

How does a sustainable home help the environment?

These days there is a lot of talk about “living sustainably” but what does it actually mean in practical terms? What does a sustainable home have that other homes don't have?

Article by Vivion O'Kelly.
Images courtesy of BRIGHT.

Shut The doors. Turn off the lights. Make sure the immersion heater is switched off. That was about it in days gone by, the full extent of our commitment to energy saving in the home, and we thought of these measures only when going on holidays. And as far as conservation and sustainability was concerned, we hardly thought about it at all. We knew little of passive home construction, and ecology was a word beloved of hippies, earth mothers and their kind.

How times have changed. Not just because the price of heating, cooling and maintaining a home has gone up, but because we have all become more aware of the vital importance of conserving what's left of our natural

environment. It may test personal commitment to see factories still spew out tonnes of dangerous substances into the air in many parts of the world, but we do what we can. And it starts in the home.

In the case of **Vista Lago Residences**, it started on the drawing board. Right from the start, BRIGHT, the development company behind this unique and sustainable community of villas in the hills above Marbella, decided to go the full nine yards in ensuring that this project would be one of the most innovatively sustainable luxury developments in Southern Europe. They also wanted proof that they had done so, and this comes in the shape of BREEAM certification, which is a universally recognised badge of excellence in sustainability and conservation technology. This affects both the way Vista Lago villas are built and the functionality of their supporting systems.

Every time a resident washes their hands or has a shower, they can be certain that water used is not being wasted.

For a start, sustainable homes need to be exceptionally well insulated, to a degree unusual in residential properties up to recent times. The thermal insulation of a Vista Lago building envelope has been thickened and thermal bridges have been reduced, to achieve a higher Spanish regulations rating for non-renewable energy consumption and carbon emissions. An indoor ventilation system with both exhaust and intake heat recovery system is in place in all rooms, contributing to both indoor air quality and energy saving.

Each villa will have an 8kW photovoltaic panel installation to contribute to the electrical consumption of the home, including the production of hot water. These will produce approximately 14000kWh per year. This is more than enough to cover the cooling and heating requirements of each villa,

Vista Lago is located in Real de La Quinta and surrounded by magnificent countryside

pool, and one has, in very simple terms, a comfortable and care-free home.

In short, the "excellence" level in BREEAM Sustainability Certification means following numerous and strict environmental guidelines, from the environmental footprint of the materials used throughout the home life cycle to the impact of the home, both inside and outside each villa, on the environment.

There are no shortcuts to excellence. Attaining such a degree of environmental friendliness has been a long and arduous road, built up bit by bit over many decades by dedicated pioneers in the protection and conservation of the natural world. How far we are from full-percentage sustainability in home construction we do not yet know, but we can rest assured, in a Vista Lago villa, that we are closer to it than in almost any other part of the world.

As the author Robert Swan said "The greatest threat to our planet is the belief that someone else will save it." We all have to do our bit, and like charity – it starts at home.

For more information on Vista Lago Residences visit: <https://vistalago.es> or call the Sales Team directly on: (+34) 648 981 111
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Vista Lago villas are designed to nestle into the mountain side rather than sit on top of it

which are approximately 5000kWh per year. The interior and exterior lighting will also be energy saving, with high luminous efficiency.

Long before the architects sat at their drawing boards, the Vista Lago developers had taken a close look at the terrain in its natural state and determined that it would stay in this state as much as was humanly possible. Their aim was two-fold: to reduce the visual impact of the buildings on the environment and to take advantage of their better adaptation to the Mediterranean climate. All Vista Lago homes will have Class A energy levels with regard to primary energy use and carbon dioxide emissions.

Storage of rainwater and grey water will exceed 75 percent of toilet, irrigation and

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washdown water use, with grey water and rainwater made suitable for irrigation re-use, a highly effective dual-flush systems in place, pressurised water-saving systems in the taps and a rainwater harvesting system capable of meeting 50 percent of irrigation demand. Every time a resident washes their hands or has a shower, they can be certain that water used is not being wasted. And when the rain falls, they can be sure the moisture sensors in the soil will detect the rain and adjust the automated irrigation accordingly.

Climate control is an essential factor in comfortable living, and with heating and cooling systems that allow for independent adjustment of temperature settings for each of the main living areas, the temperature of the air in the

home does not have to rely fully on the excellent ventilation resulting from state-of-the-art architectural design, by which at least 80% of the working area in every kitchen, living room, lounge and study will benefit from direct daylight from the outside (quite apart from the numerous other measures taken to ensure savings in artificial light energy).

While these homes have thus been designed to take full advantage of natural airflow, they also have an intelligent climate control system that optimises electricity consumption and includes monitoring of the system by mobile device or a thermostat. Add to this heat pumps and an aerothermal heat recovery system for both the HVAC system and the domestic hot water system, underfloor heating systems, photovoltaic panels and a renewable energy system to heat the swimming

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Reducing negative environmental impact is part of actively working towards a sustainable future.