

SUSTAINABILITY REPORT 2015

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WELCOME TO THE 2015 SUSTAINABILITY REPORT

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Genos produces a sustainability report to communicate to all of its stakeholders about the progress it is making in sustainability. This report covers the period since the previous sustainability report in 2012.

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A MESSAGE FROM THE CEO



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AT QENOS WE ASPIRE TO BE PART OF THE SOLUTION BY CONTINUING OUR EFFORTS TO MAINTAIN A SUSTAINABLE FUTURE.

As Qenos enters into a new and exciting chapter, we remain focussed on sustainability across our business. Our efforts in improving operational efficiency, reducing reliance on water resources, becoming more energy efficient and minimising greenhouse gas emissions are all contributing to our goal of running a sustainable polymers business.

At Qenos we use advanced manufacturing to transform Australia's natural resources into polymers that our customers convert into a wide range of products for everyday use by all Australians. The main raw material (or feedstock) used in our process is ethane gas, a co-product of natural gas processing that would otherwise be burnt as a fuel.

For more than 50 years, Qenos, and its antecedent companies have operated the manufacturing facilities in Botany (NSW) and Altona (Vic). Our operation and investment in Australia has had many flow-on benefits to Australia's workforce, knowledge and skill base. Today we contribute more than \$1 billion to the Australian economy annually, and are an integral part of the communities in which we operate.

Qenos continues to work closely with the Government and water authorities to minimise our consumption of mains water. Over the past five years, 25 percent of the water used by Qenos, equal to over six billion litres, has been sourced from alternative water supplies. A number of investment projects in our Altona facility have also enabled an improvement in our water efficiency by 20 percent over this same period.

In 2013 Qenos completed a significant expansion and improvement of its Altona facilities, including the commissioning of a 21 MW state of the art cogeneration facility in partnership with AGL Energy Limited. This cogeneration unit supplies all of Qenos Altona's electricity demand and has reduced greenhouse gas emissions by 120,000 tonnes of CO₂ per annum, which is equivalent to taking more than 29,000 cars off the road.

The leadership we show in areas such as health and safety contribute to continual improvement in safety across the industry in Australia. Since 2007 we have been taking our safety expertise to China through a knowledge exchange program with 22 of our shareholder's manufacturing plants. This program involves Qenos providing education and training for Chinese subsidiaries aimed at improving safety management systems and operational practices.

Qenos continues to invest significantly in the research and development of new polymers, working with technical experts, our customers, and both Federal and State Governments to provide sustainable solutions. Qenos polymers are used to make products that help conserve water and reduce packaging waste, whilst improving customer operating efficiencies and energy usage.

This is the third Sustainability Report produced by Qenos. We will continue to produce these reports to inform stakeholders about our performance in the critical sustainability areas of health and safety, people, water and energy, waste and emissions, finance and economic growth, business practices and community.

At Qenos we understand that the world in which we operate is focussed on driving for greater efficiencies in the use of natural resources, and lower impact on the environment. We aspire to be part of the solution by continuing our efforts to maintain a sustainable future.



Jonathan Clancy
Chief Executive Officer
and Executive Chairman



QENOS – AN AUSTRALIAN LEADER

Qenos is an advanced manufacturer, transforming Australia’s natural resources into world-class polymers. As an Australian leader in the manufacture, distribution and trading of polymers, Qenos is a vital link in the nation’s manufacturing chain.

The Qenos manufacturing operations in Altona and Botany employ around 700 people and focus on supplying Australia’s polymer market. The quality of our products reflects the skills and expertise of our people, our efforts in technology development, and our focus on sustainability, particularly efficiency and innovation.

Qenos works hard to build strong relationships with all of our stakeholders – our customers, employees, shareholders, suppliers, unions, regulators, government and local communities. These relationships are critical to future growth and prosperity for ourselves, our customers and our communities.

Qenos is a subsidiary of China National Bluestar (Group) Co. Ltd, a joint venture between China National Chemical Corporation and The Blackstone Group. Our international links allow us to source specialty products from around the world and give us access to global business opportunities.

Qenos continues its role as a leader and innovator and is focused on delivering sustainable solutions.



THE QUALITY OF OUR PRODUCTS REFLECTS THE SKILLS AND EXPERTISE OF OUR PEOPLE





Significant achievements include:

- Qenos has developed a number of new polymers to meet the changing needs of the Australian market. Alkamax® metallocene linear low density film resin for heavy duty packaging applications and Alkadyne® high stress crack resistant PE100 pipe resin for demanding pipe applications.
- Investment in the Altona facilities that increased capacity by 20 percent and improved efficiency by 20 percent to meet the growing needs of the Australian market.
- A partnership with AGL facilitated the installation of a natural gas 21 Megawatt Cogeneration facility at Altona which supplies all of the sites' electricity, and has reduced greenhouse gas emissions by more than 120,000 tonnes per year, the equivalent to removing 29,000 cars from our roads.
- Overall, water efficiency has been improved by 10 percent since 2010 through recycling and water reduction projects.



Feedstock into the Future

Qenos' manufacturing plants play an important role in adding value to Australia's economy by utilising Australian natural resources and chemistry and also creating significant direct and indirect employment within the manufacturing sector.

In 2014, Qenos secured a five year contract extension for the supply of ethane gas to its NSW facility with Santos and Origin Energy. This gas supply is essential to maintain and grow the Botany operations.

This extension, coupled with the fifteen year Altona contracts secured in 2011 between Qenos and ExxonMobil and BHP Billiton, provides long term supply confidence to our customers and the Australian market.

It also means that Qenos has a long term future, which is great news for our employees and the broader community.



HIGHLIGHTS



QENOS SUSTAINABILITY FRAMEWORK





Qenos is proud to be recognised for its achievements in manufacturing, innovation, technology and efficiency.

VICTORIAN MANUFACTURING HALL OF FAME

In 2013, Qenos received the prestigious Manufacturer of the Year award for its significant contribution to manufacturing in Australia and beyond.

The Victorian Manufacturing Hall of Fame honours the champions of manufacturing. In receiving this award Qenos was recognised for the \$195 million manufacturing expansion activities at its Altona polyethylene facilities; its world first technology commercialising polyethylene for pipes for the water, mining and gas sectors; and construction of the largest cogeneration facility undertaken in Australia in more than a decade.

This award acknowledges Qenos's continuing efforts in sustainability, safety, health and the environment.

BELOW: L-R Damian Toohey General Manager Strategy & Finance at Qenos accepting the Manufacturer of the Year award on behalf of Qenos with The Hon David Hodggett MP, Minister for Manufacturing and NAB's Cindy Batchelor



ENERGY EFFICIENCY COUNCIL

Qenos, in partnership with Australian energy company AGL, was awarded the Best Cogeneration Project at the Energy Efficiency Council National Conference in December 2012.

The \$45 million cogeneration plant provides all of the Qenos Altona plants' electricity needs. It has a nominal capacity of 21 MW and, coupled with a heat recovery steam generator, produces up to 88 tonnes of steam per hour. The facility has reduced greenhouse gas emissions at Qenos by 120,000 tonnes of CO2 per annum – the equivalent to taking more than 29,000 cars off the road.

Qenos Chief Executive Officer, Jonathan Clancy, described the cogeneration facility as an investment in real sustainability. "This investment will provide a secure long term energy source and improve the economics associated with polyethylene production at Qenos, whilst providing a significant benefit for our environment.

ABOVE: Best Cogeneration Award
Photo courtesy EcoGeneration magazine

AWARDS

PACE ZENITH

In 2012 and 2013, Qenos received Pace Zenith awards for innovation in engineering projects and technological excellence.

Qenos received the Oil & Gas award for the Altona Olefins advanced process control and plant-wide feed maximiser and for the torque monitoring system for the steam turbine powered cracked-gas compressor at Olefins.

The judges noted the ability of the Qenos team to 'deliver a world class solution'.

L-R The Qenos team of Grant Treloar, Jennifer Clemow and Richard Wawrzon receiving the Oil & Gas PACE Zenith Award from MC, Shane Jacobson, third from left.

BOTTOM: L-R Qenos representatives, Trevor and Mark, proudly display the Pace Zenith award 2013 for the Oil & Gas category.



EPA – ENVIRONMENTAL IMPROVEMENT AWARD 2014

Two very successful partnership projects were acknowledged by the Victorian Environment Protection Authority (EPA).

Qenos received an EPA award in Recognition of Environmental Improvement relating to the Qenos/City West Water Altona Treatment Plant water recycling project and the Qenos/AGL Cogeneration Project. The recycling project has significantly reduced the reliance on domestic drinking water in the manufacturing process at the Olefins plant, while the Cogeneration plant has delivered savings of 120,000 tonnes of CO2 per annum.

ABOVE: L-R: EPA Manager Metro Richard Marks, Qenos Senior Environmental Advisor Les Harman, City West Water Manager Water Innovation Muthu Muthukaruppan and EPA Chair Cheryl Batagol



VICTORIA DAY 2014 - GOOD CORPORATE CITIZEN OF THE YEAR

Qenos was thrilled to have been recognised as the Good Corporate Citizen of the Year with an Award at the Victoria Day Ceremony on 1st July 2014.

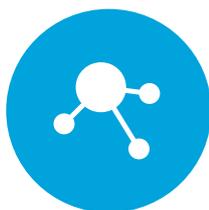
These awards mark the anniversary of the establishment of the State of Victoria in Australia. As part of the celebrations, awards were provided to the Victorian of the Year, the Young Victorian of the Year and to recognise Companies, the Good Corporate Citizen of the Year.

Accepting the award at the ceremony in the Melbourne Town Hall, Jonathan Clancy, Qenos CEO said "The work we do in the area of being a great corporate citizen is extensive. First and foremost it is our responsibility to be "world class" in safety and environmental performance. Having the ability to add value to the local community through investments such as the \$195m expansion project is so important for building confidence. One reason why we are really proud to be recognised as a Good Corporate Citizen, is that Qenos is a great business, employing people who are well trained and well paid and that one job at Qenos, generates up to five in the broader economy. As one of the largest employers in the Western suburbs of Melbourne Australia, this multiplier effect also makes for a better community with better living standards."

ABOVE: The Qenos team with Jonathan Clancy, Chief Executive Officer and Executive Chairman, accepting the Victoria Day award



QENOS PRODUCTS



Genos adds significant value to Australia's rich oil and gas reserves, converting natural resources into high value polymers that are used for a wide range of applications in diverse sectors.

SUPPLYING WORLD-CLASS POLYETHYLENE

The polyethylene produced by Genos at Botany is moisture-proof, flexible but tough, transparent, hygienic and recyclable. Many manufacturers of iconic Australian brands trust our polyethylene, using it in applications as diverse as stretch wrapping, food packaging, water tanks, wheelie bins, and long life milk and juice cartons.

The polyethylene produced by Genos at Altona is strong, dense, versatile, hygienic and recyclable. It is used by Australian manufacturers and utilities for applications including dairy bottles, water and gas distribution, and dangerous goods packaging. Our high density polyethylene is woven into shade-cloth, protects telecommunication cables, dispenses sealants and adhesives, conveys natural gas and water under pressure and keeps breakfast cereal crunchy and milk fresh.

In making these products, Genos contributes more than \$1 billion to the Australian economy annually, as well as building a strong local industry that supports a highly skilled workforce.

SUPPORTING EFFICIENCY

Products made from Genos polyethylene provide opportunities for Australians to become more resource efficient across industry, agriculture and in domestic settings. The fundamental attribute of polyethylene is its ability to make a safe and fit for use product that has a lighter weight and lower environmental footprint at a lower total cost compared to alternatives. The following are examples of how Genos products support resource and energy efficiency.

WATER CONSERVATION

An estimated 395,000 polyethylene tanks are produced annually in Australia, with the potential to capture 28 million litres of rainwater per year, making a significant contribution to water conservation in Australia.

INDUSTRIAL PIPE

Polyethylene pipes enable water savings by eliminating evaporation loss in irrigation systems, improve transport efficiency through reduced weight, and offer longer operational life – up to 100 years without the risk of corrosion or chemical attack – representing a significantly reduced environmental footprint when compared to traditional iron and concrete pipes.

FOOD INTEGRITY

The wide use of polyethylene in films and bottles has greatly enhanced food convenience and safety and allowed the development of exciting new packaging options such as stand-up pouches. Genos continues to improve and develop new products that will enable our customers to achieve their product integrity goals using less polyethylene materials.

PACKAGING

Over many years Genos has worked with our customers to maximise the proportion of polyethylene product that is supplied in refillable shipping containers (18 tonnes) rather than in 25 kg bags on timber pallets. This measure has reduced the total volume of packaging materials with a commensurate reduction in transport costs and waste.

In addition to locally manufactured products, Genos provides a wide selection of imported polymers, elastomers and specialty products.





INNOVATION AND EXCELLENCE

Qenos is a recognised benchmark in Australia for the production of world-class polyethylene grades. Our leadership role is supported by our technical excellence and innovation.

The Qenos Technical Centre at Altona is the most comprehensive polyethylene laboratory in the southern hemisphere. It is the hub of our product development, quality assurance and technology efforts. The NATA accredited analytical and processing laboratories support research and development and ensure the continued high quality, integrity and consistency of Qenos products and strict adherence to the requirements of Australian Standards.

Our Technical Centre provides a platform for transforming global trends and technologies into new products tailored for the Australian market. Specialist polymer technologists work locally and globally to stay at the forefront of polymer research and development. Combining a deep understanding of each customer's processes with access to specialist polymer and application technologies allows Qenos to deliver a powerful market advantage to its customers.



The Qenos Technical Centre at Altona is the most comprehensive polyethylene laboratory in the southern hemisphere.

DEVELOPING TECHNOLOGIES AND PRODUCTS

ALKAMAX® MLLDPE – TOUGHER, CLEARER, LESS WASTE

Alkamax® mLLDPE (metallocene linear low density polyethylene) was designed and developed by Qenos and its technology partners to cater for the Australian market.



Alkamax® mLLDPE is tougher and clearer than conventional polyethylene and is used in applications such as heavy duty sacks and food packaging. It improves the performance of existing products and, by reducing film thickness, reduces raw material use and packaging waste to landfill.

Alkamax® mLLDPE is a great example of the application of high technology and material science to add value to Australia's natural resources and support local manufacturers of film products.

ALKADYNE® – MEETING LARGE SCALE CHALLENGES

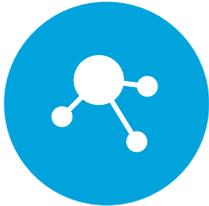


Continued development of Qenos's Alkadyne® HDPE range opens up opportunities for applications in new markets and enables customers to increase throughput, improve efficiency, reduce waste and improve sustainability.

Alkadyne® HDF145B grade is a tough, flexible and cost-effective pipe option suited to challenging applications, such as large-scale mining, water transport, desalination intakes and outfalls, and other applications requiring large diameter, thick walled pipes.

A high stress, crack resistant grade of Alkadyne® HDPE pipe resin is in the final stages of development and promises significant advantages in challenging installations such as horizontal directional drilling or plough-in in rocky conditions where the pipe may be subject to considerable abuse.

This world-class product is the result of Qenos technical experts working on original research and development in partnership with customers, technology providers and industry.



SUPPORTING MAJOR INFRASTRUCTURE

ALKATUFF® – REDUCING NOISE AND IMPROVING AMENITY

Qenos's Alkatuff® LLDPE is the product of choice when developing effective and attractive freeway walls.

The Peninsula Link Freeway in Victoria and the M5 freeway in NSW both incorporate extensive walls that reduce noise, improve visual amenity, screen neighbourhoods and establish linear roadway identities – all in a way that compliments the natural bushland setting.

These walls use Qenos polymers (Alkatuff® LL711UV), rotationally moulded by Viscount Plastics, a long-term customer known for its innovation and ability to develop and commercialise new polyethylene applications.

Thousands of colourful panels line each side of Melbourne's Peninsula Link Freeway, featuring creative natural textured designs and the names of Peninsula townships. More than 5,000 panels, each measuring 4 m by 1 m, cover approximately 20,000 m² or 3.3 km as decorative freeway noise barriers.



With construction of the M5 Freeway in New South Wales, Qenos provided Alkatuff® LL711UV polymer for the sound wall panels to be rotomoulded by Viscount into 6 m lengths, up to 600 mm high and 30 mm deep, with a UV requirement of 18 years. Over nine months, 15,000 individual panels were installed across 18 km.

Aesthetically attractive and much lighter than concrete barriers, the Alkatuff® LLDPE panels provide many advantages for the customer, the freeway user and local neighbourhoods. Rotomoulded plastic panels offer easier manoeuvrability, eliminating the need for heavy duty cranes on the freeway worksite. The panels are weather, scratch and graffiti resistant, so they are easy to clean and look better for longer. The lighter weight also brings advantages in safety for workers and overall reduced costs of materials and installation.





**ALKADYNE® HDF145B –
IRRIGATING MIDLAND TASMANIA**

Qenos polyethylene played a major role in the construction of the Tasmanian Midlands Irrigation scheme.

This large irrigation project supports the expansion of agriculture in the Tasmanian midlands through the provision of high surety water. Delivery occurs through 137 km of pipeline, a 6 MW mini-hydro station, three pump stations (383 kW, 1139 kW and 51 kW) and 500 ML storage at Floods Creek.

The pipe contract was awarded to Zezt, a Qenos pipe manufacturing customer, and required consistent supply and quality extrusion of PE pipelines. The contract involved the production, storage and delivery of pipe for the project and uses Alkadyne® HDF145B resin produced at Qenos in Altona.

Alkadyne® HDF145B is a PE100 pipe grade with market leading extrusion performance providing benefits in output rates and quality.

TOP: Pipe Storage – pipe is extruded and cut into lengths;

BOTTOM: David Kenworthy Zezt Managing Director with Qenos Sales Segment Manager, Scott Johnstone



SUSTAINABILITY IN PRACTICE

Qenos participated in a book launch at Monash University that covered sustainability for undergraduate engineers.

Familiar with Qenos’s efforts in the sustainability area, Professor Brennan of the University invited Paul Taranto, Lead Contact Engineer at Qenos and Dr John Lear of Orica to speak at the book launch.

Dr Lear covered some of the initiatives taken by Orica at the Botany Industrial Park and Paul spoke on Qenos’s 2012 Sustainability Report.

Professor Brennan thanked both David and Paul and said “Your accounts were fascinating, and gave great insight into the many challenges of sustainability for the process industries and for the chemical engineers of today. I encourage you to make the presentations again, in a different context and to a different audience. It would be good for every graduating chemical engineer to hear them”.

During the evening Paul learnt that the University’s Engineering Department use the Qenos Environmental Improvement Plan (downloaded from the Qenos website) as a teaching aid for one of their environmental engineering subjects. They consider the Qenos EIP to be an example of ‘Best Practice’ in this area.

BELOW: Paul Taranto appears here with Rotary Group Study Exchange Team Member Ingrid Schenk from Germany





Qenos operates its plants at world-class safety standards and continually acts to improve health and safety performance through a range of programs that build health and safety knowledge, implement best practice approaches and systems, and recognise achievements across its sites in Australia.

REDUCING INJURY

From Qenos Safety, Health and Environment Charter:

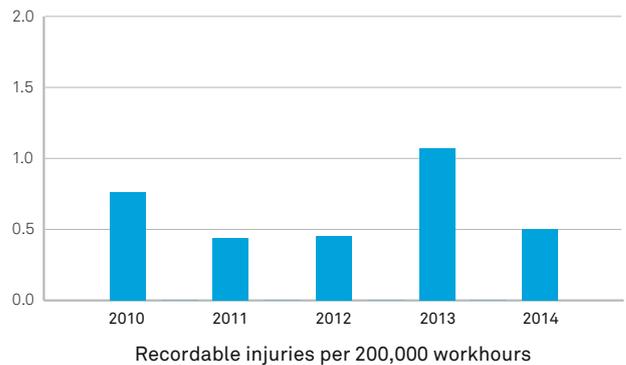
At Qenos, we believe that all injuries, occupational illnesses and environmental incidents are preventable.

We are committed to, and everyone who works at Qenos must show responsibility for operations, products and practices that protect the safety and health of our employees, contractors, customers and the community, as well as protecting the environment.

This is more than another element in our business competing for priority; it is an absolute requirement.

Reducing the risk of injury in our workplace is always a priority for all who work at or visit Qenos’s plant, facilities and offices throughout Australia. The injury rate rose to an unacceptable level in 2013 and returned to the longer term average levels in 2014. A significant effort was implemented during 2013 with engagement across all levels of Qenos, with safety activities and processes being a primary focus. The engagement process now forms a core part of our ongoing SHE processes to reduce the risk of injury in our operation.

Injury Rate



SAFETY AND HEALTH



ENHANCING EMPLOYEE WELLBEING

The health and wellbeing of our employees is a key priority at Qenos. Our comprehensive Safety Health and Environment Operating system protects employees from potential exposure to occupational harm. Employment policies include flexible working arrangements, such as part-time work and special leave provisions, to assist employees to manage personal needs. Employees and immediate family have confidential access to a free Employee Assistance Program and all Qenos employees have access to policies and procedures via our intranet system.

Qenos has introduced a health program to assist some of the age and lifestyle factors affecting its workforce. Some employees are beginning to experience an increase in injury frequency related to manual handling which has a personal health impact and lost or restricted work time. Other lifestyle factors may increase chronic health risks such as heart disease, diabetes and cancers.

Work cycles, including shift work and home life demands, present health challenges such as

- getting adequate sleep
- maintaining a healthy diet and weight
- getting enough exercise
- managing stress, work / life balance



LEFT: Dr Jan White presenting at an Employee Wellbeing workshop

This program is a unique idea aimed at promoting team and individual ownership for improving employee health through education and motivation.

The voluntary program has been adopted by 28 work groups with in excess of 100 programmed sessions being completed covering topics of interest selected by the individual workgroups.

Program sessions have included – Nutrition, Blood Testing, Lipids and Glucoses, Heart Disease, BP Risk Ratio, Sleep and Shift Work, Cancer and Mens Health, Musculoskeletal (Joints), Exercise, Hearing, Stress and Financial Planning.

The sessions have been delivered by a number of providers including the Qenos Medical Officer, Nutritionists, Exercise Physiologists, Physiotherapists, motivational speakers and representatives from our Employee Assistance Program providers.

Outcomes have seen increased participation in health programs such as bowel and prostate screening, detection of diabetes, high cholesterol and blood pressure, while other groups have improved exercise, diet and weight loss programs.



ABOVE: Botany employees workout with an Exercise Physiologist



Qenos continually seeks opportunities to improve resource efficiency in production processes and the application of our finished products. Our ultimate aim is to minimise our impact on the environment, throughout our product processes and use. We monitor our performance to measure progress.

INVESTING FOR EFFICIENCY

In 2013, Qenos completed the most significant investment, modernisation and major maintenance of its Altona manufacturing facilities since the 1970s. The investment which included a 21 Megawatt Cogeneration plant, is delivering a 20 percent increase in production capacity and resource efficiency, as well as helping to secure the competitiveness of our business over the next decade.

The resource efficiency trends have reflected an improvement for the five year trend period, in particular since 2013 when these major Altona projects were commissioned.

At our Botany facility, the Ethylene plant is scheduled for its next Major Maintenance activity late in 2015.



THE 8 STEP GUIDE TO SUPPLY CHAIN SUSTAINABILITY

Working collaboratively with the Plastics and Chemicals Industries Association (PACIA), Qenos provided assistance to develop a resource to help the industry identify and take advantage of business opportunities through its supply chains.

The practical and interactive online resource, known as the 8 Step Guide to Supply Chain Sustainability, was launched at Qenos in August 2012.

The guide is designed to help companies create business value and reduce costs by collaborating on specific projects with suppliers, service providers and customers. It encourages innovation and resource efficiency, and positions companies to meet customers' evolving demands.

Businesses working together across the supply chain achieve far greater outcomes than any one company working alone. These outcomes can include improved resource efficiency, reduced costs, stronger health and safety results, competitive advantage, or outcomes in any other area of sustainability. As an example Qenos has collaborated closely with its logistics provider to deliver product more efficiently and safely, direct to customer silos.

ENVIRONMENT

WATER AND WASTE WATER

Genos facilities use substantial quantities of water in manufacturing processes, mainly for steam production and cooling water. Our strategy is to reduce our use of mains water by improving our process water efficiency, increasing onsite water re-use, and substituting mains water with alternate water supplies.

The water usage chart below shows a downward trend in the use of mains water since 2010 with 25 percent of our water sourced from alternative water supplies over the past five years. Our Botany facility has utilised treated groundwater reducing mains water use by 40-45 percent over this period.

The Altona facility commenced a Class A recycled water supply from the nearby municipal Altona Treatment Plant (ATP), in 2011. The recycled supply provided 700 million litres in the initial year however issues at the treatment facility limited the supply of recycled water to 285 million litres before supply ceased in 2013. Following works at the ATP supply of the recycled water recommenced in June 2015 and should increase to target levels of 1,600–2,000 million litres in 2016.

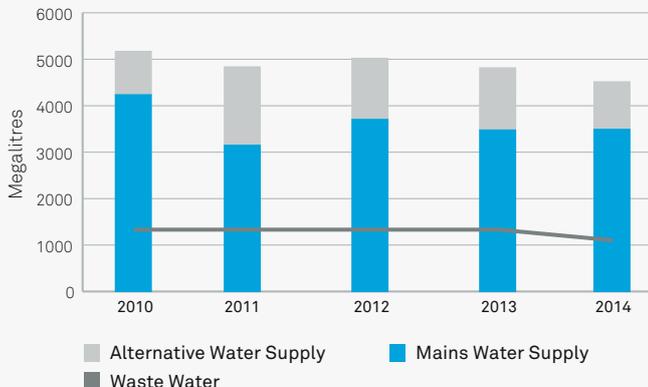
Water efficiency at the Altona facilities has improved by 20 percent over the five year period. Projects that have contributed to this efficiency include

- rationalising the site’s steam supplies with demand
- modernisation of some of the turbo compressors
- the Altona revamp project
- increased on site water re-use.

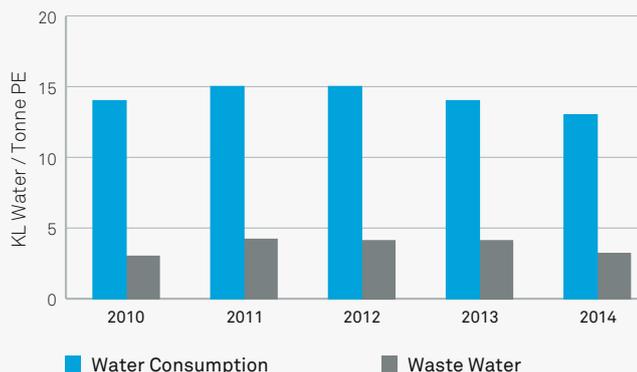
Collectively, these projects have all contributed to this significant improvement and Genos’s overall water efficiency has improved by 10 percent since 2010.

Overall, waste water generation was constant from 2010 to 2013, with a step change downwards in 2014.

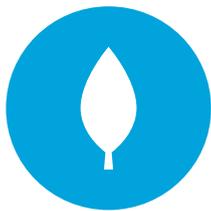
Water Usages



Water Efficiency



“Water efficiency at the Altona facilities has improved by 20 percent over the five years.”



ENERGY AND GREENHOUSE GAS EMISSIONS

On site generation of electricity for Genos's Altona facilities has been achieved without an increase in on-site greenhouse emissions since 2010.

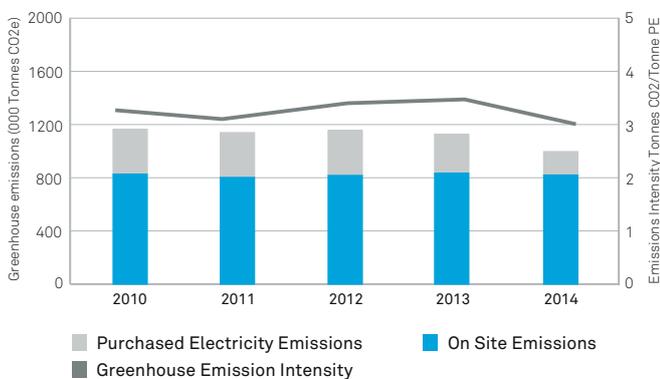
The installation of the 21 MW cogeneration plant, and significant facilities' upgrades have seen a 30 percent improvement in the Altona facilities emissions intensity. The production of on-site electricity in a natural gas fired cogeneration facility has seen a net emissions reduction of 120,000 Tonnes of CO2 per year and an ethylene production increase of ten percent in 2014.

WASTES AND EMISSIONS

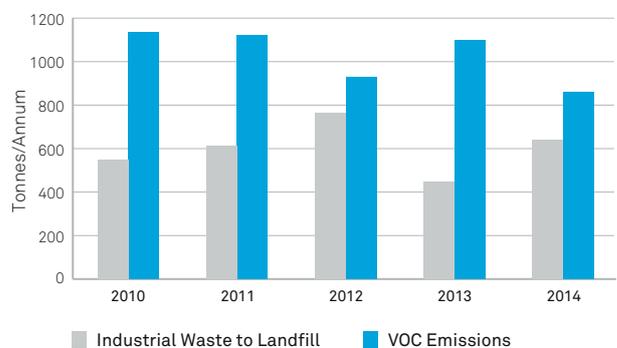
Genos's program to reduce Volatile Organic Carbon (VOC) emissions from our manufacturing facilities minimises emissions from all sources including licensed vents. Significant reductions have been made since the program began in the 1990s, while the annualised trend has been stable over the last five years, consolidating these reductions.

Industrial waste at Genos is minimised to improve resource efficiency. Where the waste cannot be eliminated from the process it is considered for recycling, re use or energy recovery prior to sending for waste disposal. Most of the Genos facilities have cleaning and maintenance cycles spanning many years which results in significant variations of waste generation from year to year associated with the maintenance cycles. The increased waste to landfill in 2012 was associated with the Altona Olefins major maintenance cycle, with increased waste in 2014 attributed to the water treatment plant cleaning cycle at the Altona Resins facility.

Greenhouse Gas Emissions



Waste and Emissions



SHARING KNOWLEDGE

QENOS KNOWLEDGE EXCHANGE

Qenos manages highly complex and inherently hazardous process plant facilities. Risk associated with these operations must be systematically and rigorously managed to avoid harm to people and the environment. Qenos has developed a world-class Safety, Health and Environment Operating System (SHEOS) to manage all aspects of workplace risk and this is embedded in everything we do.

Since 2007, Qenos has worked with its parent company Bluestar to provide substantial knowledge exchange and training in areas including analysis, diagnosis, advice, assessment, onsite/offsite training, safety systems, safety project implementation and support to personnel from more than 22 Bluestar subsidiaries across China.

Teams from Qenos have travelled to China to provide advice, training and assessment and teams from Chinese sites have visited Australia to learn from Qenos business practices first-hand.

A new Safety Health and Environment Operating System, based on Qenos expertise and practices, has been rolled out and is being embedded in day-to-day workplace activity in Bluestar companies in China. This is driving consistent improvement in SHE performance and reduced risk of safety and environmental incidents, leading to better-managed and more profitable businesses.

During a visit to Qenos in 2011, Wang Yong, Chairman of China's State Owned Assets Supervision and Administration Commission (SASAC), affirmed Qenos as a best example of Chinese investment in Australia. He spoke highly of Qenos's track record in SHE and operational and management excellence.

Qenos is expanding its Knowledge Exchange capability to provide assistance in asset management and optimisation for Chinese-based facilities. Qenos has demonstrated experience in this field, in particular in reducing downtime, maintaining asset performance and extending the interval between maintenance turnarounds.

Qenos and Bluestar have identified an opportunity to expand this long-running Knowledge Exchange Program into a larger scale commercial business providing consulting, advisory and professional education services to process industries in China.

BELOW: Chengrand Hosts Bluestar Asset Management Team



RESOURCES FOR CHEMISTRY STUDENTS



Qenos reproduced its Chemistry Resource Kit in response to requests for current data to support teachers and students in chemistry studies, particularly at years 11 and 12.

The Qenos business has particular relevance to areas of study involving:

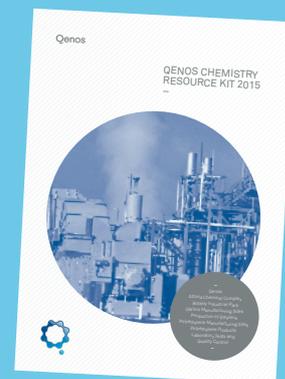
- investigation of chemicals in everyday use

- polymers, their properties, bonding and polymerisation
- selection of polymers for a specific purpose
- production of ethylene and polyethylene
- management of wastes, environmental monitoring and reporting.

The Qenos Resource Kit is available via the Sustainability & Community/Education section of our website.

ABOVE: A very cool igloo made from recycled milk bottles created by children from Sunshine Christian School

RIGHT: The Qenos Chemistry Resource Kit





RECOGNISING EXCELLENCE

Qenos hosts an annual SHE Excellence awards program that recognises work teams and individuals who make a significant contribution to improving safety, health or environmental performance in their plant or work area. Since the last Sustainability Report, a total of 67 entries have been submitted.

In 2015, nineteen projects were nominated. The projects covered all aspects including workplace safety, employee health, environmental improvement and offsite amenity impact.

The onsite award ceremonies in February and March 2015 enabled nominees to showcase their projects with a short presentation and share the SHE improvements more broadly within Qenos. The award ceremonies recognise the contribution of the nominees in improving Qenos SHE performance.

QENOS PEOPLE



Qenos has systems, practices and procedures in place to recruit, motivate and develop our employees as well as enhance their wellbeing. We are building and supporting a local workforce that is experienced and skilled and contributes to Australia’s knowledge base.

WORKFORCE DEVELOPMENT

Qenos recruits a diverse group of employees, from new graduates to people with extensive industry experience. Through partnerships with universities we offer a vacation employment program for engineering, chemistry and commerce students. Our cadetships and apprenticeships provide development opportunities for future chemical industry workers and contribute to the talent available for recruitment.

New employees are introduced to the vital role Qenos plays in the supply chain through rotational inductions that build knowledge in all areas of the business, including safety, products, customers and suppliers. Job-specific training and a mentoring program helps new employees become part of the workplace.

Qenos delivers a high standard of in-house, competency-based training and, where necessary, engages external training providers. Employee personal development is managed through a competency-based system to assist employees achieve their career aspirations and maintain the skills required to operate our business into the future.

Qenos runs a number of internal development forums covering areas such as leadership and diversity as well as the Young Professional Network, the Diversity Working Group and the Qenos Women’s Network.

The Lominger Competency framework is used to measure competitive-edge competencies and assist in identifying and developing employee talents and skill set. Competencies are also developed through work assignments, engagement in technical networks, leadership development and opportunities to participate in sponsored community outreach programs.

The Qenos website introduces some of our talented people and their roles at Qenos. It also explains our employee development systems, recruitment processes, guiding policies and organisational values.



Qenos has a duty to care for the environment and we take seriously our social responsibilities. We communicate regularly and openly with our neighbours and are proud of the associations we have built. We commit to corporate responsibility and we appreciate the opportunity to connect with, assist and benefit from our involvement with local communities.

COMMUNICATION AND CONSULTATION

Qenos communicates with the community through formal networks as well as informally through community access.

We are committed to our industry Community Right to Know Code and encourage local communities to contact the company at any time with safety, health and environmental enquiries.

Qenos is a member of the Altona Complex Neighbourhood Consultative Group (ACNCG) and The Botany Industrial Park Pty Ltd (BIP) Community Consultation Committee. These committees meet regularly and provide a forum for the community and member companies to discuss health, safety and environmental issues. In this reporting period, Qenos attended all scheduled community consultative meetings.

The ACNCG at Altona publishes the *Consultative Chronicle* and the Botany Industrial Park (BIP), representing Qenos, Orica and Huntsman, distributes the BIP brochure each year. These communications speak directly to local communities, organisations, businesses and schools, providing information on operations as well as efforts and achievements in environment and safety.

Senior personnel also attend public forums and events to keep involved with local communities and ensure that Qenos listens and responds to community concerns and is aware of how the community perceives us.



INFORMATION AND ACCESS

To encourage a connection with local communities, Qenos has a comprehensive website and provides 24-hour community hotlines at Altona and Botany.

Our website provides an avenue for the community to contact Qenos and access information as well as a valuable resource for education and information. The website receives close to 3,000 enquiries each year from a diverse range of people including students, graduates, prospective employees, customers, exporters and the general public.

The Environmental Telephone Hotline provides a single point of contact with the companies in the Altona Chemical Complex. The toll-free hotline (1800 161 050) is managed by the Qenos Environmental Advisor for Altona, with shift personnel from Qenos Olefins trained to respond to community calls. The Botany Community Hotline (1800 025 138) is also available for local residents.

In Altona, a School Network Telephone System is in operation to enable local schools and kindergartens, the Hobson's Bay Council and the Altona North Migrant Resource Centre to be notified promptly if there is an incident that may present some risk to the community. Schools, kindergartens, councils or resource centres can also use the phone system to seek information about the Qenos complex.

TOP: Liz at Somers Parade Kindergarten

BOTTOM: ACNCG Odour Audit group

ENVIRONMENTAL PERFORMANCE AND IMPACT

Performance management and monitoring is critical to improving environmental performance. Qenos has a monitoring program for environment performance which includes the tracking of community complaints and environmental incidents.

Qenos encourages the community to contact us in relation to environmental incidents and concerns and takes calls from the community directly via complaint hotlines at Altona and Botany. This means we can investigate concerns immediately and if our operations are having an impact, we work to address this in a timely manner minimising the impact.

The Community Complaints performance, shown in the chart below, is showing a long term decrease in the number of noise complaints attributed to Qenos operations.

In 2014 a noise monitoring meter was installed at the Olefins elevated flare and a noise alarm was developed and configured to alert the plant operator to noisy flare operation. This allows the plant operator to adjust flare operation and is designed to reduce the number of complaints relating to flaring.

Qenos also developed a noise Environment Improvement Plan EIP in 2013/2014 that aims to reduce noise from our Altona operations. The local community was engaged in the development of the EIP via our community liaison committee, the Altona Complex Neighbourhood Consultative Group (ACNCG). Qenos invited all residents who had made a noise

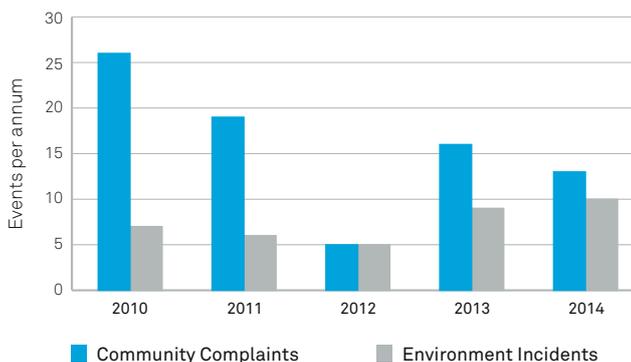


complaint since 2009 to join the consultation process and issued an open invitation via the ACNCG newsletter and the Qenos website. Several of the invited residents have engaged in the noise EIP process and plan to continue in the ACNCG process.

The environment incident trend saw a disappointing increase through 2013 and 2014.

This was due to four low impact releases to off-site storm water systems in 2013. The 2014 incident trend included six minor licence excursions of our waste water treatment plant discharges to the municipal sewer systems. Each of these events has been investigated and preventive measures have been implemented.

Environment Trends



COMMUNITY



COMMUNITY PARTICIPATION

Qenos appreciates the opportunity to get involved with and become part of its local communities.

In line with its Community Right to Know affiliation, Qenos opens its doors to local groups, universities and schools, industry representatives and other visitors, to provide information on its business and to showcase its people, plants and products.

Qenos chemists and engineers participate in the Scientists in Schools program and other educational forums both here and overseas. Qenos provides financial support in the form of educational scholarships and has partnered with Western Chances and Victoria University's Achievement Scholarships, as well as providing ongoing mentorship to students via the Victoria University's Virtual Business Program. We are proud of the association we had with the Western Bulldogs Football Club Fresh Program which provided an alternative educational experience for students outside of mainstream schooling.

Qenos contributes to the daily life of its communities through sponsorship of local sporting clubs including the Altona Football Club Juniors and Seniors; Maroubra Saints; Altona Gators Basketball Club; Altona Life Saving Club, the Yarra Bay Fun Run and golf days at Randwick and Koorngal.



Qenos sponsors some of its more adventurous employees who participate in various challenges to raise funds for charities including the Variety Bash; the International Chamber of Commerce World Cup and our cycling groups who participate in the Great Victorian Bike Ride; the MS Sydney to the Gong and the Ride to Conquer Cancer.

We regularly support local cultural events such as the Matraville Christmas Carols in the Park, the Hobsons Bay Art Society and Rotary Club of Altona's Annual Art Exhibitions and have assisted the Substation and Sydney Sports Coast Design Awards.

The Qenos Women's Network, who meet quarterly to hear from various high profile female business leaders, is proud of its annual 'new underwear collection' for the children of Kibera slum in Nairobi in conjunction with Women for Women in Africa.

Qenos provides a committee member for both BreastWest and the Hobsons Bay Community Fund to assist in fund raising to help others in our local communities.

We have a long association with the MAD Foundation, Motor Neurone Disease Australia, the Fight Cancer Foundation, the Salvation Army and the Children's Cancer Institute as well as Challenge and Very Special Kids.

Qenos encourages employees to volunteer their time to assist community members and organisations in need and to participate in community and charity events.



QENOS ENCOURAGE EMPLOYEES TO VOLUNTEER THEIR TIME TO PARTICIPATE IN COMMUNITY AND CHARITY EVENTS.



BLUESTAR SUMMER CAMP

“One of the things I learnt at camp is that after we all started to mix, we became a family, even though we were from different areas of the world”

Ronan, Botany

“I really enjoyed going to the Great Wall of China – it will be something I won’t forget. I also enjoyed making many new friends from all different places around the world, but out of all the people I met, I made one very good friend her name is Emma and she is from Norway. Not only did I make friends with people from China, Norway and France I also made friends with the Australians.

Emma, Altona

Since 2010, nearly 60 children have participated in the Bluestar Summer Camp, which takes children of Qenos employees on a trip to Beijing. Aimed at children aged between 9-14 years, the annual 20 day camp aims to strengthen the development of independence in the children, cultivate teamwork and promote an understanding of different cultures.

While in Beijing the children participate in an opening ceremony for the camp, visit the Great Wall of China and the Forbidden City, museums, galleries and some of the sporting venues used during the 2008 Olympic Games. Other highlights include recreational sports (last year included indoor snow skiing for five days), shopping, cooking classes, Chinese calligraphy lessons and a final concert where all camp participants will perform. Children also share a homestay with the families of China Bluestar employees, giving them an authentic home life experience, which includes grocery shopping, home cooking and a chance to practise Chinese conversation.

Through this camp, the children of Bluestar employees from around the world – including China, France, Italy, the UK, Brazil, USA and Norway – form strong international friendships.



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