



POLITECNICO
DI TORINO

Honors thesis

COURSE OF

Architecture for Sustainable Design

Abstract

**"BRIC(K)". A sustainable Turin project.
From the disposal of the freight Vanchiglia in Turin,
new scenarios to bring production back to the city.**

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BRIC (K) is the project of a Recovery Center for inertia and waste materials, particularly from the construction sector, able to revive Turin's production activity.

The collection, disposal and reuse of the vast amount of debris and other types of waste produced today by the construction industry is in fact for Italy and for the rest of Europe an open question that seeks solution but at the same time a challenge and a great development opportunity.

The necessary compliance with an international regulatory framework and the development of new and more efficient technologies that are sensitive to the issue of waste disposal and recycling, made possible - in a period characterized by massive production crisis - to bring productive activity back into the city, and therefore to propose for the Scalo Vanchiglia area of Turin (dismantled for some years) new experimentation and research functions on the recovery techniques and programs, sorting and recycling of construction materials, but also targeted training for companies working in the field and for a more specialized and competent manpower class, looking at European markets.

Scalo Vanchiglia, in the project, becomes the first study case of a transforming system areas where the redesign of "urban void" contributes to re-launch an idea of the city founded on the work and capable of promoting social, cultural and housing transformations.

The reference to the typological and figurative character of the Piedmont tradition related to industry and work is also confirmed in the architecture project.

The Waste Management and Recycling Center for Construction, with new training, business, office and residence activities, also wants to be a reference urban model for the diffusion and consolidation of a "circular economy".

It is a sort of "quarry" from which to extract valuable resources for a truly "sustainable" new production, which can turn into resources what the city has always generated and will continue to generate in the next future: wastes.

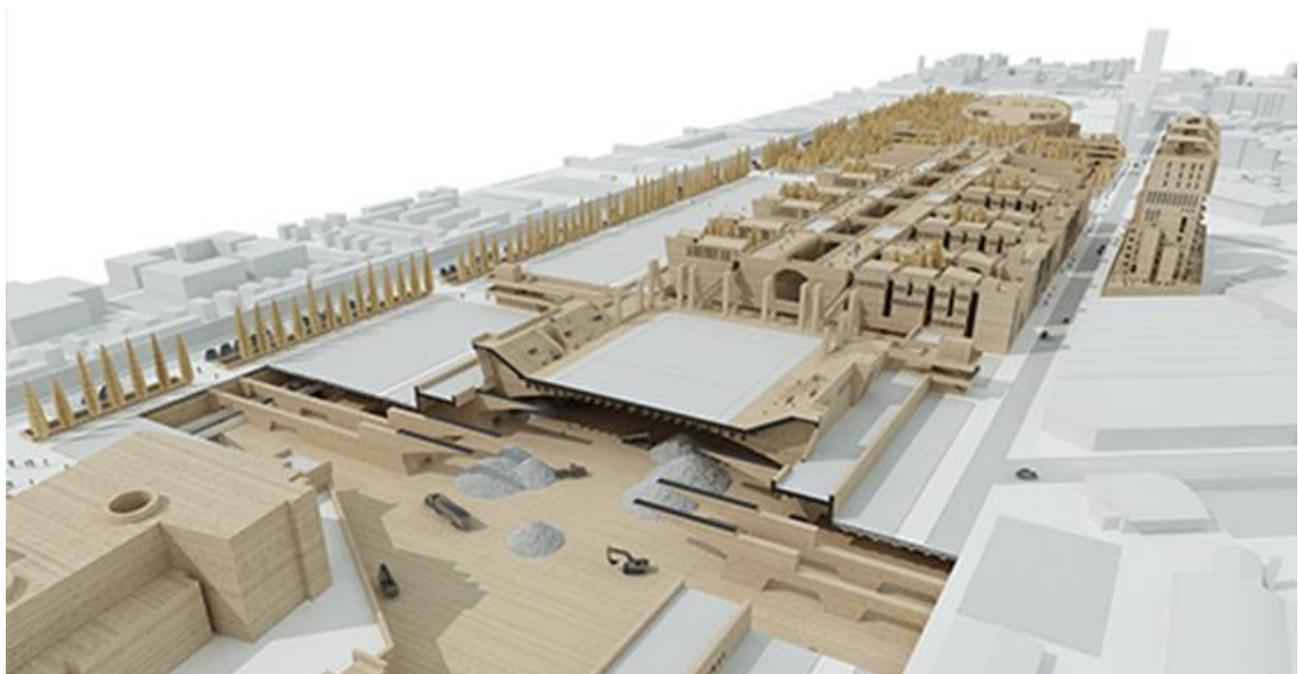
The potential for planning the recovery and enhancement of the common waste and building waste market, through programmed and controlled management of screening, recycling and re-entering into Italian and foreign production, would allow it to transform its current potential into an important economic resource.

The thesis is part of a first part of research and framing of the waste treatment phenomenon in Italy and Europe, with attention to the Community objectives and current recovery methods to verify their compatibility with the urban context.

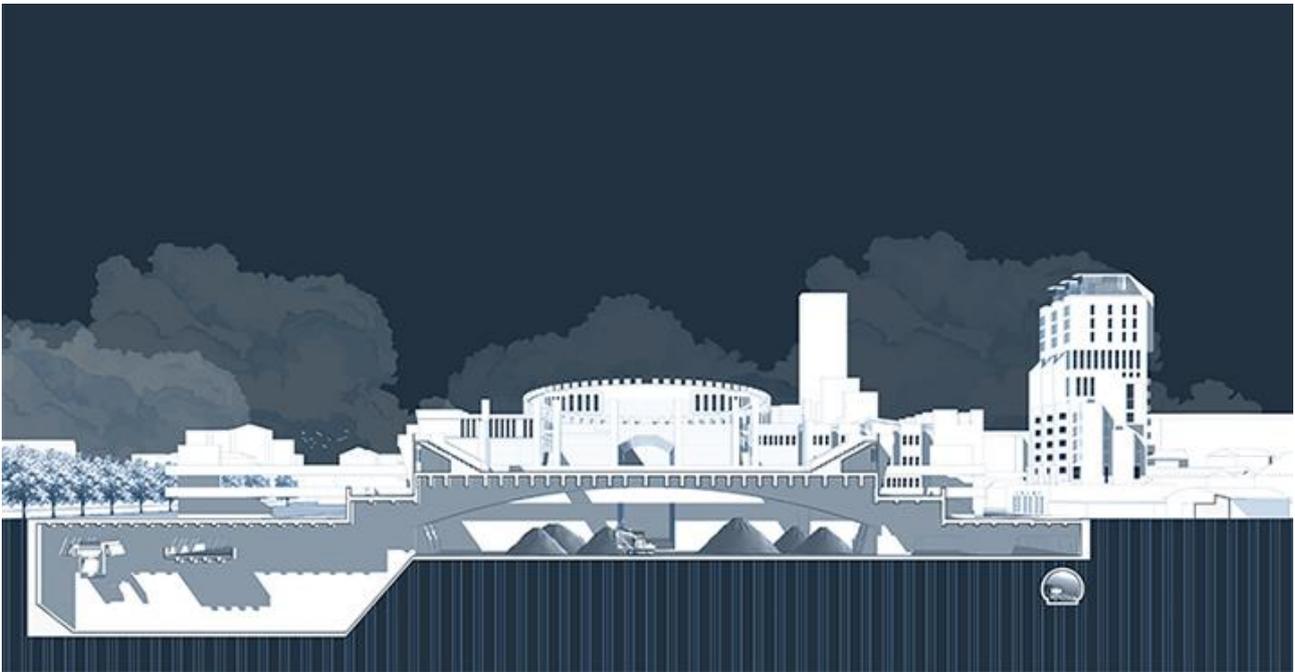
In a second phase, the goals and criticalities identified are used to draw a project proposal that is relevant to the chosen area and which shows morphologically how it is possible to integrate a "clean" production activity into an urban context and other functions of public utility.



Total three-dimensional view of the planned urban plan. In the lower left, an Auditorium with a capacity of 5000 seats, to the right of new buildings a linear park as also provided by the current Plan.



Three-dimensional split of the workplace for recovery and recycling of waste from the Construction and Demolition sector. The covering system filter dust and noise produced by the Center and is equipped with a regular football field.



Illustrative section of the workplace for waste recovery and recycling from the Construction and Demolition sector. To the left the storage pits where accumulating the treated debris now become recycled aggregates.