Energy: by hiding the problems, we won't find the solutions

by Pere Torres*

It is only natural that when we are experiencing an intense crisis, priorities shift. The poverty of many families and the vulnerable position businesses find themselves in become the centre of political and social attention. As a result, some questions of extreme relevance take second place, as if they were no longer of such importance. This has been the case with the debate surrounding oil. Panicked by its astronomical price, Western leaders have done everything possible to drum up votes to decrease their countries' dependency, increase the efficiency of their economies and promote alternative energy sources. Now that oil prices have fallen substantially (historically speaking, it would not be correct to say the price is low, but compared with the situation of a few months ago the difference is staggering), such preoccupations seem less pressing.

While the reaction has been understandable, it is worth keeping in mind that the underlying context remains unchanged. We continue to have an economy that is overly dependent on oil. Although the price of this fossil fuel has decreased due to a drop in demand, it is because the economy has weakened, not because we have lost our addiction. Consequently, when the economy once more picks up, consumption will once again increase and, presumably, so too will the price of oil. In this respect, therefore, the proposals made before the crisis are still valid during the crisis. What is more, we should take advantage of this time to give them extra impetus, at least in the basic decisions related to the energy model.

Energy consumption has always increased throughout the history of humanity. Economic crises have represented a break with this tendency, even to the point of producing temporary decreases, but they have not altered the underlying trend. Population growth, accompanied by an increase in people's purchasing power are the two most powerful factors. As long as this double expansion does not cease, increased energy demand is guaranteed.

For this reason, it is worth insisting on the need to reformulate the energy model in order not to repeat the errors made 35 years ago. At the time of the oil crisis, many countries saw what was happening and initiated projects and studies in order to increase energy efficiency and to find alternatives to oil. The first investigations into the production of biofuels from seaweed date from this time, for example. When oil prices fell

once more and fears of its scarcity declined, the funds dedicated to research also dissipated. This pattern seems to be repeating itself: Laurence Caramel, writing in *Le Monde* on the 19th March of this year, reported that in the last six months the funding for biofuel had decreased six-fold. The Spanish government, on the other hand, has changed the regulatory framework relating to renewable energy: almost everyone agrees that the new situation makes the expansion of wind and solar power incredibly difficult. Whereas before there was help, now there is only hindrance. Why is this? It is because political decisions are more influenced by attempts to halt increases in electricity tariffs and they accept the erroneous premise that electricity production from renewable sources is more expensive (in comparison to conventional production).

We need to reformulate the energy model in order not to repeat the errors made 35 years ago during the oil crisis

As I stated earlier, the recession has led to a reinterpretation of all prior decisions relating to energy production. Simultaneously, the majority of political world leaders proclaim that we need to construct a more sustainable economy. Undoubtedly, an unavoidable condition for a sustainable economy is having an energy model that is radically different from the one that accompanied us throughout the twentieth century and that helped to generate so much prosperity. It does not mean we need to declare undying love for renewable energy and stimulating certain lines of investment. Neither does it mean saying

that one day all vehicles will be electric or hybrid and applauding the use of bicycles in cities. Nor does it mean expressing confidence in hydrogen fuel cells as being a brilliant solution at an uncertain time in the future. On the contrary, it requires the realisation that oil must give up its prime position as an energy source to others that do not create the same problems. Essentially the problems are its non-renewable nature, high levels of price instability due to market fluctuations and its contribution to the emission of greenhouse gases and atmospheric pollutants. At the same time it is clear that we want alternative energy sources to offer us the same advantages: being low-cost and accessible, with easy power generation and distribution.

This rethinking of the energy model requires a broad debate, one in which civil society should be involved, and a broad political consensus in order to ensure continuity

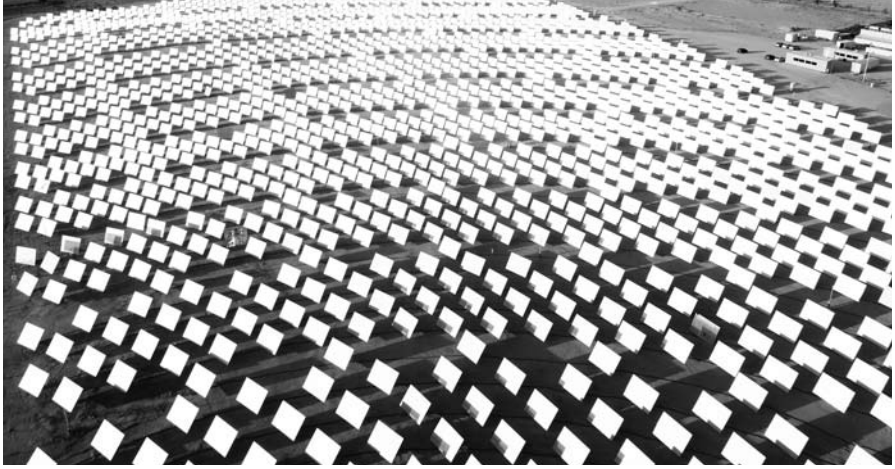
Faced with this situation, devotees of one option or another emerge. There are essentially three alternatives: those in favour of nuclear energy, those who prefer a combination of wind and solar and supporters of biofuels. The last two often go hand in hand, the former accounting for electrical generation and the latter for energy for transport. It is logical that each sector promotes the virtues it has to offer. Nevertheless, this rethinking of the energy model requires a broad debate, one in which civil society should be involved. Political parties also need to express a desire for consensus, thus ensuring energy policies are maintained in spite of changes in leadership.

We need to keep in mind that the model will only be adopted slowly (due to the nature of the process) and we need to ensure that it gives a satisfactory answer to energy demand over a long period. To this end we need to proceed with caution, avoiding the temptation to be seduced by false promises and evaluating the pros and cons of the various candidates in order that they fulfil the optimum role. It is vital that we recognise that every option has its advantages and disadvantages.

Nuclear power offers continuous production, without the emission of greenhouse gases or significant levels of atmospheric pollution, but it represents a risk to its surroundings, demands very rigorous management and, as yet, does not have an acceptable means of dealing with its waste products. If it were to become widespread, raw materials, specialised technicians and private investors would probably all be in short supply. This is without mentioning its rejection by society and spurious uses to which the technology may be put.

Wind and solar power are renewable, do not contribute to climate change or pollute when they are in use, they decrease dependence on external supplies and offer the possibility of individual units or large energy farms. On the other hand, they do not provide uninterrupted energy; their energy efficiency is still very low (especially photovoltaic power) and can occupy a lot of land, a shortcoming that has led to opposition movements.

Biofuels allow for the replacement of fossil fuels (partially or totally) and would therefore leave the existing distribution system intact. What is more, they come from renewable crops or organic waste that are better distributed on a global scale. Potential problems are that excessive haste might favour biofuels from crops that compete with those destined for consumption, that



their balance of greenhouse gas emissions versus energy efficiency is not good enough, and that they fail to free us from the ills of atmospheric contamination.

What is more, it also makes little sense to think that oil is finished and that coal and gas will disappear along with it.

In short, there is no panacea to the problem, which is why we are experiencing this situation of general uncertainty. This brings us to the need to open up an intensive, extensive, sociopolitical debate that might help build a consensus based on widely shared premises. These principles would indicate how much we are prepared to pay to achieve certain benefits.

Nevertheless, the debate cannot solely be limited to evaluating the energy alternatives themselves. It must also include other pertinent questions: the quality and extent of transport networks, the structure of electricity generation (more macro and centralised, or more micro and distributed), energy pricing policies, the cost of externalities, the redistribution of decision-making power at different levels of the administration, the redefining of public and private roles and the development of technology.

In short, there are a plethora of elements and we need to choose well when it comes to deciding on the different possible combinations. There is so much at stake (the workings of the economy and our quality of life), that it must not be a technocratic decision, divorced from its social implications. It is not easy, in other words. While there is still oil available at a relatively low price, we feel more comfortable ignoring a debate that could prove to be awkward, in which some interests stand to lose out. The viewpoint of each group needs to be redrawn without the usual jockeying for position.

Optimists say that an economic downturn can bring benefits if it serves to force people to take measures that, under other circumstances, would be difficult to swallow. The opposite might occur in this case, however: that the crisis serves as an excuse for delaying decisions that by their nature must not be delayed. If this were the case, instead of working to get out of the crisis, we would essentially be working to prepare the next one.

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