

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 FORM 6-K REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934 For the month of January 2025 Commission File Number 001-33159 AERCAP HOLDINGS N.V. (Translation of Registrant's Name into English) AerCap House, 65 St. Stephen's Green, Dublin D02 YX20, Ireland, +353 1 819 2010 (Address of Principal Executive Office) Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F. Form 20-F ☐ Form 40-F ☐ Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐ Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders. Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐ Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR. Other Events On January 6, 2025, AerCap Ireland Capital Designated Activity Company and AerCap Global Aviation Trust (together, the "Issuers"), each a wholly-owned subsidiary of AerCap Holdings N.V. (the "Company"), priced an offering of senior notes (the "Offering"), consisting of \$750 million aggregate principal amount of the Issuers' 4.875% Senior Notes due 2028 (the "2028 Notes") and \$750 million aggregate principal amount of the Issuers' 5.375% Senior Notes due 2031 (the "2031 Notes" and, together with the 2028 Notes, the "Notes"). The Notes will be fully and unconditionally guaranteed on a senior unsecured basis by the Company and certain other subsidiaries of the Company. The Issuers intend to use the net proceeds from the Notes for general corporate purposes, including to acquire, invest in, finance or refinance aircraft assets and to repay indebtedness. Citigroup Global Markets Inc., Deutsche Bank Securities Inc., Barclays Capital Inc., Credit Agricole Securities (USA) Inc. and TD Securities (USA) LLC are serving as joint book-running managers for the underwritten public Offering of the Notes. The Company has filed a registration statement (including a prospectus) on Form F-3 with the U.S. Securities and Exchange Commission (the "SEC") for the Offering. The registration statement automatically became effective upon filing on October 18, 2024. Investors should read the accompanying prospectus dated October 18, 2024, the preliminary prospectus supplement relating to the Offering dated January 6, 2025, and other documents the Company has filed with the SEC for more complete information about the Company, the Notes and the Offering. The information contained in this Form 6-K is incorporated by reference into the Company's Form F-3 Registration Statement, File No. 333-282733, and Form S-8 Registration Statements, File Nos. 333-194638, 333-194637, 333-180323, 333-165839, and 333-154416, and related Prospectuses, as such Registration Statements and Prospectuses may be amended from time to time. Exhibits 99.1 AerCap Holdings N.V. Press Release relating to the pricing of the Notes. SIGNATURE Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. AERCAP HOLDINGS N.V. By: /s/ Aengus Kelly Name: Aengus Kelly Title: Authorized Signatory Dated: January 6, 2025 EXHIBIT INDEX 99.1 AerCap Holdings N.V. Press Release relating to the pricing of the Notes. Exhibit 99.1 PRESS RELEASE For Investors: Joseph McGinley Head of Investor Relations jmcginley@aercap.com; +353 1 418 0428 For Media: Gillian Culhane Head of Corporate Communications and Marketing gculhane@aercap.com; +353 1 636 0945 AerCap Holdings N.V. Announces Pricing of \$1.5 Billion Aggregate Principal Amount of Senior Notes DUBLIN January 6, 2025 AerCap Ireland Capital Designated Activity Company and AerCap Global Aviation Trust (together, the "Issuers"), each a wholly-owned subsidiary of AerCap Holdings N.V. ("AerCap" or the "Company"), priced an offering of senior notes, consisting of \$750 million aggregate principal amount of the Issuers' 4.875% Senior Notes due 2028 (the "2028 Notes") and \$750 million aggregate principal amount of the Issuers' 5.375% Senior Notes due 2031 (the "2031 Notes" and, together with the 2028 Notes, the "Notes"). The Notes will be fully and unconditionally guaranteed on a senior unsecured basis by the Company and certain other subsidiaries of the Company. The Issuers intend to use the net proceeds from the Notes for general corporate purposes, including to acquire, invest in, finance or refinance aircraft assets and to repay indebtedness. Citigroup, Deutsche Bank Securities, Barclays, Credit Agricole CIB and TD Securities are serving as joint book-running managers for the underwritten public offering. The Company has filed a registration statement (including a prospectus) on Form F-3 with the U.S. Securities and Exchange Commission (the "SEC") for the underwritten offering to which this communication relates. The registration statement automatically became effective upon filing on October 18, 2024. Investors should read the accompanying prospectus dated October 18, 2024, the preliminary prospectus supplement relating to the offering dated January 6, 2025, and other documents the Company has filed with the SEC for more complete information about the Company and this offering. These documents may be obtained for free by visiting EDGAR on the SEC's website at www.sec.gov. The prospectus supplement and accompanying prospectus relating to this offering may also be obtained from: Citigroup Global Markets Inc., c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, by telephone at 1-800-831-9146 or by email at prospectus@citi.com; Deutsche Bank Securities Inc., 1 Columbus Circle, New York, NY 10019, Attn: Prospectus Group, by telephone at 1-800-503-4611 or by email at prospectus.CPDG@db.com; Barclays Capital Inc., c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, by telephone at 1-888-603-5847 or by email at barclaysprospectus@broadridge.com; Credit Agricole Securities (USA) Inc., 1301 Avenue of the Americas, New York, NY 10019, Attn: Debt Capital Markets, by telephone at 1-866-807-6030; or TD Securities (USA) LLC, 1 Vanderbilt Avenue, 11th Floor, New York, NY 10017, Attn: DCM-Transaction Advisory, by telephone at 1-855-495-9846. This press release shall not constitute an offer to sell or purchase or the solicitation of an offer to sell or purchase the Notes or any other securities, nor shall there be any offer, solicitation, purchase or sale of these securities in any state or jurisdiction in which such offer, solicitation, purchase or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. About AerCap AerCap is the global leader in aviation leasing with one of the most attractive order books in the industry. AerCap serves approximately 300 customers around the world with comprehensive fleet solutions. AerCap is listed on the New York Stock Exchange (AER) and is based in Dublin with offices in Shannon, Miami, Singapore, Memphis, Amsterdam, Shanghai, Dubai and other locations. AerCap Holdings N.V. 65 St. Stephen's Green, Dublin D02 YX20, Ireland www.aercap.com Forward-Looking Statements This press release contains certain statements, estimates and forecasts with respect to future performance and events. These

statements, estimates and forecasts are “forward-looking statements”. In some cases, forward-looking statements can be identified by the use of forward-looking terminology such as “may,” “might,” “should,” “expect,” “plan,” “intend,” “will,” “aim,” “estimate,” “anticipate,” “believe,” “predict,” “potential” or “continue” or the negatives thereof or variations thereon or similar terminology. All statements other than statements of historical fact included in this press release are forward-looking statements and are based on various underlying assumptions and expectations and are subject to known and unknown risks, uncertainties and assumptions, and may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied in the forward-looking statements, including but not limited to the availability of capital to us and to our customers and changes in interest rates; the ability of our lessees and potential lessees to make lease payments to us; our ability to successfully negotiate flight equipment (which includes aircraft, engines and helicopters) purchases, sales and leases, to collect outstanding amounts due and to repossess flight equipment under defaulted leases, and to control costs and expenses; changes in the overall demand for commercial aviation leasing and aviation asset management services; the continued impacts of the Ukraine Conflict, including the resulting sanctions by the United States, the European Union, the United Kingdom and other countries, on our business and results of operations, financial condition and cash flows; the effects of terrorist attacks on the aviation industry and on our operations; the economic condition of the global airline and cargo industry and economic and political conditions; the impact of current hostilities in the Middle East, or any escalation thereof, on the aviation industry or our business; development of increased government regulation, including travel restrictions, sanctions, regulation of trade and the imposition of import and export controls, tariffs and other trade barriers; a downgrade in any of our credit ratings; competitive pressures within the industry; regulatory changes affecting commercial flight equipment operators, flight equipment maintenance, engine standards, accounting standards and taxes; and disruptions and security breaches affecting our information systems or the information systems of our third-party providers. As a result, we cannot assure you that the forward-looking statements included in this press release will prove to be accurate or correct. These and other important factors and risks are discussed in AerCap’s annual report on Form 20-F and other filings with the SEC. In light of these risks, uncertainties and assumptions, the future performance or events described in the forward-looking statements in this press release might not occur. Accordingly, you should not rely upon forward-looking statements as a prediction of actual results and we do not assume any responsibility for the accuracy or completeness of any of these forward-looking statements. Except as required by applicable law, we do not undertake any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise. AerCap Holdings N.V. 65 St. Stephen’s Green, Dublin D02 YX20, Ireland www.aercap.com