

Electricity is a prerequisite for electric cars

[Najib Saab](#)

In an attempt to reduce pollution caused by the transport sector, the Lebanese government recently announced incentives to promote electric and hybrid cars. The measures comprised full tax and tariff exemption for vehicles fully running on electric motors, and a slightly lower reduction in fees on hybrid cars running on both electricity and fuel.

This is a much-needed step in a country that has severe air pollution. However, in isolation, it remains short of achieving tangible results, which demand comprehensive policies to revamp the transport and energy sectors. A recent report from the World Economic Forum found that Lebanon globally ranks very low in road quality (121 out of 137 countries). Its regional classification was not better, as it was the worst before Yemen and Mauritania.

As for electricity generation, on which electric cars rely, the situation in Lebanon amounts to national chaos. The country has been suffering severe shortages since Israel destroyed power plants in 1996. Moreover, the insufficient power produced is also inefficient, generated by obsolete plants that use the most polluting fuels. The shortages are filled by still more polluting private generators, deployed in residential neighborhoods. A recent study by researchers from the American University of Beirut found that electricity generators were the leading cause of air pollution in the city, which reached dangerous levels, threatening public health. That being the case, any improvement in the quality of air based on using electric cars will be cosmetic, if any. After all, those cars are powered by electricity coming from the most polluting sources.

In addition to poor road conditions, the absence of public transport is a major cause of traffic congestion and jams. The railway that used to efficiently connect the Lebanese northern to southern coast, through Beirut and other hubs, has been out of business for decades. This implied relying on cars for personal commuting, and trucks for transport of goods, using a ramshackle road network. The electric tramway network, dating back to the time of the French mandate, which connected various districts of Beirut was abandoned, forcing people to rely on private cars to commute between shortest distances. Public transport buses are virtually nonexistent, with the vacuum filled by minivans, run by private individuals and makeshift companies. Those lack the most basic requirements of safety and comfort, and do not follow practical routes and reliable schedules that meet people's actual commuting needs.

A similar futile initiative a few years ago to ease traffic congestion in Beirut was based on promoting bicycles, in a city with dilapidated roads lacking minimum safety standards, even for armored vehicles, let alone fragile bicycles. I was one of those who tried to join the initiative by commuting the 2 kilometers between my home and office on a bike, but had to abandon the attempt soon, as it proved suicidal. Years later, no serious effort has been made to integrate dedicated bicycle lanes into road planning.

Reducing traffic congestion and limiting pollution, nevertheless, cannot be confined to road conditions and means of transport. This requires proper urban planning and adequate land use schemes, which integrate the requirements of housing, schools, work, shopping and entertainment. This calls for the development of a coherent plan that ensures smooth interconnection between these different activities, with access to easy-to-use public transport networks. Creating active hubs outside major urban areas, including generating job opportunities, establishing educational and entertainment centers and providing them with modern services, are all necessary requirements to deal with traffic jams.

Some officials might find that our proposals belong to a grand scheme, which requires considerable time for implementation. At least we can plan well and start with measures which are attainable immediately. For example, why grant building permits to large shopping malls, implanted inside congested residential neighborhoods, with no real restrictions? At least they can be required to allocate public areas and service roads within their perimeter, as well as securing taxi stops in front of their entrances. What happens now is that part of the public roads have been allocated as service roads for the commercial complexes, after they were irregularly built, while taxis occupy the public roads in front of them, due to lack of assigned parking spaces. All this leads to heavy traffic congestion in the surrounding streets, accompanied by dangerous air pollution.

Commercial shopping malls are not the only source of congestion in residential neighborhoods, as they were supplemented by huge residential towers, haphazardly implanted in congested areas, just to maximize profit. Those high-rise concrete dinosaurs have been authorized in already overcrowded spots, surrounded by narrow streets, which cannot accommodate the hundreds of cars using their cramped multilevel parking lots. If expanding the road network was not a possible option, it shouldn't have been acceptable in the first place to grant permits for high-rise towers in overcrowded neighborhoods.

The World Economic Forum report on road quality placed the UAE in first place among all countries of the world. Along with modern roads, Dubai and Abu Dhabi built a viable public transport system, most prominent of which is a modern and practical metro network. Metro stations in Dubai stretch from the airport to major commercial and residential centers. Dubai is connected to Abu Dhabi by a fast track. The UAE produces electricity from a variety of modern sources, including sun and wind, in addition to fossil fuels. The new urban planning combines housing, work, shopping and entertainment centers in integrated locations. For these reasons, we can take the UAE's plans to promote hybrid and

electric cars seriously, because they are part of integrated policies. When Dubai allocates electric car charging stations, in public places and on its roads, consumers trust such a step, because they know that electricity production has occurred in modern low-polluting stations and that the electricity will not cut off during the charging process.

Eight Arab countries came in the first half of the road quality classification report, ranking from 1 to 68: The UAE, Oman, Qatar, Bahrain, Saudi Arabia, Morocco, Kuwait and Jordan. These countries themselves have better public transport networks and more modern urban planning.

The remaining Arab countries came in the second group, with Egypt in the 75th position, and Mauritania scoring 137, at the very bottom of the list.

It is essential that all Arab countries improve their transportation systems and take rapid measures to reduce air pollution caused by cars and other vehicles, especially in cities. But Arab countries lagging behind in the second group have more basic homework to do: They should first address the deficiencies in their road network, public transport and electricity generation before promoting electric and hybrid cars. This is the only way to show they are doing a serious job that is not confined to public relations.

Najib Saab is secretary-general of the Arab Forum for Environment and Development and editor-in-chief of Environment and Development magazine (www.afedmag.com).