

Ekosist Enerji develops a special water turbine & electronics system that can produce electricity from excess pressure in municipal water pipelines while meeting pressure control needs & ensuring water conservation.

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In pressure fed municipal (drinking) water systems, excess pressure occurs at several locations. This excess pressure is undesired and currently dissipated using pressure reduction valves. Utilization of pressure reduction valves means waste of usable energy. We, Ekosist Enerji, offer a special designed turbine & electronics system which converts this wasted energy to electricity then feeds it into the electrical grid. Thus, pressure reduction goal in the water system will be achieved by means of electricity generation. Our product, ecoturbine, not only converts this wasted energy into electricity but also regulates the flow & pressure needed downstream in the water pipeline system. By doing so, ecoturbine also provides water conservation and helps sustainable management of water resources. Besides those advantages, ecoturbine can produce electricity efficiently in low flowrates, namely below 300 l/s that is currently not considered as technical and assessable.

Our main customer segment is municipalities. There are 1397 municipalities in Turkey. Direct communication channels will be established to municipalities, some of which are currently developed. In only drinking water systems in Turkey, there are 300 MW energy wasted using pressure reduction systems. This potential energy corresponds to 300 M\$ achievable market in only drinking water systems. Other potential customer segments are industrial factories using process & cooling water and high rise buildings & skyscrapers.

Our team has produced early alpha prototype and currently working on second prototype that will be in kW scale. Our team is also working on getting patent & utility model.

Team Members

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