

Good morning – thank you for the invitation to join you today.

I appreciate that a tremendous amount of thought and discussion has taken place over the past few days, all very critical contributions that will lead to the establishment of an energy policy framework for the AUMA.

The energy sector is the engine of Alberta's economy ... and, whether you represent jurisdictions that are driving its growth, supporting it, or just trying to cope with it, every single community in this province is impacted by energy development on its infrastructure, labour and operating costs.

For this reason, it is essential that we understand the energy issues at play, and how they intertwine with the running of our province's municipalities at a macro level, and on a day-to-day basis. More specifically, in the time I have with you today, how they apply to the delivery of the essential services of power and water. I include water because it has become core and critical to the current and future development of energy resources not only in the oil sands but all other forms of energy production, extraction and transportation, and the quality of life in the communities we live in.

The best way I can contribute to this discussion, in my view, is to share my EPCOR and other industry related experiences as they relate to the energy and utility sectors, particularly in the setting and execution of strategy to meet the long term objectives of a municipal organization.

As some of you would know, EPCOR is 100% owned by the City of Edmonton but operates under a unique governance model, arms length to the City that places it on an equal footing with most entities operating in the private sector. This is short hand to say we raise all of our capital in the public markets, pay taxes, file quarterly results on Sedar and hold public AGM's.

So my intention, then, will be to parcel my remarks in two ways:

- 1) **Start with identifying three** key elements that should be in place as you develop a policy framework for the AUMA that considers the delivery of power and water.
- 2) **Look at some of the specific infrastructure challenges** and opportunities as they relate to power and water. These are most likely on your radar screen one way or another ... and, as the infrastructure

deficit grows Canada-wide, the challenges that Alberta's municipalities face today are not likely to go away, but rather intensify. My point here is, it is essential to get out ahead with thoughtful and innovative solutions that keep public safety and quality of life at the top of the agenda and not wait until catch-up because that is too late.

So, let's begin.

### **1) Building a policy framework**

As AUMA members roll-up their sleeves to begin the hard work of creating an energy policy framework, as you have done, there are three key elements that – if in place – will get you further ahead in the long run. They are, having:

- a crisp and clear definition of what success looks like
- the right people, and
- a governance structure that works to achieve your goals, hopefully separating the important political decisions from the commercial decisions.

#### *Define Success*

You can't achieve success unless you know what it looks like. Define it, at the highest level possible. It is critical that you have a vision and outcome because the rest is the roadmap to get you there.

Ask yourself: What are the payoffs in measureable terms – clean air, clean water, more green space, good jobs? This is hard work and takes time but the time you invest upfront establishing criteria will lead to better results and smoother implementation.

Long term planning is essential, and this is clearly demonstrated in the infrastructure projects that many of you oversee. They require land use considerations, are capital intensive and a great number have a life span of 40 to 50 years. For example the wisdom of setting aside land for future utility corridors, right of ways and plant expansions.

To anticipate and plan ahead far outweighs the prospect of playing catch-up and petitioning for government hardware and dollars which – as we know – are finite and certainly not guaranteed, and trying to hurry-up citizen engagement and regulatory approvals.

### *The Right People*

Given the choice, it is better to have average workers highly trained, following proven processes with modest capital budgets, than trying to attract or retain a few stars and rush through with ad-hoc processes endeavoring to build Cadillac facilities. The full cycle capital-operating-maintenance costs of facilities run with good people and reliable processes will always outperform those that have poorly trained workers with sub optimal process regardless of the quality or the size of the budget.

The tendency is to focus on the capital side, but plant costs can spiral out of control, and equipment can be inefficient and under used if it's not run properly.

By creating a work culture that attracts the right individuals, who are knowledgeable, competent and committed, and have a clear understanding of their roles and responsibilities, you win on every front.

### *Governance that Works*

But, having great people in place is just one important piece of the puzzle.

A key learning from Walkerton and North Battleford is that Canada's management and governance structure for water systems is lacking, as is effective regulatory oversight. Without this fundamental foundation in place, we breed incompetence – something that simply cannot be tolerated when it comes to our drinking water safety.

If there's one lesson that EPCOR can share, it's that good governance matters. Our business model has improved performance standards for system reliability, customer service, environment, safety and water quality. We have, in fact, met total performance targets set under the City of Edmonton's Performance Based Regulation for nine straight years since it was established (2001-2010).

EPCOR water has consistently met or exceeded provincial and national standards for drinking water. Our system losses are below the North American utility average of 10%.

These same high standards are applied to all the communities where we currently provide drinking water and that is over 65 in the province of Alberta and B.C.<sup>1</sup>

EPCOR's governance model, which separates business decisions from political ones, provides a sustainable framework for the sound management and delivery of safe, reliable power and water.

We believe to improve performance of the delivery of water and power within all municipalities that more public disclosure of actual performance to regulatory standards will help raise the bar on performance and safety. EPCOR publishes an annual report for the communities we serve that holds ourselves accountable for safety, quality of power and water, operating costs and investment in the community and we believe others should to.

## **2) Getting ahead of infrastructure challenges and opportunities**

Moving on, I would like to focus the remainder of my remarks on the infrastructure challenges and opportunities before us, and do so by focusing on two basic premises.

- First, all infrastructure projects are critical to sustaining a community's quality of life and supporting its future growth and, as such, must be planned well in advance, and
- Second, municipalities can benefit by consolidating the delivery of essential services between municipalities and within regions vs trying to do everything on their own.

### **Infrastructure cannot be built with a "just-in-time" plan.**

As I said earlier, infrastructure projects take time and a lot of patience and capital. They must be planned well in advance and executed in a disciplined manner, meaning upgrades and new construction must be anticipated and built before they are needed, rather than playing catch-up.

These days, the need to upgrade and expand electricity and water infrastructure has gained urgency, as people begin to understand the risk that is associated with letting these systems fall to decline.

---

<sup>1</sup> EPCOR supplies drinking water to 66 communities in Alberta and B.C.; 2010 EPCOR Corporate Accountability Report. Edmonton and surrounding area = 61, Alberta = 3; Strathmore, Okotoks, Canmore; B.C. = 2; White Rock, French Creek.

Just last month, the Conference Board of Canada reported that Canada's electricity sector will need more than \$15 billion in investment annually over the next 20 years to replace or refurbish aging infrastructure and meet growing electricity needs through to 2030.

While the bulk of this amount was earmarked for power generation, an estimated \$100 billion investment is required for distribution and transmission systems.<sup>2</sup>

To clarify, transmission lines are the portion of electrical infrastructure need to transport electricity from power generators to interconnections with the distribution system.

The distribution system receives electricity from transmission lines and delivers it to our homes, businesses and industries.

The fact of the matter is we're playing a dangerous game of catch-up with these systems, as there has been no significant investment in the grid since the 1980s. Canada's electrical grid was built for a population of about 20 million, and today is serving around 35 million people. Add to that, the number of large screen plasma TVs, computers, iPods and iPads that people now plug in at home ... electric cars are not too far down the road.

The situation here in Alberta is much the same, where we have recovered from the recession and the energy sector will boost economic growth. Capital investment in the oil sands is expected to reach \$218 billion over the next 25 years.<sup>3</sup>

A lack of transmission infrastructure will stall the growth of Alberta's energy sector and the province's economy. One of the four critical infrastructure projects identified by the Alberta government, which collectively add up to an estimated \$1.8 billion, is a line from the Edmonton / Heartland region here to Fort McMurray. This \$2 billion project will feature two new 500 kV lines to support ongoing oil sands development and enable the connection of industrial co-generation into the provincial grid.<sup>4</sup>

---

<sup>2</sup> Canada's Electricity Infrastructure: Building a Case for Investment, Conference Board of Canada, April 7, 2011, news release. Estimates = \$62 billion over 20 years on distribution system to sustain existing infrastructure and implement new systems; \$36 billion for transmission systems across Canada (likely underestimated).

<sup>3</sup> Canadian Energy Research Institute (CERI), Alberta Government website, May 1, 2011, <http://www.oilsands.alberta.ca/economicinvestment.html>

<sup>4</sup> Overview of Critical Transmission Projects in Alberta news release, Alberta Energy, June 1, 2009

As you know, the electricity grid interconnects communities throughout the province, just like our bridges, roads and highways. It is only as strong as its weakest link.

Growth in the energy sector will also be linked to water and wastewater, which will become core to provincial energy policy and continued development here in the Fort McMurray area.

Looking to the future, water and wastewater reuse and recycling will become increasingly more important, and should factor into municipal planning. There are currently no Canadian standards in this area, but they are necessary and will most likely be on the horizon.

**Municipalities can benefit by consolidating the delivery of essential services.**

Along with the much needed investment in transmission, the Federation of Canadian Municipalities drew public attention to another significant infrastructure deficit last fall.

The FCM noted that new federal wastewater regulations will require communities to rebuild or replace more than 25% of Canada's 3,500 wastewater treatment systems at a cost of more than \$20 billion over the next 30 years.

The challenge of sourcing financing, along with the need to meet more stringent regulatory requirements and improve performance put municipalities into a corner – one that may well seem impossible to come out from.

My point here is: It is no longer affordable or practical to go it alone. Public health and safety can not be traded off against the old school paradigm that we must own and control everything.

In 2005, an Ontario expert panel that was established after the Walkerton inquiry found that Ontario's water and wastewater system was not sustainable because of inadequate investment ... and, further, because future costs were escalating, in part as a result of more than \$800 million in additional capital costs called for by the province's new Safe Drinking Water Act requirements.

The panel recommended regional consolidation as a way to increase the scale and capacity of Ontario's water systems. While there has been little progress to date, here in Alberta, EPCOR supplies water to 61 communities and counties surrounding the City of Edmonton.

Smaller communities benefit from having access to EPCOR's water professionals, training and support, and our experience with systems and technologies such as remote monitoring and ultraviolet disinfection.

In our view, regional consolidation allows for higher performance standards, raises the bar on public disclosure, and eliminates duplication of cost and effort. In much of England and Australia, large and competent regional water authorities now provide drinking water to small communities.

A C.D. Howe Institute commentary recently noted that a decade after the Walkerton (2000) and North Battleford (2001) outbreaks, Canada is still out of step with international leaders in adopting management systems for assuring safe drinking water.<sup>5</sup>

While drinking water generally poses a negligible health risk, the regulation of drinking water in Canada is managed in a fragmented way that leaves us vulnerable to future water quality failures, most likely in smaller system.

As suggested earlier, the problem is one of mismanagement, coupled with a lack of competent operators to run these systems effectively. A municipality's responsibility to provide safe drinking water is not the same as garbage collection or snow removal. Public safety is at risk.

To demonstrate this point, Canada continues to have a large number – over 1,700 – of ongoing boil water advisories in place for months or even years. This is simply unacceptable in a country such as ours. Boil water advisories are meant to be emergency measures to protect consumers for immediate and temporary threats to the drinking water supply.

A paradigm shift is urgently needed to affect positive change. Municipalities can no longer fall back on old positions because the world is changing, and it is time to embrace new ways of thinking and doing things. We must get past the misinformation and fear mongering if we are to address the considerable challenges before us. We must work together.

Based on EPCOR's experience working in partnership with municipalities in Alberta and B.C., we see a lot of upside to managing and operating your utilities like businesses. This allows infrastructure projects to be financed in capital markets rather than on the backs of taxpayers. It also injects a greater sense of

---

<sup>5</sup> Safe Drinking Water Policy for Canada: Turning Hindsight into Foresight, S. Hruday, C.D. Howe Institute Commentary, The Water Series; February 2011

transparency, as we typically report on progress and incidents such as boil water advisories, environmental incidents, omissions, and when standards have been exceeded.

## **Closing**

Safe drinking water is not a concern that is restricted to small communities or Canada to that matter. On March 22, World Water Day, the UN secretary-general said that the provision of water to cities is not keeping pace with urbanization. He claimed that in the past decade, the number of city-dwellers without tap water in their home or immediate vicinity rose by 114 million, calling it “a crisis of governance, weak policies and poor management”.<sup>6</sup>

If the picture that's being painted may seem insurmountable – it's not. I would like to close by sharing an inspirational story I recently read – one that reminds us that even under the most trying circumstances, if we have a vision, will and the discipline to stay on course, anything is possible.

The story starts on the outskirts of Phnom Penh (pronounced “nom – pen”), Cambodia's capital and largest city, where a widow with three children is flattening used plastic bags for recycling so she can earn her wage of \$1.50 per day. Her surroundings can, at best, be described as dire – mountains of garbage, muddy dirt roads, ramshackle huts, a sense of poverty at its worst.

Yet, the widow has an around-the-clock supply of clean, running water ... and, she pays for it – \$1.77 a month. Before 2008, and the introduction of piped water, she paid \$4.71 a month to the owner of a nearby well for muddy water that had to be boiled.

Having piped water was yet another reform in a string of many since 1993 when a new boss took the helm at the City's water authority. He transformed a decrepit and war torn water supply system, left in disrepair under the Khmer Rouge, into an efficient, self-financed, autonomous business.

What he started with was a system that was serving about one-fifth of the city's residents. Only 28% of the water production was actually sold; 72% was lost to leakage and corrupt employees (who were in fact installing illegal connections at \$1,000 per connection).<sup>7</sup>

---

<sup>6</sup> Banyan: The Worth of Water – An encouraging model suggests urban Asia's water problems could be easily fixed. The Economist, March 24, 2011, print edition.

Over time, the water authority changed the work culture, restored the water infrastructure, put in meters to measure consumption, and overcame the prejudice that comes with running a public utility as a business.

The authority reached full cost recovery in 2004 and is now making modest profits. Water service covers 100% of the inner city, and is expanding with priority to urban poor communities. Non-revenue water has decreased from 72% to 6%, while bill collection is at 99.9%.

Although a world away, this story offers some universal lessons that we can all learn from. In closing, I will leave them as food for thought:

- Water is not a free good and, in fact, where it has been provided that way, people have wasted and misused it. People place greater value on it if they have to pay for the full cost of providing it. The old axiom, pay now or later is true. Many jurisdictions who have undercharged now cannot afford to upgrade their systems and are increasingly offside with safety and environmental standards.
- A business model and governance structure that provides the autonomy a utility needs to manage its costs, improve system performance, and ensure that the water supply is safe, really works.

These are basic principles including consolidation of systems and holding one publicly accountable for performance accountable publicly that EPCOR supports and, over time, we believe we will continue to demonstrate their value.

Thank you – I welcome any questions you may have.

---

<sup>7</sup> Phnom Penh Water Supply Authority: An Exemplary Water Utility in Asia, Asian Development Bank, Aug 2007, website: <http://www.adb.org/water/actions/cam/PPWSA.asp>