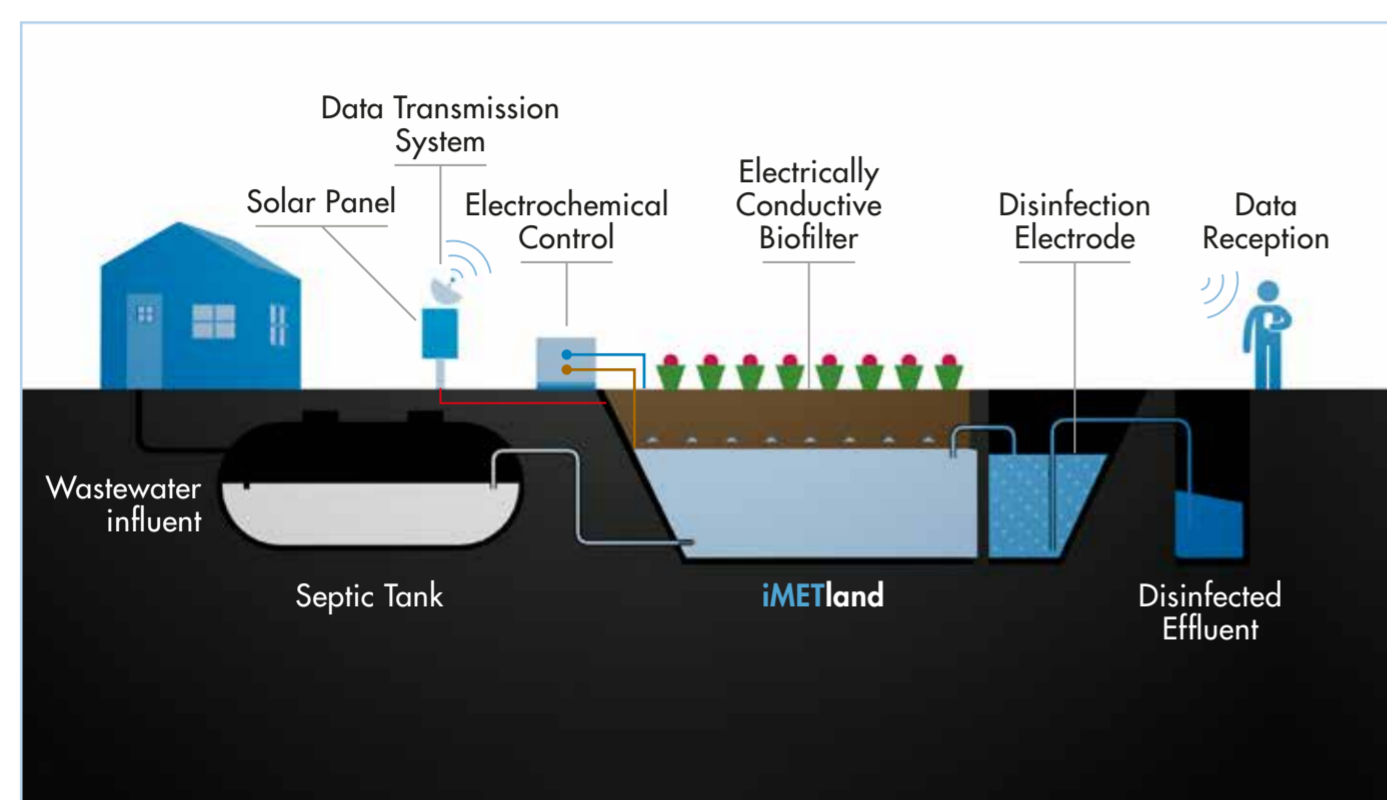


## Simply giving water a second life

iMETland is an eco-friendly device which purifies urban wastewater from small communities at zero-energy operation cost, creating a virtuous circle among water, energy, ICT and land resources, safeguarding local environment.



### iMETland innovation

The project is tested and validated at four different geographical locations: Mediterranean (Carrión de los Céspedes, Spain), North-Europe (Ørby, Denmark), South-America (Mar de Plata, Argentina) and North-America (Jiutepec, Mexico).

- Biofilters outperformance: combining **electroactive bacteria** with electroconductive material leads to **10-fold higher depuration rates** than typical methods;
- Wastewater conversion in **pathogen-free water**, suitable for **irrigation**;
- **Zero-Energy** operation cost;
- **ICT remote control**: sewage treatment process is monitored wirelessly through the electric signal generated by bacteria;
- **Landscape beautification**: integrating iMETland units with the surrounding environment.

### iMETland Monitoring Platform

iMETland monitoring platform is accessible via web at <http://imetland.iot4water.com>

- Several **sensors** have been installed all over the wetland to monitor the behaviour of the biofilters, collecting **real time data** to generate alarms and make predictions;
- Telecommunications networks that best meet customer needs for **performance, availability**, speed and data integrity are used;
- **Data processing and storage** functions, with a modular design with open standards and several applications in the cloud, ensuring and enabling real time data exchange and analysis;
- **Big Data** techniques are applied for **predicting the behaviour** of the wetland.

Stay updated! Visit [www.imetland.eu](http://www.imetland.eu) and follow our Twitter account [@imetland](https://twitter.com/imetland)

Project coordinator: Mr. Abraham Esteve-Núñez, IMDEA Water, [abraham.esteve@imdea.org](mailto:abraham.esteve@imdea.org)

