Towards Adaptation of the building sector in the Mediterranean region, how to move forward ?

7 march 2022 – Nice / online
16:15-17:45 (Central European Time)

Framework

Within the framework of the General Assembly of the Global ABC and in perspective of the COP 27 that will be hosted in Egypt from 7th to 18th of November 2022, this roundtable shall give a specific focus on **resilient building construction in Mediterranean context**.
It will invite stakeholders to share examples and challenges met in the region on how to adapt construction and buildings to climate change and highlight remaining gaps to align Mediterranean building and construction sector with Paris Agreement requirements.
This roundtable is built on a dialogue between Mediterranean GlobalABC members and a strong euro Mediterranean collaboration within a project called meetMED implemented by MEDENER and RCREEE and financed by European Commission joining their forces for massifying energy efficiency measures in building and appliances sector targeting 8 countries on the South and East Mediterranean Countries.

*With 204 members, including 34 countries, **the GlobalABC** is the leading global platform for governments, the private sector, civil society and intergovernmental and international organizations to increase action towards a zero-emission, efficient and resilient buildings and construction sector. The Global Alliance for Buildings and Construction (GlobalABC) works towards a zero-emission, efficient, and resilient buildings and construction sector through **Raising ambitions to meet the Paris climate goals**. While the sector is a major emitter, it also holds huge potential for improvement. We work to raise the level of ambition in retrofitting existing buildings and future-proofing the investments that we will see going into new buildings over the next 15 years. **Mobilizing all actors along the value chain**. Faced with a fragmented value chain, all stakeholders – from design to construction, operations and demolition in the private and public sectors – need to play their part. We encourage policy frameworks that promote both uptake of existing, cost-effective solutions and private sector innovation – using sustainable public procurement as a lever to create markets and investor security.*

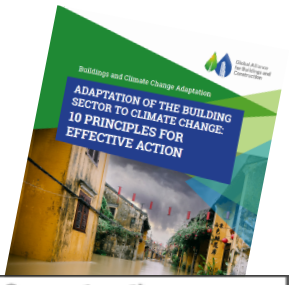
*The **Mitigation Enabling Energy Transition in the Mediterranean region** (meetMED) project is an **EU-funded project**, developed by the Mediterranean Association of the National Agencies for Energy*

*Management (**MEDENER**) and the Regional Centre for Renewable Energy and Energy Efficiency (**RCREEE**). Following the success of its first phase (**MEETMED I, from 2018-2020**), meetMED project commences its second phase aiming to enhance the energy security of beneficiary countries (namely Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia) while fostering their transition to low carbon economy. **MeetMED II** activities aim at strengthening the implementation of EE measures and improving countries' energy mix focusing on building and appliances' sectors through a multiscale, multi-partner and inclusive approach at local and regional levels, thereby fostering regional cooperation.*

What is at stake ?

Energy use in buildings represents roughly one-third of global final energy consumption and accounts for nearly 20% of the greenhouse gases (GHG) emissions worldwide. Growing population, as well as rapid growth in purchasing power in emerging economies and many developing countries, means that energy demand in buildings could increase by 50% by 2050 (IEA, 2016). Construction of new buildings will also drive energy demand and buildings-related emissions, with global floor area in buildings expected to double to more than 415 billion square meters (m²) by 2050 (IEA).

In Mediterranean Region, energy efficiency trends on buildings follow the same trends as international ones as shown in the latest scientific publications[1], rising cooling needs, rapidly growing energy demand for cities especially on coastal areas, etc. Countries are facing similar challenges; even worse considering the mediterranean area, being a "hot spot" highly vulnerable to climate change consequences and extreme events : droughts, floods, heat waves, water scarcity, accelerated desertification, etc. Construction sector shall be deeply impacted and current status of energy efficiency measures implementation and energy transition on building and appliances sector seems far from reaching the needs.



Box #1 - 10 principles for Resilient Building & construction
A call for action

1. **Urgency/** Act now.
2. **Stakeholders/** Consider a systemic integration of measures for adaptation across the entire value chain.
3. **Process/** Consider adaptation along the entire lifecycle of an asset.
4. **Mitigation/** Implement adaptation and mitigation in tandem.
5. **Data/** Understand climate risk data and accept uncertainty.
6. **Scale/** Think beyond asset-level.
7. **Green/** Consider nature-based solutions.
8. **People/** Promote a "just adaptation" of the building sector.
9. **Finance/** Enable adaptation of the building sector.
10. **Local/** Fit adaptation measures to the local context.

Several reports and 10 guiding principles have been released in 2021 by GlobalABC (refer to Box#1) pointing the huge challenges on climate change adaptation and its priorities. Buildings have a key role in addressing this challenge of

[1] MedECC (2020) Climate and Environmental Change in the Mediterranean Basin – Current Situation and Risks for the Future. First Mediterranean Assessment Report [Cramer, W., Guiot, J., Marini, K. (eds.)] Union for the Mediterranean, Plan Bleu, UNEP/MAP, Marseille, France, 632pp
This report shows the trends observed over the past five decades are likely to continue which will mean, by the end of the century.

- a rise in average temperatures of 3 to 5°C;
- a decrease in precipitation of 35% on the southern and eastern shores and of 25% on the northern shore;
- a average rise in sea level of 20 to 60 cm.

adaptation to climate change through reducing the need for cooling in the first place including by passive and locally adapted building designs, nature-based solutions and effective urban planning experiencing also innovative solutions such as district cooling.

It pointed also that “despite the fact that potential direct or indirect damages and losses to real estate are considerable, the actors in the building industry are often caught between the urgency of the present and the demands of the future. Two questions emerge from this observation: how to encourage balanced decision-making in spite of uncertainty, and how to properly put together the timeline against which to enable the transition. (…)” Regulation and its enforcement, innovative financial tools and demonstrative actions are more than necessary to reflect the commitment of all stakeholders, national institutions, local authorities, private sector and citizens. On the other hand, adaptation and mitigation need to be pursued simultaneously. Implementing adaptation cannot mean giving up on mitigation measures. (…) Although many current measures contribute to both mitigation and adaptation, some can be conflicting. For example, cooling systems are relied upon in order to maintain a decent temperature inside buildings during a heatwave. However, these cooling systems contribute to GHG emissions, therefore in order for cooling systems to meet both adaptation and mitigation objectives they must be designed to reduce their GHG emissions, be integrated into energy-efficient buildings and used carefully. Submersion and heatwaves are the two biggest risks to fight. Against these hazards, two main recommendations are put forward: limiting urbanization in risk-prone areas and anticipating the increasing needs for cooling (GSR 2019), and choosing more resistant foundations, structures, and materials. Mediterranean area can be a front runner in facing these challenges.

Objectives of the roundtable

This roundtable aims at focusing on Mediterranean area and illustrates the constraints and opportunities to adopt, enforce and scale up / disseminate the 10 guiding principles and answer the call for action proposed by the GlobalABC through a dialog between experts, national institutions and private sector.

Key potential questions :

- Regarding the 10 principles, how could they be illustrated and enforced in Mediterranean region ?
- How existing processes and regulations shall be adjusted and could answer adaptation needs ?
- What solutions for “cooling” the buildings are experienced ?

Moderation : Jauad El Kharraz, Director of RCREEE

16:15-16:30	**Opening – GlobalABC - meetMED II** Regis Meyer, MTE, Co-Chair (In-presence) Towards COP27, meetMED II highlights on Building Adaptation, Dr Jauad El Kharraz, Director, RCREEE (In-presence) Christian Estrosi, Mayor of Nice, Mediterranean cooperation, Adaptation strategy (In-presence, TBC)
16:30-16:45	**Key notes** 5' : A Call for action : 10 principles for Effective Action, GlobalABC - Karim Selouane, Resallience (In-Presence) 10' : Challenges and opportunities for adapting Mediterranean buildings What are the main challenges faced by the building sector in Mediterranean area (Climate change risks & main vulnerabilities (coastal cities, etc), Najet Aroua, Senior researcher (Online)
16:45-17:30	**Roundtable : Embedding Adaptation in Mediterranean buildings: highlights, challenges and next steps** *Scope :* Focus on practices and illustrations of these principles in Mediterranean Area to identify main areas of progress (5-6 min per speaker) o Thermal comfort indicator and solutions to design sustainable comfortable buildings in Mediterranean area, Marc Schoeffter, ADEME (In Presence) o Water energy nexus as a way to implement adaptation & mitigation in tandem, Pedro Cardoso, Senior expert, ADENE, Portugal, (On-line) o Challenges concerning data availability on climate change for designing resilient building, Prof. Guilherme Carrilho da Graça, Faculty of Sciences of the University of Lisbon/Portugal (On-line) o Experience of ABC21 program in promoting local materials for construction, Prof. Asmae Khaldoune, Al Akhawayn University in Morocco (On-line) o District cooling experience & urban management taking into account adaptation issues (Eng. Haytham Atta, PM of the district cooling plant at the New administrative capital, On-line) o Plans and measures to answer adaptation to climate change in buildings sector in Tunisia, Ibtissem Bouattay (Online or In Presence) **Moderated Q/A session (5')**
17:30-17:45	**Closing remarks** Highlights on energy program in the Region– Mohammed Elhuseeiny, Energy Expert /Energy & Climate Action, Union for the Mediterranean (In-Presence) Insight from ABC21: Africa-Europe Bioclimatic Buildings for XXI century, Prof. Lorenzo Pagliano (On-Line) Euro-Mediterranean programs for sustaining these 10 principles, meetMED, Agathe Lacombe, meetMED PM, ADEME (in-Presence) and Alessandro Federici, ENEA (On-line)