



# BIM MELCOMES YOU

#bornelectric





### IN 2021 THE BMW GROUP LAUNCHED THE NEXT BIG STEP IN THEIR TRANSFORMATION TOWARDS e-MOBILITY

#### **BMW iX FOCUS:**

- New technology kit for automated driving, incl. new features
- Interior of the future
- High end connectivity

#### BMW i4 / BMW iX SHARED FEATURES:

#### BMW i4 FOCUS:

- The ultimate driving machine
- > Long distance driving comfort
- Elegance and practicability

First ever BEV from BMW M with i4 M50

M®DI 300E





BMW iX PRODUCT SUBSTANCE BMW GEN5 DRIVETRAIN & CHARGING DRIVING
DYNAMICS &
ASSISTANCE

**BMW iDRIVE** 







### 

# THE FIRST-EVER BMW iX FLEXIBLE SCALABLE eDrive SYSTEM





	BMW iX xDrive40	BMW iX xDrive50
Maximum system output	240 kW	385 kW
Maximum system torque	630 Nm	765 Nm
Acceleration (0-100 km/h)	6.1 sec	4.6 sec
Range (WLTP)	up to 425 km	up to 630 km
Top speed (electronically governed)	200 km/h	200 km/h











Multiple conflicting targets during wheel development, especially for electric vehicles



Crash

Optimum crash performance to avoid battery intrusion



Weight

Lightweight construction to reduce inertia



Low aerodynamic drag coefficient



Acoustics

Suppression of acoustic problems through scaled stiffness levels and tailored natural frequencies



Design

Elegant design in the customer's choice of colour and finish

# THE FIRST-EVER BMW iX SMART SURFACES – KIDNEY GRILLE WITH SELF-HEALING SURFACE



An additional polyurethane coating reduces the kidney grille's susceptibility to damage. The self-healing effect of its surface repairs minor scratches, for example – within 24 hours at room temperature or through a five-minute supply of warm air.

Tool surface

Coating layer

Films

Thermoplast

Injection molding tool



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**BMW iDRIVE** 

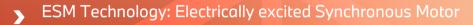
# BMW E-DRIVE COMPETENCE SINCE 2008 – IN FOUR GENERATIONS

17

- > In 2008 BMW Group started building its expertise in electrified drivetrains
- > Starting with the MINI e up to the current portfolio of Plug-In Hybrids
- Continuous development of Efficiency, Dynamics and Sustainability



# BMW GEN5 HIGHLY INTEGRATED DRIVE UNIT "THE HEART OF THE DRIVETRAIN"

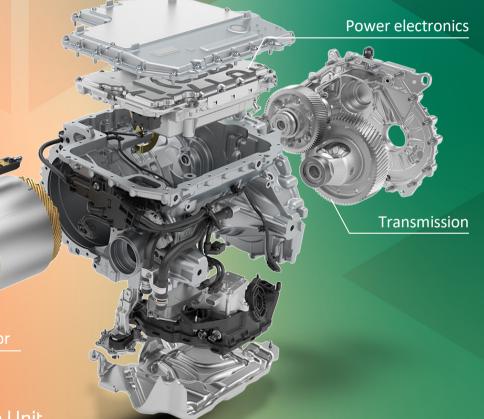


- Conceptual Advantages:
  - Exceptional balance between high peak power and stable torque even at high rpm with silent operation
    - High efficiency factor of 93%

40% improvement in power density\*

Avoids magnets and therefore rare-earth materials

\* Compared to BMW i3 MY 2020



\ Electric motor

BMW GEN5
Highly Integrated Drive Unit

### **BMW GEN5**

FIRST BMW ALL-ELECTRIC xDrive

> System Output: 385 kW. Example: BMW iX xDrive50

> Front axle electric motor 190 kW

Near-actuator wheel slip control delivers outstanding traction and directional stability

> Extremely quick power distribution

Maximum dynamics paired with maximum efficiency

BMW GEN5

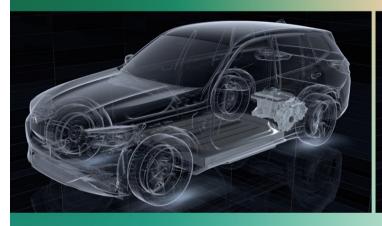
Highly Integrated Drive Unit

Rear axle electric motor 230 kW

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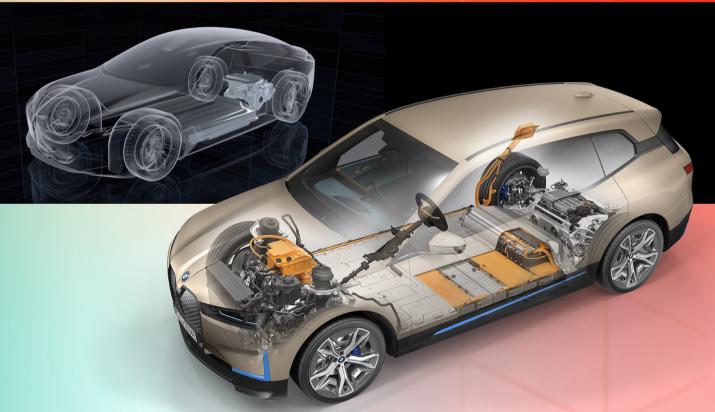
## BMW GEN5 A HIGHLY INTEGRATED SCALABLE AND MODULAR SYSTEM

Example: highly integrated eDrive unit: Different hardware configurations and different power electronics build the basis for the perfect modular system for all future BMW Group BEV



Enabling perfect Drivetrain / Vehicle combinations for our Gen5 BEV Portfolio Roll-Out

BMW GEN5
Highly Integrated Drive Unit





BMW iX PRODUCT SUBSTANCE BMW GEN5 DRIVETRAIN & CHARGING DRIVING
DYNAMICS &
ASSISTANCE

**BMW iDRIVE** 

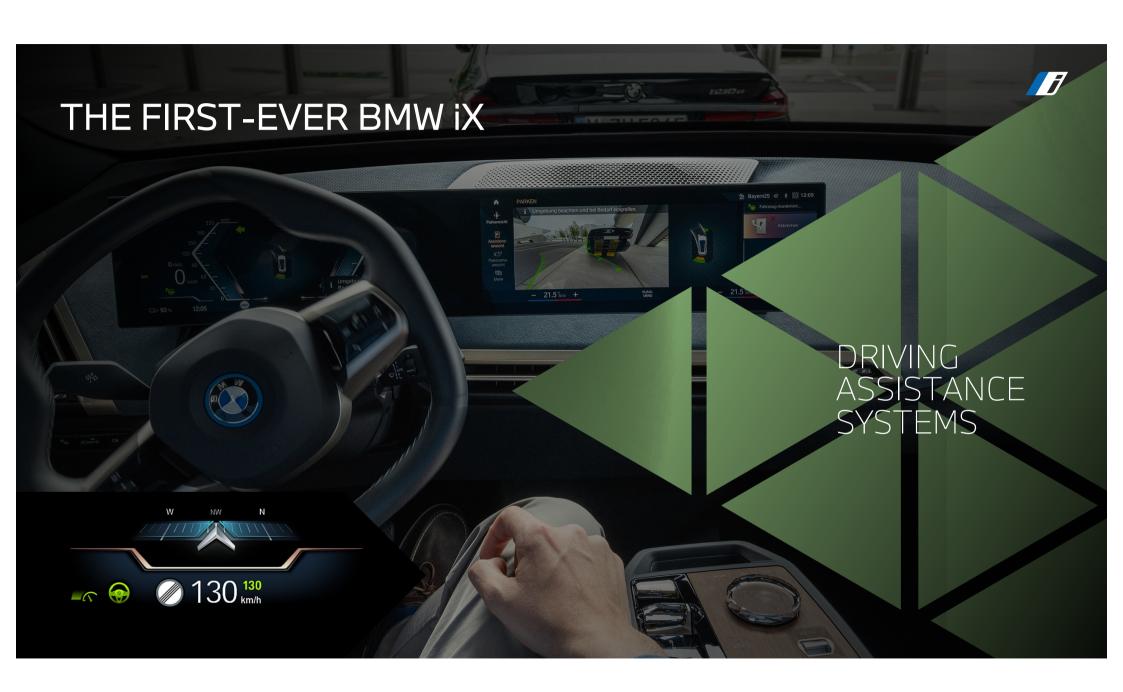
Two-axle air suspension and adaptive suspension with electronically controlled dampers

Integral Active Steering Comfort combined with fleet-footed agility

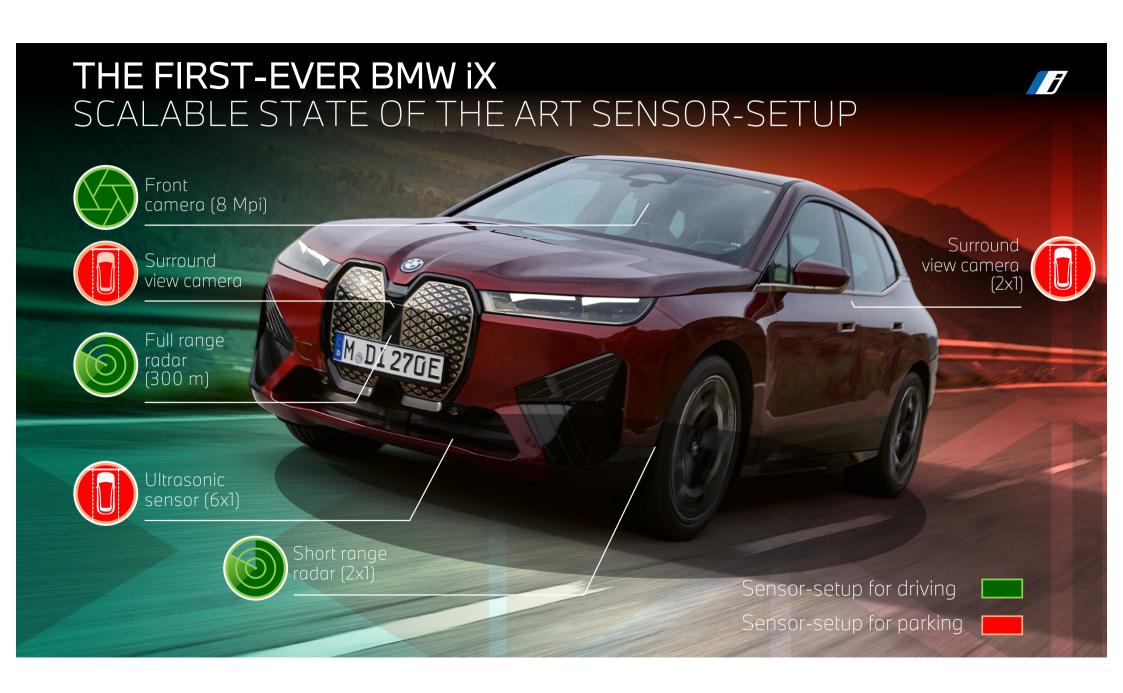


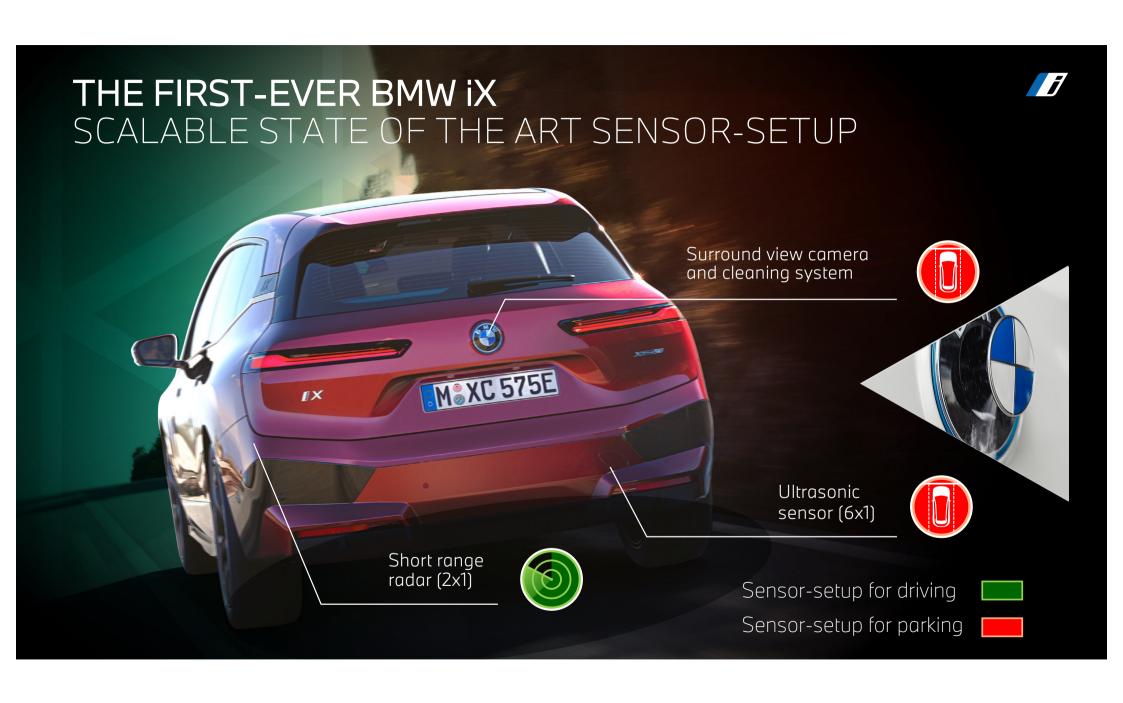












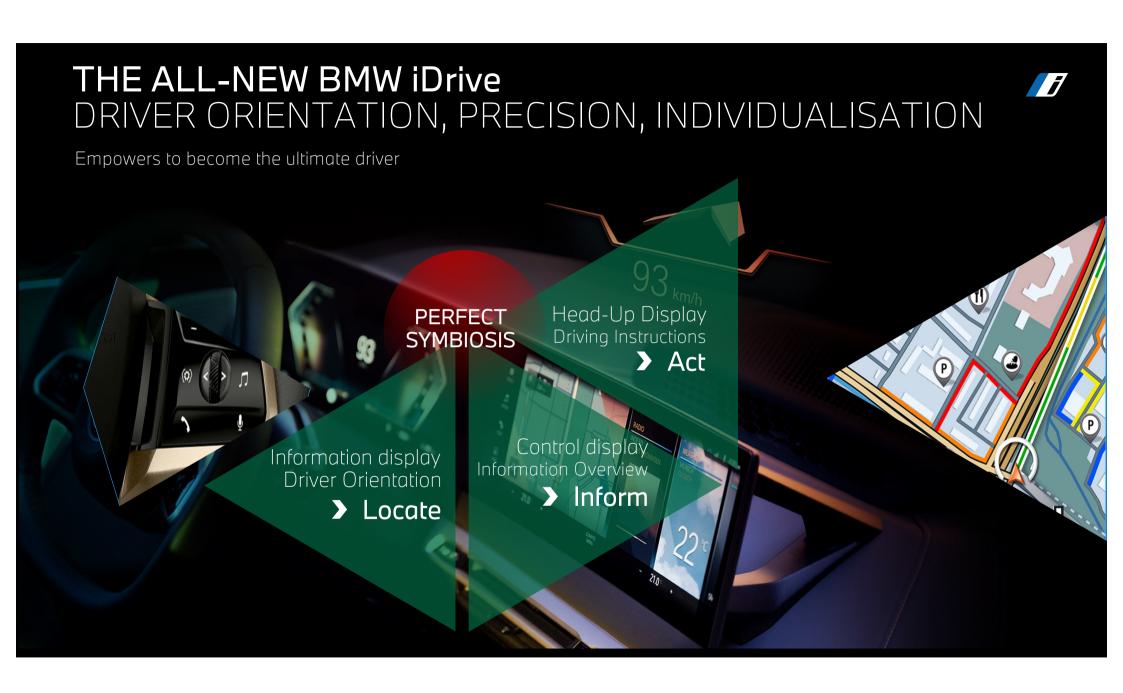


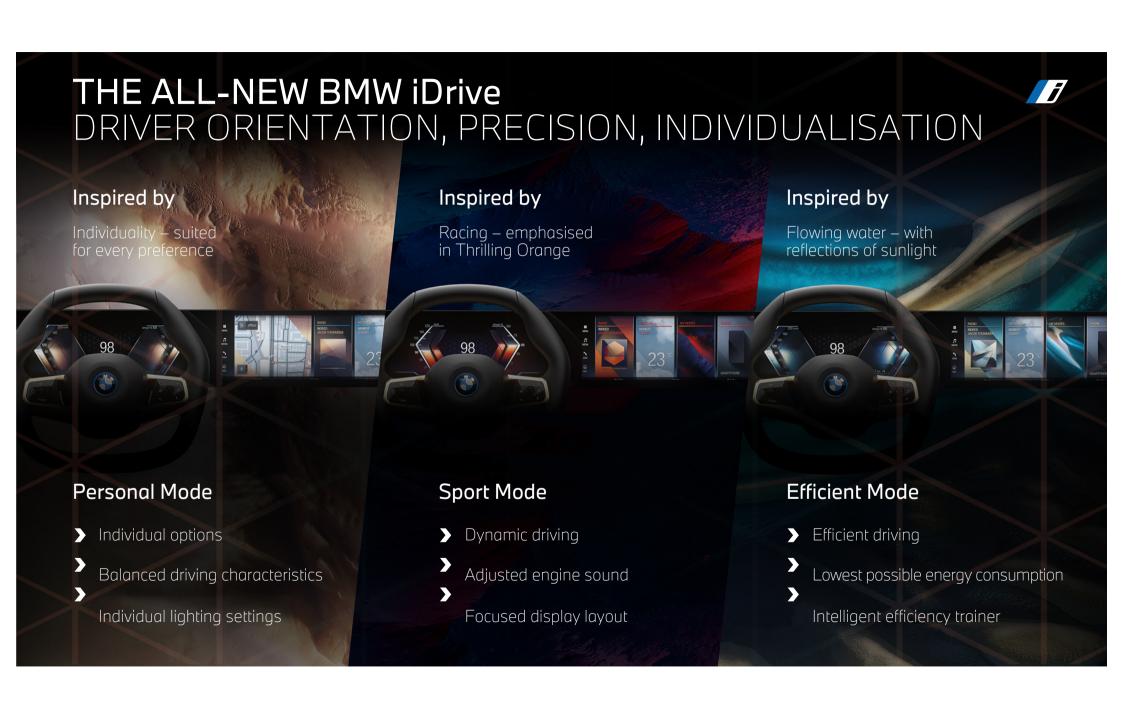
BMW iX PRODUCT SUBSTANCE BMW GEN5 DRIVETRAIN & CHARGING DRIVING
DYNAMICS &
ASSISTANCE

**BMW iDRIVE** 















### DELIVERED AS PROMISED:

### IN 2021 THE BMW GROUP LAUNCHED THE NEXT BIG STEP IN THEIR TRANSFORMATION TOWARDS E-MOBILITY

#### **BMW iX FOCUS:**

- > New technology kit for automated driving, incl. new features.
- Interior of the future
- > High end connectivity

#### BMW i4 / BMW iX SHARED FEATURES:

- BMW eDrive GEN5
- Next generation cockpit
- BMW Operating
- Wide choice of options for individualisation
- Refinement & built quality

#### **BMW i4 FOCUS:**

- The ultimate driving machine
- I and distance driving comfor
- Elegance and practicability

First-ever BEV from BMW M





### THE BMW i4 E-MOBILITY HAS REACHED THE HEART OF THE BMW BRAND

"THE BMW I4 TRANSFERS BMW BRAND DNA AND THE BMW TYPICAL DRIVING PLEASURE INTO THE ERA OF ELECTROMOBILITY."

~David Ferrufino, Head of BMW i4 Project.

#### **DESIGN**

> Pure emotion through sporty proportions with Gran Coupé character

#### SPORTINESS & COMFORT

Perfect quartet between driving dynamics, elegance, comfort and long-distance driving

### ELECTRIC DRIVING PLEASURE

Amazing acceleration, high range and adaptive recuperation system

### USER EXPERIENCE & CONNECTIVITY

 Intuitive user interface and iconic sound - driving with all senses





# THE BMW i4 - EVERYTHING YOU WOULD EXPECT FROM A BMW GRAN COUPÉ

Expressive design in high execution quality

Highly powerful & efficient drivetrain for BMW i4 M50

- **400 kW**
- > < 3.9 sec 0-100 km/h
- > 23.3 < 25.6 kWh/100 km (WLTP)
- > Up to 510 km range (WLTP) 140 km range per 10 mins max. DC charging

Superior Driving Dynamics Comfort and E-Punch

Centre of gravity 53 mm lower than BMW 3 Series

Total LCA CO<sub>2</sub> balance 30-60% better than comparable ICE model

Best in segment noise vibration harshness-level

BMW typical range of options for maximum individualisation

Large tailgate for easy access to 470 - 1,290 litres cargo space Rear view camera, smart tailgate with foot activation for opening and closing as standard equipment







# BMW GEN5 HIGHLY INTEGRATED DRIVE UNIT "THE HEART OF THE DRIVETRAIN"

- **EESM Technology: Electrically excited Synchronous Motor**
- Conceptual Advantages:
  - Exceptional balance between high peak power and stable torque even at high rpm with silent operation
  - High efficiency factor of 93%
  - ➤ 40% improvement in power density\*
  - Avoids magnets and therefore rare-earth materials
- Compared to BMW i3 MY 2020



BMW GEN5
Highly Integrated Drive Unit

Power electronics

Transmission





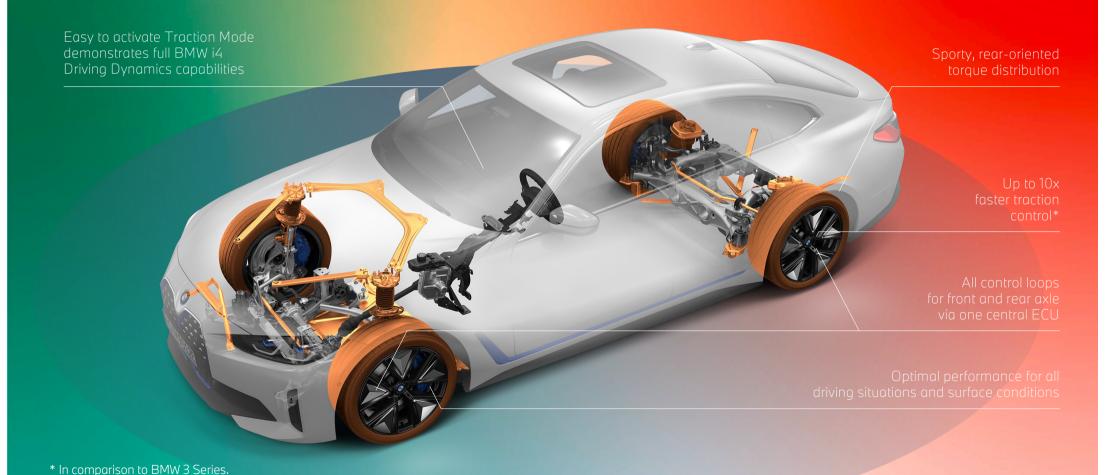
### THE BMW i4 M50 CHASSIS\* THE FIRST ELECTRIC BMW M PERFORMANCE MODEL





### THE BMW i4 M50 INNOVATION\* – JUST ACCELERATING FAST IN A STRAIGHT LINE IS NOT ENOUGH FOR BMW





### THE BMW i4 M50 GEN5 E-DRIVETRAIN PERFORMANCE & EFFICIENCY



> 200 kW DC / 11 kW AC charging (3-phase).



# THE BMW i4 TECHNICAL DATA AND PRICE





Power 400

Torque

Acceleration [0 - 100 km/h]

Range (WLTP)

Max. DC charging power

Added range per 10 mins max. DC charging

Operating system

BMW i4 M50

400 kW

795 Nm

3.9 seconds up to 510 km

> 200 kW

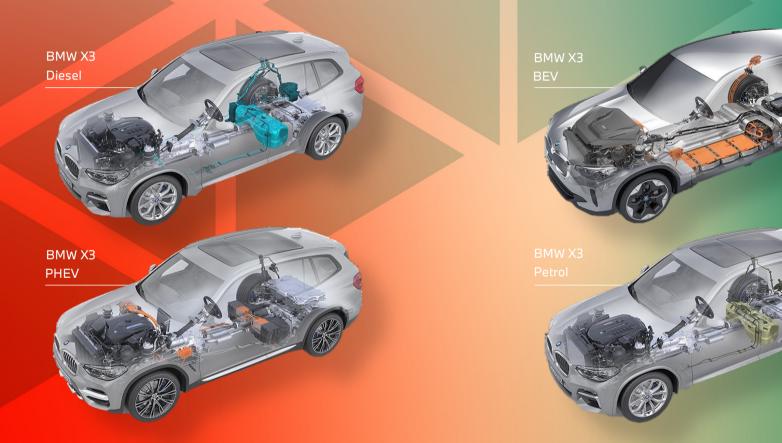
140 km

Price BMW OS8

R1,600,000

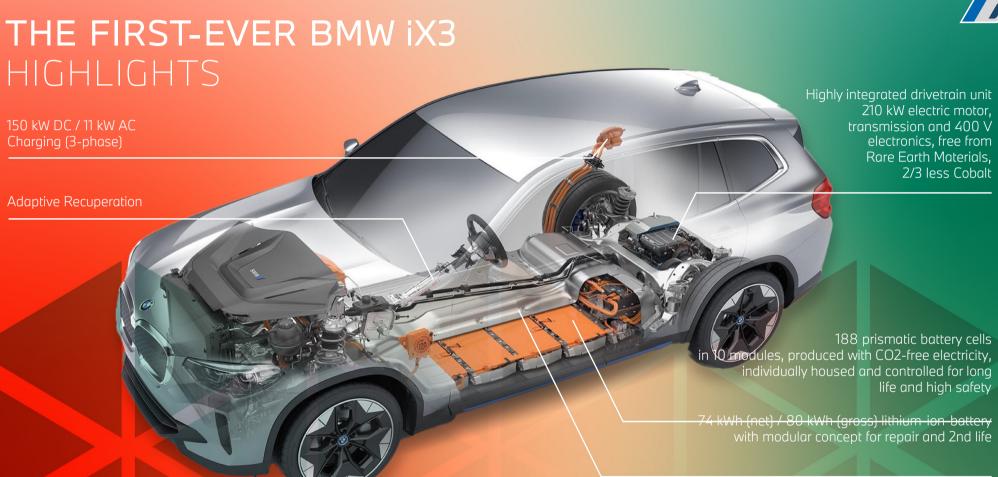


### THE BMW CUSTOMER HAS THE POWER OF CHOICE



BMW GROUP FAVOURS FLEXIBLE ARCHITECTURES OVER PURPOSE MADE BEV PLATFORMS





Max. range WLTF

Economy WLTP 19.5 - 18.5 kWh/100 km



# THE FIRST-EVER BMW iX3 TECHNICAL DATA & PRICE



	DM-43V2
	BMW iX3
Electric motor	210 kW
Max. torque	400 Nm
Electric range	Up to 460 km according to WLTP
Battery	74 kWh (net)
Consumption (kWh/100 km)	19.5 - 18.5
Acceleration (0 - 100 km/h)	6.8 sec
Acceleration (0 - 60 km/h)	3.7 sec
Top speed	180 km/h (electronically governed)
Charging time (DC/150 kW)	10 mins for 100 km WLTP range
Price	R 1,290,000