LOW CARBON HOMES
BY MORRISH HOMES

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Morrish Homes has launched the first low carbon homes to be built at Nansledan, the Duchy of Cornwall's award-winning extension to Newquay. Designed to combine exceptional energy efficiency with natural, sustainable materials, the two new EPC A-rated homes represent a major step forward in the development's long-term vision for a greener, more sustainable future.

1. **HEAT PUMP** – The homes are heated via an Ideal Logic air source heat pump with an energy performance rating of A+++.

2. **SOLAR PANELS** – Generate clean renewable energy that reduce reliance on the national grid and will help to reduce energy bills and carbon emissions.

3. **BATTERY STORAGE** – Increase the efficiency of the solar PV array by storing excess energy generated and storing it for later use. This offers energy cost savings and a backup energy source.

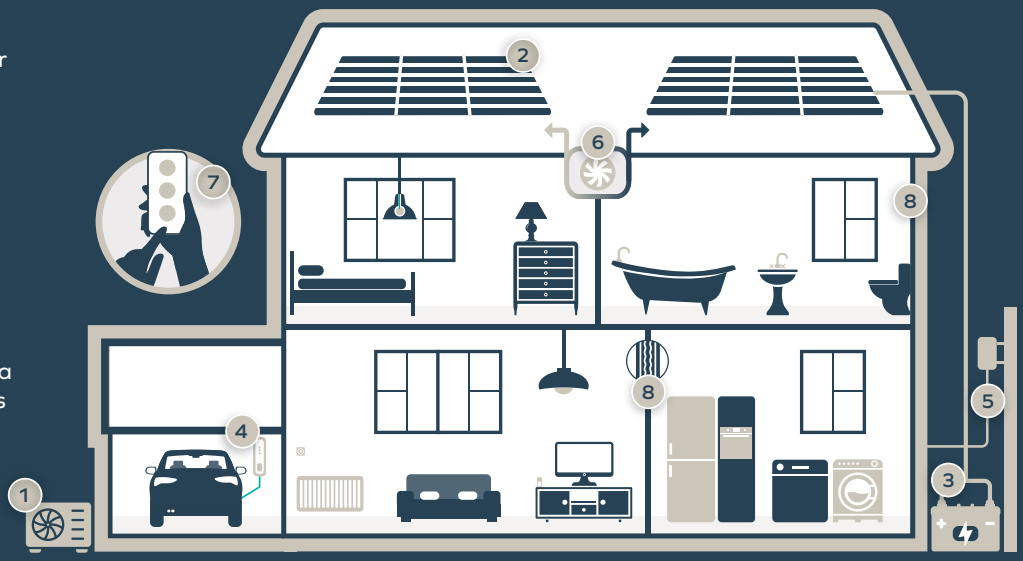
4. **EV CHARGING** – Can increase power consumption at home, but smart tariffs enable EV owners to charge vehicles cheaply overnight.

5. **NO GAS CONNECTION** – Connection to a rapidly decarbonising national grid means no fossil fuels are used in the homes.

6. **HEAT RECOVERY** – The ventilation system recovers heat from stale air being removed from the home and transfers it as fresh warm air, improving air quality and reducing wasted heat.

7. **SMART HOME HUB** – Enables smart-enabled low carbon technologies to be run most efficiently to respond to price signals.

8. **FABRIC ENERGY EFFICIENCY** – High performance insulation and airtightness minimise heat loss and use far less energy for heating and cooling the homes. Twin timber frames with natural fibre hemp insulation throughout the home help to promote a healthy indoor air quality.



CONSUMER PERCEPTION

OVER 80%
OF PEOPLE
who recently switched to a heat pump stated that they were satisfied or more than satisfied with their **new heating system**.

DID YOU KNOW?

Emerging evidence suggests that **low carbon technologies** can **add value to the average house** (including heat pumps, solar panels and EV chargers).

HEAT PUMP
+1.7 – 3%

SOLAR PANELS
+0.5 – 2%

ZERO BILLS*
+16%

EV CHARGER
+2 – 2.75%

*A'Zero Bills' home is one that meets a 'Zero Bills' specification including solar panels, heat pump, battery storage, energy and heat smart controls, and is therefore eligible for the 'Zero Bills' tariff.

"Solar Panels" are now in the **top 100 most searched** keywords on Rightmove, while "Heat Pumps" has also surged to **the top 200** in 2024.

Over one-third of new homes built today have some form of **electric heating**.

Source: baringa.com/globalassets/insights/low-carbon-futures/a-baringa-report_cleantech-homes-healthier-living-lower-bills.pdf

DID YOU KNOW?

1

LENDERS are increasingly incentivising investment in **'CLEANER' HOMES** as they are more likely to hold value in the long term because they are **NET ZERO READY** and do not need retrofitting to meet future standards.

2

It helps them meet their **NET ZERO COMMITMENTS**

3

LOWER ENERGY BILLS
free up disposable income for borrowers

A RESILIENT INVESTMENT

THE REAL BENEFITS

The Naked Solar PV System at Homes 42 and 43 show how smart energy choices can make a big difference:

LOWER ENERGY COSTS OVER TIME

A simple cost comparison shows how much you can save over 25 years. Homes with solar panels (yellow line) spend far less on energy than those without (beige line).

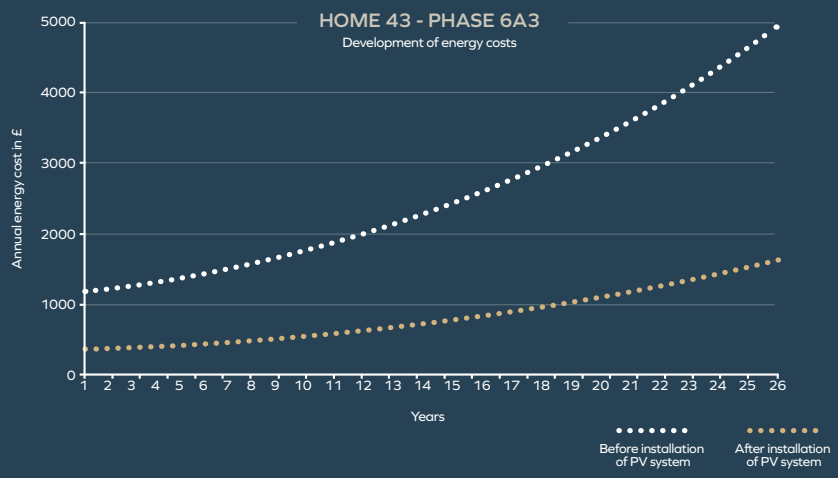
DESIGNED FOR MAXIMUM SUNLIGHT

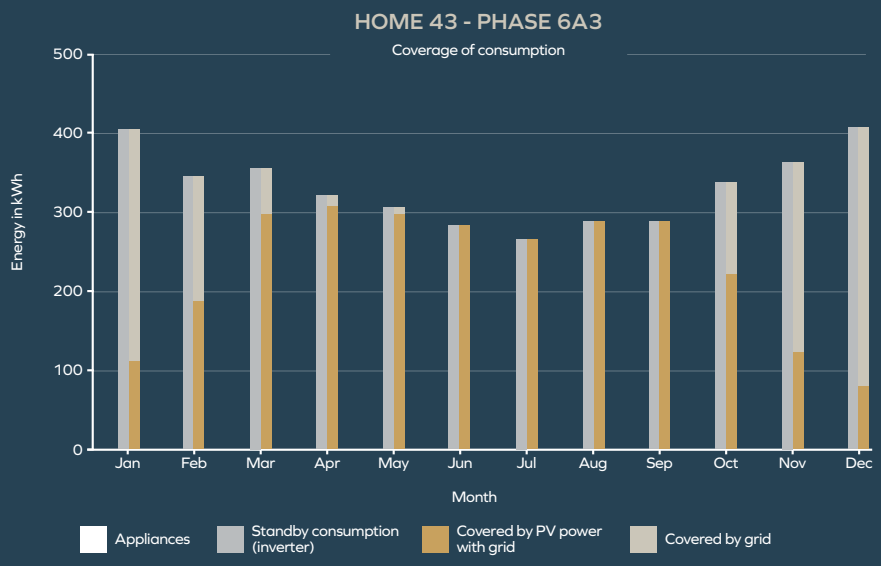
The roof is cleverly built with an east–west orientation, so the solar panels catch sunlight from morning to evening – boosting energy production all day long.

SMART ENERGY USE

Performance charts show how solar panels often produce more energy than the home uses. That extra power goes back to the grid, helping reduce bills even further.

These visuals highlight how combining solar technology with high insulation creates a home that's energy-efficient, low-carbon, and cost-effective.





TWIN TIMBER FRAME WALLS WITH NATURAL HEMP INSULATION

MORRISH HOMES

BOPAS Buildoffsite Property Assurance Scheme

SYDENHAMS Timber Engineering

GRWN Group