

AN INSTITUTION OF CARICOM

What do I need to know about

## Electric Vehicles?



Electric vehicles, also called EVs, are cars, trucks or other vehicles which use an electric motor to 'drive' it. Rail and water vehicles such as trains and boats can also be EVs.

EVs can be powered by electricity produced from renewable energy (solar, wind etc.) or other non-renewable sources.



## How is an EV different from a regular vehicle?

On the outside, both vehicles may look the same – except that that a 'regular' vehicle (let's call them ICE, as it stands for Internal Combustion Engine) has a tail pipe (where exhaust exits) and EVs have none – but, they're actually quite different on the inside. Regular vehicles are powered by combustion engines, which run on gas or diesel, while EVs are powered by lithium-ion batteries that are charged with electricity.

## Why are EVs better?

EVs are considered better than ICE vehicles due to cost and environmental factors. While EVs may be a bit more costly when they are initially bought, they require less repairs than ICE vehicles as they have less parts.

ICE vehicles have more than 2000 moving parts while EVs have just about 20. An EV can be charged from electricity generated from fuel, but what is way better is EVs are charged from renewable sources of energy, that way no fossil fuel is used at all. It also helps the environment.

The environment is less impacted when we use EVs, rather than ICE vehicles. Imagine driving

behind or walking near to a vehicle that lots of dark smoke is coming from it and you have to cover your nose and mouth. EVs produce no smoke. This smoke you may sometimes encounter relates to Greenhouse Gas (GHG) Emissions which scientists say makes the earth warmer.

This smoke can negatively affect your health too, especially if you're asthmatic or allergies. EVs are also very quiet and so, do not add to noise pollution.



## Can I run out of charge?

On a full charge, EVs can travel over 200 miles which is quite a distance.

While they can run out of charge – just as an ICE vehicle can run out of gas - this is uncommon and this distance is more than adequate for relatively long distances in the Caribbean context. It is therefore unlikely that you'll run out of charge, if you plan well. Drivers can see charge levels as they go down, which allows the driver to monitor when the car needs recharging.



