



# Istanbul

## Stream Co-habitat

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### • DURATION

Ongoing since 2022

### • POPULATION 2024

**Istanbul: 16,047,000** (Growth rate 1.26%)  
**District of Tuzla: 288,000**

### • URA SCOPE

ECOLOGY. Green Urbanism.

### • TOPICS

ECOLOGICAL BALANCE  
URBANIZATION  
ECOSYSTEM  
HERITAGE

### • MAIN ACTORS

Openact Architecture  
Istanbul Metropolitan Municipality - Department of  
Parks, Gardens and Green Areas.

Openact Architecture thrives as a beacon of innovative design. This international, award-winning studio is dedicated to exploring the uncharted territories of architecture, navigating the interplay of indeterminacy and plurality. With a focus on public space projects, Openact boldly integrates politics, infrastructure, and urban environments, crafting adaptable systems that breathe life into flexible and organic infrastructures.

One of their landmark projects, "A Co-habitat Through Stream – Landscape Design for Socio-Ecological Recovery in Tuzla," embodies this vision. Nestled at Istanbul's eastern edge, the Tuzla Peninsula is a land steeped in history. From Byzantine and Ottoman times, it flourished as a hub of salt production, fishing, healing waters, and agriculture. But the mid-20th century brought rapid industrialization, transforming Tuzla into a sprawling industrial zone of shipyards and military facilities. This unchecked growth took a toll, severing natural water sources and disrupting the area's ecological balance.

Openact set out to reclaim Tuzla's dynamic water-based identity. Their project anchors itself on the natural waterways, weaving them into the fabric of daily life across neighbourhood, district, and city scales.

The design reimagines Tuzla's natural landscape by protecting and restoring these water sources, reconnecting it to its cultural and historical essence.

Guided by the Umur Stream's winding course, the project harmonizes green patches between Tuzla's Lake and sea. It establishes a looping framework of urban, ecological, and infrastructural interventions, fostering a seamless connection between the city and its ecosystem.

The design invites socio-ecological encounters, aiming to cultivate a vibrant socio-cultural density that remains rooted in harmony with nature. It aspires to create a shared habitat where human activity and ecological preservation coexist in balance.

Spanning 7.5 kilometres, the corridor is built on three interwoven layers: circulation, ecology, and programming.

This comprehensive approach integrates green spaces and diverse neighbourhoods, bridging the peninsula's stream, lake, and sea. By aligning natural preservation with human use, Openact's visionary work breathes new life into Tuzla, transforming it into a living tapestry of history, nature, and innovation.







## Impact

**Thriving Communities** The project emerges as a beacon for community vitality, fostering socio-ecological connections that redefine urban living. One of Istanbul's few projects to embrace co-design participatory processes, it amplifies the voices of local community members across diverse ages and backgrounds. This inclusivity enriches the design, promoting equity by doubling the public space available per person.

Through interactive and social open space programs, the project transforms shared environments into hubs of connection. Accessibility and safety are prioritized through inclusive mobility solutions and thoughtful lighting. Open post-disaster assembly areas provide crucial resilience in Tuzla's densely urbanized, earthquake-prone landscape. By diversifying recreation and play options, the project bolsters public health, embodying a vision of enduring community well-being. These initiatives resonate with the Horizon Shaper Award's celebration of long-term strategic purpose and transformative urban impact, underscoring a legacy of empowerment and sustainability.

**Viable Economics** Confronting budgetary constraints with ingenuity, the project reimagines limitations as pathways to opportunity. Recycling existing site materials—such as aggregate, natural stones, and sand—minimizes waste and reduces the need for new resources. By engaging local labour and materials, the project not only cuts transportation costs and emissions but also invigorates the local economy. Low-maintenance materials and drought-resistant plants further economize upkeep, while rainwater harvesting ensures water availability during dry seasons.

Energy-efficient designs reduce electrical energy consumption by 63%, significantly lowering costs. The incorporation of biking connections to the Metro fosters sustainable mobility, decreasing fossil fuel dependence. These innovative, eco-conscious strategies align seamlessly with the Horizon Shaper Award's recognition of impactful, forward-thinking initiatives. The project's holistic approach marries economic viability with environmental stewardship, leaving a profound and lasting imprint on Tuzla's urban fabric.

## Challenge

Tuzla faces a complex array of challenges stemming from rapid industrialization, unplanned urban growth, and environmental degradation. Once known for its rich history of salt production, fishing, agricultural activity, and healing waters during Byzantine and Ottoman times, Tuzla's identity has been overshadowed by industrial expansion. Between the 1950s and 1970s, the area transformed into a hub for shipyards and military facilities, leading to sprawling unregulated development. This rapid change disrupted the region's delicate ecological balance, particularly its natural water sources, which have suffered from pollution and fragmentation.

The unchecked urbanization has also diminished Tuzla's historical and cultural significance. Traditional practices and landscapes have been replaced by industrial zones, while vital water resources—once central to the community's identity—have been neglected. Adding to the strain, Tuzla's urban sprawl exacerbates the heat island effect, amplifying city warming and intensifying the impacts of climate change.

These challenges demand innovative solutions to restore Tuzla's natural and cultural heritage, address ecological damage, and create sustainable urban environments. By reconnecting the city to its water-based roots and limiting further unplanned growth, there is an opportunity to revitalize its ecosystem and foster a resilient, harmonious coexistence between people and nature.

## Solution Proposed

**Uplifting Places** Tuzla's identity has long been tied to its diverse water resources, central to activities like fishing, salt production, agriculture, and modern shipyards.

This project restores Tuzla's dynamic character by centering water as a shared heritage, connecting natural and human elements through a living ecological belt, a yellow circulatory loop, and a socio-cultural network. By revitalizing Tuzla's heterogeneous ecosystem, it reimagines co-creation and co-habitation with nature, crafting 21st-century urban landscapes. This vision aligns with the Horizon Shaper Award criteria, celebrating transformative projects with long-term urban planning and meaningful impacts.

Healthy planet to address the impacts of urbanization and industrialization, the project reclaims the stream protection zone and establishes a continuous patch-corridor network, setting clear limits to development. The stream bed is restored to enhance biodiversity, stormwater infrastructure collects rainwater, and native plants rehabilitate habitats.

Traffic evaporation reduces the heat island effect, while new mobility solutions support decarbonization. Within a decade, the project becomes carbon net-positive, exemplifying sustainable urban transformation. These efforts reflect the Horizon Shaper Award's focus on visionary, collaborative strategies for resilient cityscapes.

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