



# CHARGING FORWARD.

A GUIDE TO BMW ELECTROMOBILITY.



The future of mobility is electric, and BMW is here to help you charge forward. In this guide to BMW electromobility, you will find everything you need to know about making the switch to electric driving – from information about home and public charging, to facts about BMW's newest electrified lineup.

If you would like to learn more about BMW's lineup of battery electric and plug-in hybrid vehicles, speak to a sales advisor at your local authorized BMW Retailer.

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# 01 | ELECTROMOBILITY ESSENTIALS



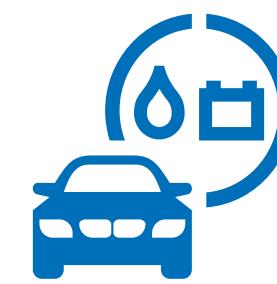


## Battery Electric Vehicle (BEV).

A BMW Battery Electric Vehicle is a fully electric vehicle powered entirely by electricity, meaning it produces zero emissions. A BMW Battery Electric Vehicle is equipped with an electric motor and a high-voltage lithium-ion battery that can be recharged via a Level 1 or 2 AC or Level 3 DC charger.

Currently BMW offers three Battery Electric Vehicles: The BMW iX Sports Activity Vehicle (SAV), the BMW i4 Gran Coupé and the BMW i7 Sedan.

In the coming year, the BMW Group will expand its electrified product lineup to include a battery electric version of the BMW 5 Series as well.

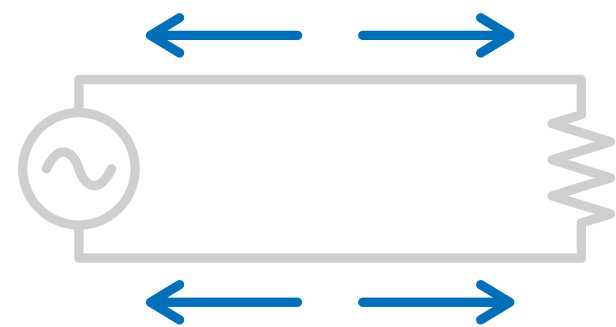


## Plug-in Hybrid Electric Vehicle (PHEV).

BMW Plug-in Hybrid Electric Vehicles combine the conventional BMW Twin Power Turbo combustion engine with an electric motor and high-voltage lithium-ion battery that can be recharged via a Level 1 or 2 AC charger. This dual-drivetrain system works together to reduce exhaust emissions and provides increased fuel efficiency without compromising range. Intuitive drive modes automatically optimize efficiency by selecting the ideal combination of electric and gas power on drives of any length.

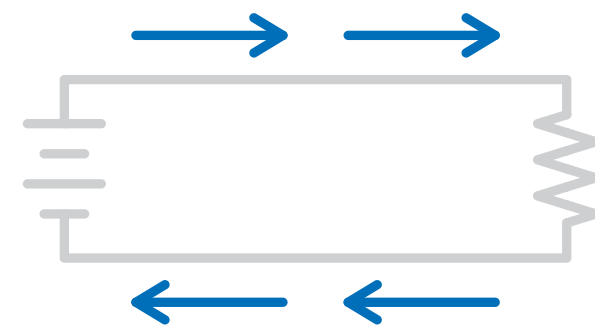
You can also choose to drive in fully electric mode within a certain range, or with the convenience of the combustion engine like a conventional BMW. Currently BMW offers a wide selection of plug-in hybrid vehicles, including the BMW 330e xDrive, the BMW 530e xDrive, the BMW 745Le xDrive, the BMW X3 xDrive30e, and the BMW X5 xDrive45e.





## Alternating Current (AC).

AC Power provides varying voltage, meaning that its flow of charge periodically alternates direction. AC power is supplied to domestic and public AC outlets from the electrical grid. When charging an electrified vehicle with an AC charger, the vehicle's on-board charger will receive the Alternating Current (AC) and convert it to a Direct Current (DC), which is then sent to the vehicle's battery and stored as energy. AC chargers are common for home and public charging, and available at different charging speeds. Both BMW Plug-in Hybrid and BMW Battery Electric Vehicles can be charged using AC charging.



## Direct Current (DC).

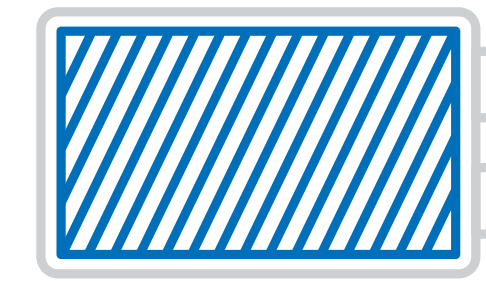
DC Power provides constant voltage and a direct current, meaning it delivers power directly from a DC charging source to the vehicle's battery, without the need for conversion from the vehicle's on-board charger. DC charging represents the fastest way to charge an electrified vehicle, however, only BMW Battery Electric Vehicles can be charged using DC Charging. BMW Plug-in Hybrid Vehicles cannot utilize DC chargers. It is commonly referred to as a form of public charging called DC Fast Charging. The fastest charging speeds, above 100 kW and up to 350 kW, are also known as High Power Charging DC, or HPC DC.

It is only available as a form of public charging called "DC Fast Charging". DC charging can accommodate Battery Electric Vehicles only.



## Kilowatt (kW).

A watt is an international unit for measuring power. In the context of electrified vehicles, it can refer to the flow of power that electric motors are capable of outputting, or the output of charging products and stations used to charge a vehicle's battery – with higher numbers equating to faster charging speeds.



## Kilowatt-Hour (kWh).

A Kilowatt-Hour is an international unit for measuring energy. In the context of electrified vehicles, a Kilowatt-Hour is used to measure the battery's energy capacity, and can be compared to the litre capacity of a fuel tank in an Internal Combustion Engine (ICE) vehicle. This means that batteries with a higher kWh are capable of storing more energy, resulting in a higher range figure.

**See more about AC and DC charging in the Charging at Home and Public Charging sections.**



02 | **HOME  
CHARGING**




There are two options for charging an electrified BMW at home: Level 1 AC Charging and Level 2 AC Charging. Determining which solution is best for you depends on your vehicle type and battery capacity in kWh (battery electric or plug-in hybrid).


## Level 1 AC Charging.

The most basic home charging option, recommended for most BMW Plug-in Hybrid models. Not recommended for BMW Battery Electric models.


Recommended For




BMW 330e  
xDrive




BMW 530e  
xDrive




BMW 745Le  
xDrive




BMW X3  
xDrive30e




Outlet Required




Maximum Output



Electric Vehicle  
Charging Equipment



0-100% Approx.  
Charging Time



Installation Requirements

Standard 120-volt household outlet (NEMA 5-15).

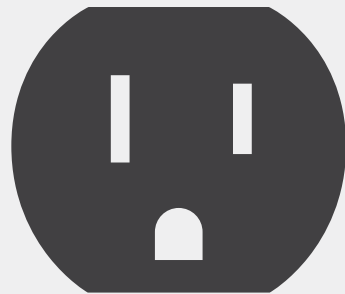
1.2 kilowatts (kW).

BMW OCCASIONAL USE CABLE.


Standard with all BMW Plug-in Hybrid models.

Approximately 8-10 hours\* for BMW Plug-in Hybrid models.

No requirements as the Level 1 BMW Occasional Use Cable can be used with a standard 120-volt household outlet.



Outlet



BMW  
Occasional  
Use Cable

\*Charge times vary based on vehicle battery size and kW output from charging device.



## Level 1 AC Charging Equipment.

### The BMW Occasional Use Cable.

Standard with all BMW Plug-in Hybrid vehicles.



The BMW Occasional Use Cable is the main Electric Vehicle Supply Equipment (EVSE) used for Level 1 AC charging with a standard 120-volt household outlet. It is suitable for all BMW Plug-in Hybrid models and can mostly deliver a full 0-100% charge overnight. The cable itself is 5 metres in length to accommodate typical residential garages.

### How to Use the BMW Occasional Use Cable.



1. Place the charge unit on the ground or hang it on the wall using the loop.



2. Connect the charging cable to the domestic outlet first.



3. The green LED light on the charge unit indicates readiness.



4. Connect the charging cable to your vehicle's charging port.



5. The blue LED light on the charge unit indicates that the vehicle is charging.



6. Unlock your vehicle to disconnect the charging cable from the vehicle's charging port.

**PLEASE NOTE:** An extension cable between the charging cable and the domestic socket is not permitted.



Level 2 AC Charging.

The fastest home charging option, recommended for BMW battery electric models and larger-battery plug-in hybrid models.

Recommended For



BMW iX  
(40, 50 and M60)



BMW i4  
(40 & M50)



BMW X5 xDrive45e  
(Plug-in Hybrid)



Outlet Required

240-volt outlet (NEMA 14-50) or hard wired in the case of the BMW Wallbox.  
Commonly used to power large appliances such as ranges and dryers.



Maximum Output

9.6 kilowatts (kW) (Both BMW Flex Charger & BMW Wallbox).



Electric Vehicle  
Charging Equipment

BMW Flex Charger (Standard Equipment) or BMW Wallbox.  
**BMW Flex Charger Standard with all BMW Battery Electric Vehicles.**



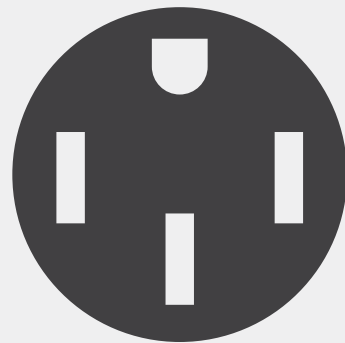
10-80% Charging Time

**BMW iX = 8.5 hrs\*, BMW i4 = 6.5 hrs\*, BMW X5 xDrive45e = 5 hrs\***



Installation Requirements

- Professional installation of a 240-volt NEMA 14-50 receptacle is required, unless your desired charging location already has one in place.
- A dedicated circuit capable of supporting a 40-amp continuous load is ideal for maximum charging power.



Outlet



BMW Flex  
Charger  
+ Adapter

DID YOU  
KNOW...

Level 2 AC charging is ideal for daily charging in Battery Electric Vehicles like the BMW iX and i4. To optimize the service life of your vehicle's high voltage battery, it's recommended to keep the charge level between 10%-80% if possible.

\*Charge times vary based on vehicle battery size and kW output from charging device. For optimal charge speed, ensure that the ePower range is between 10-80%.



## Level 1 AC & 2 AC Charging Equipment.

### The BMW Flex Charger.

The ultimate-all-in-one charging solution. Standard with BMW Battery Electric Vehicles, the iX and i4.



The BMW Flex Charger, which comes with two adaptor cables, can accommodate both Level 1 AC charging using a 120-volt household outlet, as well as Level 2 AC charging using a 240-volt NEMA 14-50 Receptacle (Level 2 AC charging). The cable itself is 5 metres in length to accommodate typical residential garages.

### How to Use the BMW Flex Charger.



1. Connect the adaptor cable suitable for your electric outlet to the charge unit.



2. Place the charge unit on the ground or use the wall mounting kit to hang it on the wall.



3. Plug the adaptor cable into the outlet.



4. The charging status bar on the charge unit will turn blue, indicating that it's ready to use.



5. Plug the charging cable into your vehicle's charging port.



6. Unlock your vehicle to disconnect the charging cable from the vehicle's charging port.

**PLEASE NOTE:** Do not use an extension cable between the charging cable and the domestic socket.



## Level 2 AC Charging Equipment.

### The BMW Wallbox.

Available through your local authorized BMW Retailer.



The BMW Wallbox is the ideal Level 2 AC charging option for drivers wanting a second charger in their residence. Featuring a sleek weather-proof design, as well as innovative features such as current control and wi-fi integration, it's made to provide the highest level of charging convenience.

### How to Use the BMW Wallbox.



1. Ensure the BMW Wallbox is installed by a licensed and certified electrician.



2. The blue LED bar indicates that the BMW Wallbox is ready to charge.



3. Plug the charging cable into your vehicle's charging port to initiate charging.



4. During charging, the charging status indicator will pulse slowly in blue.



5. When charging is complete, unlock your vehicle to disconnect the charger.



6. Return the charger to the BMW Wallbox and hang the cable on the cable holder to keep it organized.

For more information on the BMW Wallbox, visit your local authorized BMW Retailer.



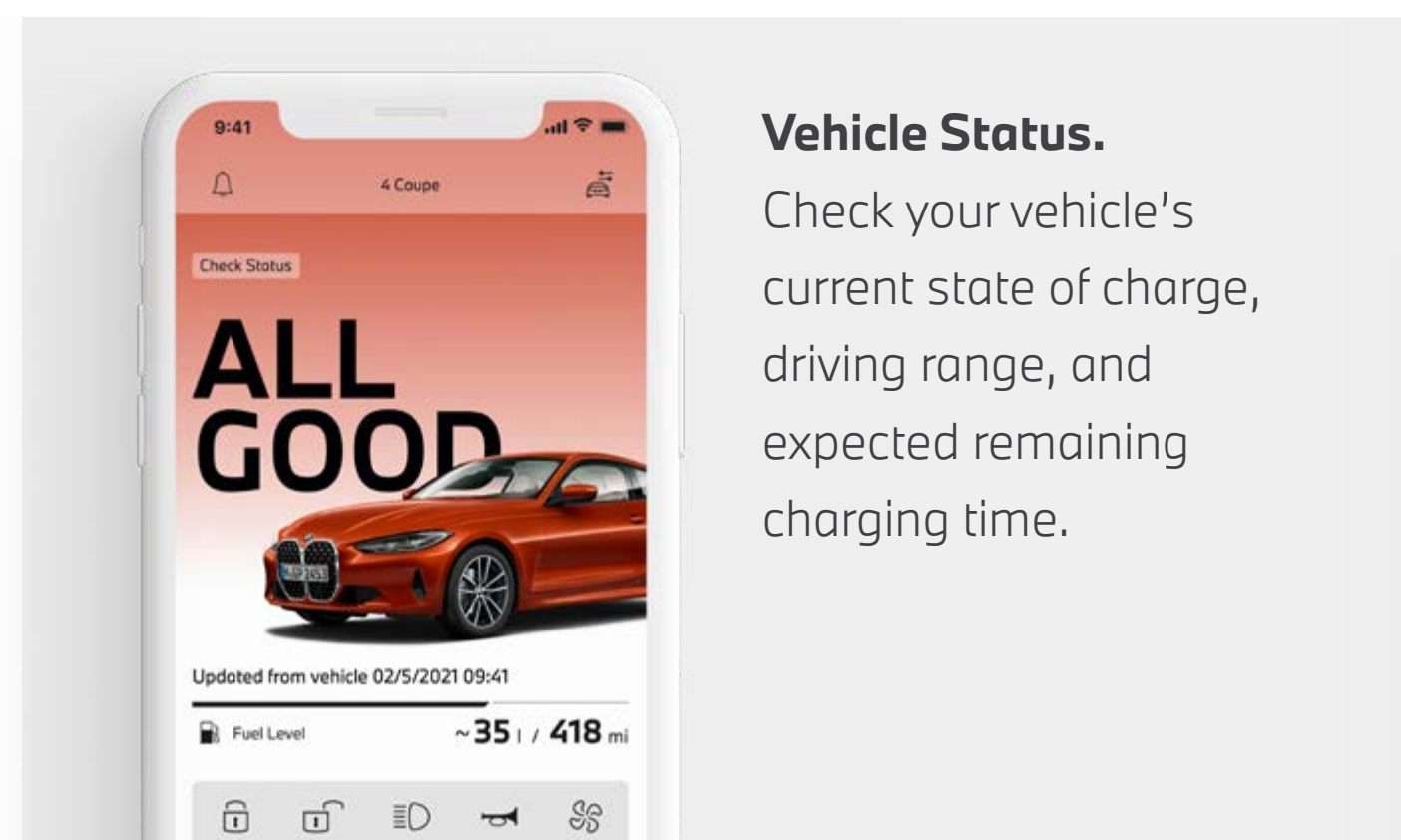
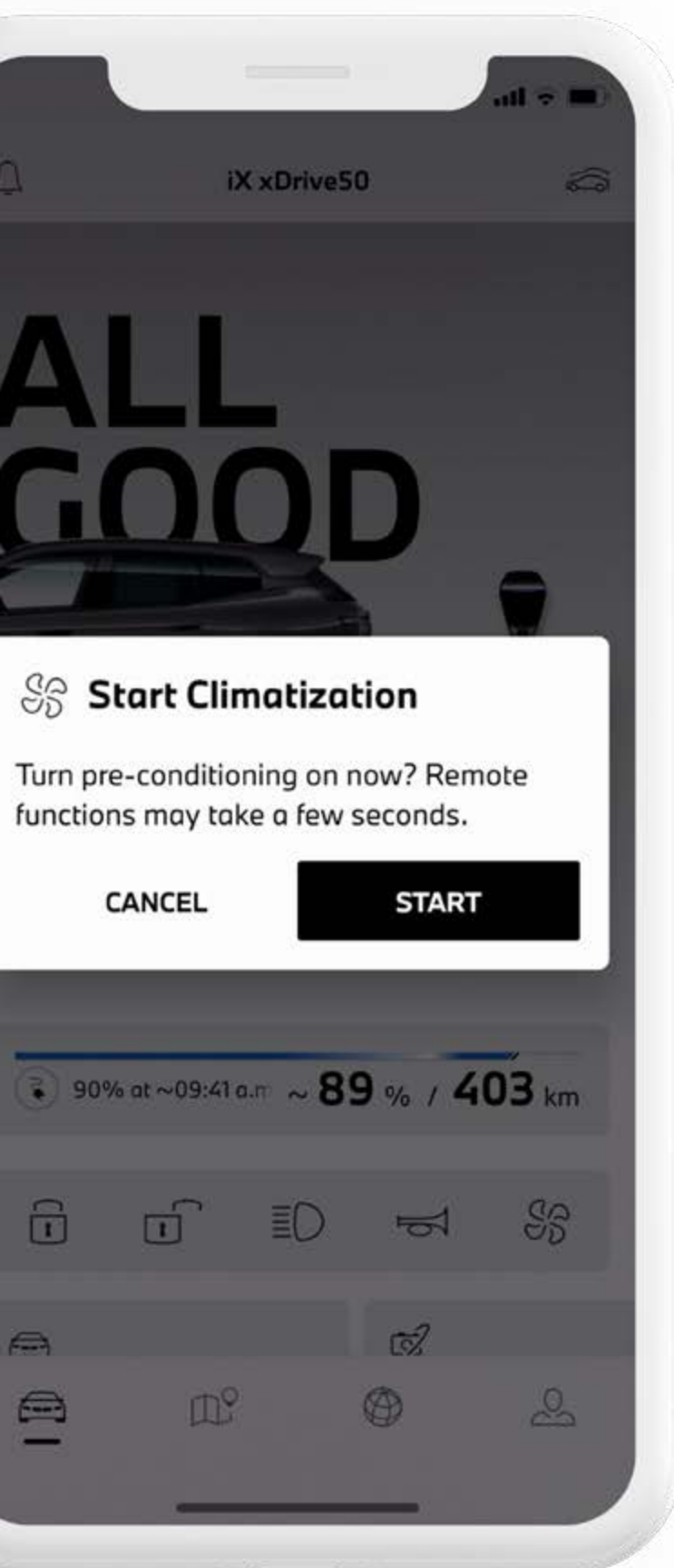
# HOME CHARGING.

CHARGING FORWARD.



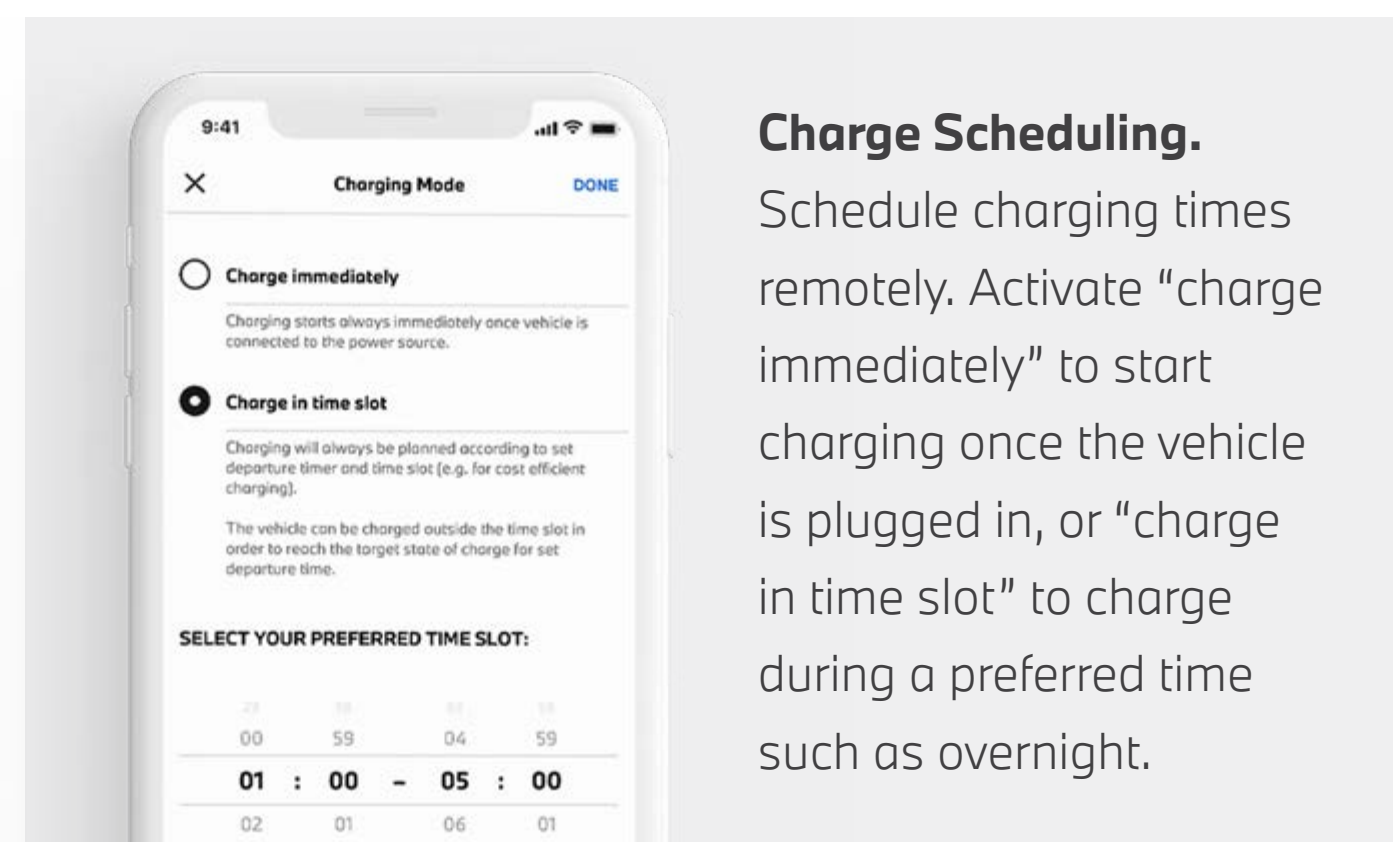
## Charge Management with the My BMW App.

With the charge management features of the My BMW App\*, you can remotely control the charging process of your battery electric or plug-in hybrid BMW. Whether you want to simply check on the current charge status of your BMW, review its charge history, or activate pre-conditioning, the My BMW App\* makes it easy to tap into your vehicle's complete charging capabilities.



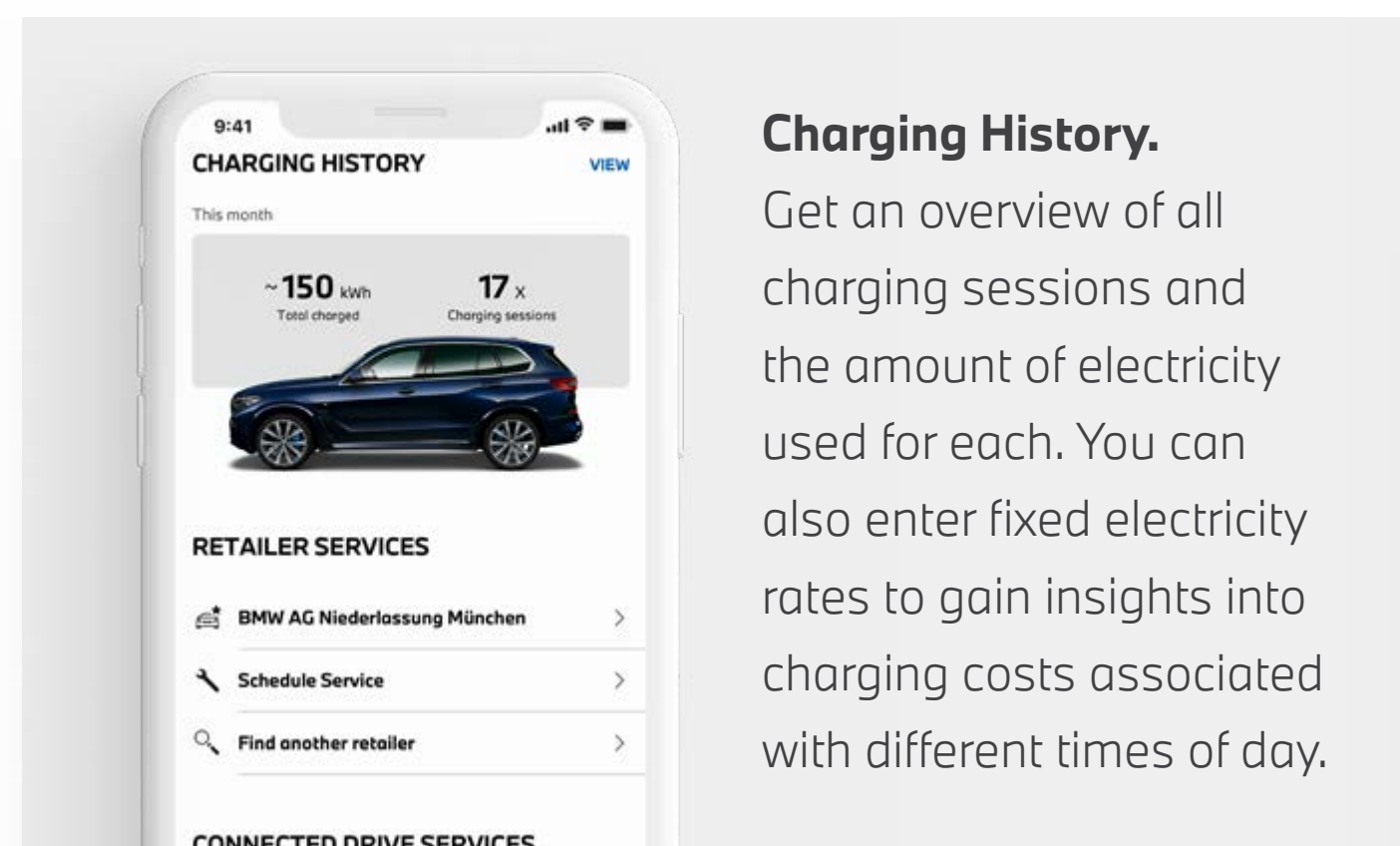
### Vehicle Status.

Check your vehicle's current state of charge, driving range, and expected remaining charging time.



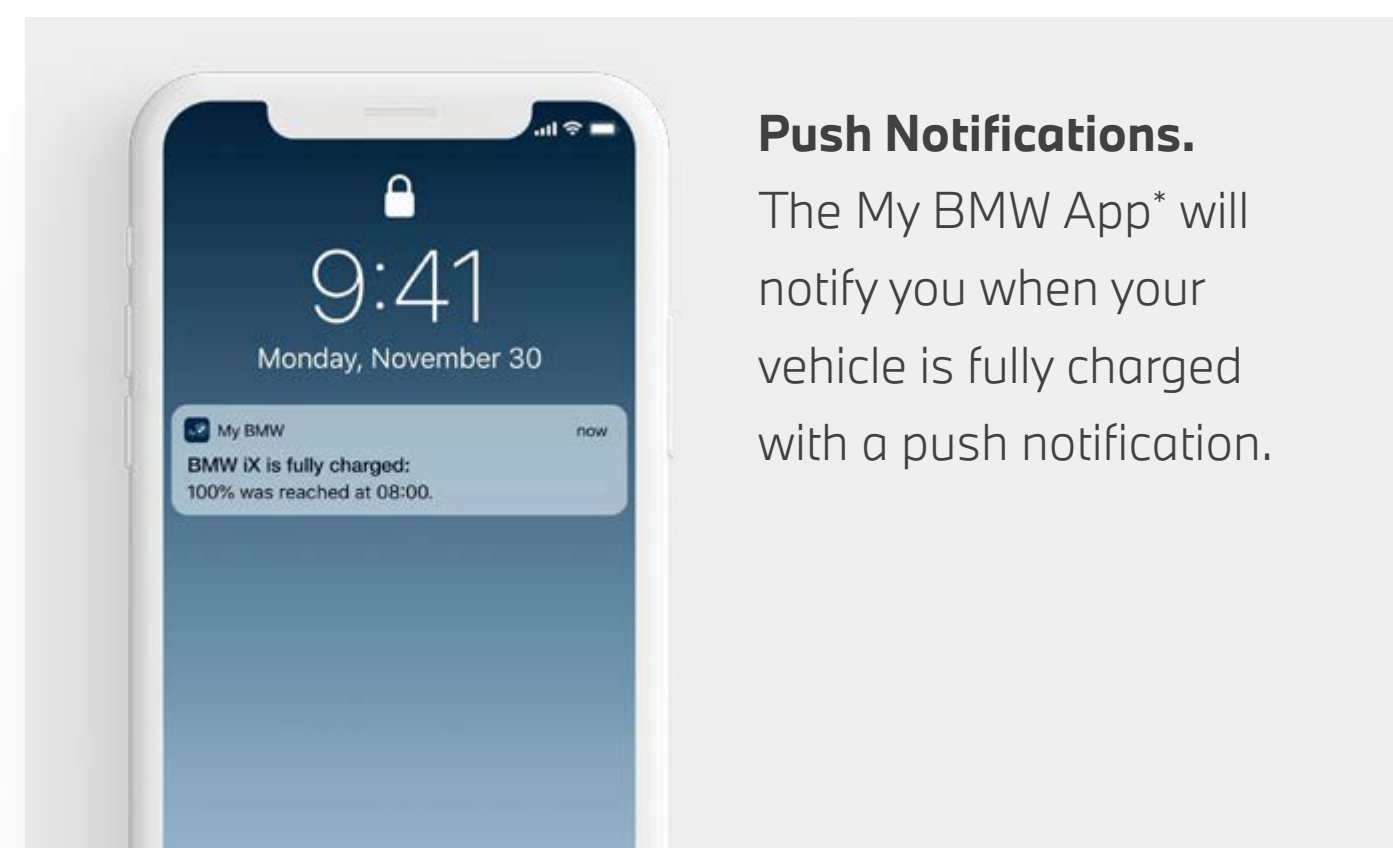
### Charge Scheduling.

Schedule charging times remotely. Activate "charge immediately" to start charging once the vehicle is plugged in, or "charge in time slot" to charge during a preferred time such as overnight.



### Charging History.

Get an overview of all charging sessions and the amount of electricity used for each. You can also enter fixed electricity rates to gain insights into charging costs associated with different times of day.



### Push Notifications.

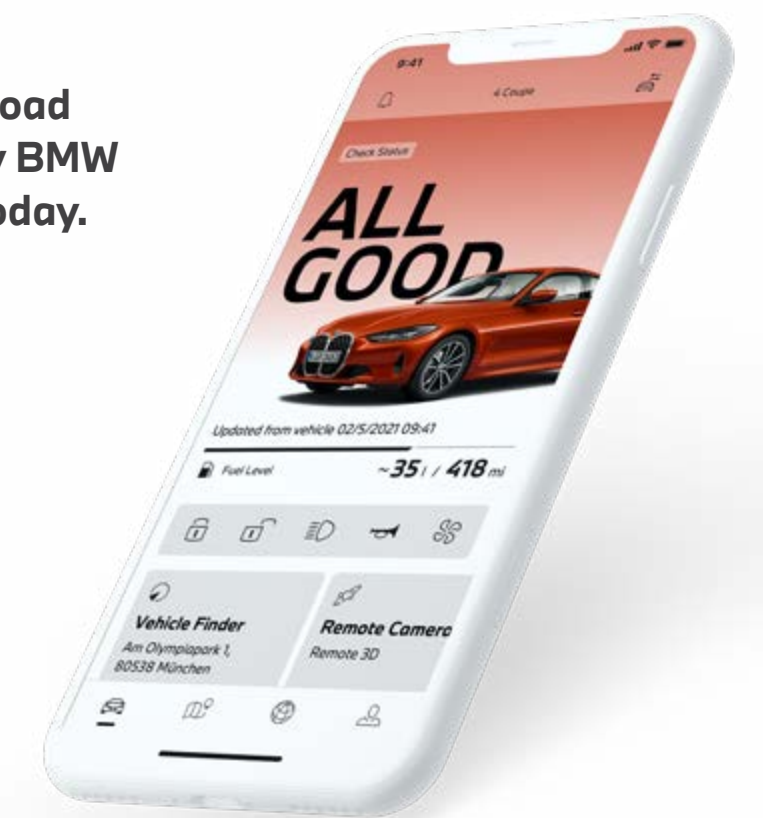
The My BMW App\* will notify you when your vehicle is fully charged with a push notification.

## DID YOU KNOW...

Some Canadian electricity providers offer "off-peak energy hours" – typically overnight – in which energy costs are lower. By using the My BMW App\* to schedule charging during these "off-peak" hours, you can enjoy significant cost of electricity savings over the duration of your ownership journey.



Download the My BMW App Today.



\*The My BMW App is optimized for BMW vehicles from 2016 model year and newer in conjunction with the option ConnectedDrive Services and a compatible smartphone. Available apps and services are subject to change, may vary by location or other factors. May require additional services, plans, subscriptions and vehicle options, and may only be operable in conjunction with certain smartphones and operating systems (smartphone not provided). Not all apps or services may be available for all BMW models.



## Tap into the Power of Pre-Conditioning.

Extreme hot or cold temperatures, common during Canada's summer and winter months, can affect the range of any electric vehicle and the overall performance of the high-voltage battery. But with BMW's electrified models, one of the solutions to counteract this effect is pre-conditioning.

Pre-conditioning refers to the process of "climatizing" your vehicle's cabin and preparing your battery while it's charging. This process will help the battery reach an ideal temperature to maximize efficiency and optimize range. Additionally, pre-conditioning will pre-heat or pre-cool your vehicle's cabin, ensuring you step into a perfectly tempered interior before setting off on your journey.

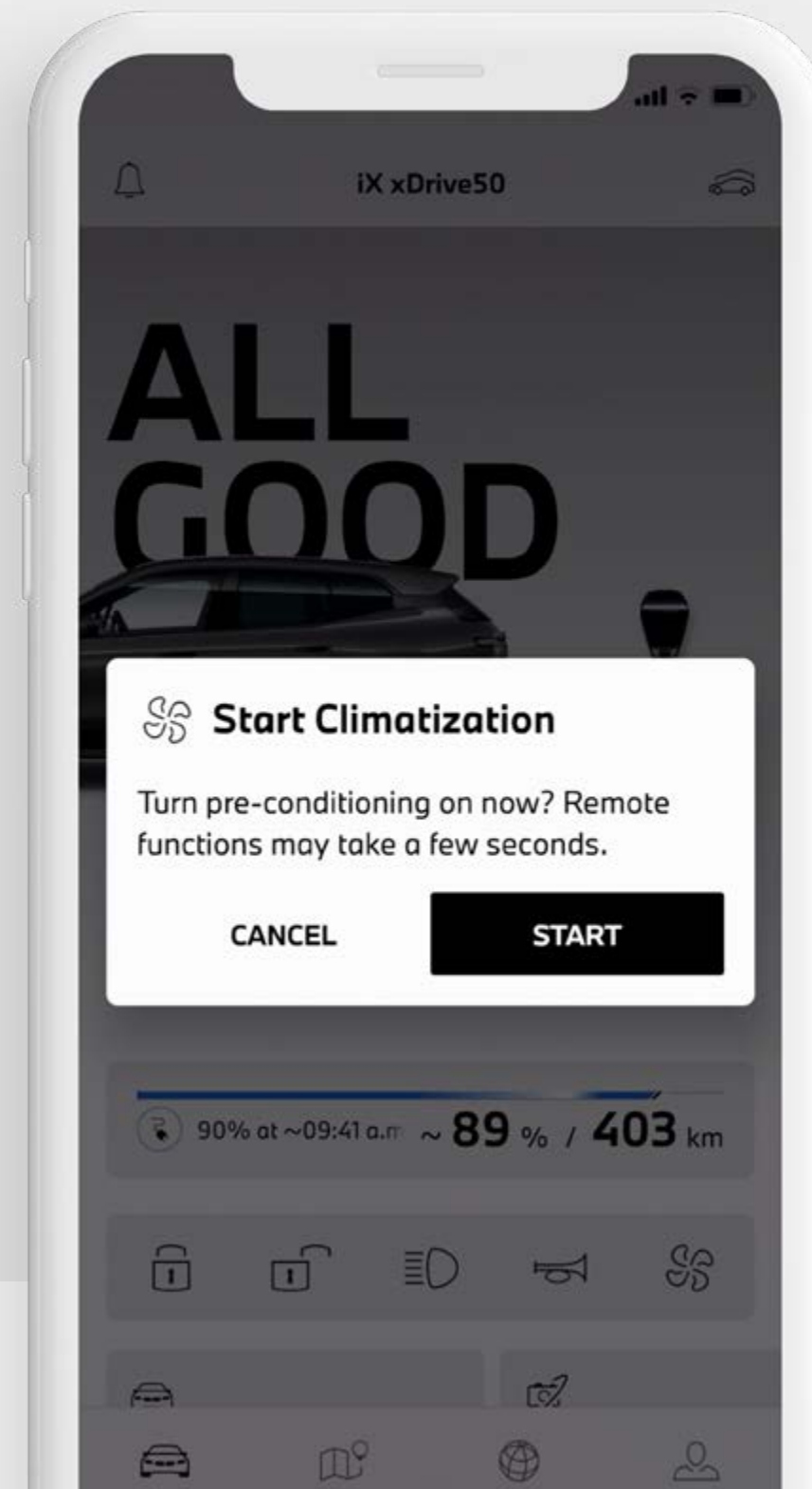
### Pre-Conditioning from the My BMW App.\*

#### To activate pre-conditioning immediately:

1. Select the fan icon and 'Start Climatization'.

#### To schedule pre-conditioning for departure:

1. Select 'Charge & Climate Settings'.
2. Select 'Edit'
3. Tap the 'Automatic climate control for departure' toggle.
4. Choose your next departure time or a recurring departure time.
5. Your vehicle will automatically activate pre-conditioning ahead of this pre-determined departure time.



### Pre-Conditioning from Your Vehicle's iDrive system.

1. Select the 'Car' Tab.
2. Select 'Settings'.
3. Select 'Climate Control'
4. Select Pre-Conditioning/Ventilation.
5. Select 'Start Now' to activate pre-conditioning immediately or 'Departure Schedule' to schedule pre-conditioning at a recurring time slot.





## 3 More Tips to Maximize Range in Winter.

1

### **Take advantage of your vehicle's heated seats and steering wheel.**

These features only draw energy from your vehicle's low-voltage battery, as opposed to the heating system, which draws more energy from its high-voltage battery.

2

### **Use your vehicle's ECO PRO or Efficient Driving Mode.**

These driving modes help to optimize your driving style, for example by modulating throttle input to ultimately improving range.

3

### **Set 'energy recuperation' level to high.**

Battery Electric Vehicles offer regenerative braking, which recuperates energy during deceleration. The energy recuperation can be set to 3 different levels via the iDrive system, or to maximum recuperation via the gear selector.





# 03 | PUBLIC CHARGING





# PUBLIC CHARGING.

CHARGING FORWARD.



While most owners of an electrified BMW tend to charge their vehicle at home, there may be times when you need to charge on the go. Fortunately, Canada is home to thousands of public charging stations – many accessible via the My BMW App\* and your vehicle's iDrive system, as well as through charging provider apps.

## Canada's Charging Infrastructure.

6,000+

Public Charging Locations

Level 2 AC and  
Level 3 DC Fast Chargers.



## PLANNING A TRIP?






Visit the BMW [Electromobility Hub](#) and use the interactive Public Charging Map to explore all public charging stations on route to your destination.

\*The My BMW App is optimized for BMW vehicles from 2016 model year and newer in conjunction with the option ConnectedDrive Services and a compatible smartphone. Available apps and services are subject to change, may vary by location or other factors. May require additional services, plans, subscriptions and vehicle options, and may only be operable in conjunction with certain smartphones and operating systems (smartphone not provided). Not all apps or services may be available for all BMW models.



## Level 2 AC Public Charging.

Often referred to as “destination charging”, Level 2 AC public charging is ideal if you plan on staying at your destination for several hours.

Recommended For	All plug-in hybrid and battery electric BMW models.	<div><div>J1772 Connector</div><div>8 kW</div><div>9-11 hrs.</div></div>
Typical Output	Most Public Level 2 Stations vary between 6 kW to 8 kW. BMW battery electric models will accept up to 8 kW, BMW Plug-in Hybrid models will accept up to 3.7 kW.	
Connector	J1772 Connector provided by the charging site.	
10-80% Approx. Charging Time	<b>BMW iX</b> = 11 hours*, <b>BMW i4</b> = 9 hours*	

## Payment at a Level 2 Public Charging Station.

Some Level 2 public charging stations are free to use. For those that are pay-per-use, the average cost is \$1.50 - \$2.50 / Hr.±  
Payment can be made through your charging provider account, and some locations will accept a tap & go credit card.



\*Charge times vary based on vehicle battery size and kW output from charging device. For optimal charge speed, ensure that the ePower range is between 10-80%. ±Data provided by plugndrive.ca. as of 03/2022




Level 3 DC Fast Charging.

Level 3 DC Fast Charging is the fastest public charging option available, with outputs varying from 25 kilowatts (kW) to High Power DC Fast Charging capable of delivering up to 350 kilowatts (kW). Level 3 DC Fast Charging can only accommodate battery electric vehicles, not plug-in hybrids.


Recommended For	The battery electric BMW iX and i4.
Typical Output	Between 25 kW and 350 kW. The BMW i4 will accept up to 205 kW and the BMW iX will accept up to 195 kW.
Connector	CCS Connector provided by the charging site.
10-80% Approx. Charging Time	<b>BMW iX</b> = 32 minutes*, <b>BMW i4</b> = 25 minutes*



CCS Connector



195 kW  
205 kW



32 mins.  
25 mins.



Payment at a Level 3 DC Fast Charging Station.

Most Level 3 charging stations are pay-per-use and bill by the minute for an average cost \$15-\$30 / hour.<sup>±±</sup>

Pre-Conditioning in Advance of Level 3 DC Fast Charging.

Through iDrive or the My BMW App<sup>±</sup>, you can select a public DC Fast Charger where you plan to charge, and “pre-condition in advance of DC Fast Charging”. Doing so will pre-condition your vehicle to the ideal parameters to that specific charger.

DID YOU KNOW...

With Level 3 DC Fast Charging, it’s recommended to charge your vehicle up to 80%. After 80%, the rate of charge will slow down, which can increase the cost of charging at a Level 3 DC Fast Charging station. Electrified BMW Owners can set the charging target to 80% through the My BMW App, or through the vehicle’s iDrive system.

\*Charge times vary based on vehicle battery size and 150 kW output from charging device. For optimal charge speed, ensure that the ePower range is between 10-80%. <sup>±</sup>The My BMW App is optimized for BMW vehicles from 2016 model year and newer in conjunction with the option ConnectedDrive Services and a compatible smartphone. Available apps and services are subject to change, may vary by location or other factors. May require additional services, plans, subscriptions and vehicle options, and may only be operable in conjunction with certain smartphones and operating systems (smartphone not provided). Not all apps or services may be available for all BMW models. <sup>±±</sup>Data provided by plugndrive.ca as of 03/2022.



CHARGING FORWARD.



# 04 | THE BMW ELECTRIFIED LINEUP




# THE BMW ELECTRIFIED LINEUP

## The Battery Electric 2022 BMW iX.

This battery electric Sports Activity Vehicle offers pioneering design, innovative technology, and sustainable luxury – in equal measure.


VARIANT	FULLY ELECTRIC RANGE	POWER
<b>BMW iX xDrive40</b>	up to 322 km <sup>±</sup>	up to 322 HP*
<b>BMW iX xDrive50</b> (with 20" wheels)	up to 521 km <sup>±±</sup>	up to 516 HP*
<b>BMW iX M60</b>	up to 450 km <sup>±</sup>	up to 610 HP*



## The Battery Electric 2022 BMW i4.

Built with far-reaching range and efficiency, along with the breathtaking performance that defines BMW.


VARIANT	FULLY ELECTRIC RANGE	POWER
<b>BMW i4 eDrive40</b> (with 18" wheels)	up to 484 km <sup>±±</sup>	up to 335 HP*
<b>BMW i4 M50 xDrive</b> (with 19" wheels)	up to 435 km <sup>±±</sup>	up to 536 HP*



## The 2022 BMW 330e xDrive Plug-in Hybrid.

The iconic BMW sedan, recharged for a new era.


FULLY ELECTRIC RANGE	POWER
<b>up to 32 km<sup>±±</sup></b>	up to 288 HP*



## The 2022 BMW 530e xDrive Plug-in Hybrid.

A driving experience that fuses maximum efficiency with supreme driving pleasure.

FULLY ELECTRIC RANGE	POWER
<b>up to 31 km<sup>±±</sup></b>	up to 288 HP*



\*European model shown. BMW AG predicted estimated range (based on EPA methodology). Official EPA test results are not yet available. Range may vary based on driving habits and other factors. \*\*Electric range may vary based on driving habits and other factors. Estimated range is based on Government of Canada approved criteria and testing methods. For more information visit <https://fcr-ccc.nrcan-rncan.gc.ca/en>. \*Horsepower performance metrics as reported by BMW AG.




# THE BMW ELECTRIFIED LINEUP

CHARGING FORWARD.




## The 2022 BMW 745Le xDrive Plug-in Hybrid.

Pairing exquisite design with the pioneering efficiency, the BMW 745Le xDrive represents BMW luxury at its most evolved.

FULLY ELECTRIC RANGE	POWER	
up to 27 km <sup>++</sup>	up to 389 HP*	


## The 2022 BMW X3 xDrive30e Plug-in Hybrid.

Maximum traction and optimized driving dynamics mean you're ready for any road.

FULLY ELECTRIC RANGE	POWER	
up to 29 km <sup>++</sup>	up to 288 HP*	

## The 2022 BMW X5 xDrive45e Plug-in Hybrid.

A versatile driving experience designed for local trips and longer journeys.

FULLY ELECTRIC RANGE	POWER	
up to 50 km <sup>++</sup>	up to 389 HP*	

<sup>++</sup>Electric range may vary based on driving habits and other factors. Estimated range is based on Government of Canada approved criteria and testing methods. For more information visit <https://fcr-ccc.nrcan-rncan.gc.ca/en> \*Horsepower performance metrics as reported by BMW AG.





05 | **THE BENEFITS OF  
GOING ELECTRIC WITH BMW**



# THE BENEFITS OF GOING ELECTRIC WITH BMW

CHARGING FORWARD.



## 1. LOWER OWNERSHIP COSTS.



### Fuel Savings.

Battery Electric Vehicles like the iX and i4 do not require gasoline, which can help you save on costs over the duration of your ownership.

To determine how much you can save on fuel every year, use the interactive [fuel savings calculator](#) on the BMW Electromobility Hub.



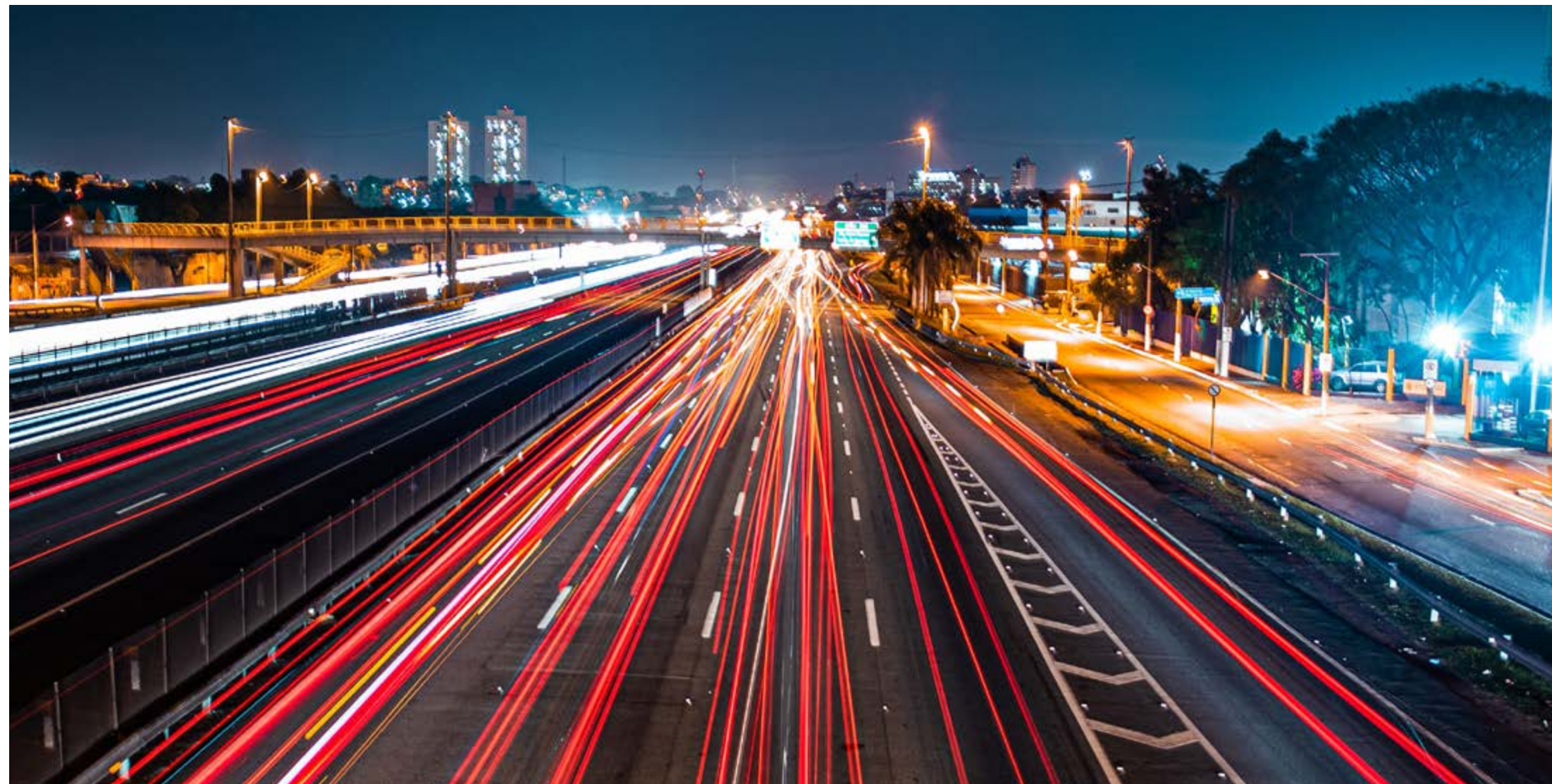
### Less Maintenance Required.

BMW's battery electric models do not require oil service, coolant changes, and spark plug replacements. They also have fewer moving parts, meaning there's less of a chance that parts will need to be repaired or replaced during your ownership journey.



# THE BENEFITS OF GOING ELECTRIC WITH BMW

## 2. PREFERRED LANE AND PARKING ACCESS.



### HOV Lane Access.

Battery electric and plug-in hybrid BMWs may be eligible for HOV lane access, even with a single occupant. Check your local regulations for details.



### Green Vehicle Parking.

Many parking providers across Canada offer preferred "Green Vehicle Parking" for battery electric and plug-in hybrid vehicles.



# THE BENEFITS OF GOING ELECTRIC WITH BMW

## 3. EXCEPTIONAL ELECTRIC RANGE.



### A Range that Goes the Distance.

The BMW iX xDrive50 offers a fully electric range of up to 521 km\*, while the BMW i4 eDrive40 offers up to 484 km\* of electric range – enough to comfortably accommodate the average daily commute of 60 km in Canada.\*\*



### ECO PRO / Efficient Driving Modes.

The ECO PRO and Efficient Driving Modes in the BMW iX and i4 help to extend electric range, by modulating throttle input and enabling more efficient driving.



### Regenerative Braking with Energy Recuperation.

Regenerative braking is a feature of the BMW iX and i4 that recuperates energy during deceleration and transfers that energy back to the battery – ultimately improving range.

The energy recuperation effect can be set at three different intensity levels through the vehicle's iDrive system. The “High” recuperation level can be activated through the gear selector to achieve maximum energy recovery and range.

\*Electric range may vary based on driving habits and other factors. Estimated range is based on Government of Canada approved criteria and testing methods. For more information visit <https://fcr-ccc.nrcan-rncan.gc.ca/en> \*\*Data provided by plugndrive.ca as of 03/2022.





## 4. RETAILERS EQUIPPED FOR ELECTRIC VEHICLES.



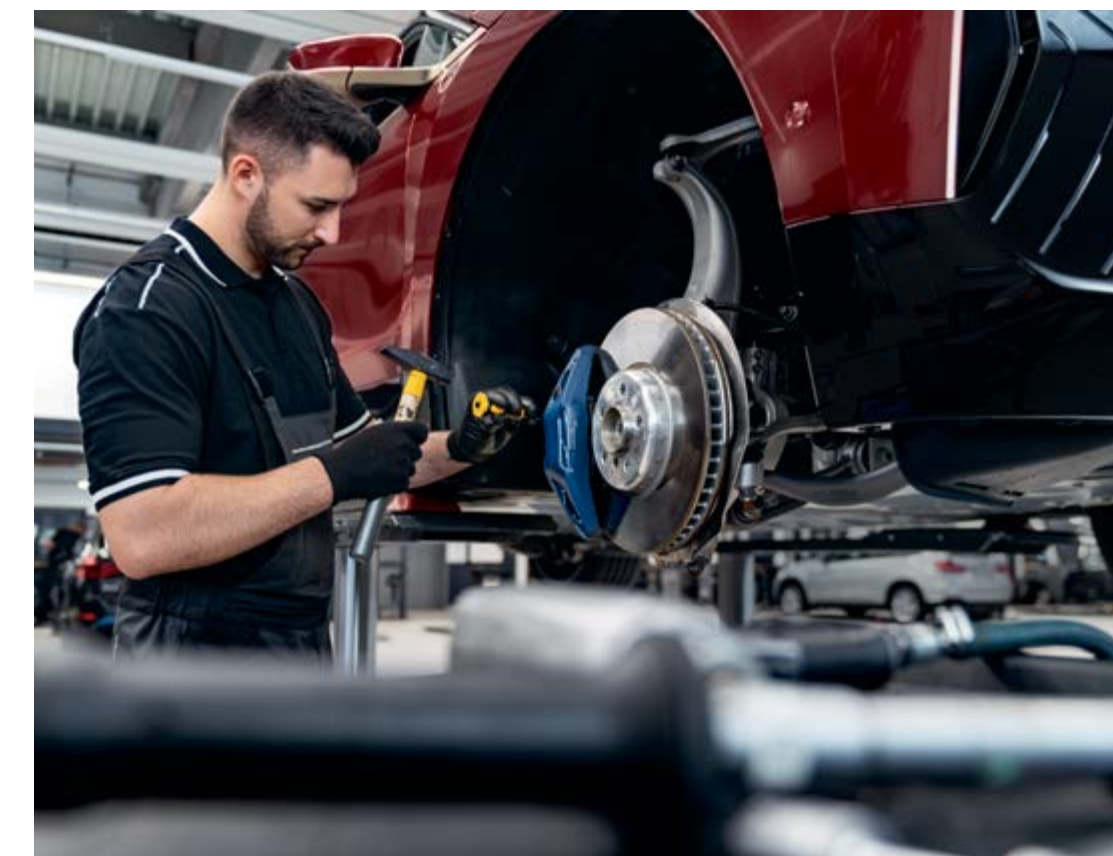
### Expertly Trained Advisors.

BMW Retailers in Canada have over 330 Sales Advisors and over 180 Service Advisors who have received extensive training on BMW's electric vehicles and electromobility as a whole.



### High-Voltage Trained Technicians.

BMW's nationwide network of Retailers have over 220 High-Voltage Technicians, who have been trained and certified to perform service on battery electric and plug-in hybrid BMW vehicles.

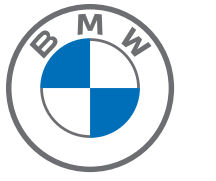


### Well-Equipped Service Facilities.

BMW Retail facilities across Canada are equipped with the latest state-of-the-art service equipment specially designed for BMW electrified vehicles.



CHARGING FORWARD.



To learn more about electromobility or BMW's electrified vehicle lineup, **visit your local authorized BMW Retailer.**

