

# GLOBAL WARMING

## Jeremy Rifkin's\* vision of the future in the face of global warming

\***Jeremy Rifkin** (born [Denver, Colorado](#) in [1943](#)) is an American essayist, specialised in future economic and scientific outlooks. He is also founder and President of the *Foundation on Economic Trends* (FOET)) based in Washington.

### PUBLICATIONS

- *The Hydrogen economy : after oil, the new economic revolution*, J.P.Tarcher, 2002

- *The Age of Access : the New Culture of Hypercapitalism*, Putnam Publishing Group, 2000

- *The Biotech Century: Harnessing the Gene and Remaking the World*, J.P.Tarcher, 1998

- *The End of Work*, Putnam Publishing Group, 1995

- *The Sorcerer Apprentices : Biology tomorrow* (with Ted Howard), Ramsay, 1979

## A. THE STATE OF THE ISSUE

The AGORA of the European Parliament held 12 and 13 June 2008 heard Jeremy Rifkin's in-depth presentation of his vision of the future.

He began his lecture with an historical review :

1. **The first industrial revolution** (1840) coincided with the invention of the steam engine using coal (fossil fuel) as the source of energy
2. **The second industrial revolution** started around 1900 with the development of the electric motor, telegraph and telephone, and later radio and television.
3. **The third industrial revolution** started to become possible in the mid-1980s with the development of the worldwide web and the Personal Computer (Bill Gates).

Where we are today everything still depends on fossil fuels. Coal and oil (with the 80-odd products derived from them) are part of our lives – while the oil price continues to go up (143 US dollars the barrel on 1 July 2008) and **threaten our purchasing power**.

And given the **dictatorial regimes** of the oil producing countries of the Middle East, Africa and Latin America, supplies are insecure.

In the face of global warming, some alternatives like nuclear energy or coal with CO<sub>2</sub> buried underground should be rejected, for :

1. Nuclear power produces at present 5% of the world's electricity. To produce all required energy in the future would necessitate building some **2000 nuclear plants** (while uranium reserves are limited), which, in view of the urgency of the problem, would take **too much time** and given political instability in certain countries (terrorism) would be **too dangerous**. In addition there's the risk of earthquakes.\*

*\*The Chaiten Volcano in Chile (Patagonia) erupted on 2 May 2008 after 9000 years of inactivity and threatens the very existence of a town.*

2. Regarding the use of coal as a source of electrical energy with CO<sub>2</sub> buried underground, the Americans have studied the project and **have just abandoned it** in view of the dangers involved in burying CO<sub>2</sub> (risk of explosion\*) and the high costs involved.

*\*This has already occurred under a lake in Kenya.*

## **B. THIRD INDUSTRIAL REVOLUTION**

**In the light of this situation it is necessary to move toward a third industrial revolution.**

### **First pillar : renewable sources of energy**

Namely: solar, wind, waste (biomass...) and tidal energy.

The technical question is to find the best way of harnessing such energy.

### **Second pillar: reduce energy consumption**

a. **By reducing transportation.** We shall no longer be able to allow ourselves to go to the other side of the world to find our food, our clothing, our technology or even our building materials (wood, stone, etc.) \*

Most of our trading will have to take place at the European level.

#### **\* Notice drafting**

*This is prevented at present by the high cost of labour in Europe, which forbids the purchase of goods made here. Two paradigms are necessary to put this right: to remove all taxation from work and to introduce a Basic Income, which will also maintain purchasing power.*

b. **By eating less meat.** It is environmentally expensive to produce because of the quantities of cereals that have to be grown intensively and with polluting inputs in order to feed the livestock.

Then add the intestinal gases expelled by the animals. (39% of land in the world is used for producing animal feed!).

c. **By making our buildings energy-positive,** producing more energy than they consume. In this way each building becomes a small power station.

This is the case for the office complex built by BOUYGUES in the Paris Region, where down to an external temperature of 6°C they consume no energy other than what they rationally recuperate from the heat generated by people and machines inside them.

### **Third pillar: Stocking energy as hydrogen**

Using surplus electricity to produce hydrogen. Electricity is thus stocked by means of a non-polluting form of energy.

### **Fourth pillar : An integrated European electric power network**

Such a network makes possible:

- a. **Redistribution** between companies and individuals of surplus electricity generated by energy-neutral buildings and by other forms of renewable energy.
- b. **Sharing of energy** through the intelligence of the network.

In this way we move away from globalisation based on elitist energy to globalisation of sharing in which power is returned to individuals

Such a revolution obviously also concerns the Southern Hemisphere where the sun becomes a source of energy shared between citizens by means of an integrated network and could represent coin for trading with the Northern Hemisphere.

The energy potential of the poorer countries will reduce their poverty.

If Europe undertakes “**the major works**” necessary for this third industrial revolution we shall become a **light in the world** for all the emerging countries which at present have only our energy-guzzling economic model which leads down a blind alley.

For example, some question whether China would accept to reduce its meat production while meat has only just begun to be generally eaten there.

This question can only be answered when Europe will have **adopted an integrated power network** the socio-economic merits of which we have outlined.

Then Europe would be able to say to China :

*“Do you want to continue to develop your society according to the second industrial revolution dating from the 20<sup>th</sup> century which (as we have seen) leads down a blind alley; or do you not find it more prudent for your future to join in the third industrial revolution?”*

Supported by this integrated global sharing our societies will be able to move towards new horizons, **in security and bringing well-being.**

Jean-Paul BRASSEUR