

Terasen Gas Inc. 2010-2011 Revenue Requirements Workshop

July 6, 2009

Workshop Agenda

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|---|-----------------------------------|
| ■ Introduction and Review of PBR Success | <i>Scott Thomson</i> |
| ■ External Situation and Future | <i>Tom Loski</i> |
| ■ Customer Service | <i>Doug Stout and Jason Wolfe</i> |
| ■ <i>Energy Efficiency and Conservation</i> | |
| ■ <i>Alternative Energy Solutions</i> | |
| ■ <i>Marketing Expenditures</i> | |
| ■ Gas Sales and Transportation Demand | <i>Lee Robson</i> |
| ■ Respected and Trusted Operator / Operational Excellence | |
| ■ <i>O&M</i> | <i>James Wong</i> |
| ■ <i>Capital</i> | <i>James Wong</i> |
| ■ <i>Codes, Standards and Regulations</i> | <i>Joe Mazza</i> |
| ■ <i>Demographic Challenges</i> | <i>Eckart Adam</i> |
| ■ <i>Gas Supply & CMAE</i> | <i>Mike Hopkins</i> |
| ■ Rate Base | <i>Diane Roy</i> |
| ■ Accounting Changes | <i>Diane Roy</i> |
| ■ Proposed Regulatory Timetable and Wrap-up | <i>Tom Loski</i> |

Summary of the 2010 & 2011 TGI Revenue Requirement Application

Introduction and Review of PBR Success

Scott Thomson – VP Regulatory Affairs & CFO

Forecast Revenue Requirements Are Reasonable And Prudent

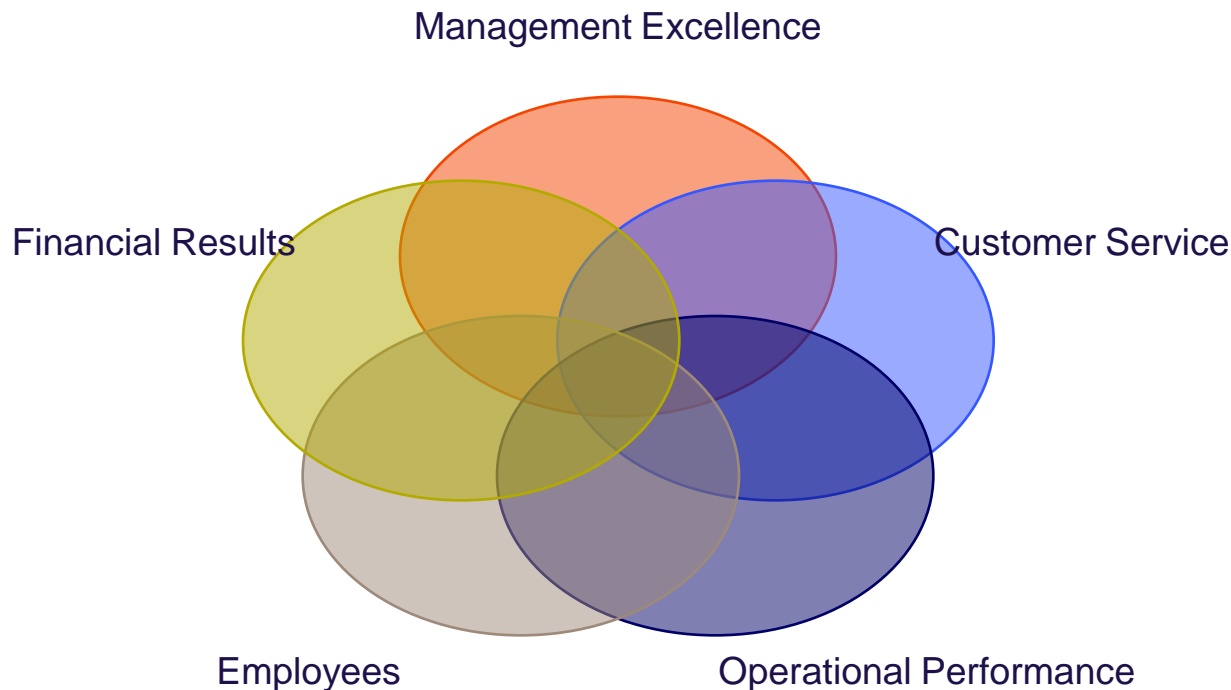


- Forecasts reflect Terasen Gas' commitment to operational excellence and the necessary investments to:
 - *Ensure safe, reliable and cost effective service*
 - *Meet the evolving needs of customers, stakeholders and shareholder*

- Forecasts demonstrate responsible management of controllable costs:
 - *Primary factors driving the rate request reflect drivers in the external operating environment that would be characterized as “exogenous factors”*

The PBR Was A Great Success

- The PBR Period clearly demonstrated that Terasen Gas is a Respected and Trusted Operator:
 - *Providing safe, reliable and cost effective utility service to our customers was tied to strong performance in five key areas:*



The PBR Was A Great Success: **Commitment To Operational Excellence**

- Prudent combination of service quality and cost
- Ensured employee and public safety and operation in an environmentally responsible manner
- Achieved through:
 - *Strong corporate governance structure*
 - *Clear division of management responsibilities*
 - *Well defined policies and procedures*
 - *Performance monitoring*

The PBR Was A Great Success: Commitment To Service Quality Throughout

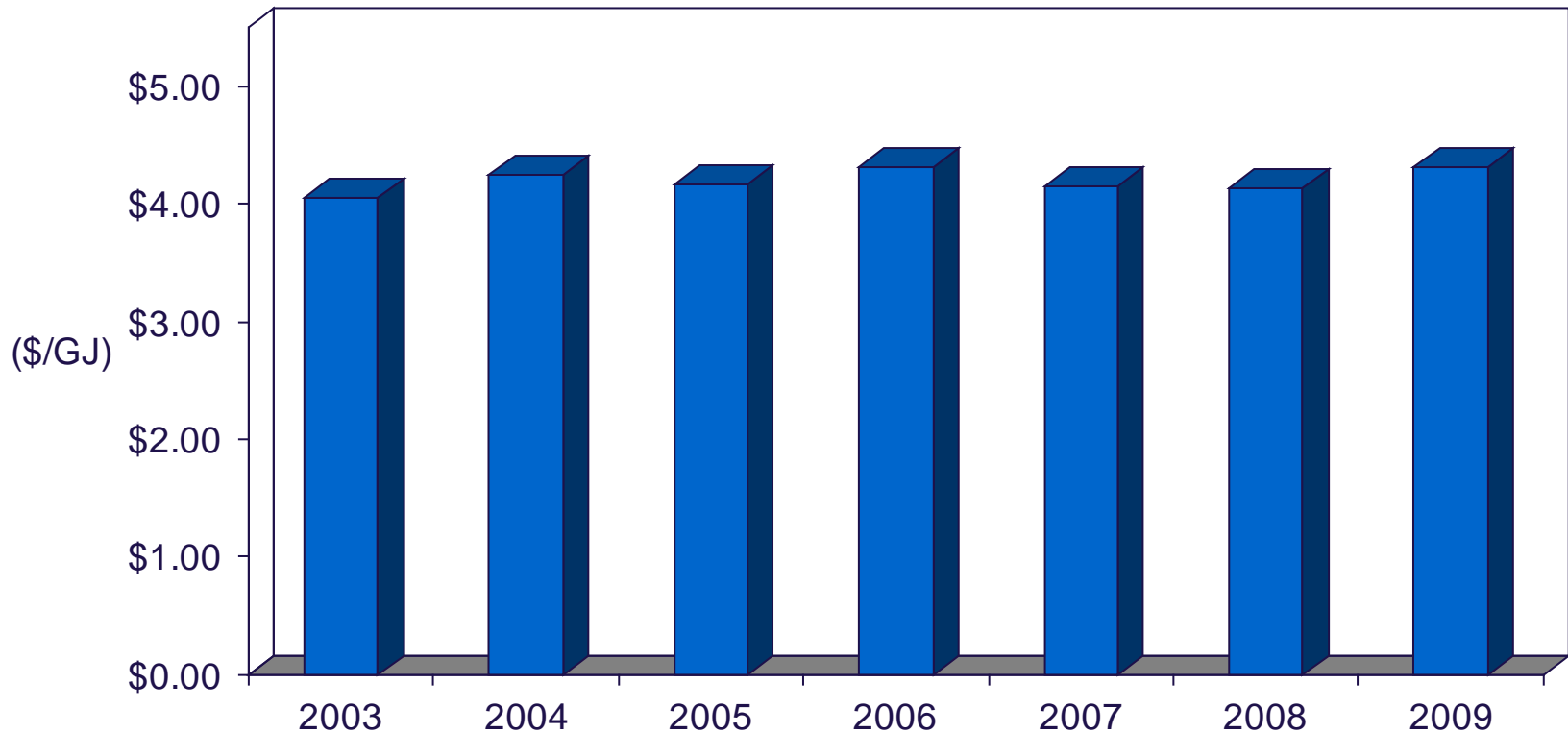
Performance Indicator		Benchmark	2003 Annual Actual	2004 Annual Actual	2005 Annual Actual	2006 Annual Actual	2007 Annual Actual	2008 Annual Actual	2003 - 2008 Average	2009 YTD April Actual
1	Emergency Response Time - Time Dispatched to Site - Emergency - Blowing Gas	≤21.1	22:00 minutes	21:36 minutes	21:42 minutes	21:30 minutes	20:36 minutes	20:42 minutes	21:35 minutes	22:00 minutes
2	Speed of Answer – Emergency (% of calls answered within 30 sec.)	≥95.0%	96.3%	97.9%	98.8%	98.6%	98.4%	98.3%	98.0%	98.5%
3	Speed of Answer – Non-Emergency (% of calls answered within 30 sec.)	≥75.0%	76.4%	77.5%	76.9%	78.2%	76.9%	73.8%	76.6%	76.8%
4	Transmission Reportable Incidents	≤2	3	3	3	1	1	2	2	0
5(a)	Index of Customer Bills Not Meeting Criteria	≤5	2.63	1.93	1.97	0.77	2.30	7.53	2.86	6.90
5(b)	Percent of Transportation Customer Bills Accurate	≥99.5%	99.8%	96.6%	99.9%	99.9%	99.5%	94.3%	98.3%	88.6%
6	Meter Exchange Appointment Activity	≥92.2%	92.6%	93.5%	94.3%	94.1%	93.5%	94.5%	93.8%	87.2%
7	Accuracy of Transportation Meter Measurement First Report	≥90.0%	97.4%	98.0%	99.5%	98.1%	98.9%	96.2%	98.0%	98.4%
8	Independent Customer Satisfaction Survey	Compared to prior years	73.9%	73.9%	77.2%	77.9%	79.3%	79.7%	77.0%	79.9%
9	Number of Customer Complaints to BCUC	Compared to prior years	101	191	121	152	130	90	131	21
10	Number of Prior Period Adjustments	Compared to prior years	24	18	14	21	23	15	19	11

Directional Indicators										
1	Leaks per Kilometer of Distribution Mains	N/A	0.0040 134	0.0045 150	0.0034 120	0.0021 76	0.0024 87	0.0016 57	0.0030 104	0.0009 17
2	Number of Third Party Distribution System Incidents	N/A	1,459	1,492	1,457	1,508	1,545	1,574	1,506	299

Reference- Table B-1-4, page 115 & Section B, Tab 1 pages 102-124

The PBR Was A Great Success: Providing Customers With Stable Rates

Lower Mainland Residential Customer-
Effective Delivery Rate (\$/GJ)



Reference- Table B-1-8, page 112

The PBR Was A Great Success: **Safe, Reliable, Cost Effective Service**



- Fundamental in providing safe, reliable, cost effective service to our customers is our strong operational performance:
 - *Code compliance*
 - *Carbon management*
 - *Information technology strategy*
 - *Delivering on major projects*

The PBR Was A Great Success: Commitment To Talent Management

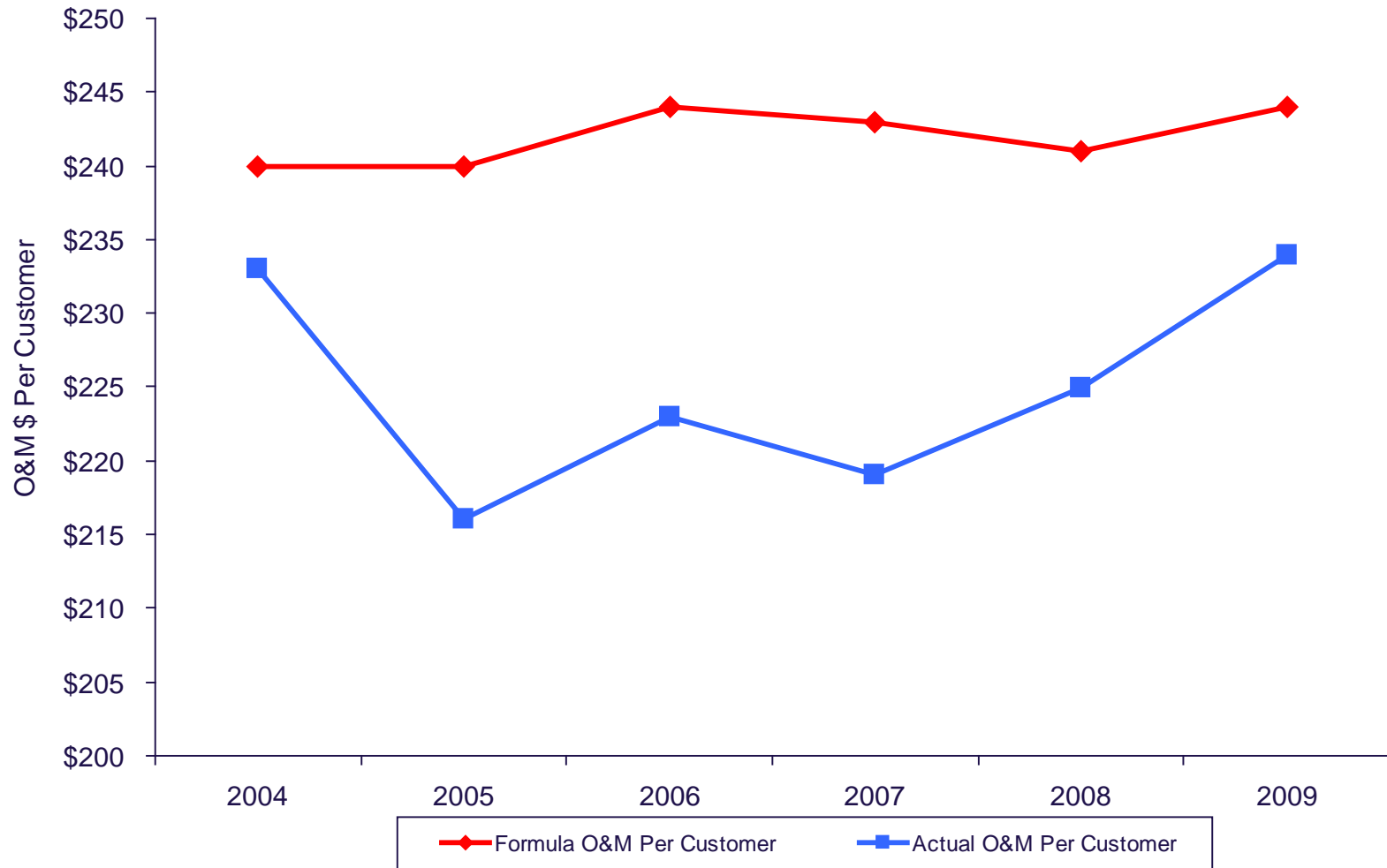
- Retain, Attract and Motivate:
 - *Safety management program:*
 - Identify, assess and reduce risk to employees
 - *Pro-active recruitment*
 - *Employee training*
 - *Fair and reasonable base and incentive compensation levels*
- Prudent and responsible approach in cost and headcount management

The PBR Was A Great Success: Proven By Financial Results

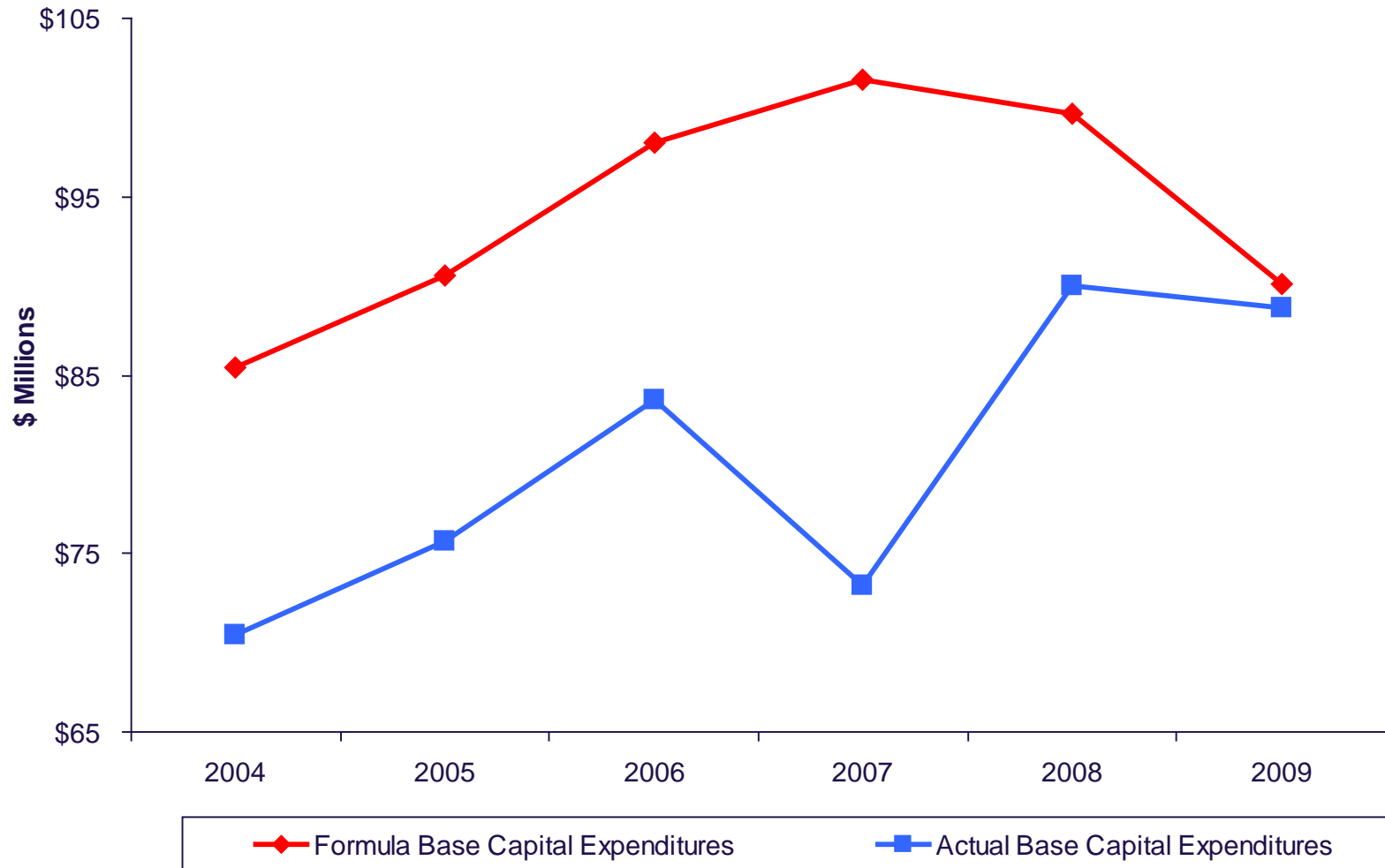
- Implementation of an effective incentive mechanism framework:
 - *Aligned the interests of customers and shareholder*
 - *Achieved significant efficiency savings shared by both customers and shareholder*
 - *Maintained commitment to service quality and safety in light of efficiency savings*
 - *Contributed to stable delivery rates*



The PBR Was A Great Success: Significant O&M Savings Were Achieved



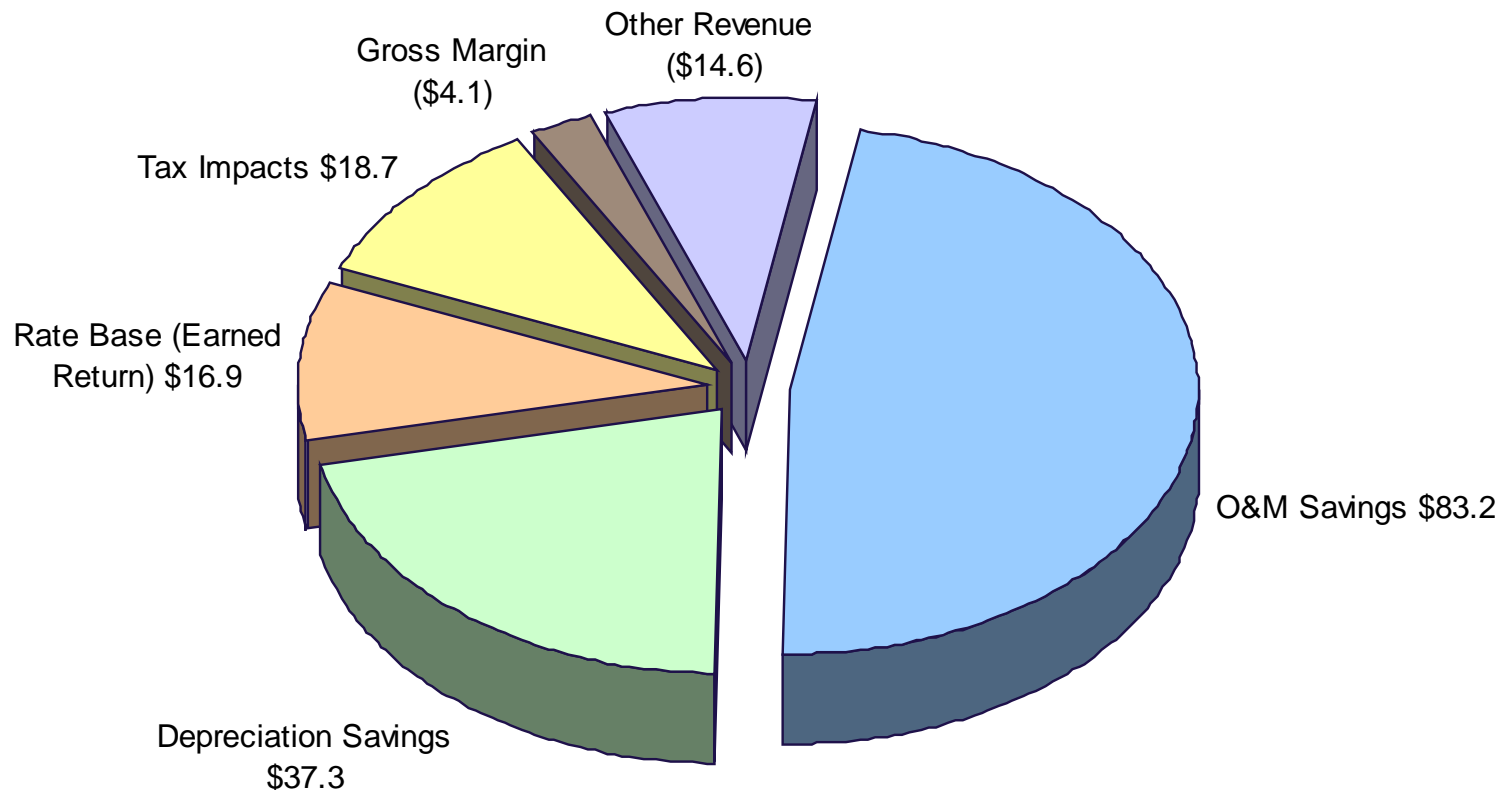
The PBR Was A Great Success: Significant Capital Savings Were Achieved



Reference- Table B-1-25, page 179

The PBR Was A Great Success: Significant Efficiency Savings Were Shared

- Efficiency gains resulted in realized savings and were distributed through the Earnings Sharing Mechanism (ESM):
 - *\$137.4 million Pre Tax in total savings; \$68.7 million is customers' 50% share*



Summary of the 2010 & 2011 TGI Revenue Requirement Application

External Situation and Future

Tom Loski – Chief Regulatory Officer

Terasen Gas Must Respond To New Realities: Changes In External Operating Environment

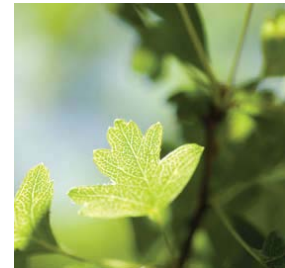
- Several external factors impact our operating environment and we must respond to:
 - *Evolving energy and environmental policies*
 - *Changing expectations of customers, regulators and other stakeholders*
 - *Level of competitiveness as an energy provider*
 - *Changing economic and demographic realities*
 - *Changes in financial accounting standards*



Terasen Gas Must Respond To New Realities: Implications Of Energy Policy Are Profound



- Natural Gas will continue to play an important role in the provincial and regional long-term and sustainable energy solution
- Terasen Gas is addressing Energy Policy objectives head on through:
 - *Continued focus on Energy Efficiency & Conservation programs*
 - *New initiatives that provide a range of energy solutions for our customers*
 - *Encouraging the efficient use of energy through market-based approaches and a regional view of Green House Gas (“GHG”) emissions*



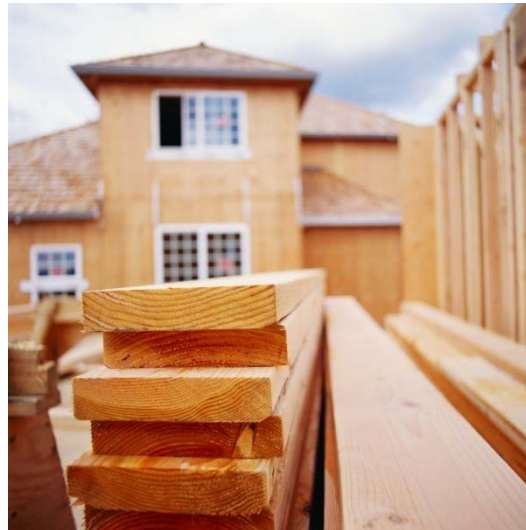
Terasen Gas Must Respond To New Realities: Stakeholder Expectations Have Changed

- Increased concerns about GHG emissions and energy efficiency
- Renewed interest in public safety and security
- Increased community engagement in energy planning



Terasen Gas Must Respond To New Realities: Competitiveness Of Natural Gas In Decline

- Gradual erosion of the cost advantage of natural gas over electricity
- Difference in how natural gas and electricity prices are set into customer rates - impacting new customer additions and existing throughput
- Perception of natural gas in light of focus on GHG reduction



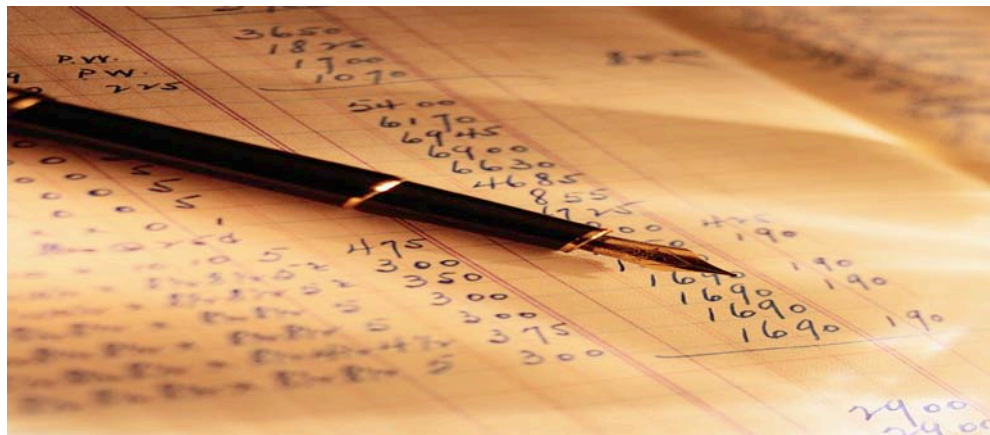
Terasen Gas Must Respond To New Realities: New Economic And Demographic Conditions



- Changes in the global, regional and local economies impact:
 - *The ability of our customers to pay for energy*
 - *The ability of our customers to invest in energy conservation measures*
 - *Customer additions*
 - *Customer demand for energy consumption*
- Demographic challenges are significant and must be addressed

Terasen Gas Must Respond To New Realities: Mandatory Changes In Accounting Standards

- Canadian Utilities required to comply with International Financial Reporting Standards (IFRS) January 1, 2011
- Comparative January 1, 2010 figures required
- Standard changes affect the timing of cost recovery
- Absent of accounting standard changes, a rate decrease would be experienced January 1, 2010



The Proposed RRA Meets Stakeholder Needs

- We must make additional investments to:
 - *Meet the evolving needs of our customers, the communities we serve, and our shareholder*
 - *Address the new realities that we are faced with*
 - *Continued management focus on five key areas*

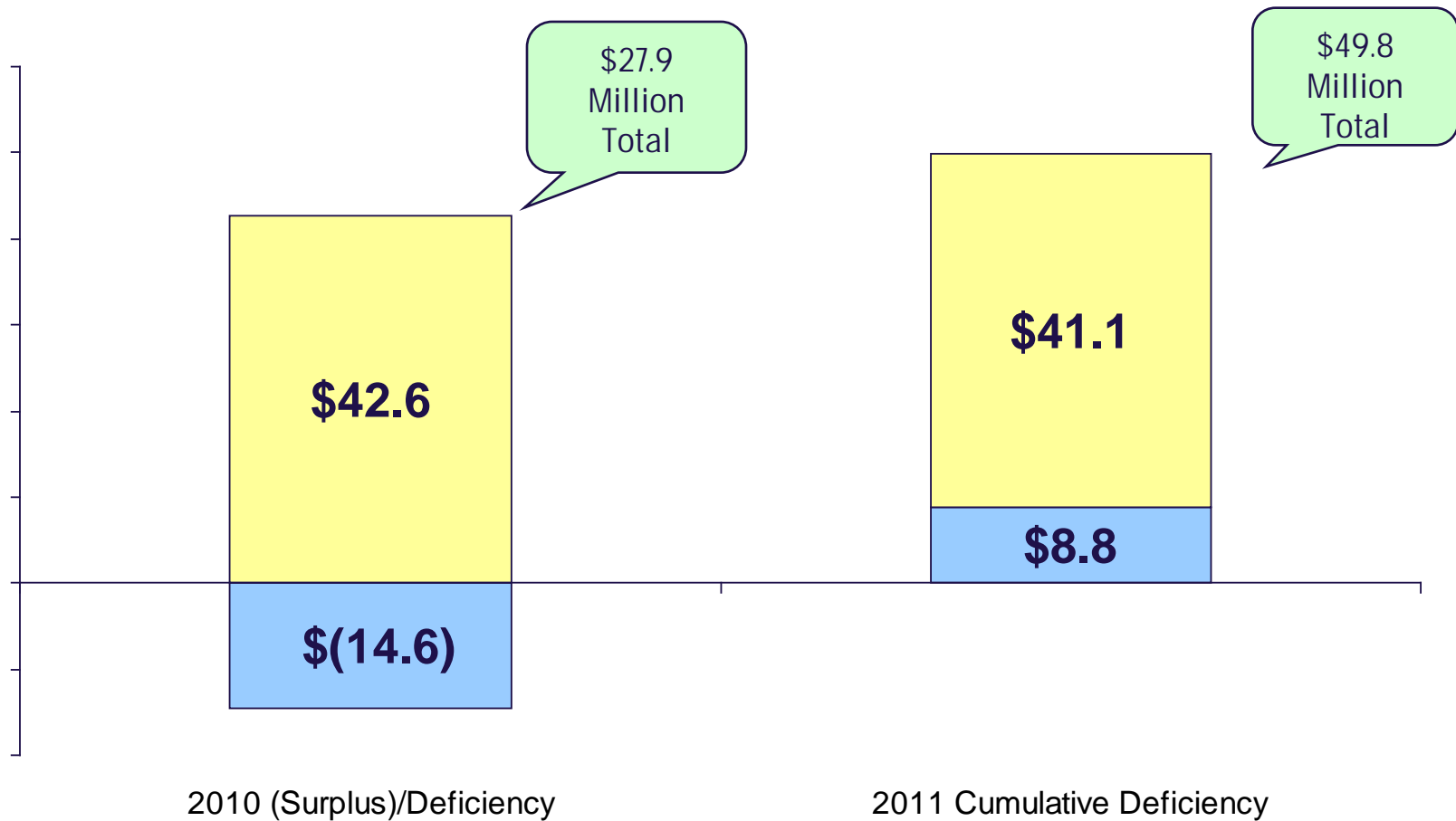


Proposed RRA Meets Stakeholder Needs: Sound Management of Controllable Costs



- Mandatory changes to accounting standards is the major contributor to the revenue deficiency: \$42.6 million in 2010, cumulative impact of \$41.1 million in 2011:
 - *Exogenous treatment under PBR settlement*
 - *These changes in accounting policies affect the timing of when costs are recovered, affecting revenue requirements and rates*
 - *Without accounting policy changes, rate decrease would have been experienced for 2010 and minor rate increase would have been experienced for 2011*

Proposed RRA Meets Stakeholder Needs: Absent IFRS Provides Rate Decrease In 2010



Proposed RRA Meets Stakeholder Needs: In The Best Interest Of Our Stakeholders

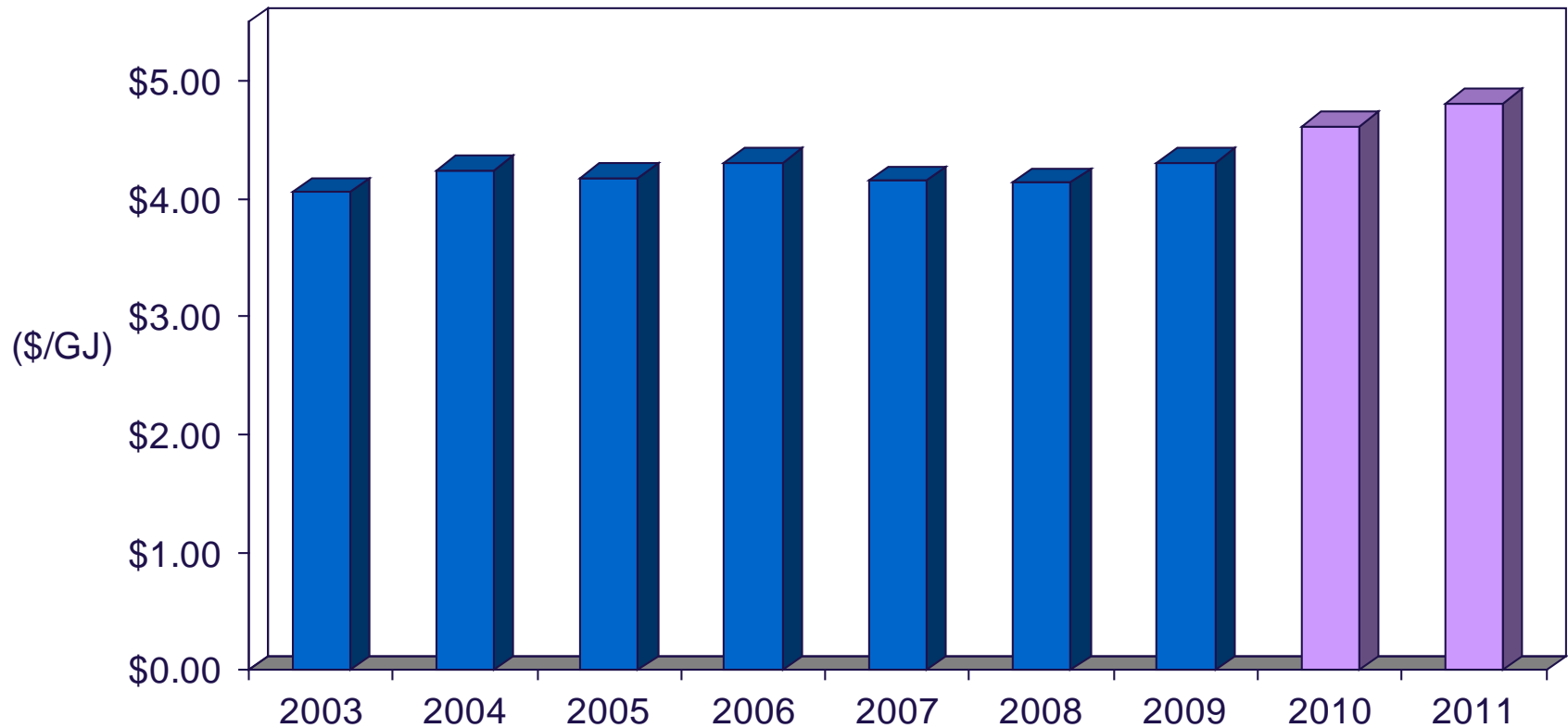


	2010	2011	Cumulative 2011
Revenue Deficiency (\$ Million)	27.9	21.9	49.8
Impact as a % of Gross Margin	5.3%	4.1%	9.4%
Approximate Annual Bill Impact (\$)*	\$31	\$19	\$50
Approximate Annual Bill Impact (%)*	2.8%	1.7%	4.5%
Earnings Sharing (\$ Million)	\$6.2	\$6.9	\$13.1

* Annual bill impact based on Lower Mainland Residential Customer with annual consumption of 95 GJs

Proposed RRA Meets Stakeholder Needs: Delivery Rates Remain Relatively Stable

Lower Mainland Residential Customer-
Effective Delivery Rate (\$/GJ)



Proposed RRA Meets Stakeholder Needs: Rates Support Efficiency And Conservation



- Increasing the proportion of the annual bill that results from volumetric charges:
 - *Flowing revenue requirement through base delivery and demand charges; maintaining existing monthly basic charge and administration fees*
 - *Consistent with the 2007 BC Energy Plan Policy Action Item 4, which called on utilities to implement innovative rate designs*

Proposed RRA Meets Stakeholder Needs: Minimal Annual Bill Impacts For Core Customers

■ Minimal Annual Bill impacts for core customers

Lower Mainland Customer- Approximate Annual Bill Impacts	2010		2011	
	\$	%	\$	%
RS 1- Residential	\$31	2.9%	\$18	1.7%
RS 2- Small Commercial	\$70	2.3%	\$43	1.4%
RS 3- Large Commercial	\$473	1.8%	\$314	1.2%
RS 4- Seasonal	\$686	1.6%	\$318	0.8%
RS 5- General Firm	\$1,726	2.0%	\$862	1.0%
RS 6- Natural Gas Vehicles	\$890	3.1%	\$421	1.4%
RS 7- General Interruptible	\$753	1.1%	\$413	0.5%

Proposed RRA Meets Stakeholder Needs: **Moderate Annual Bill Impact For Transport Customers**

- Moderate Annual Bill impacts for transportation customers

Lower Mainland Customer- Approximate Annual Bill Impacts	2010		2011	
	\$	%	\$	%
RS 22- Large Industrial T-Service	\$30,842	8.2%	\$15,889	4.3%
RS 23- Large Commercial T-Service	\$697	6.4%	\$459	4.2%
RS 25- General Firm T-Service	\$3,059	8.7%	\$1,522	4.4%
RS 27- General Interruptible T-Service	\$5,450	8.7%	\$2,751	4.4%

The Forecast Revenue Requirements Are Reasonable And Prudent



- The PBR was a success
- Terasen Gas must respond to evolving business realities
- The proposed RRA meets the needs of stakeholders including customers, regulators, and our shareholder

We look forward to serving you now and into the future

Customer Service

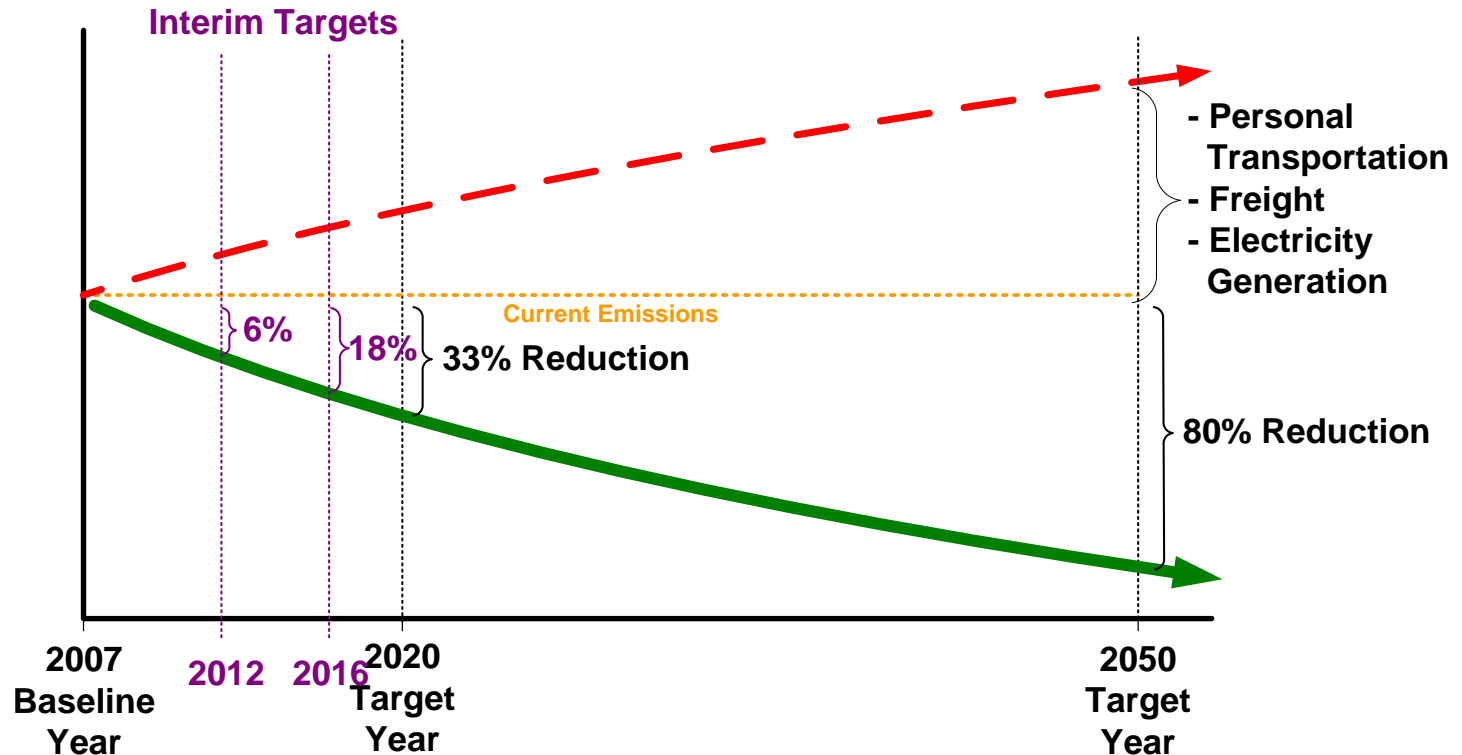
Douglas Stout – VP Marketing and Business Development

Terasen Must Adapt To A Changing BC Energy Marketplace



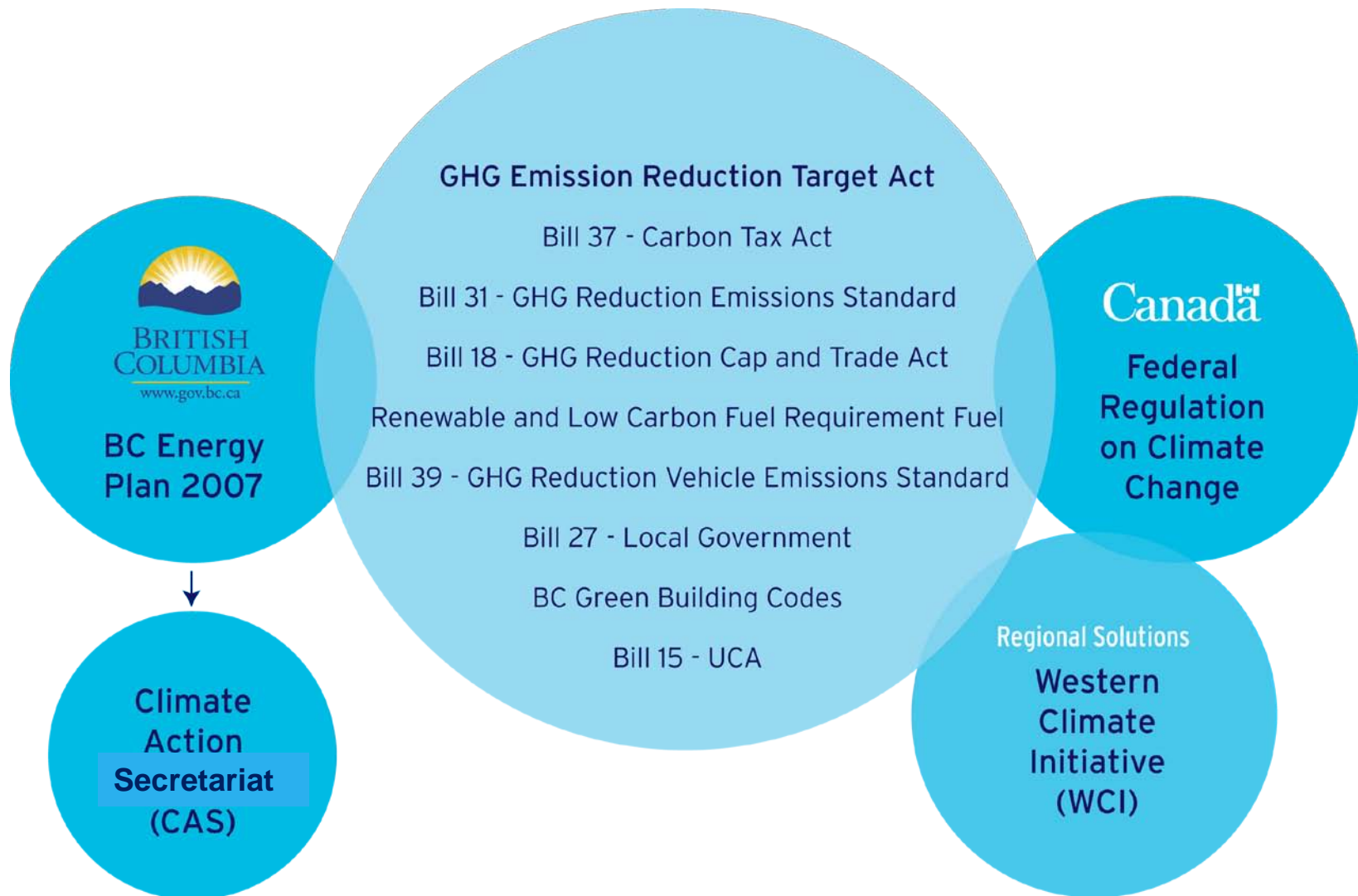
- Customers are responding to energy policy and a desire to manage energy efficiently:
 - *Customers looking to better understand energy usage*
 - *Customers looking for integrated solutions*
 - *Customers looking beyond traditional gas and electricity offerings*
- Terasen Gas must continue this evolution and be proactive to meet the changing expectations of customers by providing integrated energy solutions while continuing to offer traditional gas service

Climate Change Impacts Are Changing The Need For How Energy Is Produced, Delivered And Consumed By Customers

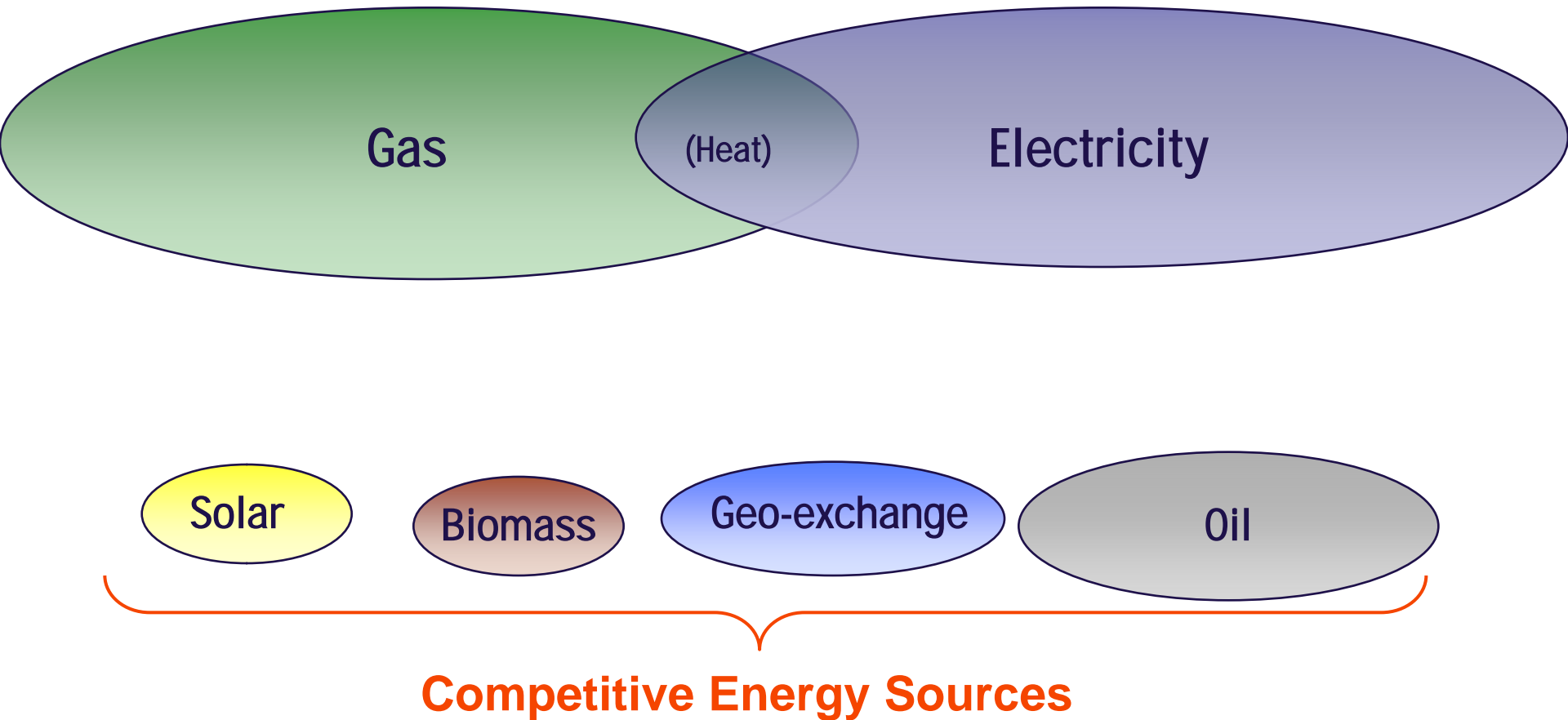


- Customers must use energy differently and more efficiently to meet 80% reduction targets

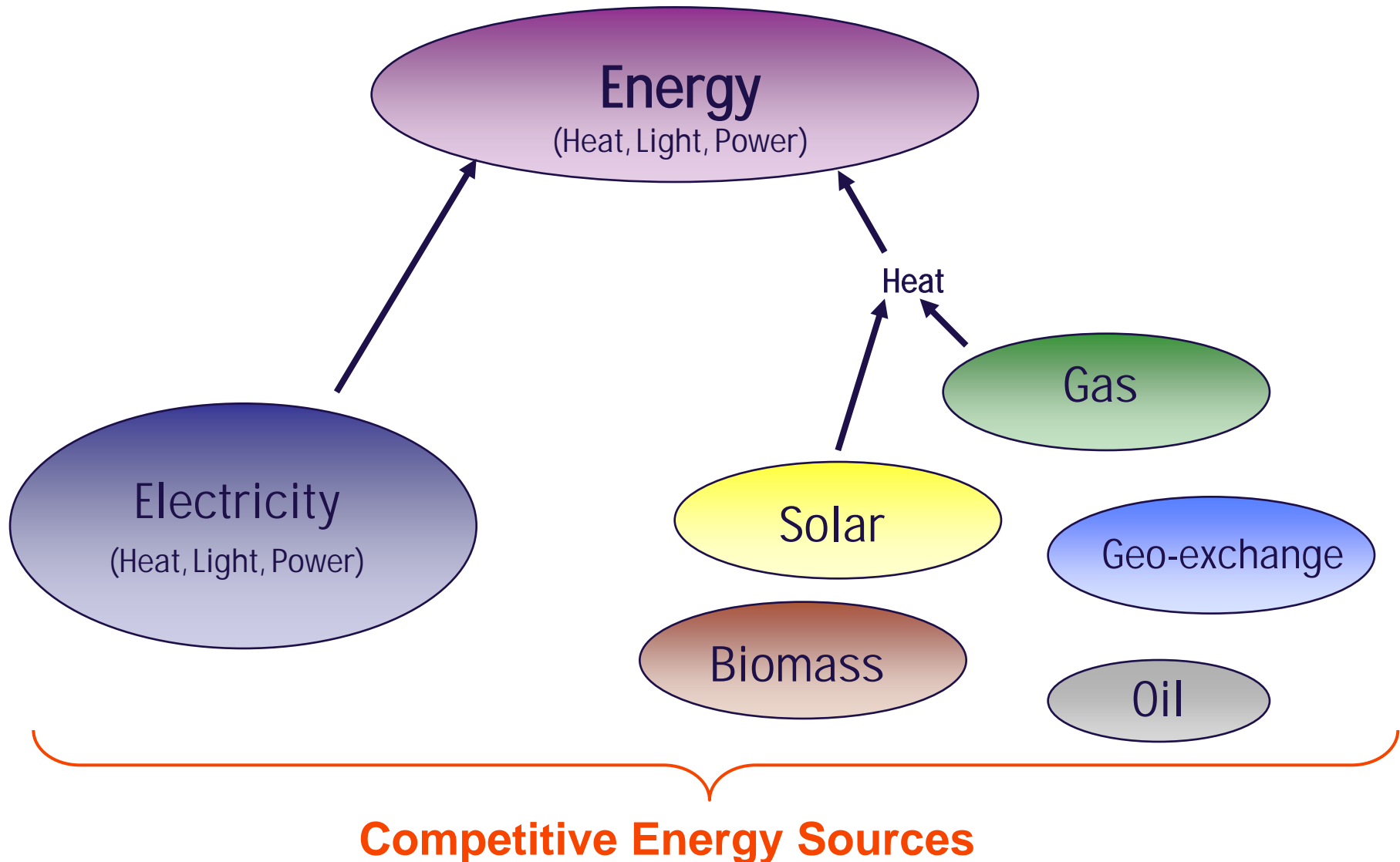
Climate Change - Regulations



Energy Competition - Past



Energy Competition Is Increasing - Current

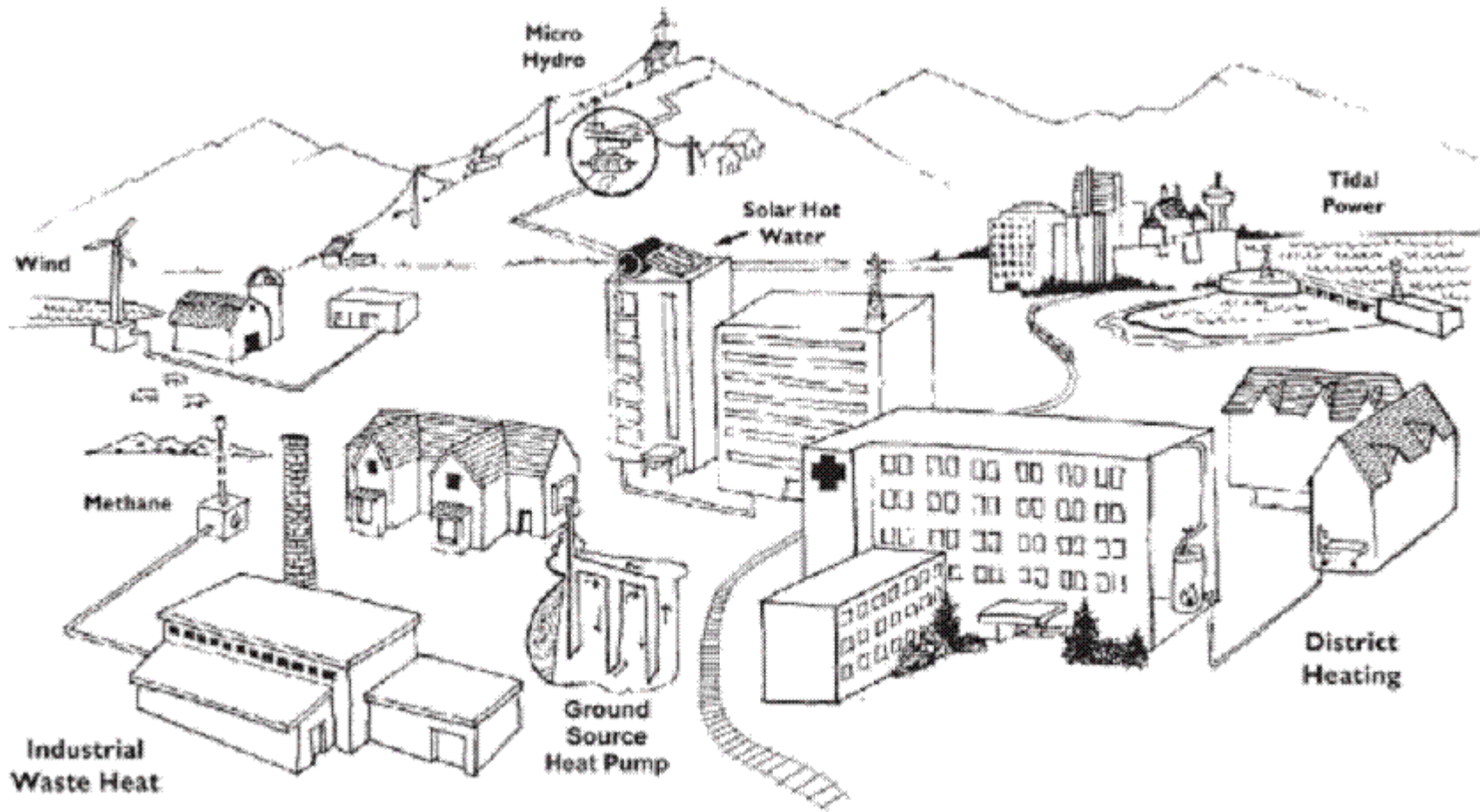


Solution Assumptions To Climate Change Challenge

- One “climate system”:
 - *Regional view to GHG reductions*
- Interconnected and integrated energy grids:
 - *Energy (natural gas and electricity) move freely across borders. Therefore, GHG policies and solutions must be coordinated across jurisdictions.*
- Energy efficiency initiatives:
 - *Must use available energy more efficiently*
 - Price signals to customers
 - *Continue to expand EEC programs*
- Energy form optimization:
 - *Right Fuel, Right Application*
 - Education and consistent messages to customers

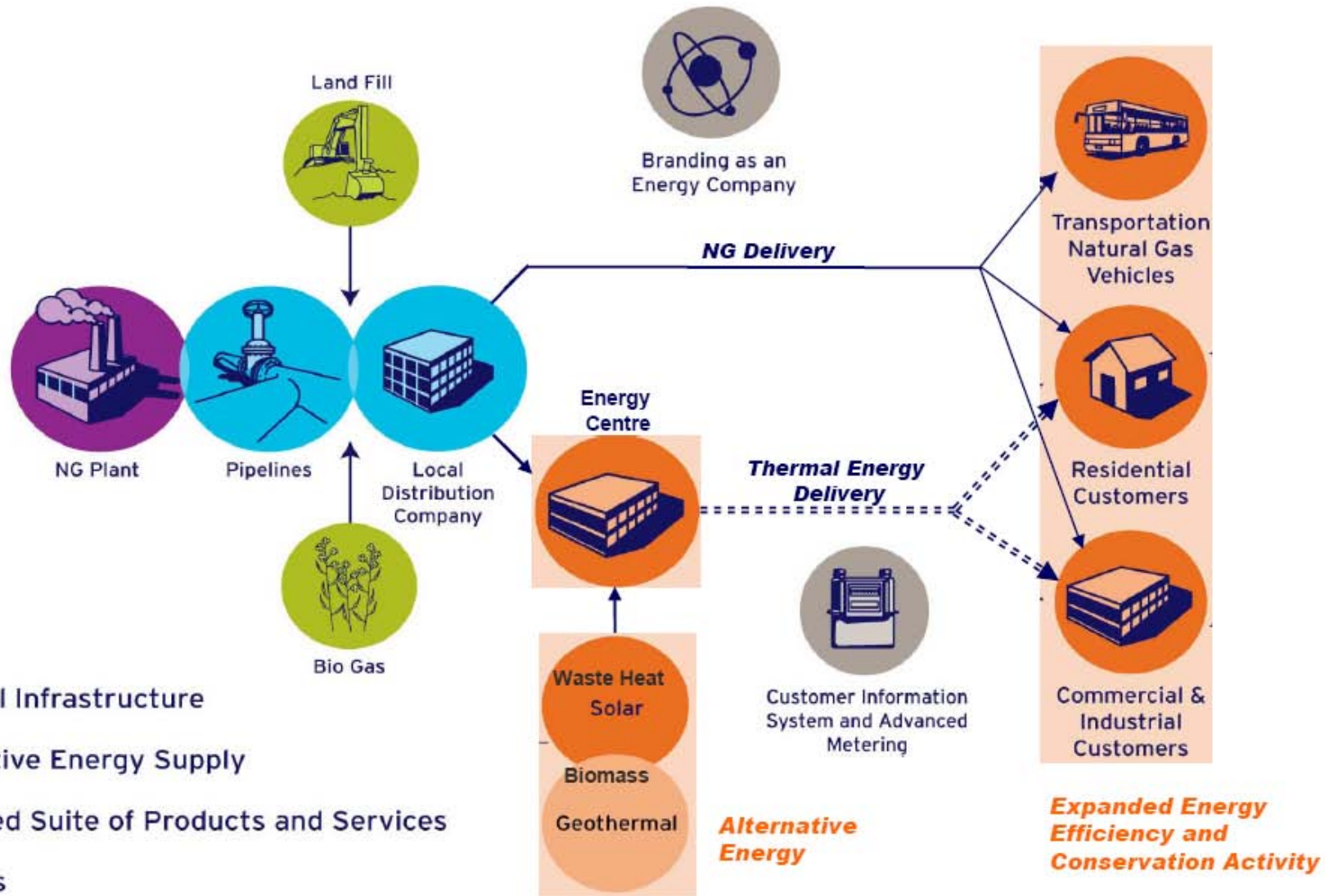
Customers Seeking Integrated Energy Solutions

Quality Urban Energy Systems of Tomorrow ("QUEST")



*Source: Green Municipalities - A Guide to Green Infrastructure for Canadian Municipalities;
prepared for the FCM by the Sheltair Group, May 2001*

Solution



Customer Service

Jason Wolfe – Manager, Commercial and Industrial Marketing

Customer Expectations Are Changing

- Customers are seeking additional information and knowledge to help them better manage their energy needs:
 - *Customers (developers, commercial and industrial) require more one on one time to discuss energy options and solutions*
- Policy requires government buildings to meet GHG reduction targets
- Increased municipal and First Nations involvement

Terasen Gas Response Is Good For Customers

- Terasen Gas actions (including additional O&M requests) help maintain existing gas load and help add new gas load
- Customers get solutions that meet their changing energy needs
- Gas customers benefit from alternative energy solutions because there are more customers to share costs:
 - *All alternative energy solutions must pass an economic test*
- All alternative energy solutions will be part of the regulated utility:
 - *Dockside Green is an example of a regulated solution providing energy to customers*

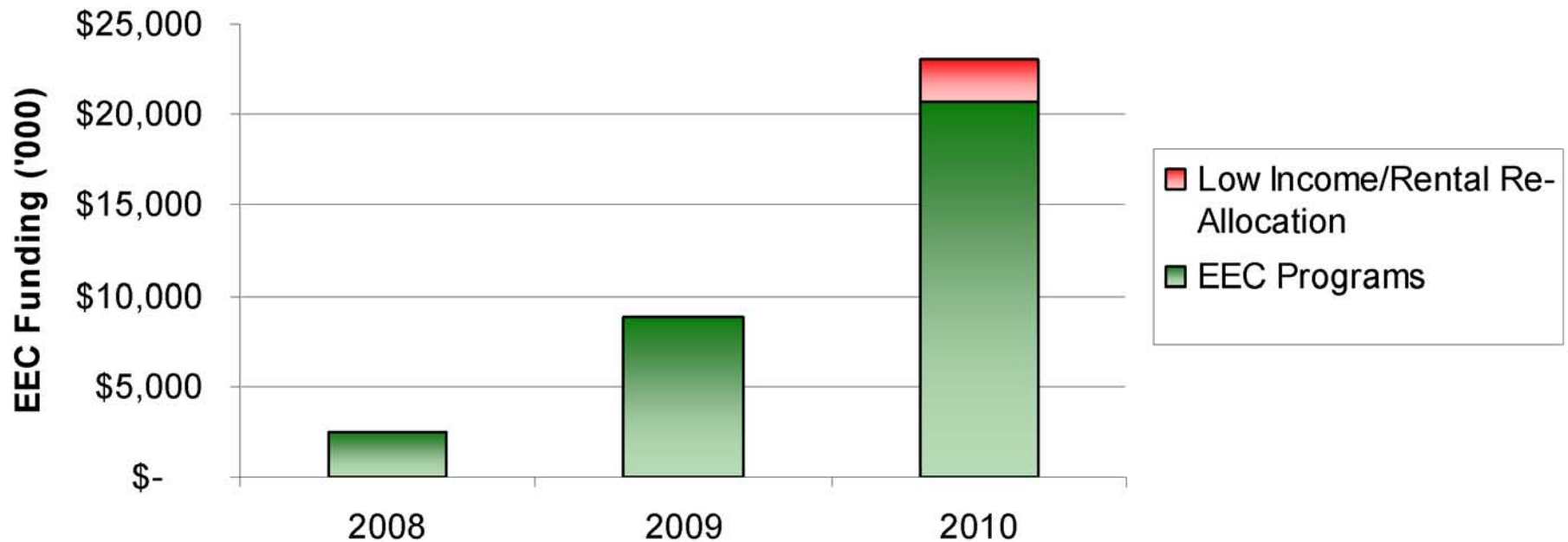
Additional O&M Help Meet Customer Expectations



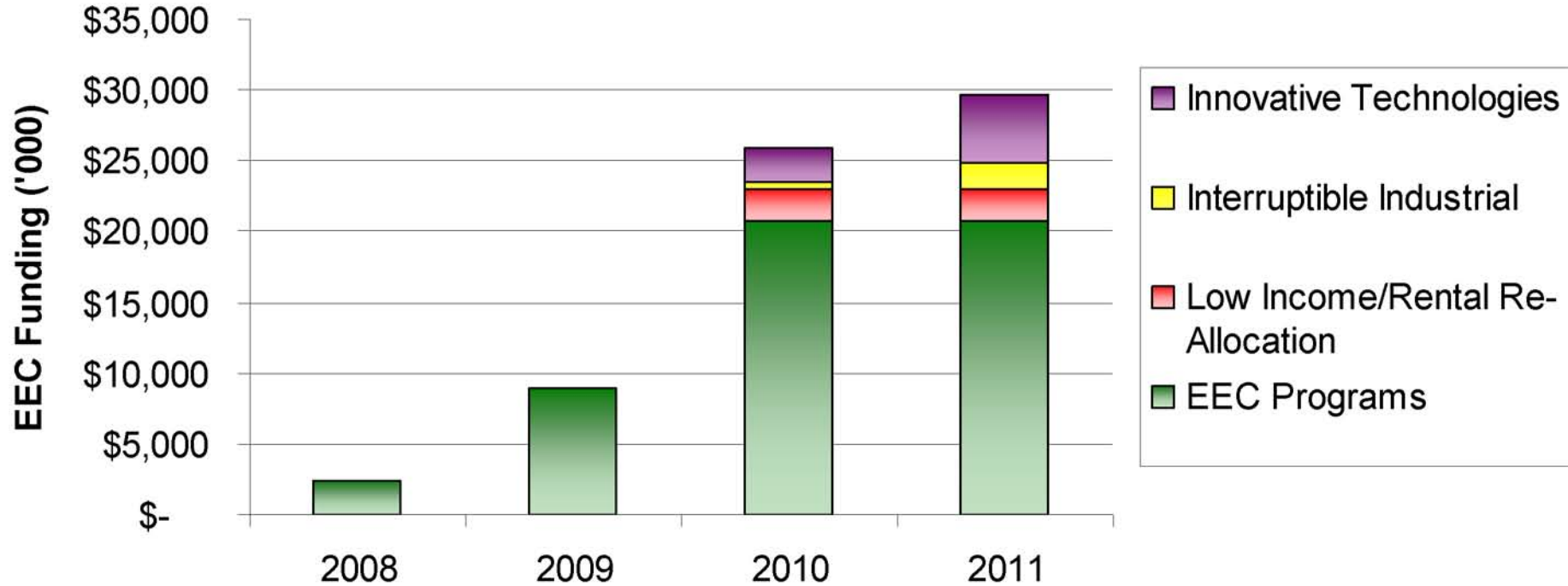
- Terasen Gas will meet customers' growing needs by adding resources in sales, account management, customer care, government relations, First Nations and market development:
 - *Help to maintain and grow gas load*
 - *Meet customers' needs for increased energy dialogue*
 - *Provide customers with better customer service*
 - *Provide resources for municipal and First Nations relations*
 - *Help customers manage their energy efficiency requirements*

Helping Customers Manage Energy Use

■ Energy Efficiency and Conservation Application Approval April 2009



Continued Focus On Energy Efficiency And Conservation To Help Customers



New Alternative Energy Solutions Must Pass Economic Test

NGV Compression – 20 year Extension Test



Biogas – Cost of Service Test



Integrated or Alternative Energy Solutions – Cost of Service Test

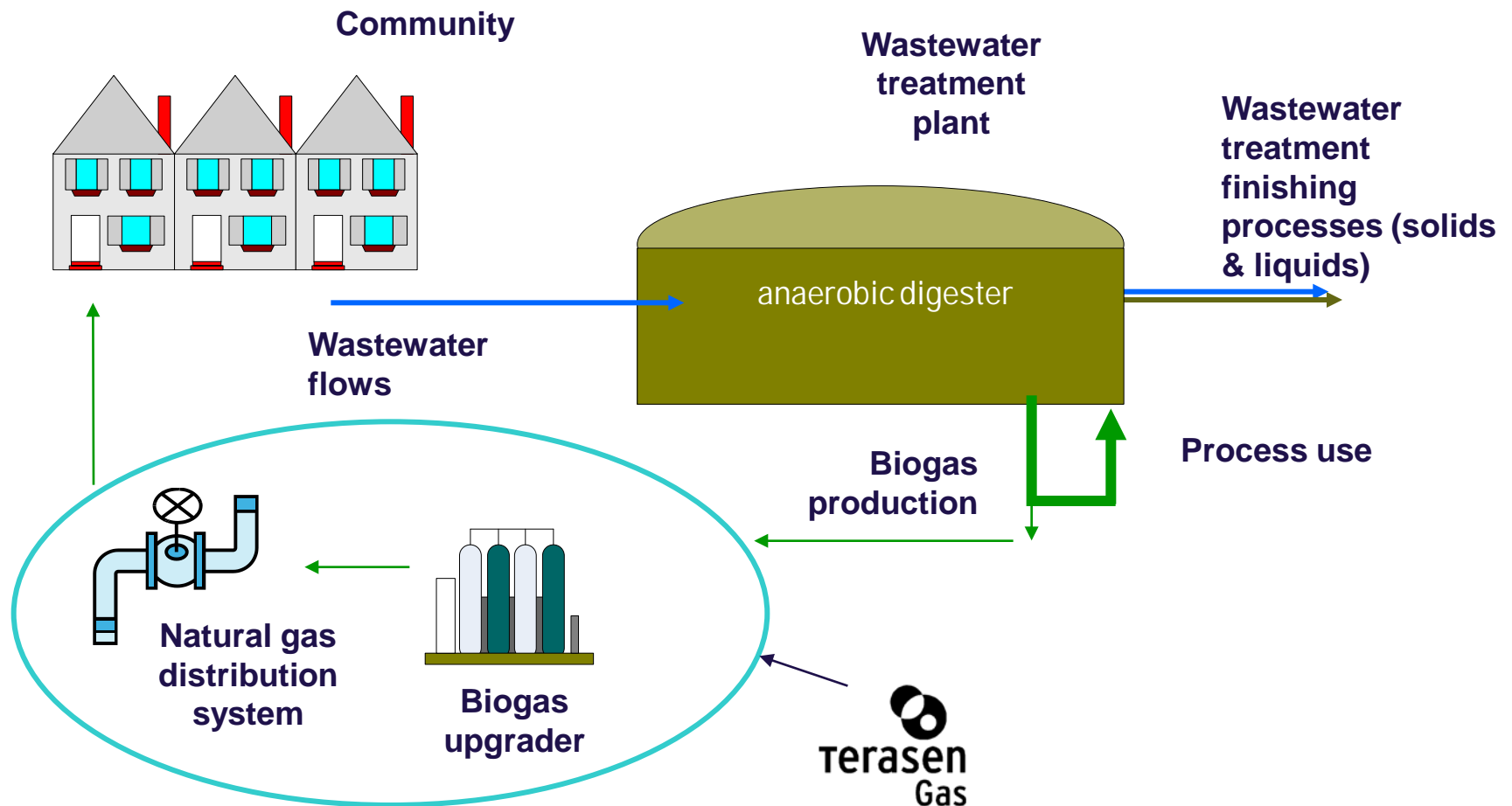


Natural Gas Vehicles Increase Natural Gas Load And Help Lower Emissions

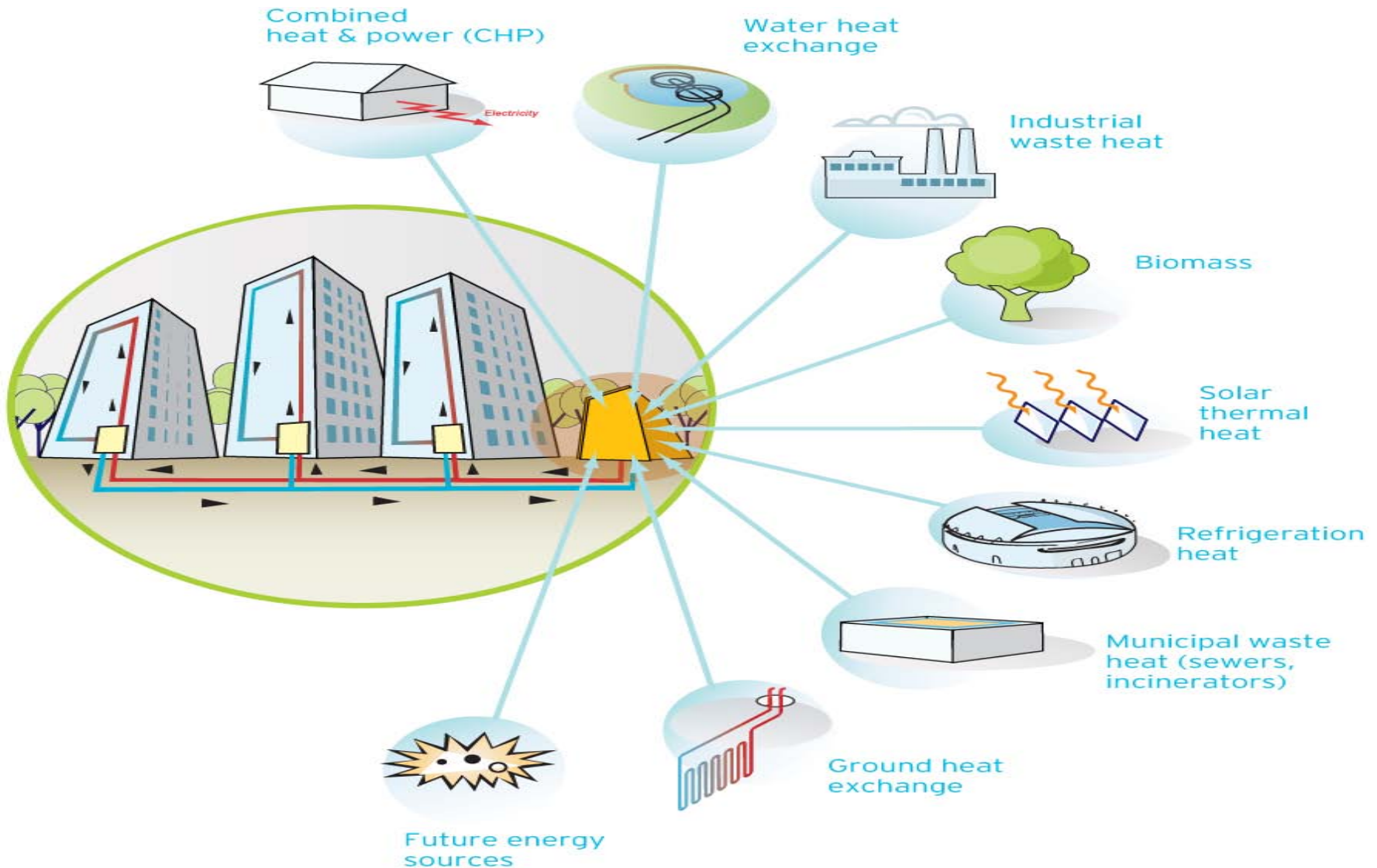


- Over 120,000 medium to heavy duty vehicles in BC:
 - *Additional Light Duty Vehicles – school buses, material handling, light duty fleet*
- Use of Natural Gas reduces GHG emissions on average by 26%
- NGV usage is high load factor, increasing the efficiency of the natural gas delivery system:
 - *Additions of NGV will help mitigate rate impacts from declining load*
- Terasen Gas can help advance the market by offering compression and dispensing service and a transportation option for customers

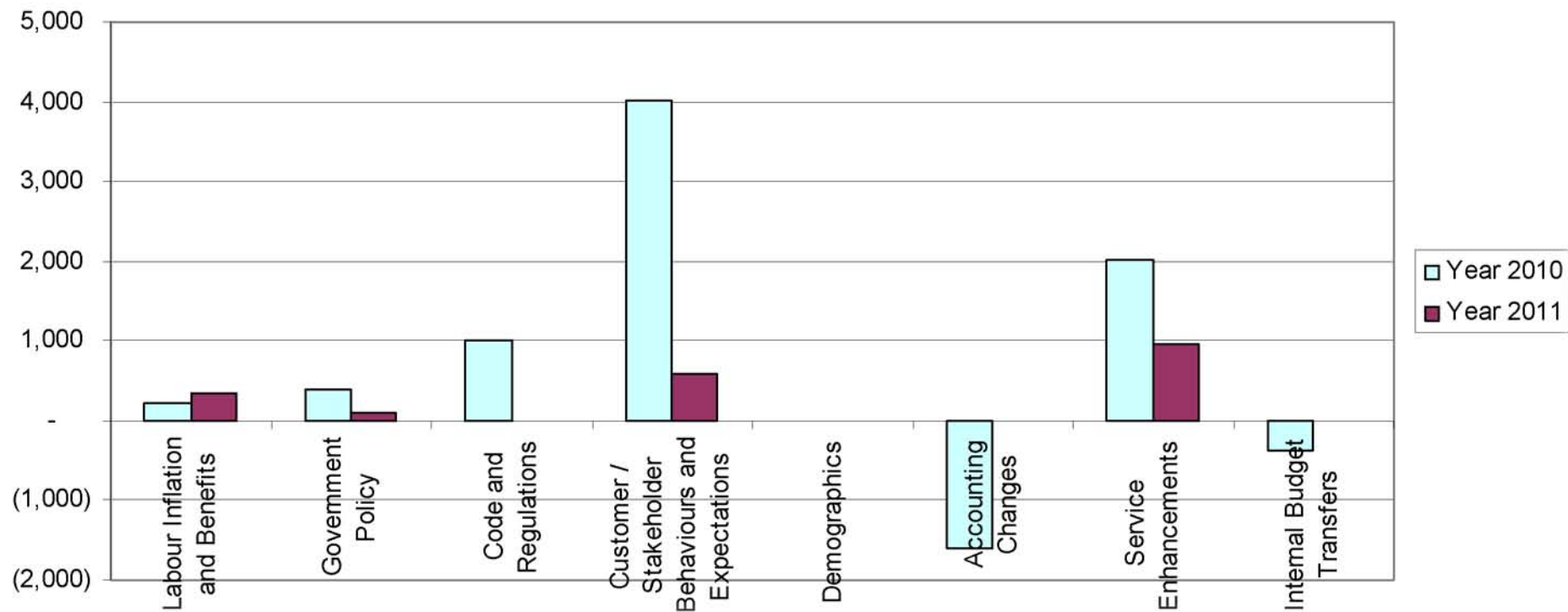
Biogas A Key Component In Meeting GHG Reduction Targets



Alternative Energy Solutions To Help Reduce Energy Usage And Emissions



O&M Request Meets Customer Needs



Conclusion

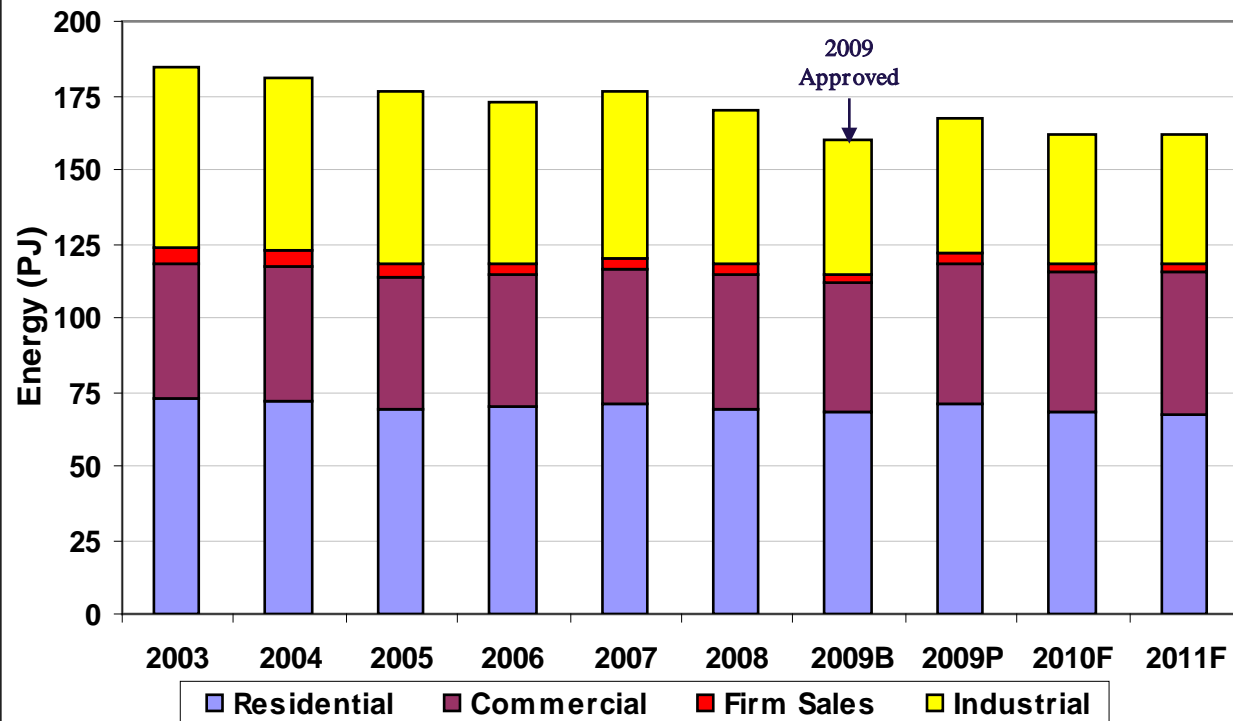
- Terasen Gas must continue to evolve and be proactive to meet the changing expectations of customers by providing integrated energy solutions while continuing to offer traditional gas service
- We believe that the solutions presented are good for both existing and new customers

Gas Sales and Transportation Demand

Lee Robson – Customer & Energy Forecasting Manager

The Demand Forecast Is Both Reasonable And Appropriate For Use In This Application

Total Normalized Energy Demand Declining

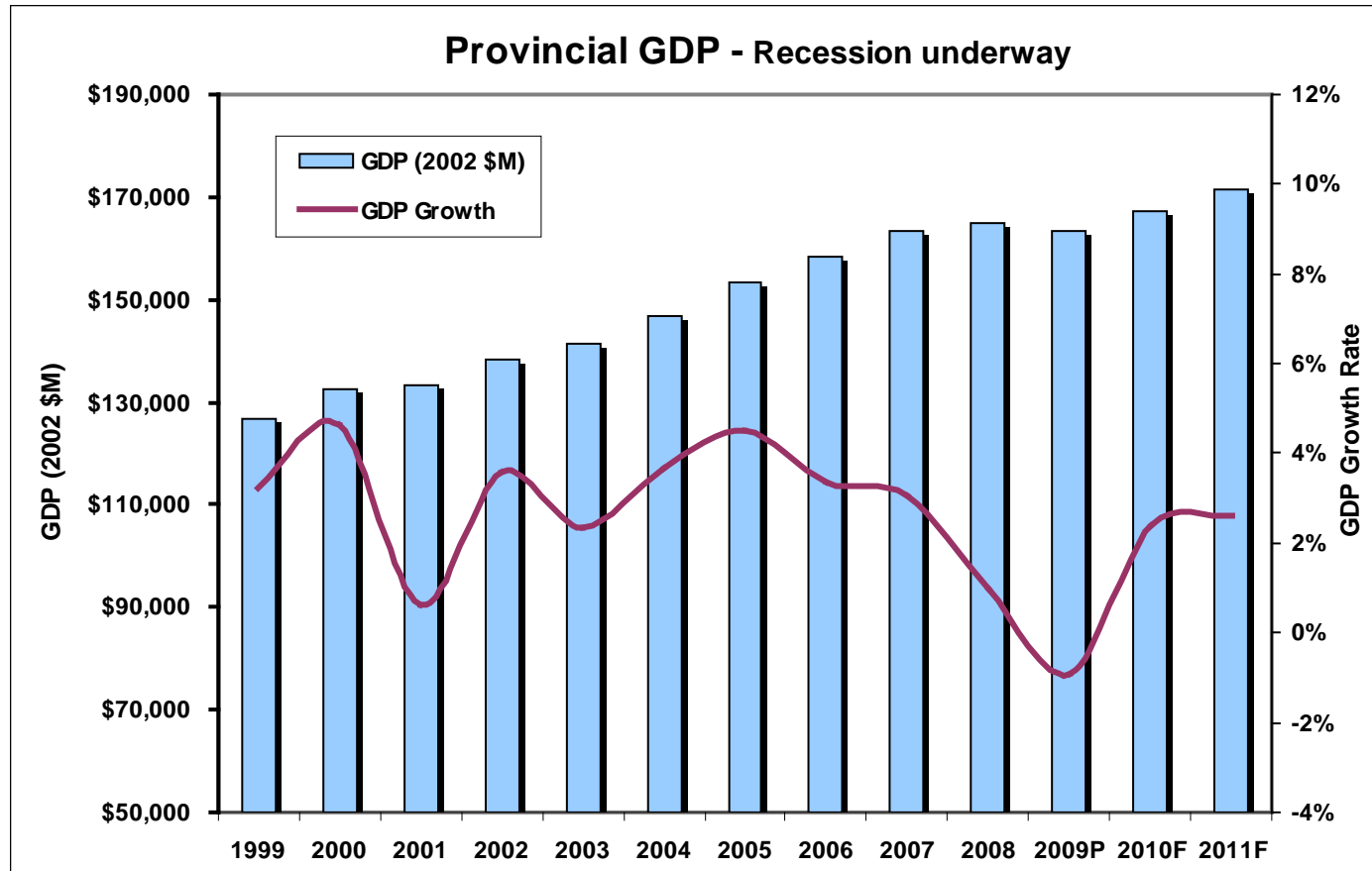


- Methodology is consistent with that used in prior years
- Methodology has been reviewed and accepted both internally and by the BCUC
- The best available information has been incorporated at the time of the forecast

Process Is Thorough And Follows A Similar Approach To That Taken In Prior Years

- Economic Fundamentals:
 - *Economic Growth in B.C.*
 - *Labour Market*
 - *Housing Market*
- TGI Forecast:
 - *Customer Additions*
 - *Average Use per Customer*
 - *Industrial Volumes & Margins*
- Company Summary

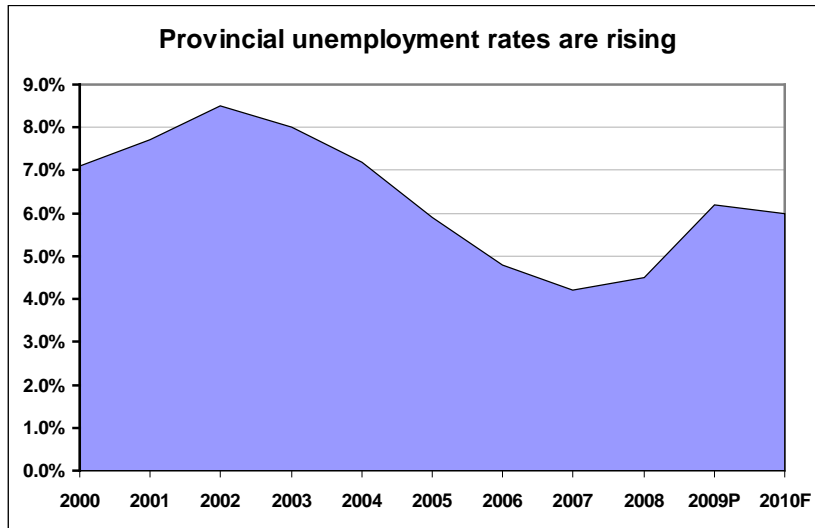
Economic Downturn Impacts The Demand For Natural Gas



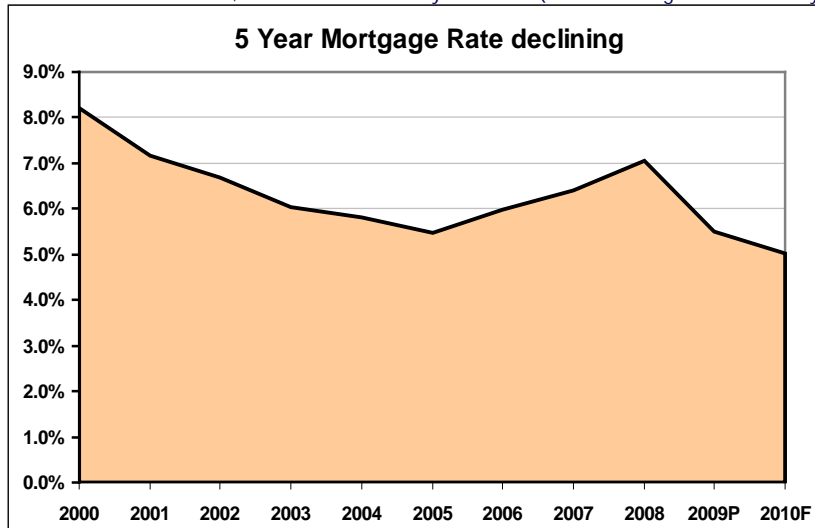
Source: Actuals – BC Stats, Forecast – B.C. Ministry of Finance (2009 B.C. Budget & Fiscal Policy)

- Contraction through 2009:
- Financial markets continue to face challenges
- Domestic demand has moderated
- Recovery expected in 2010:
- 2010 Olympics to provide a boost

Increase In Unemployment Impacting Our Current Customers



Source: Actuals – BC Stats, Forecast – B.C. Ministry of Finance (2009 B.C. Budget & Fiscal Policy)



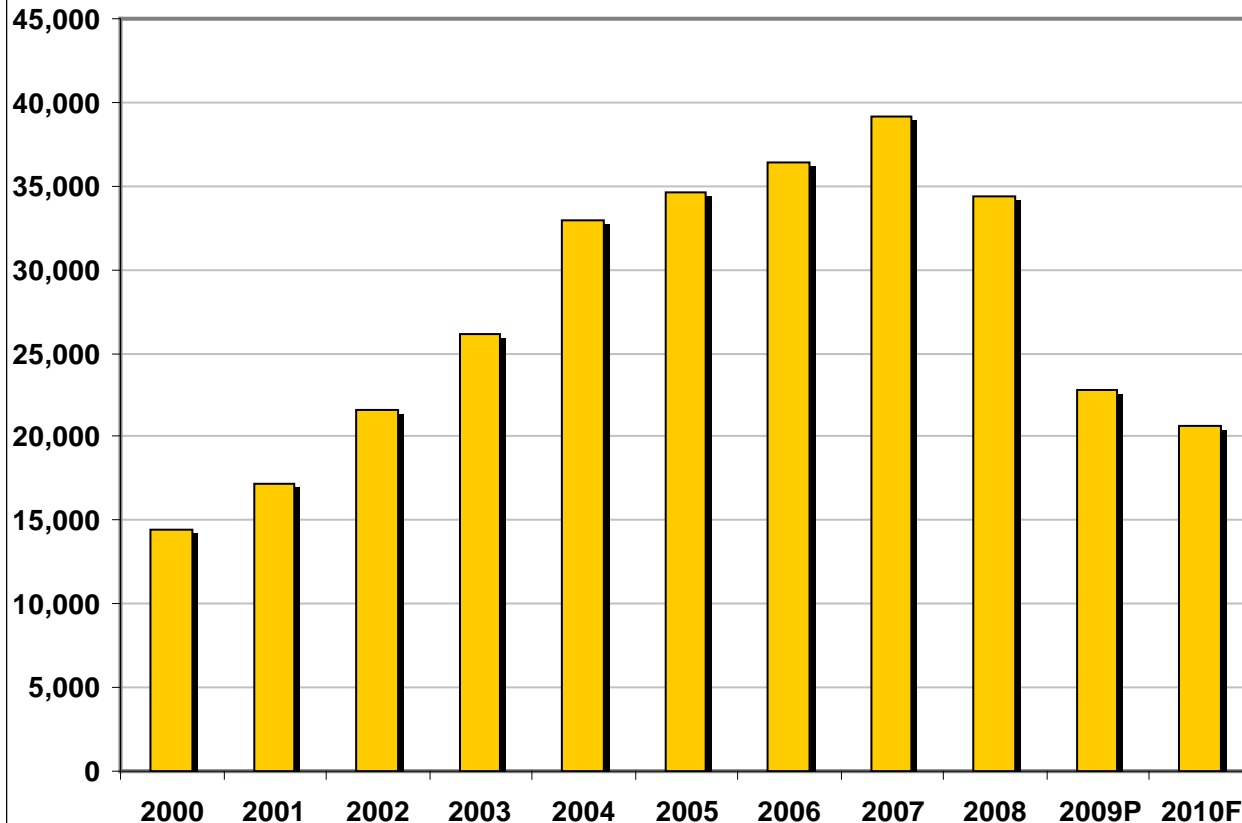
Source: Actuals – Bank of Canada, Forecast - CUCBC Interest Rate Forecast)

- Unemployment rates to rise significantly:
 - January 2009 saw 35,100 jobs lost in BC, the largest one month decline on record
 - Job losses expected to be concentrated in the construction, retail and wholesale trade sectors

- Mortgage rates trending downward:
 - Expected to continue declining through mid-2010, before stabilizing

Slowdown In The Housing Market Impacts The Forecast Of Net Customer Additions

Provincial Housing Starts to decline by 34%

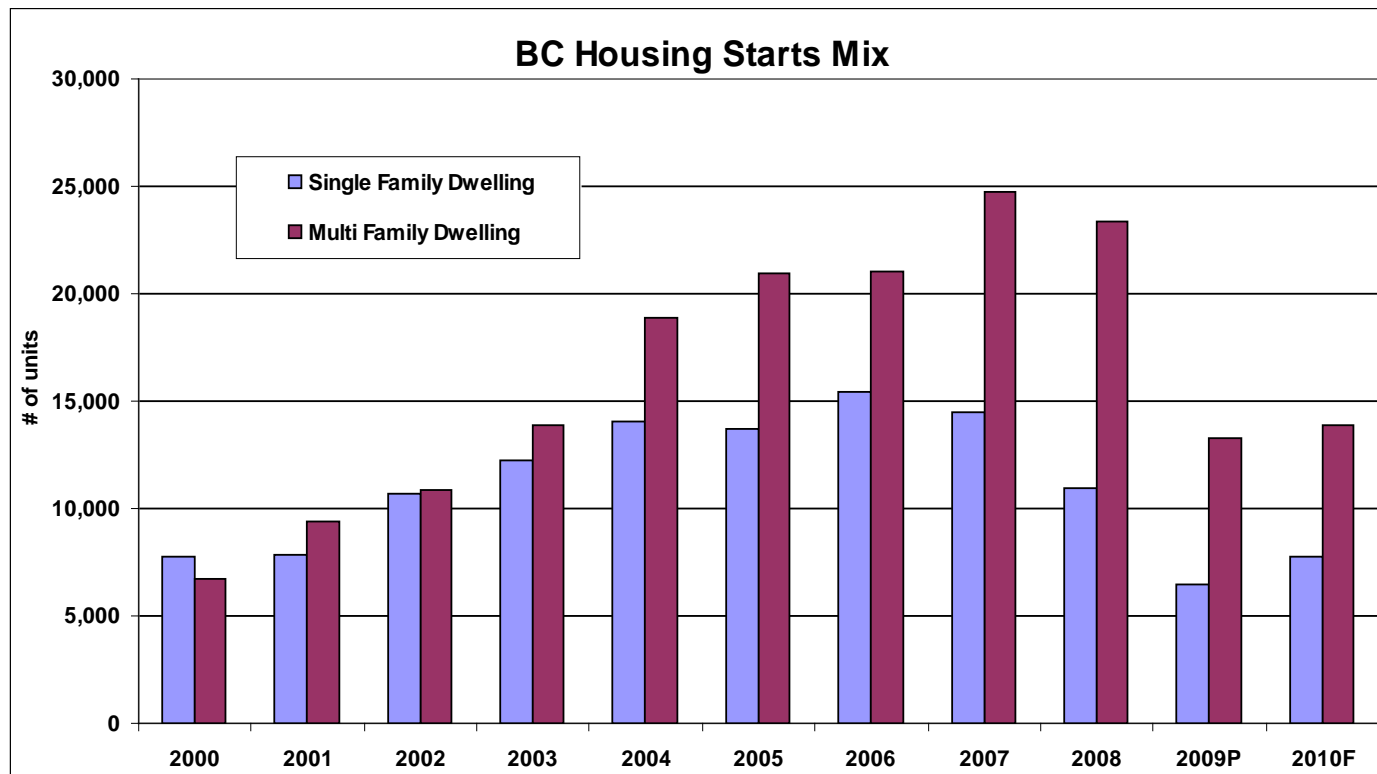


Source: Actuals & Forecast – CMHC

Housing Starts to decline in 2009 and 2010:

- 22,800 housing starts for 2009, further decline for 2010
- Primarily driven by economic downturn
- Rising construction costs
- Well supplied resale market

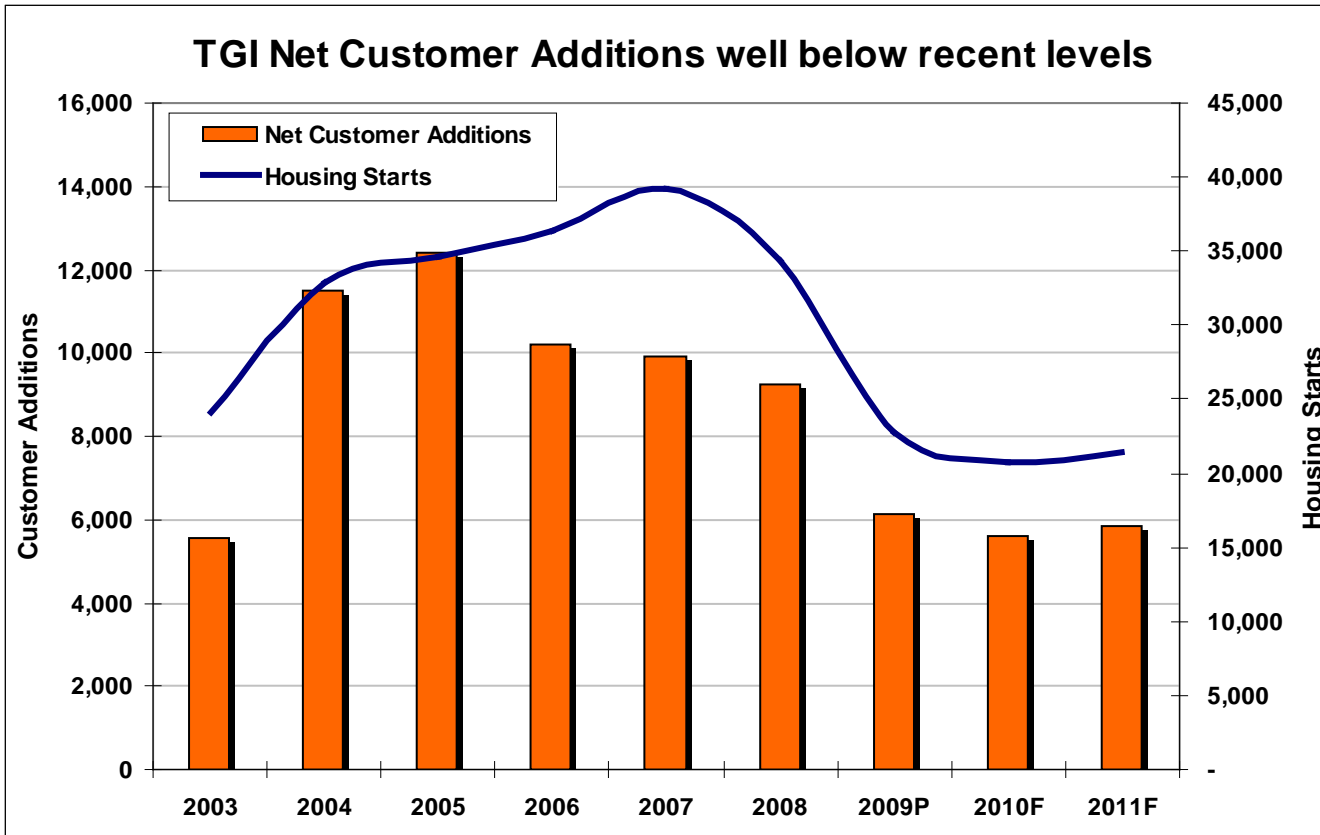
Shift Towards More High Density Housing Impacts Customer Additions, Also Average Use Per Customer



Source: Actuals & Forecast – CMHC

- High building material and land costs and declining affordability
- Single detached home starts to move to lowest levels in five years
- Apartment condos will be the focus of builders, expect some projects to be put on hold

Customer Additions Not Offsetting Declining Average Use Per Customer Rates



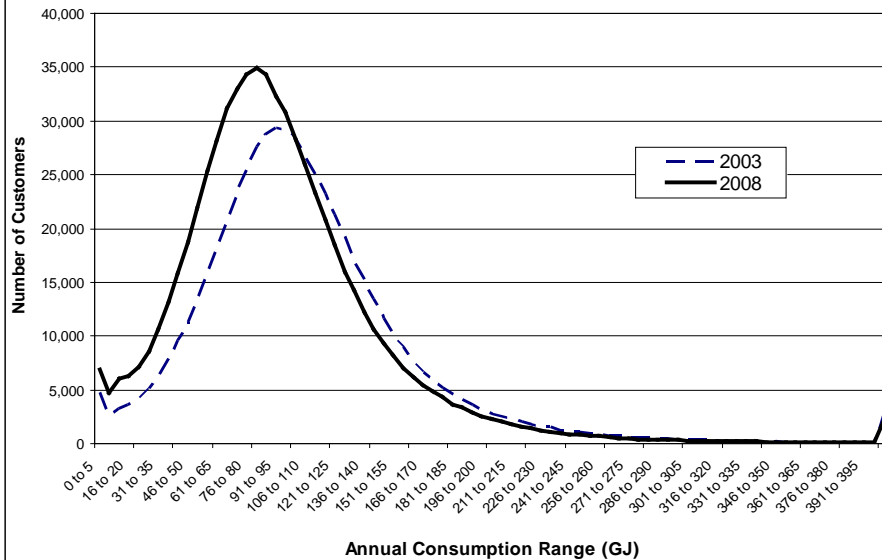
■ **Customer Additions to decline through 2010:**

■ **Reflects economic downturn, consistent with CMHC forecast**

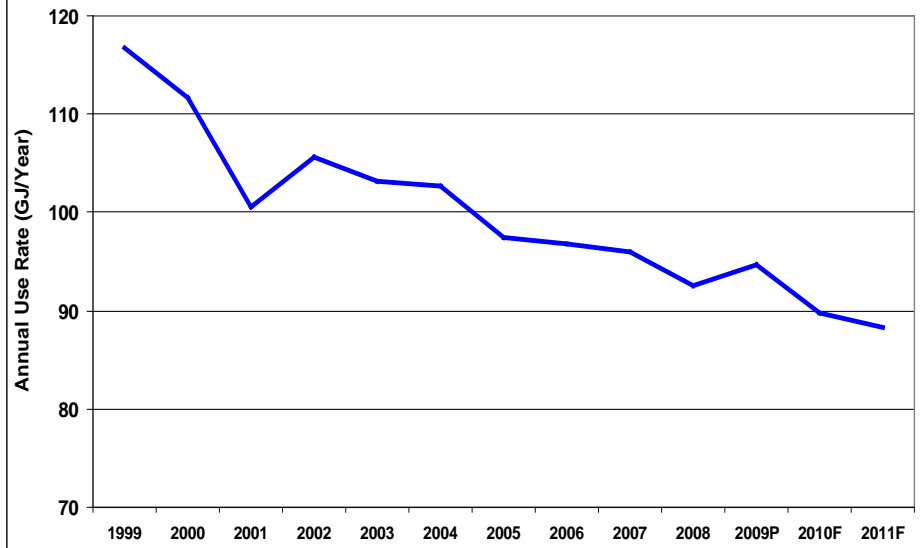
■ **Projecting:
6,120 net customer additions for 2009,
5,600 in 2010, and
5,850 in 2011**

Declining Average Use Per Customer Places Upward Pressure On Delivery Rates

Residential load profile has change from 2003 to 2008



Residential Use Per Customer - continuing to decline



- Residential load profile shifting – reflected in declining average use
- Primary drivers – shift towards more MFDs, ongoing retrofit activity
 - 21% decline since 1999 (2.5% annually)
 - Trend of recent historical results indicates ~1.4 GJ decline annually (~1.5% per year)

Declining Use Rates Is A Long Term Issue, As Our Customers Continue Seeking Efficiency Improvements

- Even within the same housing type, there are many variables that impact annual consumption



Older Low Efficient Home in Vancouver

- One storey building with basement
- 2,500 square foot older home
- Below average insulation in ceiling and walls
- Single pane windows (USI 6.7 - Single)
- Average temperature 19 degrees Celsius
- Air tightness: 6.0 ACH (tested at 50 Pascals)
- Standard efficient furnace, AFUE of 71%

Space Heating Energy = 137.6 GJ/yr



New High Efficient Home in Vancouver

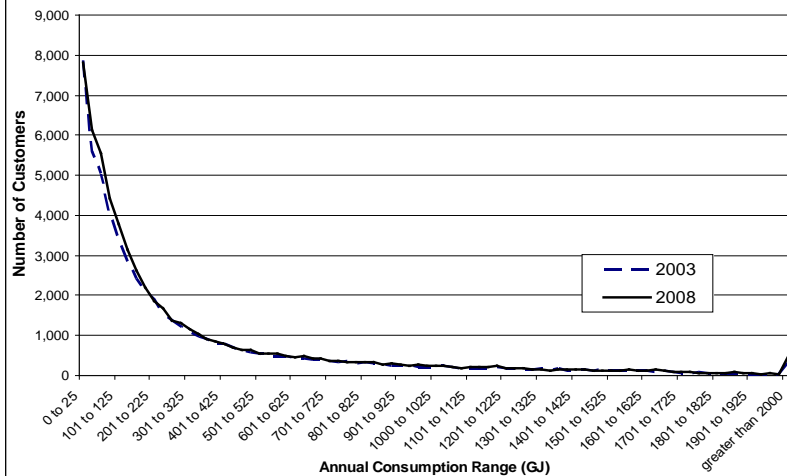
- One storey building with basement
- 2,500 square foot new home (code compliant)
- Above average insulation in ceiling and walls
- Energy Star windows (USI 2.0)
- Average temperature 21 degrees Celsius
- Air tightness: 5.4 ACH (tested at 50 Pascals)
- High efficiency condensing furnace, AFUE of 90%

Space Heating Energy = 50.7 GJ/yr

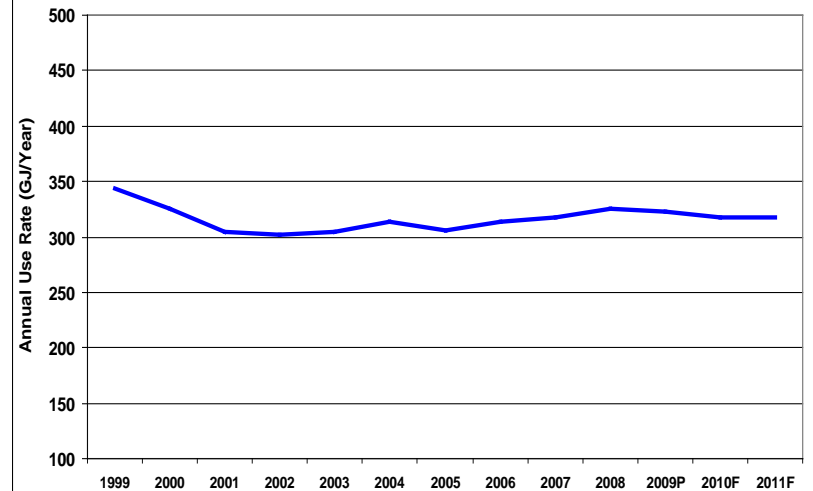
Source: Modelled through Natural Resources Canada's HOT 2000 software

Commercial Average Use Per Customer Has Been Relatively Stable – Minimal Pressure On Delivery Rates

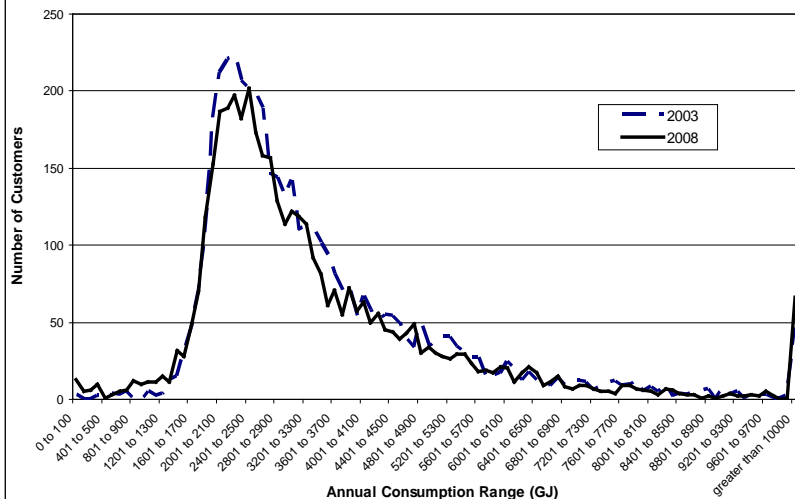
Small Commercial Customers load profiles very similar



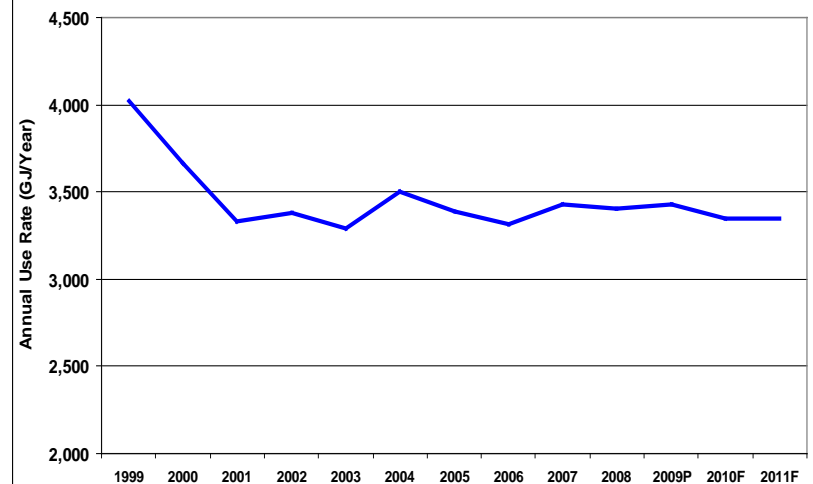
Small Commercial Use Per Customer - relatively stable



Large Commercial customers load profiles also very similar



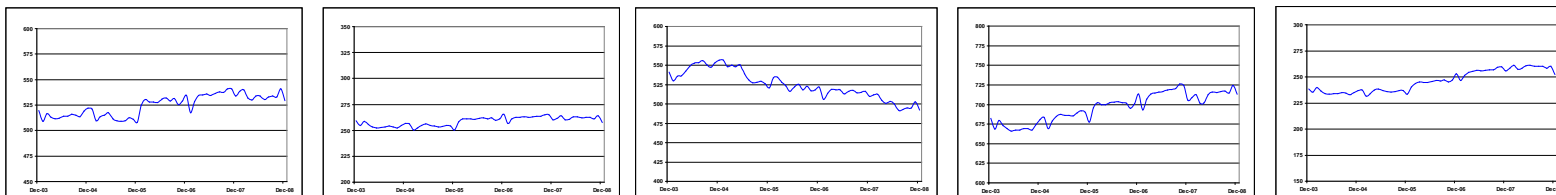
Large Commercial Use Per Customer - relatively stable



Commercial Sector Analyses

Add A Level Of Rigor To The Forecast

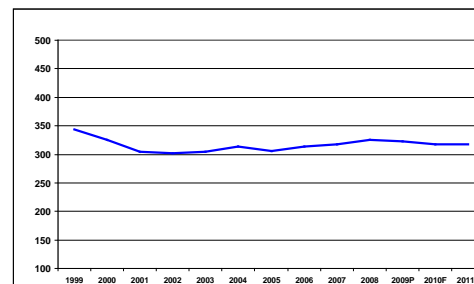
- Sector analyses for each of the commercial customer classes performed
- Top five consuming sectors analyzed individually



- Results compared to trending analysis

	Forecast
Apartment/Condo	Declining
Commercial/Office Building	Stable
Hotel	Stable
Restaurant	Declining
Wholesale/Retail	Stable
Other	Declining

VS



Average Use Per Customer Forecast Is Reasonable And Appropriate For Use In This Application

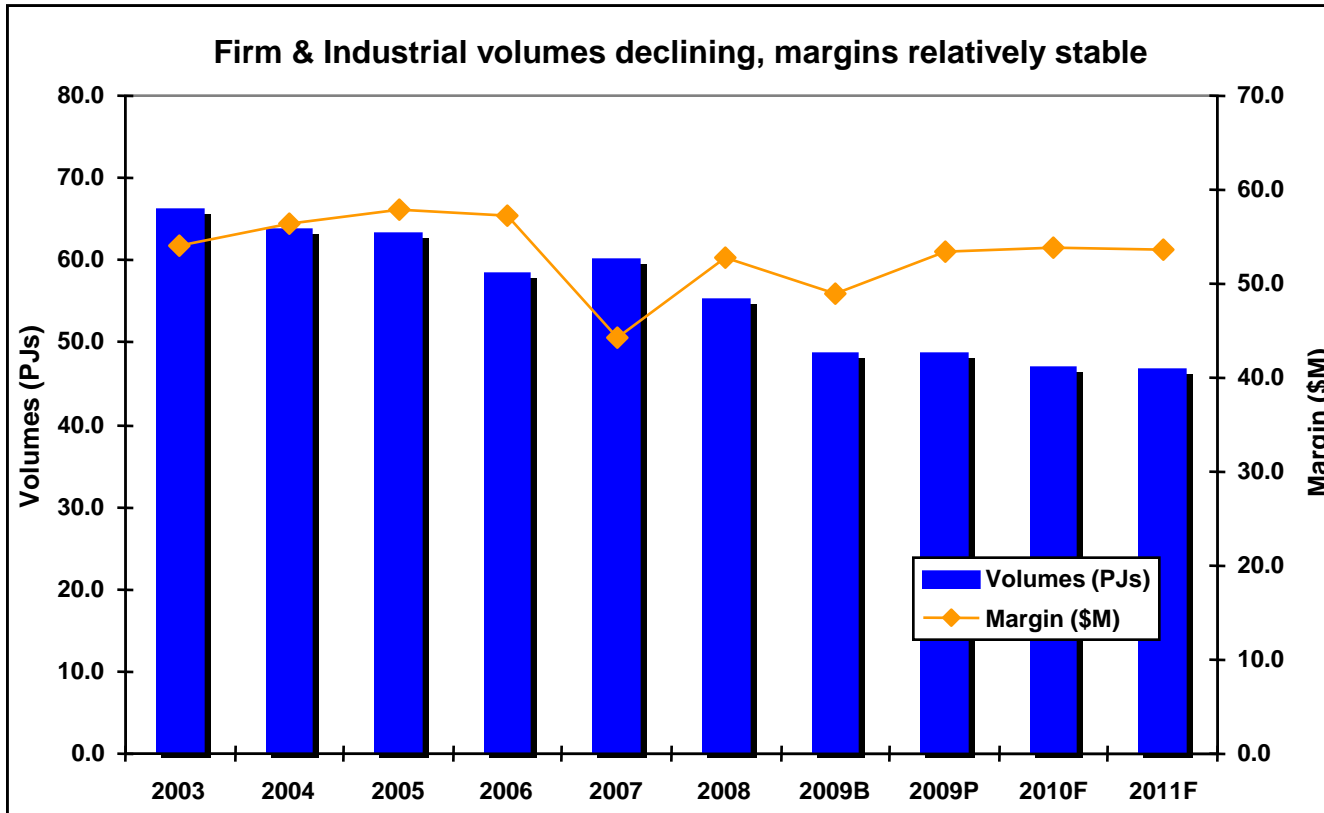
Forecast Usage - Rates 1, 2, 3 & 23 (GJ)

	Projected 2009	Forecast 2010	Forecast 2011
Rate 1	94.6	89.7	88.3
Rate 2	323	318	318
Rate 3	3,427	3,346	3,346
Rate 23	4,830	4,680	4,680

Note: First three months of 2009 are actual results (non-weather normalized)

- Residential average use to decline, commercial average use to remain relatively stable over the forecast period
- Methodology consistent with that for prior years:
 - Trending analysis of recent historical results
 - Trends in the market
 - Sector analyses (commercial segments)
 - Reviewed and accepted both internally and by BCUC

Declining Industrial Demand Placing Upward Pressure On Delivery Rates, Risk Has Also Increased



■ Industrial volumes to decline through the 2010-2011 forecast period:

- Forestry, pulp and paper industries are the main drivers
- Growth seen in some industries, partially offsetting other declines
- Margin expected to remain relatively stable

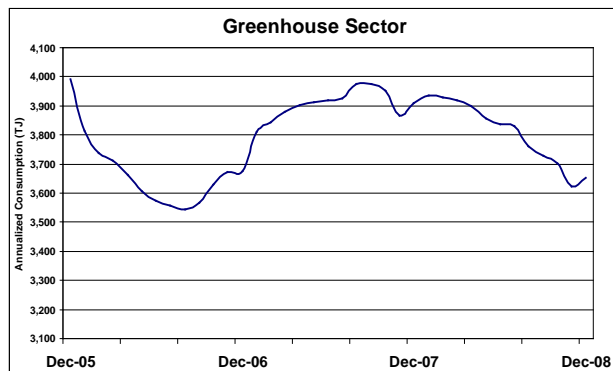
Forecast Of Industrial Demand Is Reasonable And Appropriate For Use In This Application

- Typically developed through direct customer feedback, validated through sector analyses:

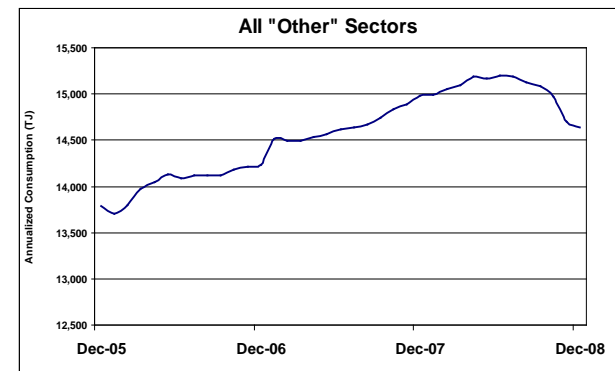
- Sector analyses provide the basis for this year's forecast
- Industrial survey still underway



- Wood Products sector continues to face challenges



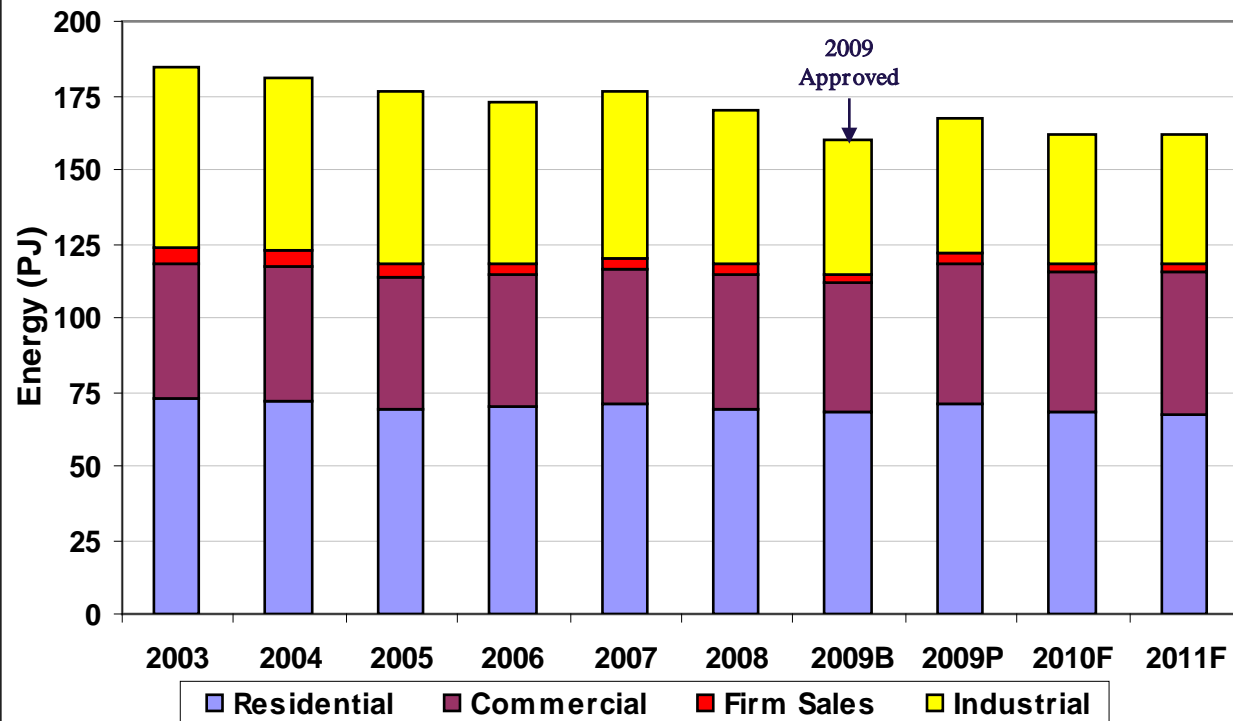
- Greenhouse sector shows more variability due to fuel switching capabilities



- Volumes in "Other" sectors began declining with economic downturn

The Demand Forecast Is Both Reasonable And Appropriate For Use In This Application

Total Normalized Energy Demand Declining



■ Methodology is consistent with that used in prior years

■ Methodology has been reviewed and accepted both internally and by the BCUC

■ The best available information has been incorporated at the time of the forecast

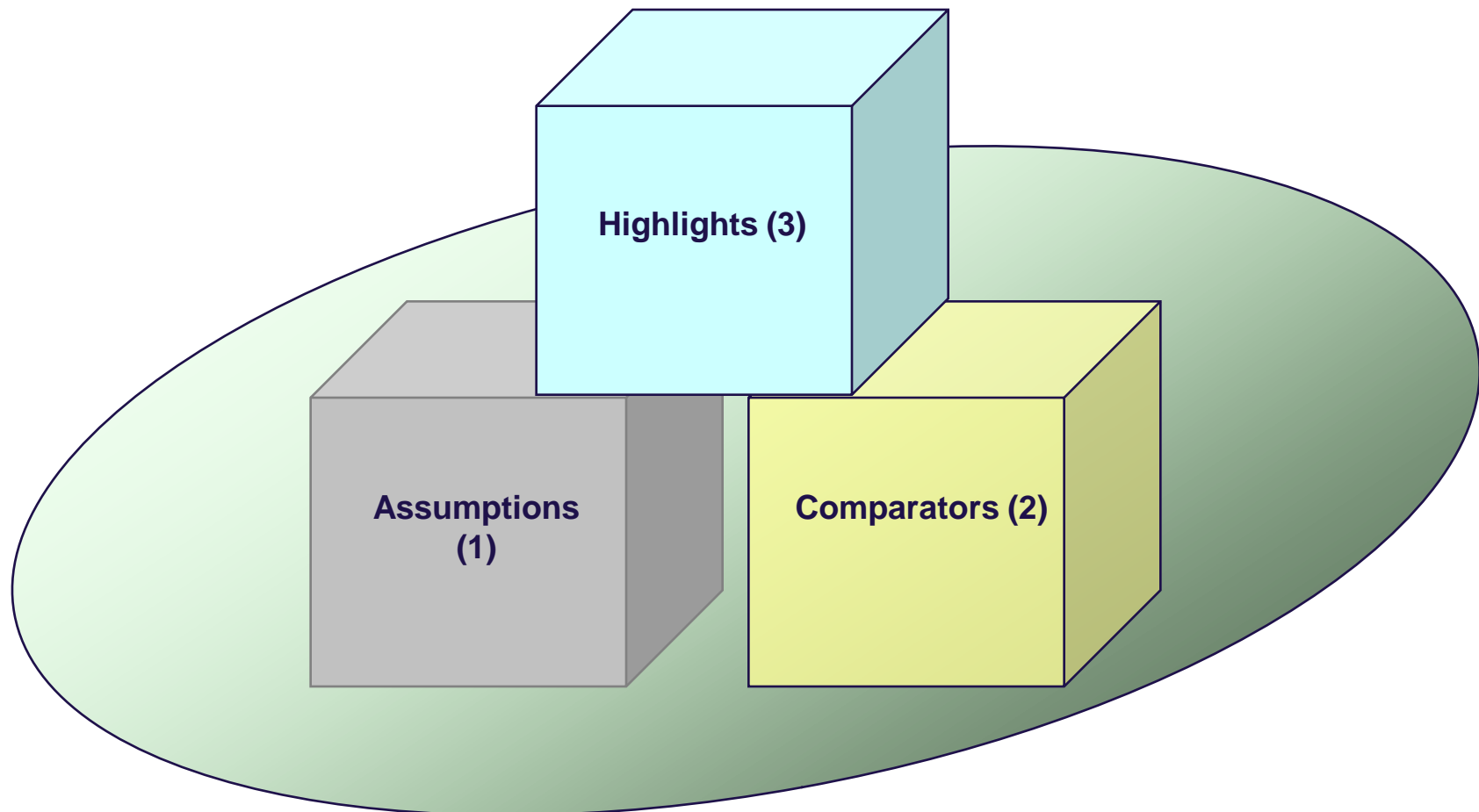
Note: First three months of 2009P are actual results (non-weather normalized)

Respected & Trusted Operator / Operational Excellence

O&M

James Wong – Director, Finance & Planning

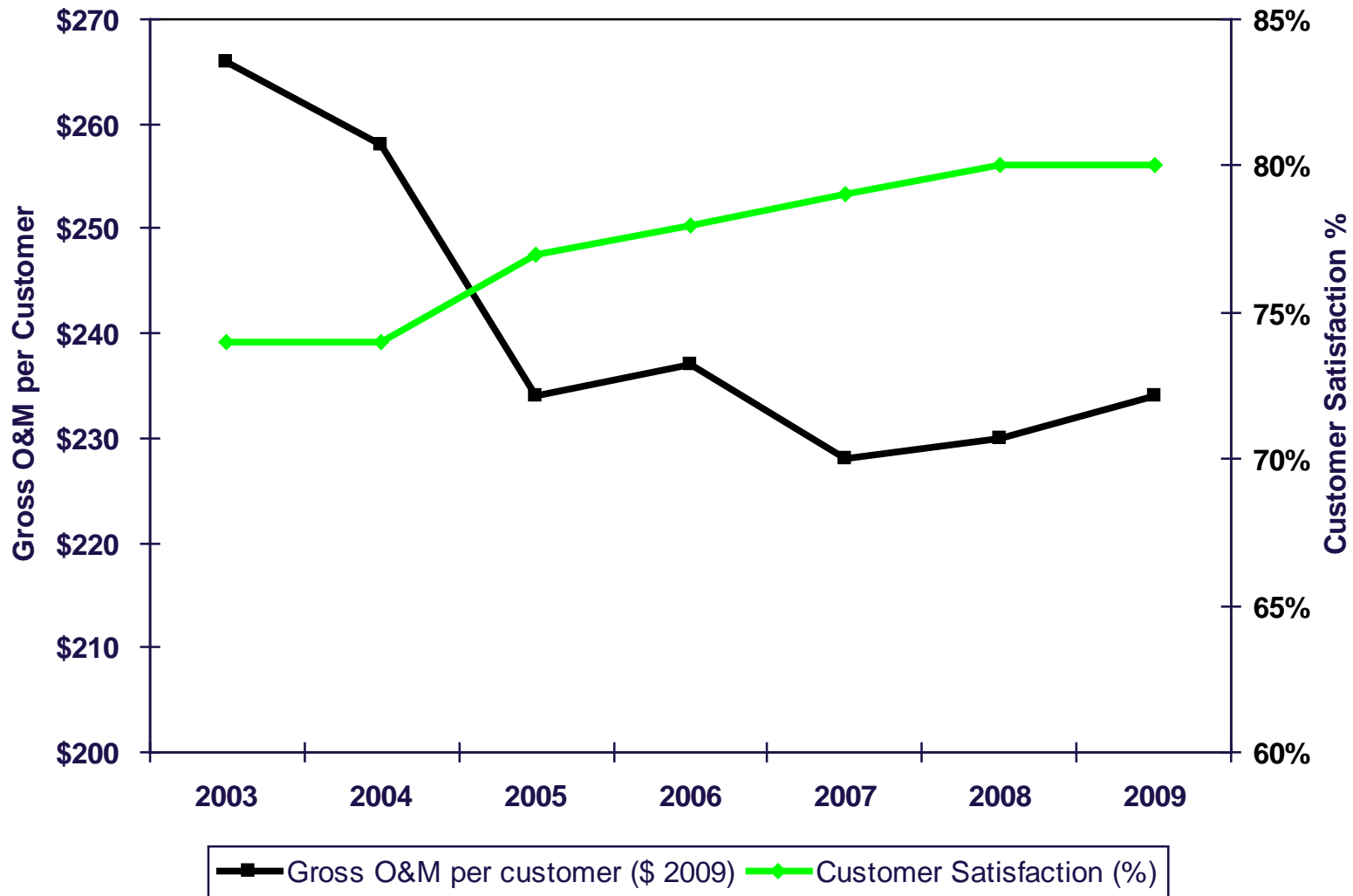
TGI O&M Expenditures



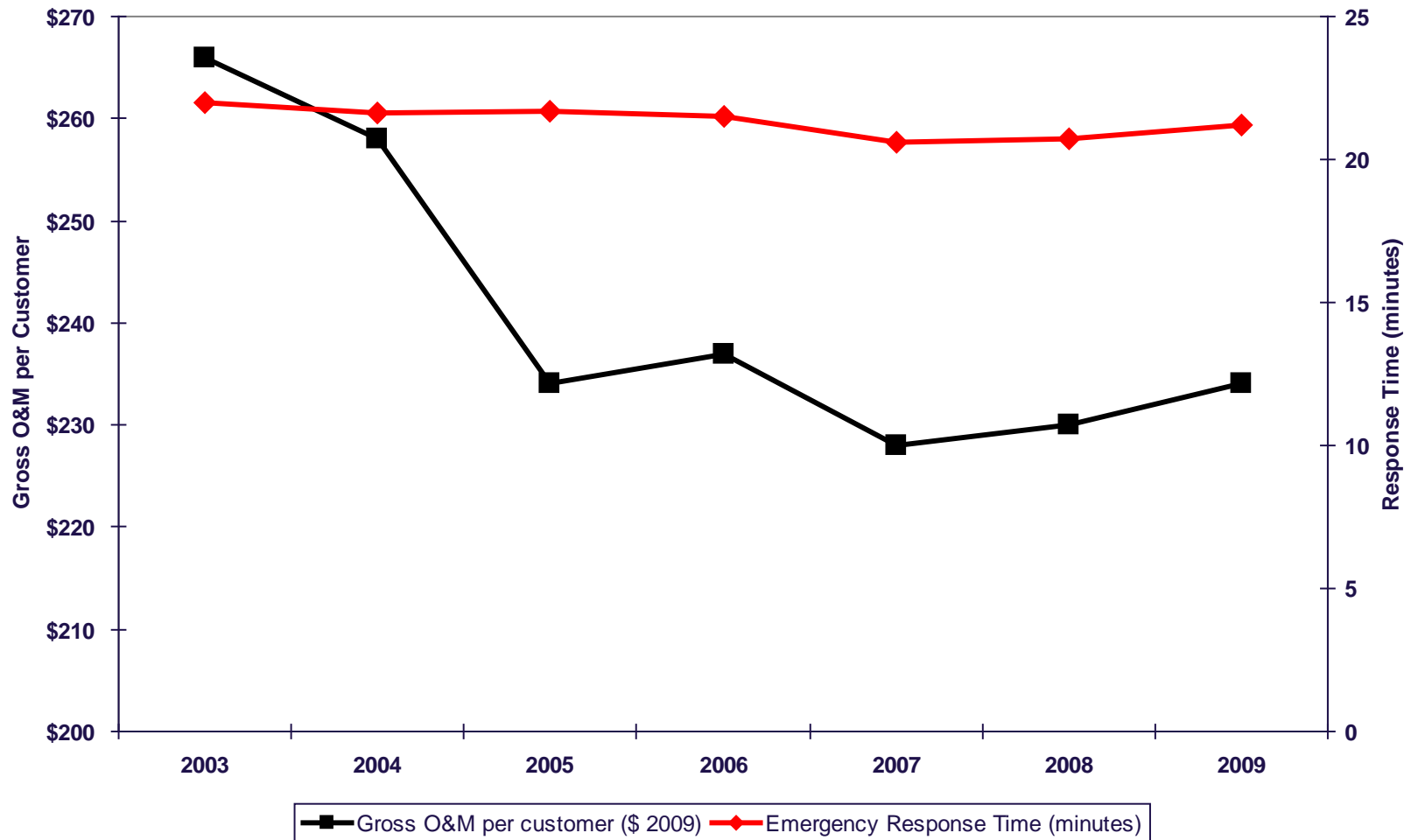
Assumptions

- Zero Based Budgeting
- O&M Management
- 2009 O&M as the Base
- O&M Incremental Funding:
 - *2010 Additive to 2009 Projection*
 - *2011 Additive to 2010 Forecast*
- Categories of O&M Incremental Funding:
 - *Labour inflation and benefits*
 - *Government policy*
 - *Code and regulations*
 - *Customer / Stakeholder behaviours and expectations*
 - *Demographics*
 - *Accounting changes*
 - *Service enhancements*

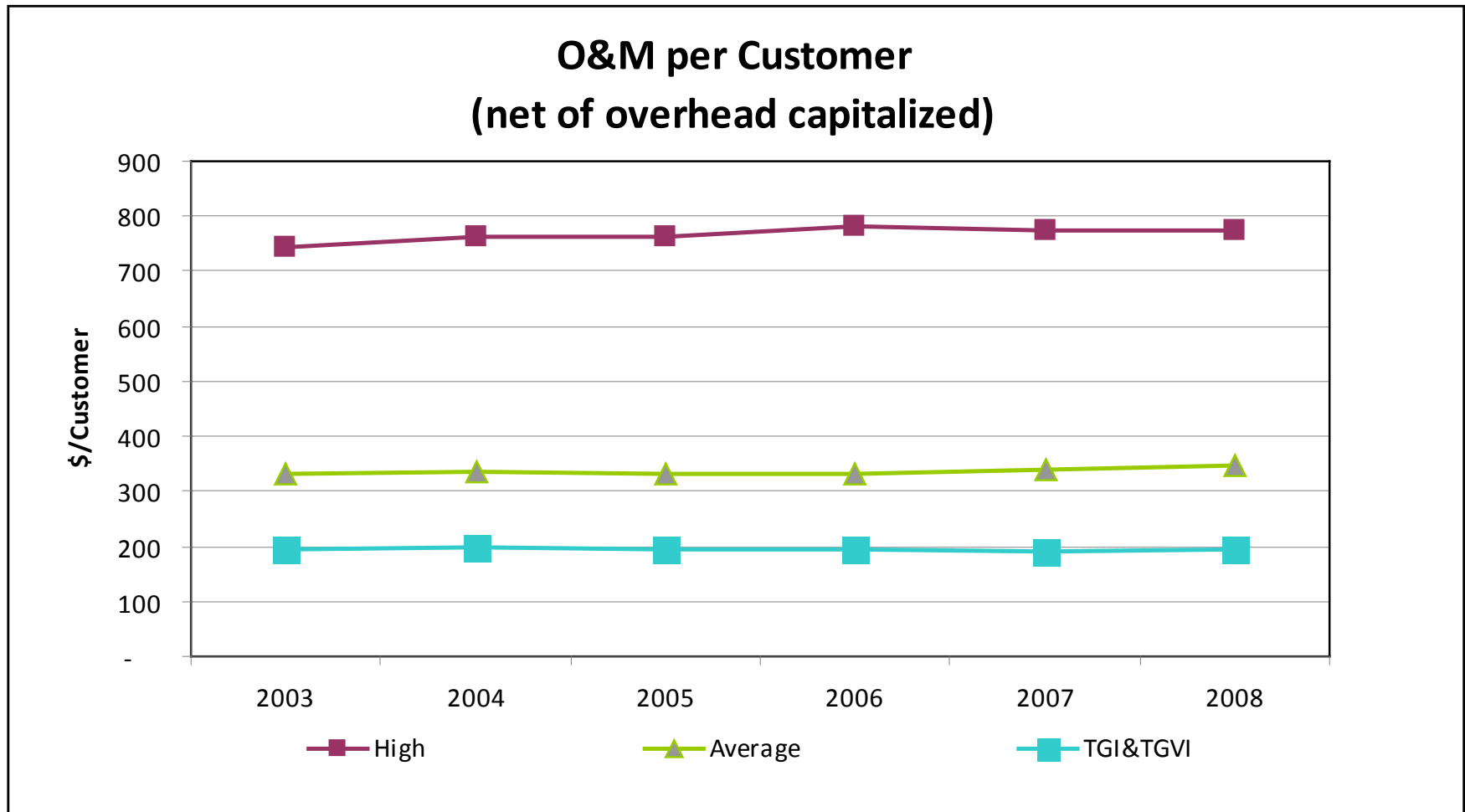
Improving Customer Satisfaction While Containing O&M Per Customer



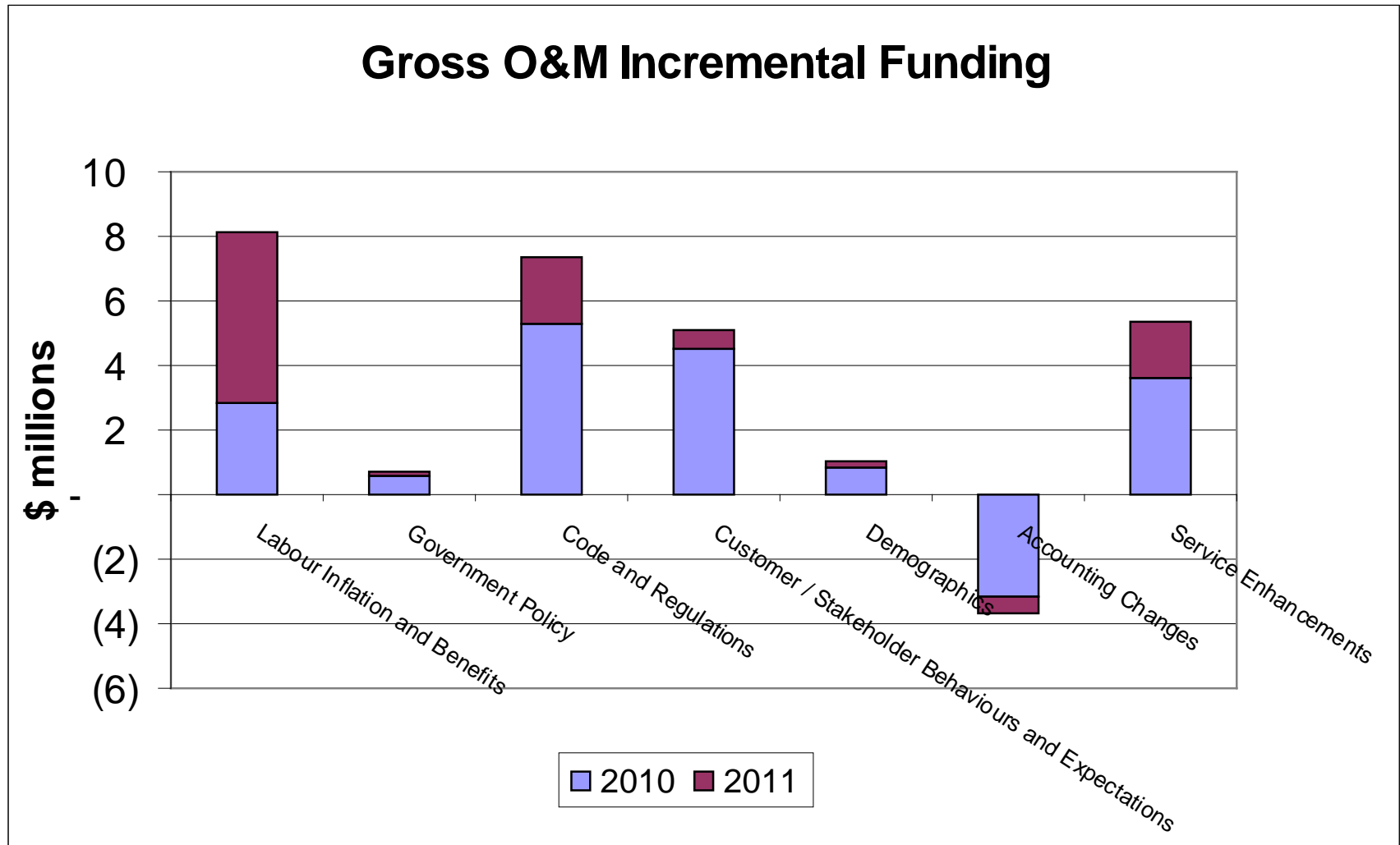
Maintaining Public Safety While Containing O&M Per Customer



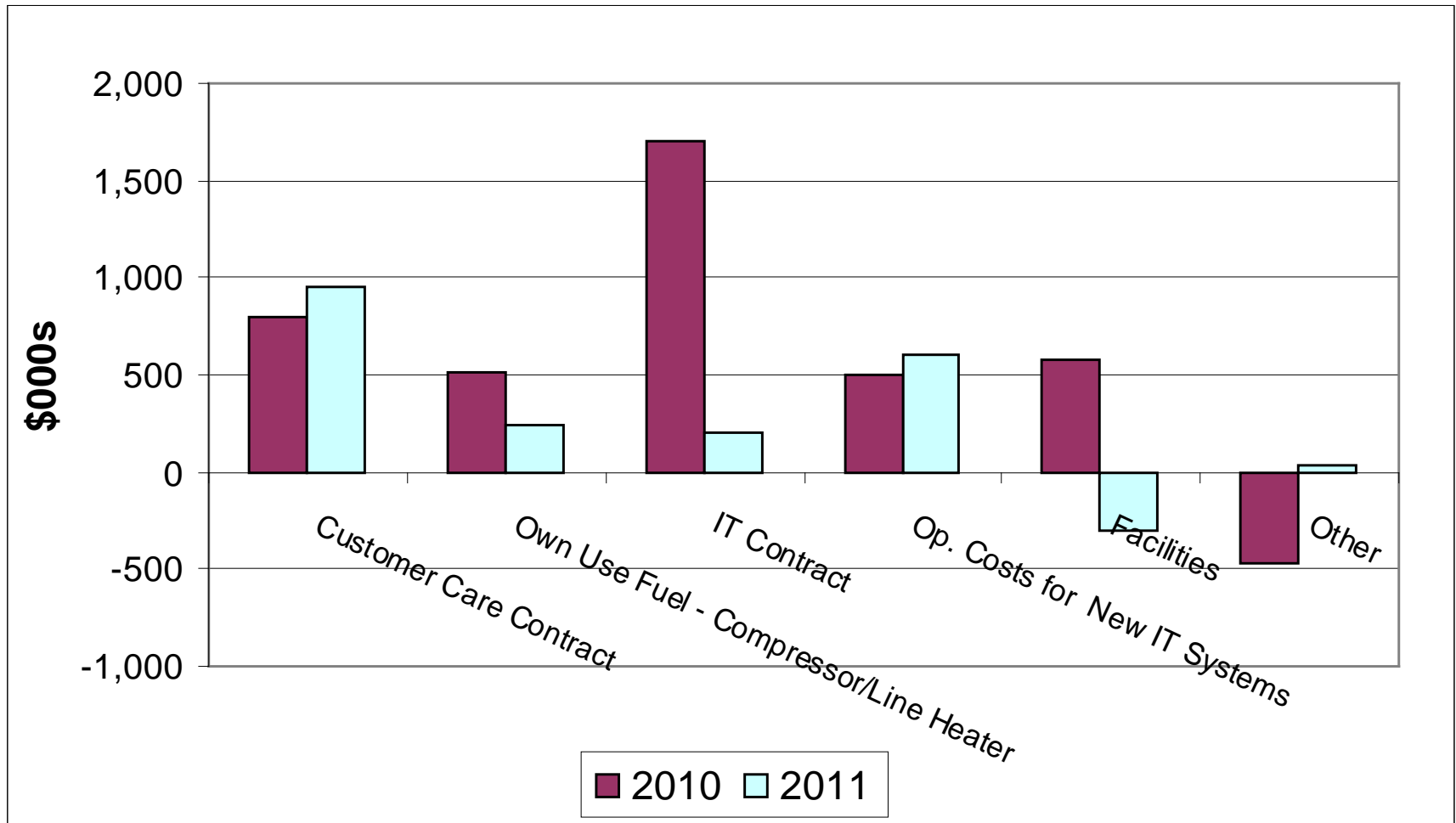
Terasen Gas Amongst The Lowest In O&M Per Customer Measure



O&M Incremental Funding To Meet Our Customers' Needs – 2010 & 2011

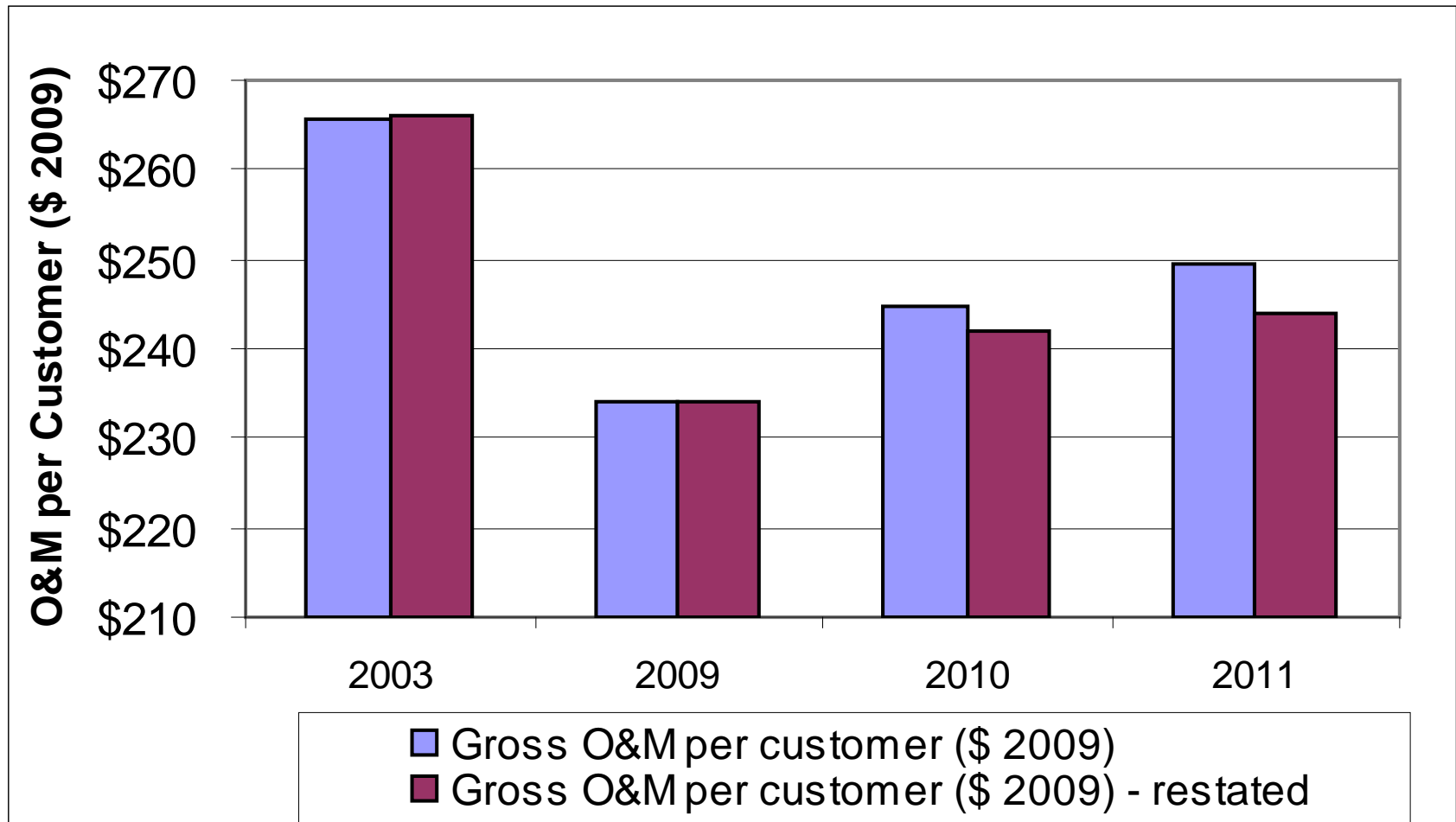


Composition Of Service Enhancement Gross O&M Incremental Funding



Customers Benefiting From Efficiencies Realized

- O&M Per Customer Is Lower In 2010 And 2011 Than In 2003



* Restated number excludes incremental funding due to government policy, codes and regulations and accounting policy

O&M Summary

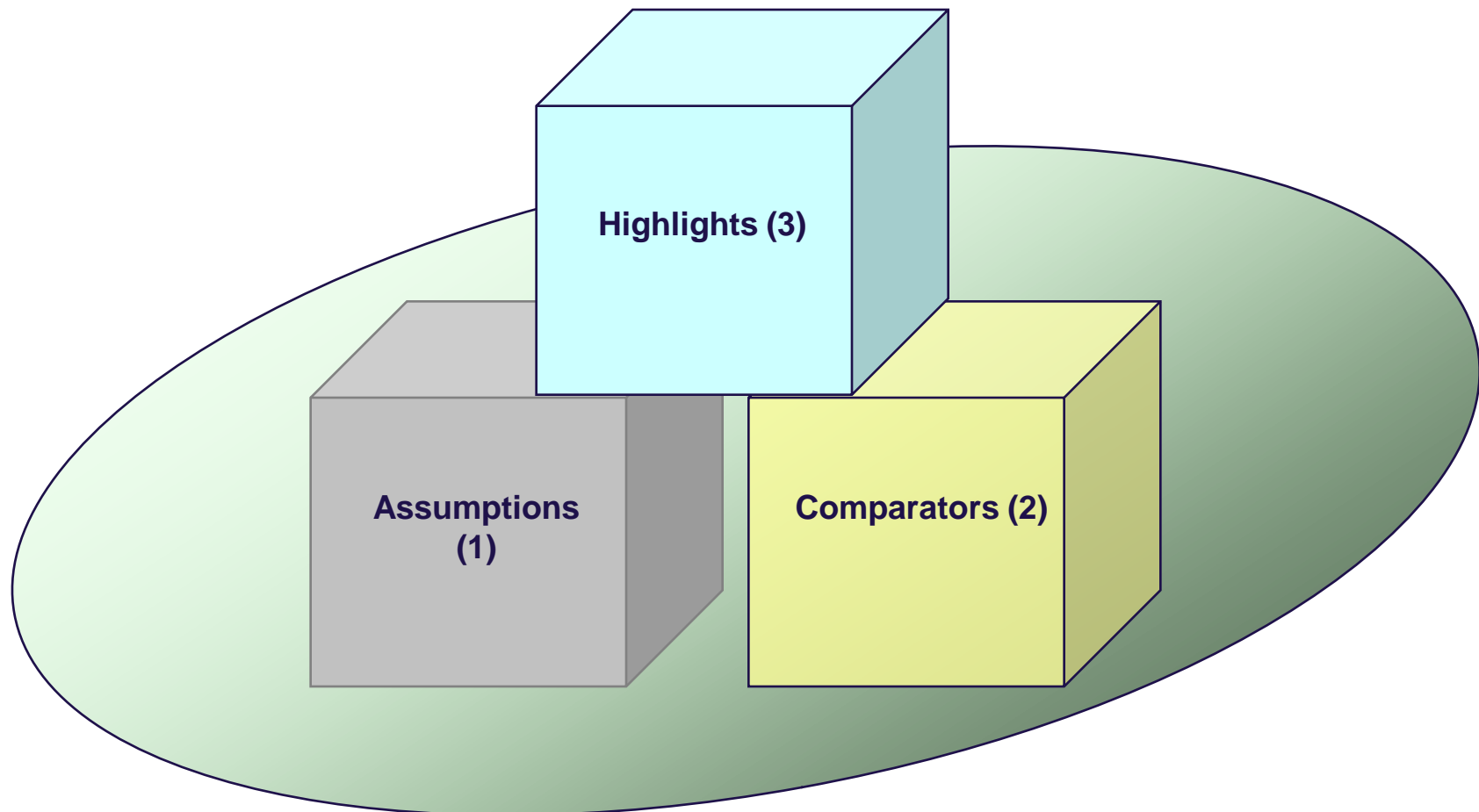
- Required to meet the needs of customers and stakeholders and to maintain Terasen Gas' profile as an efficient and effective gas utility
- Terasen Gas requests approval of the O&M funding as outlined

Respected & Trusted Operator / Operational Excellence

Capital

James Wong – Director, Finance & Planning

TGI Capital Expenditures



Assumptions

- Categories of Capital Spending:
 - *Category A - Mains, Services and Meters*
 - *Category B - Transmission and Distribution*
 - *Category C - IT and non IT*
- Category A: Mains, Services, Meters based on:
 - *Forecast Customer Additions and Meter Exchanges*
- Category B: Transmission and Distribution:
 - *Safety, Reliability and Growth*
 - *20 Year Transmission Plan, Five Year Distribution System Plan*
- Incorporates a proposed change to CPCN threshold limit:
 - *\$5 million to \$20 million*

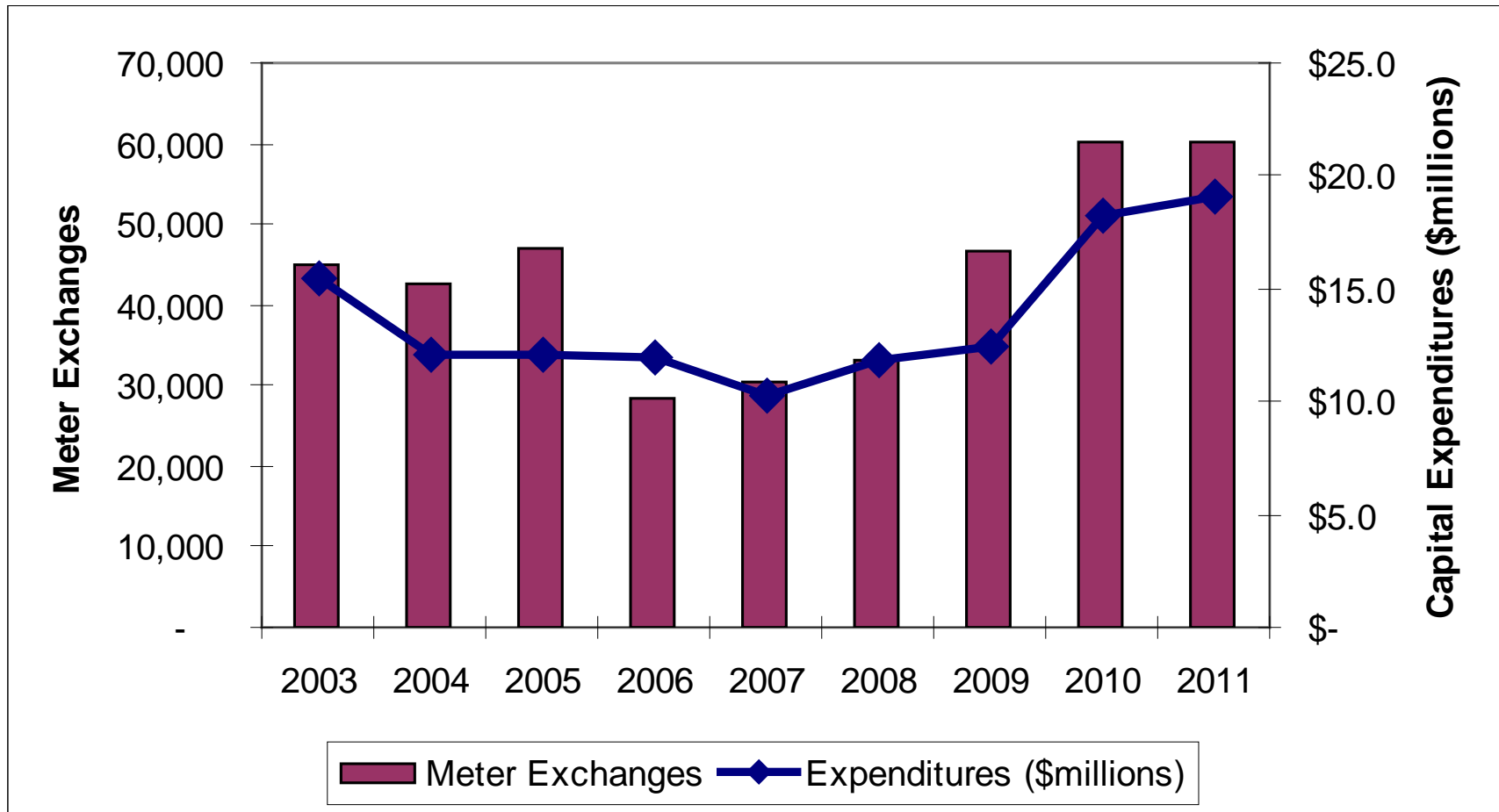
Improving Customer Satisfaction While Containing Capital per Customer



2010 – 2011 Proposed Capital Expenditures

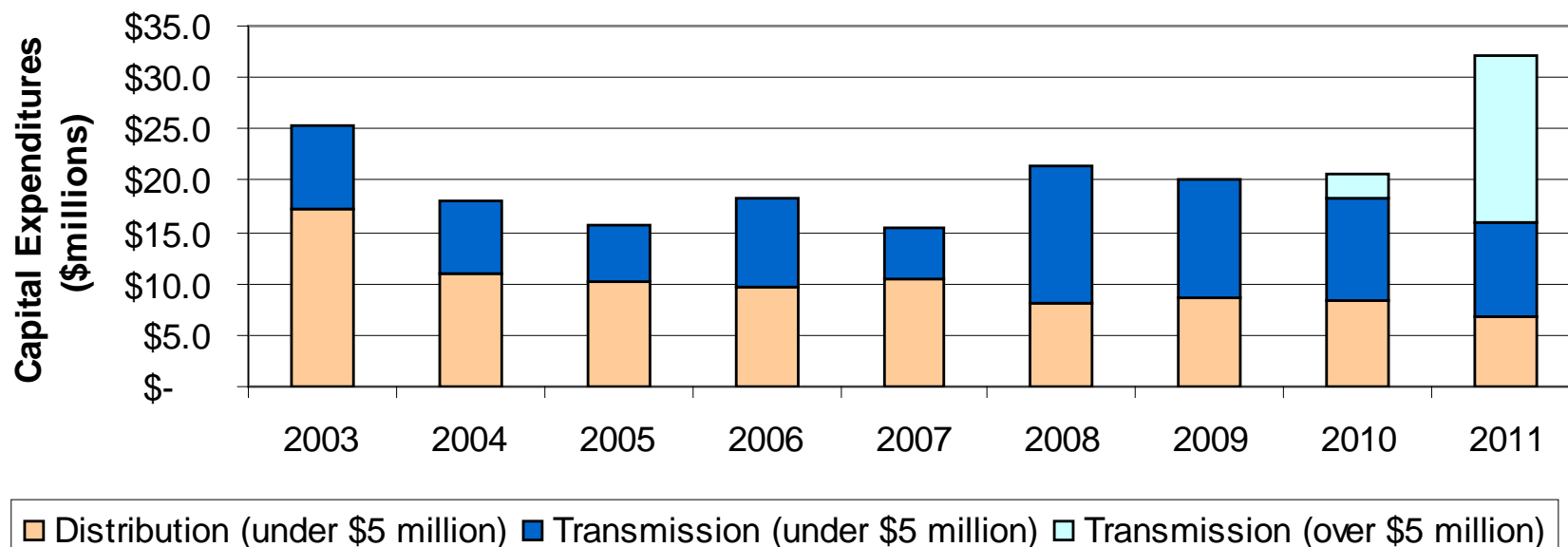


Increased Meter Exchange Activities To Manage Meter Fleet Prudently



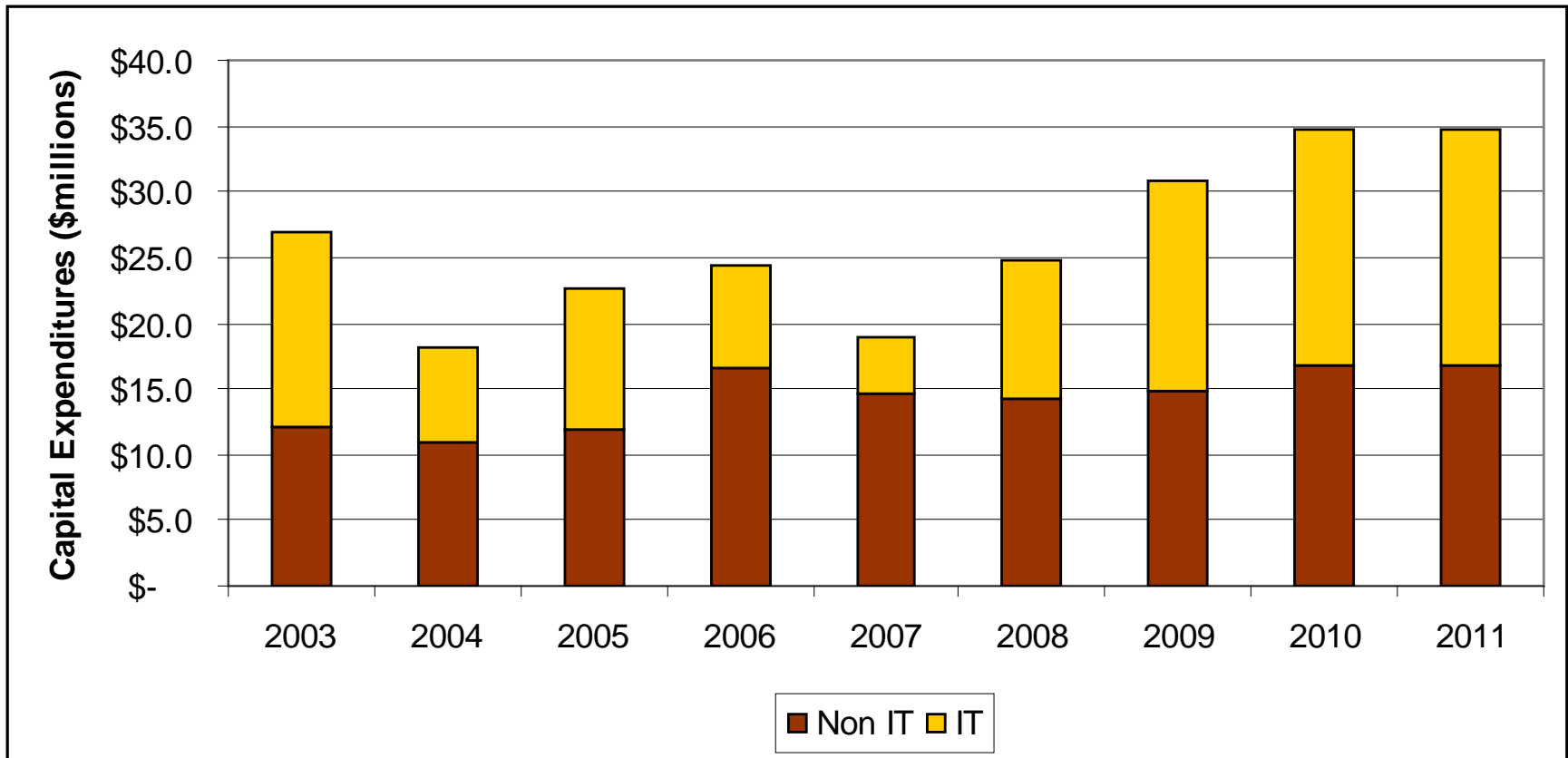
Transmission And Distribution Plant Spending Trend To Continue

Transmission and Distribution Capital Systems Integrity and Reliability



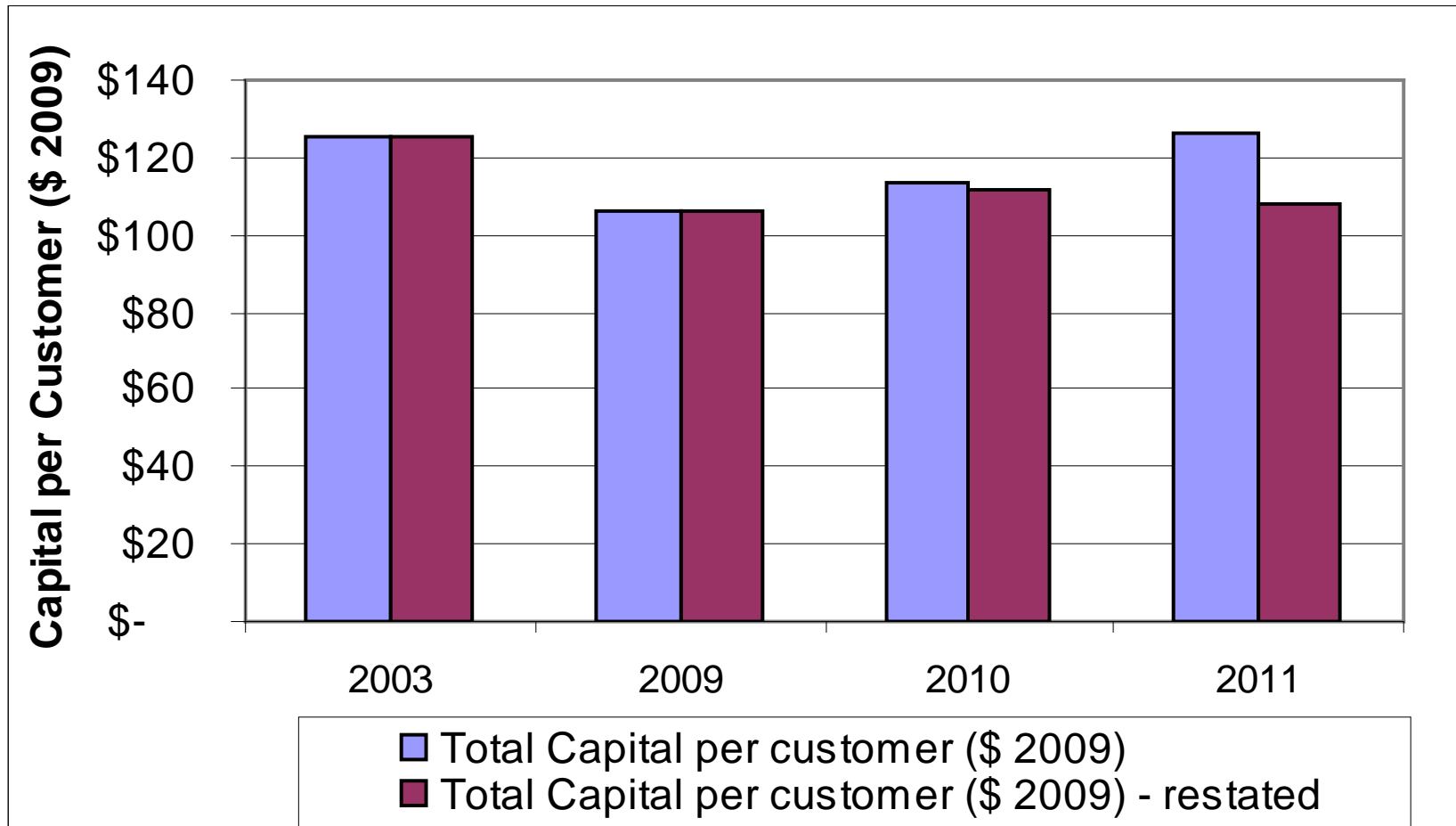
All Other Plant – Category C

Higher Investment Trend In IT



Customers Benefiting From Efficiencies Realized

- Capital Per Customer Is Lower In 2010 And 2011 Than In 2003



* Restated number excludes \$2 m in 2010 and \$16 m in 2011 for projects that otherwise would have been CPCN; Kootenay River Crossing and Huntingdon Alternative Connection

Capital Summary

- 2010 and 2011 levels of capital expenditures are required to service new and existing customers and ensure the safety and reliability of the gas distribution system
- Terasen Gas requests approval of the capital expenditures as outlined

Respected & Trusted Operator / Operational Excellence

Codes, Standards & Regulations

Joe Mazza – General Manager, Transmission

Codes, Standards And Regulations Have Evolved To Respond To Industry Incidents



Though few in numbers, incidents have occurred with tragic results

It's About Safe, Reliable, Cost Effective And Environmentally Responsible Service



- Codes, standards, and regulations are in place to ensure public concern and stakeholder expectations are met
- They have evolved to address:
 - *Increased safety concerns brought on by a few major incidents across North America*
 - *Increased environmental concerns including GHG and species at risk*
- It's about effectively managing risk and adhering to sound business practices

Compliance And Risk Management Are Not New At Terasen Gas



- Terasen Gas has:
 - *A strong history of delivering safe, reliable, cost effective and environmentally responsible service*
 - *Management systems and practices which include:*
 - Standards
 - An Asset Integrity Management Plan
 - An Environmental Management System
 - An Occupational Health & Safety Program

Asset Integrity Management Plan Defines Hazards And Their Management Programs

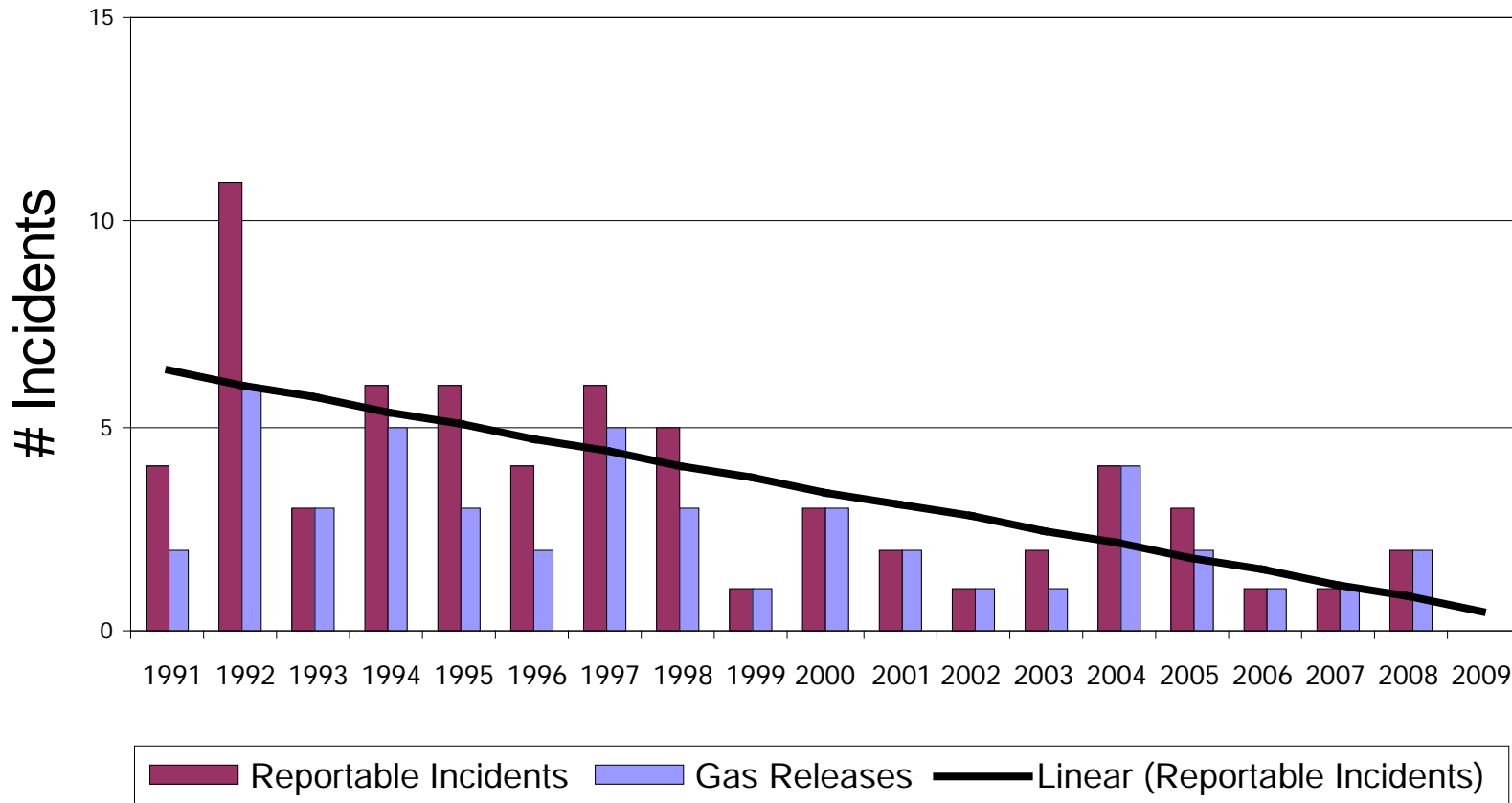
HAZARD

MANAGEMENT PROGRAMS

External Interference	<i>Right-of-Way Visibility, Control Activities on Right-of-Way, Monitoring & Inspection</i>
Corrosion & Stress Corrosion Cracking	<i>Cathodic Protection, Cathodic Protection Surveys, In-line Inspections, Stress Corrosion Cracking Program, Leak Surveys</i>
Natural Hazards	<i>Hydro-technical Monitoring, Geotechnical Monitoring, Seismic Reviews, Pipeline Patrol, Leak Survey</i>
Human Error	<i>Asset Design and Construction, Operating Procedures, Training Programs, SCADA, Operating Limits</i>
Material Defects	<i>In-line Inspections, Anomaly Investigation, Pipeline Repairs</i>

A Continued Focus On Operational Excellence Led To A Reduced Number Of Incidents (SQI In PBR)

Terasen Gas - OGC Reportable Incidents (Transmission Pressure)



Continued Compliance And Risk Management Activities Require Additional Funding



- Cost Drivers include:
 - *Growth of system; increased urbanization around pipeline and distribution assets; increased activity around pipelines*
 - *Asset age*
 - *New or changed code requirements*
 - *Inflation for external contractors*

Growth In BC Housing Means Population Density Near Gas System Assets Has Increased

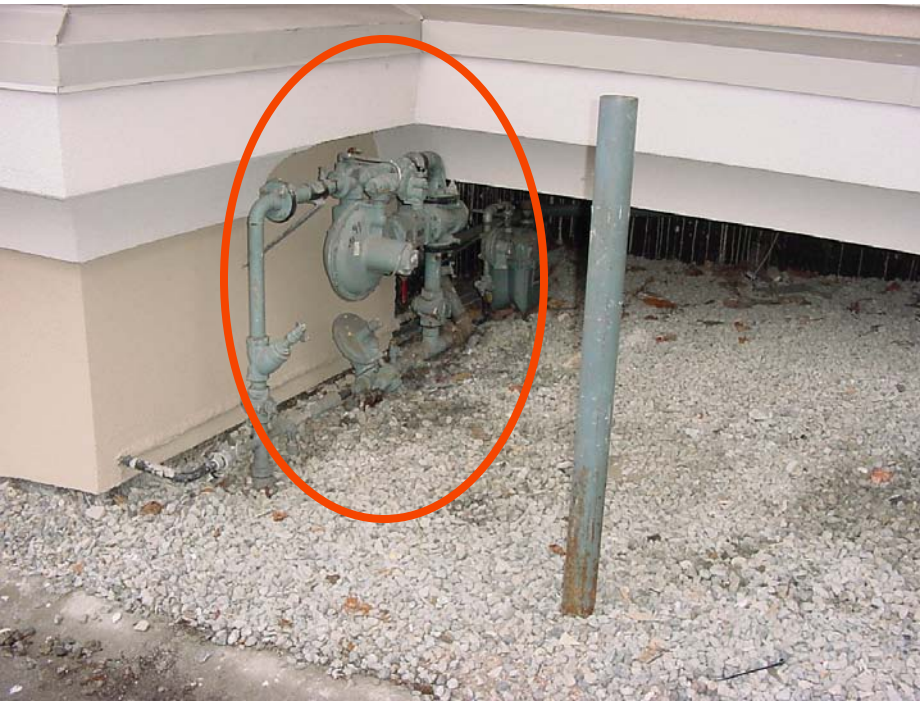


Growth In BC Housing Means Population Density Near Gas System Assets Has Increased



Increases potential for 3rd party activity near pipeline and increases consequence if pipeline is breached

Growth In BC Housing Means Population Density Near Gas System Assets Has Increased



Increases potential for 3rd party activity near service lines and meters

Infrastructure Growth And Renewal Projects In BC Have Increased 3rd Party Activities Around Gas System Assets



Increases need for monitoring and management to mitigate damage potential

Infrastructure Growth And Renewal Projects In BC Have Increased 3rd Party Activities Around Pipeline Assets



Increases need for monitoring and management to mitigate damage potential

Monitoring For Third Party Activity On Our RoWs Is An Ongoing Concern If We Are To Mitigate Damage



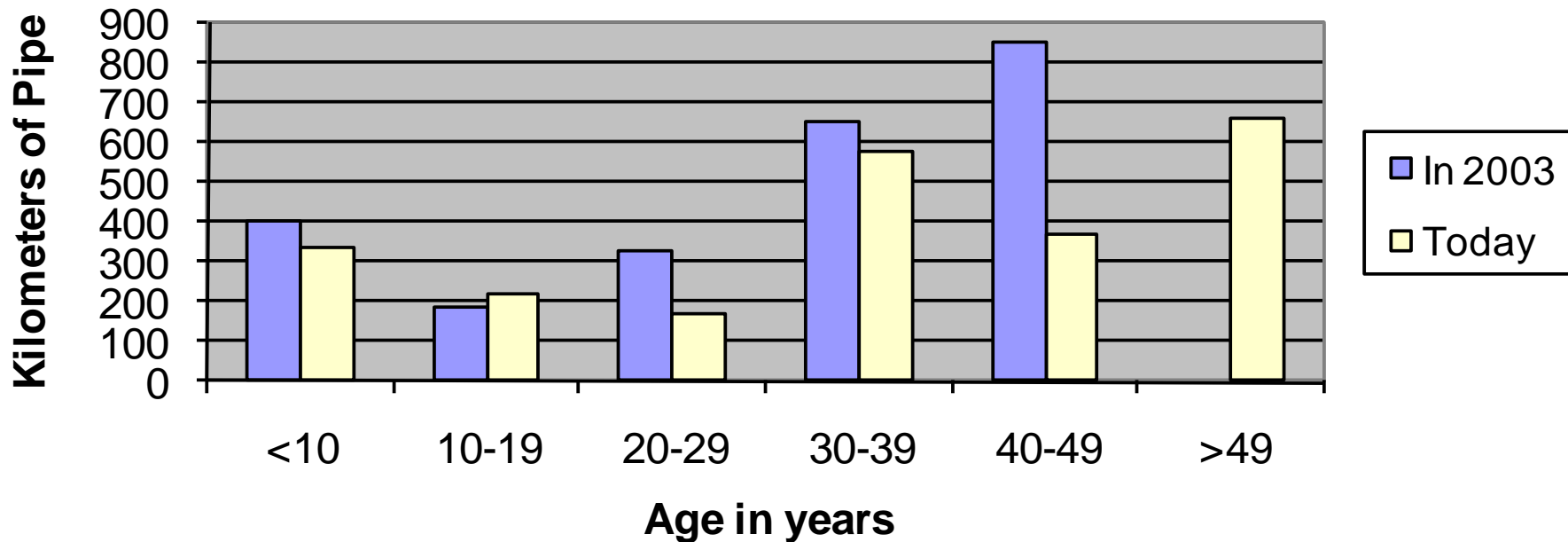
With Customer Additions The Distribution System Grows Increasing Monitoring And Maintenance Activities

Statistic	# of Assets 2006	# of Assets 2009	Growth
Km of Distribution Main	19,391	20,992	1,601
Km of Distribution Service Lines	15,167	17,612	2,445
# of Risers	743,928	753,588	9,660
# of Heaters	200	252	52
# of Customers	815,284	834,242	18,958



Increased Monitoring And Maintenance Is Required To Match The Risk Profile Of Aging Transmission Assets

TGI Transmission Pipe Age



Aging Assets Need To Be Monitored For Corrosion And Other Age Related Defects



As Stakeholder Expectations Change And Improvements Are Identified, Codes And Regulations Evolve



- Oil and Gas Activities Act
- CSA Z662 – Oil and Gas Pipeline Systems, 2007 Edition, Clause 10.2: Safety and Loss Management
- CSA Z246 - Security Management for Petroleum and Natural Gas Industry Systems (anticipated release October 2009)
- BC Safety Authority: Safety Standards Act and Gas Safety Regulations
- Environmental Management Act

Hazards Can Show Up Without Warning, Regular Monitoring Means Earlier Detection



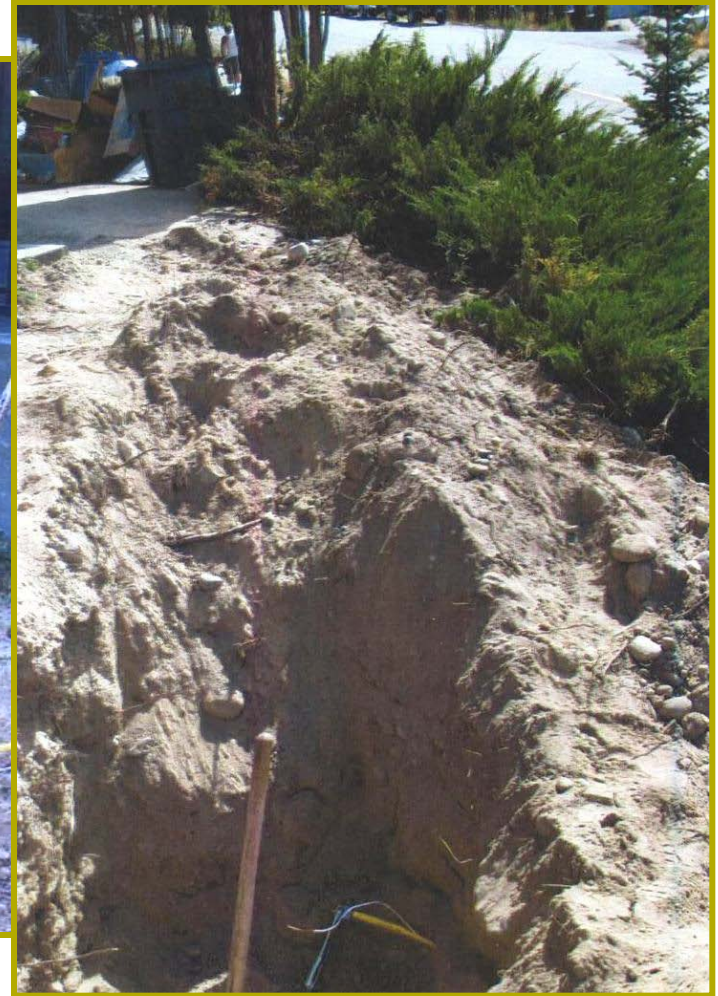
Asset Integrity Management Programs Mitigate Risks

Hazards Can Show Up Without Warning, Regular Monitoring Means Earlier Detection



Asset Integrity Management Programs Mitigate Risks

BC One Call, When Used By Excavators, Greatly Reduces 3rd Party Damage



Asset Integrity Management Programs Mitigate Risks

Vegetation Management Is Necessary For Maintaining Visibility To Assets - But In BC Growth Is Year Round And Swift



Environmental consideration of waterways must be respected and, when growth is outside of ROWs, landowners must be consulted

Asset Integrity Management Programs Mitigate Risks

Environmental Protection Rules Are Constantly Evolving, Impacting How Terasen Gas Must Operate



2010 Incremental Funding Requirements

Year	Code	Amount (\$000)
2010	BC Safety Authority – BC One Call	\$410
	CSA Z246 - Security	\$160
	CSA Z662 – Annex M&N – Integrity Management	\$3,701
	CSA Z662 – Annex A - Safety and Loss Management	\$705
	CSA Z1000 - Occupational Health & Safety	\$11
	Environmental Mgmt Act	\$90
	Power Engineers and Pressure Vessel Safety Act	\$220
	Total	\$5,297

2011 Incremental Funding Requirements

Year	Code	Amount (\$000)
2011	BC Safety Authority – BC One Call	\$127
	CSA Z246 - Security	(\$50)
	CSA Z662 – Annex M&N - Integrity Management	\$1,992
	CSA Z662 – Annex A - Safety and Loss Management	\$10
	Environmental Mgmt Act	(\$20)
	Total	\$2,059

It's About Safe, Reliable, Cost Effective And Environmentally Responsible Service



- Compliance and risk management is not new at Terasen Gas
- Continued compliance and risk management activities require additional funding
- Terasen Gas will continue to refine and enhance its management systems to balance risk, meet codes and regulation compliance and deliver safe, reliable, cost effective and environmentally responsible service

Respected & Trusted Operator / Operational Excellence

Demographic Challenges

Eckart Adam – HR Strategy and Advisory Services

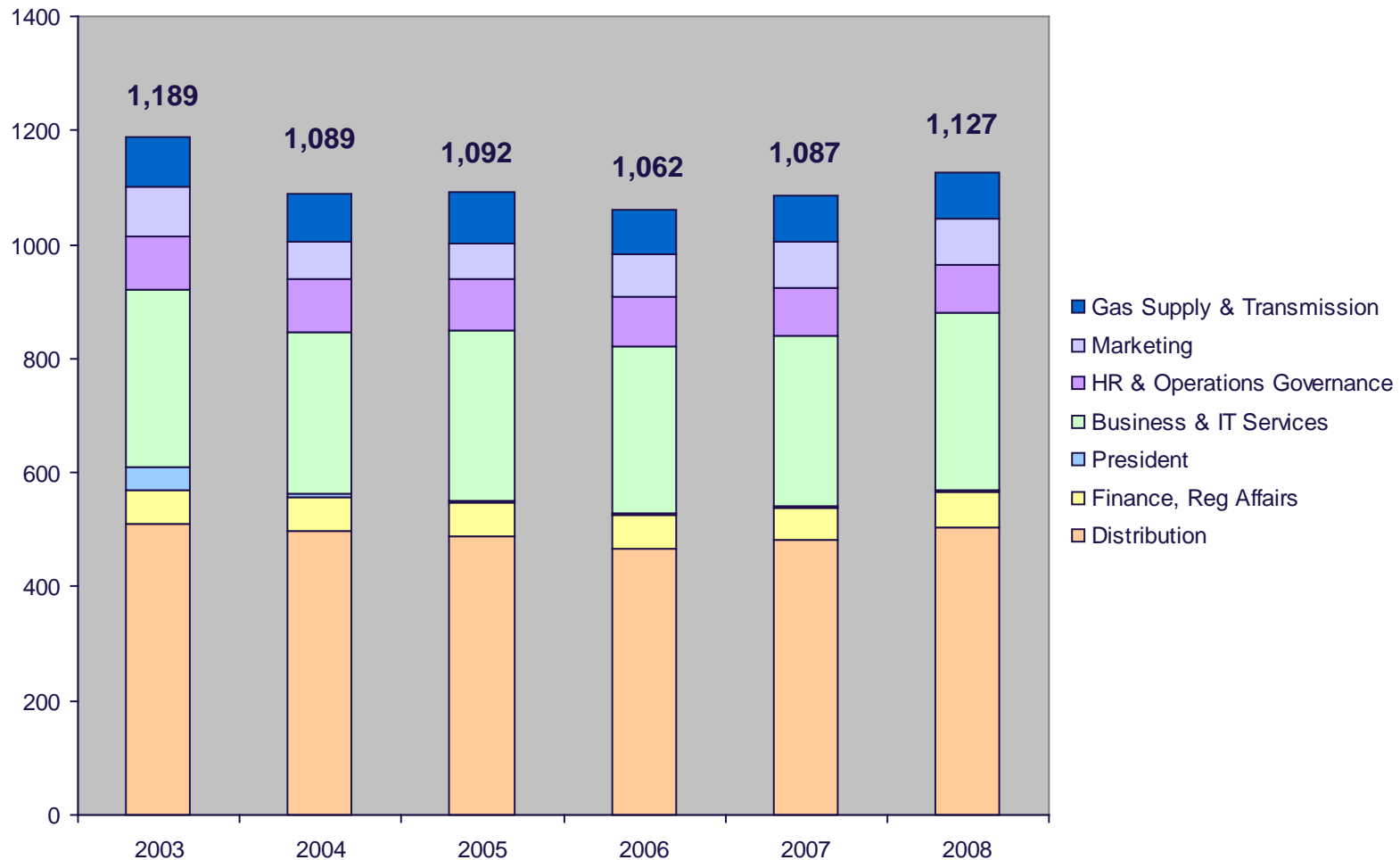
Terasen Gas Faces Significant Demographic Challenges Over The Next Five Years



- Our application addresses the action required to address these demographic challenges:
 - *Shifting workforce demographics*
 - *Looming skills shortages*
 - *Aging workforce*

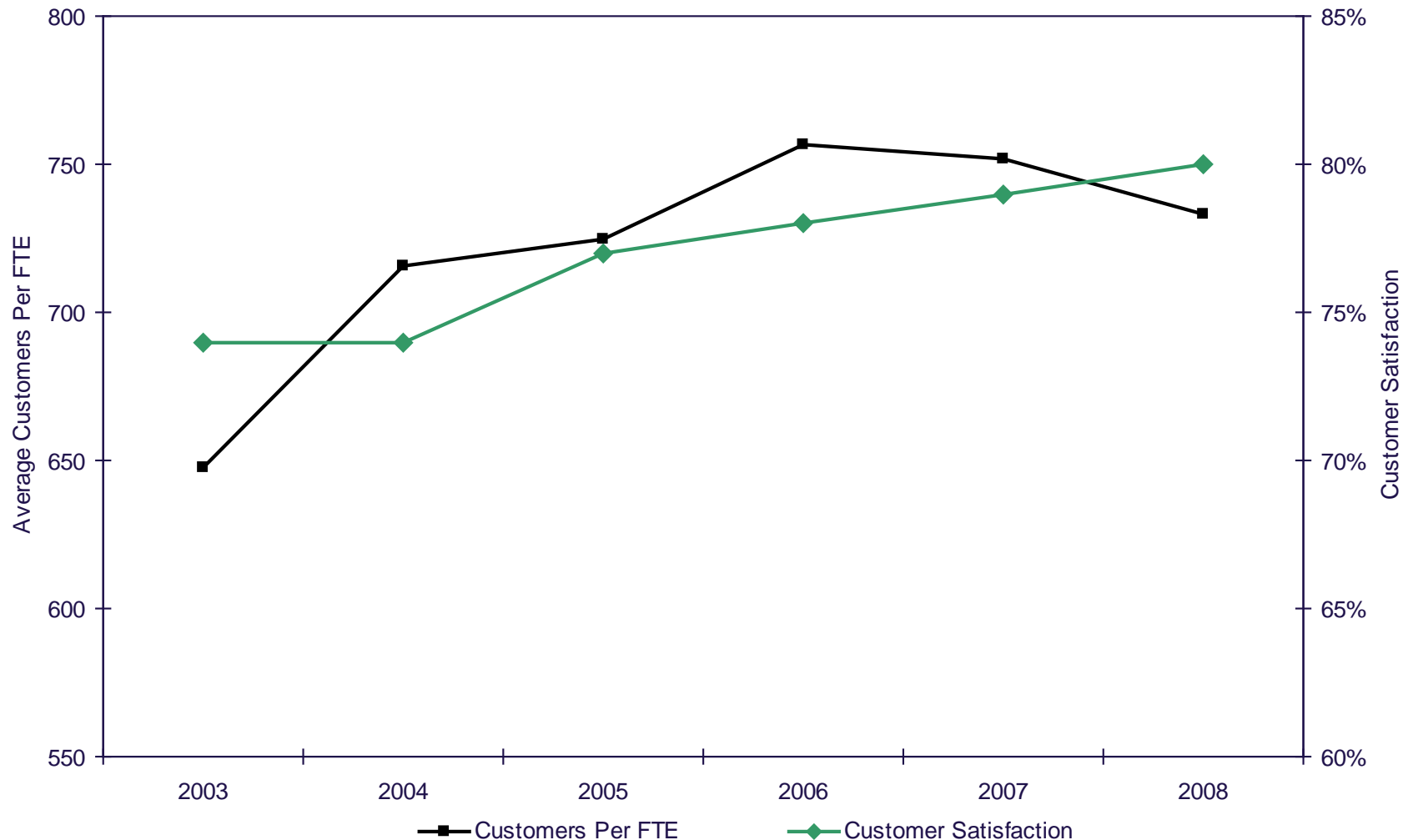
- Strategies to address challenges:
 - *Competitive total compensation*
 - *Targeted recruiting strategies*
 - *Enhanced training and development to build competencies and leadership capacity*
 - *Effective workforce transition and knowledge transfer*

Personnel Levels Were Successfully Managed Throughout The PBR (Full Time Equivalent – FTE)



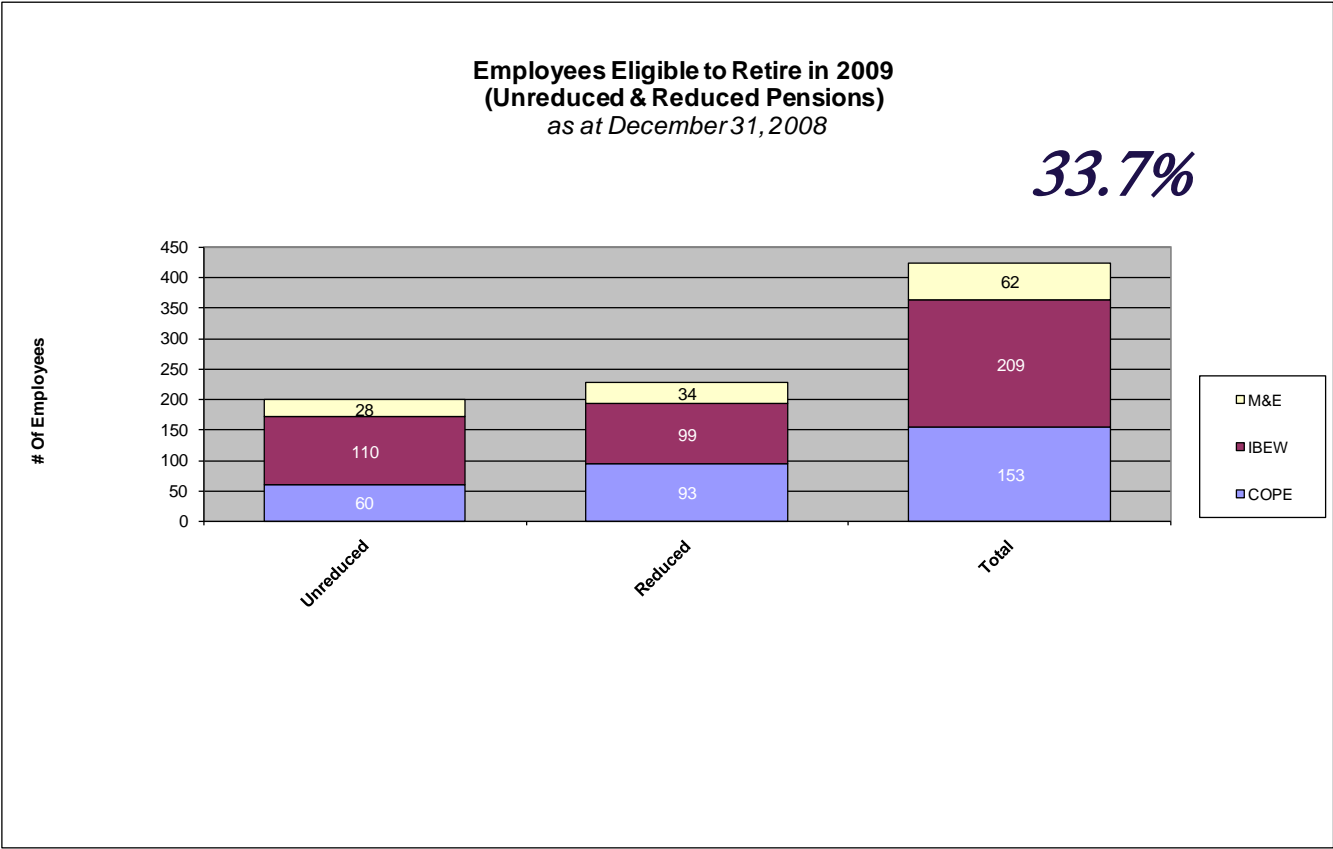
Source- Table B-1-7, page 147

Higher Average Number Of Customers Per FTE Has Had No Adverse Impact On Customer Satisfaction



Source- FTE data Table B-1-7, page 147; Average Customer data Table B-1-13, page 162; Customer Satisfaction data Table B-1-4, page 115

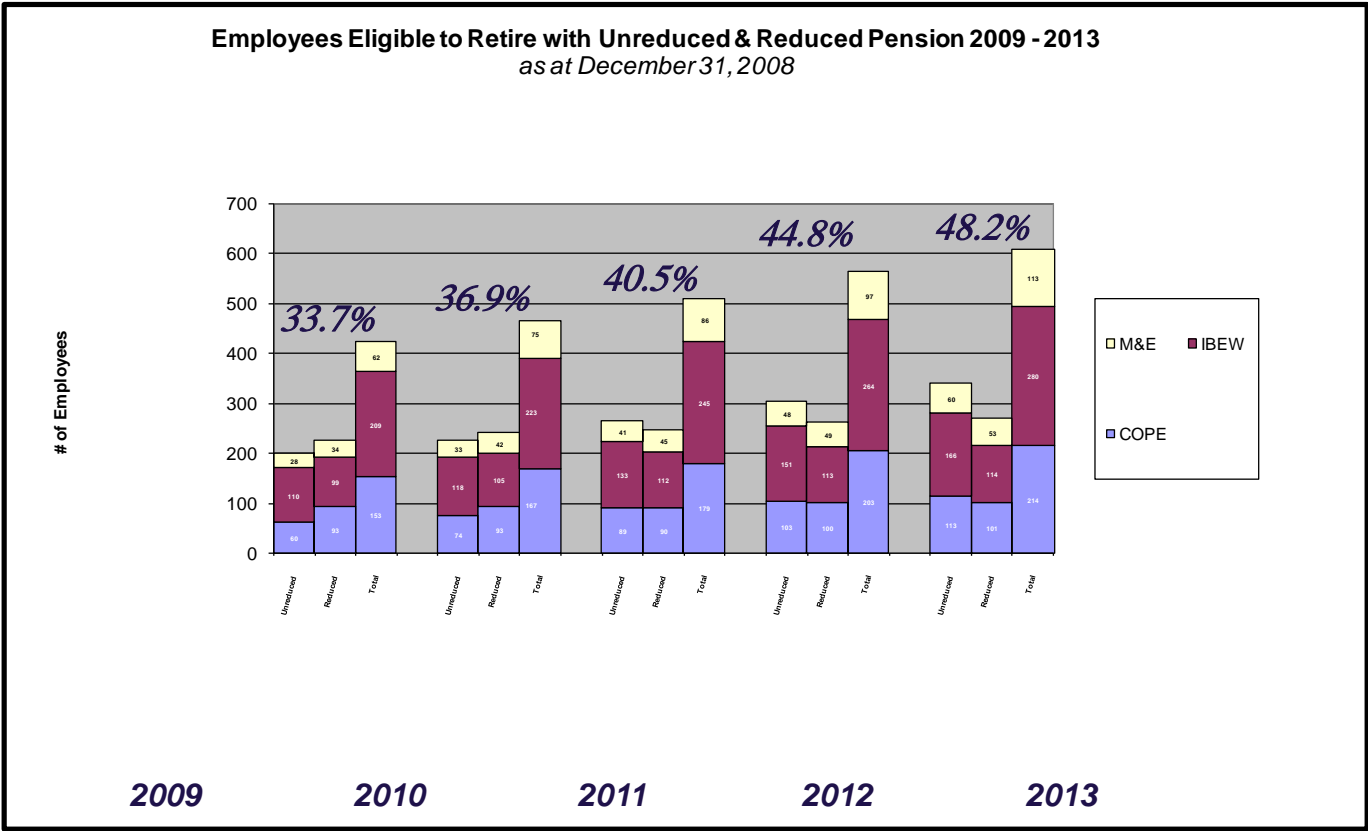
Almost 34% Of Employees Are Eligible To Retire In 2009



% of total workforce is based on December 31, 2008 FTR headcount. FTR headcount and does not include executives.

Source: Table B-2-1, Page 209

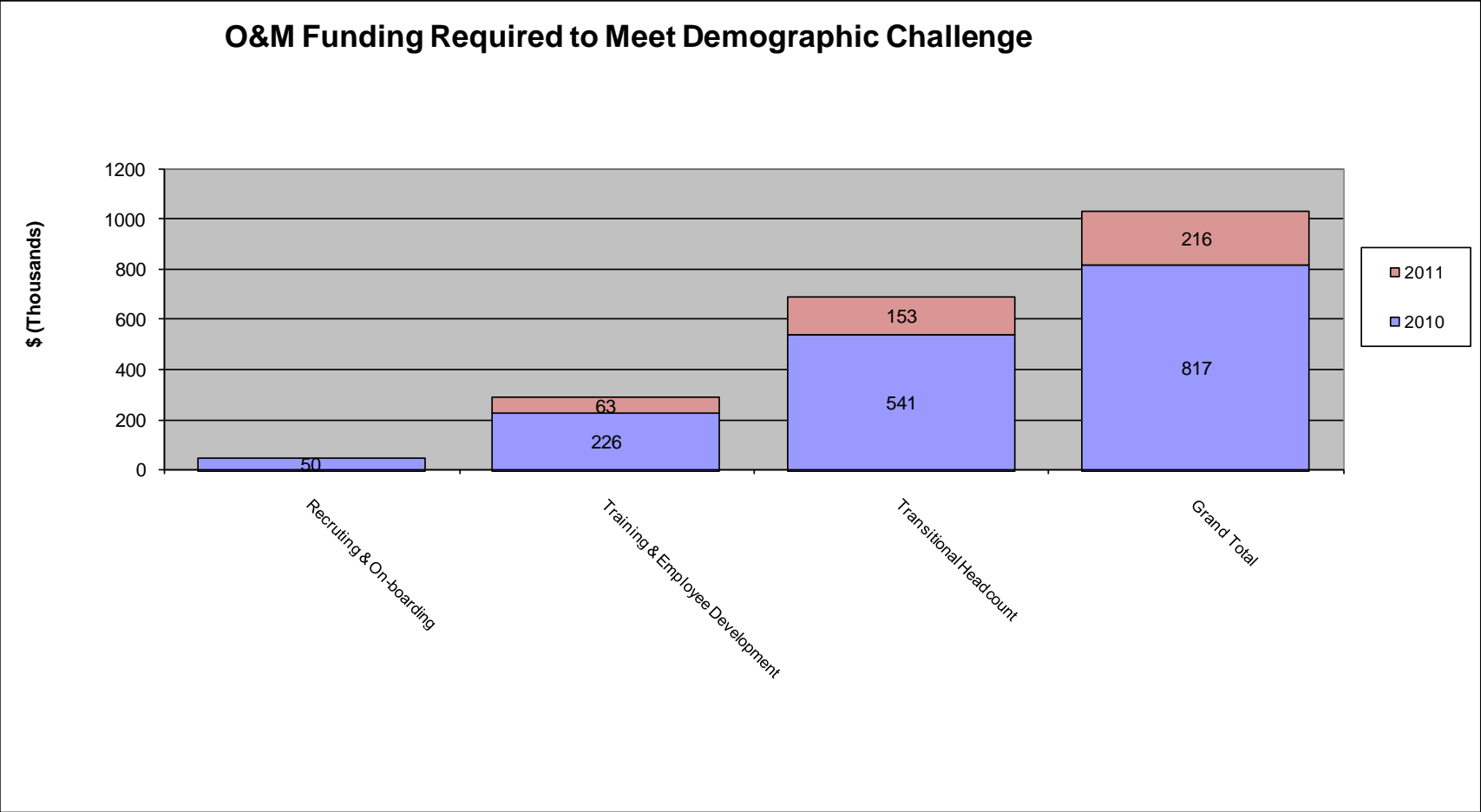
Almost 50% Of Terasen Gas' Workforce Will Be Eligible To Retire By 2013



Note: % of total workforce is based on December 31, 2008 FTR headcount and does not include executives.

Source: Table B-2-1, Page 209

O&M Funding Requirements Are Reasonable Given The Magnitude Of The Demographic Challenge



Source: Table C-6-8, Page 355

Summary

- Terasen Gas is facing a significant demographic challenge over the next five years
- 40% of employees will be eligible to retire by 2011; 20% (263) with an unreduced pension
- The additional \$1 million in funding requested for 2010-2011 is very reasonable relative to the magnitude of the challenge

Respected & Trusted Operator / Operational Excellence

Gas Supply & Core Market Administration Expense (CMAE)

Mike Hopkins – Manager, Commodity

Key Messages

- Prudent Gas Supply activity related to providing reliable, cost effective supply for Core customers is reflected in Core Market Administration Expense (CMAE)
- Slight increase in CMAE appropriate to maintain reasonable costs for customers
- Reallocations from O&M are appropriate and do not represent increased costs overall (other than inflation)

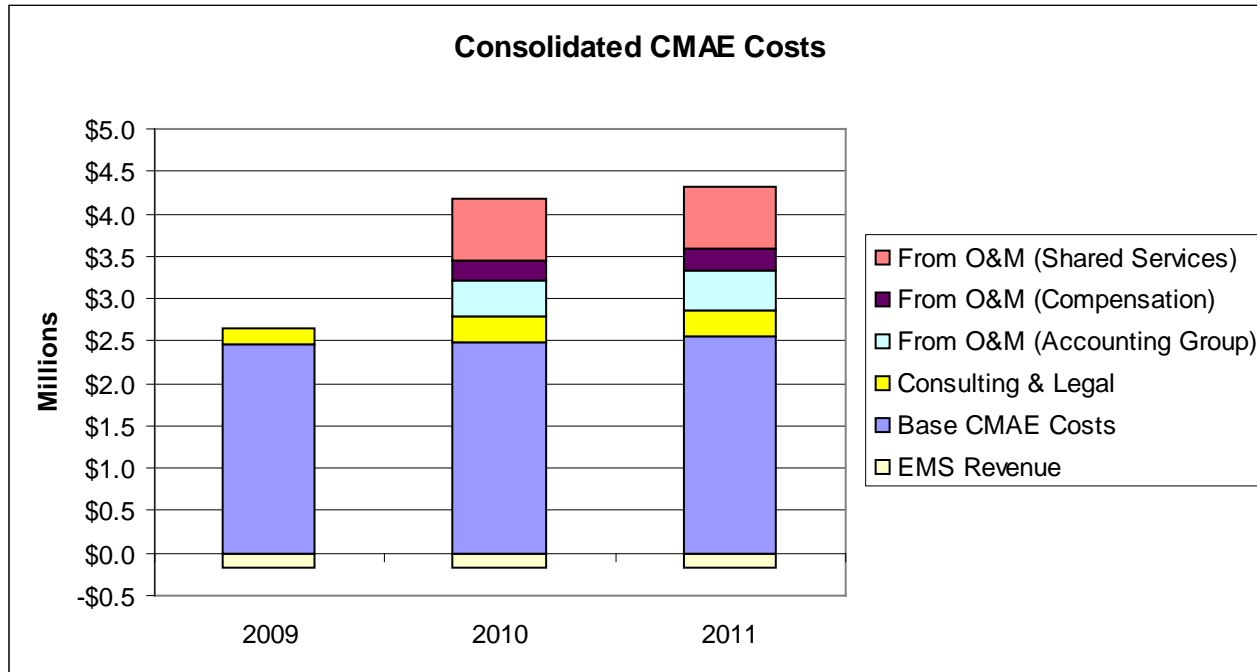
Costs Related To Gas Supply Activities For Core Customers Are Covered As Part Of Cost Of Gas – Not The Company's O&M

- Related to Gas Supply activities for Core customers:
 - *Resource procurement (commodity, transport, storage)*
 - *Mitigation activity (recovering costs)*
 - *Risk management (price risk and credit management)*
 - *Accounting and reporting*

- Flowed through to customers with cost of gas

- Allocated 90% TGI + TGW, 10% TGVI:
 - *TGI allocated 70% Midstream, 30% Commodity*

The Proposed Movement Of Some Activities From O&M Changes The Cost Profile Of CMAE But Ensures Appropriate Cost Allocation

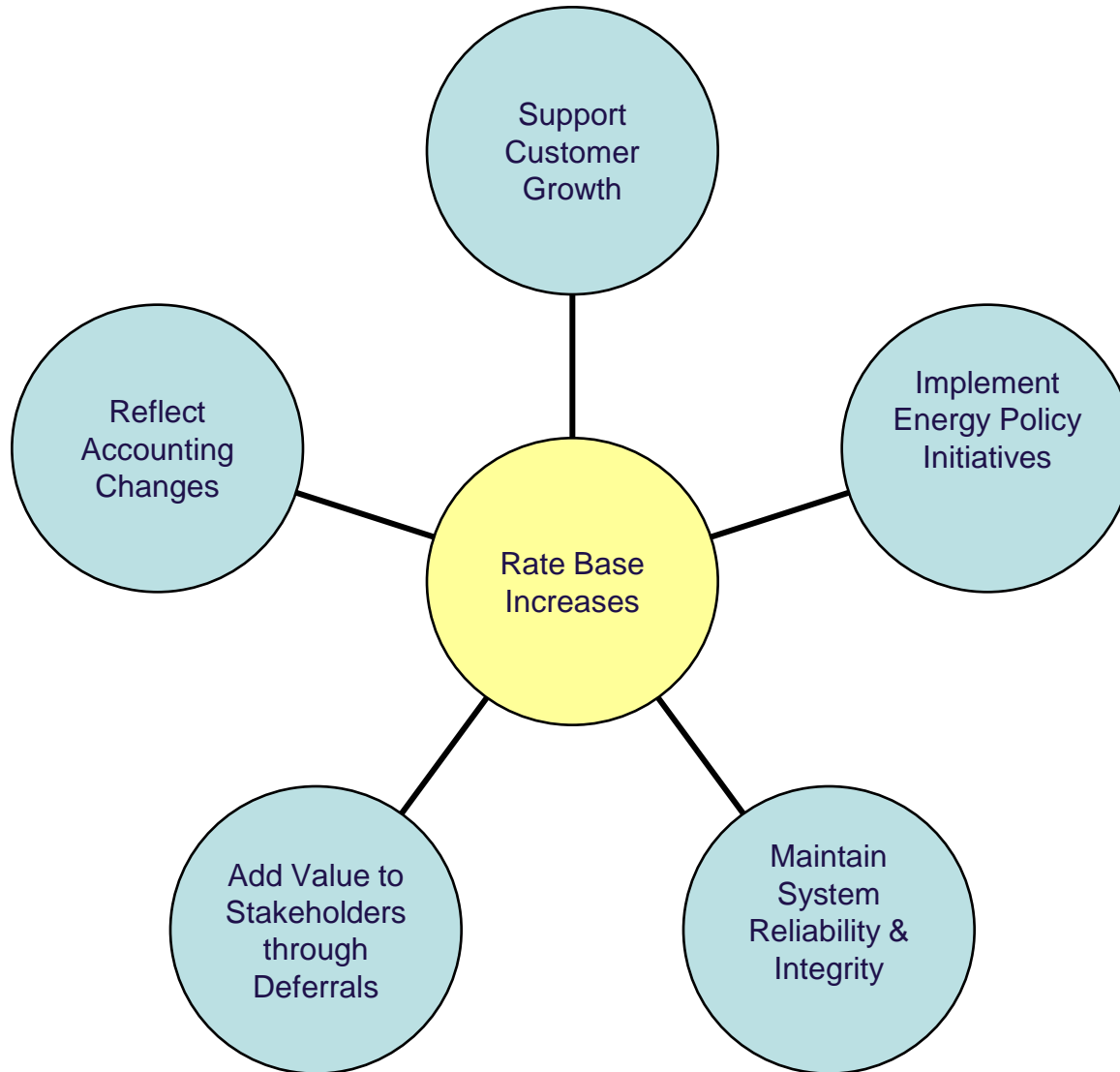


- *TGI + TGW share equals 90% or \$3.6 million per year (for 2010-2011)*
- *The increase from 2009 is \$1.26 million*

Rate Base

Diane Roy – Regulatory Strategy & Business Analysis

Rate Base Increases Are Required To Continue Serving Customers



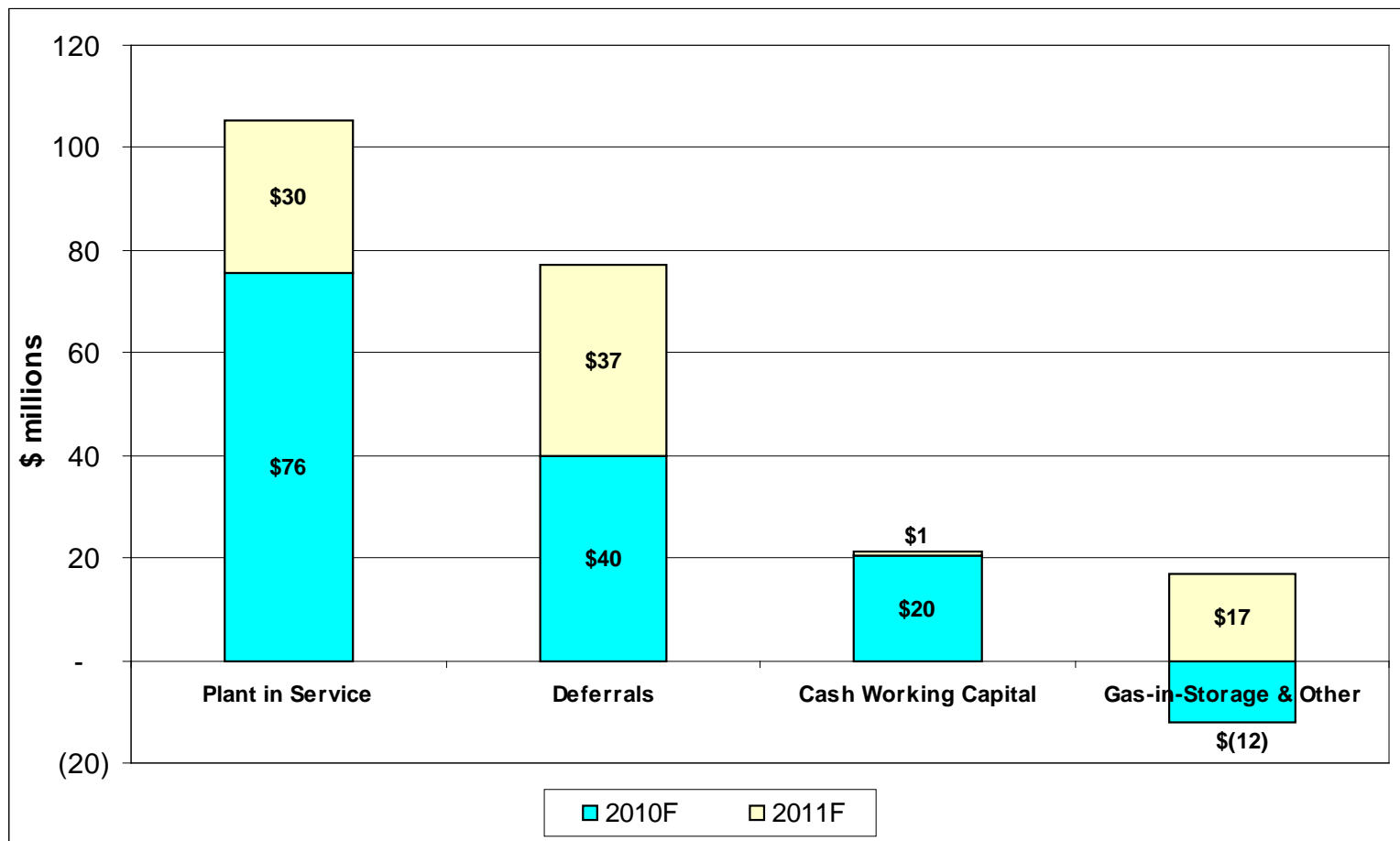
Customer Rates Appropriately Reflect Changes In Rate Base

- Changes in rate base affect rates through:
 - *Earned return*
 - *Income taxes*
 - *Depreciation or Amortization Expense (through plant or deferrals)*
- Increases revenue deficiency by \$8 million in 2010 and a further \$10 million in 2011
- Results in an increase of \$8 to \$9 to annual bill each year

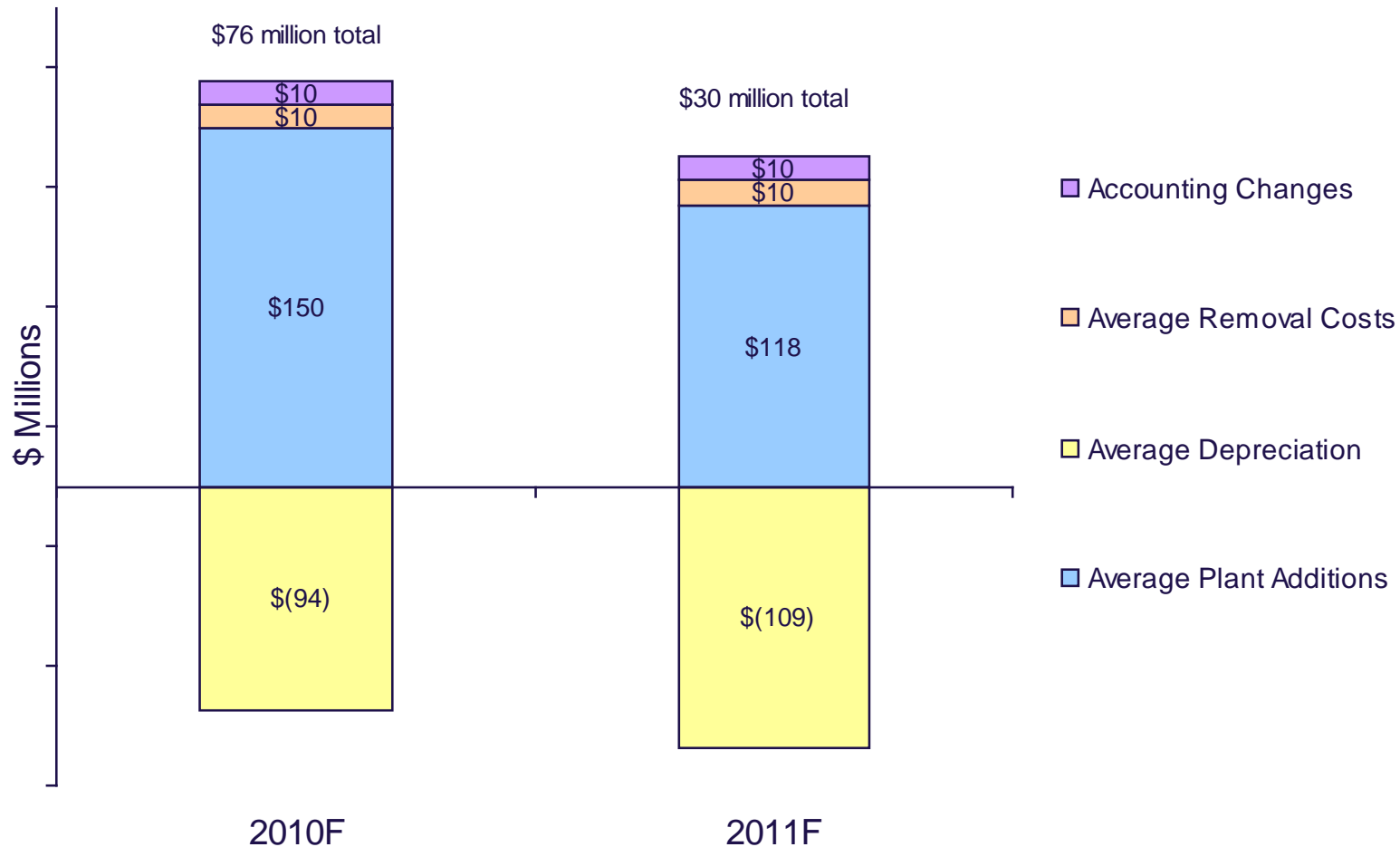
Changes In Our External Situation Impact Rate Base

	(\$ millions)		
	<u>2009P</u>	<u>2010F</u>	<u>2011F</u>
Net Plant in Service	\$ 2,392	\$ 2,468	\$ 2,498
Deferrals	(67)	(27)	10
Cash Working Capital	(27)	(7)	(6)
Gas-in-Storage	112	101	115
Other	<u>2</u>	<u>1</u>	<u>4</u>
Utility Rate Base	<u>\$ 2,412</u>	<u>\$ 2,536</u>	<u>\$ 2,620</u>
Increase in Utility Rate Base		<u>\$ 124</u>	<u>\$ 84</u>

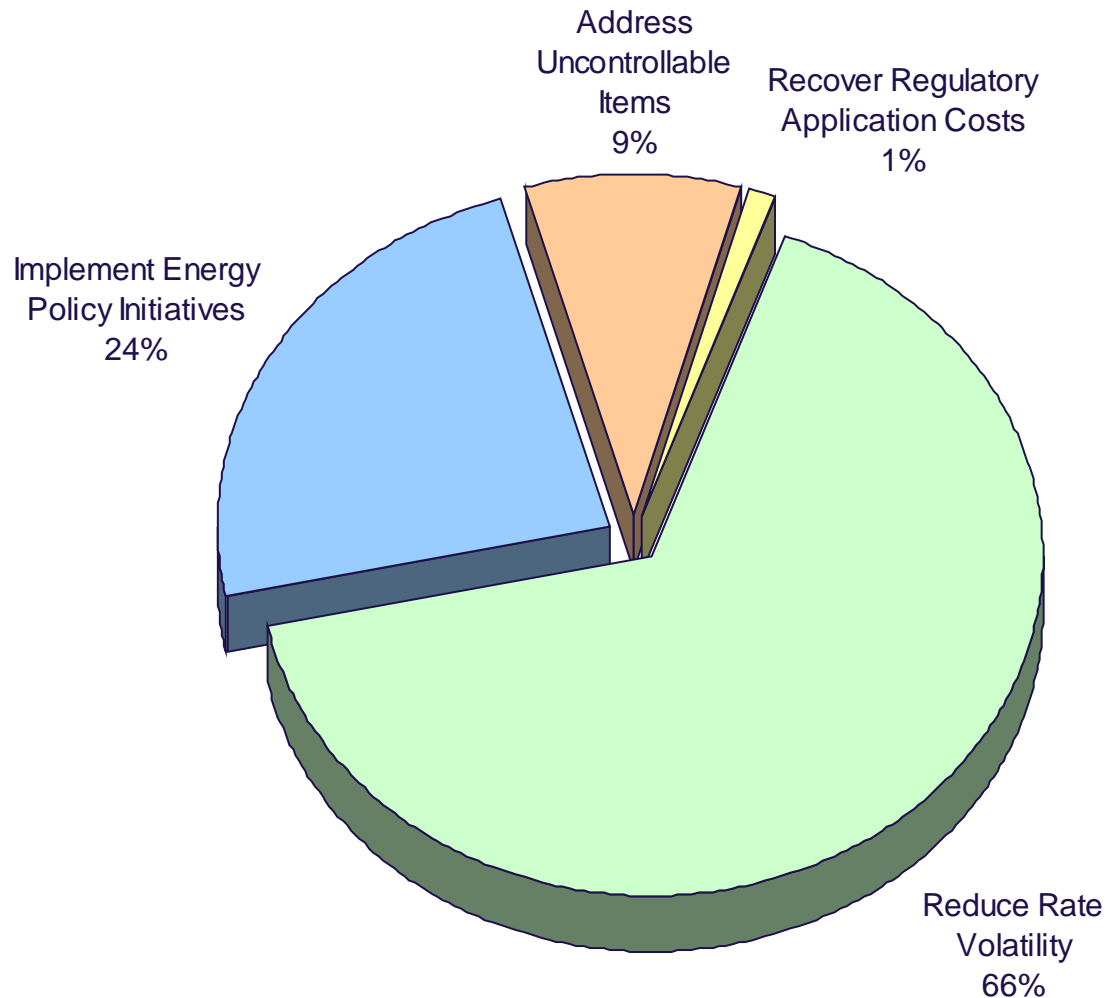
Rate Base Increases Result From Required Investments And Mechanisms To Reduce Rate Volatility



Investment In Plant Required For Growing Customer Base, System Integrity And To Reflect Accounting Changes



Deferrals Provide Benefits To Our Customers And The Company



Percentages based on the average of the years 2003 to 2011

Working Capital And Gas-In-Storage Reflect Updated Requirements

- Cash Working Capital:
 - *Updated Lead Lag Study produces 2010 and 2011 working capital forecasts*
 - *Results validated by KPMG*
 - *Reflects updated working capital requirements*

- Gas-in-Storage changes reflect changing commodity prices

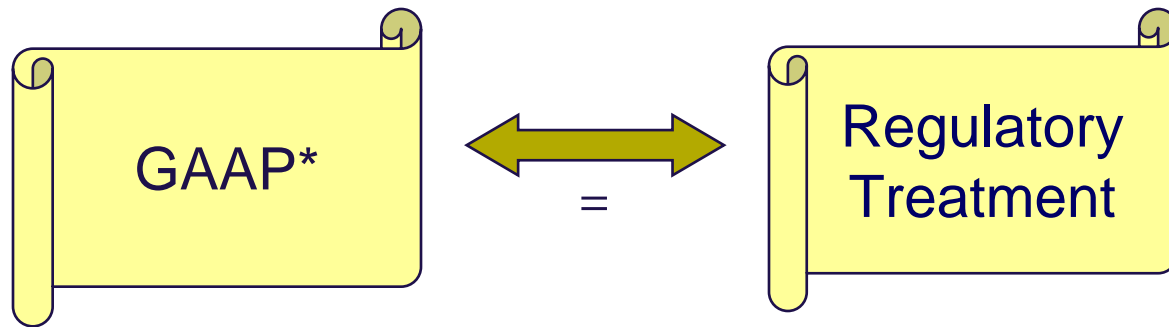
Rate Base Increases Are Required

- Rate base changes reflect our responses to the requirements discussed today and in our Application
- Rate base changes are required to continue serving customers and provide safe and reliable service

Accounting Changes

Diane Roy – Regulatory Strategy & Business Analysis

Maintaining GAAP And Regulatory Connection Is Critical



- Maintaining connection reduces overall costs:
 - *Reduces administrative burden of reconciling results*
 - *Reduces costs for additional audit and verification of results*
 - *Improves transparency in presentation of results to achieve better decision making for all stakeholders*

GAAP = Generally Accepted Accounting Principles

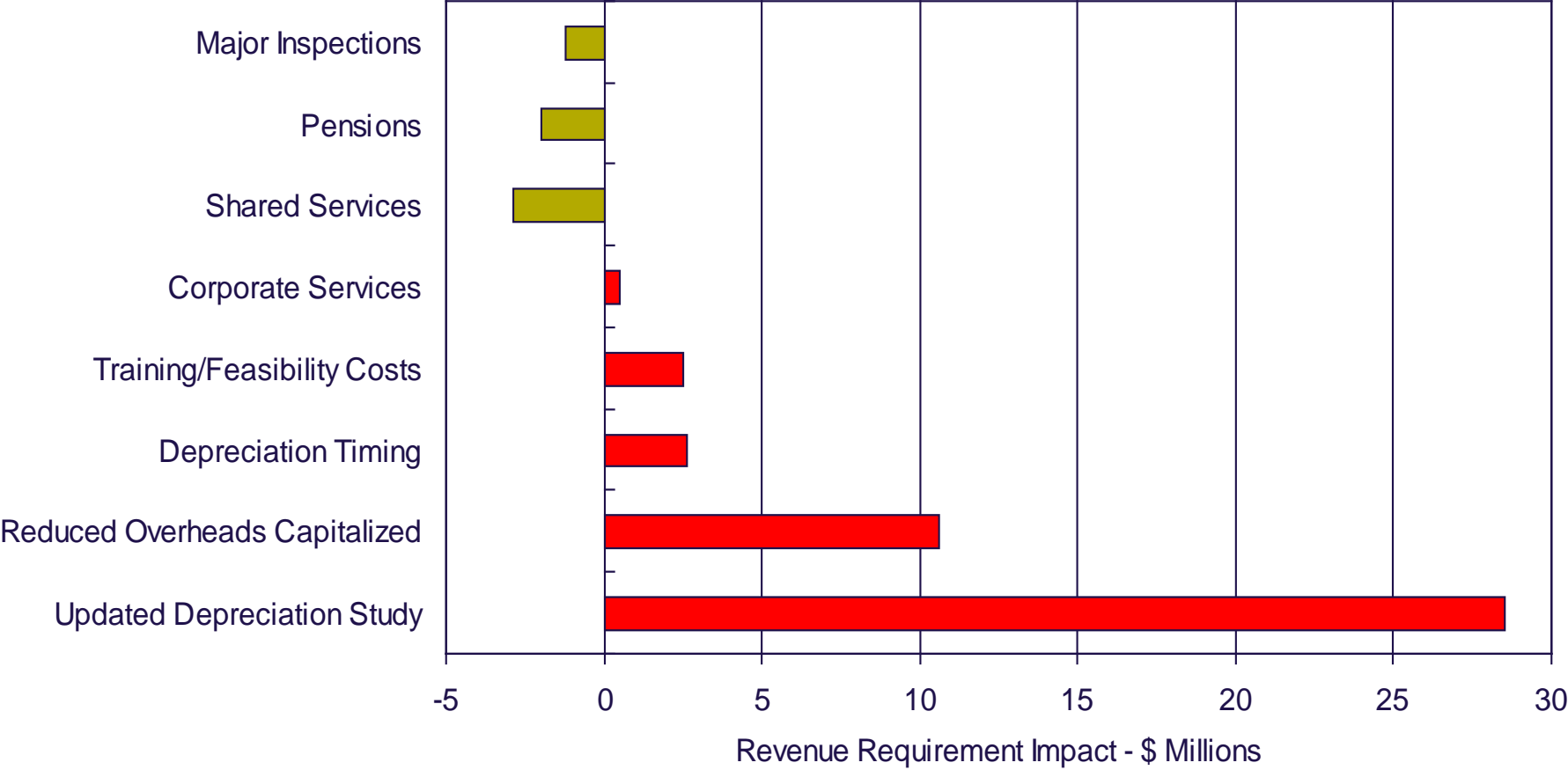
Both 2010 And 2011 Impacts Must Be Reflected In Revenue Requirements

- International Financial Reporting Standards (IFRS) adoption **required** January 1, 2011, with comparatives for 2010
- Both 2010 and 2011 impacts must be reflected in revenue requirements
- Interpretations and choices we have made have been carefully considered
- Deferrals can help to minimize rate impacts

Terasen Gas Ready For IFRS

- Completed a standard by standard review of IFRS in conjunction with Fortis working group
- Worked with the Utilities IFRS Working Group:
 - *“IFRS: A Summary of Anticipated Impacts of Transition to IFRS on Rate Regulated Utilities in British Columbia” (Appendix H-1)*
- Determined implementation strategy for Revenue Requirements
- Working to have IT systems, controls and procedures in place for 2010

Accounting Changes Appropriately Reflected In Revenue Requirements



Data from Part III, Section C, Tab 11 Table C-11-1

Our Studies Reflect Best Practices

- Updated two studies in preparation for IFRS:
 - *Depreciation study (Appendix H-2)*
 - *Overheads capitalized (Appendix H-3)*
- Updated other studies in preparation for this Application:
 - *Lead Lag/working capital (Appendix I-2)*
 - *Shared Services (Appendix H-4)*
 - *Corporate Services (Appendix H-5)*
 - *Code of Conduct and Transfer Pricing (Appendix H-6)*
- All independently validated by either Gannett Fleming or KPMG

IFRS Requires Current Depreciation Rates

- Last depreciation study was in 1998:
 - *Only a few rate changes were implemented*
- 2009 depreciation study prepared by Gannett Fleming (Appendix H-2):
 - *Depreciation rates based on asset service lives required for IFRS compliance*
- Average composite depreciation rate increases from 2.7% to 3.4%:
 - *Mainly due to continued use of pre-1998 depreciation rates*
- Increases revenue requirements by \$29 million

IFRS More Stringent On Overhead Capitalization Criteria

- 10% rate proposed in 1997
- 8% rate proposed for 2010 and 2011
- Based on a detailed overheads capitalized study (Appendix H-3):
 - *Reviewed independently by KPMG*
- Decrease from 10 to 8% results from the exclusion of specific costs as a result of IFRS
- Increases revenue requirements by \$11 million compared to existing 16% rate

We Must Continue To Monitor IFRS And Reflect Changes In Standards In Our Regulatory Treatment

- Accounting standards will continue to evolve
- Terasen Gas will continue to:
 - *Actively monitor changes to IFRS*
 - *Review the implications of any issued interpretations of IFRS by audit firms, regulatory boards, and other utilities*
 - *Determine the most appropriate method to reflect those changes in our regulatory filings*

Proposed Regulatory Timetable and Wrap-up

Tom Loski – Chief Regulatory Officer

Proposed RRA Meets Stakeholder Needs: Efficient Regulatory Process

Action	Date (2009)
File Application	Monday, June 15, 2009
Procedural Order (up to Procedural Conference)	Thursday, June 18, 2009
Intervenor Registration	Monday, July 6, 2009
Workshop	Monday, July 6, 2009
Procedural Conference	Wednesday, July 15, 2009
Procedural Order (Timetable and Process)	Wednesday, July 15, 2009
BCUC Information Request No. 1	Thursday, July 16, 2009
Intervenor Information Request No. 1	Thursday, July 23, 2009
TGI Response to Information Requests No. 1	Friday, August 14, 2009
BCUC Information Request No. 2	Thursday, August 27, 2009
Intervenor Information Request No. 2	Thursday, August 27, 2009
TGI Response to Information Requests No. 2	Friday, September 11, 2009
Negotiated Settlement Process or Hearing (proposed date range)	Monday, October 19, 2009 to Friday, October 30, 2009
TGI Final Argument Submissions	Friday, November 13, 2009
Intervenor Final Argument Submissions	Friday, November 27, 2009
TGI Reply Argument Submissions	Monday, December 7, 2009
Anticipated BCUC Decision	Friday, January 15, 2010