Imagine what we could do if your bus stop was a power station.

The streets of our busy towns and cities are noisy, crowded and dirty. The gas-burning engines of cars, buses and vans add their various loads of pollution into our public spaces — noise, carbon emissions, VOCs and fine-particles — compounded by motors that are forced to idle when traffic grinds to a halt. Where once public spaces were the social glue of our towns, now they form barriers that enforce our urban isolation.

But the re-casting of transport into a new electrical mold offers up the prospect of cleaner, quieter, less congested streets — and for city-dwellers to reclaim them as corridors for bringing their communities back to life. The imaginative seeding of human-scale clean energy generation and storage can aid the realization of this vision.

A bus-shelter that soaks up the sun’s energy by roof-mounted PV cells — and gathers the wind’s energy by pole mounted micro-turbines — can act as a new hub for clean healthy transport. Clean power charging is made available for use by new means of travel — electric-scooters or electric-bikes — forms of personal transport that take up less roadspace, are quieter and which are tail-pipe free.

Public transport can be opened up to new sections of society, as bus routes become a short ride-park-and-charge-up away. The street becomes quieter, less polluted and less busy — it becomes friendlier. The public space is reborn.

Our streets and open spaces could be brought back to life in the re-imagined city.