

# Protecting People and the Environment Megatrend

## Delivering Safety & Security for People and Infrastructures



### Personal Protection Goes Mainstream

- Kevlar®
- Nomex®
- Protera™
- Tychem®
- Tyvek® Isoclean®
- Suprel® LS
- Hybrid Membrane Technology

### The Challenge

The last decade taught people throughout the world to expect the unexpected. Terrorism, crime, pandemics and the recent economic recession have given people an increased desire to take control of their lives and their surroundings. The basic human need to be safe continues to grow as people are becoming more exposed through social networks and multiple instantaneous news sources that reach us with sound, images and words in a 24/7 world.

### The DuPont Value Proposition

DuPont continues to leverage its recognized and trusted brands by using market-driven science, heritage and capabilities. The company will expand on current offerings with new technologies that provide the protection people seek everyday, both in their personal lives and at work. DuPont's global leadership in safety and operational excellence is dedicated to saving lives in the workplace and to optimizing business productivity while managing risk to key assets throughout the world. Science and innovation are at the root of developing and implementing systems and products that create safer and more environmentally sound production capabilities. DuPont is focused on preventing the spread of infectious diseases through products and services for workplaces, hospitals and the general population. The company offers solutions that enhance air quality and water quality for consumption and industrial use. DuPont science, in tandem with deep involvement with the building industry, will continue to provide the safe and sustainable structures required by global commercial and residential customers today and in the future.



### Vigilance to Workplace Safety

- Training & Consulting Services

### The Market Opportunity

DuPont estimates the global market opportunity for protecting people and the environment will exceed \$40 billion by the year 2012. Sales in this segment represent \$2.5 billion for DuPont. According to industry estimates, the life sciences consumables market segment totals approximately \$1 billion globally, including garments, wipes and disinfectants, among others. The estimated demand for disposable and reusable garments alone is \$280 million globally. In the clean fuels market, DuPont revenues have more than tripled since 2003 and DuPont sees major growth potential in all regions of the world, with an addressable market opportunity of about \$20 billion.

### The DuPont Opportunity

#### Personal Protection Goes Mainstream

No longer is personal protection an area of interest primarily to the military and law enforcement. Today, people want increased personal safety at work, at home and at play for all members of their family. Products and services that help keep people safe and healthy by preventing injuries and illnesses provide the benefits that really matter.



### The Need for Clean Air, Water and Fuel

- Clean Technologies
- Secure Environmental Treatment
- Sulfur Technologies

#### Vigilance to Workplace Safety

While industrialized countries have seen steady decreases in the number of occupational accidents and diseases, this is not the case in countries experiencing rapid industrialization or those too poor to maintain effective national occupational health and safety systems. The United Nations International Labour Organisation (ILO) has called for preventative safety and health, and recommended that it become an integral part of wider societal culture and economic development. Increasingly regulatory enforcement, coupled with consumer backlash against poor working conditions and product safety concerns, indicates that increased vigilance to workplace safety will continue globally. As companies look to maximize capacity without new investment, they are reassessing the role of safety and sustainability within their organizations as a source of competitiveness through operational excellence.



### Reducing the Spread of Infectious Diseases

- RelyOn™
- Virkon® S
- Biosecurity Kits
- Drug Delivery Systems
- Medical Packaging
- Tyvek®
- Tychem®
- Training & Consulting Services



### Safety and Sustainability in Manufacturing

- Training & Consulting Services



### Commercial and Residential Buildings as Safe and Sustainable Sanctuaries

- Corian®
- Zodiaq®
- Tyvek® HomeWrap®
- SentryGlas®
- Energain®
- Photovoltaic Solutions
- Suva®
- Isceon®

### The Need for Clean Air, Water and Fuel

Clean air and water are intrinsically linked to population growth and higher standards of living. Less than 1 percent of the world's fresh water is accessible for direct human uses, and the demand for water for agricultural and industrial use continues to grow requiring more sophisticated solutions for economically feasible clean water technologies. Solutions to meet clean energy needs are more critical now than ever, to provide low sulfur transportation fuels and reduce air emissions. Petroleum refiners are being challenged to handle higher sulfur crudes, reduce emissions in the refining process, and continue to expand production of alkylate to meet market demand for clean burning fuels. At the same time, international government agencies are enacting increasingly stringent environmental regulations. DuPont Clean Technologies develops solutions for clean air, fuel and water. These include the reduction of particulates such as sulfur dioxide, nitrogen oxide and sulfur emissions, formulating cleaner fuels or disposing of liquid waste.

### Reducing the Spread of Infectious Diseases

In the last 30 years, there has been an average of one new disease emerging every year. The emergence of new infectious diseases and the rapid spread of older ones are due to several trends, according to the World Health Organization. And the fact that more than two billion people per year travel by air means that outbreaks can easily cross borders. While new advances in vaccines and drugs are critical, one major trend is the focus on prevention through better sanitation both within medical facilities and in the general population. This requires a mix of products and behavior change. DuPont offers a broad range of products that protect people, animals and assets, from garments and medical packaging to disinfectants and training materials.

### Safety and Sustainability in Manufacturing

The recent economic downturn resulted in the idling, mothballing and closing of many manufacturing facilities. As companies look at new ways to maximize capacity without new plant investment, they are reassessing the role of safety and sustainability within their organizations as a source of competitiveness through operational excellence. While many organizations globally are still driven primarily by regulatory pressures, more companies are beginning to see distinct financial advantages in safety and sustainability best practices in terms of energy savings and productivity. DuPont provides energy management solutions targeted to safety, operations and sustainability.

### Commercial and Residential Buildings as Safe and Sustainable Sanctuaries

Increasingly, commercial and residential buildings are viewed as sanctuaries to provide safe and sustainable space for occupants. Savvy decision-makers are engaged in thorough research to understand the products and the companies that produce these options. The desire for beauty, convenience and consistency remains high but must be provided within a framework of safety and sustainability. New products that help creative people fully exploit their creativity in design and architecture will be critical to their success. DuPont is dedicated to reducing its environmental footprint, as well as its customers', with new products that recover post industrial and post consumer content, allowing DuPont to not only recycle those products, but also to create new aesthetics that weren't possible before for builders, designers and architects. The goal: to enable the construction of net zero energy homes.



*The miracles of science™*