

**MICRO-HYDRAULIC TURBINES SPECIALLY DESIGNED TO RECOVER ENERGY UNDER VARIABLE HYDRAULIC CONDITIONS
FROM WATER DISTRIBUTION NETWORKS, MICRO HYDRO POWER PLANTS AND INDUSTRIES.**

OFFERING A WIDE RANGE OF SOLUTIONS OF BOTH, GRID-TIED AND OFF-GRID TURBINES, FROM JUST 25W UP TO 300kW

COMPANY PROFILE

WEBSITE: www.tecnoturbines.com

NAME: Tecnoturbines S.L.

EMPLOYEES: 7

Stage: Commercialization of products

FOUNDED: 2013

TRACTION

FUNDS RAISED:

- **Equity**

InnoEnergy: 100k€

Fluidra Group: 110k€

Caixa Capital Risc: 100k€

- **Grants:**

European Commission: 900k€

CDTI (Spain): 150k€

- **Loans:**

ENISA: 200k€

ICF: 100k€

NUMBER OF PILOTS:

- Grid Tied: 8

- Off-Grid: 8

- Picoturbine (25W): 150

NUMBER OF CUSTOMERS: 29

EXECUTIVE TEAM

JAIME LLEDÓ – CEO

Executive MBA (ESADE), Control Systems & Electronics Engineer. Broad experience in product development at national and international level for renewable energy-focused companies.

ENRIQUE RUIZ – CTO

Industrial Engineer. Broad experience in managing a developing hydraulic project at AGBAR group.

DAVID MIRAVET – CCO

MBA (ESADE), Industrial Engineer. Broad experience as CCO in renewable energy companies at international level.

JOSÉ CARLOS ORTS – R&D MANAGER

Control Systems & Electronics Engineer. Broad experience in validation and homologation for the locomotive industry in Vossloh.

ADVISORY BOARD

JAUME BONET

MBA from ESADE Business School. More than 25 years' experience in Financial and Administration management of multinational companies

MATIAS TORRELLAS

INNOENERGY Portfolio Manager

XAVI SERVAT

FLUIDRA ACCELERA Officer. Expert in company valuation for the FLUIDRA Group.

PROBLEM: Water distribution companies are facing an increase in energy demand and cost. Also, to power supply remote facilities (reservoirs, water treatment plants, etc) or small loads such as dataloggers for monitoring the water network where the grid does not reach, meaning large investment to be on grid per site, Diesel generator or battery periodic replacements. Standard turbines technologies do not allow variability on the hydraulic conditions, meaning that are not suitable for generating energy in water distribution lines.

SOLUTION: Tecnoturbines has developed and patented a technology that allows their turbines to work at very high efficiency under variable hydraulic conditions typically present at water distribution networks. The turbines are installed in-line over the existing pipes, taking advantage of the existing infrastructure and reducing the initial investment. The Grid-Tied range covers from 5kW to 300kW. The energy can be sold to the grid or self-consumed on site reducing the energy bill. The Off-Grid turbines covers from 25W to 3kW, specially designed for, remote monitoring, tele-control, IoT and Smart Cities or full electrification of a remote site.

VALUE PROPOSITION: 1. Energy cost reduction by using the available hydraulic resources. 2. Energy supply at remote areas and for Remote Monitoring and datalogging. 3. Pressure reduction. The system removes the excess of pressure and converts it into electricity. 4. Payback for Grid Tied: From 2 to 4 years. 5. Funding options available.

BUSINESS MODEL: 1. Local distributors who have already a business which supplies to water utilities and water distribution companies. also including services like: engineering projects, hydraulic projects, TAS, etc. 2. Commercial agreements with large global industries, as for example, PRVs manufacturers, global water utilities, etc. 3. In order to promote the technology assist to the most relevant events of the sector (Exhibitions, seminars, etc.)