The waterfront is a fragile and thin marginal area where multiple interactions between the city and the water take place. It is not a border or a limit, on the contrary it is a meeting space, an interchange area, a transition and tension zone between two or more different biological communities. Like all environmental frontiers, the waterfront is an ecosystem with a dynamic and precarious balance. Water-related challenges such as protection from wave motion, adaptation to multiple conditions (e.g. hydrogeological, health and environmental risks), albeit relevant, are often addressed in a sectorial way through confusing and ineffective procedures and plans (e.g. Environmental Impact Assessment, Landscape Authorization, etc).

The centrality that the environment assumes in the transformation processes of the land-water interfaces requires the preparation of a design approach that aims to operate as a device capable of providing a response to ecological rebalancing, in terms of resilience, energy efficiency, reduction of greenhouse gas emissions and environmental safety. Design solutions need to take into account the availability of economic resources; which is confronted with the long time of environmental processes and adaptations. At the same time strategies should be implemented immediately with targeted interventions correlated with the many ongoing and planned activities on the specific territories. According to this approach, the concept of waterfront becomes an environmental infrastructure. This reconceptualization aims to overcome the obsolete idea of waterfronts as purely related to commercial and real estate interventions. On the contrary the concept of waterfront is reframed as a design principle - incremental and inter-scalar - which considers the risks and geo-environmental fragility of coastal territories as priority themes to trigger urban and territorial regenerations.