

Good morning,

Ladies and Gentlemen

Can I begin by thanking the organisers for having invited me to participate in this round table. It is particularly gratifying for me to contribute to this round-table as I have a long standing association with Euro-CASE and was involved in setting up the Portuguese academy of engineering.

In my speech, today, I should like to concentrate in three main aspects. I will begin by outlining in general terms the importance of Horizon 2020 – a programme that I have been directly involved with during the course of my work in the Parliament – and then go on to discuss improved public awareness of the complex field of science and technology before

finishing with the importance of this matter specifically in the fields of Energy and Climate Change.

General Remarks about Horizon 2020

To begin with the general remarks on Horizon 2020: European policy for science is about to undergo a profound overhaul. This is the Horizon 2020 programme: the European Research and Innovation programme that will run from 2014 to 2020 with a budget of €70 billion. The goal of this programme is to, at once improve industrial competitiveness, to encourage excellence in science and to find ways of resolving the societal challenges that we are currently confronted with.

These challenges include unresolved health problems, pollution and global warming, an ageing population, low levels of employment and security of energy supply, to name but these.

Two of the seven main challenges that have been identified in the societal challenges pillar of Horizon 2020 are specifically devoted to the themes that are the main focus of this round table. These are, firstly, secure, clean and efficient energy, and, secondly climate action, resource efficiency and raw materials. I am optimistic that if we are able to effectively make use of the provisions of Horizon 2020, we shall be able to make considerable headway in tackling the various societal challenges in general and energy and climate change questions in particular.

Improving Public Awareness

To turn now to my second theme: from my perspective, the question is how the European Union can take active steps to improve public awareness of science and technology related issues. The Science in Society section in Horizon 2020 is already a real step in the right direction. In this respect, the Parliament, in particular, has played a very active role in identifying the need for this aspect to Horizon 2020 and ensuring that it has as much visibility as possible.

Against this background, there are, I feel, three further elements that will contribute to improved public awareness of the role Europe plays in promoting and improved perception of science and technology. These are:

~ Firstly, *Formal and informal education*: we need to ensure that scientific and technological careers are attractive to young students and to foster sustainable interaction between schools, research institutions, industry and civil society organisations. Improved science education necessarily involves gender equality and this can be further advanced by supporting structural changes in the organisation of research institutions and in the content and design of research activities.

We must also encourage citizens to engage in science through informal science education and, more generally, we must promote the diffusion of science-based activities. This might involve “science centres” and other initiatives that promote the applied side of science.

~ Secondly, we should make an effort to *improve public perception* of the quality, relevance, social acceptability and sustainability of research and innovation outcomes. These range from social innovation to areas such as biotechnology and nanotechnology. This involves developing the accessibility and the use of the results of publicly-funded research alongside deepening knowledge about how best to communicate scientific developments and principles. The goal here is to ensure more effective interactions between scientists, the media in general and the public.

Here, I should like to stress the need to overcome reticence on the part of the public at large with regard to scientific innovations. The introduction of new technologies is sometimes met with reticence on the

part of the public and in some cases this actually means that some innovations never actually see the light of day.

~ Thirdly, it is important that the public is *reassured about the ethical aspect to scientific research and with regard to the commitment and responsibility of researchers*. In this respect, we should ensure that governance mechanisms are in place that will allow for responsible research and innovation by all stakeholders (researchers, public authorities, industry and civil society organisations).

Such research should be sensitive to societal needs and demands and should promote an ethical framework for research and innovation. This also means taking due and proportional precautions in

research and innovation activities by anticipating and assessing potential environmental, health and safety impacts.

Energy and climate change are areas in which the public awareness and acceptance are crucial - for example,

- in the case of CCS several demonstration projects have stirred considerable public opposition.

- Nuclear power plants are also controversial between the public and

- Energy efficiency is most effective with behavioural changes

A better public awareness campaign might well have smoothed the passage, in this respect, and allowed for a more rapid uptake of the new

technology.

To finish, let me say a few words about the way in which we might encourage desirable changes in public behaviour. In particular, I am thinking this time of the need to encourage reduced energy consumption – and with energy consumption CO₂ emissions. It is necessary that we find ways of presenting the necessary changes in behaviour that these challenges represent as something that will be directly beneficial to citizens in general.

To this end, Horizon 2020 contains a sub-programme Intelligent Energy for Europe one of whose goals is to promote soft measures to increase energy efficiency and to foster the increased use of renewables.

I hope that these brief remarks will serve to outline something of the context for what I am sure will be a lively and stimulating discussion.

Thank you very much.