## Print

## In praise of creative destruction



Article by Dr. Hermann Scheer published in the Ode Magazine (Special Copenhagen Edition), December 12, 2009

## To unlock the economic and environmental benefits of renewable energy, dismantle the conventional power industry!

Humanity stands on the threshold of an era of unprecedented opportunities. In the past decades, many innovative new technologies have become available and affordable that can transform our current economies based on polluting fossil fuels into sustainable renewable energy economies. This transformation will provide millions of new jobs. It will halt global warming. It will create a more fair and just world. It will clean our environment and make our lives healthier. However, for all this positive change to happen, we don't need an international climate treaty. We don't need a Copenhagen Protocol, just like we didn't need a Kyoto Protocol. In fact, these international attempts stand in the way of the progress almost all of us need.

History provides many examples of technological revolutions that have reshaped the world. However, none have run their course without encountering massive resistance. No change has been brought about in consensus with those on the losing end, and none has been the subject of an international treaty—even where the effects were felt on a global scale.

Nevertheless, many of these revolutionary changes needed a political framework or targeted help at their inception in order to develop and showcase the economic and cultural benefits. The list includes railways, electricity grids, the car, shipping and aviation, nuclear power, telecommunications and information technologies. Not one happened by an international contract. Anyone who would have suggested introducing the Internet through an international system of binding quotas to prevent economic disruption would have been derided as an economic illiterate. All these technological revolutions happened because there were front-runners who showed the advantage of the new technology. These examples motivated more and more people, companies and governments to do the same.

This is the way dynamic processes have developed and continue to develop to the point where they become self-sustaining. The microelectronic revolution happened because of the productivity gains it brought, despite the almost universal structural upheaval it caused. Countries that promoted microelectronics—for example, through government-sponsored research and development—benefited accordingly. Those who held back in order to forestall economic turmoil subsequently fell behind.

The current climate negotiations will never lead to the renewable energy economy we need because they are based on the wrong premise. That premise is that the shift to clean energy will be an economic burden and that, therefore, agreement needs to be reached on common solutions, common steps and common policies to share that burden.

How can you ever come to equal or nearly equal obligations when the different countries have very different basic conditions? Some are industrialized, some are not; some are developing countries,

some are industrial countries; some are energy importers, some are energy exporters. They have different states of technological development. As a result, it is practically impossible to come to a globally unified policy. Each country wants to have exemptions. So you get a big contract with a lot of exemptions that basically leads, as its best case, to a compromised low-level agreement which runs behind the real challenge

This is the experience of 15 years of climate negotiations. And it all begins with the wrong premise that the introduction of the clean energy economy is a painful process. The right premise is: The shift to clean energy has great economic advantages. It will bring big macro-economic benefits to all countries who embark on the journey. Arguing from the right premise, there is no need for a global contract. It is the wrong premise that leads to the whole discussion and to the big bazar about burden sharing. The only value of 15 years of these negotiations is that they have created global awareness and installed the IPCC-Secretariat what helped to create a global consensus that the climate dangers exist.

A dynamic climate change strategy must have at its heart the economic opportunities arising from a revolution in energy supplies. It does not take a global treaty to unlock the benefits of renewable energy. Take the example of Germany. Germany is today the country with the most installed solar panels and windmills, whereas Germany is clearly not the country with the most sunshine and the best wind conditions. The success of the introduction of renewable energy is a result of the 20TK Renewable Energy Act.

This act was not a derivative of the Kyoto Protocol. The key point of this act is that all new renewable energies have absolute priority at a guaranteed price in the electric power market. Whatever renewable energy is produced must be taken by the grid and must be taken by the whole electric power service. The conventional energy companies have no possibility to block it. This simple act has created a lot of new investment and has already inspired more than 40 countries, including China and India, to develop a renwable energy technology market.

Governments can also support the necessary dynamism through tax policies. Renewables should be given tax exemptions. That would automatically change the investment decisions of energy producers and the demand of consumers. It is a fact that conventional energy harms the climate and human health. Therefore it is ridiculous that these 'poisoned' energies are cheaper than clean energies. It must be exactly the contrary. Clean energies must be cheaper. This would provide incentives for producers and consumers to shift to renewable energies.

In practically all countries, with the exemption of cities where slums exist, it is forbidden to throw household waste on the street. People put their waste into containers and they pay for the local waste management. But, interestingly enough, it is not forbidden for conventional, polluting energy to throw waste into the atmosphere. What has become a self-evident point in our culture of living with waste should be the same for overcoming polluting energy supplies and consumption.

We can achieve a 100% renewable electric power sector within 15 years where ever adequate policies are implemented. I am optimistic, because nothing can be implemented faster than a decentralized structure of renewable energy production. There is a very short time difference between investment and work. A windmill can be installed within two weeks, for instance. On the other hand, you need years for a conventional power plant. The implementation of renewable energies in a decentralized way is technologically and economically so much faster. It has enormous potential. And that natural

potential is the same today as it will be 10,000 years from now and as it was 10,000 years ago.

Societies have to take the political decision to create a new order. That is not a global mission; it is a national choice. It has to become a self-evident fact in the culture of our societies that we cannot continue polluting our environment with fossil fuels and radioactive nuclear waste when we have better and cleaner alternatives available. The success of the German renewable energy policy proves that. Germany has shown that it is easy to create the awareness that it's better for society and future generations to have clean energy. The new order begins with a priority for renewable energies.

The challenge is how to overcome the vested interests of energy suppliers. Renewable energy requires a highly distributed approach—each consumer is potentially also a producer—while also affording wholly new opportunities for agriculture (biomass), construction (energy-efficient materials), engineers and manufacturers (wind turbines, solar panels, biogas plants, fuel cells), the electricity industry (no more need for mains electricity) and many others besides. Properly followed through, this would be an economic revolution of the most far-reaching kind. It is fear of revolutionary change that motivates widespread resistance to renewable energy.

It is necessary to overcome this resistance. There can be no environmental revolution in energy supply without creative destruction of the existing conventional energy industry. In the end, this is a question for politicians elected by the people. They have to decide what is more important: Take care of the future interests of the conventional power business or take care of the future of society.

http://solutionsweneednow.com/in-praise-of-creative-destruction