

Turnkey Solutions and Technology

S&B offers the complete range of clean water treatment and desalination solutions provided by the world's experts in potable drinking water solutions driven by their experience and desire to formulate the excellent water quality of the Austrian Alps. Each water treatment project is unique in its requirement and can only be realized by conducting an initial Pre-Study Design analysis taking into account all the variables including the needs of the community, the entrepreneur or investor. Consideration must be given to the water treatment location, the available resources and the specified consumer requirement for operational quality whether by the community or enterprise. Upon a positive business plan and sustainability study, the project has reached the stage of commercial and financial evaluation by the customer.

In special cases where the final customer needs financial assistance either in the form of bridge or long term financing, S&B will endeavor to locate suitable sources of financing applicable for the project, but always in compliance with the special conditions associated to the country.

Solar & Benefit Workflow Agreement

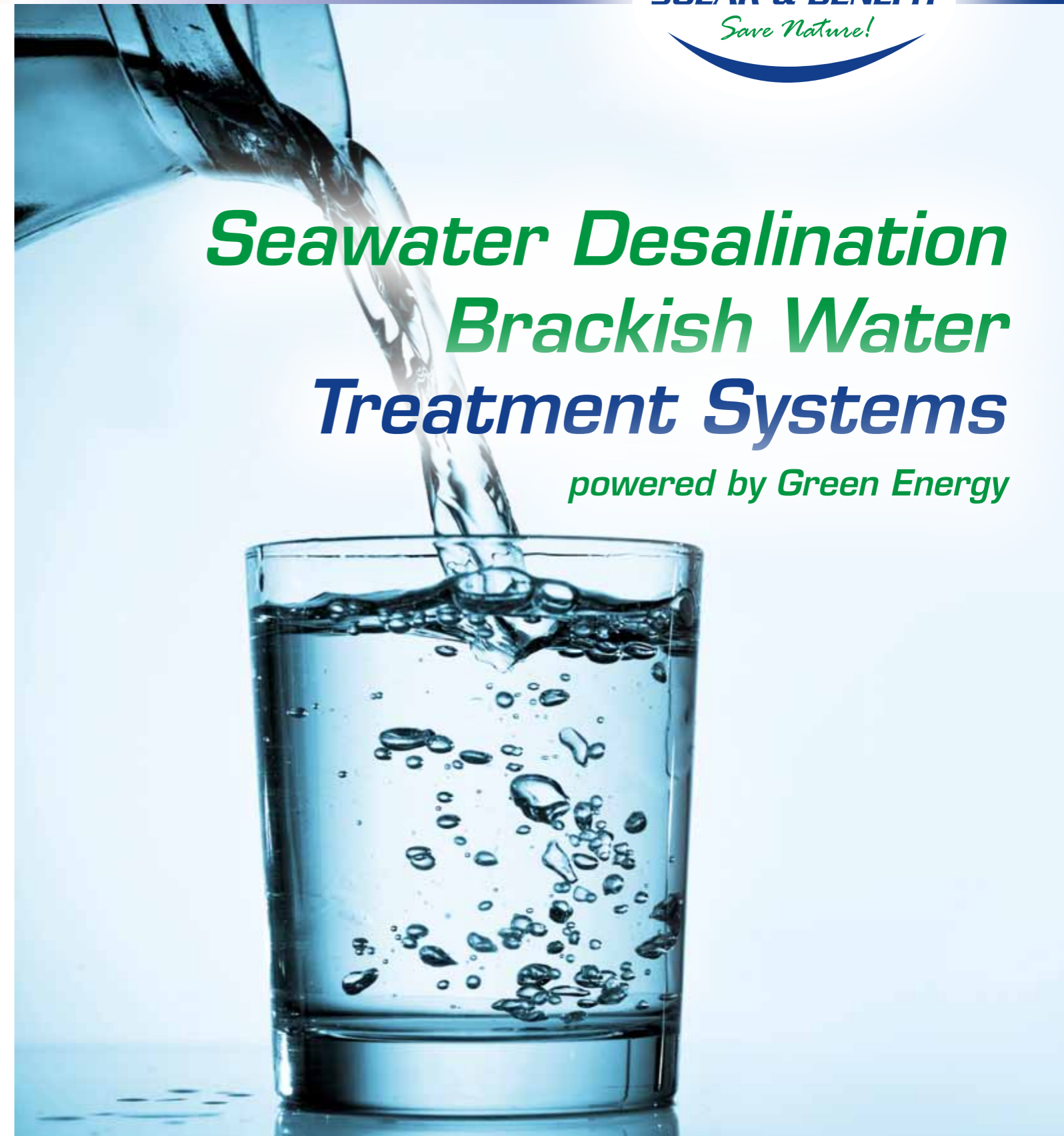
In line with the above workflow requirements, S&B undertakes the whole process from the start up to final project completion. The workflow may be summarized in the following steps:

- STEP 1** – Customer Request for Clean Water Treatment Installation
 - Clean Water Treatment Installation Questionnaire, Pre-Check, Project Qualification and Customer Water Quality and Volume Requirements declaration
- STEP 2** – Customized Pre-Study Design, Indicative Price Offer and Business Plan – with an applicable fee of 1,5% of the projected project turnkey value, based on Customer Water Quality and Volume Requirements declaration
 - Complete Design and local Documentation for Permitting – with an applicable fee of 5% calculated on the actual project turnkey value
- STEP 3** – Construction and Commissioning



Operation & Maintenance

S&B will support the customer for the immediate operational lifetime even after the initial warranty period and commissioning, being present for his subsequent concerns, whether technical or commercial. Our company's Operation & Maintenance Division will continue to provide the necessary preventative and remedial maintenance for all Biogas subsystems and support the customer for all his technical and operational concerns.



Clean Water Treatment Systems

In line with Solar & Benefit International's mission motto "Save Nature" and its Environmental Preservation Technologies and Green Energy systems, S&B offers a wide range of Desalinator and Clean Water Treatment systems catering from small to large scale potable and industrial water requirements for applications in diverse locations from north European to equatorial latitudes wherever there is need for clean water even though the access to the natural water source is not directly suitable for household or industrial use. Such water sources include any well, river, pond or lake of varying suitability, extending this list to the sea itself, the largest and most plentiful supply serving the majority of the world's population. In addition to offering a wide range of filtration, clean water treatment and desalination facilities catering for requirements of varying water conditions, S&B also offers solutions overcoming local geographic deficiencies

especially in the area of energy availability needed to power the water treatment systems, allowing the efficient and economical production of today's much needed water for drinking, washing, sanitation, irrigation and industrial applications, whether serving local communities or addressing the needs of any commercial small to large scale industrial or tourist investment.

By combining S&B's product and technologies portfolio, S&B can provide a multitude of solutions, catering for the needs of any community or commercial venture. Our technologies and synergies are available for the realization of demanding projects or guaranteeing significant savings in the operational cost of large scale commercial projects, achieved by the combination of our special features, advanced technology solutions and supporting peripheral systems:

S&B Water Treatment systems features

- Reverse Osmosis process with Microfiltration, Ultrafiltration, Nanofiltration
- Fully enclosed container systems of modular construction and installation
- Smallest footprint for commercial and tourist complex applications
- Graded water filtration adaptable for any water source quality
- Biological and brackish water filtration against infection and health disorders
- Water management and conservation for consumer installations
- Multiple water quality options for drinking, industrial, sanitation and irrigation
- Optimum efficiency operation and lowest energy consumption of systems
- Co-generation and Solar or Wind Energy systems for remote or autonomous operation
- Options for the protection and anti-polluting of the main inlet water source
- Desired drinking water taste optimization and simulation of natural water sources
- Lowest cost of ownership over the system's overall lifetime



Depending on specific community or commercial activities, whether located in remote or having difficult geographic access, unsuitability of local water quality or varying consumer demand, the advantages and synergies of S&B's features suitably combined, effectively contribute providing a stable source of potable or clean water. Further to S&B's capability to supply the solutions which produce the range of water grade qualities needed by the many diverse water requirements of communities, hotels, resorts or commercial and industrial applications, this treatment is also provided at the lowest possible operational cost.

Description and Specification of Systems

Brackish Water Treatment Plants

- Plants: up to 30,000 m³/d
- Containerized plants: from 5 to 5000 m³/d per container
- Container/Frame: 20' or 40' ft. according to ISO-standard HC
- Pre-treatment: Coarse screens
- Feed Pump: multi-stage centrifugal pump
- Backwash pump: multi-stage centrifugal pump
- Membrane modules: Microfiltration, Ultrafiltration, Nanofiltration including tank, stirrer and pump
- CIP unit: Acid, caustic, chlorine if any necessary
- Dosing stations: Automatic control of feed and product quality (pH, REDOX, turbidity), pressures and flows
- Full automation: GSM- or Internet based on-line support
- Remote control:

- Options:
- Intake / well equipment
 - Raw water pumping station
 - Automatic self-cleaning filters
 - Flocculation
 - Sedimentation
 - Multimedia filter
 - Activated carbon filter
 - DAF systems
 - Chemical dosing systems
 - Softening, demineralization
 - Product pumping station
 - Sterilization (chlorine, Ozone, UV)
 - Softening, demineralization (ion-exchange, nanofiltration, electro dialysis, ...)
 - Neutralization filter for potable water
 - Reservoirs, tanks
 - Product pumping station
 - PC + Visualization
 - Remote control and alarming system

ECO Sea Water Desalination Plants

- Plants: up to 20,000 m³/d
- Containerized plants: from 75 to 1500m³/d per container
- Container/Frame: 20' or 40' ft. according to ISO-standard HC
- Pre-treatment: Microfiltration, Ultrafiltration, dosing stations
- Fine filters: Easy handling, bag or cartridge filters rating: 5-10 micron, non corrosive plastic housing
- High Pressure Pump: High efficiency piston pump, water lubricated
- Booster Pump: multi-stage centrifugal pump
- Energy Recovery Unit: typical maintenance free pressure exchanger with approx. 95% efficiency
- RO elements: 8" spiral wound high rejection type, OEM-warranty 3 years
- Pressure vessels: high-quality GRP - vessel
- Chemical dosing: 2 complete dosing stations for acid and sodium bisulfite
- Cleaning unit: complete automatic cleaning-in-place ("CIP") system
- Neutralization unit: Re-hardening granulate filter including pump and measurement devices
- Full automation: Automatic control of feed and product quality (pH, REDOX and conductivity), pressures and flows
- Remote control: GSM- or Internet based on-line support

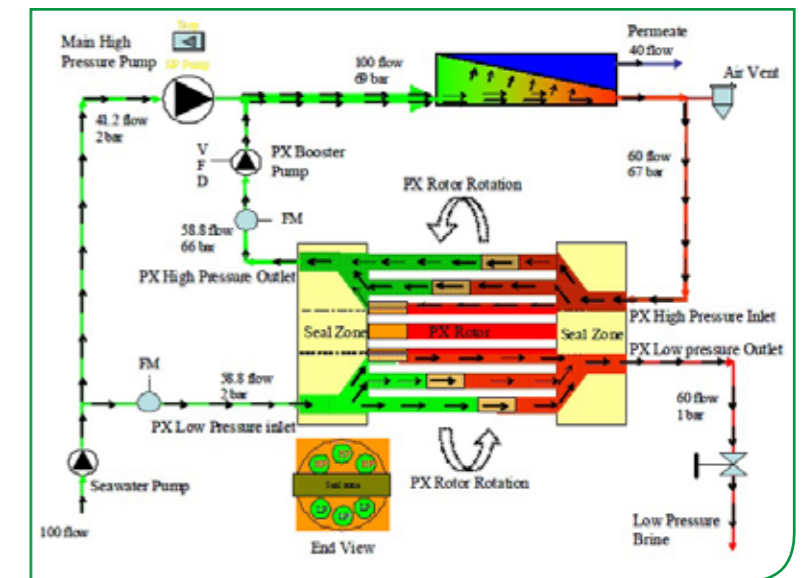
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 - Product pumping station
 - Sterilization (chlorine, Ozone, UV)
 - Reservoirs, tanks
 - Product pumping station
 - PC + Visualization
 - Remote control and alarming system

Quality

All components used in the water treatment construction and their supporting equipment and subsystems are predominantly of Austrian, German and US origin, being built to the highest standards of craftsmanship.

Guaranteed Operation – PVS System Manufacturing and Consulting

Solar & Benefit International's Clean Water treatment projects are powered by PVS Systems of Austria, one of the world's renown Water Treatment experts having built many innovative design installations in Europe, Middle-East and Asia-Pacific. To reach the guaranteed clean water treatment results specified by the initial design feasibility study, the clean water treatment capacity and quality is optimized according to the original customer's specified requirements in accordance with the specific environmental criteria.



Save Nature!