

# Green corridors in Piraeus City

Project indicative: P6.2  
Project type: policy proposal  
Project starting point: 0-5 y  
Project ending point: 10-15+ y  
Linkages: P6.1 P8.3  
Estimated implementation cost: n.d.



## FC Piraeus

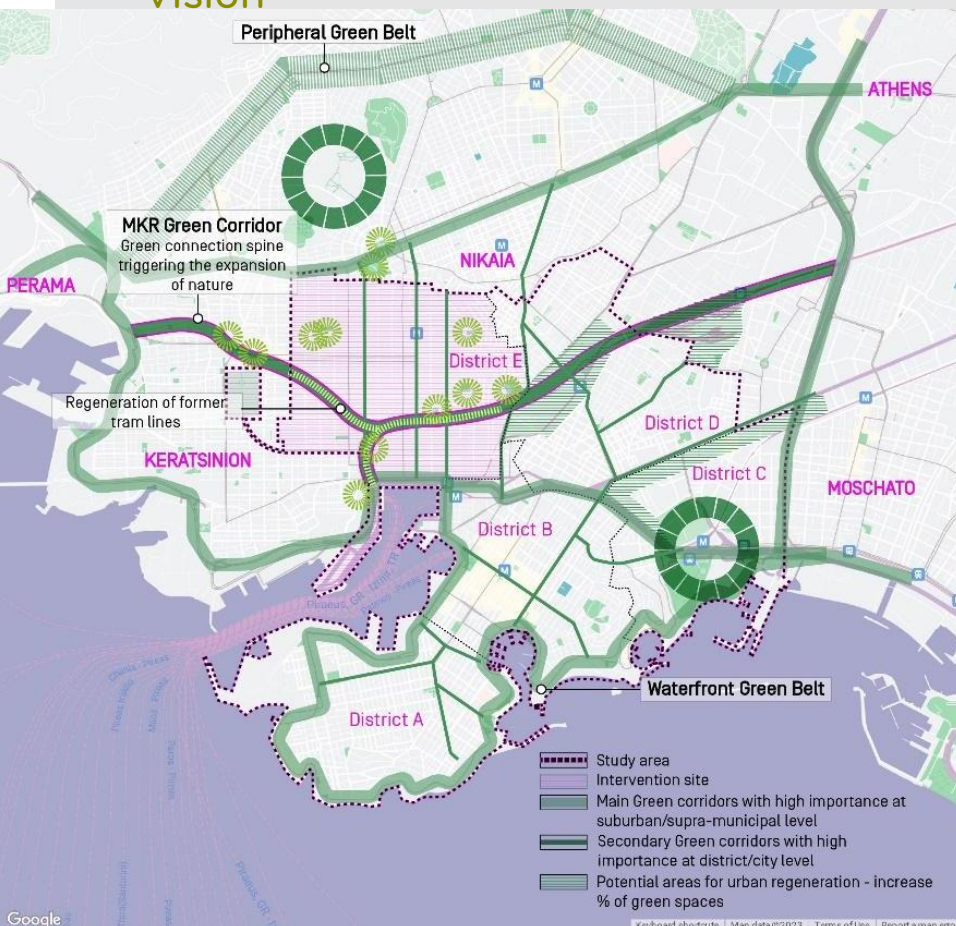
### Type of NBS intervention

**NBS 6** Strategically implementing green corridors within the dense urban environment of Piraeus. Creating sustainable and resilient green infrastructures that enhances the liveability, environmental quality, thus impacting the economic prosperity of the city and well-being of inhabitants, by having more people walking/biking, instead of using the car.

### Policy logic/need

Piraeus faces environmental, human health and well-being-related challenges due to its high-density population / urban fabric and the lack of a coherent and well-connected green system (open green spaces, parks) such as: increasing air pollution (stemming from emissions of ships and car traffic) and limited green space availability.

### Vision



### Scenarios

#### Do-it-all (best-case)

Strategy to implement NBS 6 for well-connected green corridors will be adopted by the City of Piraeus and neighbouring municipalities to ensure a cohesive and integrated green infrastructure system. Five main green corridors/belts will serve as protective barriers, reducing GHG emissions, mitigating heat island effects while providing accessible spaces with increased biodiversity for the well-being of local communities and visitors.

#### Do something meaningful

The strategic requirements will be implemented through the transformation and reintegration of the MKR area within District E and the city's green infrastructure. Additionally, four green corridors connected to MKR will be developed. A consortium composed of surrounding municipalities will collaborate to implement the strategy.

Three main green corridors will support the GI development system at wider supra-municipal level:

- (1) Waterfront Green Belt – assure that the green network is well anchored in the Southern part of the city, which is most polluted.
- (2) MKR Green Corridor – “Green pathway in between urban fabric”- main green connection spine where the most opportunities for new green spaces will be explored
- (3) Peripheral Green Belt - ensuring a natural and progressive transition from the dense urban fabric

## Study area

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The green corridor strategy considers the entire city of Piraeus by focusing on Marias Kiouris Road (MKR) in District E as a green spine that connects future key green protection belts and secondary green corridors at district and city level. The NBS aims at transforming and reconnecting the entire MKR and disused tram lines to the wider GI.



District E in the West of Piraeus (near Keratsinion Municipality) between Piraeus Port (South) and a key leisure and green major area within Athens Urban Area (located North side - in Nikaia Municipality): Katrakio Theater of Nikaia, Pantelis Nikolaidis Stadium, Andreas Papandreou Park. District E is one of the most densely populated district in Piraeus (highest population density per city block).

I.T.I.s (Integrated Territorial Investments) of Piraeus Municipality aim at highlighting the development and competitive potential of the city of Piraeus. Strategic directions include:

- “Green city” - exploitation of energy technologies in public infrastructure and services and its contribution to energy upgrade of buildings in combination with interventions of sustainable urban mobility.
- “Blue city” oriented to sea activities and blue economy.
- “Smart city” - the expansion and adaptation of new technologies, which improve services to citizens, visitors, enterprises, etc, attract young people and create new enterprises.

**"Athens-Attica 2021"**  
Regulatory Plan (2011)  
highlights environmental protection and the restructuring of the productive fabric, including agricultural production.

**Piraeus Blue Growth Strategy 2018-2024**  
includes measures for integrated spatial planning and urban revitalization.

**Piraeus Masterplan (2014)** proposes the construction of three pedestrian roads: Gkoura, Thessalonikis, and Olinthou

## Policy context

The planning process for Strategic Urban Development Initiatives (S.U.D.) began in 2014, with a focus on consultation and input from various stakeholders. The Municipality of Piraeus conducted both internal and public consultations, involving local bodies, unions, businesses, and citizens to formulate an effective strategy aligned with the municipality's needs. In September 2016, the final proposal was presented. The Municipality's strategy received the highest rating among proposals submitted to the Special Administration Unit of Attica. The total funding for the strategy amounts to 80,065,000 euros over five years, allocated for urban upgrades, social cohesion, and entrepreneurship. Additional funding of approximately 32 million euros from the Attica Region will support repairs, transportation projects, school buildings, and sports facilities.

### Challenges

Extension of the Green Infrastructure of Piraeus with green corridors addresses several challenges, including:

**Chaotic territorial development:** Low planning degree for urban green areas and between municipalities has led to progressive decrease in available green/open spaces over time. This can be mitigated by implementing a coherent and well-planned green system with continuous green corridors.

**Social, environmental, and economic benefits:** Establishing green corridors will have significant long-term advantages for the city and its inhabitants.

Socially, green corridors will contribute to overall well-being, quality of life of the community, providing opportunities for outdoor activities, exercise, and improved mental health.

Environmentally, the corridors will enhance biodiversity, promote ecological connectivity, and contribute to mitigating climate change effects by absorbing carbon dioxide and providing habitats for wildlife.

Economically, the green corridors can attract visitors, boost tourism and local trade and businesses, increase property values in adjacent areas.

### Risks

- Potential lack of involvement and desire of all municipalities to collaborate and adopt the strategic requirements. May lead to fragmented green corridors implementation / incoherent development.
- Administrative barriers (e.g. procedures) or extended timelines for adoption / implementation.
- Lack of expertise or administrative capacity.



Mavromichali Street

## Drivers for implementation

- Unused industrial former sites or free plots could represent great opportunities for regeneration (increase the percentage of green spaces).
- Unused former tram lines.
- The MKR intervention (refer to P6.1 Marias Kiouris pedestrian road) will serve as a demonstrator and a model for replicating the initiative in other relevant street corridors at the city level.
- Connecting existing green spaces, parks, amenities, schools, and public transport.

## Value proposal

A proper deployment of the policy will result in:

- A coherent and well-connected green system strategically planned in relation to the highly dense urban fabric supporting biodiversity and ecosystemic services.
- Supporting the promotion of public health and wellbeing.
- Enhancing connectivity and encouraging slow mobility.
- Boosting economic development and property values by enhancing neighbourhood attractiveness.
- Fostering climate change mitigation and resilience (improving air quality, providing green and shaded areas, implementing bioswales, etc.).
- Enhancing urban aesthetics and quality of life.
- Fostering social cohesion and community engagement (building a sense of place).

## Operational objectives

### THREE KEY PILLARS

#### Mobility and Accessibility:

- Enhance pedestrian accessibility with wider sidewalks and safe crossings.
- Adapt existing infrastructure to promote alternative modes of transport.
- Introduce parklets in intersections/former parking plots.
- Improve connectivity between green corridors and public facilities.
- Use permeable materials for pavement coverings in key areas.

#### Greenery and Biodiversity:

- Safeguard important biodiversity hotspots and existing green spaces.
- Enhance ecological connectivity between green areas, parks, and public facilities.
- Develop community gardens and transform disused railways into linear parks.
- Incorporate rain gardens to manage stormwater runoff.

#### Quality of Life and Well-Being:

- Enhance the functionality and endowment of public spaces.
- Provide urban furniture and shaded seating areas.
- Foster community activities in public spaces.

## Solution

1 main green corridor (in relation to MKR and the entire disused railway linked to Thesmoforiou and Methonis Streets) – spine of development and nature expansion trigger - **LINEAR AND COMMUNITY-ORIENTED PARK**



4 secondary green corridors - 3 out of 4 in relation to existing bus lines and metro stations (2 lines connecting Athens & Athens Airport), all in relation to commercial oriented streets, existing schools, green spaces and amenities with high importance at city/district level – Etolikon Street, Retsina Street, Mavromikali Street, Agiou Dimitriou Street – **HEALTHY COMMUNITY AND GREEN ECOSYSTEM SUPPORT**

## Partners

**Beneficiaries:** Development company of Piraeus (Municipal Company)

**Additional Investors / Shareholders:** Relevant governmental bodies (Transport, Environment, Tourism), Port Authority, Piraeus Bank, Universities

**Users:** Residents, local business, tourists.

### Phase 1 – 0-5 year

(1) Mobility and Accessibility

The interventions will focus mainly on the 1st pillar and the creation of LINEAR AND COMMUNITY-ORIENTED PARK that will support the development of the secondary green corridors.

In this period according to the general vision, other municipalities (districts) should collaborate and initiate similar interventions to achieve coherence and integration at city/supra-municipal level.

### Phase 2 – 5-10 year

(1) Mobility and Accessibility + (3) Quality of Life and Well-Being

The interventions will focus on the 1<sup>st</sup> and 3<sup>rd</sup> pillars for both LINEAR AND COMMUNITY-ORIENTED PARK (main green corridor) and secondary green corridors development - HEALTHY COMMUNITY AND GREEN ECOSYSTEM SUPPORT

Other municipalities (districts) should develop in parallel similar interventions following the main pillars. The main corridors and belts proposed have started to be developed.

### Phase 3 – 10-15 year

(2) Greenery and Biodiversity + (3) Quality of Life and Well-Being

The interventions will focus mainly on the 2<sup>nd</sup> and 3<sup>rd</sup> pillars for both LINEAR AND COMMUNITY-ORIENTED PARK (main green corridor) and the secondary green corridors development - HEALTHY COMMUNITY AND GREEN ECOSYSTEM SUPPORT

Other municipalities (districts) should develop in parallel similar interventions following the main pillars and the secondary corridors proposed are integrated as coherent parts of the city's green ecosystem.

# Policy description

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## Planning and Assessment

- In-depth evaluation of the current state of the area: land-use, transportation, main and secondary green spaces, amenities, environmental features;
- Determine exact location and boundaries of the proposed interventions based on upfront traffic studies, pedestrian flows, development needs and opportunities;
- Finding and acquiring the most suitable land to be use as community gardens in relation to future corridors (PPPs approach) and for potential parking spots

## Implementation

- Interventions should consider: Availability of space; accessibility standards (also for disabled persons); minimum number of parking spots needed in connection with commercial spaces, schools, other facilities; safety measures; traffic and parking (notably in public spaces) restrictions; waste management in public space; sun exposure (increasing canopy %); water drainage; balanced use between mineral/paved surfaces and pervious/green area (prioritizing the latter)
- Prohibited for use in green spaces: Fertilisers, chemical pesticides, insecticides, herbicides, fungicides, Noxious, invasive plants.

# Developing a Local Agenda

Raise awareness on the future interventions that will be implemented

Develop detailed action plan and outline municipality's commitment to create green corridors

Enhance collaboration and partnerships with other districts, neighboring municipalities, regional authorities

Enhance collaboration and partnerships (public-private collaboration) within the district ecosystem

Allocate adequate/constant resources and attract funds: taking into consideration all phases - planning, design, implementation, monitoring and future maintenance of the corridors

Establish monitoring and evaluation mechanisms to assess the effectiveness of the policy implementation and related interventions.

Evaluate the impact of the implemented solutions based on a set of indicators: satisfaction/ attractivity/ environmental/ accessibility

Take steps to incorporate the concept of green corridors (with specific requirements) into the municipality's future planning and