



Demonstrating integrated innovative technologies for an optimal and safe closed water cycle in Mediterranean tourist facilities www.demeaumed.eu

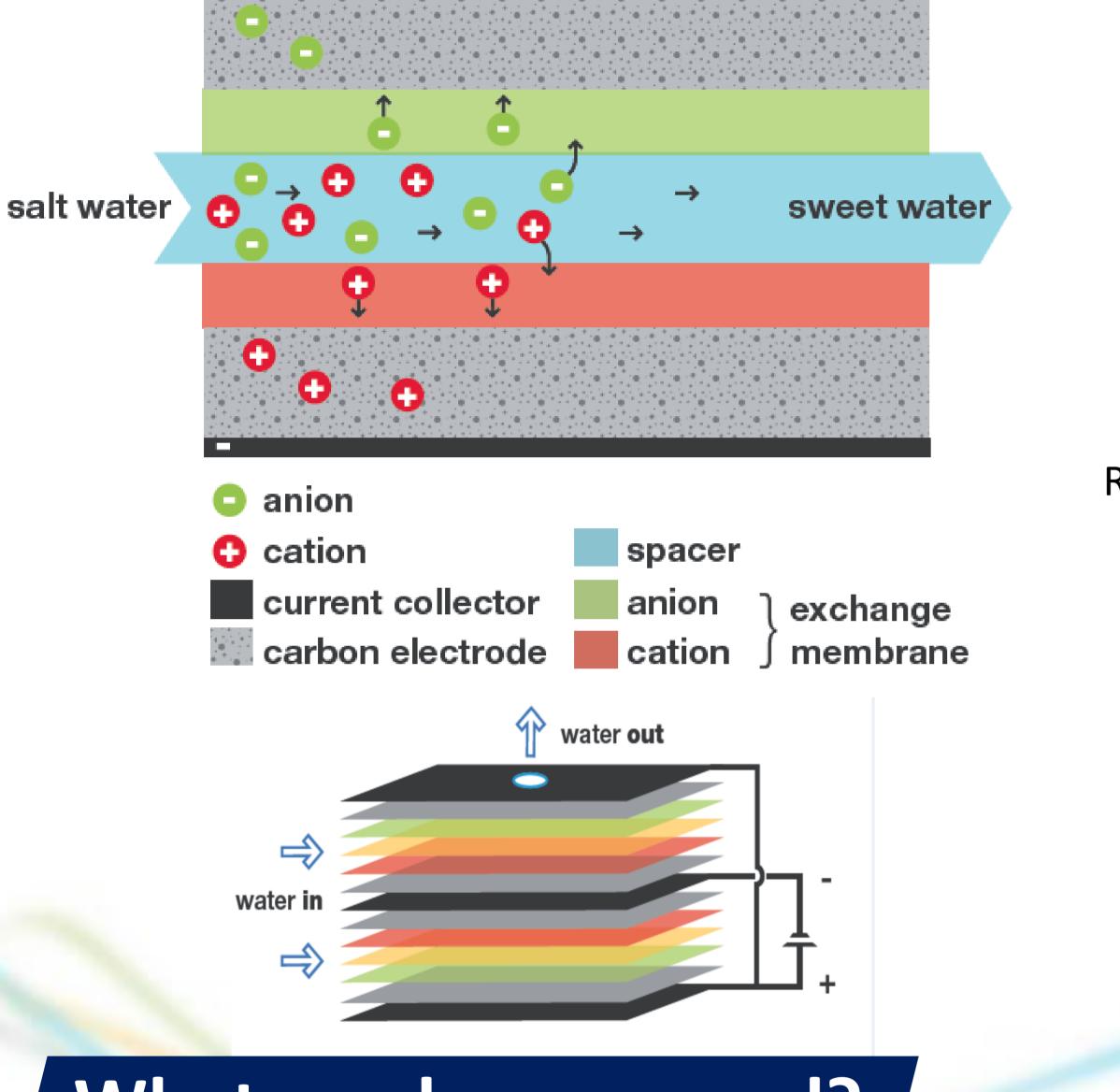
# **PLIMMER CDI**

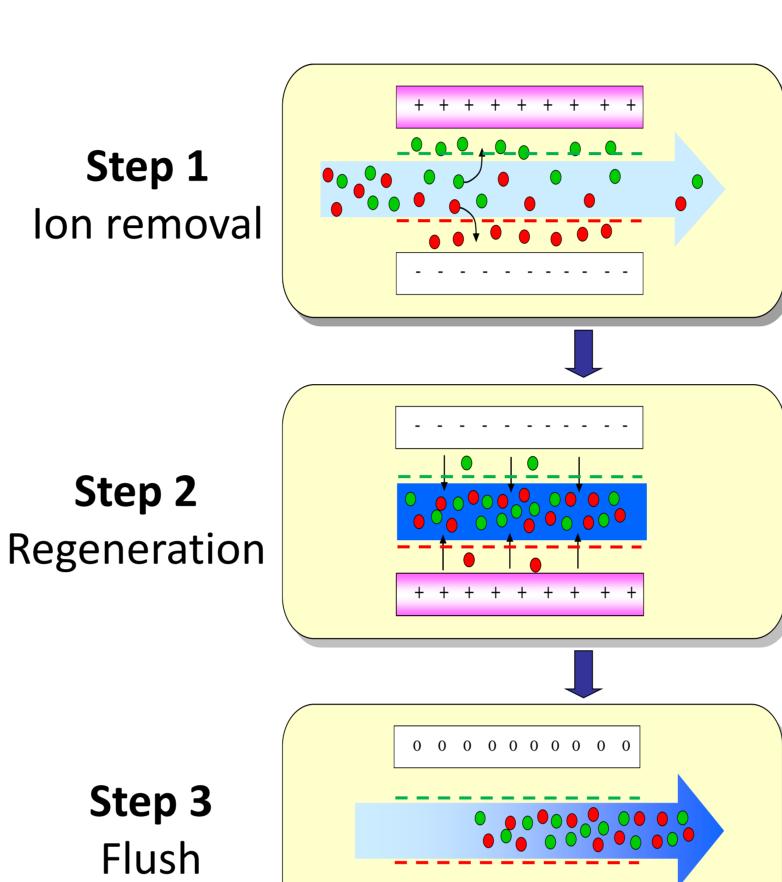


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Purification cycle  $\rightarrow$  3 main steps





0 0 0 0 0 0 0 0 0

When water passes between the electrodes, ions are attracted to the oppositely-charged electrodes. The output water with these salts and metals removed exits the system

As more and more ions are attracted to the electrodes, the electrodes become saturated. At this point, **Plimmer**<sup>®</sup> automatically stops the input flow, reverses the electrode polarity and discharges the adsorbed ions back into the cell

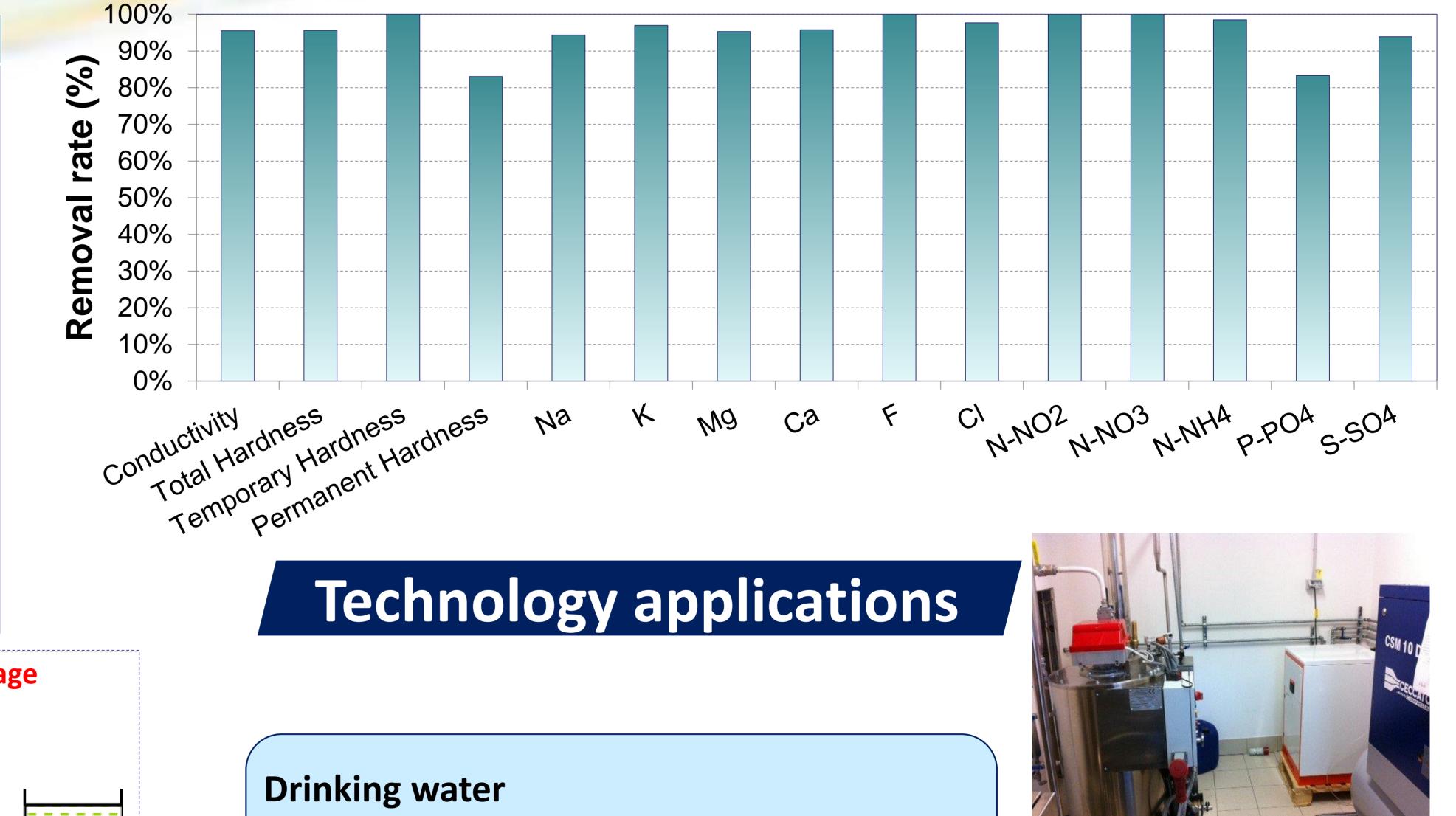
The cell is then flushed and the ions trapped in the cell are sent to waste. **Plimmer**<sup>®</sup> then re-establishes the original electrode polarity and the ion removal process (Step 1) starts

again

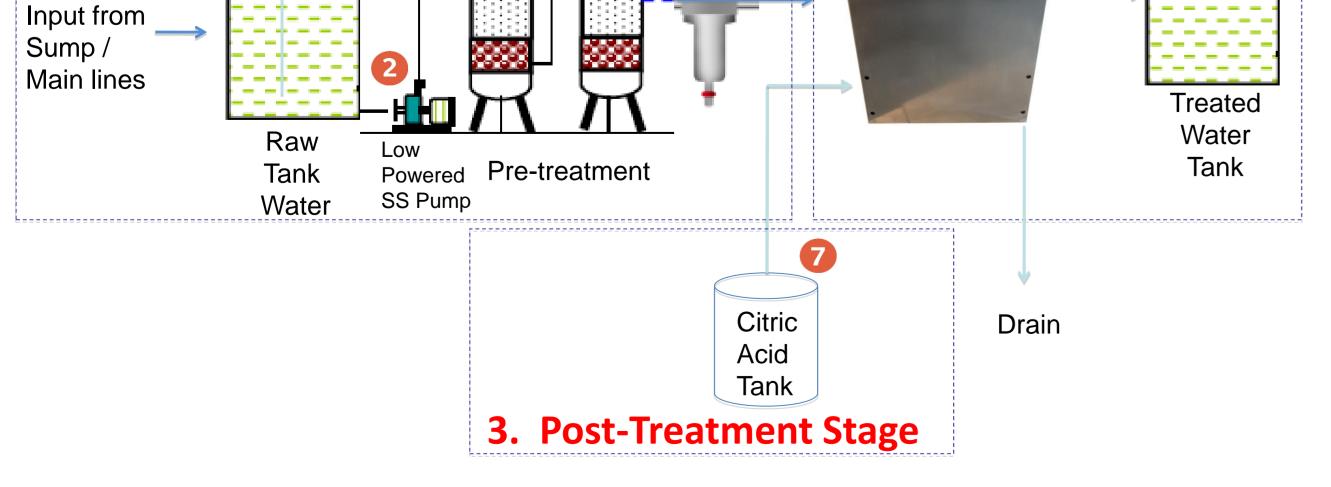
## **Example of removal rate**

### What can be removed?

SALTS	METALS	OTHERS
<ul> <li>Total Dissolved</li> </ul>	•Chrome	•Ammonia
Solids	•Iron	•Chromium 6
<ul> <li>Total Hardness</li> </ul>	•Arsenic	
•Calcium Carbonate	•Nickel	
<ul> <li>Magnesium</li> </ul>	•Copper	
Carbonate	•Zinc	
•Sodium Chloride	•Cadmium	
<ul> <li>Phosphates</li> </ul>	<ul> <li>Mercury</li> </ul>	
•Sulphates	•Manganese	
•Chlorides	•Lead	
•Nitrates	•Vanadium	
•Fluoride		
Pre-treatment Stage		2. Treatment Sta
Ozonation	Filter 4 ACF	6



**Glass/Dish washers** 



6

UF Cartridge

Plimmer

**Boiler rooms** 

### **Grey/waste water reuse**

(in combination with other technologies)



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