

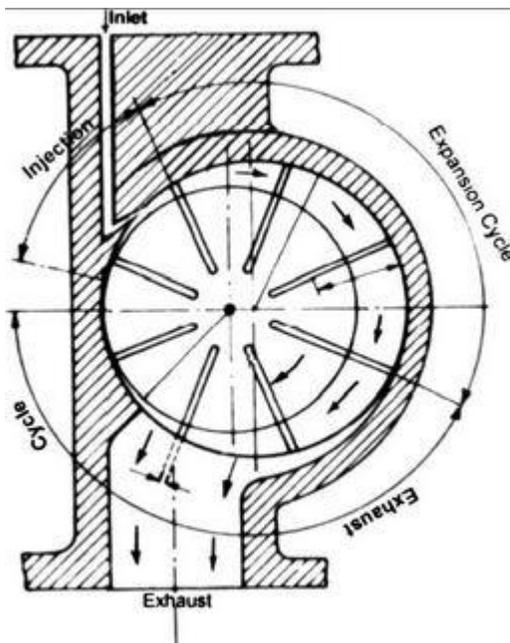
Green and clean technology
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Compressed Air Runs Motorcycle for Up to 40 Minutes

The design is laid out in a recent issue of the Journal of Renewable and Sustainable Energy. The alluring title is “Study of the influence of vane angle on shaft output of a multivane air turbine.”

While 40 minutes of air-powered, two-wheeled travel may not sound like much, it’s a step up from earlier designs and could make for a decent commute bike. Or, maybe pedaling is just as good compared to this idea. Where you can pedal may depend on where you live, however.

The design could be combined with a compressed air cylinder as a replacement for traditional internal combustion engines, say the researchers, Bharat Raj Singh and Onkar Singh, of the SMS Institute of Technology and the Harcourt Butler Technological Institute, respectively.



Maybe they’re making the leap too fast. But they say air cycles could cut greenhouse gas emissions by up to 60 percent in areas where motorcycles are a major source of public transportation (and pollution). Like in India, perhaps.

Bharat Raj Singh notes that a number of technical challenges remain, including making a compact, high-capacity air tank to store enough fuel for long rides. Existing air tanks would require someone to swap tanks every 19 miles, he says.

Is this really a path we should be going down? Air as a fuel? Sure, it works with wind turbines, but motor vehicles? Give it a chance, the researchers say.

“The use of compressed atmospheric air in air turbine is an attractive option provided the atmospheric air is compressed by natural sources such as sun energy, wind energy, etc.,” they write in an abstract.

“It has the capability to produce shaft work with almost zero pollution in the environment.”

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