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Despite being renewable, Hydropower plants (HEPP) are not necessarily to be sustainable / ecological. Previous researches were insufficient to acquire desired efficiency and profit thus HEPP projects are conducted despite with environmental disasters. On the other hand conventional HEPPs were not enough to recover the carbon foot print created by the factories' process water discharges.

Instead of closed channel systems, if open channel systems are enabled with a hydro-turbine which is eligible to generate electricity fully ecological and high efficient; it is possible to generate electricity from discharge waters, channels, water treatment plants, all natural streams and rivers.

HIDROTURBIN Co. Ltd. developed Archimedes screw technology which is historically used as a pump, to a hydro turbine working in opposite direction to derive shaft power that employs generators to get electrical energy; and created ARVIDA. It can operate at 0.1 m³/s to 10 m³/s discharges and 1 m to 7 m heads for a single unit. (1 kW - 270kW installed power) (it is possible to operate with multiple units serially or parallel wrt. potential of stream)

ARVIDA requires no water conveying, fore bay or dams moreover with low rpm of turbine it enables fish pass through the turbine. It generates fully ecological hydropower electricity. On the other hand it enables unforeseen potentials with the ability to work at any channels, discharges of treatment plants, process waters of factories'.

ARVIDA is offered as turnkey solution. (not only turbine design and manufacture but also all mechanical, electromechanical and civil works) Feasibility studies show that the investors to generate electricity recover all the costs of ARVIDA within 2-5 years.

All the natural streams, water treatment plants or discharge waters are potential markets of ARVIDA. In Turkey 326 water treatment plants with average potential 100 kW installed power have 60 000 000 EUR market share. On the other hand Turkey use only 1/3 of its hydropower potential. The technical available potential is 10 000 000 kW. Hidrotürbin aims to penetrate to market first with water treatment plants with 5% share which is equal to 3 000 000 EUR. Since established, HIDROTURBIN participated to DSİ (State Hydraulics) Dams and HEPP Congress and Fair, EIF Energy Congress, ICCI International Energy Congress and Fair; presented ARVIDA and submitted sectoral reports. Technical detailed information is shared via visits and presentations to leading Engineering and Consultancy companies of hydropower energy. Positive feedback are provided via presentation of ARVIDA with visits and shares of informations to municipalities; especially to Ankara, İzmir and Aydın. First steps for abroad markets are taken with the cooperation agreement between HIDROTURBIN Co. Ltd. and Turkish Chamber of Commerce of Republic of Ivory Coast.

HIDROTURBIN Co. Ltd. works with experienced team members along with R&D awareness.

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HIDROTURBIN Co. Ltd. win the contest of YFYİ 2015 (New ideas new businesses) at PRO energy category and achieved 2 weeks education at San Francisco USA and gained 25.000 TL price. With grant supports of KOSGEB and Teknogirişim (techno-enterprise) 1 fair type micro prototype and 1 laboratory type (1 kW) prototypes are designed and manufactured and r&d processes are conducted on for 3 years. It is arrived to the last stages of commercialization. With the permission of Ankara Kazan Municipality, it is planned to design and manufacture a pilot application at a natural stream at Kazan province. HIDROTURBIN Co. Ltd. applied to TUBITAK 1507 grant support program to realize this pilot application. After the pilot application HIDROTURBIN Co. Ltd. will arrive to sales stage.