

✘ Talk about green power is often colorblind, minimizing the darker side of the technologies. Land use and ecological concerns are sometimes raised about wind and solar, but we don't often hear about the toxics and occupational health issues raised by these renewable energy sources. In 2009, the Silicon Valley Toxics Coalition issued its report—[Toward a Just and Sustainable Solar Energy Industry](#)—detailing environmental and health concerns associated with this industry sector. The report warned that “The use of silane gas is the most significant hazard in the production [process] because it is extremely explosive and presents a potential danger to workers and communities.” The report is consistent with earlier work done at the Brookhaven National Laboratory's [Photovoltaic Environmental Research Assistance Center](#). This month [Scientific American](#) reported two fatal incidents at solar cell production facilities involving silane gas, one in Taiwan and the other in India.

Most safety experts will likely tell you that there are standard handling procedures for silane, and it is unclear whether or not the facilities in those two cases were following the appropriate procedures. Fair enough, but two additional points should also be kept in mind. First, prevention is often the best route to safety; and as the Scientific American article mentions, safer alternatives to silane may already exist. Second, green power doesn't mean necessarily safe power; policymakers and other advocates of solar power should ensure that some reasonable portion of the resources devoted to the development and deployment of solar power is directed at addressing the environmental and occupational hazards it may be creating.