Energy for the Future

BENEFITS A global transition to clean, green energy will mean:

- much less CO_2 in the atmosphere, reducing climate chaos
- reduced pollution of our air, water, and land
- greater energy security for communities and nations
- fewer conflicts and wars over energy resources
- affordable energy for everyone
- skilled jobs in cities and rural areas
- sustainable economies with stable fuel prices

Burning fossil fuels releases 75% of the greenhouse gases that are heating the planet. By switching to renewable energy we can cut CO_2 emissions in half by 2030 while saving $180 billion a year.

MORE THAN ENOUGH Renewable energy is available everywhere on the planet as sunlight, wind, flowing water, the biomass of plants, and as heat stored in the ground. The sun's energy that falls on the Earth's land surfaces every day is 15,000 times the world's total daily energy use. The widespread abundance and diversity of renewable energy allows for its multiple, decentralized, affordable, and efficient uses.

Energy and Security

SECURITY FROM VIOLENCE The global demand for fossil fuels is increasing faster than expected. As the world's oil-, coal-, and gas-hungry countries compete for depleting resources, there will be even more conflicts, wars, and violations of human rights. Renewable fuels, available everywhere, eliminate scarcity as the cause of conflict, and reduce dependence on nations or corporations as fuel suppliers.

ECONOMIC SECURITY Renewable energy production will lessen a community's or nation's vulnerability to fossil fuel market prices. It will encourage self-reliant economic growth and increase economic security.

HUMAN SECURITY The natural disasters triggered by climate chaos are responsible for 150,000 deaths every year, and cause millions of people to seek refuge elsewhere. The Intergovernmental Panel on Climate Change (IPCC—awarded the 2007 Nobel Peace Prize) predicts 50 million "environmental refugees" by 2010, and 150 million by 2050. The tremendous costs of migration affect the refugees and the communities and nations that must manage their arrival and integration.

Energy and Justice

ACCESS Any group's social and economic prosperity is linked to its access to electricity. We cannot end poverty without a sufficient energy supply for all humans. We need to conserve our existing energy resources through their efficient use and distribution and rapidly build decentralized systems that produce energy where it is consumed. An energy transition needs to achieve "energy justice"– equal access to affordable, clean, renewable energy for all.

EQUITY A small part of the global population has been consuming the lion's share of the world's fossil fuels, and pumping most of the CO_2 into our common atmosphere. But the poorest people on the planet, those who have burned little or no fossil fuels, suffer the most from climate chaos, struggling to survive its devastating effects. Clearly it is morally unacceptable that the environmental and social costs of our long history of burning fossil fuels be imposed on those least able to pay. The energy transition needs to be paid for by those who have benefited most from the current system.

All money is in U.S. Dollars. For the sources of all facts, visit WWW.POWER-TO-THE-PEOPLE.NET.

Energy, Wealth and Jobs

COSTS Renewable energy prices have been halved since 1990 and are expected to drop another 40% by 2020. Over time, the cost of renewable energy will continue to fall due to economies of scale and technological progress. The costs of fossil and nuclear energy, however, are expected to almost quadruple by 2050, as the world's supply of these fuels diminishes and the price of extraction, environmental protection, and cleanup increase.

STABILITY Communities that use locally produced renewable energy have more stable energy costs. Setting up renewable energy systems requires initial investment—but except for biomass, once installed, no fuel costs remain. Overall, energy costs become more predictable and controllable, increasing economic stability.

EMPLOYMENT Switching to renewable energy is already increasing economic growth and the number of high-skilled jobs in engineering, manufacturing, agriculture, electronics, and other fields. In Germany, the renewables sector created 234,000 jobs over the last 15 years, while the number of coal, nuclear, gas, and oil workers dropped from 223,000 to 94,500 in the same period.

Energy and Innovation

FLEXIBILITY Green energy resources—sun, wind, water, geothermal, and biomass—can be combined depending on their availability. They can provide heating, cooling, electricity, and fuel for machinery, vehicles and other transportation. Renewable technologies can be flexibly designed to fit the landscape, architecture, machines, and vehicles—increasing efficiency and autonomy.

CLIMATE PROTECTION Worldwide, a rapid shift to clean, decentralized, renewable energy will combine climate stabilization with energy independence. It will enable each of us to take meaningful action for the long-term well-being of our families, communities, and for our shared home, the Earth.

INDEPENDENT ACTION With the right policy support, each one of us can afford to switch to renewable energy, enabling all of us to be part of an energy renaissance. Many consumers can become producers of renewable energy and profitably share their surplus production with others.

What Not to Do

NOT CCS The long-term answer to our energy needs is not CCS (Carbon Capture & Storage), a proposed plan to capture CO_2 emissions from fossil fuels and indefinitely store these gases in cavities underground. This does not avoid, but rather hides, our CO_2 waste, which could leak out in the future. CCS is too expensive, uncertain, and potentially dangerous.

NOT NUCLEAR Nuclear power depends on limited uranium and produces hazardous wastes that remain radioactive for hundreds of thousands of years. The plutonium produced can be used to make nuclear weapons that will heighten our global insecurity. Nuclear plants need gigantic government subsidies and guarantees to investors. They could not be built fast enough for any real contribution to climate stabilization.

NOT THE LAST DROP Overall, the solution cannot be to find and burn every last bit of oil, coal, and gas on the planet. We know that this will only lead to a greater gap between the rich and poor and increase climate chaos, pollution, and wars.