Fact Sheet

DuPont Photovoltaic Solutions

- With global energy demand expected to double by 2050, few needs are as pressing as expanding the global energy mix. Scientific innovations are key to meeting modern needs with new sources of energy, including photovoltaic (solar) energy.

- Solar energy is the most abundant energy resource on earth – 173,000 terawatts of solar energy strike the Earth continuously. That’s more than 10,000 times the world’s total energy use. Bringing innovations to market that harness that power is essential.

- Over the next several years, the industry estimates about 15% average annual growth in solar system installations, as solar reaches grid parity in more markets with continued reduction of power generation cost.

- DuPont has been at the forefront of solar innovation. Beginning in the 1950’s, DuPont provided the first purified silicon for the Bell Labs experiment demonstrating the first solar cell.

- Today, DuPont is the leading supplier of specialty materials to the solar energy industry, with products designed to boost the power output and reliable lifetime of solar panels, lowering overall system costs and improving system investment returns for solar.

- DuPont revenue from sales into the photovoltaic market has been roughly $1 billion per year each of the last several years.

- Over the last 7 years, DuPont has introduced more than 110 new Solamet® pastes designed to boost solar panel power output.

- Tedlar® film is the only backsheet material proven to protect solar panels for 30+ years in all weather conditions.

- More than half of the world’s 700 million solar panels installed since 1975 have DuPont materials in them.

- DuPont materials have been time-tested in >11 trillion panel-hours of solar installations across the globe since 1975.
Advanced materials from DuPont include photovoltaic metallization pastes, backsheet materials, ionomer encapsulants, silicon doping technologies, electrical and structural component materials. Key examples include:

- **DuPont™ Solamet® photovoltaic metallization pastes**, that help significantly increase the efficiency of solar cells, and the power output of solar panels.

- **DuPont™ Tedlar® polyvinyl fluoride films** - the only backsheet material proven to protect solar panels for more than 30 years even in extreme outdoor conditions.

- **DuPont™ Surlyn® ionomer encapsulant materials** that deliver long term, proven protection for solar cells and circuitry.

- **DuPont performance polymers**, that provide innovative solar mounting system solutions, for easier installation and reduced system costs.

DuPont also uses solar power, with 14 installations at current and former DuPont facilities around the world generating more than 11 million kilowatt hours of solar electricity annually.

Recognized as a leading solar patent producer by the Clean Energy Patent Growth Index, DuPont continues to innovate through its global network of technical centers focused on solar R&D, application development and testing.

No other material supplier in the world has capabilities for fully integrated development, from solar materials, to cell and panel assembly, manufacturing and testing. DuPont leverages these capabilities to collaborate with its customers and help the solar industry thrive.

To learn more about DuPont Photovoltaic Solutions, please visit [http://photovoltaics.dupont.com](http://photovoltaics.dupont.com).