Leaders in water management and sustainability
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The need for a sustainable and responsible approach to resource use has never been more critical with Australia experiencing possibly its most severe drought and community concern around global warming at its highest.

As Australia’s sole producer and leading marketer of polyethylene, Qenos provides the building blocks that are integral to existing and emerging water conservation and management solutions. The high quality and performance of Qenos polyethylene makes it ideal for the production of reliable, effective and durable water storage, transport and delivery systems.

The Qenos commitment to sustainability extends to its own production methods and processes. Qenos is improving efficiency and decreasing pressure on resources in all of its operations. Efforts and achievements by Qenos in water saving have been recognised, with the company receiving Victorian Savewater awards in 2004 and 2007.

By reducing use of valuable natural resources, being more efficient and developing products that support sustainable resource use, Qenos is contributing to the quality of life today and into the future.

Value the difference we make

Polyethylene – integral to water management

Many of the products Qenos makes are essential to the manufacture of end products used in water conservation and management solutions. These include plastic tanks and pipes for water storage, transport and irrigation systems including commercial and domestic micro irrigation systems.

Products supplied by Qenos for all these applications are of the highest quality and comply with Australian Standards.

Urban water storage solutions

Since the early 1990s, Qenos has been supplying polyethylene to the Australian water tank production market.

The high quality and superior performance of Qenos products enables tank manufacturers to fully comply with the Australia Standard for rotationally moulded tanks.

In a recent study commissioned by The Australian Conservation Foundation, Environment Victoria and the Nature Conservation Council of NSW, rainwater tanks

Rainwater tanks are available in colour schemes to suit all architectural styles and tastes
‘As custodians of valuable water and power resources, we have a responsibility to show leadership in resource efficiency and management.’

Ross McCann, CEO, Qenos Pty Ltd.

were rated as a viable and cost effective urban water storage solution. They are five times more energy efficient than desalination plants and cost competitive when compared to dams.

In fact, the report noted that water tanks produced from Qenos polymer in 2007 will provide an additional 40 gigalitres of water each year, which represents approximately two per cent of Australia’s urban water usage.

Rural and agricultural water delivery

Qenos is also the leading supplier of polyethylene to the Australian pipe industry, offering a full range of Australian Standards approved products.

Polyethylene pipes are used in many water management and conservation applications, from the transport of drinking water to commercial micro irrigation systems used in agriculture.

In addition, Qenos also supplies the polyethylene which is used to provide corrosion protection to steel water pipelines. Qenos polyethylene is fusion bonded onto a preheated steel pipe providing a continuous protective coating.

With around 80 per cent of Australia’s water use directed to the distribution of water for domestic supply, stock and irrigation in rural areas, quality piping is essential to the efficient and effective delivery of water.

Polyethylene pipe is used to construct water infrastructure pipelines and is the material of choice in connecting pipelines to farms. Its flexibility means that it can be coiled into lengths that can be quickly laid or ploughed-in over vast distances. Its durability and toughness means it can last a lifetime without corrosion.

In rural and regional areas across Australia, water is distributed through an extensive network of open channels. Water losses from these systems, through seepage into the soil and from evaporation, can be as great as 90 per cent of the water originally entering the system. To combat the impacts of severe drought and ensure more effective water delivery, Qenos polyethylene piping is being used to upgrade open channel distribution infrastructure to reduce leakage, seepage and evaporation losses.

Conversion to closed piping systems can reduce losses to around five per cent of the water entering the system. When channel enclosure is complete, approximately 3,000 gigalitres of water each year, representing 12 per cent of Australia’s annual water usage, will be saved.

Water saving will be critical to improving the reliability and quantity of water available for farmers. It will also support the restoration of environmental flows to creeks and rivers, helping to keep our waterways healthy.

Agricultural watering systems

Polyethylene drip line and drip tape watering systems deliver water to a range of important agricultural crops such as grapes, olives and vegetables. The precise delivery of water and nutrients to crop root systems maximises yields while minimising wasteful delivery to weeds, and reducing disease and evaporation arising from wet foliage. Subsurface irrigation for vines can reduce water usage by as much as 40 per cent.
Domestic and recycled water supplies

Polyethylene pipe is the standard material used for connecting households to water mains. It is now also being used to connect to new recycled water mains at residential developments in Sydney’s Rouse Hill and Hoxton Park and Melbourne’s Werribee Field. This allows recycled water to be used for toilets, laundries and gardens – saving up to 35 per cent of precious drinking water supplies.

Larger diameter polyethylene pipes are also ideal for restoring networks of water mains. Polyethylene pipe does not corrode and sections are joined by welding, providing a supply system with very low rates of leakage and rupture. As polyethylene pipe is flexible enough to be pulled through old lines, city streets do not need to be excavated to allow for installation. Around 250 replacement projects have been planned for Sydney alone in 2007.

Garden watering

Drip watering systems are the most efficient means of delivering water to thirsty plants. They are set to become a standard in many gardens as households increasingly look at ways to conserve water and reduce garden water use.

Drip watering systems are made from polyethylene and a substantial volume of Qenos products goes to the manufacture of efficient watering systems for residential gardens, parks and community gardens.

Covering dams

Large dams also lose large quantities of water through seepage and evaporation. Evaporation rates vary throughout Australia, but typically 3-4 metres of water is lost from dams to evaporation each year. Dam liners and dam covers made from High Density Polyethylene are being used to almost eliminate these losses.

HDPE covered dams can save up to 4 metres of precious water each year.