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Editorial on Special Publication
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Vehicle Drives: Safety, Risks, and Logistics Management

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Editor's Foreword

The focus on alternative vehicle drives, from electric and hybrid to hydrogen-powered systems, has become a pivotal topic in both scientific research and public discourse. Yet, as this collection of articles underscores, the journey toward finding sustainable propulsion systems remains complex and far from resolved. There is no single "magic solution" to the challenges at hand. Instead, each option introduces its own set of advantages and drawbacks, requiring careful examination and balanced decision-making.

The situation is further complicated by the fragmented approach adopted by various stakeholders. While some lobby groups promote specific technologies, they often neglect the broader ecological picture. Governments, too, frequently act without sufficient foresight. A prime example is the United States' initial push toward subsidizing electric vehicles and developing charging infrastructure, followed by recent efforts to reduce their prevalence. Such abrupt shifts reflect the uncertainties and competing interests in the evolving landscape of alternative drives.

These uncertainties extend to all areas of consideration—from vehicle production and exploitation processes to the emissions generated across a vehicle's full lifecycle. As researchers and policymakers navigate this terrain, it is imperative to conduct holistic analyses that prioritize minimizing environmental harm while addressing economic and logistical challenges.

This special issue, "Vehicle Drives: Safety, Risks, and Logistics Management", addresses these critical concerns through three comprehensive studies.

1. "Ecological and Economic Risks of Using Gasoline, Electric, Hybrid, and Hydrogen-Powered Vehicles" examines the environmental and economic impacts of various propulsion systems.
2. "Hydrogen Hazards, Risks, and Protection: An In-Depth Review" provides a thorough analysis of the safety implications of hydrogen as a fuel.
3. "Logistical Challenges in Hydrogen Supply Chain for Automotive Applications" explores the logistical hurdles in hydrogen distribution for vehicle use.

Through these contributions, this special publication aims to inform and inspire further research and dialogue in the quest for viable solutions to one of the most pressing challenges of our time.

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