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- > HOSA HOTELS SL (SAMBA HOTELS), *Spain*.
- > EMWIS Technical Unit (Euro-Mediterranean Information System on the know-how in the Water sector) – *France*.
- > LGI CONSULTING (LGI), *France*.
- > JRC -Joint Research Centre- European Commission (JRC), *Belgium*.

**CONTACTS:**

ADMINISTRATIVE MANAGEMENT	SCIENTIFIC MANAGEMENT
<p><b>LEITAT</b> Lara VALENTIN CARRERA, PhD <a href="mailto:lvalentin@leitat.org">lvalentin@leitat.org</a> TERRASSA (BARCELONA) TEL. (+34) 93 788 23 00 • FAX (+34) 93 789 19 06 <a href="http://www.leitat.org">www.leitat.org</a></p>	<p><b>ICRA</b> Gianluigi BUTTIGLIERI, PhD ; Prof. Ignasi RODRIGUEZ-RODA, PhD <a href="mailto:gbuttiglieri@icra.cat">gbuttiglieri@icra.cat</a>; <a href="mailto:irodriguezroda@icra.cat">irodriguezroda@icra.cat</a> GIRONA (SPAIN) TEL: (+34) 972 18 33 80 FAX: (+34) 972 18 32 48 <a href="http://www.icra.cat">www.icra.cat</a></p>



THE EUROPEAN UNION SEVENTH FRAMEWORK PROGRAMME  
WATER INNOVATION DEMONSTRATION PROJECTS



Demonstrating integrated innovative technologies for an optimal and safe closed water cycle in Mediterranean tourist facilities (demEAUmed)

[www.demEAUmed.eu](http://www.demEAUmed.eu)



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## Demonstrating integrated innovative technologies for an optimal and safe closed water cycle in Mediterranean tourist facilities (demEAUmed)

demEAUmed is a European project co-funded by the European Union under the 7th Framework Program, and started officially on January 1st, 2014 for over 42 months (2014-2017). Seven countries are establishing this project: Spain, Germany, Netherlands, Austria, Italy, France and Belgium.

demEAUmed will face two key challenges: the importance of the tourism economy and water scarcity characteristic of the area. demEAUmed will be a critical platform for promoting the use of sustainable and innovative technologies in other Euro-Mediterranean tourist facilities in light of also the global tourism market.

## OBJECTIVE:

The aim of demEAUmed project is the involvement of industry representatives, stakeholders, policy-makers and diverse technical and scientific experts to demonstrate and promote:

- The integration of innovative water treatment technologies for an optimal closed water cycle in the Mediterranean tourist facilities.
- Fresh water consumption minimization.
- Safe water management.
- Monitoring, control and automation of water cycle.
- Dissemination to other Euro-Mediterranean tourist facilities.
- Creation of new market opportunities to European industry and SMEs.

## INTEGRATION OF INNOVATIVE TECHNOLOGIES

Eight categories of innovative technologies together with a monitoring, control and decision support system will be integrated and demonstrated on the demonstration site:

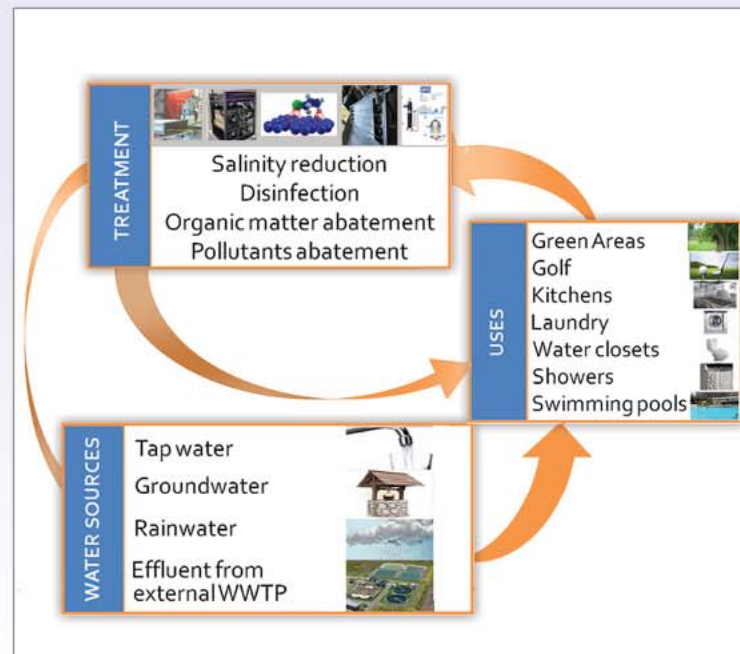
- > Electrochemical ozonation
- > Removal of micropollutants by adsorption processes
- > Photoelectro Fenton process
- > Electrocoagulation flotation technology
- > UVOX technology
- > Plimmer technology
- > Green Walls
- > Smart air MBR

## THE DEMONSTRATION SITE

The Demo site of DemEAUmed is Samba Hotel, 3\* hotel situated in Lloret de MaR. It is a large resort with 441 air conditioned rooms, green areas and exterior pools, conference rooms, bar and restaurant. It is certified by EMAS and ISO 14001.

The proposed **demEAUmed** solution integrates innovative water treatment technologies, Information and Communication Technologies and water management tools.

Different proven water treatment technologies at pre-marketable level will be properly combined to treat and adapt the different water flows to the necessities of the different areas in the resort, while saving fresh water consumption and reducing environmental and socio-economic impact in a safe way.



## EXPECTED IMPACTS

- Reduction of fresh water consumption, improved efficiency of distribution, water/wastewater treatment and reuse while minimizing carbon footprint.
  - Development and demonstration of innovative solutions for closing the water cycle in the Euro-Mediterranean tourism sector.
  - Incorporation of environmental and socio-economic assessment, advanced monitoring and control systems and a decision support tool to ultimately define the best water management solutions.
  - Mobilization of industry representatives, diverse technical and scientific experts to facilitate the exploitation and to ease the market uptake of the innovative technologies.
- Dissemination activities and transfer of knowledge both
- to policy makers, stakeholders, business and general public.