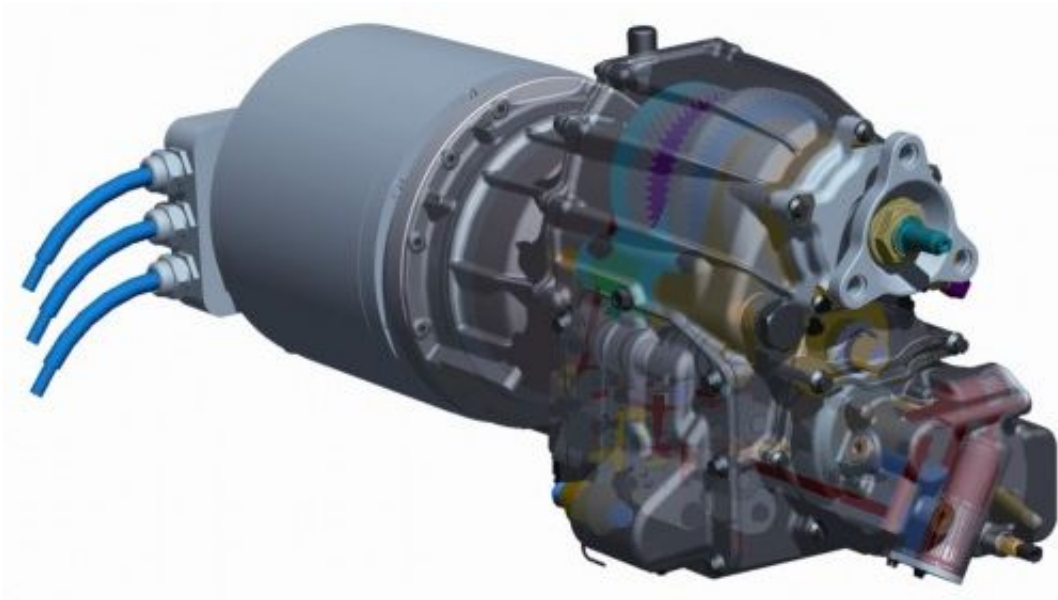


# Antonov creates a 3-speed transmission for electric cars

July 5 2011, by Katie Gatto

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(PhysOrg.com) -- There are a surprising number of designs out there for electric cars. Most of the design innovations are about creating a more efficient design. While this has meant, for the most part, that design innovations have focused on the creation of better batteries or other fuel cells to power the car but those are not the only ways to improve the electric engines.

Recently [Antonov Plc](#), a U.K. based engineering firm has decided to

take a look at a different system on the electric vehicle and give the transmission an update. They have created a 3-speed transmission that is designed specifically for electric vehicles, which are designed to bring gains in the area of [energy efficiency](#). The transmissions design details were shared at a presentation at the IDTechEX Electric vehicles conference that took place in Stuttgart this week.

You may wonder why one would want to use a 3-speed transmission in an electric vehicle? While most electric engines reach their full torque at 0 rpm, which has lead the majority of developers to believe that only one speed is needed, the efficiency of electric motors still varies at different speeds and variable efficiency. So while the engine may be a peek efficient when it reaches 90%, at lower speeds the engine may be working at 70% or even 60% of capacity. This means a multi-speed transmission can optimize the [engine efficiency](#) at different speeds.

This design change has taken the IDTechEx [Electric Vehicles](#) Land Sea Air "Technology Award" for the most significant EV technical development in the past two years. No word yet on when this innovation will show up in a consumer ready car.

**More information:** [www.antonovplc.com/technologie ... ehicle-transmissions](http://www.antonovplc.com/technologie...ehicle-transmissions)  
via [Gizmag](#)

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