



Bidirectional Energy Transfer Technologies for Vehicle-to-Grid and Other Vehicle-to-X Applications, and Solutions to Issues Caused by High Electric Vehicle Penetration Rates

Guest Editors:

Prof. Dr. Udaya K Madawala

Department of Electrical,
Computer and Software
Engineering, Faculty of
Engineering, The University of
Auckland, Auckland 1023, New
Zealand

Dr. Craig Baguley

School of Electrical and
Electronic Engineering, Auckland
University of Technology, 1010
Auckland, New Zealand

**Dr. Shantha Gamini
Jayasinghe**

Australian Maritime College,
University of Tasmania, Hobart
TAS 7005, Australia

Deadline for manuscript
submissions:

closed (10 March 2022)



mdpi.com/si/35577

Message from the Guest Editors

The penetration rate of electric vehicles (EVs) into the transport sector of future societies will be high. This will result some excellent outcomes, but will also bring one of the greatest challenges to the electric power industry that it has ever faced. Multiple solutions must be developed to address a range of issues at various levels. One potential solution of high promise is vehicle-to-grid (V2G) technology.

We propose a Special Issue on leading edge power electronic and power system issues related to high EV penetration rates, as well as the bi-directional transfer of energy between EVs and other systems (this encompasses not only V2G but all V2X system types). We welcome and encourage submissions in this area. Topics of interest include but are not limited to the following:

- Power electronic V2G, and other V2X, interface technology challenges and solutions;
- V2G, and other V2X, electricity network planning and integration requirements;
- Charge/discharge scheduling and optimization, and issues related to high EV penetration rates;
- Energy-related opportunities and challenges V2G and other V2X will present to EV owners, property owners, and utilities.



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Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

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Energies Editorial Office
MDPI, Grosspeteranlage 5
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