

### Technology's description

The technology proposed here is using a thermo-hydraulic osmotic device to produce soft water from any brackish water (less than 10 g/l), contaminated water as well as waste-water treatment using low-grade solar thermal energy.

Actually, such a technology is able to produce up to 100 m<sup>3</sup> of soft water per day, in a self-controlled and reliable way. It is running autonomously without electricity need and without man intervention. Therefore, it is ideal for small & mid-scale autonomous solar brackish water desalination & water treatment processes, more particularly in off-grid or remote locations.

It can be used to meet the needs for soft and drinking-water in rural and isolated communities and farms, as well as water irrigation wherever brackish waters or waste-waters are available. Besides, with using solar energy, the pollution that causes global warming will be very significantly reduced.

### Advantages

- Autonomous, small scale, off-grid & self-regulated system
- Ideal for remote and/or sunny locations
- Robust design (no high pressure pumps)
- Protection against water-borne diseases
- Low operation costs & maintenance, totally silent.

### Applications

Brackish, waste water treatments - Soft water production: domestic, farming & irrigation.

### Intellectual property

Patent

### Development level

Technology concept formulated



### Technology transfer

- Co-development, license,
- Know-how.

