

Evaluation of Sun Energy Group's Website Claims: July 7, 2009

Claims versus Reality

CLAIM: Sun Energy's website, www.sunenergygrp.com, claims they can generate a gross output of over 100 megawatts and electricity for 60,000 homes.

REALITY: There is no evidence or model anywhere in the world to back up the claim. There is no plant using this technology that generates any significant electricity, if any at all. The City of Sacramento, California sent staff to the Hitachi Metals facility in Utashinai, Japan – the facility that Sun Energy's technology provider Alter NRG uses as a model – and they reported that no energy whatsoever was generated into the grid.

CLAIM: "Sun Energy is a renewable waste-to-energy company headquartered in New Orleans."

REALITY: Garbage is not renewable energy and should be reduced and its generation prevented to the extent possible. Sun and wind are renewable energy, not garbage.

CLAIM: "This will be done in an enclosed, controlled facility that will be unrecognizable as a waste facility to the public."

REALITY: Sun Energy's permit application states "A stack will be provided to discharge the flue gas to the atmosphere..." and in their equipment list, it states that there would be a 200 foot "chimney." This stack would not be in an enclosed facility.

CLAIM: "In the plasma gasification process, high temperatures are used to break down the molecular structure of complex carbon-containing materials and convert them into synthesis gas (syngas) containing hydrogen and carbon monoxide. Since gasification occurs in an oxygen starved environment, the waste is gasified versus incineration."

REALITY: Syngas is not just hydrogen and carbon monoxide. Sun Energy has information that syngas contains toxic contaminants and that their process emits toxics into the air. Garbage contains oxygen, so there is oxygen present in the gasification process. In addition, Sun Energy's permit application has many references to the "combustion" of the syngas, which is the incineration stage in the plasma arc gasification process.

CLAIM: "The gasification component of this facility is a closed loop, combustion free process which produces no emissions. The facility will produce low emissions from its power plant component, but those emissions are well below established EPA standards for power plants. In fact, these emissions are comparable to natural gas fired generators. Sun Energy also plans to utilize an air monitoring process to measure any emissions."

REALITY: Gasification is not closed loop, as the syngas created by the gasification of garbage is directly vented to the combustion process. Sun Energy has provided no comprehensive emissions data, yet the limited data from other plasma arc plants including the Hitachi Metals plant in Utashinai, Japan documents emissions of dioxin and other toxic pollutants. The Utashinai facility reported excess dioxin emissions that violated standards. Plasma arc emissions are not the same as natural gas plants.

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There is no waste treatment facility anywhere in the U.S. that measures all emissions on an ongoing basis. We are unaware of any plasma arc facility in the world that measures all emissions on an ongoing basis. Usually there is a test burn every year on a day the company knows they are being tested. At best, only a few criteria pollutants are continuously monitored. There is no continuous emissions monitoring for toxic air contaminants.

CLAIM: “Sun Energy will derive its feedstock from locally generated MSW.” This technology used by Sun Energy can accept other forms of waste, such as industrial and hazardous waste.

REALITY: Sun Energy’s permit application states “The feedstock will consist of 100% MSW, with added metcoke (100 tons/day) and limestone (35 tons/day) ...” They also would use natural gas to “supplement the syngas for proper combustion.” Also, the fact that Sun Energy mentions the possibility of industrial and hazardous waste should be a danger signal to the public that even more dangerous wastes could eventually be treated if the facility is built.

CLAIM: Sun Energy advocates recycling.....Sun Energy can help New Orleans become one of the nation’s highest percentage recycling cities.”

REALITY: Sun Energy’s permit application says they would recycle only a small fraction of the waste brought to the plant, recycling about 300 tons per day while putting more than eight times that amount (2500 tons per day) that much into the plasma arc equipment. That is a terrible recycling rate that would be an embarrassment, not one of the nation’s highest rates.

If the City commits to send garbage to this proposed plant, New Orleans will never achieve good recycling rates as they will be committed to this facility and the continued generation of large amounts of garbage. The Sun Energy project would therefore undermine and destroy any real attempts by the City to develop a strong recycling program. Instead, New Orleans should pursue a comprehensive zero waste program including widespread recycling, reuse and composting.

CLAIM: “The primary by-products of plasma gasification are steam, synthetic gas and a solid recyclable product.”

REALITY: Toxic contaminants will be emitted into the air, and there would be large amounts of contaminated wastewater.

CLAIM: There would be no City financial support for a plasma arc facility.

REALITY: If the City contracts with Sun Energy to send garbage to a facility, there would be financial support.

For more information on plasma arc and gasification incineration, and safe alternatives, contact:

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