

Resourcing the world

Seeing things differently

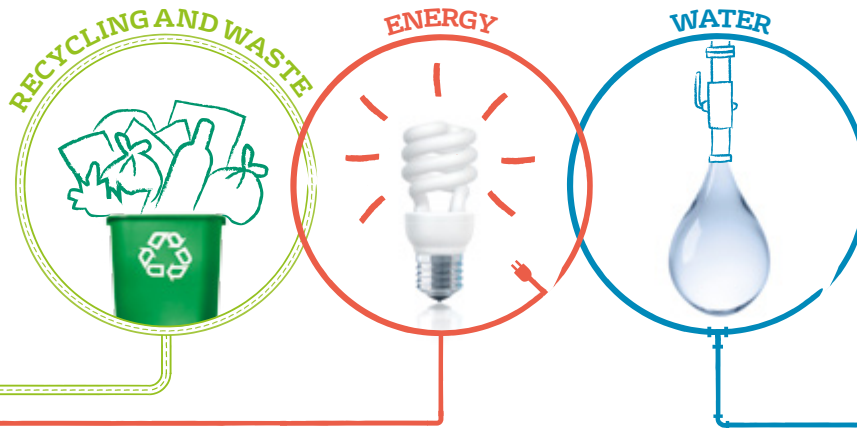


A closer look at Veolia in Ireland

At Veolia, we see things differently

For Ireland's **leading environmental services company**, sustainability means a **world without waste**. A world with **clean energy** and **water**. A **smarter** world committed to **preserving resources** for generations to come. And that makes **sustainability our business**.

We see the value in...



“Many industrial processes create by-products that can be reused or turned into new products. Because our three business activities – water, waste and energy – are interlinked, we are able to help address even the most complex resource management challenges.

That’s why we go beyond providing a comprehensive range of environmental solutions: we bring resource efficiency to our customers; we help build a circular economy in which waste is transformed into resource; and we champion sustainable societies. We call this resourcing the world. Veolia’s 577 employees in Ireland are dedicated to providing innovative solutions that are based on best practices, environmental protection and a better quality of life for everyone.”

Pat Gilroy, Country Director Ireland

...through a different kind of business model

There are no quick fixes to global challenges such as resource depletion, population growth, urbanisation and climate change but **we've already changed our business** to contribute to **sustainable development**.



We design and provide a wide range of **water, waste and energy solutions** that contribute to sustainable development

Why

Reduce resource dependency

Mitigate climate change

Create healthier communities

Protect the environment

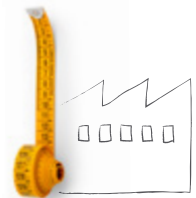
Improve quality of life

Our activities

Manufacturing green products and energy



Providing tailored solutions for our customers to help them preserve and save resources



Our approach

We create a diverse workforce that operates in a safe and innovative environment. We promote the green economy, build new markets and develop technological, financial and social solutions



Our value creation



Circular
Efficient resource management



Resilient
Improved efficiencies and risk management



Liveable
Reduced environmental impact



Inclusive
Improved social sustainability and stakeholder engagement

We see a circular economy...

In a **circular economy**, resources, such as **waste, water and energy**, are used for as long as possible. Eventually, they are recovered at end of life and turned into other products, **sources of energy or recycled raw materials**.

Already, 47% of our revenue in Ireland comes from circular products and services. This helps our customers to manage their resource use and make a more positive impact on the environment.

63% of hazardous waste at our Fermoy, Co. Cork treatment facility recycled as a substitute fuel or for reuse in the cement industry, saving **6,000 tonnes** of CO₂ emissions



Waste not, want not

The challenge:

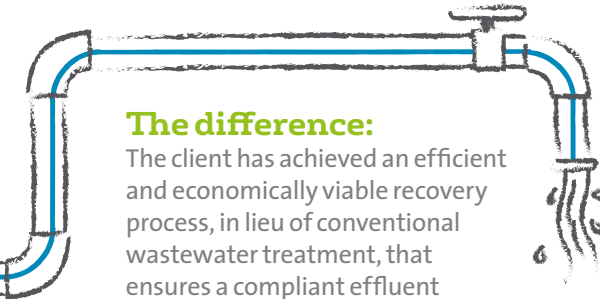
A large dairy processing company came to us needing to deal with high levels of phosphorus in a demineralised whey process reject line at their production facility.

The idea:

We used our patented Actiflo® technology, a pioneering high-rate clarification process, to treat the effluent and also to convert the phosphorus in the effluent into a valuable fertiliser product called Phoscalia.

The difference:

The client has achieved an efficient and economically viable recovery process, in lieu of conventional wastewater treatment, that ensures a compliant effluent discharge through a sustainable solution that produces a valuable fertiliser.



...and lean, clean industry

We are always **exploring innovative solutions** for our industrial customers that **save energy** and resources as well as cut costs.

Working closely with our customers, we can understand their individual needs and find the right approach to help them manage and optimise energy and resource use.



A highly skilled workforce

We are proud of our Accredited Employer status from Engineer Ireland. It reflects our ongoing efforts to create an innovative workforce.

Distilling ideas

The challenge:

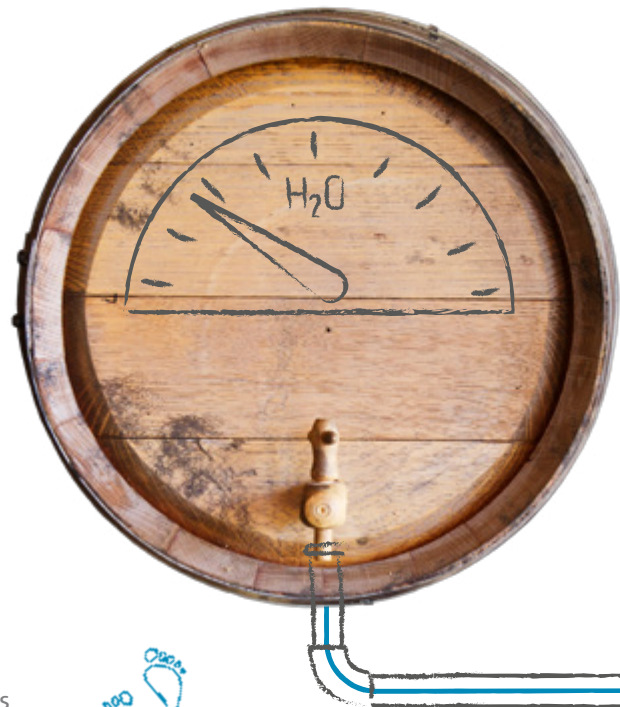
Our client, a large whiskey producer, asked us to develop and deliver a solution to meet its water demands from cradle to grave, including multiple source extraction, water treatment, distribution and effluent treatment, while minimising overall carbon and limited water footprint.

The idea:

Veolia optimised the client's complete water cycle, using the Water Impact Index tool to optimise the water and carbon footprints of the new treatment facility. We provided a turnkey solution developed around Veolia proprietary processes, such as Biosep™ and Actiflo®.

The difference:

To date the overall water solution has exceeded expectations in terms of reliability, resilience, quality and cost. Both treatment plants are designed to accommodate future modular expansion and long-term production at the facility.



Our Water Impact Index tool has helped customers achieve **25-40%** water savings

We see energy efficiencies...

We are applying our **know-how** to help businesses and communities become **energy efficient, saving carbon and costs**. Why? Because **thriving communities** help our **business to thrive**.

We use our expertise in energy management for a shared purpose by volunteering in communities. Through our relationship with Cluid Housing Association, we identified energy solutions and raised awareness around sustainable energy management.

Making **39MW** of power available to the grid. Virtual Power Plants are generating income streams for our customers from underutilised assets

We have energy performance contracts in place for **all** our utilities

Power to the people

Better Energy Communities

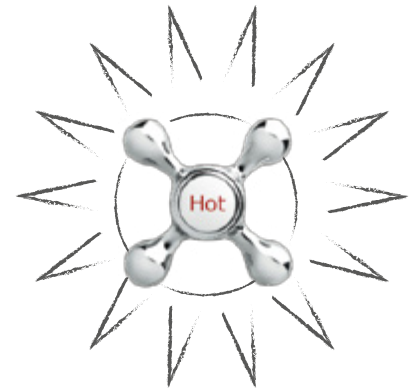
Managed by Sustainable Energy Authority of Ireland (SEAI), the purpose of this initiative was to ease the financial burden to community site clusters for energy reducing projects by providing 35% to 50% grant funding.

The challenge:

Our expertise was sought to stimulate delivery of innovative energy efficiency measures within multi-site clusters ("communities").

The idea:

Veolia formed the Marino Better Energy Community – a community cluster made up of the Marino Institute of Education, a local primary and secondary school and Innovation House (Commercial building). We developed a 10-year energy performance contract that would reduce energy consumption and provide realtime monitoring and verification of site systems via on-site metering.



The difference:

Veolia was able to help these sites achieve significant savings in energy costs and maintenance. Carbon emissions were also reduced significantly, improving these sites' carbon footprint.



...and sustainable societies

Reducing **energy** and **water** use while ensuring the strictest environmental and **quality standards** and tackling the rising costs of operation – these are just some of the challenges we're helping **industry in Ireland** to tackle.

For one of our public healthcare contracts, we introduced various efficiency improvements including setting up a new energy centre with a 140kW combined heat and power unit. These measures helped to save €230,000 in a year.

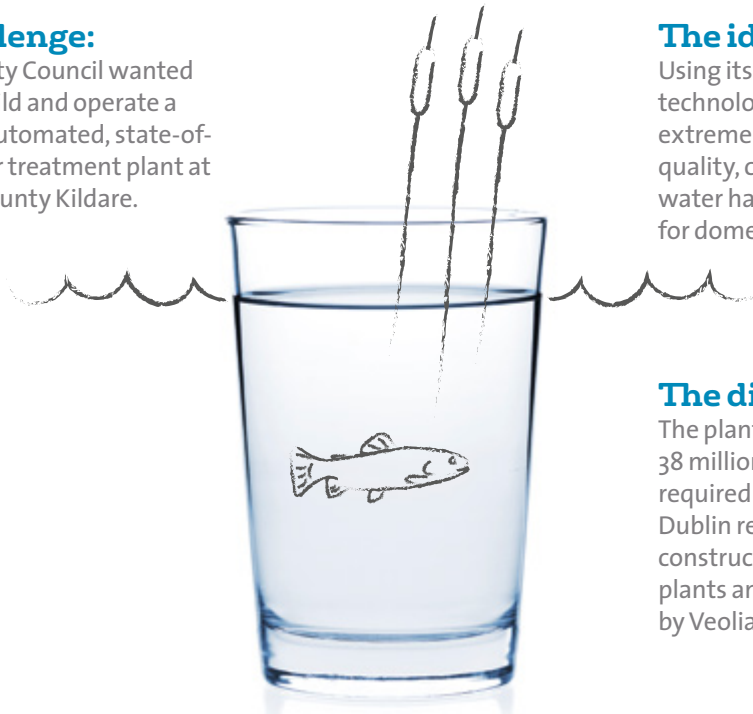


In Killala, County Mayo, at a new CHP plant, we will aim to provide **1%** of Ireland's total electricity needs with **90%** less greenhouse gas emissions.

Making water work

The challenge:

Kildare County Council wanted to design, build and operate a new highly automated, state-of-the-art water treatment plant at Srowland, County Kildare.



The idea:

Using its Actiflo® high-rate clarification technology, Veolia's automated plant deals extremely quickly with changes in water quality, colour and cloudiness, and removes water hardness which can cause problems for domestic and industrial users.

The difference:

The plant now has the capacity to supply 38 million litres per day of treated water as required by County Kildare and the Greater Dublin region. The plant has a 25% smaller construction footprint than conventional plants and is fully operated and maintained by Veolia.

What we're doing in Ireland

1 million

people benefit from our drinking water and wastewater installations each year



72MW

of power production capacity (55MW via CHP)



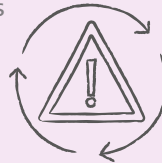
1,326

potential accidents avoided through positive staff intervention



82%

material recovery rate for hazardous waste



4 projects

already given the green light through our Innovation Den, which encourages staff to be enterprising and innovative



€20,000

contributed annually to local community groups through our Ireland Connect programme



€1 million

energy savings for schools and colleges in Dublin during 2014, through the Better Energy Communities scheme



Read more about how we are resourcing the world, at:
www.veolia.ie