

# Glossary of Key Terms

## Whole of Home in Practice: New Requirements for Energy Assessors

### Glossary of Key Terms

- **ABCB Housing Provisions:** Detailed guidelines that explain how the requirements of the National Construction Code (NCC) are to be met in practice, particularly Part 13.6, which outlines how fixed appliances should be assessed for Whole-of-Home compliance.
- **Assumed Inputs:** Data used in a NatHERS assessment when specific, confirmed information (e.g., appliance specifications) is not supplied by the builder or designer. These inputs must be clearly documented with justification and their source.
- **Chenath Engine:** The core calculation engine behind all NatHERS-accredited software tools (e.g., FirstRate5, BERS Pro, Hero). It simulates a building's energy performance dynamically, modelling hourly energy use across a full year, including fixed appliances, to produce Whole-of-Home ratings.
- **Coefficient of Performance (COP):** A measure of heating efficiency for heat pumps, representing the ratio of heating output to electrical input.
- **CPD (Continuing Professional Development):** Structured learning to develop and maintain professional skills and knowledge, as referenced in the context of this training session for energy assessors.
- **Deemed-to-Satisfy Provisions:** Specific requirements within the National Construction Code (NCC) that, if followed, are presumed to meet the performance requirements of the code. In Whole-of-Home, these relate to fixed appliances and energy loads.

- **Downlight Density:** A default assumption used in NatHERS assessments for the number of downlights if a detailed lighting plan is not provided, typically one downlight per 5 square metres of floor area.
- **Energy Efficiency Ratio (EER):** A measure of cooling efficiency for air conditioning systems, representing the ratio of cooling output to electrical input.
- **Fixed Appliances:** Major energy-consuming systems in a dwelling that are permanently installed, such as heating and cooling systems, hot water systems, solar PV, and battery storage. These are now included in Whole-of-Home assessments.
- **Mandatory Inputs:** Confirmed specifications (e.g., rated appliance capacity, system type, R-values) that must be entered exactly as provided in a NatHERS assessment.
- **Minor Changes:** Alterations to a building design or specification that do not materially affect the thermal or Whole-of-Home performance outcome. While they do not typically require a re-assessment, they must still be documented.
- **Major Changes:** Alterations to a building design or specification that affect the thermal or Whole-of-Home score, such as switching appliance types or altering insulation values. These changes require a full re-modelling and updated certification.
- **NatHERS (Nationwide House Energy Rating Scheme):** Australia's national scheme for rating the energy efficiency of residential buildings, expanded in 2022 to include the "Whole-of-Home" approach.
- **NatHERS Technical Note:** A comprehensive guide providing technical rules and procedures for conducting NatHERS energy assessments, including specific guidance on applying default values and documenting assumptions (Section 12) and defining minor vs. major changes.
- **NCC 2022 (National Construction Code 2022):** The latest edition of Australia's building regulations, which mandates the expanded Whole-of-Home assessment requirements for new residential buildings, specifically in Volume Two, Section 13.6.
- **Plug Loads:** The energy consumption from everyday electrical appliances and standby power (e.g., fridges, TVs) within a home. These are typically applied as default values in Whole-of-Home assessments based on occupancy profiles and dwelling size.

- **Product Substitution:** The act of replacing a specified appliance or system with a different brand, model, type, or efficiency during the design or construction phase, which may trigger a re-rating if it impacts energy performance.
- **Re-rating:** The process of re-modelling and issuing an updated NatHERS assessment and certificate due to significant design changes, product substitutions, or construction-phase adjustments that alter the building's energy performance beyond accepted tolerances.
- **Thermal Envelope:** The components of a building that separate its interior from the exterior environment (e.g., roof, walls, floor, windows), governing its thermal performance through insulation, glazing, and air movement.
- **Whole-of-Home (WoH) Assessment:** The expanded scope of NatHERS assessments introduced with NCC 2022, which evaluates not only the thermal performance of a dwelling but also the energy consumption of its fixed appliances (heating, cooling, hot water, PV, batteries, and plug loads).
- **Whole-of-Home Efficiency Factors:** Pre-calculated adjustment factors built into NatHERS software that modify the energy use and system efficiency calculations of fixed appliances based on expected performance under typical conditions in different climate zones.