

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 90.4-2022

# **Public Review Draft**

# Proposed Addendum a to Standard 90.4-2022, Energy Standard for Data Centers

First Public Review (April, 2024) (Draft Shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at <a href="www.ashrae.org/standards-research--technology/public-review-drafts">www.ashrae.org/standards-research--technology/public-review-drafts</a> and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at <a href="www.ashrae.org/bookstore">www.ashrae.org/bookstore</a> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, <a href="www.ashrae.org">www.ashrae.org</a>.

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BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 90.4-2022, *Energy Standard for Data Centers* First Public Review Draft.

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(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

### Foreword

Addendum a aims to provide alignment between Standard 90.4 and ASHRAE's plans to strengthen the decarbonization components of ASHRAE standards. Standard 90.4 currently regulates data center energy consumption, but cannot regulate data center greenhouse gas emissions, environmental impact, water consumption, and other resources or considerations beyond energy under its current purpose. Addendum a expands the purpose to include resources and considerations beyond energy that contribute to data center sustainability and decarbonization.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 90.4-2022, Energy Standard for Data Centers First Public Review Draft.

### Addendum a to 90.4-2022

Modify the Purpose and Scope as follows:

### 1. PURPOSE

The purpose of this standard is to establish the minimum *energy efficiency* and resource requirements of *data centers* for design, *construction*, and planned operation and maintenance of *data centers*, in service of decarbonization and reduction of greenhouse gas emissions.

Resources include but are not limited to:

a. design, *construction*, and a plan for operation and maintenance; and b. use of on-site or off-site renewable *energy* resources.

- a. non-renewable *energy*
- b. renewable *energy*
- c. water

### 2. SCOPE

- 2.1 This standard applies to
- a. new data centers, or portions thereof, and their systems;
- b. new additions to data centers, or portions thereof, and their systems; and
- c. modifications to systems and equipment in existing data centers or portions thereof.
- 2.2 The provisions of this standard do not apply to
- a. telephone exchanges,
- b. essential facilities, and
- c. information technology equipment (ITE).
- 2.3 Where specifically noted in this standard, certain other buildings or elements of buildings shall be exempt.
- 2.4 This standard shall not be used to circumvent any safety, health, or environmental requirements.