

## The climate-neutral internal combustion engine

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"At the moment, journalists and the semi-informed think that the internal combustion engine must be abolished for the sake of the climate. But that is not at all compelling," says Ernst Ulrich von Weizsäcker, Chairman of the Board of Trustees of Global Energy Solutions. "After all, if you take just as much CO<sub>2</sub> out of the atmosphere or out of exhaust pipes, it is climate neutral." At the same time, he advocates a synthesis of battery-electric and internal combustion engine vehicles. Von Weizsäcker sees the development of electric cars in China and California not motivated by the climate issue, but by the poor air quality in big cities. He finds this convincing and that is why electric mobility should be further developed. "But to destroy the combustion engine and the supplier industries because of it is not at all conclusive." When it comes to mobility, he says, one has to proceed on two tracks. He considers the idea that all mobility must now be electric misleading.

Ernst Ulrich von Weizsäcker was the founding president of the Wuppertal Institute, a member of the German Bundestag and honorary president of the Club of Rome. At the time, the Club was also the source of ideas for Desertec, an initiative that wanted to generate green electricity in the world's sunny locations. Von Weizsäcker sees Global Energy Solutions as a clever further development of the Desertec approach, since it is now about transporting molecules - and no longer electrons. Desertec was about grid-based electricity, whereas Global Energy Solutions focuses on hydrogen and synthetic fuels. This approach, says von Weizsäcker, is now much closer to realisation.

The focus of his own scientific work over the past decades has been on ecological efficiency, both material and energetic. The fact that Global Energy Solutions' approach now incorporates the existing infrastructure to transport climate-neutral energy sources suits him just fine. He also thinks gas tankers for hydrogen make sense. Last but not least: "Chemical fuel tends to be much lighter than batteries."

The fact that the south of the planet must be included in the solution to the energy and climate problem is a matter of course for von Weizsäcker. While we in Germany are heading towards a coal phase-out, hundreds of coal-fired power plants are being built around the world. "If we don't include the countries in Africa, Asia and South America, we have no chance of achieving the climate goals." Von Weizsäcker considers the use of the Sahara or the Atacama Desert, where human, animal and plant life is marginal, to be ecologically sound. In other, biologically and geographically more productive regions, such as Ethiopia, Brazil or Cameroon, however, the destruction of valuable soils should not be allowed to occur. Von Weizsäcker warns in particular against land grabbing, as practised by rich countries, especially in Africa.