

Urban Regeneration Interventions in Coastal Areas - A Comparative Analysis

Eleni Giachou, Akrivi Leka and Maria Papadopoulou (Greece)

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SUMMARY

The aim of this analysis is to identify good practices and highlight international trends in waterfront redevelopment that can serve as examples for similar interventions aimed at improving sustainability in coastal areas.

To this end, twelve (12) case studies (CSs) at coastal areas and cities worldwide that have implemented or intend to implement coastal zone regeneration projects are examined. In these CSs, a range of geographical contexts, population sizes, water body types (sea or river), levels of effectiveness and redevelopment timelines are included to identify recurring patterns, good practices and transferable principles in urban planning that support sustainability, despite the specific characteristics of each coastal area.

Building on these insights an assessment framework was proposed to evaluate based on various diverse criteria the impacts of a redevelopment project aiming at the regeneration of a coastal area. Each criterion is explicitly mapped to the relevant Sustainable Development Goals (SDGs) and organized under four pillars: Society, Economy, Environment and Urban Environment – Water Element.

All twelve (12) case studies were assessed using the proposed assessment framework, to determine the extent to which each intervention follows sustainable development paths.

The comparative analysis shows that outcomes are shaped by timing, and the political and economic conditions of the country. Not all regeneration interventions are fully successful. Economic design elements play an important role, environmental characteristics are more prominent in contemporary projects, while social dimensions are often underestimated. At the same

time, international trends toward excessive tourist and commercial exploitation of coastal areas, replication of “model” projects and the homogenization of coastal image were observed. Overall urban coastal regeneration projects can contribute significantly to the achievement of SDG 11- Sustainable Cities and Communities. They may have a complementary benefits on the economic development of the region (SDG 8), the improvement of infrastructure (SDG 9), the adoption of climate measures (SDG 13) and the improvement of the well-being of residents (SDG 3).

In the context of climate change, waterfront redevelopment emerges not only as an opportunity for environmental and economic revitalization but also as a critical adaptation strategy for mitigating the impacts of sea-level rise, coastal erosion, and extreme weather events. Equally important is the inclusion of informal development areas, often the most vulnerable to climate risks through approaches that combine resilience-building with social equity.