

Water Neutral Development

January 2021



waterwise



**Scottish
Water**
Trusted to serve Scotland



Definition and Scope

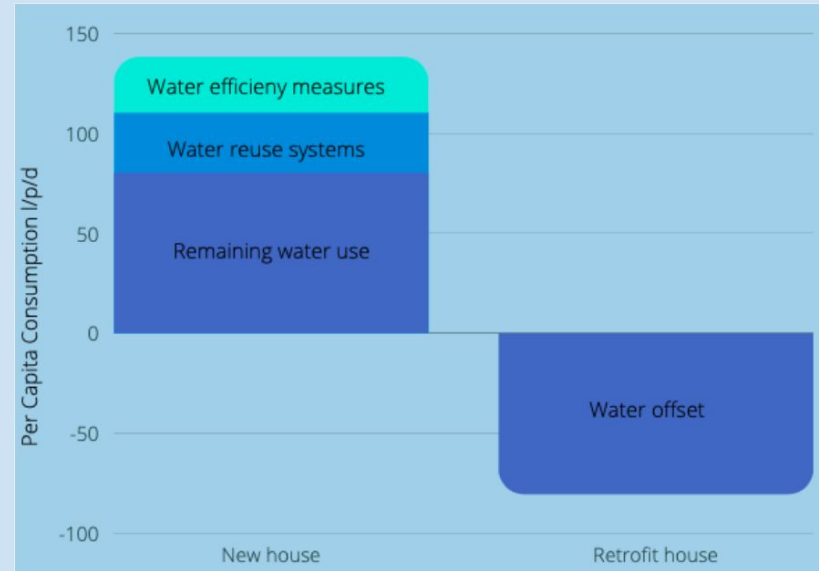


Scope of the report

- Water Neutrality can be applied to products, businesses, existing buildings
- New buildings, mainly looking at new domestic buildings

Our definition of Water Neutrality

For every new development, water demand should first be minimised then any remaining water demand offset, so that the total water demand on the public water supply in a defined region is the same after development as it was before.



Water Neutrality Hierarchy



waterwise
Water Efficiency Strategy
for the UK



Step 1 Reduce water use

- a. Water efficient devices
- b. Smart metering
- c. Water saving culture

Step 2 Reuse water

- a. Rainwater harvesting
- b. Greywater recycling
- c. Blackwater recycling

Step 3 Offset water

Water Neutrality Benefits

1. Water Saving
2. Carbon Saving
3. Money Saving
4. Environmental Impact
5. Improving Resilience
6. Enabling Future Housing



Building the First Net-Zero Water Campus in Silicon Valley

Dec 5, 2017 | [Josh Henretig](#)



Water Neutrality Barriers

1. The Low Price of Water
2. Lack of Targets
3. Funding
4. The Focus on Offsetting
5. Multiple Delivery Partners
6. Public Awareness



Barangaroo: Sydney's largest urban renewal project aims to recycle more water than it uses



Water Neutrality Enablers



1. Funding
2. Supportive Policies
3. Awareness
4. Business Resilience
5. Good Partnerships

'Water-Neutral' Supermarket





UK supermarket giant Sainsbury's has opened its first "water-neutral" store in Weymouth (which is completely self-sufficient for water), with a second to follow in Leicester at the end of the month. The moves form part of the company's ongoing commitment to reducing its water usage.

Key messages

- Water neutrality has the potential to deliver large scale water and carbon savings.
- This can help ensure sufficient water to meet the needs of people, business and the environment in a changing climate.
- It could also free up the water that will enable future housing and business growth and enhance the environment.
- It can be delivered with existing technology and water saving approaches and there are examples of where it is being adopted regionally; for new housing developments; by businesses and by industrial sectors.



Creating a world fit for the future



Independent review of the costs and benefits of rainwater harvesting and grey water recycling options in the UK

Final Report for Waterwise
WEStrategy002

The complex block contains the Ricardo logo, a large aerial photograph of a residential development with green spaces and modern buildings, and a blue horizontal bar. Below the bar is the title of the report and the final report identifier.

Recommendations



1. The National Planning Policy Framework should require the consideration of water neutrality in areas with constrained water resources, similar to flood risk “neutrality”.
2. Local planning policies should require developers to work with the local water company on proposals to minimise the water demand impact for new developments over a threshold size and target water neutrality.
3. Engagement between developers, water companies, and local authorities at a very early planning stage to discuss water resources and the potential for a development to be water neutral.
4. There is the opportunity to demonstrate the concept in practice on new developments, such as in the OxCam Arc.