Issues with the Electric vehicles

Why in news?

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- Electric vehicles (EVs) seem to be gaining in prominence as part of the renewable energy zeitgeist
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- The government’s stress on clean energy is commendable but it **should let the market decide the winning technology**
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What is the background of the issue?

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- In May, Nagpur became the first Indian city to have an electric cab fleet with about 100 EVs.
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- The state-run power giant NTPC set up its first EV charging stations in Delhi and Noida.
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- Importantly, these are not isolated initiatives; they are underwritten by broader policy shifts.
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- Power ministry has announced that government officials and agencies will soon be using only EVs, Public buses are also expected to go electric.
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- Niti Aayog, has already put out a road map for India’s mobility transformation that has three core elements: “shared”, “electric”, and “connected”.
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- The goal, according to the power ministry, is to have no diesel or petrol car sales in the country by 2030.
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What are the Pros and cons with the initiative?

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- Mainstreaming electric vehicles will require an overhaul of the country’s energy and transport infrastructure.
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- For example, EV charging stations will have to be set up on a war footing, and electricity generation will have to improve significantly.
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- EV technology (especially the battery) will have to become much cheaper before it can perform well in a price-sensitive market like India.
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- If these challenges can be tackled effectively and India can leapfrog to EV technology, then of course, the benefits to be had are numerous.
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- According to the Niti Aayog report, switching to EVs as part of the larger “shared, electric, and connected” mobility paradigm will cut India’s energy demand by 64%, its carbon emissions by 37%, and save the country $60 billion in energy bills by 2030.
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What is issue with government’s strategy?

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- Niti Aayog recommends that to push EVs, the government must subsidize the EV industry while penalizing conventional cars.
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- It calls for lowering taxes and interest rates for loans on EVs while limiting the sale and registration of conventional cars, and using taxes from diesel and petrol car sales to create electric charging stations.
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- It also suggests the government open a battery plant by the end of 2018.
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- The Ministry of power has claimed that the plan is to let market forces decide how the EV industry will shape up and that the government is only offering a helping hand until the industry can find its feet.
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- The issue is the kind of support the government is offering.
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- For instance, hydrogen-powered fuel cells offer an equally eco-friendly option.

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- Both lithium-ion and hydrogen fuel cells are zero emission, and the hydrogen-powered fuel cells can in fact be recharged faster.
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- They also give more mileage than the lithium-ion batteries commonly used in EVs today.
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- Certainly, fuelling stations for hydrogen-powered fuel cells are much more expensive,
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- But in that case, there is no greater push for CNG vehicles.
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- They are cheap, almost as clean as EVs, and the related infrastructure is already in place.
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- The government has made its choice, it is choosing only the winning technology which is globally growing.
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What is the way forward?

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- Governments generally do not have a good track record when it comes to picking tech winners.
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- For example, after the 1970s-energy crisis in the US, Millions of dollars were pumped into thermal solar technology which did not yield any viable commercial results even as the old photovoltaic cell technology continued to evolve.
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- Later, corn-based ethanol was all the rage and the government again put good money into developing a market for it but eventually it too collapsed.
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- These examples indicate the many risks associated with the government picking the winner a job that is better left to the market and industry.
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- However, this is not to say that the government should have no role at all.
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- Instead of trying to pick winners, the government should focus on building an enabling business environment that supports research and innovation.
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- Thus, instead of pumping money into one project or firm, it should support

clean energy research in general.
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- That way, the government does its part in steering the policy ship towards clean energy while still being technology-agnostic.
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Source: Live Mint

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