

**ARES INDUSTRIAL REAL ESTATE INCOME TRUST INC.
SUPPLEMENT NO. 2 DATED FEBRUARY 22, 2022
TO THE PROSPECTUS DATED FEBRUARY 11, 2022**

This prospectus supplement (“Supplement”) is part of and should be read in conjunction with the prospectus of Ares Industrial Real Estate Income Trust Inc. (the “Company”), dated February 11, 2022 (the “Prospectus”), as supplemented by Supplement No. 1, dated February 14, 2022. Unless otherwise defined herein, capitalized terms used in this Supplement shall have the same meanings as in the Prospectus.

The purpose of this Supplement is to disclose:

- updated information regarding our investment in the BTC II Partnership.

• **BTC II PARTNERSHIP**

The following updates and should be read in conjunction with the disclosure regarding our investment in the BTC II Partnership in the sections of the Prospectus titled, “Prospectus Summary—Ares Industrial Real Estate Income Trust Inc.,” “Investments in Real Properties, Real Estate Securities and Debt Related Investments—Real Estate Portfolio Overview,” “—BTC II Partnership,” “—The BTC II Partnership Portfolio” and “—BTC II Services Agreement, Incentive Distributions Sharing and Other BTC II Partnership Agreements,” on pages 2, 122, and 129 through 131 of the Prospectus.

On February 15, 2022, in accordance with the terms of the BTC II Partnership Agreement, we, along with the other joint venture partners in the BTC II Partnership, entered into a transaction to split the majority of the properties in the BTC II Portfolio amongst the joint venture partners, other than the BCG Limited Partner, whose respective interest in such properties was redeemed for \$24.9 million (the “BTC II Partnership Transaction”). As a result of the BTC II Partnership Transaction, we own a 100% interest in 11 properties, that were previously part of the BTC II Portfolio, the BTC II SLP owns a 100% interest in seven properties that were previously part of the BTC II Portfolio and the QR Limited Partner owns a 100% interest in the remaining 14 properties that were part of the BTC II Partnership Transaction. The properties acquired by us consist of a total of approximately 1.7 million square feet with a fair value as of December 31, 2021 of approximately \$423.0 million. The properties acquired by the BTC II SLP consist of a total of approximately 1.0 million square feet, and have a fair value, as of December 31, 2021, of approximately \$130.7 million. Concurrently with the BTC II Partnership Transaction, the Company and the joint venture partners formed a new joint venture partnership, through which we co-own five properties that were part of the original BTC II Portfolio and were not part of the BTC II Partnership Transaction. The partners own the same relative interests in the new partnership as they did in the BTC II Partnership prior to the incentive fee distribution that was settled in the fourth quarter of 2021, such that we own an 8.0% interest as general partner and as a limited partner, the BTC II SLP owns a special limited partner interest, the BCG Limited Partner owns a 2.0% limited partner interest and the QR Limited Partner owns a 90.0% limited partner interest. The terms of the new partnership agreement are substantially the same as the terms of the BTC II Partnership Agreement, including, without limitation, the rights of the parties to incentive distributions. Accordingly, all references in the Prospectus to the BTC II Partnership, the BTC II Partnership Agreement and the BTC II Services Agreement for periods after February 15, 2022 pertain to the new partnership that was formed concurrently with the completion of the BTC II Partnership Transaction. As of the date of this Supplement, an affiliate of the Advisor continues to provide the BTC II Advisory Services with respect to the five properties not included in the BTC II Partnership transaction, as well as the 14 remaining properties owned by the QR Limited Partner.
