



BMW Unveils All-Electric 3 Series: The 2027 i3

Description

The BMW i3, set to be the second electric vehicle (EV) built on a new platform, features advanced technology and impressive specifications. It has an 800 V battery pack that uses cylindrical cells, allowing for 20% more energy density compared to prismatic cells, which are found in earlier models like the i4. Its innovative design further increases energy density, enabling fast charging at 400 kW. BMW anticipates the i3 will offer a range of up to 440 miles (708 km), a significant 30% increase over previous generations.

At launch, the i3 will include the 50 xDrive variant. This version combines an asynchronous motor at the front with an electrically excited synchronous motor at the rear, producing a total of 463 hp (345 kW) and 476 lb-ft (645 Nm) of torque. Notably, energy losses are reduced by 40%, while the overall weight is 10% lighter, making production 20% cheaper. Sustainability is a key focus, as the vehicle contains around 30% recycled materials and utilizes renewable energy throughout its supply chain. As a result, the i3 can achieve carbon neutrality with a gasoline-powered vehicle within just a year.

Driving experience is also a priority for BMW. The i3 is designed to enhance handling with a near 50:50 weight distribution and a low centre of gravity. It uses rear-biased torque for better cornering and incorporates regenerative braking to reduce wear on brake systems. Overall, the i3 aims to provide improved driving dynamics while being eco-friendly.

Vocabulary List:

1. **density** //ˈdɛn.sɪ.ti// (noun): how much mass or energy in small space
2. **cylindrical** //səˈlɪn.drɪ.kəl// (adjective): shaped like a long round tube
3. **torque** //tɔːrk// (noun): twisting force that makes things turn
4. **sustainability** //səˌsteɪ.nəˈbɪl.ɪ.ti// (noun): using resources in a way that lasts
5. **regenerative** //rɪˈdʒɛn.ə.rə.tɪv// (adjective): able to recover energy from movement
6. **renewable** //rɪˈnuː.ə.bəl// (adjective): from natural sources that do not run out

Comprehension Questions

Multiple Choice

1. What type of battery pack does the BMW i3 use?



- Option: 800 V
- Option: 400 V
- Option: 600 V
- Option: 350 V

2. How much more energy density does the i3's cylindrical cells offer compared to prismatic cells?

- Option: 10%
- Option: 20%
- Option: 30%
- Option: 40%

3. What is the anticipated range of the BMW i3?

- Option: 400 miles
- Option: 440 miles
- Option: 500 miles
- Option: 550 miles

4. How much horsepower does the i3's 50 xDrive variant produce?

- Option: 340 hp
- Option: 400 hp
- Option: 463 hp
- Option: 500 hp

5. What percentage of recycled materials does the BMW i3 contain?

- Option: 10%
- Option: 20%
- Option: 30%
- Option: 40%

6. What kind of motors does the 50 xDrive variant of the i3 use?

- Option: Only asynchronous
- Option: Only synchronous
- Option: A combination of asynchronous and synchronous
- Option: None of the above

True-False

7. The BMW i3 has a 600 V battery pack.



8. Sustainability is a key focus in the production of the BMW i3.
9. The BMW i3 is designed to have a weight distribution of 60:40.
10. The 50 xDrive variant of the i3 includes an asynchronous motor in the front.
11. The i3 can achieve carbon neutrality with a gasoline-powered vehicle within two years.
12. The i3 is heavier than previous models due to its advanced technology.

Gap-Fill

13. The BMW i3 can fast charge at _____ kW.
14. The anticipated range of the i3 represents a _____% increase over previous generations.
15. The i3 will include the _____ xDrive variant at launch.
16. The total torque produced by the i3's motor is _____ lb-ft.
17. The i3 incorporates _____ braking to reduce wear on brake systems.
18. The overall weight of the i3 is _____% lighter compared to previous models.

Answer

Multiple Choice: 1. 800 V 2. 20% 3. 440 miles 4. 463 hp 5. 30% 6. A combination of asynchronous and synchronous

True-False: 7. False 8. True 9. False 10. True 11. False 12. False

Gap-Fill: 13. 400 14. 30 15. 50 16. 476 17. regenerative 18. 10

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)



-
1. What organization manages government revenue and expenditure?
 - Option: Federal Reserve
 - Option: Treasury
 - Option: Central Bank
 - Option: Finance Ministry

 2. What term describes the degree of variation of a trading price series over time?
 - Option: Stability
 - Option: Volatility
 - Option: Predictability
 - Option: Consistency

 3. What term is used when a borrower revises their payment schedule for repaying debt?
 - Option: Rebuild
 - Option: Refinance
 - Option: Restructure
 - Option: Reborrow

 4. Which concept refers to meeting the needs of the present without compromising future generations?
 - Option: Sustainability
 - Option: Scalability
 - Option: Profitability
 - Option: Efficiency

 5. What event is a public sale where goods or property are sold to the highest bidder?
 - Option: Fair
 - Option: Auction
 - Option: Market
 - Option: Bazaar

 6. What term refers to a statistical measure of changes in a representative group of individual data points?
 - Option: Indices
 - Option: Trends
 - Option: Data sets
 - Option: Averages

 7. What economic term describes the rate at which the general level of prices for goods and services is rising?
 - Option: Deflation
 - Option: Stagnation
 - Option: Inflation
 - Option: Depreciation



8. What shape is described as having a circular cross-section and extending in a straight line?

- Option: Cubical
- Option: Spherical
- Option: Cylindrical
- Option: Elliptical

9. Which term describes processes that are capable of renewal or restoration?

- Option: Regenerative
- Option: Degenerative
- Option: Destructive
- Option: Transient

10. What term refers to activities intended for profit or business purposes?

- Option: Locally
- Option: Residentially
- Option: Commercially
- Option: Socially

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. Technological advancements can significantly _____ the capabilities of existing systems.

12. If the conflict _____, it could lead to significant economic repercussions.

13. The project requires _____ efforts to be successful over the long term.

14. The company aims to _____ its production within the next three years.

15. The engine's _____ is essential for determining its overall performance.

16. _____ are a groundbreaking development in regenerative medicine.

17. The process of _____ organs has advanced significantly over the past decade.

18. The device was successfully _____ in the patient's chest and is functioning well.

19. The approval for the project is _____ upon meeting safety standards.



20. The doctor noted the _____ of the disease and recommended further treatment.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. The Treasury is responsible for managing the government's financial resources.
22. Volatility in the stock market can lead to significant investment risk.
23. To refinance a loan means replacing an existing loan with a new one under different terms.
24. Sustainability practices focus on reducing our ecological footprint.
25. An auction allows participants to compete to purchase assets.
26. Indices are used to gauge market performance and economic health.
27. Inflation affects purchasing power and is a key economic indicator.
28. Cylindrical shapes are often used in engineering due to their strength.
29. Regenerative technologies aim to restore and replenish natural resources.
30. Products that are developed commercially are aimed at generating profit.

Answer

Multiple Choice: 1. Treasury 2. Volatility 3. Refinance 4. Sustainability 5. Auction 6. Indices 7. Inflation 8. Cylindrical 9. Regenerative 10. Commercially

Gap-Fill: 11. enhance 12. escalates 13. sustained 14. quadruple 15. torque 16. Induced pluripotent stem (iPS) cells 17. transplanting 18. implanted 19. conditional 20. progression

Matching sentence: 1. Treasury 2. volatility 3. refinance 4. sustainability 5. auction 6. indices 7. inflation 8. cylindrical 9. regenerative 10. commercially

CATEGORY

- 1. Business - LEVEL4

Date Created

2026/03/19

Author

aimeeyoung99