### **INDAR SUBMERSIBLE PUMP SETS**

#### vs. Vertical Turbine Pumps

### Advantages of our system

Water reservoir levels do not reach to original capacity since years due to the combination of drought and increased water demand. Depletion of aquifers makes necessary to drill down in order to reach deep water reservoirs.

This picture makes **EXISTING VERTICAL TURBINE PUMP SOLUTIONS UNVIABLE:** Long shaft pumps with surface motor are not suitable to reach new depths.

Given this situation, **SUBMERSIBLE PUMP SETS** are presented like a **good alternative**. The water will be pumped to the surface with several more hydraulic and **TECHNICAL ADVANTAGES** compared to Vertical Turbine Pumps.





- Less Space •
- Less Cost of Installation
  - Easy Alignment •







(3) Maintenance Free



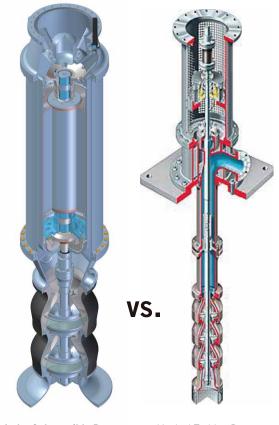
4 Very Low Noise Levels

Perfect Solution Inside Cities •



5 Avoids Flooding Risks

# INDAR SP UGP



Indar Submersible Pump

Vertical Turbine Pump

The **INDAR SUBMERSIBLE** water pump sets are made of a multistage centrifugal pump up directly coupled to an SUBMERSIBLE type electric motor To face situations where the dynamic water level is so low that water either will not reach the suction strainer of a standard submersible execution, INDAR has developed submersible pump sets with the motor above the pump and suction intake at the very bottom.

| Motor Output<br>(kW) | Flow<br>(I/s) | Voltage<br>(V) | IP | Weight<br>(Kg) | Height<br>(mm) | Head<br>(m) | Туре  | Application         |
|----------------------|---------------|----------------|----|----------------|----------------|-------------|---|---------------------|
| up to 3000           | 14-2250       | 13800          | 68 | 18510          | 6810           | 30-1000     | Semiaxial,<br>submersible motor<br>and pump | Clean water pumping |



## **Effective Return of Investment**

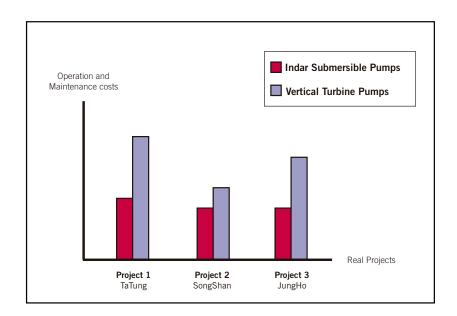
## (Roi)



Operation & Maintenance costs

45% less

compared to Vertical Turbine Pumps



|            | Project 1 | Project 2 | Project 3 |
|------------|-----------|-----------|-----------|
|            | TaTung    | SongShan  | JungHo    |
| Efficiency | 4.5%      | 5.5%      | 11%       |

Source: Taipei water department

7% better total Efficiency\*
with Indar Submersible Pump sets
compared to
Vertical turbine Pumps

\* Based on real figures

