

KingspanWater Case Study McLaughlin Residence, Banbridge, Co. Down



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Michael McLaughlin.

Client:	Michael and Isabel McLaughlin
Project:	Private Residence
Location:	Banbridge, Co, Down
Product:	KingspanWater Envireau Fully Integrated Rainwater Harvesting System

Looking to the future... an Environmental Home that'll stand the test of time

When Isabel and Michael McLaughlin were planning their new home in the countryside outside Banbridge, they had a clear vision of what they wanted.

“I have been interested in the environment all of my life, and I knew that this would be our last big move. So we set about creating our ideal retirement home, that is full of new environmentally-conscious technology,” says Michael.

Michael took the idea of a retirement home seriously and brought clear ideas into the design of the building. *“I’m still quite a distance from retiring, but I wanted to create a design that was future-proofed, and I think as we get older we all end up living on the ground floor.”* The result is a modern cottage style home with four bedrooms, a kitchen diner and study, which Isabel designed.

Michael’s day job as a Contracts and Environmental Manager with the well-known construction company Gilbert Ash gave him a fantastic understanding of what new technologies he needed in the new house. *“Every day at work I am dealing with large scale projects that are at the cutting edge of new building technology. I wanted to take what I had learned and include as much energy saving and future proofing technology as possible.”*

The house has a wood pellet boiler to power the underfloor heating and hot water system, solar collectors on the roof help to heat the water, and he has just installed a Westwind 10 kilowatt wind turbine. *“We are on an elevated site and will be able to generate electricity sufficient for our needs and have a surplus to export to the grid which will provide some revenue.”*

To get the maximum from water, Michael and Isabel installed a sewage treatment plant and rainwater harvesting system from Kingspan. *“Specifying a Kingspan sewage treatment plant made the tricky planning issues with the site much easier,”* he says.

“It is amazing how rainwater harvesting gives you back water independence in your home, and for the first time we are not dependent on anybody but nature for most of our water needs.”

The system works by collecting the rain falling on the roof, filtering it and storing it in a tank buried underground. The water is pumped from this tank to a header tank in the roof space and supplies the washing machine, the toilets and two outside taps. When there is not enough rainwater the system is taken over by the mains water supply.

“The majority of the water we use every day is for non-drinking uses and it makes perfect sense to capture rainwater for these purposes,” says Michael. He believes that in the foreseeable future there will be some type of charge for mains water and this is when the system will really come into its own.

It took over two years for Michael and Isabel to get his environmental retirement home from an idea to a finished building and they are delighted with the results. *“It couldn’t have turned out better. It is everything we need as a family; a comfortable, environmentally conscious home that is future-proofed for decades to come and is water and energy independent,”* he concludes.

Sustainable, Reliable, Affordable

