

## **Elon Musk's SolarCity Solar Panels Set Your Home (or Walmart) on fire and poison the Earth**

- Walmart sues Musk for setting their stores on fire!

A neighbor down the street proudly placed solar panels on his house. He spent \$4,000 after government subsidies and whatever deductions he may have taken from his income tax. He is confident that this move will save him tons of money on electricity and will safeguard the planet from global warming Armageddon by reducing his carbon footprint from fossil fuels.

There is one fly in this perfect ointment—solar panels generate [“tons of toxic waste”](#) during the production process and during their disposal/replacement.

The solar energy advocates, who only see cheap electricity with rose-colored glasses, are oblivious to the reality of cost, toxic chemicals, environmental pollution, and health hazards to humans and animals. Here are some immediate concerns about solar panels.

1. How much maintenance would be required for the massive roll out of solar panels around the planet and who will pay for installation and maintenance since they do require a lot of maintenance and replacement?
2. Solar farms and solar panels are heavily subsidized by governments. What if the subsidies stop? And they have. Solyndra went bankrupt and left taxpayers holding the bag for \$535 million in federal loans.

<https://www.newsmax.com/FastFeatures/Barack-Obama-Solyndra-Scandal-Green-Energy/2015/01/29/id/621537/>

3. Producing crystalline silicon from silicon results in a lot of input loss. "Sawing c-Si into the thin wafers used in panels creates a significant amount of waste silicon dust, up to 50 percent of which is lost in the air and water used to rinse the wafers. The process of making crystalline silicon from silicon is also inefficient; as much as 80 percent of the raw silicon is lost in the process.
4. [Health issues](#) in the manufacture, use, and disposal of solar panels:
  - Release of silicon tetrachloride, "a very toxic substance that reacts violently with water, causes skin burns, skin, eye, and respiratory irritations.
  - Sulfur hexafluoride, a potent greenhouse gas, 23,000 times worse than CO<sub>2</sub>, used to clean the reactors used in silicon production. In the west the "molecules are captured and reused in a closed-loop process," but in China there is silicon tetrachloride pollution from PV cell factories established to fill the demand for solar energy.
  - Cadmium telluride (CdTe) thin films are made of cadmium, which is a toxic, expensive, cancer-causing heavy metal. Cadmium can be rinsed into the water table during the production process. One percent of CdTe is released into the environment as waste. Thin-film panels that might catch on fire in a home would release cadmium.
  - Copper indium selenide (CIS) uses hydrogen selenide which is toxic and very dangerous even in low concentrations.
  - Selenium dioxide, a dangerous air pollutant, forms at high temperatures, causing problems for

manufacturing workers.

**Toxic chemicals in solar panels include cadmium telluride, copper indium selenide, cadmium gallium (di)selenide, copper indium gallium (di)selenide, hexafluoroethane, lead, and polyvinyl fluoride**

[Dr. David Nguyen, a cancer biologist, remarked](#), "The toxic chemicals in solar panels include cadmium telluride, copper indium selenide, cadmium gallium (di)selenide, copper indium gallium (di)selenide, hexafluoroethane, lead, and polyvinyl fluoride. Additionally, silicon tetrachloride, a byproduct of producing crystalline silicon, is highly toxic."

Silicon tetrachloride, the byproduct of making wafers for monocrystalline and polycrystalline panels, is highly toxic and its improper handling can cause skin burns, pollute the air, cause lung disease, and, when exposed to water it releases hydrochloric acid (HCl), a corrosive substance. Manufacturers and recyclers are directly affected and even homeowners if their homes catch on fire.

To get a picture of the environmental impact of chemicals due to solar panels manufactured and installed by 2016, a [study estimates that "photovoltaics had spread about 11,000 tons of lead and about 800 tons of cadmium"](#) into the ecosystem.

[EPA has classified cadmium as a Group B1, probable human carcinogen.](#)

There are no salvageable parts on a solar panel so it must be decomposed, and the chemicals disposed of properly. Disposal

costs are exorbitant and unscrupulous. Chinese manufacturers are releasing the toxic chemicals into the environment.

## **Carbon Footprint formed in the production, maintenance, and replacement of Elon Musk's Solar Panels**

Solar power may not produce greenhouse gases while consumers use it, but it does release [harmful chemicals during production](#). One such chemical is nitrogen trifluoride, which, according to Ray Weiss, a professor of geochemistry at the Scripps Institution of Oceanography, is 17,000 stronger than carbon dioxide.

According to *Deutsche Welle*, Sulphur hexafluoride, a greenhouse gas released during solar panel production, is 22,800 times more potent than CO<sub>2</sub>.

Since 1997, when the U.S. produced 334.2 megawatts of solar energy, the industry has grown to 6,220.3 megawatts in 2013. For the 0.2 percent solar power usage in the U.S. (Institute for Energy Research), an insignificant amount, the solar panel production and disposal industries seem to create a lot of dangerous pollutants.

Ben Howell pointed out other issues that solar panel proponents have not entertained, the carbon footprint formed in the production, maintenance, and replacement of the following:

- Batteries that store the generated electricity during the day so that the homeowner has electricity at night. If there are no batteries, then the power generated during sun light

goes back into the grid and the owner must use utility power.

- What is the carbon footprint and pollution from lithium mining?
- What about the control switching and circuitry required by law that disconnects the home from the grid during a storm in order to avoid electrocution of utility workers from the live wires coming from the home, intermingling with the offline grid during repairs?
- What about the backup fail-safe safety system if the primary system fails?
- Smart meters have the lifespan of a cell phone, are very expensive to install and do not last if the traditional old electro-mechanical meters that are known to last basically forever. Ben Howell said that “the old-school electro-mechanical electric meter on my parents’ house was installed in 1948 and is still working accurately so far for 71 years.”
- What is the cumulative cost of insurance to replace the solar panels after a hailstorm shatters the glass?
- What is the cost to periodically clean the dust, pollen, tree sap, bird droppings, leaves, and other debris that block the sunlight from the solar panels?
- What is the cost of a new roof or installing new shingles nailed in when the additional cost of disconnecting, off-loading, staging, up-loading, and re-installing solar panels are factored in
- Will solar panel degradation, breakage, contamination, storms, normal clouds formations, and other anomalies, causing fluctuations in the voltage and current output cause the lithium batteries to go kaput more quickly? And will such cases void the warranty on the homeowner’s appliances?