

HIA Western Australian GreenSmart Awards

Definitions

HIA National GreenSmart categories – Entrants who win the following categories at the WA GreenSmart Awards will automatically qualify as entrants in the HIA Australian GreenSmart Awards.

GREENSMART HOME

This award will be presented to the residential home that best incorporates cost-effective environmental features and practices, both in its construction and operation. This category is open to single and attached housing, new homes and renovations.

JUDGING CRITERIA

Homes will be judged according to: achievements with respect to design and construction innovation; quality of work completed; management of energy, waste and water; site management; the selection of materials; indoor air quality; cost effectiveness; alternative energy sources; use of new technology; innovation and overall environmental performance.

Quality of Work

A Overall quality of construction.

Innovation

B The use of new technology in the design, construction and operation of the building, including the cost and practicality of innovative practices and the ability to replicate this innovation in other housing projects.

Environmental Design, Features and Construction

C Energy Efficiency - e.g. energy rating of building envelope, insulation, passive solar design, thermal massing, lighting, appliances and fittings, hot water systems etc.

D Water Efficiency - e.g. appliances, tap and pipe fittings, landscaping, outdoor watering systems, water tanks etc.

E Resource Recovery - e.g. material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.

F Site Management - e.g. storm water and erosion control, minimising site disturbance, innovative construction techniques, noise control and vegetation protection etc.

G Indoor Air Quality - e.g. Use of low-allergen or non-toxic materials, cross ventilation.

H Materials Selection - e.g. evidence of life cycle analysis and consideration of embodied energy etc

Visual Appeal

I External street appearance and suitability of response to site constraints (e.g. slope, vegetation)

Liveability & Cost Effectiveness

J Practicality of design layout, accessibility and market appeal

K Cost Effectiveness - (i.e. Cost per sq. metre) and potential market capture

GREENSMART COMMUNITY DEVELOPMENT

This award is available to any residential project, where more than twenty lots are created or where the development is a multi unit development (high or low rise).

JUDGING CRITERIA

Projects will be judged according to their overall environmental and community contribution, including water sensitive urban design, provision of non potable water, application of site management techniques, effective solar orientation of lots, housing diversity, accessible design, inclusion of open space and the integration of natural features, heritage buildings and community elements (ie community centres, schools, and commercial precincts). Overall neighbourhood amenity achieved (i.e. community programs & visual appeal of the development) will also be considered.

Estate Design & Site Considerations

- A Subdivision layouts that optimise appropriate solar orientation for majority of lots having regard for site constraints.
- B Utilisation of non potable water resources (e.g. storm water, recycled water) fit for purpose use.
- C Design the estate to integrate with and respond to site specific issues (e.g. retention and enhancement of native flora, protection of fauna habitat and heritage features and creation of wetlands).
- D Estate design to optimise walking, cycling and use of public transport.
- E Provided a diversity of housing product through a mix of lot sizes, price range types and density.
- F Use of programmes or provision of facilities to establish and maintain community interaction and sense of neighbourhood.

Civil Works Construction

- G Incorporation of energy management techniques during construction (e.g. solar powered street lighting or water features).
- H Promotion of waste management techniques and resource energy recovery to estate builders to maximise recovery and recycling of materials and minimise general waste.

- I Implementation of site management techniques designed to control soil erosion during construction and until the site becomes stabilised by retaining soil on the site and minimising site disturbance.
- J Installation of gross litter devices.

Amenities, Visual Appeal & Liveability

- K Treatment and provisions of open space and/or other community and recreational facilities.
- L Visual appeal of estate design, price range and suitability of response to site constraints (e.g. slope, aspect, vegetation).

HIA Western Australian GreenSmart Awards

GREENSMART PROJECT HOME

A project home is a dwelling constructed, based on a repeatable design, which may be tailored to suit the needs of the client and/or site. This home may be on display.

JUDGING CRITERIA

This home will be judged according to: management of energy, waste and water; site management; selection of materials; indoor air quality; visual appeal; cost-effectiveness; market replicability; overall potential environmental performance; design and construction innovation; and the quality of work completed.

Quality of Work

A Overall quality of construction.

Innovation

B The use of new technology in the design, construction and operation of the building, including the cost and practicality of innovative practices and the ability to replicate this innovation in other housing projects.

Environmental Design, Features & Construction

- C Energy Efficiency – e.g. energy rating of building envelope, insulation, passive solar design, thermal massing, lighting, appliances and fittings, hot water systems etc.
- D Water Efficiency – e.g. appliances, tap and pipe fittings, landscaping, outdoor watering systems, water tanks etc.
- E Resource Recovery – e.g. material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.
- F Site Management – e.g. storm water and erosion control, minimising site disturbance, innovative construction techniques, noise control and vegetation protection etc.
- G Indoor Air Quality – e.g. Use of low-allergen or non-toxic materials, cross ventilation.
- H Material Selection – e.g. evidence of life cycle analysis and consideration of embodied energy etc.

Visual Appeal

I External street appearance and suitability of response to site constraints (e.g. slope, vegetation)

Liveability & Cost Effectiveness

- J Practicality of design layout, accessibility and market appeal
- K Cost Effectiveness - (i.e. Cost per sq. metre) and potential market capture

GREENSMART ENERGY EFFICIENCY

Awarded to the residential building that best incorporates cost-effective energy efficient design and operational principles, together with quality of construction and visual appeal.

JUDGING CRITERIA

The winning project will be judged according to its innovation in energy efficiency design and construction and quality of work. Incorporation of renewable energy features will be rewarded.

Nominations must clearly demonstrate passive solar design features, including the design response to the building site and climate conditions. Good orientation principles should be demonstrated including glazing, ventilation and shading. Building materials should be chosen and used with due regard to energy efficiency, including appropriate insulation and thermal mass. Building services must demonstrate regard to energy efficiency including all fittings, appliances and lighting. The House Energy Rating should be measured and disclosed so as to benchmark the overall house envelope's energy performance. The cost effectiveness and practicality of innovative features, together with the overall visual appeal and site suitability will also be judged.

Quality of Work

A Overall quality of construction.

Passive Solar Design Features

- B Solar orientation and cross ventilation
- C Windows location, size and treatment
- D Use of eaves and external shading etc., pergolas, canopies, awnings and vegetation.
- E Other features (e.g. thermal massing, room zoning etc).

Energy Saving Materials & Fittings

- F Use of energy efficient appliances and fittings (including lighting).
- G Use of energy efficient hot water system.
- H Use of renewable energy sources e.g. PV systems, etc.
- I Use of insulation appropriate to climate.
- J Colour/reflectivity of roof appropriate to climate.

Energy Rating

- K Performance of the energy rating of a building envelope.

Liveability

- L Overall environmental performance (e.g. thermal comfort), practicality of design layout and market replicability.
- M The use of new technology in the design, construction and operation of the building, including the cost effectiveness and practicality of innovative practices and the ability to replicate this innovation in other housing projects.

HIA Western Australian GreenSmart Awards

GREENSMART WATER EFFICIENCY

This award recognises innovative and replicable approaches to integrated water management in a housing project. The project should demonstrate how reduced levels of water consumption will be achieved, specifically mains (potable) water consumption and, where applicable, demonstrate protection of the natural water environment. This award is open to a residential community, an urban infill project, or single or multi-unit housing project, for their contribution to efficient water use and management.

JUDGING CRITERIA

Nominations will be judged according to: evidence of a water management plan or a strategy that demonstrates a considered approach to water protection and conservation; measures to reduce consumption of potable water when occupied.

Innovative techniques or technologies for water conservation as well as the ability for chosen solutions to be integrated into regular business practices will also be considered.

Submissions will be judged according to their practical cost effective application in one or more of the following areas:

- Potential to reduce scheme water consumption within the home and garden.
- Capacity to meet Waterwise Display Village guidelines.

Quality of Work

A Overall quality of construction

Water Management Planning & Systems

- B A water management plan/strategy demonstrating the approach to water protection and conservation, re-use opportunities and measures to reduce consumption of potable water at the occupational stage.
- C The development and application of techniques or technologies for promoting the sustainable management and saving of water, including the ability for wider industry application.

Water Saving Materials & Fittings

- D Use of water efficient appliances and fittings.
- E Use of non potable water resources.

F Installation of water efficient irrigation systems and other techniques used to conserve water use and protect receiving waters.

G Use of predominantly indigenous or drought tolerant plant species or creation of garden zonings with complimentary plant species.

Benefits of Water Saving & Innovation

- H Evidence of water consumption savings at both the construction and occupation stages of development, measured in terms of:
- Likely average usage of potable water per person or per dwelling unit.
 - The expected storm water discharge savings.
 - The expected sewer discharge savings.

Innovation

I The use of technology in the design, construction and operation of the building, including the cost effectiveness and practicality of innovative practices and the ability to replicate this innovation in other housing projects.

GREENSMART RESOURCE EFFICIENCY

This award recognises outstanding achievement in resource management, including waste avoidance and recovery, in a housing project e.g. a residential building or project and its associated civil contracting or demolition works. Projects should display achievements in the prevention/avoidance of waste through innovative designs and practices, use of recovered materials or the utilisation of existing buildings, facilities or infrastructure.

JUDGING CRITERIA

The judges will consider the practicality of chosen methodologies, the level of innovation involved in the effectiveness of on-site practices, as well as actual amounts of waste avoided, re-used or recycled in the project.

Evidence of how effective solutions have been incorporated into mainstream business practices will also be taken into account.

Quality of Work

A Overall quality of construction.

Water Management Planning & Systems

- B Innovative systems, design and processes employed to prevent/avoid waste and increase use of recovered materials.
- C Utilisation of existing buildings, facilities, infrastructure etc (adaptive reuse).

Materials Selection

- D Choice of materials: salvaged content and the use of reusable and/or recyclable materials.
- E Purchasing systems and practices to increase use of renewable and/or recycled content materials and components.

Benefits of Resource Recovery & Innovation

- F Evidence of strategies/facilities in place to recycle ongoing waste generated by occupiers (paper, glass, recyclables, organic).
- G Evidence of strategies/facilities in place to educate project managers, supervisors, contractors and sub-contractors to recycle waste generated during construction through waste planning, either as part of an Environmental Management System or a Waste Management Plan.

- H The use of new technology in the design, construction and operation of the building, including the cost and practicality of innovative practices and the ability to replicate this innovation in other housing projects.

HIA Western Australian GreenSmart Awards

GREENSMART PRODUCT

This award recognises a product that is integral to the construction or operation of a home that can either: reduce operational water or energy use in the home; or provide healthy living environments for occupants; or contain recycled content from waste material or sourced from renewable materials. The product must have been placed on the market within the 12 months prior to the closing date of entries.

Your entry must describe your company's role in the manufacturing of this product and bringing the product to market. If you are not the manufacturer you will need to acknowledge the manufacturer and submit a joint entry, where both entrants are HIA members. Please note, if your entry is successful only one award will be issued. Additional awards can be purchased following the presentation.

If you are a distributor of the product you will need to advise what form your distribution rights take eg sole distributor.

JUDGING CRITERIA

Nominated products will be judged according to their application of new technologies and design innovation, their promotion, environmental achievements and cost-effectiveness. Additional weighting will be awarded to products recognised as Australian Made.

Specified & Proven Environmental Benefits

- A Details of environmental benefits and application in residential construction, including the production phase and material used, demonstrating life cycle costing.

Innovation & New Technology

- B Introduction and application of new technology or design innovation.
- C Practicality of installation and application of the product.

Cost Effectiveness

- D Purchase price – comparison to other available products.
- E Installation / construction / maintenance
- F Operational savings.

Standard of Finish/Presentation

- G Standard of finish/presentation of product to the consumers.

Origins of Product Manufacture

- H Proof of product being recognised as Australian Made.

Promotion

- I Marketing approach through promotional material demonstrating environmental benefits.
- J Proven benefits and advantages of the product to home buyers over comparable products.

GREENSMART PROFESSIONAL

The HIA GreenSmart Professional Award is open only to accredited HIA GreenSmart Professionals. The GreenSmart Professional must have completed the GreenSmart course.

Awarded to the HIA GreenSmart Professional who best demonstrates, by written submission, the successful application of the HIA GreenSmart approach in a residential construction capacity.

JUDGING CRITERIA

Entrants will be judged according to their ongoing practices demonstrating the application of cost-effective integration of GreenSmart principles into business administration and operational procedures. Submissions should include relevant business documentation, specific examples of how GreenSmart principles have been put into practice and photographs of case studies.

Entry Questions for the 2010 GreenSmart Professional Submission.

Approach to Design, Building or Professional Service

Outline your individual philosophy on environmentally responsible building and how this has influenced the direction of your business

Consider:

- > What environmental features are of most importance to you and why?
- > What environmental features have you been incorporating into your housing projects and why?

Demonstrate how effective you have been in creating or leading change in the housing industry

Consider:

- > Have you created or lead change with others in the housing industry?
- > Have you worked with customers to achieve an improved environmental outcome?

Identify who you influence to promote improved environmental outcomes and explain how you influence them

Consider:

- > Who do you have contact with? Eg contractors, product manufacturers and suppliers, customers, apprentices, service providers
- > How can you measure your success in instilling change?

Demonstrate how you are expanding your knowledge and keeping abreast of changing trends

Consider:

- > Where do you obtain your knowledge from?
- > Do you install new products in your housing projects and review their proposed benefits?

CASE STUDIES / APPLICATION OF GREENSMART PRINCIPLES

Provide current evidence of building the GreenSmart way or providing a service that incorporates GreenSmart principles

Consider:

- > What GreenSmart principles have you applied in a recent housing project and why?
- > Do you always incorporate good site management practices? If not what are the constraints?

What are your learning's from a showcase or experimental project incorporating environmental features?

Consider:

- > Do you have an opportunity to review an innovative or experimental housing project? If so, how do you undertake a review and learn from its results?

HIA Western Australian GreenSmart Awards

Incorporation into Business Plan and/or Operational Practices by the Individual

Outline how environmental issues have been incorporated into decision making processes for your business.

Consider:

- > Have you got systems in place to reduce your businesses carbon footprint?
- > Have you got a purchasing system in place for your business operations where decisions are based on environmental features?
- > Have you got agreements in place with product suppliers for the return of packaging material for household appliances?

How do you see the housing industry adapting to a changing environment?

Consider:

- > Do you believe there will be changes in the way we build houses in the next two years and what would this include? Eg house size, material use, choice of material based on life cycle assessment and construction methods, carbon offsetting of house construction, adaptable, modular or smart housing

Innovation and Promotion

Outline how you communicate your business philosophy

Consider:

- > public presentations, publications, informative website
- > How has this approach been communicated with your clients?
- > Do you promote your business as providing a point of differentiation from others?
- > Do you promote yourself as a GreenSmart Professional in personalised marketing material?

List the principles, practices or products that you see yourself using in the future to build the GreenSmart way and why.

Consider:

- > What is a product, system or service that you see yourself using/incorporating in the next 12 months? Why?
- > Are you planning a new era for your business with respect to environmentally responsible housing? If so what is the focus?

Testimonials

- > Client satisfaction in environmental outcomes and practices
- > Number of completions or records of practice implementation

Western Australian Categories - The following categories are presented at the WA GreenSmart Awards only. Winners DO NOT progress to the HIA Australian GreenSmart Awards.

GREENSMART DEVELOPMENT

Awarded to a multi-unit residential development or multi-use project with a substantial residential component (high or low rise) that best demonstrates commitment to minimal environmental impact or net environmental gain.

JUDGING CRITERIA

Projects will be judged according to their overall environmental contribution and management outcomes, including aspects such as energy, waste, water and site management, solar orientation, design and construction innovation, overall amenity achieved and practices employed to ensure minimal environmental impact as well as ongoing environmental care. Visual appeal, construction finish and suitability to site will also be judged, together with the liveability of the project and demonstrated cost effectiveness.

Project Design & Innovation

- A The use of new technology in the project design, construction and operation of the building, including the cost effectiveness and practicality of innovative practices and the ability to replicate this innovation in other developments.
- B Design improvisation that addresses site constraints and neighbourhood character.

Environmental Management

- C Energy Efficiency - e.g. energy rating of building envelope, insulation, passive solar design, thermal massing, lighting, appliances and fittings, hot water systems etc.
- D Water Efficiency - e.g. appliances, tap and pipe fittings, landscaping, outdoor watering systems, water tanks etc.
- E Resource Recovery - e.g. material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.

- F Indoor Air Quality - e.g. Use of low-allergen or non-toxic materials, cross ventilation.
- G Material selection - e.g. evidence of life cycle analysis and consideration of embodied energy etc.

Site Management

- H Evidence of construction measures that minimise negative environmental effects - e.g. storm water and erosion control, minimising site disturbance, innovative construction technique, noise control and vegetation protection etc

Quality of Work & Visual Appeal

- I Overall quality of construction
- J External street appearance and suitability of response to site constraints (e.g. slope, vegetation)

Liveability & Cost Effectiveness

- K Practicality of design layout, accessibility and market appeal

HIA Western Australian GreenSmart Awards

GREENSMART HOME RENOVATION

This award will be presented to the residential project, involving an extension or renovation that best embodies GreenSmart principles in a practical, cost effective way.

JUDGING CRITERIA

The project will be judged according to its quality of workmanship, its design and construction innovation in relation to the transition between old and new, its environmental outcomes including improved sustainable performance. Nominations must clearly demonstrate environmental initiatives including energy, water and waste, resource recovery, material selection and site management. The overall appearance, suitability to site, together with demonstrated cost effectiveness and practicality will also be considered.

Quality of Work

A Overall quality of construction.

Innovation

- B The use of new technology in the design, construction and operation of the building, including the cost and practicality of innovative practices and the ability to replicate this innovation in other housing projects.
- C Integration of the new portions of the dwelling with the old to create a seamless transition.

Environmental Design, Features & Construction

- D Energy Efficiency – e.g. energy rating of building envelope, insulation, passive solar design, thermal massing, lighting, appliances and fittings, hot water systems etc.
- E Water Efficiency – e.g. appliances, tap and pipe fittings, landscaping, outdoor watering systems, water tanks etc.
- F Resource Recovery – e.g. material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.
- G Site Management – e.g. storm water and erosion control, minimising site disturbance, innovative construction techniques, noise control and vegetation protection etc.

H Indoor Air Quality – e.g. Use of low-allergen or non-toxic materials, cross ventilation.

I Material Selection – e.g. evidence of life cycle analysis and consideration of embodied energy etc.

Visual Appeal

J External street appearance and suitability of response to site constraints (e.g. slope, vegetation).

Liveability & Affordability

K Demonstrated improved performance from original building, practicality of design, layout and environmental cost effectiveness.

GREENSMART DESIGN CONCEPT

This award recognises a residential building or development that demonstrates how it will best embody HIA GreenSmart principles, through its effectiveness in integrating positive environmental outcomes into the design. The project may have achieved master plan status, or have successfully been accepted as a winning tender or obtained development or construction approval.

JUDGING CRITERIA

The design concept will be judged according to its overall environmental vision and proposed outcomes, including such aspects as energy, waste, water and site management, innovative construction techniques, and practices to be employed to ensure environmental care both during and after construction. Originality, practicality and site suitability are also key elements, together with the overall affordability and market appeal of the project.

Design innovation, Explanation & Promotion

- A Innovative design incorporating the use of new technologies or principles.
- B Design improvisation that addresses site constraints and neighbourhood character
- C Explanation of project marketing that promotes GreenSmart practices e.g. visual aids, clarity in explanation of environmental gains for future customers.

Environmental Considerations in Design

- D Energy Efficiency – e.g. energy rating of building envelope, insulation, passive solar design, thermal massing, lighting, appliances and fittings, hot water systems etc.
- E Water Efficiency – e.g. whole of project measures designed to encourage water reuse and efficient usage through appliances or fixtures, within individual buildings or dwellings, etc.
- F Resource Recovery – e.g. material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.
- G Indoor Air Quality – e.g. use of low-allergen or non-toxic materials, cross ventilation.

- H Material Selection – e.g. evidence of life cycle analysis and consideration of embodied energy etc.
- I Site Management – Evidence of construction measures that minimise negative environmental effects – e.g. storm water and erosion control, minimising site disturbance, innovative construction techniques, noise control and vegetation protection etc.

Liveability & Affordability

- J Practicality of design layout, accessibility and potential market capture.

HIA Western Australian GreenSmart Awards

GREENSMART SMART HOUSING

Awarded to the residential building project that best integrates technology and in a manner that benefits the environment and liveability of the home effectively. The project must be 'technology smart' and HIA 'GreenSmart' in its environmental and liveability achievements. These achievements may be either internal or operational to the home(s), provided as part of the project (including its method of construction), or may be external to the project.

JUDGING CRITERIA

The award nominations will be judged according to their effectiveness in integrating positive environmental outcomes with technological advancement. Nominations must demonstrate achievements in telecommunication, universal access or home security, energy savings, water savings and the use of monitoring systems to control resource use and environmental performance. Nominations will also be assessed according to innovation in new technologies and design.

Quality of Work

A Overall quality of construction.

Energy Saving Systems

B Use of energy saving technologies through design and construction innovation, both internally and externally e.g. lighting, power, hot water, automated heating & cooling systems designed to improve energy efficiency, etc.

Water Saving Systems

C Use of water saving technologies through design and construction innovation, internally and externally eg; water efficient appliances, water reuse, irrigation, automated systems designed to reduce the use of portable water etc.

Operational Monitoring Systems

D Use of technologies through design and construction innovation, both internally and externally that monitor resource use and environmental performance.

Liveability

E Practicality and efficiency of design, particularly in the use of technologies or automated services for universal access, home security or communications.

New Technology & Innovation

- F Incorporation of construction techniques that utilise modular concepts, achieve reduced environmental outputs or maximise waste and resource efficiencies.
- G Ability of project to encourage telecommuting.
- H Cost of new technologies and identifiable operational savings.
- I Ability for innovations to be replicated in other projects.

GREENSMART PARTNERSHIP

The HIA GreenSmart Partnership Award is open only to HIA GreenSmart Partners. The award will be presented to the organisation (representing a business, government or community group) whose efforts best typify a collaborative partnership approach with HIA in promoting and demonstrating HIA GreenSmart principles or the HIA GreenSmart programme.

JUDGING CRITERIA

Nominations will be judged according to achieved environmental outcomes, industry benefit derived from the partnership and the effectiveness of leading positive change. Partner involvement bringing work to fruition, together with the effectiveness of internal and external communication will also be considered.

Nature/Scope of Work, Service or Project involving Partnership Approach

- A Nature of the project (difficulty, complexity etc) and collaborative effort involved in the partnership.
- B Degree of innovation involved in the partnership outcome.
- C Relevance of the partnership to the housing industry.

Effectiveness of Work, Service or Project to GreenSmart Initiative

- D Environmental outcomes achieved by the project/partnership.
- E Industry benefit derived from project/partnership (practicality, applicability to housing industry, ability to replicate work, etc).
- F Effectiveness in creating or leading change.
- G Evidence of positive change having been effected by the project/partnership.

Partner Involvement

- H Extent of partners involvement in bringing the project, work or service to fruition.

Communication of Project Outcomes

- I Extent to which work, service or project outcomes have been communicated to others.
- J Effectiveness of communication to the housing industry and general public.