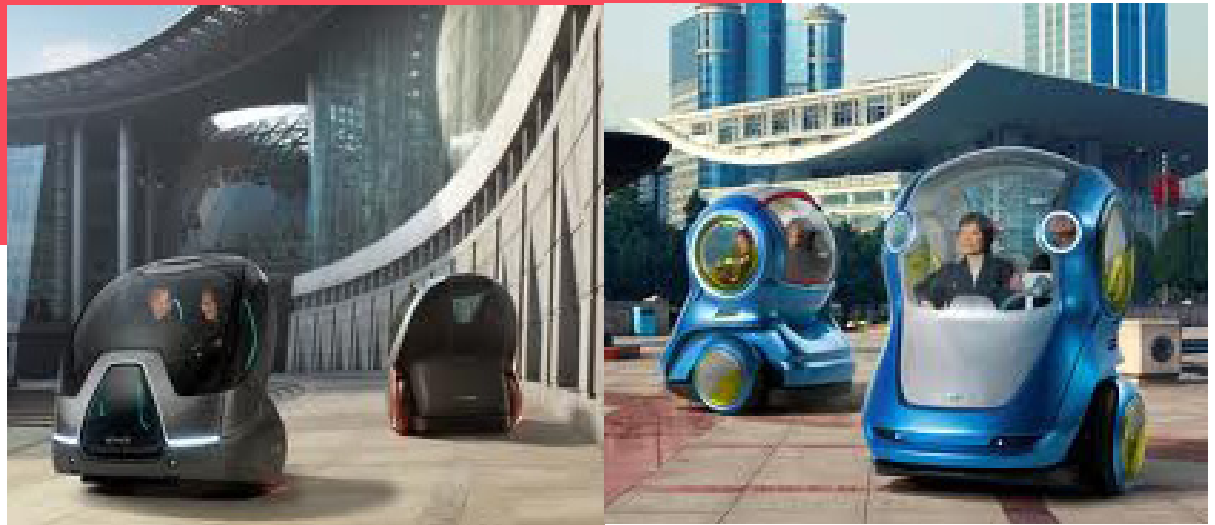


# WHAT is GENERAL MOTORS up to?



By Ed Dodge, Special to  
THE GREEN ECONOMY

In their own words they are “reinventing the DNA through the convergence of electrification and connectivity.” Starting with a clean sheet, they are designing ultra-small vehicles intended strictly for short-range intra-city use carrying light payloads.

## Solving the Problem

The ongoing challenge in designing electric cars has been overcoming the energy density problem. There is simply much more energy available in a tank of liquid fuels than in electric batteries of the same size and weight. This means that electric cars achieve neither the horsepower nor the mileage of gasoline cars, which explains the emergence of hybrid solutions and the failure of purely electric ones.

[General Motors](#) EN-V Electric Network Vehicle concept, shown

at the Lux Executive Summit in Boston, addresses some of these concerns. Christopher Borroni-Bird, Director of the EN-V program at GM was armed with data that show most vehicle miles are driven by a single passenger for short trips, not the SUV model of a car built for many passengers traveling for 300 or so miles.

Considering that crowded cities the world over face the dual





problems of pollution and overcrowding, GM has decided to prioritize zero-emissions and minimal land use, while embracing network connectivity to enhance the safety and efficiency of vehicular travel.

Communications allow the EN-V's to find the best routes, maintain safe distances for collision avoidance, avoid emergency vehicles, and even drive autonomously and park themselves.

With video-conferencing and social network capabilities, the vehicle becomes an extension of the smart-phone.

## New Markets

Since many Americans may scoff at the ultra-small vehicle that appears to be more space-age golf cart than Detroit steel, GM is looking at global markets. Particularly in Asia, where crowding and pollution are far more

extreme, the infrastructure less mature, and the expectations for vehicular style are more flexible, GM sees new opportunities. Prototypes are being tested in the Sino-Singapore Tianjin Eco-City in China, a blank slate new city where GM has signed a memorandum of understanding to help develop the infrastructure. In the West, GM is exploring being first to market the EN-V to campuses, resorts, and other enclosed communities.





There is a brave new world coming and it may not be built in America first. It is encouraging to see that there are businesses — including what many think of as staid old corporations — embracing the future.

Green solutions are not simply good business or the latest trend, but an irresistible wave sweeping us along, addressing our need for clean air, water and soil to survive.

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[See Video](#)

