

ENERGY EFFICIENCY THROUGH CULTURAL CHANGE

DuPont Sustainable Solutions



Chris Smith

Global Practice Director, Energy Efficiency
DuPont Sustainable Solutions

“There needs to be a culture created where everyone is empowered to identify problems, bring them to the attention of others, and, as appropriate, work to solve them.”



ENERGY-INTENSIVE INDUSTRIES*

with % of energy consumption

*2011 International Energy Outlook Report issued by the U.S. Energy Information Administration (EIA)/Department of Energy (DOE)

24%

Mining, Metals, and Minerals

20%

Oil and Gas

4%

Pulp and Paper

13%

Chemicals

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KEY ELEMENTS THAT DRIVE THE NEED FOR ENERGY EFFICIENCY

ACCESS TO CAPITAL
VOLATILITY OF RESOURCE COSTS
PUBLIC ACCOUNTABILITY

PUBLIC POLICY
COMPETITION

ENERGY EFFICIENCY AT DUPONT STARTED WITH STRATEGIC ENERGY MANAGEMENT

135

Diverse Production Facilities

6 BILLION

In energy cost savings since 1990 baseline

↓ 6% 40% ↑
6% reduction in energy use since 1990 baseline while production increased by 40%

60%

Greenhouse Gas Emissions Decreased 60%

45 MILLION

Continue to reclaim 5% year-over-year energy savings

5 COMPONENTS

OF STRATEGIC ENERGY MANAGEMENT



- 1 Identifying and elevating energy cost as a strategic business issue
- 2 Identifying and executing the right projects to drive highest gain results
- 3 Implementing a vertically integrated management approach to drive results
- 4 Connecting many disconnected components of complex energy management
- 5 Developing skills and capabilities of the people in the organization

CORPORATE

The Bold Energy Plan: Less Gas, More Profit

- In 2011, saved \$56 million (= 5% of the prior year's energy costs)
- Implementing 503 projects that required little or no out-of-pocket spending and 69 funded capital projects with ROI = 123%

BUSINESS UNIT

Titanium Technologies Sets the Gold Standard

- In 1999, a comprehensive program to significantly reduce energy use while increasing TiO_2 production was initiated
- By 2010, the division had increased production by 72% over 1990 levels
- Energy usage decreased by 40%

SITE

Steamy Savings @ Sabine River

- Over \$75 million savings in energy costs from 2008 to 2011
- Saved \$19 million in 2011
- Site energy productivity (in BTU per pound of product) improved 40% in 2008 with lower total production

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ENERGY EFFICIENCY WHITE PAPER



strategic energy management
operational discipline



- Energy consumption reduction
- Reduced exposure to escalating energy prices
- Cost reduction
- Volume
- Reduced risk

Energy Value Creation