

- FILTERSORB
- FILTRATION
- ADSORPTION
- INSTANT PRODUCTS
- OXY TREATMENT**
- SYSTEMS

# QUANTUM XSW SOLAR™

## SOLAR METALLIC FRAMEWORK (SMF) TECHNOLOGY

### WHAT IS QUANTUM XSW SOLAR™?

Quantum XSW Solar™ is a next-generation environmental restoration technology by **Watch Water®**, combining advanced **Solar Metallic Framework (SMF)** architecture with the power of natural sunlight.

Unlike conventional chemical herbicides, Quantum XSW Solar™ is designed to **restore rather than suppress** - supporting natural aquatic ecosystem recovery from within.

The Next Generation Solar Metallic Framework (SMF) Technology for Lake Restoration and Water Body Recovery

**RESTORE RATHER THAN SUPPRESS.**  
**WORK WITH NATURE - NOT AGAINST IT.**

This solar-powered solution helps improve water quality by supporting dissolved oxygen conditions and reducing organic accumulation. Its advanced design requires no complex equipment, making it easy to apply and maintain. Developed by **Watch Water® GmbH**, it is ideal for sustainable management of large water bodies.



### WHY CHOOSE QUANTUM XSW SOLAR™?

- Uses natural sunlight as the activation source
- Supports healthy dissolved oxygen levels
- Helps reduce organic sludge accumulation
- Assists in restoring ecological balance
- Supports improved water clarity
- Environmentally responsible treatment approach
- Suitable for lakes, reservoirs, lagoons, canals, and recreational waters

### ADVANTAGES



Lakes



Reservoirs



Lagoons



Water Canals



Recreational Waters



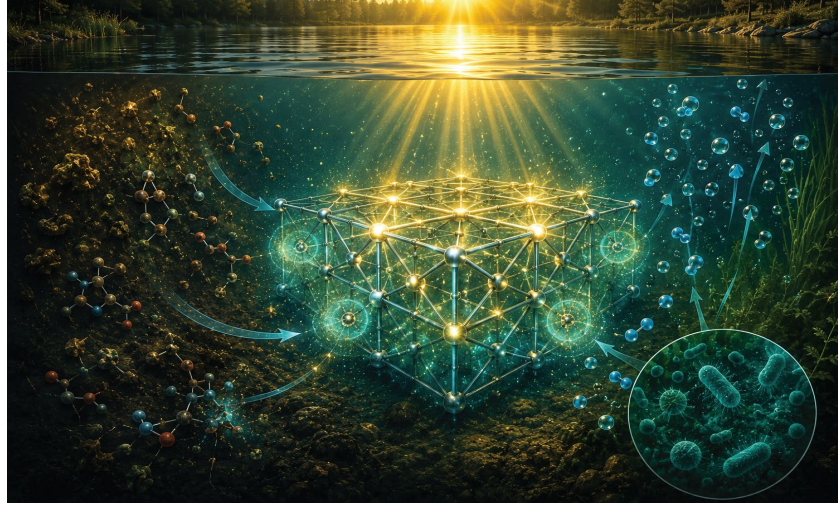
Environmental Restoration Projects



**PREMIUM QUALITY**  
**MADE IN GERMANY**

**QUANTUM XSW SOLAR™**

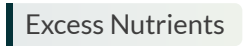
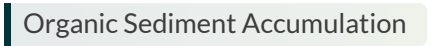



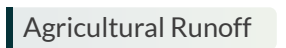
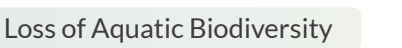
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## WHY MANY LAKES CONTINUE TO DECLINE

Across the world, lakes and reservoirs face increasing pressure from a combination of human and natural stressors. These challenges can reduce water quality and affect the long-term health of aquatic ecosystems.

### PRESSURES ON LAKES & RESERVOIRS

-  Excess Nutrients
-  Organic Sediment Accumulation
-  Algae Blooms
-  Oxygen Depletion
-  Urban Pollution
-  Agricultural Runoff
-  Loss of Aquatic Biodiversity



### THE CONVENTIONAL APPROACH






Traditional lake management often focuses on short-term corrective actions.

While these approaches may provide temporary improvements, underlying conditions can remain, requiring repeated interventions.

**TRADITIONAL LAKE MANAGEMENT OFTEN FOCUSES ON SHORT-TERM CORRECTIVE ACTIONS.**

**UNDERLYING CONDITIONS CAN REMAIN - REQUIRING REPEATED INTERVENTIONS.**

### CONVENTIONAL METHOD






-  Chemical herbicide application
-  Symptom suppression only
-  Repeated interventions needed
-  Ecological disruption risk
-  Short-term effect

## THE QUANTUM XSW SOLAR™ APPROACH

Quantum XSW Solar™ supports a fundamentally different philosophy - **Restore rather than suppress.**

By utilizing solar-driven framework technology, the system is designed to support natural restoration processes within aquatic environments — working with the ecosystem, not against it.

### THE OBJECTIVES






-  Support oxygen-rich conditions
-  Reduce environmental stress
-  Assist natural ecosystem recovery
-  Improve water quality
-  Promote sustainable management practices

## WORKING WITH NATURE MEANS WORKING SUSTAINABLY.

Quantum XSW Solar™ is designed for sensitive aquatic ecosystems where chemical herbicide use is restricted or undesirable.



### QUANTUM XSW SOLAR™

-  Solar-driven framework technology
-  Supports root-cause restoration
-  Designed for long-term results
-  Environmentally responsible
-  Sustainable management



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## HOW QUANTUM XSW SOLAR™ WORKS

### ADVANCED SOLAR METALLIC FRAMEWORK TECHNOLOGY

Quantum XSW Solar™ utilizes a proprietary Solar Metallic Framework (SMF) architecture - engineered to interact with sunlight and water simultaneously, supporting natural oxidation and ecosystem restoration processes.

**NO COMPLEX EQUIPMENT.  
NO ELECTRICAL INFRASTRUCTURE.**

**JUST SUNLIGHT, WATER, AND  
THE FRAMEWORK - WORKING TOGETHER.**

### SOLAR ACTIVATION PROCESS

The SMF technology activates through a sequential solar-driven process - clean, renewable, and designed to work within the natural dynamics of aquatic environments.

STEP 1

#### SOLAR ACTIVATION

Natural sunlight activates the framework structure - no external power source required.

STEP 2

#### SURFACE INTERACTION

The framework provides a highly active surface environment - maximizing contact with the water matrix.

STEP 3

#### ADVANCED OXIDATION SUPPORT

The system supports oxidation processes that help break down unwanted organic material - naturally

STEP 4

#### ECOSYSTEM IMPROVEMENT

Cleaner conditions support improved water quality, reduced organic loading, better oxygen conditions, and healthier aquatic environ-

### ECOSYSTEM IMPROVEMENT - OUTCOMES

- Improved water quality and clarity
- Reduced organic loading and sludge accumulation
- Better dissolved oxygen conditions
- Healthier aquatic environments and biodiversity

## SMF TECHNOLOGY ARCHITECTURE

The Solar Metallic Framework (SMF) is a proprietary heterogeneous framework design - engineered specifically for deployment in open aquatic environments.



#### Solar Activated

Uses natural sunlight as the sole activation energy source - no electrical infrastructure required.



#### Framework Based

Advanced heterogeneous framework design - maximized active surface area for water interaction.



#### Sustainable

Supports long-term environmental goals - designed for recurring natural restoration cycles.



#### Eco-Responsible

Designed for use in sensitive aquatic ecosystems where chemical herbicides cannot be applied.



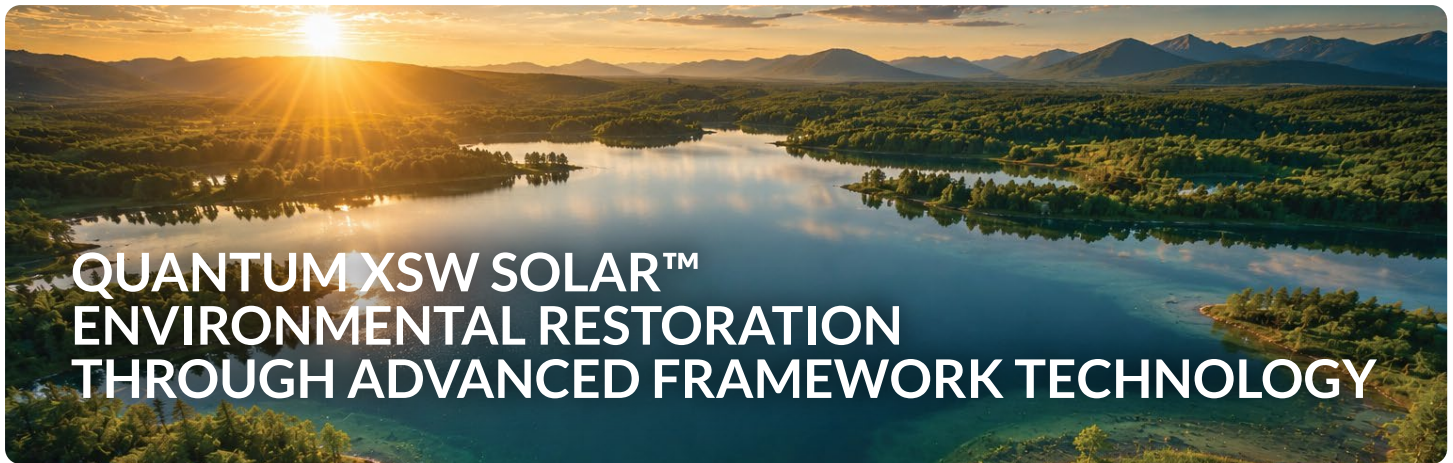
**Sunlight is free. The framework does the work. Quantum XSW Solar™ operates continuously during daylight hours - silently supporting ecosystem recovery around the clock.**

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**WHAT QUANTUM XSW SOLAR™ DELIVERS**

<p><b>Solar Powered Technology</b></p> <p>Activated entirely by natural sunlight - zero operating energy cost</p>	<p><b>Advanced Framework Design</b></p> <p>Proprietary SMF architecture for maximum water-surface interaction</p>	<p><b>Dissolved Oxygen Support</b></p> <p>Supports healthy oxygen levels – critical for aquatic life</p>	<p><b>Organic Accumulation Reduction</b></p> <p>Helps break down organic sludge and bottom sediment naturally</p>
<p><b>Sustainable Management</b></p> <p>Long-term ecosystem support without chemical dependency</p>	<p><b>No Complex Equipment</b></p> <p>Simple deployment - no pumps, electrical connections, or infrastructure</p>	<p><b>Easy Application</b></p> <p>Suitable for large water bodies with minimal logistics</p>	<p><b>Developed by Watch Water</b></p> <p>Engineered in Germany - backed by decades of water treatment expertise</p>



**QUANTUM XSW SOLAR™ ENVIRONMENTAL RESTORATION THROUGH ADVANCED FRAMEWORK TECHNOLOGY**



**Standard Packaging**

Packaging	Weight of product	Quantity/ pallet	Gross Wt./ pallet
Drum	60 kg	18	1168 kg

★ Other packaging can be considered on request

