment of future generations — thereby maximizing the use of the resources that went into their creation. With today’s growing awareness of the importance of life cycle considerations in all practices, the Stuart Dean company is actively seeking, finding and implementing ever more valuable tools to preserve building surfaces in as sustainable a manner as possible.

SUSTAINABLE SOLUTIONS

Best practices in sustainability include taking a cradle-to-cradle approach to all activities and products and making every effort to save energy, reduce water usage, and limit emissions of VOCs and greenhouse gasses (CO₂, methane and NO_x). “Green” is one of the most abused terms in marketing today. “Green Today” means a modest reduction in carbon footprint with minimal consideration of life cycle consequences. True sustainability means a commitment to using and delivering products and services that help reverse planetary damage. “Green Tomorrow” will entail the use of products and services that help heal the planet and reverse the environmental damage that is currently underway.

PURETi – A TRULY SUSTAINABLE SOLUTION

Stuart Dean has taken a leadership role in innovative sustainability by pioneering the introduction of PURETi water based photocatalytic surface treatments to its client base in the commercial real estate, hospitality and architectural markets. PURETi is the world’s most advanced, light-activated, self-cleaning, air-purifying surface treatment — and possibly the most broadly beneficial new environmental technology that most Americans have never heard of.

It may sound too good to be true but PURETi water-based surface treatments are currently being spray-applied to:

- **Roads and Cementitious Supports** – to transform roads into an NO_x reducing pollution solution
- **Roofs** – to keep white roofs whiter longer and optimize their energy-saving benefits and life spans
- **Building Facades and Windows** – to preserve appearances, cut maintenance costs by 60% and help purify the air
- **Solar Panels** – to mitigate the dust factor and optimize electrical output over time
- **Window Treatments and Lamp Fixtures** – to eliminate odors and reduce VOCs in interior environments

PURETi is real, backed by real science and excellent real world results, including a partnership with NASA to treat buildings in Stennis, MS.

Here is one client's opinion of PURETi in a Q&A from the **US Green Building Council's Summer 2009 newsletter**:

USGBC: What impact have you had on new technologies in green building?

Larry Eisenberg: "It may seem random, but our experimentation with new building coatings has brought change to that industry. **At one point, we went with an innovative titanium dioxide coating that wards off dirt and pollution, removing organic pollutants from the air and reversing the effects of greenhouse gases. It proved a major success and will cut our maintenance costs for years to come.** Just a few years ago, no market existed for this type of coating in the United States, but demand has grown to such a point that a trade association may soon form around it."

(Note: Mr. Eisenberg is the Executive Director of Los Angeles Community College District-Build Green. At \$5.7 billion, the LACCD is arguably the largest green building program in America. PURETi is the only photocatalytic surface treatment that has been applied at the LACCD. Over one million sq. ft. of building exterior surfaces (roofs, windows and facades) have been treated to date.)

SUSTAINABILITY IN ACTION

PURETi water-based photocatalytic surface treatments transform building surfaces (roofs, windows and facades), roads and solar panels into self-cleaning air scrubbers. It saves on energy and water consumption while reducing atmospheric VOCs and greenhouse gases. PURETi surface treatments form nano-thin (40nm – 1/25,000th of a mil) films that are invisible and imperceptible – yet continuously active and environmentally beneficial.

Photocatalysis is a natural process best described as the opposite of photosynthesis. Photocatalytic surface treatments use light energy to accelerate the breakdown organic matter at the molecular level – safely, instantly and continuously in billionths of a second.

One sustainable and cost-effective (LEED point-worthy) spray application of PURETi's proprietary and patented photocatalytic system works for five years or more to improve the environment and reduce maintenance costs.

When professionally applied by Stuart Dean's Certified PURETi Applicators, PURETi solutions provide Facility Managers with:

- Reduced water and chemical usage and maintenance costs
- Improved façade appearance
- Cool-roof energy savings
- Improved IAQ and mold prevention inside and out

Together, PURETi and Stuart Dean's commitment to Sustainability includes a commitment to:

Cradle-to-Cradle Sustainability – Life Cycle Analyses show PURETi to deliver a significant net environmental good.

Safety – PURETi is registered safe for food surface contact with NSF – the National Sanitation Foundation. Stuart Dean's commitment to safety sets the standard in our industry.

Quality – All PURETi products are produced in America in ISO Certified Plants with Lot and Batch Control. All PURETi products are applied by supervised Stuart Dean technicians to the highest possible standard.

Continuous Improvement – PURETi is engaged in ongoing research with NASA, LBNL, and leading universities such as Yale, LSU and Stony Brook to maintain its leadership in photocatalytic TiO₂.

Stuart Dean University – Our training center is the service industry's finest academy for setting and maintaining professional standards.

SQ – SUSTAINABILITY QUOTIENT

America's top educational institutions have created the new title "Chief Sustainability Officer" to help lead their communities into a "Greener Tomorrow." This successful innovation will become a trend as all organizations look to do their share in **"meeting the needs of the present without compromising the ability of future generations to meet their own needs."**

New metrics are being developed to track progress toward the essential goal of sustainability. Expect an SQ, or Sustainability Quotient, to emerge and rival IQ in importance. A high IQ and a low SQ is an oxymoron. More positively phrased – **"Sustainable Business is Smart Business."**

Stuart Dean has raised its SQ by leading the way with PURETi – a truly sustainable solution. **Let Stuart Dean help you raise your organization's SQ. Please give us a call today.**