

COMUNICATO n. 1374 del 01/06/2015

Energy and the environment: "we need to keep 80 per cent of coal and half of all oil underground"

EKINS: "LET'S GIVE CARBON A PRICE AND THEN TAX IT"

"We often ask ourselves when crude oil will run out, with a certain anxiety about the future of our energy reserves, but if we want to limit the temperature increase on the planet to 2°C we need to keep 80 per cent of coal underground, along with two thirds of natural gas and half the oil available. The new energy policy starts from here".

According to Paul Ekins, Professor of Resources and Environmental Policy at University College London, the solution to the energy problem depends on political decision-makers, and must be directed at reducing the contradiction between energy and the environment. In the context of these choices, priority should be given to attributing a price to carbon, as a prerequisite for subsequently taxing it, aware that in any case even by doing so we will not succeed in stopping global warming.-

Everything revolves around the energy "trilemma" - namely compatibility between the need to guarantee the safety of supplies, the economic efficiency of the system (keeping the price of energy low) and climate change – introduced at the beginning of the session by Matteo Di Castelnuovo. Together with the climatologist Antonio Navarra, he animated the discussion with Paul Ekins, chaired by the Scientific Director of the Festival of Medical Science in Bologna, Pino Donghi.

"According to the International Energy Agency", explained Di Castelnuovo "in 2014 emissions came to a standstill, something which had not happened for 40 years, due to a change in the way Europe and the USA consume energy. In ten years our dependence on fossil fuels has gone down from 82% to 75%, an extraordinary result, and this dependence will be reduced even further in the future. In the meantime the CO2 market has collapsed, but the real news is that coal-powered power stations are increasing, while gas-powered plants are losing ground. What about electrical energy? It has become junk, power stations pay for it to be withdrawn, prices have collapsed and traditional power plants are no longer capable of recovering. In Italy the demand for electricity is also falling: in 2014 almost 40 per cent of the demand for energy was satisfied by renewable sources of energy. Peak demand has also gone down gradually, but despite this hydroelectric power stations continue to be constructed and have doubled, in the face of stable or declining demand. The demand for gas has also gone down".

This was the succinct overview of what is happening in the electricity markets presented by Di Castelnuovo. As we know, the energy situation is closely linked to climate. "It is difficult to pass any policy that does not bear climate change in mind", affirmed Navarra, "but we must be optimistic, because humanity is capable of solving the problems, while at the same time we continue to be worried, because knowing that smoking is bad for you does not always help you to stop, and we are smoking the planet."

"Creating a different energy market less in conflict with the environment is certainly possible", concluded Ekins "the only unacceptable option is not to make any decisions. The decisions are difficult because the investment that we need to make will have an impact for decades. We must begin by asking ourselves how much energy we require; we can decrease the demand for energy, and indeed almost all countries today are asking for less energy, but we must also give the network the ability to respond using many distributed energy resources. There are four new sources to be used on an extensive scale: large renewable, distributed renewable, nuclear and coal. We must choose, aware that all these options lead to problems. Bioenergy, for example, is in competition with biodiversity; then there are also social problems and political conflict, especially in developing countries. Above all we must develop specific policy for new environmental and

ICT technologies, which must be incorporated in order to ensure ever greater efficiency of the system."

-

()