



## ROBERTO MENIA

### Scenarios and political actions for Italy

First of all, thank you. It is an honour to be here in this Museum, a temple of knowledge and an asset for the whole of Italy, not just this Region.

I would like to say thank you especially for the farsightedness of having combined a purely scientific debate with a political contribution. I believe that "good politics" is always that of those who try to make the most of and apply the stimuli that come from society, but, above all, from the knowledge and awareness of those who have dedicated their life to study and science. Good politics guides and reforms without having the presumption of knowing everything from the outset.

Another thank you goes to Dr. Galli, for his extremely pragmatic and solid approach, and the United States' Ambassador, who has given us a series of indications that mark a turning point and that can be immediately verified as is evident, in the new Obama administration; in the weeks and months to come, we will see how many of the issues that proved to be so successful in the long US election campaign, will be put into practice by President Obama.

I also greatly appreciated the concrete approach of Mr. Moltrasio of Confindustria, particularly for having reminded us of the position that the Italian government took during the European discussion on the 20-20-20 climate package.

Talking of Climate Change, I usually speak without notes, however, amongst the documentation I have with me, there are two very interesting pages that I tore from this morning's La Repubblica, in which one reads that the temperature is expected to rise in Europe and that, in the 21st century, it could rise from more than 1 to more than 5.5 degrees. I made a series of personal considerations about this; I have to honestly say, with full respect for the European Community, that I do not believe that I will see out the whole of this century, primarily for age reasons, however, I do not believe that those who come after me will experience a rise in the planet's temperature of five and a half degrees.

I remember, when I was at school, about twenty years ago, that they told us that we were headed for a new era of glaciation; twenty years later, I am told that I will end up roasted alive, so the question is inevitable: were teachers right twenty years ago or are they right now? I seem to remember that Greenland is called Greenland because it used to be green!!!

My doubts are fully echoed by the extremely honest position of Mr. Moltrasio, when he says that we cannot know for sure whether greenhouse gases are the cause or the effect of the global warming that we are undoubtedly living. We certainly cannot go against the facts of scientific evidence that show that there is a connection; there can be no doubt that this connection is evident, there can be no doubt that in recent years, recent decades, we have seen an increase in desertification. Europe has informed us that together with Greece, Spain and certain Mediterranean areas, we are at risk of desertification and a series of alterations, of climate changes are expected against which we have the duty and the right to act. Right and duty because, and I say this with a dear quotation of ancient Indian wisdom: we have not inherited the earth from our fathers, rather we are borrowing it from our children.

The Senate is currently discussing two different motions. One of these motions states that it has not yet been demonstrated that the mean temperature of the terrestrial atmosphere depends on the concentration of carbon dioxide in it, that the level of water in the oceans is not rising at a worrying rate, that the glaciers on dry land and the polar ice caps are not melting and in fact, that over the past few months the polar ice cap has reformed to the same extent as 20 or 30 years ago. The other motion states the exact opposite: it contains a series of scientific theories or data, that claim that since the signing of the famous Rio Convention in 1992, there has been an increase in the concentration of greenhouse gases in the atmosphere with an annual growth rate in the concentration of carbon dioxide between 1995 and 2005 of 1.9 parts per million a year, the highest measurement since atmospheric CO<sub>2</sub> measurements started.

A report by the Environment Commission of the US Senate, including the statement of 650 scientists of international calibre, shows their clearly sceptical position in relation to the theory that the current global warming phenomenon is caused by human activity. According to this position, the main cause of terrestrial atmospheric warming observed to date, of between 0.7 and 0.8 degrees centigrade, cannot be primarily attributed to anthropic activity. However, there is a connection and, with regard to the commitment of Europe and that of Italy within Europe, that we should also

bear in mind the percentage of greenhouse gas emissions. What we can say for certain is that the emissions attributed to Europe, in relation to the worldwide panorama are a minimal part compared to the emissions in rapidly developing economies such as India, China and even the United States, that generate about one quarter of global emissions. When Italy will have to commit itself to an endless and costly series of regulatory changes – Confindustria has formulated the worst forecast, however the most optimistic estimate for the next decade, is of 189 billion Euros – to discover that the benefit it will receive is a percentage of just 0.3 of the worldwide total, it will be the local politicians who will have to face the choices and responsibilities of not just a national scale but also a global one. In actual fact, climate change constitutes a priority in international Agendas. In his election campaign, the President of the United States substantially proclaimed the objective of abolishing the country's dependence on importation of Middle Eastern oil within ten years, this is something we agree with and I would like to point out that Italy, in planning its development model, aims for a future scenario in which amongst what we used to call alternative energies and before that renewable energies, it must also aim for a 25% of nuclear energy. To my way of thinking, it was madness to abandon this pathway a few decades ago, when Italy possessed the technology and knowledge that put it ahead of other countries. Italy does not doubt the principal on which the Kyoto Protocol was signed, it does not doubt the principles according to which Europe's energy climate package is functional, however it says that all this should be compared to the model of development, it should be compared to the different starting levels, in terms, for instance, of the capacity to produce and produce in an environmentally friendly way. Italy from this point of view, is a country that has invested enormously on a cleaner development model and it cannot pay more than other less virtuous countries.

Italy intends to perform the task it has been assigned at this particular moment, in other words overcoming the crisis, in a serious and disciplined way, without holding back on anything. I had the opportunity to participate in the appointment on the Green New Deal, organised by UNEP, which is held every two years in Nairobi, where it was suggested that to recover from the current economic problems we should use "green solutions" able to make sure that the environment, the exploitation, the channelling of important energies and the development of technologies with low carbon emissions, become driving elements of development. In this framework, there are governmental initiatives that address both international and national contexts. At the end of 2009, the Copenhagen Conference will be the focal point of this debate. It is essential to start to act from the smallest communities that are therefore those most deeply rooted; I am thinking of the Mayors' Treaty, the initiative launched by the European Commission to actively involve European cities in the pathway towards energetic and environmental sustainability, which does not merely mean turning out the lights every evening, which could seem a superficial solution, rather clearly investing in long-term policy.

The data from the Intergovernmental Panel on Climate Change show that the climate protection challenge to achieve energy safety, is of a global scale. According to the Fourth Climate Report, global carbon dioxide emissions should be reduced starting from 2030 by at least 50% compared to current levels, in order to stabilise carbon dioxide concentration below 550 parts per million and ensure the protection of the climatic system. In connection with this, we could add that, according to the reference scenario of the World Energy Outlook, primary energy demand will rise by an average of 1.6% between 2006 and 2030 with fossil fuels, which will in any case represent 80% of the global energy mix in 2030. Non-OECD countries represent 87% of the increase. CO<sub>2</sub> emissions caused by the use of energy will increase by 45% in 2030, with non-OECD countries responsible for 97% of the rise in CO<sub>2</sub>. In order to reach the level of CO<sub>2</sub> stabilisation, which will have to limit global warming by the tragic 2 degrees centigrade, we have to invest in technologies with a low carbon content, encouraging them so that they satisfy both demand and supply. Technologies with a low carbon content must be diffused from now on to achieve the emission reduction targets set; it is obvious that postponing policies that favour the diffusion of new technologies in the short term would also delay the achievement of the targets set. In actual fact, the technological options are already mature and available on the market, and on this point I have to say that the Italian scenario is a remarkable one; however we need to support better research and experimentation for those technologies that are still being developed.

The 2050 targets require the development and diffusion of all the technological options and therefore require that all the new technologies, even those that cost most, are available in the short term, i.e. in 5 or 6 years' time, in 2015. At the same time, the diffusion of technologies with a low carbon content and relative know-how must be guaranteed on a global level, with particular attention to technological transfer towards emerging economies and developing countries. It goes without say that the targets set in Kyoto and that will come to Copenhagen cannot ever be reached unless they take into account developing countries, those that currently have the highest development rate and are also those most responsible for the greenhouse gas emissions. The reference scenario of the International Energy Agency's World Energy Outlook envisages investments of over 26000

billion American dollars between 2007 and 2030 for the production and supply of energy, in order to satisfy the growing world energy demand. The same International Energy Agency also says that the investments to be made by 2050, the figure mentioned is 14 thousand billion dollars, for research and development, as I said before, must make the technologies currently being experimented available, in the shortest possible timeframe.

As I said, the world is facing an enormous, unknown economic and financial crisis; the Consul said the same thing a while ago: never has a crisis been so global and as much as economists of worldwide renown may consider the question, no one has come up with the right solution. There can be no doubt that there is also a slowdown in advanced economies, to which we can also add the slowdown in emerging economies: China, India and Brazil.

According to the International Monetary Fund, global productivity will dwindle to 0.5% by the end of 2009. Due to the current economic and financial crisis, it is therefore probable that Governments will concentrate on not burdening trade and industry with costs and additional regulations in an attempt to manage an historical moment in which the economy is fragile and jobs are at risk. The financial crisis has therefore questioned the basic assumptions of the programming of many national and international policies.

To tackle the financial crisis, governments are injecting large sums of money to protect the financial system, recapitalising the banks and isolating bad assets. This government has already implemented a package of measures; such as those concerning energy efficiency and 55% deductions on building efficiency. In the housing package, we have included a series of measures that still have to be passed by Parliament, but that represent a set of measures for environmentally home refurbishment that are effective and passive, using bio-architecture technologies. If we think of car-related measures, as you know, transport is one of those sectors that most contributes to atmospheric emissions and on this the Italian government has acted swiftly, having already introduced a series of measures and intending to realise others still. Our Government is experimenting a strategy that creates real economy and jobs and that also attempts to answer one of the great challenges of our time, i.e. to impose a "global ecology" against "global warming", to protect biodiversity and dedicate new, receptive attention to these questions. Our country will reflect on these matters at the Siracusa G8 summit, a G8 summit that we strongly wanted to open also to those emerging economies: Brazil, China, Mexico, South Africa, India, Australia, Korea, Indonesia and Egypt. The G8 summit will open with a session dedicated to prospects and barriers, development and the diffusion of technologies with a low carbon content in the short-, medium-, and long-term. And therefore with special attention to the financial architecture needed to promote these technologies, especially in the context of the current crisis. Together with representatives of the private sector of many of the countries meeting in Siracusa and the international organisations, the Ministers will be able to discuss the opportunity of promoting technological innovations for encouraging economic recovery and tackling the dual challenge of climate change challenges and energy safety. In preparation for the Siracusa G8, from next Thursday in Trieste, we will be holding the pre-G8 technical session dedicated to technologies with a low carbon content, with institutional representatives and private sector financial institutions, to be able to discuss the degree of implementation of the research, of the development of the most promising clean technologies in the energy, automobile and architecture sectors, in an attempt to identify the most efficacious financial tools for increasing the use of transfer in Italy of technologies on the market and above all those of emerging countries. It is evident that scientific research plays a key role in these issues. We know that the Scientific Community is fully able to take on these responsibilities and will be able to provide us with adequately reliable and non ideological solutions for achieving future objectives. I am sure that "good politics" - I will never tire of repeating it - must turn to science and technology so that it can intervene with well-informed knowledge but also with due humility. Thank you.