

I'd like to thank the hosts of this event for inviting me, and I wanna thank you all for coming. I have a rather serious matter to discuss with you today, so we'll get right to it. The results of rising CO<sub>2</sub>-emissions are becoming more and more apparent. Global disasters, extinction of species and Ozone-holes three times the size of Brazil. The majority of emissions are caused by global energy production. That, together with the fact that energy has become a luxury, not affordable by 3rd-world-countries, now leads to the conclusion, that we need clean and cheap energy to satisfy global needs.

Now, let's take a look at some sources of energy: Coal? Depletable and responsible for 40% of CO<sub>2</sub>-emissions from energy. Oil? Same problem as with coal. Maybe biofuel and waste? Renewable, but not to be neglected in emissions and also not reliable as a main energy source, because there's not enough fuel. Only wind, water, solar, nuclear and alternative innovative energy sources remain. The "ecological" sources, water, wind and solar, are currently being built and are arguably the best source until mankind expands their civilization to levels requiring constructs like Dyson-Spheres. They're cheap, reliable and don't use any depletable resources. But until the switch from oil and coal to these energy-sources is completed, it's most likely gonna be too late and global temperature will have risen enough, to destroy humanity, or chase it back into a lifestyle of primates. So what to use as a temporary solution? Alternative energies are nice but most of them are not likely to work at all and others need years of design, production and problem solving, to get them to work on an effective level. Tidal power, for example, is the dream of renewable energy production: almost no cost, buildable at every coast with mediocre or better tides and huge energy outputs. The Problem? The tides are too strong and the cost of repairing the plant every few months outweighs the energy gained by a wide margin. Until these designs are ready to be used on large scale and renewable energies are able to meet demand, we need nuclear power. An increasingly popular opinion and the only solution for rising energy demands and the simultaneous switch to renewable energies. At the current usage, Uranium is likely to last for approximately 200 years until it is depleted. If we quadruple the usage of nuclear energy, it would last 50 years. Not much, but other radioactive elements, such as Plutonium, have to be taken into consideration too. There are already reactors designed and built, able to handle such fuel and thus we can triple the lasting time to around 150 years. A solid buffer, until we discover, or complete and built and already discovered source, that's able to serve as a nondepletable source. Common objections on the matter, are, first nuclear waste. But, as president of Environmental Progress puts it: We are already producing waste from other energy sources: it's called pollution and it kills 7 million people each year. The second objection are nuclear accidents. But again, we'd have to compare it to fossil fuels, with something called "The Nuclear Death Toll". To satisfy the demand of energy in the united states alone, fossil fuels kill 61 people in the course of each year. Meanwhile, nuclear energy killed an estimate of 10.000 people, ever since it existed. These deaths are mostly caused by indirect consequences of accidents, such as stress among older residents, or mass panics. Additionally, the cause of the accidents was most often an inexperienced crew, pressure from the government, design flaws to reduce cost and because no regulations were in order to enforce security and humans being incompetence and lacking knowledge. Most of these problems were literally outlawed and can now be neglected.

So in conclusion: Nuclear energy is needed, but won't stay forever. For long-time-solutions we'll need solar, water and wind – energy, or innovative alternatives. But until then, nuclear power is a must to preserve the species, satisfy its high demand of energy and keep the atmosphere clean. Thank you for listening.