



## Press Release

### **First Solar Announces Insurance Policy to Fund Solar Module Reclamation and Recycling Expenses at End of Product Life**

*- European and U.S. Renewable Energy Leaders Endorse Innovative Insurance Program, CdTe Technology*

Phoenix, Arizona, May 25, 2005 – First Solar, LLC announced today that it has completed a long term agreement with a major international insurance company to fund the estimated future costs of reclaiming and recycling First Solar modules at the end of their use. The agreement, referred to as a Reclamation and Recycling Reimbursement Policy, assures owners of First Solar modules that, at the end of solar module use, funds will be available to pay the estimated costs of transporting First Solar modules to a recycling center and recycling them into new products.

"We are extremely excited to announce this insurance program to complement the reclamation and recycling programs we already have in place" said Mike Ahearn, CEO of First Solar. "The financial commitment we are making by funding our future reclamation and recycling expenses through a current insurance policy underscores our industry leadership in product life cycle management" he stated. "We are making a major contribution to improving the environment by scaling up production of an advanced thin film semiconductor process that has the potential to reduce solar electricity costs to levels that are competitive with conventional electricity. At the same time, our process is removing cadmium already present in the environment from mining and converting it to an environmentally safe product," he added.

"Renewable energy technologies have the most important impact for improving our environment. In an era when climate change and scarce conventional energy sources are among the highest threats humanity is facing, new renewable energy technologies are needed that become cost competitive with conventional energy sources as soon as possible", stated Hans-Josef Fell, Member of the German Parliament (Bundestag), Vice-President of EUROSOLAR and one of the leading politicians in Europe for the promotion of Renewable Energy. "First Solar's thin film PV technology promises that. With its new Recycling-Insurance program and a total life-cycle-management, First Solar takes a leading role in the PV industry to maximize the environmental benefits of solar energy," he added.

- more -



## Press Release

“The announced insurance-secured, pre-funded take-back and recycling programme of First Solar is an important step to remove the last obstacles for a large scale market introduction of CdTe photovoltaic modules. This program is in line with the Integrated Product Policy approach of the European Commission laid out in the Communication from the Commission to the Council and the European Parliament [COM (2003) 302 final],” stated Arnulf Jager-Waldau, European Commission Joint Research Centre, Renewable Energies Unit. The Joint Research Centre is a research based policy support organization and an integral part of the European Commission. “The production and use of CdTe photovoltaic modules not only removes cadmium as mining residue from the environment by transforming it into an environmentally stable semiconductor, but also generates electricity that reduces cadmium emissions in ambient air from fossil combustion processes,” Jager-Waldau said. “The voluntary insurance-secured, pre-funded take-back and recycling programme also shows the commitment of First Solar to offer the customer a product which can be produced and recycled in a closed loop manufacturing process” he added.

“First Solar’s modules not only prevent toxic and greenhouse gas emissions from conventional electricity generation but also encapsulate cadmium inevitably produced during zinc smelting into double-glass CdTe solar modules that are safe for health and the environment,” said Vasilis Fthenakis, Head of the National Photovoltaic EH&S Research Center, Brookhaven National Laboratory. The Center is responsible for evaluating the environmental effects of solar modules on behalf of the U.S. Department of Energy. “By developing reclamation and recycling programs and an insurance program to fund end of life collection and recycling costs, First Solar has developed an excellent offering from an environmental standpoint. Our research shows that CdTe in PV appears to be more environmentally friendly than all other current uses of Cd,” according to Fthenakis.

“The Department of Energy strongly supports CdTe as a leading solar module technology for the 21st century” stated Ken Zweibel, Manager of the Thin Film PV Partnership, National Renewable Energy Laboratory. The National Renewable Energy Laboratory researches and develops photovoltaic technologies for commercialization on behalf of the U.S. Department of Energy. “We believe CdTe has the potential to achieve the lowest costs among current

- more -



## Press Release

photovoltaic technologies, and its cost potential as well as its high volume production capability will enable solar electricity to make major inroads into mainstream electricity markets. This makes CdTe an important part of our nation's climate change strategy," he stated. "The fact that First Solar is removing cadmium from the environment by transforming it into a safe compound semiconductor that can be used to generate clean electricity also makes this a superior technology from an environmental perspective," he added.

"I applaud the commitment of First Solar to be among the first companies to take back and recycle all its produced modules after their life-time", said Carsten Körnig, Managing Director of the German Solar Industry Association UVS. "First Solar is the first company in the industry to fund such an ambitious program by an independent major insurance company. This shows the far-sighted approach of the solar industry to make a real environmental contribution not just to reduce greenhouse gas emissions but to also be environmentally exemplary along the whole chain from production to the end-of-lifetime of the product," adds Körnig. He continues: "With approaches like that the solar industry proves that it has learned from the mistakes of other industries not to be serious and consequent about life-cycle-management. The solar industry takes real actions already now, although most modules still have an expected life-time of an average of more than 25 years."

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### **About First Solar**

First Solar, one of the fastest growing manufacturers of solar modules in the world, employs an advanced CdTe thin film semiconductor process capable of producing high volumes of solar modules at cost levels competitive with conventional electricity, reducing vast amounts of harmful air emissions resulting from fossil fuel generation. The process also removes cadmium that is inevitably present in the environment as mining waste and converts it to a stable, encapsulated compound, CdTe, which has been independently determined to be safe to the environment. First Solar operates ISO 9000 and 14001 certified facilities and manages the entire product life cycle with a focus on continuously improving the net environmental benefits from its offerings. For more details, see [http://www.firstsolar.com/environment\\_mission.php](http://www.firstsolar.com/environment_mission.php).

For more information, please visit [www.firstsolar.com](http://www.firstsolar.com), or contact:

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