



Public Forum: Envestra Revised Access Arrangement Proposal

South Australia

29 October 2010





Agenda

- **General Overview:**

- About Envestra
- Envestra's networks
- Evolution of Envestra
- Performance in the Current Period
- Challenges Over the Next Period

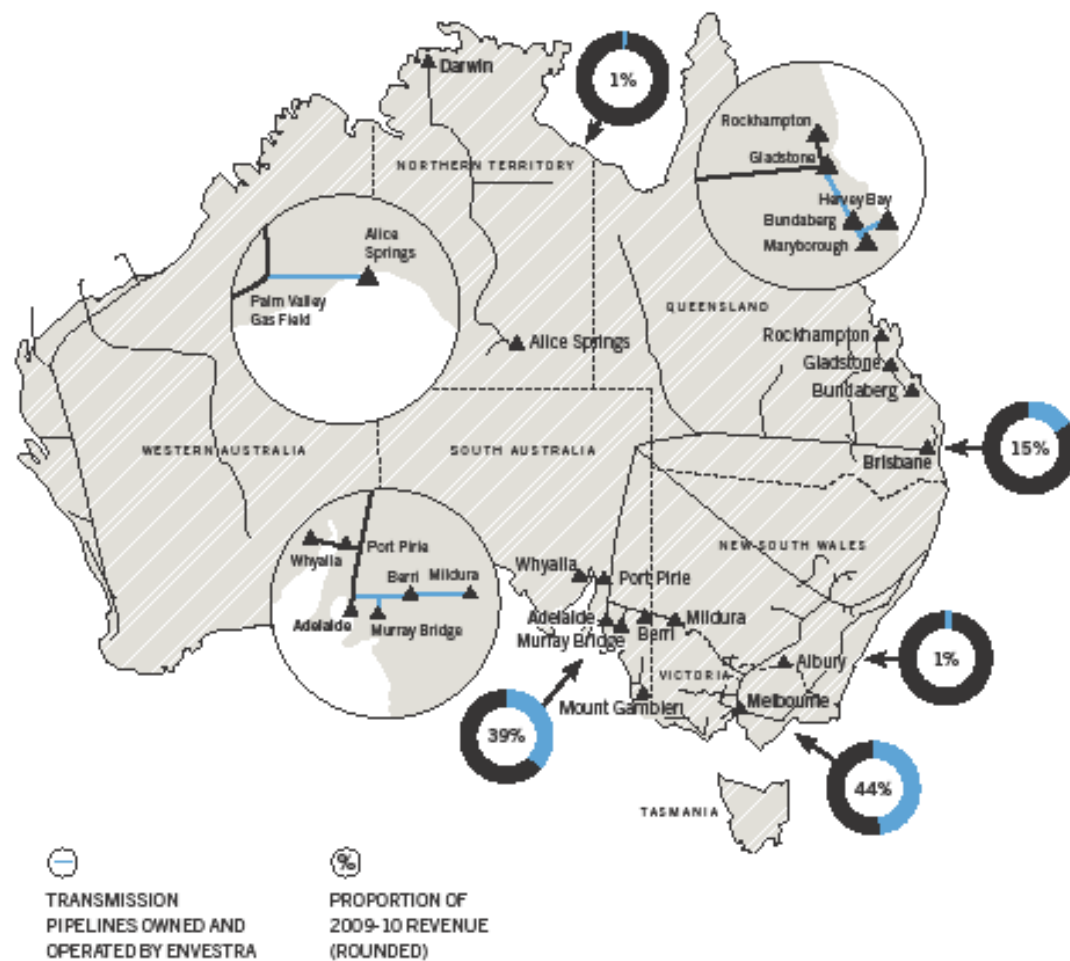
- **Regulatory Proposal:**

- Regulatory Objectives
- Capital Expenditure
- Operating Expenditure
- Rate of Return
- Depreciation
- Demand
- Impact
- Benefits

About Envestra

- Envestra was listed on the ASX in August 1997 following its demerger from the Boral group
- There are over 20,000 shareholders, including the APA Group with a holding of 32% and CKI with 19%
- Envestra is Australia's largest gas distribution business in Australia:
 - Servicing over 1,000,000 customers and delivering 115PJ of gas across SA, Qld, Vic, NT and NSW
 - Market capitalisation \$700m
 - Enterprise Value \$2,700m
- Envestra has just purchased the Wagga Wagga network from the NSW state government

Where we operate



South Australian Network

- South Australian network covers the Adelaide metropolitan area and several large regional centres across the state
- The metropolitan network stretches from Gawler in the north to Aldinga in the south and is bordered by the sea and hills
- The origins of the network dates back over 100 years
 - And consequently contains a high %age of cast iron
- Envestra's SA network:
 - Services around 395,000 customers (97% of whom are domestic)
 - Delivers around 35PJ of gas
 - Recovers around \$150m in revenue (75% from domestic)

Evolution of Envestra

1. Formation (1997)

- Acquired natural gas distribution assets of Boral in 1997
- First publicly listed company focussing on gas networks
- Structure put in place to enable Envestra to pursue acquisition opportunities in deregulated energy sector
- Established as a low cost operator
- Specialised network owner with operations outsourced to larger entity

2. Establishment Phase (1997 – 2002)

- Envestra established with Boral systems
- Envestra's priorities:
 - progressively develop its own systems
 - develop business strategy focussed on improving the network and growing the business
 - putting in place long-term financial arrangements
 - establish skill base
 - Rationalise regulatory arrangements

3. Contestability (2002 – 2005)

- Government Policy
- Required significant investment in new systems
- Assisted to transform the business



Evolution of Envestra (continued)

4. Consolidation (2005 – 2007)

- With systems bedded down, Envestra moved to consolidate the business:
 - upgraded asset management systems
 - mains replacement
 - growth opportunities
 - network development
- These initiatives incorporated in Access Arrangements

5. Global Financial Crisis

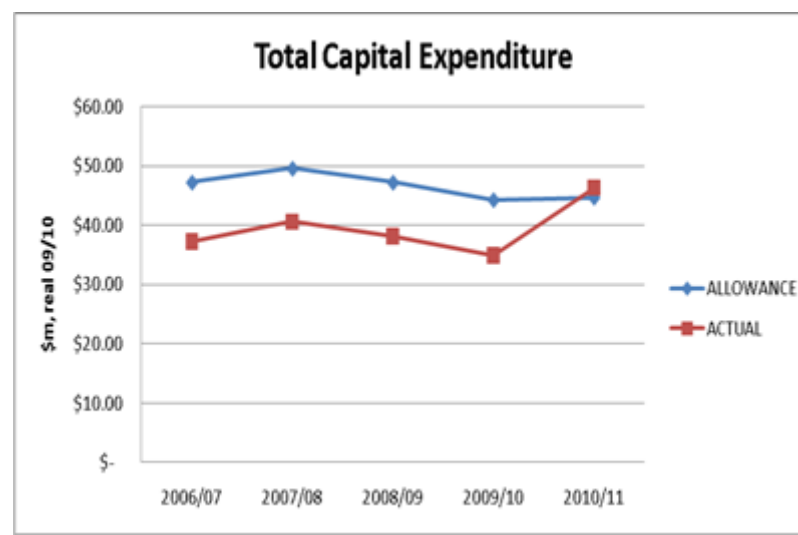
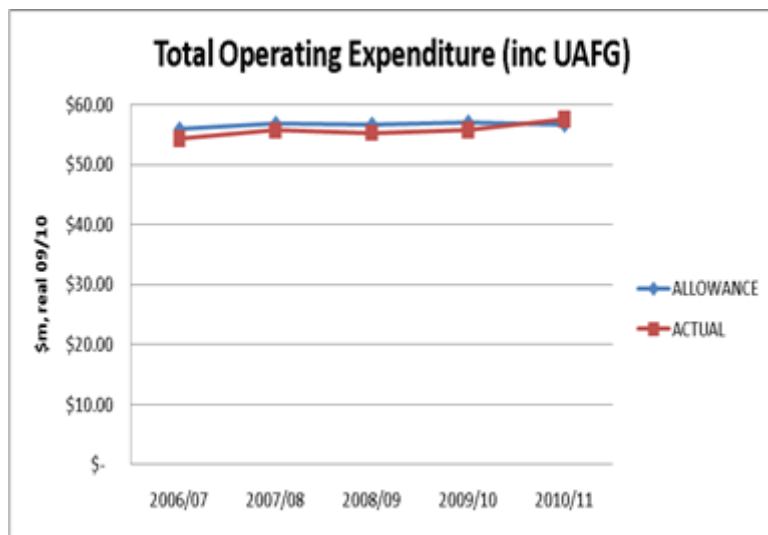
- Cost of capital increased and availability decreased
 - banks withdrew from Australia
 - actual cost of capital exceeded the regulator approved returns
- Envestra was unable to fund the capital program proposed for current period
- Curtailed both capex and opex
- Now need to reposition the business to operate at a sustainable level
 - Implication is that capex will need to increase relative to that approved at the last review to efficiently meet the demand by customers and to catch up projects deferred during the GFC

Envestra's Vision

- Envestra's vision is to own and reliably operate natural gas networks, pipelines and services that generate attractive returns to shareholders
- We will achieve this mission by providing natural gas distribution services that meet the long term energy needs of consumers.
- Over the next 10 years, we expect the energy sector to become more environmentally sustainable
- The credentials of natural gas to contribute to improved environmental outcomes is widely recognised and provides a real opportunity for natural gas
- Our Business Objectives:
 - Operate networks safely and efficiently to deliver reliable and high quality services to customers
 - Promote the use of natural gas
 - Profitably grow the business to satisfy the ongoing demand for capacity and connection of new customers so that natural gas is an option as a convenient and environmentally friendly fuel available to customers
 - Efficiently manage and operate the network.
 - Achieve attractive returns to shareholders

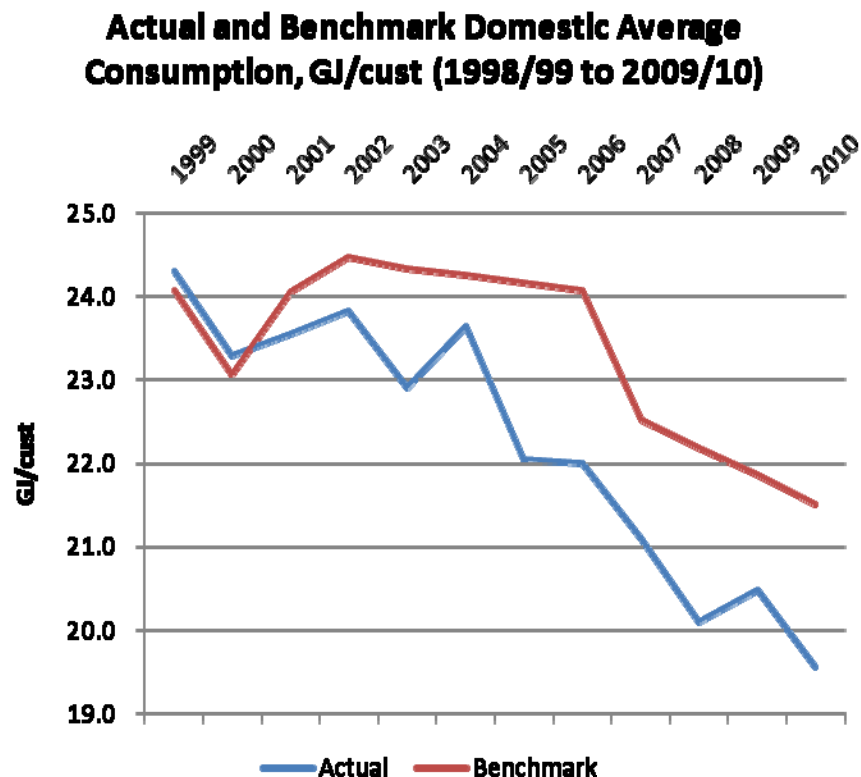
Performance in Current Regulatory Period

- Expenditure has been largely in line with regulatory benchmarks
 - Despite pressures to curtail expenditure as a result of the GFC
- Opex – significant increase in UAFG expenditure
- Capex – exceed benchmarks for mains replacement but made cuts elsewhere



Performance in Current Period (continued)

- Key challenge faced by Envestra relates to continual decline in average consumption for domestic customers
- Average domestic gas consumption has:
 - Been consistently lower than the regulatory benchmarks over the past 10 years
 - Declined at its fastest rate over the current regulatory period
 - Key drivers of the decline include warmer weather, appliance selection and continual improvements in appliance efficiency
- These matters are discussed later in this submission



Key Challenges over Next Regulatory Period

1. Key role for natural gas to meet future energy needs in a carbon constrained environment
 - includes developing new gas technologies (such as gas RCAC and NGV)
- Envestra needs to reposition the business in order to capitalise on this opportunity
 - and therefore ensure its networks are sustainable over the long term
- This requires that Envestra:
 - expands the footprint and capacity of the network to meet customer needs
 - provide a safe and reliable supply of natural gas
 - Arrest the continual declines in average consumption for gas customers
2. Repair damage caused by the GFC
 - cost of capital exceeded the regulator
 - availability of funds reduced
 - Envestra required to curtail capital expenditure program

Key Challenges over Next Regulatory Period (continued)

3. Energy demand forecasts must be set at reasonable levels

- Average consumption has decline by 2% per annum over the past 10 years
- Envestra, over this period, has been unable to achieve forecasts set by regulator

4. Renew and augment the network

- Network is deteriorating more rapidly than previously anticipated
- Large mains replacement program to improve safety/supply
- Envestra's proposal addresses the above matters
- Results in a one-off adjustment to prices in this current period
- Expectation that this is required in order to reduce the long term price to consumers

Regulatory Framework

- National Gas Objective –

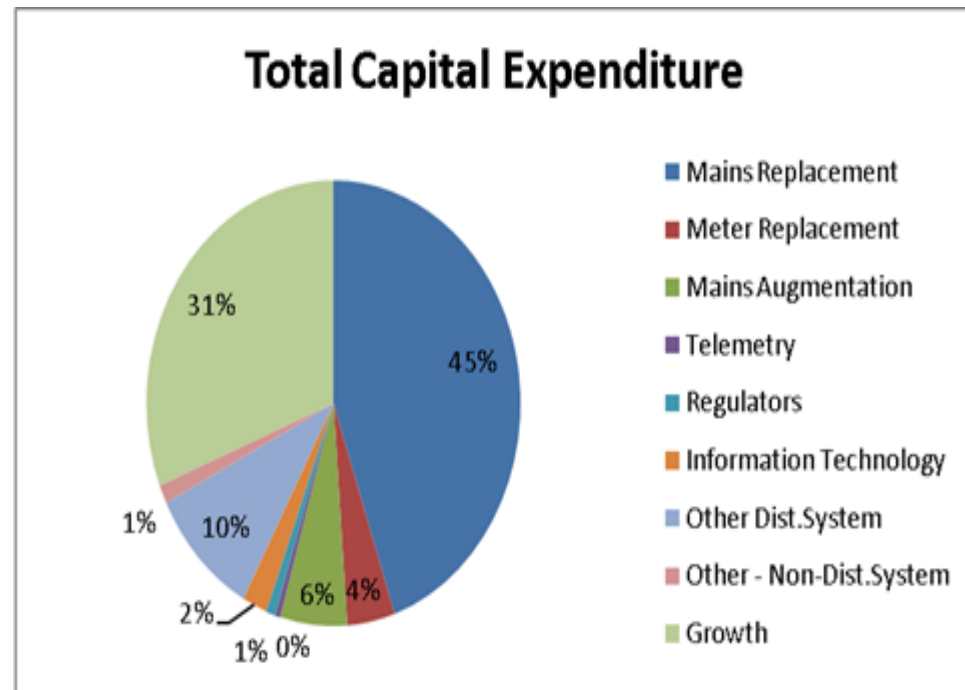
“The objective of this law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.”

Capital Expenditure

- Envestra undertook a strategic review of its network to develop its capital expenditure plans from the “bottom-up”
- In doing so, developed a comprehensive asset management plan
 - Overarching document used to determine expenditure requirements
 - Balances safety, risk, growth, performance and efficiency drivers
 - Sets out internal review processes and controls to ensure efficient costs
- Forecasts were also subject to independent external review
- Key priorities include:
 - Addressing increasing leakages from aged cast iron mains
 - Upgrading pressure in network to better service customers

Capital Expenditure (continued)

- Capital expenditure proposals are comprehensive, including:
 - Description of proposed works and main driver of those works
 - Options considered before arriving at proposal
 - Discussion of timing and risk analysis
 - Identification of opex/capex trade-offs
 - Description of why project complies with the NGR
- Summary of proposal set out to the right
- Total proposed capex of \$507m over period



Capital Expenditure (continued)

- Envestra's mains replacement program driven largely by the need to reduce leakages on the network
- This has led to a new regulatory obligation imposed on Envestra
 - Draft ESCOSA Code requires UAFG to reduce to 4% by 2016 (currently around double this level)
 - Strongly supported by SA Technical Regulator
- The aim of the program is to replace all cast iron mains by 2018
- The mains replacement program accounts for 45% (or \$227m) of Envestra's proposed capital expenditure over the next regulatory period

Benefit: A safer and more reliable network capable of meeting future customer needs

Capital Expenditure (continued)

- Network augmentation also key part of expenditure proposal
- The augmentation requirements are guided by Envestra's Capacity Management Plan
 - Which plan sets out processes for ensuring pressures and flows in the network are maintained for existing and new customers
- Augmentation expenditure accounts for 6% (or \$29m) of Envestra's proposed capital expenditure over the next regulatory period
- The two key projects are:
 - Greenhill rd: completion of looping project to enhance security of supply and improve network pressure
 - Seaford/Aldinga: required to maintain minimum required pressures at network extremities

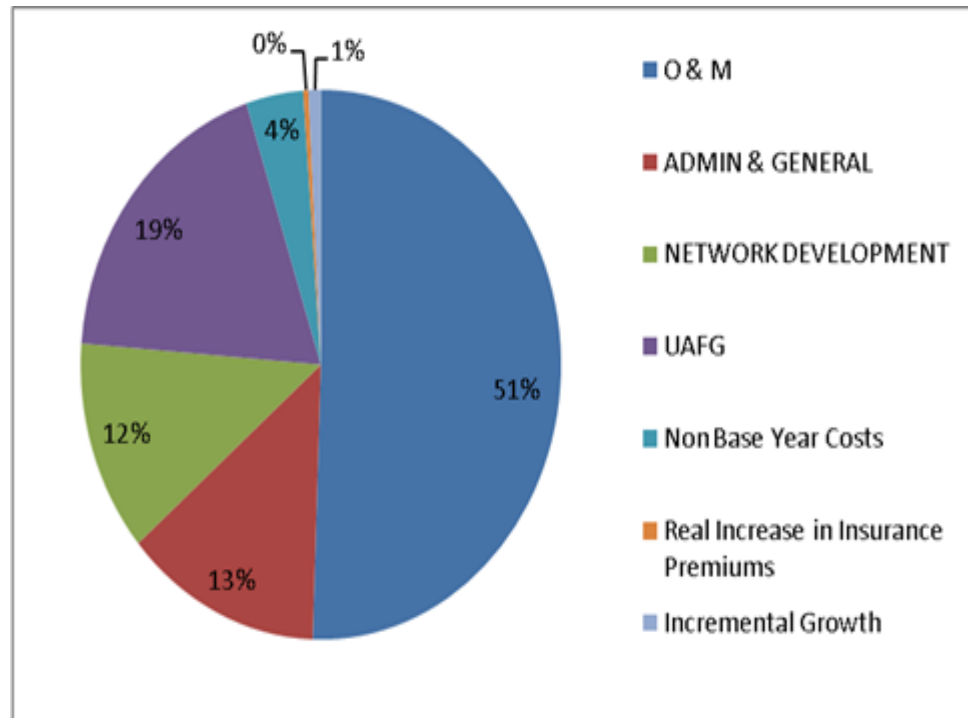
Benefit: Ensures customer needs can be met at times of peak hourly demand and provides better security of supply

Operating Expenditure

- Base year costs determined – 2009/10 using 9 mths actual + 3 mths f/cast (to be updated once 2009/10 regulatory accounts are finalised)
- UAFG and Network Development costs were split out and forecast separately (from the bottom-up)
- Any non recurrent opex items removed from the base year
- Opex items not contained in the base year but forecast to occur were identified and added
- Incremental opex costs associated with customer growth were also added
- All forecast costs (except for UAFG) were split into labour and materials components and escalated in accordance with BIS Shrapnel forecasts

Operating Expenditure (continued)

- Operating expenditure proposals based on well accepted regulatory methodologies
- Identified non base year costs have been prepared based on comprehensive business plans
- Key part of operating costs relates to Network Development Expenditure:
 - capitalising on potential for natural gas to assist community achieve environmental objectives
 - Arrest declining average consumption
- Summary of proposal set out to the right
- Total opex of \$336m over period



Operating Expenditure (continued)

- UAFG expenditure accounts for around 19% (or \$63m) of forecast expenditure
- UAFG costs are forecast to decline in line with the mains replacement program (from \$13.9m in 2012 to \$10.3m by 2016)
- Envestra tenders for supply of its UAFG gas
- Network development expenditure is the other key component of opex, accounting for 13% (or \$42m) over the next regulatory period
- Envestra has prepared a detailed Network Development Plan that sets out strategies and projects
- Key objectives, as set out in Network Development Plan, are to:
 - Arrest declining average consumption
 - Expand the footprint of gas to assist the community to achieve its environmental objectives
 - Assist in developing new gas technology (gas air-conditioning, NGV)



Rate of Return

- Envestra was concerned that the standard AER WACC was not consistent with the cost of capital in the current market conditions
- Analysis of previous AER gas distribution decisions confirmed that the standard WACC did not provide a financial profile consistent with BBB+ credit rating
- The standard AER WACC is derived on a parameter by parameter basis
- Envestra used a series of cross-checks to ensure that Envestra’s rate of return was consistent with capital market requirements and sufficient to fund business operations at the BBB+ credit rating level
- The cross checking process used by Envestra is:
 - Widely employed in commercial practice
 - Ensures the estimated range is as narrow as possible
 - Minimises errors in the estimation process



Rate of Return

- The cost of equity was estimated using the CAPM
 - Cross-checks confirmed that the proposed cost of equity is consistent with market requirements
 - The ensuing financial metrics reflect a BBB+ credit rating
- Resultant rate of return is:
 - Internally consistent with the expenditure proposal and the other WACC parameters; and
 - Will provide sufficient cash flow for the business to fund its operations at the benchmark BBB+ credit rating
- Overall WACC to apply over regulatory period is 10.64%
 - Cost of Equity: 13.02%
 - Cost of Debt: 8.69%



Depreciation

- Envestra undertook a review of asset lives
 - Clear that Envestra lives were inconsistent with industry norms

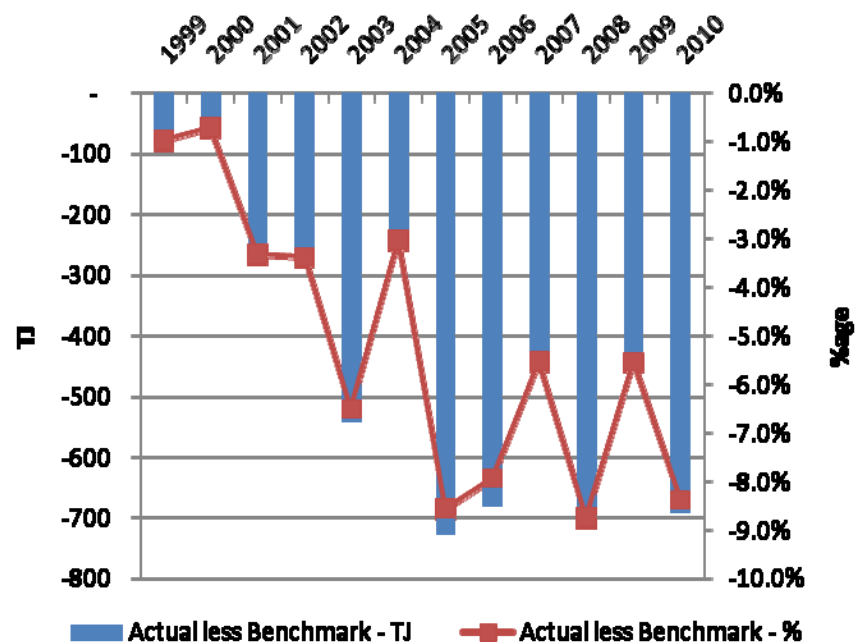
Asset Life by Pipe Type (years)	Jemena	ActewAGL	Country Energy	Envestra current	Envestra proposed
High pressure (steel)	80	80	80	130	80
Medium pressure (PE)	50	50	50	70	50
Low pressure (PE/cast iron)	n/a	n/a	50	70/85	50

- Envestra has therefore sought to realign its asset lives with that generally accepted by industry

Demand

- Envestra has not once achieved the benchmark residential volumes in the last decade
 - 97% of customer connections and 75% of revenue is recovered from the residential segment – critical market
- Driven by a continual decline in average consumption by domestic customers
- Key issue for Envestra over next regulatory period

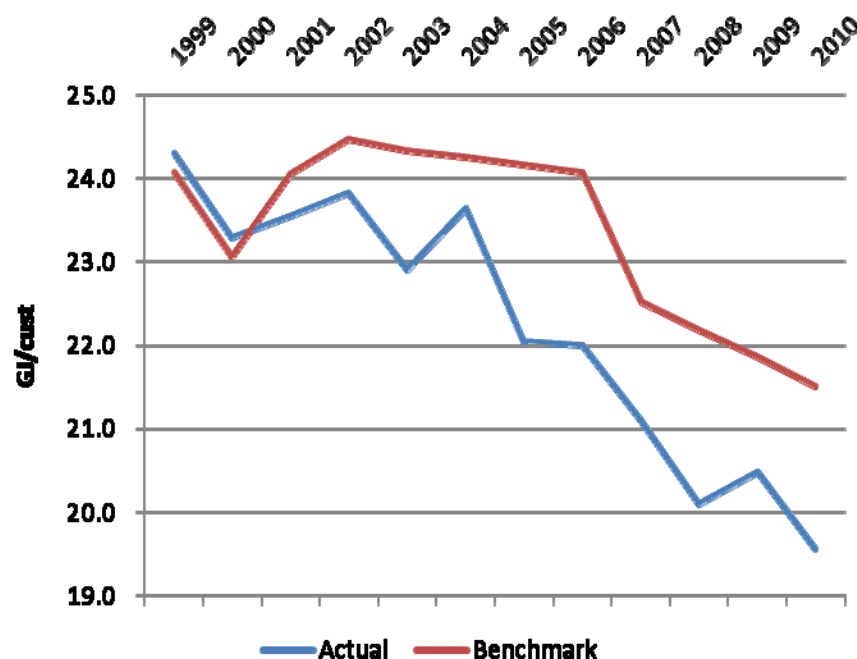
Actual less Benchmark Domestic Sales, TJ and % (1998/99 to 2009/10)



Demand (continued)

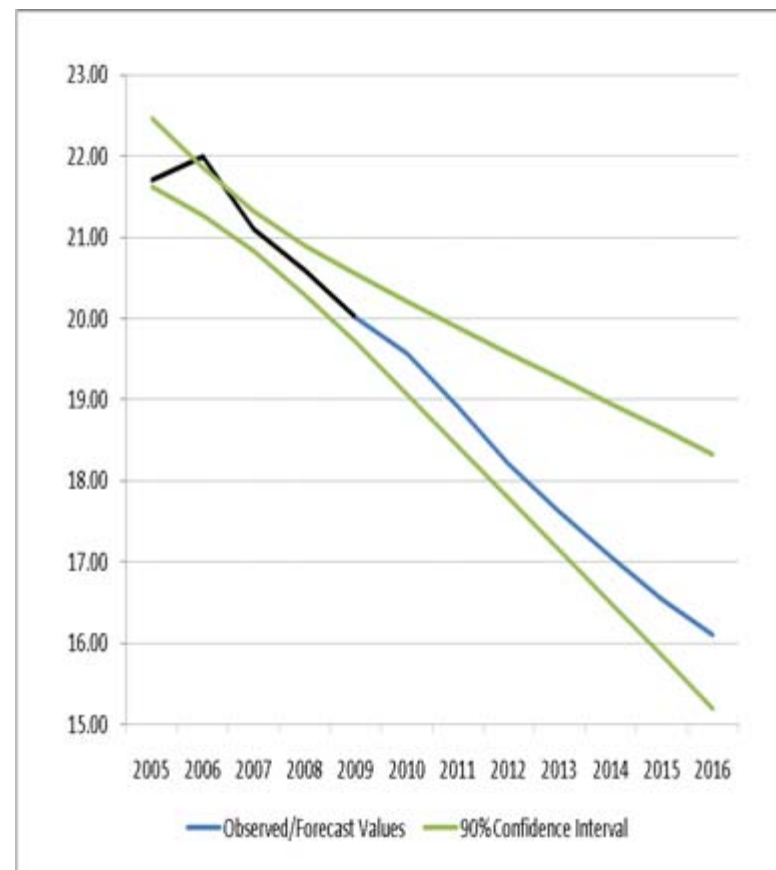
- Importantly:
 - Average consumption has exhibited continual declining trend
 - Has declined at rates greater than anticipated
 - The rate of decline has accelerated over the current regulatory period
- Key factors explaining decline include:
 - Shifts in appliance mix, including:
 - Loss of space heating to electric RCAC
 - IHW over SHW
 - Solar/Heat Pump (driven by government policy)
 - Some housing estates effectively mandate a solar hot water unit – whether gas or electric boosted.
 - Energy efficiency
 - Improvements in appliance efficiency
 - Improvements in dwelling shell thermal efficiency
 - New customers use less than existing customers with a continuing declining trend
 - Warming weather

Actual and Benchmark Domestic Average Consumption, GJ/cust (1998/99 to 2009/10)



Demand

- Envestra engaged the National Institute of Economic and Industry Research (NIEIR) to produce independent gas demand forecasts
 - over 30 years experience in energy forecasting
- NIEIR found that current declines in average consumption are likely to continue
 - But no increase in the rate of decline as was observed over current period
- Envestra tested for reasonableness
 - Forecasts to stay within 90% confidence interval
- Non domestic forecasts based on economic drivers



Price and Service Offering

- No change to reference services offered:
 - Domestic haulage service
 - Commercial haulage service
 - Demand haulage service
- No material changes to terms and conditions
 - But have taken the opportunity to align SA and Qld terms to assist retailers
- Have amended the domestic tariff to a declining 3 block structure (from a declining 2 block structure)
 - Bands reduced to reflect declining average consumption since tariffs were introduced
 - Designed to encourage greater average consumption (and hence support network development initiatives)

Impact of Submission

Costs

- Impact of the proposal on total customer bills in real terms over the period
 - Increase to domestic bill of around \$30 per annum (or by 5% per annum).
 - Increase to non domestic of around 5% per annum
- The actual impact of the proposal on customer bills will vary based on individual gas consumption

Benefits

- Reduce leakage thereby lowering opex
- Improve reliability of supply through increasing pressure
- Increasing volumes leading to relatively lower prices in the long term
- Expanding network to give South Australians greater access to natural gas
- Grow natural gas consumption to deliver better environmental outcomes