

ABSTRACT**WIND AND EXHAUST AIR ENERGY RECOVERY SYSTEM**

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This invention is a wind and exhaust air energy recovery system comprising a supportive frame (101); a turbine rotor assembly (103) mounted on the supportive frame (101) and being able to rotate about a horizontal axis; wherein the turbine rotor assembly (103) are positioned neighbouring an exhaust outlet (111) that exhaust air flow from the outlet (111) in which the exhaust air flow drives the turbine rotor assembly (103) to rotate; and at least one electric generator connected to the turbine rotor assembly (103) for converting kinetic energy caused by movement of the turbine rotor assembly (103) to electrical or mechanical energy; characterized in that at least one guide vane (107) is arranged in between the outlet (111) and the turbine rotor assembly (103) to direct the air flow towards the turbine rotor assembly (103) at a predetermined angle. The supportive frame (101) and safety enclosure (102) can be supported with additional holding structures (109) so as to be firmly secured to the exterior of the exhaust outlet (111) without obstructing the exhaust air flow.

The Most Illustrative Drawing: Figure 1