

A makeshift editorial

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The UNESCO Chair in Sustainability at the UPC was created ten years ago, in May 1996. It arose as a result of the Conference on Technology, Sustainable Development, Imbalance and Global Change. This conference was held in Terrassa in December 1995, after almost two years' work on behalf of the organisers. After the conference, the organisers became the driving force behind the new UNESCO Chair.

Many topics and debates were presented at the aforementioned conference, most of which were quite new in Spain at that time. One of the papers was given by professor Ernest Ulrich von Weizsäcker, who is currently involved in the Wuppertal Institute for Climate, Environment and Energy.

Weizsäcker talked about “Factor Four”, an interesting idea that is clearly set out in the title of the book that Weizsäcker published with Amory and Hunter Lovins in 1995. Fortunately, this book was translated into Spanish in 1997. The book is called: *Factor Four: Doubling Wealth, Halving Resource Use*. It was inspired by a Club of Rome report, and discusses the need to double well-being and wealth whilst consuming half the amount of natural resources used to date.

Since then, the idea has been developed and clarified (some, such as professor Friedrich Schmidt-Bleek have even talked about the “Factor Ten”). However, what is certain is that the idea was credible. In summary, it stated that if we continue at the typical rate of consumption found in developed western societies, we will need the resources of four planets like the earth. Therefore, it is essential to double the efficiency of production systems and halve the consumption of basic and transformed resources.

This reasoning also applies to energy, one of the main problems of our time, which is also a central issue in future sustainability. It is highly likely that the energy consumption in developed western societies is already excessive; and it appears even more so when we consider that the “emerging” societies naturally aspire to an energy consumption of the same order of magnitude. Improving

energy efficiency whilst consuming less energy appear to be unavoidable necessities today.

Since 1860, as stated in the article by Efraín León and Octavio Rosas Landa, oil capitalism has consumed a large proportion of the fossil fuel energy resources. It is extremely likely that in another two hundred years we will have exhausted the reserves of fossil fuel that the earth took millions of years to “manufacture”.

This central energy development problem is addressed in this issue of the monograph *Sustainable?*. The publication provides data, opinions and reflections that help to broaden knowledge on one of the main problems in the world today, and above all on issue of the future that we are building.

Miquel Àngel Rodríguez-Arias discusses the energy crisis and the possible collapse of our energy model and the society that created it. Nikolaus Supersberger focuses on the vulnerability of the world energy system and the consequences for democracy and global security. As mentioned above, Efraín León and Octavio Rosas Landa focus on the dangers of the oil capitalism that characterised the last century’s economic development. Xavier Ortega and Josep Puig give different, complementary ideas on nuclear energy. Some consider that this source of energy could be a solution, whilst others consider that it represents an even bigger problem, due to security issues and to the military byproducts of the nuclear industry.

Finally, Juan Martínez Magaña explains how renewable energies were replaced by fossil energy after the beginning of the industrial revolution. This led to the centralised production of energy. Now it is almost essential to return to renewable energy, which may even be provided by local and municipal agents. Therefore, the author explains in detail the European programme URB-AL type B, focused on renewable energies and networks of local development.

As always, this issue of *Sustainable?* aims to offer interested and non-specialized readers figures, arguments, and facts to help them to become more informed about one of the main problems of our immediate future: energy.