Nissan LEAF

Frequently Asked Questions

We've created the following questions and answers based on your direct feedback to help further educate the Nissan LEAF community and those looking to join in.

Electric Vehicle Summary of Terms	
EV	Electric Vehicle, a vehicle which is powered by an electric motor.
BEV	Battery Electric Vehicle, a vehicle which runs purely on battery power.
PHEV	Plugin Hybrid Electric Vehicle, a vehicle which is similar to traditional hybrid, powered by both a traditional combustion engine and electric motor with the ability to also plug-in to charge.
REX	Range Extended Electric Vehicle, an electric vehicle which also has a small petrol powered generator that can charge the battery thereby extending it's range
CP	Charge point, the "charger" itself is typically part of the on-board vehicle electrical system, the unit which the car plugs into is commonly known as a Charge Point.
EVSE	Electric Vehicle Supply Equipment, also more commonly known as a Charge Point.
SCP	Standard/Slow charge point, an on-street or home charge point, typically supplying 16 or 32 Amp (3.3kw or 6.6kw) AC which the vehicle's on-board charge point then converts to DC in order charge the main traction battery.
FCP	Fast Charge Point, also known as a DC charge point or Rapid Charge point. Typically these can charge an Electric Vehicle much faster at up to 50kw.
AC	Alternating Current, the most common form of electrical power used in residential and commercial settings.
DC	Direct Current, power stored in batteries is stored as DC
Amps	Measurement of electric current
Watt	Measurement of consumption of energy
ICE	Internal Combustion Engine, a petrol or diesel engine.
ICEd	Being prevented from using an on-street charge point by an ICE vehicle.
EVd	Being prevented from using an on-street charger by an EV that's not charging

POPULAR QUESTIONS

Q: Who can order a Nissan LEAF at this time
Nissan LEAF is widely available through 11 of our Nissan EV Dealerships nationwide

Q: Can we have the estimated price?
The Nissan LEAF is available in 3 grades XE, SV & SVE. Prices start at €21,490 excl delivery (this includes an SEAI grant of €5,000)

Q: What kind of warranty does the Nissan LEAF have
The Nissan LEAF - Basic Warranty Coverage is 3 years/100,000kms.
The Lithium-ion battery & drivetrain electric's (traction motor/invertor etc) warranty is 5 years

Q: How much will a replacement battery cost?
The battery is modular in format and consists of 48 modules with 4 cells in each. These modules can be repaired or replaced independent of each other. Replacing the battery is very unlikely. However in the unlikely event that you feel the need to change it after 5 years, the cost is set in line with the costs one would expect of replacing an engine. Please discuss with your dealer.

Q: How long does it take to charge?
Most people will charge their Nissan LEAF overnight at home, similar to a mobile phone. A full charge will take approximately 8 hours on a 3.3kw/16amp (220/240v) home-charging unit. A 6.6kw upgrade is available as a factory fit option. This will reduce your charging time by half on standard roadside chargers. 50KW quick-charging systems are now available nationwide and provide an 80% charge in under 30 minutes.

Q: What distance does it cover on a single charge?
Up to 199 kms, based on the NEDC drive cycle conducted in laboratory tests using EU standard driving conditions. In normal driving conditions one can expect an average useable range of 140kms on a single charge. Your EV Specialist in a Nissan Dealership will guide you in relation to your commute or typical driving style and how weather etc can play a part in range.

Q: Since the Nissan LEAF solely runs on electricity, would charging from home dramatically increase my electricity bill?
Based on night rate electricity an overnight full charge will cost approx.. €2. Average daytime charging = €4 for a full charge. Many employers are now offering free charging, and for now the public charging Infrastructure, including fast charging is FREE. Please check with your electricity provider to confirm costs.

Q: How fast can this car go?
The Nissan LEAF can perform in line with ones expectations from any Diesel / Petrol car. The faster you go however will affect your range. You will get better range below 100kms. Top speed is 142kmph.

Q: How is it doing in crash test ratings?
The Nissan LEAF (like all Nissan cars) is built to meet or exceed EU safety regulations. It has achieved 5 Star NCAP safety rating, the highest safety rating available.

Q: It's great to cut down on vehicle emissions, but shouldn't I worry about the power plant used to generate the electricity too?
Even in its dirtiest form, the electrical grid is much cleaner than burning gas or solid fuel. And the grid will get cleaner over time, unlike gas. Much of the night time electricity generated in Ireland is from wind turbines.

Q: How will spent batteries be disposed of?
Nissan is committed to uphold its environmental responsibility in its products. Nissan is exploring both reuse and recycling opportunities for its used EV batteries. While we do not expect to accumulate used batteries for quite a while, testing and research is already underway to explore various markets for used LEAF batteries. These include Energy Storage devices as well as powering smaller transportation vehicles. In the meantime, an EV Battery Recycling process is in place. Collection is via our EV certified dealerships and specialised third party recycling facilities have been engaged to recycle the EV battery and/or battery parts when necessary in an environmentally responsible manner.

GENERAL

Q: Will the price include the battery pack or will there be an option to rent/lease the battery pack?
The total cost of the vehicle will include the battery pack. Both lease and purchase options are available for the vehicle, but no option in Ireland to rent/lease just the battery pack.

Q: What is it, a compact or full size?
The Nissan LEAF is a compact, 5-door family hatchback, with seating for 5 (3 child booster seats fit in the back seat).

Q: I am 6'1" so interior dimensions are important to me. What are they?
The Nissan LEAF is spacious and seats 5. The interior dimensions are as follows:
Head room (front/rear) 41.2in/37.3in.
Hip room (front/rear) 51.5 in/50 in.
Leg room (front/rear) 42.1 in/31.1in.
Shoulder room (front/rear) 54.4 in/52.5 in.
Cargo volume 14.5 ft.

Q: Is this an electric Pulsar?
No. The Nissan LEAF uses an exclusive platform. It's a true individual!

Q: Can the Nissan LEAF be towed by lifting the front and leaving the rear wheels on the ground?
Towing procedures are outlined in the Owner's Manual provided with the vehicle. The simple answer is Yes. The LEAF cannot however be towed will all wheels on the ground.

Q: How long does the "quick charge" take, and will it be available for home use?
Quick charge or FC provides an 80% charge in under 30 minutes. We recommend standard home/work charging for most of your charging needs. At usage of 50kw, Quick charging will likely be available only at public stations or businesses.

Q: Where are the batteries located? Do they take up a lot of the boot / interior space?
The battery is located in the floor of the vehicle, so it has a minimal intrusion into the interior space.

Q: Does the battery location prevent the back seat from folding down?
Not at all - the battery is located in the floor of the car and won't interfere with interior space.

Q: How safe is the battery in case of a collision?
As the battery is located under the seats and is fully integrated into the body structure. It has been tested for impact safety and meets or exceeds all regulatory standards the same as any Nissan.

Q: Where is Nissan LEAF built?
The Nissan LEAF is built in Sunderland, UK.

Q: Is an upgrade to my home electrical system required to set up the charging station?
A professional evaluation of your home electrical system is part of the overall purchase process. This service and the charger is provided free of charge (for the 1st 2000 EV purchasers) by ESB eCars. In most instances an upgrade is not essential.

Q: How practical is the Nissan LEAF to own? Do I need to keep a Diesel / Petrol powered car as a backup or own only the Nissan LEAF??
It all depends on your needs. Most drivers in Ireland drive much less than 120kms per day.

Q: What kind of maintenance is required?
Minimal maintenance. No oil, engine, clutch, timing belt, gearbox!

Q: What is the weight of the car?
The Nissan LEAF has a 3,366 lb. curb weight (SV trim level).

Q: Will the maintenance cost over a few years be more or less than a similar diesel/petrol engine vehicle?
Maintenance costs are projected to be considerably lower than comparably equipped diesel/petrol cars.

Q: In case of a problem, can a qualified mechanic fix a Nissan LEAF? Is special training needed?
The Nissan LEAF has an electric motor and no fuel engine, so it will require service at your local LEAF certified Nissan EV dealership by a qualified, trained EV technician.

Q: Does it sound like driving an electric golf cart? I would imagine it would be virtually silent?
The driving experience is exceptionally quiet, but Nissan LEAF is definitely not a golf cart - it's a real car.

Q: Will my golf clubs fit in the boot space?
Yes - the Nissan LEAF is a family car with ample passenger and cargo space.

Q: Is the Nissan LEAF going to have the Zero Emission logo on it?
The Zero Emission badge is located on the back and side of every Nissan LEAF..

Q: How long will the battery remain charged if you leave it parked where you cannot charge it?
This depends on a variety of factors like ambient temperature, age of the battery and how much energy is in the battery when you park it. However, the drain is very small (about 2% per month) relative to the battery's capacity.

Q: Does the "engine compartment" just contain the smaller electric motor or is there the potential for more storage space?
The electric motor and invertor only fill the front compartment due to their size and layout, therefore, interior and cargo space in the rest of the vehicle has been maximised.

CHARGING

Q: Is there a standard power plug for home charging, or do we have to buy a proprietary power outlet or power station?
ESB will install a specialised Home-Charging unit free of charge for the 1st 2000 new EV customers in Ireland. Your Nissan EV Specialist dealer will arrange this for you.

Q: Are there options on where to charge my vehicle?
Absolutely. You'll be able to charge at home, possibly at work and at stations along your route.

Q: How long does it take to charge at home ?
Most people will charge their Nissan LEAF overnight at home, similar to a mobile phone or Laptop. A full charge (from empty) will take approximately 8 hours on home-charging unit.

Q: Do you have any information on home solar-charging systems?
A residential solar system can help control electricity costs while further reducing carbon emissions. There are a number of companies in Ireland who can talk to you about this….from PV Panels to PV Car ports. What better place to store your self produced electricity than in your LEAF.

Q: How much will it cost to charge A Nissan LEAF at a public charging station?
If/when there are any fees associated with public chargers, they'll vary by location and network, and usage will depend on your battery status at the time. These fees will be set by the Commission for Energy Regulations (CER).

Q: What happens if you run out of electricity on the road?
If you should need it, Nissan's roadside assistance service is available as part of your warranty coverage. However, the CARWINGS® telematics system in the Nissan LEAF (SV/SVE) will constantly update to show both vehicle and battery status, as well as charging locations, to help avoid such a situation. All models have an Odometer much like normal cars, offering range to empty.

Q: I live in an apartment. How would I go about charging the car?
Talk to your apartment complex owner and other residents about charging stations. You can also use public / work infrastructure.

Q: Can you charge the battery even if it's not empty?
Yes

Q: Will it plug into a regular household outlet?
It will charge on a regular 13amp socket through a specialised EVSE 'granny' cable. This is considered a "trickle charge," which means it would charge at a slower rate- up to 12 hours for a full charge. For home charging, we recommend the home-charging dock/unit as supplied by the ESB

Q: How many charging cycles can the energy storage device survive?
Like all lithium ion batteries, the Nissan LEAF battery will experience gradual capacity loss over time. We expect the battery to last over 10 years. The battery is covered under warranty for 5 years/100,000kms. This compares favourably to ICE cars where one would have to replace timing belts, clutch etc. Also with high mileage an ICE does not offer the same fuel efficiency as it did when it was new.

Q: If you run out of power will the "RAC" tow truck have a recharger or would you need to be towed to a recharge station?
The car (SV & SVE) is equipped with a telematics system called CARWINGS® which will help you locate charging stations before this happens. Additionally, RAC will take you home or to the nearest charging point – whichever is closer.

Q: Does the navigation system list charging station locations?
The Nissan LEAF (SV & SVE) comes equipped with CARWINGS®. This in-car telematics system will show you battery power and status, charging stations and more. You can also download a ChargePoint app that shows nationwide charging stations.

Q: What do I do if I want to go farther than 140 kms in one trip?
The Nissan LEAFs CARWINGS® system (on SV & SVE) will allow you to plan your route and is able to show you charging locations along your way.

Q: How long will it be before you can charge a car anywhere? Like at a petrol station?
Ireland currently has one of the best charging infrastructures in Europe. The past 4 years has seen many changes in use and technology and the ESB are currently upgrading the system to deal with some of the effect of this. Nissan is working to encourage third party and government organisations to grow the charging infrastructure. As electric vehicle acceptance grows, we expect additional growth. We do however believe most people will charge their Nissan LEAF at home much like they do their mobile phones, especially when the public infrastructure becomes commercialised.

Q: Can you install a charging station by yourself or does it have to be installed by a qualified electrician?
Your home-charging unit will need to be installed by a professional electrician. But first, we will assist you with a home assessment through ESB, which will help identify what is needed to make your home Nissan LEAF ready.

Q: Is the charger built into the vehicle?
Yes. To charge, you simply need to plug into an appropriate charging dock which supplies power safely to the onboard charger.

Q: Is there a timer that allows you to set what time the charging starts and stops?
Yes - you are able to set a charging timer in the car. You will also be able to control the car's functions and charging from any computer or Internet enabled phone (SV/ SVE models). This can be done in manual dashboard setting on the XE.

Q: When plugging the car in, is the car is "smart" enough to pull electricity during non-peak hours?
You can program the car to charge whenever you like. Most people will charge overnight at off-peak times like their mobile phone. Please contact your electricity provider for exact off-peak times.

Q: Is the home-charging station weatherproof?
Yes the ESB's home charging unit has been approved by Nissan and is weatherproofed.

Q: If I want to "prewire" a new home for a future Nissan LEAF owner, what is required?
The home-charging unit will require a dedicated circuit (max 16amp) connected to a breaker. The charging unit will need to be hard wired directly to the circuit by a certified electrician. It is recommended that you contact ESB or a current 3rd party charging unit supplier before installing a unit, to ensure that it is compatible.

Q: How can I test drive a Nissan LEAF??
Contact any of our 11 Nissan EV Dealers for a 24 hour test drive.

PERFORMANCE

Q: I know the range is up to 199kms, but is that doing 120kph or more like 70kph?
199kms is the range determined NEDC testing. This test includes ideal conditions and mixed driving styles and speeds, with 1 person. Actual achievable range will vary depending on driving habits, conditions, weather and battery age, but an average of 140kms could be expected.

Q: I drive 30,000 kms a year but never more than120kms a day. Would a Nissan LEAF work for me?
95% of Irish drivers don't drive more than 120kms a day. Range will vary with conditions, weather and battery age. But yes, your driving pattern sounds suitable. Speak with your Nissan EV Specialist for more details.

Q: Can the Nissan LEAF tow a small boat or garden trailer?
We don't recommend towing as the owner's manual states. Longer-term, there are hopes that options like these could be made available.

Q: Does the heater reduce the range of the vehicle?
Running the heater or a/c will have an impact on the range. You can pre-heat and pre-cool the car while charging before you leave to reduce battery load and optimise range. Upgrading to a vehicle with Cold Pack (standard on SVE) reduces the need to use vented heat. The Cold Pack offers heated seats, both front and rear and a heated steering wheel.

Q: Is the Nissan LEAF front or all wheel drive?
The Nissan LEAF is front wheel drive.

Q: What kind of acceleration does the Nissan LEAF have?
The Nissan LEAF has acceleration that is surprisingly quiet and effortless, with 100% torque at 0 RPMs. 0-60mph in 11.6 seconds.

Q: How does driving in cold weather affect the performance and battery life?
Your driving habits, patterns and accessory use (including heat and a/c) and outside ambient temperature all play a role in driving range. The Nissan LEAF (SVE or Cold Pack) is equipped with standard cold-weather features including a battery warmer, heated steering wheel and heated seats in both the front and rear.

Q: By about what would the range reduce to if carrying 4 people ?
Load and driving style have an impact, as they do in any car.

Q: I live in Dublin City, so traffic can often be a problem. Does the battery still drain when you are not moving?
No, when you are not moving you are not using. The battery is used only if you are using lights, stereo and other accessories when you're not in motion. The regeneration/recharging created by stop/start driving increases the range, meaning that you could actually end up with more range than when you started. Those who spend a lot of time in traffic jams will see considerable savings from driving a Nissan LEAF.

FEATURES

Q: What generates cabin heat without engine coolant?
The Nissan LEAF XE uses an enclosed electric heater. The SV & SVE have a heat exchange pump in addition to maximize efficiency.

Q: Is there a mobile app available to monitor the vehicle's charging status?
If you own a Nissan LEAF and have an active CARWINGS® subscription, you can use the free iPhone, Android or Blackberry app to check status of battery charge, begin charging, check when battery charge is complete, and see estimated driving range. You can also turn the vehicle's climate control system on or off using this app.

Q: Does it have air conditioning, CD/MP3 player, GPS, etc.?
The Nissan LEAF offers loads of features, including a/c, Sat Nav, stereo, power steering and windows, Bluetooth and cold weather features such as a battery warmer, heated steering wheel and heated seats in both the front and rear.

Q: What kind of stereo system does Nissan LEAF have? Can it play my iPod?
The Nissan LEAF audio system in the SV & SVE is integrated to the navigation system and will support XM, AM/FM, CD (w/ WMA/MP3 capability) and USB interface for iPods and other MP3 players. The SVE's system is a BOSE surround sound system with subwoofer.

Q: Does the Nissan LEAF come with a moonroof?
No it does not. A moonroof would add weight, affect headroom and create unwanted drag, which can affect range.

Q: Does the Nissan LEAF have cruise control?
Yes, cruise control is standard on the SV & SVE

Q: Does it have a rear camera? I love this feature on my other Nissan
Yes, the rear camera is available on the SV & SVE model. The SVE has a 360degree camera view, with cameras mounted on the front and side!

Q: Is there a timer that allows you to set what time the charging starts and stops?
Yes - you are able to set a charging timer in the car. You will also be able to control the car's functions (SV & SVE) and charging from any computer or Internet enabled phone.

Q: Is the Nissan LEAF available with automatic and manual transmissions?
There is no transmission in an electric car, but the experience is similar to driving an automatic.

Q: Can you plug in a laptop or other standard device into the vehicle?
The Nissan LEAF has a standard 12V power outlet.

Q: Is it true that the Nissan LEAF has no fluids like coolant, transmission, steering, brake...?
Many fluids associated with engines are eliminated (motor oil, transmission fluid, etc.). It does have brake fluid, coolant and washer fluid.

Q: The Nissan LEAF 'stays connected'. What does that mean?
The Nissan LEAF (SV & SVE) uses a mobile-type network and has its own SIM card. This allows limited connectivity to a range of internet applications such as being able to store and read aloud RSS feeds.

TECHNOLOGY

Q: What is the difference between this and a hybrid?
No tailpipe! The Nissan LEAF runs on 100% electricity, while a hybrid uses a combo of electricity and fuel. In a traditional hybrid, even the electricity is generated by the fuel engine.

Q: Has anyone considered solar panels on the vehicle for recharging the battery?
The Nissan LEAF SV / SVE can have a small solar panel on the rear spoiler to help charge the 12V accessory battery.

Q: How long will the battery last? Can it be recycled?
Like all lithium-ion batteries, the Nissan LEAF battery will experience gradual capacity loss over time. The battery can be used afterward for storage applications.

Q: What kind of front headlights do you use?
LED headlights and taillights. LEDs use far less power than conventional lights.

Q: Does this vehicle have a drive train or is it motors in the wheels?
It has a drive train.

Q: Are there designs for a future Nissan LEAF that will go farther than 199kms on a single charge?
The vision is to constantly improve our vehicles to meet our customers' needs.

Q: What kind of battery does the Nissan LEAF use?
Nissan LEAF uses a unique laminated lithium-ion battery with a capacity of 24kWh.

Q: Does the Nissan LEAF use regenerative braking to help recharge the battery?
Yes - every time you coast or apply the brakes, the electric motor acts as an electric generator. Nissan LEAF recovers some of the energy created by the braking and stores it in the battery.

Q: Is the Nissan LEAF equipped with a 4-wheel disc brake or drum?
Braking is regenerative to help maintain battery charge and optimise driving range, and is 4-wheel disc.

Q: Assuming the power steering is electric (vs. hydraulic), is there a solid steering shaft, or is it drive-by-wire?
Solid steering shaft with electric power assist.

Q: What does the drivetrain look like? AC induction motors? Does it have wheel motors or a differential?
Inverter, electric motor and reduction gear set. Output shaft connects via CV joint to hub-and-carrier assembly.

Q: Are electric cars the same as hydrogen cars?
No - hydrogen vehicles use hydrogen combustion or fuel cells. The Nissan LEAF is 100% electric and rechargeable.

Thank you for taking the time to read our FAQs on the Nissan LEAF.

If you have any questions that remain unanswered please contact your local Nissan EV Dealer or drop an email to LEAF@nissan.ie

Quotes from Nissan LEAF owners

When asked….

Why did you choose the Nissan LEAF?

Why did I buy a Nissan LEAF?

"My father was born in 1919. He watched cars come of age. I saw a chance to do the same with electric vehicles" – **Bruce M**

"I had an ICE car breaking down on me and so the laid-back maintenance schedule of the LEAF appealed to me greatly. The pep and performance when I took a test drive sealed the deal" **John M**

Steve L:
1. EV is mechanically simpler and more reliable.
2. It was less expensive total cost of ownership than ICE.
3. I want cleaner air.
4. Less maintenance.
5. It's a conversation piece!
6. Petrol /Diesel is so 20th century.

"I always wanted and electric car but knew I would only buy one if it was a true alternative to an ICE. The LEAF is exactly that" –**Glenn C**

"I've had Solar PV on my house for 6 years and when a no compromises electric car became available it was a no brainer. I added extra solar panels to my system so as long as I drive an electric car I've prepaid for 'fuel' for the next 30 years – **Damian G**

Alex OR
1. Mechanically simple (reliability, reduced maintenance, reduced repairs) - saves money and time
2. Less fuel cost - saves money
3. Expected longer life - saves money
4. Fuel diversity - financial security
5. A joy to drive! - self actualisation?
6. A conversation starter – my LEAF gets more attention than any of my previous BMWs!

So it was mostly about the money and image, and then there was the lack of any reason why I shouldn't.