PROSPECTUS SUPPLEMENT NO. 5 (to the Prospectus dated September 22, 2022)

Polestar Automotive Holding UK PLC

UP TO 2,203,977,609 CLASS A ADSs, UP TO 24,999,965 CLASS A ADSs ISSUABLE UPON CONVERSION OF CLASS C ADSs AND UP TO 9,000,000 CLASS C-2 ADSs

This prospectus supplement (this "Supplement No. 5") is part of the prospectus of Polestar Automotive Holding UK PLC (the "Company"), dated September 22, 2022 (the "Prospectus"), which forms a part of the Company's registration statement on Form F-1 (Registration No. 333-266101), related to the offer and sale from time to time by the selling securityholders named in the Prospectus of up to (a) 2,228,977,574 Class A ADSs and (b) 9,000,000 Class C-2 ADSs. This Supplement No. 5 supplements, modifies or supersedes certain information contained in the Prospectus. Any statement in the Prospectus that is modified or superseded is not deemed to constitute a part of the Prospectus, except as modified or superseded by this Supplement No. 5. Except to the extent that the information in this Supplement No. 5 modifies or supersedes the information contained in the Prospectus, this Supplement No. 5 should be read, and will be delivered, with the Prospectus. This Supplemental No. 5 is not complete without, and may not be utilized except in connection with, the Prospectus.

Capitalized terms used but not defined herein have the meanings ascribed to them in the Prospectus.

The purpose of this Supplement No. 5 is to amend the information set forth in the table under the heading "Selling Securityholders" in the Prospectus as follows:

• Addition of the following line items and related footnotes:

Saxo Capital Markets Pte. Ltd ⁽⁴³⁾	372,359 — —	372,359 — — — — —
Saxo Capital Markets HK Limited ⁽⁴⁴⁾	124,515 — —	124,515 — — — — —

- (43) Consists of 372,359 Class A ADSs received by Saxo Capital Markets Pte. Ltd ("Saxo SG") in connection with an in-species distribution of securities by Northpole GLY 2 LP, 372,356 of which are held by Saxo SG on behalf of the following clients: (1) Soegiarto Handoko, (2) Shenhua WU, (3) Chung Wee Lee, (4) Chee Yong Lum, (5) Tak Loong Chang, (6) Richard Howard Douglas, (7) Thomas Qvistgaard Hansen, (8) Adam James Reynolds, (9) Rasmus Houmann Korfits, (10) Moh Chin Hong, (11) Richard Mark Hurst, (12) Druk Holding and Investments Limited. Saxo SG disclaims any beneficial ownership of the securities held by it on behalf of its clients other than to the extent of any pecuniary interest he may have therein, directly or indirectly. Saxo SG is the beneficial owner of 3 Class A ADSs directly held by it. Saxo SG is 100% owned by Saxo Bank, which is 50.89% owned and controlled by Geely Financials Denmark A/S. (i) Geely Financials Denmark A/S is 49% owned and controlled by Geely Financials, (ii) Geely Financials is 100% owned by Geely Sweden, (iii) Geely Sweden is 100% owned by Shanghai Geely, (iv) Shanghai Geely is 60.96% owned by Beijing Geely Wanyuan and 39.04% owned by Geely, (v) Beijing Geely Wanyuan is 100% owned by Beijing Geely Kaisheng, (vi) Beijing Geely Kaisheng is 100% owned by Zhejiang Geely, and (vii) Geely is 91.9% owned by Shufu Li. Therefore, Shufu Li is deemed to have voting and dispositive power with respect to the Class A ADSs directly held by Saxo SG. Shufu Li disclaims any beneficial ownership of the securities directly held by Saxo SG other than to the extent of any pecuniary interest he may have therein, directly or indirectly. The business address of this Selling Securityholder is 88 Market Street, #31-01 CapitaSpring Singapore 048948.
- (44) Consists of 124,515 Class A ADSs received by Saxo Capital Markets HK Limited ("Saxo HK") in connection with an in-species distribution of securities by Northpole GLY 2 LP, 124,513 of which are held by Saco HK on behalf of the following clients: (1) Ching Tong Tommy Poon, (2) Kin Nang Kong, (3) Atlas Multi-Strategies Fund Ltd. Saxo HK disclaims any beneficial ownership of the securities held by it on behalf of its clients other than to the extent of any pecuniary interest he may have therein, directly or indirectly. Saxo HK is the beneficial owner of 2 Class A ADSs directly held by it. Saxo HK is 100% owned by Saxo Bank A/S ("Saxo Bank"), which is 50.89% owned and controlled by Geely Financials Denmark A/S. (i) Geely Financials Denmark A/S is 49% owned and controlled by Geely Financials, (ii) Geely Financials is 100% owned by Geely Sweden, (iii) Geely Sweden is 100% owned by Shanghai Geely, (iv) Shanghai Geely is 60.96% owned by Beijing Geely Wanyuan and 39.04% owned by Geely, (v) Beijing Geely Wanyuan is 100% owned by Beijing Geely Kaisheng, (vi) Beijing Geely Kaisheng is 100% owned by Zhejiang Geely, and (vii) Geely is 91.9% owned by Shufu Li. Therefore, Shufu Li is deemed to have voting and dispositive power with respect to the Class A ADSs directly held by Saxo HK. Shufu Li disclaims any beneficial ownership of the securities directly held by Saxo HK other than to the extent of any pecuniary interest he may have therein, directly or indirectly. The business address of this Selling Securityholder is 19th Floor, Shanghai Commercial Bank Tower, 12 Queen's Road Central, Hong Kong.
- and revision of the following line item and related footnote:

Northpole GLY 2 LP⁽²⁷⁾ 668,167 — — 668,167 — — — —

(27) Consists of 668,167 Class A ADSs acquired in connection with the conversion of certain convertible notes of Parent. Northpole GLY 2 LP is managed by Northpole GLY GP1, its General Partner. Geely Financials International Limited ("Geely Financials") owns approximately 86.0% of GLy Capital Management Partners (Cayman) Limited, which controls Northpole GLY GP1. (i) Geely Financials is 100% owned by Geely Sweden, (ii) Geely Sweden is 100% owned by Shanghai Geely Zhaoyuan International Investment Co., Ltd ("Shanghai Geely"), (iii) Shanghai Geely is 60.96% owned by Beijing Geely Wanyuan International Investment Co. Ltd ("Beijing Geely Wanyuan") and 39.04% owned by Geely, (iv) Beijing Geely Wanyuan is 100% owned by Beijing Geely Kaisheng International Investment Co., Ltd. ("Beijing Geely Kaisheng"), (v) Beijing Geely Kaisheng is 100% owned by Zhejiang Geely, and (vi) Geely is 91.9% owned by Shufu Li. Therefore, Shufu Li is deemed to have voting and dispositive power with respect to the Class A ADSs directly held by Northpole GLY 2 LP. Shufu Li disclaims any beneficial ownership of the securities reported by Northpole GLY 2 LP other than to the extent of any pecuniary interest he may have therein, directly or indirectly. The business address of this Selling Securityholder is 12F H Code, 45 Pottinger St, Central, Hong Kong.

This Supplement No. 5 is not complete without, and may not be utilized except in connection with, the Prospectus, including any supplements and amendments thereto.

We may further amend or supplement the Prospectus and this Supplement No. 5 from time to time by filing amendments or supplements as required. You should read the entire Prospectus, this Supplement No. 5 and any amendments or supplements carefully before you make your investment decision.

Our Class A ADSs and Class C-1 ADSs are listed on the Nasdaq Stock Market LLC ("Nasdaq"), under the trading symbols "PSNY" and "PSNYW," respectively. On November 14, 2022, the closing price for our Class A ADSs on Nasdaq was \$5.63. On November 14, 2022, the closing price for our Class C-1 ADSs on Nasdaq was \$1.18.

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described under the heading "Risk Factors" beginning on page 14 of the Prospectus before you make an investment in the securities.

Neither the SEC nor any state or foreign securities commission has approved or disapproved of these securities or determined if this Supplement No. 5 or the Prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus supplement is dated November 14, 2022