



PROCEEDINGS



Mediterranean Commission

United Cities and Local Governments
Cités et Gouvernements Locaux Unis
Ciudades y Gobiernos Locales Unidos



With the support of



Contents

Opening Speech	3
Towards a Mediterranean Strategy for Sustainable Development and Climate	7
Impacts of climate change in the Mediterranean and challenges for regional and local governments	7
Impact of climate change in Southern and Eastern Mediterranean towns and cities	14
New Perspectives from the Review of the Mediterranean Strategy for Sustainable Development	31
Contribution and action of local and regional authorities in combatting climate change.....	39
Reading and adoption of the political declaration	54
Climate Declaration by Local and Regional Authorities in the Mediterranean	58

Opening Speech

Michel VAUZELLE, President of the Provence-Alpes-Côte d'Azur (PACA) Region (France), Co-Chair of the UCLG Mediterranean Commission, and President of the CPMR Intermediterranean Commission

I would like to welcome everyone here today and offer special greetings to Monsieur Mohamed BOUDRA, President of the Taza Al Hoceima Taounate Region (Morocco) and President of the UCLG Mediterranean Commission Political Council.

I would also like to welcome the members of the UCLG Mediterranean Commission Political Council who are here today, as well as members of the CPMR Intermediterranean Commission Political Bureau who met together yesterday evening.

I am also pleased to welcome the various Consuls, the elected officials who were willing to take part in this meeting, and particularly the Mayor of Nice, wonderfully represented today by Mrs RAMPAL.

We are here today to discuss a very current issue. We are seeing the effects of global climate change and are well aware that our countries need to take strong actions along with the larger powers, which are often blamed for their greenhouse gas emissions. Without action on their part, we will not be able to make any major progress on the global scale.

This is why we have high expectations of COP21 Paris in late 2015 and are committed to making our contribution there.



We have a special interest in the Mediterranean region and it is our role as regional Presidents and local government leaders to ensure that our voice is heard at COP 21.

For my part, I have asked the French President to support the Provence-Alpes-Côte d'Azur Region in organising a major conference in May 2015, which I invite you to attend. It will bring together elected officials and civil society representatives from across the Mediterranean and major states outside the region. While here at Villa Méditerranée, we will have the opportunity to study desertification, which is a concern for Southern Mediterranean countries, as well as rampant climate change, and bring our findings and concerns to COP21. In the Provence-Alpes-Côte d'Azur Region, our local residents have experienced painful examples with torrential rain that wipes out everything in its path, coastal flooding, and unusually high temperatures that have been problematic for our agricultural sector. All these problems mean that we have populations that at one time were less affected by climate issues and have now become extremely vulnerable.

Tourism and agricultural professionals, and the entire economic sector are affected. People's health in our regions is potentially at risk from breathing in fine particles or other pollution-related problems, which is unacceptable. The Mediterranean's natural beauty and architectural heritage have made it the world's leading tourist region and it is our duty to

preserve the species that live here, the sea that we share, and of course the landscapes that have shaped the identities of our popular cultures around the region.

I am thrilled, as I'm sure you are, to be joined today by over 200 people from 15 different countries, including Spain, Palestine, Kuwait, Egypt, Mauritania, Malta, Algeria, Morocco, Italy, France, Tunisia, Lebanon, Greece, Croatia, perhaps Turkey and others that will share about the dramatic impacts of climate change that I mentioned earlier as we work together.

Experts of the Intergovernmental Panel on Climate Change (IPCC) have recognised that the Mediterranean region is one of the most vulnerable in terms of climate change. The examples I just referred to confirm this reality. If nothing is done, these experts forecast that by 2100 - I won't be here to see it but that is no reason to stand by without doing anything - temperatures will have risen by an average of 3 to 5°C, precipitation will have dropped by up to 25%, extreme climatic events will increase in frequency and intensity, and sea levels will have risen by up to 35 cm. Water stress, desertification, loss of biodiversity, flooding, heat waves, drought, and other extreme events that the Mediterranean region as a whole has already experienced, are indicators that back the warnings of international experts as they remind us of the urgent need for quick and drastic measures.

The Mediterranean contribution to limiting global warming to 2°C is crucial, which means that everyone needs to increase their commitment. Since the Earth Summit in Rio in 1992, local and regional authorities have gradually realised the importance of these issues. Today they are major players in establishing policy, strategies, legislation, and cooperation mechanisms in their respective regions.

I would also like to touch on the geopolitical context in the Mediterranean region. If we look at our current political climate, we cannot ignore what is going on from Pakistan and Iraq to Mauritania and Somalia, and especially the terrible civil and international war taking place in Syria and its effects on neighbouring countries, with the influx of refugees in Lebanon and Jordan, etc. The horrors of the war in Syria, instability in Libya with the terrorism of ISIS, and in the Sahara and Sahel regions with Al Qaeda, have created a violent political climate which means that we have to play our part to the fullest.

It is clear that public diplomacy has been unable to resolve these conflicts, some of which have been going on for a long time, like the nearly 70-year conflict between Israel and Palestine, where violence has escalated in recent weeks.

I recently travelled to Palestine and Israel where I came to realise that current policies, the lack of dialogue and unheeded recommendations from Europe and the United States have created a vast region across the Near East, Middle East and Sahel that poses serious problems to our governments due to the fact that we border the Mediterranean and fully experience the adverse impacts of terrorist events. It affects tourism, as tourists are afraid to travel to countries in the South, even though they are perfectly safe. However they see images of violence which make them reluctant to go on holiday there, which negatively impacts the economy in countries that, like all of us, really need the income from tourism. There are also illegal immigration problems with young people attempting to cross the sea, preferring to risk losing their lives rather than staying in hopeless situations. These extremely serious problems cause us all to reflect on how they ethically and morally affect the situation in the Mediterranean. We are very concerned about the impact they have on increasing racism, xenophobia, and intolerance, especially towards those who come from the other side of the Mediterranean.

This violent political change is alarming when it comes to our conceptions of democracy and respecting human life. Local authorities clearly have a role to play where the state and public diplomacy have failed. Regions, cities and towns have a closer relationship with populations and are in a position to pass on feedback to national governments from the people in the Mediterranean who are the most directly exposed to the harmful consequences of climate change, and political and human problems that cause war, violence and terrorism. It is our duty to express the desires of our electors.

I have gone off topic, but I do not think we can dissociate climate-related problems from violence, terrorism, war and all forms of racism, whether ethnic, social or religious. The

perverted distortion of Islam, a great religion based on peace and fraternity, by terrorist organisations is another one of these problems.

On the global level, regions have structured themselves to actively pursue international and national objectives, and come up with their own expectations and climate commitments by adopting declarations at major international gatherings, such as the last sessions of the Conference of the Parties to the United Nations Framework Convention on Climate Change.

This gathering of Mediterranean regional and local elected officials will enable us to bring a Mediterranean perspective to COP 21. Based on the discussions that we engage in today, tomorrow, and over the weeks and months to come, it is essential that we insist on the fundamental role of regional and local governments in fighting global warming so that we can tackle the main sources of greenhouse gas emissions, which are residential, as they relate to housing, services, transport and food.

We also need to develop local and regional strategies for adapting to the effects of climate change and preventing disaster risks. I see it in my own region. When people live through a disaster the first time, it is a terrible physical and emotional shock. When the same flooding and damage occurs a couple of weeks later, they become completely discouraged. This affects morale, which we must take into consideration in our positions of responsibility.

We therefore need to prevent the risks of disasters and prepare our citizens for them, and provide emergency assistance in potentially dramatic situations where lives can be lost. We need to encourage as many local and regional authorities in the Mediterranean Basin as we can to commit to a more inclusive approach to developing a new international convention that is ambitious and above all binding, in order to prevent declarations that lead to nothing, even when they are made with the best intentions. When they can, local and regional governments commit funds to implementing action plans and strategies aimed at reducing greenhouse gas emissions, developing more sustainable energy solutions and adapting to climate change, in line with the objectives of the Mexico City Pact signed in 2010.

In addition to prevention, these plans and strategies can generate opportunities to create wealth and jobs. Among the multiple possibilities for action, local governments must continue their commitments to environmentally-friendly energy transition, which I know is a major topic today in France and your own countries. This can be achieved by developing renewable energies, and building ecodistricts, structuring waste management and recycling networks, and improving sustainable water resource management. It is obviously a monumental task that we must work on together to ensure a sustainable and ecologically responsible future for the generations of the future.

This is why we would like to end this conference with the signing of a joint policy declaration that outlines the climatic impacts affecting the Mediterranean region and our commitments to deal with these problems. We also hope to continue our discussions, and so I would like to invite you now to the major conference that I mentioned, which will be held at Villa Méditerranée in May, with the French President in attendance.

It will bring together political leaders and civil society representatives from across the Mediterranean to engage in and pursue dialogue on actions that need to be taken in the Mediterranean. Our commitments must be included in the political declaration, which will be released as a brochure translated into several languages and will include various examples of innovative actions led by local governments in each of our Mediterranean countries. It will then be distributed at all climate events taking place in 2015 and finally at the COP 21 conference.

Ladies and Gentlemen, I apologise for being a little long, but I wanted to situate the discussions that bring us together in the extremely disturbing context of violence that manifests itself in various ways. We must ensure that climate does not become one of these. It is a phenomenon resulting from human activity that must be managed, and we play a key

role in this, as intermediaries between our respective governments and the local populations that we represent.

Towards a Mediterranean Strategy for Sustainable Development and Climate

Moderator

Dania ABDUL MALAK, Researcher at the European Topic Centre on Spatial Information and Analysis (Spain)

First of all, I would like to thank all of you for being here in Marseille for this climate meeting. We are here to fuel political discussions with Mediterranean local and regional authorities and define a joint Mediterranean stance on climate change that will be incorporated into international negotiations, as Mr Vauzelle mentioned, for the 2015 COP Climate Change Conference in Paris.

I am the director of the European Topic Centre on Spatial Information and Analysis at the University of Malaga in Spain and I will be moderating this session, titled “Towards a Mediterranean Strategy for Sustainable Development and Climate.”

The primary objective of this session is to present recent research on the Mediterranean that provides important insight into the issues at stake and will help guide political decision-makers and lending institutions.

In the first part, speakers will share recent data on the effects of climate change. Participants in the round table discussion will then share sustainable development strategies that have been implemented in their regions, which I hope will be used as examples for projects in other Mediterranean regions.

I would like to invite Mr Éric SERVAT to share his expertise on the relationship between climate change and water resources in the Mediterranean.

Impacts of climate change in the Mediterranean and challenges for regional and local governments

Eric SERVAT, Director of the HydroSciences Laboratory (France), Institute of Research for Development

As a scientist, it is always a pleasure to get out of the lab and participate in public debate. I am therefore very pleased to be with you this morning. I will be sharing some data on climate change, particularly for the Mediterranean region, before Marianela FADER comes to share results from a study in which she took part for the World Bank.

When you look at the issue of climate change, it is clear that there has been a real shift in awareness. This is expressed in all the common current scientific literature, which is probably less accessible to you. But we also see that climate change has been garnering a lot of attention from the press and media, and local populations are now much more aware of it. In my opinion, the high visibility of weather reports before and after televised news broadcasts on French television are an indicator of this. Meteorological information is constantly being broadcast and has found its way into an open, general and popular setting.

The simple fact of the matter is that today, global warming is an undeniable reality. In some ways, the debate is over, even if we occasionally go back over some points. From the 1950s onwards, many changes have been observed that have not been seen for decades, and in some cases, for thousands of years. A very real and significant change was taking place.

So what are the findings? Atmospheric and ocean temperatures have risen, snow and ice cover has decreased, sea levels have risen and greenhouse gas concentrations have substantially increased. If we look at a few variables, such as temperature, we can see that each of the last three decades have been consistently hotter on the earth's surface than any previous decades since 1850. The latest report released by the IPCC confirms this and I have taken many of the figures I am presenting today from it.

Figure 1 shows a curve that highlights temperature anomalies over recent decades. The increase is clear.

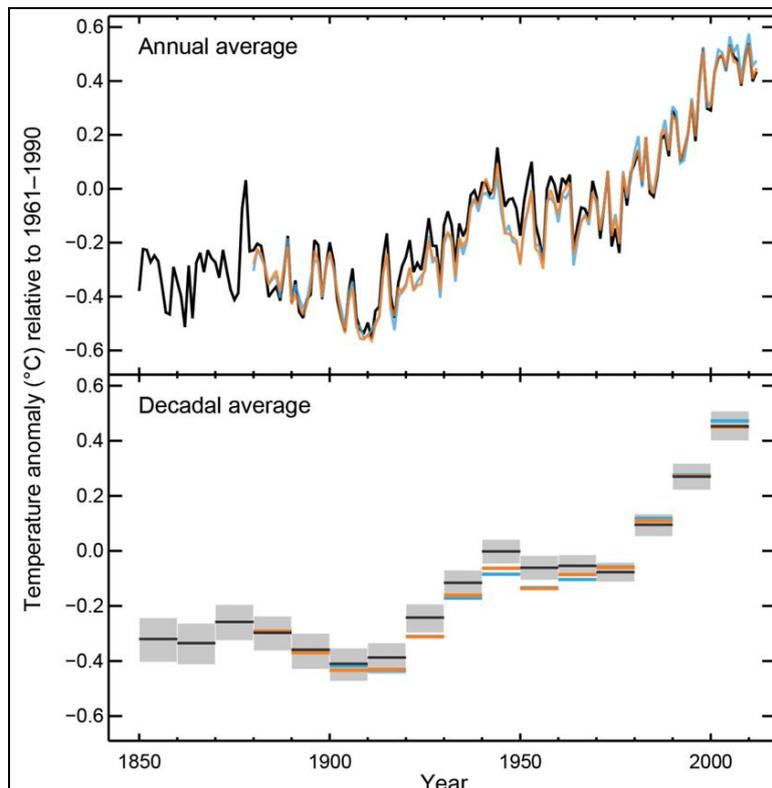


Figure 1 - Average surface temperature anomalies, combining land mass and oceans, from 1850 to 2012

In the same way, we can see on the map of the earth's surface (Figure 2) that 1983 to 2012 were probably the warmest 30 years the Northern Hemisphere has ever experienced. The map particularly shows that the Mediterranean Basin is no exception to the temperature increase and contains some of the most significant increases measured.

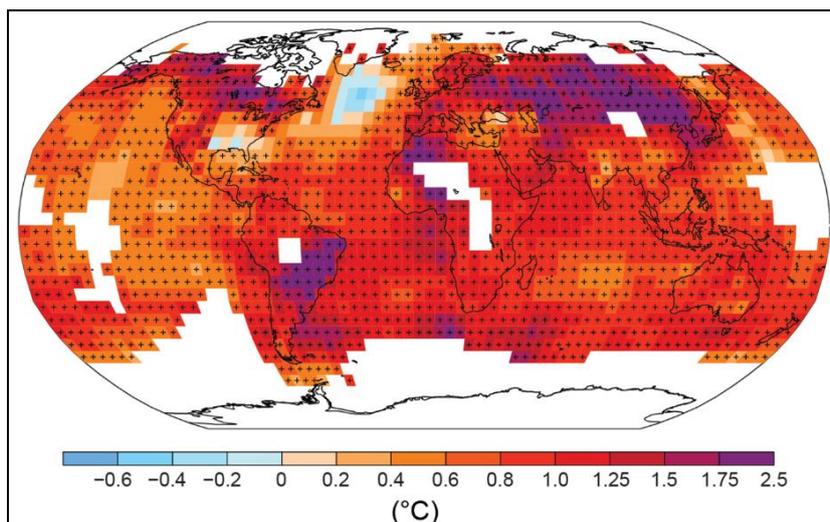


Figure 2 - Map of surface temperature changes between 1901 and 2012.

Changing climate and weather

Climate and weather, in other words what we experience every day as daily manifestations of climate, have changed profoundly. Major changes concerning numerous climatological, meteorological and extreme phenomena have been occurring for over 50 years. We have especially seen a decrease in the number of cold days and an increase in hot days, which obviously affects agriculture, water consumption, and a number of important factors related to our lifestyles and well-being.

There have also been an increasing number of heat waves in many regions of the planet, particularly in Europe and the Mediterranean Basin, where some summers have been exceptionally hot in recent years.

Precipitation has also been affected by climate and weather changes on the planet's surface. It is unequally distributed around the globe and in many places, considerable variations can be positive or negative, as these maps show:

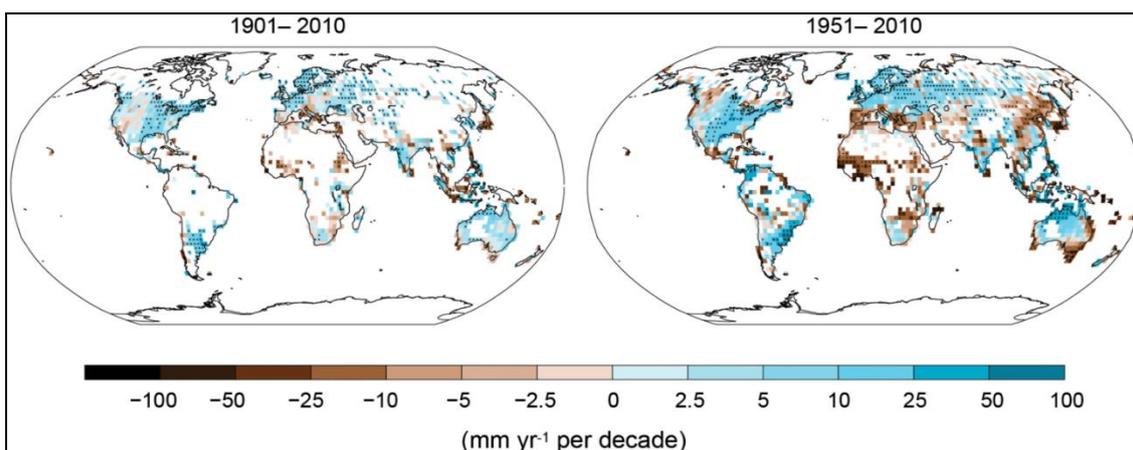


Figure 3 - Maps of precipitation changes between 1901 and 2010 and between 1951 and 2010.

It appears that rainfall has changed in recent decades (Figure 4). For the Mediterranean Basin, experience and measurements over several years point to a generally decreasing trend, like other regions of the world, such as in Africa and the Sahelian region, and along the Gulf of Guinea coast.

We are also seeing what seems to be increasingly intense episodes of high precipitation.

Recent events, particularly along the French Mediterranean coast, are highly indicative of this. This past year, the situation was quite exceptional with hotter than usual temperatures in the Mediterranean and a series of extreme situations in the area: extremely intense rainfall, devastating rises in water levels and major floods causing damage and loss of human life. These events do indeed seem to be increasing. This is probably just a taste of what's in store as far as climate and weather is concerned in the decades to come.

Sea levels have also significantly risen at a much faster rate since the middle of the nineteenth century than over the last two thousand years. For instance, between the beginning of the twentieth and twenty-first centuries, average global sea levels rose by nearly 20 cm, which comes with major consequences.

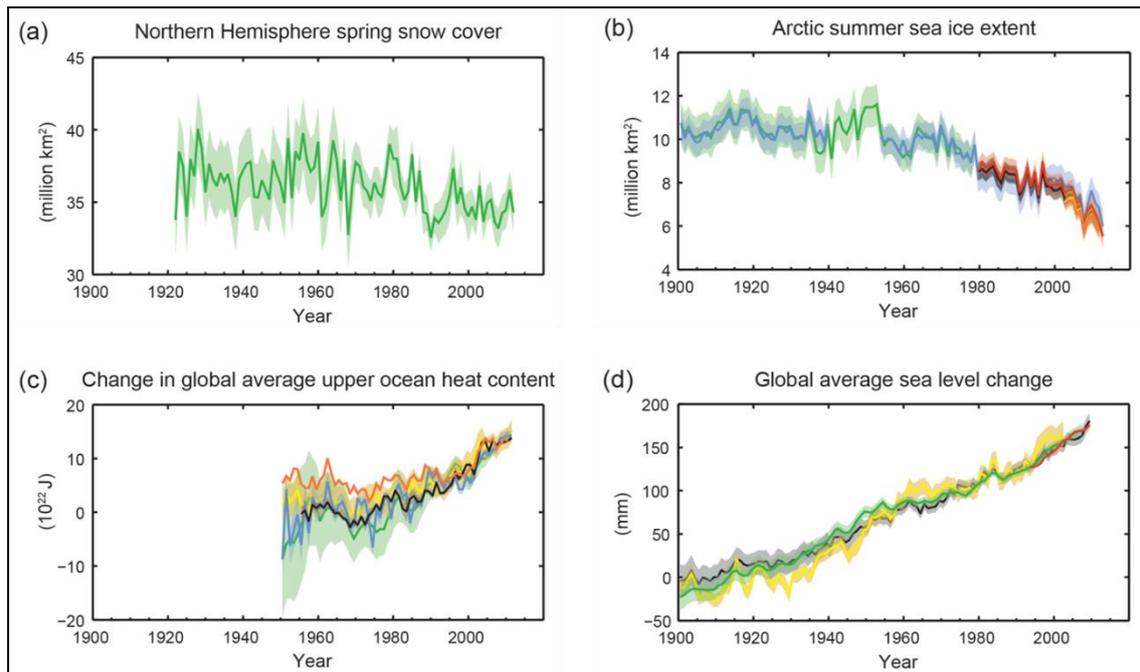


Figure 4 - Global climate change indicators

These findings are what we are currently able to reasonably measure with various sensors and systems. It is important to look forward and to be able to provide some keys for predicting climate change in the decades and centuries to come.

Some global and regional climate changes will have an impact on forthcoming decades. We are particularly seeing new greenhouse gas emissions that will cause global warming to continue, and changes that will affect every aspect of the climate cycle.

Scientific and political authorities have been insisting that to mitigate climate change, greenhouse gas emissions must be substantially reduced. Despite this, with the system's current momentum, even if we were to suddenly put a stop to all greenhouse gas emissions today, we would still see the consequences of what has already been produced for a very long time, like a boat following its trajectory when the engine has been stopped. Changes that we were able to make to the system would not necessarily mitigate the effects of climate change very quickly.

What can be predicted, in particular for temperature changes? Without going into the details of all the potential scenarios that scientists have predicted using a wide variety of models and scenarios (demographic, economic, soil use scenarios, etc.), there is general consensus that by the end of the twenty-first century, the global surface temperature will be higher than it is today and than it was in the past, with scales varying depending on the scenario and model. We are almost sure that it will be 1.5°C higher than at the end of the nineteenth century,

and for some scenarios, more than 2°C and up to 4°C or 5°C in some cases. Regardless, global warming will continue after 2100 due to the inertia of the system in which we live.

Future global and regional climate change

Another important and particularly sensitive element, especially in the Mediterranean Basin, is the “water” component and water cycle. Changes affecting the water cycle as a result of global warming are not evenly distributed on the earth’s surface.

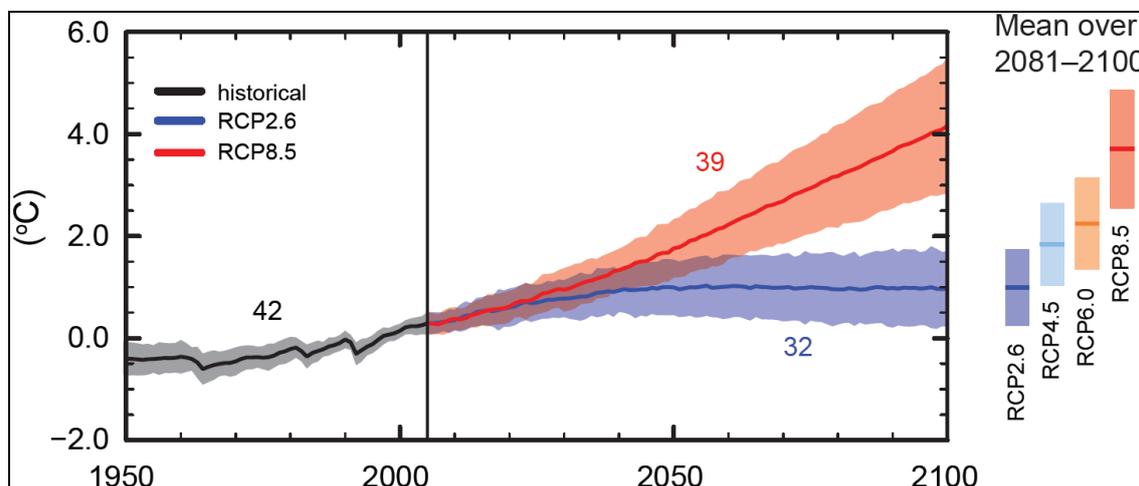


Figure 5 - Projected mean sea level changes in the twenty-first century compared with 1986-2005

Figure 5 shows the curve for global changes for two types of models: the RCP 2.6 model and RCP 8.5 model (for Representative Concentration Pathways), corresponding to different assumptions from various models. Both these models indicate global temperature increases. They also point to significant mean precipitation changes in various regions of the planet. One particular finding is that, whatever the model used, there will be significantly less precipitation in the Mediterranean Basin, which will amplify the “water” problem throughout the entire region.

Another important factor targeted by climate specialists concerns sea level changes, which will also entail major consequences, as Mariana FADER will show us.

The Mediterranean context

Here are a few important figures on the Mediterranean situation: according to research from various groups, think tanks and institutions such as the IPCC or Plan Bleu, by 2100, the mean temperature increase will likely be between 2° and 4°C, precipitation will drop by 5 to 30%, and sea levels will rise by 20 to 60 cm.

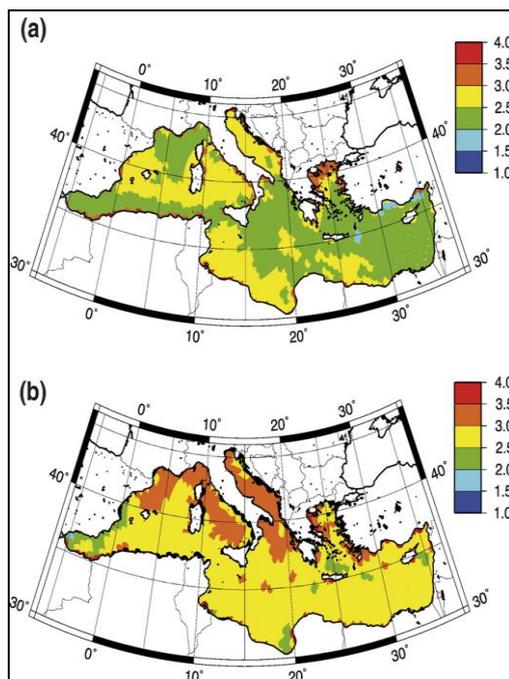


Figure 6 - Projected sea surface temperature change in winter (a) and summer (b) in 2070-2099 compared with 1961-1990 (Source: Somot et al, 2007).

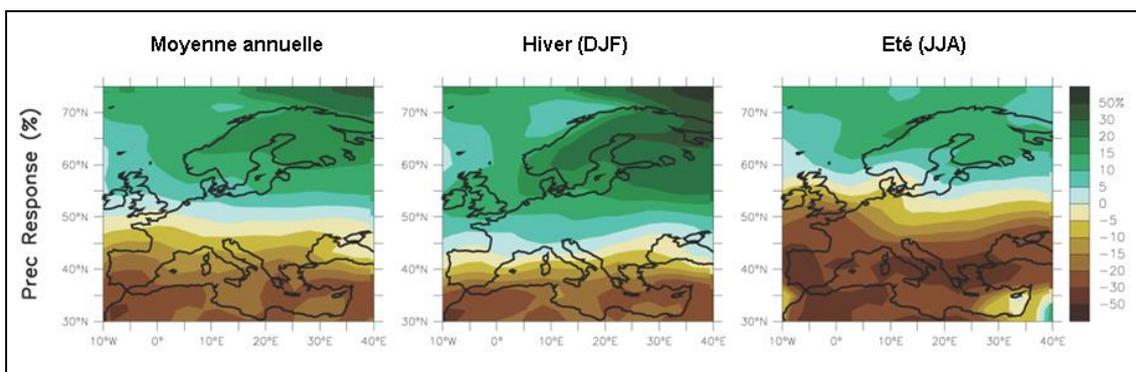


Figure 7 - Change in precipitation in the Mediterranean and Europe in 2080-2099 compared with 1980-1999, according to Emissions Scenario A1B (Source: IPCC, 2007b)

We also know that Mediterranean countries are already experiencing water stress, especially in the southern and eastern parts of the Mediterranean Basin (Figure 7).

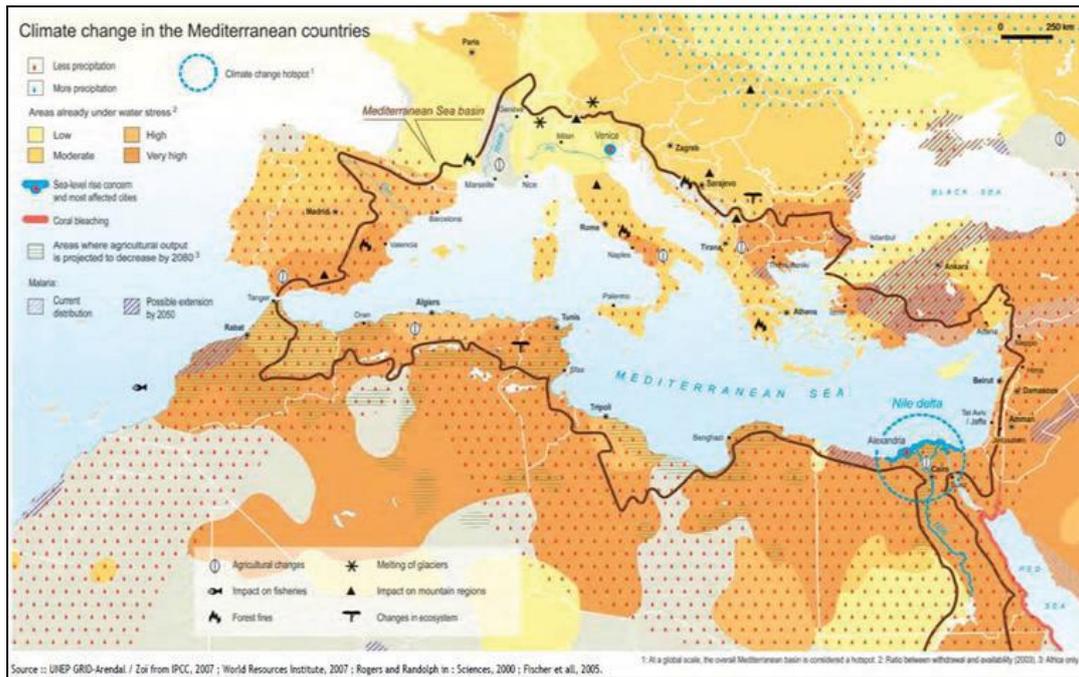


Figure 8 - Climate change in Mediterranean countries

Figure 8 shows that the Mediterranean Basin is in a vulnerable situation with respect to its natural resources, and the situation will simply worsen in the context of climate change.

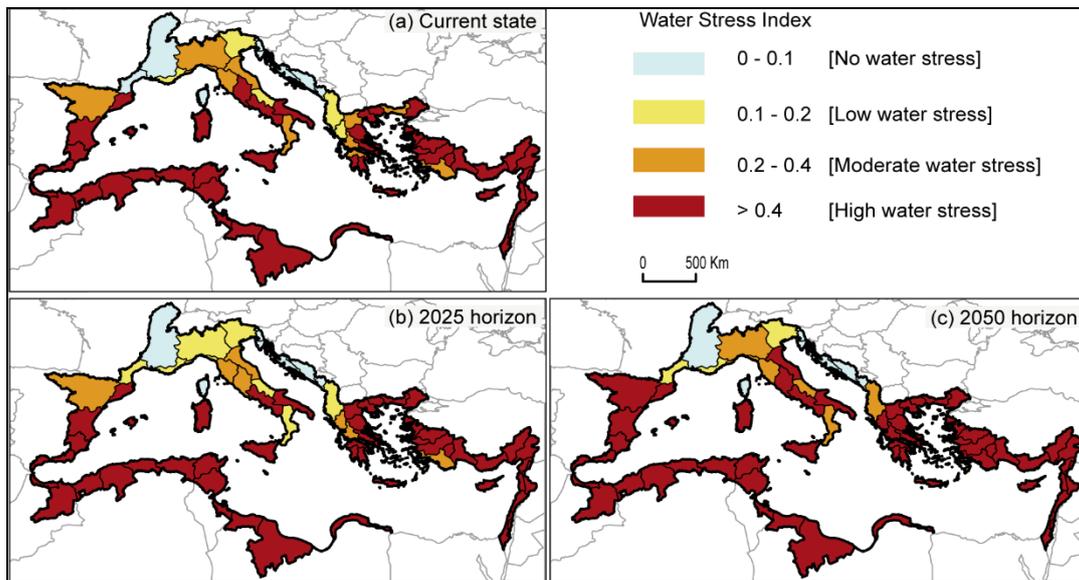


Figure 9 - Water stress

Recent studies (map in Figure 9) point in particular to a gradual yet inevitable shift towards widespread water stress across the entire Mediterranean region. The map on the top left shows the current state of water stress with situations that are already extremely difficult in the southern and eastern parts of the Mediterranean Basin. The maps for the 2025 and 2050 outlooks show a gradual shift towards widespread water stress around the entire region, which is a source of concern for local populations, policymakers, and yourselves, as political leaders. This is the context towards which we are heading and it will absolutely require important changes and quick decision-making.

Conclusion: water issues

As a trained career hydrologist, I would like to conclude by sharing some information on water and water issues in a context weakened by climate change, particularly in the Mediterranean Basin, where water is an important indicator of climate change.

Water issues can be broken into a number of major sectors:

- Food issues: the likely need to develop wastewater reuse in agriculture.
- Societal and health issues: water is the world's leading vector of disease, which poses numerous problems, especially in major urban areas.
- Economic and financial issues: flooding is one of the natural disasters with the most devastating consequences.
- Political and geopolitical issues: major rivers and aquifers cross borders, which generates many decision-making and management issues.

Finally I would like to focus on water, which, in my opinion, is a central issue in the Mediterranean Basin. The region is vulnerable to climate and environmental changes, and water-related issues are at the forefront in shaping contemporary trends, including how our societies are organised; major urbanisation and consequently, the way in which some areas are populated; immigration, which is an extremely concerning issue; sustainable development; the fight against poverty; and joint discussions on global public goods.

Impact of climate change in Southern and Eastern Mediterranean towns and cities

Marianela FADER, World Bank Consultant, Mediterranean Institute of Marine and Terrestrial Biodiversity and Ecology, Potsdam Institute for Climate Impact Research

Thank you very much for the opportunity of presenting “Turn Down the Heat” and for the invitation. My name is Marianela Fader and I am a researcher in hydrology and agriculture at the OT-Med laboratory of excellence in Aix-en-Provence, based at the Mediterranean Institute for Biodiversity and Ecology.

I worked on the World Bank report as a guest scientist at the Potsdam Institute for Climate Impact Research.

This is the third report of a series of World Bank reports aimed at showing climate change in facts that can pose obstacles for development goals. In this case, we have analysed three regions but I am only going to focus on the Middle East and North Africa regions, and only show a couple of the most important points for cities and local communities. I probably do not need to remind you that the Middle East and North Africa regions are very vulnerable to climate change, not only because water stress is already an issue and they are dependant, but also because they are expecting significant population growth and strong urbanization. Also, you can see the place of the agricultural sector and economic growth, and these can be undermined by climate change impacts.

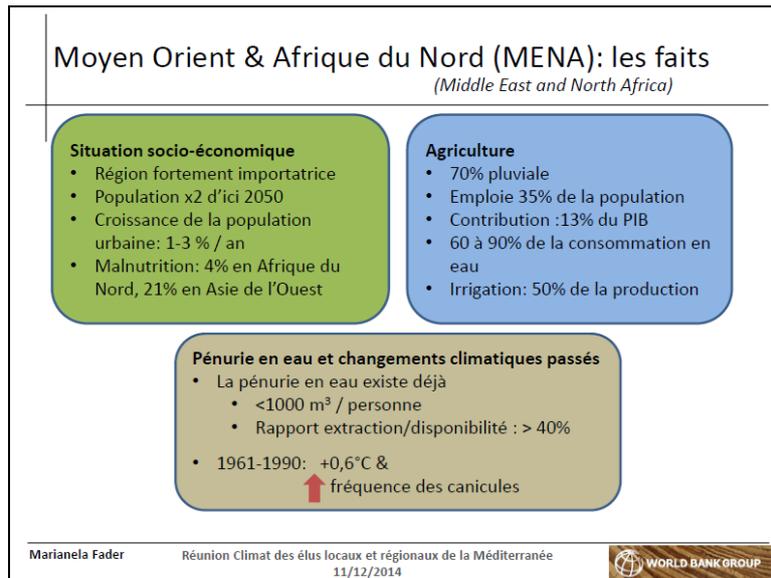


Figure 1 - Middle East and North Africa: facts

Our report shows that temperatures in the MENA region will rise and most importantly, and this is what I want to stress, they will rise more than mean global temperatures. That means, for example, that if global temperatures rise by 4°C, we see that in the MENA, some parts of Algeria in the summer months will rise by up to 8°C.

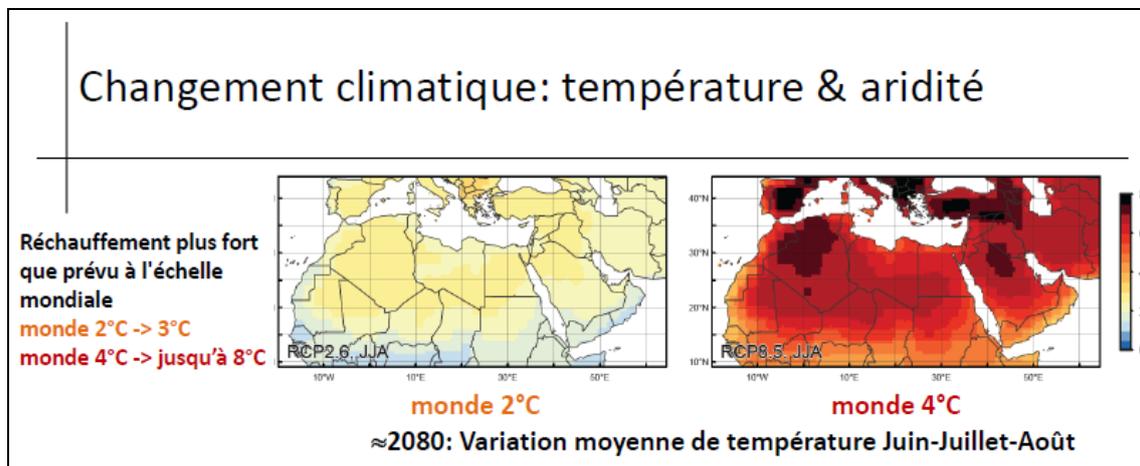


Figure 2 - Climate change: temperature & aridity

I have read the declaration that you plan to sign today and I feel that it is over-optimistic, considering that global warming is more pronounced in the Mediterranean than the rest of the world. I would also like to emphasise that a 4°C or 5°C temperature increase corresponds to a very realistic scenario if the situation is not remedied. The good news is that warming can be limited to 2°C if a global policy commitment is made to reduce greenhouse gas emissions. Heat waves are closely tied to warming trends, but I'll come back to that later.

The images at the bottom of Figure 12 show a drop in precipitation and increase in aridity north of the 25th parallel. These results are extremely reliable as other models provide the same figures.

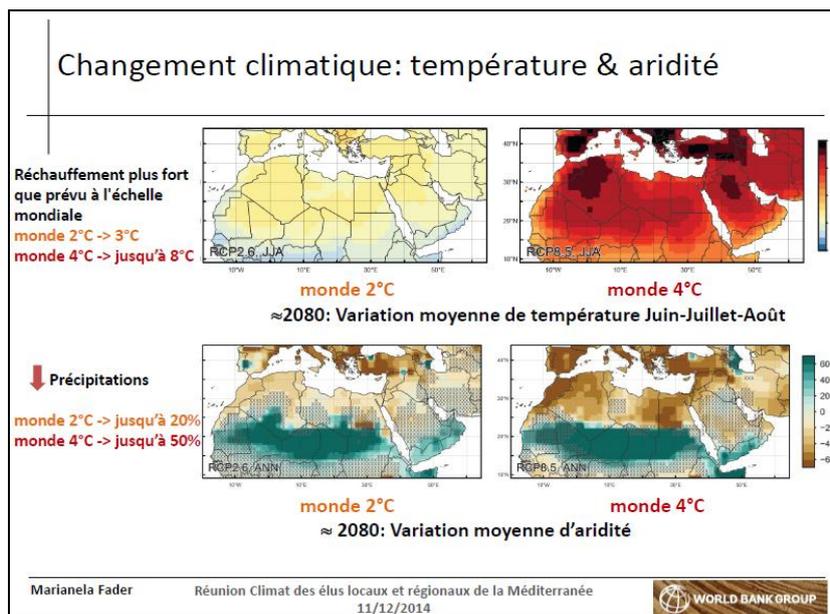


Figure 3 - Temperature and aridity

As Mr SERVAT underlined, precipitation and temperature changes will produce secondary hydrology changes, and affect sea levels. In both cases, changes are more significant and present potentially greater risks than rising temperatures. For instance, in the future, sea levels could rise by 4 to 10 mm per year rather than the current 1 mm per year. These figures may seem low, but the impacts from such increases are considerable.

These changes could have significant implications for the agricultural sector resulting in agricultural land loss, reduced crop (e.g. wheat, corn, vegetable) and livestock production, and changes to growing seasons in agro-climatic zones. This type of change has already been observed and will probably be more severe and dangerous in the future. Cities, towns and local communities will be especially affected as rural populations migrate to larger urban centres. This is already the case in Morocco, where people are migrating to cities on the Atlantic coast. In 2007, water shortages forced 6,000 farmers to migrate from rural areas to the city. In Algeria, a number of cities are seeing an influx from rural areas, as is the case in Egypt, where rural populations are moving from the Nile Delta to Cairo.

Another impact analysed as a unit is heat stress and increasing heat waves. As a result of global warming, 80% of summer months will register never before recorded extreme temperatures. A temperature increase of just 2°C will widen the range of days with extremely high temperatures to 1 to 71 days in Jordan, and 4 to 62 days in Syria. A temperature increase of 4 °C will lead to more than 115 consecutive days of high temperatures. This kind of increase will have a direct impact on the urban health sector. An Israeli study concluded that an increase of just 1°C could result in a 2% increase in hospitalisation rates and a 4% increase in mortality. The number of diseases will also rise due to various difficult-to-control factors, such as an increased number of insects, water shortage, and rising temperatures.

Children and the elderly will be the most at risk. The increase in diseases will affect the tourism sector as travellers will avoid disease-stricken destinations.

Rising sea levels will cause substantial economic loss due to the lack of adaptation resources (up to \$12 M/year in Egypt) and significant land loss (up to 70 sq. km), affecting a wide number of people, especially in the Nile Delta and Morocco.

What will be the consequences for towns and cities?

- The cost of adaptation is extremely high; according to one study, approximately \$12 million per year in 2030.

- The tourism sector will undergo considerable pressure and lose beaches as a result of coastal erosion: according to one study, more than 70% of Moroccan beaches will no longer exist at the end of the century.
- If seawalls are ineffective in preventing flooding, it would come at an expense of up to \$58 billion for Alexandria, nearly \$3 billion for Benghazi, and more than half a billion dollars for Algiers.

It should also be highlighted that climate change entails a multiple threat. On one side of the coin, populations are forced to move due to economic pressure, and on the other, they remain trapped in poverty.

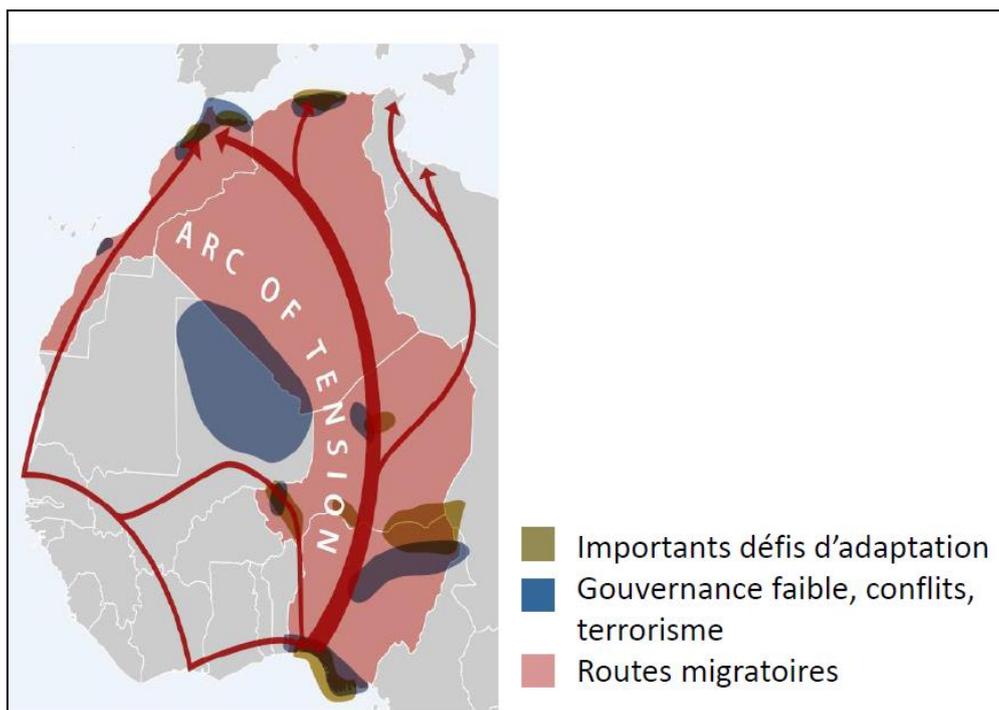


Figure 4 - Migration and security

The arc of tension is where Saharan and sub-Saharan migratory flows will converge. It is an area of transit for African populations and an area closed to Europeans. Climate change, governance problems and socio-economic factors will play a decisive role in the situation.

I would like to underline the fact that research on relationships between climate change and the security situation is critical. Climate change will probably intensify some threats, by increasing competition for already scarce resources, causing prices to rise, and heightening the risk of poverty in rural and urban areas.

There is nothing new in the World Bank report, and it does not offer solutions, but it does provide clues to finding solutions and a comprehensive look at impacts. These could be used to encourage:

- the natural conditions of the regions to be put to use for solar energy and wind power,
- the development of technological innovation,
- investments in R&D
- the increase of capability and resilience to make measures more effective
- small-scale decentralised solutions adapted to the local level, rather than major projects aimed at increasing resources, as occurred in the past.

Finally, the report emphasises how important it is for towns, cities and local communities to take measures that target the most vulnerable groups (pregnant women, the elderly, outdoor workers, rural populations migrating to cities) by providing access to social security and anti-

discrimination programmes, and fighting vulnerability in the face of rising prices and reduced purchasing power. This particularly concerns women who remain in rural areas and who are confronted with critical situations of work overload and reduced access to resources.

I would like to conclude by saying that the situation I have described for the southern and eastern regions of the Mediterranean also applies to the North, but with slight differences. The issues are therefore the same and we have a strong potential to work together to develop projects if we share our experience. I believe that is why we are here today.

Dania ABDUL MALAK

I would like to ask our speakers a couple questions. The first is more technical and concerns the reliability of projections. We know that it is sometimes difficult to predict the weather from one day to the next. So what about forecasting 50 years down the road? What is the margin of error for these forecasts?

The second question concerns the “Turn down the Heat” report, which mentions the water, energy and food security nexus. Decreased water supplies prevents staple foods from being produced or imported. In terms of sustainability, this is not sustainable agriculture. Is there a solution to this situation? You have already given us some avenues for solutions but could you be more specific?

Eric SERVAT

As far as the reliability of figures given on climate variability are concerned, it is important not to confuse meteorology forecasts, which we know have limited reliability, and predictions concerning climate change for decades to come and beyond.

The essential thing is that even if figures are becoming increasingly accurate with each IPCC report, the models proposed are developing and gaining in quality and reliability. The theories we put forward are also based on increasingly solid data. The scenarios that we base our work on propose a variety of developments in various areas, and combinations of these developments. Without going into the uncertainty calculations of models, which would be of no interest here, it is important to understand that the trend exhibited by these results is very consistent with the theories put forward. It is currently impossible to determine if sea levels will rise by 20 cm, 35 cm, or 50 cm. However, it is absolutely certain that the trends for the various parameters and sectors that Mrs FADER and I presented are consistent and all point in the same direction, towards rising sea levels, decreased precipitation, and a rise in extreme events, and they must be taken into account in decision-making and the reflective process.

That is what is most important, and it must be kept in mind that in the years to come, models are set to become more accurate and precise so that uncertainties concerning current figures will be reduced.



Marianela FADER

To answer your question about the types of solutions we have to address problems facing agricultural zones and poverty that threatens purchasing power in these countries.

A number of publications and reports present actions that can be taken in rural areas, at both the national and local levels. I cannot cite all of them but I will outline three specific points:

- It is important to ensure that the dynamics in rural zones are sustained and preserved while specifically focussing on SMEs and not just multinationals. These small businesses play an important role in ensuring food security in the places concerned.
- These regions are suffering from major water shortages and we have still not solved all these water-related problems. It is important to develop a sustainable irrigation system for these regions.
- A number of initiatives can be implemented at the field level, for instance in agriculture, conservation, and organic agriculture. Consumers also have a role to play.

Dania ABDUL MALAK

Thank you. It seems like we're already getting into political issues. The message is clear: policies need to change.

Mrs ORTEGA I ALEMANY and Mr QUERALT, what are your experiences? What are your thoughts on fighting climate change at the regional level? What findings and best practices are you able to share with the other regions of the Mediterranean?

Joana ORTEGA I ALEMANY, Vice-President of the Catalonia Region of Spain and First Vice-President of the CPMR Intermediterranean Commission

Ladies and Gentlemen, it is a great honour for Catalonia to be participating in today's meeting and to share with you, local and regional elected officials, how our region is dealing with climate change.

I am sure, and this is why we are here, that climate change is the greatest challenge currently facing our planet. It is a global phenomenon with shared responsibilities and economic and social consequences, an environment that differs depending on the specific vulnerability of each territory. It is nothing new. We already established that in the Climate Declaration by Local and Regional Authorities in the Mediterranean. Experts of the IPCC have pinpointed the Mediterranean as the region that is most vulnerable to climate change. Reports released by the European Environment Agency also corroborate this.

Catalonia is very active in combatting climate change. The regional government has worked hard together with local authorities, businesses and civil society to reduce greenhouse gas emissions and adapt to the impacts of these phenomena on our environmental and socio-economic systems.



Our government's commitment to our own country has been demonstrated with strategic planning initiatives to reduce emissions while providing the conditions that enable change. The most recent example is a framework law on climate change. It has yet to be passed by the government but has been approved by the Interministerial Commission on Climate Change. We hope to present it to Parliament in the months to come.

We are also highly committed at the local level as 90% of Catalans live in local communities that have signed the Covenant of Mayors for local sustainable energy, and more than 400 communities have already approved their action plan for sustainable energy. Catalonia is also organised into networks, the 452 Network of regions committed to sustainable development. The Catalan government submitted a proposal to the United Nations Climate Change Secretariat to include the role of regions, and local and regional authorities in the fight against climate change at the Poznan COP 14 in 2008. The COP finally acknowledged the role of sub-national governments in tackling climate change and the effective capability of their work. The addition became known as the Catalan Amendment.

I would now like to introduce the presentation of Mr Arnau QUERALT, Director of the Advisory Council for the Sustainable Development of Catalonia. He will explain what I've been talking about in more detail.

Arnau QUERALT Director of the Advisory Council for the Sustainable Development of Catalonia (Spain)

Thank you Vice-President ORTEGA I ALEMANY. I am pleased to be here as the Director of the Advisory Council for the Sustainable Development of Catalonia, a government advisory body that acts directly under the presidency and regional government to propose a strategic vision for Catalonia over the next fifteen to twenty years. The council includes non-governmental members, scientists, and professionals from the economic world and private institutions.

One of the most important issues on which we are working is climate change. This is why we are here and why we are working across government departments. Mrs ORTEGA I ALEMANY has presented a few aspects that apply to Catalonia. I would like to present 3 priorities we have identified which may interest you.

First priority: Know the impacts of climate change

We have familiarised ourselves with information provided by the inter-governmental group on climate change. We have taken note of the results of the global climate report, however we believe that it is important to apply them to a smaller scale and look at the regional impacts of climate change in Catalonia and other regions of the Mediterranean. We need to take into account the fact that Catalonia has diverse micro-climates and a wide variety of geographic landscapes. This diversity is a rich asset to the region, but it also adds complexity when it comes to climate change.

Downscaling is extremely important and we need to do it with the support of Catalonia's scientific community. Some great initiatives have already taken shape: creation of the Intergovernmental Panel on Climate Change (IPCC) and the Group of Experts on Climate Change in Catalonia (GECCC), which brings together a hundred physics, biology and chemistry experts. The group produces a five-year report on the impacts of climate change in Catalonia. This is a way of collecting data and creating partnerships with institutions, the Advisory Council, the Catalan Office for Climate Change, the Catalonia Meteorology Agency, and the National Science Academy of Catalonia. It provides a way of promoting our work and the findings of the Research Centre, and recognising the quality of work of the scientific community. This is a real win-win situation. More than seventy experts from various fields contributed to the report, which is currently in the publishing phase.

Second priority: Public action

We have put a lot of work into exploring ways of mitigating climate change. Transport is the primary source of greenhouse gases but urban development and planning are also contributing factors.

At the same time, we also need to take action to adapt to climate change. The Catalonia Region has been a pioneer in this area. Its adaptation strategy was approved in 2012 and later in April 2013 by the European Commission. Right now we are working on passing a framework law on climate change that will both regulate mitigation actions and adaptation to climate change, and it is a difficult task.

Third priority: Governance

This is perhaps the most important. In Catalonia, we have gone from addressing the issue in a sectoral manner to a cross-cutting approach, with an interministerial commission now in charge of climate change. In other words, rather than falling under the responsibility of the Ministry of the Environment or Agriculture, we are addressing the issue of climate change with an across-the-board approach. For instance, it is important that the Ministry of Education works to educate students on the subject.

Coordination with local governments is also important. A number of the high officials of European municipalities committed to the European Mayors Adapt initiative are from Catalonia. This makes way for regional governments and local administrations to work actively together.

The general public also needs to be convinced of the important economic interests at stake as a result of climate change. It is not easy to discuss the various scenarios with the public and get them to consider the 2100 outlook, or make them understand that a 0.3°C temperature increase represents direct climate change that comes with major indirect consequences.

We especially need to convince the economic sector of the responsibilities of regional and local governments, and that it is possible to make a difference, as long as these sectors are involved in the process. The tourism sector, for example, must adapt to become sustainable. This is a priority, and a challenge as well.

Dania ABDUL MALAK

I'm taking note of several of your points: good governance involves local governments and institutions, and takes social responsibility for the general public, and in particular a regionalised approach to effects and impacts. These are clear messages for other regions. Thank you very much.

I would now like to invite Mrs Nadira BOUAZZA to give us her thoughts as a young entrepreneur, and to touch on the difficulties she has encountered with respect to the relationship between government and business, and potential solutions.

Nadira BOUAZZA, Urban planning architect, entrepreneur specialised in environmentally-sustainable architecture (Algeria)

I am very proud to be participating in this event on Mediterranean climate. I am here as a project sponsor and entrepreneur in Algeria. We all know that the building sector contributes to 25% of CO2 emissions.

In Algeria, new public policies are attempting to revitalise the image of large cities by developing local industries, setting objectives for new sustainable towns and cities, and protecting biodiversity.

Several projects are coming to light in this context. I have selected a few, such as the new town of Hassi Messaoud in Southern Algeria. This is a 4,000 ha oil oasis, with 80,000 residents and a 6 billion dollar budget for a project slated for 2016 by an Algerian-Korean consortium.



Figure 5 - New town of Hassi Messaoud

The new town in Oran is another project that will build a suburban district next to Oran (the second largest city in Algeria), on a 1,400 ha site. The project will cost €250 million. The call for tenders will be launched in 2015 for feasibility and technical studies, and urban planning.



Figure 6 - New town in Oran

Both projects are part of a sustainable development approach. In the case of Hassi Messaoud, South Korea conducted a climatological study. Not all sustainable development elements will be used in this huge project, but elements such as parks, energy efficient public buildings and modern social housing will be incorporated. In the case of the suburban district, feasibility studies will determine how sustainable development is integrated into urban projects. Urban planning and public buildings in the area will be built with the environment and bioclimatic architecture in mind.

Another project involves redeveloping the Bay of Algiers as part of the City's 2030 strategic plan. The project has been underway for quite some time and includes several important underlying projects, such as the bay's visual identity and style, parks created as leisure spaces, and an experimental ecodistrict. The ecodistrict is part of a Franco-Algerian partnership with the Arte Charpentier design firm.

This type of project requires new skills that do not exist or are limited locally: preliminary studies, specialised energy conservation studies, energy audits, consulting, and sustainable development-related assistance.

I am involved in this aspect, through supporting an environmentally-sustainable business project. I am trained as an urban planning architect. I completed my preliminary architecture studies in Algeria, and went on to study urban planning, and obtained a Master's in urban project management and construction company management in France, where I have been living for the last ten years. In September, I began training in Poissy to become a Certified European Passive House Designer. Bioclimatic architecture is my core activity. I am trying to make it more available locally. I returned to Algeria as part of the Euro-Mediterranean Paceim programme which enabled me to develop this project in partnership with the IRD and Anvredet, a local Algerian research agency. I also had the opportunity to join Marseille Innovation, a business incubator that is helping me find partners for the project. Qualifications alone are not enough to succeed with this type of project in an environment like Algeria. It takes ambition and a trailblazer attitude which wants to bring sustainable development to the forefront of urban projects.



Figure 7 - Bay of Algiers redevelopment project

The project itself is an environmentally-sustainable architecture endeavour, which means designing energy-saving buildings, involving the public in open dialogue, and coming up with ways of managing different projects with a sustainable development approach. I created the business/design department where I produce architectural and urban designs. The next step will be to set up a “Property Development” department to promote this type of project, and perhaps even found a training school.

To bring together this seminar with my thinking and the journey that I’ve been on since August 2014, I would say that the first priority is to ensure continuity with research work. A lot of work has been done with the APED (Algerian association for renewable energies and sustainable development) and Algerian laboratories on local lifestyles and ways of integrating

sustainable development into urban projects. Transitioning from the research phase to the research implementation phase is essential. It is very important but we have not yet found the right solution.

The other priority is to consider targeted programmes. It is impossible to work on a widespread scale. Things are not necessarily done as easily in Algeria as they are in Europe. I'm not just referring to Algeria but the Southern Mediterranean in general, including Tunisia and Morocco. These three countries all have a different way of tackling things, a different methodology and a different understanding of sustainable development. Taking the site and culture into account is very important. Some things are a given in Europe but this is not necessarily the case in Southern Mediterranean countries, such as certification and public consultation. Since August, I have come to realise that 80% of my work involves raising awareness and informing people. I am trying to focus on the urgent need to take action and not just develop programmes with promising potential.

Social equity should also be mentioned because equal access to energy-saving buildings is at the heart of sustainable development. It is not a question of being wealthy. We need to insist on creating social housing that integrates these aspects and, at the risk of repeating myself, takes into consideration the site, culture, and public dialogue.

I would like to close by saying that this is not just an action or a project; it is a philosophy of life, our day-to-day way of life.

Dania ABDUL MALAK

Thank you very much. I would now like to ask Mr José Luis MUNOZ-BONET to speak.

José Luis MUNOZ-BONET, Co-Director of RIC Valencia, Climate-KIC, Valencia Region (Spain)

Hello ladies and gentlemen, I would like to thank the organisers of this fascinating conference. Thank you for inviting me to share a few ideas on the issue of climate, and particularly Climate-KIC.

We have been exploring how our ideas can be applied to the Mediterranean as a whole. I will explain the role we hope regions and municipalities will play and how we can use these European initiatives at the regional level. I would also like to give you a few practical examples of public-private partnerships involving the basic issue of high-calibre experts and their mobility throughout Europe.



Figure 8 - Our planet Earth

Figure 17 shows where we live, our home. All the presentations made this morning share a common message, and that is the need to work together because climate change is not a regional or local problem. We need to work at the local and regional level but it is something that is happening on our own doorsteps.

We have already heard about these issues this morning from Mr SERVAT and Mrs FADER, who presented various scenarios for the future. It is clear that we all need to take action. To achieve a maximum level of efficiency, we above all, need complete cooperation between local players. This will not change the technological aspect or governments, but we need to work hand in hand for our actions to be effective.

There are several wonderful initiatives at the European level, such as the C-KIC, which is a community founded on climate change knowledge and innovation. It is the first community of its kind to have created a regional structure within the community and is probably the largest public-private climate change partnership. We have established a partnership base with micro-businesses and SMEs at a local and international level, from the public and private sectors, as well as the academic field.

We are working together to find climate change solutions. For us, it is essential that we work through national and regional centres.

The challenges of this type of project include both technological and socio-technological issues. We need to implement new forms of innovation in a systematic and consistent manner. We need new models that help us understand economic problems. However, innovation requires interaction between several activity sectors.

Mission and objectives

We are working on climate change mediation without neglecting the economic aspect. Without the involvement of business, nothing is going to change. We therefore need to take all the areas into consideration.



Figure 9 - Climate KIC: Missions and objectives

We need to bring innovation to market and remove obstacles to innovation and creativity. We are working to attract talent. Europe has high-calibre experts and key information at our disposal, but we need to increase cooperation in order to achieve better interaction at the local, national, and international levels.

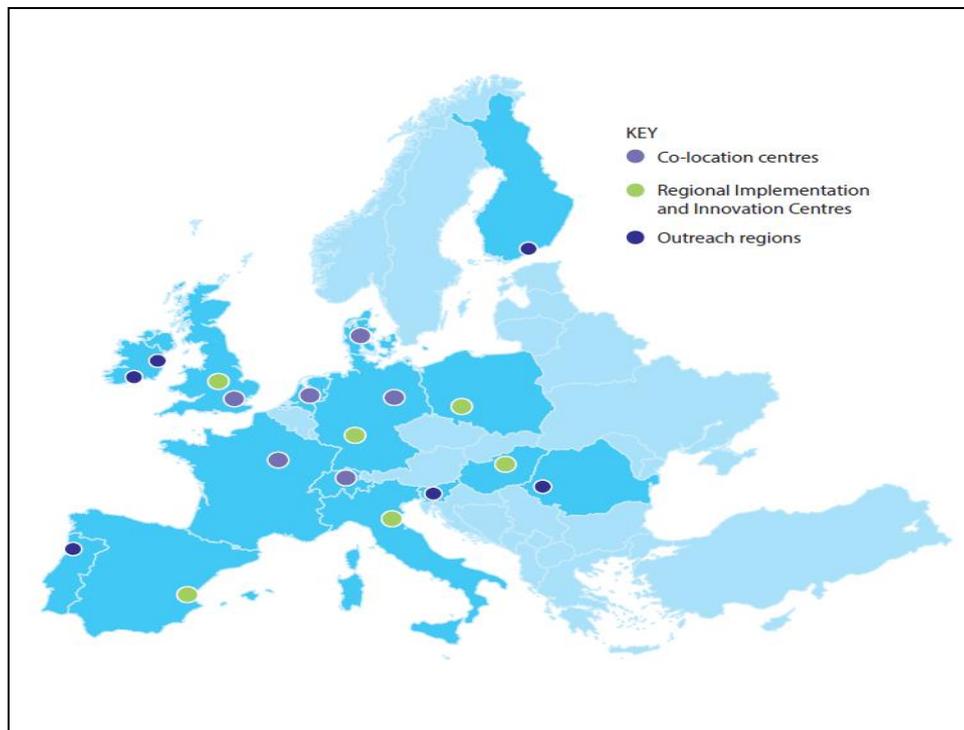


Figure 10 - Climate KIC: Partnership network

We are backed by a network of 250 partnerships in Europe, spread across six co-location centres in London, Berlin, Paris, Zurich, Copenhagen, and the Netherlands. We also work with six regions that have their own climate strategies: Emilia-Romagna in Italy, the Valencia

Region in Spain, the Hessen Region in Germany, Lower Silesia Province in Poland, the Central Hungary Region and the West Midlands Region in the UK.

We have also expanded the borders of our consortium and are working with Ireland, Finland, Portugal, Romania, and Slovenia. We would like to broaden our field of action even more towards the Mediterranean.

C-KIC Valencia

The working tool developed by the Climate-KIC Office in Valencia is a pyramid of innovation that links businesses, education, governments and public institutions, and research.

We work in our region in Valencia in our Climate-KIC office with what we call a Pyramid of innovation, linking business, education, government, public, and research together, in what is called the pipeline of innovation.

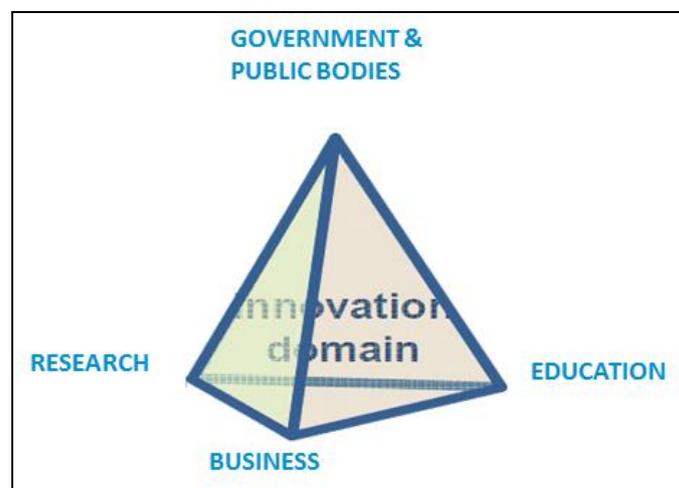


Figure 11 - Pyramid of innovation

Mr Queralt mentioned earlier that raising awareness is key. It really is key. We need to educate, to train our people in Europe. This means helping new entrepreneurs run companies. We also work on pathfinder projects and innovation.

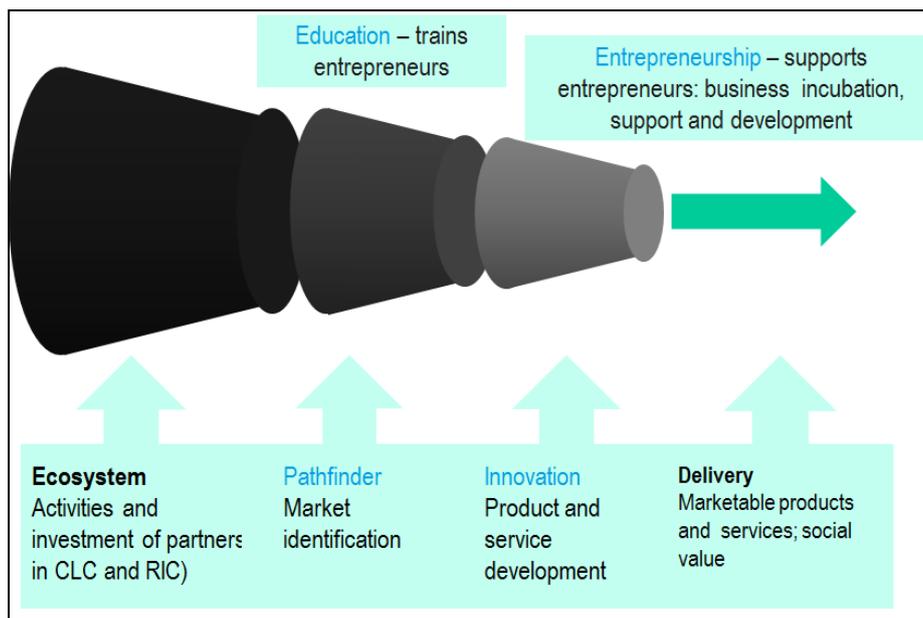


Figure 12 - Pipeline of innovation

Our action is based on 3 different pillars: Innovation, entrepreneurship, and education.

The Innovation pillar includes 8 working platforms structured around the following themes:

- Greenhouse gas monitoring.
- Making transitions happen.
- The built environment.
- Industrial symbiosis.
- Adaptation services.
- Sustainable city systems.
- Land and water.
- Developing a bio-economy.

Through these platforms, we work on transition entities and projects where we link cities for developing new models on low-carbon economy, building parameters for sustainable buildings, transport, industry, bio-economy, land and water.

We also work on the Entrepreneurship pillar, to create new companies and support our entrepreneurs in Europe to create the new services and products that our society is going to demand as a result of climate change.

Education: we are working on different formats of education but “pioneers into practice” is one that I would like to outline quickly with you. Pioneers into practice: this is a mobility program for experts in this pillar of innovation. We believe that we probably don’t have the right people or they are perhaps not well prepared to deal with the challenges at hand. That is why we need this significant role for entrepreneurial and public players. What we need is to work on systemic social technological aspects to implement these effective changes to mitigate and adapt to climate change. We need transformative and not incremental innovation in this area. This is why we developed the concept of Pioneers. What is a pioneer? Pioneers are developing something new. They are paving a new way.

Who can participate? Civil servants, public employees, researchers, PhD. candidates, employees, entrepreneurs... we could say anyone who has experience and has been working on these issues. Then we create a mobility problem in our region and in the old regions. We work on location, this is really key. What is different here is the regional character of this

programme; that is essential: the territory. That is why regions and local entities are key in this respect, but also in practice. We need to put into practice new models, new services, new products and people. We need to invest in capacities and systemic innovation to achieve this transition in our society.

What we are working on is picking up people, bringing them out of their comfort zones. We have started by recruiting civil servants from our regional government, and hope to transfer them to other governments. We bring them to our company. We also bring them to universities. We create this environment and I must say that it has been a truly incredible experience. We now have roughly 600 experts in Europe, and you can see that they come from large companies, small and medium sized companies. This is really a very useful tool for them, but also universities and public entities, public agencies, business intermediates, NGOs, as well as research centres working together to try to find solutions in this area. I should mention that this year we have been working with 232 pioneers in these 12 countries.

We have achieved outstanding results. Over the next seven years, experiments will be led on fighting greenhouse gas in Europe. We have European tools and we need to support our regions in this area. We need to establish regional programmes to work on an integrated shared approach.

We also need to develop a new concept based on regional innovation. This is the future: creating new concepts.

Dania ABDUL MALAK

I have a couple questions for our speakers. The first is for Mrs BOUAZZA. How would you describe your experience in Algeria? Are your efforts focused on raising awareness of climate change problems amongst the public and the government, or implementing your work at the local level?

The second question is for Mr MUNOZ-BONET. You presented your experience at the European level. Do you think that it would be possible to extend your work of connecting businesses, governments and institutions across the Mediterranean, i.e. to regions that are not part of Europe?

Nadira BOUAZZA

In reality, it is impossible to separate raising awareness and implementation. If people, and by that I mean the end users of the premises and not politicians, are not aware of the environmental protection initiative, you can't do anything. Everyone knows that we're heading straight for a natural disaster, but how do you avoid it? Algeria and most countries in the Southern Mediterranean lack an environment that facilitates work on this. Some partnerships between Europe and the Southern Mediterranean are working to develop this type of environment, but partnerships are not enough. We need to train people locally so that they can continue this approach and take it on themselves. It will be a lengthy process, but it needs to be done as quickly as possible.

José Luis MUNOZ-BONET

To answer your question, our aim is precisely to expand our work to the Mediterranean. The opportunities that I presented are not limited to Northern Europe and we now need to create new opportunities for Mediterranean countries. There are some programmes in existence that can help: the MET programme, the INTER-REG programme, LIFE+. We need to use these programmes to our strategic advantage by implementing them in our regions and countries. That is what we are trying to do by using them in our strategy.

In our region, we have an integrated strategy for climate change. In other words, we defined our goal and then used these tools. Once again, cooperation is key, not just because we are confronted with a problem, but because it is such a great challenge. Cooperation creates opportunity for our businesses, universities, and civil society. Our goal is to cooperate with you. So we want to hear your initiatives and ideas for improving the development of our cooperative process.



Dania ABDUL MALAK

Mr RAVENEL and Mr SIMONET, could you please present the work you've accomplished as part of the Mediterranean Strategy for Sustainable Development and explain how it intends to make the Mediterranean region less vulnerable to climate change?

New Perspectives from the Review of the Mediterranean Strategy for Sustainable Development

Hugues RAVENEL, Director of Plan Bleu

Climate change issues have a general impact on sustainable development. It is true that on a municipal, regional and Mediterranean-wide scale, the primary objective is not so much to develop projects, but to address existing challenges. We do not spend our time arguing with those who are sceptical of climate change and whether or not there will be an increase in extreme events. These things are already a reality. Our development model is not resilient, and it is therefore having a hard time coping with these phenomena. Climate change issues are pushing us to shift more quickly towards sustainable development, right here and now.

The review of the Mediterranean Strategy for Sustainable Development (MSSD) is being carried out within the framework of the Mediterranean Action Plan, at the initiative of Mediterranean countries and the United Nations Environment Programme, which has already been in existence for 40 years. It can be somewhat depressing to think that those who came before us had already exposed what Mrs BOUAZZA just told us about the important relationships between environment and development. In 1975, protecting the Mediterranean was not a conservation initiative, but rather a way of ensuring future development, in tourism for example.

In 2005, following the Johannesburg summit on sustainable development, Mediterranean countries wanted to develop a Mediterranean Strategy for Sustainable Development that would be equivalent to Agenda 21, applied to the entire Mediterranean. Plan Bleu assisted the Mediterranean Commission on Sustainable Development in writing the document, which was structured around four objectives - the three pillars of traditional sustainable development, and the pillar of governance issues - and a number of priority areas of action, including water, tourism, and rural areas.



Unfortunately, although the document was a joint framework intended not to seize the opportunity for funding windows, but to really work together for the future of the Mediterranean, it received little recognition. It established a list of indicators that Plan Bleu has been monitoring every two years.



■ In terms of reporting and follow-up, the MSSD has provisions for monitoring based on 34 priority indicators, allowing periodic regional assessments

ISSUES	INDICATORS
Economic, social and environmental benchmarks	Gross Domestic Product (GDP)
	Human Development Index (HDI)
	Ecological Footprint (EF)
Water	GDP, HDI, EF
	Water Efficiency Index
	Water demand
	Exploitation Index of renewable resources
	Share of population with access to an improved water source
Energy and climate change	Share of population with access to an improved sanitation system
	Energy intensity
Tourism	Share of renewable energies in energy balance
	GHG emissions
Rural development, agriculture	International tourism receipts
	Ratio of agricultural population versus rural population
Urban dev.	Proportion of agriculture quality products and Share of the agricultural land area used by organic farming
	Proportion of urban population with access to a decent dwelling
Sea, coastal areas	Proportion of coastal urban population connected to a sanitation network
	ODA of OECD DAC countries donors.
Solidarity, commitment and financing	Proportion of the ODA allocated to Mediterranean countries
	EU net public financial flows to EU Mediterranean countries
	Proportion of bank credit allocated to the private sector - Existence of alternative financing systems to bank credit
Human capital and participation	Youth literacy rate
	Girl/Boy primary and secondary school registration ratio
	Public and private expenses for research and development in percentage of GDP

Figure 13 - Governance indicators

Following Rio+20, during the Conference of the Parties in Istanbul (December 2013), the 21 countries surrounding the Mediterranean asked the Mediterranean Action Plan and Plan Bleu to review the Mediterranean Strategy for Sustainable Development. A number of people here today participated in the process.

A multi-scale approach is essential to this type of strategy. Mr QUERALT spoke about this with respect to regionalisation. Addressing climate issues at the regional level is an important step forward initiated by scientists working for the IPCC with a view to making local awareness-raising more effective.

I would also like to emphasize that when it comes to sustainable development, it is important to be consistent with global Agenda 21 sustainable development goals and the Mediterranean Strategy for Sustainable Development 1.0 and soon 2.0, which we are working on at the moment. The UN is currently involved in a relatively dynamic process of defining global sustainable development goals. Once completed, it will offer a sustainable development dashboard addressing different issues via 17 sustainable development goals. The Mediterranean Strategy for Sustainable Development is a similar version of the global dashboard, but needs to be based on your local experience, and the experience of the previous Mediterranean Strategy for Sustainable Development (1.0).

2014 has been spent gathering input and preparing the MSSD through a number of steps, and a draft strategy should be ready in late 2014 or early 2015. A consultation phase will take place in 2015 and include:

- A conference in Malta, where the draft will be reviewed.
- The meeting of the Mediterranean Commission on Sustainable Development in Morocco.
- Late 2015/early 2016, adoption of the MSSD.

Based on the consultation process, the priority themes are:

- the sea,
- natural resources,
- rural development,
- food,
- climate,
- sustainable towns and cities,
- green economy,
- changes to consumption and production methods,

- governance.

These themes provide consistency between MSSD and global sustainable development goals so that issues can be addressed at all levels.

In terms of vision, the idea is to move towards sustainable development using healthy ecosystems in order to improve cooperation, solidarity and equity.

Stéphane SIMONET, Director of ACTERRA, Environment and Adaptation to Climate Change

I would like to give you a sneak preview of the content of the Climate chapter in the Mediterranean Strategy review that is currently being prepared. First of all, the work that has been done and is still underway for this section is not the work of one expert or institution but results from collaboration between representatives from various economic, political and scientific spheres in the Mediterranean. What we are presenting today is still in the preliminary phase, as the strategy has not yet been validated.

From a strategy standpoint, climate change is treated as a central priority because the Mediterranean is a climate change hotspot, as our scientific colleagues have shown. On an international level, some of the most important influences on the economy, environment and societies will come from climate. The MSSD cannot overlook this issue, especially since it has economic implications and repercussions on human development and the implementation of development goals. From this perspective, the aim of the strategy is to speed up the Mediterranean region's transition towards low-carbon trajectories and development models that are adapted to and compatible with anticipated climate changes.

The "Climate" chapter was prepared in three phases. First, we consulted with a number of regional players and used their expertise and opinions to identify priority climate change issues and problems in the region. This information was then used to come up with proposals to determine the strategy's direction and finally establish a set of actions and flagship initiatives that the strategy could promote.

Major problems that were identified include scientific challenges, the importance of financial issues (how do you fund adaptation and mitigation in the region?), and determining political responsibility for these issues at a local, regional, and national level.

This led to a number of proposals with respect to the strategic direction of the "Climate" component that could also be applied to the other themes. The idea was to address climate change as a risk to development, rather than as a strictly scientific or environmental issue, and ensure that the strategy's various thematic and sector-oriented approaches integrate this concept.

For climate itself, 4 strategic directions were defined based on scientific aspects:

- Develop and promote research for use in decision-making.
- Accelerate innovation and the adoption of cutting-edge technologies to overcome climate challenges.
- Exploit international climate funding available and relevant national instruments and put it to more effective use.
- Encourage political and institutional reforms to guide these initiatives and ensure that they address climate issues.

Actions and Flagship initiatives (examples)

SD 3.1: Develop scientific knowledge and technical capacities to confront climate change and ensure informed decision-making at all levels

Actions:

Establish Science-Policy Interfaces, with a view to prepare consolidated scientific assessments and guidance on climate change trends, impacts and adaptation and mitigation options

→ *Local CC scientific platforms and observatories*



Actions and Flagship initiatives (examples)

SD 3.2: Accelerate the uptake of climate-smart technologies across the region

Actions:

Establish support mechanisms aiming at fostering i) collaborative R&D programmes between universities, governments and businesses, ii) regional knowledge sharing and iii) transfer of sound technologies

→ *Local policies to stimulate innovation and development of Clusters and Excellence Centers on climate solutions and technologies (PRIDES in PACA)*



Actions and Flagship initiatives (examples)

SD 4.7: Enhance urban resilience by identifying risks and territorial, economic and social vulnerabilities in urban areas and promoting sustainable and smart solutions

Actions:

Set up an inventory of Mediterranean local authorities undertaking climate change adaptation exercises, and of relevant good practices

Climate proofing of urban plans which have a spatial dimension

→ *Conduct local vulnerability assessments, develop and implement Integrated Low-Carbon and Climate-resilient Local Development Plans*



Actions and Flagship initiatives (examples)

SD 4.8: Advance coastal spatial patterns that reduce demand for energy and transportation, and promote eco-construction practices

Actions:

Development of urban planning which anticipates future growth and future transport needs, based on transport to be provided mainly by collective forms of transport

Promotion of self-production of energy (solar, wind), including provision of the necessary network infrastructure

→ *Reduce need for mobility, develop multi-modal transport schemes, limit urban sprawl, set up local policies and incentives in favor of EE/RE*



The slides above show examples of strategic directions broken down into detailed actions, and how they can be used alongside local government action on the ground. They also show how local government actions can contribute to implementing the strategy in their territories.

For the first strategic direction (develop scientific knowledge and ensure that it is used in political decision-making), one of the flagship initiatives being considered involves creating science/policy, or science/decision-making interfaces so that both communities share information on a regular basis and ensure that scientific advances are used towards the ongoing development and implementation of policy in various fields besides the energy sector. This has concrete implications in terms of guidance and the ability of territories to set up scientific platforms. As we heard earlier, the Catalonia region is an example of this. The PACA region has begun looking into setting up this type of platform, as well as observatories and programmes that would promote local research.

For another strategic direction, an example action is the importance of enhancing urban resilience and action plans aimed at developing certain infrastructure. Here again, the initiative will help support local authorities, particularly by developing territorial climate/energy plans, or with regard to work on assessing urban vulnerabilities to climate change. This is a way of supporting efforts at the local level. As elected officials, you can use these initiatives to directly contribute to making the strategy operational and tangible on a local scale.

Dania ABDUL MALAK

All the presentations clearly point to underlying change, and particularly climate change, in the Mediterranean. We really need to increase water efficiency and shift towards organic agriculture. As for governance, it is in our interests to adopt a clearly strategic and regional vision, and establish inter-institutional platforms to address climate change and regional impacts, and involve the scientific community. This last point seems very important to me, and I am thrilled that it was emphasised in the presentations.

There is a lot of awareness-raising work to be done in the public business sector, especially in the Southern and Eastern Mediterranean. Another platform that reaches beyond Europe could be set up with Climate-KIC to encourage collaboration between the public sector, institutions, and businesses.

Finally, I think the Mediterranean Strategy for Sustainable Development really takes climate change into consideration and provides adaptation tools via a joint Mediterranean platform. Getting ready for COP Paris is also a good thing.

Henri-Luc THIBAUT, Interministerial Delegation to the Mediterranean Affairs, with responsibility for Agriculture, Food Security (France)

I would like to make three comments on these fantastic presentations.

First, the presentations on climate change impacts. They did not underline an essential point for the Mediterranean. Mediterranean countries share a specific climate that is part of their identity. The Mediterranean climate does not cover the entire Mediterranean region, but it is characterised by a climograph that is only found in a few other places in the world (e.g. California, Chile, South Africa). The Mediterranean climate has carved the region's landscapes, shaped social organisations, and inspired different types of architecture. Finally, for local players, the Mediterranean climate evokes a common interest that needs to be protected. This is why the Mediterranean needs to speak out on climate issues. We need to know how to look out for ourselves! We have to save this Mediterranean climate that is such an important part of our identity.

Second, the latest IPCC report was ground-breaking in that it focussed on a new sector: the land sector - agriculture, land-use change and forestry. This is responsible for almost 25% of greenhouse gas emissions and needs to be approached in a more comprehensive manner. This is essential because local players are the first in line when it comes to managing land-use change and urban sprawl. Reduced farmland also depends on the decisions of authorities and elected officials. You are on the front lines for ensuring that these factors do not become too negative, and that the land sector becomes a key focus in reducing greenhouse gas and adaptation.

My third comment is that we have had a very urban-oriented approach to these issues. However, for me, the agricultural sector and the future of rural regions seems fundamental. What is agriculture? It is optimising and nurturing the virtually miraculous biological process of photosynthesis. Carbon gas is absorbed and using the renewable energy of the sun, it is transformed into assimilable carbon for living organisms.

The primary task of local communities and elected officials is to support farmers. We must not forget them, especially in the Mediterranean, where they represent 50% to 60% of the population in some regions.

Philippe ZANIN, Chamber of Commerce and Industry of Marseille-Provence (France), representative of ASCAME¹

I am delighted to have heard presentations from a young entrepreneur, the representative from Valencia, who emphasised the interaction between the economic world and actions to combat global warming, and Plan Bleu, which also touched on this. The chambers of commerce, and especially the businesses that they represent (remember that 90% of Mediterranean businesses are small, essentially traditional businesses, and not high-tech start-ups), are convinced of the need to get businesses involved in fighting climate change.

We have identified two completely different strategies. The first involves raising awareness of companies and getting them to control their own waste/emissions, energy consumption, water management, etc., so that they are adopting attitudes and uses that contribute to fighting climate change. This is important for all businesses, but the issue is knowing how to motivate and get them involved when many are in survival mode.

The second strategy involves mobilising all types of businesses and the entire business value chain as much as possible, from the most innovative businesses to the smallest manufacturing companies, in designing, manufacturing, installing, maintaining, and marketing systems that will help combat climate change and, more broadly, contribute to sustainable development. I agree with Plan Bleu that climate change is a facet of the transition to sustainable development.

Mohamed BARRADA, Director of Cooperation, Nouakchott (Mauritania)

I would like to stress that the city of Nouakchott is extremely vulnerable to climate change. It was originally built in 1956 to accommodate 2,000 residents, and now has a population of 1 million. Climate change from the 1970s onwards is behind this influx of migrants that has changed the landscape of Nouakchott. One of the other characteristics of the city is that it is protected from the sea in the west by a line of coastal sand dunes. In 1995, a five-metre breach in the dune caused flooding that almost led to considerable damage. Our climatologists estimate that if urgent measures are not taken, by 2050 we risk seeing flooding that could cause damage costing as much as \$6 billion.

I share this with you to make you aware of our interest in funding solutions for combatting the effects of climate change. We already developed an Agenda 21 in 2012. However at a cost of €3.5 million, we are now running into problems funding it. We have already funded part of the Agenda using our own resources, through awareness-raising and training for agents.

Mohamed SADIKI, Vice-President of the Rabat-Salé-Zemmour-Zaer Region (Morocco), and Vice-President of the Intermediterranean Commission.

I would like to thank the speakers for the quality of their presentations. We have really got into the issues around climate change. I would ask that the scientists provide tables showing the responsibilities of each country and region to support their findings. We do not all have the same greenhouse gas emissions quotas. If we break down quotas by individual country, it will become clear that although the southern region has low greenhouse gas emissions, it unfortunately suffers the same consequences.

¹ ASCAME is a Mediterranean network of 300 Chambers of Commerce and Industry

I would like to quickly mention the latest storm to hit Morocco, the South of France and Spain. In Morocco, 36 people lost their lives in a storm the likes of which we had not seen in over 30 years. I would kindly ask you to observe a minute of silence in honour of these victims.

I will add that we have made considerable progress in promoting renewable and clean energies. Our goal is for one quarter of our energy needs to be covered by clean energies by 2020.

Thank you for your attention and please join me in a minute of silence in memory of the people who perished in recent storms.

Dania ABDUL MALAK

I suggest that we hear from our speakers after a minute of silence.



Eric SERVAT

I would like to say a word about what has just been said. I'm not sure if we should go as far as looking at individual greenhouse gas production to, in some way or other, pinpoint the culprits. Today we are facing the same situation, whether we like it or not. What we need to do is raise awareness among the public, governance systems and stakeholders in both the Northern and Southern Mediterranean so that everyone can make the effort required to preserve the planet, as Henri-Luc THIBAULT mentioned.

We share a common heritage in the Mediterranean Basin, with its climate, what it represents and the way it has shaped us. We are all well aware of the current situation. It is a result of all of our history, and it seems critical to me that we focus on strategies that help mitigate certain effects, especially those that Mr RAVENEL and Mr SIMONET evoked earlier. I think that these included some very thought-provoking things that you as leaders would have an interest in discussing, sharing, and implementing as much as possible. Scientists will help you in doing this. We will continue our efforts, by refining our forecasting system whenever we can, so that we provide decision-makers with useful data.

I believe that we need to move forward together and do everything that we can to fix current trends and work towards a more sustainable model that benefits everyone.

Marianela FADER

I think it is important to underline two things. First, the IPCC report makes it clear that it will be impossible to save the planet or climate if we do not all work together. Everyone needs to contribute or we will fail in this endeavour.

Second, climate change presents opportunities for development. Pioneers like the Moroccans with alternative energies could reap financial benefits. That is something positive.

José Luis MUNOZ-BONET

I would like to end with a positive message about what you said. As the Chamber of Commerce representative highlighted, in the near future, there will be opportunities for our companies businesses, and employment. We need to change our current models. I would like to keep this message in mind: there is opportunity for everyone; actions need to be taken locally and regionally. We need to work together to solve this problem.

Dania ABDUL MALAK

Thank you all for joining us for this session.

Contribution and action of local and regional authorities in combatting climate change

Moderator

Hervé LEVITE, Senior Environmental Specialist, World Bank (France)

My name is Hervé Levite. I am based here in Marseille at the World Bank, on a secondment from the French Ministry of Ecology with the Center for Mediterranean Integration, a platform for lending institutions working on development in the Mediterranean.

I am delighted to be chairing this round table. We want it to be a time for interaction with you in the audience, both through the questions that you have for our guests, and through your responses to the various oral presentations that they will be giving. They will not be using PowerPoint.

We've heard from scientists and regional institutional players, Plan Bleu, and from a number of people in the private sector. Now we would like to hear from local authorities, who have become key players in combatting climate change. This is not just the case in the Mediterranean. The same thing is happening on a global scale for the next COP. Local authorities are playing an increasingly important role, and they want to get involved because they are on the front line when it comes to climate change. As President Vauzelle said in his introduction, they need to prepare, prevent, act and implement by putting in place local and regional strategies.

We are incredibly fortunate to have a panel representing a wide range of regional and municipal authorities from both Northern and Southern Mediterranean countries. They also represent a wide range of geographic landscapes, including mountain regions, coastal regions and continental areas.

In the hour we have together, we would like to introduce the declaration that will be adopted at the end of this meeting. It is a declaration of intention on behalf of local and regional authorities as part of the international climate change Agenda. We will focus on four main questions:

- What is the situation in these towns, cities, and regions? What is their current experience of climate change, and how do they intend to adapt to it - which they need to do as soon as possible.
- The high level of commitment on the part of local and regional authorities to mitigate the effects of climate change. Local authorities want to play a role, and they say that they can deal with some problems at their level, but it is the overall effort that will reduce the effects of climate change. We would like to hear about what local authorities have already done, and what motivated them to do it. Was it local residents? Or their sense of responsibility towards their citizens?
- Mitigation and adaptation. What opportunities could climate change present us with locally in terms of growth, employment and local innovation?
- Would local authorities who currently come together under the UCLG and the CPMR Intermediterranean Commission be interested in developing the regional dimension? How can networks of towns and cities or local authorities lend weight to these efforts?

We have six speakers for this round table. I won't take the time to introduce them all first, but would like to hear straightaway from Morocco, and from Mr Mohamed Sefiani, who is the President of the Chefchaouen City Council.

Mr Sefiani, could you respond to these four main questions from the perspective of your region?

Mohamed Sefiani, President of Chefchaouen City Council (Morocco), MedCities.

I would like to thank the organisers, and in particular the UCLG Mediterranean Commission, the Provence-Alpes-Côtes d'Azur region and the City of Marseille, for inviting me to take part in this important event.

With regard to the questions asked by the moderator, it is important for us, as regional and local authorities, to get actively involved in themes such as the environment and climate change. Our last municipal elections were held in 2009 for a six-year term. A few months later, in April, we drafted a local environment policy, which received unanimous support. Climate change was one of the key priorities in this document.

In terms of local policy, we started working with the voluntary sector as part of our participatory democratic approach, in order to discuss, debate and implement environmental projects, some of which included a climate change aspect. So climate change is one of the areas that we have been working on.



Why are local authorities in Morocco getting involved? What are their roles? Do we have a role

to play? Our municipal charter (published in 2009, the next version of the charter is planned for 2015) defines the operation of regional and local councils and encourages them to be given more authority. We talk about the big international meetings or summits, such as Kyoto, and various UN conventions. But at a local and regional level, how do we implement major international decisions? This charter is all about giving us the power to do so.

Morocco's new constitution, dated 1 July 2011, gave greater authority to local and regional authorities, with a real decentralisation of power. There is currently a big push towards regionalisation. Elections are likely to be held next summer, and regional authorities are going to be given new powers. Generally, local and regional elected officials are being given increasing jurisdiction over the Environment.

In Chefchaouen, we have been working on the basis that nature abhors a vacuum. The central government may be responsible for the country as a whole, but there is nothing to stop us from working in areas such as the environment at a local level. This is what we have been doing, and are continuing to do. For example, we worked with the University to set up a vocational degree on sustainable development and ecotourism, initiated by the city council. We also set up a BTS (vocational 2-year post-secondary qualification) in environment and ecotourism.

In Morocco, we use a development instrument for regional development planning, called the Municipal Development Plan (*Plan Communal de Développement - PCD*). This is a six-year

strategic development plan with an “Environment” component which was important for us, especially since we have been working with a participatory approach.

In 2010, we worked with Spain, Greece and Italy to have the Mediterranean Diet entered on the List of the Intangible Cultural Heritage of Humanity. The City of Chefchaouen is the only city in the Southern Mediterranean with representation to the government on all these initiatives.

Nearly two years ago in Morocco, an initiative was launched by the National Agency for the Development of Renewable Energies and Energy Efficiency (ADEREE) with the French Agency for the Environment and Energy Management (ADEME) and Swiss and German partners - the “Jiha Tinou” initiative for renewable energies and energy efficiency. As part of this, we set up the first *Point-Info Energie* awareness organisation in Morocco. Three cities were chosen for the initiative - Chefchaouen, Agadir and Oujda. We now work together in practical ways on projects related to energy. For example, we carried out an energy audit of the city and municipal buildings. We rebuilt traditional communal ovens in the medina quarter taking into account energy efficiency, with lower wood consumption. We are working on a municipal heating project using solar panels, which would be usable from April to September, instead of just the months of July and August. And we have also set up an Ecocentre in Chefchaouen, together with our partners from Malaga, as part of a European programme. We are moving forward.

With regard to the fourth question on the regional dimension, we need to work together across the Mediterranean within networks. In 2010, we joined the Moroccan network, *Association Marocaine pour des Ecovilles (AMEV)*. We are also members of the Medcités network, and have been involved in the creation of a new network, Divercités, along with a number of other Mediterranean countries, which is designed to facilitate implementation of the UN Convention on Biological Diversity.

We are therefore working in these areas, but despite our efforts and the size of our ambitions, without support from various international institutions such as the Green Climate Fund (GCF) or the World Bank, our action could end up having a negative effect on the people who believe in what we're doing.

We need support programmes for energy in general, because in Morocco, few people are talking about climate change at the municipal level. But energy, energy efficiency and the environment are vital issues.

So I want to issue an appeal for help - local and regional authorities need more funding, and more resources. Thank you.

Hervé LEVITE

Thank you very much. The number of initiatives that you mentioned in just a few minutes is really extraordinary. You talked a lot about raising awareness on the environment. How is your city currently experiencing the problems presented in the first part? Are local people seeing or experiencing the effects of climate change first hand?

Mohamed SEFIANI

Our region is located in the north-eastern region of Morocco, two hours from Tangiers. We are fortunate in that it is located in two nature reserves - the Talassemtane National Park, and the Bouhachem Regional Park (established in partnership with the Provence-Alpes-Côtes d'Azur region in France). We are better off than a lot of other areas in the Mediterranean. Nonetheless, over the last several years we have been affected by the negative effects of climate change. Just recently, we have had lots of rain. Our friend, Mr Mohamed SADIKI, Vice-President of the Rabat Region, has already mentioned the tragedy that just happened in Morocco. In the North, and in my province, nobody died, but a lot of infrastructure was damaged, and particularly roads. We have submitted our report to the Government to ask them to help us make repairs. To give you another example, Chefchaouen gets quite a lot of rain, with a high level of variability (40 L per second to 1300 L per second). It would take just

two straight years of drought to give us serious water problems. We are at the heart of climate change, and it has a direct impact on local residents in the city and province.

Hervé LEVITE

One last question for you: you mentioned a number of initiatives, which demonstrate that you are mobilising local people. Who is getting involved? Young people, professionals? Is that leading to any new innovations?

Mohamed SEFIANI

Yes, indeed, we're not alone in our efforts. We have 24 councillors and civil servants, but we also work with a very dynamic civil society, which is a real pillar and key for local development. We have even created a platform for consultation as part of a participatory democracy project, with a commission focussing on the environment.

The voluntary sector does a lots of work, and we support them, because we can't do it all ourselves. One of these organisations runs an environment fair, with the aim of raising awareness about life in the medina quarter and the city. They use it to inform the public about the negative effects on the forest (we are surrounded by forest), and the importance of environmental conservation. So a lot of local initiatives are run by the voluntary sector, and through decentralised cooperation. We have built a lot of relationships in Chefchaouen, and we take part in numerous international projects and programmes. We receive support and technical assistance from foreign partners.

Hervé LEVITE

Thank you very much. We are now going to shift to the Northern Mediterranean coast, to a rather sensitive region that some of you may know - the Peloponnese region in Greece. We would like to hear from you, Mr Apostolos PAPAFOUOTIU. Mr PAPAFOUOTIU is a regional councillor, and wants to tell us about why it is important to work regionally and locally on this issue, in an area that has probably been made vulnerable by the heat waves Greece has been experiencing and the vulnerability of Mediterranean forests.

Apostolos PAPAFOUOTIU, Peloponnese Regional Councillor (Greece), Member of the CPMR Intermediterranean Commission Political Bureau and the UCLG Mediterranean Commission Political Council.

Thank you for giving me this opportunity to share a few thoughts on methods for dealing with and combatting climate change, especially in my region, the Peloponnese.

Before starting my presentation, I want to say that climate change is an international problem which affects each one of us and our entire planet. A 35 cm sea level rise has been predicted for the Mediterranean. This will not have the same effect everywhere, and coastal areas in particular will need concerted and specific action. Among these coastal areas, there are some that differ from general characteristics.



Figure 14 - The Peloponnese Region

Our actions are adapted to this situation, which is affecting us directly in the Peloponnese region. We have been living with these problems for some time, and we have got used to the direct effects of climate change on our country, especially on the Northern coast.

A few examples of coastal erosion protection

Figure 23 shows the Gulf of Corinth, which separates the Peloponnese from Greece. It is a very unusual gulf that is 130km long and 25km wide, with a depth of 1,000m, similar to depths in the open sea. Clearly, then, problems with the sea affect us directly.

The coast is extremely rugged, with many hills and plateaus. Figure 24 shows the area where the most extreme climate events occur. They are directly linked to coastal erosion.

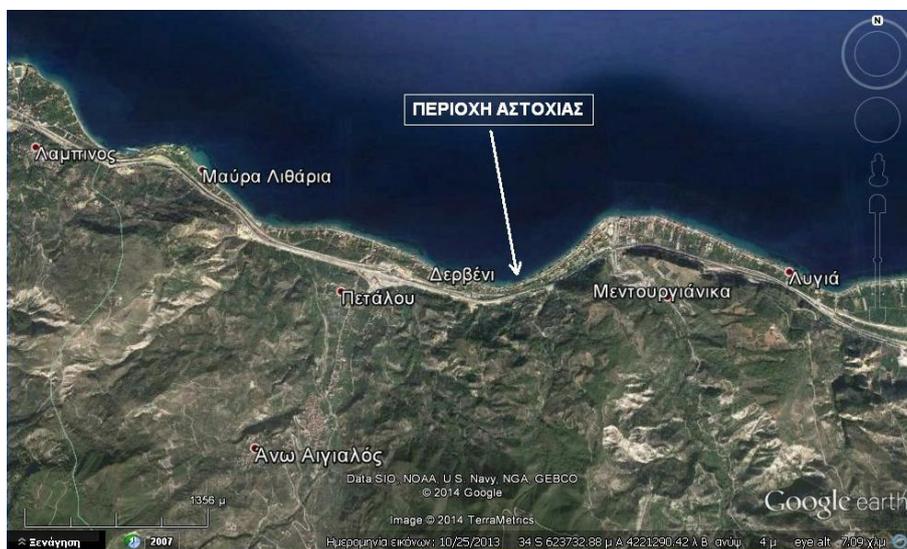


Figure 24 - Location of the seaside resort town of Derveni

Figure 25 shows the small seaside resort town of Derveni, which has a population of 2000 during the winter, a number which increases massively in the summer. You can immediately see the problems associated with coastal erosion. Figure 25 shows the coastline as it was 30 years ago (about 35m from local residences) and the situation today.



Figure 15 - Coastal erosion in Derveni

Other phenomena also impact the integrity of our coastline, such as earthquakes which create extreme events. It is difficult to measure the effects of these events because we are having great difficulty in dealing with erosion.

Figure 26 shows an event that took place one night two years ago (February 2012), when a huge storm hit the shoreline. Today, this type of event occurs regularly, with considerable damage to buildings.



Figure 16 - Storm (February 2012)

As you can see, there is now virtually no beach. Houses have had to be propped up with stilts. Thankfully nobody has been killed.



Figure 17 - Material storm damage

We have had to respond to this situation extremely quickly, without even applying for planning permission. It takes a very long time to get planning permission in Greece, and a number of government ministries allow us to proceed without official approval in order to act quickly.

We built a 150m-long reinforced concrete wall and a dyke in front of the buildings.



Figure 28 - Seawalls for coastal erosion protection

We also used another protection method by building a wall perpendicular to the coast. This operation was extremely expensive, but it was necessary to ensure the safety of our residents and their property.



Figure 18 - Construction of a coastal walkway (1)



Figure 19 - Construction of a coastal walkway (2)

Figures 29 and 30 show the construction of a small walkway for direct access to shoreline properties. These methods have been very efficient. We did not have a lot of other options. We used the same method to protect a road along the coast which had collapsed due to coastal erosion. There used to be about thirty metres of beach which has now been swallowed up by the sea and completely disappeared. This phenomenon is increasing all the time.

Here is another method that we have used (Figure 31) to repair collapsed roads. We use backfill to build the road back up and reinforce the coastal barrier. Once it has been repaired, the road runs right next to the sea.



Figure 31 - Another coastal erosion protection method

What can we do to manage these natural phenomena?

The impact of coastal erosion is obvious. How should we deal with these events? There is no one-size-fits-all solution, because we're talking about an area that is 130km long. It is just too expensive for us to work on the entire coastline - we haven't got the money to do it. Our budgets are very tight. We focus on a few of the most affected hotspots. This means that the work is always local. This is crucial in my area.

These events are not only happening in the northern part of the Peloponnese, but in other areas too, in perhaps less dramatic fashion. The Gulf of Corinth has an unusually deep sea (1000m), while other areas have a depth of 50-60m, so the situation is different. We do not have enough money for efficient action, and we are therefore unable to create a fully integrated solution for combatting these natural phenomena.

There are two key concepts that we have to bear in mind: mitigating climate change, and adapting to climate change. In terms of mitigating climate change, we try to work with partners from a perspective of acceptance of climate change. In this sense, mitigating climate change and adapting to it are two fully complementary processes.

We are also working to reduce greenhouse gas emissions. We have a mild climate, but it is warming up. We need to stay abreast of these changes.

To conclude, I think that raising awareness and providing information for local residents is essential. We need to learn how to explain what is happening to them, and to make the effort to help them understand. This is the how we will succeed in our combat against climate change. Thank you very much.

Hervé LEVITE

Thank you. I'm sure the audience will have some questions about the terrible problem of coastal erosion. I also have a question for you - what is the Peloponnese regional authority doing to combat this phenomenon? Is it funding the work? Is the Region developing plans for adapting towns and cities to the emerging environment? Is the regional authority playing an active role?

Apostolos PAPAFOTIOU

Yes, the Peloponnese region is facing geographical problems that are specific to it. We have always had problems with landslides. We are used to these kinds of events. We need to keep working in this way. We have used the impact of climate change to develop a strategic plan for the entire zone, i.e. a stretch of 7,000km. We are focusing particularly on specific high-risk areas, where we carry out studies. We then try to maintain the environmental conditions by protecting the area so that we can be sure to conserve the beauty of the region.

Hervé LEVITE

I imagine that coastal erosion is also very active in Sidi Bou Said, in Tunisia, but that there are less resources for combatting it. Mr Mohamed Raouf DAKHLAOUI, please tell us about it. Mr DAKHLAOUI is President of the Special Delegation of the town of Sidi Bou Said. Over to you.

Mohamed Raouf DAKHLAOUI, President of the Special Delegation of the town of Sidi Bou Said (Tunisia), MedCities.

Before I begin, I would just like to thank the organisers, and in particular for the warm welcome we have received. Before dealing with the points we are looking at in this round table, let me give you a little introduction to Sidi Bou Said. This will provide a context for the level of our involvement, which is relatively limited compared to the problems faced by larger towns or cities.



Sidi Bou Said is a small town with a population of 4,800 and a surface area of 217 hectares, over half of which is parkland. It is located 18km from the capital, Tunis, and is generally considered a tourist and University town. Its traditional Andalusian-style architecture and the requirement to paint walls white and doors and windows blue have made it into an essential tourist destination. The area of Sidi Bou Said cannot be extended because the town is stuck between the sea on both sides, and two other fairly large towns, Carthage and La Marsa.

Sidi Bou Said has no major employers, factories, manufacturing workshops or industrial areas, but just local shops, a market and a small supermarket. It welcomes a very large number of foreign and domestic tourists, which means that there are a host of small shops, cafés, restaurants and coastguards. In summer it can get up to 120,000 visitors per day, for a population of 5,000. It therefore attracts numbers that are significantly disproportionate to the local population. However, the municipal budget is based on the number of local residents.

The main problems are a result of the high visitor numbers: unauthorised street vending, dense traffic on roads not designed for it, problems with exhaust fumes and parking, problems with disposal of food packaging, plus, sadly, a lack of community-mindedness, but that doesn't have a huge influence on climate change. There is another factor which plays an important role in CO2 emissions, which could be better managed - almost everyone uses natural gas heating systems and air conditioning.

Anything we could do would have to be part of a broader policy that includes our much larger immediate neighbours and industrial areas where direct action is easier. A partnership operation has been launched for processing household waste and recycling with the support of the GIZ (German Federal Enterprise for International Cooperation).

The laws governing local authorities in Tunisia are still very centralised and strict, and leave municipalities with fairly little room for manoeuvre. Each stage in developing and implementing projects comes with significant red tape. Everything requires permission from the supervising authority, which in this case is the Governorate (which corresponds to the *Préfecture* in France). The Governorate often needs to get approval from one or more national departments, and it can take several years to implement a project once approved by the town council, regardless of the type of work under consideration. Local authorities need to be backed by laws that simplify procedures and give town councillors greater freedom at every level. This would allow them to deal directly with local issues and act more quickly and efficiently on the various issues encountered at a local level.

For example, environmental projects are stuck pending approval from the supervising authority, which wants to decide whether it is useful. Our environmental projects are on standby because the political situation in Tunisia is taking time to settle, and nobody dares to make anything other than very short-term decisions. Once the process has been completed and next week's elections have been held, we will be able to see more clearly.

It is true that in the revolution of 14 January 2011, Tunisians rejected the authority of the State, and government was weakened because it represented an arbitrary power. A lot of abuse was perpetrated behind a veil of revolutionary legitimacy. The demand for rights has concealed the concept of duty. This has led to a host of anti-civic acts, unauthorised building and construction, illegal street vending or the refusal to pay local taxes, water and electricity bills. Some issues have been resolved over the last two years, but others remain a problem, four years later, such as unauthorised residences in a small tourist town, or the multiplicity of hawkers, which undermines the aesthetic value of the town. Furthermore, and my colleague from Sousse will back me up on this, the municipal police force is no longer under the direct jurisdiction of the municipality, but is now part of the national police force - which means that it is often unavailable to fulfil its municipal duties.

Giving local authorities more power will do more than just support initiatives. It is a necessary step for local governments in Tunisia in general, and Sidi Bou Said in particular, so that they can fulfil their role with diligence and efficiency. Who better than people living locally, who experience the daily realities of life in a town and are continually in touch with residents affected and the organisations that make up civil society, to respond to the issues of daily life, monitor complex situations as they develop and envisage solutions for problems, whatever their political affiliation or leanings? Surely not the technocrats who apply general solutions to specific problems and, to paraphrase Coluche, who answer your question by drowning you in so much incomprehensible information that when they have finished explaining, you have forgotten your question.

Hervé LEVITE

We hear your appeal for the importance of local government. Together with the example from Morocco that was presented earlier, it makes a convincing case for the importance of work at this level. Can you tell us something about what you're trying to do to change things locally?

Mohamed Raouf DAKHLAOUI

We have focused our future actions on pollution and CO2 emissions on two areas as part of a medium-term 2014-2019 Municipal Initiatives Plan. First we intend to make Sidi Bou Said into a pedestrian town for non-residents. This is a fairly complicated project to implement due to a number of economic factors, such as access for tourists and customers to the numerous shops in the town square, but there are several possible solutions.

An urban planning consultancy firm will be selected before the end of 2014, i.e. in the next two weeks, to carry out an overall study so that we can move on to an actual feasibility study of a basic proposition for discussion with the residents of Sidi Bou Said with regard to a specific shuttle service which will replace current modes of transport. Secondly, we want to use renewable energy to power municipal buildings and street lights.

Studies will be launched in early 2015 for this too. At the same time, we are looking for partners because the Sidi Bou Said project could access a lot of funding as a pilot project. The small size of our town and its fame could attract a number of organisations, and provide them with good publicity. I'll say it again - Sidi Bou Said is a small town. We are too small for our action to make a big difference in combatting the effects of climate change, but we can make a small contribution.

Hervé LEVITE

Are you also appealing for partners for your project?

Mohamed Raouf DAKHLAOU

Absolutely. We started work with our immediate neighbours in the two municipalities of La Marsa and Carthage. With the influence and support of Mr Mohamed SEFIANI, we are part of the MedCities network and the Medina network which he leads so well.

Hervé LEVITE

Thank you - you've given us a lot of information. It has been interesting to hear from a small local authority that is looking for greater power, in some ways. Governments tend to take their time, while local authorities move faster. That much is clear from international negotiations. So this aspect interests us a lot.

Another close neighbour to Sidi Bou Said is Italy. We would like to hear now from the large region of Tuscany where you come from, Mr Massimo TOSCHI. Massimo TOSCHI is Special Advisor to the President of the Tuscany regional authority. We know how much work Italy is doing on climate issues. It has a number of specialist centres, including the International Center for Climate Governance in Venice, but I imagine there are also a wide range of national-level initiatives. Please tell us your perspective on regional issues.

Massimo TOSCHI, Special Advisor to the President of the Tuscany Region for Cooperation, Member of the CPMR Intermediterranean Commission Political Bureau and the UCLG Mediterranean Commission Political Council.

I think it is important to avoid generalisations when we're talking about the environment and climate issues, because the climate is a serious problem.

Since 2010, 112 meteorological phenomena have caused damage in Italy, including 30 floods due to intense rain that have damaged infrastructure, led to 29 days of metro and urban train stoppages, and 8 cases of damage to historical monuments. This severe weather has also led to 138 deaths since 2010. We're talking about a catastrophe on a level with a war. There were 38 days of power outages between 2010 and 2014. There are also some specific situations - Sardinia saw 16 deaths after a flood in Olbia, in the Ogliastra region. In Genoa, the situation caused serious damage to our cultural heritage.

Rome saw five floods between 2013 and 2014. In Milan, the Seveso River burst its banks 4 times.

I'm going back over these facts because we need to remember that climate change is a real issue, with real impacts. In Italy, there is now a clear-cut division between the public and politicians. The Mayor of Genoa and the President of Liguria are the focus of aggressive protests, because they are being held to account. 138 deaths! Who is going to take responsibility for them? That is what is needed to begin rebuilding our country. The provinces of Lucca, Grosseto, Pistoia, Massa and Carrara have all been affected in Tuscany. The most recent bad weather events occurred on 5 November 2014. Local residents demonstrated their dissatisfaction by occupying the town hall, demanding answers from the politicians. We really are talking about a war here, because the key is not to think in general terms, but to resolve the question of CO2, etc. and find answers for each country, city, town, and region.



I want to offer three conclusions:

- Climate risks do not affect all countries in the same way, and the same applies for different cities or regions.
- These events are more extreme at particular times of year and occur more frequently during the summer.
- We believe that urban areas need to become a political priority for joint work to prevent disasters. For the moment, there is a great shortage of prevention work. If 138 people died, that means that prevention systems are non-existent. Politicians need to take responsibility for including the prevention of meteorological disasters and adapting to climate change in the region.

Action needs to be taken to prevent and mitigate the effects of climate change. These are difficult issues. I think that the question of climate change in Tuscany will come up as a key issue during the elections in March 2015. Politicians are going to have to find answers.

I'd like to make one final point - climate change prevention and mitigation requires legal policy. However, it has been observed that legal observance is something of a rarity among politicians in Italy. Politicians are responsible for operating in accordance with the law and monitoring the situation. There is always a shortage of monitoring, and the people are overlooked. There is a lot of media hype, but a few days or months later, actions performed are superficial, not monitored and not commensurate with the situation. The real political challenge is monitoring, supervising and acting in accordance with the law.

There is an area in Italy, between Caserta and Naples called the "Land of Fires" which is facing a terrible situation due to organised crime that has used this area for the most horrific environmental trafficking. Observance of the law is a serious issue.

Our friends from Abruzzo are here. We remember the earthquake in L'Aquila, which reminds us of the issue of ideological disasters. That is the real issue here. Thank you.

Hervé LEVITE

Thank you very much. What you're saying is rather terrifying. We're hearing hope from the Southern Mediterranean countries, but in the Northern Mediterranean, we're facing catastrophe due to communication difficulties with central governments.

I would like to ask you two questions. There is clearly the problem of flooding associated with these extreme events, but there are also probably things linked to the development planning carried out by local authorities (such as the concreting of surfaces and the modification of catchment areas due to changes to forest and farmland). Do the regions also need to take responsibility for some of this, and make some decisions? This is what is happening in France with regard to planning permissions in flood zones. It has to be considered at a regional level. Furthermore, does a big region like Tuscany have the researchers and specialists who can be mobilised in support of civil society and decision-makers?

Massimo TOSCHI

The real problem is that the response is always too slow. We therefore have to plan ahead and act quickly. Politics is overly focussed on its own interests, and gets lost in debates where everyone takes sides. It's true that these debates can be fairly effective. But we have to plan ahead and avoid delayed decisions because another natural disaster could take place. My friends from Carrara or Grosseto have lost everything, including hope, and they want to know what the politicians are going to do about it.

As for your question on universities and research, we have working groups. The issue is not a lack of knowledge but whether we are going to use the ideas from technical experts to take preventative action. And it's the politicians who are responsible for that.

Hervé LEVITE

Which is why the declaration that we are going to adopt in a few minutes is important, with local and regional authorities committing to inform central Governments that they need their support.

Let's stay in Europe now, and hear about Spain from Mr Pau PERDICES PLA. Pau PERDICES PLA is Vice-President of the Lleida Provincial Council in Spain. The problems you are currently facing include water shortages and agricultural problems. How is your regional authority working to combat climate change?

Pau PERDICES PLA, Vice-President of the Lleida Provincial Council (Spain) and Presidency of the Arco Latino Territorial Cohesion Commission

I am very honoured to have been invited to take part in this meeting. Please excuse my poor French. I hope you will be able to understand to me. I am here as a representative of Arco Latino, an association of intermediary local authorities in Spain, France and Italy. It includes 14 Spanish provincial councils, 8 French *département* councils and 8 to 10 Italian provinces that have been working together since 2002 to reach the objectives set by these intermediary councils. To sum up the position of local and intermediary authorities, I would say that we have no legal authority to combat climate change. The same is true for municipal councils. Authority on these issues lies with the regional authorities, central governments and the European Union.

To give you a better idea of the area we come from - I represent a province of 12,000km², close to Barcelona, which includes 230 municipalities. Half of the province is agricultural land, and the other half is mountainous (the Pyrenees) with 30-40% of the area located in National Park nature reserves, where there is high awareness of climate change (increased snowfall in the mountains). Furthermore, since there are not plentiful amounts of water in Spain's agri-food regions, we are used to skilfully administrating the issue of water.



Since the Palma Declaration in Mallorca, 2010, Arco Latino has set the goal of implementing a European policy for compensating mayors, which has been directly encouraged by the European Commission. It is now clear that this policy has been a real success. There are 1,000 municipalities in the Latin Arch that stand to benefit from this policy based on the voluntary participation of mayors who wish to take part.

In return, these mayors commit to reduce municipal energy

consumption by 20%, and to ensure that 20% of their energy comes from renewable sources by 2020. We do not impose the measures to be taken for each municipality. Generally, they involve reducing spending on public lighting and sporting infrastructure. These mayors are required to set a “Sustainable Energy Plan” up to 2020, whose implementation is assessed every 2 years. The provincial councils have set up a body to coordinate the plan. The Council of European Municipalities and Regions (CEMR) has really encouraged this work and made it into a genuine partnership programme. I would like to invite all regional and local authority representatives present here today to join it.

Mayors are not used to making laws, but applying them. So this approach is a good compromise for adapting to the effects of climate change that can be applied around the world. Thank you.

Hervé LEVITE

Thank you for this impressive account of partnership between local and regional authorities. Your experience is really very interesting. Before handing over to Mr Mohamed BOUDRA, we would like to open up the floor to the audience, and let you ask some questions on either adaptation to climate change, or work on mitigation. We’ve heard a number of demands, in particular for increased decentralisation, and for central governments to take responsibility for the issues we’re talking about.

Monsieur JARNY

I work for GERES, an NGO that works to develop solutions. We have worked, in particular, in the Chefchaouen area. We have heard this morning that we are facing significant, if not tragic, consequences of climate change. We have also heard about opportunities for economic development and job creation. However, Europe and France are currently operating an austerity policy. But this is really the key moment for massive investment in energy transition and agricultural development. The politicians, who are the decision-makers, are doing the exact opposite by reducing funding from all sources.

So my question is for our panel of local and regional officials: The consequences of climate change have enormous costs, both in financial and human terms. Is this not the right time for massive investment?

Hervé LEVITE

I think that all the officials here today would agree with you, but how do we do it? Who would like to answer this question? We heard from Morocco that they are investing.

Mohamed SEFIANI

Indeed, Morocco is investing. For example, we will be completing the world's largest solar power generation plant in the coming months. I would like to congratulate the representative from GERES, for their instrumental role in the project. In response to your question, I will mention the project that we presented together last year, which was selected as part of a call for projects launched by the European Union Delegation in Rabat. We will be working together on energy efficiency, renewable energies, raising awareness, pilot infrastructure projects, use of LED lamps, etc. International cooperation is focusing on these areas, and the European Union has an ambitious programme for 2014-2020, which we need to make the most of. There are also other international funds that need to be drawn on, in addition to national, regional and local funds.

Hervé LEVITE

Thank you. I think that the declaration is also about the idea that we are going to need to invest and take action. During our previous round table, another European investment project was presented, the Climate-KIC.

These projects could also be developed in other regions, especially within France. I was talking earlier with the representative from the City of Nice. Why not roll out these operations across Europe? They help acquire know-how that can then be shared with other countries.

There are no more questions from the audience, so we are going to hand over to Mr Mohamed BOUDRA, President of the Taza Al Hoceima Taounate regional authority and President of the UCLG Mediterranean Commission Political Council. First, he is going to give us an overview of climate change in Morocco, from a different perspective than the one we have already heard. Then we will move on to the declaration by all the local and regional elected officials of the Mediterranean.

Reading and adoption of the political declaration

Mohamed BOUDRA, President of the Taza Al Hoceima Taounate Region and President of the UCLG Mediterranean Commission Political Council.

President Michel Vauzelle, elected officials, civil servants, experts, please allow me to say a few words in Arabic.

First of all, I would like to say a few words in Arabic to present my heartfelt thanks to President Michel Vauzelle and all the elected representatives of the region and City of Marseille. Laurence and Catherine, thank you so much for the marvellous way you have organised this event. Thank you, also, for the warm welcome you have given us. Thanks to everyone who has been with us, to the Presidents of regional authorities, mayors and elected officials. Thanks as well to the representatives of the Arab Towns Organization for joining us.

As Mr Vauzelle has already said, the political climate influences the our region. The political seen in the always under the control governments. The Palestinian people, by the Mayor of Nablus, is There are a number of our region. I believe it is Mediterranean responsibility and deal affairs.

It is important to thank and the Provence-Alpes- which are working to and the Mediterranean in particular of the culture, and the defence Mediterranean.

The debate going on in moment is very new law regulating urban municipalities, and a new law regulating the work of regions. Regional and local officials are aware of the need to find more funds to finance more projects and increase development. In Morocco, we will be debating the new laws for regional and local decentralisation next month. The voluntary sector and local and regional officials have already discussed them. Modifications have been made to these laws before they are voted on in about a month's time. Other Arab countries are also seeing this transformation from a national focus to increased regional and local power.



said, the political physical climate in climate, as we have Mediterranean, is not of Mediterranean suffering of the represented among us tangible proof of this. ongoing conflicts in time for all governments to take with their internal

the City of Marseille Côte d'Azur region, defend our culture climate. I am thinking Mediterranean of the people of the

Morocco at the important. There is a and rural

As you said this morning, as local and regional elected officials, our key role in climate change policy is manifested on a daily level in the actions that we implement to adapt to climate change and reduce greenhouse gas emissions across a range of areas, including energy, transport, town planning, waste management and water management. On this last

issue, I was able to highlight the importance of including sustainable waste management in a climate change strategy in a report that I wrote for ARLEM.

We have a vital contribution to make on these issues. Furthermore, at the Forum of Local and Regional Authorities organised by the UCLG Mediterranean Commission, all the elected officials present reaffirmed their desire to share their experience and improve the impact of their proposals in all current processes targeting regional development and conservation.

In the light of what we have heard this morning, I think that we can say that as local and regional elected officials, we:

- Assert our leading role in fighting climate change. Our initiatives may offer the greatest reduction in greenhouse gas emissions, and massive potential for adapting to climate change. This requires greater decentralisation and subsidiarity. It also requires a genuinely regional and local dimension to all international and national “Climate” actions.
- We underline the excellent position we have to help local residents understand the issues and impacts of these debates on their health, security and quality of life. We should not forget that the first institution, and the first level of government to which local people turn is the municipal administration, the local authorities or the region.

As you have read, we call on governments to implement a number of measures, and in particular:

- Lead the signing of an ambitious and binding agreement.
- Connect the Climate Agenda to the Post-2015 Agenda for sustainable human development.
- Provide financial contributions to the various existing funds and especially the Green Climate Fund. The active participation of developing countries in reducing greenhouse gas emissions will only succeed with appropriate financial support.
- Approve and encourage direct access mechanisms to these global funds for local and regional authorities. This is important, because most of the time, these funds have to go through national government to reach local government. It would be beneficial for local and regional authorities to be able to access them directly. And, more generally, ensure that international, European and national funds are dedicated to “climate” actions across our regions. We hope that consideration for the climate becomes an integral part of all projects financed by development stakeholders across our regions.
- Recognise that local and regional action will be more efficient if we have tools available for measuring and checking greenhouse gas emissions in a transparent way that involves our citizens and civil society.

For our part, we undertake to:

- Mobilise the greatest possible number of local and regional authorities from around the Mediterranean Basin to commit to a more inclusive approach towards creating a future international agreement that is ambitious and binding in line with the increasingly urgent warnings from the scientific community.
- Take a more active role in our territories, by serving as initiators, gatherers and coordinators of political projects and initiatives regarding mitigation and adaptation to climate change.
- Intensify, according to our resources, our participation in global processes on climate change, such as the Carbon Climate Registry, Making Cities Resilient, or the Covenant of Mayors.
- Mobilise, where possible, local and regional funds to set up action plans and strategies in favour of reducing greenhouse gas emissions, developing new, more sustainable energy solutions, and adapting to climate change in continuation of the Mexico Pact (2010). These plans and strategies are opportunities for wealth and job creation.

Among a large variety of possible actions, we undertake to focus our activities on areas in which we are likely to obtain a significant leverage effect that will benefit our regions:

- Developing sustainable urban and integrated territorial development strategies focusing on the fight against urban sprawl as well as sustainable management of transport.
- Developing energy efficiency policies and coordinated regional strategies for the energy-efficient renovation of buildings in the Mediterranean Basin.
- Developing renewable energies, with particular focus on solar, biomass, and the emerging sector of marine energies.
- Developing ecodistricts, green and blue corridors, public spaces.
- Structuring waste management and recycling sectors.
- Developing Integrated Coastal Zone Management strategies.
- Developing strategies to reduce risks linked to disasters and resilience.
- Improving the sustainable management of water resources (quality, treatment, use, provision, distribution, price, technologies and innovative or traditional techniques)
- Reinforcing local policies concerning citizen awareness and information on these issues.

Ladies and gentlemen, I have quickly presented our political declaration by attempting to summarise the ideas discussed throughout the process, from the beginning of the forum to our discussions today. Would anybody like to say anything before we proceed to the adoption of the declaration?

Mohamed SADIKI

I would like to present the amendments of the CPMR Intermediterranean Commission. I would like to acknowledge the work carried out by both the UCLG commission and the CPMR commission to prepare this excellent and fulsome declaration.



Yesterday the Political Bureau of the Intermediterranean Commission met to make a few amendments which we would like to submit officially and in full to Mr Boudra. I will present them briefly, just mentioning the titles. I will not read everything, but will give an overview of the three points, with some more details on the fourth point.

The amendments that we proposed are:

- Promote innovation on climate issues in order to accelerate the creation of effective policies and solutions for markets in order to mitigate the potentially dangerous effects of climate change and develop adaptation measures. We have to reduce connection losses from expensive renewable energies. There are technical problems with the connection technologies that need to be used. We need to use smart grids for better connections.
- Combine efforts between regions by sharing innovations focused on local best practice. We need to share these practices and allow all the regions we represent to benefit from them.

- Take into account the specific nature of islands, and of their sensitivity and vulnerability to climate change by working on these aspects. Just as we have mentioned the Covenant of Mayors, we could mention the Pact of Islands, which includes complementary aspects.
 - o Encourage investment for local residents who commit to practices that reduce and combat carbon emissions. These practices need to be recognised by investment into these regions and residents.
 - o Allow economic operators and particularly farmers who commit to clean energy best practices to benefit in line with the same principle of universal access to water
 - o Support existing best practices and local strategies on islands. I'm thinking here of the Eco Gozo programme dedicated to the island of Gozo, but which could be extended.
 - o Request that the European Commission relax policy on aid for the most vulnerable regions, such as islands.

Mohamed BOUDRA

Thank you Mr SADIKI. I think that we can easily integrate these amendments. I observe that everyone is agreement, and happy with this declaration. We can therefore state that it is unanimously adopted, if there are no objections.

Before concluding our gathering, I would like to invite President Vauzelle and everyone in the audience to come up on the stage for a group photo.





Climate Declaration by Local and Regional Authorities in the Mediterranean

The Mediterranean area has been recognised by experts from the Intergovernmental Panel on Climate Change (IPCC) as one of the most vulnerable areas in terms of climate change. If nothing is done, by the year 2100 they predict a 3 to 5°C rise in global average temperatures, a decrease in precipitation by up to 25%, an increase in the frequency and intensity of extreme weather events and a rise in sea level that could reach as much as 35cm.

Water stress, desertification, loss of biodiversity and floods, heat waves and droughts, among other extreme events already faced by the Region are emergency indicators, at a time when the last IPCC report reiterates the need for comprehensive and prompt action in order to limit the increase in average temperatures to under 2°C. As the Mediterranean's contribution to achieving this goal is crucial, it is particularly important that all stakeholders continue and improve their commitment.

Since the Rio Earth Summit (1992), local and regional authorities have progressively taken on these issues. Nowadays, they are major actors in policies, strategies, legislation and cooperation mechanisms across their own territories. They are structured at a global level to contribute actively to achieving these international and national objectives, as well as to establish their expectations and their own climate commitments through declarations at important world meetings and especially at the last Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change.

Meeting in Marseille, to make our Mediterranean contribution in light of the Paris Climate Conference (COP21) and in continuation of previous declarations, and in particular the 2013 Nantes declaration, we, the local and regional elected representatives of the Mediterranean:

- Asserting our leading role in fighting global warming. We are responsible for the development of our territories, and are at the forefront in taking action with regard to the main causes of greenhouse gas emissions: residential (housing and services), transport and food; in drawing up local and regional strategies for adapting to the effects of climate change; in preventing the risk of disasters, preparing our citizens and providing them with emergency aid.
- Noting that our initiatives can represent the biggest source of greenhouse gas reduction and huge potential for adapting to climate change, however these initiatives need:
 - o Increased decentralisation and subsidiarity: more independence, greater financial and human resources for our regional and local authorities;

- A real local and regional dimension from all international and national initiatives concerning climate action.
- Bearing in mind the role of higher education and partnership research to inform policy makers of the impact that climate change has on our societies.
- Underlining our privileged position in order to help our citizens understand the issues and impacts of negotiations on their health, safety, and way of life. This understanding is key for the support and mobilisation of the greatest number possible, and a prerequisite for the success in a fight that concerns us all.

Call on national governments to:

- *Pay* particular attention to the Mediterranean: climate change will not have the same effect on all territories. This area needs specific and urgent action, particularly in coastal areas.
- *Lead* the signing of an ambitious and binding agreement in line with the increasingly urgent warnings from the scientific community; the urgency of the situation requires a strong and collective response, which involves developing local solutions and know-how.
- *Connect* the Climate Agenda to the post-2015 Agenda for sustainable human development. A strong link has to be established between the various rounds of negotiations. The fight against global warming and poverty, fostering sustainable development and preparation for resilience and disaster management fall within the same logic needing converging strategic actions.
- *Provide* financial contributions to the various existing funds and especially the Green Climate Fund. The active participation of developing countries and disadvantaged communities in reducing greenhouse gas emissions will only succeed with appropriate financial support.
- *Approve and encourage* direct access mechanisms to these global funds for local, insular and regional authorities. And, more generally, ensure that global, European and national funds are dedicated to “climate” actions across our regions. We hope that consideration for the climate becomes an integral part of all projects financed by development stakeholders across our regions.
- *Recognise* that local and regional action will be more efficient if we have tools available for measuring, reporting and checking greenhouse gas emissions in a transparent way that involves our citizens.
- *Promote* innovation in order to accelerate the creation of effective policies and solutions adapted to local markets to mitigate the potentially dangerous effects of climate change and to develop adaptation measures.

We undertake to:

- *Mobilise* the greatest possible number of local and regional authorities from around the Mediterranean basin to commit to a more inclusive approach towards creating a future international agreement that is ambitious and binding in line with increasingly urgent warnings from the scientific community.
- *Take a more active role* in our territories, by serving as initiators, gatherers and coordinators of political projects and initiatives regarding mitigation and adaptation to climate change.

- *Intensify*, according to our resources, our participation in global processes on climate change, such as Carbon Climate Registry, Making Cities Resilient, the Covenant of Mayors and the Pact of Islands.
- *Mobilise*, where possible, local and regional funds to set up action plans and strategies in favour of reducing greenhouse gas emissions, developing new, more sustainable, energy solutions, and adapting to climate change in continuation of the Mexico Pact (2010). These plans and strategies are opportunities for wealth and job creation.

Among a large variety of possible actions, we undertake and ask for resources to be made available to focus our activities on areas in which we are likely to obtain a significant leverage effect that will benefit our territories:

- *Developing* sustainable urban and integrated territorial development strategies focusing on the fight against urban sprawl as well as sustainable management of transport;
- *Developing* energy efficiency policies and coordinated regional strategies for the energy-efficient renovation of buildings in the Mediterranean Basin;
- *Developing* renewable energies, with particular focus on solar, biomass, and the emerging sector of marine energies, smart grid systems and low-carbon energy careers;
- *Developing* ecodistricts, green and blue corridors, public spaces;
- *Structuring* waste management and recycling sectors;
- *Developing* Integrated Coastal Zone Management strategies;
- *Developing* strategies to reduce risks linked to disasters and resilience;
- *Improving* the sustainable management of water resources (quality, depuration, use, provision, price, technologies and innovative or traditional techniques);
- *Reinforcing* local policies concerning citizen awareness, information and involvement in these issues.
- *Providing* resources for enhanced networking and knowledge sharing between sustainable development operators, scientists and community actors.
- *Strengthening* climate innovation capacities, by means of cooperation, to provide locally targeted solutions addressing the challenges of climate change.

Finally, we propose to:

- List, among the UCLG Mediterranean Commission and the CPMR Intermediterranean Commission, best practices in place in the Mediterranean. This review of the situation could help intensify the exchange of experience and use of results through, in particular, cooperation, capacity building, and the adaptation of existing measures to local and regional specific characteristics.
- Develop and support new actions linked to Euro-Mediterranean policies, especially with regard to energy, climate, industry, the maritime sector and neighbourhood, among others.

- Consider the possibility of setting up a solidarity fund, like the Green Climate Fund, on climate in the Mediterranean.
- Monitor our commitments and measure our results during the next Forum of Local and Regional Authorities of the Mediterranean in 2016.

Proceedings of the climate meeting of local and regional elected officials of the
Mediterranean

Drafted from the transcription by Redac +
English translation: Connected Language Services