Rotary wind engine with hydroturbine and horizontal rotational axis consists of upper and lower horizontal beams anchored in rock, bearings installed in the upper and lower bearing housings, wind wheel with working blades mounted on the upper vertical shaft, secured by bearings located in bearing housings, and fixed to beams of electric generator. The upper beam is connected to the upper part of the upper shaft via bearings installed in the upper bearing housing, wherein a middle vertical shaft is inserted into it, as well as a lower horizontal shaft, one end of which is secured in bearing housing of the lower horizontal shaft, which is anchored in rock. Its other end is secured in gearbox, hydroturbine mounted on the lower horizontal shaft with the possibility of rotation, and a middle horizontal beam secured in rock and connected to the upper vertical shaft via bearings in the middle bearing housing. The upper part of the middle vertical shaft is secured to stator of electric generator, wherein the lower part of the upper vertical shaft, which is connected to rotor of electric generator, is secured via bearings in the lower bearing housing to the lower horizontal beam.