



Country / City	Sardinia, Italy
	University of Cagliari_Faculty of Engineering and Architecture
Academic year	2018-2019
Title of the project	Recycle. Systems and circular economies for the post-mining landscape.
Authors	Federico Carta, Carlo Corda (students), Giorgio Peghin, Antonio Angelillo (teachers), Roberta D'Angelo, Anna Corda, Andrea Scalas (tutors)





TECHNICAL DOSSIER

Title of the project	Recycle. Systems and circular economies for the post-mining landscape.
Authors	Federico Carta, Carlo Corda
Title of the course	Mining Landscapes
Academic year	2018-2019
Teaching Staff	G. Peghin, A. Angelillo (teachers), R. D'Angelo, A. Corda, A. Scalas (tutors)
Department/Sectior	n/Program of belonging DICAAR_University of Cagliari

University/School University of Cagliari_Faculty of Engineering and Architecture

Written statement, short description of the project in English, no more than 250 words

Sardinia, a land of ancient origins and ancient uses, has seen over its life different types of production: from agriculture to industry, each of them has always left its mark on the territory. The mining scars left in the last 150 are emblematic, like the ones in Monteponi: its red mud, a landscape element as fascinating as dangerous, witnesses a past of rich production that has now left a void in the economy of a territory which is now struggling to start again. The mines are the evidence of an incompatibility between infinite growth and exhaustible resources, made even stronger by the affirmation, until today, of a linear type of production model: a straight line in which natural resources, through a process of extraction, processing and consumption, become waste to be disposed of. In recent years, therefore, there is much talk about the need to totally change the production system, moving from a linear model to a circular model. The circular model is the "closure of the circle". It means that right from the design step of products and services, attention must be paid in reusing natural resources so that, at the end of the product's life, they can be recovered and used in other production cycles. In a small reality like Sardinian one, the circular model becomes an opportunity for restarting and connecting production chains, which can be generated precisely from waste: giving shape to waste to make landmarks out of them, to identify the presence of a network of secondary raw materials, serving a new productive landscape. Among these towers, the mining ones are the only ones to constitute themselves as a real administrative, laboratory and exhibition buildings, precisely where the production scar was deeper, due to the mining modifications.

For further information Máster d'Arquitectura del Paisatge - DUOT - UPC

T: + 34 93 401 64 11 / +34 93 552 0842 Contact via email at: biennal.paisatge@upc.edu Máster d'Arquitectura del Paisatge -DUOT - UPC ETSAB- Escola Tècnica Superior d'Arquitectura de Barcelona Avenida Diagonal, 649 piso 5 08028 Barcelona-Spain

CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

Barcelona





September 2020 SCHOOL PRIZE







WASTE TOWERS

























stage 0

stage 1

stage 2

stage 3



- regional land use analysis - pedological analysis
- identification of landfills and polluted areas
- identification of abandoned mining areas
- analysis of the system of territorial relations



- identification and analysis of infrastructures and connections between the different urban poles of the island
- identification and analysis of disused tracks, aimed to connecting various production areas (agricultural, mining, industrial)
- feasibility study, recycling project and analysis of areas suitable for bio-masses and waste



- design and implementation of local supply chains for the transformation and recycling of waste
- construction of waste towers, collection and retrieval systems for waste from local production systems
- construction plants for demonstration, management and research plants at the disused Monteponi mine



- productive network institution, waste search and re-cycle
- dismissed mining sites refunctionalization as research and administration center for the productive network



