The Impact of Climate Change in the Mediterranean

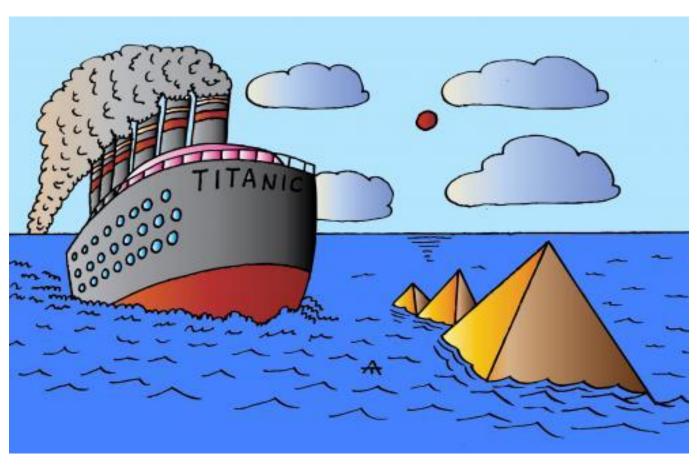
Designing short-, medium- and long term regional strategy for dealing with climate change

Rafiq Al-Husseini DSG Environment & Water, UfM

ELIMEP Meeting Athens 24-25 February 2011

2/25/2011

Climate Change and the Mediterranean In the year 2525 (Zager & Evans 1969)



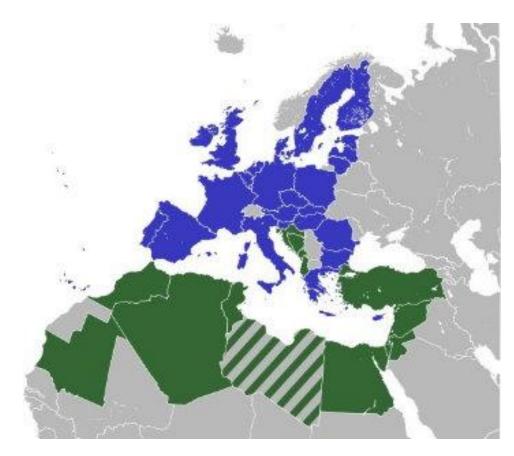
Rather than Clash and Conflict between Euro-Mediterranean Empires & Civilizations...



UfM Environment & Water Division

23/03/2011

UfM aims to achieve Regional Security, Cooperation and Development through Positive Dialogue, Constructive Discourse and Common Projects



UfM Secretariat

- **Statutes** (March 2010) Agreed by 43 members of SOM
- **Structure: SG** +**6 DSGs** (Sep/Oct 2010)
- SME + Funding (Italy)
- Civil Protection (Malta)
- Energy (Greece)
- Transport & Urban Development (Turkey)
- Education & Research (Israel)
- Environment & Water (Palestine)

UfM Environment & :
Water Division

23/03/2011

Specific Objectives for UfM Secretariat Environment & Water Division

- Identify and promote concrete UfM branded projects in Environment and Water and explore funding mechanisms
- 2. Promote dynamic implementation of Environment H2020 agenda and other major considerations including climate change
- Secure wide and meaningful stakeholder participation, including private sector and NGO participation, and enhance operational synergies
- 4. Ensure completion of strategic action planning for the Water sector and promote substantive collaborations for projects' development.
- 5. Prepare Studies on relevant Environment & Water issues and establish/develop networks

Guiding Principles for UfM-Branded Projects

- Regional/Sub-Regional/transnational
- Innovative
- Cost- Beneficial/Effective
- Piloting Cutting-Edge Technology
- Applying as much "Green", "Clean" and "Renewable Energy" as possible in project development

Climate Change & the Mediterranean

- Serious environmental threats, notably to *biodiversity*, natural resources, *habitable areas*, health and food security.
- Major challenges of water scarcity and drought.
- *Global warming* will increase pressure on water resources already squeezed by escalating demand from growing populations, improved standard of living and per capita water needs

Global Mitigation Policy Instruments on GHG Emissions

Several policy instruments put a price on Green House Gas emissions:

- carbon or energy taxes;
- removal of environmentally harmful subsidies;
- tradable permit schemes;
- **project-based flexibility mechanisms** of Kyoto Protocol (UNFCCC).

Application of GHG mitigation Instruments in the Med countries

- **OECD countries** applied one or more instrument and to some extent
- Priority is to extend their use and to link them so as to provide a strong and consistent price signal across all GHG-emitting activities
- Developing global carbon price decreases total costs of reducing GHG emissions, also helps to level playing field between countries

2/25/2011

Adaptation Challenges to non-EU Countries of UfM



Adaptation Challenges to non-EU Countries of UfM

- Integration of **cost-effective adaptation** to climate change **into all policy areas** is a new challenge in all countries, esp. Med. southern and eastern rims.
- Non-EU countries in UfM region need sustained financial and technical support to help increase their capacity to adapt to the level of climate change already locked-in due to past emissions.

UfM Climate Change Policy Guiding Principles

- Integration of climate change and energy policy objectives is essential
- Today's investments will "lock in" the infrastructure, fuel and technologies to be used for decades to come
- Buildings and transport infrastructure put in place today will be in use for decades, even centuries

UfM Climate Change Policy Guiding Principles (2)

- Promoting innovative and participatory processes and initiatives will allow Mediterranean countries to have strong action-oriented voice in support of global efforts to tackle climate change, through the UNFCCC process
- Ensuring that issues related to funding of adaptation measures and safe and sustainable low-carbon development opportunities for the region are explored at the international level and fed into the longer term post-Kyoto framework

UfM Climate Change Policy Guiding Principles (3)

- Greater policy attention to accelerate up-take of existing "green" technologies and practices that encourage greater energy efficiency and achieve large reductions in GHG emissions needed in coming decades
- Market-based instruments provide strong incentives for innovation, but market forces alone may not be enough; firms under-invest in research and development (R&D) if they fear they will not be able to earn a decent profit on resulting product development

UfM Climate Change Policy Guiding Principles (4)

- Climate change concerns should be integrated in all areas of public policy, particularly economic and social policies.
- This means addressing possible conflicts and defining trade-offs between policy objectives, as well as identifying and strengthening policies with potential "co-benefits".
- The co-benefits of GHG mitigation actions can include improved energy security, urban air quality and human health benefits

Climate Change SUfM Short/Medium-Term Strategies

- 1. Raising awareness on all levels of citizens (through stakeholders platforms and forums), politicians and governments (esp. in south and eastern rim) about degree and consequences of environmental degradation.
- 2. **Promotion**, through stimulation of sub-regional or transnational projects, **of energy efficiency processes** (labor intensive)
- 3. Facilitation, through stimulation of sub-regional or transnational projects, of technology transfer for more utilization of Green Renewable Energy (capital intensive)

Climate Change SUfM Short/Medium-Term Strategies 2

- 4. Encouragement of emissions mitigation and reduction (targets and actions), through **adaptation strategies** (based on technical, institutional or financial solutions) **that take into account the local context**.
- 5. Capacity building and knowledge sharing between institutions on several levels (central and local Government, technical institutions, private sector, civil society).

Climate Change Strategy 2/25/2011

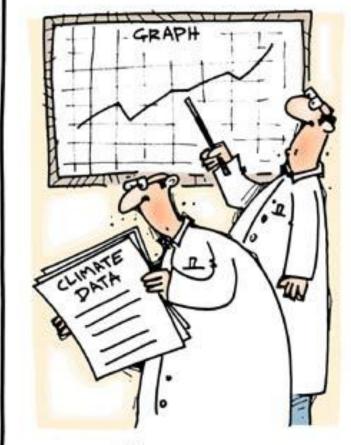
Climate Change SUfM Short/Medium-Term Strategies 3

- 6. **Incentivization of adaptation using financial tools** such as GEF Adaptation Fund, Carbon Development Mechanism, Green climate fund, other
- 7. **Strengthening of regulatory frameworks and enforcement activities** through introduction of new
 (or utilization of already existing) directives, regulations, legislation
- 8. Encouragement of Forests protection and expansion schemes

Points we will remember for effective action on Climate Change in the Med!

- Promote/market longstanding universal climate change policies by adopting an innovative approach
- "Innovation is central to tackling climate change" Michael Grubb Visiting Professor, Imperial College, London
- Reach parts others have not been able to reach
- Involve women and youth in the battle; they have proved themselves in being catalysts for revolution and change
- Think big but hail even the tiniest step forward!

ASSESSING THE IMPACT OF CLIMATE CHANGE ...



THE SCIENTISTS



THE POLITICIANS

2/25/2011

Thanks for Listening!

