

**Mediterranean Report on SBC
Outcomes of the Regional Conference SB04MED
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Main Host : SD-MED International Association**

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The topics and issues of the SB04MED Conference were prepared by the “**SD-MED**” **Association**¹, being responsible for the organizational and scientific coordination of the SB04MED Conference entitled “ Sustainable construction: Action for sustainability in the Mediterranean region”. This Conference has constituted a regional Event prior to the Global SB05 Conference "Action for sustainability " held in Tokyo, last September. It has constituted, at the same time, a **Euro-Mediterranean cooperation and dissemination action in the frame of the Life-Environment Programme of the European Union**, and more specifically in the frame of the **LIFE “SB-MED” Project** concerning “*Enhancing transferability of innovative techniques, tools methods and mechanisms to implement sustainable building in the Mediterranean basin*”. Consequently, this event has constituted a synergy of international range aspiring to **articulate local, national, regional and international initiatives** for the promotion of both the idea and practice of sustainable urban environment and more specifically of “sustainable building” and construction.

The main plenary session topics were structured around :

1. The specific conditions (economic, social, environmental, cultural) defining urban sustainability, Sustainable building (SB) and Sustainable Construction (SC) in the Mediterranean region.
2. The policies and strategies, the perspectives and barriers for implementation of SB in the Mediterranean countries.

There has been also a closing plenary trying to make a first synthesis of the round tables outcomes and trace conclusions for the elaboration of the SBC Report for the Mediterranean region, to be presented in SB05 Tokyo.

There were also 14 Parallel workshop dealing with specific issues, as below :

I. Definitions, approaches, methodologies, indicators and standards of Sustainable Building (SB) and environmental quality (EQ) in buildings.

Ia. Which definitions, which approaches?

Ib. Indicators, Methodologies and standards, Standardisation of durability and sustainability in buildings, national and international progresses (ISO, CEN)

II. Traditional and modern constructions: Best practices and failures in realized SB projects in the Mediterranean region.

IIa. Traditional construction, as a source of knowledge for modern sustainable construction

IIb. Modern sustainable construction projects : Best practices and failures

¹ The SD-MED Association “ **Association for co-operation on sustainable development and sustainable construction in the Mediterranean**” constitutes a **Hellenic-French and international initiative**, of non-profit character aiming at a multi-level and multi-dimensional cooperation around a common vision of sustainable development. It partly emanates and is consistent with the French Policy with regard to the need of cooperation for sustainable development in the Mediterranean, as expressed in 2002, in the Johannesburg Summit, with a view to encourage the **emergence of a common vision for the future of the Mediterranean**.

IIc. Sustainable Olympics : experiences, plans and perspectives in hosting cities

III. Environmental Quality and the Community, user and social groups' participation in sustainable planning and design.

IIIa. General aspects

IIIb. Best practices of implementing sustainability in school buildings, Lycees HQE in France. The LIFE Environment SB-MED Project and the school buildings.

IV. Sustainable Urban rehabilitation and regeneration; Sustainable urban management.

IVa. Which models of urban development in the Mediterranean basin?

IVb. Projects and tools of urban rehabilitation and regeneration - Urban environmental management issues

V. Policies and strategies, perspectives and barriers for implementation of SB in the Mediterranean countries.

Va. National, regional and local policies and strategies for the implementation of SB in the Mediterranean region.

Vb. Education, training, sensitization and communication issues

VI. Performance assessment of buildings, Institutional and technical aspects of building performance. Performance assessment tools.

VII. Sustainable Use of building stock (SUBS), General and Regional aspects, Sustainable housing-maintenance issues, Evaluation instruments and tools.

VIII. Financial instruments to achieve energy efficiency, environmental quality and RES in buildings, innovative financial mechanisms (e.g. energy performance contracting, third party financing), Relevant market development .

IVa. What instruments and methods of financing energy efficiency, environmental quality and RES in buildings?

What innovative mechanisms in Europe and in the Mediterranean countries?

Examples of energy performance contracting and third part financing schemes. Development of the ESCOs market in the region.

IVb. Integration of renewable energy sources in buildings, Development of solar systems market.

Major Outcomes of SB04MED

The major outcomes of SB04MED can be classified as follows :

A. Methodologies, policies and standards for sustainable building and sustainable city in the Mediterranean

Mediterranean characteristics: Cultural, technical and environmental specificities (energy, water).Privileged zone of exchange between North and South, with necessity of transfers. Need to establish places, instruments and opportunities of technology transfer.

A sensible issue : need of subsidiarity, local context and various levels' regulations (national, regional-Mediterranean, European- and international)

A focal point for discussion: regulations or market oriented measures. They have been considered complementary. Their respective role has to be examined.

Problems and constraints to solve:

✓ new jobs, responsibilities, professional skills, relationships between different jobs.

✓ Follow-Up of change. Need of concepts and of simple tools, easily applicable

and adapted to the local cultures.

- ✓ Cost of projects. Necessary progress of investments, cost increase won't be acceptable even if the global cost favors that. Necessity of using innovative financial instruments and tax measures.

B. Building and city projects, systems and operations, where are we in the Mediterranean ?

Issues, problems and constraints discussed

1. A general remark : main constraint for implementation, the inertia of the "old world"
2. Factors affecting dramatically the environment in the Mediterranean.
3. Scientific and technological knowledge on SB: is it available?
4. Industry as well as professionals are not aware of the environmental impact of construction materials.
5. The cost and the affordability of sustainable constructions.
6. The integration of the global cost concept.

Proposals-Recommendations

- ✓ The establishment of a regional mechanism that will gather data and knowledge and will propose instruments and tools for design and evaluation to all actors involved in the construction and will provide information to state and local authorities to facilitate regulatory, volunteer, economic, investment and other policy measures.
- ✓ Integration of SB design as priority course in architectural schools
- ✓ Development of a mechanism of information and awareness raising to cope with the inertia of the "old world" and prepare the conditions for change.
- ✓ Research coordination and dissemination of available techniques, focus on research for existing buildings and building stock.
- ✓ Multiply and support financially demonstration projects.

C. Assessment and evaluation instruments and tools : where are we ?

Current situation :

Many environmental methodologies and methods for evaluating the environmental performance of buildings are being currently developed in the world, according to the local cultures and organisation. Especially for the Mediterranean it is also worth mentioning VERDE, a software system for assessing the environmental performance of buildings in Spain. Besides, a project methodology, called "HQE", that is high environmental quality has been developed in France presenting a mostly open character: it integrates a great number of parameters, requires a mode of management of the operations inspired by the international standard ISO 14001, and consists of a project methodology instead of a simple ex-post certification like in the majority of the other existing methods. Thus, it offers an interesting framework for capitalising experience feedbacks, and for seeking common denominators. In the LIFE SB-MED Project, a study is carried out to elaborate an SB-MED Methodology based on the existing methods and approaches. Furthermore the SD-MED Association is preparing an SB-MED Assessment tool.

Conclusions- Recommendations-Proposals:

- ✓ Assessment tools (either rating or labelling) should be simple and friendly to the user. Nevertheless, it has been argued that reference values(benchmarking) and systems would be preferable.
- ✓ It was also pinpointed that green city(urban planning, neighbour scale etc) tools have to be developed. There are some experiences in Europe (HQE2R tool, DPL etc),consequently transfer of this knowledge in Mediterranean countries should be supported.
- ✓ Besides integration of economic and social aspects in the tools has been proposed, as well as involvement of actors like decision makers, private companies, industrial actors etc.
- ✓ It was claimed that case-studies are useful and related training and education programmes have to be developed.
- ✓ The need to “work together” was finally revealed.
- ✓ The effective use of such tools presupposes the existence of the appropriate substructure at national or regional level (extensive databases, regulations, statistics).

D. Financial instruments and mechanisms: market development, realities and perspectives.

Issues discussed :

- There were contradictory opinions about the use of novel and innovative financial mechanisms in financing energy efficiency in buildings and application of RES in buildings.
- On the other hand, it was claimed that scarce public resources and funds mainly for rehabilitation of public buildings and other infrastructures lead to the need to implement public-private partnership schemes and third part financing.
- It has been pinpointed that provision of energy services has to be combined with the proper energy management in buildings.
- About development of ESCOs in the Mediterranean, it was stated that the development of ESCOs companies is inhibited by some legislative and market constraints.
- Indirect financial instruments were. Share of cost between the user and the community has been also mentioned, practiced in some cases.

Conclusions-Recommendations :

- ✓ Financial tools have to be complementary with other instruments or tools like policy tools, training and qualification measures etc
- ✓ Subsidies, meaning that over cost is resulting from SB are not adequate, nor sufficient. We need to identify best practices of financial instruments to mobilize funds and involve proactive key-players (investors, contractors, ESCOs etc)
- ✓ In the Mediterranean, we need experience of pilot projects like it is the case in Germany, UK etc.
- ✓ Efforts and willingness of Mediterranean countries to clarify relevant legal framework have to be supported since key actors are quite ready in the market.
- ✓ Furthermore, Need of broad information of the public has been identified (a kind of information points including financial issues)
- ✓ Raising public awareness and user’s participation has been identified.

- ✓ To attract investors and other key-players we have to be attractive and convince about the profits of SB, about what is good for the user and the community as well (in terms of value for money)
- ✓ Development of ESCOs meaning not only **energy** but **environmental service companies** which implicates the integration of building environmental efficiency assessment and measurements, that is an easy quantification of environmental quality .
- ✓ The need to develop Life Cycle Cost Tools has been mentioned to facilitate not only energy but environmental performance contracting.

E. Summary- Suggestions to SB05Tokyo

Introduction : **The populations** living along the coasts of the Mediterranean Basin are united not only by **ancient historical and cultural ties**, but also by the fact that they belong to the **same ecosystem or ecoregion**. This **historical and ecological unity** should not however blind us to the **many differences**, which are all too often simplified in terms of the North-South divide alone. The future of the Mediterranean basin depends on its people' s ability to conceive a **collective management**, manifest interdependencies linking them, whether **geographical** (the sea), **political, economic** (trade), **social** (migratory flows) or **cultural**. Sustainable development can restore the sense of a common future for this region and can provide the opportunity to ensure the convergence of strategies led by various agents.

Current situation and future trends:

Sustainable construction is the expression of SD in the construction and building sector. Current situation and future trends of SBC in the Mediterranean have to be analysed through the following topics :

1. Specific conditions of the built environment in the Mediterranean basin (economic, social, environmental, technology, climate, urban form related etc)
2. Policies and strategies in Mediterranean countries regarding sustainable building and construction. Links with strategy for sustainable development in the Mediterranean.
3. Progress of Projects and Techniques of sustainable building and construction. Recommendations for further progress.
4. Progress of performance assessment tools. Existing tools and need of a regional SB-MED tool (SB-MED Methodology and tool)
5. Progress of market oriented measures and financial instruments. Exchange of experiences and adaptation of financial instruments to national and local contexts. Need to promote Public-Private partnerships and third part financing schemes.
6. Strategies at a **macro-regional level**. for an effective implementation of sustainable built environment principles.

A general way of action :

In order to proceed to the elaboration of more effective macro-regional implementation concerning sustainable built environment, we have to find a solution to the following contradiction:

- on the one hand create a **common language**, which will be necessary to **exchange experiences and knowledge**,
- on the other hand **promote specific ways to reach environmental performances according to the geographical, cultural and technical local contexts**.
- Furthermore, a general policy framework to achieve sustainability of the built

environment at a macro-regional level (e.g Southern Europe or the Mediterranean basin) should first of all include the establishment of a **mechanism** to elaborate **methodological bases needed to explore environmental excellency and diversity in different local conditions**. These bases have to respond to **specific problems and needs to help local actors to create their own systems**.

A proposal for coordinated action :

A Sustainable Building Observation Network is proposed. This is an already expressed in various relevant congresses (e.g B4E in Maastricht etc) joint proposal of St.Kyvelou and D.Bidou (see references below). This observatory could be established in the framework of the on-going Mediterranean strategy for sustainable development. Nevertheless it has to keep **its independent, non-governmental and coordinating character**. In this way effective participation of all the actors, players and stakeholders will be ensured (international organisations, states, local authorities, construction sector, and mainly NGO's, civil society). This observation network could also constitute a framework (see OECD recommendations) in order to : **–regularly monitor the environmental performance** of the building sector in the region–**encourage greener public purchasing strategies** for construction procurement and **–undertake ex-post evaluation of policy instruments**.

Main References :

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