Lifestyle apartments and infrastructure recycled from former freeway viaducts, near Scilla, Italy

Project data

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<th>Project group</th>
<th>Landscape, urban design and infrastructure projects</th>
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<td>Regione Calabria</td>
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Main author

<table>
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<tr>
<th>Name</th>
<th>Philippe Rizzotti</th>
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<tr>
<td>Profession</td>
<td>Architect</td>
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<td>Philippe Rizzotti Architects</td>
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<td>City, country</td>
<td>Paris, France</td>
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Further author(s)


Comment of the Holcim Awards jury Europe

The jury endorsed this project as an excellent example of the smart transformation of an existing structure into a completely different use, responding to both economic and social issues. Remarkable is the minimal footprint and the way the scheme efficiently makes use of the bridge’s supporting structure that is to accommodate the infrastructure and technical utilities. The fact that the bridge will not be demolished results in a positive material balance and reduces the overall expenses.

Project description by author

Parco Solare Sud – Nests for (European) Snowbirds

The municipalities of Scilla and Bagnara are crossed by some ten kilometers of Italian Autostrada del Sole (A3 Atrani – Reggio Calabria Highway), constructed for the most part, in the 1960’s and featuring numerous imposing and, for their time, audacious infrastructures (viaducts and tunnels). This stretch of highway is set to be decommissioned following the construction of a new highway. Rather than completely demolishing the old route, with its extraordinary reinforced concrete viaducts, new fully integrated within the landscape and the collective imagination, the reuse and redevelopment of certain bypassed sections is proposed as a means of boosting the production of renewable energy, experimenting with new eco-friendly technologies, favouring connections between villages and access to the valuable coasts on mountain crests, and, finally, developing new forms of environmental and land art and urbanism capable of stimulating responsible tourism.

REPORT: The bridges allow a limited impact on the landscape. The local production of Bergamot orange demonstrates the region’s favorable temperatures (16-22°C), and the volcanic area reveals a high energy potential.

PROGRAM: The climate and the site inspire vertical villages for “European snowbirds” (housing/medical equipment/entertainment/shops) that are connected by walkways to the sea and highways to the cities. The system is autonomous regarding the water and energy thanks to the rainwater storage and high-thermal power. Water is injected deep underground to be heated, and its temperature climbs to 200°C, which provides steam to generate electricity via turbines. The system doesn’t create any waste. Part of the hot and cold water is used for sanitary purposes, and polluted water is treated by phytoremediation and methanisation.

Innovation and transferability – Progress

The objective of the Solar Park South competition was to stimulate concrete ideas and revolutionary proposals for the reuse of the decommissioned highway sections. 20th Century hyper-urbanism becomes an adapted solution in order to convert existing unused megastuctures into eco-friendly vertical villages. This idea can be easily applicable and transferable to many similar abandoned structures and megastuctures all over the world. This project makes Utopian urbanism as “Spatial Cities” feasible.

Ethical standards and social equity – People

The reuse and redevelopment of certain bypassed sections is proposed as a means of boosting the production of renewable energy, experimenting with new eco-friendly technologies, favouring connections between villages and access to the valuable coasts on mountain crests, and, finally, developing new forms of environmental, urbanism and art capable of stimulating responsible lifestyle. Although Italy’s Calabria region is one of the most comfortable areas in Europe to live in, with a mild climate and amazing landscapes over-looking the sea towards Sicily, there is growing economic uncertainty with economic and social implications. This project is commissioned by the government and will be mandatory for investors to involve locals in the development of the new city.

Environmental quality and resource efficiency – Planet

Solar Park South adopts a conceptually opposite approach of environmental acupuncture, promoting the reuse of the existing before consuming new land, pursuing landscape integration, micro energy generation and economic self-sustainability. By beginning with renewable energies, the idea is that of developing a new virtuous cycle founded on the green economy capable of bringing research, experimentation, technologies, production, employment and tourism to the whole of Calabria. The city is completely autonomous regarding resources thanks to rainwater storage and high energy geothermal power. Water is injected deep underground to be heated, and its temperature climbs to 200°C, which provides steam to generate electricity via turbines.

Contextual and aesthetic impact – Proficiency

The project provides design and technological solutions in relation to the local landscape and the application or enhancement of renewable energies. It is economically energetically and culturally sustainable. It explores applications in alternative energies, promoting a new social message focused on the widespread diffusion of a culture of sustainability aimed at demonstrating that energy habits and lifestyles can be changed to better confront pressing post-Ekpylos issues.

Relevance to target issues by author

Economic performance and compatibility – Prosperity

Instead of spending 60 million to demolish the highway the same money can be employed in productive investment. Furthermore, considering that the financial and environmental cost of transforming the tolled roadway will be considerably lower than that of a fouls less environment-friendly refurbishment, the creation of the park and vertical villages optimises public expenditure and brings value to the potentials of the site, energy production, agriculture, scientific research, manufacturing.

Bronze Award Europe