

FUTURE READY PREMIUM WATER

Next Generation Natural Mineral Water Platform

ABR Adsorption Power + **SMO** Nano Activation

Cleaner. Fresher. Safer. Premium Water for the Future.



PFAS
Ready



Microplastic
Removal



High DO
(Saturated)



Nano Activated
Water



Natural Mineral
Preservation



ESG & Sustainable
Future



Conventional Bottled Water Process



Emerging contaminants (PFAS, Microplastics) not fully addressed



Limited Dissolved Oxygen and freshness



Biofilm & re-contamination risk in system & package

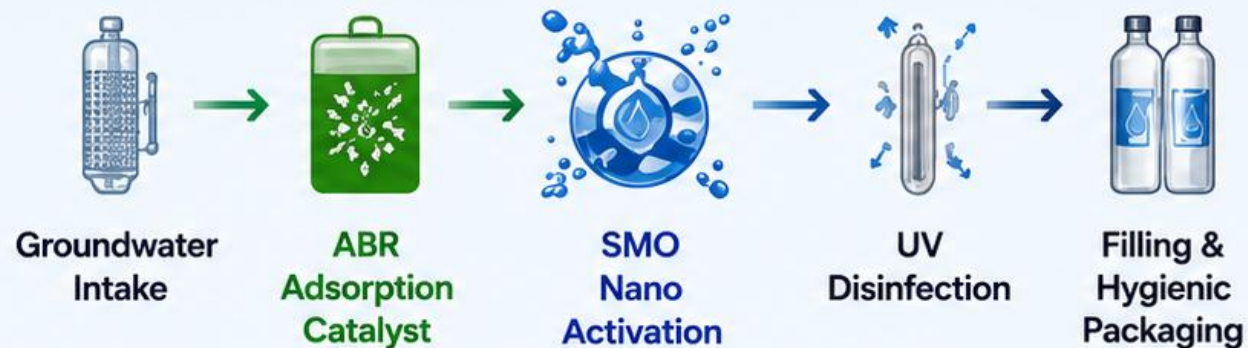


Loss of natural minerals and water characteristics



Rising regulatory pressure and consumer expectations

NEXT GENERATION PREMIUM WATER with ABR + SMO Integrated System



PFAS, Heavy Metals, Microplastics effectively removed



High Dissolved Oxygen for fresh taste & stability



Inhibits biofilm and recontamination



Preserves natural minerals and water characteristics



Future-ready technology for regulations & market



Better Water. Better Life. Better Future.

The Synergy of Adsorption Power and Nano Activation

ABR removes contaminants. SMO activates water.

Together, they create unmatched water quality.

✓ PFAS Removal

✓ Heavy Metals
Removal

✓ Microplastics
Removal

✓ High Capacity

✓ Regenerable

ABR

Adsorption Catalyst



SMO

Nano Activation



✓ 270 Million
Nanocavity Bubbles/ml

✓ High Dissolved Oxygen
(Saturated)

✓ Nanozyme Water

✓ Sterilization &
Biofilm Control

✓ Natural Mineral
Preservation

Next Generation Premium Water Platform

**UNIVERSITY
OF ALBERTA**

Third-Party PFAS
Removal Test
(2023)

PFAS REMOVAL PERFORMANCE BY ABR

(University of Alberta Test Results)

LONG CHAIN PFAS (6 COMPOUNDS)

100%

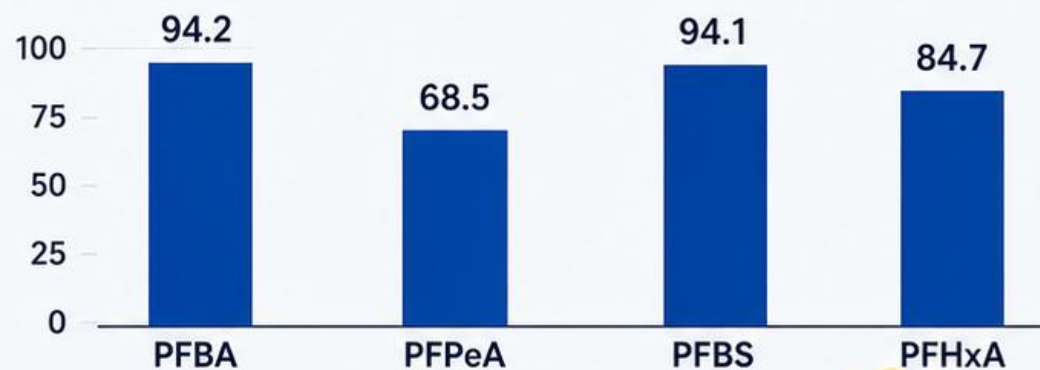
REMOVAL ACHIEVED



SHORT CHAIN PFAS (4 COMPOUNDS)

80%+

REMOVAL ACHIEVED



No heat, pressure or complex apparatus were applied.



Utilization in common and scalable systems such as clarifiers.





Superior Safety

PFAS, heavy metals and microplastics effectively removed for safer water.



Longer Shelf Life

Inhibits biofilm and microbial regrowth for extended freshness.



Fresh Taste & Clarity

High dissolved oxygen and nano activation deliver crisp, fresh taste and excellent clarity.



Clean Label Advantage

Chemical-free physical process for clean label products.



Preserved Naturalness

Natural minerals and water characteristics are maintained.



Sustainability & ESG

Lower chemical use, water reuse and reduced carbon footprint.



Better Water. Better Life. Better Future.



Retrofit Friendly

Easily integrated into existing water treatment lines with minimal modification.



Lower OPEX

Reduced chemical use, filter replacement, cleaning frequency and downtime.



Energy Efficient

Low energy consumption due to SMO technology.



Premium Pricing

Enables premium branding and higher market price realization.



ESG Leadership

Supports ESG goals and future regulatory compliance.

Illustrative Economic Impact (for 50 ton/day Plant)

15~25%

OPEX REDUCTION
(Estimated)

20~30%

**CHEMICAL COST
REDUCTION**

10~20%

**ENERGY COST
REDUCTION**

20~40%

**PREMIUM PRICE
POTENTIAL**

Actual results may vary depending on raw water quality and site conditions.

JOINT PILOT PROJECT



Pilot validation at
Korea site
(30~90 days)

- Water Quality Analysis
- ABR + SMO Pilot Test
- Performance Validation
- ROI Assessment



COMMERCIAL DEPLOYMENT



Scale-up & integration
into production facility
(6~12 months)

- Engineering & Design
- Equipment Supply
- Installation & Commissioning
- Operator Training



NATIONWIDE DEPLOYMENT



Expansion to other plants
and market leadership
(12+ months)

- Multi-site Rollout
- Brand Co-marketing
- Continuous Innovation
- Global Expansion



LONG-TERM PARTNERSHIP



Sustainable growth
through innovation
and trust

- Joint R&D
- Shared Value Creation
- Strategic Collaboration
- Future-Ready Solutions

ORP INNOVATION – YOUR PARTNER FOR NEXT GENERATION PREMIUM WATER

Let's create the cleanest, healthiest and
most valuable water together.



INNOVATION



SUSTAINABILITY



TRUST



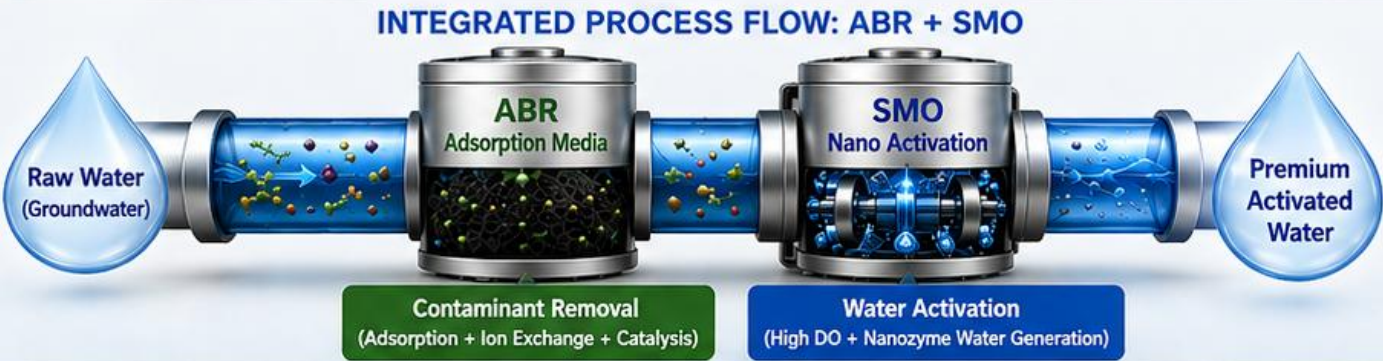
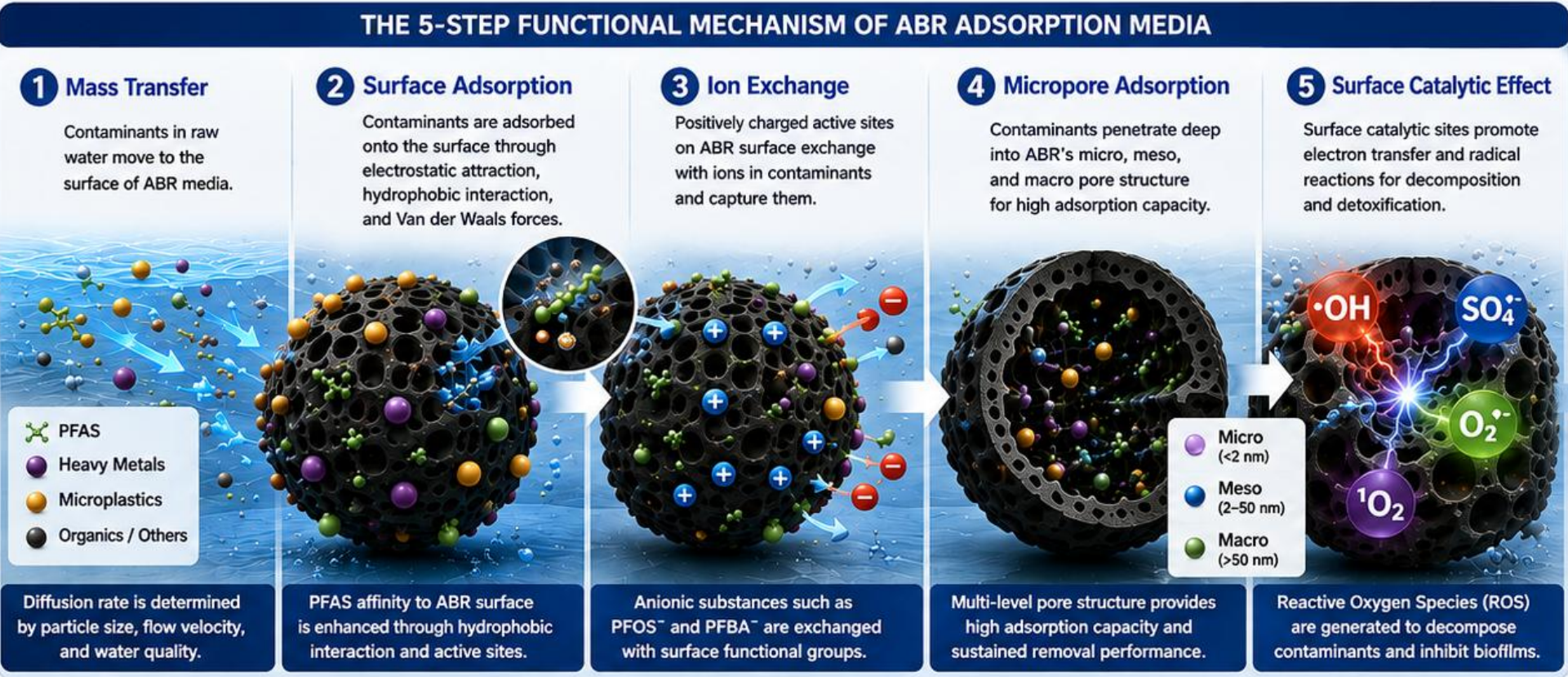
VALUE CREATION

Appendix



ABR ADSORPTION + SMO NANO ACTIVATION INTEGRATED PLATFORM

We remove what does not belong. We enhance what makes water valuable.



Why SMO?

Shockwave Molecular Optimization™

The World's First Water Activation Platform

Conventional systems remove contaminants. SMO optimizes the molecular environment of water to create fresher, healthier, and more stable premium water.

ABR REMOVAL PLATFORM

Removes What Does Not Belong



PFAS



Heavy Metals



Microplastics



Organics

SMO ACTIVATION PLATFORM

Optimizes What Matters



High DO



Nanozyme Activation



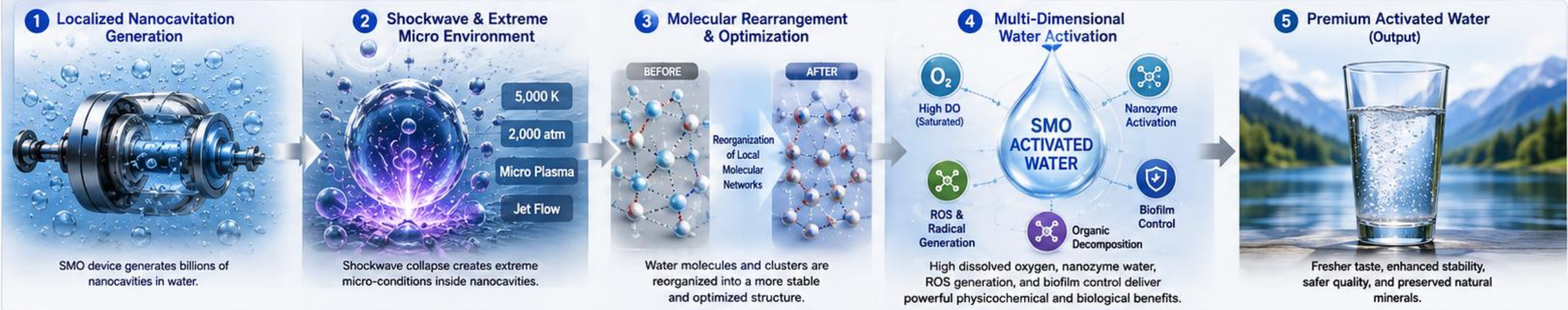
Molecular Optimization



Biofilm Control



THE 5-STEP SMO PROCESS (Shockwave Molecular Optimization™)



Proven Multi-Dimensional Performance



PFAS Removal



Heavy Metal Removal



Microplastics Removal



High DO (Saturated)



Nanozyme Activation



Organic Decomposition



Biofilm Control



Natural Mineral Preservation

- ### SMO Key Benefits
- ✓ Transforms water at the molecular level
 - ✓ Highest dissolved oxygen & freshness
 - ✓ Inhibits biofilm and recontamination
 - ✓ Enhances taste while preserving minerals
 - ✓ Reduces chemical use and energy
 - ✓ Supports ESG and sustainable operations



WHY SMO-2KM™ IS DIFFERENT

From “Nanobubble Generator” to “Multi-functional Water Activation Platform”

EXISTING TECHNOLOGIES Nanobubble Generators

Moleaer



Mazzei



AquaB



Conventional
Microbubble



Electrolysis



Ultrasonic



CORE FUNCTION

Nanobubble Generation
Gas Transfer / Oxygen Dissolution
(Single or Limited Function)

LIMITATIONS



- ✗ No Hydrodynamic Cavitation
- ✗ No Shockwave
- ✗ No Nano Emulsion Capability
- ✗ Limited Radical Enhancement
- ✗ Limited Water Activation
- ✗ Single Purpose / Limited Application

FOCUS : Gas Injection & Nanobubble Only

SMO-2KM™ Multi-functional Water Activation Platform



All-in-One
Water Technology
Platform

SMO UNIQUE TECHNOLOGY FLOW



Nanobubble
Generation



Nano
Cavitation



Shockwave
Generation



Nano
Emulsion



Water
Activation



Multi-
Applications

KEY ADVANTAGES



Multiple
Functions in
One System



High Efficiency
& Low Energy
(0.75 kWh/m³)



Ultra Quiet
Operation



Proven in Diverse
Applications



Reliable &
Long-term
Performance

FOCUS : Water Activation & Multi-functional Applications



AI Cooling



Agriculture



Aquaculture



Drinking Water



Cosmetics / Nano Formulation



Industrial Water



Food / Fermentation



Hygiene Water

SMO-2KM vs. Existing Water Technology

From Nanobubble Generator to Multi-functional Water Activation Platform

Key Features	Moleaer	Mazzei	AquaB	Conventional Microbubble	Electrolysis	Ultrasonic	SMO-2KM
Nanobubble Generation	★★★★★	★★★★☆	★★★★☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★
Microbubble Generation	★★★★★	★★★★★	★★★★☆	★★★★★	★★★☆☆	★★★☆☆	★★★★★
Oxygen Dissolution	★★★★★	★★★★★	★★★★☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★
Gas Transfer Efficiency	★★★★★	★★★★★	★★★★☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★
Nano Emulsion Capability	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★	★★★★★
Hydrodynamic Cavitation	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★
Shockwave Generation	☆☆☆☆☆	★★★☆☆	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆	★★★☆☆	★★★★★
Radical Reaction Enhancement	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★
Water Activation Platform	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★
Multi-functional Processing	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★	★★★★★
AI Cooling Water	✓	✓	✓	✓	—	—	✓
Cosmetics / Nano Formulation	—	—	—	—	✓	✓	✓
Agriculture	✓	✓	✓	✓	✓	✓	✓
Aquaculture	✓	✓	✓	✓	✓	✓	✓
Industrial Water	✓	✓	✓	✓	✓	✓	✓
Drinking / Hygiene Water	✓	✓	✓	—	✓	✓	✓
Energy Efficiency	★★★★☆	★★★★★	★★★★☆	★★★☆☆	★★★☆☆	★★★☆☆	★★★★★
Noise Level	★★★★☆	★★★★★	★★★★☆	★★★☆☆	★★★★★	★★★☆☆	★★★★★

SMO-2KM

Multi-functional Water Activation Platform



- Nanobubble
- Nano Cavitation
- Shockwave
- Nano Emulsion
- Water Activation
- Multi-Functional

Key Applications



Drinking Water



Cosmetics



Agriculture



Aquaculture



AI Cooling



Food & Beverage



Industrial Water



Health & Hygiene



Nano Emulsion

Why SMO-2KM?

- ✓ All-in-One Water Activation Platform
- ✓ Higher Performance, Wider Applications
- ✓ Energy Efficient & Eco-friendly
- ✓ Proven Technology with Multiple Validations



A Global Solution for Next-Generation Water Technology