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# THE BENEFITS OF ENVIRONMENTALLY FRIENDLY TRANSPORT

As the number of cars on our roads continues to increase, it's important for everyone to make an effort to reduce our carbon footprint. The cars we drive are one of the leading causes of CO2 emissions – a major contributor to climate change. Many people are interested in using eco-friendly transport as much as possible to help preserve our environment.

#### Importance of Eco-Friendly Vehicles

By choosing environmentally friendly transport, such as electric cars, you're helping to reduce your individual carbon footprint and supporting businesses who prioritise eco-friendly driving practices. As climate change becomes a more pressing issue, it's empowering to know there are small steps you can take to help minimise the release of future greenhouse gases into our atmosphere. It's all about making smart decisions with how you decide to travel from A to B.

#### Features of Eco-Friendly Cars

#### No direct pollution

Eco-friendly vehicles like the Tesla Model S, help reduce our reliance on fossil fuels that damage our environment such as oil, natural gas and petroleum. Since electric cars use battery power to drive the motor and do not burn petrol and fossil fuels, they create zero direct carbon emissions.

#### Cleaner even on fossil fuels

Electric cars produce much less pollution than a car's internal combustion engine. Even using electricity from coal, an electric car is approximately 4 percent more efficient than a petrol-powered car.

#### Lightweight structure

Tesla's electric cars are made of lightweight materials, ensuring that they need less energy to run. A smaller, lighter engine also saves energy.

#### Recharging battery

An electric car uses electricity from its battery pack to power its electric motor. Because its motor is electric, it has no fuel tank and runs solely with a rechargeable battery.

Thanks to its recharging battery and electric design, the Tesla Model S offers excellent fuel economy, which means it runs cleaner and requires less fuel to run — contributing to better environmental outcomes and lower dependence on fossil fuels. In fact, conventional cars typically require a top-up of fuel after 5,000 kilometres. With an electric car, you'll likely only need to refuel after travelling 8,000 to 9,500 kilometres.

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Each time you press on the brake while driving an electric vehicle, your car's battery will recharge a little. How? An internal mechanism kicks in that captures the released energy, which regenerates the battery.

#### Reduced exhaust emissions

Eco-friendly cars, such as electric vehicles, are proven to produce a much lower level of harmful exhaust emissions when driving at all speeds in all types of weather conditions. When traditional vehicles burn fuel, they release carbon monoxide into the air. Carbon monoxide is one of the major greenhouse gases in the atmosphere that has been linked to climate change and global warming.

In comparison, a fully electric car like the Tesla Model S produces no carbon monoxide. Since electric cars depend on electricity to run, they produce far less harmful carbon monoxide than traditional vehicles.

#### Cleaner air

The Tesla Model S features a medical grade HEPA air filtration system. This removes at least 99.97% of particulate exhaust pollution and 100% of allergens, bacteria and contaminants from the cabin air to protect passengers' health.

#### Ouiet

Electric cars are quieter than petrol-powered vehicles, resulting in less noise pollution.

#### Safety

One of the major benefits of eco-friendly cars like the Tesla S is their lower centre of gravity, which makes them less likely to roll over. The Tesla's body construction and durability also make them safer in a collision.

#### Battery replacement

Disposal of an electric car's lithium batteries is much less hazardous than the disposal of lead-acid batteries from conventional cars. For example, the materials in our Tesla Model S's lithium-ion batteries are recycled by Tesla through their 'closed loop' battery recycling program, to recover valuable metals for reuse in future batteries.

Source: https://news.hughes.com.au/the-benefits-of-environmentally-friendly-transport

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# **CLEAN MACHINES: THE 12 'GREENEST' CARS FOR 2021**

It should come as no surprise to anyone that the cleanest rides on the road for 2021 are all electrified to some extent. That's according to the latest Greener Cars ratings issued by the American Council for an Energy Efficient Economy (ACEEE). The results are based on a study of over 1,000 models, including conventional gas or diesel-powered vehicles, plug-in hybrids that run on both batteries and gasoline, and full-electric models that come powered solely by batteries or hydrogen fuel cells.

Each vehicle is given an overall Green Score that can be used to compare the relative environmental friendliness – or unfriendliness as the case may be – from one model to another. Those are expressed on a 100-point scale, with higher numbers being better.

Seven of the top 12 models on the 2021 cleanest cars list are full-electric vehicles (EVs) that produce zero tailpipe emissions. The rest are either gas/electric-powered hybrids (HEVs), or plug-in hybrids (PHEVs) that emit far less C02 emissions than conventionally powered rides. The top models in this regard for 2021 are the full-electric Hyundai Ioniq and MINI Cooper SE, both with a Green Score of 70.

While consumers still tend to favor large vehicles—2020 was the first year in which pickup trucks outsold sedans—automakers are hedging their bets by ramping up future electrified offerings at a fever pitch. General Motors is committed to bringing 20 new EVs to showrooms by 2023. Hyundai says it will sell 23 EVs by 2025, with Jeep planning to offer an electrified option on each of its models by 2022. And there's no shortage of battery-powered pickup trucks and family-sized SUVs on the horizon, coming from established and startup automakers alike.

"[These] results provide a glimpse into a promising future with more efficient and greener vehicle options, driven primarily by electric models," says Peter Huether, senior research analyst for transportation at ACEEE. "Consumers will benefit from the increasing number and variety of electric models, some of which offer affordable alternatives to gasoline cars."

Source: https://www.forbes.com/sites/jimgorzelany/2021/02/23/clean-machines-the-12-greenest-cars-for-2021/?sh=41754a0844ac

# GOING GREEN: TOP ELECTRIC CARS IN INDIA FOR ENVIRONMENTALLY-CONSCIOUS PEOPLE

By Maleeva Rebello

#### Go Green

With pollution on the rise in many cities in India, these electric vehicles are a solution to the problem for people who care about the environment.

#### A Sustainable Move

Environment Minister Prakash Javadekar arrived for the winter session of Parliament in an electric car recently. He told a news agency that the government was gradually switching to pollution-free cars. He urged people to also do likewise or use public transport.

These are the cars in India which are fully electric. PTI



#### **Hyundai Kona Electric**

This was the car that Javadekar chose to make his entry for the Parliamentary session in. The car has a 134hp permanent-magnet synchronous electric motor. This is powered by a high-voltage 39.2 kWh advanced lithium-ion polymer battery. The car can do a maximum range of 452 km on a full charge. The battery can be fully charged in seven to eight hours using standard charging. Fast charging of the battery can go to 80 per cent in 54 minutes.

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#### **Tata Tigor EV**

With a 21.5 kWh battery pack, the car can do 213 km on a single charge. The car has two charging ports for fast charging and slow AC charging. Bihar Chief Minister Nitish Kumar was seen using the car to arrive for the Monsoon session of the state assembly. He had praised the vehicle's design as well as its lack of sound. He called it comfortable back in July.



#### Mahindra e-Verito

The car can do 140km on a single charge with its electric motor and a 72V lithium-ion battery pack. The battery can be fully charged in one hour and 45 minutes using a fast charger. With a regular charger, it takes about eight hours to charge. The e-Verito's top speed is 86 kmph. It is available in three variants.

<u>Source:</u>https://economictimes.indiatimes.com/magazines/panache/top-electric-cars-in-india-for-environmentally-conscious-people/go-green/slideshow/72161722.cms