

The Home Performance Index (HPI) is Ireland's first national voluntary certification system for quality and sustainable residential development.

What is it?

The Home Performance Index provides a label for quality sustainable residential development complementing existing schemes used in the commercial sector such as BREEAM and LEED.

For the homeowner

It provides homebuyers with assurance that their homes have been designed and constructed with care to ensure low running costs, enhance their wellbeing and minimise environmental impacts.

For the developer

- · Communicate the quality of your housing to homebuyers.
- Demonstrate the quality of the development to planning authorities, potentially saving time and cost.
- Provides a sustainability indicator to investment funds and housing associations who increasingly need to report their sustainability achievements.
- Enable design and construction teams to work more effectively together, setting and delivering quality and sustainability targets.
- · Add value to your development and investment portfolio.

How is certification achieved?

The HPI certification is based on over 30 verifiable indicators that are divided into five categories: Environment, Economic, Health and Wellbeing, Quality Assurance and Sustainable location. Most indicators allow several levels of achievement based on good, better and best practice. The award of a certificate is then based on the overall attainment across all categories.

The design team is encouraged to work from a very early stage to achieve targets. They provide the evidence requested for each of the indicators. This is then audited for compliance and if successful certification can be awarded for the level achieved.

In order to achieve certification the dwelling is required to demonstrate that it is designed to meet minimum performance levels in certain indicators which may exceed building regulations.

Points are awarded for each indicator and the development must meet a target score. The minimum score is based on good performance across the core indicators. Where poor performance is unavoidable in certain indicators, this should be offset by targeting enhanced performance in others.

Where development fails to achieve the required score from core indicators it must assess further indicators. Where certification is already achieved within these core indicators the developer can achieve an enhanced level certification by assessing and meeting criteria within non core indicators.

In all cases evidence must be provided in support of each indicator before points can be awarded.







Developer can achieve an enhanced level certification by assessing and meeting criteria within non-core indicators.

The Indicators

The following core indicators need to be assessed under each category and the developer may also assess the non core indicators to achieve a higher level of certification.



Environment



Land use is assessed based on whether it is greenfield or a previously developed brownfield. The efficiency of land use is also determined by the residential density achieved.



Water efficiency calculations for each dwelling must be submitted based on sanitary ware fittings and other water reduction measures.



A minimum BER of A3 is required but achievement of the NZEB standard and higher is encouraged.



The greater embodied environmental impacts of very large dwellings need to be offset by improving performance in other areas.

Calculation of embodied impacts of dwellings is encouraged.

Additional indicators which may be assessed include

- Minimising water run off leading to potential flooding.
- Ecological improvement of the site.
- Construction waste management.

- Use of Environmental Product Declarations for construction materials .
- Calculation of the Embodied Impacts of construction.
- Use of sustainable timber.



Health and Wellbeing



A commissioned ventilation system to ensure good indoor air quality is required.



A minimum level of natural day lighting is required.



Economic



The dwelling must be designed not to exceed a maximum permitted annual heating demand.

Additional indicators which may be assessed include

- Monitoring system for internal air quality
- Specification of Low VOC paints
- Enhanced Acoustic performance

Additional indicators which may be assessed include

- Energy and water costs
- Smart metering of energy and water
- Energy labelled goods



Quality Assurance



The dwelling must not exceed a maximum air infiltration level. This is considerably improved on minimum building regulations requirements.



The dwelling should be designed not to exceed a maximum permitted level of thermal bridging which exceeds minimum building regulations requirements.



The construction team is assessed based on the registration and up skilling of contractors, sub contractors and site workers.



The design team is assessed based on levels of expertise, qualifications and up skilling.

Additional indicators which may be assessed include

- Commissioning of services.
- Customer aftercare.



Sustainable Location



The site is assessed for access to public transport, networks of walking and cycling paths, and alternative transport options such as car clubs, cycle sharing and electrical charging points.



The site is assessed for access to schools, shops, healthcare, parks, open space, leisure facilities and other amenities.



The site is assessed for flood risk.

How will you know if What are the costs of your development can certification? achieve certification?

IGBC has developed an assessment spreadsheet and associated calculators accompanied by a detail manual. This allows the design team set targets at the start of the project and to assess the likely level of performance.

The costs for registration and certification are based on the number of units, types of units and complexity of development. The IGBC is currently supporting a limited number of developers with support of the EPA Green Enterprise programme to complete the certification process at low cost over the next year. If you wish to apply to participate in this programme contact: hpi@igbc.ie

Will certification add cost to the construction of the homes?

The system is designed to encourage early integrated design between professionals and construction team and if all are appropriately skilled and working to agreed targets, there should be little or no additional construction costs. It is designed to integrate with the existing documentation required to demonstrate building regulations compliance and this minimises additional administration and paperwork.

How has it been developed?

It has been developed by the Irish Green Building Council in consultation with its members, major housing developers, housing associations, the main construction institutes and state agencies, and is informed by an extensive review of best international and European practice for the design of assessment and certification systems for sustainable housing.

Who is the Irish Green Building Council?

The Irish Green Building Council is the leading authority on best practice sustainable building in Ireland and is made up of the leading businesses operating in the Irish construction and property industry. It is part of a global network of over 100 Green Building Councils.



Costs

- Annual heating costs per year €250 - €400 based on standardised use.
- Smart metering of energy to allow easy control of costs.
- Very low flood risk.
- Location should help lower transport costs.



Wellbeing

- Designed for enhanced daylight levels.
- Better than standard sound proofing between dwellings.
- Designed for good indoor air quality.
- Walkable distances to amenities for more active lifestyle.



Our Planet

- A2 BER rating ensures lower carbon emissions.
- Reduced impact from construction materials used.
- Designed for 40% less water consumption per occupant than average Irish home.
- Development helps reduce flood risk in the locality.
- The development improves the local ecology.

Sample standardised scorecard that could be generated from the technical indicators for direct communication to home buyer or tenant of the positive aspects incorporated into their home.

Find out more

Contact Irish Green Building Council: hpi@igbc.ie



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