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MEDITERRANEAN ACTION PLAN

12th Meeting of the Mediterranean Commission
on Sustainable Development
Istanbul, Turkey, 30-31 May 2007

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**REPORT OF THE 12th MEETING OF THE
MEDITERRANEAN COMMISSION ON SUSTAINABLE DEVELOPMENT**



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Introduction

1. At the kind invitation of the Turkish Government, the Twelfth Meeting of the Mediterranean Commission on Sustainable Development (MCSD) was held at the Sheraton Hotel, Maslak, Istanbul, from 30 to 31 May 2007.

Attendance

2. The meeting was attended by the following members of the Commission: Albania, Algeria, Bosnia and Herzegovina, Coordinamento Agende 21 Locali Italiane, Croatia, Cyprus, Environnement Développement et Action au Maghreb (ENDA Maghreb), Egypt, European Community, France, Friends of the Earth/MEDNET (FOE/MEDNET), Greece, Israel, Italy, League for the Environment (LEGAMBIENTE), Libyan Arab Jamahiriya, Malta, Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE), MedCities, Monaco, Morocco, Mediterranean Environmental Technical Assistance Program (METAP/World Bank), Region of Sicily, Regional Environmental Centre for Central and Eastern Europe (REC), Montenegro, Slovenia, Syrian Arab Republic, Tunisia, Turkey and the Union Méditerranéenne des Confédérations d'Entreprises (UMCE–BUSINESSMED), as well as the following alternate members: Association Internationale Forêts Méditerranéennes (AIFM), Association pour la Protection de la Nature et de l'Environnement de Kairouan (APNEK), International Marine Centre (IMC), Institut Méditerranéen de l'Eau (IME), Observatoire Méditerranéen de l'Energie (OME) and WWF.

3. The following components of UNEP/MAP were also represented at the meeting: Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), Regional Activity Centre for the Blue Plan (BP/RAC), Regional Activity Centre for the Priority Actions Programme (PAP/RAC), Regional Activity Centre for Cleaner Production (CP/RAC), INFO/RAC and the MAP Secretariat for 100 Mediterranean Historic Sites.

4. The following United Nations specialized agencies, intergovernmental , non-governmental organizations and other partners attended the meeting as observers: United Nations Environment Programme/Economic and Social Commission for Western Asia (UNEP/ESCWA), League of Arab States (LAS), Arab Network for Environment and Development (RAED), Palestinian Authority, Abdus Salam International Centre for Theoretical Physics, the Institut du Développement Durable et des Relations Internationales (IDDRI) and the World Conservation Union (IUCN).

5. A full list of participants is contained in **Annex I** to the present report.

Opening of the meeting (agenda item 1)

6. The meeting was opened at 9.15 a.m. by Mr Paul Mifsud (MAP Coordinator), who thanked the Turkish authorities for hosting the meeting and assisting in its organization and in particular Mr Sedat Kadioglu, who was to chair the meeting, for his strong support. He also thanked the outgoing President of the Steering Committee, Mr Charalambous Hajipakkos of Cyprus, his predecessor, Mr Nicos Georgiades, and the Cypriot Government for their support of MCSD activities during the Cypriot presidency of the previous year.

7. Mr Kadioglu, Chairperson of the meeting, speaking on behalf of Mr Ahmet Kideys, Executive Director of the Commission on the Protection of the Black Sea against Pollution, who was unable to be present, said that the utilization of resources demanded integrated

planning. In that context, the Mediterranean Strategy for Sustainable Development (MSSD) was an important tool for guiding the preparation of national strategies for sustainable development (NSSDs) and for initiating dynamic Mediterranean partnerships. The MCSD had a vital role to play in establishing such partnerships among all stakeholders, in developing policy choices for sustainable development and in supporting the process of selecting activities for sustainable development. Turkey had been actively involved in the MAP process for over 30 years and in that connection had taken a series of measures, including coastal monitoring and protection of monk seals and turtles, which had benefited the entire region and thus merited continued support. Turkey was also closely following issues related to integrated coastal zone management (ICZM).

8. In his capacity as Chairperson of the meeting, he said that it was essential to combine resources and efforts for achievement of the common target of protecting the Mediterranean Sea and environment through sustainable development. The current meeting afforded a good opportunity to share knowledge and understanding of the many cross-cutting issues which that involved.

Election of the Steering Committee (agenda item 1 cont.)

9. In accordance with Rule 17 of the Rules of Procedure and following the customary consultations, the Commission elected its new Steering Committee, as follows:

President:	Mr S. Kadioglu (Turkey)
Vice-Presidents:	Mr T. Kupusovic (Bosnia and Herzegovina)
	Mr A. Sahibi (Morocco)
	Mr M. Bricelj (Slovenia)
	Mr E. D'Alessio (Coordinamento Agende 21 Locali Italiane)
	Mr D. Calza Bini (LEGAMBIENTE)
	Mr H. Abou Jaoude (UMCE-BUSINESSMED)

Adoption of the agenda and organization of the meeting (agenda item 1 cont.)

10. In response to a suggestion by the MAP Coordinator, it was agreed to discuss in combination items 2 and 3 of the draft agenda contained in document UNEP(DEPI)/MED.WG.313/1/Rev.1. The draft agenda was then adopted, and the agenda appears as **Annex II** to this report.

Report by the Secretariat on the activities of the MCSD (May 2006-May 2007) and of the implementation plan for the period 2008-2011 and work programme 2008-2009 (agenda items 2 and 3)

11. The MAP Coordinator, presenting the report by the Secretariat on the activities of the MCSD (May 2006-May 2007), contained in document UNEP(DEPI)/MED.WG.313/3, outlined developments since the previous meeting and reviewed MCSD activities. The first such activity involved assistance to countries in their preparation of NSSDs, in which context he added that such countries would continue to receive support after the preparation exercise was complete. A first regional working session on the challenges and opportunities presented by the NSSD formulation process had also been held in October 2006 for the four countries that had already formulated their NSSDs and the other four that were about to do so. After giving a short account of the activities and results of the working session, he gave details of activities undertaken by the working groups established within

the relevant RACs. Other MAP components had also prepared reports on activities relating to prevention of land-based pollution, biodiversity and cultural heritage.

12. Concerning MSSD implementation plan, the report highlighted the need to define the role of MAP components, identify pilot actions and bring the plan to fruition. It was also for the working groups to facilitate the implementation process, and their objective, role, function and *modus operandi* should therefore be defined in that context. In particular, they should not work in isolation or focus exclusively on technical issues. The report also gave an account of the Extraordinary Meeting of MAP Focal Points, held in Catania in November 2006, at which recommendations about the future of the MCSD had been made and a post-session drafting committee to elaborate papers on strategy and governance had been established. Those papers would be circulated to MCSD members when they became available. Lastly, the report underlined the endorsement of the MSSD by the third meeting of the Ministers of Environment of the Euro-Mediterranean Partnership (EUROMED) and the role of MAP components in the Horizon 2020 initiative.

13. Turning to the implementation plan for the period 2008-2011 and the work programme 2008-2009, contained in document UNEP(DEPI)/MED WG. 313/5, he said that the aim was to translate the MSSD into an implementation plan comprising a four-year indicative programme and a detailed two-year work programme, organized on the basis of six two-year cycles of the MCSD programme of work approved at the 14th Meeting of the Contracting Parties. The programme would also mirror the implementation cycle of the United Nations Commission on Sustainable Development (UNCSD), comprising a review year and a policy year. As already mentioned the role of the working groups would shift from formulation to implementation and become more action-oriented. He said that in the Governance Paper, the Drafting Committee is expected to propose that in future the MCSD would meet every two years. However, the MCSD Steering Committee would continue to meet annually in order to monitor implementation of the work programme. Full details of the multi-year thematic programme of work approved in Portoroz, and a detailed two-year work plan, including objectives, activities and expected outputs, were set forth in the document.

14. In the ensuing discussion, several members expressed the view that the current meeting should concern itself primarily with the way forward for MCSD, focusing on concrete issues. A number of participants expressed regret that the documents being prepared by the drafting committee of the MAP Focal Points, which contained significant proposals on the role, mandate, membership and working procedures, including meetings, of the MCSD, were not available for discussion. It was pointed out that many of the activities and programmes proposed depended largely on the ongoing debate on MCSD reform. It was further considered regrettable that members representing non-governmental organizations (NGOs), civil society and socio-economic actors had not been given an opportunity to express their views on the issues being addressed by the drafting committee. Indeed, as a result, the future of the MCSD would be decided by the MAP Focal Points and the Contracting Parties without any input from those members on crucial issues of strategy and governance. Such actors had valuable experience and expertise to share. A widely supported proposal was made to set aside time at the current meeting for a working session to enable all views to be aired.

15. Mr Mifsud said in reply to those comments that NGOs had been represented at the Extraordinary Meeting of MAP Focal Points in Catania and took an active part in the discussion. He added that the draft Governance Paper was not yet available and therefore there was no point in having a discussion. He assured participants that, once finalized, the documents would be made available for comment.

16. Discussing the role of the MCSD, members drew attention to its added value as a regional advisory forum that brought together representatives of government, civil society

and the business sector and addressed cross-cutting issues. That its role had been questioned at the 14th Meeting of the Contracting Parties was a matter of concern, and prompted the comment that the MCSD must change in response to evolving requirements and new global developments since its establishment. There was a need to take a fresh look at the sustainable development approach in the region. In the view of one speaker, the need for change required a more thorough going debate and was not adequately reflected in the proposals for the next four years. Another member said that the MCSD should enjoy greater autonomy from the Meeting of the Contracting Parties. Its scope of competence and action exceeded strictly environmental issues. Furthermore, the duplication of its work with other intergovernmental organizations, and coordination with them, should be addressed. One approach might be to invite such organizations to participate in MCSD meetings. Several members considered that much of the questioning about the MCSD's role was a matter of visibility, with one speaker referring to the need for political "buy-in" and another stressing the role of the MCSD in brokering partnerships and generating initiatives. Production of an official list of MCSD initiatives was suggested.

17. It was agreed that, with the MSSD now in place, the time had come to focus on the implementation of the agreed objectives. A number of comments were made on the proposed implementation plan and work programme which had met with approval in terms of general structure and content. Emphasis was placed on the need for a clear, concrete and well-organized structure, including specified time frames, mapping out the way forward for the MCSD and for future MSSD implementation, with one member stating that a commitment in that regard was expected of the current meeting.

18. On the subject of NSSDs, it was noted that one of the principal messages to emerge from the 14th Meeting of the Contracting Parties was that a crucial next step was preparation of the national strategies, with provision of assistance to countries that needed it. In addition, the MCSD should give countries the tools to implement their NSSDs. Attention should therefore be focused on country projects, particularly pilot activities, in order to have a practical working basis for ensuring sustainability. The valuable contribution that NGOs, especially those with large networks, could make to the NSSD preparation process, warranted more attention.

19. In that context, it was suggested that, while regional meetings were important, more emphasis should be placed on national meetings, organized with Secretariat support, to which neighbouring countries sharing similar concerns could be invited. The convening of such meetings would strengthen the sense of ownership by all stakeholders, and also heighten the visibility of Mediterranean sustainable development initiatives. Another point made was that the preparation of NSSDs had substantial financial implications for the countries concerned – hence the need for Secretariat support for relevant initiatives.

20. The question of the working groups on thematic and cross-cutting issues gave rise to some discussion, with a number of members stating that the whole concept of the working groups and their membership and operation should be revisited now that the MSSD implementation phase had begun. It was observed that it was unclear from the progress report on MCSD activities which working groups were in place. It was widely agreed that working groups should not be set up or continued on themes that came within the sphere of activities of MAP components. It was necessary to build on available knowledge and structures rather than create new bodies. Again, NGO involvement was in many cases essential. It was pointed out that the working groups reported to the MCSD, but that only the Contracting Parties could assess implementation of the MSSD. What should now be done was to incorporate the MSSD into the RACs' work programmes. Another point strongly voiced by some members was that participation in the working groups had not been sufficiently open, on account of inadequate information or communication on the opportunities available.

21. Several speakers expressed the view that the proposals were not specific enough about synergies with other sustainable development-related initiatives, an example being coordination with the Horizon 2020 initiative. The need to develop interaction among countries, between them and MAP components and with other organizations and forums working on similar themes was therefore again stressed. Support was expressed for alignment with UNCSD working methods, notably the two-year cycle, and themes. A good example of partnership with a subregional initiative was the trilateral Croatian-Italian-Slovenian Commission for the Adriatic Sea and Coastal Area. Other examples of good practice in terms of coordination with other interested parties were the activities of PAP/RAC in the area of ICZM and of CP/RAC in partnership with the business sector. The involvement of all stakeholders, including civil society, local authorities and socio-economic actors, was again stressed in that connection.

22. Regarding increased visibility and awareness, the need to disseminate the sustainable development concept among the general public was highlighted as a means of securing active civil society involvement in the implementation process. It was noted that the necessary tools were now in place for improved information and communication.

23. The MAP Coordinator, responding to comments, said the MCSD reported to the Contracting Parties. It was the Contracting Parties which decided on the functioning of the MCSD. He reminded members that NGOs and civil society were represented at meetings of the Focal Points and the Contracting Parties, where they had every opportunity to air their views. He again assured the meeting that, once the draft documents on the terms of reference of the MCSD became available, they would be circulated for comment. He said that a session on these matters at the present meeting without a document from the drafting committee would not have much point. He added that it was the Secretariat that had proposed that the procedures for setting up thematic working groups should be revised, and, in future, the MAP Secretariat would specify the purpose, objectives and working procedures of each group. He reminded the meeting that the issues addressed by working groups had been approved by the Meeting of the Contracting Parties. The MAP Secretariat was doing its utmost within its limited functional, financial and human resources to assist countries in developing their national strategies, with support from several countries in the region and site visits by members of the Secretariat. The initiative for such support came, however, from the countries themselves. He said that the future work of the MCSD would be decided upon by the Meeting of the Contracting Parties; however, greater effort was made to ensure that the recommendations for objectives, activities and targets in respect of the programme of work were more specific than in the past.

24. In his intervention on agenda item 2 and 3, Mr Atila Uras (UNDP Turkey) made a presentation on the integration of sustainable development into sectoral policies in Turkey.

Presentation on climate change in the Mediterranean (agenda item 4)

25. Mr Filippo Giorgi (Abdus Salam International Centre for Theoretical Physics) made a presentation entitled "Climate change over the Mediterranean region", which is attached as **Annex IV** of the present report. He briefly described the particularities of the Mediterranean climate and then presented the observational evidence that rising temperatures and precipitation were due to anthropogenic factors, also giving projections based on modelling. The presentation ended with some examples of potential effects on the Mediterranean.

26. In the ensuing discussion, several members emphasized the importance of finding concrete solutions to the problems associated with climate change at national and regional levels, and it was suggested that time be set aside at the present meeting for further debate on the issue. One member requested that the meeting prepare specific guidance on the subject. Others, noting that Mr Giorgi had demonstrated that the Mediterranean was particularly vulnerable to the effects of climate change, asked what specific measures should be taken in the region that differed from those being taken at global level. It was also noted that, whatever measures were taken at regional level, the problem remained essentially a global issue that regional action alone could not solve.

27. Differing views were expressed on the importance of adapting to the changing climate. Several speakers stressed that adaptation measures should be taken soon, while others emphasized that certain activities, for example intensive desalination of seawater, could have damaging environmental effects and even increase carbon emissions. It was generally agreed that it was essential to take steps to mitigate the effects of climate change, thus reducing the need for adaptation.

28. The Mediterranean was a diverse region in many respects. Its natural resources included a high level of biodiversity, which could be adversely affected by climate change, and also significant potential for exploiting solar and wind energy. In terms of cultural and political diversity, the need for international cooperation – both between North and South and among industrialized countries – was highlighted, including resolving or alleviating conflicts where they existed. One member suggested that a mechanism for cooperation between industrialized countries should be developed within the framework of the Barcelona Convention. International cooperation should also be a channel for capacity-building. Although some countries in the region were more vulnerable to the effects of climate change than others, all should be seized of the need to act urgently.

29. Several speakers underlined the importance of raising awareness and educating populations, particularly since consumption and production trends needed to change. The economic aspects of climate change were complex: although action to mitigate its effects was costly, the cost of inaction would be higher. It was acknowledged that adaptation measures, education strategies and research were much needed although they could be expensive. In discussing possible climate change activities for the implementation of the MSSD, one speaker recalled that Mediterranean countries are all members of the United Nations Framework Convention on Climate Change (UNFCCC), where possible common regional level actions could be identified and agreed within its various bodies and working groups. The same speaker also mentioned the integrated project on Climate Change and Impact Research: the Mediterranean Environment (CIRCE), financed by the EC 6th FP and led by INGV, Italy, as a good example of a research effort with 51 partners to develop for the first time an assessment of the climate change impacts in the Mediterranean area, including the evaluation of the consequences for society and the economy of the population. Another speaker observed that lack of funds was not always the main obstacle to action.

30. Mr Giorgi, responding to points made, said that adaptation, although useful in itself, could not be considered a substitute for mitigation. Current data showed the situation to be worsening incrementally, rather than suggesting that a critical event was likely; however, it was up to countries to ensure that the “point of no return” was not reached. At present, such an outcome was avoidable, but only if carbon emissions were reduced. The Mediterranean region was not among those with the highest carbon emissions, and therefore had less potential for contributing to the reduction of global carbon levels. Nevertheless, it had political power, which it should exert to encourage prompt action by countries that could have a significant impact. Projections indicated that the whole

European region, not only the countries of the southern Mediterranean, would be particularly affected by climate change. He agreed that it was important to raise awareness and educate populations, especially since there were many misconceptions on both sides of the debate. In the simplest and most balanced way possible, people should be encouraged to heed the scientific evidence.

31. Prior to introducing the break out sessions, Mr Mifsud presented the new Programme Officer for Sustainable Development, Mr Spyros Kouvelis, who assumed his duties with the MAP Secretariat in early May 2007.

Breakout sessions

Energy and climate change

32. A breakout session was held to discuss the relation between energy production and consumption and climate change in the context of the MCSD. The session was chaired by Mr Emad Adly (RAED), with Ms Marguerite Camilleri (Malta) as Rapporteur.

33. Ms Houda Ben Jannet Allal (OME) made a presentation entitled "Energy and climate change in the Mediterranean region", which is attached as **Annex V** to the present report.

34. In the ensuing discussion, one member said that policies to reduce the price of fuel and electricity in the countries of the Middle East and North Africa through subsidies did not encourage energy savings. Others pointed out that subsidies could be reduced to only a certain extent and were essential in some countries in order to meet the basic needs of society. Pricing policies were not, however, the only constraint to energy saving, and the meeting suggested that a study be conducted of the socio-economic effects of climate change in the Mediterranean. A further study might address the energy needs of specific countries.

35. Several speakers emphasized the importance of regional solidarity. For instance, transboundary cooperation would be essential if subsidies were to be removed. Another cooperative initiative might be a regional network of electricity supplies, similar to the EuroMediterranean energy market and the Energy Community Treaty for South Eastern Europe. It was further suggested that a regional carbon fund be established, although it was pointed out that some countries appeared to consider carbon rebates as a type of negotiable currency. Solidarity should also be expressed in the form of North–South and South–South investments, especially for capacity building.

36. A number of members commented that several initiatives had been taken to address the problems associated with energy and climate change. A first step might therefore be to put into effect the section on energy and climate change of the MCSD's programme of work, with monitoring to ensure that the measures were effective enough to meet the increasing gravity of the situation. Studies should be conducted to determine why other initiatives had not been successful. One member pointed out that adequate funding was available, from the World Bank and other sources; what appeared to be lacking was awareness of the importance of the issue and a will to change the status quo. Others suggested that efforts should be made to increase the attractiveness of Mediterranean countries for funding by the clean development mechanism (CDM) of Article 12 of the Kyoto Protocol to the UNFCCC.

37. The Euro Mediterranean Partnership has a significant influence on energy policy. Furthermore, the EIB also has an important role to play in funding energy initiatives.

Funding has, however, until now been provided largely for traditional power projects, with little investment in renewable sources of energy and energy efficiency in spite of several pre-feasibility and feasibility studies financed over the last decade by several international donors which should be reviewed to understand the reasons why many of them failed to generate actual investments.

38. In the long term, cheap technology was needed for the supply of clean, renewable sources of energy; in the meantime, activities should focus on the demand side, including improving energy efficiency and energy savings in cities, public buildings and the industrial sector. Ultimately, energy consumption would have to be strongly rationalized throughout the region, whereby energy needed was used in the most efficient and effective way. The challenge would be to ensure that a market-based economy reflects the full costs, including the environmental ones, of all energy sources thus benefiting those which are environment friendly, promoting the use of clean energy technologies, renewables, energy demand management and cleaner production and consumption.

39. Certainly, one of the recommendations of the meeting should be to improve energy efficiency; however, it would be important to take into consideration national and regional specificities. In general, recommendations should be made for a new energy infrastructure for transport, production and energy supply and for a strategic plan at national, sub-regional and regional levels. Nevertheless, whatever recommendations were made, they should be concrete and include measures to ensure their implementation.

40. One member suggested that countries that were preparing their national plans should be advised to incorporate an energy policy, stressing renewable sources and climate change. The outcome of such policies should be monitored, and an annual report might be prepared in which countries could exchange information and experiences.

41. Strategies were needed to foster political will to combat climate change by rationalizing energy production and consumption. In general, the level of awareness about energy and climate change should be raised, and new partners should be sought for new kinds of activities.

42. Ms Marguerite Camilleri (Malta), Rapporteur of the breakout session on energy and climate change, presented a list of key points raised by the group to the plenary. The recommendations, as later amended, are attached as **Annex III** to the present report.

Tourism and climate change

43. A breakout session was held to discuss the impact of tourism on climate change and vice versa. The session was chaired by Mr Patrick Van Klaveren (Monaco), with Mr Magdi Ibrahim (ENDA Maghreb) as Rapporteur. Mr Raphael Billé (Institut du Développement Durable et des Relations Internationales (IDDR!)) gave a presentation entitled "Tourism and climate change", which is attached as **Annex VI** to the present report. Instead of making recommendations on such a wide and complex subject, participants said they were in favour of setting out the major areas of concern and points of view that emerged from the discussion. Various speakers emphasized the importance of cultural tourism in the Mediterranean, but at the same time underlined its fragility in the light of the impact of climate change on historical monuments and landmarks.

44. Despite a marginal fall, Mediterranean tourism accounted for over 30 per cent of the global tourism market, with the northern Mediterranean countries as the main

beneficiaries. The tourism sectors in the southern and eastern Mediterranean countries were nevertheless experiencing the highest growth.

45. With regard to the impact of tourism on climate change, transport was responsible for some 90 per cent of emissions. Options for reducing those emissions, such as a move to maritime transport, which had its own impact, or a passenger tax, were somewhat unrealistic. As for the impact of climate change on tourism, the relationship between the two was complex and involved more than simply such immediate effects as increased heat and shifting seasons. A "tourism comfort index" had therefore been developed as a function of that relationship. Emission-reduction policies also had their own indirect impact, as did environmental changes such as a rise in sea level. Climate change had a global impact on tourist destinations.

46. Concerning the wider impact of tourism on the environment, it was necessary to rethink land-use planning from an overall perspective that took into account climate change. There were, however, implications for the landscape and ecosystems, the resilience of which was reduced through such factors as coastal erosion and increased fire risk. With regard to adaptation, one option might be to seek a reduction in mass tourism while maintaining the revenues from tourism on which many Mediterranean economies depended. Such an option might involve changes in tourist destinations or the promotion of cultural or high-end tourism.

47. Another question raised was that of striking a balance between prevention and adaptation. Careful management of information on the impact of tourism on climate change was essential; parameters other than those inherent in the uncertainties of climate change and potential disaster should be taken on board. Politicians, tour operators and the public at large should be made aware of the options for lessening the impact of tourism and non-viable practices on climate change. Ultimately, the short-term approach should be avoided in the interest of developing a spirit of solidarity and creating new opportunities, utopian though that idea might be. It was therefore essential to keep in mind that the increasingly acute impact of climate change on tourism called for medium- and long-term measures. Options that were not too costly and brought a return on investments should be entertained.

48. Mr Magdi Ibrahim (ENDA Maghreb), Rapporteur of the breakout session on tourism and climate change, presented a list of the key points raised by the group to the plenary, which is attached as **Annex VII** to the present report.

Signing of an agreement between CP/RAC and UMCE-BUSINESSMED

49. In the afternoon of day one of the MCSD the Cleaner Production Centre CP/RAC and UMCE-BUSINESSMED signed a cooperation agreement. Mr Hicham Abou Jaoude (UMCE-BUSINESSMED) said that his organization was pleased to be signing an agreement with CP/RAC, in order to demonstrate the commitment of the business community to sustainable development and the environment. The agreement would further strengthen his organization's ties with the MCSD.

50. Ms Virginia Alzina (CP/RAC) said that the agreement would enable CP/RAC to provide capacity-building and guidance to the business community on environmental practices. Specific guidance had been prepared for several industrial sectors. Under the agreement, the Centre would coordinate training and organize promotional events and

workshops. It would make it possible to mount sustainable projects for sustainable energy consumption and production in the Mediterranean.

Presentation of the MSSD information and communication strategy (agenda item 7)

51. Mr Sergio Illuminato (INFO/RAC) introduced the draft information and communication strategy for the MSSD contained in document UNEP(DEPI)/MED WG. 313/4. He outlined the steps that had led to the strategy, stressing the participative nature of the process. The objective was to increase the visibility of the MSSD and to improve understanding of its objectives, among both the general public and decision-makers; it should also serve to facilitate cooperation among countries, institutions and organizations. He said that the MSSD would become more visible only if it was recognized as an authoritative source of information on sustainable development; therefore, all information would be verified before dissemination..

52. He said that an InfoMAP website was being planned to serve as a common information system for the region, and the MSSD website would form part of that network. One element of the website would be a monthly magazine, EcoMedia, which would provide a platform for an exchange of views on MSSD issues; another was a list of the main institutions, organizations, companies and universities working in environmental protection and sustainable development in the Mediterranean. Further planned or existing activities were an advertising campaign devised in collaboration with international advertising agencies; a number of promotional events; audiovisual productions, including documentaries, spots and interviews with key stakeholders in the Barcelona Convention; and media campaigns. With regard to the media, guidelines had been drawn up to ensure optimal relations with journalists, including conferences and training sessions to sensitize them to the main issues covered by the MSSD.

53. It was also announced that a memorandum of understanding had been signed with the business community of Turkey to conduct a wide range of information and communication activities.

54. Mr Turgut Yildiz (Business Council for Sustainable Development, Turkey) said that his organization, which included a number of multinational companies, looked forward to a two-way sharing of information, knowledge and experience with INFO/RAC, with a view to assisting the work of the MCSD.

55. In the discussion on Mr Illuminato's presentation, a number of speakers commented that the draft information and communication strategy did not appear to be designed specifically for the MCSD but rather for MAP as a whole. The added value of the MSSD information strategy in respect of the MAP communication strategy should be clearly spelled out. The main aim of the strategy should be to facilitate implementation of the MSSD.

56. There was general agreement that the draft strategy was not specific enough. Several members commented that a strategy providing readily accessible information on sustainable development was needed rather than an advertising campaign. Visibility was not a target in itself but only a means to an end. The strategy should be revised after clear definition of the message to be conveyed and the target audiences. The extent to which those audiences overlapped with those targeted by the MAP communication strategy should be taken into account.

57. Several members said that the target audience for the strategy should be those persons who were in a position to help implement the MSSD. Thus, the strategy should be designed to reach not only the general public but also local, national and regional administrators. Governments had to develop their own communication and information strategies, and they should be able to use the MSSD strategy as a source of ideas and tools.

58. There was general agreement that INFO/RAC should consult more closely with MCSD members in order to understand both their needs and their possible contributions to formulating and implementing the strategy. It should build on existing networks and communication strategies, including those established by NGOs and civil society. Links should also be forged with existing national information systems, networks and websites. A number of speakers stressed the importance of links with other organizations, both for identifying the potential target audience and to avoid duplication of effort. The role of the European Commission, for instance, should be clearly spelled out in the strategy.

59. One member commented that the strategy appeared to focus on the MSSD rather than on the MCSD, whereas it would be important to raise the profile of the work of the Commission itself.

60. Various suggestions were made for items that could be included in the proposed website. To ensure transparency, a list of MAP Focal Points could be given, with contact details for each topic of interest, and also a list of working groups, with participants and a meeting schedule. The website might also be used to post progress reports on MCSD activities. One member commented that, although the presentation had indicated that the MSSD communications strategy was the result of a wide consultation, as MCSD focal point for her country she had not been consulted.

61. Several members suggested that the planned output should be monitored, for instance by conducting a cost-benefit analysis to estimate the impact of the strategy, on the basis of the numbers of people reached and other indicators. In general, if the strategy was to attract implementation partners, it should have a logical framework, with clearly defined inputs, outcomes, objectives, performance indicators and reporting. It should be revised to indicate which tools should be used to attain specific targets. One member said that the draft recommendations did not reflect the content of the document.

62. Mr Illuminato said that INFO/RAC welcomed the comments of the MCSD members. The strategy would be revised on the basis of those comments and also on the basis of the revised work programme for the coming biennium, which would clearly state the targets, resources and other concrete elements on which the information strategy should be founded.

63. Mr Mifsud said that the MSSD IC strategy was one component of the overall MAP information and communication strategy. It should not duplicate the websites of other MAP components but should clearly address the target audience of the MSSD. He said that the strategy would not be adopted by the meeting but would be revised to reflect the comments that had been made and then sent to the meeting of MAP Focal Points and subsequently to the Meeting of the Contracting Parties for their review and adoption.

Water demand management (agenda item 8)

64. Mr Henri-Luc Thibault (BP/RAC) presented the outcome of the third regional workshop on "Water demand management in the Mediterranean, progress and policies" held in Zaragoza, Spain, in March 2007. The workshop had been organized by Blue Plan in

conjunction with several partners, under the aegis of the MCSD and with the support of UNEP/MAP, the European Commission and the French Ministry of Ecology and Sustainable Development, and was intended as a follow-up to workshops organized on the same subject in 1997 and 2002 and to the adoption of the MSSD in 2005. The main objectives of the workshop had been to take stock of progress on implementing the MSSD water component, take more detailed stock of progress on water demand management (WDM), enable regional sharing of experiences and propose ways to speed up the mainstreaming of WDM across sectoral, water and cooperation policies.

65. National reports had been prepared by 11 volunteer countries. Data had been presented on the five priority indicators set out in the MSSD and 14 complementary indicators, revealing an alarming evolution of water demands, notably for irrigation, which were incompatible with availability in the majority of countries. The proportion of the Mediterranean population with access to drinking-water had increased to more than 80 per cent in the majority of countries in 2004, and the proportion having access to improved sanitation had risen above the world average of 59 per cent, although some 47 million people in the region still had no adequate facilities. The situation was least favourable in rural areas, particularly in the south and east. The figures also revealed that, while progress had been made since the 2002 workshop concerning integration of WDM into water and certain sectoral policies, there were still obstacles to implementation. Economic tools were either insufficiently used or inadequate, and planning and concerted action tools were needed. The Water Framework Directive of the European Union had had a decisive effect on accelerating the adoption of WDM in water policies.

66. He outlined the results of three regional studies, one on virtual water in the Mediterranean, one on the impacts of reforms to the European Union's Common Agricultural Policy on water demand for irrigation, and one on international cooperation and official development assistance for water between 1973 and 2004.

67. Mr Scoullos (MIO-ECSDE) introduced the recommendations made by the Zaragoza workshop, which are contained in **Annex III (Appendix I)** of the present report. He highlighted as a key problem the fact that the agricultural sector, a major water user, was often addressed as part of governments' social policy. A multisectoral approach should be used in decision-making, since water savings could only be achieved in an integrated manner.

68. In the ensuing discussion, it was noted that, when WDM had been introduced, the focus had primarily been on water savings at consumer level. However, it was more important to have strong regional and national WDM policies, and progress was gradually being made in that area. Transboundary issues and the difficulty of coordination among national authorities in different countries were highlighted, and it was also pointed out that the instruments needed for solving problems in WDM often lay outside the remit of the MCSD. Action should be taken through, for example, agricultural policy, but it was not always straightforward to persuade sectors not ostensibly connected with sustainable development to act in a way that would promote the sustainable development agenda. The increased interest in environmental issues in many quarters over recent years could make it easier for non-environment agencies to relate to sustainable development. Particular attention should be given to how much water was used by the tourism sector.

69. Reliable infrastructure was essential, particularly in view of the figures for the amount of water lost through, for example, transport and leaks, and steps should be taken to improve it. Several speakers highlighted the importance of desalination as a means of obtaining drinking-water, and one speaker asked whether Blue Plan had looked into the impact of such facilities. It was emphasized that WDM policy should be applied to all new facilities, not only those for desalination, at every stage of construction and operation.

Attention was drawn to the potential for recycling effluent for irrigation purposes, which, though more expensive than using fresh water, was still less costly than desalination. One speaker asked whether Blue Plan was intending to look more closely at indicators for WDM and sustainable development, since some countries wished to make their indicators more targeted.

70. Although there was general support for rationalizing water consumption, it was emphasized that the total amount of water being consumed by different countries should be taken into account, and more information on that issue should have been included in the presentation by Blue Plan. The view was expressed that rationalization was not appropriate in situations where populations did not have access to enough water for the basic functions of life; rather, such access should be ensured even for those who could not afford to pay for it. The issue of pricing was important and should have been included in the workshop's recommendations; another member stressed that water was not merely a commodity. One speaker requested that reference be included in the conclusions and recommendations of the present meeting to the problem of access to drinking-water, as one of the Millennium Development Goals, since the Commission was concerned with social as well as environmental issues.

71. Views were expressed on the inclusion in the presentation of data on virtual water flows as a result of inter-country trade. Several speakers underlined the value of such information, although another speaker suggested that the concept of virtual water was very controversial. In particular, countries under siege relied on their own agriculture, and their food security strategy therefore included ensuring their own water supply.

72. Although the presentation and recommendations were generally welcomed, the need for action to be taken on the basis of such recommendations was highlighted, along with the need for any recommendations produced to go beyond previous work and provide added value. One speaker, expressing great satisfaction with the terms of reference under which the volunteer countries had prepared reports for the workshop, asked whether it was envisaged that such reporting would continue as part of the two-yearly process proposed in the recommendations. Several speakers stressed the need to ensure that information was circulated to the appropriate people, including ministers of agriculture and trade, and that the recommendations concerning information and communication were implemented.

73. Mr Francesco Saverio Civili (MED POL) drew attention to the fact that the Contracting Parties had recently decided to view desalination of seawater as an industrial activity under the Protocol for the Protection of the Mediterranean Sea Against Pollution from Land-Based Sources, and desalination plants would thus be subject to more stringent regulations and reporting requirements in future. Thus far, construction licences had been relatively easy to obtain, as evidenced by the large number of desalination facilities in industry, and environmental factors had not always been taken into account. MED POL had now issued guidelines on constructing plants and produced training courses, manuals and other resources.

74. Mr Thibault, responding to points made, said that time pressures had limited the amount of information he had been able to include in the presentation. He agreed that the issue of pricing was important; it was in fact referred to in the first of the workshop's recommendations. The workshop had not examined desalination closely because it was more relevant to supply than demand, and therefore came under the heading of integrated water resources management (IWRM), not WDM. There had been much debate at the workshop on how regional objectives could be translated into national policy, taking into account differences in national circumstances. Certain sectors, such as tourism, should be the focus of special attention. Virtual water was a concept of interest to many sectors. The reports referred to in the workshop's recommendation would not be as detailed as the

national reports, but would nevertheless provide Blue Plan with up-to-date information for its two-yearly reports to the Meeting of the Contracting Parties. National reports similar to those submitted by the volunteer countries would be prepared every five years. In order to disseminate information, he would be giving similar presentations at meetings of other bodies. MCSD members could act as ambassadors, ensuring that information reached policy-makers and those at ministerial level.

75. Mr Scoullos added that one of the original purposes for establishing the MCSD was to ensure that information on the issues it covered reached others besides environment ministers, and its role in that regard should be strengthened.

Energy efficiency and renewables (agenda item 9)

76. Mr Thibault gave a presentation on BP/RAC activities conducted with various partners as follow-up to the MSSD component on energy and climate change, adding that the relevant BP/RAC documents and information on the subject were available to members on a CD-ROM. Involving numerous countries and experts, those wide-ranging activities had culminated in a final workshop on energy efficiency and renewables, held in Monaco in March 2007, which had been attended by a broad spectrum of participants with expertise in energy and sustainable development. In terms of energy development, the major trends identified were inconsistent with sustainable development objectives in that they would produce an imbalance in the regional energy system. The MSSD response, which he outlined, comprised five objectives relating to the sustainable management of energy and to mitigation of and adaptation to the effects of climate change, in addition to two desirable quantitative objectives to be achieved by 2015. Priority and complementary indicators showed, however, that the first of those objectives, which was to reduce energy intensity by 1 or 2 per cent annually, was unachievable. They also showed that, despite the progress made in absolute terms, much remained to be done in the area of renewable energy.

77. Concerning the issue of financing, regional studies and a subregional workshop had been conducted on the subjects of official development assistance for renewable energy and the rational use of energy CDM and the cost of inaction. It was important to find ways of mobilizing resources, such as those available in the banking sector, which displayed more than a passing interest in energy-related matters. A total of 12 national reports had been prepared in order to provide information on changing country situations and raise awareness of the need for involvement in ambitious renewable energy and rational use of energy development objectives. He reviewed the key facts, obstacles and economic, environmental and political deciding factors highlighted in those reports, together with examples of good practices and tools that could be simultaneously mobilized.

78. Ms Allal (OME) presented a set of recommendations to national political authorities and recommendations for the work of BP/RAC from the participants in the Monaco workshop. The recommendations are attached as **Annex III (Appendix II)** to the present report.

79. In the ensuing discussion of the subject, some members gave details of successful energy efficiency measures in place in their own countries. Another member said that the World Bank would like to use the MSSD as a sounding board for a potential regional initiative aimed at strengthening the financial and economic capacity of all Mediterranean countries to cope with climate change, adaptation and mitigation. Tools were also being developed to assess the cost of inaction and explore cost-effective options and priorities, with particular focus on ministries of finance. It was the implementation of national energy strategies that counted, and the World Bank was set on helping the poor, who would be badly affected by climate change. One member said that initiatives to integrate assistance

to the poor into energy strategies were very welcome, particularly if synergized with the MSSD. Members were further informed that the World Bank was seeking to foster private-sector participation in CDM and to find ways of generating extrabudgetary sources of revenue for ministries of environment so that they might achieve some degree of financial independence. It also intended to sound out other forums in order to determine whether the proposed regional approach to climate change, adaptation and mitigation was warranted.

80. The need to synergize actions and actors was emphasized, together with the need to cooperate and collaborate with existing partners and actors, such as the Johannesburg Renewable Energy Commission, and to take into account the energy recommendations contained in the MSSD. It was further stressed that efforts to improve the regulatory framework and promote investment in energy should be complemented by information and awareness-raising campaigns, particularly among local communities. Harnessing the solar energy capabilities of Mediterranean countries and the proper siting of electrical distribution networks were other issues that merited attention.

81. One member suggested reconsideration of the recommendation to set up an institutional and regulatory framework to promote rational use of energy and renewable energy development, which was over-ambitious in view of the number of actors involved, and another pointed out that a number of such frameworks were already in place. Mr Thibault explained that deadlines had been included in the recommendations in order to promote concrete progress but agreed that a compromise between results and over-ambitious targets would be desirable. In response to a question, he also explained that the participants in the Monaco workshop had agreed to compile a short list of recommendations specifically targeted at the national political authorities of Mediterranean countries for two reasons: some influence could be wielded with those authorities, and the recommended actions fell within their mandate. He pointed out that the recommendations had been listed in such a way as to facilitate the monitoring of progress on the basis of indicators.

82. One member said that it was important to consider ways to implement the recommendations. In that context, a stronger political message would be conveyed if such recommendations were to come from the MCSD, rather than from BP/RAC. Another member said that the six key recommendations signalled no progress, embodying as they did principles identical to those contained in recommendations long since adopted. A preferable alternative would be to provide information on the efforts being made to implement the recommendations already adopted and the country initiatives under way in that context. Mr Thibault said that work on energy efficiency had been ongoing for many years and the recommendations could be regarded as a follow-up to work already completed.

83. In answer to a question, Mr Thibault said that the two sets of recommendations were mutually consistent and coherent. Moreover, the recommendations from the breakout session stated that they took into account and built upon those from the Monaco workshop, in which many MCSD members had participated. He also pointed out that the non-environment participants in that workshop were now fully aware of the MSSD energy component and of the MSCD, from which they expected results insofar as they regarded it as a new advocate for the cause of energy efficiency.

Sustainable development indicators (agenda item 10)

84. Mr Thibault reported on BP/RAC's work on indicators with a view to ensuring follow-up to MSSD implementation in relation to objectives, monitoring progress towards sustainable development in Mediterranean countries and assessing such progress.

Working on the basis of 34 priority sustainable development indicators, two complementary approaches were being taken. The first was to conduct trends analyses of the MSSD follow-up indicators and disseminate the results in the form of user-friendly indicator “fact-sheets”, which were regularly updated, could be consulted on the Blue Plan and MAP websites and would be used as input to the two-yearly Report on Environment and Sustainable Development. The second approach was to produce and disseminate a Mediterranean countries’ “rating” based on a new method known as multicriteria analysis and on MSSD indicators.

85. Having found that the 34 priority indicators did not cover all MSSD objectives and issues, BP/RAC had developed and tested a series of additional indicators on water, energy, coast and sea, and rural development and agriculture. The follow-up of MSSD implementation was an ongoing process, and BP/RAC was strengthening its information system in order to provide users with ready access to the updated fact-sheets as from 2008.

86. On the basis of ongoing modelling calculations, BP/RAC was currently working on the production and dissemination of a multicriteria country classification showing individual countries’ progress towards MSSD implementation. Classification included benchmarking, showing countries’ performance, and rating, which classified countries in order of successful implementation of the relevant sustainable development objectives.

87. In response to questions about possible duplication with ongoing work in other bodies, Mr Thibault assured participants that, as well as the specific MSSD indicators, BP/RAC had developed its additional indicators with due regard for existing indicators, aware as it was of the need to ease the data collection burden. Its originality lay in the elaboration of composite sustainable development indicators.

88. Questions were also raised about coordination with monitoring work being conducted under the Horizon 2020 initiative; the need for the indicators to be described by type, so that a full set would be available for assessment purposes; and the multicriteria analysis method, which was seen by one speaker as a somewhat controversial method used in some cases to justify decisions already made. In response, Mr Thibault confirmed that BP/RAC’s work was being coordinated with the Horizon 2020 initiative and was to be presented to a forthcoming Horizon 2020 meeting. Work was likewise ongoing with InfoMAP, which would provide a user-friendly interface for BP/RAC’s activities.

Sustainable Impact Assessment (SIA) of the Euro-Mediterranean Free Trade Area (EMFTA) (agenda item 11)

89. Ms Carol Chouchani Cherfane (Sustainable Development and Productivity Division of UN-ESCWA) presented the preliminary findings and recommendations of Phase III of the SIA-EMFTA, which was prepared by the University of Manchester, UN-ESCWA and other consortium partners with funding provided by the European Commission (**Annex VIII**). The presentation made particular reference to the proposed monitoring mechanism, on which MCSD feedback was sought. The project was now in its third and final phase of preparation. MSSD development had been taken into account throughout the process, and the MCSD was looked to as an important partner.

90. Phase III of the assessment focuses on four key issues: environment-related aspects, agriculture, tax reform, and urban employment and industrial diversification. Ms. Chouchani Cherfane outlined the key findings of the assessment. An in-depth case study on Morocco with comparisons for Eastern Mediterranean Countries is included in the interim Phase III report. This final stage of the project also proposes the establishment of a

participatory monitoring mechanism which, inter alia, would involve continued interaction with stakeholders and identifies indicators for monitoring sustainability impacts, which include MSSD indicators

91. The proposed monitoring framework includes indicators and data to be monitored, sources of data, data analysis, responsibilities for monitoring, consultation and participation, awareness-raising and capacity-building, and interaction with policy-making processes. In this connection possible links with BP/RAC's work on indicators and data analysis were suggested. It was also noted that the Circle of Mediterranean Parliamentarians for Sustainable Development (COMPSUD) at its recent meeting in Corfu, Greece suggested that the MCSD might serve as a body for post-SIA-EMFTA monitoring. She thus invited views and comments on future MCSD involvement in the SIA-EMFTA process.

92. In the ensuing discussion, attention was drawn to the possible effect of EMFTA on gross domestic product (GDP), reported to be minimal. Concern was expressed about the impact on agriculture, with the attendant risks of higher rural unemployment, higher poverty levels and significant gender impacts, which meant that there were serious political implications; and about the possible imposition of a carbon tax, which would be unacceptable to many Mediterranean countries. The initiatives proposed for economic revival were, in the view of one speaker, tantamount to standard rural development strategies, and the South-East Asian example of industrial diversification could not be transposed to the very different economies of the Mediterranean countries.

93. In response, Ms Chouchani Cherfane confirmed that the impact on GDP had been found to be marginal, but that there was a correlation between GDP and socio-economic and environmental factors, which was why a linkage was needed between GDP and other indicators. The idea of a carbon tax had been on the table as a possible option but had not been advocated. Regarding the reference to the South-East Asian economies, the intention had been to draw lessons from those countries' experience.

94. Several speakers stressed the crucial importance of monitoring to determine the actual adverse or positive impacts on the countries of the region. Support was expressed for the idea of national monitoring mechanisms, with emphasis placed on input from NGOs. Arrangements should be in place to ensure that the assessment findings were reaching the right people in the Mediterranean countries. It was pointed out that, although target dates had been set for region-wide implementation, trade agreements were being realized through bilateral agreements. Ms Chouchani Cherfane explained that the purpose of indicators was also to help identify, on the basis of negotiated agreements, what measures had been instituted.

95. Regarding the possible role of the MCSD as a monitoring body, preliminary comments were that EMFTA was essentially a political process and was backed by strong political will. That had emerged from discussions during the COMPSUD General Assembly and in the Corfu Declaration, which expressed support for the MCSD and possible linkages with SIA-EMFTA monitoring proposals.

96. Ms Chouchani Cherfane observed that it was to be assumed that an indicator-based approach to monitoring sustainability involved measuring social, economic and environmental impacts and that the environmental indicators proposed were intentionally drawn from existing MSSD indicators to support complementarity between regional initiatives. In those instances, BP/RAC might have a role to play. However, other indicators would also need to be monitored, including EMFTA implementation trends and trade data. Regarding the body(s) that might be responsible for the monitoring mechanism, the idea was not necessarily to identify a specific entity in the final report, but to determine the characteristics or terms of reference of such a mechanism.

97. One member stressed the wide implications of designating the MCSD as a monitoring body, and would need to be taken in the framework of the Euro-Mediterranean Partnership. Such a departure from its current role as an advisory body was not to be taken lightly. Mr Mifsud agreed that the MCSD did not have the capacity to engage in such a demanding exercise and suggested that BP/RAC, as a MAP component, should continue to follow the SIA-EMFTA process and participate actively in it.

Approval of conclusions and recommendations (agenda item 12)

98. The Chairperson invited the meeting to consider a paper containing draft recommendations for submission to the 15th Meeting of the Contracting Parties. The draft contained the recommendations of the Working Group on Water Demand Management, Zaragoza, Spain, March 2007; the recommendations of the breakout group on energy and climate change; the recommendations of the meeting of experts on energy and sustainable development in the Mediterranean, Monaco, 29-30 March 2007; and a recommendation for approval of the implementation plan 2008-2011 and the work programme 2008-2009. The conclusions of the breakout group on tourism and climate change had not been included as that group had decided not to make recommendations.

99. There was general agreement that the recommendation to approve the implementation plan for the period 2008-2011 and the work programme 2008-2009 (UNEP(DEPI)/MED WG.313/5) could not be forwarded to the Contracting Parties as it stood. Firstly, the Commission had not been given an opportunity to comment on the implementation plan and the work programme in detail; although a number of substantive comments had been made, that was not reflected in the recommendation. Furthermore, both the implementation plan and the work programme would have to be revised to take into account the changes to be proposed by the drafting committee of MAP National Focal Points to the mandate and function of the MCSD.

100. 100. After discussion, the text of the recommendation was approved as amended as **Annex III** to this report.

101. Several speakers stressed that members of the MCSD should also have the opportunity to comment on the documents on the future mandate and governance of the MCSD being prepared by the drafting committee of MAP National Focal Points, before they were forwarded to the Meeting of the Contracting Parties.

102. A number of members proposed that the recommendations of the Working Group on Water Demand Management and of the meeting on energy and sustainable development, which had already been approved by those groups after intensive discussion, should not be included as part of the recommendations of the MCSD. The meeting could take note of or endorse them and annex them to the report, although it might also be useful to add the comments of members.

103. With respect to the conclusions of the breakout group on energy and climate change, a number of revisions were proposed, to more clearly reflect the group's discussions.

104. It was agreed that the present report would be circulated to members for comment within the coming few days and then recirculated for approval after the Secretariat had incorporated their comments.

105. It was further agreed that the recommendations would be revised by the MCSD Steering Committee, with the input of other members by electronic means, on the basis of the discussions at the meeting and written comments. They would then be sent to all members for approval, on a "no objection" basis, before they were forwarded to the Meeting of the Contracting Parties.

106. It was also agreed that members of the MCSD would have the opportunity to comment on the documents on the future mandate and governance of the MCSD that were being prepared by the drafting committee of MAP National Focal Points, by electronic means with the members of the drafting committee, and that the drafts would be revised in the light of those comments, before they were forwarded to the Meeting of the Contracting Parties.

107. It was finally agreed that the implementation plan for the period 2008-2011 and the work programme 2008-2009 would be revised on the basis of the discussions at the meeting, of comments submitted in writing by members within the next two weeks, and of the comments on the documents on the future mandate and governance of the MCSD being prepared by the drafting committee of MAP Focal Points. The revised implementation plan and work programme would then be circulated to members for approval before being sent to the Meeting of the Contracting Parties.

Other matters (agenda item 13)

108. There was no other business.

Thirteenth meeting of the MCSD (agenda item 14)

109. The MAP Coordinator said that a decision about the date of the next meeting of the MCSD could be made only after the document on the future governance of the MCSD being prepared by the drafting committee of MAP National Focal Points had been received, as that would state the periodicity of MCSD meetings. No offers had yet been received to host the next meeting.

Closure of the meeting (agenda item 15)

110. Following the customary exchange of courtesies, the meeting was closed at 6:30 p.m. on Thursday 31 May 2007.

ANNEX I

List of Participants 12th meeting of the MCSD, Istanbul, Turkey, 30-31 May 2007

MCSD MEMBERS

ALBANIA

MS ERINDA MISHO

Expert, Head of Unit of Environment
Agency of Environment, Forestry and Waters
Rruga Halil Bega, Nr 23
Tirana, Albania
Tel: 355 4 371242, 355 682084017
Fax: 355 4 371243
E-mail: erindamisho@yahoo.com

ALGERIA

MR FARID NEZZAR

Ingénieur en Chef
Directeur de l'Administration et des Finances
Ministère de l'Aménagement du Territoire et de
l'Environnement
47 rue Mohamed Douar
Belouizdad, Alger
Algérie
Tel: 213-21-431248 / 434576
Fax: 213-21-432867 / 432848
E-mail: farid_nezzar@yahoo.fr

BOSNIA & HERZEGOVINA

MR. TARIK KUPUSOVIC

Special Advisor to the Minister
Ministry of Physical Planning and Environment
Hydro Engineering Institute
Box 405, S. Tomica,1
71000 Sarajevo, Bosnia and Herzegovina
Tel/Fax: 387 33 207949
Fax: 387 33 212 466
Email: heis@heis.com.ba
E-mail: tarik.kupusovic@heis.com.ba

COORDINAMENTO AGENDE 21 LOCALI ITALIANE

MR. EMILIO D'ALESSIO

Presidente della Associazione Agende 21 Locali
Italiane
Comune di Ancona
Piazza 24 Maggio, 1
I-60124 ANCONA
Tel: 0039 071 222 2433
Fax 0039 071 222 2676
E-mail: emilio.dalessio@comune.ancona.it

MR. ERIUCCIO NORA

Director
Segreteria Nazionale Coordinamento Agende 21
Locali Italiane
c/o Provincia di Modena, Viale Martiri della Libertà
34, 41100 Modena, Italy
Tel: 0039059 209350
Fax: 0039059 209398
E-mail:
coordinamento.agenda21@provincia.modena.it
Nora.e@provincia.modena.it

CROATIA

MS. ZRINKA LASIC

Junior Assistant
Ministry of Environmental Protection, Physical
Planning and Construction
International Relations Department
Republike Austrije 14, 10 000
Zagreb, CROATIA
Tel : +385 1 37 82 181
Fax : +385 1 37 17 149
e-mail: zrinka.lasic@mzopu.hr
www.mzopu.hr

MS. SANDRA TROSELJ STANISIC

Expert Adviser
Ministry of Environmental Protection,
Physical Planning and Construction
Department for Sea and Coastal Protection
Uzarska 2/I, 51000 Rijeka
Republic of Croatia
Tel:+385 51 213 499
Fax:+385 51 214 324
e-mail: sandra.troselj-stanistic@mzopu.hr

CYPRUS

MR. CHARALAMBOS HAJIPAKKOS

Senior Environment Officer
Environment Service
Ministry of Agriculture, Natural Resources and
Environment
Nicosia, 1411, Cyprus
Tel. 00-357-22 -303851, Fax 00 -357 -22 -774945
Email chajipakkos@environment.moa.gov.cy

**ENDA MAGHREB-ENVIRONNEMENT
DEVELOPPEMENT ET ACTION AU MAGHREB
MR. MAGDI IBRAHIM**

Resident Representative of ENDA in Morocco
Coordinator, Enda Maghreb
12 rue Jbel Moussa - Apt. 13 "Joli Coin"
Agdal, Rabat
Morocco
Tel: 212 37 67 10 61/62/63
Fax: 212 37 67 10 64
E-mail: coord@enda.org.ma, magdi@enda.org.ma

EGYPT

DR MAWAHEB ABU-ELAZM

Chief Executive Officer
Egyptian Environmental Affairs Agency (EEAA)
Ministry of State for Environmental Affairs
Cabinet of Ministers
30 Misr Helwan Rd, Maadi, P.O. Box 955
Cairo, Egypt
Tel: 20 2 5256450
Fax: 20 2 5256490
E-mail: mawaheb@eeaa.gov.eg
E-mail: mohamedtantawy75@hotmail.com

MR. OMAR ALI ABOU EICH

Minister Plenipotentiary
Head of Environment and Sustainable
Development Affairs
Ministry of Foreign Affairs
Corniche El Nile Street
Maspero, Cairo, Egypt
Tel: 20-2-5747847, Tel (mobile): 20-12-1021644
Fax: 20-2-5747847
E-mail: oeich@hotmail.com

EUROPEAN COMMUNITY

MS ANNE BURRILL

Deputy Head of Unit, DG Environment - Enlargement
and Neighbouring Countries
Environment Directorate E - International Affairs
(DG ENV-E-1)
European Commission
200 rue de la Loi
Office: BU9 05/151
Brussels, Belgium
Tel: 32 2 2954388
Fax: 32 2 2994123
E-mail: anne.burrill@ec.europa.eu

MS. MARTINA KLENNER

European Commission, DG Environment Unit C1
Climate Strategy, International negotiation and
Monitoring of EU action
Office Beaulieu 5 3/158
BU-5 3/158, B-1049 Brussels, Belgium
Tel.: 32 2 298 5697, 32473615995
Fax: 32 2 296 9970
E-mail: Martina.KLENNER@ec.europa.eu

FRANCE

M. BERNARD BRILLET

Ministry of Ecology and
Sustainable Development
6 rue Rosa Bonheur
75015 Paris, France
Tel: 33623720515 -33616011584
E-mail: Bernard.BRILLET@ecologie.gouv.fr

FRIENDS OF THE EARTH/MED NET

MR. EUGENE MALACHY CLANCY

Friends of the Earth MedNet Coordinator
Las Mezquitas 43, San Juan de Alicante,
03550 Spain
Tel: 34965652932
E-mail: mednet@foeeurope.org

15 Rue Blanche
1050 Brussels
Tel: 34965652932

GREECE

DR. ILIAS MAVROIDIS

Scientific Expert
Hellenic Ministry for the Environment, Physical
Planning and Public Works
Department of International Relations and EU Affairs
15, Amaliados Str., 115 23 Athens
Greece
Tel: 30 210 64 26 531, 30 213 15 15 666
Fax: 30 210 64 34 470
E-mail: i.mavroidis@tmeok.minenv.gr

MR. NICOLAS MANTZARIS

Hellenic Ministry for the Environment, Physical
Planning and Public Works
Department of International Relations and EU Affairs
15, Amaliados Str., 115 23 Athens
Greece
Tel: 30 2131515680, 30 210 64 15 986
Fax: 30 210 64 34 470
E-mail: n.mantzaris@tmeok.minenv.gr

ISRAEL

MR. NIR KEDMI

Director
Economics and Standards Division
Ministry of Environmental Protection
5, Kanifei Nesharim,
P.O.Box 34033 Jerusalem
95464 Israel
Tel: 972 2 6495835/6120
Fax: 972 2 6495894
E-mail: nir@sviva.gov.il

ITALY

MS. MARIA DALLA COSTA

Head, International Relations Unit
APAT - Italian Agency for Environmental Protection &
Technical Services
Phone: 39 06 5007 4201/4107
Fax 39 06 5007 4276
E-mail: dallacosta@apat.it

MS. EMANUELA VIGNOLA

Expert
Italian Ministry for the Environment
and Land and Sea
Department for Environmental Research and
Development
Phone: 39 06 5722 8109
Fax: 39 06 5722 8178
E-mail: vignola.emanuela@minambiente.it

Italian Ministry for the Environment and Land and
Sea
Department for Environmental Research and
Development
Via C. Colombo, 44
Rome, Italy

LEGAMBIENTE- LEAGUE FOR THE ENVIRONMENT

MR. DANIELE CALZA BINI

Policy Officer
International Department
Tel: 390686268330
E-mail: d.calzabini@mail.legambiente.com

MR SIMONE ANDREOTTI

Head of Civil Protection
E-mail: protezionecivile@mail.legambiente.com

Via Salaria 403 - 00199 Roma, Italy
Tel: 390686268329
Fax: 390686218474
www.legambiente.com

LIBYAN ARAB JAMAHIRIYA

Dr. ABDULFATAH BOARGOB

Environmental Advisor, Head of delegation
Tel/Fax : 218 21 48370266
E-mail: aboargob@yahoo.com.uk

MR. HAMZA MABRUK

Technical Advisor
Environmental General Authority
Al Geran, P.O. Box 83618
Tripoli, Libyan Arab Jamahiriya
Tel.: 218 21 4873761, 218925626446
Fax: 218 21 4872160
E-mail: hamzamabruk@hotmail.com

MALTA

MS. MARGUERITE CAMILLERI

Policy Coordinator Manager
Director General's Office
Malta Environment and Planning Authority (MEPA)
St. Francis Ravelin street
Marsa, Floriana CMR01 Malta
Tel: 356 2290 1529
Fax: 356 2290 2295
E-mail: marguerite.camilleri@mepa.org.mt

MEDITERRANEAN INFORMATION OFFICE FOR ENVIRONMENT, CULTURE AND SUSTAINABLE DEVELOPMENT (MIO-ECSDE)

PROF. MICHAEL SCULLOS

Chairman
12, Kyrristou str. 105 56, Athens, Greece
Tel: 30210-3247490, -3247267
Fax: 30210-3317127
E-mail: info@mio-ecsde.org,
scoullos@mio-ecsde.org
www.mio-ecsde.org

MEDCITIES

MR. JOAN PARPAL

Secretary General
Mancomunitat de Municipis de l'Area,
Metropolitana de Barcelona, C/ 62, Núm. 16/18
Sector A, Zona Franca, 08040 Barcelona, Spain
Tel: 34-93-2234165
Fax: 34-93-2234849
E-mail: desurb@amb.es

MONACO

MR. PATRICK VAN KLAVEREN

Ministre Conseiller
Délégué Permanent auprès des Organismes
Internationaux à caractère scientifique,
environnemental et humanitaire.
13, rue Emile de Loth
98000-MONACO
Tel: 377 98 98 81 48
Fax: 377 93 50 95 91
E-mail : pvanklaveren@gouv.mc

MOROCCO

MR. ABDELFETAH SAHIBI

Chef de la Division de la Coopération Internationale
Ministère de l'Aménagement du Territoire, de l'Eau et
de l'Environnement
4 place Abou Bakr Esseddik.
Avenue Fal Ould Amir - Agdal
Rabat, Maroc
Tel: 212-37-772662, 21269780586
Fax: 212-37-772640
E-mail: sahibi@minenv.gov.ma

METAP- WORLD BANK/MEDITERRANEAN ENVIRONMENTAL TECHNICAL ASSISTANCE
MR. SHERIF ARIF

METAP Coordinator / Regional Environment and Safeguard Advisor
Water, Environment, Social and Rural Development
Tel: 1 202 4737315
Fax: 1 202 4771609
E-mail: sarif@worldbank.org

MR. LUIS COSTANTINO

Sector Manager of the Environment, Social and Rural Development
The World Bank
Middle East and North Africa Region
1818 H. Street; NW, room H8-133
Washington DC 20433
United States of America
Tel: 1 202 4587340
Fax: 1 202 4771609
E-mail: leconstanuno@worldbank.org

REGION OF SICILY

MS. SANDRA PATERNOSTRO

Via U. La Malfa 87-89
90146 Palermo
Sicily, Italy
Tel: 00390917070637
Fax: 00390917070800
E-mail: sandrapaternostro@hotmail.com

Via Collazia 20 int 1
00183 Roma
Tel: 0039 349 8868590

REC-REGIONAL ENVIRONMENTAL CENTRE FOR CENTRAL AND EASTERN EUROPE

MS. SIBEL SEZER

Country Office Director for Turkey
sibel.sezer@rec.org.tr
2000 Szentendre, Hungary, Ady Endre ut 9-11
Tel: 36 26 504 000
Fax: 36 26 311 294
E-mail: mbonifert@rec.org, info@rec.org

MONTENEGRO

MS. JELENA KNEZEVIC

Head, Department for Strategic and Integration Processes
MAP Focal Point
Ministry of Tourism and Environment
Rimski trg 46, PC Vektra
81000 Podgorica
Republic of Montenegro
Tel: 382 81 482 313
Mobile: 382 67 255604
Fax: 382 81 234168
e-mail: jelenaknezevic@cg.yu, jelenak@mn.yu

SLOVENIA

MAG. MITJA BRICELJ

State Secretary
Nature Protection Authority
Tel: 386-1-4787384
Fax: 386-1-4787419
E-mail: mitja.bricelj@gov.si

MS. NATASHA BRATINA JURKOVIC

Senior Advisor
Tel: 386-1-4787080
Fax: 386-1-4787223
E-mail: natasa.bratina-jurkovic@gov.si

Ministry of the Environment, Spatial Planning and Energy
48 Dunajska
1000 Ljubljana
Slovenia

SYRIAN ARAB REPUBLIC

MS. MANAL AL SAKKA

Head of EIA Department
General Commission for Environmental Affairs
Ministry of Local Administration and Environment
P.O. Box 3773, Tolyani Street
Damascus, Syrian Arab Republic
Tel: 963 11 4461072
Fax: 963 11 4461079
E-mail: msakka@postmaster.co.uk
E-mail: env-min@net.sy

TUNISIA

MR. MOHAMED ADEL HENTATI

General Director of Sustainable Development
Ministry of Environment and Sustainable Development
Tunis, Tunisie
Tel : 216 70 728462
Fax: 216 70728682
E-mail: boc@mineat.gov.tn

UNION MÉDITERRANÉENNE DES CONFÉDÉRATIONS D'ENTREPRISES – UMCE-BUSINESSMED

MR. HICHAM ABOU JAOUDE

UMCE-BUSINESSMED Representative
Association of Lebanese Industrialists
P.O.Box 11-1520, Riad el Solh
Beirut, Lebanon
Tel: 9611350280/1/2 +9613412267
Fax: 9611351167
E-mail: h.aboujaoude@umce-med.org
E-mail: hichamaj@hotmail.com

TURKEY

MR SEDAT KADIOGLU

Ministry of Environment and Forestry
Head of Department
Department of Foreign Relations and EU
Tel: 90 312 2075411
Fax: 90 312 2075454
E-mail: sedakkad@yahoo.com

MS GULSUN YESILHUYUK

City Planner
Ministry of Environment and Forestry
Foreign Affairs and EU Department
Tel: 90 3122075387
Fax: 90 3122075454
E-mail: yesilhuyuk@yahoo.com

MR. BARAN GORMEZ

Expert
Ministry of Environment and Forestry
Foreign Affairs and EU Department
Tel:90 312207 5384
Fax:90 312 207 5454
Cell: 90 532 578 9583
E-mail: barangormez@gmail.com

MR. ERCAN ASUR

Ministry of Environment and Forestry
Foreign Affairs and EU Department
Tel: 90 312 2075425

MR. MUSTAFA TEYRAN

Ministry of Environment and Forestry
Foreign Affairs and EU Department
Tel: 90312 2075409

MR. UFUK KÜÇÜKAY

Expert
Ministry of Environment and Forestry
Foreign Affairs and EU Department
Tel: 90 312 2075449
E-mail: ukucukay@hotmail.com

MR SAKIR TOKUR

Ministry of Environment and Forestry
Foreign Affairs and EU Department

MRS SENNUR ALDEMİR

Ministry of Culture and Tourism
Ankara
Tel: 90 312 212 8377
Fax: 90 312 212 8394
e-mail: sennursan@yahoo.com

MR IZZET ARI

Planning Expert
State Planning Organization
Necatibey Cad. No: 108
Gankay, Ankara
Tel: 90 312 294 6561
Fax: 90 312 294 6577
iari@dpt.gov.tr

MR SAKIR TOKAR

Officer
Ministry of Environment and Forestry
Tel: 90 312 207 5411

MRS SIBEL MINE GÜÇVER

Biologist
General Directorate of Environmental Management
Ministry of Environment and Forestry
Tel: 90 312 2076636
Fax: 90 312 2076695
E-mail: msgucver@yahoo.com

MS TUĞBA İÇMELİ

Deputy Expert
General Directorate of Environmental Management
Department of Air
Sogutozu Cad. 14/E, Ankara
Tel: 903122076513
Fax:9031202076535
E-mail: tidikat@yahoo.com

MS SENNUR ALDEMİR

Chief of Division
Ministry of Culture and Tourism
Tnomi Bul No 5 Emek
Ankara
Tel: 90 312 2128377
Fax: 903122128394
E-mail: sennursan@yahoo.com

Mr M. CEYHUN

Ministry of Agriculture and Rural Affairs

MR. ALI CAN

Turkish Institution of Statistics
Tel: 903144100219
Fax: 903124250918
E-mail: ali.can@turk.gov.tr

MR. AHMET KOYUN

Yildiz University

UNDP TURKEY

MR. ATILA URAS

Project Manager
E-mail: atila.uras@undp.org

MR. ALPER ACAR

Project Manager Assistant
E-mail: alper.acar@undp.org

MS. GÖZDE DOGAN

Communications Outreach Officer
E-mail: gozde.dogan@undp.org

UN House
Birklik Mah. 2. Cad. No.11
Yildiz, Ankara, Turkey
Tel: 90 312 454 1181-73
Fax: 90 312 2946578

ALTERNATE MCSD MEMBERS

**AIFM-ASSOCIATION INTERNATIONALE FORETS
MEDITERRANEENNES**

MR. MOHAMED LARBI CHAKROUN

President
14, rue Louis Astouin
13002 Marseille, France
Tel : 33 4 91 90 76 70
Fax : 33 4 91 90 71 62
E-mail: info@aifm.org
+216 71 71 41 19

**APNEK- ASSOCIATION POUR LA PROTECTION
DE LA NATURE ET DE L'ENVIRONNEMENT DE
KAIROUAN**

MR BELGACEM KHAMMARI

Vice-president of APNEK
Headquarters / Secretariat Mailing Address: BP 197
Kairouan 3100
Tunisia
Tel: 216 77 229668, 21698250574
Fax: 216 77 229668, 216 71 708 354
E-mail: apnektunisia@yahoo.fr

**IMC- INTERNATIONAL MARINE CENTRE
MR. PAOLO MAGNI**

Head, Marine Pollution & Biodiversity Unit
IMC - International Marine Centre
Localita' Sa Mardini
09072 Torregrande - Oristano
ITALY
Tel.: 39-0783-22027
Fax : 39-0783-22002
E-mail: p.magni@imc-it.org

**IME- INSTITUT MÉDITERRANÉE DE L'EAU
Ms. SELMINE BURAK**

Board member IME
Associate Professor
Istanbul University Institute of Marine Sciences and
Management
Muskule Sok. No:1 Vefa-Eminonu
Istanbul, Turkey
Tel: 90 212 4400000 int:26049
Direct fax&tel: 90 212 5140367
E-mail : sburak@istanbul.edu.tr

Mediterranean Water Institute (MWI)-Institut
Méditerranéen de l'Eau (IME)
Les Docks - Atrium 10.3 - 6th Floor
10, Place de la Joliette
13002 Marseille, France
Tél : 33 04.91.59.87.77
Fax : 33 04.91.59.87.78
E-mail: info@ime-eau.org, mohamed.ennabli@gnet.tn

**OME- OBSERVATOIRE MEDITERRANEEN DE
L'ENERGIE**

MS. HOUDA BEN JANNET ALLAL

Senior Energy Analyst
Renewable Energies & Sustainable Development
14, rue Xavier Privat
75005 Paris, France
Tel: 33 172766704
Fax: 33 143367776
E-mail : allal@ome.org

WORLD WILD FUND

MR. PAOLO LOMBARDI

Director
WWF Mediterranean Programme Office
via Po 25/c
00198 Roma - Italy
Tel: direct +39-06-844-97-381
Tel: assistant +39-06-844-97-227
Tel: switchboard: +39-06-844-971
Fax: 39-06-841-38-66
E-mail: plombardi@wwfmedpo.org

UNITED NATIONS BODIES AND SECRETARIATS
AND OTHER OBSERVERS

**UNEP/ESCWA-UNITED NATIONS ENVIRONMENT
PROGRAMME-ECONOMIC AND SOCIAL
COMMISSION FOR WESTERN ASIA
MS. CAROL CHOUGHANI CHERFANE**

Acting Team Leader / First Economic Affairs Officer
Technology and Enterprise Development Team
(TED)

Sustainable Development and Productivity Division
(SDPD)

United Nations House

P.O. Box 11-8575

Beirut, Lebanon

Tel: 961-1-978-518 (direct)

Tel: 961-1-981-301, ext. 1518

Cel: 961-3-769-466

Fax: 961-1-981-510

Em: chouchanicherfane@un.org

LEAGUE OF ARAB STATES

MR. DJAMEL-EDDINE DJABALLAH

Chief of Housing and Local Development Division
18, El-Tahrir Street

Cairo, Egypt

Tel: 20 2 5750511, 20106049566

Fax: 20 2 5740331, 202 574 3023

E-mail: envsusdev.dept@las.int

**RAED-ARAB NETWORK FOR ENVIRONMENT
AND DEVELOPMENT**

MR. EMAD ADLY

General Coordinator

3A Misr Letmaameer Buildings

Zahraa Maadi Street, Maadi

P.O. Box 2, Magles Elshaab,

Cairo, Egypt

Tel: 202 5161519- 202 5161245

Fax: 202 5162961

Email: aoye@link.net

PALESTINIAN AUTHORITY

MR HISHAM AZMI MATAR

Acting Director General

Environment Quality Authority

Elnasser street, Elreemal

Gaza, Palestinian Territories

Tel: 9708- 2822000/ 2823000/ 2855461

Mobile : 97059-726368

Fax: 00970599 255488

E-mail: hishamater@yahoo.com

hishamater@hotmail.com

**ABDUS SALAM INTERNATIONAL CENTRE FOR
THEORETICAL PHYSICS**

MR FILIPPO GIORGI

Head of Earth System Physics Section, The Abdus
Salam International Centre for Theoretical Physics
Strada Costiera 11, I-34014

Trieste, Italy

Tel. +39 (040) 2240 425

Fax +39 (040) 2240 449

E-mail: giorgi@ictp.it

**INSTITUT DU DEVELOPPEMENT DURABLE ET
DES RELATIONS INTERNATIONALES (IDDRI)**

MR RAPHAEL BILLE

Chef de projet, Changement Climatique en
Méditerranée,

6, rue du Général Clergerie

75116 PARIS

Tel. +33 (0)1 53 70 22 74

Fax +33 (0)1 53 70 21 45

E-mail: raphael.bille@iddri.org

IUCN-THE WORLD CONSERVATION UNION

MRS NILUFER ORAL

Istanbul, Turkey

Tel: 90 532 407 3358

E-mail: noral@bilgi.edu.tr

MR. RAMI A. SALMAN

Head of Programme

IUCN Centre for Mediterranean Cooperation

Parque Tecnológico de Andalucía,

Calle Marie Curie 35

Campanillas, 29590,

Malaga, Spain

Tel: 34 952 028 430

Direct Line: 34 952 028 452

Fax: 34 952 028 145

E-mail: rami.salman@iucn.org

REGIONAL ACTIVITY CENTRES OF THE MEDITERRANEAN ACTION PLAN

**REGIONAL MARINE POLLUTION EMERGENCY
RESPONSE CENTRE FOR THE
MEDITERRANEAN SEA (REMPEC)
MR. FREDERIC HEBERT**

Director

Manoel Island,

GZR 03, Malta

Tel: 356-21-337296/7/8

Fax: 356-21-339951

E-mail: fhebert@rempec.org; rempec@rempec.org

**REGIONAL ACTIVITY CENTRE FOR
THE BLUE PLAN (BP/RAC)
MR. HENRI-LUC THIBAUT**

Director

Plan Bleu, Centre d' Activité Régional

(PB/CAR)

15 rue Ludwig van Beethoven

Sophia Antipolis

F-06560 Valbonne, France

Tel: 33-4-92387130/33

Fax: 33-4-92387131

E-mail: planbleu@planbleu.org

**REGIONAL ACTIVITY CENTRE FOR THE
PRIORITY ACTIONS PROGRAMME (PAP/RAC)
MR. IVICA TRUMBIC**

Director

11 Kraj Sv. Ivana

21000 Split

Croatia

Tel: 385 21 340470

Fax: 385 21 340490

E-mail: ivica.trumbic@ppa.htnet.hr

**REGIONAL ACTIVITY CENTRE
FOR CLEANER PRODUCTION (CP/RAC)
MS. VIRGINIA ALZINA**

Director

C/ Dr. Roux, 80

08017 Barcelona

Spain

Tel +34 93 553 8790

Fax +34 93 553 8795

E-mail: valzina@cprac.org

INFO/RAC

MR. SERGIO ILLUMINATO

Director General

E-mail: director@inforac.org

MR. PAOLO GUGLIELMI

Deputy Director

E-mail: pguglielmi@inforac.org

MS. MARIA TVERITINA

Assistant Media Project

MR TURGUT YILDIZ

INFO/RAC Partner

President, Turkish Business Sustainability Council

Tel: 90 532 2629274

E-mail: turgut@tbcsd.org

MR. FERIT KARAKAYA

INFO/RAC consultant

Via Cagliari, 40

00198 Rome

Italy

Tel: 39-06-85305147

Fax: 39-06-8542475

E-mail: info@inforac.org

www.inforac.org

**MAP SECRETARIAT FOR
100 MEDITERRANEAN HISTORIC SITES
MR. DANIEL DROCOURT**

Coordinator

Atelier du Patrimoine de la ville de Marseille

10 ter square Belsunce, 13001 Marseille, France

Tel: 33 491 907874

Fax: 33 491 561461

E-mail: ddrocourt@mairie-marseille.fr

COORDINATING UNIT FOR THE MEDITERRANEAN ACTION PLAN

MR. PAUL MIFSUD

Coordinator

Tel: 302107273101

E-mail: paul.mifsud@unepmap.gr

MR. F. SAVERIO CIVILI

MED POL Coordinator

Tel: 302107273106

E-mail: fscivili@unepmap.gr

MS. TATJANA HEMA

Programme Officer

Tel: 302107273115

E-mail: thema@unepmap.gr

MR. SPYROS KOUVELIS

Sustainable Development Officer

Tel: 302107273149

E-mail: skouvelis@unepmap.gr

MS. LUISA COLASIMONE

Information Officer

Tel: 302107273148

E-mail: luisa.colasimone@unepmap.gr

Coordinating Unit for the
Mediterranean Action Plan
48, Vassileos Konstantinou Avenue
P. O. Box 18019
116 10 Athens, Greece
Fax: 30210 7253196-7

ANNEX II**AGENDA OF THE MEETING**

- Agenda Item 1:** Welcome and Opening Remarks;
Election of the Steering Committee;
Adoption of the Agenda and organization of work.
- Agenda Item 2:** Brief presentation by the Secretariat of MCSD progress report including activities carried out by the MAP components since the last meeting in Nicosia, Cyprus.
- Agenda Item 3:** Presentation by the Secretariat of the Implementation Plan 2008-2011 and the Work Programme 2008-2009.
- Agenda Item 4:** Presentation by Keynote Speaker on Climate Change in the Mediterranean followed by general discussion.
- Agenda Item 5:** Breakout sessions: - (i) Energy and Climate Change;
(ii) Tourism and Climate Change.
- Agenda Item 6:** Presentations of outcomes from breakout sessions on the thematic issues of energy and climate change and tourism and climate change.
- Agenda Item 7:** Presentation of the MSSD IC Strategy (INFO/RAC); Discussion and Approval.
- Agenda Item 8:** Water Demand Management (BP/RAC); Presentation, discussion and approval of recommendations/conclusions.
- Agenda Item 9:** Energy Efficiency and Renewables (BP/RAC); Presentation, discussion and approval of recommendations/conclusions.
- Agenda Item 10:** Sustainable Development Indicators (BP/RAC); Presentation of progress.
- Agenda Item 11:** SIA/EMFTA Monitoring Mechanism-Presentation and discussion.
- Agenda Item 12:** Approval of Conclusions/Recommendations.
- Agenda Item 13:** Other matters.
- Agenda Item 14:** Next MCSD meeting;
Closure of the meeting.

ANNEX III

MCS D Recommendations to be submitted to the 15th Meeting of the Contracting Parties in Almeria Spain, January 2008

The 12th Meeting of the Mediterranean Commission on Sustainable Development (Istanbul, Turkey, 30-31 May 2007) in accordance with its Terms of Reference and taking into account the Mediterranean Strategy for Sustainable Development has agreed to submit the following recommendations to the 15th Meeting of the Contracting Parties in Almeria Spain, December 2007:

Water Demand Management

1. Endorsed the Recommendations that emerged from the Working Group on Water Demand Management, held in Zaragoza, Spain, March 2007, as presented in Appendix I of this document, with the notes that the MCS D introduced.

Energy and Climate Change

2. It is recommended that Chapter 2.2 of the MSSD on Energy and Climate Change should be implemented without further delay. In this context, national strategies for sustainable development (NSSDs) should include mainstreaming renewable energies (RE), energy efficiency and climate change concerns, including adaptation. According to the latest findings of the IPCC, the threat posed by climate change has significantly increased since the preparation of the MSSD.

3. There is a need to assess the socio-economic impacts of climate change in the Mediterranean, particularly for the most vulnerable groups. This should be complemented by a country-specific needs and vulnerability assessment.

4. A two-pronged approach to energy policy is required. A focus on the supply side, i.e. on the availability of clean and affordable energy systems, is constrained by the need for clean but affordable technology. It is therefore also important to focus on the demand side. In particular, work is needed on energy efficiency (in cities, in buildings, and in the industrial sector) and energy savings.

5. It is important that prices send the right signals, although it should be noted that this is not the only constraint to sustainable energy use and climate protection. From experience in some countries, although prices can be made to reflect environmental costs more clearly, there is a limit to how much subsidies can be reduced. This type of reform has considerable social impacts, particularly in certain countries, where there is not even enough energy available to fulfill basic needs. It is also important, however, that new energy provision schemes are conceptualized on the basis of sustainable and climate-friendly energy systems.

6. There is a need for collaboration and solidarity across the Mediterranean, both among and between northern and southern countries, at any administrative level, with a focus on capacity-building and investment.

7. There is a need to increase the attractiveness of Mediterranean countries for Clean Development Mechanism (CDM) projects.

8. IFI finance can have a significant impact on energy and climate change through the choice of projects financed in the energy and transport sectors. In order to advance with RE investments and to overcome obstacles in the future, in-depth reflection is recommended on the reasons why several RE projects and CDM projects in the region have often stopped short of actual investments, not going beyond feasibility studies. This should begin with a stock-taking exercise that explores these issues. It appears that funding is not a major constraint, but that there is a need for stronger commitment at national level to break into this market, including the commitment of financial resources.

9. There is a need to use tools such as strategic environmental assessment (SEA) and sustainability impact assessment (SIA) for policies and projects in key economic sectors such as energy and transport. This should take place at three levels: national, sub-regional (transboundary) and regional (international). Through tools such as SEA, the link between national energy policies and regional commitments to the MSSD can be made.

10. Because of the importance of the power of example, it is recommended that greater use should be made of green public procurement, whereby governments target their procurement strategies at climate-friendly options.

11. Pursue actively the development of synergies with Euro-Med Partnership, JREC (Johannesburg Renewable Energy Coalition), EU Energy Initiative, GEEREF (Global Energy Efficiency and Renewable Energy Fund), the S.E Europe Energy Community, etc.

12. These recommendations and conclusions take into account and build upon those of the Monaco Workshop on 'Energy and Sustainable Development in the Mediterranean', which took place on 29 and 30 March 2007, which are presented in Appendix II of this document with the notes that the MCSD introduced.

Implementation Plan 2008-2011 and Work Programme 2008-2009

13. Recommends the approval of the Implementation Plan of the period 2008-2011 and the programme of work 2008-2009 [UNEP(DEPI)/MED WG.313/5] after amendment to reflect the concerns expressed during this meeting, and subject to possible further comments in view of the ongoing discussion on the future role of the MCSD.

Appendix I

The 12th Meeting of the Mediterranean Commission on Sustainable Development endorsed the Recommendations that emerged from the Working Group on Water Demand Management held in Zaragoza, Spain, March 2007, with the following notes:

- i. Under paragraph 6.5, the MCSD feels that there is no need to create a new Mediterranean Water Observatory, and therefore the part of the paragraph beginning "...and contribute to setting up...decision makers." should be omitted.
- ii. The MCSD underlined the need for the development of synergies with existing initiatives such as the EU Water Initiative – MED component, the GWP-Med, EMWIS etc.

Recommendations of the Working Group on Water Demand Management, Zaragoza, Spain, March 2007

Preamble

1. Considering Recommendation 26 of the Action Plan adopted at the Johannesburg World Summit on Sustainable Development,
2. Committed to the implementation of the Barcelona Convention and the objectives of the Mediterranean Strategy for Sustainable Development,
3. Being of the opinion that the European Union Framework Directive on Water contains know-how in several fields which the EU neighbours might wish to share,
4. Considering that Water Demand Management is a resource and that it is an integral part of integrated water resources management,
5. Recalling that water demand in the Mediterranean is expected to increase by 50 km³/year by 2025 to reach 332 km³/year, and that the various losses due to transport, leaking and the various uses could exceed 120 km³/year,

Recommendations

6. The participants to the 3rd Regional Workshop on Water and Sustainable Development in the Mediterranean, convened at Zaragoza, 19-21 March 2007, recommend to the national political authorities of the Mediterranean countries to:
 - 6.1 Include, in accordance with the MSSD orientations, Water Demand Management, in the national priority strategies, to promote its implementation, on the one hand by setting annually on the basis of regional objectives, national objectives of efficiency and on the other — in order to achieve them — by mobilizing, with a concern for social equity,

the various technical instruments and tools, but also those regulatory, normative, tariff, fiscal, contractual or market tools and instruments available to them; further, to coordinate its implementation, follow-up and evaluation in the various sectoral policies, especially in the fields of agriculture, energy, tourism, environment and land development,

- 6.2 See to it that the problems connected with Water Demand Management are properly integrated within the global environmental problems, such as climate change, and biodiversity and ecosystem conservation,
 - 6.3 Promote mobilization and responsabilization, at the various relevant territorial scales, connected with either the rural or the urban environment, of the various stakeholders concerned with Water Demand Management, public, academic, private or association-related by taking into consideration the particular role of women in this field; further to invite the partners, public — especially donors — and private to contribute to the resulting activities, operations and investments,
 - 6.4 Take all necessary measures to raise the awareness of the public in terms of Water Demand Management — especially through environmental education activities, mainly by informing the public on the challenges involved and by identifying, implementing and making use of the relevant good practices, especially concerning the maintenance of water distribution systems, individual consumption of drinking water, rational use in agriculture as a function of the geographical context, and the protection of ecosystems,
 - 6.5 Assess, every two years, progress accomplished in Water Demand Management and therefore reinforce the inclusion of Water Demand Management in the national information systems on water; further to document the various relevant indicators, mainly those adopted by the MSSD, reinforce the regional scientific and institutional cooperation to promote Water Demand Management and contribute to setting up a Mediterranean Water Observatory which would, on a continuous basis, compile data, information and good practices useful to Mediterranean stakeholders and decision makers.
7. Moreover, it is expected of the Blue Plan, in conjunction with its partners to:
- 7.1 Make a report, every two years, on progress accomplished in the Mediterranean in the field of Water Demand Management
 - 7.2 Contribute to establishing a compendium of good practices in the field of Water Demand Management
 - 7.3 Organize in 2012 the fourth regional workshop in Water Demand Management.

Appendix II

The 12th Meeting of the Mediterranean Commission on Sustainable Development endorsed the Recommendations that emerged from the Working Group on energy and sustainable development in the Mediterranean, held in Monaco, March 2007, with the following notes:

- i. The MCSD noted that the dates mentioned in Paragraphs 8 and 9 of this appendix should be realistic.
- ii. The MCSD felt that Paragraph 9 should be rephrased into 'Reinforce the existing institutional and regulatory frameworks...' as there is no need to set up a new one.
- iii. Similarly, in Paragraph 12 the text should be modified to read "Ensure the follow up and assessment...", as there is no need to put in place a new system.

"Energy and Sustainable Development in the Mediterranean" 29 & 30 March 2007, Monaco

Preamble

1. Considering that energy development in the Mediterranean must contribute to the region's sustainable development especially by reinforcing security of supply, controlling emissions of greenhouse gases, reducing pollution connected with it at local and regional level, promoting access to energy and energy services and improving energy efficiency,
2. Estimating that these challenges are closely linked with the socio-economic and environmental challenges, particularly climate change, which the Mediterranean countries are also facing,
3. Considering that energy demand in the Mediterranean is expected to increase by 415 Mtep between 2005 and 2020 to reach 1360 Mtep, that the region has one of the highest potentials for renewable forms of energy in the world and that the various losses due to transformation, transport and different uses could reach 20 to 50% of the energy consumed depending on the country,
4. Taking into consideration the decisions of the European Council to achieve 20% of energy savings and a share of 20% renewable energy in the total European consumption by the year 2020,
5. Attached to the implementation of the Barcelona Convention and the objectives of the Mediterranean Strategy for Sustainable Development (MSSD),

6. Resolved to see the recommendations concerning renewables and rational use of energy translated into action.

Recommendations

7. The participants to the meeting of experts on energy and sustainable development, convened at Monaco, on 29 and 30 March 2007, recommend to the national political authorities of the Mediterranean countries to:
8. Include, in accordance with the MSSD orientations, the rational use of energy (RUE) and the development of renewable energy (RE) in the national strategic priorities and to transpose by 2008 the relevant regional objectives to the national level as objectives which are clear, ambitious, differentiated by sector and paced in time,
9. Set up by 2010 an institutional and regulatory framework to promote the development of the RUE and RE as well as the strategies for the mobilization of various fiscal, tariff and market tools and instruments available to them, by taking into consideration the local contexts and favoring both small-scale projects and industrial ones,
10. Promote public outreach on the questions of the RUE and RE, especially by developing programmes of environmental education which focus on these issues; further to set up instruments for the effective participation of the various categories of stakeholders, particularly women, in the decision-making process concerning RUE and the promotion of RE,
11. Submit to public and private partners, especially donors, projects on the RUE and the promotion of RE, while ensuring the coordination of their interventions at the various relevant territorial scales,
12. Put in place a system for the follow-up and assessment of policies and actions undertaken in the fields of RUE and RE, by sharing and documenting the relevant indicators developed by the competent organizations, especially those used in the MSSD,
13. Reinforce regional cooperation in the RUE and the promotion of RE, especially by mutually reinforcing research and assessment capacities and sharing good practices.

Moreover, the Blue Plan in collaboration with its partners is expected to:

14. Contribute to the collection in the field of energy of information which is clear, reliable, regularly updated and comparable from country to country,
15. Continue its prospective work in the energy sector by basing its scenarios on clearly formulated assumptions, particularly the economic aspects,

16. Carry out a more in-depth analysis of the link between climate change and energy by integrating the cost estimate of climate change and the adaptation and abatement measures,
17. Prepare, every two years, a report on progress registered in the Mediterranean in the fields of RUE and RE, by developing and documenting shared and relevant indicators, established according to tested methodologies and to contribute to setting up a platform for the exchange of good practices.

ANNEX IV

Presentation on Climate Change in the Mediterranean

by Mr. F. Giorgi

Climate change over the Mediterranean region

*Filippo Giorgi
Abdus Salam ICTP, Trieste*

12th Meeting of the Mediterranean Commission on Sustainable Development, Istanbul, 30-31 May 2007

Outline

- Brief considerations on Mediterranean climate
- The observational evidence of climate change and its attribution (IPCC 2007)
- Projections of climate change, globally and for the Mediterranean region (from global and regional model experiments)
- Examples of potential impacts of Mediterranean climate change

The climate of the Mediterranean

Temperate-Wet

Atlantic storms
Local cyclogenesis
Topography
Land-Atmosphere Interactions
Coastlines
Ocean heat source
Atmospheric aerosols and desert dust

Hot - Dry

Marked seasonality
Cold wet winters
Warm dry summers

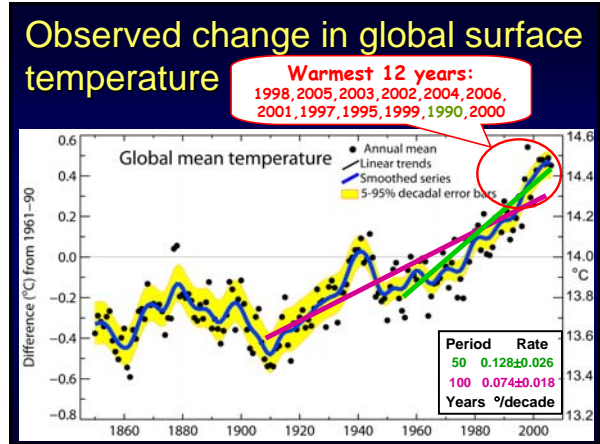
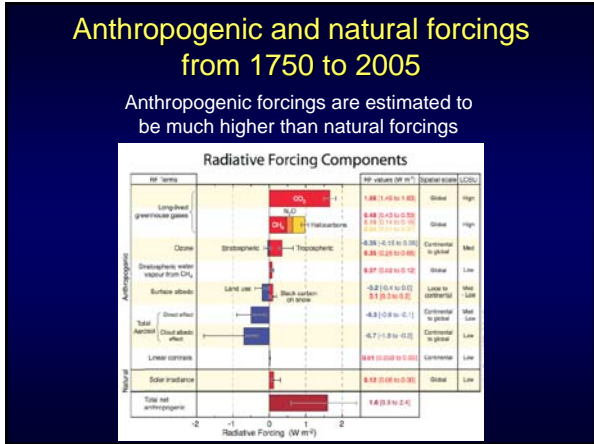
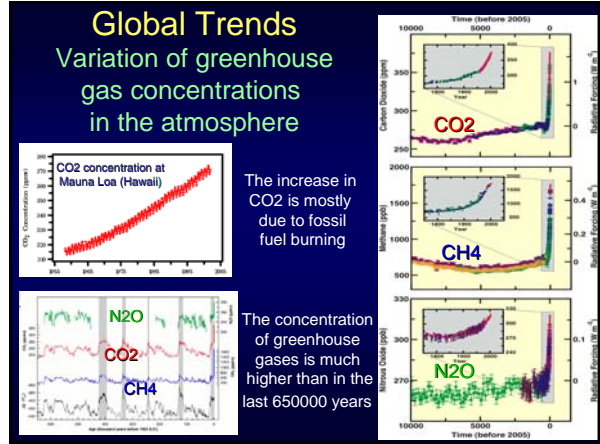
Marked spatial variability

The Mediterranean encompasses many countries and cultures

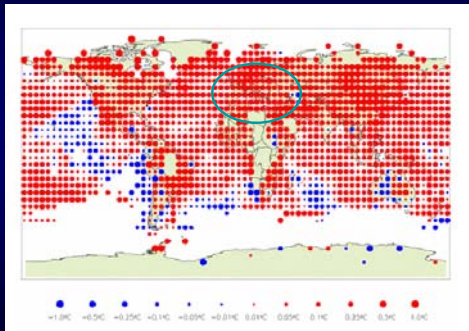
Map showing countries and cities around the Mediterranean Sea, including France, Italy, Greece, Turkey, and others. Scale bars for 400 km and 400 mi are provided.



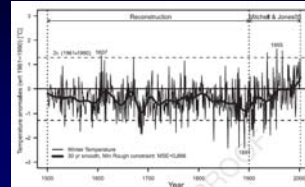
The evidence of climate change



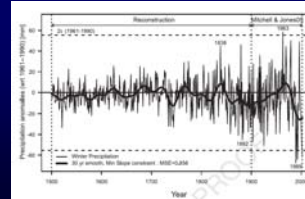
Temperature change 1979-2003



Reconstructed Mediterranean climate variability (last 500 years)



Winter Temperature

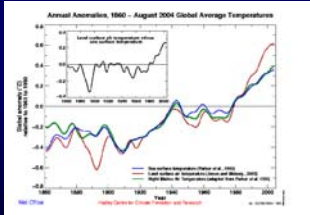


Winter Precipitation

From Lutherbacher et al. (2006)

Observed variation of ocean temperatures

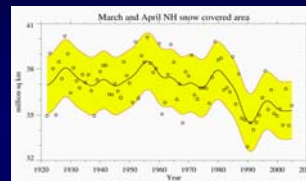
Global



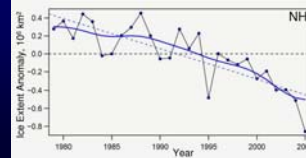
Mediterranean



Decrease of snow cover and sea ice

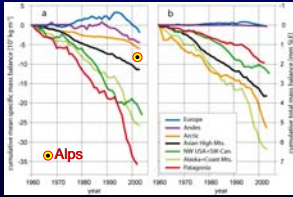
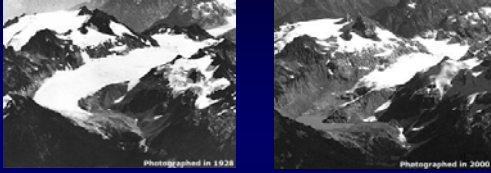


Decrease of snow cover



Decrease of sea ice

Melting of glaciers



Sea level rise

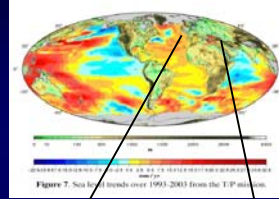


Figure 7. Sea level trends over 1993-2003 from the I.P.O. tide gauges.

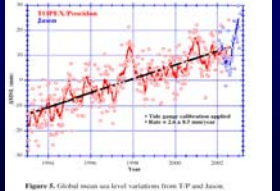
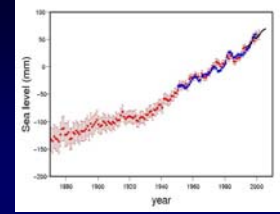
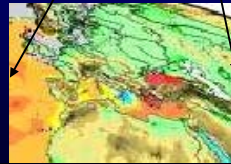
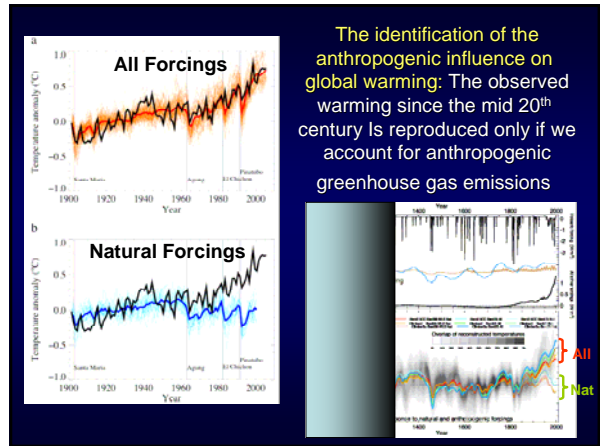
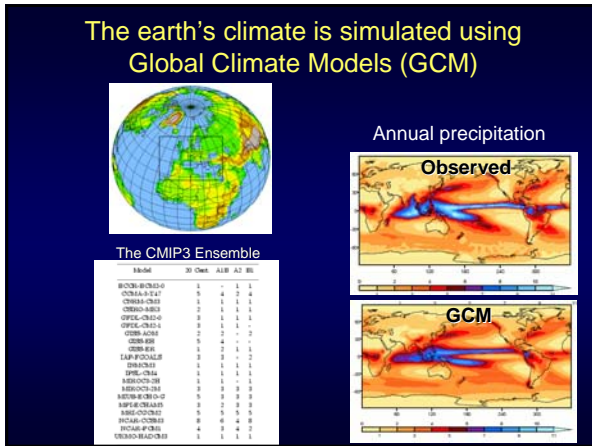
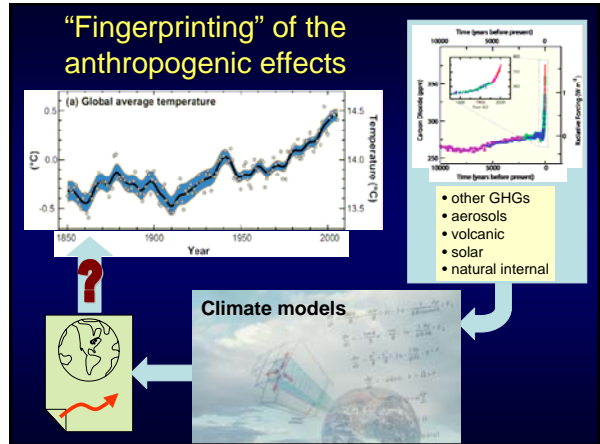


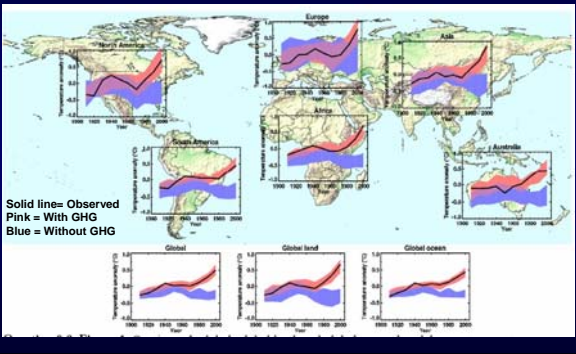
Figure 9. Global mean sea level variations from I.P.O. and Jason.

The evidence:
Global warming is
Unequivocal (IPCC 2007)

Is global warming caused
by human activities?



Identificaton of the anthropogenic effect on regional warmings

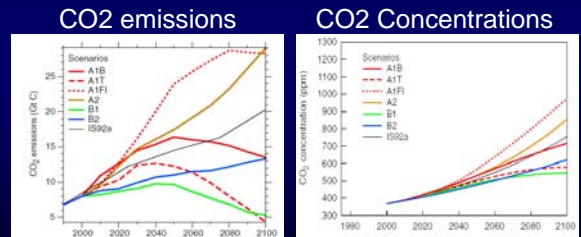


Is global warming caused by human activities?

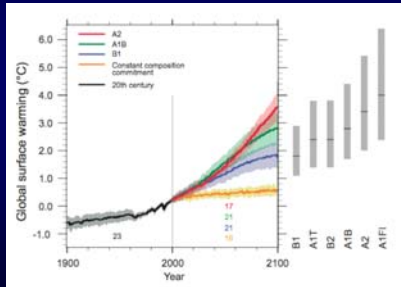
IPCC-2007: Most of the observed increase in globally averaged temperature since the mid-20th century is very likely (90-95%) due to the observed increase in anthropogenic greenhouse gas concentrations.

What can we expect for the future?
From the global scale to the Mediterranean

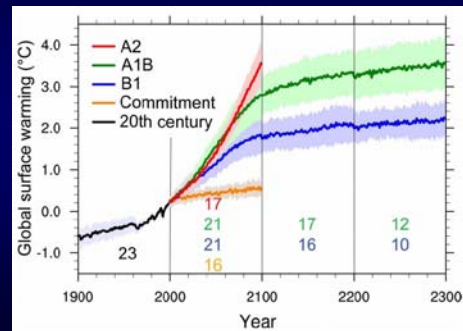
Greenhouse gas emission and concentration scenarios (IPCC-2000)



IPCC – 2007: Global temperature change projections for the 21st century



Global temperature change projections after stabilization



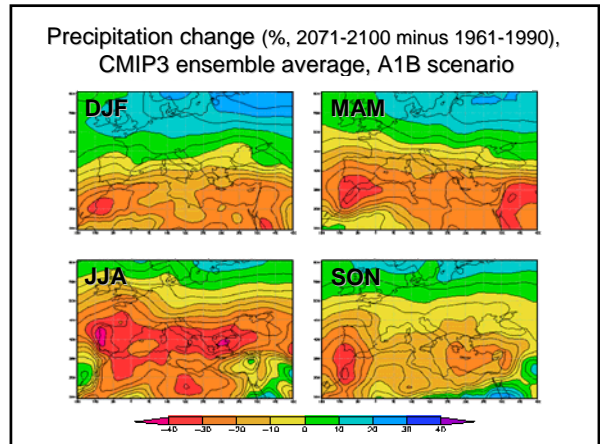
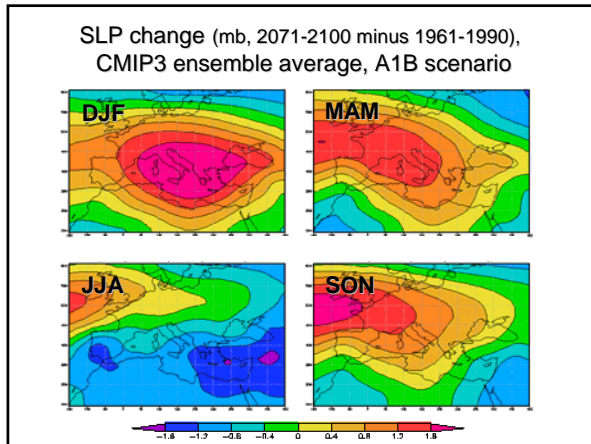
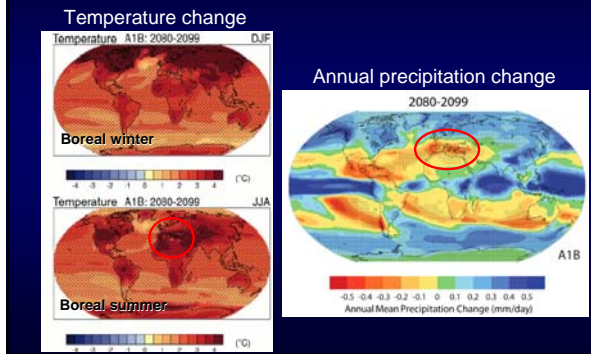
Global mean sea level rise (cm) for 2099-2100 with respect to 1980-1999 for different emission scenarios (IPCC 2007)

Scenario	Model range
B1	19 - 37
A1T	22 - 44
B2	21 - 42
A1B	23 - 47
A2	25 - 50
A1FI	28 - 58

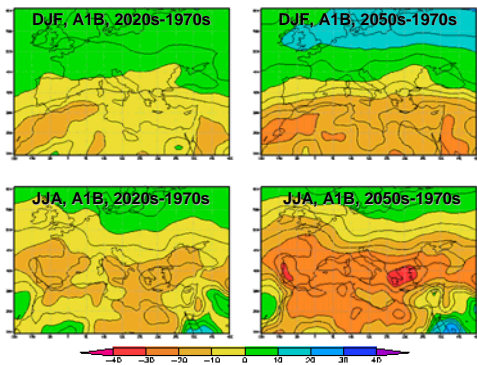
Some other projected changes

- > Poleward shift of mid-latitude storm tracks
- > Greater intensity of tropical and extratropical cyclones
- > Increase of heat-waves and mid-continental drying
- > Greater intensity of precipitation

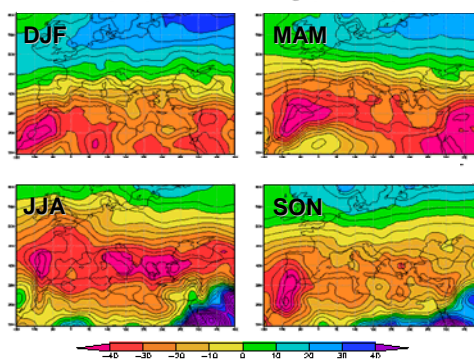
Regional change in temperature and precipitation: A1B scenario



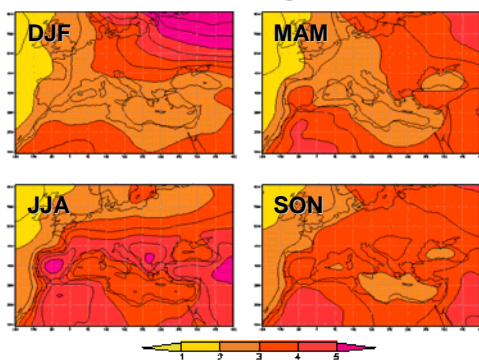
Precipitation change (%) as a function of time, CMIP3 ensemble average. A1B scenario



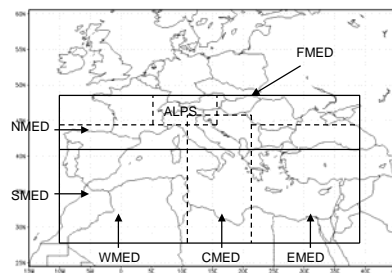
Precipitation change (% 2071-2100 minus 1961-1990), CMIP3 ensemble average, A2 scenario



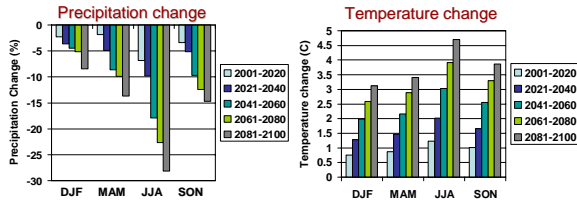
Temperature change (C, 2071-2100 minus 1961-1990), CMIP3 ensemble average, A1B scenario



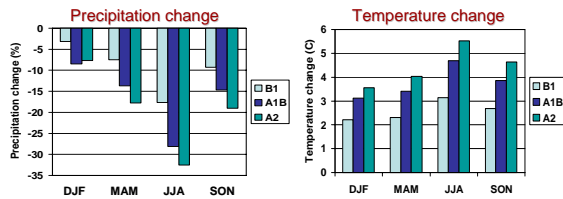
Mediterranean sub-regional analysis



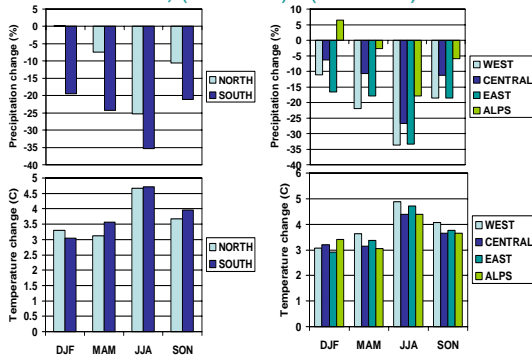
CMIP3 ensemble average change as a function of time
Full Mediterranean, A1B scenario



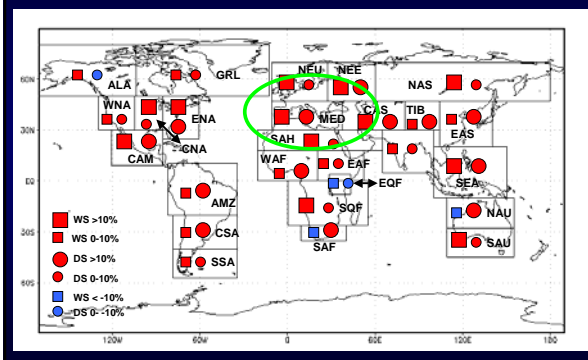
CMIP3 ensemble average change as a function of emission scenario
Full Mediterranean, (2081-2100) – (1961-1980)



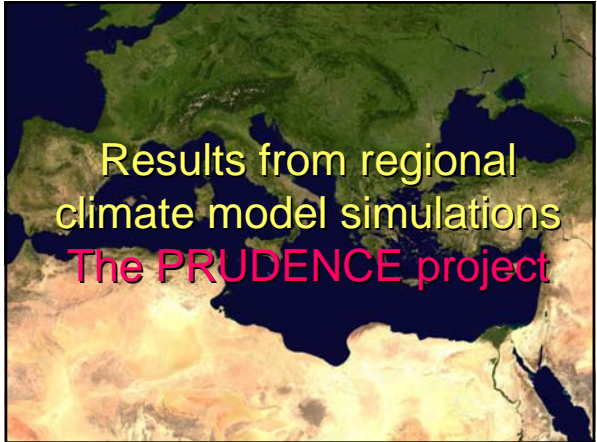
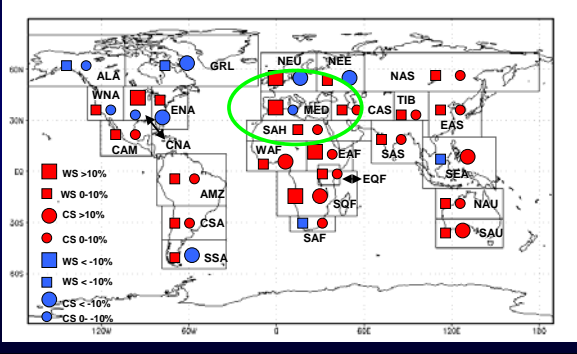
CMIP3 average change for different sub-regions
A1B, (2081-2100) – (1961-1980)



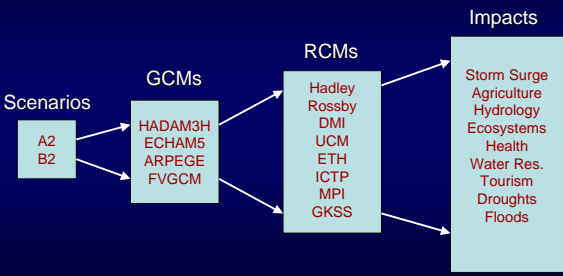
Change in precipitation interannual variability
CMIP3 ensemble, 2080-2099 minus 1960-1979, A1B-A2-B1



Change in temperature interannual variability
 CMIP3 ensemble, 2080-2099 minus 1960-1979, A1B-A2-B1

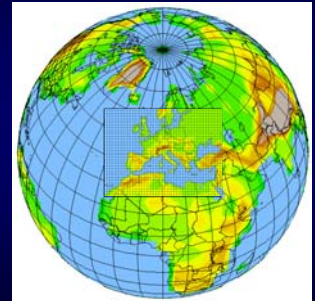


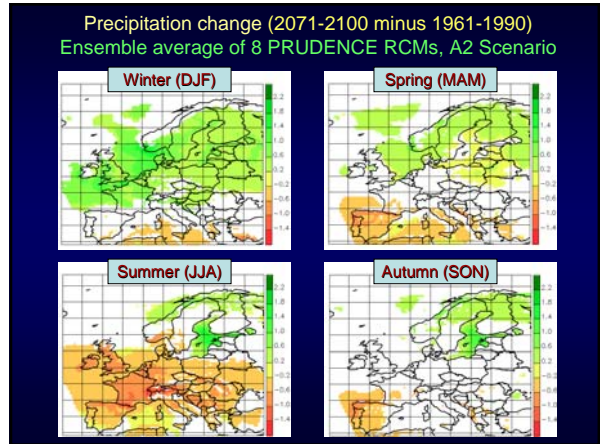
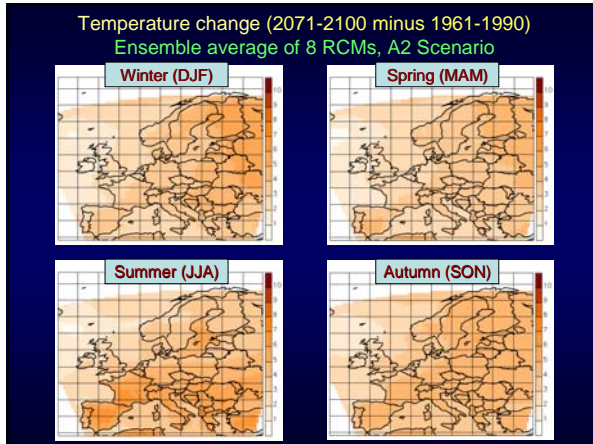
PRUDENCE STRATEGY



RCM experiment design

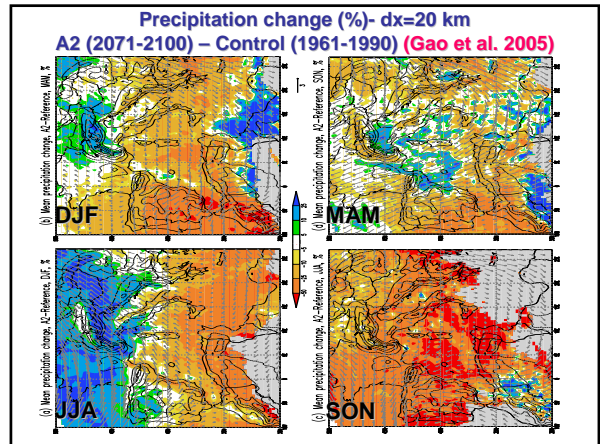
- **Global Model:**
 - Dx ~ 1 lat x 2 lon
 - SST from coupled GCM runs
 - Coupled sulfur model
- **Regional model:**
 - Dx = 50 km
 - SST, GHG and sulfate from GCMs
- **Simulation periods**
 - 1961-1990 : Reference run
 - 2071-2100 : Scenario run
- **Scenarios: A2, B2**

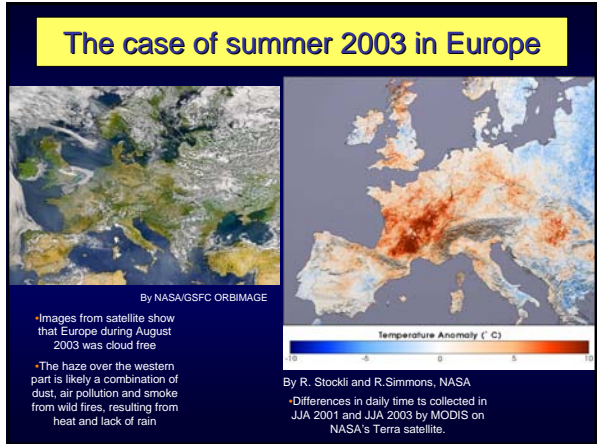
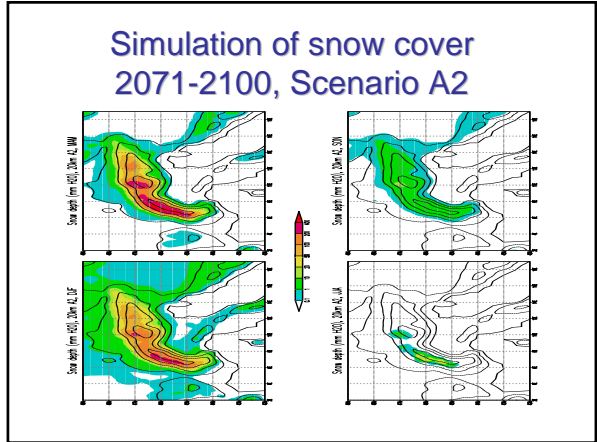
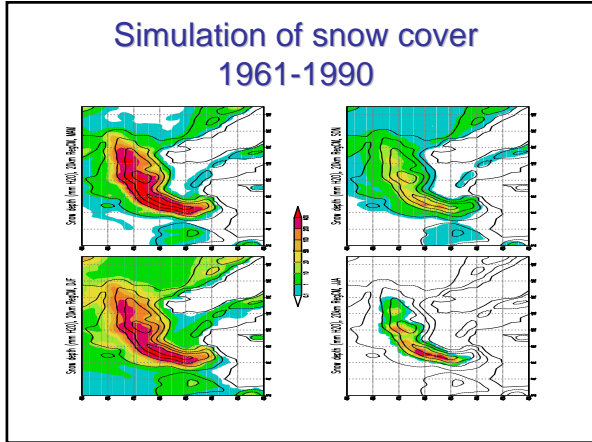


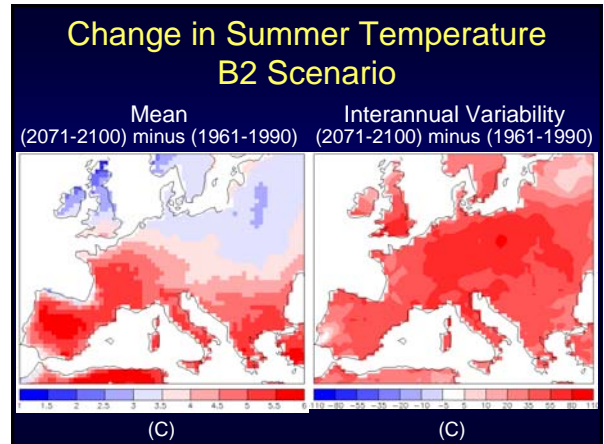
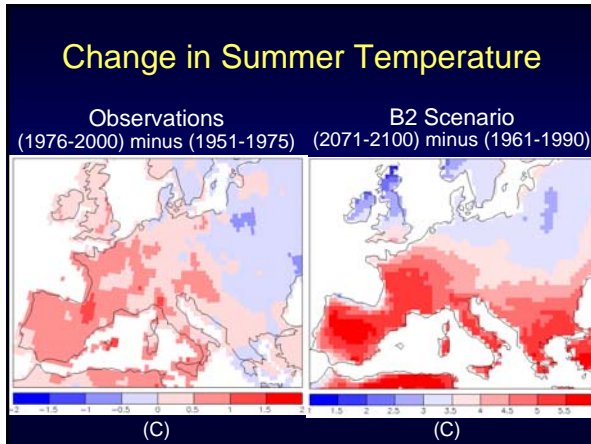
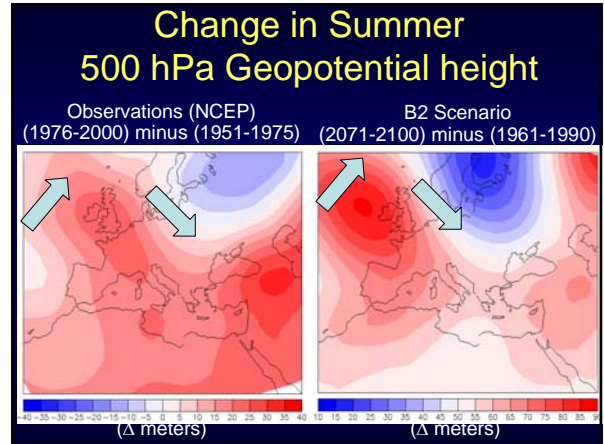
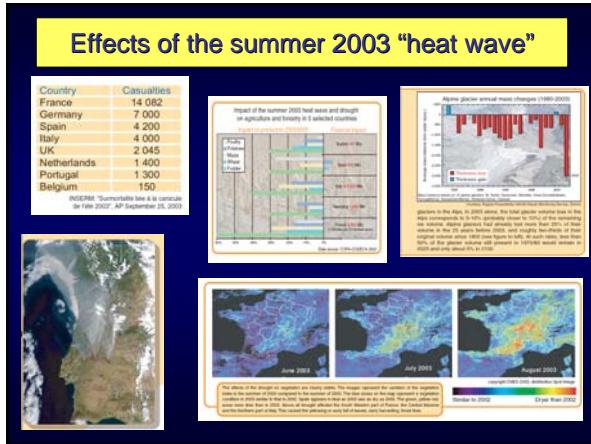


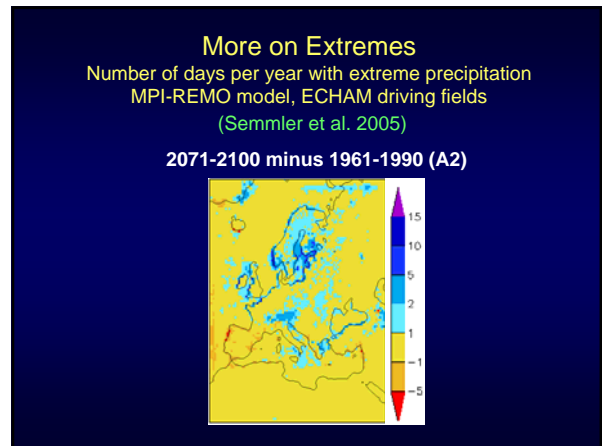
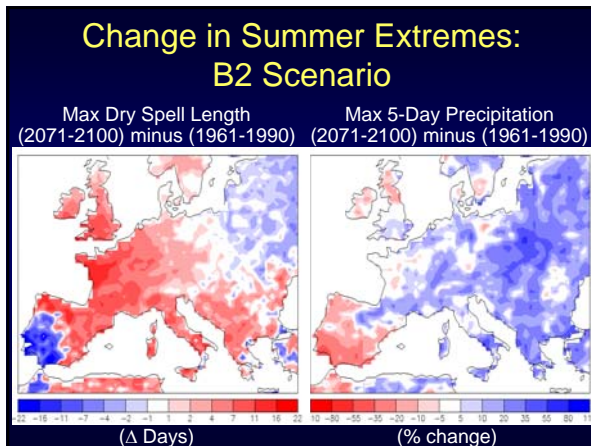
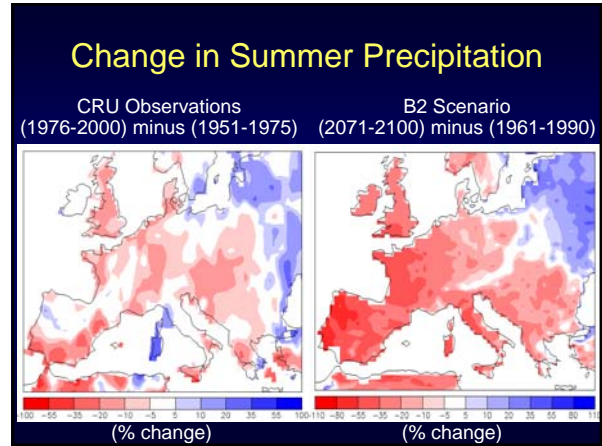
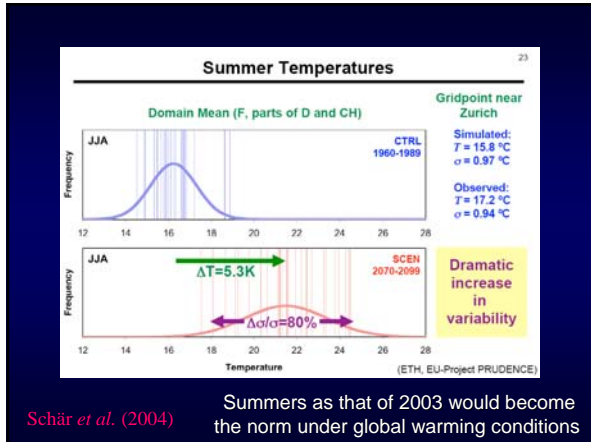
High resolution experiment over the Mediterranean basin

- Model configuration
 - 20-km grid point spacing
 - Full Mediterranean domain
- Experiment design
 - Forcing fields from PRUDENCE RegCM simulations
 - Reference simulation (1961-1990)
 - A2, B2 scenario simulations (2071-2100)









Some effects of Mediterranean climate change

Coastal areas

Health; Heat stress

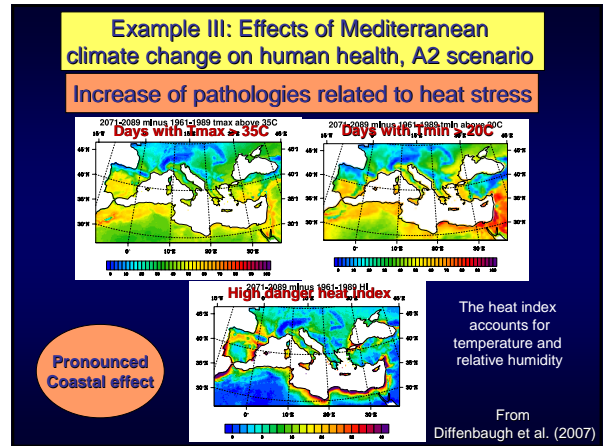
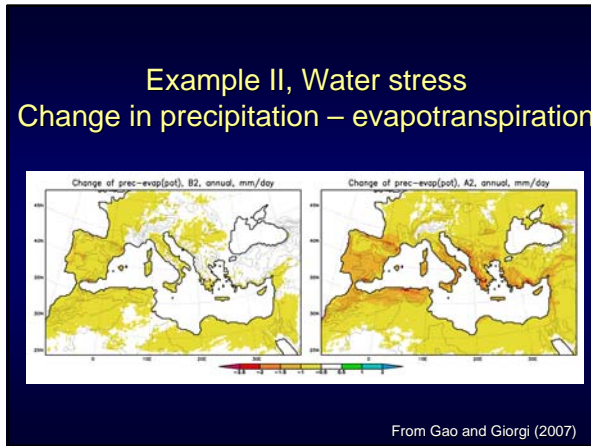
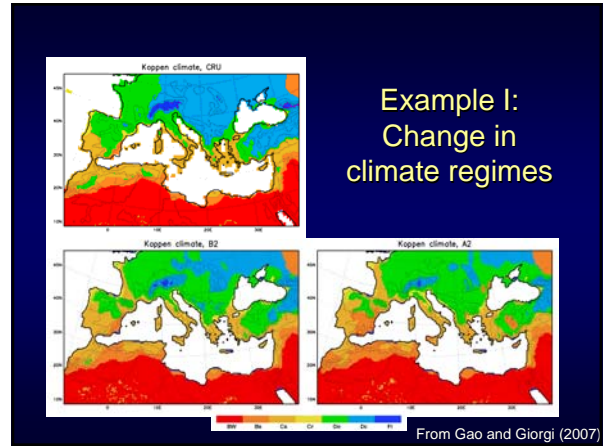
Water resources and agriculture

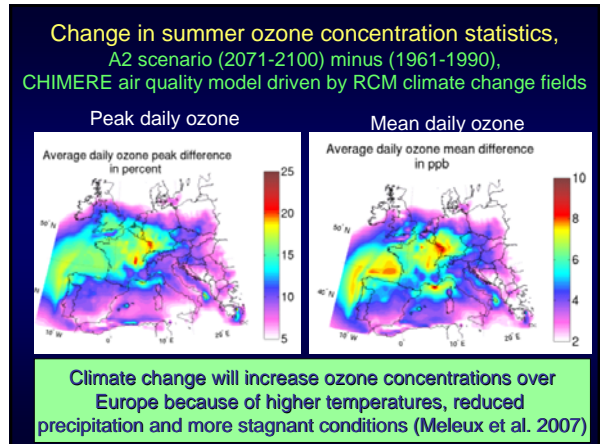
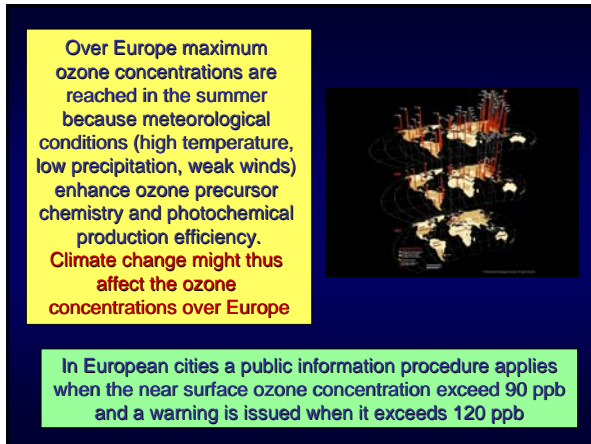
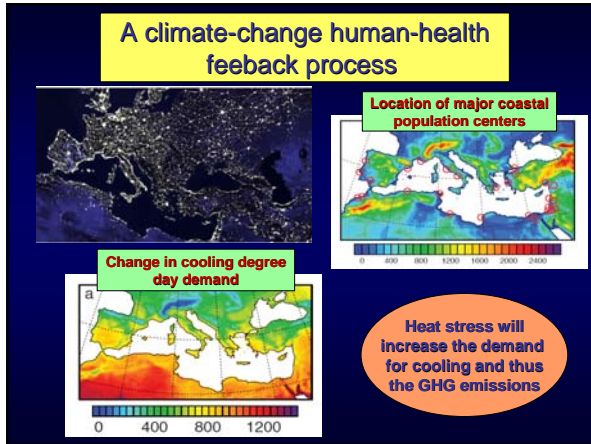
Air quality

Tourism

Natural Hazards

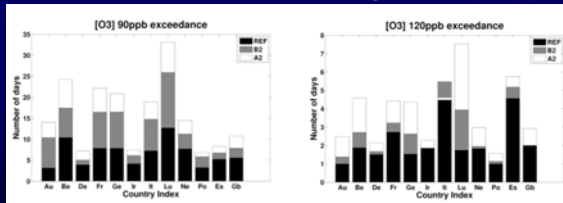
Glacier and snow melting





Number of exceedance days for different ozone concentration thresholds and different scenarios

Information threshold (90 ppb) Warning threshold (120 ppb)



Conclusions

Model projections indicate some robust changes over the Mediterranean region

Cold season climate

- Warming throughout the region (greater than global average)
- Increase in precipitation over the northernmost Mediterranean areas, decrease over the southern Mediterranean
- Increase in the positive phase of the NAO
- Increase in precipitation interannual variability; small decrease in temperature interannual variability
- Increase in the frequency of extreme precipitation events over the northern Mediterranean regions, decrease of extreme cold events

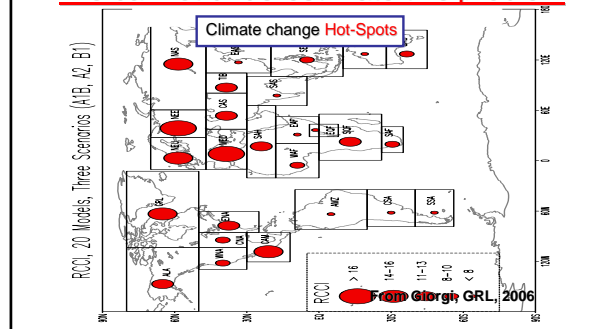
Conclusions

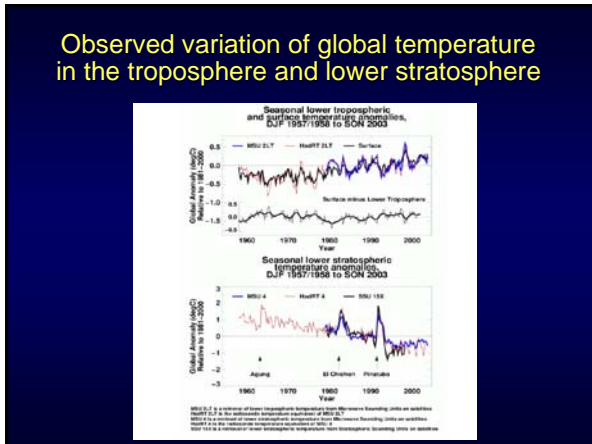
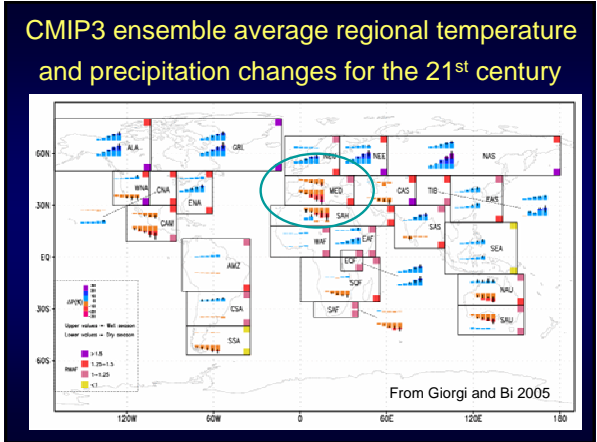
Model projections indicate some robust changes over the Mediterranean region

Warm season climate

- Large warming (much greater than the global average)
- Large decrease in precipitation
- Increase in temperature and precipitation interannual variability
- Decrease in the frequency of precipitation events and increase in the length of dry spells and in the intensity of extreme warm events
- Large increase in summer maximum temperatures
- Consistency with some trends observed in recent decades

The Mediterranean appears to be particularly vulnerable to global change
We cannot underestimate this problem

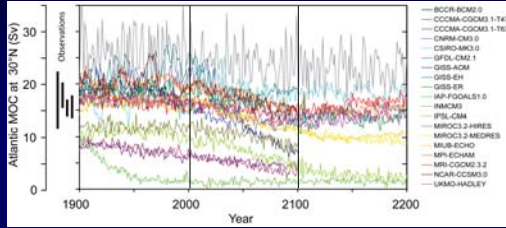




Other observed changes

- > Poleward shift of mid-latitude storm tracks
- > Greater intensity of tropical and extratropical cyclones
- > Increase of heat-waves and droughts
- > Greater intensity of precipitation

Changes in the Meridional Overturning Circulation (MOC)



Very likely that the MOC will slow down over the course of the 21st century. However, there is no indication of a complete shut down in the 21st century.

Temperatures in the Atlantic region still increase due to the much larger warming associated with increased greenhouse gases.

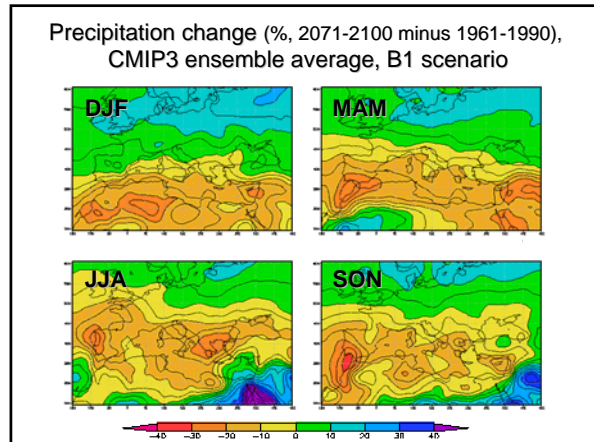
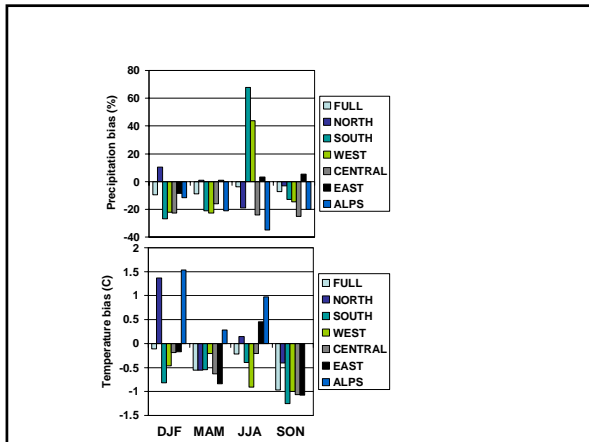
Very unlikely that the MOC will undergo a large abrupt transition during the 21st century. Longer-term changes in the MOC cannot be assessed with confidence

Regional Climate Change Index (RCCI)

$$RCCI = [n(\Delta P) + n(\Delta \sigma_P) + n(RWAF) + n(\Delta \sigma_T)]_{WS} +$$

$$[n(\Delta P) + n(\Delta \sigma_P) + n(RWAF) + n(\Delta \sigma_T)]_{DS}$$

n	ΔP	$\Delta \sigma_P$	RWAF	$\Delta \sigma_T$
0	< 5%	< 5%	< 1.1	< 5%
1	5 – 10%	5 – 10%	1.1 – 1.3	5 – 10%
2	10 – 15%	10 – 20%	1.3 – 1.5	10 – 15%
4	> 15%	> 20%	> 1.5	> 15%



Modified Koppen-Trewartha (K-T) type and climate, vegetation cover

K-T type	Climate	Prevalent native vegetation type
BW	Dry arid	Desert
BS	Dry semiarid	Steppe
Cs	Subtropical summer-dry	Hardleaved evergreen trees and shrubs
Cr	Subtropical humid	Longleaf trees, slash pines and deciduous forest in inland areas
Do	Temperate oceanic	Dense coniferous forests with large trees
Dc	Temperate continental	Needleleaf and deciduous tall broadleaf forest
Eo	Sub-arctic oceanic	Needleleaf forest
Ec	Sub-arctic continental	Tayga
FI	Ice cap	Permanent ice cover

ANNEX V

Presentation on Energy and Climate Change in the Mediterranean Region

by Ms Houda Ben Jannet Allal



UNEP/MAP
12th Meeting of the Mediterranean
Commission on Sustainable Development
Istanbul, Turkey
30-31 May 2007

***ENERGY AND CLIMATE CHANGE IN THE
MEDITERRANEAN REGION***

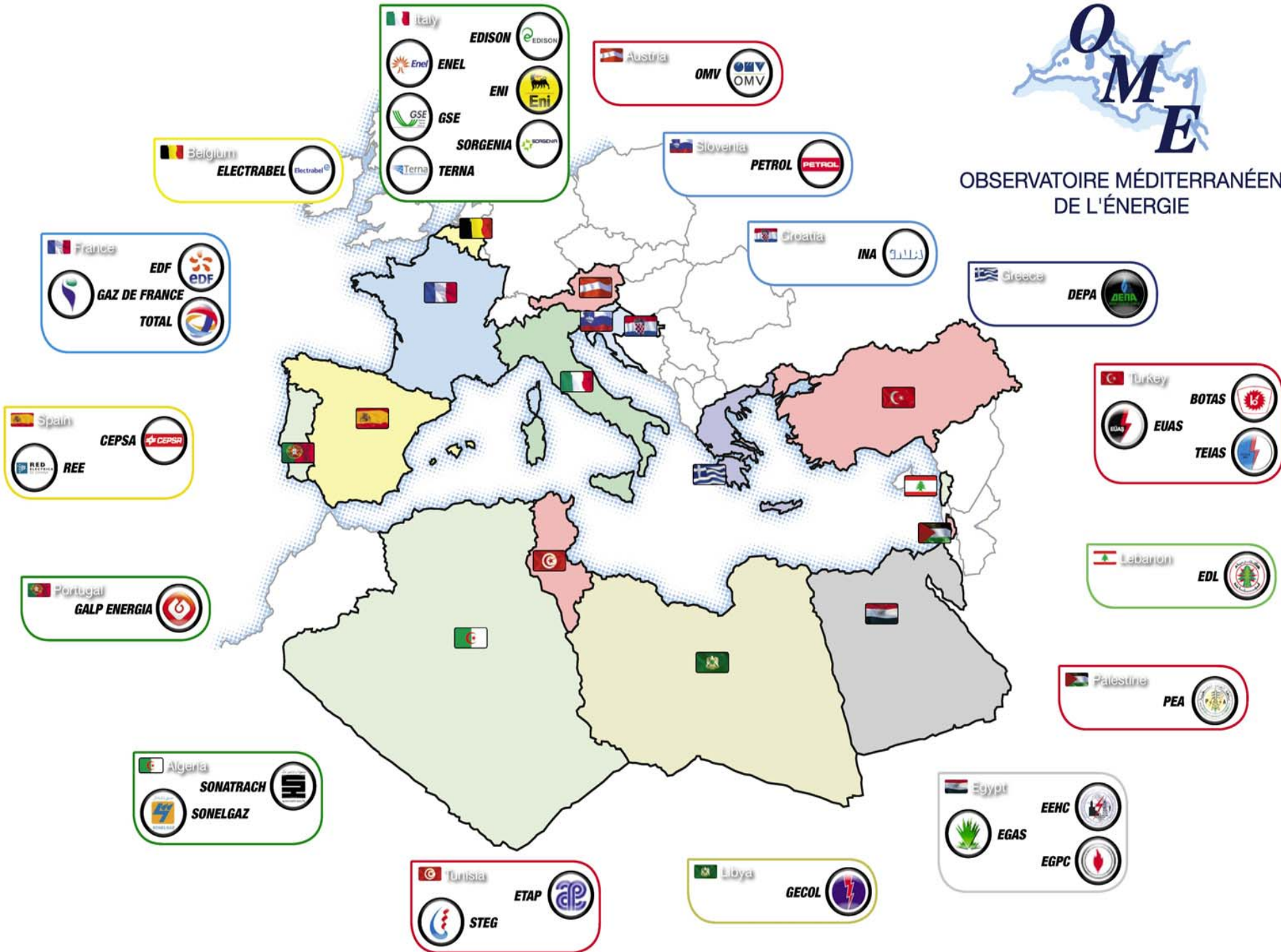
Dr Houda BEN JANNET ALLAL
Dr Eng. Mustapha Kamel FAÏD

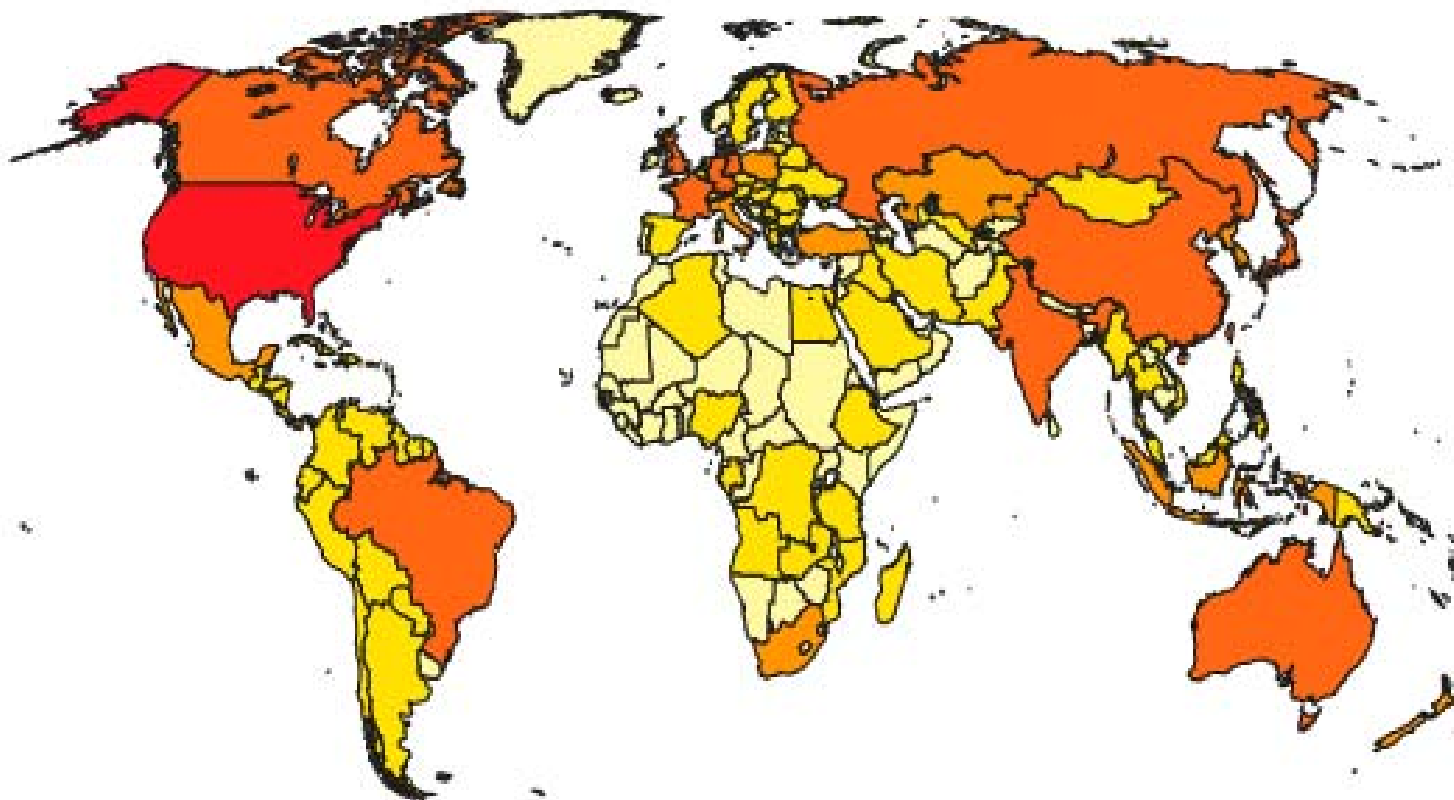


- OME
- Context
- Present situation and prospects
- Recommendations

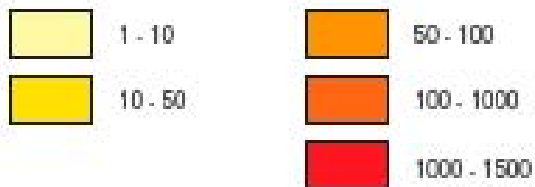


OBSERVATOIRE MÉDITERRANÉEN DE L'ÉNERGIE

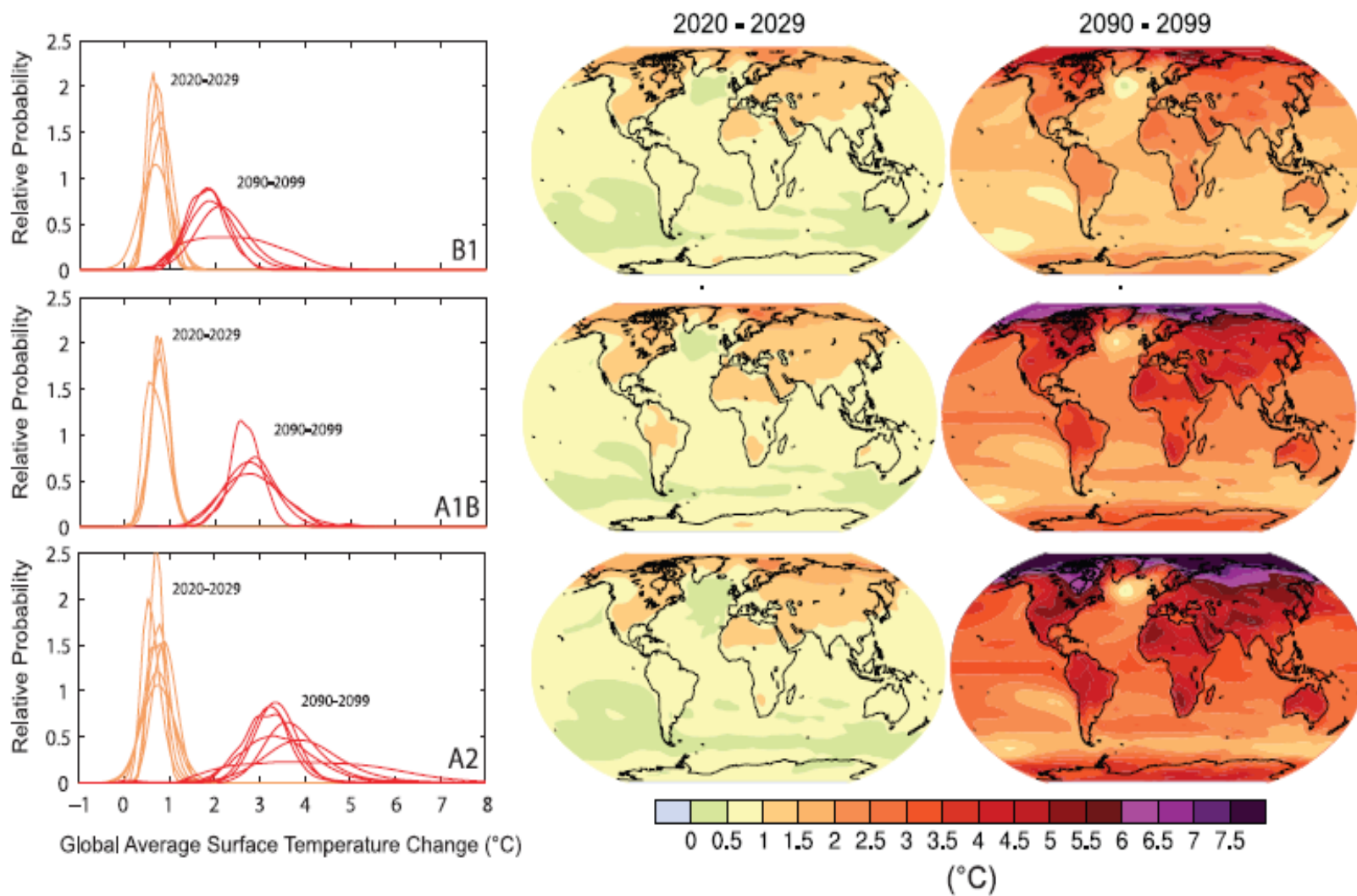




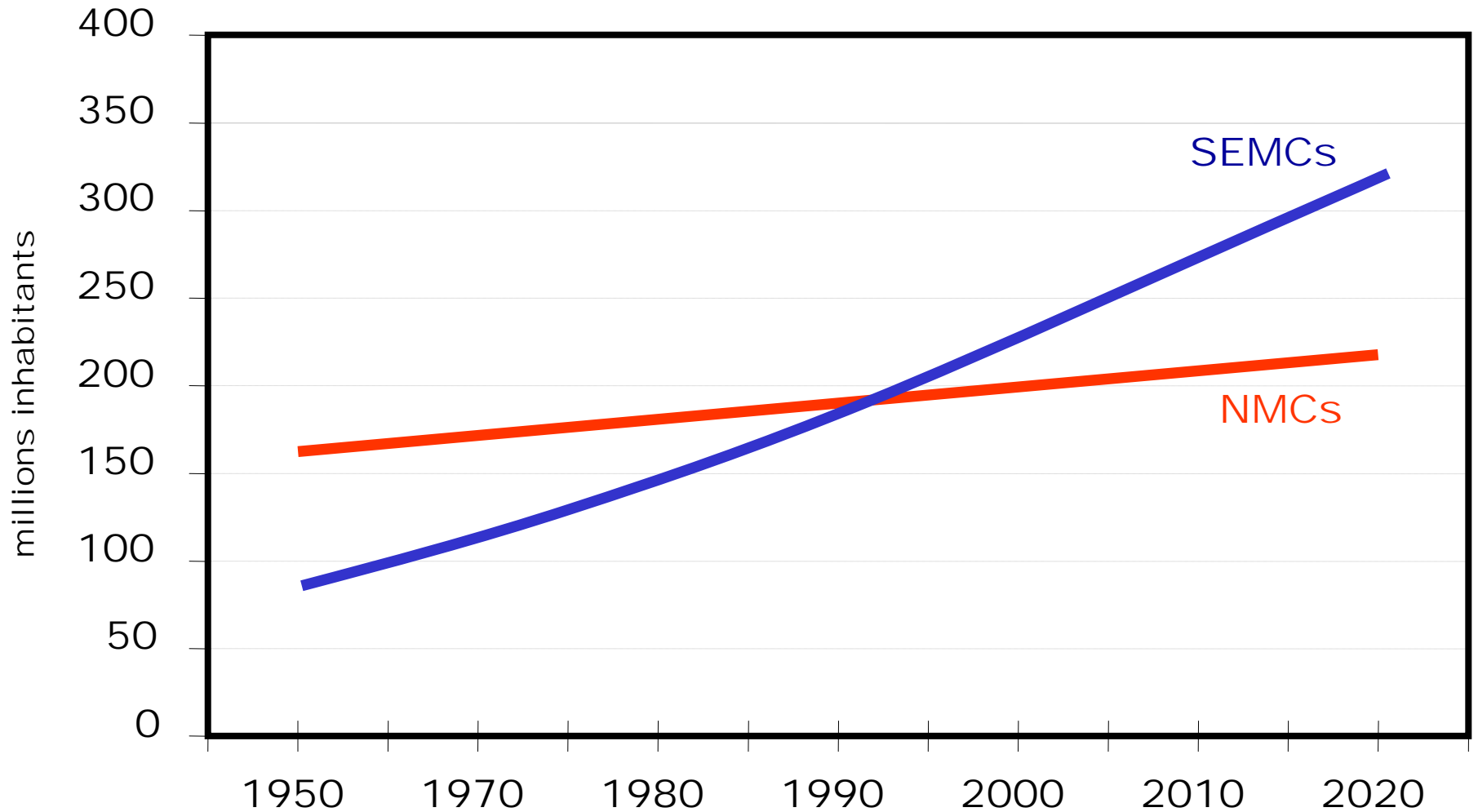
* CO₂ emissions from fossil fuel combustion and cement production, including land use change (Mt C per year from 1950 - 2003)



PROJECTIONS OF SURFACE TEMPERATURES

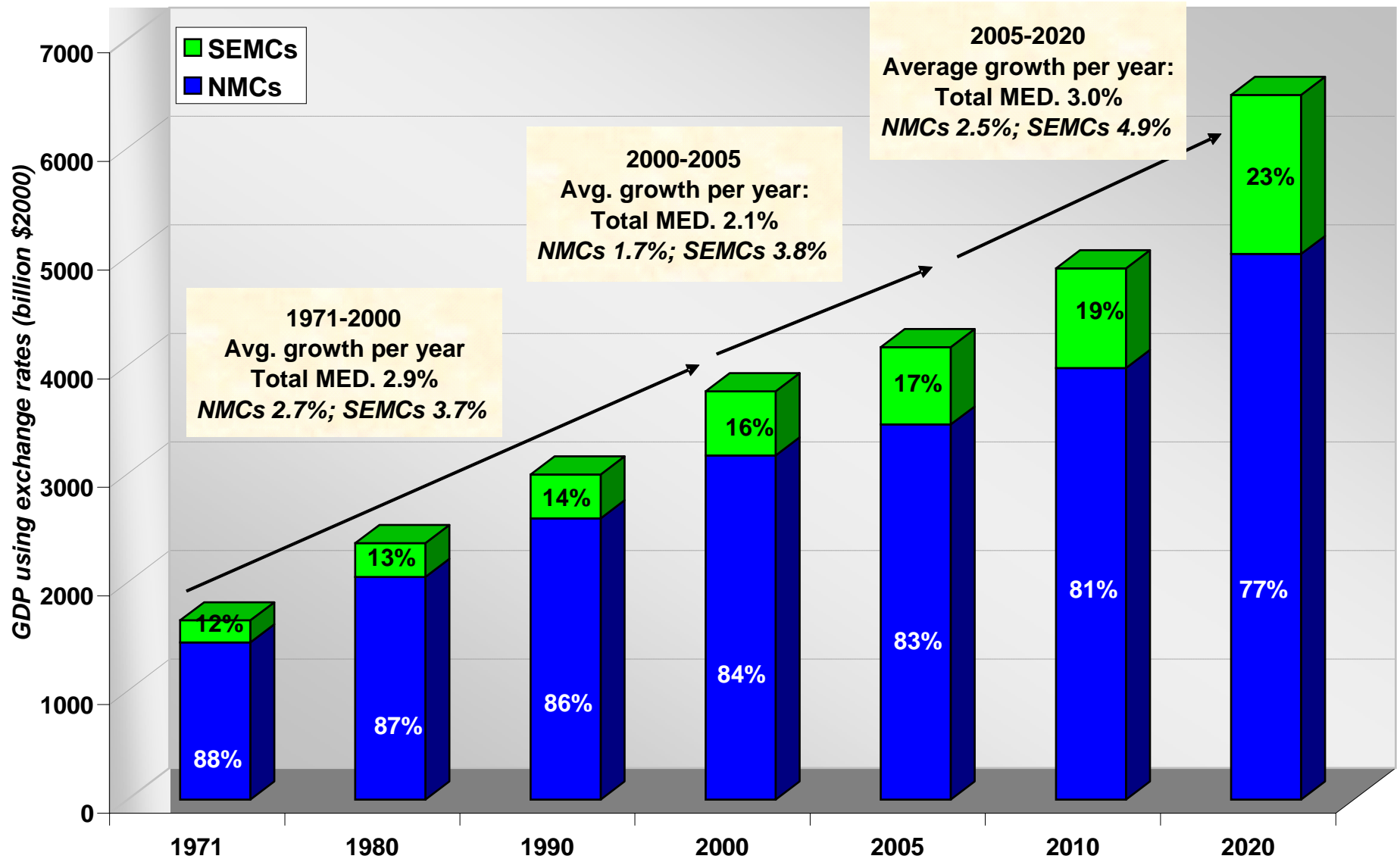


Demography in the Mediterranean Basin

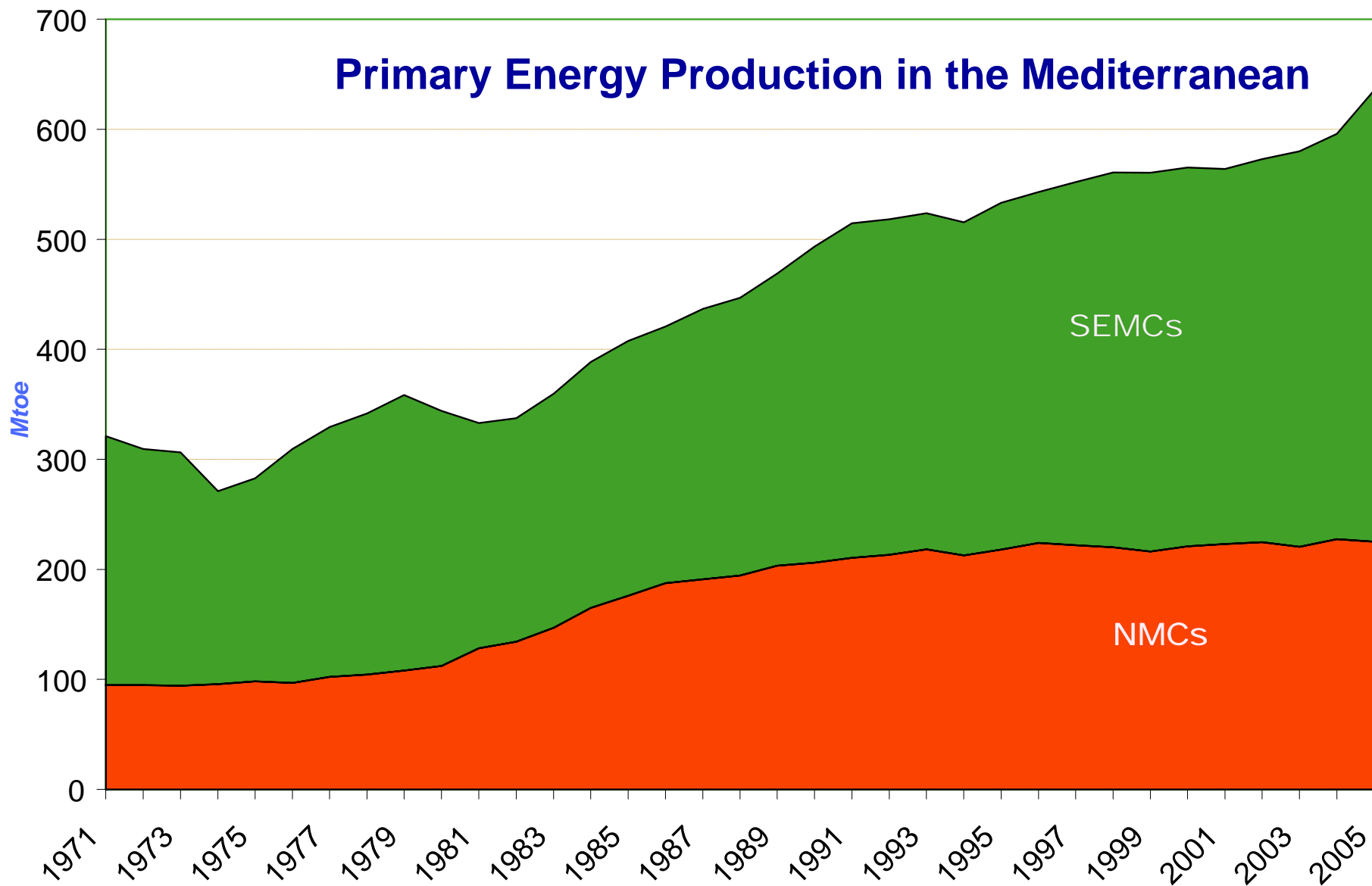


Source: Plan Bleu, OME

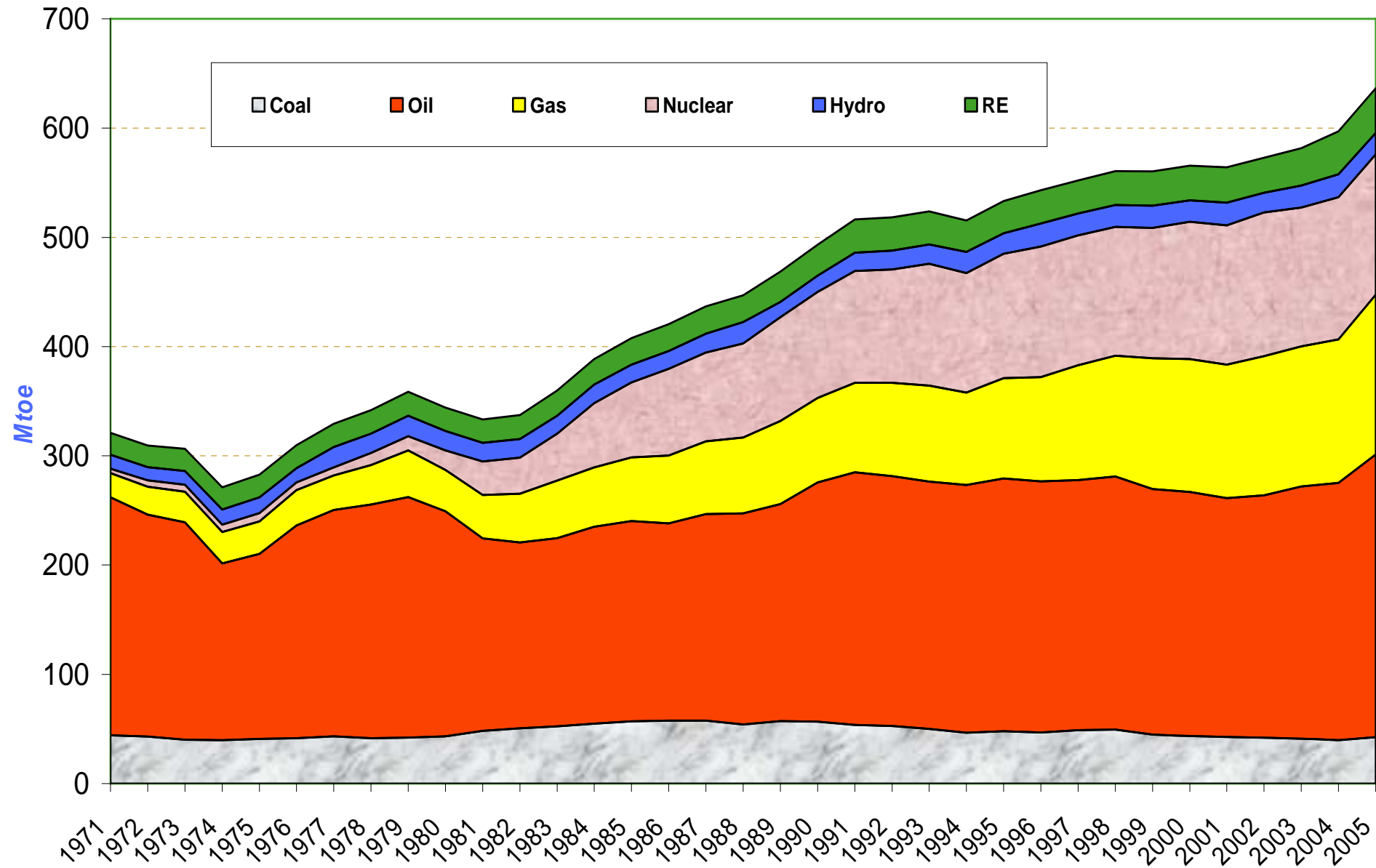
Economic Development in the Mediterranean



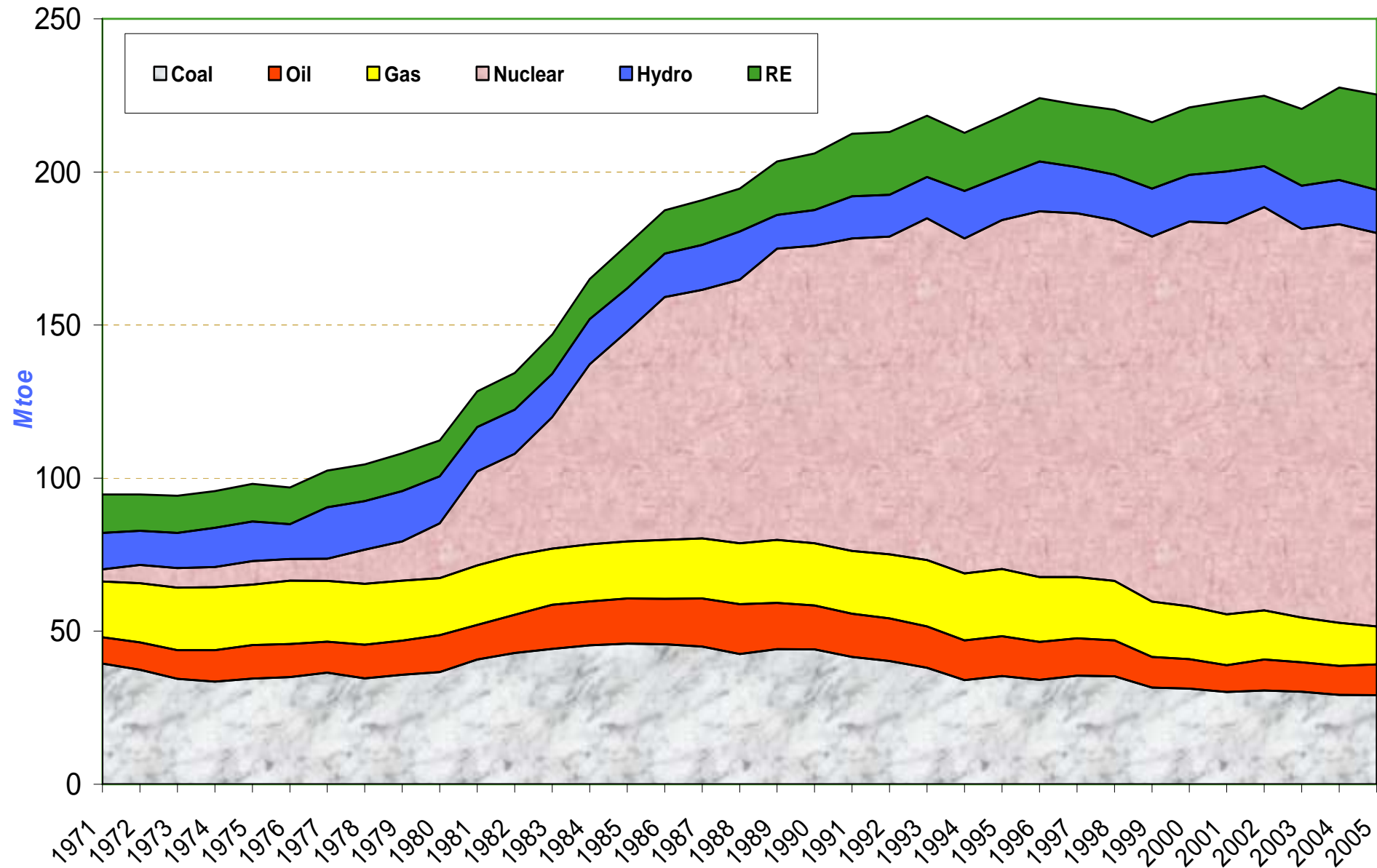
Primary Energy Production in the Mediterranean



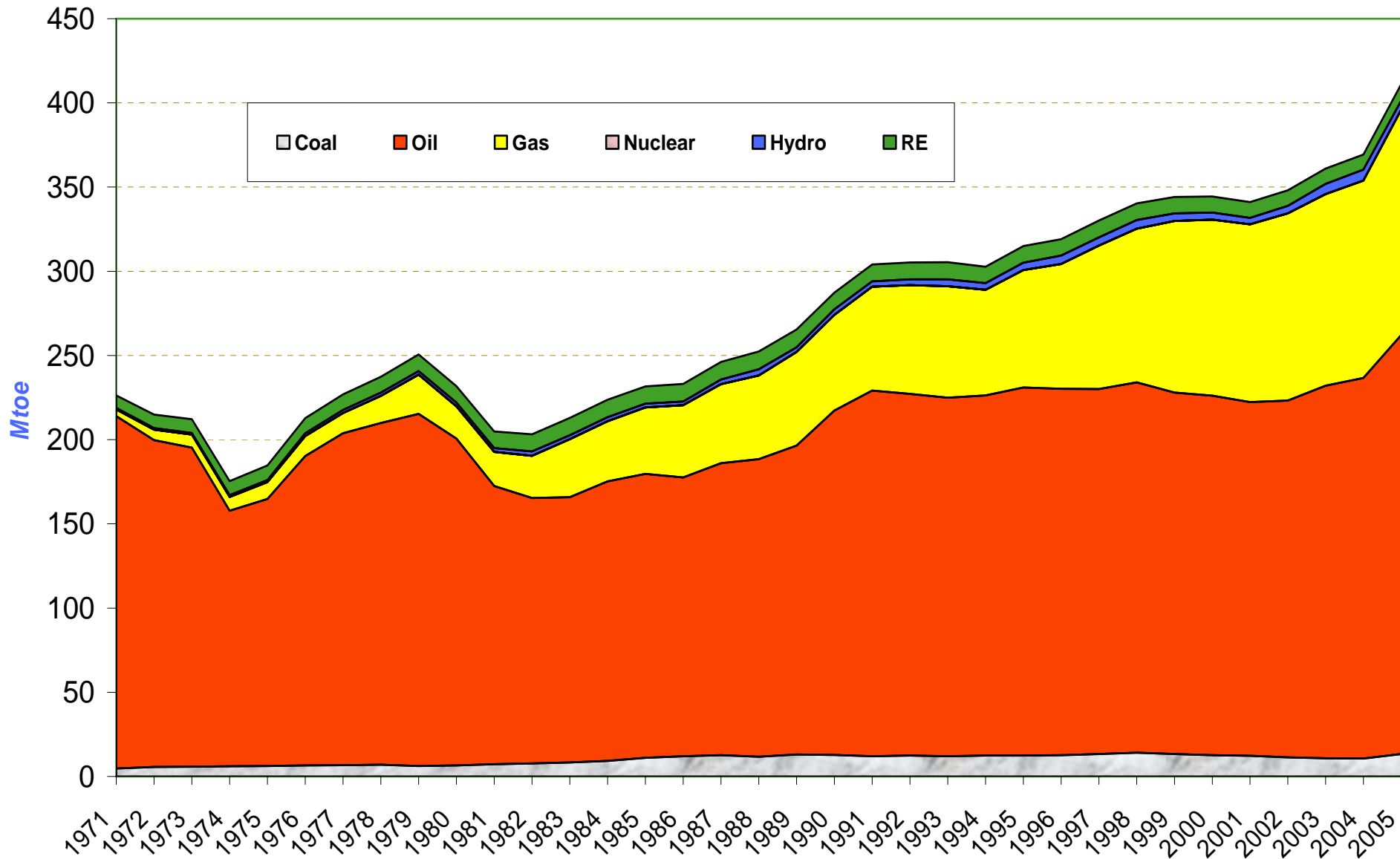
Primary Energy Production in the Mediterranean



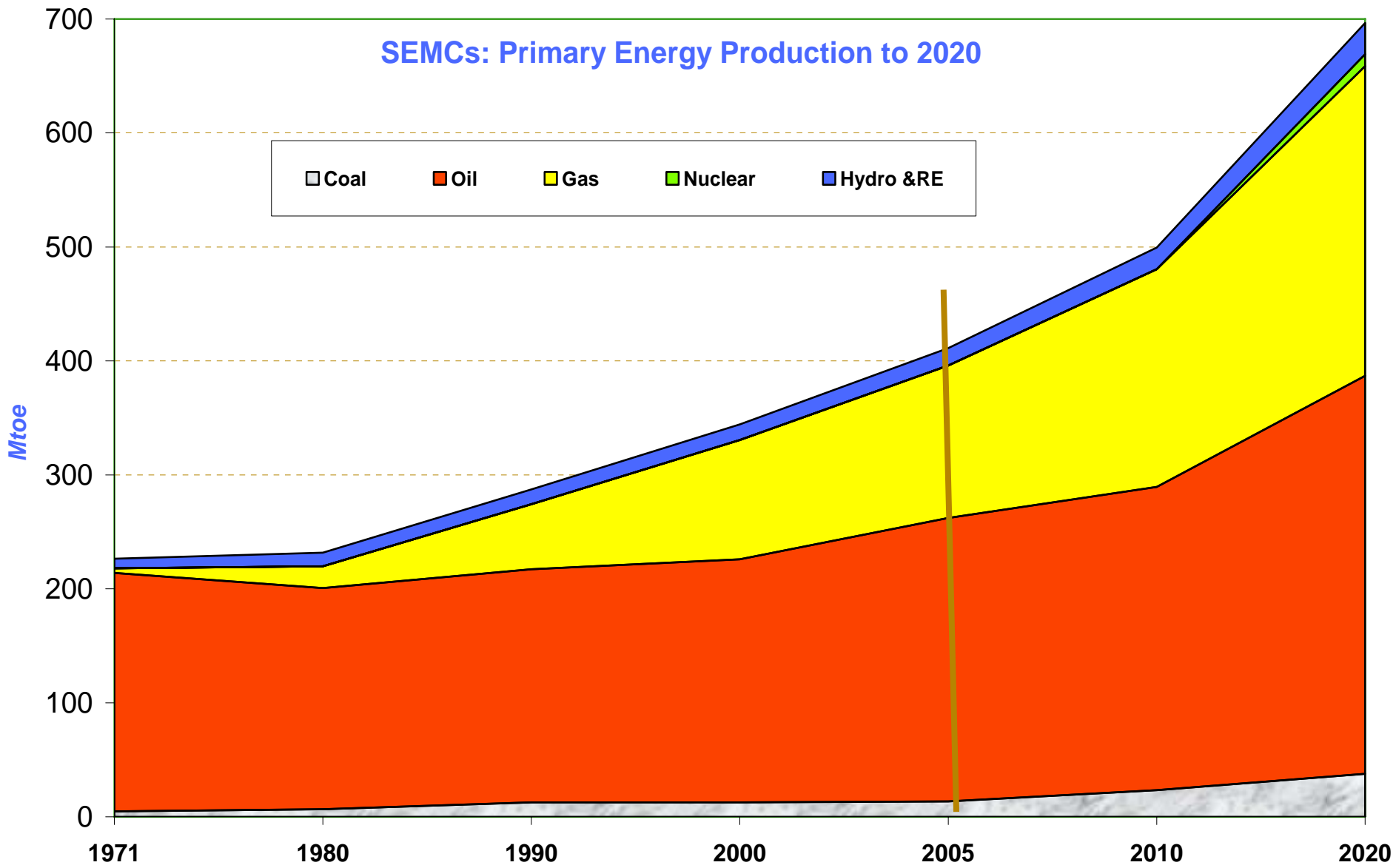
NMCs: Primary Energy Production



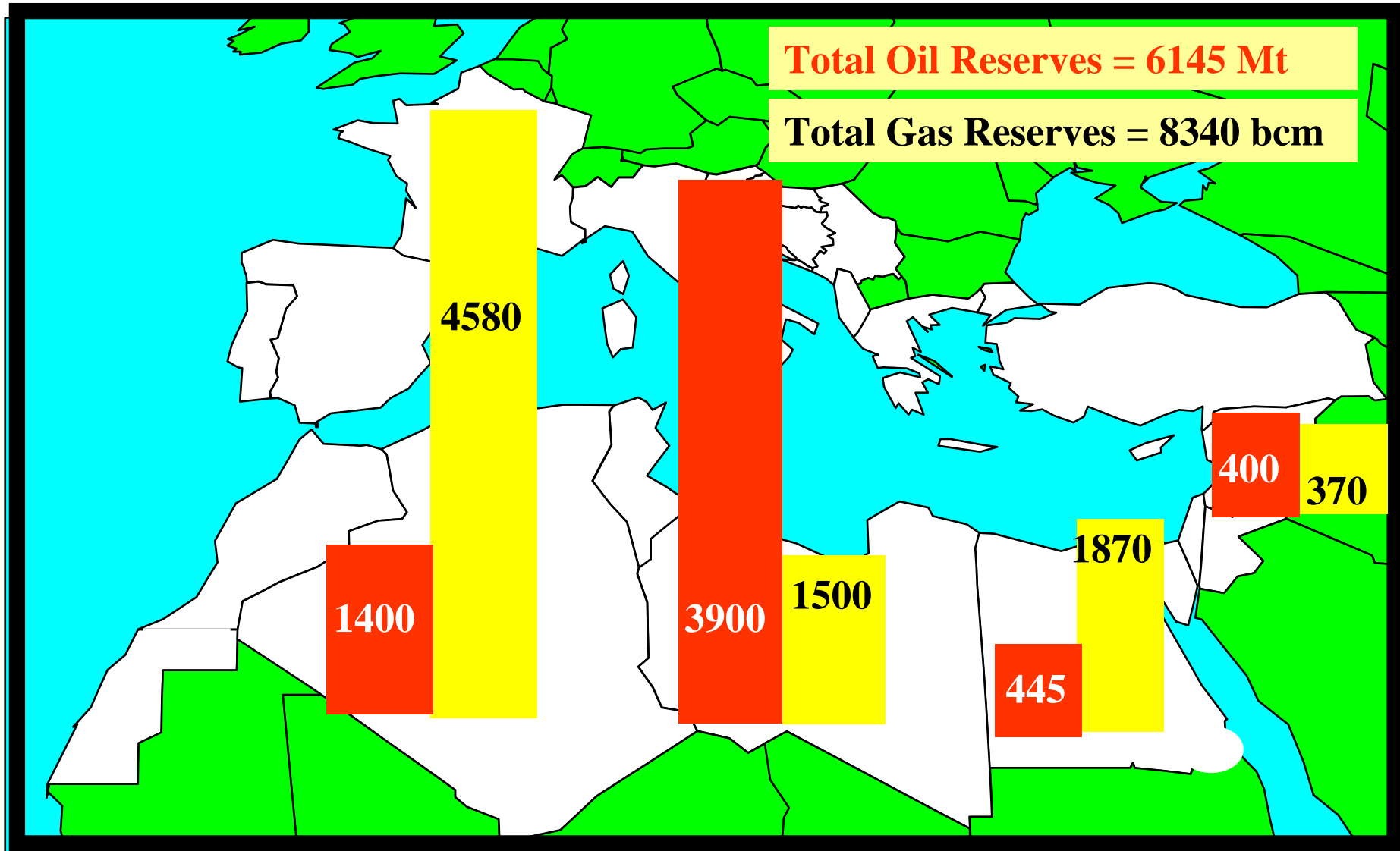
SEMCs: Primary Energy Production





SEMCs: Primary Energy Production to 2020

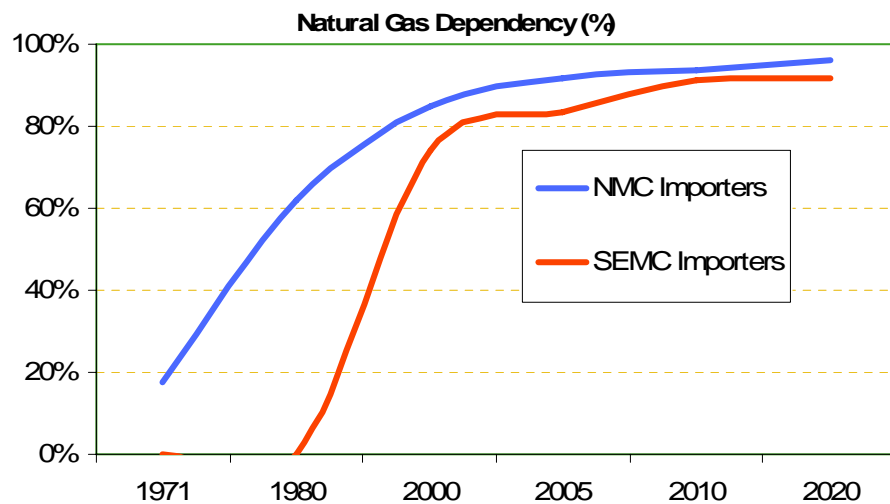
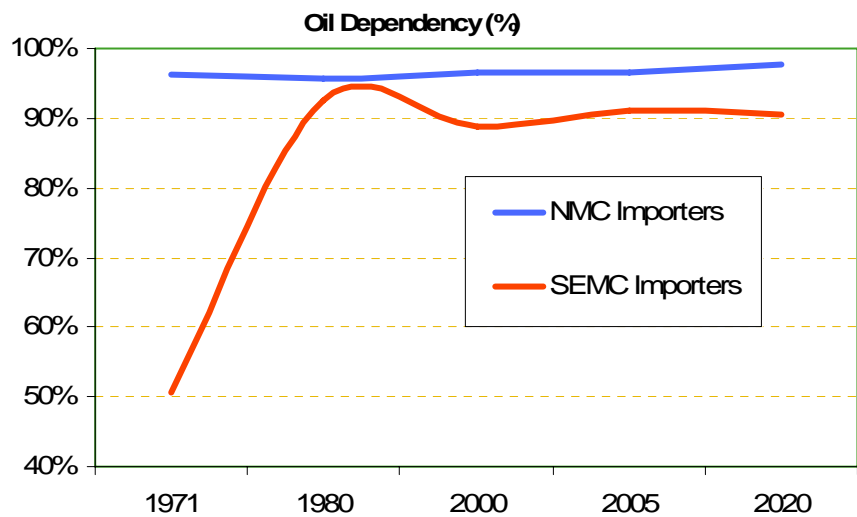
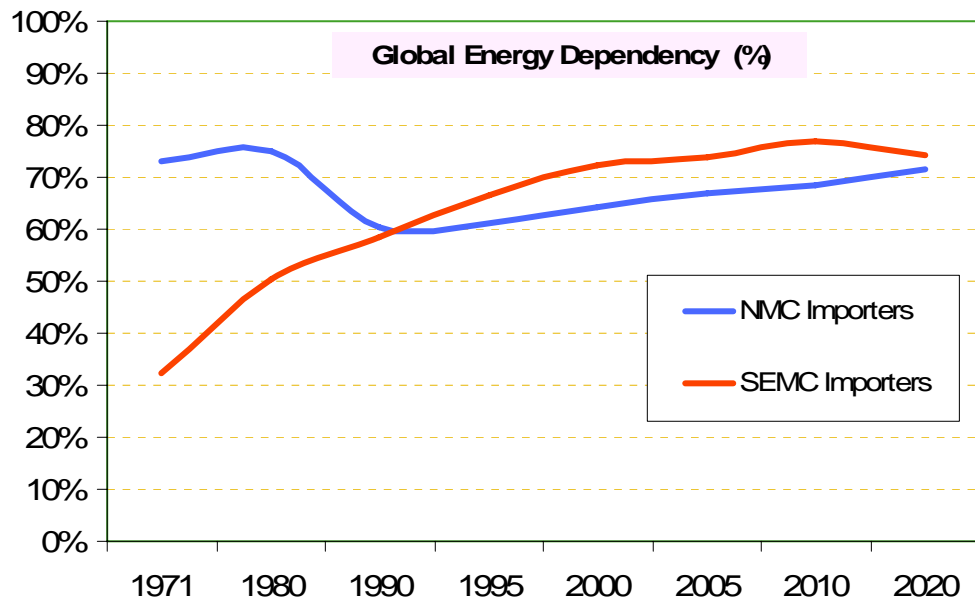


Oil (Mt) & Gas (bcm) Reserves



Source: Reserves from BP & CEDIGAZ

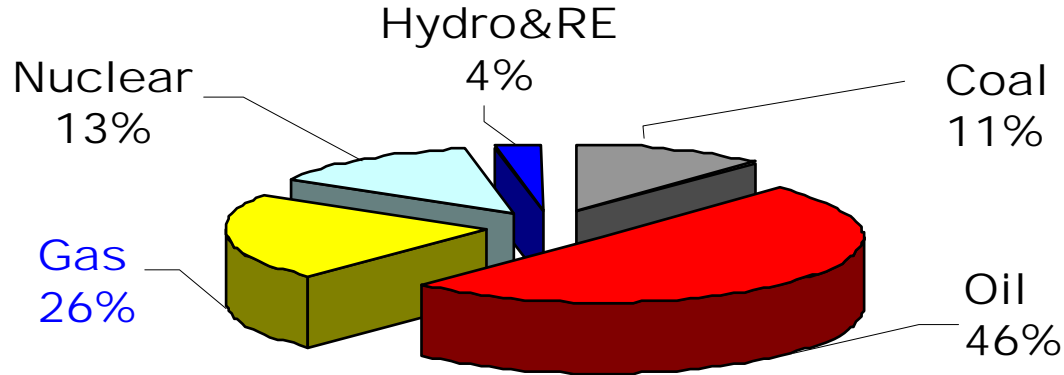
 Oil Reserves  Gas Reserves



Mediterranean: Primary Energy Demand

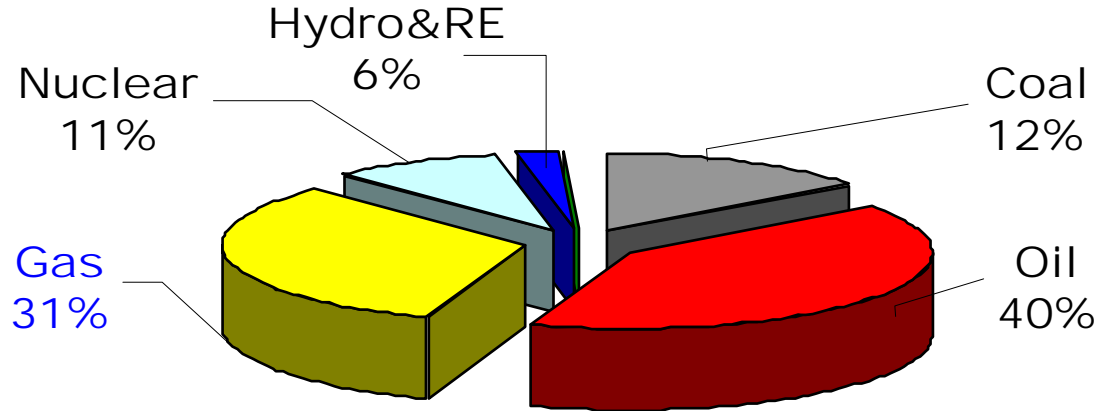


2005 (953 Mtoe)



Electricity Production
2005 (1780 TWh)
28% gas
& 16% RE

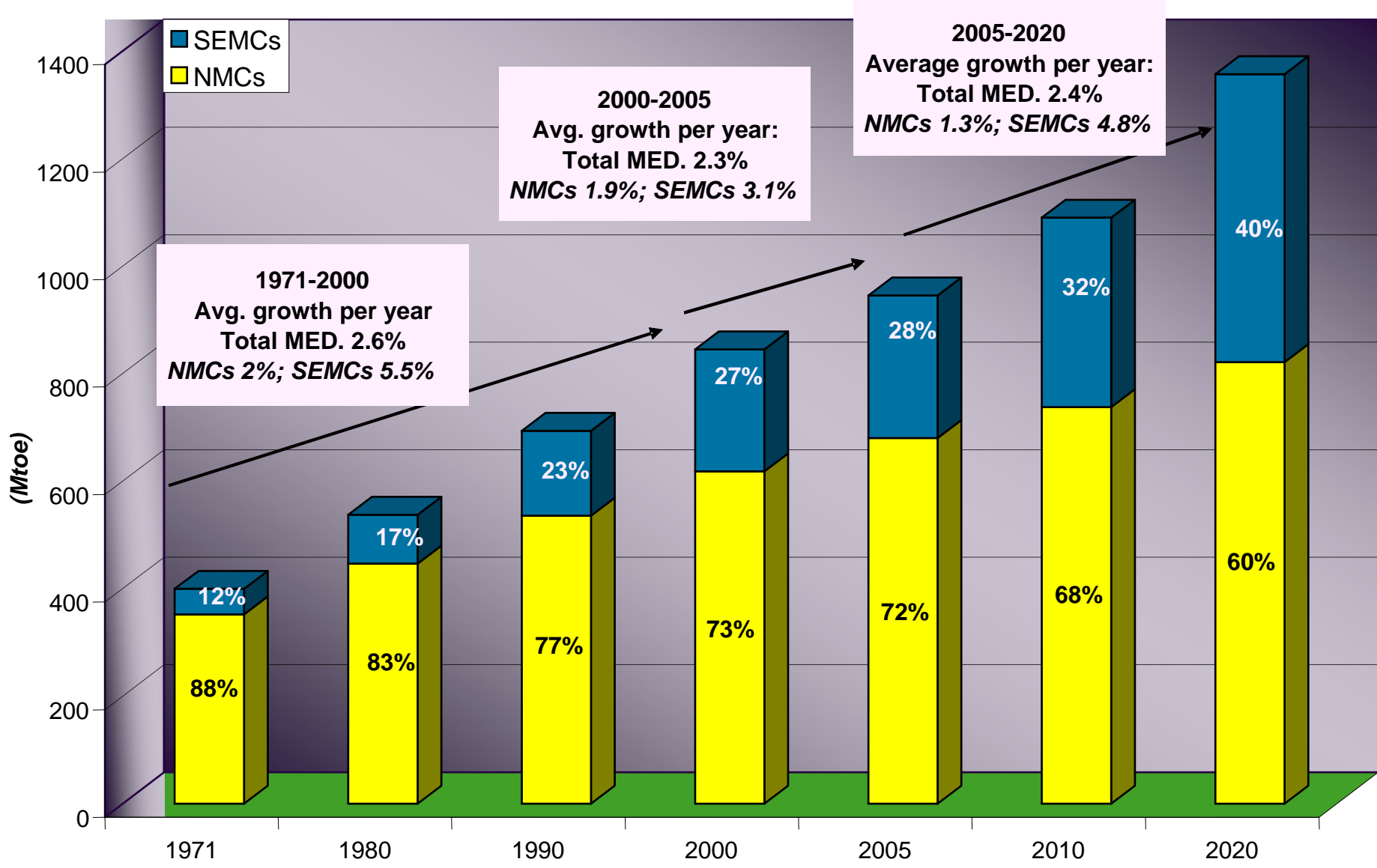
2020 (1360 Mtoe)



Electricity Production
2020 (2750 TWh)
41% gas
& 19% RE

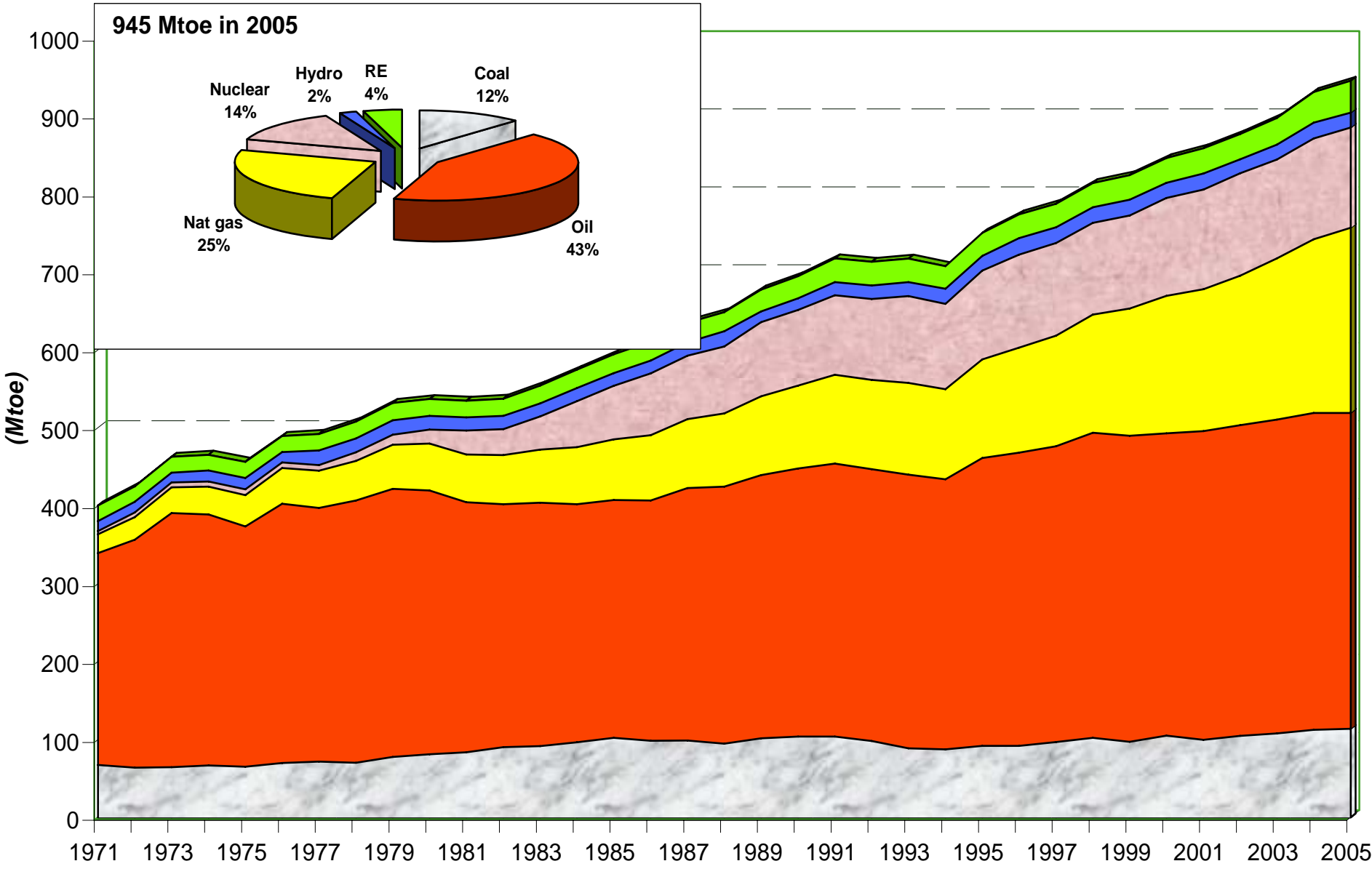
Source: OME, 2007

Mediterranean: Energy Demand

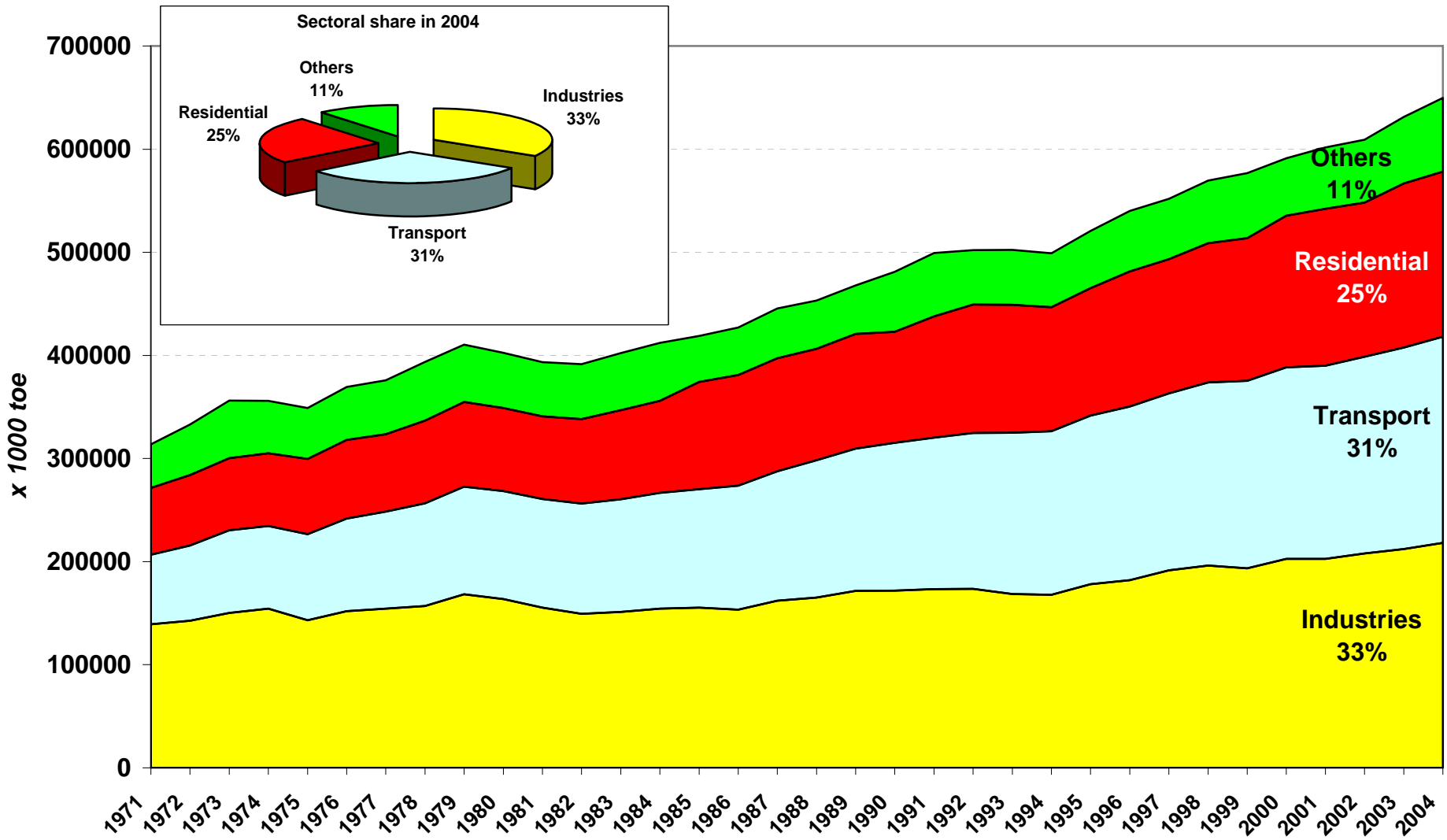


Source: OME, 2006

Mediterranean: Energy Demand by Primary Source (1970 to 2005)

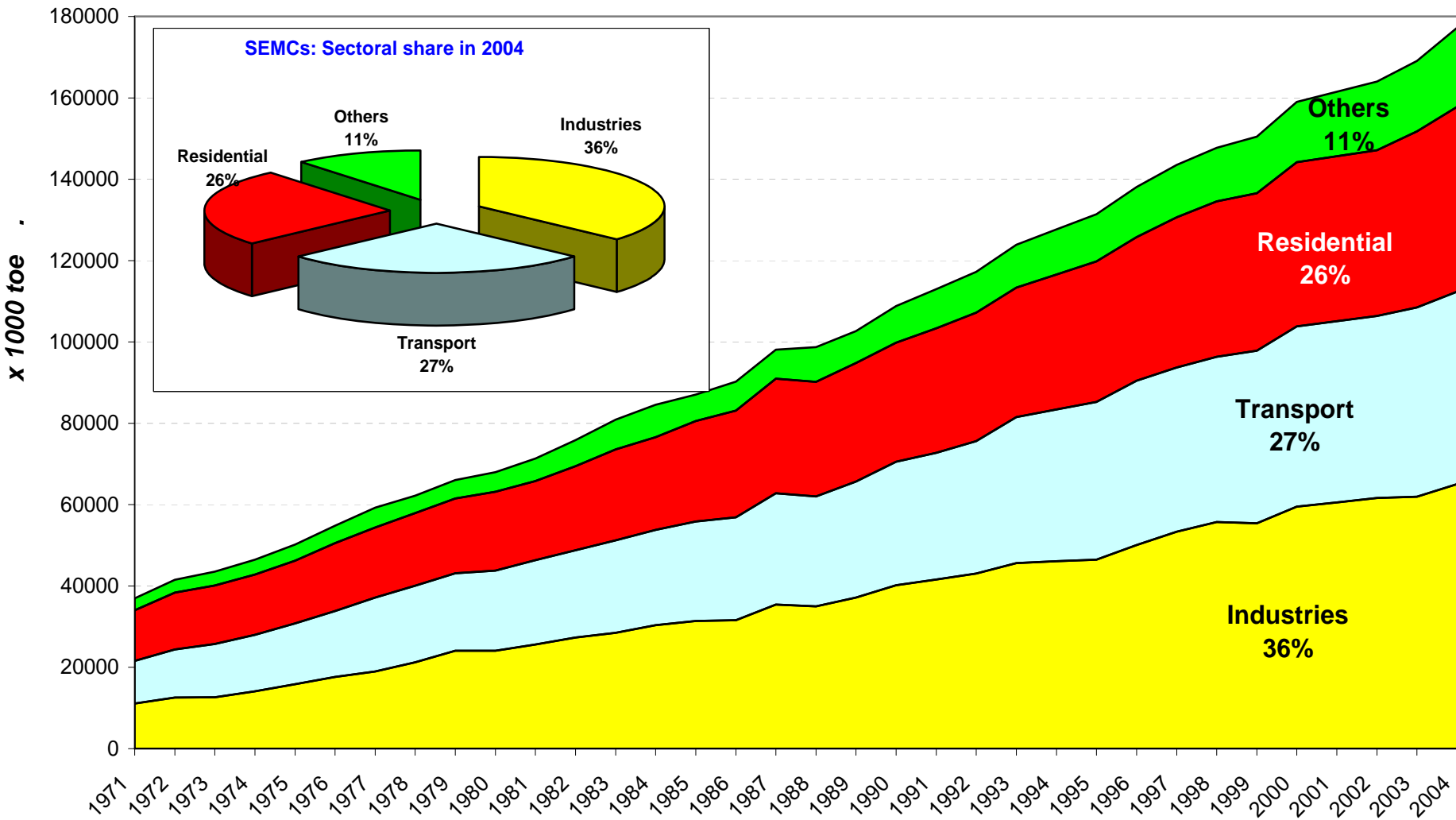


Mediterranean: Energy Consumption by Sector

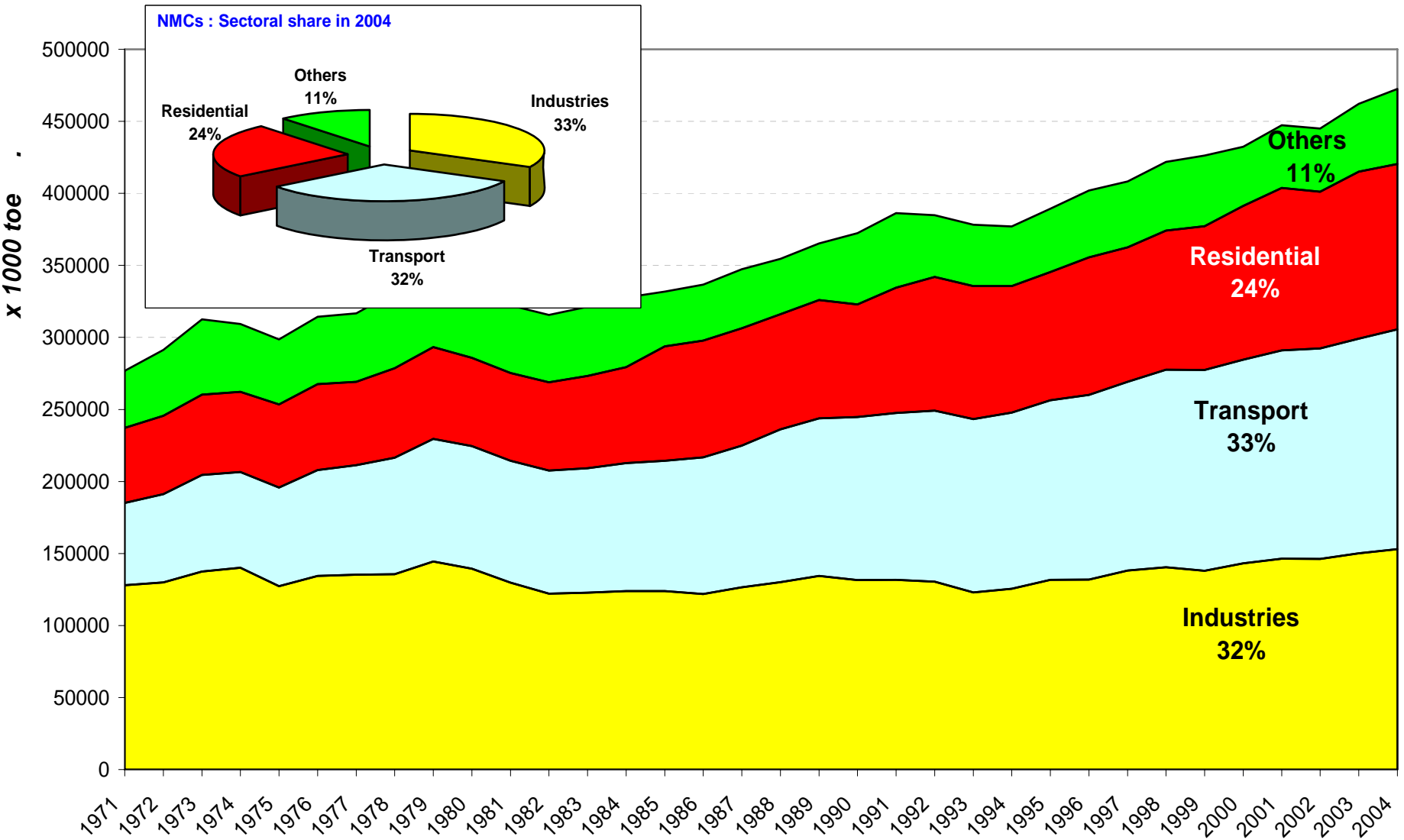




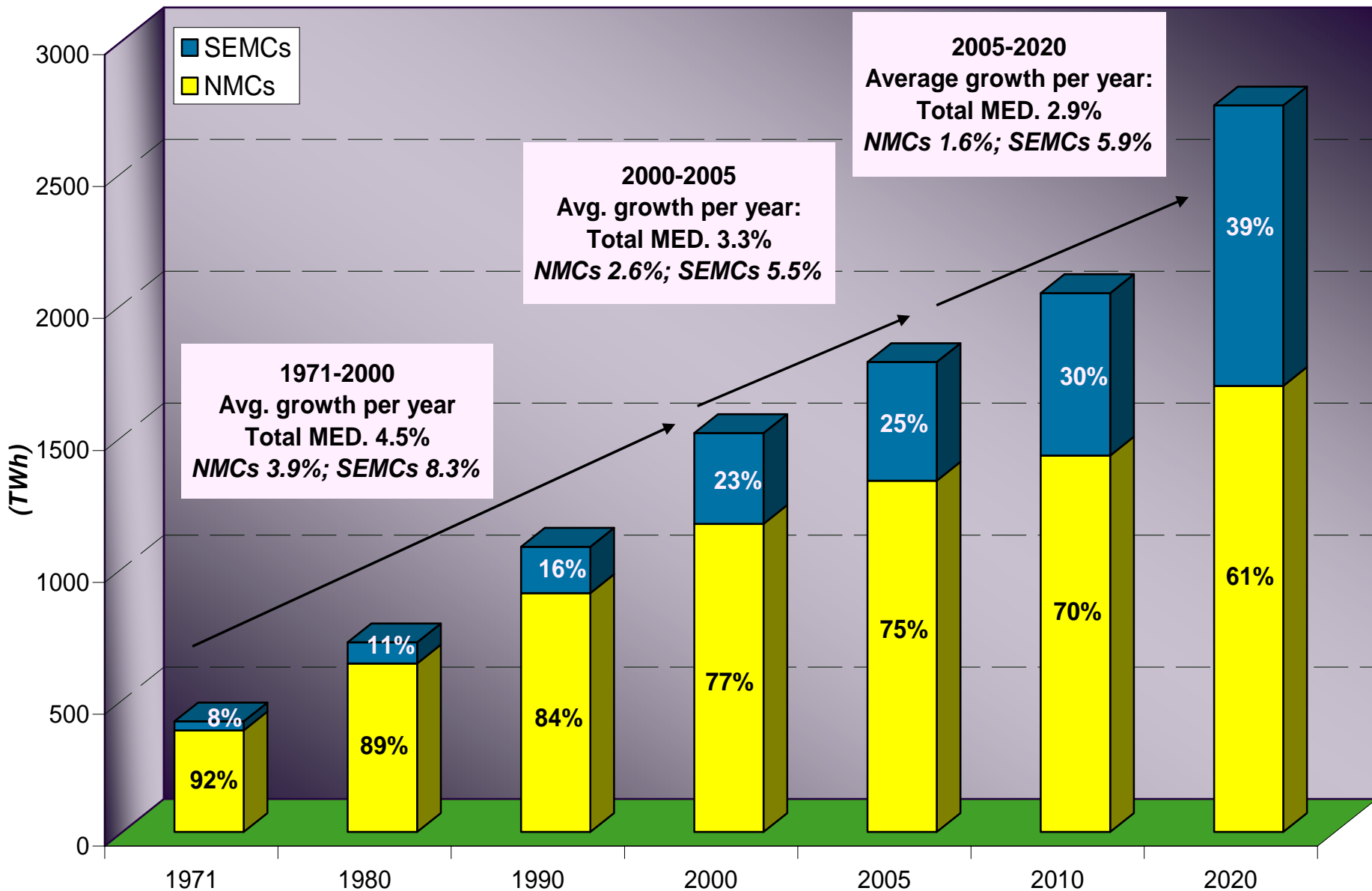
SEMCs: Energy Consumption by Sector



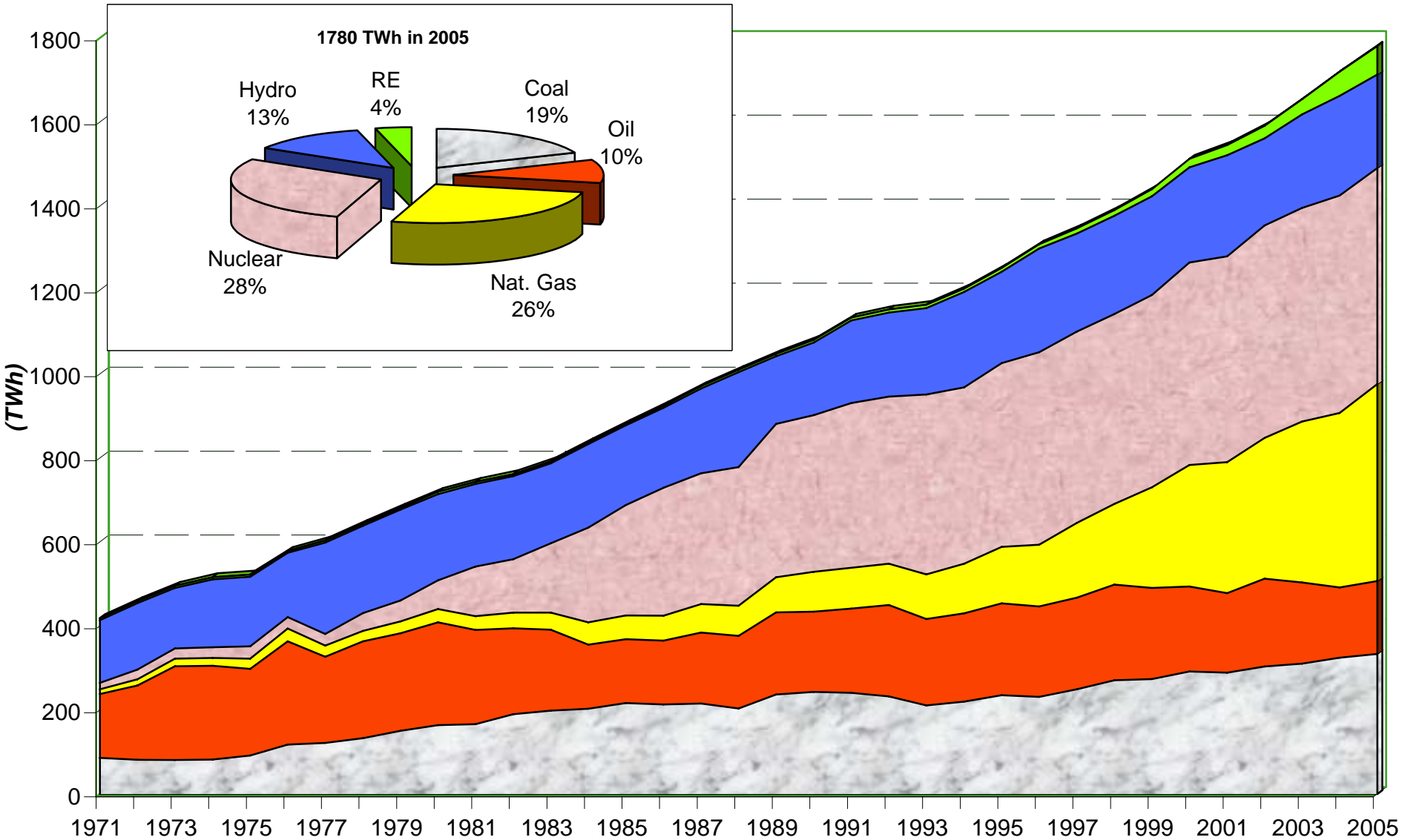
NMCs : Energy Consumption by Sector



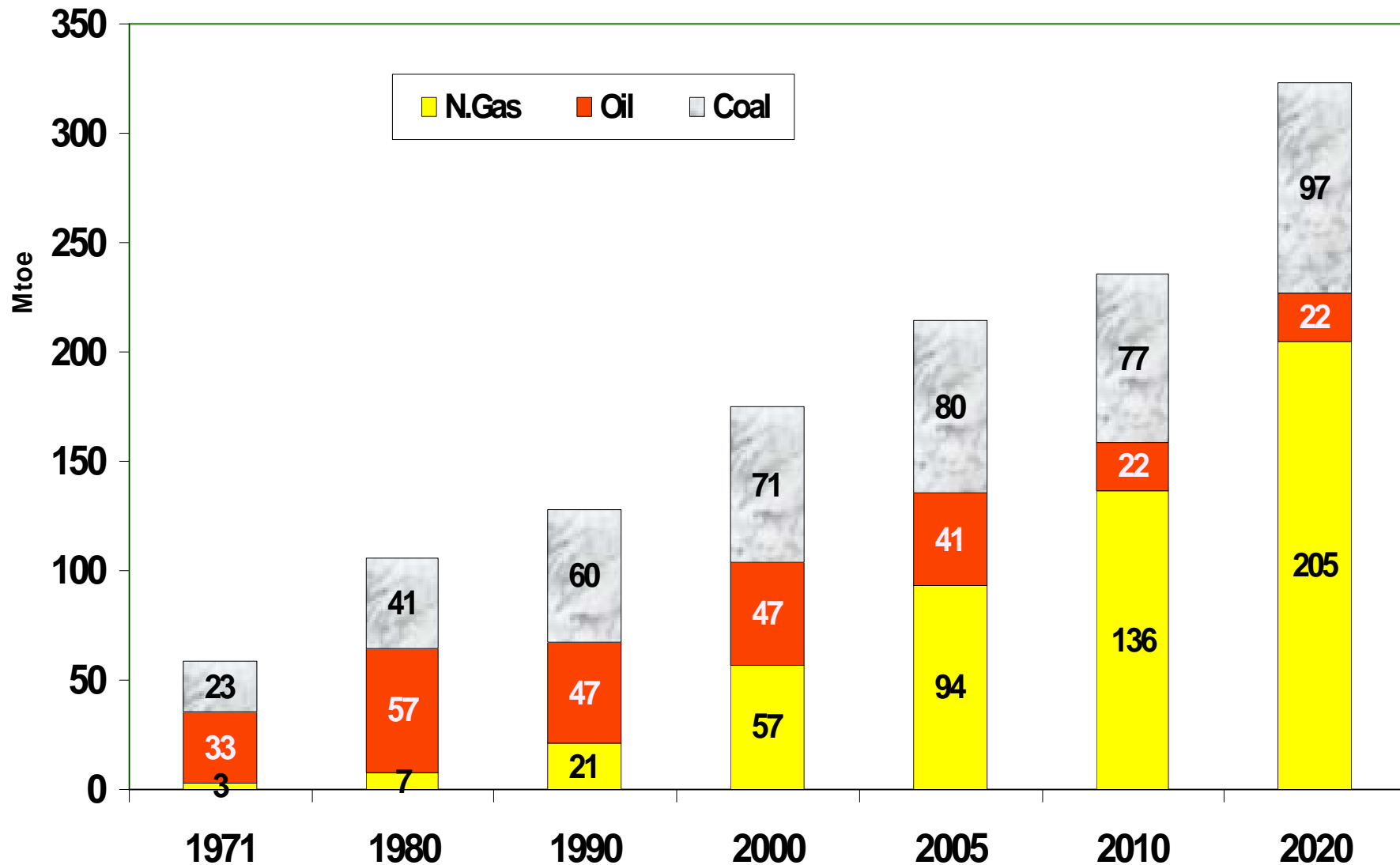
Mediterranean: Electricity Demand



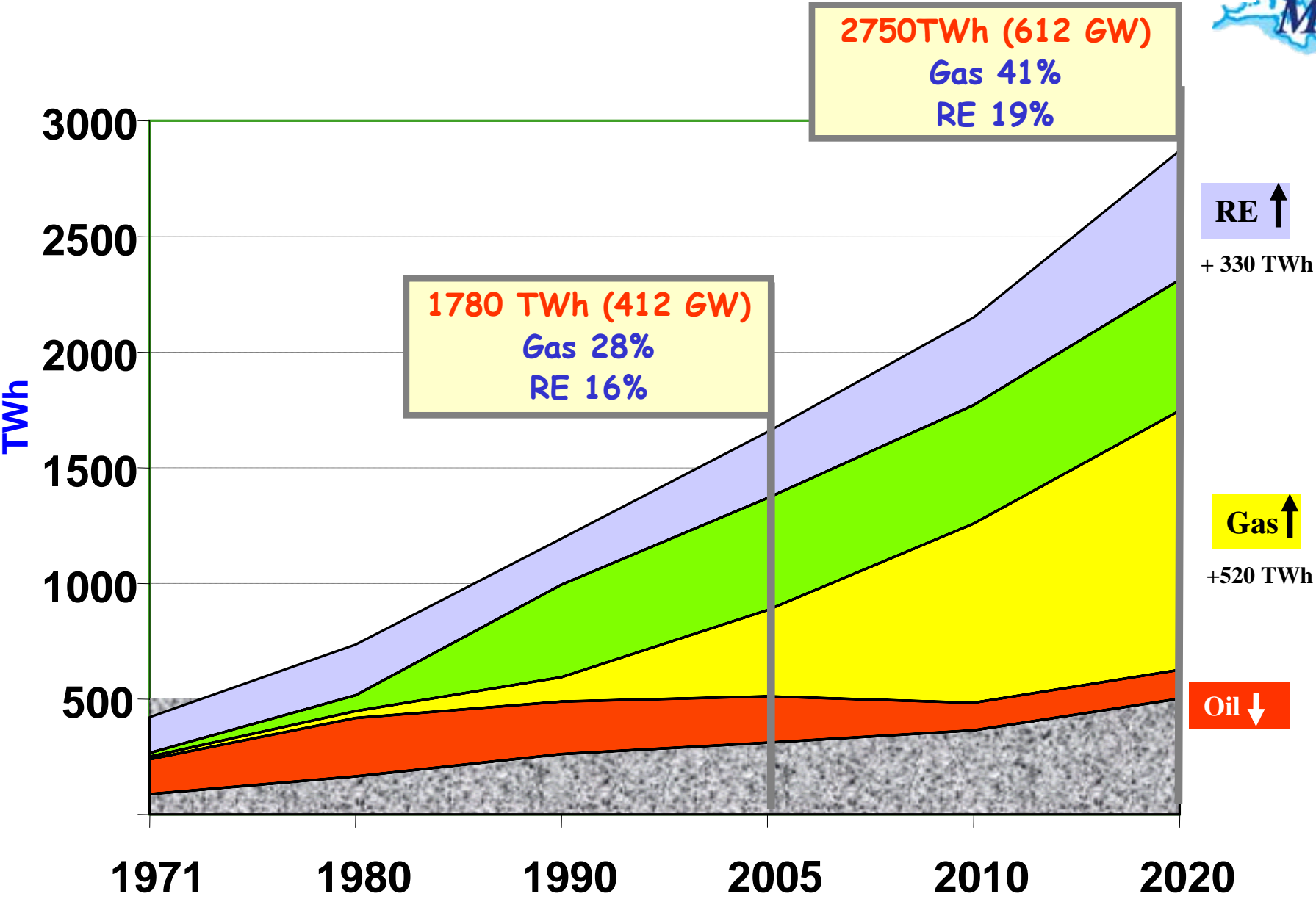
Mediterranean: Electricity Demand (1970 to 2005)



Electricity accounts for 40% of additional TPES



Mediterranean : Power Production (by source)

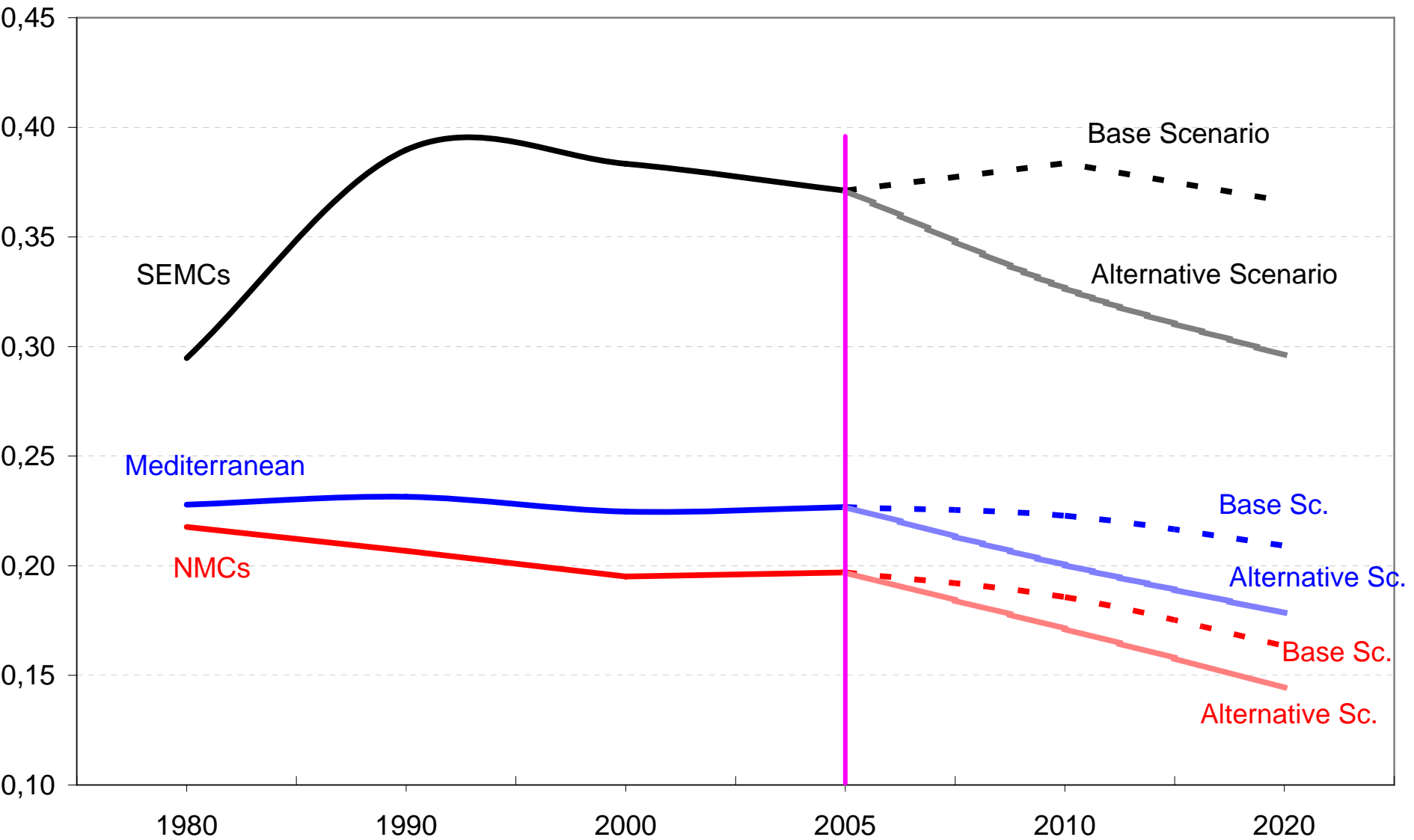


RE-based power generation SEMCs

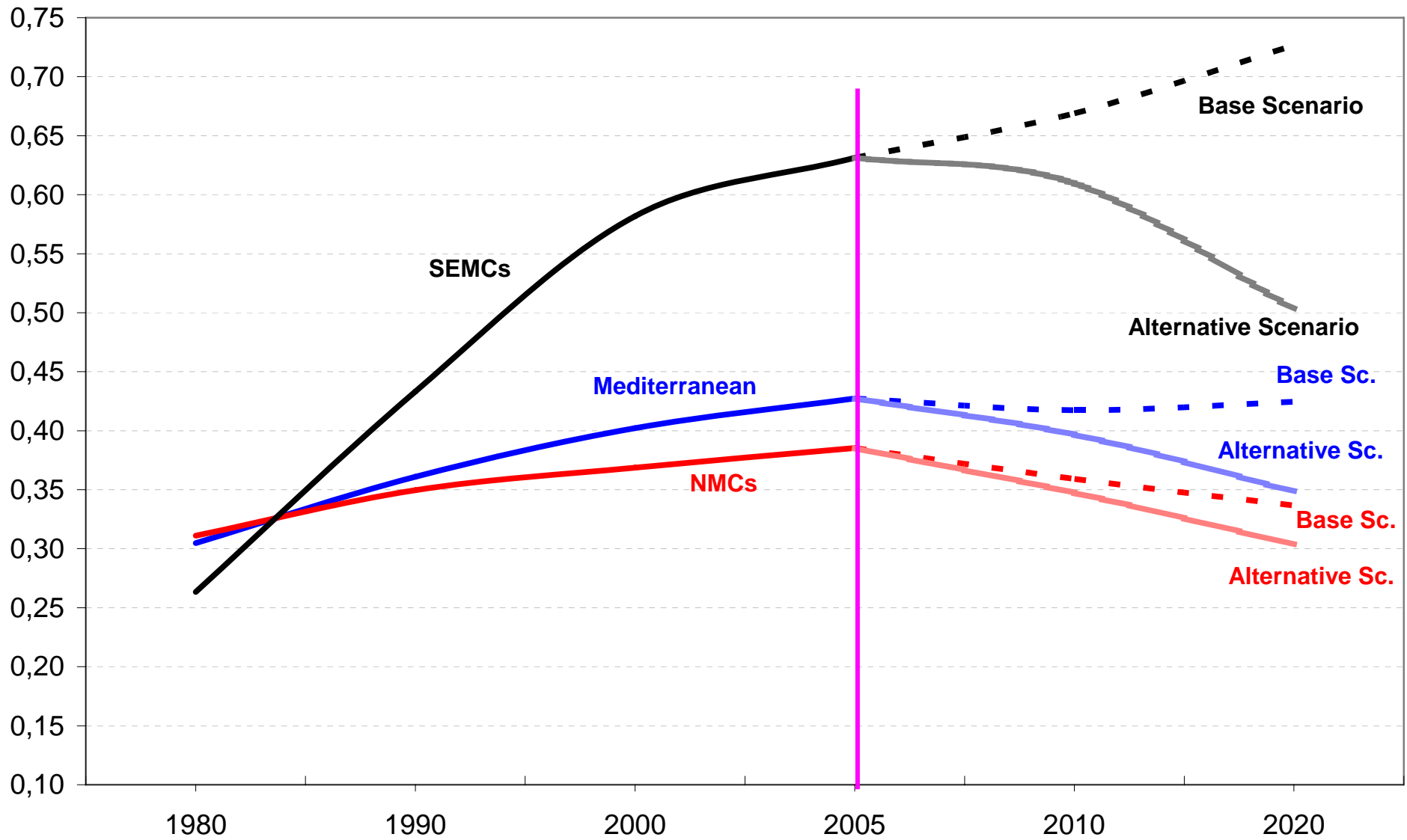


	2000	2007	Launched projects	2012
Morocco	54	54	<i>60 MW under construction by Gamesa in 2007 & 200 MW under tendering</i>	1054
Tunisia	11	20+34 <i>(under construction)</i>	<i>3 new wind farms 120 MW will be installed at Bizerte by 2009</i>	174
Egypt	68	230	<ul style="list-style-type: none"> - <i>Wind projects planned to be operational by 2011 which are located in Zafarana :</i> <ul style="list-style-type: none"> <i>80 MW with KFW (Germany) by 2008</i> <i>220 MW with JBIC (Japan) by 2009</i> <i>120 MW with Danida (Denmark) by 2010</i> <i>100 MW with Spain</i> - <i>150 MW solar thermal under tendering phasis</i> 	1050
Algeria	0,5	150 <i>ST under construction</i>	<i>150 MW Solar Thermal under construction by Abener (Spain) at H. R'Mel</i>	160

Energy intensity

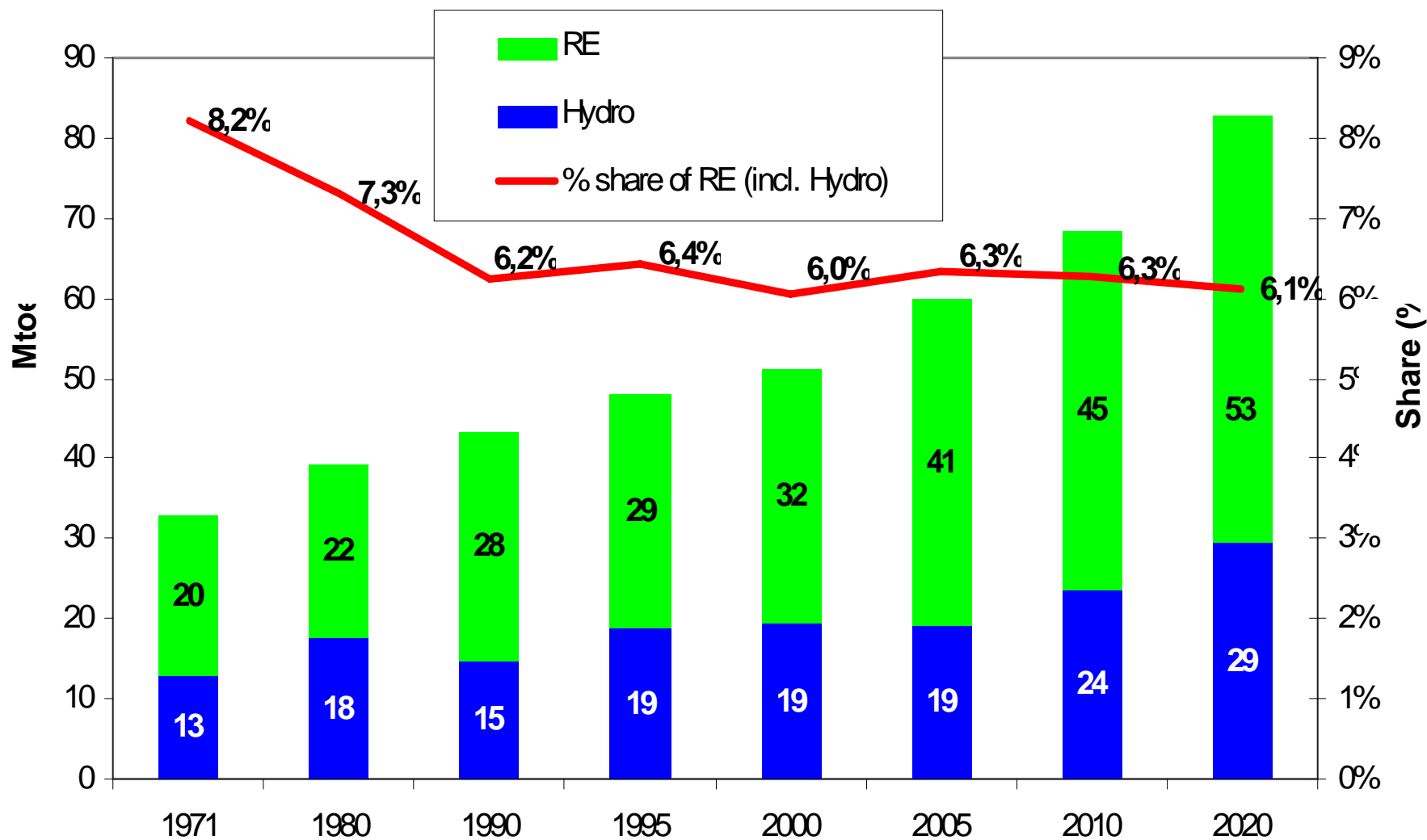


Electricity Intensity

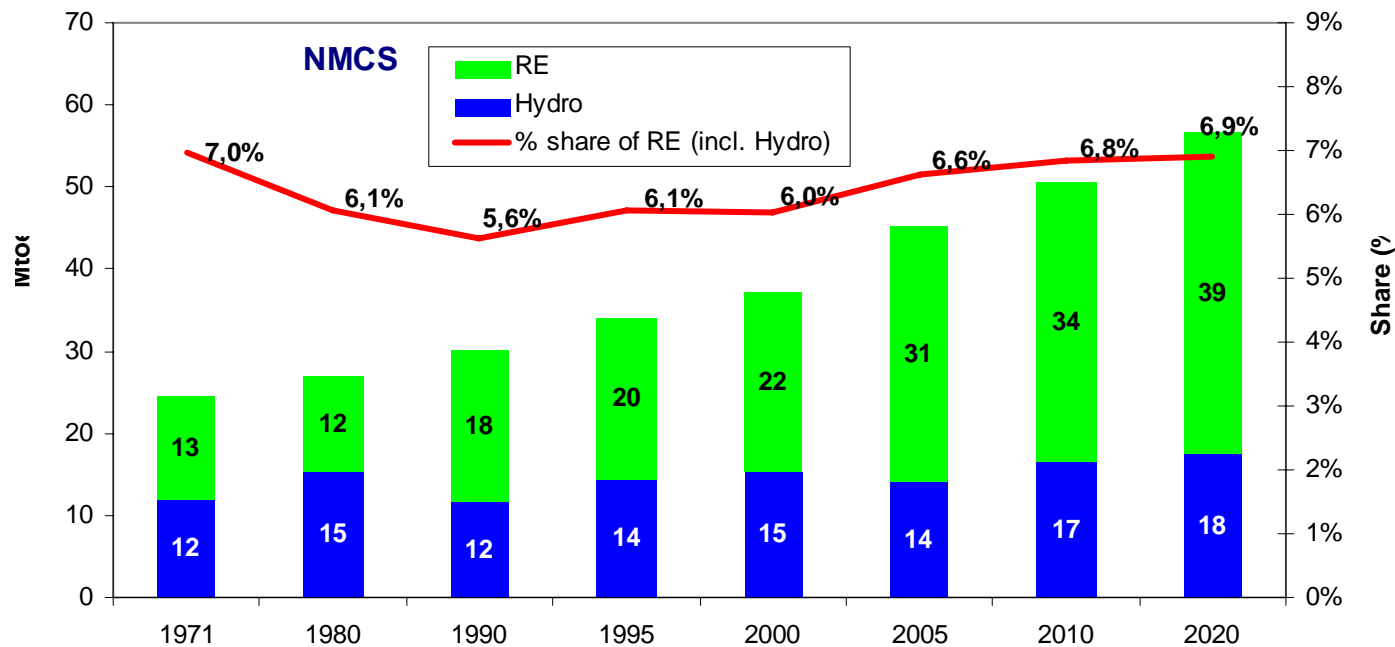
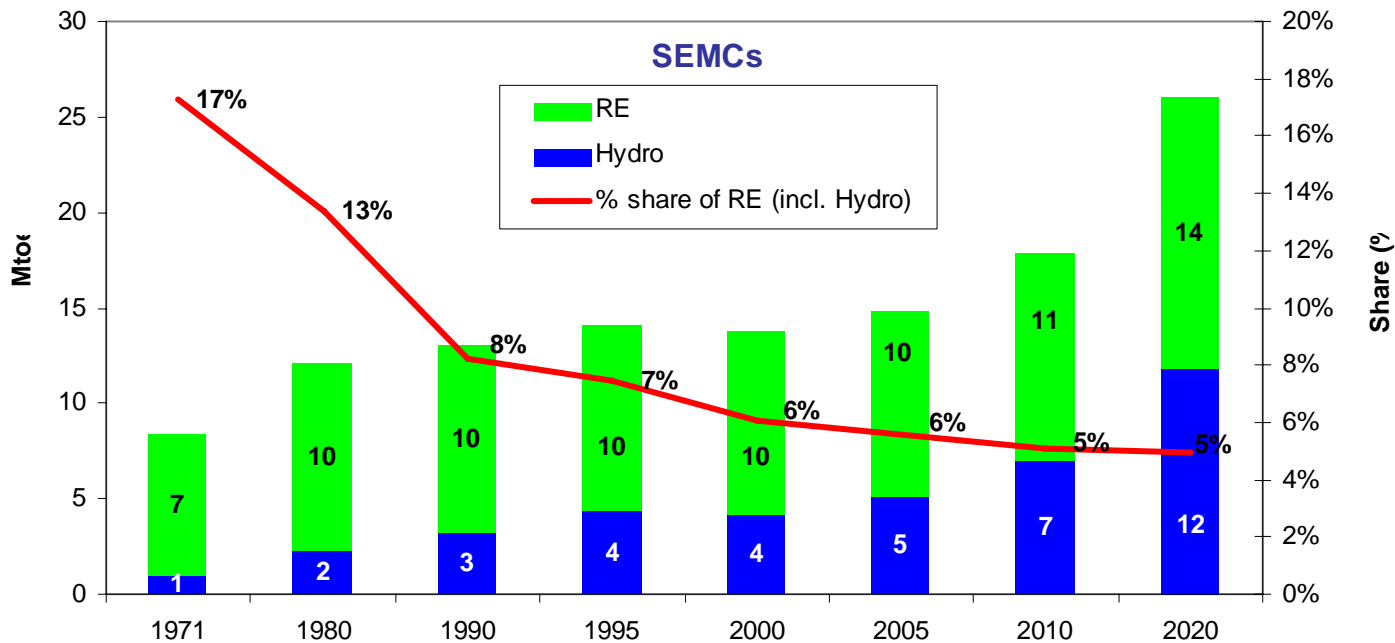




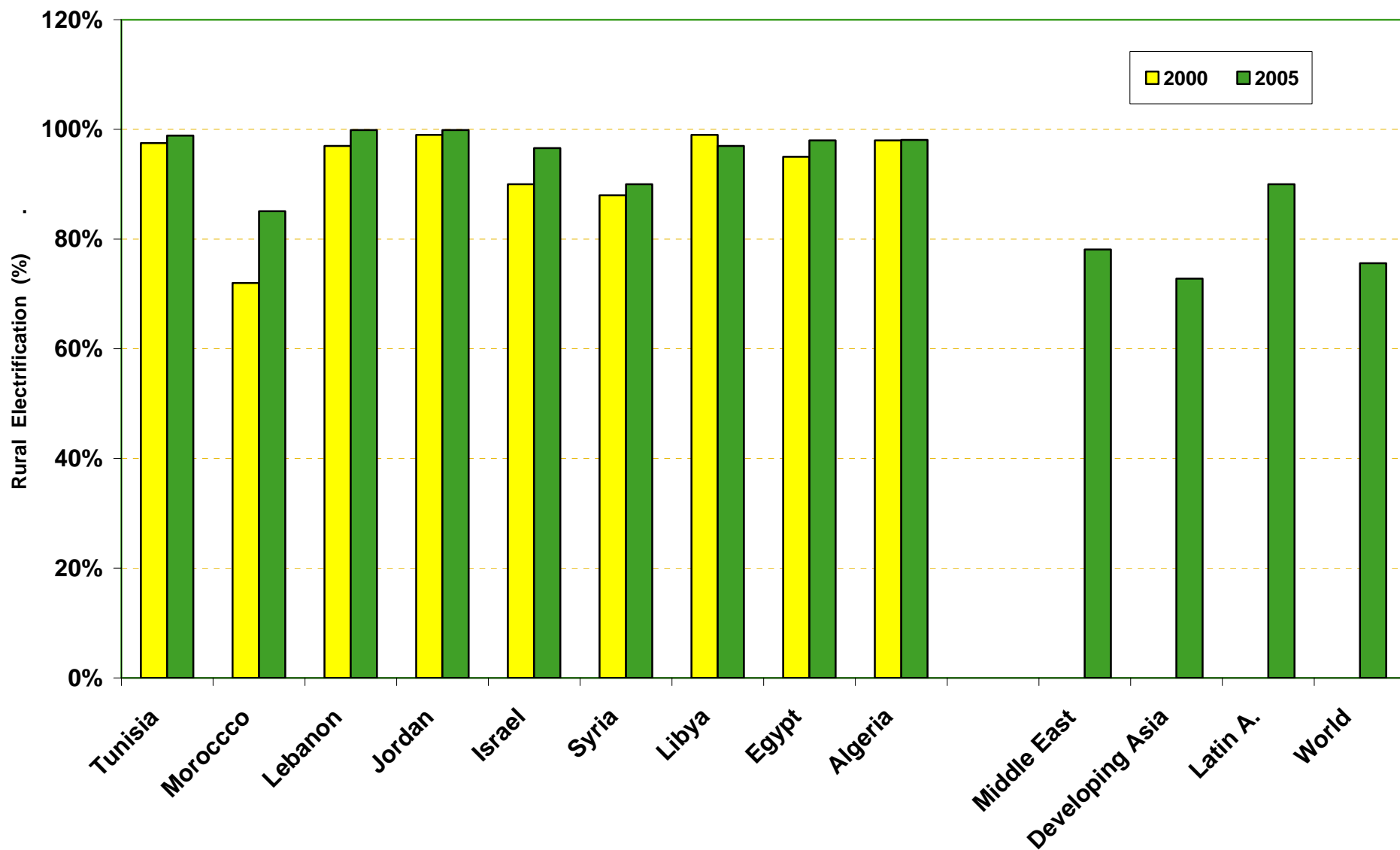
Mediterranean : RE share in the Energy Balance

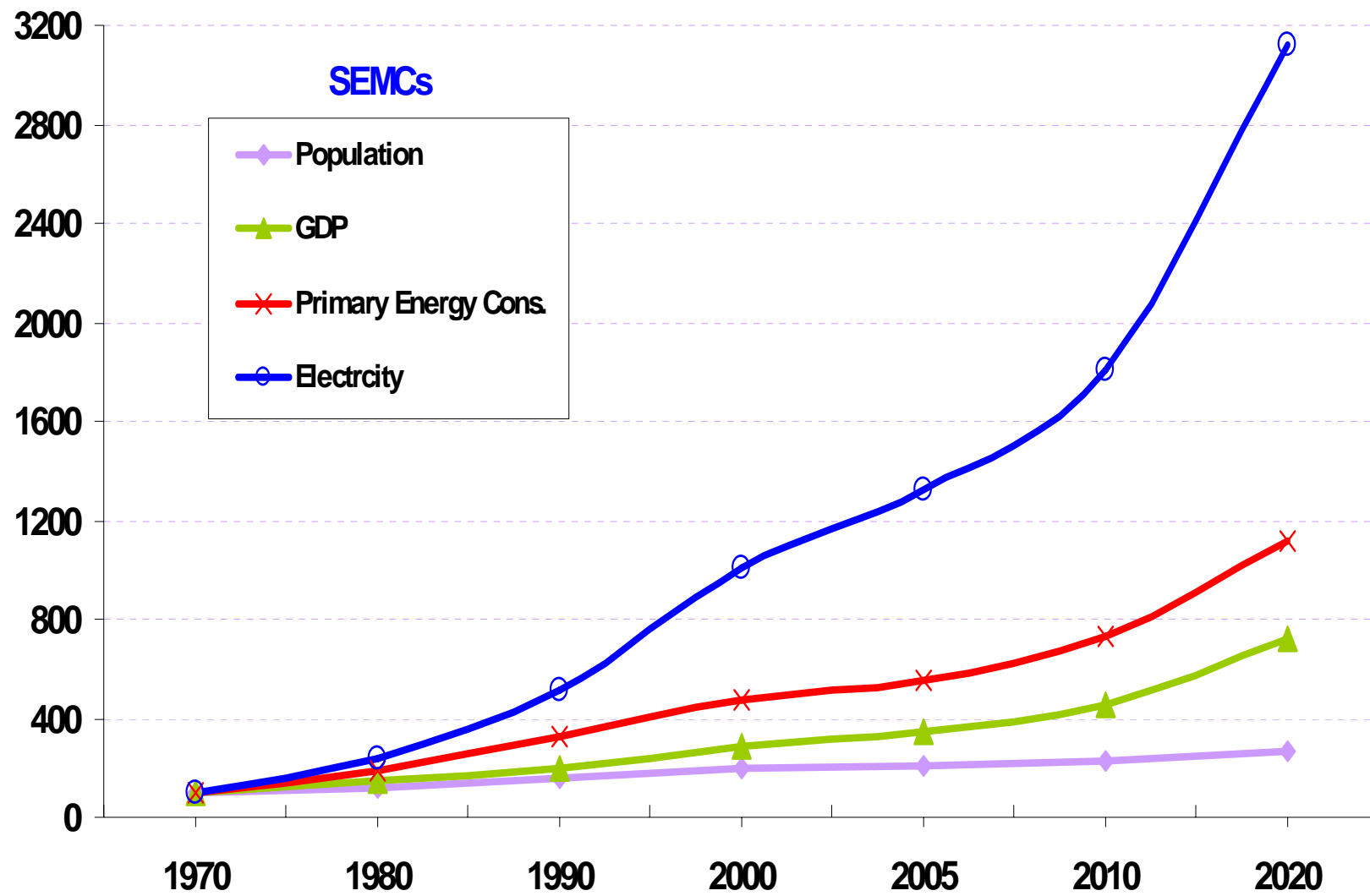


SEMCs & NMCs : RE share in the Energy Balance

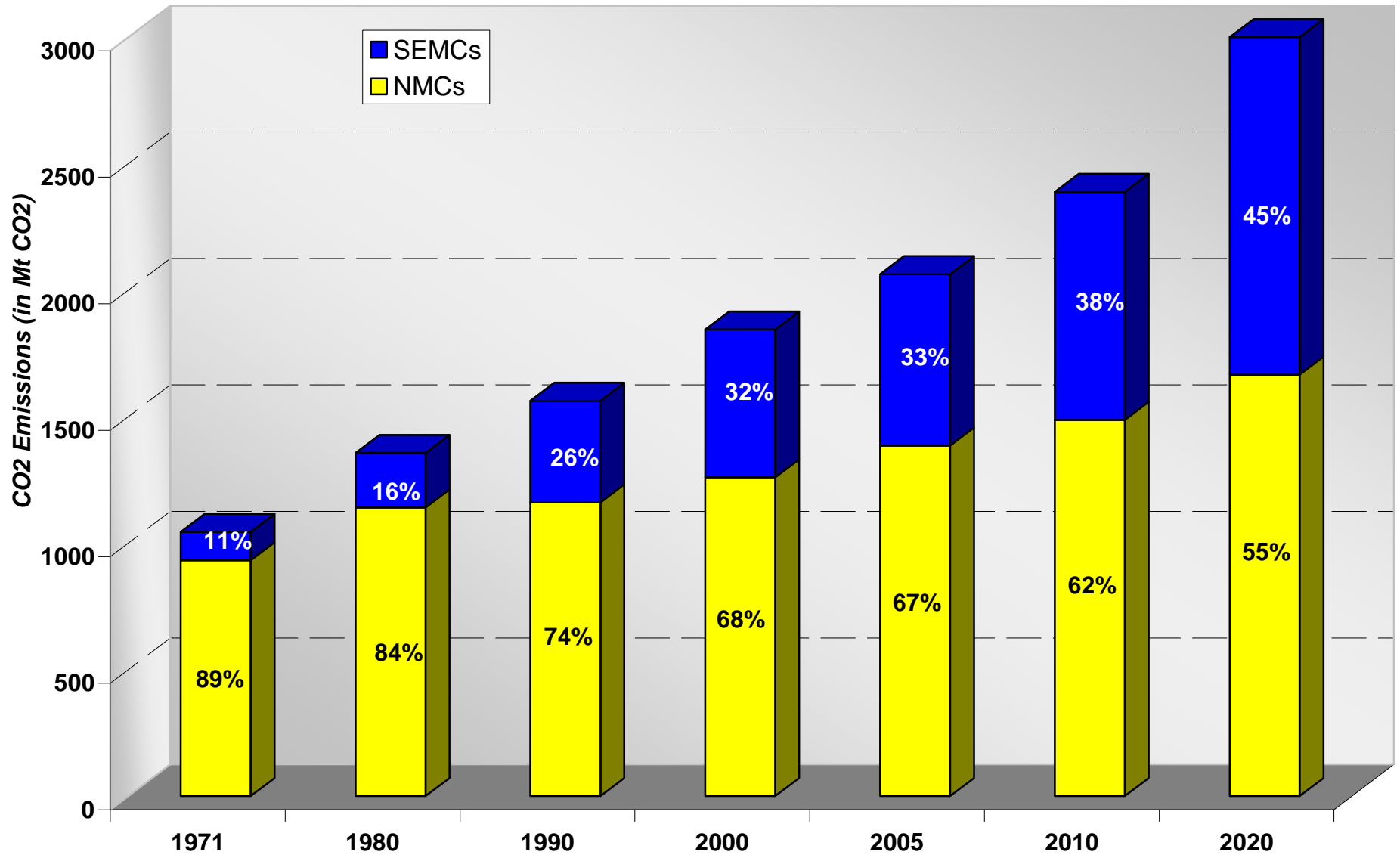


Rural Electrification in the SEMCs



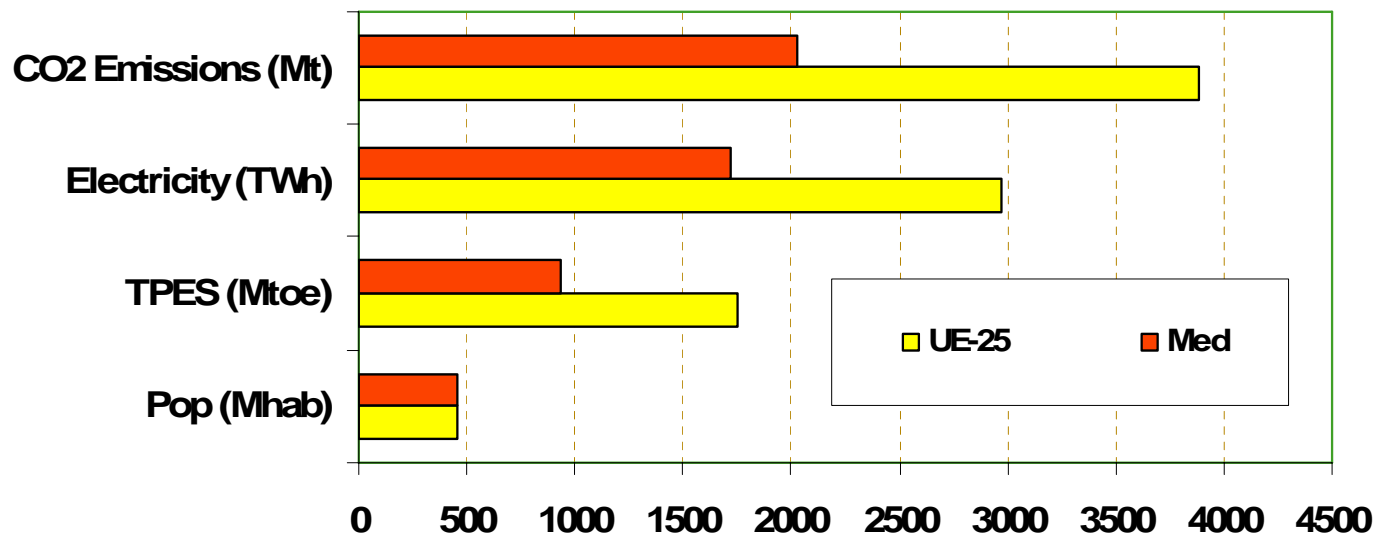


CO₂ Emissions from Energy Consumption in the Mediterranean

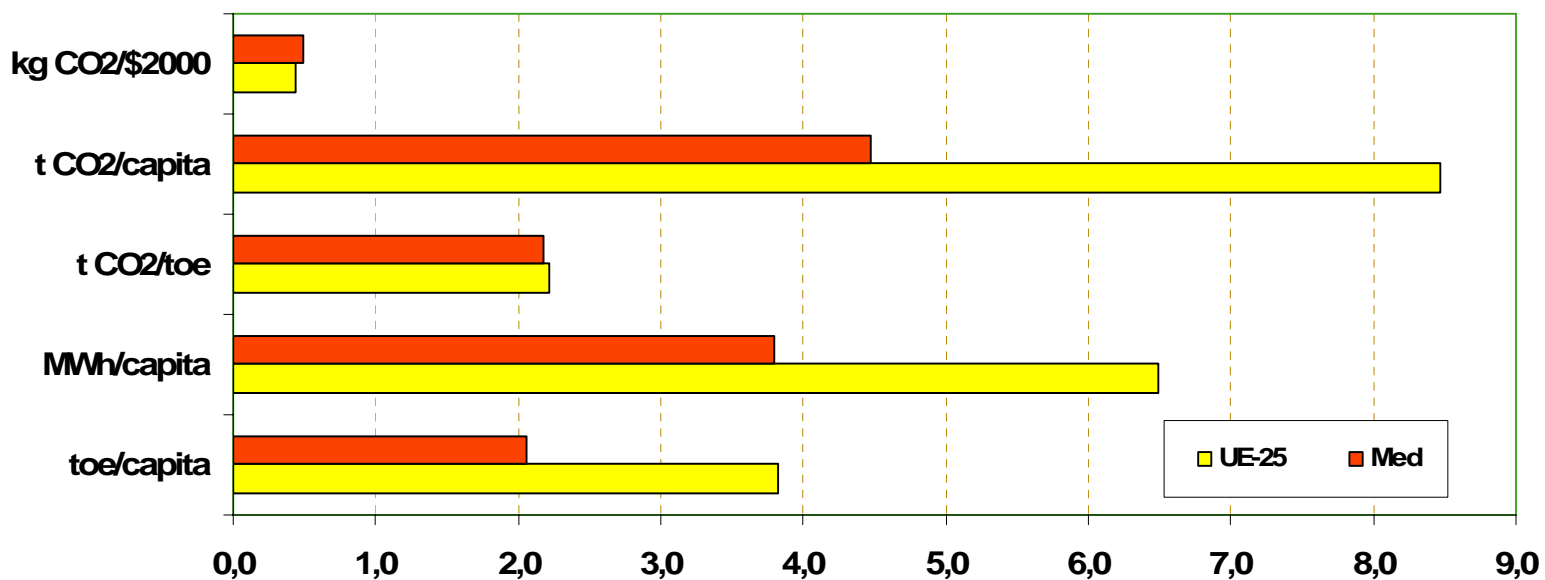


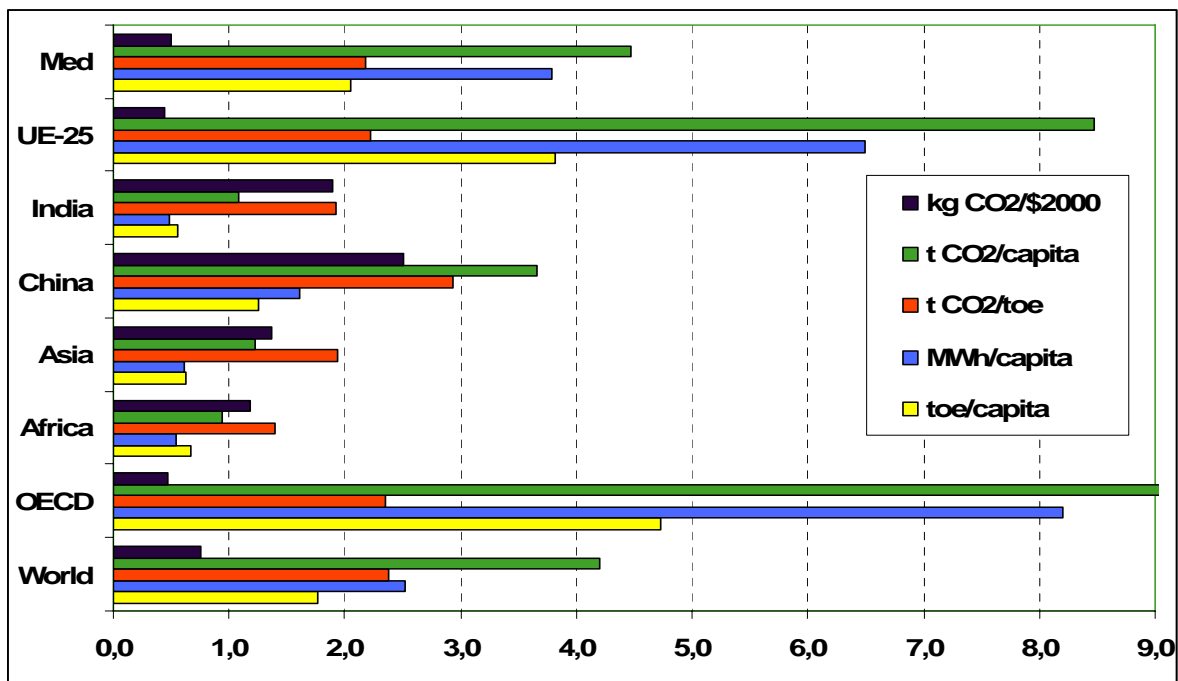
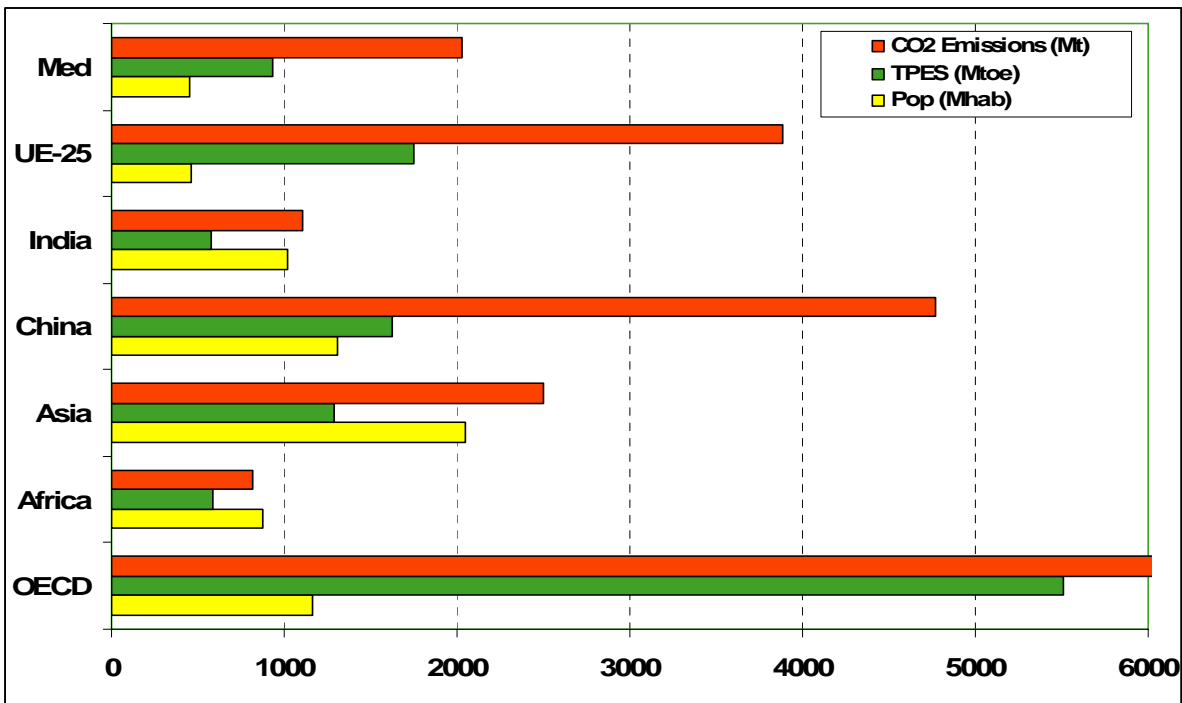


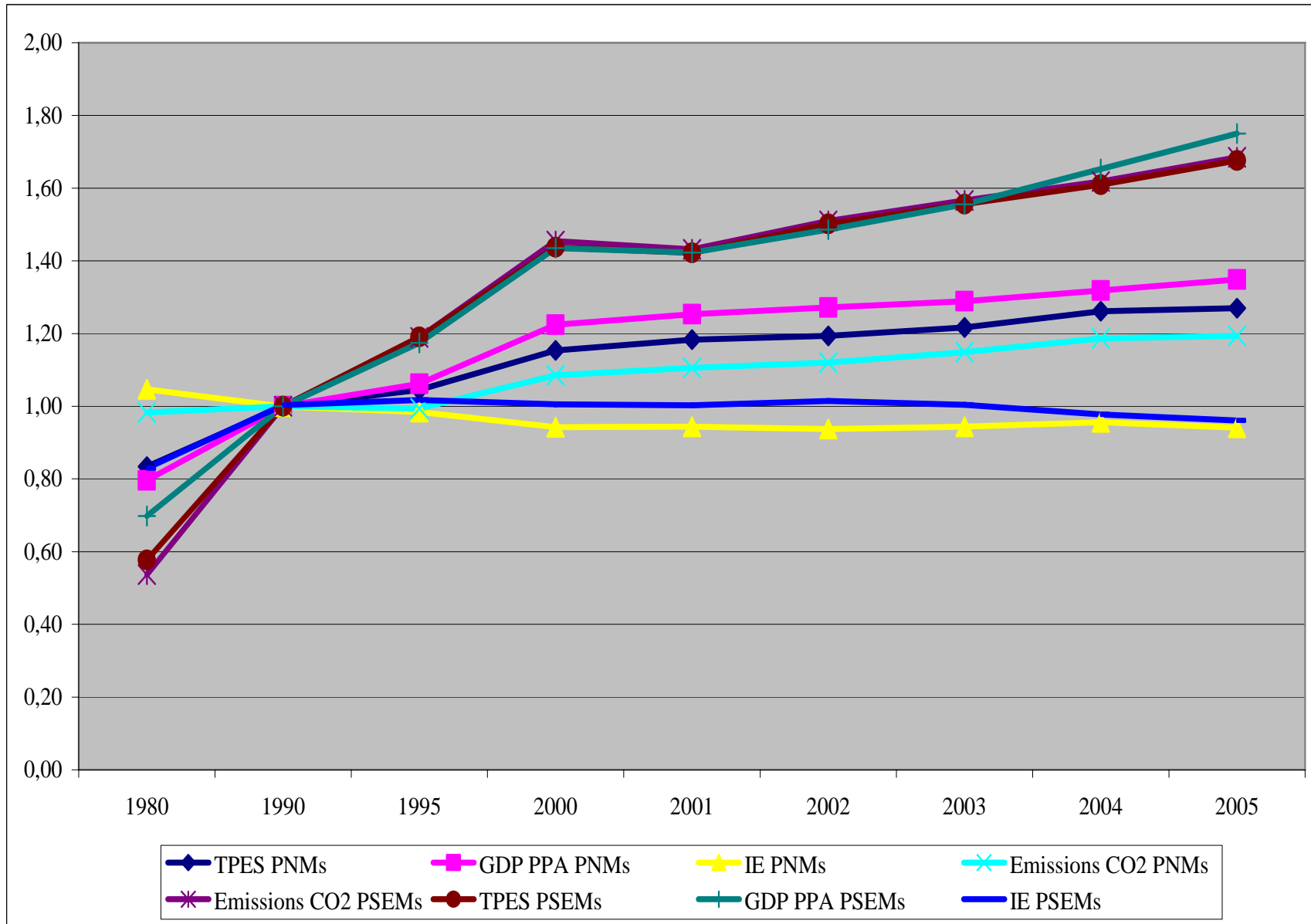
UE-25 & Mediterranean in 2004

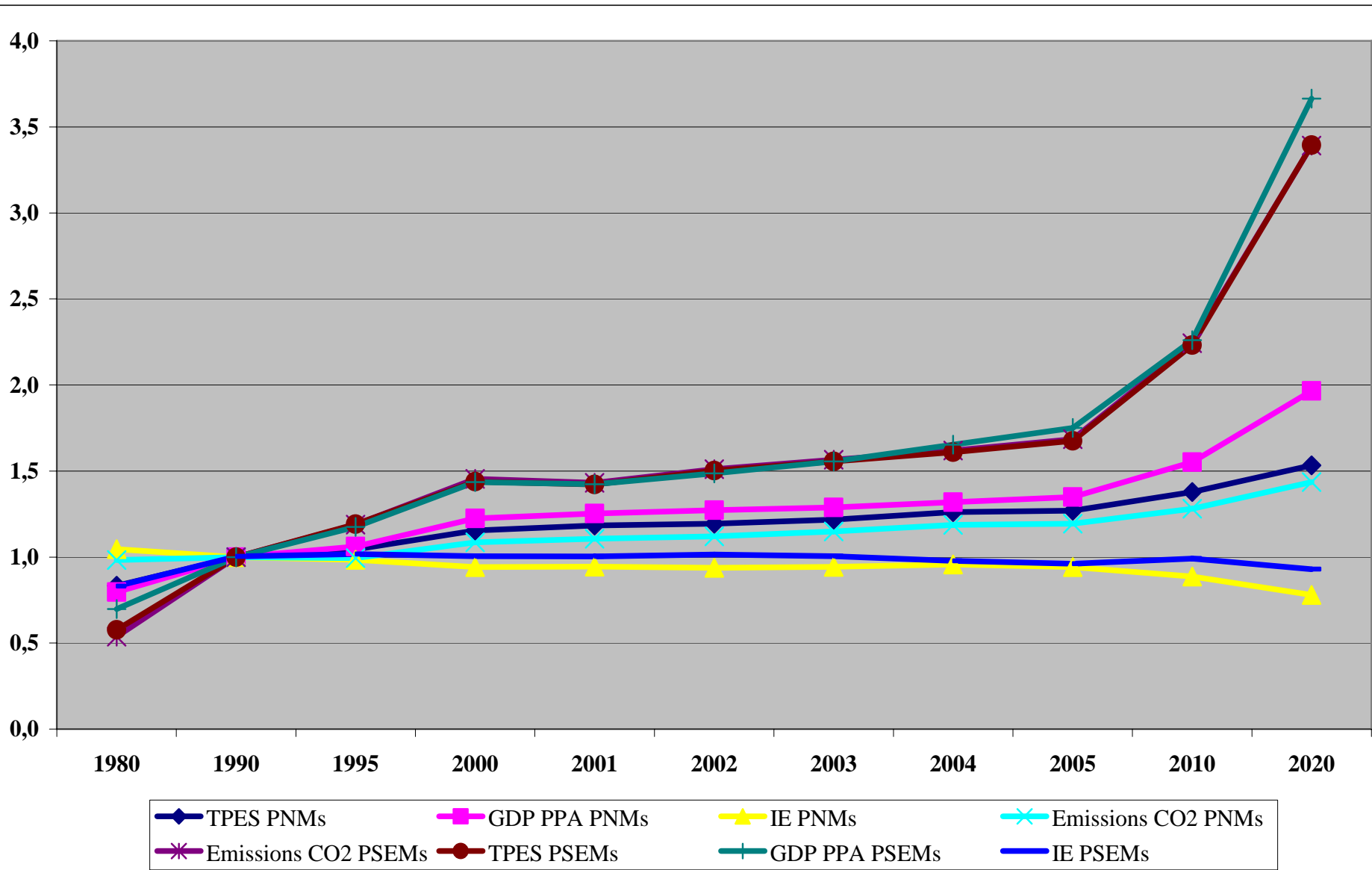


UE-25 & Mediterranean in 2004











- **A more sustainable future is needed**
- **A more sustainable future is possible**



Recommendations -1-

- **Realistic regional targets for EE, RE and access to electricity**
- **Adapted institutional and legislative frameworks involving all stakeholders**
- **Regional programme of implementation and measures strengthening in the fields of CC, RE and EE**
- **Techno-economic studies for integrated euro-mediterranean projects for solar and wind development in the SEMCS**



Recommendations -2-

- **Strengthened regional cooperation**
- **Regional carbon fund**
- **Regional programme for awareness and dissemination of information**
 - *Supervisory Board*



Thank you

ANNEX VI

Presentation on Tourism and Climate Change

by Mr Raphael Billé

Tourism and Climate Change

Mediterranean Commission on Sustainable Development

Raphaël Billé, 30 May 2007



Presentation outline

- **Mediterranean tourism**
 - Significance
 - Characteristics
 - Climate-related issues
- **Impact of tourism on CC**
 - Tourism emissions
 - Mitigation
- **Impact of CC on tourism**
 - Risks & vulnerabilities
 - Adaptation
- **Conclusion & discussion**

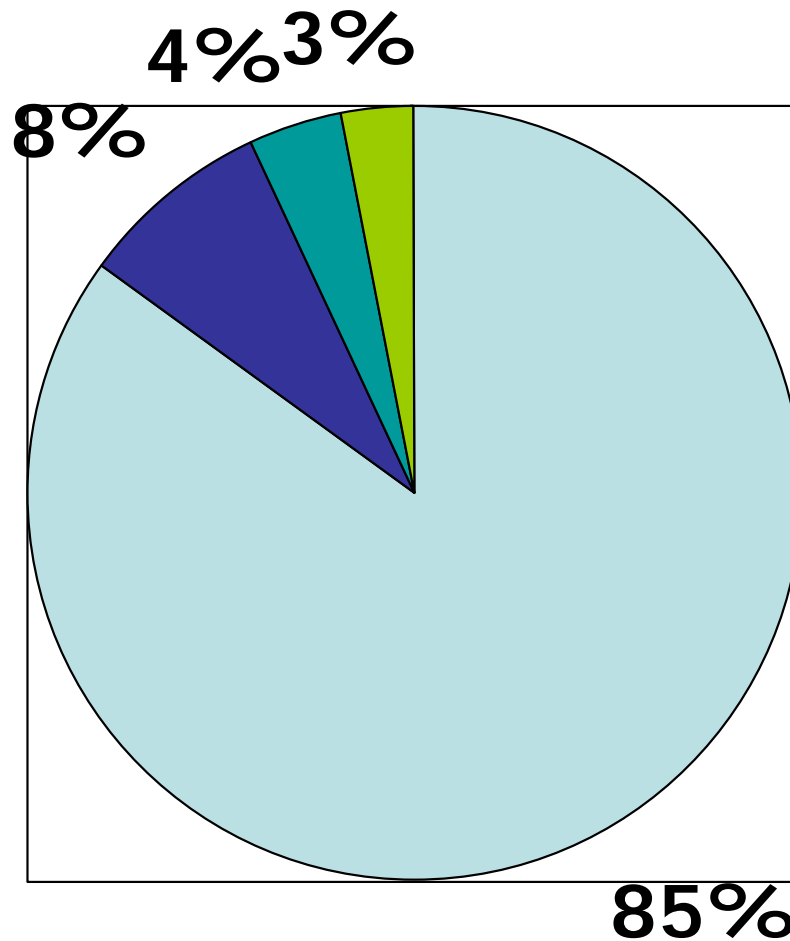
Global significance of Mediterranean tourism

Zone META*, évolution de la part de marché mondiale 2000 – 2005

Source Organisation Mondiale du Tourisme baromètre 2005, résultats provisoires



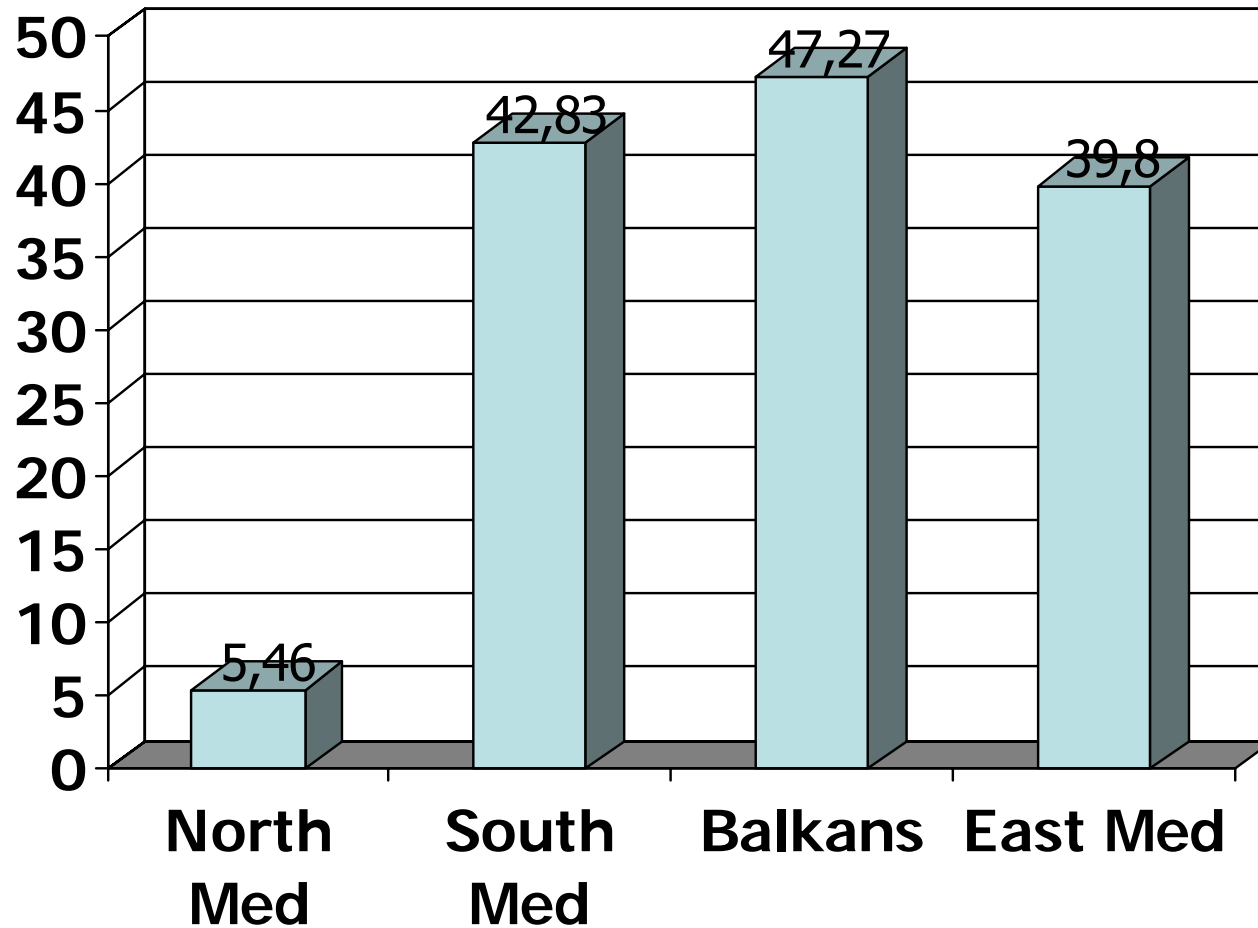
Repartition of tourist arrivals



Out of 262 million arrivals
(Source: WTO, 2005)



Tourist arrivals growth 2000-2005



(Source: WTO, 2005)

The dual issue of tourism & climate change

- **Tourism is:**
 - A fast growing GHG emitter
 - A highly vulnerable sector
- **Hence 2 intertwined issues:**
 - Tourism emissions / impact *on* climate change
 - Tourism adaptation / impact *of* climate change

Impact of tourism on climate change

- Low – and decreasing - carbon efficiency
- Fast growing share of global GHG emissions & radiative forcing
- Transport accounts for 90% of tourism emissions
- Air transport is becoming the main concern

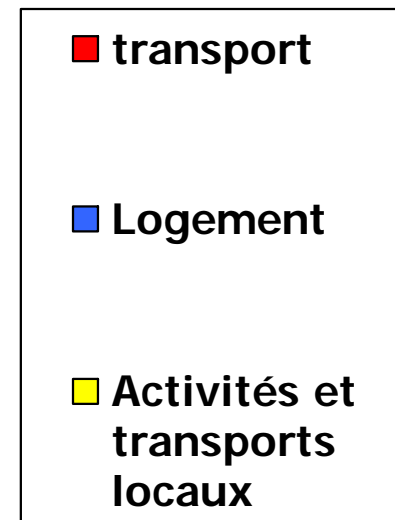
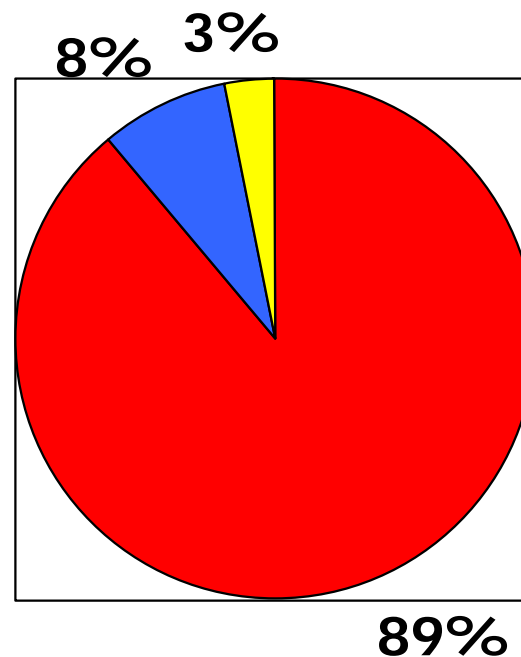


Global GHG emissions per tourism element (2002)

Répartition des émissions de GES du tourisme

Tourism is about mobility

Mobility is about transport



Perspectives for emission reduction

- **On-site environmental management: importance and limitations**
- **Air transport:**
 - Reduce air traffic
 - Reduce GHG emissions per passenger
 - Increase emissions cost
 - Emission permits
 - Taxes
 - Compensations
- **Conclusion**
 - Cocktails are nice
 - Beware of irreversible development paths

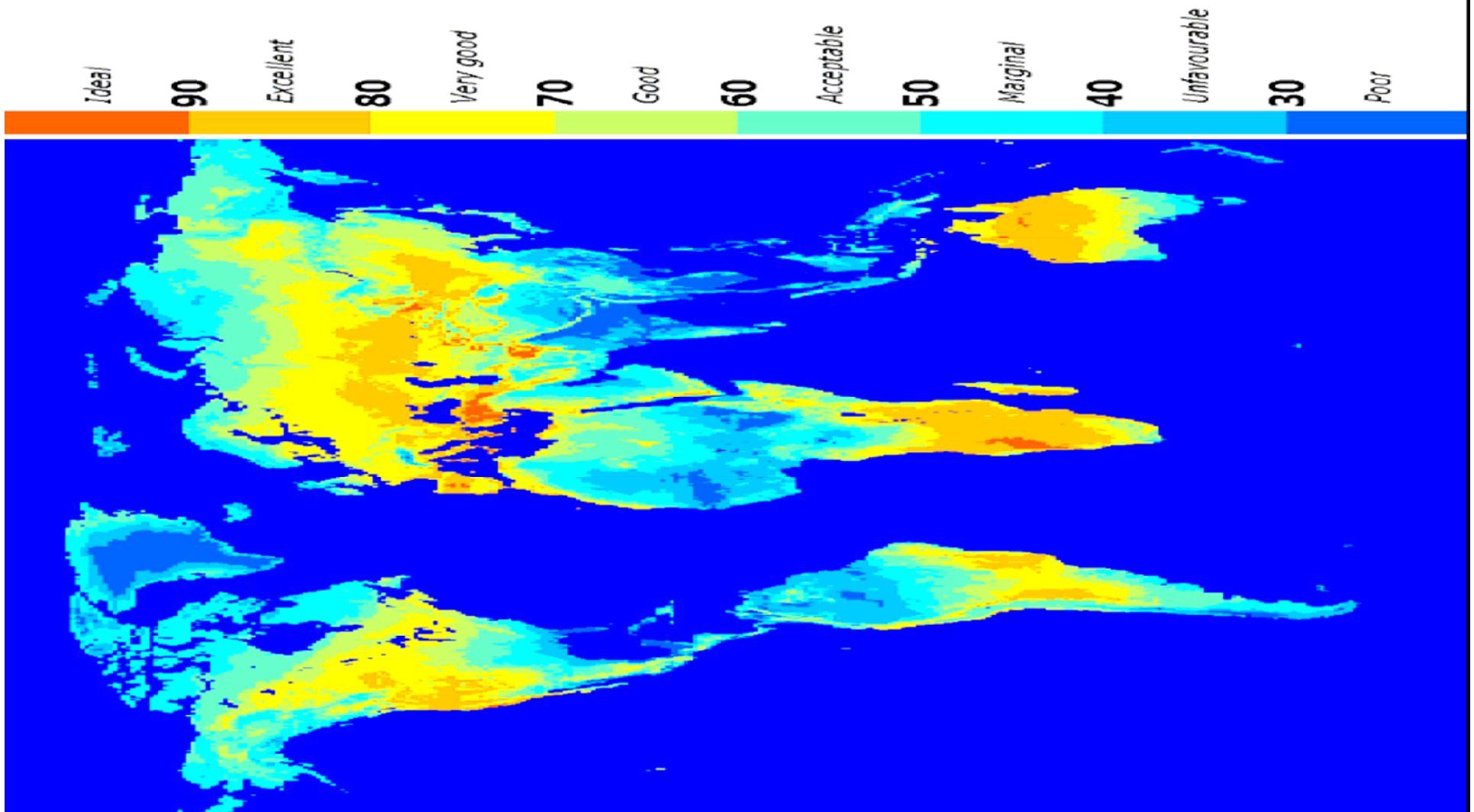


Impact of climate change on tourism

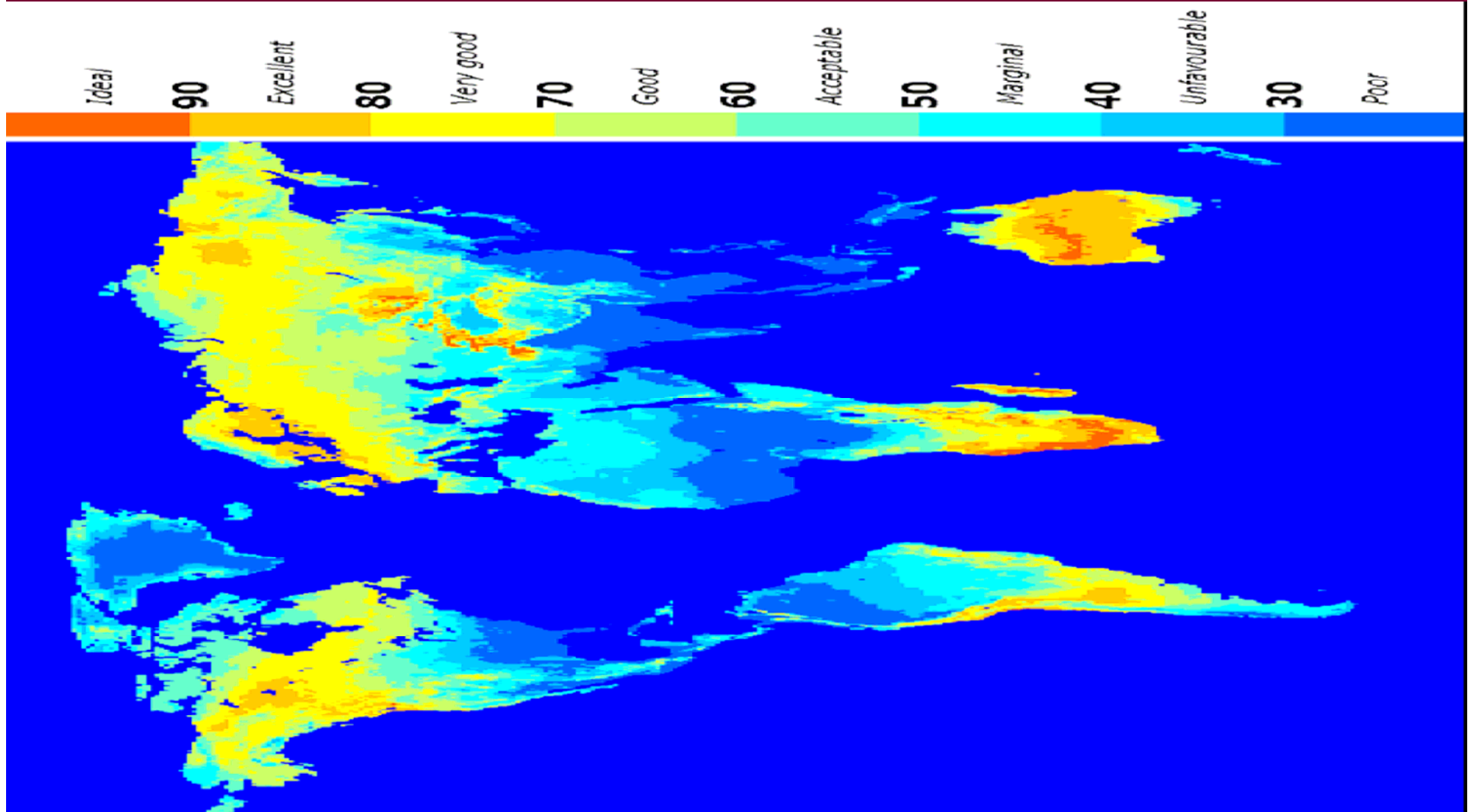
▪ The tourism-climate connection

- Climate is key to tourists motivation and satisfaction
- But the connection is complex
- An **imperfect but visually powerful** model: the Tourism Comfort Index (TCI) (adapted from Mieczkowski's Tourism Climatic Index, 1985):
 - Combines information about the average temperature, maximum temperature, humidity, precipitations, sunshine and wind
 - E.g. less rain = better, more sunshine = better, more wind = ?
 - Optimum conditions: 100
 - Flexible: criteria, weighting, rating adjustable

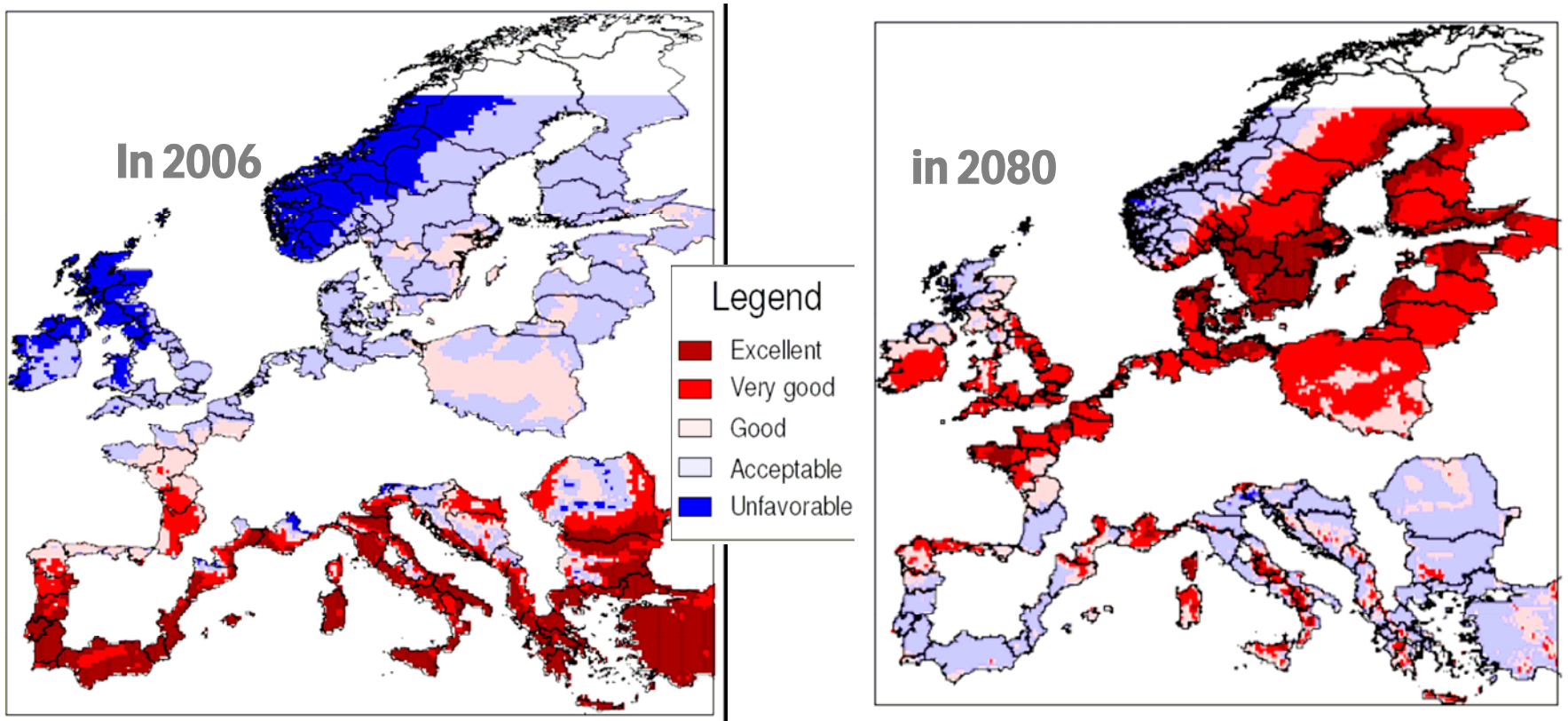
TCI in June, July & August (today)



TCI in June, July & August (2080s)

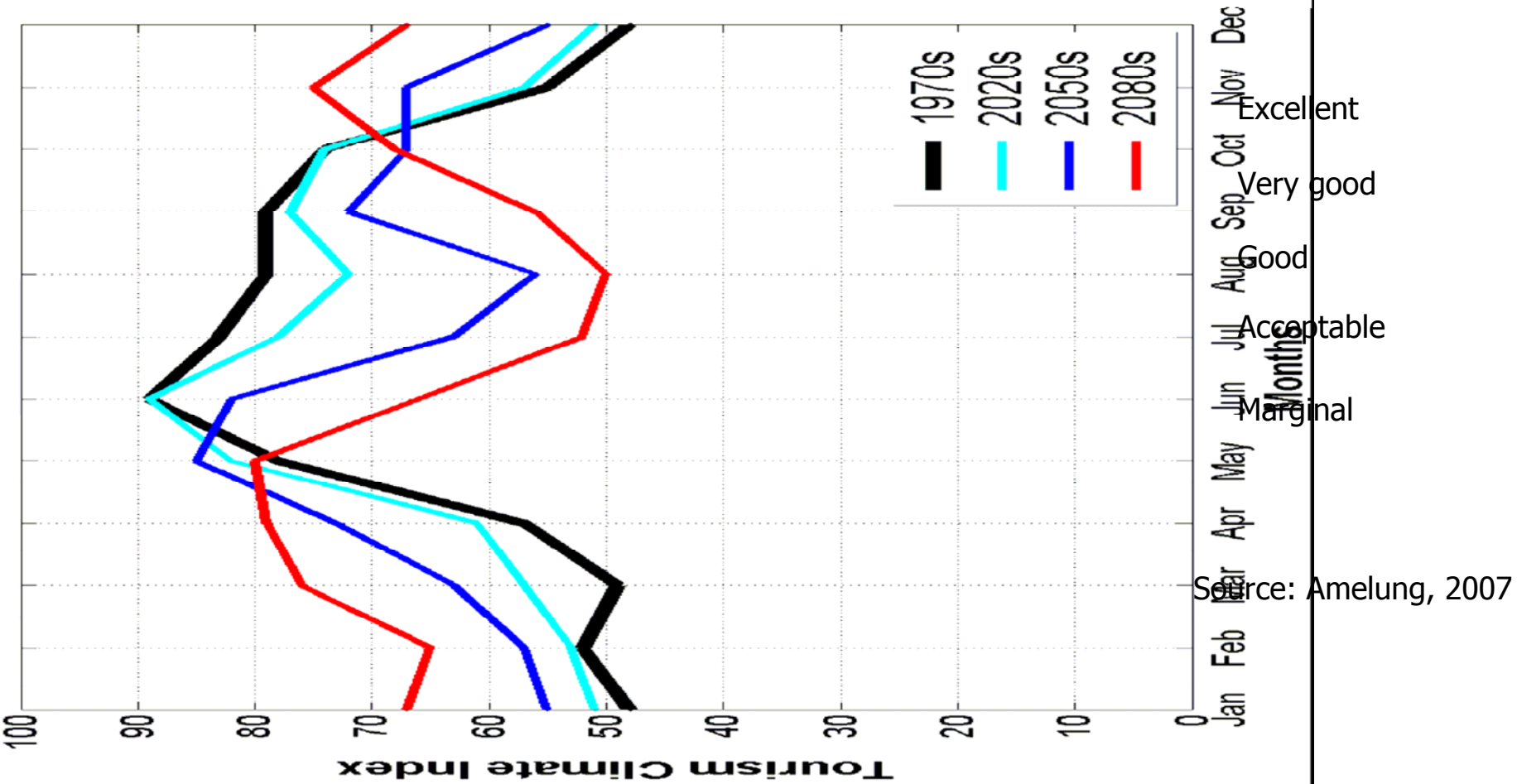


TCI over Europe



Source: Moreno 2006

TCI in Majorca, Spain



Source: Amelung, 2007

Four types of CC impacts on tourism

- **Direct impact caused by climate alteration (cf TCI)**
- **Indirect impact of CC through environmental changes**
- **Indirect impact of emissions reduction policies**
- **Consequences of CC global impact for our societies**

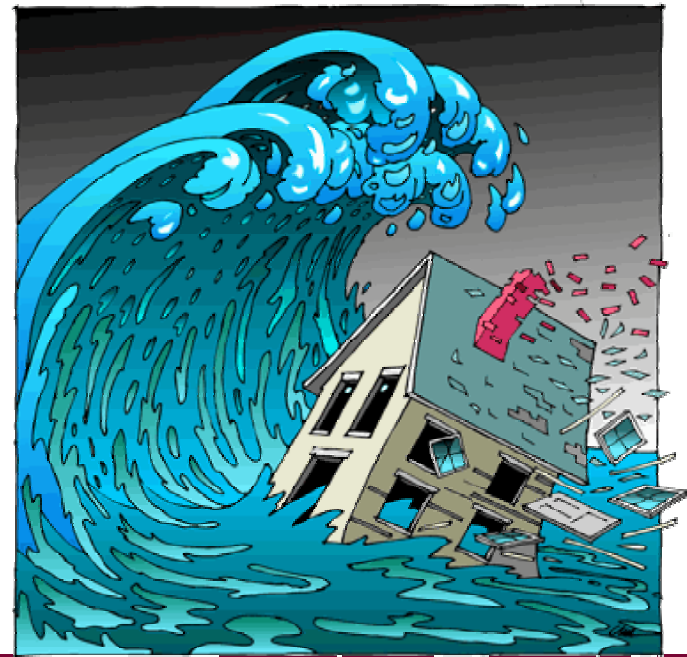
High potential to reshuffle relative competitiveness of destinations

Expected effects of climate change on the Mediterranean tourist destinations

Climate change in the place of origin	Climate change at the destination region	Implications for the destination region	Possible market reactions
<ul style="list-style-type: none"> -Much warmer, wetter winters -Warmer, drier summers -More "reliable" summers <p>Source: G. Vereczi, WTO, 2007</p>	<ul style="list-style-type: none"> -Warmer, wetter winters -Much warmer, drier summers -Changes more marked in Eastern Mediterranean -Increased heat index -More days above 40°C -More arid landscape -Small tidal range means greater sea level rise impact 	<ul style="list-style-type: none"> -Greater drought and fire risk -Increased water shortages -Greater personal heat stress -Beach degradation and habitat loss due to sea level rises -Vulnerability to more tropical diseases (e.g. malaria) -More flash floods -Poor urban air quality in cities 	<ul style="list-style-type: none"> -Improvement of Northern European summers triggers more domestic holidays -Decreased incentive for Mediterranean summer holidays -Increased incentive for shoulder month Mediterranean holidays -Increased incentive for southerners to go north

From impacts to vulnerability

- **Tourism and climate change hotspots**
- **Indirect impact particularly high for coastal tourism**
- **Impact of mitigation policies on South/East Med tourism**
- **Tourism reinforces its own vulnerability by its resource-intensive pattern**



From vulnerability to adaptation

- **Tourists will adapt**
- **What about public planners and private operators/investors?**
 - Contrasted interests
 - Option 1: move
 - Option 2: go sober
 - Option 3: diversify
 - And beware of “solutions” that reinforce the problem...
- **In a nutshell:**
 - Some businesses will be severely affected
 - Need to get past the disaster-rhetoric
 - And to provide more local information

Conclusion

- **CC is becoming a key issue for Mediterranean tourism**
- **Where is the right balance between adaptation and mitigation?**
- **Need to make better use of climate information**
- **Start with no-regret and no-cost options for mitigation, adaptation... and return on investment**
- **But will not exonerate us from more powerful and painful “cocktails”**

In a highly sensitive context – economically, socially and culturally

Thank you



raphael.bille@iddri.org
www.iddri.org

ANNEX VII

TOURISM AND CLIMATE CHANGE

A breakout session was held to discuss the impact of tourism on climate change and vice versa. The session was chaired by Mr Patrick Van Klaveren (Monaco), with Mr Magdi Ibrahim (ENDA Maghreb) as Rapporteur. Mr Raphael Bille (Institut du Developpement Durable et des Relations Internationales (IDDRI)) gave a presentation entitled "Tourism and climate change", which informed the ensuing discussion. Instead of making recommendations on such a wide and complex subject, participants declared themselves in favour of setting out the major areas of concern and points of view that emerged from the discussion. Various speakers emphasized the importance of cultural tourism in the Mediterranean, but at the same time underlined its fragility in the light of the impact of climate change on historical monuments and landmarks.

- Despite a marginal fall, Mediterranean tourism accounts for over 30 per cent of the global tourism market, with the northern Mediterranean countries as the main beneficiaries. The tourism sectors in the southern and eastern Mediterranean countries are nevertheless experiencing the highest growth.
- With regard to the impact of tourism on climate change, transport is responsible for some 90 per cent of emissions. Options for reducing those emissions, such as a move to maritime transport, which has its own impact, or a passenger tax, are somewhat unrealistic.
- As for the impact of climate change on tourism:
 - The relation between the two is complex and involves more than just simply such immediate effects as increased heat and shifting seasons. A so-called tourism comfort index has therefore been developed as a function of that relation.
 - Emission-reduction policies also have their own indirect impact.
 - Environmental changes, such as a rise in sea level, also have indirect impacts.
 - Social impacts could affect tourist destinations.
- Concerning the impact of tourism on vulnerability:
 - It is necessary to rethink land-use planning from an overall perspective that takes into account climate change factors.
 - There are, however, implications for the landscape and ecosystems, the resilience of which is reduced through such factors as coastal erosion and increased fire risk.
- With regard to adaptation, one option might be to seek a reduction in mass tourism while still maintaining the revenues from tourism on which many Mediterranean economies depend. The achievement of such an option might involve:
 - changes in tourist destinations or
 - the promotion of cultural or high-end tourism.

- Striking a balance between prevention and adaptation will require careful management of information on the impact of tourism on climate change; parameters other than those inherent in the uncertainties of climate change and potential disaster should be taken on board. Politicians, tourist operators and the public at large should be made aware of the options for lessening the impact of tourism and non-viable practices on climate change. Ultimately, the short-term approach should be avoided in the interest of developing a spirit of solidarity and creating new opportunities, utopian though that idea might be.
- Options for prevention and adaptation that are not too costly and bring a return on investments should be entertained.
- It is essential to keep in mind that the increasingly acute impact of climate change on tourism calls for medium- and long-term measures.

ANNEX VIII

Presentation of the European Union's SIA-EMFTA project

by Ms Carol Chouchani Cherfane



SUSTAINABILITY IMPACT ASSESSMENT OF THE EURO-MEDITERRANEAN FREE TRADE AREA

Phase III Findings & Proposed SIA Monitoring Mechanisms

Carol Chouchani Cherfane
SIA/EMFTA Regional Coordinator
Acting Team Leader, Technology and Enterprise Development
Sustainable Development and Productivity Division
United Nations Economic and Social Commission for Western Asia

A project funded by the European Commission, DG RELEX/EUROPEAID



SIA/EMFTA Consortium led by The University of Manchester in partnership with:



Deloitte.

odi
Overseas Development Institute



Consultation with MCSD on SIA/EMFTA

Phase I (2004-2005)

- Methodology
- Presentation of SIA to MCSD / Genoa (June 2004)

Phase II (2005-2006)

- Scenario Developed & Consultations on Findings
 - No EMFTA Scenario
 - Full trade liberalization scenario for:
 - Industry, Agriculture, Services, South-South trade
- MCSD preparation of MSSD focus of 2005 meeting, MSSD used for SIA
- Consultation on SIA findings with MCSD / Cyprus (May 2006)

Phase III (2006-2007)

- Case Studies & Recommendations
- Consultation with MCSD on Monitoring / Istanbul (May 2007)

Phase III TOR

- **Stage 1 – completed November 2006**
 - Examines four key issues identified during Phase II Consultations for further analysis
 - Proposes possible means of avoiding significant adverse impacts and enhancing beneficial ones for MPCs
 - Examines the potential for EU assistance through funding lines and other forms of support
- **Stage 2 – nearly complete**
 - Proposes SIA monitoring mechanism
 - Draws upon consultations with Advisory Committee & Stakeholders
 - Presents outcomes of national/regional consultations on key issues
 - Provides case study findings
- **Stage 3 - Final Report**
 - Reviews SIA/EMFTA findings
 - Offers final recommendations

Phase III, Stage 1

Key Issues

1. Environment-related aspects

- Impact on water resources
- Environmental services

2. Agriculture

- Small scale agriculture and rural livelihoods
- Environmental and product standards and opportunities in EU markets

3. Tax reform

4. Urban employment & industrial diversification

Environment-related aspects (water resources)

- Extensive support on water resource issues is already being provided through EC-supported initiatives
- Support may be tailored and extended to ensure that it addresses the problems in those specific locations where agricultural production is expected to rise through the EMFTA, and where water resources are already under stress
- Detailed research is needed in each country, undertaken by the country's own institutions, with assistance where appropriate from relevant EC programmes

Environment-related aspects (environmental services)

- Minimal impact (positive or negative) when private sector involvement is low
- Private sector involvement in the region is increasing and may be accelerated by the EMFTA
- Liberalisation may add significant further efficiencies to service delivery
- Liberalisation will not reduce the need for imaginative and effective public sector initiatives and administrative frameworks, nor the level of public finance needed for delivering services to poorer sections of the community
- Sophisticated regulatory frameworks will be needed for schemes which go beyond subcontracting to private sector management of the service
- EMFTA will give low benefits and low risks if private sector is restricted to subcontracting
- EMFTA gives potential for high benefits with high risks for higher degrees of privatisation
- Assistance with developing appropriate regulatory frameworks may be a valuable component of EU support

Agriculture

(small-scale farming and rural livelihoods)

- Institutional infrastructure needed to accelerate rural diversification is weak, particularly for women and young people
- Greater research is needed into the social and economic capabilities of individual local communities
- National development strategies need to capitalise on those capabilities, to make rural development a central component of national development
- EU experience of integrating rural development into national development is of limited relevance to MPCs
- Closer parallels are to be found in South East Asia experience, which minimised rural problems while maximising overall economic development
- EU support for either urban or rural development may be targeted to promote similar measures to those used in South East Asia, within a strategically coherent framework for integrated urban and rural development

Agriculture

(environmental and product standards and market opportunities)

- For both conventional agricultural produce and new initiatives, such as organic and hydroponic products, are highly dependent on iterative ongoing programmes of market research and agricultural research
- Convergence of environmental and product standards in MPCs towards those of the EU offers potential benefits, but is constrained by the ability of MPCs to respond.
- Product labelling, geographical indications, cumulation of rules of origin, liberalisation of related services, quality certification, and organic farming may affect MPC marketing strategies for increased exports to the EU and elsewhere.
- Need for government initiatives is restricted mainly to in-depth research of this nature to identify areas where coordinated support might contribute to demonstrably profitable private sector initiatives
- There is little scope for additional interventions or EU support related specifically to the EMFTA that would enhance its potential benefits beyond those that are expected to emerge through market incentives

Tax reform

- Most MPCs have introduced VAT systems which would in principle be appropriate for replacing lost tariff revenues without adverse effects on income distribution
- All countries' tax systems have scope for significant improvements in efficiency, as well as the need for higher rates in response to EMFTA
- Tax reform is not currently covered in the Barcelona+10 work programme, and may be considered an important area for inclusion in order to avoid significant adverse EMFTA impacts
- Assistance may be targeted in particular at tapping the experience of EU countries in developing efficient tax systems
- In the light of the recommendations of the UK government Stern report on climate change, provision of some of the finance needed to incorporate carbon taxes into the tax reforms is a second potential area for EU support

Urban employment & industrial diversification

- Since the mid-1990s the EC has supported Mise à Niveau programmes to help enable MPC industries respond to increased EU competition and avoid rising unemployment
- Mise à Niveau has been relatively successful in some countries, particularly Tunisia, and less so in others
- The main success factor has been strong direction and ongoing funding by national government
- Detailed success factors may be identified through comparison with similar SE Asian programmes
- Each MPC needs to tailor its own programme to address specific local issues
- When used to support local initiatives, EU assistance can make an important contribution to mitigating the potentially adverse employment impacts of the EMFTA and enhancing the potential economic gains

Phase III, Stage 2

Country Case Study

Detailed case study undertaken on Morocco

- Rural development, water use optimization
- Agricultural competitiveness, non-farm income sources
- Gender dimensions, food security
- Regional targeting of agricultural policies, in view of drought management, productivity, different zones (mountains, pastures)
- Industrial development and modernization program (mise à niveau)

Lessons learned for Eastern Mediterranean Countries (EMCs)

- Highlights similarity between development visions, but potential differences in impact between MPCs due to differences in economic structures.
- Shared concerns regarding small and medium producers, water use optimization, need for linking rural-urban development
- Establishment of industrial zones/special economic zones in EMCs increasing.

Comments Welcome!

1. Environment-related aspects

- Impact on water resources
- Environmental services

2. Agriculture

- Small scale agriculture and rural livelihoods
- Environmental and product standards and opportunities in EU markets

3. Tax reform

4. Urban employment & industrial diversification

5. Morocco case study issues to consider

- Points to consider for EMCs

Phase III, Stage 2 (draft report)

Proposed Monitoring Mechanism

Purpose

- The SIA has identified potential impacts of the EMFTA
- Follow-up is needed to determine if these impacts occur, in view of assisting policy-makers to appropriately respond to impacts as they occur
- Requires a mechanism that ensures a “participatory and practical approach” to monitoring

Monitoring Principles

- Follow-up is essential to determine outcomes
- Transparency and openness are important
- Impact assessment process should include a commitment to follow-up
- Proponent of change must accept accountability for implementing follow-up
- Regulators should ensure that follow-up takes place
- The community should be involved
- All parties should seek to cooperate openly and without prejudice
- Mechanisms should be appropriate for the cultural and societal context
- Cumulative effects and sustainability should be considered
- Follow-up should be timely, adaptive and action-oriented
- Continuous learning from experience should be promoted
- There should be a clear division of roles, tasks and responsibilities
- Follow-up should be objective-led and goal-oriented
- Methods used should be fit for purpose
- Clear performance criteria should be set
- Follow-up should be sustained over the entire life of the activity
- Adequate resources should be provided

Monitoring Framework

Mechanism should be participatory and practical.

Data requirements	Institutional responsibilities
<ul style="list-style-type: none">• Impacts and other data to be monitored• Indicators and sources of data• Data analysis	<ul style="list-style-type: none">• Responsibilities for monitoring• Arrangements for consultation and participation• Awareness raising and capacity building• Integration with policy-making

Data: What needs to be Monitored?

1. **Negotiated agreements** by comparison with the SIA scenarios
2. **Implementation of agreements**, e.g. level of tariffs, non-tariff barriers, etc.
3. **Parallel actions** by comparison with the SIA recommendations
4. **Changes in production and trade flows** by comparison with SIA estimates
5. **Sustainability impacts** (economic, social, environmental, process) in each of the MPCs and the EC.

Data: Indicators for Monitoring

40 Indicators drawing from existing data sources,
including MSSD indicators

EMFTA implementation		Data source
1	Negotiated agreements – SIA scenarios	published agreements (qualitative)
2	Implementation of agreements (e.g., tariffs, peaks, escalation, NTBs)	national, EC, WTO
3	Parallel actions – SIA recommendations	National (qualitative)
4	Imports/exports EU-MPC (non-agricultural, agricultural, services)	national, EC, WTO
5	Imports/exports MPC-MPC (South-South) (non-agricultural, agricultural, services)	national, EC, WTO
6	Production (non-agricultural, agricultural, services)	national, EC, WTO

Indicators of SD impacts

Economic			
Real income	7	GDP per capita	national/WB
	8	GDP growth rate (total, per capita)	national/WB
	9	Average input prices, services	national
	10	Consumer price index	national
	11	Tariff revenue, total government revenue	national/WB
	12	Total agricultural exports/imports	national, EC, WTO
	13	Total industrial exports/imports	national, EC, WTO
	14	Total service exports/imports	national, EC, WTO
Fixed capital formation	15	Fixed capital formation	national/WB
Employment	16	Unemployment (urban, rural, total)	national/WB
Social			
Poverty	17	Poverty level (\$US/day 1, 2)	national/WB
	18	Average wage rates (skilled, unskilled, industrial, agricultural)	national/WB
	19	Food imports as percent consumption	national/WTO
	20	Social expenditure	national/WB
Health and education	21	Health expenditure, education expenditure	national/WB
Equity	22	Gini index	national/WB
	23	GDI	UNDP
	24	GEM	UNDP
	25	Cultural diversity	MSSD a17

Indicators of SD impacts

Environmental			
Biodiversity	26	Loss of arable land by desertification etc.	MSSD 16
	27	Surface of protected coastal and marine areas	MSSD 26
Environmental quality	28	Proportion of the population with access to safe drinking-water (total, urban, rural)	MSSD 4
	29	Proportion of the population with access to sanitation (total, urban, rural)	MSSD 5
	30	Household waste generation per capita	MSSD 21a
	31	Number of uncontrolled dumping sites	MSSD 21b
	32	Air quality index	MSSD 22
	33	Greenhouse gas emissions (total, total transport, shipping, air)	MSSD 8 (modified*)
Natural resources	34	Water efficiency index (total and per sector)	MSSD 1
	35	Exploitation index of renewable water resources	MSSD 3
	36	Energy intensity, total and per sector	MSSD 6
Process			
	37	Energy intensity, total and per sector	MSSD 6
	38	Public and private expenses for research and development	MSSD 34
	39	Transport infrastructure investment	MSSD a5
	40	Rural-urban migration rate	national

* Indicator 33 (greenhouse gas emissions) will need to be a modified version of that MSSD indicator in order to give specific information on transport emissions as well as total emissions.

Data Analysis

- **Regularized collection, compilation, reporting, dissemination of indicators needed as part of monitoring mechanism**
 - Requires consistency in reporting and reporting methods
 - Eurostat might be responsible for collection of indicators for EU countries, with reference to European Environment Agency (EEA) outlook reports for environmental components
 - Medstat project of Eurostat has partnership with Blue Plan on collection of environment indicators; collection of other indicators not as advanced.
- **Analysis of the data also needed**, thus some arrangement necessary to support research studies or *ex post* assessments triggered by reported changes in indicators
 - Proposed that such studies should initially be undertaken on an *ad hoc* basis, and that a more formal approach should be considered if accumulating experience indicates an ongoing need.
 - DG Research might provide a suitable funding line for the necessary research identified in monitoring the EMFTA.
- **Provides the linkage between the indicators and the SIA Scenarios**
 - Draw upon SIA summary tables to determine dynamic changes (impacts) over reporting period based on related indicators.

Impact on <u>Industrial Products</u> Summary Table	Countries / sectors affected	Causal factors	Factors affecting significance	Potential significance		Indicator
				ST	LT	
Economic						
<u>Real income</u>						7
welfare	EU manufacturers	Increased exports		↑	↑	13
	Morocco, Tunisia, others less	lower consumer and input prices	pass through of tariff reduction to domestic prices	↑	↑	10
government revenues	Algeria, Lebanon, Palest., others less	reduction in tariffs	compensation through other revenue generating activities	↓	↓	11
<u>Fixed capital formation</u>	Algeria, Egypt, Tunisia, Morocco, others less	production changes, firm closures, new investment	investment climate, firm dynamics	↓	-	15
<u>Employment</u>	Algeria, Egypt, Tunisia, Morocco, others less. Food and beverages, textiles, automotive, others	production changes, labour productivity	wages policy, labour market flexibility, training, long term growth	↓	-	16
Social						
<u>Poverty</u>						17
unemployment	Algeria, Egypt, Tunisia, Morocco, others less. Food and beverages, textiles, automotive, others	production changes, labour productivity	existing unemployment and vulnerability, wages policy, training, workforce mobility, transferability of skills, long term growth	↓	-	16
wage rates	Algeria, Egypt, Tunisia, Morocco, others less. Food and beverages, textiles, automotive, others	production changes, labour productivity	wages policy, workforce mobility, transferability of skills, long term growth	↓	-	18
social support	Algeria, Lebanon, Palest., others less	government revenue decrease	compensation through other revenue generating activities	↓	↓	20

Impact on Agriculture Summary Table	Countries / sectors affected	Causal factors	Factors affecting significance	Potential significance		Indicator
				ST	LT	
Environmental						
<u>Biodiversity</u>	Positive and negative effects in locations where production falls and rises.	Production changes and pressures on resources	Existing levels of stress. Implementation of programmes to protect sensitive areas and promote sustainable use	↑↓	↑↓	26, 27, 35
<u>Environmental quality</u>						
water quality	Positive and negative effects in locations where production falls and rises.	Production changes, greater intensification, greater resource efficiency	Stronger regulation, support for efficiency improvements	↑↓	↑↓	28
climate change	all	International transport	transport modes	↓	↓	33
urban environment	all	Loss of rural jobs exacerbates trends for internal migration	Town planning systems and infrastructural investment	↓	(28, 29, 31
Natural resources	all	Positive and negative effects on water abstraction and land conversion. Economic growth.	Existing levels of stress. Water management and land use policies and regulations	(((26, 35
Process						
<u>SD principles and strategies</u>						
General	all	Consistent with most principles and strategic objectives		-	↑	
production/consumption	MPCs	Accelerated growth	Environmental policies	-	↓	8
rural and urban development	MPCs	Rural-urban migration	Pace of liberalisation, industrialisation	-	↓	40

Responsibilities for Monitoring

At the Regional Level, recommended that EC & MPC Governments:

- **Establish a regional body** to adopt a supervisory role in monitoring the EMFTA;
- **Ensure top level representation** on this supervisory monitoring body by government officials representing economic, trade, social and environmental issues;
- **Provide for civil society representation** on the supervisory monitoring body which includes the private sector (for agriculture, industry and services), environmental groups and social actors such as trade unions and universities;
- **Establish a reporting and advisory role for the supervisory body**, to the Euro-Mediterranean Parliamentary Assembly and to high level and other Ministerial meetings of the Euro-Mediterranean Partnership Barcelona process.

Responsibilities for Monitoring

At the National Level:

- Although, Regional Body would be responsible for monitoring the EMFTA, EC and MPCs Governments, would need to:
 - Provide representatives to the proposed Regional Body for EMFTA monitoring
 - Contribute to the provision of monitoring data.
 - Establish transparent mechanisms at the National Level for responding to recommendations from the monitoring body

Linkage to Neighbourhood Policy & Action Plans

- In view of the close similarities it is proposed that monitoring of the EMFTA at regional level be closely co-ordinated with the national level monitoring of the Action Plans.
- Governments should thus establish a formal relationship between the joint EC-MPC bodies responsible for monitoring Action Plans under the Neighbourhood Policy.

Consultation & Participation

Transparent and open the monitoring mechanism necessary

- The effectiveness of the monitoring system will be highly dependent on public scrutiny of the mechanism and its outputs.

This will require:

- Information Dissemination
 - Including website (English, French, Arabic) with data on indicator, reports
- Contributions from Civil Society
 - Representation of NGOs, private sector on regional monitoring body
 - Contributions should be encouraged through the website and liaison with stakeholder groups
- Role for Parliamentarians
 - Information dissemination and consultation with:
 - Committees in the European Parliament and MPC parliaments dealing with trade, environment, social issues and regional issues
 - Regional groups of the Euro-Mediterranean Parliamentary Assembly (EMPA)
 - Circle of Mediterranean Parliamentarians for Sustainable Development (COMPSUD)

Awareness Raising and Capacity Building

Need to build awareness about monitoring mechanism that is ultimately established.

- Mechanisms should not only disseminate information, but also ensure that stakeholders have ability to access it and understand it so as to be able to effectively contribute to the monitoring process.
- Could include workshops or other mechanisms to raise awareness about the monitoring program and strengthen capacity for participating in the process.
- Could provide forum for building regional cooperation in related areas.

Integration with Policy-Making

European Commission

- EC Steering Committee for SIA/EMFTA preparation already established. The Committee should be maintained for supervising the EC's involvement in the monitoring mechanism, with similar participation of DGs responsible for trade, environment, social issues, key economic sectors, foreign relations and development assistance.
- EC issues position paper on SIA reports; EC should also issue papers on regular (annual) reports issued by the Regional Body, including summary of inputs from consultation with civil society.

MPCs

- Each MPC Government should establish a Steering Committee similar to that in the EC, with similar participation of all relevant Ministries, to supervise its involvement in the monitoring mechanism. Could be linked to those overseeing Neighborhood Policy Action Plans
- MPCs should also consultant and issue position papers in response to reports issued by the Regional Body, as it concerns national developments.

Conclusions

- Mechanism for monitoring SIA/EMFATA outcomes must be based on sound principles.
- Mechanism should operate at the regional level based on inputs from the EC and MPCs, with independent monitoring arrangements also operating at the national level.
- Funding for the mechanism needs to be shared, with inputs provided from the EC and MPCs.
 - Specific funding lines might be developed for ad hoc activities (e.g., ad hoc studies, website)
 - Funding would also be needed to ensure the regular and coordinated operations of the Regional Monitoring Body
 - Body responsible for collecting/compiling reports on indicators needs not necessarily be the same body responsible for data analysis, dissemination and consultation.
- System must be transparent, participatory and practical, with the ability to inform high-level decision-making on sustainability in a variety of areas related to trade and sustainable development.



Please send us your comments!

E-mail: sia-emfta@man.ac.uk

Website: <http://www.sia-trade.org/emfta>

Website available Arabic, English and French

Thank you!