Transforming Urban Mobility - II

Click here for Part I

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What is the issue?

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For the transforming urban mobility need, countries need focus on not just E-vehicles but mass and shared transit capacity as well.

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> ***What differentiate advanced cities are not highways and flyovers, but rather quality side-walks and cycle ways.***
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Why are e-vehicles gaining importance?

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- The regulations governing fuel efficiency and exhaust emissions were given increased push in the recent decades.
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- Resultantly, a modern petrol or diesel car emits less than 5% of the harmful emissions of its predecessor from four decades ago.
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- So now there are very less options to gain any further improvements from conventional engines.
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- This has thus led to a wave of investment in Electric Vehicles (EVs), connected cars, autonomy and shared mobility.
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What are the benefits?

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- The focus of further improvements in EVs is in energy-density, power-density and cost of batteries.
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- EVs have zero exhaust emissions and lower carbon emissions than conventional cars.
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- So it is a suitable option for limiting the deterioration in urban air quality.
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- They have fewer moving parts, potentially lowering cost of manufacture and extending useful life.
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What are the larger concerns and solutions?

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- **Single occupant cars** - Electric cars are alone not the panacea for urban mobility.
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- In many cities a good fraction of rush-hour traffic comprises single occupant cars.
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- This takes a toll on both space and energy, which could have otherwise been used by a larger number if shared.
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- Cities like Singapore, New York and Tokyo seek to sustain high population densities and high economic activity per square km.
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- They have therefore come to depend on mass transit and shared mobility and discourage use of private cars.
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- **Mobility solutions** - The developments in digitised economy has facilitated many promising shared-mobility solutions.
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- The new generation that is digital-friendly is growing comfortable with alternatives to car ownership.
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- They increasingly employ varied mobility solutions and apps for motorisation.

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- E.g. Uber and Ola have proven useful to many affluent urban commuters.
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- Cities such as San Francisco and New York have extended this concept to vans, aggregating 10-12 passengers at a time.
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- This results in further lowering of cost, energy use and carbon emissions per commuter.
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- **Inclusiveness** - The wave of urbanisation in many countries has largely redesigned the cities as middle class spaces.
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- Lower income groups have thus been forced to the peripheral suburbs.
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- This has lowered their opportunities and increased the cost and time for commuting.
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- The tenets that govern new mobility architectures must thus promote inclusive access to mobility.
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- E.g. Mexico has defined mobility as a basic human right and this helps steer policies that are inclusive.
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- **Neglected modes** - Many cities are also re-discovering neglected travel modes that are augmented with modern technology.
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- Pedestrian zones and short passages are reappearing in cities like Seoul, Barcelona and New York.
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- Bike-lanes and bike-sharing solutions are a growing trend in Amsterdam and Paris.
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- There is a need for accelerating investments in these low cost and environment-friendly modes.
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Source: BusinessLine

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