



## **A Methodological Approach to Urban Brownfield Sites Redevelopment**

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The process of industrial change related with the change of economic structure has resulted in the creation of brownfield sites across space particularly in urban areas. The presence of brownfields has adverse effects not only on the environment, but also on the economic and social health of an urban area. Considering the wide-spread environmental, economic and social problems brownfield sites generate, brownfield redevelopment has to be a key element in sustainable urban development strategies since 1990s. The increasing importance of redeveloping these sites has based on not only their capacity to accommodate new economic activities but also their positive impact on sustainable development of urban areas and on urban quality. A remarkable attention is paid to regeneration of brownfield sites since it is accepted that these areas provide opportunities to struggle with the phenomenon of urban sprawl and Greenfield consumption and to strengthen these sorts of shrinking areas. Finding solutions for brownfield sites have been an increasingly important part of effective policies aimed at a sustainable future for land and in particular cities.

The continuous changing in demographic and economic structure of the Istanbul Metropolitan area (IMA) has resulted that some industrial sites have completed their functional existence and lost their economic efficiency related to new production technologies. Therefore, they have become remarkable sites which provide extended opportunities as new development corridors that enhance central business district or to provide opportunities to emerge new subcenters. Bayrampasa is one of the most striking examples of these sites across the IMA.

It has an approximately 302 hectare areal size. It is surrounded by the historical central bussines district - Eminonu and Beyoglu-, and a new subcenter of the metropolitan area -Bakirkoy. Its strong connection with urban transportation systems increases its accessibility. The main land use of the area is industrial land use (%32.07). This is followed by retail (%12.66). The percentage of residential area is quite low, it covers only %1.27 of the total area. Although it was an important manufacturing area accomodating small size firms which dominated technological improvements, because of the changing pattern of economic structure, inefficient infrastructure and local environment, and increasing land values around, the employment and population rate of the area has gradually declined and many of the industrial buildings have become obsolete. This changing structure has resulted the decline of the area and offered devalued land in some parts that this opens up the potential for redevelopment of the site.

This paper aims to develop a methodological redevelopment approach for Bayrampasa light industrial brownfield site within the context of sustainable urban development. Dealing with such sites in a sustainable way is a significant challenge that has social, economic, environmental and institutional aspects. This is why; brownfield redevelopment process needs integrated approaches to deliver sustainable outcomes. Consistently, also, this paper aims to elaborate an intellectual framework for coordinated research and development of tools of redevelopment focusing on the specific conditions of the site. Moreover, the strong and weak side of a methodological approach is discussed related with its expected economic efficiency, its contribution to sustainable urban development and urban quality.

**KEY WORDS:** Brownfield sites, redevelopment, sustainable development, Istanbul.