



FAQ



**PROJECT
ZERO**
Affinity Water



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What is Water Neutrality?

Being “water neutral” means that a new development takes no water at all from the environment. We will achieve this by making new homes highly water efficient, influencing residents' behaviours and “offsetting” or reducing water waste from across the surrounding community.

How does water neutrality help the environment?

The UK is facing a water shortage. There is a predicted potential 4 billion litres a day deficit by 2050, (Environment Agency, 2018) and Water Neutrality is an important approach for new housing developments not to add to an existing or future water scarcity challenges. It is important that new developments minimise the additional pressure they place on water supplies and the water environment, especially where they are already under stress. To do this, all new development needs to be far more water efficient than current Building Standards require. The cross-sector Future Homes Delivery Plan (future-homes.org.uk) sets out many of the things that are needed together with a recommended timeline. One of the key things that the plan includes is water neutrality for new developments.

Will water neutrality help combat climate change?

Around the World climate change and rising temperatures are impacting water access for people as droughts and floods become more frequent (Environmental Agency, 2018; IPCC, 2022). In the UK warmer temperatures lead to higher demand for water and when droughts occur and there is less rainfall our water resources in rivers and reservoirs run low (Met Office, 2021). As the temperatures become hotter, we are likely to run into increasing water shortfalls placing more importance on measures such as Water Neutrality when new homes are built. It will help us to facilitate sustainable growth and to have a healthy environment. According to Currie & Brown and AECOM (2019), Around 20% of the homes that will exist in 2050 are expected to be new builds. The more water efficient we can make all new development, the less likely it is that realising future growth or achieving a healthy environment will be limited by water availability.

What kind of measures can be introduced?

To achieve water neutrality, water demand is first minimised through efficient fittings, rainwater harvesting and water reuse. Any remaining additional demand is then offset locally through water saving interventions in the local community. This requires collaboration between relevant stakeholders and the use of accurate water consumption data for offsetting. Some argue that we already take a similar approach with new development and flooding so why not for water demand?

What is Project Zero?

Project Zero (formerly known as Water Neutrality at NAVs sites) is an innovation project and winner of the Water Breakthrough Challenge, part of Ofwat Innovation Fund with Challenge Works and Nesta. The aim is to test the concept of Water Neutrality at different locations. Our journey towards Water Neutrality started at ***Bidwell West in Houghton Regis***, a development of 908 homes, where the Water Neutrality Team have tested the effectiveness of a behavioural campaign on 908 houses working with three external consultancies. The behavioural change experts Grapeviners and IWNL, who operate water and wastewater networks across the UK, and are the Affinity Water NAV partners, and H2OiQ, a manufacturer and supplier of water efficiency products completing offsetting in the local area. It is also working closely with Central Bedfordshire Council and the local community.

What is a NAV?

New appointments and variations (NAVs) are limited companies which provide a water and/or sewerage service to customers in an area which was previously provided by the incumbent monopoly provider. NAVs also have the same duties and responsibilities as the previous statutory water company. Within the Affinity Water region there has been a significant increase in the number of NAVs sites, and this is expected to continue rising. The project aims to support current NAVs and through water neutrality, open the market to new entrants.

What is offsetting?

Offsetting is essential for achieving water neutrality and brings the overall demand down for a new development site. We find non-households with high water consumption and work collaboratively with them to retrofit water efficiency technology ~~tech~~ and identify & fix potential leaks.

What are the results?

At Bidwell West, the water usage pre campaign was **262,000** litres per day. Post behaviour change campaign the water usage was **238,000** litres per day. Offsetting saved an additional **246,000** litres per day in the local area. This means we are leaving **12,000** more litres in the environment than before the new homes were built. We set out with the aim of achieving water neutrality, however we can now say Bidwell West is water positive, making it the first of its kind.

Do you share open data?

We are openly sharing our data and will publish this via a Water Neutrality Blueprint so any new development can adopt the same steps to achieving water neutrality, nationally or internationally. Currently we have two reports published:

- [Water Neutrality at NAVs sites report](#)
- [Lessons Learned](#)

What response have you had from customers and businesses who are working with you?

Thanks to the local community we can proudly say Bidwell West is Water Positive. All the partners have worked around the clock to make water neutrality a reality. Organisations like Chilterns School have taken part and are helping us offset the new development's water demand by reducing their own water consumption. Water Neutrality is an environmental approach that will help us protect the environment, support our society to continue growing and mitigate the water scarcity future challenges and help us combat the impact of climate change on our water resources. Collaboration is the key to its success.

What are the next steps?

We will look to trial water reuse at a new development site combined with our previous approaches such as offsetting, and a behaviour change campaign. Water reuse in new homes can include systems like grey water recycling, which collects wastewater from sinks, showers and washing machines to reuse for non-potable purposes such as toilet flushing and irrigation supplies. Currently due to building regulations, Affinity Water are unable to install water reuse systems, however we are working with DEFRA who are considering the practical solutions for grey and green water harvesting to enable this to happen.

In what area of the Country does Affinity Water work?

Affinity Water has been supplying water to the local community for more than 170 years. Our mission is to provide sustainable, high-quality water and work together with our community to make better use of water and safeguard the local environment now and in the future. We are the largest water-only supply company in the United Kingdom. We provide 950 million li-

tres of water each day to a population of more than 3.8 million people in the South East of England covering parts of Bedfordshire, Berkshire, Buckinghamshire, Essex, Hertfordshire, Surrey, the London Boroughs of Harrow and Hillingdon and some of the London Boroughs of Barnet, Brent, Ealing, and Enfield. We also supply water to the Tendring peninsula in Essex and the Folkestone and Dover areas of Kent.

How can I stay up to date with the project?

We publish a seasonal newsletter with all the latest updates from Project Zero and the Water Neutrality Team so you can keep up to date. Our newsletters are published via our website: [Newsletters](#). Additionally, the Team attend events and conference to share our knowledge with the wider sector. If you have any speaking opportunities, please do get in touch with a member of the team Sustainablehome@affinitywater.co.uk to discuss.

Can I receive an incentive for a Water Efficient Development?

Yes, Ofwat have introduced the Environmental Incentives Common Framework (EICF), effective 1 April 2025. This is aimed at incentivising new household developments to build more water efficient properties. The framework introduces two new elements into our Developer Charges, the Environmental Component and Environmental Incentive. While the Environmental Incentives Common Framework (EICF) focuses on promoting water efficiency in new builds, it is however not a part of Project Zero workstreams. Project Zero is an Ofwat and Nesta sponsored innovation project specifically dedicated to achieving water neutrality for new developments, ensuring they do not contribute to increased water demand.

The Environmental Component is a charge of £127 for each water service provided to a household property connected to the network. This charge is to fund the Environmental Incentives.

The Environmental Incentive is a payment designed to encourage customers to create water-efficient properties by installing more efficient fixtures and fittings (e.g. taps, showers) and/or combining these with water reuse opportunities.

We have adopted a tiered approach to our Environmental Incentives payments aligning to the baseline methodology applied by EICF, alongside enabling an approach to drive greater efficiencies, through our Enhanced, Premium and Water Neutral tiers.

Environmental Incentive Tiers

Tier	Cost	Criteria
Basic	£127	Meet baseline fixtures and fittings methodology set in EICF
Enhanced	£590	Achieve water usage of between 90 – 81 litres per person per day
Premium	£2,163	Achieve water usage of 80 litres per person per day or less
Water Neutral	£2,880	Achieve out premium Tier and offset the remaining water demand from the site

Further information on our water neutral approach can be found on our [Bespoke Environmental Incentives](#)

Further information on EICF can be found [here](#).

References

Environment Agency. [2018]. *The state of the environment: water resources*. <https://www.gov.uk/government/publications/state-of-the-environment-water-resources>

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