

PYTHEAS Technology offers turn-key solutions for the installation of very low head hydropower plants, for both individuals and canals or waterways management companies.

In Europe, the potential of very low head hydropower (below 2.5m) is estimated at 5 GW. Most of the hydropower is available at pre-existing sites, which could be redesigned and refurbished. This predictable and distributed resource is exceptionally attractive as part of the renewable energy mix. However, its development is still limited because most classic industrial turbines (Kaplan, Pelton ...) have low efficiencies on these sites or require large civil engineering. Moreover, they have a strong environmental impact because of their influence on fish populations.



PYTHEAS Technology takes advantage of the last innovations in water wheels and its expertise in low-speed electricity generators (<30RPM) to offer an innovative turn-key system with prime efficiency. Our solution is based on hydrostatic water wheels and combines high efficiency, low cost, and continuity of sedimentary and biological fluxes. This technology won the 2017 National Innovation Award from the Ministry of Research.



PYTHEAS Technology very low head hydropower solution	
Rated power	5kW – 250kW
Hydraulic head	<5m
Flow rate	0.1 – 10 m ³ /s
Services offered	Feasibility assessment
	Supply of water wheels and generators
	Construction management and on-site integration
	Electrical power conditioning
	Financial modeling
	Legal and administrative support

Our expertise in hydrodynamic modeling and simulation, as well as our academic collaborations, allow us to adapt our solutions to each site and guaranty a high efficiency and respect of the environment.

Our Partners



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