

## **Carbon Footprint: Top Ten Sources you would never expect.**

Please read this article carefully, we do not guarantee its factuality as a whole, just that it is from an interesting perspective. The lesson is that we must keep ourselves aware because there are many viewpoints. We need to read listen then verify while we continue do what we can about what we are aware of now. The facts are hidden somewhere in between the viewpoints. At some point, during our lifetime we will be voting as a consumer and at the ballot box on items and issues that will make a difference while affecting these sources along with others. Global warming is loud – from science labs to Presidential debates, everyone is talking about what to do about it. More than any weapon of war crafted by man, global warming, if unchecked, stands poised to threaten the well-being of humankind. Everything about global warming is controversial – its causes, effects, even whether it actually exists.

As such, many are interested in it, and many more are interested in debating it. For an issue that is so well known, its causes are not. Most people would blame oil, others would point to coal, and almost all would say that buying a hybrid car helps. But are these the primary causes of global warming? Does that awesome-looking new Prius really reduce your carbon footprint? Surprisingly, the answer is no – to both questions. The primary causes of global warming are much more interesting and much more diverse than the simple one-word answers of “coal” or “oil”. This article identifies ten global warming culprits that are shocking, unusual, and even funny. Nuclear Energy-say “no” to the “glow” While some hail nuclear power as the panacea to the energy crisis, nuclear power actually causes more environmental problems than it solves. Nuclear power relies on the mineral uranium – a heavy metal – to facilitate a nuclear reaction. While nuclear power itself is a clean source of energy, the process of producing it is much dirtier. Uranium processing and milling is a significant source of air pollution, releasing such gases as Nitrogen Oxide and Sulfur Dioxide.

Nitrogen Oxide’s effect on greenhouse warming is 296 times greater than Carbon Dioxide, contributing more than all of the cars in the United States combined. Second is Cows Going to the Outback Steakhouse is not just delicious, its good for the environment. Methane – the polite name for flatulence given by the U.N.’s Food and Agriculture Organization – generates over eighteen percent of the world’s greenhouse gas emissions. For the remainder of us, the technical term is “cow farts”. But it’s not just the gas that’s problematic - manure from cows also contributes significant amounts of methane into the environment. Methane has an effect that is 25 times greater than Carbon Dioxide. Third, Farming When you order the steak, hold the veggies. According to Gabrielle Walker, “Agriculture accounts for about thirteen percent of global greenhouse emissions – approximately the same amount as vehicular transport.” This is because – like cows – the gas methane is produced. Plants process the nutrients they receive through their root systems, and emit methane as a byproduct. The levels of methane can be attributed partly to the fertilizers used; plants that use methane fertilizers emit 49% more methane than non-methane-fertilizer plants. The amount of methane fertilizers – the scientific name for cow poop – is directly related to the amount of methane fertilizer creators. Perhaps the steak dinner is alright after all. If a tree falls in the

woods and no one hears it, does it still hurt our environment? The lumber industry does a powerful double harm to the environment. First, the machinery used to chop down and harvest trees causes harm to the environment; they are largely powered by diesel fuels – which produce extremely dirty fumes – and consume great amounts of these fuels. And on occasion where the goal is development, not lumber harvesting, the trees are simply burned, emitting high levels of greenhouse gasses. But more significantly, they remove our ability to recover. Trees naturally convert Carbon Dioxide to Oxygen through their own process of respiration. Yet here, the very trees that process Carbon Dioxide and return Oxygen to the atmosphere are now removed. It is for this that the lumber industry directly accounts for over sixteen percent of carbon dioxide in the atmosphere, or about 1,600,000,000,000 pounds of gas.

The not so friendly skies. How many times do advertisements for the newest hybrid car appear on our television screens? Extended promises about huge gas mileage – with fine print spoken at 800 words per minute at the end of the commercial – create the impression of satisfying environmental savings. But beyond cars-what about airplanes? Aviation has been growing faster than any other source of greenhouse gases. Between 1990 and 2004, the number of people using airports rose by 120%, and the energy consumed by the planes themselves rose 79%. The resultant Carbon Dioxide emissions increased drastically, to a total of 3,900,500,000 pounds in 2004 – and growing. The aviation industry is expected to triple in passengers over the next 20 years, with emissions mirroring the increasing numbers. Take off that suit – ties are our sixth cause. Should every day be casual Friday? Most people would say yes – but now they have a reason to do so.

Suits and ties are actually contributory to global warming. This is because they are generally dark colored, and thus absorb significantly higher amounts of heat than other, brighter colored pieces of clothing. This heat is then carried into the office building, which increases the workload – and energy consumption – of the air conditioners. As funny as this may sound, it has been empirically demonstrated; in 2006, this policy allowed Japan to cut an estimated 7,900,000 lbs of CO<sub>2</sub> by reducing its air conditioning workload. Camouflage is not green - The Military TEN HUT! The US military is actually one of the least green industries in the United States. The emissions are so severe that the military had to be given a special “national security exemption” from Environmental Protection Agency, to avoid indictment for using such outdated and environmentally harmful machinery.

The Army once considered replacing the mother of all fuel-gorgers, the Abrams tank engine, with a more efficient diesel plant. But the Army leadership then reversed course because it was too expensive. Most recently, the Army canceled a program to produce hybrid-diesel humvees, and has de-prioritized the development of other hybrid trucks in the medium and heavy fleets. The military’s tanks and vehicles account for extremely high amounts of carbon emissions from the United States, and represent a significant threat to the global environment. Eighth, go country - Cities Urban Heat Island – no, its not another bad reality show, it’s a cause of global warming. Urban Heat Island occurs when an area becomes very developed. The tall buildings within many urban areas

provide multiple surfaces for the reflection and absorption of sunlight, increasing the rate at which urban areas are heated. Another effect of buildings is the blocking of wind, which inhibits cooling. Waste heat from automobiles, air conditioning, industry, and other sources also contributes to the Island. The Environmental Protection Agency sums up the Island effect: Heat islands form as vegetation is replaced by asphalt and concrete for roads, buildings, and other structures necessary to accommodate growing populations. These surfaces absorb - rather than reflect - the sun's heat, causing surface temperatures and overall ambient temperatures to rise. I say we vote heat off the island. Ninth, Computers; your PC is not PC Reading this article right now has the same annual carbon footprint of an SUV that gets 15 miles to the gallon? Your computer is actually a significant source of energy consumption.

Factors such as extremely high screen resolution combined with high powered graphics lead the computing industry to contribute several percent to Carbon Dioxide emissions. Additionally, many users choose to leave their computer in "idle" or "hibernate" mode, in hopes of reducing energy consumption. Wrong - modes such as idle and hibernate use similar amounts of energy to maintain the programs still running on your computer - they just do it while a screen is black. Turning off your computer is one of the single-most effective ways to reduce your carbon footprint. Tenth, cars. No, not that SUV - your new Prius. Hybrid Cars are extremely counter intuitive. While in one moment being touted by car companies as a way to significantly reduce your carbon footprint, the reality is hybrid cars are "one of the most environmentally damaging processes seen today." Well, not the car itself; production of the nickel-battery for the car. The nickel mined and smelted for the Toyota Hybrid, for example, has rendered the area around it a complete dead zone. The main plant for all the nickel used in the Prius' engine comes from a small town called Sudbury, Ontario.

The resultant pollution from the nickel refinery and acid rain caused by the plant has killed off all vegetation surrounding the factory, and has created a complete ecological destruction in a 10-mile radius of the area. Currently, NASA tests out moon and mars rovers in the decrepit landscape. While most of this damage stems from years of pollution, the production of these batteries is still very toxic to the environment. Once the nickel has been smelted into its final form, it is transported to a special plant in China, which produces "nickel foam" for use in the Prius' battery-powered engine. The nickel foam is then shipped off to a special plant in Japan to be used in the final production of the battery. To recap: The production of a single battery to be used in the Prius starts from Canada, to China, and finally to Japan. One can simply imagine the amount of fuel that is needed to complete this world-round trip to produce a single battery for the Prius." Global warming is caused by many things we take for granted in our daily routines. Anything from nuclear power to your office's dress code can contribute to the increased carbon dioxide emissions. If we intend to preserve our world for future generations, we must look beyond the coal mine and petroleum refinery for elements of change. The causes of global warming are diverse, unique, and sometimes ironically comical. While it is ok to take the occasional chuckle at the thought of your tie heating our planet, that chuckle must be followed by some effort to help fix our planet as well. Dress down, log out, have a steak.