



Essential Services Commission

Asian Development Bank Water Professionals

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Agenda

- Who is the ESC?
- Water pricing
- Performance monitoring
- Customer protection framework

Session 1 – Who is the ESC?

Who is the ESC?

- We are the independent economic regulator for essential services in Victoria established by legislation (*Essential Services Commission Act 2001*)
- The ESC has a number of regulatory roles in key sectors including water, electricity, gas, transport (ports, taxis, tow-trucks, rail)
- The primary objective of the ESC is to ‘promote the long-term interests of Victorian consumers with regard to the price, quality and reliability of essential services’
- Key roles:
 - Pricing
 - Energy and Water customers protection framework
 - Performance monitoring of utility services
 - Administration of the Victorian energy efficiency targets scheme
 - Advice to government

Why is the ESC established?

- Set up in 1994 to provide support to the Victorian Government's microeconomic reform program to improve the efficiency and competitiveness of the State's economy
- An independent regulatory body was seen as necessary to ensure that the benefits of industry restructuring were passed on to household, commercial and industrial customers
- Since its establishment, the Commission has now widened its program to include Ministerial reviews and the administration of the Victorian energy efficiency target scheme.

Structure of the ESC

- Structured as a Commission comprising a Chairperson and two part-time Commissioners, supported by around 65 staff
- Chairperson and Commissioners cannot be removed from office unless Parliament decides to do so
- Not subject to direction or control
- The ESC's regulatory and analytical staff are mostly qualified in economics, accounting, law and engineering
- Specialist consultants experienced in advice on technical, economic and legal matters also support the ESC as needed
- Funded by State Budget appropriation (annual \$17m)
- Some regulated entities pay licence fees (water around \$3m per annum)

How does the ESC go about doing its work?

- Matters that the ESC takes into account include:
 - Incentives for long-term investment
 - Financial viability of the industry
 - Degree of, and scope for, competition within the industry, including countervailing market power and information asymmetries
 - Relevant health, safety, environmental and social legislation applying to the industry
 - Benefits and costs of regulation (including impacts on low income and vulnerable customers)
- Open and transparent process and consultation

Some examples of the ESC's decisions

- Every five years, the ESC sets the water prices for 19 urban and rural water businesses
- Every five years, the ESC reviews the economic regulation in Victorian ports and recommends any changes to regulation to the Minister
- In July 2014, the ESC set the taxi fares for metropolitan Melbourne to apply for the next two years
- In 2012–13, almost 8 million energy efficiency certificates were created (each certificate represents a deemed tonne of greenhouse gas abated). This brings to around 19 million the total number of certificates registered by the ESC since start of scheme in 2009

A Typical Industry Restructure

- Vertically integrated utility is disaggregated into generation, transmission, distribution and retail businesses
- Wholesale market trialled and established
- Retail competition is then phased-in
- Create competition wherever possible and monopolies are regulated through incentive-based regulation
- Institutions like the ESC and ESV (technical and safety regulation) are established
- Ombudsman, ie Energy and Water Ombudsman of Victoria is also created to assist resolution of customer complaints
- Over time, customer advocacy bodies are also set up

Questions?



Session 2 – Water Pricing



Water Industry Act

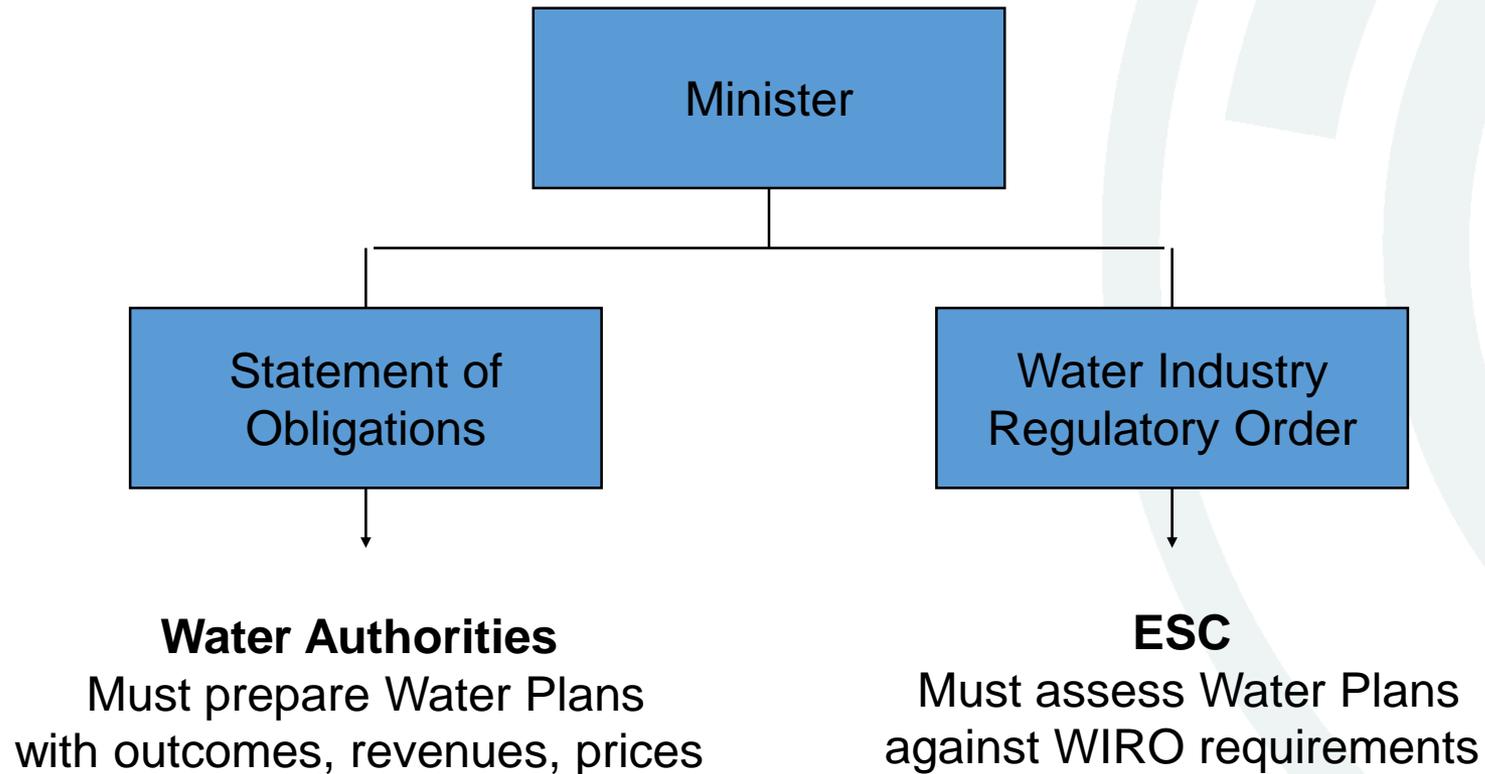
- Objectives set out in ESC Act and Water Industry Act – in part they are:
 - Facilitate investment, efficiency, viability
 - Have regard to safety, environmental, etc. obligations
 - Have regard to different operating environments
- Water Industry Regulatory Order
- Statements of Obligations

Regulatory responsibility

Function	Agency
Pricing	ESC
Customer service	ESC
Resource allocation	DEPI
Dam safety	DEPI
Environmental	EPA
Water quality	Department of Health

Regulatory Framework

- Establishes ESC as economic regulator of water authorities since 2004



Water Industry Regulatory Order

- Water Industry Regulatory Order (WIRO) prescribes:
 - Goods and services ESC to regulate
 - Businesses subject to regulation
 - Powers to regulate prices, standards, conduct and monitor the sector
 - Principles and process for approving price/service proposals

Statement of Obligations

- One for each water business
- Relationship between the Minister and the water business
- An SoO includes:
 - performance standards
 - policy/regulatory obligations to be met
 - community service obligations, and
 - customer and community consultation

Victoria's water industry

- 19 state owned water corporations
 - Established under Water Act
 - Defined by geographic boundaries
 - Monopoly industry / no meaningful competition
 - Businesses operate as standalone entities
 - Boards appointed by Government

Victoria's water industry

- Three main sectors:

Melbourne

- Melbourne Water is bulk water and sewerage provider
- Three retailers - City West, South East & Yarra Valley

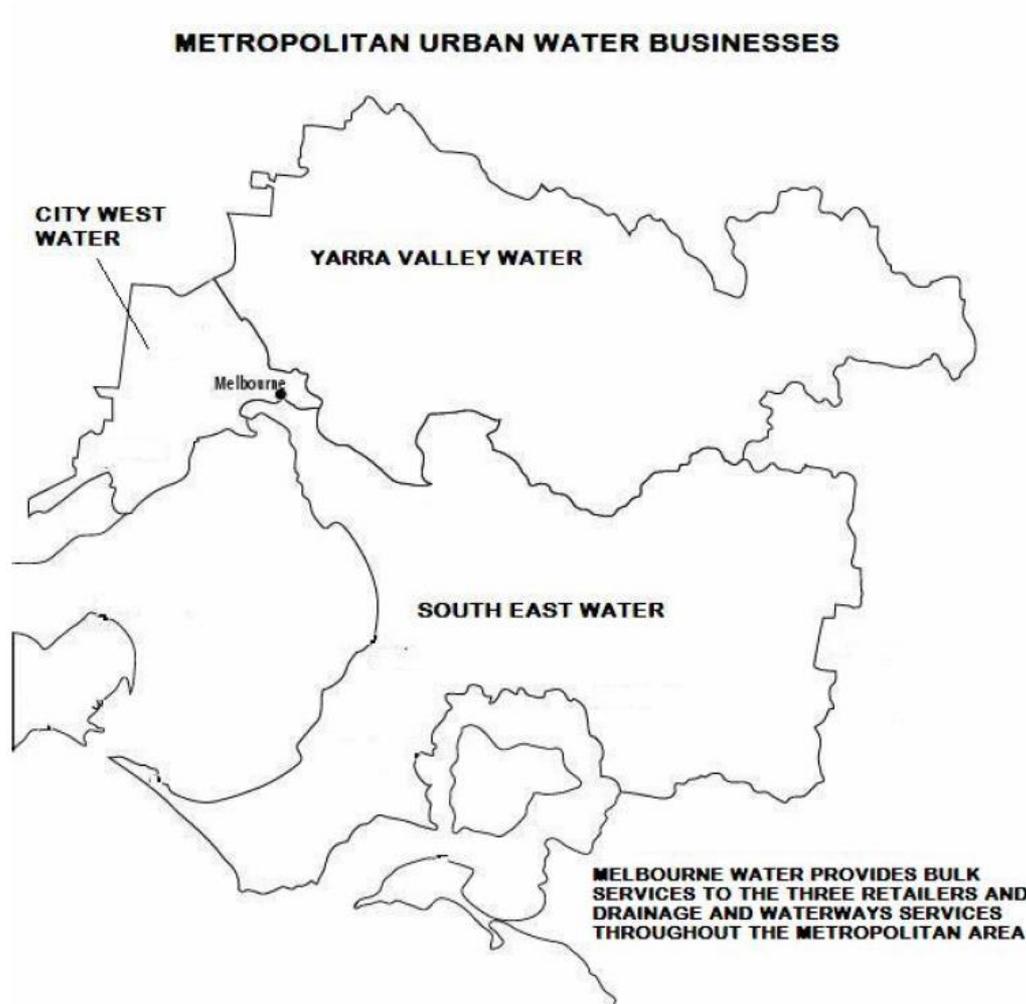
Regional Victoria

- 13 businesses provide water and sewerage services

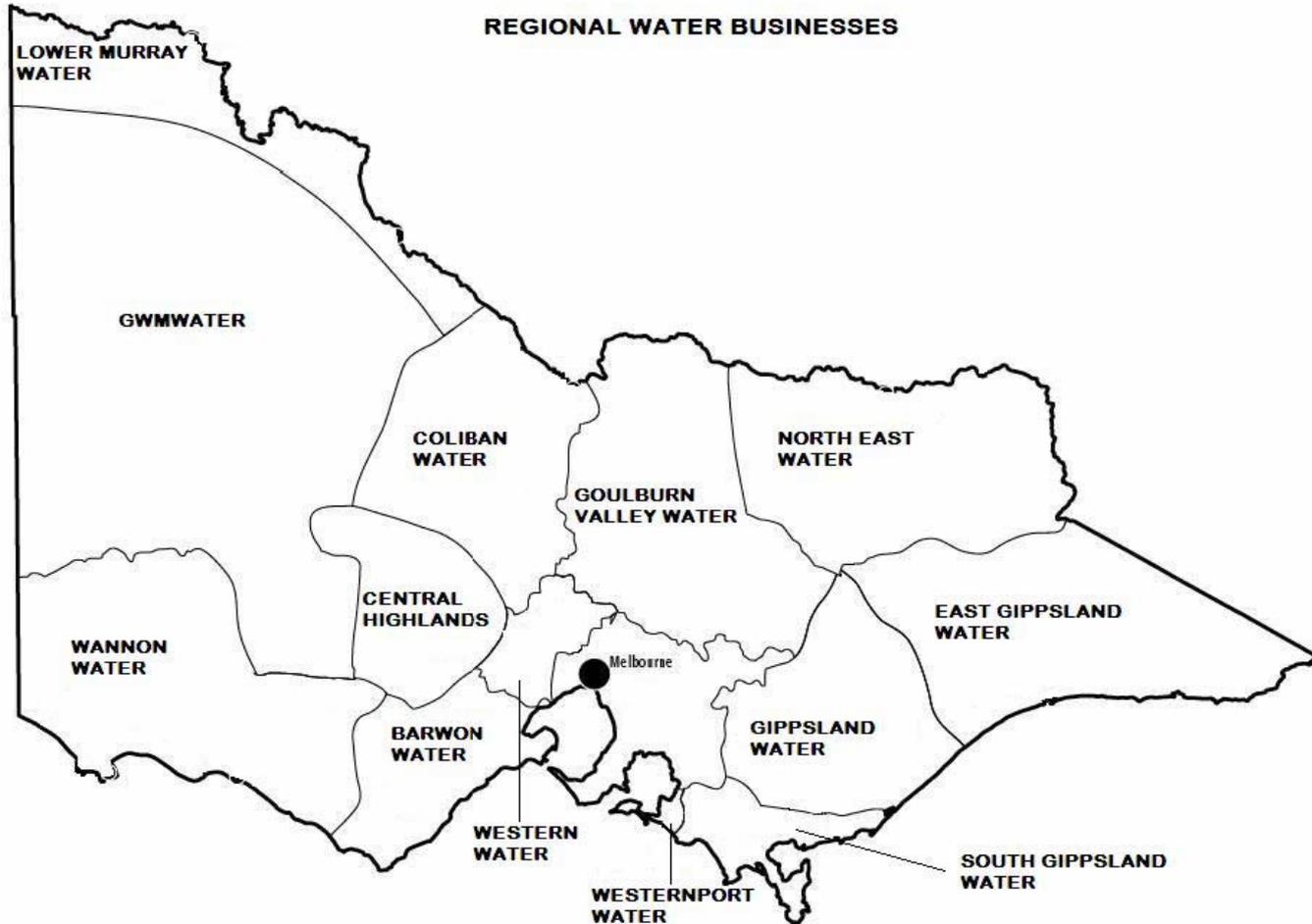
Rural Victoria

- Four businesses providing irrigation services to farmers

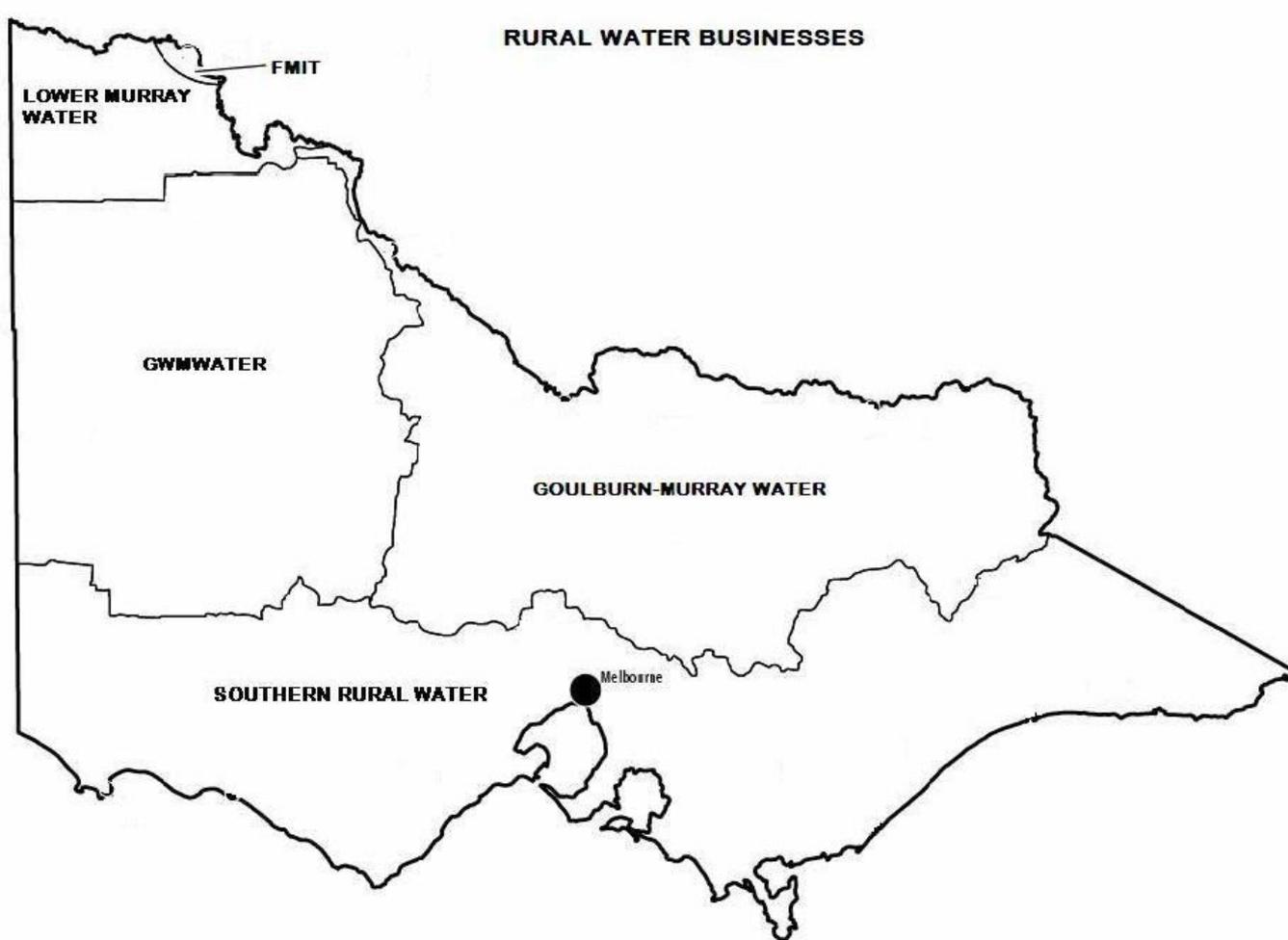
Victoria's water industry



Victoria's water industry



Victoria's water industry



Victoria's water industry

- Businesses provide services to around 2.2 million urban customers (connections)
- Regulated revenue around \$4b+ per annum
- Ave. household bills in Melbourne around \$1,100 per year (water and sewerage)
 - Or about 2 per cent of annual average income
 - [[Electricity + gas bills about 5 per cent of ave. income]]

Our role in the water industry

- Independent economic regulator
 - Decisions not subject to Government direction / influence
 - Operate according to regulatory framework established by the Victorian Government (currently under review)
- Three main functions:
 - Authorise maximum prices / tariffs
 - Report on water business performance
 - Administer customer protection framework

[Energy and Water Ombudsman resolves non-price disputes between customers and businesses]

Our main outputs

- Decisions / determinations on prices
 - Major price reviews (every five years)
 - Annual tariff approvals
 - Within period price applications
- Annual performance report
- Customer codes
- Regulatory accounts
- Inquiries (hardship, licensing, productivity)

... wide consultation underpins our approach

Forms of price regulation

- price monitoring
- negotiate arbitrate
- **building block cost based pricing – generally price or revenue caps**
- total factor productivity linked price caps – a form of index based pricing
- franchise bidding

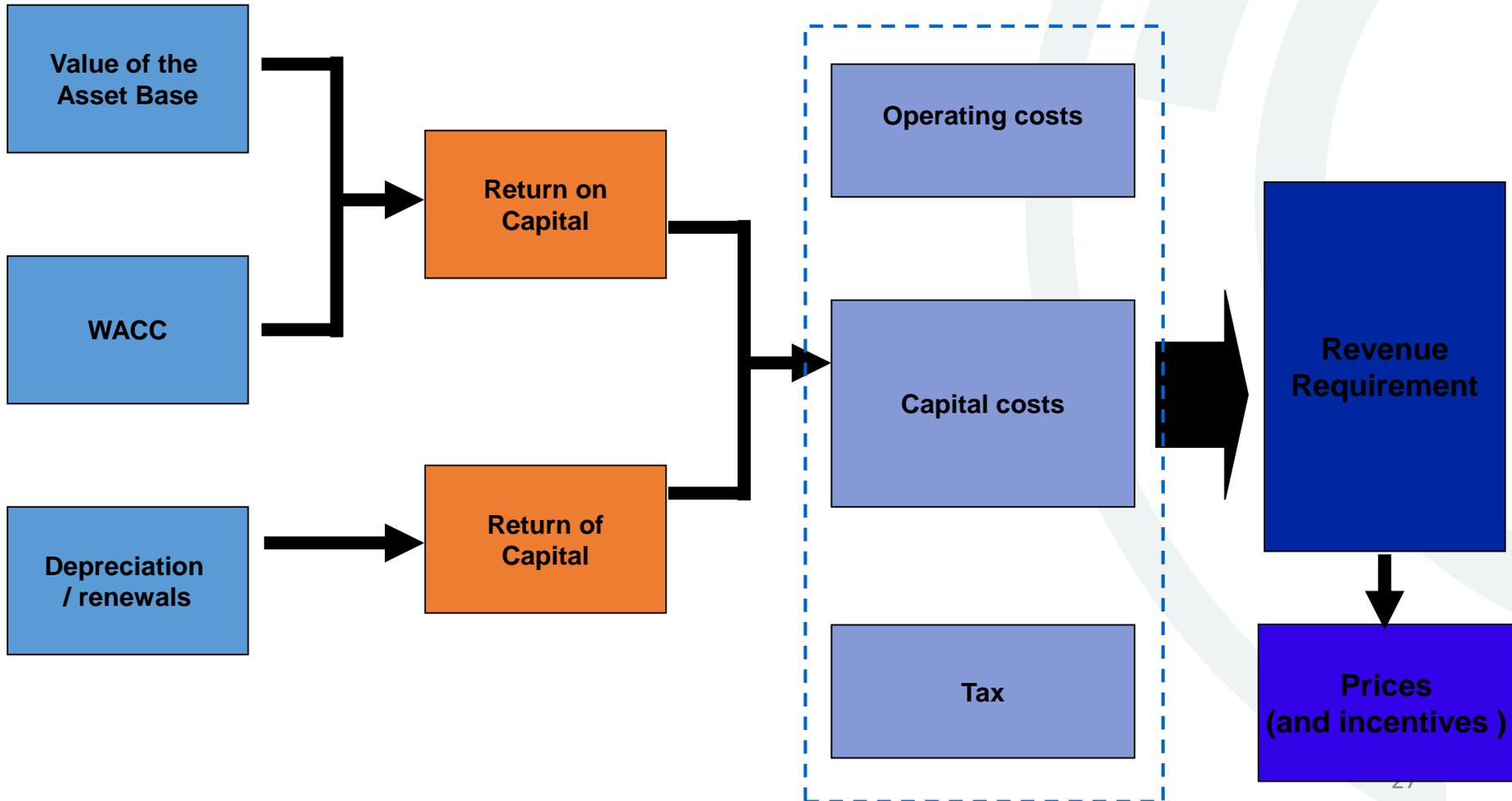
WIRO is based on a building block model, currently under review

Approach to setting prices

- Building block approach
- Revenue
 - Return on Assets
 - Return of Assets
 - Operating costs
 - Taxes
- Price is revenue divided by quantities

Building block model

Defined service level



Building block

- Three main components:
 - **Outcomes** – what is to be delivered by water authorities and for whom?
 - **Revenue** – how much money is required to cover opex, capex, return on and of past investments?
 - **Prices** – what will individual customers have to pay given likely levels of demand?
- *Important iterations between outcomes & prices e.g. customer willingness to pay, tariff structures to influence demand/investment, collective impact of regulators' demands*

Price review process

- Commission provides guidance to water businesses on content of price submissions
- Water businesses prepare price submissions in consultation with:
 - EPA, DH, DEPI & DTF
 - Customers
- Water businesses expose draft price submissions for public comment
- Businesses incorporate feedback into final price submissions which is submitted to Commission

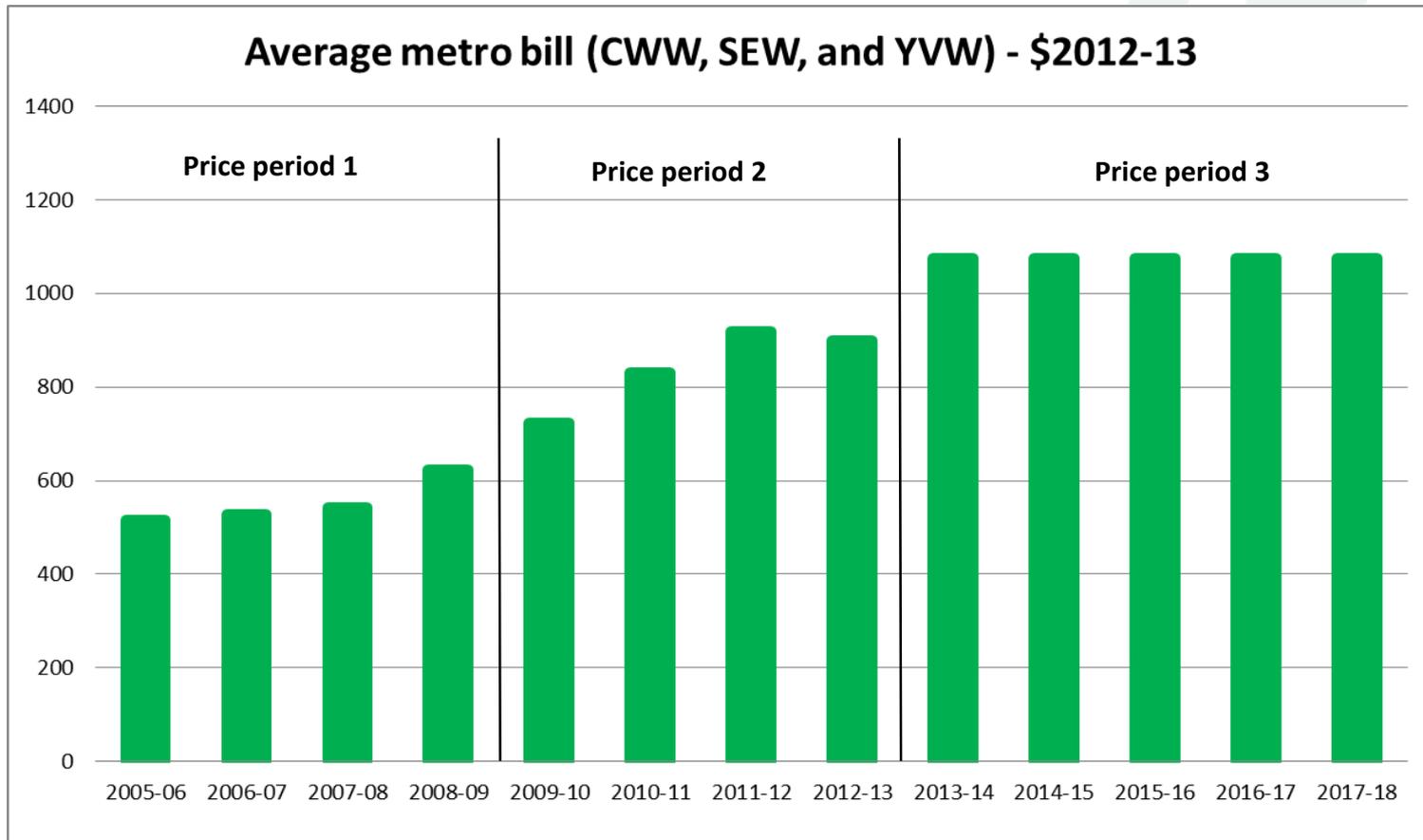
Approval of price submissions

- Commission tests price submissions against principles in ESC Act, Water Act and WIRO
- Prices should:
 - Provide a sustainable revenue stream
 - Not reflect monopoly rents and/or inefficient expenditure
 - Provide signals regarding the costs of supply
 - Be readily understandable by customers
 - Take into account the interests of customers

Pricing process

- ESC Draft Decision must either propose to
 - Approve prices (or pricing process) set out in Water Plans, or
 - Refuse to approve them and propose changes needed to obtain approval
 - Seek public comments
- Final Decision may approve revisions or specify required prices

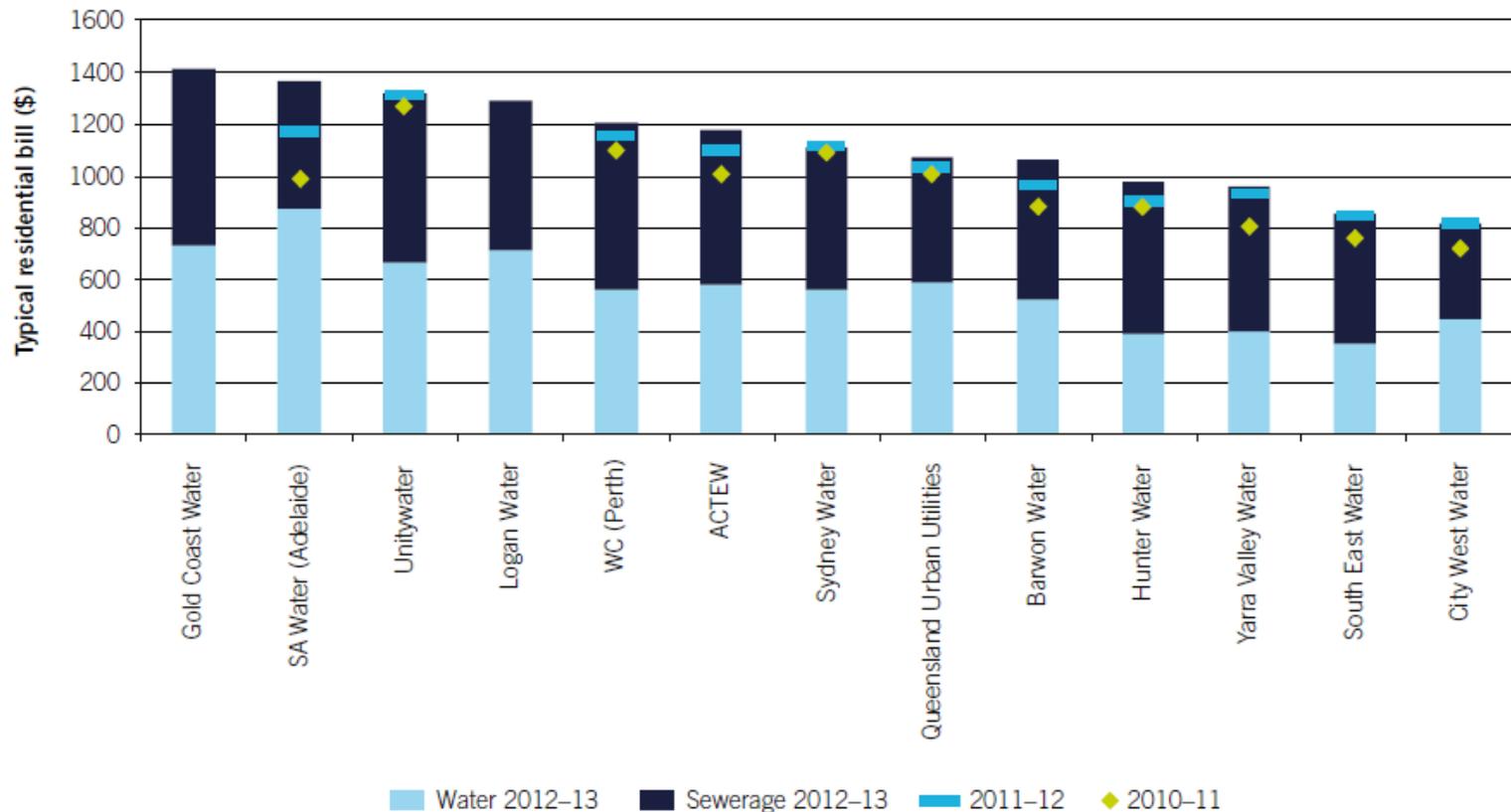
Trends in customer bills (metro)



Bill comparison across States

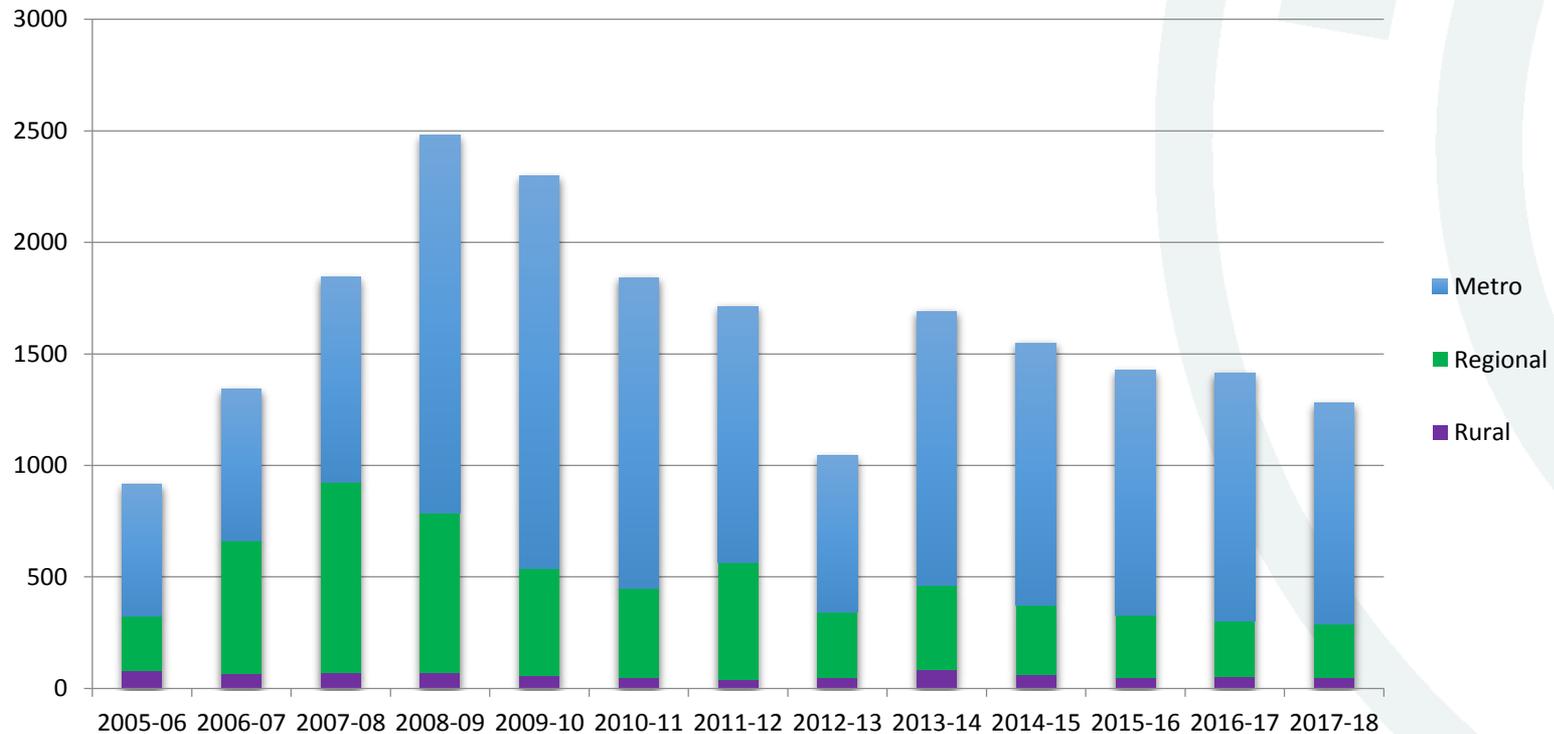
Figure 5.2: P3, P6 Typical residential bill (based on average residential water supplied), 2010–11 to 2012–13 (\$)

For utilities with 100 000+ connected properties



Major projects a key driver of prices / bills in recent years

Capital Expenditure (\$2012-13m)



Typical tariff structure

- Residential - water
 - Fixed service charge
 - Variable / usage charges (3 steps)
- Residential – sewerage
 - Fixed service charge
 - Variable component deduced from water meter reading (metro only)
- Residential – recycled
 - Fixed service charge (small)
 - Variable / usage charge (around step 1 of potable)

Typical tariff structure contd

- Non-Residential - water
 - Fixed service charge
 - Variable / usage charges (single)
- Non-Residential – sewerage
 - Fixed service charge
 - Variable component deduced from water meter reading (metro only)
- Non-Residential – recycled
 - No fixed service charge
 - Variable / usage charge (around 75% of potable)

Service levels

- Potential price quality trade-off under incentive based regulation
 - incentive for regulated firm to cut costs to earn higher profits
 - this could cause service quality to decline
 - stricter price regulation may also risk service quality degradation through reduced service rather than improved efficiency
- Need to clearly define outputs to be delivered
 - Water quality
 - Effluent quality
 - Reliability – frequency, duration
 - Resource security – weakness in water compared to energy sector
 - Dam safety
- Maintenance of efficient service quality levels can be achieved through non-financial or financial mechanisms such as
 - public reporting (performance reports)
 - the establishment and enforcement of service quality standards (GSL payments)
 - through service incentive mechanisms applied under price or revenue regulation use of an S factor in electricity, proposed RP factor in water

Questions



Session 3

Performance monitoring

Performance monitoring

- **Under WIRO the Commission is required to monitor and publicly report on the performance of the water businesses**
- **Establishing, Monitoring & Reporting on performance**
 - industry-wide indicators, reporting to promote yardstick competition
 - Statewide performance reporting and auditing framework established during 2004
 - built on work Commission already undertakes for metropolitan sector
 - undertake regulatory audits of the data
 - publish a report each December
 - contribute to a national reporting framework

Coverage

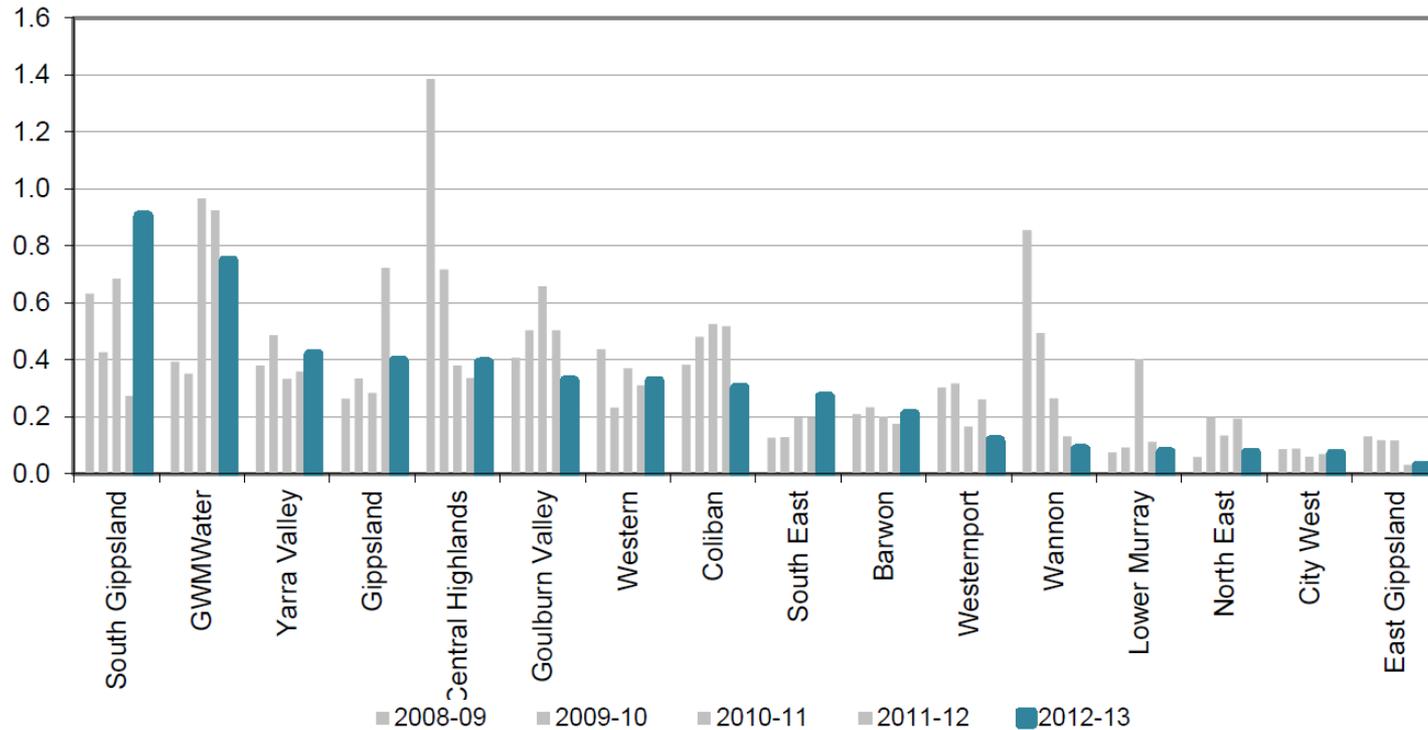
- Report covers key aspects of service
 - Water quality
 - Prices
 - Payment difficulties
 - Reliability of supply
 - Environmental
 - Recycling

Focus

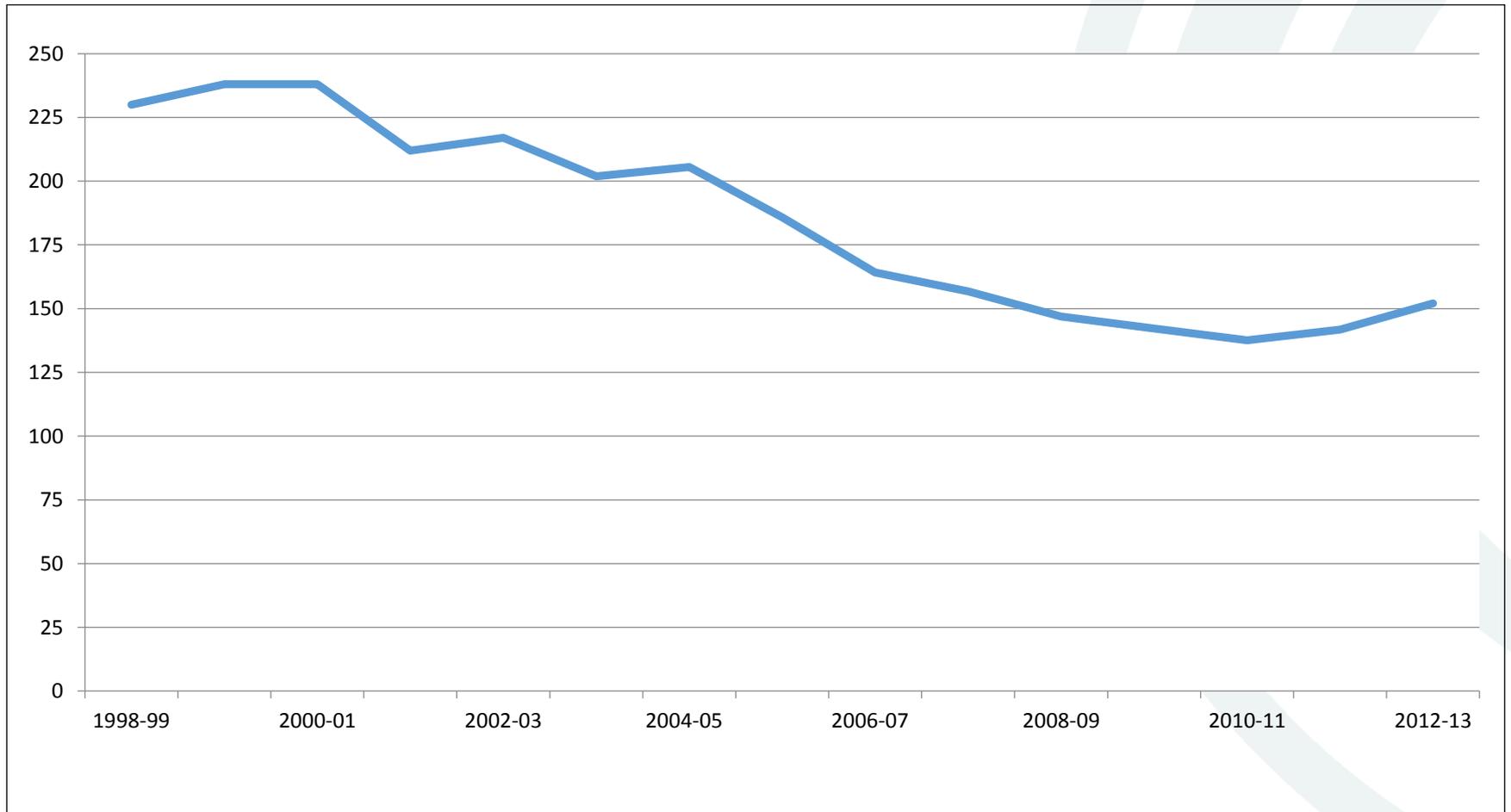
- Comparison between businesses
- Long term trends in performance
- Some examples

Water quality

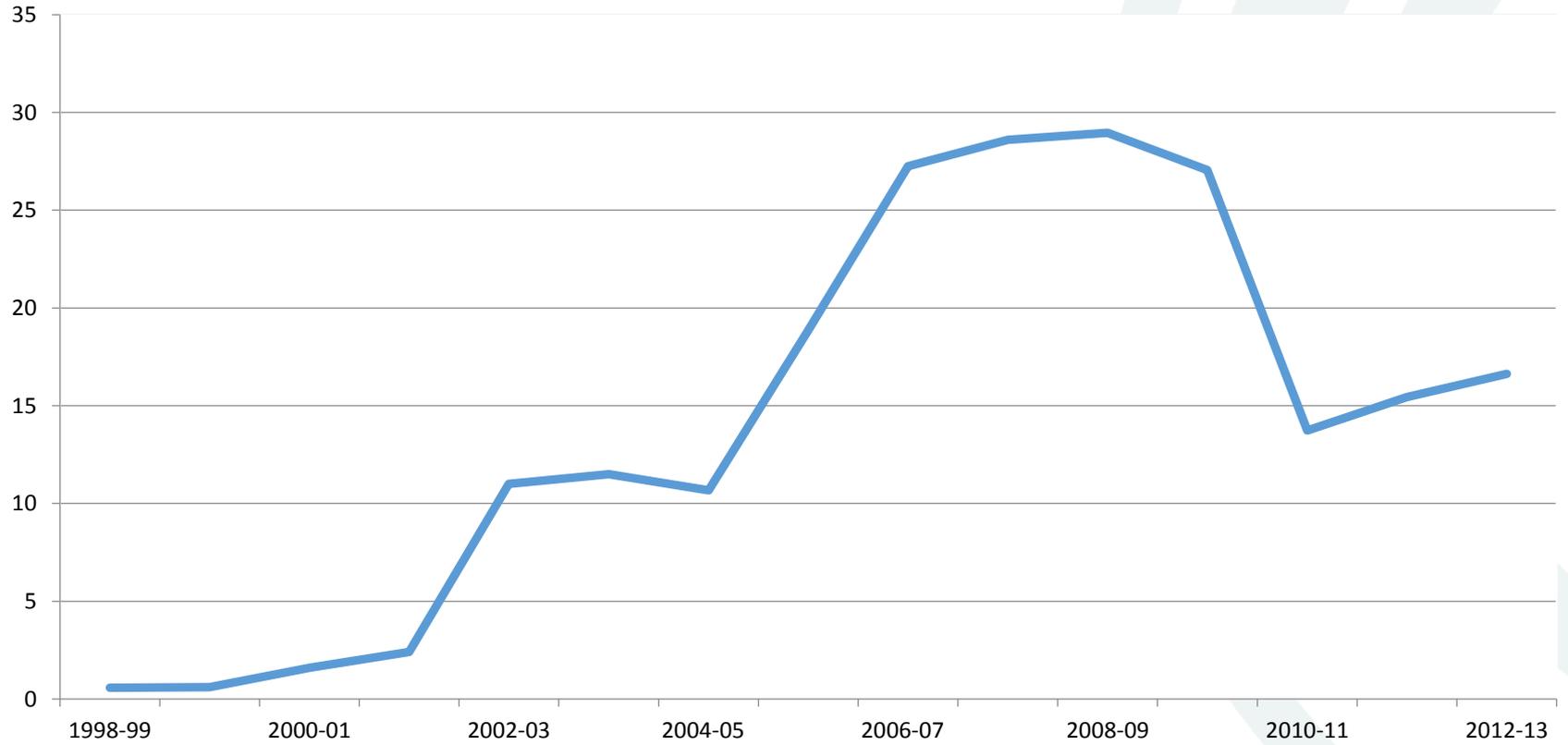
FIGURE 6.1 WATER QUALITY COMPLAINTS — ALL CAUSES
(per 100 customers)



Household water consumption (kL per annum)



Recycled Water (%)



**Session 4
framework**

Customer protection



Customer Service Codes

- The Commission is responsible for establishing the terms and conditions of service and supply
- Established Urban and Rural Customer Service Code and a Trade waste Customer Service Code

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- The Customer Service Codes cover matters such as
 - Information on bills
 - Billing and payment terms
 - Time to pay
 - Assistance with payment difficulties
 - Complaint handling processes
 - Maintenance responsibilities
 - Repair times

GSLs

- Also established Guaranteed Service Levels where businesses are required to make payment to customers if they fail to meet certain performance levels

- Questions

