



Ruling

Combined Heat and Power & District Heating and Cooling

Version 1.0 — June 2022



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Building Research Establishment (BRE)

Bucknalls Lane,
Bricket Wood,
Watford
WD25 9NH
United Kingdom

Email: nabers.uk@bregroup.com

Website: www.bregroup.com/nabers-uk

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1 Introduction

1.1 General

This document is a **Ruling** that provides additional instructions for **Assessors** that are required to use the following documents as part of accounting for district heating and cooling in a NABERS UK Energy Rating:

- *Ruling: Treatment of Cogeneration and Trigeneration Systems v1.2 May 2022*
- *Standard Methodology in The Interim Rules – Thermal Energy Systems v1 2021.*

 This Ruling replaces *Section 8.1 Combined heat and power and district heating and cooling* in NABERS UK The Rules - Metering and Consumption Version 1.1

1.2 Interpretation of the Rules and Rulings

This **Ruling** is to be read in conjunction with the respective NABERS **Rules** as they apply to the specific building type.

Note: **Rulings** are used to address specific issues that may arise after the publication of the **Rules**.

Where a conflict between this **Ruling** and existing **Rules** is present, the requirements of the **Ruling** take precedence over the **Rules**.

1.3 Situations not covered by the Ruling

Assessors must comply with this **Ruling** unless prior approval has been sought and approved by the **Scheme Administrator**.

Where appropriate, **Assessors** may contact the **Scheme Administrator** to propose an alternative methodology, outlining the circumstances and rationale. Prior approval for use is required and may be granted conditionally, on a case-by-case basis and at the **Scheme Administrator's** discretion.

1.4 How to use this document

The term “**Ruling**” refers to a body of works produced by NABERS UK that specify what must be examined, tested and documented when an **Assessor** conducts a rating. Wherever the term is used in this document from Chapter 3 onwards, it refers to this document, *NABERS Ruling — Combined Heat and Power & District Heating & Cooling*. Other **Rules** documents mentioned in the text are distinguished from the present document by the inclusion of their title.

Text appearing **dark green** and **bold** is a defined term. Defined terms can be found in Chapter 2 of this **Ruling** or in the terms and definitions chapter of the respective **Rules** document.

The following formatting conventions may appear in this text:

Note: Text appearing with a grey background is explanatory text only and is not to be read as part of the **Ruling**.

1.5 Related documents

The following document have been referenced within this **Ruling**:

- NABERS UK The Rules – Metering and Consumption v1.1 May 2022
- Ruling: Treatment of Cogeneration and Trigeneration Systems v1.2 May 2022
- Standard Methodology in The Interim Rules – Thermal Energy Systems v1.0 2021

2 Terms and definitions

This chapter lists the key terms and their definitions that are integral to the proper use of this document.

Term	Definition
Assessor(s)	An accredited person authorised by the Scheme Administrator to conduct NABERS UK ratings.
Scheme Administrator	The body responsible for administering NABERS UK, in particular the following: <ol style="list-style-type: none">Establishing and maintaining the standards and procedures to be followed in all aspects of the operation of the system.Determining issues that arise during the operation of the system and the making of ratings.Accrediting Assessors and awarding accredited ratings in accordance with NABERS standards and procedures. The functions of the Scheme Administrator are undertaken by the BRE Group.
rated premises	The building to be rated.
Rules	Authoritative document produced by the Scheme Administrator that specifies what must be covered by an Assessor in order to produce a rating.
Ruling(s)	An authoritative decision by the Scheme Administrator which acts as an addition or amendment to the Rules .

3 Combined heat and power and district heating and cooling

For buildings attached to external district heating or cooling schemes, there is a choice to either use default or measured kWh_e energy intensity factors for the heating and cooling supplies. However, where the district heating/cooling plant is on site, measured factors must be used. This is illustrated in the decision tree as seen in Figure 1.1 below.

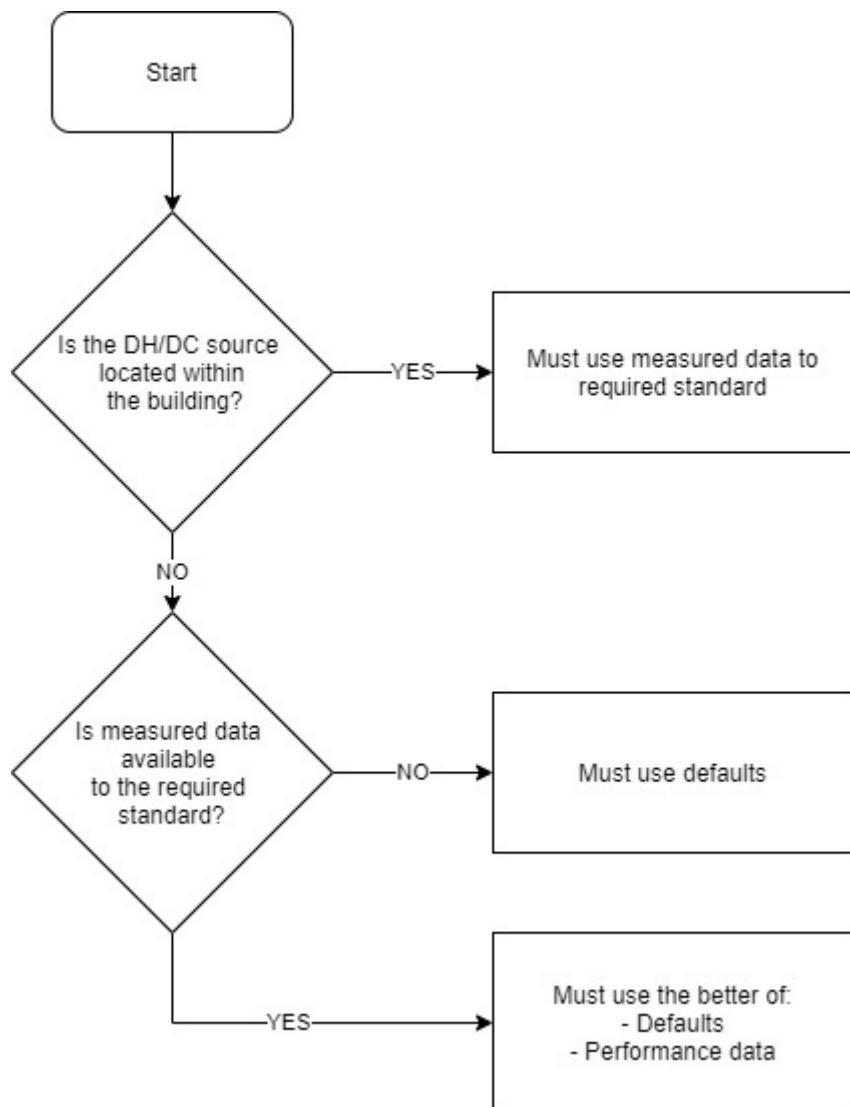


Figure 3.1: Decision tree to determine when measurements, defaults or performance data must be used.

1.6 Externally supplied chilled water and hot water

The kWh_e factors for chilled and hot water supplied externally to a base building, whole building or tenancy shall be determined based on the default kWh_e factors for externally supplied chilled and hot water services unless the system specific kWh_e factors are:

- a) available to the required standard; and
- b) are beneficial to the NABERS Rating being undertaken.

The system specific kWh_e factors must be calculated according to the *Ruling: Treatment of Cogeneration and Trigeneration Systems v1.2 May 2022* and the *Standard Methodology in The Interim Rules – Thermal Energy Systems v1 2021*.

1.7 Externally supplied electricity

The kWh_e factor for externally supplied electricity to a base building, whole building or tenancy shall always be equal to the default kWh_e factor for electricity.

1.8 On-site Combined Heat and Power or District Heating/Cooling

Where a combined heat and power or district heating/cooling system is located within the **rated premises**, the base building or whole building rating is determined from the energy inputs to that system.

If such a system exports electricity, chilled water or hot water to a third party, then the reduction in energy inputs relating to that export must be calculated using the *Ruling: Treatment of Cogeneration and Trigeneration Systems v1.2 May 2022* and the *Standard Methodology in The Interim Rules – Thermal Energy Systems v1 2021*.

For tenancies in such buildings, the provisions of Section 3.2 apply.

For further information please contact the **Scheme Administrator**.

Note 1: The default figures for externally supplied services are 0.4 kWh_e/kWh_{th} for chilled water, 0.9 kWh_e/kWh_{th} for hot water and 1 kWh_e/kWh for electricity.

Note 2: The fact that a site is connected to a district scheme, and whether the rating has used measured or default figures, is recorded against the rating and may be publicly disclosed in context of the rating.

Note 3: This Ruling does not cover the treatment of “ambient loops” which operate to provide a heat source or sink for equipment in buildings rather than direct heating or cooling.

Contact us

NABERS UK is owned and overseen by the New South Wales Government, Australia and administered by the Building Research Establishment (BRE).

Bucknalls Lane, Bricket Wood
Watford
WD25 9NH
United Kingdom

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