

A Response from the Edmonton Chamber of Commerce to the City of Edmonton's "The Way we Green" White Paper

The City of Edmonton launched an action plan to address environmental concerns in a recently completed White Paper called "*The Way we Green*". The Chamber firmly believes that sound environmental management is important for ensuring the city of Edmonton continues to be an attractive city in which to live, work, and do business. As such, we are pleased to provide input to the City on the development of its environmental strategy.

Background: Many issues, and a wide-range of goals

The Way We Green White Paper outlines a vision in which:

- Edmonton's use and sources of energy are: (a) sustainable, and (b) resilient to disturbances that might occur to Edmonton's energy supply and/or distribution system;
- Edmonton is: (a) climate change neutral, and (b) resilient to disturbances that might occur as a result of climate change;
- Water quality in the North Saskatchewan River is so high that human and environmental health does not suffer;
- Edmonton has reliable sources of water that meet its needs (i.e., that can be relied on for generations to come);
- Edmonton has a resilient food and agriculture system that contributes to the local economy and the overall cultural, financial, social and environmental sustainability of the city;
- Edmonton's air is fresh, clean and safe today and into the future;
- Biodiversity is valued and maintained;
- Edmonton's residential and non-residential waste is diverted from landfill; and
- The amount of waste generated by Edmontonians is continually decreasing (regardless of population and economic growth).

-City of Edmonton, The Way We Green White Paper, pages 2-7

Analysis: A need for realistic goals and coordinated, cost-effective actions within local control

Taxpayers, business owners, and both fiscally- and environmentally-minded citizens should all be in agreement that any money or civic resources allocated to environmental initiatives should be directed to actions which have the most impact per dollar spent. This does not imply selecting only one or two priority areas – far from it. In fact, a broad portfolio of environmental initiatives is more likely to allow the City to capture those environmental improvements

available in our City which would of most benefit to all including those who choose to live, work, and do business in our City. The White Paper has certainly examined a very broad spectrum of opportunities, rather than being focussed on a single issue such as climate change or biodiversity. However, the White Paper falls short in narrowing the list of actions to those with the most benefit. The White Paper reflects a participatory approach to developing environmental goals which must now be complemented by a prioritization in line with the City's overall Strategic Plan.

Given that the City of Edmonton operates in a fiscal situation which limits the resources which may be deployed with respect to any city initiative including *The Way We Green*, the Chamber believes that there are three key ways in which this White Paper fails to propose an effective integration of environmental considerations into sound municipal decision-making:

1. **There is little to no integration of the Way We Green with other components of the Edmonton Strategic Vision.** Rather than integrating environmental concerns into all aspects of the municipal strategy, *The Way We Green* proposes what are likely to be conflicting goals and policies which can easily be compromised. We suggest that the document be aligned to provide a concrete methodology for the integration of environmental management into other elements of the Strategic Plan.
2. **The stated goals and policies are not accompanied by estimates of relative benefits and costs associated with them.** Allocating the resources required to meet some these goals is likely to impose a significant increased burden on commercial and residential taxpayers. This could significantly affect Edmonton's competitiveness relative to other cities in which people can choose to live, work, or own a business. We suggest that the White Paper establish benchmarks for the value generating through meeting each of the goals as well as the costs of the requisite actions. The three pillars of sustainability are social, environmental, and economic, and the plan as written focuses largely on the environment while devoting little attention to economic and social implications of its implementation.
3. **The City of Edmonton cannot, on its own, achieve some of the goals set out in the White Paper.** The paper deals with many issues which are well beyond the City's regulatory jurisdiction or which are already regulated by other levels of government. By potentially adding a second level of regulation in many sectors, the White Paper may increase uncertainty for business. Further, we encourage the City to consider some of the unintended consequences which may result from their proposed approach.

Each of these three ways of improving the reach of *The Way We Green* is discussed in more detail

Integration with other planning documents

The current web of strategic documents provides a very murky view of the role of *green* in City decision making. The *Way We Green* presents the ideal opportunity to clarify the willingness of the City to prioritize a cleaner environmental footprint. However, it is important to clearly define the links with other planning documents and to ensure that the direction the City is taking with respect to the environment is clear.

The *Way We Green* provides an excellent opportunity to establish clear, environmental decision-making criteria. For example, The Transportation master plan (TMP) dubbed *The Way We Move* contains a suggestion that Edmonton *could*, in order to substantially reduce GHG emissions, either “purchase green electricity offsets or construct renewable energy generating facilities from which key infrastructure such as the LRT can be operated.”¹ This possibility is put into action with a statement that suggests we should use green technology “when appropriate”, however this is in direct conflict with the top-level strategic action to “minimize the total life-cycle cost of operation.”² Thus, the TMP allows only those environmental improvements which reduce operating costs to be considered – it does not place value directly on any environmental amenities such as reduced air pollution, lower GHG emissions footprint, or reduced impact on watersheds. *The Way We Green* could greatly improve the City’s ability to implement sound environmental management in this case by establishing a measure of the value of green electricity for project planning, so that high- and low-footprint plans may be considered on a level playing field.

A common challenge with respect to municipal decision-making with respect to the environment is that, while other aspects of a planning project have clear financial tradeoffs, the environmental trade-offs are less clear. As a result, an alternative design which delivers superior environmental performance but which comes at an increased cost may not always be chosen. There are many mechanisms through which the City could use *The Way we Green* to send consistent signals to Edmonton businesses about the value of the environment. If, for example, the City were to put its GHG goals into action by stipulating that any decision with regard to City-owned buildings will build-in a \$20/ton price for carbon emissions in evaluating competing bids, this would send an unequivocal signal to bidders. Similarly, the City could reward building contractors on the basis of realized energy efficiency. Similar mechanisms would also provide the City with a strong basis for internal decision-making with regard to infrastructure decisions for roads, LRT expansions, storm water management, etc.

The current array of competing goals and values with respect to the environment creates an uncertain environment for businesses. Consider how much uncertainty is present for construction and renovation of city-owned facilities. In *The Way We Grow*, policy 5.6.1.6 states that all City-owned facilities (incl. Major renovations) are designed and built to exceed the LEED silver standard. This contrasts with the *Way We Green* policies 2.1.3 (resp. 2.1.4) which state that “The City will establish, implement and maintain world class energy efficiency

¹ Transportation Master Plan, City of Edmonton, 2009. Page 91.

² *ibid*

standards for new City buildings (retrofits).” LEED silver signals very clearly to construction and renovation contractors that they must build a particular level of expertise in order to continue to compete for City contracts, while the loose terminology of “world class” leaves a great deal of question both for those planning the work and for those who will bid on it in the future. A contractor considering a bid built to LEED-Platinum or perhaps more importantly to a world-class overall level of environmental performance but without the LEED certification is exactly the type of project the City seems to envision, but it is not clear how any of these environmental enhancements would be rewarded within the decision making process.

Setting a clear value on environmental amenities would also send a strong signal to Edmonton firms to innovate. Business needs to know the rules of the game in order to innovate. If the City is able, through *The Way We Green* to signal to businesses the value of lower-impact ways of doing business, and to allow businesses to realize the gains from innovation, then there is the possibility of a win-win. Importantly, in the examples above, money would not actually be collected for a carbon charge (so the City is not exceeding its jurisdictional authority), but the implicit value was used in weighing the bids which increases the value of low-carbon decision making.

Measuring both the costs and benefits of actions

The Way We Green White Paper devotes only two pages to the question of the costs of implementation of the policies considered. Many of the goals proposed are very aggressive and would impose significant costs on the population, either through direct taxation or indirectly through the mandated use of more expensive technology. The Chamber does not believe that *green* necessarily means *more expensive*, but firmly believes that many of the proposed options should be evaluated on a cost-benefit basis. The City must also be wary of creating the sense that all environmental improvements lead to tax increases and so should be wary to invest in only the most cost-effective opportunities in the early implementation of *The Way We Green*. To illustrate the importance of this, we take the example of renewable energy for which the

Renewable energy is generally more expensive. In most jurisdictions, renewable sources are not used more extensively because the historic mandate of electric utilities has been to supply reliable power at minimized total capital and operating costs. Jurisdictions throughout the world are implementing more renewable electricity, and they are doing so by imposing a variety of policies which transfer costs either to power generators, to taxpayers, or to electricity consumers. For example, Ontario will see electricity bills rise by over 45% in the next 5 years, and 50% of this increase is due to the Green Energy Act which pays higher *feed-in tariff* rates for renewable power.

The Way We Green proposes that the City should move to more renewable energy sources, largely to hedge against limits in future fossil fuel supplies as well as for mitigation of climate change effects. Both of these are important goals, but they must be taken in context. First, Alberta’s energy reserves are much longer-lived than would be suggested by strong push for renewable energy today for energy security reasons. Furthermore, if market energy prices were

to rise to the levels currently paid to suppliers of renewable power, vast quantities of reserves would be made available.³ Finally, from a GHG reduction perspective, GHG reductions may be very expensive when sourced through incentives to renewable power.⁴ The outcomes of the policy should be valued and compared to the costs or, equivalently, to the benefits of deploying the same resources in another project designed to address the same problems. For example, studies have consistently shown building envelope improvements to be low-cost means of reducing energy use and so the benefits of policy expenditures on sourcing renewable power could be compared to the impacts of using the same resources for building retrofits.

Understanding both the costs and benefits of regulatory changes, incentives, or purchase decisions will lead to the most effective use of City resources deployed to improve our City's environment.

Regulating within Edmonton's sphere of influence

The Chamber is concerned that many of the goals stipulated in the *The Way We Green* depend on actions from jurisdictions outside the City's boundaries or are not easy to implement given the tools at the City's disposal. *The Way We Green* White Paper examines these issues in some depth. For example, the report acknowledges that the City is limited in its ability to tax or mandate some activities within its own boundaries. For example, the Building Code is determined through Provincial legislation, and municipalities in Canada cannot tax gasoline or other consumption goods. Further, the Chamber is concerned that some proposed measures may have unintended consequences as a result of Edmonton's limited ability to impose regulations outside of City limits.

It is certainly right to ask the question *if not us, then who*, but we should also question whether our actions will have significant impact. The Chamber believes that the City should tread cautiously in trying to find proxies for ideal regulations within its jurisdiction. For example, the White Paper discusses using property taxes on gas stations as an approximation for a carbon tax. While this would certainly increase the cost of operating a gas station in Edmonton, it would not necessarily reduce carbon emissions. In fact, if the impact were such that gasoline were both cheaper and more available in outlying areas, then the consumption of gasoline might not be significantly affected, but the margins of business owners in the City would be affected.

Unintended consequences of regulations should be considered much more than they have been. Consider that the document discusses a medium-term requirement for NetZero standards and other building standards within the City as well as the establishment of *green zones* within the

³ For example, that Ontario's Green Energy Act pays \$0.42/kWh for industrial-scale solar energy. One thousand cubic feet of natural gas contains approximately 378 kWh of energy, which can be converted to approximately 190kWh of electricity with a newer combined cycle gas plant. Assuming a \$0.025 per kWh capital cost, gas power would cost \$0.42/kWh if the gas price were approximately \$75/TCF. Today's gas price in Alberta is less than \$4, and it is today's price which provides the foundation for estimates of remaining resource reserves.

⁴ For example, a study by Frondel et al. (2009) found that the German feed-in tariff regime displaced GHG emissions at a cost of more than 20 times the prevailing carbon price in Europe, or over \$1000/ton.

City where houses would have to implement lower-energy solutions. In a city with significant natural barriers (e.g. waterways, mountains), these strategies may be implemented without much worry about spillover effects. In Edmonton, we need to consider how these decisions will impact overall housing and building choices in the region. Likewise, the pricing strategies proposed to limit sprawl could have very positive effects on the downtown core, but need to be part of an integrated plan. Since the City only controls pricing within city limits, changes to the zoning laws which make building or renovating a house in Edmonton more expensive could end up encouraging more relocation to the bedroom communities. This shift could, in turn, induce more transportation emissions and more pressure on the City's tax base to maintain infrastructure. This pressure could lead to seeking the lowest short-term cost for infrastructure which may lead to environmental attributes being shelved. An integrated view is required, rather than simply looking at each area and asking "how can this be more environmentally friendly?"

Environmental issues often encompass many jurisdictions, so this challenge is not specific to Edmonton. There is little to no discussion within the White Paper on integration with other jurisdictions locally, provincially, or nationally. It is of crucial importance to understand how the City's actions will position Edmonton relative to other areas and how our actions will complement or compete with other legislative efforts on the environment.

Conclusions

This document has provided a set of 6 recommendations which The Chamber believes will enhance environmental management in the City of Edmonton. Sound and sustainable municipal management is important for ensuring the city of Edmonton continues to be an attractive city in which to live, work, and do business.

Recommendations

The Edmonton Chamber of Commerce recommends that the City of Edmonton:

- 1. Align strategic documents.** Ensure that *The Way We Green* is a complement to the other strategy documents and, wherever possible, ensure the other strategies are consistent with the objectives and actions of *The Way We Green*;
- 2. Explicitly Value Environmental Attributes of City Projects.** Provide clear signals to businesses on how environmental attributes will be valued within City projects, in particular in the areas of Transportation, city-owned infrastructure, and zoning, and consider the value of these environmental attributes explicitly in making decisions for the City;
- 3. Estimate both the costs and benefits of environmental commitments.** Measure both benefits and costs of environmental actions to ensure that actions produce a net benefit to Edmontonians;
- 4. Ensure that all three pillars of sustainability are respected.** Sustainable decision making must weigh the social, environmental, and economic impacts of our actions. *The Way We Green*

should consider not just environmental benefits, but also the costs to Edmonton as a whole and the costs to individuals and business of these actions;

5. Be clear and realistic about the scope of influence. Delineate those objectives that the City can achieve on its own, those that it needs to work with partners on, and those for which it can only be an advocate. This will make it clear what the City is committing to do and the results for which it can/will be accountable; and

6. Be sure actions make real change and don't transfer or exacerbate the problem. Ensure that the actions contemplated (e.g., tax measures and zoning) do not simply swap one environmental harm for another or negatively impact the environmental profile of surrounding jurisdictions.