

History of the Company

Envestra's origins date back more than 140 years through the gas distribution networks of the former South Australian and Brisbane Gas Companies. In 1997 Envestra was formed when it acquired the natural gas distribution and transmission networks in South Australia, Queensland (north of the Brisbane River) and the Northern Territory. In 1999 the Company acquired a further natural gas distribution business, in Victoria.

Envestra's Operations

As Australia's largest distributor of natural gas, Envestra holds a key position in the nation's fastest growing energy sector.

Envestra owns in excess of 18,500 kilometres of natural gas distribution mains and 1,100 kilometres of transmission pipelines delivering natural gas to around 1 million homes and businesses. Each year approximately 20,000 new consumers are connected to Envestra's distribution networks.

The Company generates revenue by charging energy retailers for transporting natural gas through its distribution networks and transmission pipelines to their customers.

Envestra has contracted Origin Energy Asset Management (OEAM) to operate and manage the Company's distribution networks and transmission pipelines throughout Australia.

Natural Gas - Australia's Fastest Growing Energy Source

Natural Gas is environmentally friendly and is Australia's fastest growing energy source.

Currently natural gas represents around 18% of Australia's primary energy consumption, however, the Australian Bureau of Resource Economics predicts that by 2020, around 24% of Australia's energy requirements will be met by this fuel.

The Gas Industry

The natural gas industry comprises four sectors, of which Envestra is involved in the transmission and distribution of natural gas.

Exploration and production companies locate and process the gas. It is then sent via high pressure, large diameter and long distance pipelines (known as transmission pipelines) to capital and regional centres around Australia.

At this point the gas enters local distribution networks where it is delivered to consumers, who are charged for the gas they use by their energy retailer.

Through the introduction of Competition Legislation gas markets around Australia have become 'contestable'. This has resulted in the disaggregation of previously bundled utility businesses into energy distributors and retailers.

Simultaneously, retailers have, through contestability, gained access to both gas and electricity, driving a major change in focus in the energy industry.

Independent Regulators have been appointed in each state to ensure the interests of consumers and asset owners are addressed.

This involvement by government-appointed Regulators means that once an Access Arrangement determination is made, usually for five years, Envestra has considerable confidence about the revenue it will generate over this future period. The Access Arrangements set out the terms, conditions and tariffs to be applied to retailers when they use the Company's distribution networks.

Environmental Benefits of Natural Gas

Natural gas delivers numerous benefits to the environment.

Power stations fuelled by natural gas are far cleaner than those burning coal. This is because the carbon dioxide emissions produced by coal in generating electricity are almost 80 percent higher than for natural gas. Brown coal emissions are higher again.

Additionally, research commissioned by the Australian Gas Association in 2000 found that in the residential sector, greenhouse gas emissions from a natural gas space heater equate to one third of the emissions produced through heating powered by black coal-generated electricity. Furthermore, the emissions from natural gas water heating are much lower than those from electric water heating.

Envestra has played a key role in promoting the use of natural gas as a vehicle fuel, particularly in place of conventional diesel engines. Using natural gas in preference to diesel has improved air quality, and substantially reduced noise pollution and greenhouse gas emissions. In Brisbane and Adelaide metropolitan bus and Council fleets, as well as a number of private organisations' forklifts and vehicles operate on natural gas.

Undertaking R&D in Gas Appliances

Envestra supports the improvement in safety and technology associated with natural gas appliances through such bodies as the Australian Standards Association. The Company is represented on Code Committees for appliances and installation.

Additionally, Envestra is a member of the Gas Appliance Manufacturers Association which represents natural gas and LPG appliance manufacturers, importers and agents. Through this involvement the Company encourages appliance research and development, with the aim of increasing appliance efficiency.

Envestra also supports energy efficiency projects such as 5 Star Housing, incorporating gas boosted solar hot water systems.

In supporting these projects Envestra recognises that they may have a negative impact on the volume of gas transported through its networks.

Promotion of Natural Gas

Envestra markets the benefits and applications of natural gas for both the residential and small-medium industrial and commercial market segments through television and general advertising, promotion and incentives. Over 95% of new homes constructed in South Australia and Victoria, where natural gas available, are connected to Envestra's distribution networks.

Natural Gas Network Extensions

Envestra continues to expand its natural gas distribution infrastructure throughout Australia to keep pace with urban sprawl and geographic development.

In 2003/04 Envestra spent about \$50 million installing 365 kilometres of natural gas network and connecting over 21,000 new gas customers to its networks in South Australia, Victoria, New South Wales, Queensland and the Northern Territory.

Environmental & Sustainable Work Practices

Envestra, through OEAM, is committed to sound management of quality, health, safety and environmental issues associated with the activities of the Company.

Quality Management System

Envestra, through OEAM, has introduced an ISO9000 Quality Management System (QEC 7070) to ensure the activities performed by the business conform to legislative requirements, set benchmarks for industry best practice and meet or exceed the expectations of customers, stakeholders and members of the public. Regular compliance auditing of the business demonstrate that field activities are well managed, adaptable to change and undergo continuous improvement.

Health Safety and Environmental Management

Envestra maintains its commitment to occupational health, safety and the environment by continuously monitoring the performance by its contractor, OEAM, in these areas.

Envestra and OEAM's commitment is reflected in Origin's Health Safety and Environment Policy which is supported by comprehensive Standards and Codes

of Practice. These standards and codes are integrated into OEAM's work practices in relation to the construction of gas mains and services, as well as in the HSE Management System (HSEMS).

The organisation's commitment to HSE emphasizes:

- ◆ Identification and management of risks outside the organisation's control;
- ◆ Elimination of hazards and risks within the organisation's control;
- ◆ Assisting employees to meet HSE obligations; and
- ◆ Undertaking activities with consideration for economic constraints, environmental management and community expectations.

The HSEMS is an integrated process that incorporates all aspects of HSE management into all levels of OEAM. The major features of the HSEMS are:

- ◆ Occupational Health, Safety and Environmental management considerations are covered in a single comprehensive system;
- ◆ Applies to all levels of the organisation and to all working conditions;
- ◆ Is a documented system with hierarchical structure; and
- ◆ Operates as a closed loop system that locks in compliance requirements and resulting changes to ensure continuous improvement of the management system and operational outcomes.

Health, safety and environmental performance is continuously monitored and reported through a range of programs and statistical performance measures. Such programs include reporting and investigating all health, safety and environmental incidents, field compliance monitoring, audits of procedures and inspections of necessary health safety and environmental risk controls, and reporting on outcomes of both health and safety and environmental emergency response exercises. This information is conveyed to Envestra's management on a monthly basis and to its Board at each regular meeting.

Envestra closely monitors OEAM's safety performance through the following measures:

- Serious Injury Frequency Rate (SIFR) (Total of Lost Time and Moderate Injuries);
- Lost Time Injuries (LTI) (requires more than a day off work);
- Moderate Medical Injuries (MMI) (requires less than a day off work); and
- Minor Injuries (able to return to duties).

In 2003/04 the following Injuries were sustained:

	OEAM	Contractors
SIFR	7.4	6.9
LTI	5	4
MMI	1	4
MI	26	28

The target SIRF for OEAM for 2003/04 was 14.7.

During 2003/04 OEAM also conducted 23 audits of its Emergency Response Plans for the 18 sites from which it operates and completed 15 emergency response exercises. This performance was in line with the program submitted to Envestra at the commencement of the year.

During 2003/04 OEAM conducted six environmental audits and completed eight environmental response exercises. No major environmental concerns were identified through both activities.

Environmental Management Program

OEAM, as contractor to Envestra, has developed and implemented an Environmental Management Program that is based on the requirements of ISO14001:1996. The promotion of environmental awareness and responsibility to employees and contractors through company policies and procedures is considered critical to good operational practice and ultimately generates costs savings from continued improvement in performance.

Operations Conducted Responsibly

The range of activities undertaken by Envestra which promote environmental responsibility and minimise the disturbance caused by the installation of gas mains and services on the surrounding environment and vegetation are:

- ◆ Job Impact Statement for all work conducted by field crews;
- ◆ HSE Management Plans developed for all major projects;
- ◆ Common trenching with other utilities to minimise disturbance;
- ◆ Directional boring to prevent damage to the root systems of trees located in nature strips and minimises disturbance to the surrounding environment;
- ◆ Leakage surveys conducted on regular programmed basis;
- ◆ Traffic management and control;
- ◆ Continual training and competency assessments;

- ◆ Long-life materials used for all gas assets to minimise disturbance from maintenance activities; and
- ◆ High standards for the clean-up of worksites to ensure that they are reinstated to near or better than original condition.

Envestra also adopts measures to control the potential discharges to the environment from its activities. These measures have been incorporated into gas mains and services operating procedures, and include:

- ◆ Accelerated mains replacement project to upgrade and replace older cast iron mains in order to minimise leakage. Over \$50 million has been spent on this activity over the past seven years;
- ◆ Purging operations kept to a minimum, and where necessary, flaring is used to minimise the impact on the environment;
- ◆ Stockpiles of dirt from excavations are stored in a manner that minimises soil erosion and run-off into storm water systems;
- ◆ Sediment pollution traps and filters are used to minimise wastewater and sediment run-off into storm water systems;
- ◆ All wastes are disposed of at licensed landfill sites including disposal of hazardous materials e.g. 'old' asbestos cement meter boxes; and
- ◆ Waste reduction, re-use and recycling practices are promoted at all worksites and offices.

External Accreditation

OEAM is accredited by Esso Australia to perform critical activities associated with oil and gas pipelines. This accreditation demonstrates that Envestra's contractor has in place the necessary quality and HSE management systems and practices to conform to an established worldwide framework for managing HSE risks within the oil and gas industry.

Safety Cases

A comprehensive Safety Case governs each transmission and distribution network owned by Envestra and managed by OEAM. These Safety Cases, which are approved by the Technical Regulator in each State, identify management responsibilities and the application of safe operational and facility management through strategic planning, workplace consultation and a systems approach to work practices and procedures.

In this way, the Safety Cases provide for the safe operation of Envestra's pipeline facilities in accordance with HSE best practice and license and regulatory requirements.

Key objectives of the Safety Cases for Envestra's gas distribution and transmission assets are to ensure that:

- ◆ A strong focus on safety is maintained;
- ◆ All risks are identified and effectively managed;
- ◆ Relevant information is communicated to those in need;
- ◆ Ongoing training and development to ensure required competencies are maintained;
- ◆ Adequate monitoring and controls are in place for gas pressure, quality and odorant to ensure safety levels are maintained; and
- ◆ Gas incident and emergency preparedness is maintained and tested to meet all probable eventualities.

Remediation Works

OEAM is contracted to manage six Envestra owned sites that contain contaminated soil from past gas manufacturing processes.

The approach to managing these sites is to minimise harm to the environment from the contamination.

Site specific management plans, including continual monitoring and strategic remediation activities are being developed and implemented in conjunction with the relevant environmental authorities. The health and safety of workers operating on these sites is also integral to the site management plan.

Envestra's site specific management plans include annual groundwater monitoring, specific remediation activities for soil and groundwater, review and analysis of data collected and annual review/update of the site management plans. The annual review of site management plans incorporate new site data to ensure the site plans comply with any changes to the regulatory environment.

In 2001/02, a detailed external audit was completed to review and update the environmental plans developed for the containment or remediation of all Envestra owned sites. The audit recommendations have been implemented and a follow-up audit is scheduled for 2005/06.

Envestra's Code of Conduct

Envestra's Code of Conduct was developed through consultation with Directors, management and employees of Envestra. The Company recognizes that its success will be determined by the manner in which it's Directors and employees comply with all legal and prudential requirements, in both the

letter and spirit of the law. A copy of the Code is available on the Company's website www.envestra.com.au.

Envestra's Employees

Both Envestra and OEAM strive to provide and maintain a satisfying and rewarding working environment for employees.

Employees are provided with training considered mandatory to undertake their role and are encouraged to take advantage of other company sponsored training programs. The organisations also facilitate the professional and academic development of staff through the provision of educational assistance funding, study leave to attend classes and exams, and subsidies for books and learning materials.

Statistics collated on employee absenteeism, in terms of available work days taken as sick leave, indicate that Envestra and OEAM have low rates of absenteeism.

Envestra, through OEAM, places priority on rehabilitation programs in the event that employees sustain work related injuries or illnesses. These programs focus on returning the employee to pre-injury duties where possible. Rehabilitation and return-to-work plans are developed to allow employees to re-enter the workplace as soon as practicable, and assist with their recovery.

Community Sponsorships

Envestra in its own right, or through OEAM, undertakes a range of sponsorships and community programs designed to add value to the communities in which it operates.

The principal initiatives undertaken by the Company in 2004/05 are:

Community

- ◆ Canteen
- ◆ Cora Barclay Centre
- ◆ Down Syndrome Society
- ◆ Flinders Medical Research
- ◆ Royal Flying Doctor Service
- ◆ Carclew Arts Centre
- ◆ Urban Myth Theatre Group
- ◆ Trees for Life
- ◆ Jam Factory
- ◆ Adelaide Fringe Festival
- ◆ Adelaide Festival of Arts
- ◆ Pickard Charity Foundation

Educational

- ◆ Hospitality Group Training (apprentice training)
- ◆ “Cookers in Schools” program providing cooking equipment in secondary schools in South Australia
- ◆ Supply of gas appliances to Regency Plumbing School for apprentice plumber/gasfitter training
- ◆ Regency TAFE Engineering Awards
- ◆ Sponsorship of Royal Melbourne Institute of Technology student awards
- ◆ Funding of prizes for four TAFE Colleges which hold commercial cooking courses
- ◆ South Australian Restaurant Awards
- ◆ “Top Hat Award” for apprentice chefs
- ◆ Training of 12 apprentice gasfitters per year
- ◆ Group training program for apprentice plumbers and gasfitters
- ◆ Plumbing Industry Association
- ◆ Representation on associated Australian Standards and Codes Committees
- ◆ Investigator Science Centre
- ◆ HIA Homes of the Year Awards
- ◆ Master Builders Association Awards
- ◆ Urban Development Institute
- ◆ Regency TAFE Excellence Awards

References

- ◆ Envestra Annual Reports
- ◆ Envestra Investor Booklet
- ◆ Australian Gas Association ‘Natural Gas - Realising the Benefits’ July 2003
- ◆ Australian Gas Association ‘Gas Statistics Australia’ February 2003
- ◆ Origin Energy Sustainability Report to Stakeholders 2004
- ◆ OEAM Internal Policies and Procedures