Czech Automobile Mobility According to Green Deal

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Individual car mobility may be subjected to great changes in the future due to intended decarbonization and transformation to electrified or even electric vehicles all over the world. The specific situation is described by Green Deal for Europe and the following regulations roofed by in Fit for 55 and possibly adapted to new situation caused by the war in Ukraine. The paper analyses currently known solutions at vehicle design and transport management sides with links to energy production, trying to keep technological neutrality, distinguishing between geographic parts of Europe and taking industry competitiveness into account.

The simple predictive model of fleet energy consumption has been developed and applied to different types of current and future vehicles, yielding the requirements of increased energy production and distribution using different energy vectors. The unbiased assessment of pros and cons is extended to vehicle fleet development possibilities.

The holistic approach to mobility paradigm changes tries to determine and assess technological, economical and, at least using selected examples, even social aftermaths of intended revolutionary or evolutionary changes in energy production, distribution and use for individual and mass modes of transport.