
SeaCon project
International Market Event Infravation
innovation projects
side event of IALCCE 2016
19th October 2016

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Short overview

Concrete plays a remarkable socio-economic role in the world. More than 18B tons of concrete are nowadays produced every year, requiring large amounts of natural resources.

Water

Approximately 1.5 trillion liters of **freshwater** are used annually in concrete production for mixing, curing and equipment cleaning.



Aggregates



Can we save natural resources?



Projected innovations and outcomes



seawater



RCA

+



FRPs



stainless steels

Long-term experimental tests



2 field demonstration projects
(USA and Italy)

+



+

LCA
LCC



Suggested implementation

Concrete itself could become a more sustainable material, allowing:

- the use of seawater for mixing and curing
- the use of salt-contaminated recycled concrete aggregates (RCA)
- the use of cements without chloride restriction (e.g. use solid waste as kiln fuel as well as adding kiln dust back to the clinker)
- Novel cements
- ...

Technology will be demonstrate by means of two real-size field prototypes in two countries (Italy and Florida, USA)



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