

LIFE MEMORY AND CIRCULAR ECONOMY

Circular Economy is the way to go if we want to overcome current global challenges, as well as a guide to address the change of mentality needed to achieve real **sustainable development**. The role of water treatment in the circular economy is key: **water reuse** allows to take advantage not only of the regenerated water but also brings the opportunity to recover its contained energy and nutrients.

In this context, the **new technology** of Anaerobic Bioreactors demonstrated in the **LIFE MEMORY** project goes along the needed **change of paradigm** in the urban wastewater treatment field towards a **sustainable** treatment process from an economic, social and environmental point of view.



The **anaerobic biological process** applied in this technology transforms the organic matter into biogas – a renewable source of energy – with low sludge production. **Membrane filtration** disinfects low-loaded wastewaters at ambient temperature.

The preliminary results in the AnMBR demonstration plant show, compared to conventional WWTP treatments, the avoidance of **CO₂ emissions** by more than 80%, the reduction of **sludge production** by more than 80% and the reduction of **space requirements** by 25%, as well as a reduced **energy consumption** due to the generated biogas.

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4th Neemo visit to LIFE MEMORY project in Alcázar de San Juan (Ciudad Real)



The meeting between the consortium of the LIFE MEMORY project and Neemo was held on June 7th 2018 in Alcázar de San Juan (Ciudad Real, Spain) to review the status and the next steps of the actions' implementation. An overview of the amended dates for all pending deliverables was presented and some administrative and financial aspects were checked. At the end the group visited the demonstration site.

Results from the LIFE MEMORY project in the Specialized International Conference "Ecotechnologies for Wastewater Treatment (IWA ecoSTP18)"

The event was held in London, Ontario (Canada) from June 25th to 28th. The oral presentation "Environmental behaviour of an AnMBR demo plant for sewage treatment: the LIFE MEMORY project" presented the recent results of the project within the LCA & Sustainability Session.



The LIFE MEMORY project presented in UK



The WWT *Water Industry Energy Conference 2018* (Birmingham, June 12th) and the British Water *Water and the Circular Economy Conference* (Liverpool, June 14th) were opportunities for the partner FCC Aqualia to present the LIFE MEMORY project in front of water industry professionals

A local newspaper follows up the LIFE MEMORY project

The newspaper *La Tribuna de Ciudad Real* published the article "La depuración del siglo XXI llega a Alcazar" in February 2018. The article informs about the implementation of AnMBR technology in the first demonstrative prototype plant located in Alcázar de San Juan (Spain) within the LIFE MEMORY project. The advantages and benefits of the technology are explained, together with the expected and preliminary results.



Aqualia in the International Water Summit in Abu Dhabi



International Water Summit is the world's leading global exhibition dedicated to developing solutions for water sustainability in arid regions. In January 2018, FCC Aqualia attended the conference and organized a parallel workshop to present the main projects developed with impact on carbon footprint reduction, including the LIFE MEMORY project.

Extension of the LIFE MEMORY project granted until December 2018

The initial project planning set 30/06/2018 as the end date of the LIFE MEMORY project. However, in order to perform a proper analysis of the system at cold temperatures, a six-month extension was requested which has been approved. The updated planning therefore sets 31/12/2018 as the amended end date of the LIFE MEMORY project. The final report of the project for the European Commission will be issued before 31/03/2019.

LIFE MEMORY project was present in the Spanish Roundtable on Water Treatment (META)



On 18th-20th June 2018, León (Spain) held the 13th Spanish Roundtable on Water Treatment (META). The LIFE MEMORY project was presented with a poster that described its objectives, the prototype, the influent water characteristics and the main results achieved, such as high COD removal (reaching legal discharge levels), small sludge production and high methane content in the generated biogas.

RETEMA publishes the article “AnMBR technology for urban wastewater treatment and agricultural reuse”

The Spanish technical magazine *RETEMA* (Volume 207) published the article “AnMBR technology for urban wastewater treatment and agricultural reuse” presenting the ongoing work by the partners UV and UPV of the LIFE MEMORY project within the European Initiative “Innovation Deals on Circular Economy” in order to detect legal barriers to water reuse and especially AnMBR technology implementation.



Water technology for Hungarian-Spanish cooperation

The Conference *Innovative Technologies in Water and Sustainability*, organized by the Hungarian Embassy in Madrid took place in May 2018. The LIFE MEMORY Project was presented in the Panel “Innovative Practices in the sanitation sector” as demonstration of an innovative technology for resource recovery maximization from wastewater.



More than 230 people have visited the prototype plant of LIFE MEMORY project



Several visits to the prototype plant located in Alcázar de San Juan (Spain) are being organised since its start-up in September 2016. The main aim is to disseminate among local population the features and advantages of AnMBR technology in terms of sustainability. More than 230 students, researchers and journalists have already visited the prototype plant.

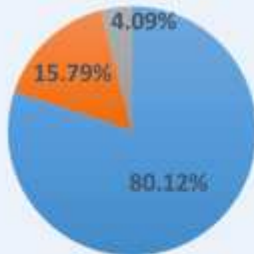


PRELIMINARY RESULTS OF THE LIFE MEMORY'S SURVEY

LIFE MEMORY project assesses social awareness and acceptance of the AnMBR process. A survey with 8 multiple-choice questions related to wastewater treatment processes, sustainability and AnMBR technology is being circulated and the first 170 answers are shown below as preliminary results, demonstrating a wide public acceptance of the technology. The survey is still available in the website of LIFE MEMORY project and answers from all social contexts are welcome.

www.life-memory.eu

If you know that reclaimed water has the **same quality** as water usually used for irrigation, **what water would you prefer** to be used for irrigating the agricultural products you consume?

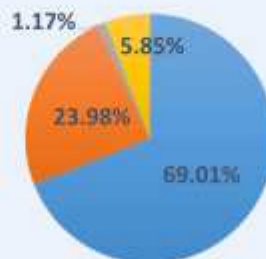


- Reclaimed water
- Other water usually used for irrigation
- No preference

If you know that reclaimed water has the **nutrients needed for the crops** and that this means economical savings and smaller environmental impact, **what water would you prefer** to be used for irrigating the agricultural products you consume?



Would you agree to allocate **public funding** for applying **AnMBR technology** in WWTP?



- Yes, I think it is a priority
- Yes but I do not think it is a priority
- No
- n.a.



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