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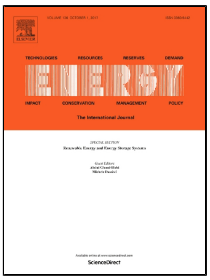

Impact of electric vehicles and synthetic gaseous fuels on final energy consumption and carbon dioxide emissions in Germany based on long-term vehicle fleet modelling

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Highlights

- A vehicle fleet model for the development of different power-trains is presented
- Model combines a bottom-up consumer demand approach with a dynamic stock-flow model
- Results reveal an increasing diversification of power-trains and fuels in the future
- Carbon dioxide taxation can be an effective measure to implement different power-trains
- Synthetic gaseous fuels can be a solution to displace fossil fuels in the future