# ALL-NEW LEXUS NX



PRESS KIT WORLD PREMIERE, 12 JUNE 2021

The all-new NX opens a new chapter for Lexus, heralding new directions in exterior and interior design, new powertrains, including Lexus's first plug-in hybrid electric model, dynamic improvements that deliver a more rewarding and connected driving experience, next generation multimedia and connectivity and the use of advanced technologies for higher levels of safety, comfort and convenience.

It replaces a model that has been very successful for Lexus in Europe, with more than 170,000 sold since its introduction in 2014. Most of these have been to customers new to Lexus, making it a key contributor to the brand's growth in the region.

To build on this achievement and deliver a compelling new product to customers who today expect much more from their vehicle, Lexus has carried out a total reinvention of the NX.

Its ambition and commitment are demonstrated in big advances in performance, handling and efficiency, and in no less than 95 per cent of the vehicle's parts being new.

Lexus has maintained a human-centred approach throughout, key to delivering the new NX's essential *Feel More in Every Moment* quality.

Following its official reveal on 12 June, the new NX will be launched in the UK and European markets during the last quarter of 2021. Details of the UK model range, specifications and prices will be announced nearer the launch date.

### DEVELOPMENT CONCEPT

- "Vital and Tech" concept combines dynamic agility with the use of advanced technologies
- Represents the first step in Lexus's brand transformation, benefiting from new approaches to product development, design and testing

"Vital and Tech" is the over-arching theme for the new NX's development concept – Vital expressing dynamic agility and Tech standing for innovation with advanced technologies.



Chief Engineer Takeaki Kato explains:

"The new NX is designed to meet the diverse lifestyles of customers around the world with a complete renewal of its key strengths, including electrification, design, driving performance and advanced technologies to broaden its appeal."

This approach has delivered important advances, including a new design language; Lexus's first plug-in hybrid; a connected and rewarding driving experience with the Lexus Driving Signature; a focused and intuitive driver's cockpit designed according to the new Tazuna architecture; and the application of advanced, human-centred technologies for safety and convenience.

The new NX development programme has brought about a major change in Lexus's approach to new vehicle development, applying digital modelling and computer techniques for smarter engineering that can achieve a higher level of quality assurance. At the same time, the *takumi*-led skills of the human hand, ear and eye remain essential to achieving the highest sensory quality.

A further innovation was the use of professional racing drivers to help hone the car's dynamic performance – particularly steering and braking – in track testing at Lexus's Shimoyama facility. There was also a focus on early adoption of new technologies for safety and comfort, while containing costs to ensure affordability for customers.

The elements in the development concept are brought together in the spirit of *Feel More in Every Moment* - the slogan Lexus is using to capture the rich sensory and driving appeal of the new NX.

## FEEL MORE SOPHISTICATED: A NEW DIRECTION IN LEXUS DESIGN

- "Functional beauty" in NX design appeals directly to diversifying customer needs and preferences
- Retaining the NX's avant garde quality with a more mature, sophisticated and muscular look
- Shape of the iconic Lexus spindle grille made integral to the vehicle's overall design
- Wider front and rear tracks give a more planted stance;
   flared wheel arches house up to 20-inch diameter wheels
- Rear characterised by new L-shaped lights with illumination spanning the entire width of the vehicle,
- Introduction of "LEXUS" name in place of the L-emblem on the tailgate, creating a clean, modern look

The new NX marks the beginning of a significant evolution of Lexus design, while remaining true to the brand's core L-finesse philosophy – applying leading-edge design and technology, with finesse. The new model advances the avant garde appeal of the original NX, but also presents a more sophisticated, dynamic and mature appearance and a more muscular character.

The goal for the design team was to create "functional beauty," expressing in the styling how Lexus is meeting increasingly diverse customer requirements and preferences. The theme of "simplicity rooted in technology" informs the way clean, simple design can communicate the appeal of innovative functions and technology and how Lexus is keeping pace with the times.

The NX has balanced, strong proportions with a powerful roadgripping stance. Compared to the first generation NX, overall length has increased by 20mm, the wheelbase by 30mm, the



width by 20mm and the height by 5mm. These dimensions ensure optimum packaging, including more space in the cabin for rear seat passengers.

At the front, the hallmark Lexus spindle grille plays a more integral role in the car's design: rendered more upright and with a more subtle frame, it accentuates the long bonnet and generates the overall form and volume of the body, which flares broadly towards the rear wings. Its more upright position also improves the grille's cooling performance. The powerful, agile impression is strengthened by the wider front and rear tracks (enabled by the NX's Global Architecture K - GA-K - platform), the long, sleek bonnet, short overhangs and flared wheel arches housing larger wheels — up to 20 inches in diameter.



line stability in high-speed driving.

At the rear, distinctive new features include L-shaped rear combination lights, with signature Lexus blade lighting that spans the width of the vehicle, The Lexus emblem has been replaced with the "LEXUS" name emblazoned on the tailgate, creating a simple and more modern look.

The functional beauty is evident in details produced in collaboration between the NX's designers and performance engineers to control airflow over and under the body, such as flush side mouldings and a new engine undercover design with a dimpled surface, like a golf ball. This creates microvortices in the airflow beneath the car, improving straight-

## FEEL MORE IN CONTROL: A NEW CONCEPT IN CABIN ARCHITECTURE

- First model to feature Lexus' new Tazuna driver's cockpit concept
- Layout of controls and information sources optimised for "hands on the wheel, eyes on the road" focus, with an intuitive interface that requires minimal eye, head and hand movement for operation
- New design adds to the quality of the driving experience, inspiring the driver's confidence and sense of connection with the vehicle

The new NX marks the first application of Lexus's new Tazuna concept for the driver's cockpit design. Taking its name from a Japanese word describing a rider's control of their horse using the reins, it focuses on giving the driver direct, intuitive control of the vehicle, following the principle of "hands on the wheel, eyes on the road." It also adds to the rewards of the driving experience, making the driver feel confident and in control of their vehicle and their surroundings.



An example of the intuitive control that's central to the concept is the touch-tracer switches on the steering wheel, which can be customised to operate the driver's preferred functions. When the switch is used, its shape is shown on the head-up display, so the driver doesn't have to look down at the wheel to check the function they want to operate.

The cockpit feeling is created by the shaping of the space curving around from the driver's door to the centre console. Here, the information sources — the multimedia screen, multi-information display, single-dial combineter, centralised gauges and (where

specified) head-up display – are grouped in a unified area so their content can be read with minimal eye and head movement.

A similar principle is applied to the arrangement of the vehicle controls: the starter button, shift lever, air-conditioning controls, drive mode select button are all set on the same plane, so reach and operation are simplified and perfectly intuitive.

The designers worked with Lexus's takumi artisans to perfect the design relationship between the steering wheel and shift lever. The cross-section of the wheel was precisely determined to give the best grip feel and ease of operation, while the shift lever was made as compact as possible, but with snug fit in the hand and an ideal angle. Lexus also researched the shoulder-to-fingertip distance of people around the world to define a layout that provides excellent control without disturbing the driver's posture.

### FEEL MORE LUXURIOUS: COMFORT, QUIETNESS AND AN *OMOTENASHI* EXPERIENCE

- Focus on passenger environment design to give the feel of a luxurious lounge
- Takumi craftsmanship with high sensory appeal and fine quality materials
- Omotenashi hospitality with welcome illumination, ambient lighting with up to 64 colours and Lexus's first e-latch one-touch electronic door release system
- Remote functions provided by Lexus Link app, including cabin preheating and cooling and door locking and unlocking
- Faster, quieter power tailgate operation

While the driver experiences the focused, engaging environment created by the NX's new Tazuna cockpit design, passengers enjoy an increased sense of spaciousness with an elevated level of comfort, quality and attention to detail that are quintessentially Lexus.

### **COMFORT AND QUIETNESS**



For the front passenger environment, the design goal was to create the feeling of a luxurious lounge, with no intrusion from the driver's area. This is emphasised in the cabin design by the curving line that delineates the two spaces.

The cabin finish is rich in examples of Lexus *takumi* craftsmanship approach, using high-quality materials that both look and feel good. Comfort is addressed in details such as the precise front seat design, with attention to the cross-section shape of the seat, the position of the side-supporting bolsters and even the forming of concave areas to make space for the occupant's elbows. Extensive use of materials to absorb and insulate noise and vibrations makes for a quiet and calm environment.

#### NEW FEATURES IN THE SPIRIT OF OMOTENASHI HOSPITALITY

New features that enhance the on-board ambience reflect Lexus's *omotenashi* principles of anticipating people's needs and making them feel as welcome and comfortable as possible. These include an entry and start-up illumination sequence and personal welcome on the driver's multi-information display. The ambient lighting system, available as standard or an option according to model grade, offers a choice of 64 colours to suit the occupants' mood for the journey.

The new NX is the first Lexus model to be fitted with the e-latch electronic door release system. This replaces the familiar internal door handle with a push-button switch positioned next to the arm rest in the door panel. The ease of use with one smooth and simple motion is inspired by the traditional *fusuma* sliding paper screen room dividers in Japanese homes.

Convenience is also provided by the remote functions available to all new NX owners using the Lexus Link app, with pre-heating or cooling of the cabin before starting a journey and door locking and unlocking.



The operation of the power tailgate has also been improved so that it is both quieter and quicker – opening or closing time has been reduced by half to around four seconds.

### FEEL MORE EXHILARATED – AND RESPONSIBLE: POWERTRAINS AND PERFORMANCE

- Electrified powertrains with class-leading performance
- NX 450h+, Lexus first plug-in hybrid electric vehicle and the halo model of the new NX range, giving 302bhp, 40 miles EV driving range and CO<sub>2</sub> emissions below 40g/km
- NX 350h with fourth generation Lexus hybrid electric system, improves power by 22 per cent and reduces emissions by 10 per cent

The new NX's status as a transformative model for Lexus with the potential for greater market penetration is further reflected in a wider range of powertrains using new and improved technologies, delivering emphatic best-in-class performance. They include Lexus's first plug-in hybrid that will be a new reference point in the segment for its combination of power, efficiency and EV driving capability. The line-up also offers a new hybrid electric model, with significantly enhanced performance from fourth generation hybrid technology.

### NX 450h+, THE FIRST LEXUS PLUG-IN HYBRID ELECTRIC VEHICLE

Lexus has drawn on more than 15 years of hybrid technology expertise to produce its first plug-in hybrid electric vehicle (PHEV), the new NX 450h+. The new model will accelerate the roll-out of electrified vehicles under the Lexus Electrified strategy.



The halo model in the new NX range, it features a four-cylinder 2.5-litre hybrid engine and a rechargeable lithium-ion battery with 18.1kWh, the highest capacity in its class. An additional rear electric motor enables full-time all-wheel drive. The plug-in system produces 302bhp and is expected to give 0-62mph acceleration in a little over six seconds. By contrast, estimated  $CO_2$  emissions (WLTP combined cycle) of less than 40g/km and fuel economy of better than 94mpg are set to be the best in the NX's class.

The battery's size and capacity and Lexus's electrified efficiency know-how combine to deliver a class-leading EV driving range of 40 miles and enable all-electric zero-emission driving at speeds up to 84mph.

Crucially, the Lexus plug-in hybrid electric system maintains high efficiency when the battery is depleted. In many competitors, operation defaults to an internal combustion engine, but in the NX 450h+ the default is to an efficient self-charging hybrid system. In these circumstances, the NX's efficiency is expected to be as much as 20 per cent greater than competitor systems.

Accommodating the plug-in system does not compromise the NX's practicality – the boot has the same capacity as the hybrid model (with no space lost to powertrain components). There is also a 21-litre space beneath the deck board for tidy storage of the charging cables. Acknowledging how customers in the NX's segment typically use their vehicle for longer journeys, the fuel tank capacity is also unaltered, at 55 litres.

#### NX 350h WITH FOURTH GENERATION HYBRID ELECTRIC TECHNOLOGY

The performance and efficiency of the hybrid electric NX 350h have been taken to a higher level with the introduction of fourth generation Lexus hybrid technology. This provides 22 per cent more power than system in the current model, taking output to 239bhp and improving 0-62mph acceleration by 15 per cent to 7.7 seconds, while at the same time giving an expected reduction in  $\text{CO}_2$  emissions of around 10 per cent.

The NX 350h will be available with both front and all-wheel drive. Towing capacity for the FWD model has been increased to 1,500 kg, matching the capability of the AWD version.



## FEEL MORE CONFIDENT: THE LEXUS DRIVING SIGNATURE AND NEW GA-K PLATFORM

- Lexus Driving Signature combines ride comfort with steering, throttle and braking response perfectly faithful to the driver's intentions
- New NX built on Lexus's GA-K platform, gaining fundamental benefits in dynamic performance
- High body rigidity supported by world-first use of advanced materials and innovative design
- Dynamic performance tuned with direct input from professional racing drivers in the testing programme
- Improved all-wheel drive performance

Development of the new NX's dynamic performance focused on delivering the Lexus Driving Signature – an ideal combination of ride comfort with steering, throttle and braking performance that is faithful to the driver's intentions at every moment, generating confidence and a rewarding sense of connection with the car.

Central to achieving this is the use of Lexus's Global Architecture K (GA-K) platform. This secures a lower centre of gravity (-20mm), an increase in the front and rear tracks and an improved front/rear weight balance, all of which benefit the car's improved handling and the driving experience. The new suspension design features front MacPherson struts and rear double wishbones with trailing arms.

Beyond that, a much more rigid body has been designed using innovative lightweight materials to add strength and allow for the weight of extra bracing and reinforcements. The structure includes world-first use of 1180MPa steel for the rocker reinforcement and 1470MPa steel for the roof reinforcement. The front wings and bonnet are made from aluminium and a new laser peening technology has been developed, in addition to laser screw welding and the use of adhesives for joining the structure. A twin bonnet latch design has been adopted, with a transverse reinforcement between the two locks, which adds to the rigidity of the bonnet and the overall body, and suppresses vibration caused by air turbulence.

### PRO-DRIVER TESTING PROGRAMME

The NX has undergone extensive testing at Lexus's Shimoyama proving ground, with professional racing drivers included in the team. Their detailed feedback fed directly into adjustment and tuning of the car and proved valuable in helping make significant improvements to the responsiveness and feel of the steering and braking.



#### **ALL-WHEEL DRIVE**

The E-Four electric all-wheel drive system in the new NX 450h+ and NX 350h has been upgraded so that the rear electric motor is always operational, providing more torque and giving the driver a greater sense of the car gripping the road.

## FEEL MORE CONNECTED: FASTER, SMARTER CONNECTIVITY

- Completely new multimedia system providing faster response, additional functions and seamless connectivity
- Smart user interface combining touchscreen and buttons for intuitive operation
- New 'Hey Lexus' voice assistant
- Cloud navigation with access to real-time journey and traffic information via the vehicle's data collection module – with no data usage
- 14-inch high-definition Lexus Link Pro display available on high grade models
- 50 per cent quicker wireless smartphone recharging
- Phone integration with Apple CarPlay (wireless) and Android Auto
- Remote functions using Lexus Link app, including pre-journey air conditioning operation

The new NX marks the introduction of a completely new Lexus multimedia platform that transforms performance compared to the current system, meeting customers' priority for fast, intuitive on-board connectivity. Operation is as smooth and simple as using a tablet.



The new platform introduces smart services, including advanced cloud navigation (where the local market supports the technology) via the car's data communication module (DCM). This provides real-time journey information and traffic event updates without using up the owner's data plan (a four-year data package is included in the car's purchase price). The system also provides a new 'Hey Lexus' assistant, which responds to natural voice command dialogues as if you are conversing with the car.

The standard system, Lexus Link Connect, uses a 9.8-inch display with an anti-glare touchscreen and additional buttons for intuitive

access to the most frequently used functions. It gives significantly quicker response, with computing power much faster than the current system.

The Lexus Link Pro system uses a new 14-inch display – one of the largest in it class. It is standard on high grade models and available as an option elsewhere in the new NX range. The high-definition screen presents clear graphics in all lighting conditions, while the speed of CPU (central processing unit) is 3.6 times faster than the current system.

### CHARGING CONVENIENCE FOR ALL ON BOARD

Convenience for everyone on board is addressed with four USB ports in the cabin: two front and two rear. Of these, three are USB-C standard and can be used for device charging. Where specified, the wireless phone charger has 50 per cent faster operation, while there is now wireless connection for smartphone integration using Apple CarPlay; wired connection using Android Auto is also provided.

### **LEXUS LINK**

A wider range of services and functions can be accessed remotely using the Lexus Link app, for example locking or unlocking the car and activating the air conditioning system to pre-warm or cool the cabin prior to a journey – a function that's standard across the new NX range.

Owners of the NX 450h+ can use the app to monitor charging progress, scheduling and settings.

## FEEL MORE REASSURED: ADVANCED SAFETY AND DRIVER ASSISTANCE

- Third generation Lexus Safety System+, a comprehensive active safety and driver assistance package
- Lexus Safety System+ fitted as standard to all NX models in all European markets, increasing the accessibility of advanced safety technologies
- Systems expanded and upgraded to provide safeguards against more collision risks
- Operation calibrated for a more natural feel, increasing driver confidence
- New Safe Exit Assist system linked to e-latch electronic door release

The new NX is Lexus's first model to feature the third generation of Lexus Safety System+, equipping it as standard with a comprehensive package of active safety and driver assistance features and setting a new benchmark for accident risk detection and prevention measures.

Lexus's leadership in safety goes hand in hand with its commitment to making these technologies accessible to more motorists. With this aim in view, it is providing Lexus Safety System+ as standard on all new NX models across all its European markets.

The latest development of Lexus Safety System+ introduces new features and upgrades in the performance and functionality of others. Systems have also been tuned to operate in a way that feels more natural to the driver, and thus more reassuring, adding to the sense of driving confidence inspired by the NX's new platform and powertrains. With this evolution, Lexus Safety System+ moves to the next level as a personal driving partner.

The improvements introduced with the new NX include further expansion of the Pre-Collision System's capabilities so that motorcycles and some solid objects in the car's path, such as trees, walls and utility poles, can be detected. It also gains a new function that identifies collision risks with oncoming traffic or crossing pedestrians when making a turn at a junction. Its detection response is quicker and the ability to avoid an impact is increased with the addition of Emergency Steering Assist.

With these developments, the Pre-Collision System can recognise and help to avoid 36 per cent more accident scenarios than previously.

Changes have been made to the Adaptive Cruise Control so that it recognises traffic cutting in in front of the NX more quickly and, in conjunction with upgrades to the Lane Trace Assist, follows a more natural line through bends. The ACC's co-operation with the Road Sign Assist has also been expanded to respond to more signs and commands, including warning signs and STOP signs. When speed limits are recognised, the system alerts the driver to adjust the cruising speed.

#### **EXTENDED SAFETY PACKAGE**



Owners can extend their vehicle's safety provisions and with an optional Extended Safety Package, available for higher grade NX models. In addition to the Lexus Safety System+features, this provides automatic lane change assistance. This initiates preliminary acceleration or deceleration from the preset cruising speed when the driver indicates to overtake or move into a lane behind a slower vehicle. The package also adds a front cross traffic alert system which uses radar monitoring to detect and warn the driver of traffic approaching from either side when emerging from a junction at low speed.

### SAFE EXIT ASSIST

The new e-latch electronic entry and exit system is linked to the car's Blind Spot Monitor to warn of any traffic or cyclists approaching from the rear. If it detects a risk, it will trigger a warning light and buzzer, and cancel the door unlatching. Lexus believes this system can help prevent 95 per cent of the accidents caused by door opening.



#### **NEW LEXUS NX OUTLINE SPECIFICATIONS**

DIMENSIONS	NEW NX	DIFFERENCE vs CG NX
Overall length (mm)	4,660	+20
Overall width (mm)	1,865	+20
Overall height (mm)	1,640	+5
Wheelbase (mm)	2,690	+30
Front track (mm)	1,605	+30
Rear track (mm)	1,639	+59
Front overhang (mm)	1,007	+7
Rear overhang (mm)	963	-17

POWERTRAINS	NX 350h	NX 450h+
Туре	HEV	PHEV
Engine	4-cylinder in-line	4-cylinder in-line
Engine capacity (litre)	2.5	2.5
Battery type	Lithium-ion	Lithium-ion
Max.power (bhp/kW)	239/178	302/225
Transmission	Hybrid transaxle	Hybrid transaxle
Drivetrain	FWD or AWD	AWD