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The Application of Energy-Based Fuel Formulae to Increase the Efficiency Relevance and Reduce the CO₂ Emissions of Motor Sport



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Abstract

Concerns over energy security and global warming are beginning to be a serious issue for society and are also starting to drive customer purchasing decisions across many areas. Against this background there is an increasing call for motor sport to improve its environmental image, despite the fact that the global energy consumption and CO₂ emissions attributable to motor sport are a very low proportion of the total. The real issue for motor sport in the face of the wider societal concerns is that, if it is truly at the cutting edge of relevant automotive engineering, it should be configured and managed in such a way as to drive technology for the betterment of mankind. The status quo is, it is contended, increasingly seen to be blatantly energy-profligate in the eyes of many people and this issue must be resolved if motor sport is to demonstrate the wider benefits of the technology developed by the huge financial investments committed to competing at the highest level. The paper proposes the adoption of much broader rules based on limiting only the total energy available to the vehicle to complete the race distance.

It is concluded that the application of this sole constraint would lead to the use of the substantial funding that the sport attracts in the evolution of energy-efficient technologies of direct relevance to the wider automotive sector.

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Topic

- Carbon dioxide
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