



# Introduction

## Reversing the waste paradigm

### Waste Architecture Platform and beyond

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WA sessions at Sardinia 2017 were coordinated by Studio Arcoplan

Speaking about waste management, nowadays there is a need for a global plan to link the different features of the land and drive the correct siting of plants in order to transform them into public spaces. From a lack of use of the areas improperly used in the past for disposal, it has now evolved into a process that generates new applications to use these spaces.

Indeed, the planning and design stage of the management and development of waste disposal plants may comprise a sort of landscape design focussed on integrating the site into the surrounding urban area (area of public interest and use) rather than representing the result of an emergency. The need to integrate waste disposal systems into an environmental planning strategy connected to the landscape, to urban and extra-urban spaces requires an integrated planning activity and a multidisciplinary approach.

From this perspective, the technical aspects, once exclusive domain of environmental engineering, nowadays give rise to an interesting synergy with architecture.

Today, architects play a minor role in the design of

industrial and infrastructural projects. In the specific context of Waste Management, in common practice (exception made for a few cases) architects remain conspicuously absent from the conception, design, and implementation of major related works (waste-to-energy facilities, landfills, treatment plants, systems for the collection of waste in the cities, etc.).

Waste Architecture is a new and relatively unexplored conceptual and design topic, which aims to trigger a lively debate between environmental and architecture/urban design professionals.

One of the fundamentals of Waste Architecture is that «it is possible to use the most advanced waste management processes to promote interdisciplinary cooperation in which the architectural, structural and thermodynamic aspects, suitably combined, would generate urban units with new political and social contents» (Kara et al., 2017).

Waste Architecture Platform was created in 2015 with the specific aim of exploring the unexpressed role of architecture for the proper evolution of these projects, from the planning stage to the full realization. Waste Architecture Platform is a complex pro-

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ject conceived as a container of initiatives devoted to environmental architecture in connection with interventions relating to the collection, disposal and management of waste. It was conceived by Studio Arcoplan with the aim of developing a new and relatively unexplored conceptual and design topic, by means of a series of initiatives involving environmental professionals, architects and experts from waste related disciplines in the framework of seminars, round tables, design workshops, publications, etc.

The International Workshop on Waste Architecture represented the first of a series of thematic seminars on environmental design and interventions focussing on waste collection, disposal and management. This first appointment, held at Forte Village Resort on October 6<sup>th</sup>-7<sup>th</sup> 2015, was focused mainly on the architectural, functional and landscape rehabilitation of old landfills.

The workshop was organised as a parallel event of Sardinia 2015 / 15th International Waste Management and Landfill Symposium, a world-renowned event registering the attendance of approximately 800 experts from all over the world. The International Sardinia Symposia were established in 1987 to make ideas and experiences in the rapidly developing field of waste management and landfilling readily available to professional communities worldwide. Since then the symposia have rapid-

ly become the international reference forum where every two years planners, operators, public officials and scientists present their relevant experiences and discuss new concepts and technologies of waste management.

Arcoplan coordinated the International Workshop with the scientific support of the Department of Architecture, Design and Planning / University of Sassari and the Department of Industrial Engineering / University of Padua.

The purpose of the Workshop was to stimulate a debate on the requalification of landfills and analyse all related aspects, including architectural/landscape quality, compatibility with site reclamation and state-of-the-art, encouraging a comparison between the situation in Italy and the rest of the world.

The workshop lasted 2 days, with the first day consisting in the presentation of oral contributions in thematic sessions to be followed by opportunities for discussion and debate. On the second day, professionals in the field organized and coordinated a practical landscape design lab. The two days of intense work and networking with different professionals revealed how existing modern landfills can represent an opportunity to provide new spaces for the community and thus yield a benefit. With this prerogative, it would be of particular interest to

study during the design stage, potential functional uses for not only existing landfills, but also specifically landfills that have yet to be developed, applying an approach that takes into account from the outset the future use of the plant from a technical and economical viewpoint.

Following the interesting experience of the International Workshop on Waste Architecture, in 2017 Waste Architecture was included in the main programme of Sardinia 2017 / 16th International Waste Management and Landfill Symposium. The purpose of the oral sessions dedicated to Waste Architecture was to stimulate a debate on architecture for the environment and, more specifically, the architecture of major works related to waste management.

In this international context, the thematic sessions provided the setting for in-depth discussion on this specific topic, aimed at not only environmental professionals, but also experts in architecture, landscape planning and design, and town planning, represented an opportunity to make contact with the world-leading experts in the field. Several interesting talks focused on the potential contribution of architecture and design in promoting an enhanced integration into the local context of the structures needed to obtain energy from waste (incinerators) and addressed the multiple aspects linked to their potential reuse in the future.

## References

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