

LIFE
CER
SUDS

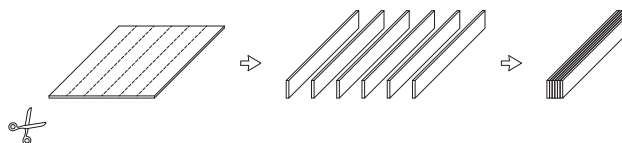
What LIFE CERSUDS System consists?

It consists of a permeable urban pavement formed by ceramic tiles of low commercial value existing in stock. The module consists of seven tapes obtained from cutting ceramic tiles.

How is and where is located the demonstrator?

The demonstrator of the LIFE CERSUDS project is located in the municipality of Benicàssim (Castellón, Spain) and consists of the reurbanization of the section of Torre de Sant Vicent street, between Mossén Elies and Tramontana streets, in an intervention area that occupies 3,209.41 m².

It comprises a section of roadway consisting of a 3.65 m wide, one-way central track with a 2.00 m bicycle rail and two sidewalks, one 1.35 m wide and the other 3.00 m wide. A single platform solution with a 2% transverse slope towards the bike lane has been proposed.



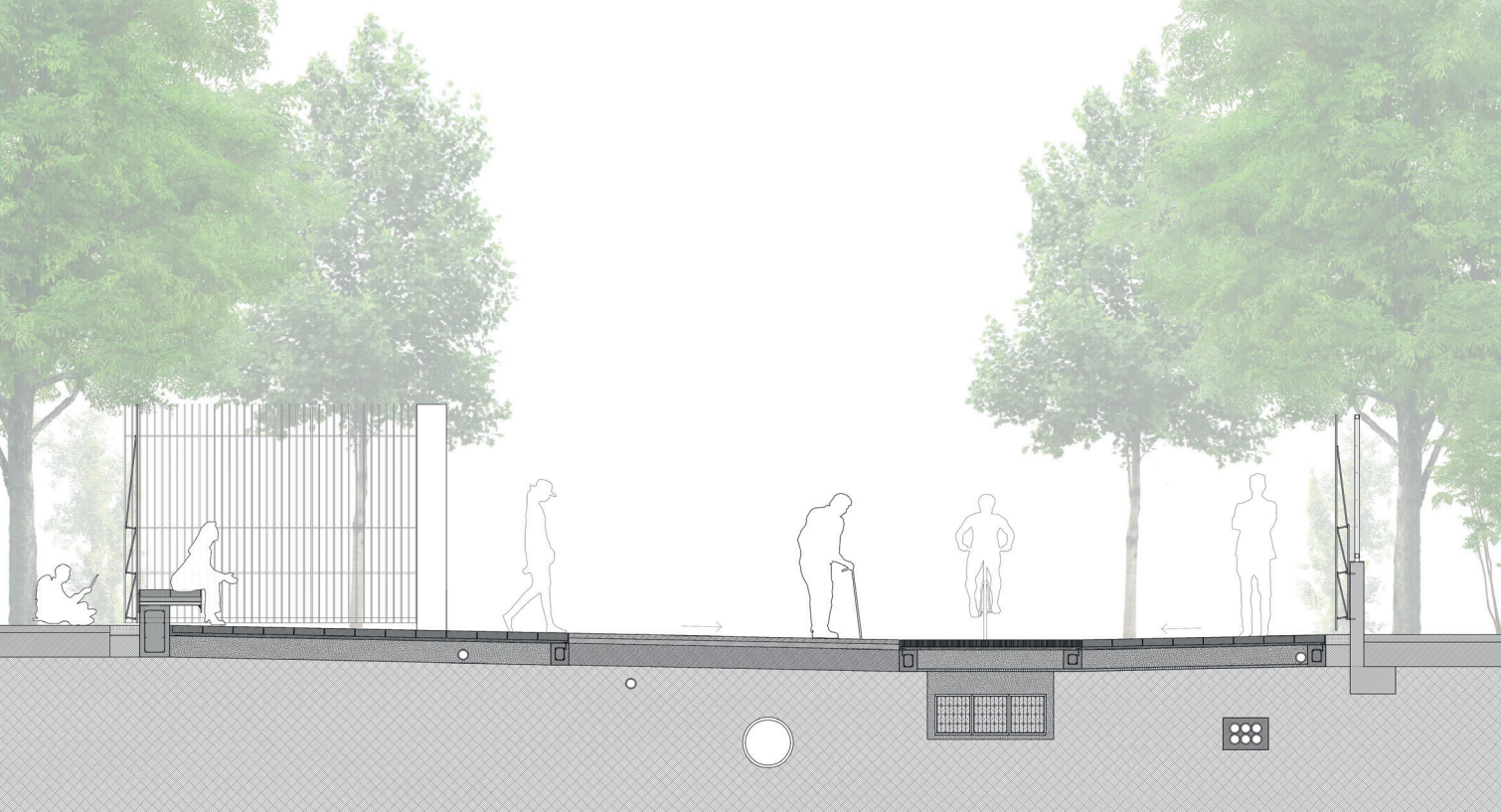
For the **Urban Sustainable Drainage System (SuDS)** we transform the current solution, consisting of a sealed surface with collection of urban runoff by means of point scuppers connected to a rainwater collector, to a permeable pavement formed by recycled ceramic pavers placed on draining bases that allow water infiltration into the ground, leading the excess to a channel formed by drainage boxes located under the bike lane.

This system allows reuse of water for irrigation of garden areas, also acting as a runoff routing system, delaying and decreasing the contribution to the drainage network during rainfall events.

What is LIFE CERSUDS?

LIFE CERSUDS Ceramic Sustainable Urban Drainage System is a European project financed by the European Commission through the LIFE programme.

It develops a demonstrator in the municipality of Benicàssim which consists of a sustainable urban drainage system (SUDS) that uses ceramic material of low commercial value as a permeable pavement system.



Why does LIFE CERSUDS benefit us?

We want to improve cities' capacity to adapt to climate change and promote the use of green infrastructures in urban development.

Thanks to LIFE CERSUDS we can:

- Reduce flooding caused by rainfall by increasing permeable surfaces.
- Reuse the stored water for irrigation of gardens.
- Reduce volumes of runoff and peak flows that end up reaching the sewerage network.
- Integrate rainwater treatment into the urban landscape.
- Reduce CO₂ emissions by using low-value ceramic material for the manufacture of pavement systems.
- Offer to the ceramic industry a new approach for ceramic material with low commercial value.
- Ensure transferability beyond project completion through training of specifiers and raising awareness in municipalities.

- Generate technical documentation for replication in other cities.
- Disseminate sustainable drainage systems in geographical environments where they are not well known.

What we do with LIFE CERSUDS System?

- LIFE CERSUDS develops a 3,000 m² replicable SuDS demonstrator with rainwater storage capacity, which will then be re-used as irrigation water for the maintenance of public space.
- LIFE CERSUDS will allow the development and validation of a ceramic permeable flooring system based on ceramic tiles with a low commercial value, which can significantly reduce surface runoff.
- In addition, we are going to develop similar pre-projects for the municipalities of Aveiro (Portugal) and Fiorano (Italy), countries participating in the LIFE CERSUDS consortium, to boost the replicability of the demonstrator in these cities.

Who participates in LIFE CERSUDS?

COORDINATING ENTITY



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Benicàssim Town Council
<http://www.benicassim.es>



Centro Ceramico di Bologna (CCB-Italia)
<http://www.centroceramico.it>



CHM Obras e Infraestructuras, S.A.
<http://www.chm.es>



Centro Tecnológico da Cerâmica e do Vidro
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Trencadís de Sempre, S.L.
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www.lifecersuds.eu



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