



Generating electricity from airport runways: Bangladeshi paper sees prospect

At the 5th IEEE Systems Modelling Conference held at the University of New South Wales, Australia, a team of three Bangladeshi engineering graduates received recognition for a paper on alternative power generation for Bangladeshi airports. The paper titled 'Sustainable Electricity Generation from Hazrat Shahjalal International Airport, Dhaka: A Milestone for Green Energy in Aviation' proposes the idea of using conveyor belts on airport runways to produce electricity.

The research team consisted of Md Asifuzzaman Khan, School of Aerospace Engineering, Shenyang Aerospace University, China; Sk Kafi Ahmed, Industrial Systems Engineering, University of Regina, Canada and Shahrukh Khan, School of Mechanical Manufacturing and Automation Engineering, Beihang University, China. They

According to the paper, the proposed road power generation (RPG) project will consist of four cylindrical rollers placed under the airport runway. Each roller

would contain two bearings and two sprockets on each side, with a rotor shaft under the middle with its own separate set of sprockets and bearing. This rotor shaft would be connected to a generator, which can generate power whenever electricity is trapped on the roads from moving vehicles.

Since this setup is independent of environmental factors such as sunlight and wind, the research team claims this will be a major proponent of green and renewable energy for Bangladesh.

According to their findings, by 2035, their proposed road power generation project will be able to produce 142.5 MW of electricity every year and save up to Tk. 19 lakh for Bangladeshi airports.

The project is currently in the conceptual stage, with a prototype to be released soon. The research team believes that the implementation of this project will improve the aviation infrastructure of Bangladesh and provide better sustainability in energy generation in airports.

