

MARIA DA GRAÇA CARVALHO

OVER THE HORIZON



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To my parents

FOREWORD



Professor Maria da Graça Carvalho played a very important role in the European Parliament in support of the European Union and of Portugal. Her work left an indelible mark on the structure of the Union's programmes and legislation, particularly in the area of science and innovation but also on energy and climate-change policies.

I already knew Professor Maria da Graça Carvalho as she was my Minister for Science and Higher Education from 2003 to 2004. I was, therefore, well aware of her intelligence, dedication and work ethic. In these past ten years as President

of the European Commission, I have followed her career in the European institutions and I have witnessed the appreciation and admiration that she has garnered from the European Union's most prominent representatives. Her work was particularly appreciated by the Commissioners responsible for the areas in which she was most involved - the Commissioner for Research, Innovation and Science, Máire Geoghegan-Quinn, and the Commissioner for Education, Culture, Multilingualism and Youth, Androulla Vassiliou.

Her work on Horizon 2020, specifically the report on simplification, and her unstinting efforts to improve the programme's structure and to increase the budget allocated to science and innovation, will help to shape the approach taken by the European institutions in this area over the next seven years. The measures that she incorporated in Horizon 2020 and the funding that she fought for in the European Parliament for this and other programmes, such as the Space programmes, largely motivated by her constant concern to promote employment - especially youth employment - have made a vital contribution to the increased competitiveness of European SMEs and industry.

The European Institute of Innovation and Technology benefited greatly from the initiatives taken by Maria da Graça Carvalho - such as the setting-up of the

Group of Friends of the EIT – designed to promote and consolidate the Institute.

During her time as an MEP, Maria da Graça Carvalho remained in close contact with Portuguese institutions – universities, business associations, local government, citizens’ groups – channelling a major part of her activities into explaining to national officials how the European institutions work and how to make use of European support mechanisms. With the European project as her constant point of reference, Maria da Graça managed successfully to combine the European agenda with national interests.

It is clear from reading this book that by putting her academic and scientific training at the service of the

causes for which she fought, Maria da Graça gave an extraordinary depth and range to the results of her political activity.

The book is the account of a successful term in office in the European Parliament. I believe that its contents will be useful not only for those who will play a role in the European Parliament, whether political or administrative, but also for all those who have worked for some years in the European institutions and for those who wish to know more about the world of the European Union and its potential.

José Manuel Durão Barroso



1 - INTRODUCTION

When I was elected as an MEP, I received a vote of confidence from the Portuguese people and I endeavoured to honour this trust as best I could during the five years of my mandate as an MEP. I saw my task as that of representing the interests of Portugal and the Portuguese as well as the interest of Europe and Europeans in the European Parliament. I have pursued this aim with commitment and dedication in the work that I have undertaken in the different parliamentary committees and delegations.

As I announced at the outset of my mandate, I was eager to tackle five spheres of particular concern: science and innovation, energy and climate change, youth employment, the less-favoured regions and, finally, developing countries. These spheres of interest reflect my vision of what I consider to be the key priorities in European politics. My interest in these areas results, partially, from my academic training as a researcher in environment and energy policy and, partially, from the political experience that I have acquired over many years. At all stages of my academic training, from graduation to Ph.D. and beyond, I have been directly involved with all five of these spheres in my research work and teaching. Indeed, having worked for over 30 years in the fields of energy, the environment and climate change policy, I have been consistently attentive to

issues related to research and innovation as well as to further education and science.

In the different positions I held before being elected to the European Parliament – in the *Instituto Superior Técnico*, the Faculty of Engineering at the University of Lisbon, (both as member of the Governing Council and as head of the Scientific Council), the Institute of Engineers in Portugal and as a Portuguese Minister in the XV and XVI Constitutional Governments – I devoted most of my energy to work related to Higher Education, Science and Innovation as well as to developing the skills of young people. During my spell at the European Commission as a principal adviser to President José Manuel Barroso, I was involved, from the outset, for the development of the European Strategy for Energy and Climate Change.

My academic training and subsequent experience was thus instrumental in determining those spheres in which I thought I could make the greatest contribution as an MEP. Certainly, it is true that, as is always the case in political life, the nature of these concerns has changed under the pressure of events. However, I believe that I have maintained the direction that I set for myself and that I have not been swayed towards a direction that external events might have imposed on me.



“I WAS DIRECTLY INVOLVED IN FURTHERING OUR VITAL INTERESTS SUCH AS ENHANCING INDUSTRIAL POLICY SO AS TO SUPPORT SMALL AND MEDIUM SIZED ENTERPRISES”

Relation to Portugal

When running for election as an MEP, I had a set of well-defined objectives before me. Indeed, during the campaign leading up to the 2009 elections to the European Parliament, I repeatedly reaffirmed my intention to put into effect the ten programmatic commitments the Portuguese Social Democratic Party (PSD) had drawn up. These were: to adequately represent the interests of Portugal at European level; to foster greater employment and create wealth; to invest in the economy; to guarantee law and order, justice and freedom; to build a Europe for its citizens; to strengthen economic and social cohesion; to place Portugal's young people at the forefront of European integration; to ensure that questions of the envi-

ronment and energy were given equally prominent treatment; to place Portugal at the forefront in the leadership of Europe; to defend Portuguese as an official language of the European Union and, finally, to take a leading role in European maritime strategy. Today, I can say with some pride and satisfaction that in my sphere of action as an MEP, my work has contributed – in many cases, I believe, decisively – to the fulfilment of these objectives.

I am optimistic that, in the coming years, Portugal will overcome the problems of debt and weak competitiveness that currently characterise its state structures and economy. As a result, in my different public announcements, I have repeatedly urged political leaders and institutions to begin to prepare the post-crisis period. The high point of this process was in early 2013 when Portugal began preparing a new strategy for accessing funds from the European Union.

Working in the European Parliament

The European Parliament has 20 separate committees whose mission is to develop, amend and adopt legislative proposals and own-initiative reports, which are then presented during the plenary session. There are also 41 delegations that ensure relations between the European Parliament and the Assemblies and Parliaments of third countries. It is in these different committees and delegations – made up of dozens of MEPs – that most of the work of the European Parliament is undertaken.

MEPs move within a rich, multifaceted reality that manifests itself in the different languages they use in their day to day activity and in the diversity of contacts they have with the various personalities

to be found in the political, intellectual, economic and social worlds they inhabit. Their political work in different bodies and institutions translates into initiatives (proposals, reports, speeches, oral statements, questions to the European Commission and the European Council, voting declarations, etc.) that are then further developed in plenary sessions or in committee.

At the same time, MEPs also come into regular contact with European citizens - with representatives from civil society, officials, observers and journalists - whilst conducting hearings and public consultations with various organisations and social partners including voluntary associations, companies and the unions. MEPs are able to invite groups of Europeans to visit the European Parliament and other EU bodies thus strengthening the ties between the European institutions and European citizens. In my case, it was decided, at the beginning of the mandate, that I would devote myself to reinforcing the links binding the EP to the Portuguese regions of Alentejo and the Algarve. This was a task that I was particularly grateful to undertake, as I come from the south of Portugal.

Specific Roles in the Parliament

It was against this background, that I struggled to make my ideas heard and to defend the reforms that I believed were necessary.

I took on, for instance, the role of parliamentary *rapporteur* for crucial questions such as the Report on Simplifying the Implementation of the Research Framework Programmes or the report on the Specific Programme Implementing Horizon 2020 - The Framework Programme for Research and

“I AM OPTIMISTIC THAT, IN THE COMING YEARS, PORTUGAL WILL OVERCOME THE PROBLEMS OF DEBT AND WEAK COMPETITIVENESS THAT CURRENTLY CHARACTERISE ITS STATE STRUCTURES AND ECONOMY”



Innovation (2014 - 2020). In these activities, I sought to contribute to the improvement of the regulatory environment in areas that are of key importance for the European Union.

As a full member on the Committee on Industry, Research and Energy (ITRE), I was eager to further

the interests of all Europeans, and not least those of the Portuguese. I defended a vision of greater energy independence for Portugal and Europe. This can be achieved through investment in the diversification of renewables and through the consolidation of the internal market for energy sources. I also believe that I have been able to make a significant contribution to controlling pollution and to the fight against climate change and the lack of security in energy supply. In the ITRE Committee, I was directly involved in furthering our vital interests such as enhancing industrial policy so as to support small and medium sized enterprises or creating new – or developing already existing – energy and telecommunications infrastructures.

As a substitute member of the Committee on Budgets (BUDG Committee), I was appointed as the main, permanent *rapporteur* for the EPP with regard to space policy (the GALILEO and COPERNICUS and SST programmes). This was a task with great responsibility, not least on account of the size of the funds involved. I was also appointed as permanent shadow rapporteur for all matters relating to Science and Innovation, Energy, the Environment and Climate Change.

In 2010, I was appointed as a substitute member of the Special Committee on Policy Challenges and Budgetary Resources for a sustainable European Union after 2013 (SURE Policy Challenges Committee). This temporary Committee had particular importance because it was created specifically to help in drawing up the European budget for 2014-2020. In the process, the Committee determined the priorities for Europe for the future and the allocation of funds to the different priorities. The Committee decided on, for example, the structural



Receiving the award for best MEP in 2011 in the area of research and innovation awarded by The Parliament Magazine

“THE FIVE SPHERES OF INTEREST REFLECT MY VISION OF WHAT I CONSIDER TO BE THE KEY PRIORITIES IN EUROPEAN POLITICS”

funds that would be attributed to Portugal as well as on the allocation of other EU funds – managed by the European Commission – that Portugal is entitled to apply for.

I was also fortunate to be able to actively champion the cause of developing countries within the framework of the ACP-EU Joint Parliamentary Assembly (Joint Assembly for Africa, the Caribbean, the Pacific and the European Union). In particular, as a full member of the European Parliament Delegation to the ACP-EU Joint Parliamentary Assembly, I was elected co-chairperson of the Committee on Economic Development, Finance and Trade. Currently, I was also a substitute member of the Delegation to the Parliamentary Assembly of the Union for the Mediterranean (UfM-PA).

Publications and other Contributions

During my 5 year mandate, I continued scientific analysis in relation to the issues I was working on in the Parliament. This resulted in a set of scientifically oriented publications (Annex C). I also made a constant effort to render the results of my activity public by means of numerous seminars and publications of a less technical nature aimed at the layperson. Quantitatively, I estimate that, during my term of office – which began on 14 July 2009 and which, at the time of writing, will shortly end on 1 May 2014 – my work has resulted in: 7 reports, 3 as *rapporteur* and 4 as shadow *rapporteur*; 13 opinions, 3 as *rapporteur* and the others as shadow *rapporteur*; 8 motions, 4 written declarations and 32 parliamentary questions. In the European Parliament plenary, I was responsible for 1 100 statements (oral and written). I also invited 18 groups of visitors to witness for themselves the nature of my work in the European Parliament. In the course of my parliamentary activities, I have organised 95 seminars, have been invited to deliver 200 conferences, published 109 articles in newspapers and magazines of general scientific interest and have written 4 chapters for different books. I have, at the same time, published 20 articles in international scientific journals and given 5 invited lectures at international scientific conferences.

Organisation of the Book

Following this introductory chapter, the second chapter is devoted to my struggle to foster a system that will actively stimulate scientific development and innovation at a European level. The first stage in this struggle, in so far as my activity in the Parliament is concerned, was the simplification of the rules of access to European funds for science and innovation.

Since then, the route has been long and arduous and has involved no less than 67 simplification measures. These measures were initially adopted by the ITRE Committee and subsequently by the European Parliament; which has now built them into Horizon 2020, the European Union's science and innovation programme for the period 2014-2020. It was only with real difficulty that this was achieved: the question of whether scientific projects would be able to recover the VAT was a notable sticking point. To achieve our goal, it was necessary to change the financial regulations of the Union and this required a decision at the level of an EU meeting of finance ministers.

Once the measures had been adopted, I took the initiative to draw up an accompanying document ('simplification table') concerning the consolidation of these measures within the EU budget and measures were designed that would provide a long term guarantee that the reforms would be fully complied with by the EU Commission. A full account



On the 100th anniversary of International Women's Day with Maria do Céu Patrão Neves, Regina Bastos and European Commission President, José Manuel Barroso

of the process involved is also to be found in the second chapter.

The culminating point of this process was the adoption of HORIZON 2020, the largest support programme for science and research in the world with a budget of €79.4 billion. Actually achieving final approval for HORIZON 2020 was a long and arduous process, one that required the convergence of diverse strands of support, from within the European Parliament but also from the worlds of academia, business and civil society. The strategic approach that enabled us to bring these strands of support together eventually enabled an increase in the budget from that of the 7th Framework Programme for Research and Technology 2007-2013 of €52 billion to a final figure of €79.4 billion. This achievement is all the more significant given that the overall amount of the EU budget was cut by 10% during the same period.

At the same time and despite the difficulty of the task, the end result was that, after managing a thorough-going overhaul of the rules inherited from previous programmes, the mechanisms for accessing funding from Horizon 2020 were simplified considerably. The programme was structured in such a way that it would strengthen the competitiveness of SMEs whilst fostering employment opportunities for young people, in particular. Finally, I am proud to say that practically all the relevant priorities for Europe in the area of science and innovation were incorporated into Horizon 2020.

The third chapter is divided into two parts. The first describes European strategy for energy and climate change, something that has been a constant interest of mine since my years as an adviser at the European Commission. I deal with the various steps that led from

the adoption and approval to the implementation of this strategy. The second part concerns European foreign policy in the fields of energy and climate change as well as the influence that this policy has subsequently had at various meetings of the United Nations (COPs 15, 16, 17 and 18).

The fourth chapter addresses a major problem to be found in European societies today: the problem of youth unemployment despite high levels of educational achievement. Questions such as the mobility of youth and youth entrepreneurship are examined alongside a consideration of the role that the European Institute of Technology (EIT) is able to play in meeting the challenges that this problem represents.

The fifth chapter concerns the less favoured regions and the policies that might be developed to aid these areas. The chapter analyses the role of the National Strategic Reference Framework - NSRF (European regional policy funds allocated to Portugal over the period 2007-2013) and the importance of reprogramming. To end with, the chapter considers the question of how the new Strategic Framework-Portugal 2020 (European Funds for Regional Policy 2014-2020) might help overcome the crisis affecting the country through a decisive investment in science, in innovation, SMEs, industry, the energy field and in combating climate change.

Finally, the sixth chapter describes the work that has been undertaken in order to aid developing countries, both economically and in political and social terms. This is considered in parallel with the transition to – or the consolidation of – more just and democratic societies, societies that are respectful of human rights and not least of women's rights.

Purpose of the Book

Every responsible politician should be able to account for his or her activities during the exercise of a parliamentary mandate. I have already sought to ensure that this has been the case during my term as an MEP but this is, perhaps, the time to offer a more comprehensive and systematic account. This is the rationale that underlies this book.

I hope that reading this book will illustrate to what extent I have sought to live up to the expectations that being elected by the Portuguese people to the European Parliament has entailed and the extent to which I have sought to carry out my duties as fully as possible. Indeed, I feel that I have fully carried out my responsibilities with regard to a Parliament that is often the focus of attention in Portugal, in Europe and in the rest of the world. This was recognised by The Parliament magazine, when I was nominated twice as the best MEP of the year. In 2011, I was elected the best MEP in the field of research and innovation and in 2013, was nominated for the award of best MEP in the energy sector.

I believe that this book will be of some use to future MEPs, especially for those that wish to pursue work in the fields that I have specialised in or in fields in close proximity to my interests. To this end, I have made a concerted attempt to supplement the text with references that will allow the reader to find more detailed information on the topics discussed. I have also included through the text brief discussions of some of the peculiarities of the functioning of the European Union. This being said, I am also optimistic that this book will remain of use to a wider audience.

CHAPTER 2

SCIENCE AND INNOVATION



2 - SCIENCE AND INNOVATION

2.1 - INTRODUCTION

Importance of Science and Innovation

Science is generally recognised as a source of real benefit and of huge potential for humanity. Scientific understanding of reality underpins modern societies and profoundly influences the nature of their actions on the surrounding environment enabling, in the process, both social progress and economic development. Similarly, science and innovation constitute a key factor in furthering competitiveness in the European Union. It is necessary that European companies invest in innovative products and processes and engage in activities that actively produce added value if we are to improve productivity and to become ever more competitive. In the process, it is equally vital that companies are able to benefit from an environment that actively fosters innovation, something that entails the participation of both the private and public sectors.

Indeed, innovation is crucial to economic growth, job creation and the overall quality of life in Europe. If an environment fully conducive to innovation is to be achieved, it is necessary that investment in R&D remains sufficiently elevated. At the same time, it is crucial that there are scientific research institutions of high enough quality to be able to collaborate fruitfully with industry in the development

of products, processes and technologies. To move in this direction will mean that European states are able to overcome the low rates of growth by which they are currently beset, above all for those confronted with low productivity or competitiveness.

In this respect, investment in science and innovation should be seen from two perspectives. On the one hand, it is necessary to ensure that Europe as a whole is able to keep up with the rapid pace of the globalised world. Currently, the European Union is home to 7% of world population and represents 29% of the world economy. The EU is responsible for 24% of expenditure on R&D and 33% of scientific publications in the world¹. However, in a world characterised by the rapid development of many of its various regions, the relative importance of Europe will undoubtedly tend to decline. It is predicted that in 2050, for instance, the EU's share in the world economy will shrink from 29% to 17 %².

On the other hand, the least developed European countries should be able to overcome their difficulties and catch up with those states that currently lead in the field of innovation. After the economic crisis, data made available by the European Commission³ indicated that there had been a parallel decline in levels of investment in R&D in the economy. This was accompanied by a widening of the gap between the 27 member states with regard to key indicators of innovation. This state of affairs represents a quite different picture to that of the gradual improvements in levels of R&D investment experienced over the course of the previous decade. Nevertheless, since 2012 and above all in the private sector, there have been signs of a recovery in levels of R&D investment, which once again attained rates comparable to those experienced prior to the crisis of 2008⁴.

Organisation of Sections

This chapter concerns the underlying rationale, the different stages and the results of my work in the European Parliament. My unwavering purpose has been to highlight the role of science and innovation as a key factor for both European competitiveness and the well-being of Europeans in general. In pursuing this goal, I have conducted an analysis of the state of science and innovation in the EU in an international context (section 2) and of the strengths and weaknesses of European innovation (section 3). There then follows a consideration of the particularities of the Portuguese case (sections 4 and 5) as this entails the consequent need to strengthen convergence between countries that are still lagging behind with regard to innovation.

The first major battle I fought was on the occasion of my report on simplifying bureaucracy and access to EU funds for science and innovation (section 6). The results of this process were examined and incorporated into the Framework Programme for Science and Innovation 2014-2020. In particular, in order to palliate the effects of the cuts in the EU budget for 2014-2020 – resulting, as expected, from the economic crisis – a series of measures were taken to ensure that the budget allocations for science and innovation were not unduly affected (section 7). Any investment programme that allows European countries to recover sustained growth should be based on a commitment to innovation and this is something that is closely linked to the development of scientific research and to appropriate levels of specialised higher education.

Consequently, an effort was made to bring together the 7th Framework Programme for Research, the

Competitiveness and Innovation Programme and the European Institute of Innovation and Technology under the common umbrella of the new framework programme, HORIZON 2020. This was something that we were able to achieve, giving rise to the final design of today's HORIZON 2020 programme. The programme is now the single largest programme supporting research and innovation in the world. HORIZON 2020 is structured in such a way that it will make a decisive contribution to maintaining and strengthening European leadership in science and industry whilst meeting the many challenges that today's European societies face (section 8).

It would have been impossible to bring this chapter on science and innovation to an end without mentioning the European space programmes. This was also a sphere in which the budget underwent significant reinforcement with a view to ensuring the adequate development of European space programmes (section 9).

2.2 - SCIENCE AND INNOVATION IN EUROPE

BRIEF DIAGNOSIS

The various proposals for science and innovation that I have made have been founded on a prior diagnosis of the state of science and innovation in the European Union. The diagnosis involved examining the amount and distribution of human resources allocated to R&D, the number of scientific publications, the number of

patents, the volume and intensity of investment in R&D alongside an analysis of various indicators of innovation. I believe the latter merits special attention and, for this reason, analysis of these indicators of innovation will be undertaken in the next section.

Human Resources

In 2007, the human resources employed in R&D represented 1.57% of total employment in the EU -27⁵. Nationally, the highest values were to be found in Finland 3.19%. Between 2003 and 2008, the human resources allocated to R & D increased on average by 3.3% per year in the EU-27. There were, however, notable differences to be found between Member States. The most significant increases of over 10%, were found in Malta (17.0%), Portugal (14.0%), the Czech Republic (12.7%) and Slovenia (11.2 %). In three countries, there was, by contrast, a decline in this indicator: Finland (-0.2%), Poland (-0.6%) and Romania (-1.7%).



With the European Commissioner for Research, Innovation and Science, Maire Geoghegan-Quinn

In the EU, the economic position of the staff involved in R&D presented a varied pattern. For example, in Bulgaria the government sector employs most of the staff working in R&D while in Estonia, Greece, Cyprus, Latvia, Lithuania, Poland, Portugal and Slovakia most researchers were to be found in higher education. Generally speaking, across the EU-27 in 2008: 45.9% of researchers were employed in companies while 40.4% were in the higher education sector and 12.5% in government sponsored sectors.⁶

Investment

Over the last twenty years, Europe has enjoyed satisfactory results with respect to R&D. This has contributed to the gradual increase in investment in this area. Between 2003 and 2008, investment in EU-27 R&D grew at an average 3.3% per year, reaching €237 billion in 2008⁷. Taken together, large countries such as Germany, France, Italy and the UK accounted for more than half of this investment. In 2007, average European investment in R&D – as a percentage of EU-27 GDP – was 1.85%.

The following year, this rose to 1.90%. However, this is a figure that is still well below the target of the 3% that the Europe 2020 strategy aims to achieve by the year 2020. Among the different EU Member States only Sweden (3.75%) and Finland (3.73%) have managed to attain a level of investment that is higher than the goal of 3% of GDP for R&D. These countries have outshone even Japan (3.44 % in 2007), the United States (2.76% in 2008) and South Korea (2.13% in 2007). Denmark (2.72%), Austria (2.67%) and Germany (2.63%), although not quite reaching the goal of 3%, are, it should be acknowledged, well positioned with a level of investment markedly above the EU-27 average⁸.

However, the intensity of the total investment in R&D in the EU-27 (1.90% of GDP in 2008) is much lower than that of Japan (3.44% of GDP in 2007), South Korea (2.13% of GDP in 2007) and the United States of America (2.76 % of GDP in 2008). If investment in the public and private spheres is broken down to isolate trends in private investment in particular, differences between countries can be explained by the distinct dynamics underlying this source of investment. Indeed, it is of prime importance, when analysing investment in R&D, to consider the role played by the business sector. This is because business investment indicates the degree to which business values R&D as a part of its productive drive. In 2008, the business sector across the EU-27 accounted for 55% of investment in R&D⁹.

In addition to achieving investment levels of 3% of GDP, the second goal set by Europe 2020 was to ensure that two thirds of R&D was financed by the business sector. However, at national level, only three member states have achieved this target: Luxembourg (76.0%), Finland (70.3%) and Germany (67.9%). Significantly, in some countries the greatest share of the investment in R&D undertaken by businesses was in the industrial sector. This was the case in Germany, Slovenia and Finland where business investment in this sector amounted, respectively, to 88.7%, 88.2% and 80.0 % of total investment in R&D¹⁰.

Major European companies are always willing to take a risk when it comes to R&D, since they consider that investment of this sort gives them a competitive advantage. Although this willingness attenuated during the crisis, in 2012 figures for expenditure on R&D once again reached the same level as they had in 2008. Interestingly, the sectors that invest most heavily in R&D also tend to demonstrate greater rates of employability.

Patents

Between 2002 and 2007, the number of patents taken out by EU-27 member states increased 2% per year on average. With the sole exception of the UK, during this period, all the Member States increased the number of patents registered per million inhabitants, with an annual average of between 1.0% and 36.6%. At the end of this period, in absolute terms, Germany registered the most patents (23 929), followed by France (8 421), the UK (5 422) and Italy (5 107). In a more realistic approach – one that considers data with regard to patents in relation to the population of the Member States – the outcome is slightly different. This time, Sweden boasts the largest number of patents per million individuals (298), while Germany and Finland stand, respectively, at 291 and 251 patents per million inhabitants¹¹.

The performance of EU Member States in terms of the amount of patents taken out has progressed positively, but a lack of the desired convergence between states is still to be observed not to mention worrying if still incipient signs of widening divergence. It appears that the performance of the leading member states in the field has improved while those that lag behind have not developed enough to reduce the gap.

Outside Europe, the highest number of patents in 2007 was found in the United States (31 908), followed by Japan (20 657) and South Korea (5 607)¹².

Innovation

With regard to their performance in the area of innovation, the EU Member States are classified into four groups: innovation leaders, innovation



Plenary Session after the final vote on Horizon 2020 with Christian Ehler, Teresa Riera Madurell, Jack Metthey, Director in the Directorate General for Research and Innovation at the European Commission

followers, moderate innovators and weak innovators¹³. In 2013, as had happened in previous years, there were four Member States whose performance in innovation stood well above the EU-27 average, namely Denmark, Finland, Germany and Sweden. These states are “innovation leaders”.

Another set of Member States (Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, the Netherlands, Slovenia and the UK) come in close to the EU-27 average – or are situated slightly above or slightly below it – and are classed as “innovation followers”. The performance of the other Member States is clearly below this benchmark. Although the Czech Republic, Greece, Hungary, Italy, Lithuania, Malta, Portugal, Slovakia and Spain are not that far below the average, these countries are classified as “moderate innovators”. Finally, a small number of other countries (Bulgaria, Latvia, Poland and Romania) are well below the European average.

Descending to the regional level reveals, once again, considerable diversity. Most European states have

regions with very different performances in terms of innovation. Portugal and France have a particularly diverse regional culture, in this respect, since they have at least one region that is classed in each of the four categories of innovation above. Other Member States, such as the Czech Republic, Finland, Italy, the Netherlands, Norway, Spain, Sweden and the UK include at least one region in three of the four classifications¹⁴. These differences across the EU-27 suggest the urgent need for a revised conception and operation of how the programmes targeting the different regions.

One element that inevitably stands out is that regions with better innovation performance are also those regions with institutions of higher education and research that are of better quality or level of excellence. Internationally, the United States, Japan and South Korea have a higher performance in terms of innovation than do the EU-27 and are, indeed, world leaders in this area. Currently, South Korea has actually outperformed Japan and has become, alongside the United States, one of the two most innovative countries in the world¹⁵. In terms of innovation indicators, if the EU-27 has been catching up with the U.S., especially since 2008, the world leaders in innovation – the United States, Japan and South Korea – continue to occupy a particularly dominant position. This is the case not only for those indicators that reflect the level of business investment in R&D but also in terms of joint publications between the public and private sectors, registered patents and the percentage of population with higher education.

This being said, the EU-27 still out paces Australia, Canada and all the BRICS (Brazil, Russia, India, China and South Africa) in terms of innovation performance. However, this position is beginning



Speaking in the plenary session

to be eroded by China, which has been catching up with the EU-27 over the last few years. For the remaining BRICS, Europe continues to perform well ahead of the field.

Unfortunately, improvements in recent years made by Europe are insufficient to guarantee a comfortable position in today's globalised world. As has already been stated, besides the United States and Japan, there are now other countries and regions that have made significant progress with regard to science and innovation. Today, the European Union is subject to more diverse challenges and if it fails to adopt appropriate policies in the face of these changing circumstances, the EU could be outstripped by these other regions of the globe.

Publications

The European Union still has a considerable way to go with regard to the impact of innovative ideas on society and in terms of the means by which such innovative ideas are taken up by the business

community. Regarding scientific publications of high quality, the EU leads in quantity (33% of scientific publications worldwide against 31% in the United States of America). However, when the emphasis shifts to the question of quality, this state of affairs is reversed.

Overall Findings

Despite the amount of progress that has been made, today only 20% of researchers around the world work in Europe and only 30% of the world's patents are registered in Europe. In absolute terms, the number of patent applications in the European Union has grown, but the proportion of patents taken out by EU resident scientist has declined by comparison with the rest of the world. By contrast, the emerging countries have progressed by leaps and bounds. For example, in China the number of researchers has doubled over the last 6 years as have scientific publications and China is now showing signs of outstripping Japan. The Chinese private sector has a very large and growing number of patents and, in so far as publications are concerned, partnerships between the public and private sectors have risen.

The challenges facing Europe are therefore enormous. What, in detail, though, are the strengths and weaknesses of Europe in the area that is the single most important factor in their competitiveness: innovation?

2.3 - EUROPEAN STRENGTHS AND WEAKNESSES IN TERMS OF INNOVATION

The determining factor in European development today is innovation. Simply concentrating on innovation and the development of new products will result in Europe's becoming more competitive whilst reducing unemployment. However, innovation requires new ideas and knowledge and this supposes, in turn, a clear willingness to bear the risks that investment in R&D entails. The economic crisis certainly slowed the process in Europe and included both cuts to investment in R&D but also to education.

In my opinion, nevertheless, these were not the worst consequences of the crisis. In terms of science and innovation, the most adverse consequences were to be found in the effect the crisis had on the framework of innovation itself. Bureaucracy remained excessive, burdensome regulations abounded and levels of risk aversion rose. All this has created barriers to the emergence of a dynamic private sector in the area, particularly for companies that have been forced to channel their investments towards less innovative and less demanding activities in terms of new scientific knowledge. At the same time, public authorities have been confronted with a growing difficulty in justifying and putting into practice systems of competitive financing.

Much of my mandate, as a result, was dedicated to trying to create the conditions that would minimize and ultimately overcome these sorts of constraints, constraints that had already been present before the crisis. I fought to stimulate increased investment by simplifying procedures and instruments, particularly those that facilitate the transfer of research results to the real economy thereby enhancing the role of innovation in the business sector.

The previous section discussed several issues that potentially explain the difficulty confronted by Europe in achieving the levels of competitiveness of other global leaders: i.e. low levels of investment in R&D, both public and private, fragmentation, bureaucracy and the lack of an innovation-friendly framework.

Consequently, during my time in Parliament I actively sought to overcome those structural factors that prevent the EU from achieving the levels of competitiveness enjoyed by such major international partners as the U.S., Japan or South Korea.

As a result, the design of mechanisms for funding science and research – that would also foster innovation – has become a central concern of my political activity. I was particularly interested in furthering convergence in innovation performance between different member states, in reducing red tape with regard to R&D programmes and in encouraging the development of the right conditions for emergence of dynamic, innovation eco-systems.

One aspect of particular relevance to innovation is the legislation on intellectual property. In this respect, I set up an informal cross-party working group with colleagues that included Amelia Andersdotter

(Swedish MEP, the Pirate Party) and Catherine Trautmann (French MEP, Socialist Party) in order to discuss questions related to this domain in detail. Other MEPs from across the political spectrum joined this working group and several meetings with experts in the field were organised¹⁶.

I also contributed to the setting up of another working group dedicated to science and innovation under the umbrella of the think tank European Ideas-Parliamentary Network of the EPP. This think tank was chaired by my colleague from Spain's *Partido Popular* and head of the EPP Spanish delegation, Jaime Mayor Oreja. Guillermo Martínez Casañ is the director and I had the privilege of chairing the working group. In this context, I launched fruitful discussion on topics such as the economics of intellectual property and state aid in research and demonstration technologies¹⁷.

It would be wrong to suggest that – although the European Union has struggled with a number of challenges – the Union has not recognised the potential that science and innovation represents. Europe benefits from having research centres and universities of the highest quality and excellence. European companies lead in several industrial sectors such as the automotive, aerospace and chemical industries. Europe can take pride in its open, diverse and dynamic culture, one that is extremely rich in traditions and values. Such factors as environmental protection, improved quality of life, the European social model are all widely recognized and shared as values. Moreover, the EU is now the largest single market in the world and remains committed to supporting the development of the poorest members of society whilst defending ideals of freedom and democracy at a world level.

Few would wish that the next generation of European policies should fail to take advantage of these strengths whilst overcoming lingering weaknesses. This is something to which I shall return in section 6 of this chapter.



With the Nobel Prize for Medicine 2011, Jules Hoffman, during the press conference on the European budget for science and innovation

2.4 - SCIENCE AND INNOVATION IN PORTUGAL

Brief Description

Over the past 25 years, Portugal has made remarkable progress in so far as the indicators for science and innovation are concerned.

Human Resources

In Portugal, the human resources allocated to R&D have steadily increased over recent years. Currently, the country occupies the 4th place at European level in terms of the number of researchers per thousand active inhabitants. In 2012, Portugal accounted for 9.2 researchers per thousand active inhabitants. This is a figure above the European average, which

is 6.8 researchers per thousand active inhabitants. However, Portugal falls below the European average when total human resources in R&D (10.2 people per thousand as opposed to 10.9¹⁸) are considered.

Investment

Between 2007 and 2009, the country's investment in R&D increased above the EU-27 in 2009 average reaching a maximum of 1.64% of GDP¹⁹. Over the past few years, however, there has been a shift in patterns of investment by the public and private sectors. There has been a slight decrease in total investment since 2010, something that can be accounted for by disinvestment on the side of domestic industry. Today Portugal invests 1.5% of its GDP in R&D²⁰.

The indicators relating to business activity and indicators that reflect the benefit that advances in science and innovation have on the economy as a whole have improved slightly but remain well below the European average .

Patents

In 2007, the absolute number of patents registered by Portugal saw the country occupy twentieth place in the EU-27 although calculations based on the number of patents per million inhabitants meant that the country rose to sixteenth place. Although not a very satisfactory score, this should be set in the context of an average annual growth of 24.1% between 2002 and 2007, the fourth best in the EU-27. Currently, the country still lags behind the European average and between 2012 and 2013, there was even a dip in income from licenses and patents²¹.

Innovation

In 2013, Portugal was classed as a “moderate innovator”, a position that was obtained mainly on account of the large number of doctorates and international scientific co-publications. Between 2012 and 2013, the number of doctoral students originating from outside the EU increased by 15% and the number of international scientific co-publications increased by 12.5%. This reflects the sustained growth of national scientific production in all scientific and technological fields²².

2.5 - STRENGTHS AND WEAKNESSES OF PORTUGAL WITH REGARD TO INNOVATION

Today, the determining factor in Portuguese development remains, necessarily, innovation. Innovation must be a key component in a vibrant economy and it is by pursuing such a path for innovation that Portugal will be able to boost productivity and competitiveness in order to create more jobs and to improve the quality of life. However, as we know, innovation requires a clear commitment to science and research.

In recent years Portugal has seen remarkable progress in the indicators of scientific excellence:

the number of scientific publications has grown, the number of researchers and doctors as a percentage of the labour force has increased substantially. With regard to the latter the country achieved a result above the European average, a remarkable achievement for a country that started from such an unsatisfactory base.

The country has universities of recognized quality, positioned mid-table in the world rankings. The role of universities and polytechnics as centres of for the development of skills, for knowledge transfer and the creation of new ideas is absolutely crucial to science and innovation. Currently, the country is endowed with more than adequate infrastructure and has a significant number of R&D bodies and institutions that have been classified as excellent in international assessments. The country has a region that has been classified as an innovation leader (Lisbon) and another as a follower (Central Region). The other regions are moderately innovative (North, Alentejo and the Algarve) or modest (Azores and Madeira)²³. Although this represents a considerable regional imbalance, it is fair to say that the country as a whole can now be considered as a moderate innovator.

Portugal also benefits from a growing number of SMEs with innovative services and processes, and there has been an increase in the number of partnerships between companies, universities and research institutes, although this has been predominantly promoted by public support until now.

However – and this is the down side – Portugal is the only European country where this progress has merely had a marginal impact on the economy, on the generation of wealth and on GDP. During the



Celebrating 40 years of the Rubik cube with Prof. Rubik, President Barroso, Commissioners Máire Geoghegan-Quinn and Androulia Vassiliou and Raquel Lucas, advisor to President Barroso

economic crisis, the consequences arising from this state of affairs were not long in making themselves felt. The main outcome was youth unemployment and the brain drain of young scientists to other countries.

The question of the impact of scientific research in the real economy, in the production of wealth, is particularly relevant given that it directly supposes the effectiveness of policies designed to stimulate investment in research and innovation. Such policies should not aim at improving a narrow band of indicators by comparison with other countries. Certainly, achieving improvement in this field is a real challenge and might, at first sight, appear to be a goal in itself. However, it is also necessary that research and innovation

remains a driving force for the competitiveness of the economy, for wealth creation and, ultimately, for the country's development and for the well-being of its population.

It is worth remembering that for 2014-2020 the conditions that will enable Portugal to make significant progress in this area are already in place. The European Strategic Framework includes €27.8 billion of funding for Portugal. It is essential that European funding is leveraged to strengthen the quality of our education system and enhance the excellence of our scientific system. However, in parallel, it is also necessary to envisage a number of measures that will catalyse the private financing of research and the recruitment of researchers by firms. On the one hand, this approach will allow greater



With the Director-General of DG Research and Innovation at the European Commission, Robert-Jan Smits

access to the labour market for young scientists and, on the other, it will permit the strengthening of investment capacity available to companies as they seek to improve their competitiveness and to achieve new levels of internationalisation.

However, none of this will come about unless the enviroing conditions are favourable. Such conditions have a direct and powerful influence on the impact that investment in science and innovation has on the economy, on wealth creation and on society at large. It is essential to ensure favourable conditions for the operation and competitiveness of the business sector as this includes: an effective system of credit, a market with fair and transparent competition laws, efficient and flexible administration mechanism, an effective and rapid justice system, simple industrial property laws, clear and expeditious licensing rules, immigration laws that attract researchers and skilled labour alike. Without these conditions, no matter how much the country invests in science and

innovation, the improvements that are achieved will remain marginal.

It is to be recommended, as a result, that the structural reforms under way in the country take into account the points raised and that policies are developed that will actively foster synergies between education, innovation and the business sector. The ability to Portugal to meet the challenges that globalization, competitiveness, economic growth and job creation represent depends on the implementation of the adjustment programme currently in progress. However, it is also necessary to consider how Portugal can be encouraged to take advantage of its natural potential in terms of endogenous resources, its high quality infrastructure and the excellence of its scientific capacities. These are factors that should be enhanced by the proper application of the next EU framework programme. Indeed, much of my work in Parliament was devoted precisely to this goal as will become clear, I hope in the following pages.

2.6 - SIMPLIFICATION

Excessive bureaucracy is one of the major difficulties of European education and science. In 2010, about 13 000 European researchers signed a petition that demanded more trust on the part of the European institutions and a substantial simplification of procedures relating to research projects applying for EU funding. I had direct experience of the sort of difficulties that gave rise to this petition during the time I spent teaching at the Instituto Superior Técnico in Lisbon.

The system then in force was based on a cost analysis performed with a caution that bordered on frank distrust and an almost complete aversion to risk. The situation was simply not sustainable, especially for less well-endowed entities, such as small and medium sized enterprises, start-ups, small high technology institutions and other smaller bodies. Moreover, the process was dominated by bureaucratic procedures and these absorbed a significant share of the funding. For example, during the Seventh Framework Programme (2007-2013), then in force, the funding available stood at around €52 billion. On average, for each R&D project, about 25% of the funding was spent on administrative costs, reducing the amount available for science by a quarter. When the programme came to an end about €13 billion had been spent on administrative and bureaucratic costs.

It, thus, seemed of paramount importance that the main focus be recentred on trust and a willingness

to take a degree of risk. The opportunity came when the European Parliament and the European Commission launched a mid-term review of the seventh and the preparation of the eighth Framework Programme for Research, the latter being HORIZON 2020. In May 2010, I was appointed rapporteur for the report on the simplification of the rules for the participation of current and future European Programmes for Science and Innovation²⁴. The aim was to redefine the rules of participation not only for the Seventh Framework Programme for research but also for the science and innovation programmes included in the EU budget for the period 2014-2020. In both cases, the goal was to simplify access to funding.

To ensure the participation of universities, research centres and business in preparing the report, I conducted a public consultation process during which the key rules for participation in European Programmes for Science and Innovation were discussed. This enabled the identification of weaknesses with a view to then determining what modifications should be introduced. To this end, a large number of public initiatives at national and European level were pursued. In Portugal, a seminar was held in Porto and another in Lisbon. The process culminated in a hearing in the European Parliament. My MEP website - www.gracacarvalho.eu - served as a platform for gathering any proposals, comments, suggestions and criticisms and in general, any contributions that individuals wished to make to the report.

The results confirmed the importance of simplifying the control of financial aspects, reinforcing technical and scientific evaluation alongside the strengthening of approval mechanisms based on peer based review

as a means of establishing the excellence of the various projects concerned. Instead of control being centred on administrative and financial aspects, the main focus was shifted to, on the one hand, a more risk tolerant and simplified procedure and, on the other hand, greater reliance on and confidence in project assessment procedures conducted by the scientific and business communities. Another central concern was the harmonization of the rules and procedures for the different instruments used in the Commission's programmes. In summary, simplifying access to funds for research and innovation should be based on a partnership in which rigour, assessment and trust is found on all sides involved.

I was subsequently invited to present the report to the Ministers of Science of the 27 Member States at the "Competitiveness" Council of 16 July 2010²⁵. In November of the same year, the report was adopted unanimously in ITRE and later by a large majority of votes in a plenary session of the European Parliament. The report included 67 measures, including, for example, the recovery of VAT on projects that had previously been ineligible, something that left the cost to be borne by the institution where the project had been developed. Some of these improvements were implemented during the 7th Framework Programme; others required an amendment to the EU's financial regulations. Many of these measures were pursued as a direct result of initiatives for which I was responsible and were subsequently introduced into the HORIZON 2020 programme. In order to monitor the progress made, I drew up a table detailing the implementation of each measure (see Annex A). Today, I can affirm with confidence that 65 of the 67 measures have been properly addressed within the HORIZON 2020 programme.



With Irish Prime Minister Enda Kenny

2.7 - EUROPEAN BUDGET FOR SCIENCE AND INNOVATION

A factor that had to be taken into account was that the crisis would most probably see the member states opt for a series of austerity measures. This would mean cuts to the overall European budget for science and innovation – as eventually turned out to be the case – and this led to the conclusion that, if nothing were done, such cuts would adversely affect the budget available for scientific research and innovation. The 7th Framework Programme for Research and Technological Development (2007-2013) had an overall budget of €52 billion. At the beginning of my mandate, there was talk of setting the budget for the 8th Programme at €45 billion, a figure far below the €79.4 billion that was eventually obtained at the end of the negotiations. Armed with the conviction that the path to renewed growth inevitably entailed investment in science and innovation, I sought to ensure that the likely cuts would not impact negatively on the EU budget for 2014-2020. I worked out a strategy to ensure increased funding for science and innovation under the new budget provisions for the period 2014-2020. In the process, I managed to convince and mobilize my EPP colleagues to vote for an effective doubling of the funds available for HORIZON 2020 as compared to the previous programmes. I pursued this battle with the German MEP Christian Ehler, who contributed to the cause with real commitment.

Basing ourselves on the European Commission proposal to increase the budget for science and

innovation to €80 billion, we upped the stakes and asked for an increase to a figure of €100 billion. After further analysis and considerable discussion, this proposal formed the basis for the official position of the European Parliament. However, the budget proposed by the European Parliament still had to be approved by the European Council.

In pursuing this goal, some of the initiatives taken were particularly memorable. A series of conferences with eminent scientists were organised. These included a conference with Sir Tim Hunt Nobel Prize for Physiology and with Jules Hoffman, Nobel Prize for Medicine. These prominent figures urged EU leaders to defend the future HORIZON 2020 budget for research and innovation and, later, co-authored an open letter signed by 44 Nobel Prize laureates and 6 Field Medal winners (the Field Medal is the “Nobel Prize” in the field of Mathematics). They warned against the dramatic consequences of a possible cut in the budget for research and innovation and gave added visibility to the “No Cuts to Research” petition. The petitioners shared a common objective with them and the petition was signed by more than 154 417 citizens across Europe and the world.

This strategy paid off and had a direct influence on the European Council. Certainly, there would be reductions in the budget but by starting from such a high point when entering the negotiations, we succeeded in favourably limiting the extent of the effect the cuts would have. The total amount of the EU budget was reduced by 10% but the investment available for science and innovation rose from €52 billion to €79.4 billion. This was not simply a stroke of luck: it was the result of a determined effort designed to maintain adequate levels of investment in science and innovation. The strategy we pursued had been put in place from the outset.

2.8 - HORIZON 2020

HORIZON 2020 is the name of the eighth European Framework Programme for Research and Innovation and will run for the period 2014-2020. It forms a core component in the Europe 2020 strategy and interweaves three overlapping initiatives: the Seventh Framework Programme for Research (FP7), the Framework Programme for Competitiveness and Innovation (CIP) and the European Union's contribution to the European Institute of Innovation and Technology (EIT). During the period 2007-2013, these three initiatives coexisted and represented separate investments of €52 billion, €3.6 billion and €308 million, respectively. The latter figure, in particular, was clearly insufficient.

The final amount allocated to HORIZON 2020 was set at €79.4 billion. HORIZON 2020 aims to meet the needs of businesses, universities and research institutes in terms of faster and easier access to financing. The programme also aims to strengthen the link between research and innovation with the objective of creating the necessary conditions that will facilitate the passage from scientific breakthroughs to innovative products. The programme responds to the challenges posed by globalization but also by such factors as climate change, energy security and the greying of the population.

The main innovations of HORIZON 2020 compared to previous programmes include greater attention to societal challenges, on the one hand, and competitiveness, on the other. Research and innovation are to be more effectively coordinated

(as this supposes regular and coherent funding 'from the idea to the market'). Innovation is accorded increased support and there is greater emphasis on encouraging scientific activities with market potential. At the same time, the need for simplification is a leitmotif that runs through the entire programme. The general architecture of the programme has been simplified, there is a single set of rules, less bureaucracy, a simpler model for reimbursing costs, less documentation to fill in, fewer controls and fewer audits alongside expanded access for new partners and promising young scientists.

It took two years of intense work to move from the European Commission proposal to the final approval of HORIZON 2020 at the European Parliament sitting in plenary session. The initial proposal for HORIZON 2020 was prepared in the European Commission in 2011 and was adopted as an official proposal by the Commission in November of that year. Once the proposal had been submitted to the European Parliament in the ITRE Committee, the EPP Group took responsibility for its further elaboration. In February 2012 - Pilar del Castillo, the EPP coordinator for this Committee, granted me the honour of nominating me as the rapporteur for the Specific Programme Implementing Horizon 2020²⁶.

This decision of the coordinator for EPP-ITRE was the culmination of a strategy that I had developed since first coming to the Parliament and which had involved a concerted effort to obtain precisely this responsibility. At European Parliament meetings of all sorts, in parliamentary committees and at a series of other events - conferences, debates, seminars and so on - whenever it was a question of science and innovation, I had already sought to make my voice heard as loudly as possible.

The report that I drew up was eventually presented at the ITRE committee in June 2012. There then followed a month long period set aside for the tabling of amendments. The initial welter of nearly one thousand proposed amendments were debated by MEPs during countless meetings in which the various political groups all participated. These amendments were then condensed into compromise amendments.

At the end of the process, the report was approved unanimously by the ITRE Committee in December 2012. As rapporteur, I was then charged with initiating the negotiations with the Council where the Commission proposal was undergoing a parallel process of review. The report was included in a negotiation package together with the other reports related to HORIZON 2020 (i.e. Regulation, Rules for participation, EIT). The negotiations lasted for 6 months and followed the procedure of co-decision, a process that entails tripartite negotiations – “trilogues” – between the European Parliament, the European Council and representatives from the European Commission. After 9 trilogues (the last finishing at 4 o’clock in the morning, after 11 hours of meeting), an agreement on HORIZON 2020 was eventually reached. This was then voted on during a plenary session at the European Parliament. The final amount allocated to HORIZON 2020 was set at €79.4 billion. Although the programme falls short of the amount that the European Parliament and the Commission would ideally liked to have obtained, it is nevertheless the case that the programme is now the third largest EU programme and the largest programme for science and innovation in the world.

In seeking to achieve its objectives HORIZON 2020 rests on three pillars or priorities: scientific

excellence, industrial leadership and societal challenges. Each of these pillars is divided into a number of well-defined objectives and activities.



Ceremony for the signing of Horizon 2020 with European Parliament President Martin Schulz and Vytautas Leskevicius, European Affairs minister in charge of Lithuania's EU presidency, Christian Ehler, Teresa Riera Madurell and Marisa Matias

Scientific Excellence

Time and space prevents me from mentioning anything but the main results of the negotiations concerning the Specific Programme Implementing Horizon 2020. The first pillar of Horizon 2020 aims to consolidate the EU’s position as a world leader in science. This pillar consists of four sub-programmes: the European Research Council, Future and Emerging Technologies, Marie Skłodowska Curie Actions (MSCA) and Research Infrastructures.

The European Research Council aims to award individual grants (ERC scholarships) to excellent

researchers who have come up with stimulating new ideas. The scholarships can be awarded at different stages in a researcher's career: initial, consolidation, advanced synergy (2-4 researchers) and proof of concept.

The Future and Emerging Technologies (FET) programme was designed to fund innovative ideas that involve high degrees of risk but that might potentially have considerable social or technological impact. This programme encourages collaborative research and entails three types of projects classified according to their size: FET Open Domain (bottom-up), FET Proactive (with a set of pre-defined research areas in relation to which communities of multidisciplinary research are set up) and FET Flagships (for large scale projects).

The Marie Skłodowska Curie Actions were designed to reinforce education through mobility. For this purpose there are four categories of grants: initial training of researchers; lifelong training and career development; an industrial dimension and, finally, international or "World Fellowships". During the negotiations, I was responsible for the creation of the category of Return Grants under the umbrella of the Marie Skłodowska Curie Actions. These scholarships seek to facilitate the reintegration of researchers who have benefited from an experience abroad, especially when these researchers return to regions characterised by a modest showing in terms of innovation.

The Research Infrastructure sub-programme, for its part, will reinforce existing infrastructures, rendering them accessible to all researchers, whilst simultaneously promoting the development of new

research infrastructures. Their purpose is to promote the potential of existing research infrastructures and their human capital, strengthening European research policy and international cooperation in the process.

Industrial Leadership

European industrial policy is financed by HORIZON 2020, especially through Pillar 2, devoted to ensuring industrial leadership in innovation and key technologies as well as to facilitating access to finance for SMEs. The measures developed within this framework should help overcome the difficulties encountered in knowledge transfer for businesses and the economy in general at the same time as they will help to overcome some of the weaknesses that have already been discussed in connection with private investment in R&D.

This pillar is divided into three sub-programmes: Enabling and Industrial Technologies, Financial Instruments and specific support to SMEs. The Enabling and Industrial Technologies programme is designed to foster research and innovation in strategic technologies thus encouraging innovation in existing and emerging sectors. These include the key enabling technologies such as Information and Communication Technologies (ICT), nanotechnologies, advanced materials, biotechnology, production, advanced processing and space.

The Financial Instruments programme, for its part, aims to attract private investment for research and innovation. The programme includes a debt mechanism (loans and guarantees for high-risk projects implemented by the European Investment Bank and European Investment Fund) and an equity

facility (investment in early stages and during growth stages might also come from venture capital and “Business Angels”).

The SME instrument is a sub-programme devoted to providing support for innovative SMEs. This sub-programme is divided into three phases: concept and feasibility assessment; demonstration and market replication in R&D and, finally, marketing. During the negotiations, the European Parliament managed to substantially improve the SME Instrument. In particular, it was agreed that SMEs will receive at least 7% of the combined budget of sub-programmes in the categories of Leadership in Enabling and Industrial Technologies and Societal Challenges. This will be dealt with in more detail shortly. The European Parliament also insisted on a dedicated management structure with a specific instrument for the SME budget.

One of my specific contributions was the introduction of a simple and rapid scheme named “Innovation Vouchers”. These will finance research and innovation in the second phase – Demonstration and Market Replication R&D – of the SME Instrument. The goal is to promote start-ups and to improve levels of research and innovation in already existing SMEs.

Finally, an additional goal is that of ensuring the participation of SMEs in research and innovation consortia and not merely in the context of the SME instrument. This time the objective is to ensure that 20% of the budget attributed to Leadership in Enabling and Industrial Technologies (part of pillar 2) and Societal Challenges (pillar 3) is attributed to SMEs.

Societal Challenges

Pillar 3 addresses the major concerns shared by all Europeans across six key themes: health, demography and welfare; food security, sustainable agriculture, marine and maritime research and the bio-economy; secure, clean and efficient energy; smart, green and integrated transport; climate action, resource efficiency and raw materials and, in sixth place, inclusive, innovative and secure societies.

During the negotiations, we were able to improve the original proposal in many respects. New lines of action were undertaken in marine and maritime affairs as well as in terms of “European cultural heritage and identity.” Social and Human Sciences were initially lumped together with Security as a single challenge and are now considered as distinct challenges in their own right. This is a significant change that avoids ambiguities in the allocation of funding to each of the areas. The priorities in societal health challenges were also considerably clarified. The focus is now on diseases in children and the elderly; musculoskeletal, chronic and neuro-degenerative diseases; diseases related to poverty, ageing and welfare; and personalized medicine and rare diseases.

The energy budget was increased from 7.2% to 7.7% of the overall budget provisions for HORIZON 2020 budget. In addition, it was decided that 70% of the budget in the area of energy would be devoted to energy from renewables, energy efficiency, smart grids and energy storage and over 15% to activities aimed at market absorption of existing renewable and efficient energy technologies (formerly the Intelligent Energy-Europe Programme).



With the European Commissioner for Research, Innovation and Science Máire Geoghegan-Quinn and Prof. Mark Ferguson, Director General of Science Foundation Ireland in Dublin

An independent course of action designed to “broaden participation” was also envisaged with a dedicated budget (1.06 % of the HORIZON 2020 budget). This line of action will promote initiatives for networking and twinning of research organizations in order to establish and strengthen partnerships between units of regional and national research, on the one hand, and major European counterparts, on the other hand. The actions undertaken in this area will facilitate participation in projects of small, but excellent, research groups and start-ups. An independent line of action – also with a dedicated budget (0.6 % of the HORIZON 2020 budget) – was similarly opened for “Science with and for Society”.

Another specific measure worthy of mention in connection in this context consists in assigning a Seal of Excellence to excellent projects that,

on account of budgetary constraints, fail to find funding. The Seal of Excellence will make it easier for consortia to find alternative sources of funding, both from public and private sources.

Finally, the creation of scientific panels in the health care field involves leadership by top medical doctors and researchers who will contribute to the structuring and design of research policies. At the same time, these panels will promote dialogue, the exchange of best practices and the sharing of research results. The increased collaboration between scientists will allow for acceleration in the achievement of results in the field of research and innovation.

There remains two important new aspects to HORIZON 2020: namely synergies between this programme and other European funds and the promotion of youth employment. These have been discussed in more detail in section 8 of Chapter 5 and section 6 of Chapter 4 respectively.

Public Consultation

The success of the vote on my report on the Specific Programme Implementing Horizon 2020 was largely due to the considerable effort that was made to generate a broad consensus involving civil society. In this respect, the public consultation process undertaken during the preparation of the report was particularly successful in terms of participation. Public hearings were organized alongside the organisation of an electronically based consultation process. This ensured the involvement of universities, research centres and companies. Dozens of public initiatives at national and European level were organised with auditions being held at

universities, polytechnics, research centres, business associations, trade unions, local authorities and NGOs. In Portugal, events were held all over the country as was the case with Belgium, Luxembourg, Poland, Ireland, Croatia and Denmark.

At the same time, alongside the hearings and broad public consultations, numerous Portuguese institutions and organizations were invited to visit the European Parliament; workshops and exhibitions were organised (on such themes as JTIs - Joint Technology Initiatives - and FETs - Future and Emerging Technologies) and seminars were set up with the participation of European institutions and European associations (LERU, EUA, CLORA, Business Europe, CEFIC) sharing similar concerns. Groups of visitors were also invited to the Parliament and the scientists, business people and students who made up these groups were able to attend some of the meetings in which HORIZON 2020 was discussed. During the course of their stay, these guests were able to exchange their experience of previous Framework Programmes.

My professional website - www.gracacarvalho.eu - served as a platform for any proposals, comments, suggestions, criticisms and, indeed, any information that might be useful in preparing the report. This drive to include civil society has not stopped since the approval of HORIZON 2020. The focus is now on promoting the programme and facilitating the formation of international consortia and access to these consortia on the part of prospective partners.

2.9 - EUROPEAN SPACE POLICY

As a substitute member sitting on the BUDG Committee member, I was gratified to be appointed permanent rapporteur for the EPP with regard to space programmes (GALILEO, COPERNICUS and SST programmes)²⁷⁻²⁹.

GALILEO will create a global navigation system for advanced satellites that guarantee a highly accurate and reliable global positioning service and that will provide businesses and citizens with direct access to a satellite navigation signal produced by Europe. It is a EU flagship project developed in line with the provisions of the Europe 2020 Strategy. As rapporteur of the GALILEO programme in the BUDG committee, I proposed that the project receive funding to the tune of €6.3 billion. This was then approved by the Parliament and the Council.

COPERNICUS is another EU programme designed to provide information from space for use in civil defence and security as well as for in the general economy. I also fought for adequate funding for this programme and, eventually, the Parliament and the Council earmarked €3.8 billion for COPERNICUS: double the amount that had been set aside for the programme seven years previously.

The SST (Space Surveillance and Tracking) programme was finalised at such a late point that it was impossible to properly consider what an adequate budget for the programme would actually be. I proposed a budget



At the inauguration of the exhibition organized by Maria da Graça Carvalho “Made in Europe: ICT Building blocks tackling societal challenges” with Vice President of the European Commission, Neelie Kroes

of 70 million for seven years but I also stressed that it was necessary to consider the contribution that other programmes could make to this key programme.

I was also able to ensure that the contribution to SST made by HORIZON 2020 would be strictly limited to the domain of space research and innovation. The SST programme will be divided into sub-programmes: sensor networks, data processing and services to users. This will avoid excesses and facilitate the Parliament’s ability to control and supervise the programme.

It is worth remembering that these programmes are of cardinal importance for European SMEs that work in the space domain. This is because they promote the development of an innovative and competitive space industry in which these companies already participate with remarkable success.

CHAPTER 3

ENERGY AND CLIMATE CHANGE



3 - ENERGY AND CLIMATE CHANGE

3.1 - INTRODUCTION

European Responses to Energy Needs

Questions of energy have always been of central importance for Europe. The founding act of the European project – the creation of the European Coal and Steel Community – was evidently based on energy concerns. However, if only after a considerable lapse of time, energy questions returned to the top of the agenda during the first mandate of President Barroso.

The first Barroso Commission set ambitious and credible targets established in the context of European Strategy for Energy and Climate Change. The Barroso II Commission then played a key role in implementing this strategy. Indeed, European strategic vision regarding energy and climate change represents a significant opportunity to reorganise European society in a more sustainable and equitable manner. With a correctly conceived policy, Europe should be able to grow whilst ensuring the increased competitiveness of industry and, at the same time, combating climate change and guaranteeing energy security.

During President Barroso's second mandate – which corresponded to my term of office in the European Parliament – EU strategy was consolidated and, in

this period, the internal energy market and foreign policy in the energy sector underwent a significant widening of scope. This was also the period that saw the initial preparation of the European Strategy for Energy and Climate Change for 2030 and 2050. Meanwhile, the EU was actively engaged in the negotiations leading to a new international protocol that would follow in the wake of the Kyoto Protocol.

As principal adviser to President Barroso between 2005 and 2009, I was directly involved in the development of European energy strategy and its response to climate change. At the time, each Member State had their own, exclusively national energy policies in the absence of any overall strategy in Europe. However, a comprehensive approach was required as Europe was – and still is – highly dependent on imported energy.

The numerous national obstacles set in the way of such a pan-European approach were only overcome after a long process of negotiation. Nevertheless,



With the President of the European Commission, José Manuel Barroso, during a plenary session of the European Parliament in Strasbourg

a set of policy options emerged around three key areas: security of supply, the fight against climate change and the increased competitiveness of European industry. In this respect, 2007 marked a turning point in European energy and climate change strategy. At the European Council 2007, the EU was able to provide international leadership in the field of energy and to establish a global strategy that ultimately resulted in the definition of a number of key objectives.

The Integrated Climate Change and Energy Strategy – drawn up in 2007 – was approved the following year by the Council and the European Parliament. The strategy advocated a 20% cut in emissions of greenhouse gases (GHG) by 2020 and – as long as it were possible to reach an international agreement on climate change – the EU further committed itself to reducing its GHG emissions by 30% by 2020. The European target of reducing GHG emissions by 2020 would be achieved by using a mix of 20% renewable energy and a 20% increase in energy efficiency. The targets for the reduction of GHG emissions and increasing use of renewable energy were mandatory, whereas the objective of increasing energy efficiency was not binding.

Common sense indicates that it is advisable to set goals but these become meaningless if they are not accompanied by concrete measures that allow their achievement. In this respect, the EU has established a set of policies and measures in the area of energy and climate change that actually enable it to meet the targets it has set itself. These include the extension of the internal market, the promotion of energy efficiency and of renewable energy alongside a policy designed to render the emissions trade more dynamic. The objectives contained in the 2020 strategy can only

be achieved by means of considerable investment in the areas of the knowledge triangle (higher education, scientific research, innovation) and through an inclusive process that progressively reinforces European research and innovation in energy matters. In November 2007, in response to this need, the Commission introduced the European Strategic Energy Technology Plan: a plan to establish a new research agenda for Europe in the energy field.

Organisation of Sections

In this chapter, I begin by briefly describing the main lines of the long-term vision (2050) adopted by the EU in the area of energy and climate change. I have also included something of my own views on the matter, views that are largely based on my academic work (Section 2). To achieve the ambitious targets that the EU has set itself, it is fundamental that a consensus be built up with regard to how best to put these objectives into effect. This involves the working out of a number of possible options – reflecting discussion in different European contexts – that have helped structure my own contribution to European energy and climate change policy in the period to 2030 (section 3).

In addition to these measures, it was necessary to develop a short term and medium term vision as this supposed question of funding and the European budget for 2014-2020 (Section 4) as well as consideration of the internal policies (section 5) and external policies (section 6) required. In this respect, the main concern was to align the EU's instruments with the perspectives it had adopted for 2030 and 2050.

European citizens – and the representative bodies that function at local and regional level – remain



In the Energy Laboratory at the Instituto Superior Técnico

central to the creation of a more energy efficient and environmentally friendly society in Europe. Indeed, as I argue in section 7, our energy policy will succeed only if responsibility for their implementation is assumed at local and regional levels. On the other hand, however, Europe accounts for only 11% of GHG emissions, so considerable attention in the fight against climate change must also be given to the international dimension.

For some time, the EU's participation in international negotiations (COP) on climate change met with only moderate success (section 8). However, in recent years, a series of noteworthy steps that might eventually culminate in a global agreement in 2015 – year in which the COP will be again held in Europe – have been taken (section 9). In particular, I believe that the adoption of a sectoral approach to the problem of controlling emissions could well, in due course, represent a real contribution to guiding international negotiations towards a successful conclusion (section 10).

3.2 - EUROPEAN ENERGY AND CLIMATE CHANGE STRATEGY 2050

A Roadmap for Long Term Progress

There is now a broad, global consensus concerning the need to reduce GHG emissions by 50% by 2050. This objective represents a cut of at least 80% in GHG emissions throughout the industrialized world. This necessarily supposes a considerable reorganisation of society and with it of business activity, transport, leisure, urban planning, housing and electricity.

In approaching the question of how to reform European energy provision – with the benefit of my academic training – I have been conscious that, for some time now, we find ourselves in a historical environment characterised by three overlapping crises: the financial crisis, the energy crisis and the crisis represented by climate change. I believe that if we fail to act decisively at this juncture, we will miss an opportunity to create the conditions that will allow future generations to reap the benefits of a more sustainable attitude to the planet.

In basing their approach on the long view that 2050 supposes, the European institutions will no longer restrict their targets to the horizon represented by 2020. This being said, the approaches pursued will continue to stress the need for competitiveness and respect for the European social model. Indeed,

the reform of the energy sector is an opportunity to promote a fairer, more equitable and more sustainable world, laying the foundation for a global, low carbon society. The aim is not only to ensure access to sustainable energy but that energy is produced and distributed fairly. In this respect, competitiveness cannot be disconnected from a range of social concerns.

The EU has drawn up a roadmap¹ to prepare for the long-term goal of reducing GHG emissions between 80% and 95% compared to 1990 levels by mid-century. In the common effort to prepare the transition to a low carbon economy, this roadmap identifies the sectors responsible for emissions in Europe: power generation, industry, transport, buildings and construction. The roadmap outlines the steps, policy challenges, investment needs and the opportunities that are likely to emerge in these different sectors. It takes into account that the targeted reduction from 80% to 95% of emissions in the EU should be achieved mainly in terms of internal policy. The analysis of the various options revealed that – relative to 1990 levels – the most economically advantageous path would reduce domestic emissions by 40% by 2030 and 60% by 2040 with an initial reduction of 25% before 2020 at the latest.

A Third Industrial Revolution

The potential for a new method for distributing renewable energy will represent, I believe, an energy revolution in Europe and the World. What though is an energy revolution? Information technologies and communication by means of the internet have utterly transformed the economy and the society we live in. In the field of energy and in a manner that is

similar to this transformation of our ordinary lives, people will be asked to produce renewable energy and share it the same way we now produce and share information. This renewable energy will then be mainly distributed in various forms, something that should encourage greater decentralisation, flexibility and consumer choice. This amounts to nothing less than what some have termed a “third industrial revolution”, a revolution based in: renewable energy, self-sufficient buildings, energy storage in hydrogen, smart distribution networks and energy sharing.

THE REFORM OF THE ENERGY SECTOR IS AN OPPORTUNITY TO PROMOTE A FAIRIER, MORE EQUITABLE AND MORE SUSTAINABLE WORLD, LAYING THE FOUNDATION FOR A LOW CARBON SOCIETY

It is altogether feasible that in the future millions of individuals will be able to produce renewable energy in their homes, offices, factories and vehicles. The available infrastructure must be able to collect and produce energy locally from several sources such as from the: sun, wind, waste, agricultural and forest residues, tidal movements, waves, mini-hydro and geothermal sources. It is anticipated that the use of such sources will produce enough energy for local consumption and that, moreover, these sources will generate a surplus that can subsequently be shared. This energy production model – in the development of which the American Jeremy Rifkin has played a central role – has been described in numerous academic articles^{2,3}.

Energy storage is of central importance in this model. To maximize the use of renewable energy and minimize costs, it will be necessary to develop storage methods that, in turn, facilitate the use of intermittent energy sources. This will undoubtedly represent one of the key research concerns for the next generation of European programmes. Against this background, I consistently stressed the importance of energy storage in my report on the Specific Program Implementing HORIZON 2020.

3.3 - EUROPEAN ENERGY AND CLIMATE CHANGE STRATEGY FOR 2030

GHG Emissions

In order to achieve the objective of a reduction of 80% to 95% of greenhouse gas emissions by 2050, the EU roadmap indicates that a smooth and efficient transition in terms of costs requires a 40% reduction of GHG emissions by 2030. The EU should start preparing the concrete policies and measures that will allow us to move towards the 2030 target as soon as possible.

For my part, I approached this problem by drawing on my university training, by comparing various options and weighing the pros and cons associated with each. I was also conscious of the importance

of the need for a cost efficient solution to the development of a clean energy system and, hence, one that would be both affordable and sustainable. As a result, I compared two well established scenarios: firstly, a single binding target (reducing GHG emissions) and three binding targets (reducing GHG emissions, whilst promoting energy efficiency and renewable energy), with, secondly, the introduction of four binding targets. This latter includes the promotion of interconnection within the EU and more particularly between the Iberian Peninsula and France. These scenarios were also compared with other more innovative approaches, such as setting goals for the combined production of heat and electricity; combined goals for energy efficiency and renewable energies or a new approach to transport-related targets that includes energy efficiency and renewables.

I presented the results of my analysis at numerous events, conferences and debates and in doing so, continually emphasised the need for the EU to take concrete steps in order to ensure legislative stability and investor confidence. One such occasion was a debate organized in the European Parliament in November 2013 by EUFORES. EUFORES is a European parliamentary network dedicated to the promotion of renewable energy and energy efficiency (in which I have played a significant role since September 2010).

The analysis that I had undertaken served as a basis for the amendments that I tabled concerning the European Parliament report on the subject. A communication on the part of the European Commission⁴ proposed a 40% reduction of GHG emissions and a target of a 27% share for renewables energy in the energy mix (but



With European Commissioner for Energy, Gunther Oettinger and MEPs Sirpa Pietikainen, Graham Watson, Satu Hassi and Vittorio Prodi

without committing to new energy efficiency values). In 2014, following this communication, the Parliament approved a report on European Energy and Climate Change for the year 2030. I contributed several amendments most of which were integrated into the final document.

In the European Parliament plenary session, MEPs approved a policy⁵ that now includes a binding obligation to reduce domestic GHG emissions by 40% compared to 1990. It was agreed that this goal should be achieved through a commitment to producing at least 30% of total final energy consumption from renewable energy and by increasing energy efficiency by 40%. This position is more ambitious than the European Commission's proposal for energy and climate strategy for the EU in

the same time frame. In particular, the Commission's proposal abandoned the imposition of national targets for renewable energy. This left Member States free to choose their own energy options and was opposed by the European Parliament.

A Competitive Cross-border Market

As for the promotion of interconnections within the EU, I could but note that cross border interconnection capacity remained well below the target set at the 2002 Barcelona European Council. This constituted an obstacle to the deployment of renewables, the development of the internal energy market and to the inefficiency of the energy system and, hence, to high energy prices. This stood in stark contradiction with one of the main objectives of EU

energy policy, which is to encourage competitive energy costs in the economy in general and for individual citizens in particular.

Together with my colleague, Correia de Campos, in an attempt to redress the situation, I tabled an amendment calling on the European Commission to set binding targets for minimum cross-border transmission capacity and a clear deadline for implementation. Following this initiative, a binding 10% target for electricity interconnections between member states was adopted for the first time. The impetus for this binding target originated in the EP report on European energy and climate change strategy to 2030.

3.4 - EUROPEAN BUDGET FOR ENERGY AND CLIMATE CHANGE

Investment

Achieving energy security and combating climate change in Europe will require large quantities of investment. To overcome the initial financial risks and the associated liquidity problems, it is crucial to establish adequate financing mechanisms. The European Investment Bank, the European Bank for Reconstruction and Development, as well as the financing plans contained in the next EU Multi-annual Financial Framework for 2014-2020, will play a key role in this process. These institutions and

measures will provide additional financial resources essential to the development and implementation of energy efficient technologies and low levels of carbon emission.

The projected EU Multi-annual Financial Framework budget for 2014-2020 reflects the political priorities of the EU. It was not difficult to predict that a significant proportion of the EU budget for 2014-2020 would be devoted to energy policy and to combating climate change. This included meeting the challenges represented by smart, modern infrastructures; energy efficiency projects; renewable energy; scientific research; innovation and technological development.

As a result, on both the SURE and Budget Committees – on which latter I sat as a substitute member in addition to my principal role on the ITRE Committee – I have consistently argued that priority should be given in the EU financial framework for 2014-2020 to questions of energy, the environment, combating climate change and promoting science and innovation. Similarly, given that on both the SURE and Budget committees, the members are given particular responsibility for thematic areas, I was able to make sure that I was attributed those areas where I thought I could be of the most use. In addition to the work that I was already responsible for, I was able to increase my direct involvement in areas of central interest to me by taking on responsibility for energy, the environment, climate change, science and innovation and space, within the EPP.

The EP was also the scene of a number of interventions that addressed matters that were close to my heart. For example, the debate on the Bendtsen Report⁶, saw the presentation of an ambitious

vision of how best to pursue energy efficiency and to introduce well-defined individual goals and positive incentives. The rapporteur stressed the need to double the funding for scientific research, technological development and demonstration in the area of energy. There was also a demand for the increased use of structural funds for energy efficiency, something that would mean a struggle to ensure that this became a priority in the EU budget 2014-2020.

3.5 - INTERNAL ENERGY POLICY

Energy Efficiency

Energy efficiency is a central theme in European policies that aim to generate smart, sustainable and inclusive growth. The transition to an efficient use of economic resources is not possible without energy efficiency. At the same time, energy efficiency is one of the most effective ways, in terms of cost, of enhancing the security of the energy supply and reducing greenhouse gas emissions. Indeed, energy efficiency might be seen as being, to some extent, the single most important “energy resource” available to Europe.

Yet, the objective of a 20% increase in energy efficiency is not a mandatory goal and, at one stage, the estimates produced by the European Commission tended to suggest that Europe would only manage to achieve half of its target.

In 2012, in order to deal with this shortfall, the European Commission proposed a revision of the Directive on Energy Efficiency and, in due course, the European Commission's proposal was submitted to the European Parliament. The report on the new Directive was assigned to MEP Claude Turmes from the Greens, with whom I had the pleasure of working in close collaboration. I actively participated in the debates and parliamentary work related to Directive on Energy Efficiency⁷, which was voted on by Parliament in September 2012 before entering into force on 4 December 2012.

Energy Efficient Buildings

The new energy efficiency directive will see the obligatory renewal of a minimum number of public buildings and requires energy audits for large companies. Under the new rules, power companies are also required to submit energy efficiency plans. It is estimated that the reduction in EU energy consumption by 20% could save around €50 billion per year. Similarly, the new Directive – which the member states have to transpose into national legislation within a year and a half – requires governments to renew 3% of total floor area with energy efficient heating or cooling systems each year.

This measure will apply to buildings owned and occupied by central government with a total usable floor area greater than 500 m² and as of July 2015 greater than 250 m². Member States are also entitled to make use of alternative methods to achieve equivalent energy savings such as considering the building as a whole, including the building envelope, equipment, operation and maintenance. In addition, the EU should oblige energy companies located

on its territory to achieve a minimum percentage of energy savings by 2020. At least 1.5% of annual energy sales to final customers between 2014 and 2020 must be devoted to energy savings.

Energy sales in the transport sector need not be included and alternative methods that will achieve equivalent energy saving can be made use of. Energy audits must be conducted on a regular basis (every four years for large companies). These audits are to begin three years after the entry into force of the Directive and are to be conducted by accredited experts. SMEs are not subject to these rules. Finally, the Directive encourages Member States and regions to make use of the Structural and the Cohesion Funds in order to invest in energy efficiency measures. According to the rapporteur, this legislation is not only essential to combating climate change but will also boost the economy and create jobs.

In May 2010, the EU adopted the new Energy Performance of Buildings Directive⁸. Buildings represent the greatest potential for energy savings and, as I mentioned in a May 2010 speech in the plenary of the EP, the construction sector in the EU is responsible for 40% of energy consumption and 35% of GHG emissions. The new rules stipulate that by 2020, new constructions will result in what are, to all intents and purposes, zero-energy buildings and that by December 2018 new buildings occupied and owned by public authorities are, similarly, zero-energy buildings.

The new Directive lays down minimum requirements, but each Member State is still entitled to introduce more ambitious measures. In April 2013, in the wake of the new measures introduced by this directive,

the Commission published a report evaluating the effectiveness of current financial support for energy efficient buildings⁹. The report also aims to help Member States to implement the energy saving requirements found in the directive. In particular, this concerns the rolling out, until April 2014, of a long-term strategy for mobilizing investment in the renewal of the national stock of buildings. The report indicates how the Commission can assist Member States with financial support furthering energy efficiency in buildings. In my speeches on the subject, I enthusiastically lent my support to the new legislation.

The Internal Energy Market

I also actively participated in the debate on the consolidation of the internal energy market. On multiple occasions in the ITRE Committee and the plenary of the EP, I advanced a series of measures that are necessary if this market is to become a concrete reality. For example, in June 2013, at a hearing on the internal energy market attended the Commissioner for Energy, Günther Oettinger, I outlined three main measures that I believe could well ensure the smooth and efficient functioning of the European energy market¹⁰.

Firstly, the EU should seek to develop existing technologies and promote new technologies to improve the supply of affordable energy while ensuring that such energy technologies do not impact negatively on the environment. In this respect, the HORIZON 2020 programme – along with the synergies that were to be improved with the Structural Funds – has been designed in such a way as to promote the development of clean and affordable energy technologies.

Secondly, it was important to offer legislative guarantees to industry that the objectives of achieving the energy market would continue beyond the period from 2020 to 2030. It was similarly necessary to set new goals for the future in terms of CO2, renewable energy and energy efficiency but whilst ensuring that we had armed ourselves with the necessary means to achieving these ends.

Thirdly, while consolidating and expanding its energy infrastructure, the EU must implement internal market legislation and strengthen competition rules. In this respect, it was essential that legislation was designed in such a way that it would protect consumers and ensure a flexible market. It was also urgent to build the foundations for a European network of gas and electricity interconnections.

The measures I have mentioned are crucial to the completion of the internal market. They assume greater diversification in terms of gas and electricity; in terms of energy sources (such as gas, coal, nuclear and renewables) and diversification in terms of countries of origin and transit countries.

Infrastructure and Interconnections

An energy strategy at European level requires a policy for energy infrastructure and an integrated European electricity and gas network will represent huge benefits in terms of security of supply and stable prices for consumers.

In due course, the European Parliament approved the Report on the guidelines for trans-European energy infrastructure authored by Mr Correia de Campos. Today, these priorities serve as the basis for granting authorisation and deciding on financing with regard

to concrete EU projects. In this respect, the EU favours regional cooperation between countries whilst setting long-term objectives, such as the European electricity motorways. About €200 billion should be invested in energy transport in pipelines and electricity networks alone. It is estimated that of this amount, around half will come from the private sector, with the remainder being paid for out of the European public budget or by the member states.

My contribution in this area has focused on improving electricity and gas interconnections between the Iberian Peninsula and the rest of Europe. In several reports – together with MEPs Correia de Campos and Vidal Quadras – I introduced a set of amendments to this effect. For example, in January 2014, in a report that outlined the main lines of European Energy Policy for 2030¹²⁻¹³, I tabled a number of amendments that sought to establish a mandatory minimum percentage of electrical connections between the Iberian Peninsula and France. The amendments that I tabled with my colleague in the European Parliament will contribute, I believe, to a significant lowering of the burden of energy costs for citizens and a more competitive economic environment.

Taxation

The rates that we pay for the energy that we consume largely determine the use that we make of energy and the value we attach to energy sources. However, traditionally, energy is taxed to raise revenue and this influences consumer behaviour, helps ensure more efficient and economical energy use and can be employed to promote the use of cleaner sources of energy. In 2003, in order to avoid anti-competitive forms of business practice in the domestic energy



With the European Commissioner for Energy, Gunther Oettinger and European Parliament President Jerzy Buzek at a hearing on the Internal Energy Market

sector, the Energy Taxation Directive (ETD) was adopted. This is a directive that, to a significant extent, harmonises energy taxes at EU level. However, since the ETD was adopted, the underlying policy framework has changed radically. A number of concrete and ambitious policy objectives concerning energy and climate change for the period up to 2020 have been defined. For example, in August 2011, the European Commission presented a proposal to amend the ETD¹⁴.

In September of the same year, the EPP nominated me shadow rapporteur for the draft opinion produced by the BUDG Committee. This opinion would lay out the Community framework for the taxation of energy and electrical products. The purpose of the amendments that were tabled was to reconcile four elements: climate change, energy efficiency, the internal market and finally, growth and employment.

The main outcome was that future taxation would be established on a double basis: firstly CO₂ content and, secondly, energy content. Amongst other issues, the report also warned of possible social repercussions and noted that any changes that were introduced should not translate into increased rates impacting on prices for end users. The matter is still under discussion in the European Council as the member states failed to reach an agreement.

Safety of Offshore Oil and Gas

My work has also touched on questions of offshore oil and gas and I feel this is worthy of mention given that it has consequences for European foreign policy as well as for the European Maritime Safety Agency, a key EU institution based in Lisbon. The environmental disaster represented by the oil spill in the Gulf of Mexico on 20 April 2010 drew attention

to both the risks and responsibilities as well as the need for adequate legislation associated with the exploration and extraction of oil. At the plenary session of the European Parliament in July 2010, the EU Commissioner for Energy, Günther Oettinger, proposed to strengthen the legislation then in force concerning safety in offshore oil and gas.

As shadow rapporteur for the report on safety of offshore oil and gas, I made a series of propositions¹⁵ that moved in the same direction as that of the Commissioner. I proposed to extend the powers of the European Maritime Safety Agency so as to enable the agency to develop mechanisms for the supervision of safety on European oil rigs located in the North Sea, the Black Sea and the Mediterranean. In the process, the agency would have responsibility for the prevention of environmental disasters related to oil exploration. In addition to presenting this suggestion to the Commissioner in Parliament – a recommendation that had been introduced in the report on safety of offshore oil and gas – a few days later, I sent a letter to Commissioners Oettinger (Energy), Kallas (Transport) and Georgieva (International Cooperation, Humanitarian Aid and Crisis Response) that stressed of the importance of safety considerations and of the need to ensure the protection of our coasts.

The European Maritime Safety Agency

Against this background, the European Maritime Safety Agency already provides support and technical assistance to the European Commission and member states in the development and implementation of Community legislation regarding maritime safety and protection as well as in the area of pollution caused by ships. The agency has also been assigned a number of operational tasks such as responding to

oil pollution and the long range tracking, monitoring and identification of ship movements. The new supervisory powers with regard to the exploration and extraction of oil – alongside the development and implementation of legislation in these areas – were not incompatible with the existing responsibilities of the agency. Indeed, they would actually complement these duties.

A number of MEPs suggested the creation of a new agency altogether but there was no sense, as I saw it, in creating a new agency that would take over responsibilities that could easily be attributed to a body that was already in place. Indeed, the allocation of similar responsibilities to distinct bodies (that could otherwise be handled by a single organisation by enlarging its sphere of action) is something that should be avoided. This is because a decision to introduce a new body entails higher costs in terms of administration and logistics and tends to generate overlapping responsibilities.

It was extremely gratifying for me that the European Commission's legislative proposal on this subject, which appeared a few months later, included the suggestions that I had made. It was one of those moments in which being an MEP was rewarded with a feeling of having served both one's own country and the interests of Europe as whole.

Science and Technology

The objectives of the strategy for energy and climate change can only be achieved through enhancing the impact of scientific research, education and innovation in the energy domain. In November 2007, the European Commission proposed the European Strategic Energy Technology Plan or the SET Plan¹⁶.

This was intended to establish a new research agenda for Europe in the field of energy.

Certainly, Energy technologies have a key role to play in ensuring the energy supply of both Europe and the World. However, achieving the targets set for 2020 and 2050 will require the development of new, more efficient and less costly technologies. Europe clearly has the potential to develop a new generation of low carbon technologies such as offshore wind power or advanced generation biofuels. To this end, the European Strategic Energy Technology Plan represents a new approach, focusing on common planning (at regional level, at the level of the member states and at EU level). The goal is to make fuller use of European potential in the fields of research and innovation and to maximise the possibilities offered by the market. The plan aims to develop research and industrial innovation, aligning sectoral, national and European activities.



With the Portuguese Minister of Education and Science, Nuno Crato

The Intelligent Energy-Europe Programme

In line with the general drift of my work in the European Parliament, I have consistently defended priority support for science and innovation and not least in the energy field. The funding of scientific research in this domain has declined in Europe since 1984 and this situation was only reversed with the Barroso presidency, which emphasised the urgent need for 2014-2020 European funding of science, innovation and energy as well of a properly conceived policy for the environment. I took every opportunity I could – whether it be writing op-ed articles or in speeches in the plenary – to further this objective.

For example, in December 2011, I requested a debate in the plenary of the European Parliament on the “Intelligent Energy-Europe” programme¹⁷. This programme is of great interest to Portugal and Europe in general as it focuses on non-technological barriers to renewable energy and energy efficiency. In defending this report, I addressed several questions to the European Commission. I urged the Commission to declare their commitment to their programme in the future Multiannual Budget for 2014-2020 and to improving, financing and creating the necessary institutional framework for the successor programme. Günther Oettinger, the Commissioner for Energy, subsequently assured MEPs that the level of funding for the IEE would be maintained.

This plenary debate was part of a broader campaign conducted to further science and innovation in the area of energy and in the context offered by the “Intelligent Energy-Europe” programme. This eventually culminated in the approval of HORIZON 2020, in which the IEE has now been embedded. As ever, as rapporteur of the Specific Programme

Implementing HORIZON 2020, I made a determined effort to obtain a substantial increase in funding for the societal challenges related to energy and the IEE, an effort that eventually turned out to be fruitful (see previous chapter).

3.6 - EXTERNAL ENERGY POLICY

The European Union imports more than 60 % of gas and over 80 % of the oil it requires. In a context of increasing demand for fuel worldwide, increased competition and price levels – alongside the simultaneous presence of associated environmental, climate and public health risks – it is increasingly urgent that the EU adopts a forceful, effective and equitable position on the international stage.

Accordingly, in September 2011 the European Commission presented a proposal to the European Parliament concerning security of supply and international cooperation in the energy field¹⁸. The document sought to consolidate the position of the member states, enhancing energy supply and competitiveness in the EU whilst avoiding the weaknesses associated with bilateral agreements that contribute to the fragmentation of the internal market. The proposal subsequently descended to the ITRE Committee and I was gratified to be given responsibility of acting as the shadow rapporteur for EU external policy with regard to energy. After being approved in the ITRE Committee, the report was submitted to the plenary of the European

Parliament in Strasbourg in June 2012 where it was approved.

In the amendments that I tabled during this process, I stressed a number of reforms that included: the need to strengthen the external dimension of the internal energy market; to deepen partnerships contributing to the provision of secure, sustainable and competitive energy; to improve access to sustainable energy by developing countries and the promotion of EU policies abroad. I believe that Europe should be more independent from the energy point of view and this is something that can be obtained by greater coordination within the EU in terms of energy policy. Only by speaking with one voice can the EU pursue its central commitments in negotiations with third countries, whether these third countries represent countries of transit or energy producing countries.

In particular, I managed to ensure that the report made mention of several areas where EU foreign policy in terms of energy policy should be tightened up. This included, on the one hand, links between the EU and the South Atlantic region, notably with countries such as Nigeria, Angola and Brazil and, on the other hand, relations between the EU and South America. I was even able to ensure that the needs of developing countries – especially the poorest countries – were included in the report. Similarly, I managed to ensure that energy policy was accorded a key position in European policies for development aid.

3.7 - THE IMPLEMENTATION OF ENERGY POLICY

The success of a given policy depends on its application and on levels of general acceptance. In the area of energy and climate change, as in many others, it is crucial to actively involve both individuals and communities. This is because they are the first to be affected by such policies and the main actors in their effective implementation. The disclosure and dissemination of information and the creation of mechanisms that actively engage different communities are crucial to the success of European policies and the European Strategy for Climate Change, in particular. In this sense, I contributed to and took a direct role in several initiatives that were designed to achieve this end. Two examples are the Covenant of Mayors and the Pact of Islands.

Sustainable Cities and the Covenant of Mayors

In March 2014, 75 Portuguese cities were to be found amidst the 5 120 European signatories that made up the Covenant of Mayors. All these local authorities have committed themselves to the priority of confronting energy related problems and combating climate change. By signing the Covenant of Mayors, local authorities have pledged to prepare, propose and implement an Action Plan for Sustainable Energy.

Local authorities are central to the implementation of the European Strategy for Energy and Climate Change. In the European Union, 80% of the population now lives in urban environments, and – as will increasingly be the case in the rest of the world – their quality of life, their working conditions and their health are directly affected by the environment they live in. Cities now account for about 75% of CO2 emissions and consume about 75% of natural resources. On the other hand, cities are also responsible for 80% of total economic growth.

During my term in Parliament, I organised and participated in many initiatives, some directly and others more indirectly aimed at creating the conditions required for the implementation of the measures of the European Energy and Climate Change Strategy. In particular, several initiatives were undertaken in the context of my links to the regions of Alentejo and the Algarve. At the beginning of the mandate for the period 2009-2014 in the EP, the European delegation of the Portuguese Social Democratic Party (a member of the EPP) assigned responsibilities to each MEP by sector and geographical region. I was eager to take responsibility for relations with the regions around Beja, Évora, Faro and Portalegre. At this time, the local authorities in Beja, Évora and Faro had already joined the Covenant of Mayors.

The Covenant of Mayors is an initiative of a group of mayors that aims to create the conditions that will enable local authorities to meet and go beyond the targets proposed by the European Energy and Climate Change Strategy. It was consequently important that local authorities were adequately informed about the best ways to carry out their commitment to the EU's Strategy for Energy and Climate Change. As a result, a number of initiatives

were organized in Brussels, in Alentejo and the Algarve with a view to promoting greater ties between Europe and these regions. This was the case, for instance, with the conference on “Energy and Environment in Cities” held in the Silves Municipal Library on 16 April 2011.

Indeed, the concentration of resources at this regional level is of considerable use in the fight against climate change. Decentralized energy production, the integration of renewable energies in the urban environment, the use of information and communication technologies for energy systems and the use of clean vehicles are examples of novel alternatives at local level. The Covenant of Mayors is a model for Europe, one that it must adopt if it is to effectively combat climate change. Voluntary commitments are undoubtedly essential, in this respect, but the role of various partners as well as of local communities must be clearly defined in such voluntary agreements.

The Pact of Islands

The Pact of Islands is another instrument that will contribute, in my opinion, significantly to the implementation of the Energy and Climate Change Strategy. The Pact of Islands allows island authorities (countries, regions or simply islands) to help to meet EU targets for sustainability by the year 2020. The Pact is structured in a similar manner to the Covenant of Mayors but also takes into account the specificities of European island communities. The signatories of the Pact of Islands undertake to respect a number of significant commitments with the prime goal of meeting and going beyond the energy and climate change objectives set by the EU for 2020.

I considered that it was of the utmost importance that the visibility of this initiative be heightened within the EU and, as a result, in September 2011 – together with other members of the European Parliament – I tabled a written statement that suggested that this initiative be granted official European status. The statement, signed by over 400 MEPs, called on the European Commission to continue to provide support to island communities across Europe, with a view to achieving the EU’s sustainability targets. The statement insisted on the presence of distinctive and explicit references to sustainable development on islands within Framework Programmes and EU policy texts and particularly within the Future framework Programme for Science and Innovation. In January of the following year, it was with great satisfaction that I saw the Pact of Islands granted the status of official European initiative.

The Pact of Islands is an initiative of great importance for Portugal and for the Azores and Madeira in particular. The existence of specific priorities for funding programmes that take into account the island dimension is essential in the task of facilitating the participation of partners from the Azores and Madeira in EU programmes. Like so many other islands, the Azores and Madeira will be able to research and develop their approaches to renewable energies and to confront concerns linked to biodiversity and management of human activity on the oceans. If islands are often particularly vulnerable to climate change, they also often abound in renewable energy sources. As a result, the development of these sources may have a significant impact on reducing the permanent structural handicaps that many islands face, providing much needed socio-economic benefits for their inhabitants.



During a vote with the Spanish MEP Pilar del Castillo, EPP coordinator for the ITRE Committee

This work was particularly gratifying because it arose as a natural consequence of my academic work. Over several years, I have developed models that optimize the use of renewable energy on islands and isolated regions. These models have been applied on several islands (Porto Santo, Corvo, Flores, the Cabo Verde Islands and on several Croatian islands). This interest has also been reflected in a series of scientific publications¹⁹⁻²⁶ and several master's degrees and doctoral theses that I have supervised.

Energy and Regional Development

One of the prime tasks of an MEP, as I conceive it, is to clarify and disseminate ideas leading to improvement and reform, both nationally and at European level. In the field of energy and regional development, one example of this activity was the development of renewable energy in the Alentejo region. I was born and grew up in Alentejo and, hence, it was a great honour and pleasure for me to be able to contribute to the discussion of region's future. One of the cause

of this optimism with regard to the future arises from the region's ability to achieve energy independence by means of renewables.

Alentejo has considerable potential for growth, something that could also have a wider impact on the development of the country as a whole. This future depends on the willingness and commitment of local officials, the quality of the projects developed and the dynamism of economic agents in the region. In this context, the emergence of a low-carbon economy is an opportunity we cannot afford to miss. Alentejo – by virtue of its natural conditions and by means of its ability to further exploit the resources it already possesses – is particularly well-placed to assume a leading role in the development of renewable energy by means of biofuels and solar energy .

Europe has developed a series of criteria for the production of renewable energy and Alentejo is able to satisfy these criteria without difficulty. Alentejo has huge resources in terms of usable farmland and possesses enough water and good enough weather to allow for the emergence of innovative agricultural methods. In this respect, the region could make a real contribution to both the country's energy security and requirements in terms of foodstuffs.

In so far as solar energy in particular is concerned, Alentejo has the largest potential in terms of solar energy in Europe accompanied by an abundance of available land, a pre-requisite for the development of solar power plants. At the same time, Alentejo has centres of knowledge that are able to play a crucial role in reducing the costs of the technologies required to produce renewable energy. This is found alongside the potential to create a pool of scientists,

engineers and technicians able to manage the required installations. In a naturally well-endowed region, the centres of learning – the Polytechnics in Beja and Portalegre as well as the University of Évora – are well positioned to assume this role.

3.8 - EU FOREIGN POLICY IN THE AREA OF CLIMATE CHANGE

External EU policy with regard to climate change is very much focused on the negotiation of an international agreement that will take over from the Kyoto Protocol. Obviously, such negotiation is conducted within the framework supplied by the United Nations. Within the UN, the Conference of the Parties (COP) is the executive arm of an international agreement on climate change. The First World Conference on Climate Change took place in 1979 and the UN Convention on Climate Change (UNFCCC) came into force in 1994. This important historical agreement was signed in 1992 at the Rio Summit and, so far, as been ratified by 195 states. In 1997, the third Conference of the Parties (COP 3) met in Kyoto, giving rise to the famous Kyoto Protocol: an international treaty committing its signatories to reducing greenhouse gas (GHG) emissions.

The Protocol entered into force in 2005, the first commitment period being 2008-2012. In the context of these international negotiations, the EU aims to reduce emissions of greenhouse gases by



Alfredo de Sousa, Advisor for the ITRE Committee for the European People's Party

30% by 2020 compared to 1990 levels. However, CO₂ emissions in the EU represent only 11% of global emissions and hence the importance of an international agreement. Prior to the conclusion of an international agreement, the EU has made a firm, independent commitment to achieve a reduction of at least 20% of GHG emissions by 2020.

In other words, the fight against climate change is confronted with major obstacles arising on account of a mixture of economic, political and geographical factors (89% of GHG emissions are generated outside of the EU while developing countries are not subject to constraints imposed by Kyoto as they wish to maintain their competitiveness). Despite these difficulties, the area of climate change policy in the EU remained a central priority in my parliamentary work.

Once again, from the outset, I was able to draw on my academic background in this context – and particularly on work that I had developed in

relation to the Kyoto mechanisms²⁷⁻²⁹ – and on the experience that I gained during the Portuguese Presidency of the EU in 2000 when negotiating the entry into force of the first commitment period of the Kyoto Protocol (2008-2012). As a professor at the Instituto Superior Técnico in Lisbon, I collaborated with the Ministry of Environment in international negotiations concerning matters related to developing countries as this included, for example: the Clean Development Mechanism, Capacity Building and Technology Transfer.

Since coming to the European Parliament, I have been able to deepen and further take advantage of my experience whilst participating in an official capacity in 4 COPS: COP15-Copenhagen 2009; COP16-Cancun 2010; COP17-Durban 2011 and COP-18- Doha 2012.

COP15-Copenhagen 2009

The Copenhagen Conference (COP 15) was crucial to reaching an agreement that would prolong the Kyoto Protocol. However, the eventual outcome differed considerably from the result that had initially been anticipated. Copenhagen represented much more than a Climate Change Summit as the conference brought out the importance of a new set of forces in the world and of the role played by the multilateralism inherent in the functioning of the UN. Different visions of development clashed with one another whilst, with regard to the motives of those involved, there was clear conflict between global needs and the interests of national sovereignty.

The growing influence of emerging countries such as China, Brazil, India and South Africa – who joined the U.S. in the drafting of a document that served as the basis for negotiations – was obvious. As a result, the

Copenhagen Accord was the result of a completely different process to that normally followed during the course of UN negotiations. The text prompted outrage from many countries – especially small island states and African countries – that objected that decisions had been imposed from above by the large countries rather than being worked out through discussion with all parties concerned. Indeed, the Copenhagen Conference demonstrated the weakness of the UN system in discussions concerning climate change and global development.

Significantly, President Obama also stamped the conference with a mark that reflected the outlook of the United States. President Obama pointed out the need for a non-binding agreement that would involve all the major emitters with three key conditions: the need for transparency, for mitigation actions and for financing for developing countries. China played a particularly important role, in this context, opposing the international scrutiny of mitigation actions for sovereignty issues. Brazil also played a much more prominent role than in previous COPS, something that saw President Lula receive one of the loudest cheers of the entire COP when he declared that Brazil was willing to financially assist poorer countries.

There was no reason for Europe not to take a leading role and to stand out at Copenhagen. If Europe was well prepared for and knowledgeable about the technical side of the negotiations, its approach to the political aspect of the process displayed quite the opposite degree of preparation. Europe should have established a series of powerful alliances with the countries most affected by climate change – with the African countries and Small Island states to the fore – given that these states are aligned with the EU perspective on climate change. However, this



With my team of the European Parliament Sol de la Guardia, Amelia Areias, Maria João Albernaz and Paulo Afonso

supposes that the ground work involved in creating a working consensus has first been undertaken.

During the conference, it was with this need in mind that I contributed to organising “Training, Technology Transfer and adaptation to climate change in Africa”³⁰. This event was aimed, in particular, at those countries where Portuguese is an official language. 35 representatives of official delegations from Angola, the Cabo Verde islands, Guinea Bissau and Portugal attended. The event was a success and the participants expressed their wish to pursue this experience at future COP meetings. Indeed, the Copenhagen conference illustrated to what extent it is necessary to rethink the role of Europe in the world. It is not acceptable that an agreement – one that has such important consequences for the future of humanity and in which Europe has always been a leader and a pioneer – should be drawn up, to all intents and purposes, without any assistance from the EU. It will be necessary to draw on all the possibilities offered by the Lisbon Treaty if Europe

is to speak with one voice and to negotiate strong and effective strategic alliances.

It should not be forgotten, however, that internally, the fight against climate change supposes meeting a number of highly demanding challenges, including: the actual application of the legislation adopted; investment in clean technologies; fostering scientific research and energy efficiency; investment in a new industrial policy based in the efficient use of resources and in innovation as well as promoting a policy turned towards low carbon urban environments and sustainable transport and mobility.

COP-17-Durban 2011

The 17th UN Conference on Climate Change, held in 2011, was also of considerable significance. After an impressive negotiating marathon, the conference ended with an unexpected and noteworthy result for the future of the planet. The 195 member countries of the UN Framework Convention on Climate

Change agreed to the proposed EU roadmap that will culminate in a binding global agreement on fighting climate change. The agreement replaces the Kyoto Protocol and has given rise to what is termed The Durban Platform, a platform that will serve as a basis for defining the instruments to be adopted in 2015 and in 2020. Durban also saw the opening of a second commitment period under the terms of the Kyoto Protocol since the first commitment period was due to expire on 31 December 2012. The second period of the Kyoto Protocol began, as a result, on 1 January 2013. These decisions ensured continuity between the Kyoto Protocol and its successor and, importantly, called on all countries to contribute to the reduction of GHG emissions affecting the climate.

The decisions taken at Durban were at once pragmatic and appropriate to the current state of affairs. The familiar, twentieth century division of the world into, on the one hand, industrialised countries with binding obligations and targets and, on the other hand, the developing countries with voluntary responsibilities – so that China is subject to the same rules as Mali – was rendered obsolete. Indeed, Durban initiates a new era: the era of multilateralism in which the commitments of all countries have the same legal value. Consequently, the Durban Platform will necessarily differ from the Kyoto Protocol. It will have to reflect a more complex world in which many industrialized countries are confronted with serious economic and financial crises while the developing countries experience rapid economic growth. Nevertheless, it appears that actually bringing the agreement to fruition will remain a considerable challenge, one that must reconcile potentially contradictory ambitions. These include the preservation of the planet, the furthering

of economic growth, the eradication of poverty and the ability to guarantee the sustainable well-being of current and future generations.

COP 18 - Doha 2012

The (COP18) UN Conference on Climate Change 2012 was held in Doha in Qatar and saw the participation of approximately 200 countries. The COP-18 conference involved three main issues: the extension of the Kyoto Protocol, the funding to developing countries and the Durban Platform that will replace the Kyoto Protocol in the near future. As such, the results of the conference as a whole helped further pave the way to a balanced and sustainable decision with regard to how best to combat climate change. This decision should be adopted in 2015 and enter into force in 2020.

After two weeks of meetings, including a final 48 hours of intense negotiations, the conference took the decision to extend the term of the Kyoto Protocol to 2020. However, Russia, Japan and Canada have not signed up to this second period whilst the United States has never adhered to Kyoto and the developing countries signed up to both Kyoto I and Kyoto II but have not been required to cut their emissions. Although the countries that actually committed themselves to the second period represent only 15% of global emissions, this remains an important decision given that the Kyoto Protocol is the only legal and binding agreement that we have in the fight against climate change.

The question of funding continued to occupy the centre stage during COP18. The developing countries demanded additional development aid, funds that will allow them to adapt to climate change and mitigate

its effects. The commitment to additional funding announced by the UK and Germany – seconded by the European Commission and a number of other countries – enabled a final agreement.

If there was much that was familiar in these measures, there was also a new aspect to the final text. In particular, the chapter on a new “loss and damage” mechanism involves the notion that the industrialized countries should be held financially responsible for damages caused by severe weather events such as hurricanes and floods. The United States and Europe have always opposed such a measure. Indeed, it is one that is liable to translate into very large sums of money not to mention endless discussions about how such a compensation scheme will actually be implemented. The result might well be increased entropy in the already complex negotiation process.

As for the Durban Platform itself – the document that will replace the Kyoto Protocol in 2020 – progress on Doha was poor, with the debate centring on the calendar and procedural issues. However, the Durban Platform is crucial to correcting the distortions introduced by the Kyoto Protocol. The platform allows for the adoption of a differentiated approach towards the developing countries alongside the introduction of mechanisms to reconcile industrial competitiveness with policies to combat climate change.

3.9 - THE FUTURE AGREEMENT ON CLIMATE CHANGE

The first commitment period of the Kyoto Protocol expired on 31 December 2012. A second commitment period that should last until 2020 was introduced in Doha. However, USA has never been part of Kyoto and Russia, Canada and Japan did not sign up to Kyoto II. Developing countries, for their part, subscribe to both Kyoto I and Kyoto II but, it might be remembered, have no obligation to reduce GHG emissions.

In this context, countries that have pledged to reduce emissions in Kyoto II only represent 15% of global emissions and of this percentage, only 11 % of these emissions are produced by the EU. In other words, those countries that have pledged to reduce their emissions under Kyoto II represent only a small fraction of the emitting countries taken as a whole.

It is, nevertheless, important that a global agreement is reached, for environmental reasons but also for reasons of competitiveness and in order to establish a fair competitive environment for European industry. This means that all countries concerned should participate in the process on an equitable basis and in accordance with their common responsibilities. However, allowance should also be made for their particular needs and their respective capacities.

At the same time, given that the terms and principles of the agreement have changed, it is necessary to adopt a radically different approach to obtaining a global consensus. By comparison with Kyoto, the Durban Platform, which was agreed during the COP-18 in 2011, represents a real step in the right direction. There are two reasons for this. Firstly, all UN Member States have signed up to the platform and, secondly, because – despite its vague wording – the platform represents an opportunity for Europe to defend its own vision of how best to shape progress.

In November 2013, the COP returned to Europe – to Warsaw more precisely – and the European Union took the opportunity to present the fundamental principles of a future agreement on tackling climate change and safeguarding industrial competitiveness. The next crucial step will be the 2015 COP in Paris, when it will be essential to finalise the negotiation process.

Five Fundamental Principles

In my opinion, in the run up to this decision, the new agreement should take more account of complex patterns of global environment change. It is true that Kyoto had the charm of simplicity: the world was divided into two blocks made up of the industrialized and developing countries. Today, it is necessary to take a much more multi-faceted vision of the world into account. In this context, a simple agreement may not accurately reflect the forces at work in this complex world. In this respect, I feel that we should respect five fundamental principles when striving to reach an international agreement on climate change in 2015.

First, the agreement must not divide the world into two groups of countries. It is necessary to establish a system in which each country contributes to the common effort according to their responsibilities and capabilities. Second, it is necessary to deal adequately with carbon leakage. Carbon leakage occurs when industries with high energy consumption relocate to regions outside the EU. To achieve this, we should associate the targets for the economies on a country by country basis with common goals to be adopted by specific industrial sectors that are particularly subject to carbon leakage targets on a global basis. Third, the framework should be more flexible and should accommodate a wider range of initiatives, in particular bottom-up initiatives such as those pursued by local authorities seeking to promote energy efficiency. Fourth, market mechanisms should continue to be used to regulate matters relating to climate change. Finally, cooperation in research and in the development of clean technologies should be foregrounded as a central objective.

3.10 - SECTORAL ANALYSIS IN A GLOBAL CONTEXT

It is not easy to fully account for all the forces that hinder the progress of international negotiations but they clearly include concerns about the competitiveness of industries exposed to international trade and the difficulties of developing countries with regard to access to new technologies and financing.

Prompted by debate surrounding the question, consideration of this issue has led me to propose the idea of a model based on a sectoral approach. I first presented this novel approach at European level during the EPP Study Days in Budapest at the end of 2010³¹. I explained that it was a model that approached industry by sector at international level in order to maintain and even strengthen competitiveness. The structure of the model was more complex than the model then under discussion, but it had the advantage of being significantly more effective and realistic. In the new model, the drive to reduce CO2 levels takes into account the competitiveness of industry and, in so doing, minimises resistance from that source.

Besides this advantage, the model is versatile enough to be implemented in any of the three possible options currently underpinning international negotiations: firstly, international agreement; secondly, prolongation of the Kyoto Protocol and, finally, absence of international agreement. In May 2011, the ITRE committee approved an amendment that referenced the sectoral model and this was then approved during a plenary session in the European Parliament. The sectoral approach thus supersedes and integrates the EP's position in relation to the international framework of action on combating climate change post-2015.

Two remarks might be made by way of conclusion. Firstly, sectoral approaches might potentially allow for the articulation of actions aiming to combat climate change, to foster competitiveness and to stimulate economic growth. The approach represents, as a result, an extremely useful tool given that it has the capacity to advance the transition to a low carbon economy and to pave the way

to a global carbon market. Sectoral approaches might also be integrated into an international post-2015 framework for actions on climate change. Secondly, sectoral approaches have already been implemented in Europe – for sectors not covered by the emissions trading scheme in the EU – with positive results. It is desirable that European industry takes a firm and determined lead concerning this option as it might play a significant role in the post-Kyoto agreement that will be hammered out in Paris in 2015.

CHAPTER 4

YOUTH EMPLOYMENT AND HIGHER EDUCATION



4 - YOUTH EMPLOYMENT AND HIGHER EDUCATION

4.1 - INTRODUCTION

The decisions taken by European leaders in response to the financial and economic crisis of 2008 were crucial to the survival of the European economy as a functioning whole. However, it was not possible to avert the negative impact on employment and economic growth.

Young people were particularly affected by this turn of events and, today, Europe is still confronted with unacceptably high levels of youth unemployment. Entrenched youth unemployment – coupled to the increasingly difficult transition from school to working life – might well transform an inability to participate in the labour market into a long term loss of human capital. Central government is now particularly eager to prevent youth unemployment from becoming a structural, economic phenomenon. In 2009, the worrying state of youth employment was already a matter of concern and, the Portuguese Social-Democratic Party committed itself to defending a series of measures in its manifesto for the European Elections published 6 May 2009. These included promoting the mobility of young people and access to the work market for individuals seeking their first employment.

The programme for the 2009 European Elections of the Portuguese Social-Democratic Party was entitled “The National Interest: the European Contract with the Portuguese” and included ten commitments. Throughout the election campaign, I reaffirmed my intention to do all that I could to honour these ten manifesto commitments. The fifth commitment was “Ensuring that young Portuguese are at the forefront of European Integration”. With regard to the labour market for young people, this section of the Manifesto stated:

“Young people are the single largest beneficiaries of most European policies... There are pro-youth measures that can be adopted immediately. It is possible and necessary to democratize the ERASMUS programme so that it involves more young people whilst reinforcing the aid offered in such a way as to prevent discrimination on the basis of economic means. We will propose the creation of a European mobility programme for those seeking their first employment: the ERASMUS-1st employment programme.”

However, my concern with youth employment, in particular, dated from before 2009.

As Portuguese Minister of Science and Higher Education in the XV Constitutional Government and Minister for Science, Innovation and Higher Education in the XVI Constitutional Government, I had already realised that ensuring reasonable levels of youth employment in the future would constitute a major problem. Consequently, I initiated a process of restructuring university degrees that had little chance of actually producing future employment and made an attempt to introduce conditions that would facilitate the uptake by the business community of highly qualified individuals such as those with a master’s degrees or a doctorate.

When I came to the European Parliament, I was not appointed to sit on those committees directly concerned by the problem of employment or youth employment. However, the committees on which I did sit – particularly the ITRE and BUDG committees – have consistently stressed the importance of catering for the needs of young people, in general, and the need to deal with youth employment at an EU level, in particular. This was especially the case when discussing or formulating policies linked to science and innovation or industry and entrepreneurship. These are matters that fall under the ambit of the ITRE Committee but are also dealt with – albeit at the level of the overall budget plan – by the Budget Committee.

This chapter briefly describes the aspects considered most relevant to my work with regard to ensuring high levels of youth employment and promoting higher education in Europe. I devote a brief passage to the central position that youth policies have always occupied in my work (section 2). The first initiative developed at European level in the field of youth employment was to ensure compliance with the election pledge to create the ERASMUS-1 First Job Programme (section 3). The drive to place young people at the centre of European policy making – as the PSD manifesto had also promised – gave rise to a number of further initiatives such as strengthening the ERASMUS for Young Entrepreneurs programme (section 4) as well as ensuring that HORIZON 2020 included a battery of measures that promoted the employment of highly specialized young people into the business environment (section 6). I also contributed to the development of the social economy by approving preparatory actions that would foster social innovation, facilitate the emergence of social enterprises and encourage young entrepreneurs (section 5).

The formulation of the underlying rationale involved in the creation of the European Institute of Innovation and Technology also saw considerable attention being granted to questions of adequate training for young people in today's highly competitive global environment. A Group of Friends of the EIT was set up in order to consolidate this new body (section 7). Dealing with the challenges that higher education is confronted with – particularly at a national level – also lay behind a series of measures introduced into HORIZON 2020 and the planning of how best to articulate the objectives of this programme with other sources of EU funding (section 8). However, these ties to the Portuguese educational system went beyond the world of higher education. Indeed, I was eager to maintain close contact with as many aspects of everyday life in Portugal as possible. This led me to conduct a series of visits to secondary schools, local councils and NGOs during which I was able to outline the nature of my activity in the European Parliament and to answer the questions that the students had about the workings of the European institutions (section 9).

4.2 - THE CHALLENGE OF YOUTH EMPLOYMENT

A new intake of MEPs began their mandate on 14 July 2009. Since much of the work of the European Parliament takes place in committees – which are organized by thematic sector – each member has the



The launch of the Group of Friends of EIT with the European Commissioner for Education, Culture, Multilingualism and Youth, Androulia Vassiliou

right to choose the committee on which he or she wishes to sit. It is also possible to sit on a committee as a “substitute member”. When I began my term, I chose to sit on the Committee on Industry, Research and Energy (ITRE) and as a substitute member on the Committee on Budgets (BUDG). In addition to debating proposals for new legislation emanating from the European Commission, the Committees prepare “initiative reports”, table amendments and, in the Budget Committee, the MEPs are able to propose pilot projects and preparatory actions. Traditionally, the preparatory actions and pilot projects enable the European Parliament to lay the ground for new policies. Activities of this sort mean that the European Union is more dynamic and democratic and that the Union contributes directly to the adoption of laws enabling new EU programmes and projects.

The areas of youth policy in education, training and the transition from education to the labour market were all high on the agenda of the Portuguese delegation of the EPP. In this respect – together with the MEP José Manuel Fernandes, a full member of the Budget

Committee – I proposed a set of amendments aimed at increasing funding for education, the training and the mobility of young people as well as the creation of a new programme designed to facilitate the first entry of young people onto the labour market. The proposed amendments were received positively by the EPP and the Committee and were later adopted in the European Parliament plenary. The batch of amendments introduced during the budget negotiations in 2012 – together with the amendments submitted by other MEPs – had a notable impact in shaping the final budget. It was actions of this sort that meant that the budget was described as a “Youth Budget”, a term that reflects the general orientation of EU budgets but above all the 2012 budget.

4.3 - IMPROVING EMPLOYMENT PROSPECTS AND THE ERASMUS FIRST JOB PROGRAMME

The ERASMUS programme – which stands for the European Community Action Scheme for the Mobility of University Students – is one of the most successful programmes in Europe. Indeed, the ERASMUS programme has enthusiastic supporters and admirers and some even regard it as the forerunner of a new European culture and as a

pillar in the construction of a future conception of European citizenship. Millions of European students and teachers in higher education have benefited from the measures it contains: in 2012 alone, the European Commission was able to boast a figure of 3 million students and teachers engaged as active participants in the exchanges the programme enables. Designed in the spirit of the Single European Act – which established the single European market – the programme came into being in 1987. However it had first to overcome various setbacks and obstacles from the most powerful European states, which were then running similar programmes.

In 2009, the year that I began my term as an MEP, the EU budget for the period 2007-2013 was still in force. Since the final form of the 2010 budget would be hammered out between September and December 2009, I took this opportunity – once again in conjunction with my fellow MEP José Manuel Fernandes – to propose a set of changes to ERASMUS. We considered that it was necessary to extend the scope of the programme to include provisions that would, in particular, facilitate entry onto the labour market¹.

Without losing sight of this tremendous achievement that the programme represents, however, the scheme was then exclusively focused on the exchange of students and teachers between institutions of higher education and provided no specific orientation to the needs of the labour market and the future employability of those that participated in ERASMUS. Indeed, some even warned that participating actually tended to hamper job seekers by comparison with those that had chosen not to take part. Only 54% of Erasmus students during the period 2000-2001 – as opposed to 71% in 1988-1989

– stated that their experience of the programme had been a direct advantage when looking for work.

It was in order to remedy this situation that I and several others considered that the programme should be given a more vocational aspect. MEPs José Manuel Fernandes, Salvador Garriga Polledo, László Surján and Damien Abad joined me in proposing a series of amendments to the annual budget for 2010 that would extend the programme's scope and improve the job prospects of those that had taken part in ERASMUS. These amendments were subsequently incorporated into the ERASMUS First Job pilot project, which was launched with an initial budget of €2 million. Following this initiative, the project remained in operation as a pilot project until the adoption of the new European budget for 2014-20. After this, the project was officially recognised as a permanent programme and now forms an integral part of ERASMUS+.

The ERASMUS First Job programme aims to establish clear ties between the education system and the labour market by reinforcing the links between



With the Vice-President of the European Commission, Antonio Tajani and Vice-President of the European Parliament, Gianni Pitella at the launch of the Erasmus Project Young Entrepreneurs

training and business. In practical terms, this means that – with the co-funding offered by the European budget – a participant will be able to benefit from a first experience of the business world in an innovative company in another country to that of his or her original country.

4.4 - ERASMUS FOR YOUNG ENTREPRENEURS

ERASMUS-Young Entrepreneurs is a European Union funded exchange programme that offers young entrepreneurs the opportunity to work, from six months to a year, with an experienced entrepreneur in a European country other than the country of origin of the young entrepreneur. The aim is to strengthen the capacities and skills of the young business person, helping him or her to create their own business.

In 2009, ERASMUS-Young Entrepreneurs existed as a preparatory action of the European Commission. By the end of 2009, 2 200 young Europeans had participated in the programme, of which 99 were Portuguese. However, for 2011, the budget was fixed at only €2 million and 1 200 young people were expected to participate. This was disappointing given the emphasis that the European Union has placed on promoting youth employment. Following several attempts, I was able – in conjunction with Commissioner responsible for entrepreneurship, Antonio Tajani, on the one hand, and the backing

of the European Socialists, on the other hand – to transform the status of the ERASMUS-Young Entrepreneurs programme from that of preparatory action to that of permanent programme.

This paved the way to the allocation of a more adequate budget and at a joint press conference with Commissioner Tajani on 7 July 2010, we pressed for a budget increase to €3 million for ERASMUS-Young Entrepreneurs to come into effect as early as 2011²⁻⁴. In 2012, ERASMUS-Young Entrepreneurs gained the status of a permanent programme of the European Commission and its funding was actually hoisted to €7 million. The money allocated was then raised to €8 million in 2013.

4.5 - SOCIAL INNOVATION, SOCIAL ENTERPRISE AND YOUTH ENTREPRENEURSHIP

In 2011, I presented a proposal – in the context of the Budget Committee of the Parliament – for a preparatory action by the name of “Social Innovation Driven by Social Business and Young Entrepreneurship”. This was then approved by the Committee on Budgets and the plenary of the European Parliament and implemented by the Directorate General of Employment at the European Commission in 2012.

This preparatory action was intended to emphasise the importance of social innovation and to encourage the emergence of social enterprises, a notion that has real potential. Together, these two phenomena serve as drivers of change, generating viable business models that will lead to more inclusive, socially equitable and environmentally sustainable growth. At the same time as the two measures meet social needs in a context of sustainable and inclusive development, they also generate employment.

The aim of this preparatory action was to identify, develop, promote and disseminate best practices amongst national governments and regional or local authorities, on the one hand, and financial intermediaries, on the other. The action, consequently, provides additional support to young entrepreneurs in times of high youth unemployment. The use of structural funds for the period 2014-2020 for this type of initiative is absolutely unavoidable. However, I am certain that the results of this preparatory action will contribute to the implementation of relevant flagship initiatives contained in the Europe 2020 Strategy and that this will prepare the ground for an effective use of the European Social Fund-ESF and other EU funds after 2014.

4.6 - HORIZON 2020 AND YOUTH EMPLOYMENT

If Europe wishes to continue to play an active role in a world subject to accelerating globalization, the continent must become more competitive by means of heightened innovation and knowledge. This is a goal to which young people can make a decisive contribution. Already crucial for the future of Europe, investment in science and innovation is also able to contribute significantly to raising levels of youth employment. The articulation of these two aspects – the need to invest in science and innovation and the need to increase the vocational qualification of young people – is a challenge that confronts all countries in Europe. Against this background, HORIZON 2020 represents a key component in the European response to the challenge of youth employment. The programme has a budget of €79 400 million and as such is the largest financial instrument dedicated to innovation and research in the world. HORIZON 2020 will be crucial to helping Europe find its way out of the crisis.

As *rapporteur* for the Specific Programme Implementing HORIZON 2020, I did all that I had in my power to do in furthering measures with a direct impact on job creation, especially for young people. In one of the measures that I promoted, I reinforced the priority given to the employment of young researchers under the programme. This involved,

for example, the introduction of two changes that will have a direct impact on job creation. The first measure was the introduction of Innovation Vouchers. This mechanism allows a simple and rapid injection of funding for the creation of “start-ups” or existing SMEs in order to allow them to adopt innovative products. The second proposal involved Return Grants as a means of further strengthening of the Marie Skłodowska Curie fellowships. These return grants promote the transfer of technology and knowledge, the mobility of researchers and facilitate the reintegration of researchers who have benefited from having pursued their activities abroad. As a result, this measure will encourage the development of research activities in geographic areas that tend to be less dynamic in terms of innovation.

One of my own specific contributions was the fact that the programme now has simple rules for financing and contracting when undertaken by universities, research centres and companies. The programme also offers special incentive to SMEs, once again with a view to creating more and better employment.

EPP Initiatives

An example of initiatives undertaken by the EPP was the seminar entitled “A project of Hope for Future Generations”⁵ organized by the *Instituto Sá Carneiro* - under the chairmanship of Dr. Carlos Carreiras - and by the European Ideas Network, an EPP think tank. The seminar was opened by the Portuguese Prime Minister, Pedro Passos Coelho, who outlined the situation that Portugal then found itself in before going on to describe the national response to the economic crisis. During the two

days of the seminar, Portuguese and European policymakers and experts in the area of education and employment policy debated the issue of youth employment. The main emphasis was on social inclusion and the need to grant special attention to life long education and training.

4.7 - GROUP OF FRIENDS OF THE EIT

Setting Up the Group of Friends

It is essential that politicians design policies that encourage young people to involve themselves in the challenges represented by European competitiveness, innovation and employment. Europe requires a generation of young, well-qualified people who possess high degrees of creativity, an entrepreneurial spirit and who are able to assume leadership. The European Institute of Innovation and Technology (EIT) was established to further this aim.

The EIT first came into being in March 2008. The idea of creating a European institute dedicated to innovation and the development of new technologies originated with the European Commission President, José Manuel Barroso. From the outset, the President of the European Commission backed the initiative, consistently reiterating his belief that the EIT should play a decisive role in strengthening the ties between science and industry in Europe. As principal adviser to President Barroso, I was directly



During the second meeting of the Group of Friends of the EIT with the European Commissioner for Education, Culture, Multilingualism and Youth, Androulia Vassiliou

involved in designing the model for the future EIT, now based in Budapest. The idea germinated and matured during the mid-term review of the Lisbon Strategy in 2005 and was presented at the European Commission in the following year and subsequently adopted by the European Council and the European Parliament. The EIT Regulations, for their part, were approved in 2008 and the first meeting of the board took place in the same year.

As is the case with any other institution, the EIT requires finance. Currently EU funding programmes operate during a seven year period. In 2008, the year in which the EIT effectively came into operation, the budget for 2007-2013 had been approved and was already in operation. Consequently, there was little funding available in the existing budget for the EIT and the institute began its life as a very small scale project. This was not helped by the fact that the idea of setting up a European research

institute did not command universal assent and had to face a degree of resistance and hesitation from the academic world.

It took an entire awareness raising campaign before the idea really took root. The Group of Friends of the EIT was created under my initiative in the European Parliament in 2011 and benefited from the constant and committed support of the European Commissioner for Education, Culture, Multilingualism and Youth⁶, Androulia Vassiliou. The Group was set up to help consolidate the EIT but also to actively prepare the conditions for the period between 2014 and 2020 during which the EIT would be able to come into its own. This group was particularly effective in this process and the unrelenting work undertaken by the Group of Friends of the EIT certainly contributed to the consolidation and future growth of the institute.

My speech at the opening of the conference on “The EIT: promoting innovation and strengthening synergies with the European Union”⁷ represented a modest contribution to this consolidation process. The conference was held at Trinity College Dublin on 29 April 2013 and was attended by the Irish Minister for Science and Innovation, Seán Sherlock. In the speech, I noted that the EIT was like a flower that might well blossom or, without the right conditions, wither and I asked: “What should we do to ensure that the EIT lives and prospers?”

I then presented the four key points found in the EIT development strategy: simplification; a comprehensive approach to the innovation cycle; widening participation and synergies with the Structural Funds. At the end of the speech, I suggested that:

“these four principles are common to HORIZON 2020 and the EIT. However, the EIT is a special programme because it combines education with research and innovation, something that has been specifically designed to have a direct impact on jobs and economic growth through a culture of entrepreneurship, the creation of new skill bases and the encouragement of start-ups.”

It is gratifying to note that the 2014-2020 European Budget has set aside a budget that is 10 times higher than the first budget provision for the EIT. Today, the central mission of the institute is now both clearly defined and widely accepted: this is, essentially, to strengthen the bonds uniting the “knowledge triangle” made up of higher education, research activity and business.

The drive to integrate these three forces more closely is a response to the recent, much debated EU deficit in innovation and competitiveness. The causes of this phenomenon – which have markedly adverse consequences for Europe – might be summarized in general terms as: difficulty in translating research results into commercial opportunities; the lack of critical mass; excessive fragmentation and a weak entrepreneurial and innovation culture. These factors operate in many areas including in higher education and in research institutes as well as in SMEs (representing, it might be noted, the single largest proportion of employers in the EU business community).

Against this background, the EIT aims to stand at the forefront of the innovation process by creating the conditions that will allow society to quicken the pace of development, to take the lead in providing solutions to emerging societal problems and to meet demand emanating from markets and consumers.

Indeed, the difficulty experienced by Europe in stimulating entrepreneurship and innovation has had a direct impact on the continent’s competitiveness in international terms. In an economy where knowledge plays an increasingly important role, innovation is a crucial factor in generating growth, competitiveness and the improved the well-being of society. As such, the EIT will play a key role in furthering entrepreneurship and innovation whilst lending its support to young scientists and, in the process, fostering the job prospects of young graduates and post-graduates.

The EIT and KICS

The EIT is made up of KICs (Knowledge and Innovation Communities) whose goal is to address the challenges facing the EU. The first three KICs were devoted to climate change mitigation and adaptation; renewable energy and to the information and communication society. Each KIC consists of a number of hubs or “Co-location Centres” whilst the overall structure seeks the direct involvement of business partners, in particular SMEs, in all the strategic, financial and operational processes that lead from the first idea to the market.

Currently, the EIT is a part of HORIZON 2020 and this has enabled it to widen the scope of its ambitions. Five new KICs have been provided for in the following areas: innovation for healthy living and active ageing; raw materials: sustainable exploration, extraction, processing, recycling and substitution; Food4Future: sustainable supply chain from resources to consumers; value added manufacturing and urban mobility. Although part of HORIZON 2020, the EIT was the subject of a separate report to the report implementing Horizon 2020. One of *rapporteurs*

was MEP Marisa Matias, whose invaluable work and spirit of cooperation contributed directly to the consolidation of the EIT project. For my part, it was very rewarding to have been able to assist in the germination of a body of such central importance to the European project.

4.8 - CHALLENGES IN HIGHER EDUCATION

Six Challenges

Portugal and other European countries need to invest in science, innovation, education and training in order to develop the necessary skills on the labour market that will allow for the production of more innovative goods and services as well as a better quality of life for European citizens. Research – and especially the process of translating ideas into innovative products and procedures – is an engine for economic, social and environmental growth and Portugal as much as the other European countries must continue to invest in these areas in particular.

The challenges faced by institutions of higher education in the age of globalization are essentially the following:

- achieving excellence leading to internationalization;
- training of human resources at regional, national and international level;
- diversifying sources of funding;
- developing critical mass;



With the Secretary of State for Higher Education, João Filipe Queiró and António Rendas, Rector of the Universidade Nova de Lisboa and President of the CRUP at the European Parliament in Brussels

- contributing to economic growth, to the creation of more and better jobs;
- fostering regional development.

At the same time, the modified environment produced by social development and by globalization poses new challenges in the world of higher education.

If higher education is to remain true to the task of training individuals who are able to actively contribute to economic development and social well-being, institutions responsible for higher education must become more innovative, differentiated and competitive. Indeed, it is of utmost urgency that we improve the promotion of innovation and that we mobilise additional resources for education, research and technological development. Meeting these challenges will require these institutions to simultaneously display both considerable resilience and openness to the world. They must improve the attractiveness and relevance of their curricula, set up partnerships with diverse partners and develop their capacity for scientific research. It is

also essential that higher education become more rapid and flexible in its reaction to a changing world.

As was the case with the funding of R&D – described in chapter 2 – examination of the differences between higher education funding in Europe and a number of reference countries, such as the United States or Japan, suggest that Europe suffers from the lower dynamism of European private investment in this sector. In 2007, public expenditure on higher education in the EU was 1.13% of GDP whilst private expenditure was five times lower (at 0.23% of GDP). During the same period, in both Japan and the United States, private spending on higher education was significantly higher than public spending⁹.

To improve this situation, the EU member states must set themselves the goal of achieving an investment level of 2% of GDP in higher education by 2020. Of course it would be ideal if this objective were partially obtainable by means of increased private investment. To take the example of Portugal here: before the start of the crisis, Portugal devoted a percentage of GDP to higher education that roughly corresponded to the European average. Nevertheless, funding per student stood at about half of the amount spent by the EU and a quarter of that spent by the U.S.A.

The situation has worsened since then and to this can be added the chronic under funding of science in general. Portugal invests 1.5% of GDP on R&D while the European average stands at 1.9%. The continued under funding of higher education undermines its ability to attract and retain the best talent and, in so doing, to strengthen excellence in research and in teaching activities. As I had the opportunity

to explain in various speeches given in Portugal, Europe and elsewhere, in addition to defending public funding for research and education – and, if possible, increasing these levels – higher education institutions should seek to diversify funding sources by promoting higher private contributions and by insisting on the creation of a favourable tax system that will attract private donations.

It remains up to institutions of higher education to define their funding strategies and to respond, in the process, to the need for funding beyond the limits of traditional public investment. This will entail their taking greater responsibility for their financial sustainability in the long term, particularly regarding research. However, if such institutions are to react to changing circumstances quickly and efficiently, this approach requires real autonomy and responsibility on the part of such institutions. In the process, institutions should be freed from micromanagement and an onerous regulatory framework as they develop towards accepting full institutional accountability for their results.

The contribution made by students – in the form of tuition or registration fees – must be accompanied by a robust support system for needy students in order to safeguard principles of meritocratic access to higher education. In February 2011, it was with this in mind that I decided to appeal to the Portuguese government. In my appeal, I called for the urgent review of the effects of government backed changes to the principles underlying the Social Action programme⁹. My motivation was to prevent students from abandoning their studies for financial reasons. I was also a signatory of a letter addressed to the Portuguese Minister of Education and Science, Nuno Crato, which warned

of the need to ensure that the grants attributed to students from families that were behind on their tax payments were not affected by the irregular situation in which their families found themselves.

Government action – in the negotiations surrounding the Common Strategic Framework – represents a crucial aspect to the struggle to overcome under funding. Governments must strive, in the first place, to ensure that science, higher education and innovation are established as national priorities. However, at the same time, the Government must also make an effort to establish the conditions that will allow such institutions to apply for funding at international level, in particular within the HORIZON 2020 programme.

Another difficulty is the lack of critical mass and the fragmentation of the innovation process. It is a phenomenon that is not only to be found in Portugal but is also present also across the European Union. In the United States, only 3% of the top institutions receive about 80 % of investment in R&D. By contrast, in the European Union as a whole, the results are much more diversified. However, the European project is based in the diversity of the different national and cultural forces of which it is made up and this diversity represents an added value. If the same concentration of resources as is to be found in the United States is undesirable, it is nevertheless necessary to find ways of increasing critical mass in Europe whilst maintaining this diversity.

In an environment of greater institutional “autonomy”, higher education should seek to encourage networking to generate critical mass whilst promoting interdisciplinarity, a powerful orientation towards European and international

dimensions and responsiveness to social needs and demands. The merger or the forming of consortia between institutions is able to create a space for integrated management and tends to generate savings and economies of scale. It is clear; however, that the decision to merge or form consortia should always remain a prerogative of the institutions concerned and that they should retain their autonomy in the process.

Partnerships between higher education institutions, joint degrees, double degrees and “European” masters or doctorates might contribute desirably to increasing critical mass, to internationalization and to the ability to attract the best students. However, it is essential to maintain the university and polytechnic in distinct spheres and to understand and reinforce their separate vocations. Polytechnics have a crucial role to play in training specialised individuals that are able to immediately take up their place within the economic fabric of the country. Ensuring this division of labour will contribute to Portugal’s exiting the crisis with a network of more technically advanced and more competitive companies.

In Portugal, the percentage of students with higher education is among the lowest in Europe. Increasing the number of graduates with a degree should mainly be achieved by means of polytechnics. The major bottleneck on the way to meeting this objective is the dropout rate in primary and secondary education, (which remains very high in Portugal). This problem must be attacked by diversifying the training on offer at different levels of school education and by creating alternative modes of training; for example, through dual education. This approach should not rule out the possibility of mobility between the

various types of education, however. Professional qualifications – as repeatedly recommended by international organisations – are one solution. They have the advantage of combining theory with practice and, if they are attractive to young people on this basis, they will contribute significantly to reducing excessive levels of youth unemployment.

Although Portugal has managed to reduce the innovation gap and to dramatically improve its indicators in the area of scientific research and innovation, the country has, by and large, failed to reduce the gap of its GDP when compared to the European average. While all innovation indicators have improved, the most significant increases are linked to the public sector where low values still persist in key indicators such as the number of Ph.D.s or the amount of highly qualified staff in companies. Finally, the necessary enviroing conditions and the motor forces involved in stimulating private sector led innovation are not particularly strong in Portugal.

All of this confirms once again that levels of investment in knowledge are a necessary but not sufficient condition for growth and increased employment. Indeed, a number of factors all significantly influence the relationship between innovation and GDP *per capita*. These include macroeconomic conditions, competition rules, the functioning of the market, fiscal policy, the efficiency and swiftness of response on the part of governments, a highly qualified services sector and the ability of society to adjust to products, innovative ideas and concepts.

In addition to ensuring the education and training of their students, institutes of higher education should promote research, produce knowledge,

drive technological progress and innovation and, in the process, provide an invaluable service to the community. The last aspect, in particular, requires further attention: it is important that higher education institutions reinforce the bonds that tie them to the regions where they are situated. It is crucial that institutions of higher education become an engine of regional development by encouraging innovation and improving the productivity of economic and institutional actors. This will enable their surrounding regions to become more competitive and to generate new opportunities and more jobs.

In March 2013, at the opening of a seminar on Education co-organized by the CRUP (Council of Rectors of Portuguese Universities) and the EUA (European University Association)¹⁰, I emphasized the particular role the new European budget is able to play with regard to higher education institutions engaged in the development of the regions where they operate. The contribution of these institutions is crucial in defining regional innovation plans, today referred to in terms of “smart specialization” (see section 7 of chapter 5), as well as the establishment of partnerships with businesses and other institutions with a view to making the best possible use of regional funds.

With regard to internationalization, it is clear that the battle for the international visibility and reputation of Portuguese institutions – as this involves their participation in international networks – is still far from having been won. These institutions should become poles of attraction for talented, critical and creative individuals and, in saying this, I am thinking not only of students but also of scientists, teachers and staff.

As I have repeatedly stated in numerous speeches on higher education, European programmes are critical to addressing the need for the internationalization of institutions of higher education in Portugal. Thus, it is to be hoped that the government will approach negotiations surrounding the Common Strategic Framework with a firm dedication to ensuring that higher education is adequately funded and that, as a result, it will promote an agenda of excellence, development and internationalization.

4.9 - VISITS TO SCHOOLS

After being elected, MEPs who come from countries that are at large distances from Brussels – as in my case – perform their duties at a considerable physical remove from their constituents. This distance is inevitable but it can and must be overcome by the MEP. Indeed, MEPs should not lose contact with the people by whom they were elected and in my case this means contact with the Portuguese people: the strength of Europe finally depends on the potential of each of its citizens. The European Parliament is a political body that represents the interests and hopes of the electors and these electors legitimately expect that their representatives in Parliament will be concerned about what their fellow citizens think or the problems they struggle with.

To this end, I visited a large number of schools in order to lend my support to the efforts to the

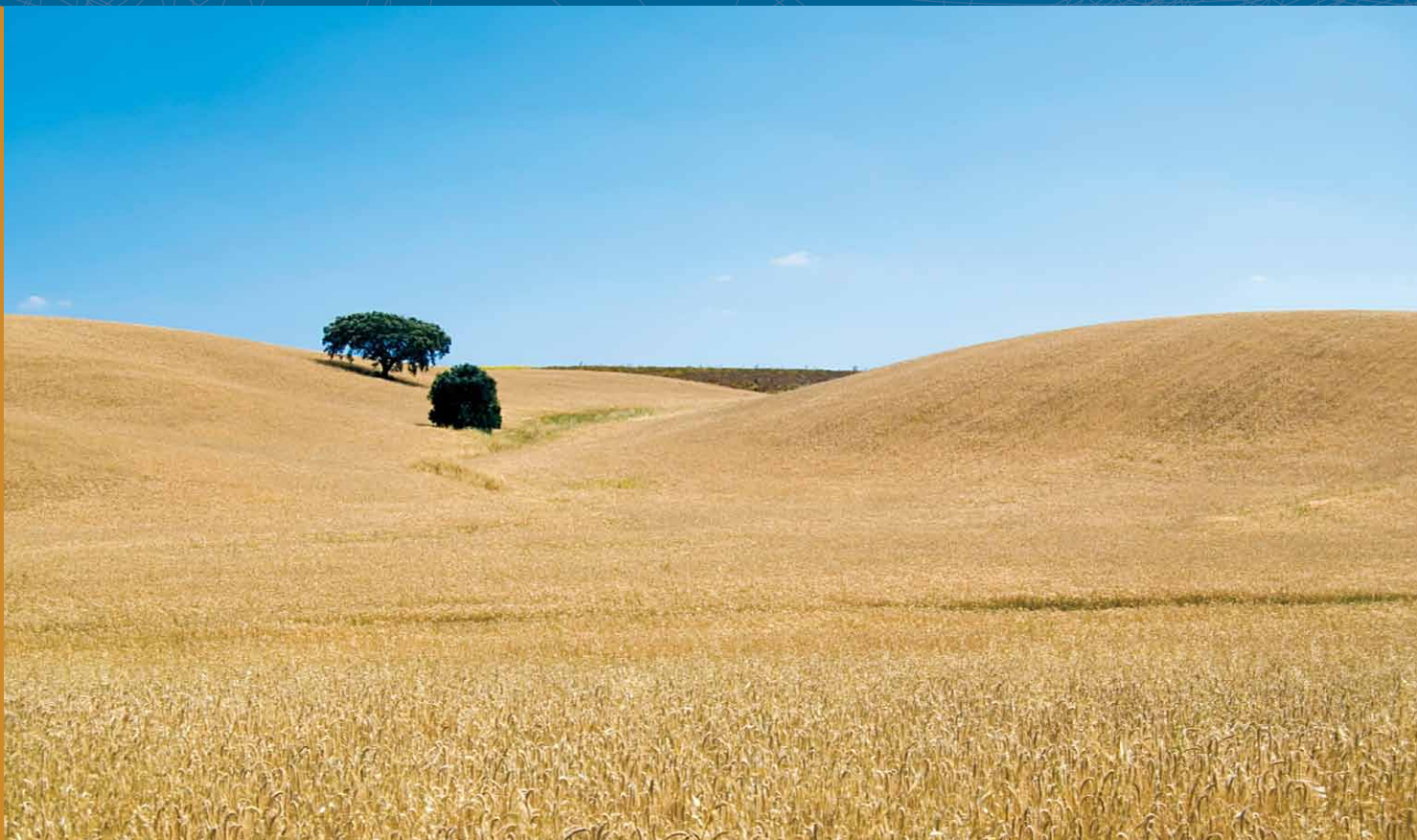
teaching staff. Amongst other functions, education involves a daily battle to lay the grounds for future civic participation on the part of young people, in particular. During these many visits, I outlined something of the work that we undertake in the European Parliament.

One example was the debate organised in May 2010 by the Food Bank Against Hunger and more specifically in the context of the “Education for Citizenship” project¹¹. This debate took place during the visit that was organised with students in their last year of secondary education at the Francisco de Holanda School, from the *Escola Agrupamento Vertical das Escolas de Búzio* in the Vale de Cambra and from the Instituto D. João V- Louriça. Another example was the exchange of views with final year secondary school pupils from the EBI-Centro de Portugal-Vila de Rei¹². This meeting was organised by the Mayor as part of the Europe Day celebrations. In both cases, the result was a lively debate about the European Parliament and its role.

Similarly, in September 2010, I took part in an event in Vila Real de Santo António organised in the context supplied by the EU programme Youth in Action¹³. The objectives of the programme is to promote intercultural dialogue and debate concerning European citizenship and youth policies in Europe by means of various cultural initiatives, music and the contemporary arts. The main sponsor was Portugal but young people from Austria, Germany, France, Italy and the Czech Republic were also involved in the project and attended. Finally, I had the great pleasure in January 2011 of visiting the Santa Maria de Beja primary school, into which my old primary school, S. Salvador, has now been integrated.

CHAPTER 5

DISADVANTAGED REGIONS



5 - DISADVANTAGED REGIONS

5.1 - INTRODUCTION

My parliamentary activity on behalf of disadvantaged regions has mainly been undertaken within the ITRE Committee and the Committee on Budgets. The programmes with which I was most directly concerned – such as the science and innovation programme and the programme designed to assist SMEs – certainly complement the EU's regional programmes. However, my involvement with regional programmes also dates from the period when I was a Minister in the fifteenth and sixteenth Constitutional Governments in Portugal. During this time, I was especially involved in reprogramming the Portuguese Structural Funds (2000-2006) in the areas of higher education and science and innovation.

In January 2004, the Extraordinary Council of Ministers in Óbidos – presided over by Prime Minister Barroso – adopted a strategic initiative for Portugal. The Council took place after a year and a half of policies dominated by financial rigour and retrenchment. As a result, this was considered a suitable time to devote more attention to themes of economic development. It was also argued that science, innovation and knowledge in general were essential strategic options in furthering this aim. The Council of Ministers at Óbidos decided to make a strategic investment in science and innovation and to refocus the financial resources available through the reprogramming of the Structural

Funds. This initiative entailed the creation of two new programmes: the Operational Programme for Science and Innovation and the Operational Programme for a Knowledge Society.

The financial resources available for the two programmes stood at €1 billion and negotiations with the European Commission took place during 2004 with the new programmes being approved later in the same year. This sum was made available for investment in research infrastructure, higher education and various scientific projects (laboratories, scientific equipment, canteens and student residences) and research projects. It also covered consortium projects undertaken with companies in order to promote productivity and competitiveness alongside the advanced training of researchers and teaching staff in higher education. It also included aid to further the business careers of highly qualified individuals such as those with a master's degrees or a doctorate. The implementation of these programmes contributed to the improvement of most indicators for science and innovation (such as the number of doctors, scientific publications and levels of investment in science and innovation).

In a context in which EU funds represented the main source of public funding, this was also the period that saw the beginning of the mid-term reprogramming of the Community Support Framework III process (2000-2006). I was then Minister for Science, Innovation and Higher Education and, in this capacity, I actively participated in the interim renegotiation of the areas of science, innovation and higher education within the context of Community Support Framework III. As a result, I was able to follow the whole process



Speech in the plenary session in Strasbourg

of the design and review of regional programmes from the mid-term reprogramming of Community Support Framework III (2000-2006) onwards.

This included the implementation and reprogramming of the 2007-2013 framework (Sections 2 and 3) and preparing the 2014-2020 framework (as an MEP in so far as this latter programme was concerned) (sections 4 and 5). After the adoption of the EU budget for 2014-2020, Portugal had to negotiate a Partnership Agreement with the European Commission as this involved deciding on the actual form that it wished to give European investment. I presented a series of ideas about how best to organise this investment in Portugal with a view to overcoming the structural weaknesses of the country (section 6).

Developing greater constructive interaction between the various European funds is a sphere in which there has been a longstanding potential for constructive reform. However, it was first necessary to tackle this problem at its roots: which is to say

at that point at which the structure of the funds was determined in the first place. I initiated this process with HORIZON 2020, building potential synergies with regional funds into the design of the programme (section 8). Before this, however, there is a brief description of a new concept in regional policies: “smart specialisation” (section 7).

5.2 - REPROGRAMMING THE NSRF

Difficulties with the NSRF

The main aim of the National Strategic Reference Framework for 2007-2013 was:

“the qualification of Portuguese human resources, valuing knowledge, scientific and technological development and innovation. The framework promotes high and sustained levels of economic and socio-cultural development and territorial qualification with the aim of increasing the efficiency and quality of public institutions whilst ensuring equal opportunity.”

This hefty strategic plan was funded by the Structural Funds (ERDF - European Regional Structural Fund and ESF - European Social Fund) and the Cohesion Fund and involved three thematic agendas: the Agenda for Human Potential, the Agenda for Competitiveness Factors and the Agenda for Territorial Enhancement. The implementation of the three thematic agendas was carried out by means of the General Operational

programmes (Human Potential, Competitiveness Factors: ERDF and Territorial Enhancement). The General Operational programmes covered Mainland Regions; Autonomous Regions of the Azores and Madeira; cross-border territorial cooperation (Portugal-Spain and the Mediterranean); trans-national cooperation (Atlantic Area, Southwest Europe, the Mediterranean and the Azores-Madeira-Canaries); inter-regional cooperation as well as by the “Technical Assistance” Operational programmes (ERDF and ESF).

However, the programme was beset with a number of difficulties. In particular, these included the advent of the economic crisis, the high rate of national co-financing, excessive bureaucratic complexity and the lack of appropriate measures when compared with the real needs of member states. These difficulties meant that the programme required revision as quickly as possible. Moreover, European policies – such as the European energy strategy and climate change policies – had changed since the programme had first been approved, further justifying a reconsideration of objectives.

The programme had initially envisaged an ambitious level of national co-financing (higher than that required by the European Commission) given that the programme had been set up before the international economic crisis affecting the country. With this crisis – which dramatically exposed the most obvious weaknesses of the Portuguese economy – it was necessary to reduce the level of national co-financing in all programmes where possible. This was also the moment to envisage accompanying reprogramming with a simplification of administrative procedures and bureaucracy in order to increase rates of implementation.

Such simplification has something of the character of a personal crusade for me. Over the last few years, in numerous speeches and op-ed articles¹, I have regularly drawn attention to the excessive complexity and bureaucracy of regional development programmes. This has meant that actually making use of the programme has tended, in itself, to become a task of major proportions. I have also repeatedly called attention to the increasingly self-evident fact that the priorities of the programme were out of phase with the reality experienced in the countries concerned. The emphasis of the programme was on large infrastructure whereas it should have been on lending support to SMEs alongside the fostering of innovation and competitiveness.

The Portuguese reprogramming of Structural Funds

Such reprogramming could have been undertaken under the government of Prime Minister José Sócrates but nothing was really done until Prime Minister Passos Coelho came to power. By this stage, reprogramming was not only necessary but also increasingly urgent. Indeed, a whole battery of effective and pragmatic measures was required, something that I have stressed, once again, in numerous speeches and op-ed articles².

The first involved speeding up the implementation of the structural funds that Portugal and other European countries are entitled to. In Portugal, the implementation rate was a meagre 23% in 2010. This was all the more disturbing given that large proportions of these funds were being invested in projects that would have little effect on the country’s economic growth. I calculate that if the Portuguese NSRF programme meant that each Portuguese SME

were able to employ at least one new worker, this would result in nothing less than the elimination of the problem of unemployment in Portugal. In other words, measures to accelerate the implementation of funds would undoubtedly help stem the disturbing rise in the rate of unemployment.

The second aspect involved seizing the opportunity that the mid-term review (beginning in 2010) of the Structural Funds represented. It had become clear that the two factors – lower rate of implementation and bureaucracy – were closely related. The explanation for the low implementation rate of EU funds was not simply a lack of political will or the ineffectiveness of the administration: it was the very complexity and lack of flexibility of the funding programmes themselves – when coupled with delays in processing applications – that represented the major difficulty. Hence, a mid-term review of structural funds represented a golden opportunity to, firstly streamline and facilitate access to EU funding in the domain and, secondly, to redirect the funds towards more productive investments with a direct effect on economic competitiveness and job creation. This would certainly contribute to alleviating something of the effects of the economic downturn.

In my public statements, I stressed that the Portuguese government should urgently seek an interim review of the NSRF and should not let the issue drag on. I argued that the review should be aimed at easing the rules for participation and recentring efforts on those measures that would enhance economic growth (such as investment in innovation and SMEs). I suggested requesting the reduction of national co-financing to the minimum required by the European Commission and that a proportion of national co-financing be paid in kind, for example in hours of work.

I also suggested negotiating and even lowering level of co-financing for the following year, something that would be offset over the course of later years. At the same time, in the European Parliament, I strove to ensure that significant steps were taken towards the simplification of the rules and red tape that surrounds these funds. To this end, the government was able to reduce the national contribution to co-financing by 5 to 15% and this excellent result was due, in no small measure, to the active intervention of President Barroso.

5.3 - CONTRIBUTION TO IMPROVING IMPLEMENTATION: THE “DIFFUSION” EFFECT

In my first speech in the plenary sessions of the European Parliament, I pointed out that funds for more needy regions were being devoted to Lisbon³, something that the then government justified by the “diffusion” effect. In my view, this practice constituted a breach of the principles that underlie economic and social cohesion and, hence, of the principles that represent an essential pillar to the European project. Consequently, in October 2009, I called on the European Commission to investigate the changes made by the Portuguese Government to the regulations governing the ERDF and Cohesion Fund. The complaint was taken up by the Portuguese media and a number of nationally prominent figures



in the north of the country also commented on the issue. A series of mayors similarly expressed their public indignation at the fact that such investments in Lisbon, nevertheless, appeared in official accounts as investments that had been made in their regions. As a result of these protests and complaints – the city of Porto even went so far as to take the matter to European Court – the government eventually corrected the situation.

5.4 - TRANSITION REGIONS

Cohesion policy until the end of 2013 was organized around a distinction between regions whose objective was “convergence” and regions whose

objective was “competitiveness and employment”. Regions were classified as belonging to the first category of convergence objectives if their GDP was less than 75% of the EU average. If their GDP was above this figure, they were classified as regions whose objective was competitiveness.

Beyond these two categories, there was no intermediate regional category. There was, however, a phasing out/in mechanism for regions whose GDP had reached a level above 75% and who were thus in the process of leaving the convergence group for the competitiveness group. During this period, Portugal in the Norte, Centro, Alentejo and the Azores regions fell into the category of “convergence” regions whilst the Algarve had entered the phasing-out and Madeira the phasing-in regions.

Leaving aside the question of whether or not this system was fair, there were problems concerning the design and implementation of the policy. Many regions – that now found themselves in the “competitiveness and employment” group – nevertheless continued to struggle with a fragile socio-economic environment, high unemployment, structural difficulties and low fiscal capacity. These regions were accorded exactly the same levels of aid from the EU as were the most competitive regions. For example, the Greek region of Central Macedonia (82 % of the EU average) and London (338 % of the EU average) were treated in the same manner. As a result, in the European Parliament, I lent my support to the creation of an intermediate category of “transition regions” that would correspond to regions with a GDP between 75% and 90% of the European average. This would mean that such regions would still be able to benefit from much needed European support. I was delighted to see

that these “transition regions” were adopted under the 2014-2020 EU budget. Consequently, the Algarve is now considered a “transition region” and is able to benefit from the current European framework in a way that would have been impossible had there been no such category.

5.5 - EU BUDGET

The EU budget is a key instrument of European policy. Under the Treaty of Lisbon, the multi-annual EU budget for the period 2014 to 2020 must be approved by Parliament. This is a new entitlement that Parliament has managed to obtain only after a long process of gradual consolidation of its powers. For this reason, the adoption of the most recent EU budget by the European Parliament had a political significance that made for particularly delicate negotiations. This was all the more so the case given that the proposal submitted by the European Council expressed a desire to lower the amount of the 2014-2020 budget by comparison with previous years. The European Commission, for its part, proposed a budget of €1 028 billion (2011 constant prices) but this was too high for the Council.

This was the first time in the history of the European Union that a budget that was lower than that of previous years was to be approved. Negotiations with regard to the EU budget – the triad between the Commission, Council and Parliament – were long and tense. Bearing in mind that the European Parliament was set against

any reduction to the budget and considering the size of the cuts that were proposed, there was a real risk that the Council’s proposal was vetoed by a majority of MEPs. A significant majority in Strasbourg argued that the crisis should actually give rise to an increase rather than a reduction in the budget available for EU policies. In the absence of a final agreement between governments and MEPs, EU finances would have been organised in twelfths – or monthly payments – from 2014. Fortunately, this eventuality was averted when a final agreement was arrived at.

The budget for the 2007-2013 period amounted to €993 billion while the budget that resulted from negotiations between the Council, Parliament and Commission for the period 2014-2020 reduced this value by €33 billion. The new comprehensive proposal now stood at €960 billion. On average, 13.1% of the previous funds were no longer available to European countries. Eventually, the EU adopted a budget for 2014-2020 that was lower than 2007-2013 although the EU did manage to substantially increase investment in the areas of science, innovation, SMEs, space and education.

Despite the significant reduction made to the overall budget, Portugal nevertheless received €27.8 billion from the Cohesion Policy and the Common Agricultural Policy. This represents an annual sum – to be spent over the next seven years – of €3.971 billion or a figure of €10.8 million per day in the form of funds to be aligned with the Europe 2020 strategic objectives. The goal of these funds is to create jobs, strengthen the competitiveness of companies, to contribute to economic social and territorial cohesion and to lend support to agriculture, fisheries and rural development. When

this is taken into consideration, the Portuguese government was able to reduce the amount lost to only 9.7%.

This budget contained a number of measures that I believe will also have a positive impact in Portugal such as increased funding for research, education, youth and SMEs. Until 2016, Portugal will also be able to benefit from a 10% increase in the co-financing rate. This means that the co-financing rate for Cohesion Policy (ERDF, ESF, CF) might rise to 95% whilst the rate for Rural Development (EAFRD) could rise as high as 85%. In addition, the country will still be eligible for an envelope of €1 billion for its Cohesion Policy and €500 million of allocations from the EAFRD will be funded at 100%.

The President of the European Commission, José Manuel Barroso, played a key role in these negotiations and enabled, in particular, the guaranteeing of the last two aids. His contribution to the process enabled the approval of the two extra envelopes: €1 000 million for cohesion policy and €500 million for rural development. It is particularly significant that the €500 million set aside for rural development did not entail any obligation to provide parallel co-financing given that Portugal was then the object of a financial assistance programme.

The European budget 2014-2020 was allocated as follows: 47% for cohesion and competitiveness in order to foster growth and employment; 38.9% for direct aid to farmers, market expenditure, fisheries and rural development; 6.4% administration; 6.1% for external policy and 1.6% for citizenship, freedom, security and justice. Only 6.4% of the EU budget has been set aside for expenses incurred by the EU institutions and administrative structures. 94%

of the budget was thus allocated to investment in different Member States. There is, however, no budget for a national state with such low rates of institutional and administrative expenses. Despite having been cut substantially, the final version of the EU budget includes an increase of 37.3% for the competitiveness component. This sum is spread across the Science and Innovation programme (HORIZON 2020) and programmes in the field of space (GALILEO and COPERNICUS), for SMEs (COSME) and nuclear fusion (ITER).

5.6 - NEW STRATEGIC FRAMEWORK: PORTUGAL 2020

Studies by the European Commission and other bodies have pointed to three main difficulties for Portugal: low economic competitiveness, high unemployment and the inefficient use of natural resources and energy. Despite the huge investments in the economy and the education system that have been made since accession to the European Community, it has not yet been possible to fully overcome these weaknesses.

Given the enormous economic and social challenges that Portugal faces, it is essential that the political direction taken involves a focus on a limited number of priorities, thus ensuring maximum added value and economic and social impact. In particular, the new programmes should give priority to

competitiveness. In this respect, considerable stimulus to competitiveness can be achieved by modernising the business and industrial structures of the country through enhanced innovation. The country needs to invest in science, innovation, education and training, in order to develop the skills required by the labour market and in order to promote the creation of know-how that will subsequently translate into the production of new goods and services.

The strategic guidelines and rules governing the use of European funding by Portugal are contained in the Common Strategic Framework 2014-2020 under the name of PORTUGAL 2020. This framework incorporates five European funds: ERDF, the European Social Fund and the Cohesion Fund - the three current NSRF funds - and the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund. The policies that make up the European Strategic Framework came into force on 1 January 2014. Portugal had to negotiate with the Commission concerning the investment priorities and direction that it wished to pursue with regard to these European funds.

As ever, I actively contributed to this debate on the priorities that Portugal should adopt by means of op-ed articles, speeches in the European Parliament and, indeed, wherever I thought I could make my influence felt. In Portugal, the debate around this subject began officially on 8 January 2013 at the conference on the Common Strategic Framework held at the Lisbon cultural centre *Culturgest* organised by the Portuguese Government.

At the invitation of the Portuguese Government, I outlined my vision⁴ of how European funds might

contribute decisively to the country's overcoming both its structural and cyclical weaknesses. An approach to the implementation of the Strategic Framework 2014-2020 had to be worked out - in light of existing constraints - in order to effectively guarantee that new investments would contribute to overcoming the crisis, to the revival of economic growth, job creation, social inclusion and to increased exports. This approach was essential because, as I stated at the conference, the funds allocated by the Common Strategic Framework will constitute the main source of public investment in Portugal.

Indeed, the next seven years will be crucial for Portugal. The current EU framework will be essential in creating the foundations of a competitive and efficient economy that protects and enhances natural resources, guarantees an elevated quality of life for its citizens and contributes to economic growth and job creation. The ability to Portugal to meet the challenges represented by globalization, competitiveness, economic growth, job creation, the preservation and enhancement of natural resources, the security of energy supply, to name but these, depends on the proper implementation of the adjustment programme in progress. However, it also involves Portugal's being able to take advantages of the capacity the country already possesses as this includes indigenous resources, its excellent infrastructure and the quality of its scientific human potential. These are factors that the proper implementation of the next EU framework will be able to enhance and develop.

5.7 - SMART SPECIALISATION

Smart specialization – as a means of redesigning regional policy – was developed between 2005 and 2009 within the “Knowledge for Growth” group of experts. I had the honour of belonging to this group set up by Janez Potočnik when Commissioner for Science and Research. Smart specialization is a key concept that allows for the building of bridges between the structural funds and programmes aimed at competitiveness such as HORIZON 2020. The concept supposes a new vision of regional policies; one that identifies the competitive advantages that facilitate the establishing of research and innovation priorities at a specifically regional level. By focusing on the strengths of a region and its comparative advantages, countries or regions can make use of this notion to identify and select a limited number of priority areas into which investment in knowledge should be channelled. Universities, institutions of higher education and research centres play a crucial role in this process, a process that takes into account the fact that the richest regions in Europe are those that develop around universities of excellence.

5.8 - REGIONAL FUNDS AND HORIZON 2020

As I have repeatedly argued, research, technological development and innovation are fundamental to economic development and job creation and HORIZON 2020 represents a cornerstone of European policy in this area. At the regional level, the objectives are to promote and strengthen the competitiveness of regions. It is, therefore, desirable to promote further complementarities between research and innovation policy and regional policy by building bridges between the two. It was with this in mind that I sought, through my report on HORIZON 2020, to actively promote synergies between HORIZON 2020 (whose focus is on scientific research and innovation) and the structural funds (with their greater emphasis on regional development).

After examining this possibility closely in a report on the potential for synergies between the Framework Programme for research and innovation and the structural funds, I made a set of recommendations⁵. In particular, HORIZON 2020 has introduced the concepts of “spreading of excellence” and “widening participation”. The aim is to promote networking and the twinning of research organisations in order to establish and strengthen partnerships between research units and their main international counterparts. This represents a way for Europe to invest in embryonic units of excellence, such as small research groups and to foster the development of highly innovative start-ups.

At the same time, the bridges between Horizon 2020 and the Structural Funds should be built in both directions. To this end, I worked with the MEP Lambert van Nistelrooij – who was responsible for the report on the structural funds – in order to develop bridges between the Structural Funds and HORIZON 2020. Upstream from HORIZON 2020, the structural funds can be used for capacity building, for example, and, downstream, the Structural Funds will help smooth the transition from design to market. In this respect, the structural funds might be used to enable institutions to prepare for international competition through funding the formation of clusters, research grants and scientific equipment. Additionally, these funds might be used to finance the commercialisation of research projects, thus facilitating the arrival on the market of concepts and ideas first developed by means of these projects.

CHAPTER 6

DEVELOPING COUNTRIES



6 - DEVELOPING COUNTRIES

6.1 - INTRODUCTION

My work with developing countries has taken two main forms. The first is participation in the delegations associated with the African, Caribbean and Pacific ACP-EU Joint Parliamentary Assembly (section 2) and EUROMED, Euro-Mediterranean Parliamentary Assembly (section 9). The second main aspect to my work with developing countries is the activity that I have pursued in forging ties between the European People's Party, the Konrad Adenauer Foundation and parties in developing countries that belong to the EPP political family.

With regard to the ACP, as it was simply impossible to take into account developments in an indefinite number of countries, I decided to concentrate my efforts on a more restricted group of the most vulnerable states. In particular, I was most interested in small island states such as the Cabo Verde Islands (section 7), in countries with large stretches of desert areas such as Mali (section 5) – a country that struggles with significant problems of sustainability and even survival – and in those countries that suffer from periods of political instability such as Guinea Conakry, the Republic of Côte d'Ivoire and Mozambique (sections 3, 4 and 6).

In the work that I have undertaken in relation to UfM-PA, I have been especially attentive to

developments in Algeria. This is because I consider Algeria to be a country of key geo-strategic importance, both for Europe as a whole and for Portugal in particular. I also feel that European attitudes to the country are characterised by a certain apathy – or even indifference – with regard to this close neighbour (section 10).

As for the second main aspect, the EPP is actively engaged in discussion with and in counselling and informing African political parties, above all by means of the Windhoek Dialogue. This is a network that brings together the parties of the EPP, the Adenauer Foundation and the African political parties with similar outlooks to that of the EPP (section 12).

In addition to these two main interests, healthcare is of particular concern as cooperation in this sphere plays a crucial role in the battle against underdevelopment. An exemplary programme in this field is the European EDCTP clinical trials and vaccine development scheme. I had the opportunity to contribute to this programme in many ways during my European mandate (section 8). Finally, I have also closely followed changes in the political process in Burma and, above all, the remarkable path pursued by the Burmese opposition leader Aung San Suu Kyi (section 11).

6.2 - THE AFRICA, CARIBBEAN, PACIFIC - EUROPEAN UNION JOINT PARLIAMENTARY ASSEMBLY

Climate Change, Education, Training and the JPA

The ACP-EU Joint Parliamentary Assembly (ACP-EU-JPA) was created with the goal of bringing together the elected representatives of the European Community – the Members of the European Parliament – and the elected representatives of the African States and of Caribbean and Pacific countries that signed up to the Cotonou Agreement. The agreement – concluded in June 2000 for a period of 20 years – aims to promote economic, social and cultural development in the ACP regions.

Under the Cotonou Agreement, the representatives of the 78 ACP countries are members of the JPA. The JPA meets for a one week plenary session twice a year and meetings of the JPA occur alternately in an ACP country and an EU country. The work is overseen by two presidents elected by the JPA, who head the Bureau comprising 24 vice-presidents (12 EU and 12 ACP members, also elected by the JPA). The Bureau meets several times a year to ensure the continuity of the work of the JPA and to prepare new initiatives aimed mainly at strengthening and deepening cooperation. The Bureau also analyses

relevant policy issues and adopts positions on a comprehensive range of human rights cases. In 2003 three standing committees were created – the Political Affairs Committee, the Committee on Economic Development, Finance and Commerce and the Committee on Social and Environmental Affairs – with a view to developing more substantive proposals, which are then voted on by the JPA.

In 2009, after starting my term as MEP, I was elected co-chairperson of the ACP-EU Committee on Economic Development, Finance and Trade. The work that I undertook was mostly devoted to the Least Developed Countries. Since its first signing in 2000, the Cotonou Agreement has been open to revision every five years. When the revision of the Cotonou Agreement came up in 2010, I was eager¹ to draw attention to the dangers associated with climate change and energy security while promoting training and education in ACP countries. Indeed, concern about climate change has always been a central factor in my work with developing countries. The financial and economic impact of this phenomenon in ACP countries was discussed at length during the 19th session of the JPA in Tenerife.

In my speech on this subject², I stressed that the ACP countries:

“have contributed the least to climate change but are today suffering the most severe consequences of this phenomenon. Climate change threatens to undermine work undertaken in the domains of poverty, water and energy supply, food security and health. Climate change will contribute dramatically to the increased vulnerability and fragility of the least developed countries and small island countries.”



Speech at the 21st Session of the ACP-EU Joint Parliamentary Assembly in Budapest

I also pointed out that:

“the investment needed to combat climate change in developing countries cannot come exclusively from public funds: the private sector is also called upon to contribute. This requires innovative financing mechanisms and a new model of global governance that ensures greater participation of the ACP countries.”

However, whilst global warming is evidently a threat, at the same time, it is an opportunity to take a series of desirable measures.

The renewable energy resources that these countries possess are indispensable to their economic and social development. They will also enable these countries to achieve greater independence in terms of energy, something that will, in turn, help them cope with the global crisis. Investment in education and training is also essential in the fight against poverty, unemployment, emigration and the brain drain.

Healthcare

One of the main aspects of the ACP related activity that I have pursued over the last five years has been the training of health care professionals. In its report “Strengthening the Health System for Universal Health Coverage and Social Protection” the World Health Organization stressed the need to increase the number of workers in healthcare, particularly in the member countries of the ACP.

I took this call to action on the part of the World Health Organization – presented at the 19th Session of the ACP-EU-JPA in March 2010 in Tenerife – to intervene in the debate² and to express my support for the position taken by the World Health Organization. I mentioned that:

“the world does not have enough health professionals and many health professionals trained in ACP countries emigrate to developed regions on account of the absence of available opportunities and conditions in their countries of origin. With the increasing aging of the population, however, we need more and better professionals in this area.”

The shortage of medical doctors in ACP countries is unquestionable and, in this light, I urged European governments to look beyond the crisis and to increase the number of students training in the health sector.

During the same debate, I also called attention to the fact that a degree in medicine represent an average investment of €15 000 per year per student, while a degree in the humanities and the social sciences represented an investment of €2 500 per year per student. I mentioned that the restrictions in public finances prevailing at the time, discouraged



governments from increasing the number of students studying for degrees in medicine.

Report on Post-Copenhagen Arrangements

The phenomenon of climate change and its impact on developing countries is an issue that is particularly dear to me given my previous professional and academic activity. In fact, long before entering politics in 2000 – during the Portuguese EU Presidency – I took a sabbatical year from the Instituto Superior

Técnico, where I was then teaching. This allowed me to participate as an expert in the negotiations that led to the first commitment period under the Kyoto Protocol. Years later, towards the end of 2010, I was appointed shadow rapporteur for the report on “Post-Copenhagen: Technology Transfer, New Technologies and Building technical Capacity in ACP countries”⁴. This report advances a number of recommendations concerning innovation, development and the transfer of low carbon technologies to ACP countries as a means of addressing the challenge posed by climate change.

In the report, I argued that it was essential to “identify the experiences, barriers and opportunities experienced by ACP countries (...) and to adapt approaches to technology transfer to local conditions.” Both technical and institutional capacity building should be a priority and such an approach should be comprehensive rather than merely piecemeal. Issues such as the brain drain of qualified personnel – particularly due to low wages and poor working conditions – must be overcome. While the initial report refers to cooperation between companies, government agencies and research institutions in developed countries and ACP countries, I emphasized the importance of setting up “partnerships with intergovernmental institutions but also – at the local level – with non-governmental organisations and organisations that are firmly implanted in communities.”

As for how best to deal with the technological aspects, I believe that technology should, of course, be as clean and low in carbon emissions as possible but that it should also be efficient and economically viable. Pursuing these goals requires a holistic and sustainable approach covering social, institutional, environmental, economic and health issues. At the same time, technology should be able to offer a

response that both mitigates and adapts to climate change. Finally, I insisted on the need to ensure that the measures taken were of “most direct benefit to the ACP countries themselves under the Clean Development Mechanism” – one of the Kyoto market mechanisms – and that their implementation should take into account the “economic weaknesses of the least developed countries and the difficulties involved in creating economies of scale in small and remote islands.”

Modernisation of Customs

In October 2013, the EPP entrusted me with the role of shadow rapporteur for the report on “Regional Integration and Modernization of Customs for Sustainable Development in the ACP Countries in cooperation with the EU.”⁵ Customs administrations are, of course, crucial in the application of trade measures, in the detection of crime and especially trafficking of one sort or another, not to mention irregularities connected to tax. Customs and excise authorities are responsible for the collection of duties on goods and this is a crucial source of revenue for the public budget, especially for ACP countries struggling with high deficit levels and, in some cases, high levels of public debt. As shadow rapporteur, I lent my support to all the rapporteur’s recommendations particularly with regard to the modernisation and efficiency of the customs services as well as to encouraging closer cooperation between customs administrations. Modernisation requires the encouragement of and support for such aspects as the recruitment and training of customs experts, providing appropriate technical infrastructure (including ICT), simplifying procedures and reducing red tape. At the same time, it should not be forgotten that the deepening of regional

integration among ACP countries as a result of the modernisation of their customs services requires good governance and transparency as well as an effective legislative framework. Parliamentarians must encourage the adoption or amendment of legislation that moves in this direction whilst ensuring the full involvement of national parliaments and relevant stakeholders.

By the end of the term in November 2013 – during the 26th Session of the Parliamentary Assembly ACP-EU Joint Assembly held in Addis Ababa Ethiopia – I was appointed the main rapporteur for “Private Sector Development Strategy Including Innovation for Sustainable and Inclusive Development”⁶. This was an initiative that I had, in fact, originally proposed given that the development of private sector, training and innovation is a key pillar for economic growth in developing countries.

Macro-regions

During my mandate, considerable progress for ACP countries was also made in the area of regional policy. In the EU, it is possible to set up macro-regions in order to increase the effectiveness of regional policy. This is an idea that I believe, should be applied across the EU and there are already a number of exemplary applications of this type of regional policy. The Baltic Sea Strategy, for instance, provides a model for the coordination of policies and EU funding in geopolitical units – macro-regions – organised in relation to a set of specific criteria. This strategy, like the Strategy for the Danube Region and its accompanying Action Plan, meets the need to improve mobility, energy security, environmental protection, social and economic development, cultural exchange, security and civil protection in the regions concerned.

With this in mind and acting as Co-Chairperson of the Committee on Economic Development, Finance and Trade, I took an active role in furthering the committee's work dedicated to the "Euro-African-Atlantic Area and the Incorporation of the Outermost Regions (ORs) in the Regional Integration Process in Africa Western".

In the session devoted to "The Euro-African Atlantic Area" I set up and presented the ACP-OR working group for the Outermost Regions of the European Union, the French overseas departments and ACP countries neighbouring these regions⁷. During my speech, I expressed my support for the establishment of the ACP working group, stating that:

"since enlargement, Europe has tended to overlook the importance of the Atlantic area. The creation of the Euro-African Atlantic Area will deepen relations between the European south-west coast, the outermost regions (ORs) and neighbouring ACP countries. This will result in improving cooperation in areas such as transport, energy security, scientific exchange, the development of tourism, security and illegal immigration. I also argued that "the EU has several instruments that could be adapted for use in this respect. These include regional strategy (e.g. the Baltic Sea Strategy) and the neighbourhood policy."

The aim of the working group is to draw the European Commission's attention to the need for a space for cooperation - the "Euro-African Atlantic Area" - that includes the outermost regions of the Canaries, the Azores and Madeira as well as the ACP countries. Such an organisation aims to foster dialogue and cooperation between ORs and neighbouring countries under the auspices of the ACP Joint Parliamentary Assembly.

6.3 - REPUBLIC OF GUINEA

On 2 October 1958, Guinea gained its independence - as a one-party dictatorship with a closed economy - with Sékou Touré as president. Sékou Touré died in 1984 and a military junta headed by Colonel Lansana Conté seized power on 3 April of that year. The country had had no democratic elections until 1993 and in the elections that were then held, Lansana Conté won in a tight race before being re-elected five years later, in 1998. On 22 December 2008, President Conté died and was replaced by a military junta.

In September 2009, tens of thousands of demonstrators gathered in the largest stadium in Conakry to protest the impending nomination of the head of the junta, Captain Moussa Dadis Camara at the presidential election in January but the military junta violently suppressed the protests. Against a background of long periods of ethnic tensions and acts of political (and ethnic) violence related to the election campaigns, this repression occurred at a time when the international community was applying pressure on the leader of the coup to respect his commitment not to run for election and to relinquish power to civilian government.

Nevertheless, in 2013, the Republic of Guinea set out on the path to full democracy. Parliamentary elections marked a significant step towards the completion of this transition and the creation of new democratic institutions. It was extremely important

that the process be transparent, peaceful, inclusive and open to all democratic forces in the country. At the 25th session of the ACP - EU-JPA held at the European Parliament in Brussels from 17 to 19 June 2013 (within the framework of the Committee on Economic Development, Finance and Trade), I presented a resolution on Guinea⁸ expressing solidarity with the people of the Republic of Guinea and their efforts to complete the process necessary to the establishment of a genuinely democratic state.

I took advantage of this resolution, to warn of the risk of outbreaks of violence between communities and to appeal to all Guinean political leaders to contribute to a peaceful and democratic process. I also stressed the need for all sides to demonstrate responsibility and democratic maturity. The resolution also called attention to the need for technical assistance provided by the European Union – and other bilateral and multilateral partners – in order to monitor the electoral process and to ensure that the elections were transparent. The resolution on the Republic of Guinea was adopted by the ACP-EU Joint Parliamentary Assembly in Brussels on 17 June 2013.

6.4 - THE REPUBLIC OF THE CÔTE D'IVOIRE

In the Republic of Côte d'Ivoire, the mandate of the President, Laurent Gbagbo, ended in October 2005. However, the rampant insecurity in the country made it impossible to hold free democratic elections. Consequently the government's mandate

was extended by one year in accordance with a proposal from the African Union backed by the UN Security Council. However, in the years that followed, the situation failed to improve and the elections were eventually postponed until November 2010.

As announced by the Electoral Commission, the preliminary results for this election meant that Alassane Ouattara would form the next government with 54 % of the votes. International observers considered the election had been properly conducted but Gbagbo's party submitted a challenge to the Constitutional Council. This Council, which included a large number of Gbagbo's supporters, declared that a share of the votes cast had been invalid and reversed the final election result. Gbagbo was declared the winner of the elections with 51% of the votes.



With East Timor President, José Ramos-Horta in the European Parliament, Brussels

Nevertheless, most UN member states recognized Ouattara as the victor in the process and the Security Council adopted a resolution to this effect based on the position of the Economic Community of West African States (ECOWAS). ECOWAS suspended the Côte d'Ivoire from all its organs and the African Union refused to allow the country membership. Negotiations, accompanied by acts of violence, continued for months with Ouattara taking control of most of the country and Gbagbo remaining entrenched in Abidjan, the country's largest city. International organisations reported numerous human rights violations on the part of both Gbagbo's and Ouattara's forces.

In April 2011, Gbagbo was captured by Ouattara's forces and once Ouattara had been internationally recognized as the new president, it became crucial that the Côte d'Ivoire set out on the path to national reconciliation. In May 2011, during the 21st Session of the ACP-EU Joint Parliamentary Assembly, I presented an urgent draft resolution⁹, which was subsequently adopted. It called on the European Commission to provide all humanitarian aid needed to the Côte d'Ivoire and insisted that those who had been responsible for atrocities, particularly where civilians had been involved, were tracked down and brought to justice. The resolution called for measures to be undertaken in a spirit of national reconciliation and for President Ouattara to restore stability and to promote the unification of the country. This would provide the basis for future development, prosperity and growth. The resolution was adopted by the ACP-EU Joint Parliamentary Assembly in Budapest on 17 May 2011.

6.5 - MALI

The northern regions of Mali penetrate deep into the central part of the Sahara, a region that had been historically prominent the transportation of gold, salt and slaves. Following the establishment of sea routes by the Europeans, these trans-Saharan routes lost something of their role. However the Republic of Mali is still the third largest gold producer in Africa and the Republic continues to play a crucial role in the security of the Sahel region. It is above all for this reason that the stabilisation of Mali is essential not only to North Africa but also to Europe.

In 2002, the people of Mali elected Amadou Toumani Touré as President of the Republic. Touré was a retired general who had played a key role in the democratic and peaceful revolution that had taken place in March 1991. During the term of his mandate, Mali was considered to be one of the most stable countries in Africa, both politically and socially. However tensions – sparked to some considerable extent by adverse weather conditions – broke out between the Tuareg, who inhabit the northern part of the country, and the population groups in the southern regions. These tensions remained acute and culminated in a Tuareg rebellion in early 2012 led by the National Liberation Movement of Azawad (MNLA).

In March of the same year – as a result of the dissatisfaction of the population with the inability of President Touré to effectively deal with the Tuareg rebellion – an army officer, Amadou Sanogo, launched a coup that enabled him to take power. The coup

eventually allowed the MNLA to assume control of the three northern regions of Mali – Timbuktu, Gao and Kidal – and to unilaterally declare the independence of these regions as the state of Azawad. However, neither Mali nor the international community recognized this as legitimate. The situation was further complicated when Islamic fundamentalists, who had previously helped the MNLA to defeat the Government of Mali, turned against the Tuaregs and took over the region, introducing Sharia law in the process. In January 2013, the French army intervened at the request of the Sanogo’s Government and with the help of Malian troops returned control of the north of the country to the Malian the government.

In my speech at the 25th session of the ACP-EU Joint Parliamentary Assembly – held in Brussels in June 2013¹⁰ – I pointed out that while “the current Republic of Mali has been stage for several empires of enormous cultural and religious richness, being a territory that trans-Saharan trade had necessarily crossed for centuries (...) with the outbreak of the current crisis, the situation has deteriorated in political, security and humanitarian terms.”

Consequently:

“the EU should take the lead in defining a strategy to solve the problems encountered in the Sahel region and the EU has a crucial role to play in furthering integration on the basis supplied by the twin pillars of development and security.”

At the end of my speech, I mentioned that it was “essential that there was a collective effort on the part of the EU and the UN: the stabilization of Mali is essential to the security of the entire Sahel, North Africa and Europe.” I also expressed my full

support for the resolution on the reconstruction and democratization of Mali adopted at the plenary session of the EP in Strasbourg.

6.6 - MOZAMBIQUE

Mozambique was another country that I devoted considerable attention to during my term in the European Parliament. This involved the Windhoek Dialogue, shortly discussed in more detail. It was through this network that I was able to follow the development of the MDM (Democratic Movement of Mozambique), a party created in 2009.

During the last municipal elections in November 2013, the MDM managed to gain representation on 51 of the 53 local councils and, today, the MDM governs in three of the four major cities of the country (Beira, Quelimane and Nampula). The organisation has also achieved spectacular results in elections in Maputo and Matola. However, Renamo did not participate in the elections and Frelimo won in 50 out of 53 local councils with the MDM achieving electoral victory in the remaining three municipalities. As a result, MDM benefited from the Renamo protest and was able to assume influence at a national level. After examining the results, Pascoal Mocumbi, a former prime minister and a founder of Frelimo, publicly declared that “it was possible for “democratic changes in power to make themselves felt in the country”.

One of the requirements of Renamo is the presence of international observers during negotiations with

the Mozambican government. As a result – at the formal opening of the 26th session of the ACP-EU JPA in Addis Ababa on 25 November 2013 and after the European Commissioner for Development, Andris Piebalgs had spoken – I took the floor and drew the attention of those present to the fact that Mozambique was undergoing something of a difficult period. After 20 years of peace, its civilian population had no desire to return to violence and war and I called for renewed dialogue between the parties concerned.

I requested that Andris Piebalgs clarify the possible role of the EU in contributing to dialogue on the ground and, with it, to the consolidation of peace, stability and economic growth in Mozambique. Commissioner Andris Piebalgs replied that he believed that the EU might act as an observer or facilitator in the negotiations between the two parties provided that they expressed a desire for the EU to play this role.

6.7 - CAPE VERDE- SPECIAL PARTNERSHIP WITH THE EUROPEAN UNION

Strategic Importance of Cape Verde Islands

Africa is now the fastest growing region of the world and, indeed, over the past decade, six of the fastest growing economies in the world have been African. The proper use of the potential that Africa represents

requires more and better cooperation between Europe, Africa and South America. In particular, for the European Union, both strategically and economically, the South Atlantic is an increasingly important area.

Cape Verde is a country whose weaknesses have not prevented it from confronting enormous challenges. Against all odds, an island nation with no natural resources and that suffers from long periods of drought has managed by means of good governance, appropriate policies and international cooperation to achieve the status of a “Middle-Income Country”. If international recognition is undoubtedly deserved in light of this achievement, this does not mean that the country will not be faced with more challenges, one that are potentially even more difficult to surmount, at a time when the European and American economies are experiencing difficulties of their own.

Cape Verde enjoys a unique and privileged geographical situation on the African continent. It lies in the centre of the South Atlantic, a central geopolitical position for Europe and South America. If it is able to leverage its privileged geographical position, Cape Verde should be able to play a pivotal role in any tri-continental dynamic that develops in the South Atlantic region. To succeed in this task, the country should be able to rely on consolidating its political and social advances and strengthening international cooperation. The Special Partnership will continue to play a crucial role, in this respect.

Cooperation with the EU and the Special Partnership

Bilateral relations between the EU and Cape Verde are framed by the Cotonou Agreement of 2000 and were strengthened with the creation of a special

partnership between the EU and Cape Verde alongside a Mobility Partnership. These initiatives are aimed at providing a framework for political dialogue and enhanced cooperation between the European Union and the Republic of Cape Verde.

The Special Partnership was adopted on 19 November 2007 and Cape Verde is the only ACP countries which is able to boast a special partnership with the European Union. The special partnership falls under the terms of the implementation of the Cotonou Agreement. However, it seeks to exploit all aspects of the Agreement in order to generate a new model of cooperation between the EU and Cape Verde, deepening and broadening cooperation between both entities and exploring new avenues for collaboration. The Special Partnership is a policy approach that goes beyond a mere donor-recipient relationship. This is not a transfer of funds or other benefits from one body to another but, instead, an incentive for the parties to develop projects and initiatives that enable them to take reciprocal advantage of the potential that both represent.

The tenth European Development Fund, in force until 2013, is the main source of support for technical and financial cooperation between the European Union and Cape Verde. Approximately 86% of available funds are channelled into support for the general budget of the State of Cape Verde with a view to promoting the Special Partnership and achieving the reduction of poverty and encouraging sustainable economic growth. The remainder is dedicated to the water sector, sanitation and other specific projects in various areas.

Trade between Cape Verde and the European Union is a key factor in the development of the country. As the President of the European Commission, José Manuel

Barroso, stated in his speech to the National Assembly of Cape Verde on the occasion of the anniversary of five years of the European-Cape Verde Special Partnership Union: “The European Union is by far the largest trading partner of Cape Verde, constituting 70% of its imports and representing a target of 85 % of its exports. The scale of these trade relations helps explain the growth of Cape Verde’s economy in recent years, despite the global economic crisis.”

The Group of Friends

In June 2010, I set up the Group of Friends of Cape Verde in the European Parliament in Brussels¹². The objective was to deepen relations between Cape Verde and the European Union in matters of sustainable development, neighbourhood policy, energy, scientific research and education – to name but these – but also to help Cape Verde better exploit the opportunities opened up by the Special Partnership that the archipelago had concluded with the EU.

Neither the European Parliament nor the National Assembly of Cape Verde were formally involved in the monitoring mechanism of the Special Partnership and, hence, I felt that it was necessary to familiarise MEPs with the actual state of affairs in the Cape Verde islands and to promote the Special Partnership in the different working committees in the Parliament. This was especially the case in so far as MEPs from Central, Northern and Eastern Europe were concerned. These initiatives were pursued by means of visits, seminars and a newsletter and the dialogue with Cap Verde authorities and personalities. An example was the seminar with the Minister of Culture of Cape Verde held on 27 March 2012 during his visit to Brussels¹³.

Visit to Cape Verde

To commemorate the five years of the European Union-Cape Verde Special Partnership, the Group of Friends of Cape Verde, organised an EP delegation to Cape Verde during which fruitful contacts with Cape Verde¹⁴ parliamentarians were established. The initiative took place at the invitation of the President of the National Assembly of Cape Verde, Dr Basilio Mosso Ramos. MEPs reviewed the use made by Cape Verde of European funded projects – in a very favourable light – and recognised and underlined the importance of disseminating best practices at the level of the European Parliament and the European authorities in general.

Drug trafficking and religious fundamentalism pose serious security threats across West Africa, particularly in Guinea-Bissau, Mali and the rest of the Sahel region. Similarly, security is one of the most pressing issues in Cape Verdean society and the government of Cape Verde has done admirable work in this area. To concentrate on the question of drug trafficking alone here, the EU has lent its support to the Government's determined fight against drug trafficking in Cape Verde but it is also essential to obtain the cooperation of all relevant regional and international organizations and to intensify regional and intercontinental cooperation between Europe, West Africa and Latin America. Indeed, it is widely recognized that only a concerted international drive will eradicate the scourge of drug trafficking. In this context, ECOWAS, the CPLP, the African Union, the European Union and the United Nations should work closely to provide adequate responses and this should also involve ensuring free and transparent elections in the countries of the region that are held hostage by corrupt governments and drug traffickers.

An important tool in this field is the European Neighbourhood Policy (ENP) established in 2004 with the aim of strengthening the prosperity, stability and security of the EU and neighbouring countries. The ENP is currently applied in 16 countries with direct, land or sea borders with the EU. I have always believed that it would be of interest to both the EU and Cape Verde were this country to be included in the group of countries covered by the ENP. Hence, in March 2011, together with a number of other MEPs, I signed an amendment to the ENP to include Cape Verde. It was gratifying that our proposal was endorsed by the European Parliament.

The Return Invitation

With a view to pursuing strengthened relations between the EU and Cape Verde and promoting awareness of the history and culture of this country, in September 2013, the Group of Friends of Cape Verde returned the invitation that they had previously received from Cape Verde. The President of Cape Verde was invited to visit the European Parliament and to participate in a cultural event that included the performance of the Cape Verdean singer Nancy Vieira¹⁵. In my speech at the opening of the event, I stressed: “It is cultural diversity that underlies the uniqueness of cultural identity” and with particular respect to Cape Verde “the appreciation of its heritage has been an important means to achieving human development, forming an integral complement to economic development based on principles of the sustainable use of resources.”

6.8 - HORIZON 2020 AND EDCTP

The EDCTP

I always had a deep conviction that the health sector is crucial to overcoming developmental barriers. I have already mentioned the lack of sufficient numbers of healthcare professionals as being one of the problems of developing countries. Another sizeable difficulty is the predominance of poverty-related diseases (e.g. AIDS, malaria and tuberculosis) but also of neglected diseases that have not been given priority by private groups working in the health area. I believe that these diseases should be a priority for the public sector, in particular as regards scientific research.

Consequently, it was with great enthusiasm that I accepted the invitation from Máire Geoghegan-Quinn, the Commissioner for Research, Innovation and Science, to participate in a high-level conference to be held in Cape Town on 5 November 2012¹⁶. The invitation to the conference was addressed to me as a member of the ITRE Committee but also as chairperson of the ACP-EU-JPA Committee on Economic Development, Finance and Trade.

The conference would discuss the second programme of the European and Developing Countries Clinical Trials Partnership (EDCTP). The EDCTP is a partnership between Europe and the developing countries with a view to conducting clinical trials. It is a partnership of the Public-Public type (P2P) under Article 185 of the Treaty on the Functioning of the

European Union (TFEU). This treaty allows the EU to participate in research programmes undertaken by a number of Member States, including participation in structures that have been set up to run national programmes. The programme is funded by various partner countries and the Community contribution is financed through the HORIZON 2020.

The EDCTP programme is an excellent example of the leading role that the EU is able to take in international cooperation. The programme has proved to be extremely effective in improving the quality of medical intervention and research in the struggle to overcome poverty related diseases such as AIDS, malaria and tuberculosis. Hundreds of African researchers and doctors have been trained under the programme and African experts have coordinated over half of the 57 clinical interventions and have been granted three-quarters of EDCTP funds.

The EDCTP's High Representative is the former Prime Minister of Mozambique, Dr Pascoal Mocumbi. Nine years before, as Minister for Science, Innovation and Higher Education in Portugal, I was directly involved in the negotiation of and approval by the Competitiveness Council of the first EDCTP. In the process, I had proposed Dr Pascoal Mocumbi for the post of secretary-general for the project. For my part, it was rewarding for me to have been nominated shadow rapporteur for the second phase of the EDCTP project, which will run for 10 years (2014-2024) with an EU contribution of €700 million¹⁷.

Horizon 2020

The contribution of the HORIZON 2020 programme to the EDCTP is substantial. Within the third pillar - devoted to societal challenges - health is considered

one of the most important challenges and with a budget of about €8 billion, health correspondingly has the most substantial share of the budget. The third pillar includes: “Health, Demographic Change and Wellbeing”. One of the sections of this challenge is devoted to initiatives resulting in the development of new vaccines and drugs alongside a greater focus on disease prevention, including poverty related diseases such as AIDS, malaria and tuberculosis. Given the new philosophy adopted in HORIZON 2020 – which includes simplified access to finance – it is anticipated that EDCTP access to financing will be facilitated. Such facilitated financing is all the more important when it is necessary to bring funds together from different sources in order to meet costly spending requirements. This will contribute, I am sure, to the organisation’s being able to actively continue its work with determination.

EDCTP2

The EDCTP2 programme will continue to lend its support to the clinical development of diagnostics, drugs and vaccines against AIDS, tuberculosis and malaria. The EDCTP2 initiative will also contribute to studies on neglected infectious diseases (except Chagas disease) as defined by the World Health Organization on its list of seventeen neglected infectious diseases. In this context, I have made many contributions to the EDCP of which the most noteworthy are perhaps: increased transparency in decisions and processes (mainly in the definition of procedures); removing barriers to the participation of new research groups; the implementation of measures to “broaden participation”; disclosure of contracts and other relevant information through the same channels as the HORIZON 2020 (Participant Portal); synergies with other funding sources,

especially with the Development Fund of the EU (as was already the case with the Gates Foundation); increases in the scope of EDTCP 2, including other neglected and poverty-related diseases; open access to publications in line with the new rules governing HORIZON 2020; the establishment of research priorities in a more results orientated perspective alongside the acceleration of this process so as to more quickly eradicate neglected and poverty-related diseases and, finally, the strengthening of coordination and alignment with other European and national initiatives such as the Scientific Panel on Health established under HORIZON 2020.

6.9 - EUROMED

The Parliamentary Assembly of the Union for the Mediterranean (UfM-PA) was set up as the parliamentary wing of the partnership established by the Barcelona Declaration of November 1995. The UfM-PA has members from both sides of the Mediterranean. As a substitute member of the Delegation of the UfM-PA; I have participated in several meetings of the Plenary of the Parliamentary Assembly of the Union for the Mediterranean. This was the case, for instance, with the plenary held at the King Hussein Bin Talal Convention Centre in Jordan on 8 and 9 February 2014¹⁸. The plenary session focused on the peace process in the Middle East and the situation of Syrian refugees in Turkey, Jordan and Lebanon.

Various personalities expressed their commitment to supporting the democratic process in the

Southern Mediterranean by promoting initiatives that encourage investment and creation of youth employment in the region. For my part, I stressed the role of education in the peace process in the Middle East, arguing that it is through education, culture, science and communication that a culture of peace emerges in a context characterised by economic and social development. Consequently, the manner in which countries invest in knowledge will determine both the extent of their capacity to take advantage of the new opportunities created by globalisation as well as their ability to meet local and global challenges.

I also mentioned a number of programmes developed in Europe (e.g. ERASMUS +) that combine internal EU priorities with cooperation with third countries. This allows for the promotion of partnerships alongside the multilateral mobility and exchanges of students, teachers and researchers between the EU and third countries. I stressed the need to intensify the use of these programmes to increase awareness of new cultural and social environments as this would facilitate understanding of other cultures and allow Europe to play a global role in furthering a culture of peace.

Following the plenary session of the Parliamentary Assembly for the Mediterranean¹⁹, I also participated in the EPP conference with parties from the Mediterranean with the same political outlook as the EPP. The Conference was co-chaired by Joseph Daul, Chairman of the EPP and Chairman of the Parliamentary Group of the EPP in the European Parliament. This meeting was a continuation of several successful exchange programmes organised by the EPP with representatives from Mediterranean countries and civil society over the last two years.

Joseph Daul stressed that the EPP is especially committed to providing specialized assistance to countries seeking to establish a political system that respects the rule of law, democracy, gender equality, human rights as well as the rights of ethnic and religious minorities.

6.10 - ALGERIA

Algeria is the largest country in Africa by surface area and the largest country in the Maghreb region in terms of population. Geographic proximity to Europe and an abundant supply of natural gas – critical to the day-to-day existence of Europeans – means that the stability of Algeria has a strategic importance for Europe as a whole.



EUROMED Rome

However, Algerians have lived under a state of emergency for 20 years. In 1991, the Islamic Salvation Front won the first round of the elections with an overwhelming majority but shortly afterwards a military coup prevented the holding of the second round of elections. A state of emergency was declared, one that then lasted a generation. The sequence of events triggered by the Arab Spring in late 2010, however, forced the Algerian government to revoke this state of emergency and the government announced a wide range of political and economic reforms. The reforms aimed at changing electoral law and more particularly at amending legal provisions concerning the representation of women in political life, the nature of political parties and civil society organisations. In 2011, the government increased the state budget by 25%, subsidised a number of food products, increased the salaries of civil servants, particularly teachers and created a housing programme as well as a programme for youth employment and a micro-credit scheme also directed at young people.

To ensure the legality of the election to be held in the spring of that year, President Bouteflika announced that the elections would be monitored by international observers. I travelled to Algeria in the company of a group of other parliamentarians in late 2011 as part of an observer mission dispatched by the European Parliament²⁰. Consultations were held with leading figures in Algeria including government leaders, ambassadors, leaders of opposition parties and trade unionists. All were fully aware that the path to the spring elections would be demanding but that this was an opportunity that Algeria could not miss. It was necessary to persist in the democratization of the political system by April 2012 as this involved encouraging the development of a rejuvenated

political elite and pursuing a wide-ranging process of national reconciliation. At the same time, greater diversification was required in the economic system as an economy based almost exclusively on hydrocarbons exports had contributed little to employment. It was also essential to strengthen the fight against terrorism, something that Algeria had hitherto pursued in collaboration with Mali, Niger, Mauritania, Chad, Burkina Faso and Nigeria.

It was important that Europe assisted Algeria on the path to the spring elections and that the EU continued to lend its support to efforts made to ensure further progress following the elections. While respecting the independence of the country, Europe cannot turn its back on Algeria as it has, unfortunately done too often in the past. It was personally gratifying that the efforts that had been undertaken to contribute to the Algerian elections were able to bear fruit and the international observers reported that the elections had taken place without any major irregularities.

I hope, however, that the Algerian political elites remain attentive to the fact that elections alone do not ensure political and social stability and that they remain committed to the democratization of civil society and of the state. The protests that followed the election – as well as the disproportionate reaction of the authorities – indicate that the road ahead remains long and that the political class will have much more to do than simply oversee the electoral process.

The current state of Algerian society and of its neighbouring countries means that President Abdelaziz Bouteflika will only be able to meet the challenges the country faces by mobilizing civil

society and encouraging a renewal of the political class. It is desirable that this happens progressively and peacefully so as to avoid upsurges of radicalism or the polarisation of social groups. This renewal of the political class and the openness to the contribution that civil society is able to make are vital. The sooner efforts are made in this direction, the sooner will Algerians be able to reap the benefits of life in a free and democratic society.

6.11 - BURMA

A Repressive Regime

After the independence achieved on 4 January 1948, Burma set out towards achieving a multiparty, parliamentary democracy and Burmese politicians gained international fame and recognition. U Thant, one of the foremost of these politicians, was elected Secretary-General of the United Nations in 1961 and remained in office for two terms. Among his staff was to be found a young woman by the name of Aung San Suu Kyi, daughter of the hero of the struggle for national independence, Aung San. The coup staged by General Ne Win in 1962, however, plunged the country into a ruinous totalitarian, socialism. The Burmese would only begin to awaken from this nightmare on 8 August 1988 during a mass popular uprising that became known as the 8888 Uprising (the uprising of 8/8/88).

As a result of international pressure coupled to a popular movement and the opposition struggle – led by Aung San Suu Kyi – the military government was

forced to hold free elections in May 1990. Aung San Suu Kyi's party, The National League for Democracy, won the elections with over 60% of the vote and 80% of the seats in Parliament and, in 1991, she was awarded the Nobel Prize for Peace. However, the military government annulled the elections and maintained the repressive regime in place with Aung San Suu Kyi being sentenced to house arrest. Burma remained a military dictatorship with chronic problems of human rights violations: news of child abuse, the segregation of ethnic minorities and the violation of the rights of women, forced labour and corruption followed each other in thick succession. The government jailed more than 2 200 political prisoner and when Cyclone Nargis struck the country, the government refused the entry of international aid with the result that more than 3 million people were left homeless and approximately 150 000 people died.

The European Campaign in favour of Democracy in Burma

During my visit to the region in the summer of 2010, I had the opportunity to meet with international journalists and members of NGOs working with refugees and ethnic minorities on the Thai border with Burma. Their accounts of events in the country unambiguously confirmed allegations of abuse and human rights violations. New elections were scheduled for 7 November 2010 but to avoid a humiliating outcome similar to that of 1990, the regime enacted laws that excluded registered political prisoners from standing for election as well as Burmese citizens married to foreigners. 25% of the seats in parliament were reserved for the military. Aung San Suu Kyi, for her part, remained under house arrest and there was nothing to indicate that she would be released before the election.



With the Nobel Peace Prize winner Aung San Suu Kyi during the Myanmar Women's Forum 2013 in Rangoon

Concern with this blatant violation of democratic principles compelled me to take part in various movements organised in Brussels in response to this state of affairs. I took the initiative to organize a seminar on the situation in Burma²¹, attended by a number of prominent Burmese opposition leaders and international figures who were fighting for a change of regime in the country. Preparation for this seminar took me to Thailand²², where I was able to meet diverse representatives of the media and of opposition groups concerned about the Burmese situation.

I invited President Ramos Horta, President of Timor-Leste and Nobel Peace Prize winner, as the keynote speaker at the seminar. Timor-Leste is a country in South-east Asia with strong ties with Portugal and Europe and, as such, is uniquely positioned to act as a bridge between the ACP (Caribbean and Pacific countries), the CPLP (the Community of Portuguese

Language Countries), ASEAN (the Association of South-East Asian Nations) and Europe. On account of his prestige and international credibility as well as his extensive experience and marked sensitivity to issues of human rights, President Ramos Horta has made an important contribution to the Burmese question.

During the event, President Ramos Horta also called for a tripartite dialogue between the Burmese government, the opposition and the various ethnic minorities among the population. Indeed, in Burma, there is a rich, ethnic mix with over 100 different languages and a broad diversity in faiths and distinct cultural traditions. However, the country's history is peppered with violent episodes resulting from unresolved ethnic tensions. President Ramos Horta also questioned the effectiveness of economic sanctions on the grounds that they harm the Burmese people themselves and do little or nothing to influence authoritarian government. For my part, I made an appeal to the European Parliament to reaffirm its condemnation of continued human rights violations and of basic democratic principles in Burma. I also called on the Parliament to urge the Burmese government to ensure free elections, to release political prisoners and to begin the process of national reconciliation and the transition to democracy. Finally, I emphasized the importance of involving Russia, India and China in the search for a solution to the crisis that Burma was then experiencing.

It would be naive to expect that the situation in Burma - a situation that is of concern to any democrat - should undergo significant improvement at a single stroke. However, we retained hope that the impending elections, despite the difficult conditions

in which they were held, might pave the way towards a more just, free and democratic society. Our hopes have partially materialised: San Suu Kyi was finally released on 13 November 2010 and began the arduous task of national reconciliation. In April 2012, the Burmese leader was elected to the lower house of the Burmese Parliament after her party had won 43 of the 45 free seats in the chamber. In October 2013, 23 years after being awarded the Sakharov Human Rights Prize, San Suu Kyi arrived in Strasbourg to receive the award that Parliament had bestowed on her in 1990 and which she had been unable to formally accept on account of her house arrest.

Aung San Suu Kyi and Women's Rights

In this context, it was extremely rewarding for me to have personally made Aung San Suu Kyi's acquaintance during my visit to Burma to participate in the Myanmar Women's Forum 2013, held in December 2013 in Rangoon²³ where I had the opportunity to meet both Aung San Suu Kyi and the director of the IMF, Christine Lagard. The Women's Forum Myanmar 2013 was the first international conference on women held in the country and was organized by the Women's Forum for Economy and Society. This is an organisation that aims to create an international network that promotes the influence of women and to draw up concrete action plans that encourage women to contribute to society and to the diversity of the business world. During the opening of the forum, Aung San Suu Kyi made a poignant call to build a free and democratic society in Burma and went on to detail some of the enormous difficulties faced by women, in particular, and the democratic opposition in Burma, in general.

This remarkable woman is currently leader of the National League for Democracy and Member of the Burmese Parliament and has recently announced her intention to run for the next presidential elections, scheduled for 2015.

6.12 - POLICY DIALOGUE ON AFRICA AND THE MEDITERRANEAN

The Windhoek Dialogue

My work in African or the Mediterranean has been largely pursued by means of the Windhoek Dialogue - in connection with political parties that share the EPP outlook - alongside activity and meetings organized under the auspices of the Adenauer Foundation for the Mediterranean Region. The Dialogue is an initiative structuring EPP involvement in African Policy and was launched in March 1996 in Windhoek, the capital of Namibia.

By means of the Windhoek Dialogue and the structures that have been set up by the Konrad Adenauer Foundation, the EPP continues to contribute significantly to good governance and democratization in Africa and the Mediterranean. The Dialogue also underpins the work undertaken by the UAPDD - the Union of African Parties for

Democracy and Development – which currently unites 25 political parties from 24 African countries.

Between 29 October and 1 November 2010, in my capacity as Vice-President of the ACP-EU-JPA Committee on Economic Development, Finance and Trade²⁴, I participated in a meeting in Windhoek. The meeting had several purposes including: the preparation of a joint statement to be presented at the EU-Africa summit; discussion of national issues presented by the UAPDD; the transmission of information concerning the entry into force of the Lisbon Treaty and the repercussions of this document for external relations to African participants; explanation of EU actions aiming to combat the effects of the global economic crisis.

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ANNEX A

**Recommendations made in the
Carvalho report “Simplifying the
Implementation of the Research
Framework Programmes”**

RECOMMENDATIONS OF THE REPORT	IMPLEMENTED ALREADY IN FP7	DONE IN THE MIDTERM REVIEW OF FP7	IMPLEMENTED IN HORIZON 2020	CHANGES NEEDED TO FINANCIAL REGULATION
Uniform interpretation of rules and regulations	A recently established steering group of senior officials from all the Commission departments and agencies involved will remove inconsistencies in the application of the rules on research funding. Input from stakeholders possible through web-based central enquiry service			
Revision and/or extended interpretation of the EU Staff Regulation				(Staff regulation)
Distinction clearly between fraud and errors				
Higher rate of tolerable risks of error (TRE)				
Research funding should be more trust based and risk tolerant towards participants				

<p>Broader acceptance of usual accounting practices for the eligible costs</p>	<p>Allowing more flexibility in how personnel costs are calculated so that EU research grant holders can apply their usual accounting methods when requesting reimbursement for average personnel costs. They will no longer need to set up entire parallel accounting systems just for this purpose</p>			
<p>Simplifying the calculation of average personnel</p>	<p>Allowing more flexibility in how personnel costs are calculated so that EU research grant holders can apply their usual accounting methods when requesting reimbursement for average personnel costs. They will no longer need to set up entire parallel accounting systems just for this purpose</p>			
<p>Accept statements of assurance on the reliability of the organization's annual accounts</p>				
<p>Combining funding rates and defining indirect costs</p>				
<p>Lump sums and flat rates voluntary basis; clarify the terminology</p>				

RECOMMENDATIONS OF THE REPORT	IMPLEMENTED ALREADY IN FP7	DONE IN THE MIDTERM REVIEW OF FP7	IMPLEMENTED IN HORIZON 2020	CHANGES NEEDED TO FINANCIAL REGULATION
Introduction of lump sums covering 'other direct costs'				
Facilitate modification of the grant award agreement				
Simplification of time-recording mechanisms				
Lift the obligation to recover interest fees on pre-financing				
Prizes to be encouraged but not a substitute for properly structured funding				
Reimbursement of costs incurred after the presentation of the proposal				
Definition of eligible costs; considering VAT an eligible cost item where non-deductible				
Commission's relevant audit strategies				

Precise, consistent and transparent rules of procedure for audits				
Implement the 'single audit approach'				
Reducing the need for ex-post audits and retroactive corrections; to resolve prior situations				
Introduction of a Response procedure				
Favours 'science-based' funding				
Shortening the average time-to-grant and time-to-pay				
Shorten time-to-contract				
Extend the average time from the publication of the call to submitting the application				

RECOMMENDATIONS OF THE REPORT	IMPLEMENTED ALREADY IN FP7	DONE IN THE MIDTERM REVIEW OF FP7	IMPLEMENTED IN HORIZON 2020	CHANGES NEEDED TO FINANCIAL REGULATION
Not abolish the legal requirement for an opinion by committees of Member State				
‘Two-stage’ application procedure				
Simplification of the application and contractual procedures				
One single Commission project Officer				
Each document provided by the Commission and its services should clearly establish its legal status				
E-administration and IT tools				
Information and awareness-raising campaign				
Commission’s Open Access Pilot				
Ensure full and effective beneficiaries’ involvement in the use of FP7 resources				

Increased transparency as regards the process of topic selection for calls				
Harmonised peer review system				
Reduced set of rules and common principles for funding				
Launch training for project officers and internal auditors				
Reduction in the diversity of instruments				
Public-private venture and loan capital investments				

Note: The two only measures presented in my report “Simplifying the Implementation of the Research Framework Programmes” that were not implemented are: “Revision and/or extended interpretation of the EU Staff Regulation” and “Higher rate of tolerable risks of error (TRE)”.

ANNEX B

List of Abbreviations

ACP - African, Caribbean and Pacific

ACP-EU - (Joint Parliamentary Assembly): Africa-Caribbean-Pacific-European Union

ASEAN - Association of Southeast Asian Nations

EIB - European Investment Bank

BUDG - Committee on Budgets

CEFIC - European Chemical Industry Council

CLORA - Club de Recherche des Organismes Associés

CF - Cohesion Fund

COP - Conference of the Parties

COPERNICUS - European Earth Observation Programme

COSME - European Programme for the Competitiveness of SMEs

CPLP - Community of Portuguese Language Countries

CRUP - Council of Rectors of Portuguese Universities

CSISP - Coordinating Council of Polytechnic Institutes

DTE - Energy Taxation Directive

EAFRD - European Agricultural Fund for Rural Development

EDF - European Development Fund

ERDF - European Regional Development Fund

EIF - European Investment Fund

EIT - European Institute of Innovation and Technology

ECOWAS - Economic Community of West African States

EDCTP - European and Developing Countries Clinical Trials Partnership

ENP - European Neighbourhood Policy

ENVI - Committee on the Environment, Public Health and Food Safety

ERASMUS - European Community Action Scheme for the Mobility of University Students

ESF - European Social Fund

EUA - European University Association

EUROMED - Euro-Mediterranean Partnership

EP - European Parliament

EPP - European People's Party

FET - Future and Emerging Technologies

GALILEO - European Global Satellite Navigation System

GDP - Gross Domestic Product

GHG - Greenhouse Gases

HORIZON 2020 - Horizon 2020 Framework Programme for R&I (2014-2020)

ICT - Information and Communication Technologies

IEE - Programme Intelligent Energy-Europe

IMI - Public-Private Partnership for Innovative Medicines

IMM - Instituto de Medicina Molecular

ITER - International ITER project on nuclear fusion

ITRE - Industry, Research and Energy Committee

JPA - Joint Parliamentary Assembly

JTI - Joint Technology Initiative

LERU - League of European Research Universities

MEP - Member of European Parliamentary

NGO - Non-Governmental Organization

NSRF - National Strategic Reference Frameworks

R&D - Research and Development

OR - Outermost Regions

SME - Small and Medium Enterprise

SURE - Temporary special committee of the European Parliament on 'Policy Challenges and budgetary resources for a sustainable European Union after 2013'

TFEU - Treaty on the Functioning of the European Union

UfM-PA - Union of the Mediterranean Parliamentary Assembly

UAPDD - Union of African Parties for Democracy and Development

UN - United Nations

ANNEX C

**Publications as Member
of the European Parliament**

A) PARLIAMENTARY REPORTS AND OPINIONS

1. Report on simplifying the implementation of the Research Framework Programmes, ITRE Committee, rapporteur. Report adopted November 2010.
2. Report on facing the challenges of the safety of offshore oil and gas activities, ITRE Committee, shadow rapporteur. Report adopted in 2011.
3. Opinion on the proposal for a regulation establishing a programme to aid economic recovery by granting Community financial assistance to projects in the field of energy, BUDG Committee, shadow rapporteur. Opinion adopted in 2010.
4. Opinion on the mid-term review of the 7th Framework Programme for research, BUDG Committee shadow opinion. Opinion approved in 2011.
5. Report on Engaging in energy policy cooperation with partners beyond our borders: A strategic approach to secure, sustainable and competitive energy supply. ITRE Committee shadow rapporteur. Approved in June 2012
6. Report on the proposal for a Council decision establishing the Specific Programme Implementing Horizon 2020 - The Framework Programme for Research and Innovation (2014 - 2020). ITRE Committee rapporteur. Report approved in November 2013.
7. Opinion on the proposal for a regulation of the European Parliament and of the Council amending Regulation (EC) No 294/2008 establishing the European Institute of Innovation and Technology, BUDG Committee shadow rapporteur. Approved in 2012.
8. Opinion on the proposal for a Council decision on the adoption of a Supplementary Research Programme for the ITER project (2014-2018), BUDG Committee shadow rapporteur. Approved in 2012.
9. Opinion on the proposal for a regulation of the European Parliament and of the Council on the establishment of a Programme for the Environment and Climate Action (LIFE), BUDG Committee shadow rapporteur. Approved in 2012.
10. Opinion on the proposal for a Council regulation on Union support for the nuclear decommissioning assistance programmes in Bulgaria, Lithuania and Slovakia, BUDG Committee shadow rapporteur. Approved in 2012.
11. Opinion on the proposal for a regulation of the European Parliament and of the Council on the implementation and exploitation of European satellite navigation systems (GALILEO), BUDG Committee rapporteur. Approved in 2013.
12. Opinion on the proposal for a regulation of the European Parliament and of the Council establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010, BUDG Committee rapporteur. Approved in 2013
13. Opinion on the proposal for a decision of the European Parliament and of the Council establishing a space surveillance and tracking support programme, BUDG Committee rapporteur. Approved in 2013.
14. Report on the proposal for a decision of the European Parliament and of the Council on the

participation of the Union in a second European and Developing Countries Clinical Trials Partnership Programme jointly undertaken by several Member States, ITRE Committee shadow rapporteur. Approved in 2014.

15. Opinion on the draft Council decision concerning the renewal of the Agreement on cooperation in science and technology between the European Community and the Government of the Russian Federation, BUDG Committee shadow rapporteur. Approved in 2013.
16. Report on Strategy for the development of the private sector including the innovation for a sustainable and inclusive development. Rapporteur ACP delegation
17. Report on regional integration and modernisation of customs for sustainable development in ACP Countries, in cooperation with the EU. Shadow rapporteur at ACP delegation.

B) RESOLUTIONS

1. Motion for a resolution on investing in the development of low carbon technologies (SET-Plan), approved on the Plenary Session, May 2010.
2. Motion for a resolution on electric vehicles, approved on the Plenary Session, May 2010.
3. Motion for a resolution on the outcome of the Copenhagen Conference on Climate Change (COP 15), approved on the Plenary Session, February 2010.

4. Motion for a resolution on major natural disasters in the Autonomous Region of Madeira, France and Spain, approved on the Plenary Session, March 2010.
5. Joint motion for a resolution on the major natural disaster in the autonomous region of Madeira and the effects of the storm 'Xynthia' in Europe, approved on the Plenary Session, March 2010.
6. Resolution on Côte d'Ivoire, adopted, May 2011.
7. Joint motion for a resolution on the Tuberculosis Vaccine Initiative (TBVI) – practical implementation of the Europe 2020 strategy with a view to meeting MDG 6 and eliminating tuberculosis by 2050, adopted, February 2011.
8. Resolution on the Republic of Guinea, adopted, June 2013.

C) SEMINARS

1. "Need: A new approach for research and innovation in Europe", European Parliament, Brussels, 30 November 2009.
2. "A China e as Alterações Climáticas", European Parliament, Brussels, December 2009.
3. "Capacitação, Transferência Tecnologia e adaptação às alterações climáticas em África", COP 15, Copenhagen, December 2009.
4. "Cidades Sustentáveis e Alterações Climáticas - Como as cidades poderão combater as alterações climáticas", European Parliament, Brussels, 14 April 2010.

5. "Rethinking 2050. A 100% Renewable Energy for the European Union", European Parliament, Brussels, 15 April 2010.
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7. "Intergenerational fairness: giving the future a face", European Parliament, Brussels, 3 May 2010.
8. "Gerações Futuras e UE 2020 - Garantir Oportunidades para os jovens, gerações futuras e património cultural", European Parliament, Brussels, 15 September 2010.
9. "Processo paz e mocracia na Birmânia", European Parliament, Brussels, 5 October 2010.
10. "Electric Vehicle Batteries Made in Europe", European Parliament, Brussels, 30 November 2010.
11. "European Forum for Manufacturing Innovation, Research & Manufacturing", European Parliament, Brussels, 26 January 2011.
12. "Assuring the future of a competitive and sustainable manufacture in Europe", European Parliament, Brussels, 10 February 2011.
13. "Strategy for energy infrastructures in Europe", European Parliament, Brussels, 2 March 2011.
14. "Meeting on European Education, Health, Structural Funds and Culture", European Parliament, Brussels, 21 March 2011.
15. "SAVE ENERGY", European Parliament, Brussels, 26 May 2011.
16. "What future for European Research", European Parliament, Brussels, 1 June 2011.
17. "Research for excellence at the European Parliament: a day with the IMM", European Parliament, Brussels, 15 June 2011.
18. "How Research and Technology organisations strengthen the Research and Innovation base in Europe", European Parliament, Brussels, 23 June 2011.
19. "Simplifying the implementation of Research Framework Programmes", European Parliament, Brussels, 1 September 2011.
20. "Launching the Group of Friends of the EIT", European Parliament, Brussels, 21 September 2011.
21. "Joint Technology Initiatives", European Parliament, Brussels, 5 October 2011.
22. "Health and Life Science Research in Europe", European Parliament, Brussels, 19 October 2011.
23. "FuturICT", European Parliament, Brussels, 20 October 2011.
24. "Biomass and resource efficiency", European Parliament, Brussels, 10 November 2011.
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177. “Liderança Industrial e interdisciplinaridade”, Copenhagen Business School CBS, Copenhagen, 27 September 2013.
178. “Inovações médicas ao serviço dos pacientes”, European Parliament, Brussels, 1 October 2013.
179. “Stairway to excellence”, European Parliament, Brussels, 2 October 2013.
180. “Iniciativas Tecnológicas Conjuntas”, European Parliament, Brussels, 2 October 2013.
181. “Conhecimento, Inovação e Crescimento Económico”, Gabinete do European Parliament em Portugal, CCB, Lisbon, 4 October 2013.
182. “O futuro do ensino superior politécnico no contexto europeu”, Instituto Politécnico de Setúbal, Setúbal, 11 October 2013.
183. “O papel da radiologia na medicina personalizada – Como assegurar a melhor prevenção e o melhor tratamento?”, European Parliament, Brussels, 15 October 2013.
184. “O futuro da Energia na Europa”, Conselho da Europa, Estrasburgo, 15 October 2013.
185. “Saúde e género (s): políticas de cooperação para a investigação”, Escola Superior de Enfermagem de Coimbra ESEnFC, 19 October 2013.
186. “O Horizonte 2020 e as perspectivas para Portugal”, Laboratório Nacional de Energia e Geologia - LNEG, Lisbon, 25 October 2013.
187. “A promoção das oportunidades para os jovens no contexto europeu”, Agência Nacional Juventude em Acção, Pombal, 25 October 2013.
188. “South for Growth”, Gabinetes do European Parliament de na Grécia, Chipre, Itália, Irlanda, Portugal e Espanha, Athens, 4 November 2013.
189. “Meta Vinculativa para as Energias Renováveis-Discussão do pacote 2030”, Grupo EUFORES, European Parliament, Brussels, 5 November 2013.
190. “Os objectivos e os desafios do orçamento europeu da investigação para os próximos anos”, European Parliament, Brussels, 7 November 2013.
191. “O capital de qualidade e excelência da escola de enfermagem de Coimbra”, Escola Superior de Enfermagem de Coimbra, Coimbra, 8 November 2013.
192. “From Lab to Market: Horizon 2020 - and how the EU can advance innovation”, European Parliament, Brussels, 12 November 2013.

193. “Conhecimento, Inovação e Crescimento Económico”, UGT, Centro de Formação Sindical e Aperfeiçoamento Profissional CEFOSAP, Lisbon, 15 November 2013.
194. “A estratégia europeia 2020 para o crescimento e as estratégias nacionais/regionais de investigação e inovação para a especialização inteligente”, Faculdade Farmácia da Universidade de Lisboa, Lisbon, 28 November 2013.
195. “Financiamento às políticas energéticas e de sustentabilidade para o período 2014-2020”, RNAE Associação de Agências de Energia em parceria com a ENA Agencia de Energia e Ambiente da Arrábida, Palmela, 29 November 2013.
196. “A importância do programa Horizonte 2020 para a União Europeia e para Portugal”, Centro Cultural de Belém CCB, Lisbon, 13 December 2013.
197. “Public Private Partnerships PPPs under Horizon 2020 on Factories of the Future, Energy Efficient Buildings, Green Vehicles and Sustainable Process Industry”, Charlemagne Building, European Commission, Brussels, 17 December 2013.
198. “Ciência, Europa e Futuro”, Fundação Francisco Manuel dos Santos, Lisbon, 24 January 2014.
199. “Os Programas Espaciais Europeus”, Charlemagne Building, European Commission, Brussels, 29 January 2014.
200. “O futuro do ensino superior, ciência e inovação no contexto europeu”, UTAD, Vila Real de Trás-os-Montes, 22 March 2014.

E) ARTICLES IN JOURNALS AND MAGAZINES

1. “A Cimeira de Copenhaga - uma nova ordem mundial”, *Expresso*, 31 December 2009.
2. “Investir no futuro: Bambino bonds”, *Diário de Notícias*, 5 February 2010.
3. “OE e o reforço na confiança”, *Diário Económico*, 13 February 2010.
4. “Energias Renováveis e Turismo Sustentável: Europa mais próxima do Alentejo e do Algarve”, *Barlavento online*, 4 March 2010.
5. “Paulo Rangel: coragem e consistência”, *Diário de Notícias*, 24 March 2010.
6. “Igreja Católica inspira nova relação com o ambiente”, *Público*, 28 April 2010.
7. “Alentejo pode liderar sociedade de baixo carbono”, *Diário do Alentejo*, 7 May 2010.
8. “Orçamento dá Prioridade à Juventude, Ciência e Inovação”, *Diário de Notícias*, 5 June 2010.
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10. “Nos 25 anos da ESAB”, *Diário do Alentejo*, 25 June 2010.
11. “Apoios europeus à ciência e inovação em debate”, *Público*, 20 July 2010
12. “Agência Europeia de Segurança Marítima deve alargar competências”, *Diário de Notícias*, 22 July 2010.

13. “Os fundos estruturais e o emprego”, *Diário do Alentejo*, 23 July 2010.
14. “Um ano no Parlamento Europeu “, *Diário do Alentejo*, 6 August 2010.
15. “As cidades e as alterações climáticas”, *Diário do Alentejo*, 20 August 2010.
16. “A Juventude e o Primeiro Emprego”, *Diário do Alentejo*, 3 September
17. “Simplification, Simplification, Simplification”, *The Parliament Magazine*, 20 September 2010.
18. “O Orçamento Europeu do pós-crise”, *Diário do Alentejo*, 1 October 2010.
19. “Timor Leste, oito anos de independência”, *Diário do Alentejo*, 15 October 2010.
20. “Para quando eleições justas e livres na Birmânia?”, *Diário de Notícias*, 23 October 2010.
21. “A Birmânia na encruzilhada”, *Diário do Alentejo*, 29 October 2010.
22. “Para uma Agência de Segurança Marítima com novas competências”, *Diário do Alentejo*, 12 November 2010.
23. “Sakineh Ashtiani sobreviveu”, *Margem Sul*, 16 November 2010.
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25. “Trust and simplify”, *Times Higher Education Magazine*, 25 November 2010.
26. “A democracia é possível na Birmânia”, *Diário de Notícias*, 27 November 2010.
27. “Simplify, simplify!”, *The Parliament Magazine*, 29 November 2010.
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29. “A Conferência de Cancún”, *Margem Sul*, 11 December 2010.
30. “Uma nova oportunidade na luta pelo clima”, *Diário de Notícias*, 28 December 2010.
31. “A saga dos activistas residentes”, *Diário do Alentejo*, 31 December 2010.
32. “Liberdade de escolha na saúde”, *Diário do Alentejo*, 14 January 2011.
33. “Ano Novo auspicioso para o clima”, *Expresso*, 15 January 2011.
34. “Por uma Europa da Saúde”, *Diário de Notícias*, 26 January 2011.
35. “No limiar da terceira revolução industrial”, *Diário do Alentejo*, 18 February 2011.
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37. “Europa deve liderar energia limpa”, *Diário do Alentejo*, 25 March 2011.
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39. “Orçamento Europeu com acrescida flexibilidade”, *Margem Sul*, 6 April 2011.
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41. "A importância do orçamento europeu para a região do Alentejo", *Diário do Alentejo*, 17 May 2011.
42. "Uma oportunidade para o crescimento", *Diário de Notícias*, 20 May 2011.
43. "Como dinamizar o crescimento", *Margem Sul*, 27 May 2011.
44. "Orçamento e o Algarve", *O Algarve*, 10 June 2011.
45. "O Financiamento do Ensino Superior e o Algarve", *O Algarve*, 16 June 2011.
46. "Crucial moment for Europe's scientific community", *Public Service Europe*, 17 June 2011.
47. "Um financiamento do Ensino Superior justo e equilibrado", *Margem Sul*, 21 June 2011.
48. "Ensino Superior - o desafio do financiamento", *Diário do Alentejo*, 21 June 2011.
49. "The future EU Research and innovation programmes", *Science and Business*, 11 July 2011.
50. "O futuro orçamento europeu para a ciência e inovação", *O Algarve*, 14 July 2011.
51. "Um orçamento corajoso e inovador", *Diário de Notícias*, 26 July 2011.
52. "European Parliament propõe o reforço da ciência e da inovação", *Diário do Alentejo*, 27 July 2011.
53. "Um Plano Marshall para relançar a economia europeia", *O Algarve*, 12 August 2011.
54. "Ciência e inovação europeias reforçadas", *Margem Sul*, 28 August 2011.
55. "Plano Marshall Europeu", *Diário de Notícias*, 06 September 2011.
56. "Um plano europeu para o crescimento da economia", *Diário do Alentejo*, 9 September 2011.
57. "O futuro orçamento europeu para a ciência e inovação", *O Algarve*, 16 September 2011.
58. "Recordar o passado para ganhar o futuro", *O Algarve*, 1 October 2011.
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60. "Finalmente um Plano Marshall europeu", *Diário de Notícias*, 27 October 2011.
61. "Ciência e inovação geram crescimento", *Diário do Alentejo*, 28 October 2011.
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66. "Durban", *O Algarve*, 23 December 2011.
67. "A verdadeira Primavera de Argel", *Diário de Notícias*, 16 January 2012.
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83. "COP18: Uma ponte para o futuro", *Diário de Notícias*, 12 December 2012.
84. "Inovação, competitividade, Crise e Europa 2020", *Eixo Atlântico Newsletter*, 20 June 2012.
85. "Parceria UE-Cabo Verde", *GLOBO*, 12 February 2013.
86. "Algarve: Região em Transição", *Semanário O Algarve*, 14 February 2013.
87. "O Alentejo e o novo Quadro Estratégico Europeu", *Diário do Alentejo*, 14 February 2013.
88. "O novo Quadro Estratégico Europeu", *Diário de Notícias*, 18 February 2013.
89. "The Challenges Faced by Research and Innovation in Europe", *EPLO*, 12 April 2013.
90. "Horizonte 2020", *Revista Edifício e Energia*, 20 April 2013.
91. "Horizonte 2020", *Alentejo em linha*, 3 June 2013.
92. "A importância do novo quadro comunitário 2014-2020 para Portugal", *Espaço Global*, 11 June 2013.
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94. "Horizonte 2020", *Diário de Notícias*, 28 June 2013.
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96. "Estado da União: o elogio do crescimento", *Diário de Notícias*, 12 September 2013.
97. "Stairway to Excellence", *The European Files*, 15 September 2013.

98. "Horizonte 2020: um desafio e uma oportunidade", *Diário de Notícias*, 12 December 2013.
99. "A posição única do Alentejo", *Jornal Negócios*, 19 December 2013.
100. "EU Space Policy - A Driver for Growth", *The Parliament Magazine*, 21 January 2014.
101. "Governo apoia ciência na transição entre quadros europeus", *Diário de Notícias*, 28 February 2014.
102. "Horizonte 2020 - o futuro da ciência e da inovação na Europa", *Newsletter da PARSUK - Portuguese Association of Researchers and Students in the UK*, March 2014.
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105. "Mudanças no ensino e na investigação em Portugal", *Técnico - Valores Próprios*, número especial dedicado aos 40 anos do 25 April de no Técnico, February 2014.
106. "Portugal no centro da Europa", Clube Europeu do Agrupamento de Escolas de Vilela, em Paredes, February 2014.
107. "Entrevista a Maria da Graça Carvalho", *Vida! Magazine*, March 2014.
108. "Entrevista a Maria da Graça Carvalho", *MEMO*, ESEnFC publication, March 2014.

ACADEMIC PUBLICATIONS

A) Chapters in Books

1. Le Grand, J., Carvalho, M.G., "Investing in Youth: Banbini Bonds" in *Empowering people, driving change: social innovation in the European Union*, BEPA-Bureau of European Policy Advisers, European Commission, 2011.
2. Carvalho, M.G., "O Papel das Instituições do Ensino Superior e a Relação com as Empresas na Investigação Científica e Tecnológica na Área da Energia" in *Opções Energéticas para Portugal - Produção Sustentável e Consumo Eficiente*, Grupo Lidel, 2011.
3. Carvalho, M.G., "Ciência e Inovação no Espaço Europeu" in *Políticas Públicas em Portugal*, ISCTE-IUL, 2012.
4. Carvalho, M.G., "Prefácio do livro Inovação para a Mudança" de António Lúcio Baptista, Brussels, 2013.

B) International Journals

1. Zdena Zsigraiova, Gilberto Tavares, Viriato Semiao, Maria da Graça Carvalho. "Integrated waste-to-energy conversion and waste transportation within island communities", *Energy* (2009).
2. Martins, R., Krajacic, G., Alves, L., Azevedo, J.T. and Carvalho, M.G. - "Energy Storage in Islands, Modelling Porto Santo Hydrogen System", *Chemical Engineering Transactions*, No. 18, 2009, pp. 367-372.

3. Tavares, G., Zsigraiova, Z., Semião, V.S. and Carvalho, M.G. – “Optimisation of MSW Collection Routes for Minimum Fuel Consumption Using 3D GIS Modelling”, *Waste Management*, Vol. 29, No. 3, 2009, 1176-1185.
4. Zsigraiova, Z., Tavares, G., Semião, V.S. and Carvalho, M.G. – “Integrated Waste-to-energy Conversion and Waste Transportation within Island Communities”, *Elsevier*, Vol. 34, No. 5, 2009, pp. 623-635.
5. Krajacic, G, Duic, N. and Carvalho, M.G. – “H2RES, Energy Planning Tool for Island Energy – The Case of the Island of Mljet”. *International Journal of Hydrogen Energy*, Vol. 34, No. 5, 2009, pp. 7015-7026.
6. M. G. Carvalho, M. Bonifácio, P. Dechamps, “Building a Low Carbon Society”, *Energy*, Vol. 36, Iss.4, 2011, pp.1842-1847.
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8. Krajacic, G, Duic, N. and Carvalho, M.G. – “How to Achieve a 100% RES Electricity Supply for Portugal?”. *Applied Energy*, Vol. 88, 2011, pp. 508-517.
9. Rifkin J., Carvalho, M.G., Consoli, A., Bonifacio, M. “Leading the Way to the Third Industrial Revolution”. *European Energy Review*, pp. 4-18, 2011.
10. G. Krajacic, N. Duic, M.G. Carvalho (2011). “How to achieve a 100% RES electricity supply for Portugal”. *Applied Energy*, 88, 508-517, February 2011.
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15. Carvalho, M.G. and, Geoghegan-Quinn, M. “Reducing red tape in research”, in *SCIENCE*, 17 July 2012.
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17. Garcia, J., Cerdeira, R., Tavares, N., Coelho, L. M. R., Kumar, P., Carvalho, M. G. “Influence of virtual changes in building configurations of a real street canyon on the dispersion of PM10.” *UCLIM Urban Climate Journal*, Elsevier, 2013.

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C) Conferences

1. Carvalho, M.G.- "Building a Low Carbon Society". 5th Dubrovnik Conference on Sustainable Development of Energy, Water and Environment Systems, Dubrovnik, Croácia, September-October 2009.
2. Carvalho, M.G.- "EU Energy and Climate Change Strategy". ECOS2011-24th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems. Novy Sad, Serbia, 3 to 7 July 2011.
3. Carvalho, M.G.- "Opening Speech", SDEWES VIII Conference on the sustainable development of energy, water and environment systems, Dubrovnik, 23 September 2013.

D) Congresses and International Symposia

1. Garcia, J., Cerdeira, R., Tavares, N., Coelho, L. M. R., Carvalho, M. G. Study of children's exposure to Particulate Matter in indoor air in school. VII Mediterranean Congress of Air Conditioning (CLIMAMED), 3-4 October 2013, Istanbul, Turkey.
2. Garcia, J.M., Teodoro, F., Cerdeira, R., Coelho, L.M.R., Carvalho, M.G., Developing a methodology to predict PM10 outdoor urban concentrations using GLM. 22nd International Conference on Modelling, Monitoring and Management of Air Pollution, 7-9 July, 2014, Opatija, Croatia.

ANNEX D

**Events Coordinated by
MEP Maria da Graça Carvalho**

Maria da Graça Carvalho MEP
invites you to participate in the meeting



Climate for Cooperation: The EU, China and Climate Change

The panel will identify "new ways of EU-China climate cooperation", based on the findings of a recent report by Brussels Institute of Contemporary China Studies (BRICCS).

Tentative Panel of speakers:
Maria da Graça Carvalho MEP, EPP Group, Member of the Committee on Industry, Research and Energy
Duncan Freeman, BRICCS and Co-author of the study
Jo Leinen, Chair of the Committee on Environment, Public Health and Food Safety
 Representative from DG Environment

Wednesday 14 October 2009 from 18.00 to 20.00 hrs
 Room JAN 6Q2 - European Parliament, Brussels

Hand copies of the report will be available at the meeting.

Maria da Graça Carvalho MEP
invites you to participate in the meeting

Sustainable Cities and Climate Change: the Covenant of Mayors

Panel of speakers:
Maria da Graça Carvalho, Member of the Committee on Industry, Research and Energy, EPP Group, EP
Fabrizio Barbato, Deputy Director General Energy DG ENER, European Commission
Gisela Cierfany, head of Climate Energy at the Cabinet of Anna Huusonekka,
 Minister for Environment Region Bruxelles-Cap

Wednesday 14 April 2010 from 18.00 to 20.00 hrs
 Room JAN 6Q1 - European Parliament, Brussels

EPP Group Hearing

Wednesday 1 September 2010
 from 15.00 to 18.30 hrs
 European Parliament, Brussels - Room ASP-3E2

Simplifying the implementation of Research Framework Programmes

Chaired by Maria Da Graça Carvalho MEP

EPP Group
 European People's Party




(Information: FR DE IT EN ES PT PL)

Tuesday 5 October 2010 from 17.30 to 20.00 hrs
 European Parliament, Brussels - Room A3E-2

Chaired by **Maria da Graça Carvalho MEP**

Towards peace and democracy in Burma

Speaker: **José Ramos Horta**,
 President of East Timor,
 Nobel Peace Prize Laureate
 Concluding remarks by
Paulo Rangel MEP

EPP Group

Interpretation: EN - FR - PT


Tuesday 30 November 2010 from 16.30 to 18.30 hrs
 European Parliament, Brussels - Room JAN 4Q1

SIMPLIFICATION: The way ahead

Workshop hosted by **Maria da Graça Carvalho MEP**
 EP Rapporteur of the Report "Simplifying the implementation of the Research Framework Programmes"

with **Benoît Cœuré**, Minister for the Brussels Capital Region Government, in charge of Employment, the Economy, Agricultural Policy, Foreign Trade and Scientific Research.

Co-organised by
 European Parliament and
 Belgian Presidency of the EU



Thursday 10 February 2011 at 08.00 hrs
 in the Members Salon, European Parliament

Breakfast briefing on

Assuring the future of a competitive and sustainable manufacturing in Europe

Maria da Graça Carvalho MEP
 and **Pr Heinrich Fliegel**, Chairman of the ETP MANUFUTURE;
 Director Advanced Materials and Manufacturing Engineering,
 Group Research and Advanced Engineering,
 Member of the Supervisory Board Daimler AG



Tuesday 16 March 2011 at 15.00 hrs
European Parliament, Brussels - Room A5E-3

Friends of EIT

European Institute of Innovation and Technology

hosted by **Maria de Graça Carvalho MEP**
Androulla Vassiliou, European Commissioner for Education, Culture, Multilingualism and Youth

Monday 21 March 2011 from 17.30 to 19.30 hrs
European Parliament, Brussels - Room JAN 6Q1

MEETING ON
**EUROPEAN EDUCATION, HEALTH,
STRUCTURAL FUNDS AND CULTURE**
Hosted by **Maria da Graça Carvalho MEP** (EPP Group)

www.gracacarvalho.eu

Wednesday 2 March 2011 at 13.00 hrs
in the Members Salon, European Parliament

European Parliament lunch debate on
Strategy for energy infrastructures in Europe

Maria da Graça Carvalho MEP (EPP Group)

Rui Cartaxo, President of the REN - Redes Energéticas Nacionais, SGPS, S.A.
(REN is National Energy Grid in Portugal)

The objective of the lunch is to discuss the Strategy, funding and regulation Environment of European Energy Infrastructure

MEETING ON
EUROPEAN AFFAIRS

Hosted by **Maria da Graça Carvalho MEP**

Thursday 14 April 2011 from 15.00 to 17.30 hrs
European Parliament, Brussels - Room A3F3B3

Tuesday 3 May 2011 from 13.00 to 14.30 hrs
European Parliament, Paul Henri Spaak Building, Room P7C050

**The Future of Social Science
and Humanities Funding in Europe**

Hosted by **Maria da Graça Carvalho MEP**, ITRE Committee

Pamela Bailly, Member of cabinet of Commissioner Malm-Göteborg-Quinn, European Commission
Pr Erika Fischer-Lichte, IBC Panel Chair/ Freie Universität Berlin
Pr Laine Beegs, Supporter of the FP7 Interim Evaluation Expert Group/Professional research Fellow at LSE
Dra. Charlotte Fiala, Head, EU Liaison Office of Freie Universität Berlin

Special Conference

Thursday 30 June 2011 from 14.00 to 17.00 hrs - European Parliament, Brussels, Room A3E2

The EIT What is its Future?

Hosted by
Maria da Graça Carvalho MEP

Ronald de Bruijn Director EIT
Sander Frans Wever Director DG Education and Culture
Luís Rosário Director DG Education and Culture
Jill Barkham Director DG C, Employment, Labour, Research & Innovation Policy
Alexander von Gumbert Chairman, EIT
John Reynolds Vice President of EIT Africa Network
Karin Markides President & CEO, Chair of Humanity Foundation
Elmer Dierckx Director SAP Research Programme, EIT
Mary O'Brien CEO, Climate-KIC and Intellectual Capital Institute




Wednesday 15 June 2011 from 16.30 to 18.30 hrs - European Parliament, Brussels, Room Aicef Antall 601

Research of excellence at the European Parliament
- a day with IMM

Hosted by **Maria da Graça Carvalho** MEP

J. Leão Antunes, President of the Instituto de Medicina Molecular (IMM)
M. Carmo Fonseca, Executive Director of the IMM
M. Pinto Gago, Managing Director, IMM
M. Hindade, Science Funding Coordinating, IMM
M. Moita, Head of the Malária Unit, IMM
B. Silva Santos, Head of the Molecular Immunology Unit of IMM








Wednesday 21 September 2011 at 15.00 hrs
European Parliament, Brussels - Room ASF-385

Friends of EIT
Second meeting

hosted by **Maria de Graça Carvalho** MEP
Androulla Vassiliou, European Commissioner for Education,
Culture, Multilingualism and Youth


EXHIBITION

Together with
Commission Vice-President **Michèle Knackx**,
Commissioner for the Digital Agenda,
Maria da Graça Carvalho MEP
is pleased to bring you to the exhibition

**MADE IN EUROPE:
ICT BUILDING BLOCKS TACKLING
SOCIAL CHALLENGES**

Five exhibits will showcase how Information and Communication Technologies (ICT) promote growth and jobs
in Europe while addressing societal challenges in the areas of health, sustainability and mobility.
On display will be tangible results of European research and innovation projects!

Organised by **European Institute of Innovation & Technology**
welcome address by **Amalia Sartori** MEP, Chair of the EIT Committee and **Maria da Graça Carvalho** MEP
Key speech by Commissioner for Education, Culture, Multilingualism and Youth


16-18 October 2011, Brussels 10.00 hrs to 17.30 hrs
Individual guided tours of about 30 minutes through the exhibition in English.
In the individual guided tour, we would like to present the exhibits and projects to you and your staff.
First and foremost, however, we would like to answer your practical questions, inspired by your particular interests
and learn about what you think should be given special attention in the future development of ICT building blocks
tackling economic and societal challenges.

"Distribution area" ASP 3rd floor from 8 to 10 October European Parliament, Brussels




**EMPOWERING
ENERGY SAVINGS
WITH SMART
TECHNOLOGIES**

Hosted by
Maria da Graça Carvalho MEP
and **COGEN** Europe

Monday 19 December 2011 at 19.00 hrs
in Member Salon
European Parliament in Brussels





Dinner - Debate


Wednesday 22 February 2012
from 09.00 to 10.30 hrs
ROOM: JAN 601
European Parliament,
Brussels,

Meet the EIT Award winners
**European Entrepreneurs
Europe's future**

Hosted by
Maria da Graça Carvalho MEP
and EIT






Tuesday 7 February 2012 at 19.45 hrs
**Private Members' salons of the European Parliament's
Altiero Spinelli building**



**The contribution of
Project Management
to public spending efficiency
in Europe**

Parliamentary Dinner hosted by
MEP **Maria Da Graça Carvalho**
and co-hosted by
Mark Langley
President and CEO of PMI




Wednesday 11 April 2012 at 13.00 hrs in the Members Salon, European Parliament

ENERGY INFRASTRUCTURES IN EUROPE

Maria da Graça Carvalho and António Correia de Campos MEPs jointly with Rui Cartaxo, President of REN - Redes Energéticas Nacionais: SGPS, S.A. (REN is the Portuguese Transmission System Operator for electricity and gas)



REN
Redes Energéticas Nacionais



Porto: 11 de Maio de 2012 das 17h00 às 19h00
Auditório: FEUP - Faculdade de Engenharia da Universidade do Porto

Maria da Graça Carvalho organiza

Seminário sobre o Programa Específico de Execução do Horizonte 2020 Programa-Quadro Europeu de Investigação e Inovação (2014-2020)

O Seminário contará com a presença do Secretário de Estado do Empreendedorismo, Competitividade e Inovação, Carlos Nuno Oliveira e com o Director da FEUP - Faculdade de Engenharia da Universidade do Porto, Sebastião Feyo de Azevedo

Grupo PPE

PARLAMENTO EUROPEU

Entrada Livre

Mais informações consultar www.gracacarvalho.eu



Wednesday 30 May 2012 from 12.30 to 14.00 hrs
European Parliament, Brussels - Room A7F387

OUR BLUE FUTURE

Towards a MarineKIC in the European Institute of Innovation and Technology

hosted by MEPs Maria da Graça Carvalho and Maria do Céu Patrão Neves with the participation of Ricardo Seraldo Santos, Provost for the Integration of Sea Affairs, University of the Azores and President, IMAR - Instituto do Mar

Marisa Matias MEP & Rapporteur, Decision on the EIT'SIA

Ioannis A. Tsoukalas MEP & Shadow rapporteur, EIT Regulation

Karin Lochte, Chair, KDM - The German Marine Research Consortium and Director Alfred Wegener Institute for Polar and Marine Research

Hervé Moulinier, President, Pôle Mer Bretagne & Director of Technical Strategy, Thales Group



FUTURE OF EUROPEAN RESEARCH

THE ROLE OF UNIVERSITIES IN HORIZON 2020

Hosted by Maria da Graça Carvalho MEP and CLUSTER

Date: 18 June 2012
Time: Dinner-Debate 19.30 hrs
Venue: Member's Salon
European Parliament, Brussels



PORTO: 2 de Julho de 2010 das 15.00 às 17.30
Sala das Assembleias Gerais do Palácio da Bolsa

LISBOA: 9 de Julho de 2010 das 15.00 às 17.30
Salão Nobre do Instituto Superior Técnico

Maria da Graça Carvalho organiza

Seminário sobre os Programas Europeus de Ciência e Inovação

Mais detalhes sobre o relatório e contribuições de Universidades, Indústria e Centros de Investigação, podem ser consultados no site: www.gracacarvalho.eu

Maria da Graça Carvalho é Deputada ao Parlamento Europeu. É membro efectivo na Comissão Indústria, Investigação e Energia, membro suplente da Comissão dos Documentos, membro suplente na Comissão Especial sobre os Recursos Organizacionais da UE e Co-Presidente da Comissão do Desenvolvimento Económico, das Finanças e do Clusters da Assembleia Parlamentar Parlamento ACP-UE.

Para mais informações contactar maria@graca.carvalho@europarl.europa.eu

Grupo PPE

www.gracacarvalho.eu



Wednesday 19 October from 08.00 to 09.30 hrs

Maria da Graça Carvalho MEP and Health Cluster Portugal

Invite you to a business breakfast

The Future of Health and Life Science Research in Europe - a Portuguese Perspective

Venue: European Parliament, Members' Restaurant

Health Cluster-Portugal (HCP) has as its main objective the promotion and implementation of initiatives and activities leading to the creation of a national cluster for competitiveness, innovation and technology, with an international outlook and, as such, taking into account high standards of quality and professionalism, to promote and foster cooperation between companies, organisations, universities and public entities, with a view to increasing business volume, supports and qualified employment in the economic areas related to health and the improvement of healthcare.

Wednesday 28 November 2012
from 12.30 to 14.45 hrs
ASP o G Salon,
European Parliament
Brussels



Maria da Graça Carvalho MEP
in association with Shell
is delighted to invite you to a LUNCH DEBATE on:
**Advanced and better biofuels
Getting the policies right**

Speakers will include:
Luca Scalfone, VP for Alternative Energies, Shell
Anaïs Eisenberg, Biorefinery Analyst, Renewable Energy Division, International Energy Agency
Andrew Botton, Senior Manager, Climate Change and Sustainability Services, Ernst & Young




Thursday 11 November 2010, from 14.30 to 17h30 hrs
European Parliament, Brussels - Room ASP A3E2

**From Copenhagen to Cancun
State of play of the climate talks**
Hosted by Maria da Graça Carvalho

Speakers:
Maria da Graça Carvalho MEP (EPP Group), Member of the Committee on Industry, Research and Energy
Sirpa Pietikäinen MEP (EPP Group), Member of the Committee on the Environment, Public Health and Food Safety and President, GLOBE EU
Adam Matthews Secretary General, GLOBE International
Laurence Goffé, Head of Unit, "International and Inter-Institutional Relations", European Commission, DG Internal Affairs
Delia Villagrana, Senior Advisor, European Climate Foundation
Anke Schalmöster, Senior Lead Policy Officer, World Wildlife Fund Policy Officer





Monday 4 March 2013 from 17.00 to 18.30 hrs
Room A5G-1 - European Parliament, Brussels
Seminar on
**Strategic Partnership
in Research and Education**
Opening by Maria da Graça Carvalho MEP
with the Council of Rectors of Portuguese Universities

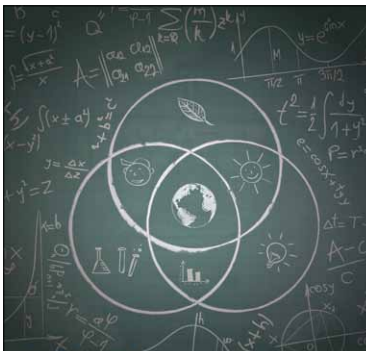





Towards the creation of a high-tech building industry
Turning energy efficiency into a sustainable business
Research & Innovation Roadmap 2011-2020
hosted by Maria da Graça Carvalho MEP



Tuesday 23 April 2013 from 18.00 to 19.15 hrs
Room JRN 6Q1 European Parliament, Brussels



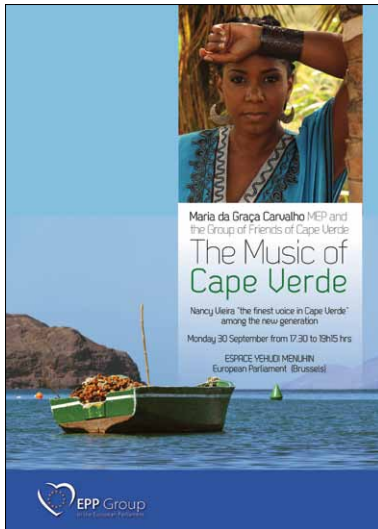
Facts & Figures for Energy
Energy Systems: A World of Equilibrium
Opening by Maria da Graça Carvalho MEP and Françoise Grossetête MEP

SEMINAR | Wednesday 5 June 2013 from 18.30 to 20.15 hrs
Room JAN 6Q1 - European Parliament - Brussels


3 - 7 June 2013 - Couloir Cheval, European Parliament, Brussels
Discover the stories behind wind energy
Hosted by Fiona Hall, Jo Leinen and Maria da Graça Carvalho MEPs
EWEA would like to invite you for an evening reception on 5 June 2013 from 18.00 hrs in the European Parliament, Couloir Cheval. To admire the photographs, discover the stories behind wind energy and enjoy some drinks and food.




Maria da Graça Carvalho MEP and the Group of Friends of Cape Verde

The Music of Cape Verde

Nancy Ureia "the finest voice in Cape Verde" among the new generation

Monday 30 September from 17:30 to 19:15 hrs

ESPACE YVESLE MENJANI
European Parliament, Brussels


 EPP Group

Tuesday 9 July 2013 from 12.30 to 14.30 hrs
Members' Restaurant, European Parliament, Brussels


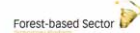
Lunch debate


The forest-based sector's vision for growth A renewed Strategic Research and Innovation Agenda for 2020

Hosted by Maria da Graça Carvalho MEP (ITRE Committee)
in association with The Forest-based Sector Technology Platform



RSVP: mariaadagraça.carvalho@europarl.europa.eu or j.sainio.riegman-beck@forestplatform.org






13 November 2013 at 12:30 hrs in the European Parliament Members' Salon

TUBERCULOSIS IN EUROPE ELIMINATING THE MODERN THREAT

Lunch debate with the European Respiratory Society
Hosted by Maria da Graça Carvalho MEP

To register please visit www.ersnet.org/tuberculosisineurope
or contact Tanja El-Nemr tanja.elnemr@ersnet.org




19 February 2014 from 15.00 to 18.00 hrs - Room JAN 602, European Parliament, Brussels

HORIZON 2020 AND THE EIT

New tools for transforming Southern Europe and the Mediterranean area
in regions of Innovation and Research Excellence

Hearing hosted by MEPs Ioannis A. Tsoukalas and Maria Da Graça Carvalho

Interpretation: FR, EN, GR, ES, IT

 EPP Group


Please confirm your attendance via email:
melanie.toussaint@ep.europa.eu

Wednesday 6 June 2012 from 15.00 to 18.30 hrs
Room JAN 602 - European Parliament - Brussels

Hearing on the HORIZON 2020

EU Framework Programme for Research and Innovation
hosted by MEPs Maria da Graça Carvalho & Christian Ehler

Interpretation: DE, EN, FR

 EPP Group

If you do not have a pass that allows entry to the Parliament, you will need to provide your personal details (name, surname, nationality, citizenship) in person by 29 May 2012 to horizon2020@europarl.europa.eu



13 November 2013 from 14.30 hrs to 16.30 hrs - Room A4F 384 - European Parliament

ATLANTIC OCEAN RESEARCH ALLIANCE

Hosted by Maria da Graça Carvalho MEP

Opening by Robert-Jan Smits, Director-General DG Research and Innovation, EC
Lowri Evans, Director-General, DG for Maritime Affairs and Fisheries, EC





21 Fevereiro 2014, 15-17h
 Instituto de Higiene e Medicina Tropical, Aula Magna, Lisboa

**The role of Portuguese research
 in the European & Developing Countries
 Clinical Trials Partnership (EDCTP2)**

Maria da Graça Carvalho, Parlamento Europeu
 Maria de Belém Roseira, IHMT e Assembleia da República




WORKSHOP 17 February 2014 from 15.00-16.30 hrs
 Room ASP A5E3 - European Parliament

**SCIENCE AND INNOVATION:
 'CLOSER' THAN 'RARE!'**

hosted by MEPs **Maria da Graça Carvalho** and **Mário David**
 with the patronage of the Portuguese First Lady **Maria Cavaco Silva**




The TB PAN NET Research consortium
 invites you to a
Final stakeholder meeting
 TB PAN NET network:
Fighting MDR tuberculosis in Europe
 hosted by **Maria Da Graça Carvalho** MEP

1st April 2014 from 14.00 to 15.00 hrs
 Room JAN 6Q1 - European Parliament
 Brussels





ANNEX E

Photo Galery



Visit to D. Dinis Secondary School



At COP15, Copenhagen



At COP15 in Copenhagen with: MEPs Françoise Grossetete, Karl-Heinz Florenz, Pilar del Castillo, Romana Jordan and, adviser to the PPE, Amarylli Gersony



Group of visitors from the Portuguese Science and Higher Education sector



At COP 16 in Cancun, with the Portuguese MEP Marisa Matias



With Yves Leterne Prime Minister of Belgium and the MEPs Ria Oomrn-Ruijten and Paul Rübzig



In a debate with Poul Nyrup Ramussen, President of the European Socialist Party and former Prime Minister of Denmark



With the Rector of the UTL, Prof. Ramôa Fernando Ribeiro, President of the IST Pr. António Cruz Serra and the Rector of the University of Lisbon, Pr. António Sampaio da Nóvoa



With the Belgian Minister Benoit Cerexhe and Clara de la Torre, Director DG Science and Innovation



In Funchal with José Manuel Soria, Minister of Industry, Energy and Tourism (Spain), João Cunha e Silva Vice President of the Regional Government of Madeira and the Spanish MEP Gabriel Mato



With Alvaro Uribe former President of Colombia, at the EPP meeting in Budapest



With the Vice-President of the European Commission and European Commissioner for Digital Agenda Neelie Kroes



With the Chairman of ITRE, Herbert Reul; President of the European Parliament, Jerzy Buzek; and Vice-President of the European Commission and Commissioner for Digital Agenda Neelie Kroes



During the inauguration of the exhibition "Science beyond Fiction: Future Emerging Technologies" organized by Maria da Graça Carvalho in the European Parliament in Strasbourg



With MEP José Manuel Fernandes, D.Vitalino Canas, Bishop of Beja, D. Jorge Ortega, Archbishop of Braga in the European Parliament



Meeting with the President of East Timor, Jose Ramos Horta in Dili



Meeting with the Prime Minister of the Republic of East Timor, Xanana Gusmão in Dili



King Philip of Belgium with Vice-President of the European Commission and Commissioner for Digital Agenda Neelie Kroes and Daciana Sarbu MEP



With the German MEP Ingeborg Graessle (PPE)



With a group of former Student Association leaders in Brussels



With Dutch MEP Lambert van Nistelrooij and the French MEP Jean-Pierre Audy Head of the French Delegation to the EPP



With President of the International Energy Agency Nobuo Tanaka



With the Vice-President of the European Commission responsible for Industry, Antonio Tajani



In a meeting with Prof. Heinrich Flegel, Director of Research at Daimler; José Manuel Mendonça, INESC; Francesco Jovane, Politecnico di Milano; Massim Mattucci, Effra Chairman; George Chryssolouris University of Patras; Herbert Von Bose, EC; Javier Eguren, Manufacture ETP; José Carlos Caldeira, INESC; Frank Knecht, Effra and Ricardo Bueno, TECNALIA



With MEP Diogo Feio at one of the plenary sessions of the European Parliament in Strasbourg



With European Parliament President Jerzy Buzek and MEPs Ilda Figueiredo and Teresa Jimenez-Becerril during the celebration of the 100th anniversary of International Women's Day



With Dr. Manuela Ferreira Leite in the European Parliament



Meeting with the President of the European Commission during the visit of a group of women from the PSD to the European Parliament



With Willen De Ruyter, Director of EMSA, Theresa Crossley and Leendert Bal during a visit to the European Maritime Safety Agency EMSA in Lisbon



With Pedro Passos Coelho and Carlos Moedas during the campaign for the Portuguese parliamentary elections of June 2011



In the Climate Parliament Forum with Rudolf Strohmeier and Nicholas Dunlop



With Greek MEP Rodi Kratsa



Maria da Graça Carvalho with Spanish MEP Méndez de Vigo



With the Spanish MEPs Francisco Millán Mon and Salvador Garriga



With European Commission President José Manuel Barroso and MEP Vittorio Prodi and Graham Watson



With European Commission President José Manuel Barroso and MEPs Mario David, Paulo Rangel, Nuno Teixeira, Carlos Coelho, Maria do Céu Patrão Neves, José Manuel Fernandes Bastos



Seminar organized by Graça Carvalho in the European Parliament with João Lobo Antunes, Maria do Carmo Fonseca, Maria Mota, Bruno Silva Santos, Margarida Trindade and Margarida Pinto Gago



Closing session of the Summer University 2011 in Castelo de Vide



Meeting with the Prime Minister of Algeria, Ahmed Ouyahia in Algiers



With European Commission President Jose Manuel Barroso and Jeremy Rifkin



Debate on the future of energy policy in Europe organized by Friends of Europe



At the Climate Conference COP17 in Durban with the Minister of Marine, Environment and Spatial Planning Assunção Cristas



At the Climate Conference COP17 in Durban Lena Ek, Minister of Environment of Sweden, Pilar del Castillo, MEP and Prof. Pris, London School of Economics



With the Mayor of Évora, José Ernesto d'Oliveira



*With the Rector of the University of Evora,
Carlos Alberto dos Santos Braumann*



*With the Rector of the University of the Azores, Jorge Medeiros
and MEP Maria do Céu Patrão Neves*



*With the Minister for Science, Innovation and Higher Education of Denmark,
Morten Ostergaard in Copenhagen*



*Meeting with the Minister of Education, Higher Education and
Science of Italy, Francesco Profumo*



William E. Kennard, U.S. Ambassador to the European Union



Meeting with the State Secretary of Norway for Science and Innovation, Kyrre Lekve



With Prof. José Veiga Simão



With the Minister of Culture for Cabo Verde, Mario Lucio Sousa in Brussels



With the Secretary of State for Science, Leonor Parreira and the President of the Champalimaud Foundation, Leonor Beleza



With MEPs Graham Watson and Theodoros Skylakakis



Meeting with the Prime Minister of Cabo Verde, José Maria Neves in Brussels



Meeting with the Minister of Health of the Republic of Cyprus, Stavros Malas



With Carlos Nuno Oliveira, Secretary of State for Entrepreneurship, Competitiveness and Innovation and Feyo Sebastião de Azevedo, Director of the Faculty of Engineering at the University of Porto



With President of Instituto Superior Técnico, Arlindo Oliveira



With Guillermo Martínez-Casán Director of the European Ideas Network of the European People's Party



With Carlos Carreiras, President of the Institute Sá Carneiro; Paulo Rangel MEP; Jaime Mayor Oreja, Head of the Spanish Delegation of the EPP and Chairman of EIN



With Prime Minister Pedro Passos Coelho



With Prof. David Justino, President of the National Council of Education



With MEPs Maria do Céu Patrão Neves, Regina Bastos and Berta Cabral presidential candidate to the Regional Government of the Azores



Entrance to an audience with Pope Benedict XVI at the meeting of the leaders of the Centrist Democrat International CDI



With Manuel Ferreira de Oliveira, President of GALP and MEPs Elisa Ferreira and Nuno Teixeira



With the Vice President of the European Commission, Neelie Kroes, the President of the ITRE Committee, Amalia Sartori and MEPs Pilar del Castillo and Edit Herczog



With the President of the National Assembly of Cabo Verde, Aristides Lima and MEP Filip Kaczmarek



Visit to Cape Town with the European Commissioner for Research, Innovation and Science, Máire Geoghegan-Quinn



With Tim Hunt, Nobel Prize for Medicine 2001, the President of the ITRE Committee, Amalia Sartori and the President of the European Research Council, Helga Nowotny



Maria da Graça Carvalho and the Vice Rector for International Cooperation of The Technical University of Silesia Prof. A. Ryszard Bialecki



With the European Commissioner for Climate Action, Connie Hedegaard and MEP Karl-Heinz Florenz at COP 18 in Doha



With the Portuguese Secretary of State for Higher Education, President of Portuguese Council of Rectors, President of EUA and Portuguese Rectors



Ceremony of the 27th anniversary of the Polytechnic Institute of Lisbon



With the President of the Assembly of the Portuguese Republic, Assunção Esteves and MEPs Nuno Teixeira Nuno Melo and the Mayor of Porto Rui Rio, EPP Summer University in Porto



With the Director General of the Joint Research Centre, Dominique Ristori



With President of the Republic of Cabo Verde Jorge, Carlos Fonseca and Cabo Verdean singer Nancy Vieira in the European Parliament



With the President of the Republic of Cabo Verde, Jorge Carlos Fonseca, the Secretary of State for Foreign Affairs of the Republic of Cabo Verde, José Luis Rocha and the Ambassador of the Republic of Cabo Verde in Belgium Maria Jesus Mascarenhas



With the Director General of DG for Maritime Affairs and Fisheries, Lowri Evans and MEP Christian Ehler



With the director of the IMF Christine Lagarde and MEP Anna Maria Corazza in Rangoon



Visit by secondary school students to the European Parliament



Official Launch of Horizon 2020 in Portugal at the Centro Cultural de Belém in Lisbon



With the representative of Mali during the 21th Session of the ACP-EU Joint Parliamentary Assembly in Budapest



Official visit of the President of the Republic of Cabo Verde to the European Parliament

ACKNOWLEDGEMENTS

The parliamentary work presented in this book would not have been possible without the dedication, skill and professionalism demonstrated by the members of my office staff: Maria João Albernaz, Amelia Areias, Sol de la Guardia, Utimia Madaleno and Paulo Afonso. Over these previous five years, the work and revision of texts in Portuguese was undertaken by Manuel Loureiro, who proved to be an invaluable aid, whilst the English texts were revised with humour by John Hart.

I should also like to express my gratitude to my fellow Portuguese MEPs for the cooperation, and friendship they have shown me as well as to the staff of EPP and of the EP that both helped me and worked with me so enthusiastically. A word of thanks, in particular, to Alfredo de Jesus, EPP counselor for ITRE, who has been an of invaluable assistance from the outset whenever I requested his advice. He has helped me to elaborate strategies and to navigate through the European Parliament. Also a word of thanks to my EPP coordinators – for the ITRE, Pilar Castillo, and for Budgets, Salvador Garriga Polledo.

I should also like to extend my thanks to the Ministry of Education and Science of Portugal, to the Minister, Nuno Crato, the Secretary of State for Science, Leonor Parreira, the President of the Foundation for Science and Technology, Miguel Seabra, and the coordinator of the Office for the Promotion of Portuguese Participation in the Framework Programme, Eduardo Maldonado. All

of these individuals were of inestimable assistance and patience during my work.

A word of profound gratitude to the two other European institutions, the European Council and European Commission. All worked during the sometimes difficult negotiations with a constructive spirit, a willingness to pursue mutually beneficial paths and, invariably, with the common goal of ensuring of achieving as much as possible for the European project. I should like to thank the Danish Presidency of the EU, with a special mention for the Minister of Research, Innovation and Higher Education, Morten Østergaard. My thanks also to the Irish Presidency in the person of the Minister of Science and Innovation, Sean Sherlock.

In the European Commission, a special thanks to President Barroso, for his unending support and willingness, from the outset to devote his time to sharing information and his being on hand at all times to help MEPs in their professional tasks. I cannot finish these acknowledgements without also expressing my gratitude to the different European commissioners with whom I worked: Máire Geoghegan-Quinn - Research, Innovation and Science; Androulla Vassiliou - Education, Culture, Multilingualism and Youth; Neelie Kroes - Digital Agenda; Antonio Tajani - Industry and Entrepreneurship; Günther Oettinger - Energy; Connie Hedegaard - Climate Action; Andris Pielbalgs - Development; Tonio Borg - Health Issues.

My thanks also extend to the entire team that worked on Horizon 2020 as this includes the rapporteurs (Teresa Riera Madurel, Christian Ehler, Marisa Matias and Philippe Lamberts) and representatives of the Commission and Council. The spirit of cooperation and friendship that they displayed made what at time seemed to be endless meetings an enjoyable and enriching experience. A special mention also to the Director General Robert-Jan Smits and his entire team. Robert Jan-Smits and his team were unrelenting in their open, constructive and cooperative help whilst displaying considerable responsibility and immense knowledge.

To all, let me once again, express my deep gratitude.



Grupo **PPE**
no Parlamento Europeu

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MARIA
DA GRAÇA
CARVALHO

Maria da Graça Carvalho is currently a Principal Adviser in the BEPA (Bureau of European Policy Advisers), a DG in the European Commission reporting directly to the President of the Commission, post that she had already occupied from 2006 to 2009. The areas covered are: Science, Higher Education, Innovation, Digital Agenda, Research Policy, Energy, Environment and Climate Change.

Maria da Graça Carvalho was a member of the European Parliament from 14 July 2009 to 30 April 2014. She sat on the Industry, Research and Energy (ITRE) Committee as a full member and was a substitute member of the Budgets Committee as well as being substitute member of the SURE-Special committee on the policy challenges and budgetary resources for a sustainable European Union after 2013. She was also a full member of the ACP-UE Joint Parliamentary Assembly and was elected co-President of the Economic Development, Finance and Trade Committee of ACP-UE Joint Parliamentary Assembly. She was also substitute member in the Delegation to the Parliamentary Assembly of the Union for the Mediterranean. In November 2011, she was awarded the Prize for the best MEP in the area of Research and Innovation.

She was Minister of Science and Higher Education of the XV Constitutional Government of Portugal and Minister of Science, Innovation and Higher Education of the XVI Constitutional Government. Ms Carvalho is a Full Professor in Energy and Sustainable Development at the University of Lisbon. In 1983, Ms Carvalho obtained her Ph.D. at Imperial College in London in the area of energy. She is a fellow of the American Institute of Aeronautics and Astronautics (AIAA), of the American Association for the Advancement of Science (AAAS), of the World Academy of Art and Science (WAAS) and remains a fellow of the Portuguese Institute of Engineers and of the Portuguese Academy of Science and a founder of the Portuguese Academy of Engineers.

Maria da Graça Carvalho has been awarded the title of “Great Official of the Order of Public Instruction” by the President of the Republic of Portugal in 2002. She has also been awarded by the Chancellery of the International Order of Merit of the Discoverer of Brazil with the high honour of the Great Cross (26 April 2005).

May 2014