

# Press Release

Contact: C. G. Steiner  
Phone: 913.897.2727

**For Immediate Release**  
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**Subject: Converting Nuclear Power Plants to Fossil Fuel thereby Eliminating Greenhouse Gas (GHG) Emissions.**

**Contrary to existing belief, nuclear power plants do indeed discharge greenhouse gas emissions (GHG) in the form of water vapor—the most severe of all the greenhouse gases.**



**Steam and water vapor from cooling towers at the Tricastin Nuclear Power Plant located in the Rhone River Valley, Drome, France**

The United States Department of Energy Office of Nuclear Energy, Science, and Technology (see <http://www.energy.gov/environment/climatechange.htm>) sponsors programs to maintain the Nation's existing nuclear electricity generating capacity and also develop advanced nuclear power plants. The USDOE says **“Since nuclear power plants do not emit the harmful gases that could cause climate change, expanded use of nuclear power helps meet national energy and environmental goals.”** **WaterSmart Environmental Inc.** says **“A blatant lie by the USDOE.”**

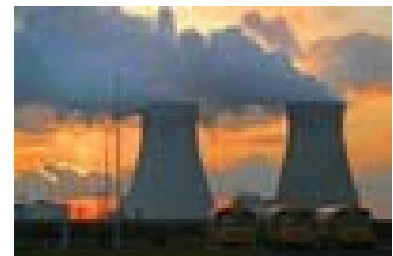
The truth of the matter is that water vapor in great quantities is being discharged from Nuclear Power Plant Cooling Towers throughout the world. On earth, the most abundant greenhouse gases are, in order of relative abundance:

- water vapor,
- carbon dioxide,
- methane,
- nitrous oxide,
- ozone, and
- CFCs.

The most powerful greenhouse gases are:

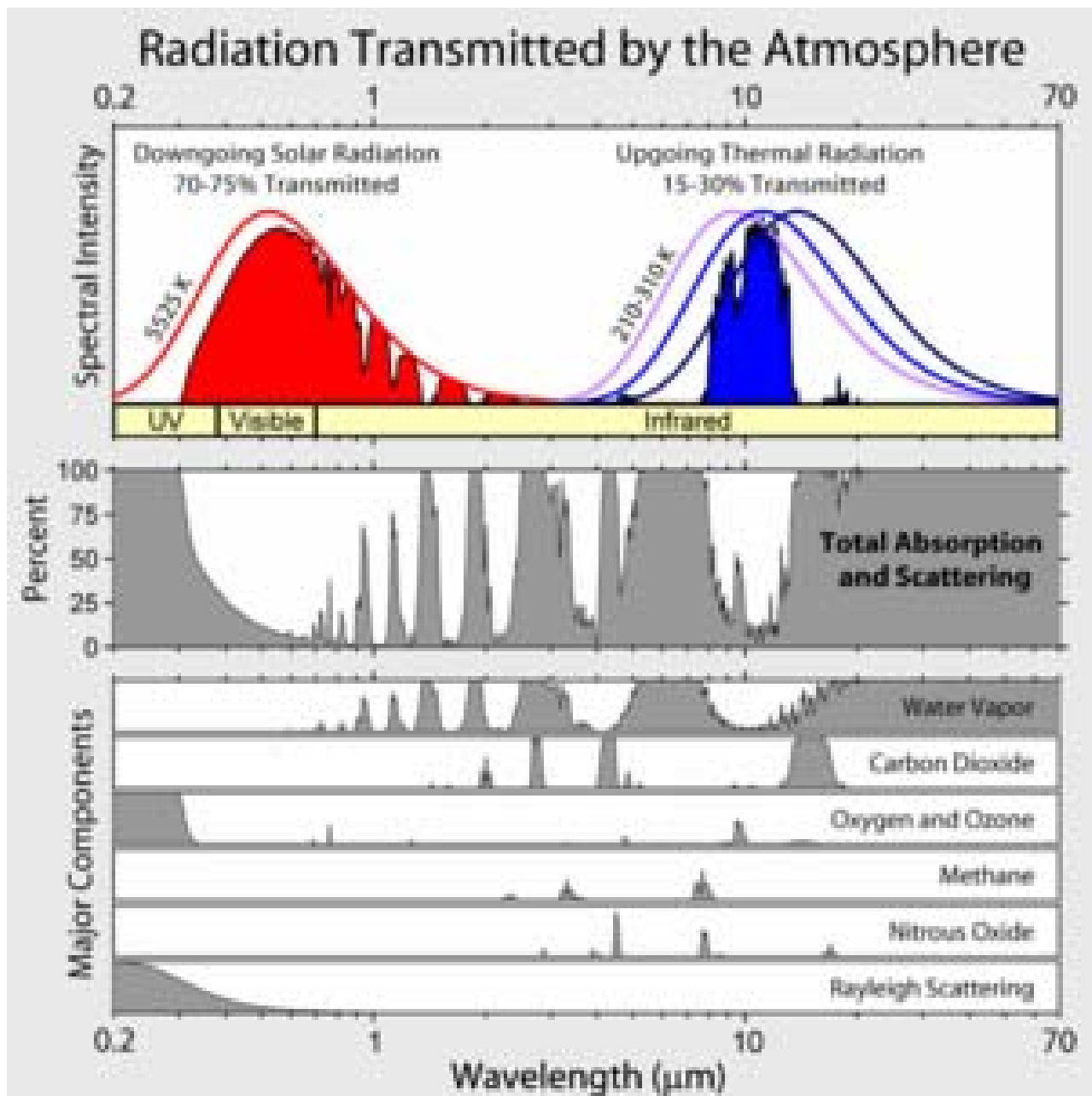
- water vapor, which causes about 36–70% of the greenhouse effect on Earth. (Note clouds typically affect climate differently from other forms of atmospheric water.),
- carbon dioxide, which causes 9–26%,
- methane, which causes 4–9%, and
- ozone, which causes 3–7%.

**These above findings were established by the forty references listed below.**



**More examples of water vapor discharges from nuclear power plant cooling towers.**

## The Greenhouse Effect



Pattern of absorption bands created by greenhouse gases in the atmosphere and their effect on both solar radiation and upgoing thermal radiation. Please note the significant impact of Water Vapor.

When sunlight reaches the surface of the Earth, some of it is absorbed and warms the surface. Because the Earth's surface is much cooler than the sun, it radiates energy at much longer wavelengths than the sun does, peaking in the infrared at about  $10 \mu\text{m}$ . The atmosphere absorbs these longer wavelengths more effectively than it does the shorter wavelengths from the sun. The absorption of this longwave radiant energy warms the atmosphere; the atmosphere is also warmed by transfer of sensible and latent heat from the surface. Greenhouse gases also *emit* longwave radiation both upward to space and downward to the surface. The downward part of this longwave radiation emitted by the atmosphere is the "greenhouse effect". The term is a misnomer though, as this process is not the mechanism that warms greenhouses.

According to the United States Energy Information Administration, as of October 31, 2005, there are 104 commercial nuclear generating units that are fully licensed by the U.S. Nuclear Regulatory Commission (NRC) to operate in the United States. Of these 104 reactors, 69 are categorized as pressurized water reactors (PWRs) totaling 65,100 net megawatts (electric) and 35 units are boiling water reactors (BWR) totaling 32,300 net megawatts (electric). Every single one of these nuclear power plants has one or more very large cooling towers similar to the above photographs. These large cooling towers frequently impact adversely on the local water resources. The nuclear power industry, USEPA, and USDOE well know that every single one of these nuclear power plants can be converted to operate with oil, natural gas, or coal.

On February 15, 2007 **WaterSmart Environmental, Inc.** announced the availability of technology to Convert Fossil Fueled Power Plants to Zero Greenhouse Gas (GHG) Emissions (see [http://www.watersmart.com/2007\\_Press\\_Release.html](http://www.watersmart.com/2007_Press_Release.html)) through Waste-To-Energy and Total Recycling Technologies. The same technology also permits the distribution of electricity to the public at the flat rate of US\$0.045/kWh while the power generation station is able to show an internal balance sheet profit based on the sale of its electricity at US\$0.25/kWh. By changing to fossil fuel a nuclear power plant can completely eliminate its greenhouse gas emissions and make more profit in so doing. There are no losers and one very large winner, namely the **Global Environment** itself.

**WaterSmart Environmental, Inc.** is a provider of waste-to-energy, food independence, water independence, and energy independence technologies and a manufacturer of highly engineered water purification components and systems. The company designs and builds a wide variety of water treatment equipment including packaged water and wastewater treatment plants, UltraPac™ aerobic package plants, OAT™ Process anaerobic digesters with associated energy production, aerators, filters, PuriSep™ and SmartWater™ oil/water and solids/liquids separators, RainDrain™ perimeter trench sand filters for stormwater runoff, dissolved air flotation separators, air strippers, complete skid assembled aqueous waste treatment plants, FilterFresh™ skid mounted potable water production plants, skid mounted wastewater treatment systems for laundromats, commercial laundries, and car/truck wash facilities with water reclamation and reuse, softeners, demineralizers, activated carbon treatment equipment, and water purifiers for domestic and international markets.

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