

First Solar Environmental Health & Safety Reference List

Websites:

First Solar Product Lifecycle Management

http://www.firstsolar.com/product_lifecycle.php

Cadmium Use in Photovoltaics – NREL website

<http://www.nrel.gov/pv/cdte/perspective.html>

Cadmium Facts and Handy Comparisons, NREL website

http://www.nrel.gov/pv/cdte/cadmium_facts.html

Columbia University Center for Life Cycle Analysis

<http://www.clca.columbia.edu/mission.html>

Brookhaven National Laboratory

Photovoltaic Environmental Research Assistance Center

<http://www.bnl.gov/pv>

George Washington University Institute for Analysis of Solar Energy

<http://solar.gwu.edu/index.htm>

Reference Documents/Reference Sources:

Emissions from Photovoltaic Life Cycles, Vasilis M. Fthenakis, Hyung Chul Kim, and Erik Alsemsa, Environmental, Science & Technology, March 15, 2008

Study on the Development of a Take Back and Recovery System for Photovoltaic Products, Funded by BMU, Grant number 03MAP092, 2008

Environmental Impacts of PV Electricity Generation – A Critical Comparison of Energy Supply Options, E.A. Alsema, M.J. de Wild-Scholten, V.M. Fthenakis, Presented at the 21st European Photovoltaic Solar Energy Conference, Dresden, Germany, 2-8 September 2006

RESOLVED Report, BAM et al, 2008

Cadmium Market Report, International Cadmium Association Informational Meeting, Raleigh, NC, April 10, 2008

Summary Report, Peer Review of Major Published Studies on the Environmental Profile of Cadmium Telluride (CdTe) Photovoltaic Systems, Arnulf Jager-Waldau, European Commission, DG, JRC, Institute for Sustainability, Renewable Energies Unit

Emissions and Encapsulation of Cadmium in CdTe PV Modules During Fires, V.M. Fthenakis, M. Fuhrmann, J. Heiser, A. Lanzirrotti, J. Fitts, and W. Wang, Progress in Photovoltaics: Research and Applications, 2005.

Health, Safety and Environmental Risks from the Operation of CdTe and CIS Thin-film modules, Progress in photovoltaics; Hartmut Steinberger, Research and Applications, December 1998

Life cycle impact analysis of cadmium in CdTe PV production, Vasilis M. Fthenakis, Renewable & Sustainable Energy Reviews, December 2003

