

# Energy is power

and it is connected to everything in our lives: our jobs, our health, the food we eat, the places we live, the weather we experience, and the wars we fight. Over the past few hundred years, our energy has primarily come from fossil fuels – oil, coal, and gas. But these are causing global climate chaos – and are running out.

Until now, energy has been controlled by a small number of large corporations. And governments have been giving about US \$300 billion of subsidies to these corporations every year. Thanks to this arrangement, some people have become very rich. But most people are simply dependent on these companies for the power they need – and

two billion people, or one third of the world's population, are still without access to reliable energy.

We need to make a switch. We have to move quickly from our destructive, wasteful, and unfair use of fossil fuels to a new model where the production, distribution, and control of energy is clean, efficient, and affordable for everyone.

With existing technology, we can capture enough renewable energy from the sun, wind, water, and the earth to power the world six times over. This technology can bring clean energy to everyone, everywhere. All we need is the political will and determined action to make it happen.

## Connect with your own power

### Legislators:

Encourage energy entrepreneurship with policies that have been proven to be successful renewable energy legislations.

### Business leaders:

Call for long-term incentives that stimulate investment in energy innovation and support a vibrant green energy market.

### Citizens:

Demand innovative solutions, which give everyone access to renewable energy, as key for sustainable development.

### Want to know how?

Visit [www.futurepolicy.org](http://www.futurepolicy.org) and help make the switch.



# Power to the People!

## ENERGY FOR THE FUTURE



### BENEFITS

Burning fossil fuels releases 75% of the greenhouse gases that are heating the planet. The urgently required transition to clean, green energy will mean:

- Much less CO<sub>2</sub> in the atmosphere, reducing climate change
- Reduced pollution of our air, water, and land
- Greater energy security for communities and nations
- Fewer conflicts and wars over energy resources
- Affordable energy and energy access for everyone
- Skilled jobs in cities and rural areas
- Sustainable economies without dependence on fuel imports



### MORE THAN ENOUGH

Renewable energy is available everywhere in Africa in the form of sunlight, wind, flowing water, biomass of plants, and as geothermal 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 DEVELOPMENT



### ERADICATE POVERTY

The sustainable and efficient use of renewable energy for cooking, heating, cooling and lighting will ease constraints on tight household budgets. Improved energy technologies and practices will open up opportunities for income generation.



### EDUCATION

With less time spent collecting fuel, girls will have more time available for school attendance and homework. Access to electricity can facilitate studying at night and enables usage of information and communication technologies.



### HEALTH

According to the WHO, 400,000 women in Africa die of air pollution every year caused by indoor cooking fires. Medical services can be greatly improved through cooling of medication, lighting of surgeries and safe water supply.



### THE RESOURCE CURSE

The resource curse refers to the paradox that countries and regions with an abundance of non-renewable resources like fossil fuels and minerals tend to have less economic growth and worse development outcomes than countries with fewer resources.

## 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<sub>2</sub> 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 change, struggling to survive its devastating effects. Clearly it is morally unacceptable that the environmental and social costs of the 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.

## 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

According to the International Red Cross, climate change is now a bigger cause of population displacement than war and persecution. Serious environmental changes are responsible for 300,000 deaths every year, reports the Global Humanitarian Forum. The Intergovernmental Panel on Climate Change predicts 150 million "environmental refugees" by 2050. In Africa, an estimated 10 million people have migrated or been displaced over the last two decades mainly because of environmental degradation and desertification.

## 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 clean-up 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

Jobs in installing, operating, and maintaining decentralized renewable energy systems can benefit a broad range of communities. For instance, Kenya has one of the largest and most dynamic solar markets in the developing world with 10 major solar PV import companies, and an estimated 2,000 solar technicians. In South Africa, 300,000 "green jobs" are expected to be created over the next 10 years.

## 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<sub>2</sub> emissions from fossil fuels and indefinitely store these gases in cavities underground. This does not avoid, but rather hides, our CO<sub>2</sub> 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 cannot 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 change, pollution, and wars.

June 2010  
Switch now!



## FIT - A solution for grid-connected areas

Targets for renewable energy are set everywhere; however they need to be backed with clearly outlined policies on how to reach these goals. What's the best way to help people switch from burning fossil fuels to using clean renewable energy? Make it easy, affordable, and profitable.

One policy that has proven successful for grid-connected areas is the so called "Feed-in Tariff" (FIT) law. After it was first introduced in Germany in 1990, over 45 countries and states have developed their own form of this solution. In a nutshell, a FIT requires power companies to buy electricity at a set price for a set period of time from anyone who produces electricity from clean, renewable sources and feeds it into the electricity grid.

By guaranteeing a price for 15–20 years, FIT laws attract financial investment in renewable energy technology. By selling their electricity to the power company for

a known price, people make back the cost of their equipment and then make extra income for years to come.

In Africa, Kenya, Mauritius, South Africa and Uganda have already introduced a Renewable Energy Feed-in Tariff (RE-FIT). If compiled accurately, this mechanism will draw investments into renewable energy production and create a competitive electricity market.

Naturally, energy is more than electricity and the majority of Africans living in rural areas will most probably not be connected to the national electricity grid soon. This is why the World Future Council and the African Renewable Energy Alliance (AREA) are working on suitable solutions for cooking and non-grid connected renewable energy provision.

To find out what your version of a good renewable energy or energy efficiency policy could look like, visit:

[www.futurepolicy.org](http://www.futurepolicy.org)

## World Future Council

The World Future Council brings the interests of future generations to the centre of policy making. Its up to 50 eminent members from around the globe have already successfully promoted change. The Council addresses challenges to our common future and provides decision-makers with effective policy solutions. In-depth research underpins advocacy work for international agreements, regional policy frameworks and national lawmaking and thus produces practical and tangible results.

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AREA, the African Renewable Energy Alliance, is a platform for political decision makers, representatives from business and civil society to exchange information and consult about policies, technologies and financial mechanisms for the deployment of renewable energies in Africa.

[www.area-network.ning.com](http://www.area-network.ning.com)  
[www.area-net.org](http://www.area-net.org)

With the right policies, people in Africa can profit from creating their own renewable energy.



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