

# “ ZEOLITE IS THE GAME CHANGER FOR WATER INDUSTRY”

“ Zeomedia is a zeolite-based filter media that substitutes all other filtration system in water and wastewater .”

**PureGy-Zeomex**, the leading company in the provision of Zeolite filter media in Middle East that help to reduce the cost of a filtration system down to 40% and the total cost of a desalination plant by up to 8%.

Zeolite Media has been nominated for the GPID prize for its innovative water treatment technologies, addressing the urgent need for efficiency and sustainability in industries like SWCC. Amid tightening regulations, their solutions offer hope, reducing energy and water waste while meeting quality standards. The nomination highlights their impactful contributions to a more sustainable future in water management.

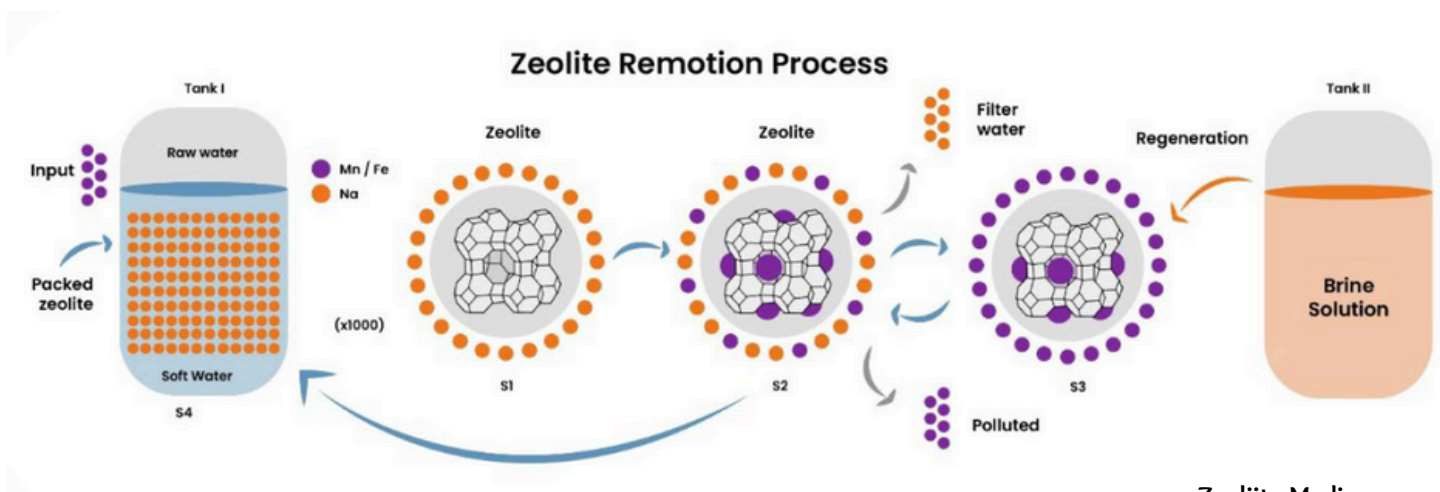
Zeolite Media benefits:

- Zeolite Media possesses a high adsorption capacity; it retains particles up to 1 micron, and other organic compounds, Ammonia, Ammonium color, and heavy metals such as Iron and Manganese provide a far better filtration quality than other filtration system.

- It also reduce the capital expenses of new filtration systems since it can reduce the required filtration area by up to 50% compared with other filtration system.
- Since it is lighter and more permeable than sand, Zeolite Media can provide a three times longer operational cycle than sand and anthracite, reducing the water and energy waste in backwashes up to 60%.
- By replacing your current filter media with Zeolite Media, you can increase your production capacity More than 80%.

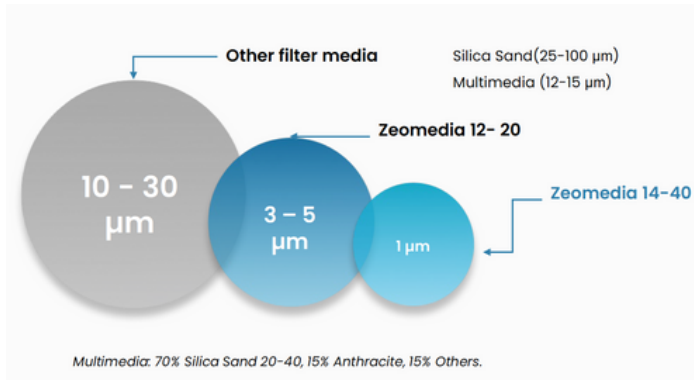
**Save up to 60% of water and energy during backwashing.**

The only precleaned and refined high purity filtration media that guarantees an easy and trouble-free start-up.



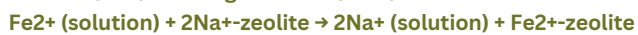
Zeolite Media

# FUTURE SUSTAINABILITY



Depending on the oxidation state of Fe in water, the possible ion exchange reactions were:

**Sodium (Na<sup>+</sup>) exchange for iron (Fe<sup>2+</sup>):**



**Sodium (Na<sup>+</sup>) exchange for iron (Fe<sup>3+</sup>):**



In these equations, the iron ions (Fe<sup>2+</sup> or Fe<sup>3+</sup>) present in the aqueous solution replace the sodium ions (Na<sup>+</sup>) in the clinoptilolite structure. As a result, sodium ions are released into the solution and iron ions are incorporated into the Zeolite Media.

