

THE WAY WE GREEN

SUMMARY OF

Public and Stakeholder Input

OCTOBER AND NOVEMBER 2010

Appendix 2

**Stakeholder Questionnaire
Comments**

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Appendix 2 – Stakeholder Questionnaire Comments

When invited stakeholders were sent a copy of the City of Edmonton's *The Way We Green, White Paper*, they were asked to complete two web-based questionnaires which listed all of the recommended policies in the *White Paper*.

Questionnaire 1 addressed the proposed policies under Goals 1 and 2 (Energy and Climate Change). Questionnaire 2 addressed the proposed policies under Goals 3 to 10 (Water, Food, Air, Biodiversity, Solid Waste and One Planet Living). Participants were asked whether or not they agreed that the proposed policies should be included in the City of Edmonton's strategic environmental sustainability plan. The opportunity to respond on-line was available from October 21 to November 5, 2010.

Fifty-three (53) responses were received for Questionnaire #1. Respondents represented a broad spectrum of stakeholder interests and accounted for 15% of the 350 stakeholders invited to participate. Twenty-seven (27) responses were received for Questionnaire #2 (8% of the stakeholders invited to participate). Respondents demonstrated a high level of agreement with most, but not all, of the suggested policies.

Appendix 2 documents all of the comments received from stakeholders who completed the on-line questionnaires.

Questionnaire #1 – Comments

Energy

1.1.1 Improve “energy density” by requiring new neighbourhood developments to be designed and developed to be energy efficient.

- AGREE
- Agree in the strongest possible terms! But new developments themselves should be limited to exceptional circumstances, see below.
 - I note that in the introduction you say "Remember, as you respond that each policy will cost tax dollars..." I question this. I think that many of the proposed policies will save the City money, either in the short-term, the long-term, or both. This is one of those policies. There are others, and I won't point them out systematically. But I do think you should comb through the white paper and remove commentary like that; the myths of environment vs. strong economy and environment vs. affordable taxes etc. are just that - myths. Let's not perpetuate them. :-)
 - I agree with this, providing the planning includes large spaces for trees. According to Dr. David Nowak, with the US Forest Service. The number one reason to have trees in the urban forest is to have cooler air temp. Thereby helping to reduce the heat island effect of the city. As well trees provide air and water quality improvements and aid in building energy conservation.
 - Build all new buildings to the Passivhaus standard! This standard produces buildings that optimally minimize energy consumption and provide the best starting position from which to achieve net-zero performance by adding renewable energy generation.
 - To what degree and how?
 - I am correct in assuming that this statement does not refer to the building design but rather the neighbourhood design? If so, I agree (I agree with energy efficient buildings as well) Would this idea include "solar access" as a zoning right so that people that move to solar power would have some assurance that they would have access to the sun for solar panels?

- AGREE with conditions
- Communities are about people. It should be as efficient as possible but also liveable to encourage its replication. A beautiful, walkable community that improve "energy density" is a success.
 - This has to be balanced with the need to have affordable communities.
 - Local Energy substations should be part of this strategy
 - But not just developed in a more dense design, improve building code requirements for residential homes.
 - It will be important to understand the market realities surrounding designing and developing new neighbourhoods to be energy efficient. Only a portion of new residential units in the Edmonton market will be of a higher-density form using less land and providing the "critical mass" for providing transit service and walkable neighbourhood commercial and institutional and recreation services. It will be important to strategically locate and distribute higher-density residential units to achieve attractive neighbourhoods with an appropriate balance of ages and incomes. In addition, innovative residential built forms in combination with neighbourhood amenities will be important to attract families, seniors and other demographic groups to higher-density units. For commercial, institutional and recreation uses it is important to locate and design neighbourhood scale uses to encourage transit and non-motorized access. For regional scale uses it will be important to have high-quality

1.1.1 Improve “energy density” by requiring new neighbourhood developments to be designed and developed to be energy efficient.

transit access. For industrial uses, eco-industrial strategies should be supported and encouraged by the City. Rail transportation should be supported wherever possible both to reduce GHG emissions related to industrial transportation and to reduce the deterioration and congestion of roadways.

- Cost of this should not put the cost of housing out of the reach of ordinary Edmontonians
- Define energy efficient. There should be no burden of extra cost, however developer/builder needs to appreciate that all costs and savings may not be strictly hard/capital costs. Needs to be consistent across the board. There needs to be research into understanding the construction costs to do this to demonstrate that making it a standard is appropriate. New development should also be flexible to adapt to new energy sources in the future as well, this is also important.
- Agree with the condition that dwellings are not too small (subjective).
- This applies to all types of neighbourhoods - residential, commercial, and industrial.
- it’s important to consider what the competing counties do, to remain competitive
- Incentives should be in place as well to ensure that in those neighbourhoods strategically selected for upgrading, developers are not discouraged from upgrading housing stock and increasing density.
- While new housing developments should be required to attain a high energy efficiency rating, it is also important to do this kind of development with a mixed-income level approach so that such community developments are affordable for a variety of income levels. This approach also works to ensure that energy-efficiency is not just a market-driven solution for those who can afford energy efficient houses. Worse, if lower-income earners are only able to afford energy inefficient homes in a future of energy instability and vulnerability to shocks, they are in a worse off situation for higher energy bills and energy insecurity with less income to invest in retrofits and home improvements.

DISAGREE • Alberta will never be without oil, gas, or coal. It is not necessary to try to force people to live in apartments to save fuel.

UNSURE • This is a vague statement - what is energy efficient? Efficient in comparison to what? Can a neighbourhood to be energy efficient, or is it the buildings that are energy efficient and the neighbourhood is well-planned to encourage walkability (hence lower transportation energy.)

1.1.2 Use pricing and taxation strategies to encourage densification and discourage sprawl.

AGREE • Densification must be approached from a creative whole-systems perspective, designing a built environment that fosters rich community life and interaction, not just more apartment buildings and condos where people never meet their neighbours. Also, to reduce the environmental and energy costs of building this densified, energy-efficient housing, preference should be given where possible to retro-fitting and expanding existing structures, rather than tearing down and building from scratch.

- Again this is one that can save taxpayer money. And actually it can provide additional revenue sources.

AGREE with conditions • We should penalize residents that currently live on the periphery of the City. Taxation and pricing should apply to new housing and development.

- Take into consideration the areas and the impact pricing and taxation may have on certain income types, income areas and ensure growth is still encouraged

Questionnaire #1

1.1.2 Use pricing and taxation strategies to encourage densification and discourage sprawl.

- Densification will require additional servicing costs in renewing existing infrastructures in the matured NHs and downtown
- There are limits where the density is too much. An optimum density, that minimizes energy density, should be determined as a goal. In energy mapping exercises it was found that mid-rise densities are less dense than high rise.
- Define densification and make it palatable. If we do not create places for families and destroy existing neighbourhoods, we will have people making the choice to leave centres for suburbs. Stop approving development permits for new neighbourhoods.
- This should apply to new buildings and retrofits / renovations of existing structures. The incentive should be available to developers, home owners, and business owners.
- Yes discourage sprawl, for the sake of sprawl and quick profit. However densification to a point and I believe pricing and taxation strategies could be better invested on other policy changes, e.g. improving building (incl. residential) efficiencies
- 1.1.2 The City should carefully evaluate the long-term fiscal benefits of higher-density development (i.e. reduced roadway and municipal service maintenance costs, provision and maintenance of parks and transit, etc.) with a view to ensuring pricing and taxation strategies proposed are not fiscally unsustainable.
- What pricing does the City have control of??? and we only have limited things we can do with taxation---it needs to be uniform across the Region
- Encouragements combined with restrictions must steer developers to support an overall design philosophy of the city, emphasizing the current, small-neighbourhood structure of Edmonton, with walkable, local amenities and green space adequate to serve the residents.
- Taxation can cause gentrification, diminish supply of affordable housing; changes in tax rate may not reflect levels of service in location-specific scenarios. Whatever tax incentives and market mechanisms employed, they must be of equal benefit to every income bracket.

- DISAGREE
- The city can best control the urban sprawl through the building permit issued for the development/building permits instead of the taxation
 - I think that we should move in the direction of planning and zoning to discourage sprawl. It seems to me that what you are referring to here is that the rich can sprawl but the poor can't. I think that this is a bad direction.
 - This would be seen as penalizing people's choices if they wish to live in a suburban setting
 - It is much simpler to establish / require by policy than by taxation strategies. People / developers may be willing to pay the pricing / taxation instead of densifying.
 - Sprawl is an undefined word and in fact there is not anything that could be called sprawl within the city boundaries. Policies that restrict market choice will drive people to buy outside Edmonton and then drive in every day. That's sprawl.

- UNSURE
- Taxation strategies hurt the pocket book and are only temp fixes unless. The money from this taxation needs to go into programs for people to have the environmental space that is needed.

1.1.3 Support re-development of the City Centre Airport as a model for future development in Edmonton.

- AGREE • Besides being a model for future development, there is a good opportunity for education of contaminated sites, what to do with them, and why it's important that we take measures in future industry sites.
- AGREE with conditions • The airport lands could be done well, or done poorly. It is vital that they be done well (dense, energy efficient). This is our chance to turn the City around - to go from a massively sprawling city that is very energy inefficient, to start heading in the right direction with a best-practices, leadership-oriented development. We must make sure we don't blow it. If we can't do it right, then we should leave it as an airport and wait until we can.
- YXD is of great historic importance to Edmonton, and as many associated structures should be conserved in situ (NOT - repeat not EVER - be removed to "Ft Edmonton" park) to maintain a powerful Sense of Place to the neighbourhoods.
 - The only condition would be that medivac and STARS have suitable airstrip alternatives that would not increase risk to the injured and health providers.
 - The City Centre Airport presents an amazing opportunity to do something great, however the capacity to absorb this amount of development in Edmonton does not exist yet. Developing it too soon will jeopardize other important intensification projects going on currently such as The Quarters, Fort Road, and the Arena.
 - The airport lands will work only if the City does not overlay status quo approaches, standards, bylaws, etc. Sustainability needs to be comprehensive, demonstrable, flexible, and easily replicated in other areas of the City. These shouldn't be Airport only solutions.
 - City Centre Airport should not only be a model for future development in Edmonton, but also for the world. We have a first-class opportunity with the airport lands to be more efficient and better designed than Dockside Green in Victoria, better than BedZed in England for community involvement, better than anywhere else for a liveable, sustainable community. Let's grab the opportunity!
 - Based on the decision after the appeal. Dependent on what the public wants to see done with the airport. This answer is not meant to indicate whether I support the airport closing, remaining open or combination.
 - This project should be a competition not just from an economic standpoint but from an engineering, design and innovation standpoint.
 - I think the city should seriously rethink closing the airport at all. IF this is a firm decision, though, then I definitely agree that the Airport space redevelopment MUST be a model development, far ahead on energy efficiency, lighting efficiency, distributed energy production, passive solar design, accessibility by walking and bicycling, integration with mass transit, etc. I propose this be a Net Zero Ready only region.
 - I am not certain that the City Centre Airport model can be supported economically. I would like to hear more about the price/unit area of these new residences. If the units are not priced for the market we could wind up with a new "bleak zone" of undeveloped properties. As rationale for this view point, what happened to all of the high rise projects that have been approved (Century Park, Strathern, 142nd St etc.

Questionnaire #1

1.1.4 Re-develop inner city neighbourhoods to increase density and improve alignment with sustainability requirements (energy efficient configuration, durable building stock, community amenities such as schools).

- AGREE
- Densification must be approached from a creative whole-systems perspective, designing a built environment that fosters rich community life and interaction, not just more apartment buildings and condos where people never meet their neighbours. Also, to reduce the environmental and energy costs of building this densified, energy-efficient housing, preference should be given where possible to retro-fitting and expanding existing structures, rather than tearing down and building from scratch.
 - Downtown buildings should have their first-floor reserved for commercial use and residences above, following the model of cities such as Vancouver. This will help to develop a more well-designed urban centre over time and will increase property values for everyone.

- AGREE with conditions
- This has to be done strategically and sensitively.
 - Encouragement of Green spaces within densified neighbourhoods.
 - There should be financial incentives for inner city neighbourhood redevelopment - the residents of such areas typically are not as wealthy as those in newer areas.
 - should introduce passive solar capture as site design criteria
 - It cannot be made without considering the current residents and there must be an affordable place for them in the redeveloped community.
 - Densification will require additional servicing costs in renewing existing infrastructures in the matured NHs and downtown
 - Similar comments to above, achieve optimum energy density not maximum population density.
 - Again, as long as it is an affordable initiative to every income bracket.
 - Edmonton's inner city neighbourhoods provide distinctive character neighbourhoods which symbolize Edmonton's heritage. They provide affordable housing stock for families within transit and non-motorized commuting range to the major employment centres of Downtown and the University of Alberta. 1.1.4 It will be critically important to sensitively integrate re-development opportunities to improve "alignment with sustainability requirements" in these neighbourhoods in order to retain and enhance their attractiveness to a full range of ages and incomes and to preserve their "sense of place".
 - Inner City neighbourhoods should be given a priority over the Airport lands. These are already serviced, the density and proximity to exiting amenities is there, the cost to do this is considerably less, and the City can easily contribute through tax incentives and in the end gain more revenue through the increased density.
 - Encourage redevelopment while recognizing the people that live within the neighbourhood. Do not redevelop to push people out of their area.
 - Attention needs to be paid to design in aesthetics to attract new populations. Low income subsidies must be a requirement with mixed use for all buildings essential.
 - Why the focus on inner city neighbourhoods to the exclusion of all other neighbourhoods? I think that new and "middle" neighbourhoods should become more sustainable as well. Many people have bought properties in the inner city with a bundle of rights that have cost them a premium and the proposed approach would disregard this history and would over time put their properties in the shade/dark and could precipitate a move to the suburbs where you can have whatever you want (e.g. sunlight) except proximity to the centre).

1.1.4 Re-develop inner city neighbourhoods to increase density and improve alignment with sustainability requirements (energy efficient configuration, durable building stock, community amenities such as schools).

- Increased density is something that should be pursued in developed neighbourhoods, but should not be done at the expense of protecting green space, aesthetics and "quality of space" for residents.
 - we need to be sensitive to the existing communities when we start adding density--should be very focussed in certain communities and perhaps not as much in others
 - Do Area redevelopment plans that are approved by Council and then let the market work.
 - Again, the redevelopment of mature neighbourhoods is frightening for those of us who live in one. It usually means horrible high rise developments or other intrusive development. Any policy change has to have very clear definitions and guide lines! It has to consider social implications of crowding.
 - Yes discourage sprawl, for the sake of sprawl and quick profit. However densification to a point and i believe pricing and taxation strategies could be better invested on other policy changes, e.g. improving building (incl. residential) efficiencies
- DISAGREE • I don't believe the city is responsible for redevelopment. The policy should be for rezoning to encourage the movement in this direction, and possibly having grants and/or incentives. The city is not a developer.
- UNSURE • The style and type of re-developing inner city determines support for this initiative. Block busting SF streets with random 3-4 story walk ups separated by one or two SF homes must not be allowed. Higher densities in suburban neighbourhoods must also be required.

1.2.1 Adopt world-class energy efficiency standards for all City-owned buildings.

- AGREE • At LEAST to LEED Canada-NC Certified
- The only comment is world-class needs to be defined. Choose some benchmarks.
 - We need to look beyond LEED as a measuring tool for sustainable buildings. LEED does not focus primarily on energy consumption or zero footprint structures. City Planners need to be involved to loosen restrictions to allow builders more flexibility in building design and green energy sources such as wind, solar and geothermal.
- AGREE with conditions • Not 'world class' but 'world leading'.
- The funding requirements need to be made clear to city council before implementing this policy. For example it should be presented that world class energy efficiency will cost taxpayers X% more for each building. Use examples of previous buildings and what that would've cost with the new standards.
 - Be mindful of the costs. Lifecycle and cost/benefit analysis needed to be done.
 - The City should carefully evaluate the long-term fiscal benefits of achieving world-class energy efficiency for City-owned buildings and pursue this objective while keeping fiscal sustainability and responsibility in mind. Establishing a "savings account" to direct monies saved by energy efficient city buildings to fund new energy efficient buildings or renovate existing buildings could be a strategy.
 - This policy should also be paired with a commitment to educational and training programs for the youth, women and the unemployed to gain access to the green trades in Edmonton.
 - Cost benefit analysis will need to be considered.
 - Energy efficiency is only one aspect of sustainability spectrum. In a one planet living model, energy is a small component and the minute improvements to efficiency are negligible compared to the

Questionnaire #1

1.2.1 Adopt world-class energy efficiency standards for all City-owned buildings.

investment. The same money invested in landscaping, mobility, social programs, etc. would be better use of money. An Energy efficient building isn't necessarily a sustainable building. Don't separate specific components of your sustainability plan in isolation.

- Recognizing that cost to some city owned buildings may not make this standards achievable, feasible. acknowledge that looking forward may start with new buildings (from some point in time on) and major renovations instead
- The LEEDS standard to date is the most thorough.
- we have this already in our LEED Requirement for new buildings---we can only go so far, financially and functionally on existing buildings
- It would be better stated that City "occupied" buildings. Because more energy efficient builds would most likely have higher initial/capital costs, there will be a powerful argument to rent instead of build or retrofit City-owned buildings.

- DISAGREE
- I'm not sure this makes financial sense, especially if the standards are far more expensive than current code requirements. It is far more important that ALL buildings be required to be more efficient. I know the argument is that the City can lead by example, but it's expensive and doesn't accomplish nearly as much as regulation and financial incentives that apply across-the-board to private and public buildings.
 - Alberta class energy efficiency is sufficient.

1.2.2 Adopt world-class energy efficiency standards for all new buildings.

- AGREE
- At LEAST to LEED Canada-NC Certified
 - Again - world-class needs to be defined.
 - Cost needs to be part of the formula. We don't want restrict growth to a point where it hurts the economy.
 - Including residential.
 - I'm not sure this makes financial sense, especially if the standards are far more expensive than current code requirements. It is far more important that ALL buildings be required to be more efficient. I know the argument is that the City can lead by example, but it's expensive and doesn't accomplish nearly as much as regulation and financial incentives that apply across-the-board to private and public buildings.

- AGREE with conditions
- As long as the standards don't make us uncompetitive relative to other municipalities.
 - This would require collaboration with Provincial Authorities in respect of Building Code issues. If the Province is not prepared to adopt such standards, the CoFE would need to consider incentives to developers to encourage compliance with this policy.
 - Ensure that LEED certification is among these standards
 - There still needs to be a balance between affordability and higher building standards
 - Co-ordinate with national building code so there are no contradictions or competing objectives.
 - We have to be careful not to put restrictions up which discourage development of old buildings. Incentives need to come alongside requirements for new buildings.

1.2.2 Adopt world-class energy efficiency standards for all new buildings.

- See above - world class limiting - should be world leading...
- The funding requirements need to be made clear to city council before implementing this policy. For example it should be presented that world class energy efficiency will cost taxpayers X% more for each building. Use examples of previous buildings and what that would've cost with the new standards.
- Be mindful of the costs. Lifecycle and cost/benefit analysis needed to be done
- 1.2.2 The impacts to the development industry of adopting world-class energy efficiency standards for all new buildings would have to be carefully considered. It may not be economically feasible for the development industry to provide such a high level of energy efficiency while providing development that is affordable. Perhaps a more gradual approach to achieving this policy should be considered. There are many proven technologies which are being economically applied currently which could become requirements in the near term, with standards being raised to keep pace with the current accepted industry "best practises" in energy efficiency.
- Cost benefit analysis will need to be considered
- Energy efficiency is only one aspect of sustainability spectrum. In a one planet living model, energy is a small component and the minute improvements to efficiency are negligible compared to the investment. The same money invested in landscaping, mobility, social programs, etc. would be better use of money. An Energy efficient building isn't necessarily a sustainable building. Don't separate specific components of your sustainability plan in isolation.
- The LEEDS standard to date is the most thorough.
- we have this already in our LEED Requirement for new buildings---we can only go so far, financially and functionally on existing buildings
- I am not sure what "world-class efficiency standards" means. Also, on a personal note, I am trying to build a house and can only find a handful of companies that can approach this standard. I think that there would be great difficulties in implementing this approach. I would like to know about affordability. I hear some analysts predicting that the net-zero housing in Vancouver will be in the \$750 to \$1,000 per square foot range.

- DISAGREE
- Difficult to ensure that the building owners would maintain the buildings to that standard
 - It is up to building owners to decide the level of energy efficiency they wish to achieve. Tenants will insist or will pay less rent so generally the market will force the decision based on the cost of energy.
 - Alberta class energy efficiency is sufficient.

1.2.3 Improve the energy efficiency of existing building stock.

- AGREE
- At LEAST to LEED Canada-NC Certified
 - But what does this mean - benchmarks, again.
 - We need to put in place a funding model to facilitate energy efficiency upgrades. Something more flexible than EMRF in terms of payback.
 - Yes, this is where the low-hanging fruit is (in terms of buildings). A lot of older buildings are very energy inefficient and can be upgraded.

Questionnaire #1

1.2.3 Improve the energy efficiency of existing building stock.

- AGREE with conditions
- Realistic energy improvements within the design limits of the existing buildings.
 - Within an affordable business case but pushing the boundaries.
 - Recognizing feasibility and efficiency of buildings.
 - Only on a carrot versus stick approach
 - Again, the city should find ways to improve energy efficiency in the context of an overall city plan, or at least a planning philosophy, which addresses neighbourhood identity, green space, walkability, local amenities (playgrounds, schools, athletic infrastructure), and other key factors alongside of density and energy efficiency.
 - Proper funding needs to be in place with policy. You can't do policy then expect to get the funding.
 - Be mindful of the costs. Lifecycle and cost/benefit analysis needed to be done
 - 1.2.3 It is important to understand the amount of time required for an energy efficiency upgrade to recover the cost of the upgrade. Upgrades which are cost recovered in a relatively short period (perhaps 10 years) through savings may be attractive to building owners and should be strongly encouraged and supported while those that require a longer period will be more difficult to realize without significant support through grants, rebates or other strategies.
 - Cost benefit analysis will need to be considered
 - Energy efficiency is only one aspect of sustainability spectrum. In a one planet living model, energy is a small component and the minute improvements to efficiency are negligible compared to the investment. The same money invested in landscaping, mobility, social programs, etc. would be better use of money. An Energy efficient building isn't necessarily a sustainable building. Don't separate specific components of your sustainability plan in isolation.
 - All new permits for existing structures, and buildings that are in neglect should fall into this category.
 - cost benefit analysis has to be balanced against other needs and spending in a sustainable initiatives focussed budget exercise
 - I am cautious that this is something that should be added to the tax role. Perhaps the approach could be connected to the taxation system with some sort of rebate for the cost of city-services that are reduced. I would support this fully if there were changes to the building code and the changes could be reasonably recovered in the life span of the building.
 - Easing building code requirements would greatly facilitate this policy.
 - What is the implementation for this policy? Without a solid implementation plan or buy in from owners it won't work. Who pays?
- DISAGREE
- Difficult to ensure that the building owners would maintain the buildings to that standard
 - Market will punish those that are inefficient and they will do their own upgrading. Regulation is counter productive.

1.2.5 Adopt zoning regulations that promote energy efficiency.

- AGREE

 - Passive solar zoning coupled with simple super insulated walls greatly reduce heat energy use, as in the Mill Creek Flexhomes Triplex. The cost of heat energy for one apartment averaged \$30/month for a 1300 sq. ft. three story unit.
 - I think that there is an incredible scope for progress with zoning (see solar access comments above).
- AGREE with conditions

 - Add thoughtful and best practices not only for building standards but for community development standards to these policies. Too many times we have done the wrong thing for the right reasons.
 - Zoning regulations should also be used to create energy efficiency in the way communities function by promoting the development of self-reliant local economies which would increase the amount of Edmontonians with the opportunity to have both meaningful work and residences in their community.
 - The most important energy improvement we can make with zoning is to decrease reliance on single-occupancy motor vehicles.
 - 1.2.5 The City will need to carefully investigate how to structure zoning regulations to promote energy efficiency in order to ensure there are inspection and compliance enforcement options to ensure energy efficiency standards are implemented.
 - I would need to see this better translated into real policy first. It's a good idea can this be integrated a zoning bylaw level is hard to tell.
 - maybe, but pushing for adoption of higher efficiency standards in building codes might be better
- DISAGREE

 - Zoning is a poor tool for this, changes to the Safety Codes or changes to subdivision design may be appropriate
 - It is not an appropriate use of zoning regulations.
- UNSURE

 - What does this mean? I presume this means to encourage densification and encourage street-level retail for walkable communities - spell it out.

1.3.1 Recognize the risk of Peak Oil and identify how the rate of oil consumption in Edmonton can be reduced.

- AGREE

 - Use natural gas for power and transportation. All city fleet vehicles should use natural gas particularly transit buses to improve quality of the air, save money and create jobs.
- AGREE with conditions

 - This comes across as information and education types of policy, which is fine if this is the intent. Not clear who the audience is and how this would be applied.
 - I think overall energy consumption, not necessarily oil, since coal is firing power generation in Edmonton
 - Accept Edmonton is in a unique and privileged position regarding fossil fuels. We can reduce waste and pollution without guilt or melodrama.
 - Any decisions, such as designating a petrochemical industry zone should demand that industries applying for development permits have a 20 year transition plan to replace the industry with green energy / renewable resources / and maintain jobs.
 - Edmonton should also consider the risks that pipeline projects would create regarding energy security. If we are exporting more bitumen to the U.S. or off the pacific coast, while Alberta is an energy producer, these projects do little to ensure local energy sustainability.

Questionnaire #1

1.3.1 Recognize the risk of Peak Oil and identify how the rate of oil consumption in Edmonton can be reduced.

- We need to do this anyway. It's important that we don't make it conditional on oil price increases.
- We need to remain cognisant of costs and benefits of the "alternate" sources of energy
- DISAGREE • We still need to look at peak oil demand even though we don't have a policy for it.
- Peak oil is not the issue; it is dependency on fossil fuels. The focus should be reducing the dependency upon fossil fuels. It should be recognized that relying upon non fossil fuel energy sources will increase the cost of energy.
- 1.3.1 I don't believe this is a policy but rather a restatement of "the Challenge".
- There is no risk of peak oil in Alberta. Check with Alberta Natural Resources for confirmation.
- UNSURE • This is vague.

1.3.2 Establish a Renewable Energy strategy for Edmonton to reduce reliance upon coal and increase the use of renewable sources of electricity generation.

- AGREE • Nuclear should be off the table. When the impact of uranium mining is factored in, nuclear is no better, greenhouse-gas-wise, than fossil fuels. Never mind the unsolvable nuclear waste issue.
- Would love to see the City set renewable energy targets.
- Natural gas is now more competitive than coal and absolutely cleaner.
- AGREE with conditions • As long as the carbon foot print of the renewable sources are truly understood.
- non-polluting renewable resources
- ...at all "levels" (commercial, residential, government) of society
- Continue to use the resource wealth we have not to transition us into the low carbon future with renewables as a center piece.
- Keeping in mind how Edmonton is currently limited in what alternatives are out there and that there are many future alternative option "goals" or "hopes" but nothing concrete, i.e. Biofueling systems/stations.
- The extra operating budget dollars for this on an annual basis should only be to agreed limits such as the extra tax levy for rehabilitating neighbourhoods
- I am concerned about the cost-benefit of this proposal.
- Have to look at the cost of this strategy
- If it's not too cost prohibitive.
- Not clear who the audience is. Is it intended to apply to the citizens of Edmonton, and/or the City? Would this be intended to get the City involved in the production of renewable electricity generation in the future? Options for securing electricity from renewable sources from electricity producers seems to be rather limited.
- This is longer range 'legacy' thinking, likely beyond the ten years devoted to this plan. More likely a 25 year payoff window for infrastructure required for green gas plant for example...
- Relatively clean and smart transition strategies away from coal are to be encouraged.

1.3.2 Establish a Renewable Energy strategy for Edmonton to reduce reliance upon coal and increase the use of renewable sources of electricity generation.

- Seems too focussed on Coal. Why is coal singled out, and how much of a premium are we willing to divert from other spending to make this type of statement?
- It should be recognized that relying upon non fossil fuel energy sources will increase the cost of energy.
- DISAGREE • I don't think it should be a policy but developing a renewable energy strategy is crucial. I will volunteer to sit on the committee. (Randall Colgan Project Engineer - Energy Conservation)
- Coal technology has progressed to the point that it is no more polluting than oil. We have an 800 year supply that sustains us.

1.3.3 Create incentives for businesses and residents to install renewable power generating equipment/infrastructure.

- AGREE • Definitely agree. Would love to see the city expand its residential and commercial solar rebate programs.
- Should also support distributed, high-efficiency power generation (not just renewable). For example: home or business-based sterling machines, high efficiency gas turbine generation with cogeneration (for water or building heat, or to heat greenhouses.)
- AGREE with conditions • This would need to be done in conjunction with Federal and Provincial authorities.
- Promotion of a "buy-back" policy for individuals to feed energy they've created back into the grid.
- It's a good idea but what direct benefit does the city or taxpayer receive? Perhaps the City could help in influencing in reducing or eliminating the fees to connect to the grid, influence building code issues and permit issues, influence architectural controls that restrict things like solar panels.
- Strongly support and believe the City should favour the use of community owned power or energy cooperatives to achieve the maximum environmental, social and economic benefit for Edmonton as it transitions to renewable energy.
- Keep an eye on prices year-to-year, and ensure the incentives are enough to make it happen without anyone getting a windfall profit.
- It is important to understand the amount of time required for to recover the cost of installation of renewable power generating equipment / infrastructure. Incentives will be most important for equipment / infrastructure with longer cost recovery periods. The City could consider strategies to utilize incentives to reduce cost recovery periods for equipment / infrastructure which is otherwise unattractive to businesses and residents due to its typically long cost recovery period.
- As long as the carbon foot print of the renewable sources are truly understood.
- Keep the incentives within the market realities for all energy prices; avoiding Ontario distorted solar incentives, i.e. \$.44/kwh subsidies
- New development should be directed to be energy efficient as a matter of development approval. Increasing energy costs will encourage retro-fitting a percentage of the build environment. Municipal assistance should be provided to those - retired, low income, fixed income - who need the financial assistance, not just everybody.
- DISAGREE • It is not the role of the City to provide incentives - looks like a pay out in the public's eyes. We should lead by example.

Questionnaire #1

1.3.3 Create incentives for businesses and residents to install renewable power generating equipment/infrastructure.

- Incentives provide false economies.
- This type of program seems to benefit the reasonably wealthy building owner with cash to match and it probably realistic to conclude that it would not be financially feasible to include every building owner in Edmonton.
- Something like this could go against the known economies of scale and reliability of large power infrastructures

1.3.4 Introduce municipal feed-in tariffs.

AGREE • Strongly, strongly agree! One simple step that could make so much difference.

- Definitely a terrific idea, and should help a lot with uptake of renewable energy, especially solar.
- This has proved immensely popular in many U.S. (particularly CA) utility districts

AGREE with conditions • This has to be carefully structured. There have been many problems with abuse or nil effect of feed-in tariffs. It would have to be structured to ensure the desired outcomes.

- Tariffs must be carefully designed in order to avoid unintended outcomes that are counter to good planning.
- This concept needs better explanation
- Not 100% clear what is meant here. If you mean provide incentives for businesses and residents to sell renewable power into the Edmonton grid, then my comments above apply here.

DISAGREE • Could have unintended consequences.

- Sounds great, but again it creates false economies. Also, we've sold EPCOR, so the city has no control over this.

UNSURE • Do not understand this terminology

- Don't know what this is.
- Don't know what this is.
- I don't know what this is.
- Sorry I don't know what this means.

1.3.5 Use local improvement charges to help finance alternative energy developments.

AGREE • Some of these funds need to go into the development of the urban forest as it provides a number of benefits to the residents i.e. cooler air temp, social physiological benefits, air and water quality improvements, building energy conservation, UV radiation reduction, wildlife habitat to name a few.

AGREE with conditions • How would the local improvement charges distributed and implemented. For instance would it take into consider house hold income or the level of consumption.

- These typically entail a local vote (if you use the existing mechanism). Why not a property tax subsidy?
- Yes, but not all funding should come from improvement charges. Energy efficiency and resilience to petroleum prices should be a central priority for the government.
- As long as it's not financing carbon capture and storage. Go with what works-- renewable energy.

1.3.5 Use local improvement charges to help finance alternative energy developments.

- Could have unintended consequences.
 - consider the socio/goe/demographic factors
 - It is difficult to get more than one property owner to agree, unless the benefits can be demonstrated on a utility reduction.
 - Perhaps could work, and burden of support would have to come from property owners supporting the particular levy bylaw. Still requires big capital \$\$ from the City.
- DISAGREE
- This is a tax. Tax the emissions of carbon, first, rather than taxing the renewable developments.
 - Alternative energy must pay for itself with the exception that capital incentives will be necessary.
 - Let co-generation and district heating plans earn their place in the urban mix of sustainability strategies.
- UNSURE
- I don't know what this means
 - Local improvement charges? I cannot find the specific definition in the white paper or documentation provided.
 - If structured so that it is not off-loaded to the new lot purchasers. The community should share the costs.
 - Need to do business case and MGA review
 - Are the local improvement charges for local alternative energy developments or for any alternative energy development?

1.3.6 Take action to eventually switch to electricity for all energy end uses in City operations.

- AGREE
- Too late for buses!
- AGREE with conditions
- Investigate other sources of energy as well (renewable for example).
 - Agree if you can reduce reliance on coal fired plants
 - Again - if you are going to do this - funding needs to be included with the policy submission to council. If you go with just policy and no funding it won't get done.
 - This proposal needs better explanation and justification
 - I assume this would mostly be space heating and vehicles. Don't replace one fossil fuel source (e.g. natural gas for heating) with a dirtier one (coal-fired electricity).
 - Using new electricity generating systems. i.e.: solar, wind
 - provided the electricity sources are not detrimental to biodiversity, i.e. solar OK, hydro and wind need care and study
 - As long as that electricity is not produce by coal.
 - I think sustainable energy sources for generating electricity is the point.
 - It really depends on how this electricity is generated (e.g. coal fired? nuclear?)
 - Carbon reduction must transition in time with the cost ratio that applies to the tipping scale of economy.

Questionnaire #1

1.3.6 Take action to eventually switch to electricity for all energy end uses in City operations.

- Depends on how the electricity is generated
- DISAGREE • Although this is a nice goal, I'm not sure this is realistic. Should be striving for energy efficiency and electricity may not be the most efficient in all cases. Natural gas could have an important role to play in efficient energy use in the future.
- This is not foundational. Presumably it will naturally follow a move away from fossil fuel energy sources. Therefore it is a CONSEQUENCE of other policy and not properly a primary policy.
- I agree with this policy as it pertains to movement toward electric vehicles used by the city. But I think the switch should be in the direction of more sustainable and resilient options, and where they are most cost effective.
- Will drive the cost of operations unrealistically.
- Distributed energy centers could run on biodiesel, synthetic gases from the land fill, waste gases and emissions from plants, etc. This is a limiting statement.
- Unless a very long timeline is defined, I view this as impossible/unreasonable.
- Strongly disagree with this one. Yikes! Until Alberta moves away from coal for generation, natural gas is definitely a cleaner option for pretty much everything!
- What nonsense, electric trucks and graders and busses etc. etc. Our electricity comes from coal. What's the point?
- Not under the present structure where there is no incentive for home owners, businesses and the city to reduce consumption. California has not increased consumption since 1974, but I do not know if the measures taken at State level to reduce consumption could be introduced at a municipal level. However there must be some incentives that the city has the power to introduce.
- The source of electric energy needs to be considered. We are currently and in the foreseeable future will depend on the non-renewable electric energy source such as coal. Can we meet the goal? It is very doubtful.
- Putting all your eggs in one basket is not a wise course of action. Having a mixture of energy sources ensures a higher level of security of supply.
- This would mean moving to coal power which I understand to be more polluting.
- UNSURE • I don't understand this.
- Not sure by what you mean by "electricity"?

1.5.1 Promote distributed energy generation (localized generation of heat and power with district heating).

- AGREE • Work with SPARK cooperative to achieve this.
- Has anyone looked at geothermal district heating?
- This provides a much cleaner option than present, and has significant efficiency improvements over conventional generation and heating.
- Planning rules should allow a wide variety of local, site specific energy generation - windmills, solar, geo-thermal - that, if producing in sufficient quantity, can be exported off site.

1.5.1 Promote distributed energy generation (localized generation of heat and power with district heating).

- AGREE with conditions
- Has a cost benefit analysis been conducted on this?
 - Promoting vs. providing or funding is less costly to the City.
 - The City currently has an energy agreement with EPCOR. In that agreement, I believe it states that the City shall not generate its own electricity. We need to keep this in mind before we contradict ourselves in any policies that allow self generation.
- DISAGREE
- Too expensive and encourages waste.
- UNSURE
- I don't know of any workable models that inspire others to adopt this approach. For example, North Vancouver's system is limited to one small area and no one else has seen an advantage to copy this approach.

1.5.2 Seek partnerships to develop a "resilience centre" (a building complex designed for its micro-climate, which integrates multiples uses and recycles heat and water for year-round urban agriculture).

- AGREE
- Yes!
 - An excellent idea to include in the Airport redevelopment.
 - I am totally in agreement with this idea. We should call it "Centre for Energy Excellence" It should also be a facility with a zero footprint. Come and see me for ideas. Randall Colgan
- AGREE with conditions
- As long as this building can meet with Energy efficiency standards
 - With a preference for community-based partnerships over business.
 - Do a cradle-to-grave footprint analysis of this and what it's replacing. Don't do a high-end boutique showcase project with trivial outcomes if you can accomplish more by picking the low hanging fruit with across-the-board incentives and regulation.
 - Agree with PROMOTION of a "resilience center" (per White Paper), but not through a City "partnership" program, unless it is part of CoE infrastructure. Presumably, City policy should encourage private sector development of these, through one of its many available mechanisms (density bonus, tax break, etc.).
 - also allow and support financially residential agriculture and community gardens
 - Promote these initiatives and partnerships but not necessarily mandating them.
- DISAGREE
- This should be left to the private sector. (It also sounds like a fancy (expensive) name for a greenhouse.)
 - I think money can be better spent on other TWWG initiatives.
 - Is this really the role of the municipality?
 - I don't think it should be the City's mandate to develop such likely very expensive prototypes---Leave that to the Feds.
 - The urban agriculture area would be so expensive to build that it would be 40 years before the value would break even. This is just romance.
- UNSURE
- Sounds like a demonstration project, certainly.
 - Seems like a massive undertaking to do much good in Edmonton - and will be incredibly expensive. Anything less will be a novelty project. How come business is not taking this on.

Questionnaire #1

1.5.3 Require new buildings to be designed for 200+ years of use.

- AGREE
- Like in Europe. Let's stop building slap-dash disposable buildings.
 - The use of trees helps to extend the life for a building and roads.
- AGREE with conditions
- define buildings
 - Considering the rapid rate of development of energy efficient building design technologies and strategies, and considering there may be significant costs to provide buildings that will last for 200+ years which will impact affordability, the time span should potentially be reconsidered. A focus on building and material reuse and recycling as well as construction waste management may be more effective.
 - Leave some discretion to the development planner for the nature of the development (i.e. long or short term).
 - The funding requirements need to be made clear to city council before implementing this policy. For example it should be presented that a building to last 50 years costs this much and if the building was to be built to 200 years it will cost this much more.
 - will need to evolve to other uses over time if that long a life span
 - As long as it is not too expensive for the average Edmontonian to afford.
 - Yes and buildings should be designed so that they can be easily adapted for different uses over that timeframe. This also implies they will need to be located in places that people will continue to access and use over that timeframe.
 - We must be careful that such requirements are balanced with related incentives, such that development is not entirely discouraged. Requirements and incentives should fit into a development plan for the city, so that development of new buildings may be more encouraged in certain areas of the city. In other areas, requirements for energy efficiency should be strict and without incentives.
 - You can't design a building for 200 years. Design for 100 years and it will likely last 200. That is, of course, given that they are maintained properly and we don't tear them down as we are wont to do in Edmonton...
 - How can this be required, what is the implementation for this policy?
 - Depending on cost.
 - Should only be applied in respect of buildings or areas where such a life span makes sense.
 - Cost benefit analysis will need to be considered
 - As long as the correlative surrounding infrastructure is intentionally complementary in design functions.
- DISAGREE
- What does this mean and look like? Who can confirm?
 - The devil's in the details here. How do you come up with a standard for buildings that will last 200+ years, how do you not drive away businesses and residents if the cost of building these in Edmonton is so much greater than equivalent size buildings elsewhere? Planning horizons for businesses and residents are typically a whole lot shorter than 200 years.
 - 200 year old buildings in Canada I suspect would be cost prohibitive although it wouldn't hurt to do a cost benefit analysis.

1.5.3 Require new buildings to be designed for 200+ years of use.

- I don't think we have any idea what our needs are going to be in 200 years. We probably will have much better building materials and techniques available by then (provided that climate change hasn't devastated our civilization, which is equally likely, in which case there is also no reason to think that far ahead on buildings).
- This is an area of much debate. "Building for the future" (e.g. provincial transportation infrastructure stds) tends to mean "overbuilt", with financial consequences and the risk the technology will be obsolete and never fully exploited.
- Look at/ recognize of making buildings 200+. In some cases, temporary building stock is desirable. Some buildings do not need to last 200 years before the land they sit on becomes park land or building stock not needed. What is the cost?
- Significant cost impacts
- I don't know how we would determine or even begin to enforce this ---and look back at what a building built 200 years ago would have been required to contain and functions it would perform--- this concept ignores change and innovation
- What is the point. We now that change is continuous and that this building will be obsolete in less than 40 years. Even refurbished a couple of times it still isn't worth it.
- The ability to adapt new buildings on the same piece of land is important. If the structure is highly recyclable, highly reconfigurable, the replacement of the building may be a valid need and better suited to that specific piece of land. Increasing density, etc. A 200 year old building locks us into one specific form.
- This would not be economically feasible. A number of building materials that are typically used for construction would not hold up to 200+ years. In addition, a present building forms may not be suitable in 100+ years
- This would lock everyone into today's technology without an opportunity to implement new technologies. It is kind of what we have now in some cases (e.g., housing from the early 20th century).

UNSURE • Isn't this already covered in 1.2.2?

- Highest and best use is difficult to administer over 200 years. Might create unintended outcomes, like parking lots...

1.6.1 Explore, test and (where feasible) adopt new energy technologies that will reduce dependence on fossil fuels.

AGREE • I have done pilot studies on new technology which will not be cost prohibitive to implement.

AGREE with conditions • Intensify partnerships with research institutions in this area.

- This policy should be such that the City encourages the testing of new energy technologies by the private sector. It should not be that the City will undertake a research program.
- Reduce dependence on fossil fuel and move away from carbon and carbon capture and storage.
- Everything then should be on the table including nuclear.
- Edmonton shouldn't aim to be bleeding edge. Cutting edge only.

Questionnaire #1

1.6.1 Explore, test and (where feasible) adopt new energy technologies that will reduce dependence on fossil fuels.

- Agree that the CoE should cooperate with institutions (e.g. university, utilities) which have existing competence in R&D, to the extent of being a test-bed. But the City ought not attempt to engage in R&D itself. Building research competence is a lengthy and hugely costly endeavour.
- To a limited degree we can do this.
- DISAGREE • Natural gas is affordable, abundant and clean.
- Not necessary here.
- UNSURE • This is vague. What does feasible mean? Is it the city's responsibility to research new energy technologies or is that the Alberta Research Council and U of A?

1.7.1 Promote economic development that favours industries that do not require intensive use of fossil fuel energy.

- AGREE • This is key.
- This is the easiest, most politically defensible, and perhaps most important policy.
- Huge topic, impacting a great many indirect elements foundational to attracting a "creative class" - e.g. City park space, arts community, etc.
- AGREE with conditions • Economic and Social development
- Consider also promoting industries which use electric energy (currently generated by coal power plants) which could be gradually provided with energy from renewable sources as the capacity is developed.
- DISAGREE • If you are going to change society you cannot exclude those who most need change. By being inclusive you have the opportunity to change how they do business. In addition the transition in some sectors will be slower than others so blanket policies could do real unintended harm.
- This is counter productive given our fossil fuel industry. We are world leaders and should encourage the petrochemical industry to innovate solutions to problems, not avoid them.
- Industry growth still needs to be recognized as essential to the city and in some cases, intensive use of fossil fuels doesn't have an alternative (at this time). Not councils job to tell industry how to work but to work with them to come to mutually satisfying outcomes.
- Fossil fuel energy as a feedstock to develop a petrochemical value added industry is necessary for the economic survival of this City.
- Considering we are in the heartland for fossil fuel recovery, is this really achievable in the ten year implementation of this plan?
- The emphasis should be on getting industry to reduce its use of fossil fuels. (Someone is forgetting that 70% of fossil fuel use in North America is from transportation. This policy seems to step over the dollar to pick up the penny.
- The majority of our current and expected economy is pretty fossil fuel based---this would be seen by me to be Political suicide for Edmonton!
- Do not include natural gas.
- We need jobs always growing. Never turn down business.

1.7.1 Promote economic development that favours industries that do not require intensive use of fossil fuel energy.

- How do you favour an industry?
- The oil sands are still a strategic resource.
- UNSURE • Not sure how effective a specific policy on this would be. It might be a natural outcome of adopting the proposed policies above.
- Seems like we need a more wholistic viewpoint than the amount of fossil fuel energy used.

Climate Change

2.1.1 Purchase green power for City operations to meet its greenhouse gas reduction targets.

- AGREE • Purchasing green power is only part of the solution we need to find better ways to provide power to the city.
- Especially the LRT
- In the next 5 years, this is the only way we will reach our targets.
- This is definable.
- AGREE with conditions • Use strategies which also promote green power development
- We should be ultimately lobbying for downscale of current coal providers as well.
- Funding has to be front and centre with this policy. You can't expect operations to eat a charge this large.
- Purchasing offsets is the last thing to be done after drastically reducing the production. This will save a significant amount of money because we will be purchasing less, and will have a much greater environmental benefit.
- Only if this actually reduces our GHG emissions.
- Only after the City has demonstrated leadership in meeting reduction targets and purchasing the balance. Purchasing is the last step the City should be making.
- Please look "overall footprint/impact", including the production and installation of "green power"(e.g. do solar panels in their life span generate more energy that was used in their production?0
- Again, holding the City to a higher standard than everyone else is costly and doesn't achieve much. I am not convinced that good examples will motivate people and firms who still face regular market prices and respond to those incentives.
- There are no canonical standards for "green power" yet. The criteria must be very carefully weighed.
- I think this should be an incentive.
- This should be done only if there is proof that the 'green power' actually results in GHG reduction.
- Only to pre-approved budget amounts
- Has the full cost of the "green" power alternatives been explored?
- Care should be taken to be sure that the supplier actually creates new green power rather than just brokering recycled credits.

Questionnaire #1

2.1.1 Purchase green power for City operations to meet its greenhouse gas reduction targets.

- DISAGREE
- Purchase nothing, set our own standards and clean up locally beyond politically set standards.
 - Costly
 - That's not "the" answer but we could purchase "some" green power as a statement.
 - Surplus green power is absorbed into the grid and already forces up costs. There is no need for City to sign on for all power at a large increase over the market.

2.1.2 Do not sell carbon credits from City operations.

- AGREE
- The City should never sell a "license to pollute" to third parties.
- AGREE with conditions
- Unless we have overwhelming surplus in future years.
- DISAGREE
- Why not?
 - Not sure why the City wouldn't want to do this. There is a carbon market developing and this would provide a way for the City to recover some of the costs associated with being greener.
 - Funding can be used to advance environmental initiatives.
 - If selling carbon credits makes sense for cost-effective GHG reductions, then do it.
 - If the City's actions result in credits, why not sell to generate income to further environmental action?
 - Fundamental philosophical differences here. Carbon trading, in global environmental terms is geared toward using virtues of capitalism to achieve the most emission reductions at the lowest societal cost.
 - If the funds are used to create additional offsets selling may be a good thing.
 - This would handcuff us economically
 - Apply them to our own "carbon footprint"
- UNSURE
- I do not know what the reasoning behind this proposal would be. Yes, it provides carbon credits that allow emitters to continue their operations. But if there is an effective carbon credit market, the costs of purchasing the credits will increasingly undermine emitters' competitiveness as credit prices increase. I do not see why the City should participate in this market. I don't think it a detriment for city budgetary decisions to be influenced by a green financial incentive.
 - What is the cost/benefit?

2.1.3 Adopt world-class energy efficiency/carbon emission standards for municipal fleet and transit.

- AGREE
- In Canada, the transportation sector is the main area that will achieve the 2020 targets so green cities that convert to natural gas will be critical to Canada's GHGE reductions.
 - Implementation might be a different story. Developing standards is a necessary first step.
- AGREE with conditions
- City should carefully evaluate the long-term fiscal benefits of achieving world-class energy efficiency/carbon emission standards for municipal fleet and transit and pursue this objective while keeping fiscal sustainability and responsibility in mind. A "savings account" established that directs monies saved by energy-efficient city buildings to fund new, or renovate existing, energy-efficient buildings could be a strategy.

2.1.3 Adopt world-class energy efficiency/carbon emission standards for municipal fleet and transit.

- Depend on the cost impacts
 - Funding has to be front and centre with this policy identifying the increased costs.
 - Cutting edge yes, bleeding edge no. For reasons immediately above.
 - We should be using a best practical technology approach instead of a best available technology approach
 - Cost benefit analysis will need to be considered
 - Recognizing some of the targets set are based on technologies that are not currently available.
 - Again, world leading, not world class.
 - Balance cost/benefits
 - within budget limitations
- DISAGREE • Alberta class energy efficiency is sufficient.
- DISAGREE • Edmonton does not have a problem. Just maintain properly.
- UNSURE • This is vague - what does this mean? What standards? etc.?

2.2.1 Establish a Community Greenhouse Gas Management Plan for Edmonton

- AGREE • This plan must include trees. Although trees may not provide immediate results they will provide results in the long term. As trees provide measurable greenhouse gas reductions.
- AGREE • Development of this plan should be at the front of this list.
- AGREE • I would offer to serve. Sam Shaw
- AGREE with conditions • Only if it is scientifically not politically based.
- AGREE with conditions • This plan should eliminate incentive based programs as I have never seen them as effective and seem elitist in my opinion
- DISAGREE • We don't need it.
- UNSURE • I thought that we did this?
- UNSURE • Aren't other areas of regulation involved here, like the province? That should be regulated regionally? Not just within the city boundaries?
- UNSURE • What does that mean?
- UNSURE • Would need to know more details of such a plan, what its targets are, penalties for not meeting it, how the community is to be engaged, etc.

Questionnaire #1

2.3.1 Establish a Climate Change Adaptation Plan for Edmonton.

- AGREE • Parks Branch is starting to do this.
- AGREE with conditions • To the degree possible - we are after all situated in the cold climate area and it has to be taken in all equations
- I think this is important, but believe that we should initially prioritize focus on a GHG reduction strategy and should pour the majority of our efforts and money into this. The more we can prevent climate change from happening, the better. We will obviously need an adaptation plan as the rest of the world might not move as fast, but it's most important to do as much as possible to reduce emissions.
 - Adaptation must not be considered an alternative to mitigation.
 - Climate change and greenhouse gas plans should begin as a set of specific recommendations or guidelines to be fine-tuned by public input such as this one.
 - Buy in should be regional or province wide, not just the municipality. These targets should be set regionally or provincially.
- DISAGREE • Highly premature - and there will undoubtedly be federal protocols eventually.
- What do you think will happen? Too little rain or too much, too hot or too cold? It doesn't matter and there is nothing sensible that the City could plan to do.
- UNSURE • What does that mean?
- Again, would need more details.

Questionnaire #2 - Comments

Water

3.1.1 Support development, implementation and enforcement of reach-specific water quality objectives for the NSR.

- AGREE • This development needs to include the use of trees as they are very important component in reducing storm water and improving water quality.
- AGREE with conditions • Not 100% sure what reach-specific means. I think I know. Couldn't find explanation in the white paper. As a general comment, I don't think water is a pressing issue, even though I have put "Agree" on a lot of these items below. Climate change and energy are much more pressing.
- UNSURE • I am not familiar with "reach-specific" water quality objectives.

3.1.2 Support development, implementation and enforcement of Instream Flow Needs (IFN) objectives in the NSR.

- AGREE with conditions • A lot of these points are in provincial-level jurisdiction. I suppose Edmonton could work with the provincial government to get these things to happen.
- UNSURE • I am not familiar with "Instream Flow Needs".

3.1.3 Support development, implementation and enforcement of water quality objectives for all tributaries of the NSR.

- AGREE • Development of water quality objectives should be focused initially on the tributaries which contribute the most water to the North Saskatchewan River and are most threatened. As capacity becomes available, objectives should be expanded to eventually be developed for all tributaries.
- AGREE with conditions • Depends on how much is the costs and how much benefits we get out of this
- A lot of these points are in provincial-level jurisdiction. I suppose Edmonton could work with the provincial government to get these things to happen.
- UNSURE • Water bodies are owned by Province and some tributaries are part of drainage system (collect surface runoff from developed areas). It will be very hard to set quality objectives for tributaries as they are already heavily affected by development, most have very low flows (more important is to control source of discharges into the tributaries and set regulations for land users.

3.1.4 Support development of aquatic ecosystem health objectives for all water bodies and riparian (shoreline) areas.

- AGREE • Trees are an important consideration for this policy
- AGREE with conditions • Development of aquatic ecosystem health objectives should be focused initially on the most sensitive areas which offer the most significant ecological services and are most threatened. As capacity becomes available, objectives should be expanded to eventually be developed for all water bodies and riparian (shoreline) areas.
- A lot of these points are in provincial-level jurisdiction. I suppose Edmonton could work with the provincial government to get these things to happen.

Questionnaire #2

3.1.5 Support development of programs to maintain, improve, restore and protect wetlands and riparian areas that are part of our watershed.

- AGREE
- There are many existing CoE policies which militate against this and other hydrological objectives. For example, a Top of Bank road captures edge flow into our ravine systems and removes it down into the NSR or downstream along the ravine - thus removing a significant part of the water budget from that local reach. Ask us (Sierra Club) for field data on this point. VERY LONG topic.
 - Our wetlands and riparian areas are very important component of the watershed.
- AGREE with conditions
- For this policy to be embraced by landowners that own lands which contain wetlands and riparian areas not subject to Crown bed and shore claims or Environmental Reserve dedication, a creative approach to support preservation of these lands is needed which will offset the "loss" of these lands for development.
 - A lot of these points are in provincial-level jurisdiction. I suppose Edmonton could work with the provincial government to get these things to happen.

3.1.6 Support implementation of a range of strategies to prevent/mitigate damage to the watershed (including groundwater) from municipal, commercial, industrial, agricultural, forestry activities.

- AGREE with conditions
- Advocate for the new LEED-ND (Neighbourhood Development) hydrological standards. As per above, no current development in the City could meet these.
 - Sewage standards fit within city jurisdiction. Including limits on industrial discharges into sewers and sewer-use charges.

3.2.1 Establish a storm water management strategy that gives priority to “Low Impact Development” approaches, which minimize storm water impacts on natural water bodies.

- AGREE
- Advocate for the new LEED-ND (Neighbourhood Development) hydrological standards. As per above, no current development in the City could meet these. Hugely important.
- AGREE with conditions
- Depends on how well the LID BMP works and how much it costs; total lifecycle cost.
 - This strategy should be Corporate Strategy and all City departments should operate in the same direction (set by Strategy) not only one.
 - All City of Edmonton standards will need to be up-to-date to permit the implementation of L.I.D. approaches and all Departments and Branches will need to be well versed in and supportive of the use of such approaches.

3.2.2 Establish “Low Impact Development” guidelines for all developments in Edmonton.

- AGREE with conditions
- These guidelines must be translated to standards in order to achieve successful implementation.

3.3.1 Reduce and eventually eliminate combined sewer overflows to the NSR.

- AGREE • With the aid of proper plant material.
- AGREE with conditions • Should be a STRONGER commitment to this policy. Not "eventually."
- Not sure complete elimination of CSO is achievable. Total separation of the combined sewer systems will cost more than \$3B.
- Elimination is economically impossible but we should work towards reduction while maintaining development.

3.4.1: Reduce water pollution from all sources to promote a healthy river ecosystem. *No comments received.*

4.1.1 EPCOR will lead Edmonton's efforts to conserve and reduce water usage in Edmonton.

- AGREE with conditions • This should not be interpreted as a limitation on the City's ability to partner with other businesses, organisations, or groups to achieve this goal.
- With other partners and citizen advisory group
- EPCOR should take a leadership role but not be the exclusive source of leadership.
- If this is where the most qualified staff is, maybe an arm's length organization might serve better as they could have a better focus (less differing demands)
- DISAGREE • Huge conflict, profit versus conservation.
- Conflict of interests
- I don't like the idea of putting the lead into a Company's hands, without municipal watchdogging.
- EPCOR has a profit-maximizing mandate, and the City exercises no policy-setting role in respect of EPCOR. I think this is a problem. But until the City, as shareholder, changes that, EPCOR isn't in a position to lead Edmonton's efforts.
- EPCOR is a non-statutory, private corporation, without obligation for public consultation or assent to policy (this is one reason water ought never to have been privatized - never mind the shareholder). We can only "ask". The City (remember, Edmonton is a DIFFERENT entity) should "lead".
- City should take the lead. Reduction of water usage can be achieved by various means
- UNSURE • As a utility that is in the BUSINESS of selling water to its users, is it reasonable that EPCOR should "lead" this initiative?
- City of Edmonton should lead all efforts regarding conservation of water.

4.1.2 Develop a risk management plan to deal with possible reduced flows in the NSR.

- AGREE • This assumes that we know for sure the flow in NSR will reduce. How long term is this?
- AGREE with conditions • Longer term consideration. It probably makes sense to recognize in the plan that everything cannot be done or should be done right away - distinguish between short term and longer term objectives. This would apply to a number of objectives that are well founded but not an immediate priority.
- Not an urgent priority. Important in the long-term.

Questionnaire #2

4.1.2 Develop a risk management plan to deal with possible reduced flows in the NSR.

- "Risk management" has many meanings, not necessarily contingency planning. It should never be invoked as a way out of maintaining a strict overarching and continuing precautionary principle approach.
- This should not become more important than steps to avoid this eventuality

Food Security

5.1.1 Establish a Food Policy Council to develop a food charter and city-wide food and agriculture strategy.

- AGREE • The Food Policy Council must get a say in all land-use decisions.
- AGREE with conditions • The concept of a food charter requires better explanation.
- Ensure this is not political...Key groups... Just Food Edmonton, Community Garden network, Growing Food Security in Alberta, Slo Food, Farmers markets, Community Shared Agriculture, Edmonton Permaculture, Little green thumbs and school gardens, Food Secure Canada. Talk with Toronto Food Policy Council...Greater Edmonton Alliance is NOT the voice...see the groups above.
 - Depends on who will be sitting on the council, how members will be selected and appointed to create a council that is productive and constructive and not bogged down by infighting.
 - As above this is a longer term objective.
 - Depends what's in it (content). But this sounds like a good first step on process.
 - As long as setting up a "Council" is not the only positive action that the City takes!
- DISAGREE • Absolutely agree with a City "food charter" - strongly disagree with the proposed "Council" governance structure. Should be far broader participation, guided and assisted by existing staff. A dozen "experts" cannot replace democratic civic engagement.
- UNSURE • I am not familiar with food charters.

5.1.2 Develop a city-wide food and agriculture strategy.

- AGREE • This needs to include constraints on use of fertilizer, pesticides and herbicides. I would not let my children touch, play or get close to an intensely used potato, corn or canola field as the amount of sprays and toxic chemicals used are quite high. Is genetically modified canola grown within city limits right now?
- AGREE with conditions • Existing arable lands should be reserved for priority of local food and energy centers, as well as distribution centers for Alberta producers.
- Include grocery chains and processors.
 - As above this is a longer term objective.
 - Depends what's in it (content). But this sounds like a good first step on process.
 - This should be a provincial (if not federal) responsibility, realized at the REGIONAL level. We should await (and encourage) provincial protocols.

Air Quality

6.1.1 Increase air quality monitoring throughout Edmonton (per the recommended 2009 Ambient Air Management Strategy of Alberta) and make information available to Edmontonians on a real time basis.

- AGREE • Through the Urban Forest Effects Model we were able to show the amount of work that the urban forest was providing in helping the clean the air.
- If we address the other sustainability concerns (e.g. reducing car use, less energy-intensive industry), air quality will probably improve without any special additional efforts.

- AGREE with conditions • I'm not convinced that monitoring is more important than policies to improve air quality. I see a lot of discussion of monitoring and studying, and not a lot on policies to make a difference. What's the point of monitoring, or even adopting goals/guidelines or plans, if you're not putting in place the policies to achieve change?
- The White Paper suggests partnerships with the Capital Airshed Alliance. There is a MAJOR PROBLEM with the airshed boundary between it and the adjacent Fort Air Partnership Airshed. It is a boundary purposefully intended to "Gerrymander" the nexus of major point source pollution - with a line running virtually through the Ft Sask and [planned] NE Edmonton industrial zone. Do not ignore the Fort Air Partnership. The two must be combined. Realizing this is outside the City mandate, it should raise the methodological issue and not accede to this distortion as defined by the Province. Fair warning: Sierra Club will make a major public political issue out of this if not raised by the City.
 - Promote availability of this information

6.1.2 Determine, through studies, the quality of air in Edmonton, the sources of emissions and how the health of Edmontonians and the urban ecosystem is impacted.

- AGREE • please provide numbers on the impact on car exhaust on the people living close to arterial roads and include noise pollution
- The White Paper suggests partnerships with the Capital Airshed Alliance. There is a MAJOR PROBLEM with the airshed boundary between it and the adjacent Fort Air Partnership Airshed. It is a boundary purposefully intended to "Gerrymander" the nexus of major point source pollution - with a line running virtually through the Ft Sask and [planned] NE Edmonton industrial zone. Do not ignore the Fort Air Partnership. The two must be combined. Realizing this is outside the City mandate, it should raise the methodological issue and not accede to this distortion as defined by the Province. Fair warning: Sierra Club will make a major public political issue out of this if not raised by the City.

- AGREE with conditions • I'm not convinced that monitoring is more important than policies to improve air quality. I see a lot of discussion of monitoring and studying, and not a lot on policies to make a difference. What's the point of monitoring, or even adopting goals/guidelines or plans, if you're not putting in place the policies to achieve change?

6.1.3 Adopt and strive to achieve air quality guidelines recommended by the World Health Organization.

- AGREE with conditions • WHO recommendations are a great baseline, but Edmonton should not limit itself to these recommendations as a ceiling. Edmonton should focus on becoming a world leader in air quality, and this may mean going above and beyond the WHO recommendations.
- Too non-specific about how to achieve.

Questionnaire #2

6.2.1 Support and participate in management activities designed to address specific local air quality issues, including (but not limited to) developing and implementing air quality management plans.

- AGREE with conditions
- As per comments above. This MUST include real-time information from the Fort Air Partnership.
 - Plans and guidelines are not effective without policies (i.e. regulations, incentives, etc.).
- UNSURE
- If we address the other sustainability concerns (e.g. reducing car use, less energy-intensive industry), air quality will probably improve without any special additional efforts.

Biodiversity

7.1.1 Establish biodiversity offset requirements, making it necessary for developers to replace biodiversity lost through development.

- AGREE
- We can and should go beyond this, promoting and increasing bio-diversity rather than just offsetting its loss.
- AGREE with conditions
- Lands subject to a biodiversity offset must be carefully considered to provide a significant biodiversity asset. Preservation of natural areas will expand the City's development footprint, lengthen travel times, impact the affordability of development and require additional funds for maintenance and enforcement.
 - Minor point. The developer may not be in a position to replace and could be required to fund replacement by the City
 - Many ecosystems are irreplaceable; prior to new development ecosystems under threat should be evaluated to ensure similar habitat and biodiversity are possible to relocate. On that note, potentially those sites could be valued depending on their biodiversity, and developers could pay more to develop it, as well as a replacement, there could be an environmental 'tax' to ensure protection of species and habitat within conservation strategies.
 - Strongly agree with this. However, Edmonton should work at creating a meaningful definition of biodiversity that goes beyond the pithy Provincial one.
- DISAGREE
- "Offset requirements" will likely be used by some unscrupulous developers to buy their way into destroying important environmental areas. Cap/trade arrangements do not protect the environment. They just put a price on unsustainable practices and establish a rather dubious new market.
 - There should be no biodiversity lost through future development.
 - This should be a fall-back position only. As with "no net loss" policies on wetlands (where the developer either buys an equivalent and far cheaper wetland elsewhere far away or builds a "constructed wetland" on a more convenient site - neither is a remotely adequate substitute), this is a license to destroy. The PREFERRED POLICY must be retention of irreplaceable natural areas. Fair Warning: Sierra Club will strongly oppose Policy 7.1.1 without a strong initial policy of no destruction of existing natural ecosystems.
- UNSURE
- I think that developers need to work with the City to ensure that we have connected natural areas that will add to the biodiversity and provide links for wildlife. I am not too sure how you can replace biodiversity once you have lost it.
 - I don't understand this.

7.1.2 Develop a Biodiversity Strategy that encompasses the existing Natural Connections Strategic Plan and provides additional focus on non-traditional ways of increasing biodiversity in Edmonton.

- AGREE with conditions
- I don't know whether biodiversity is a big priority in Edmonton. As a global-level issue it is.
 - I would prefer "innovative" to "non-traditional". We don't want to allow this to be used as a reason to abandon "traditional" restrictions on unsustainable development practices.
- DISAGREE
- Per above. Depends on "non-traditional". We know of no viable alternative [equal to] preservation of natural ecosystems. PLUS, the existing "Natural Connections" Plan is methodologically weak and inadequate. Long topic for technical discussion.
- UNSURE
- Unfamiliar with natural connections strategic plan.

One Planet Living

10.1.1 Promote the concepts of "one planet living" through social marketing, outreach, education and awareness campaigns.

- AGREE with conditions
- Longer term objective.
 - I agree that this is important, but believe that we should first prioritize programs that will enable immediate action to reduce our environmental footprint, such as solar rebate programs, energy efficiency targets for buildings, water use restrictions for developers, etc. All of these initiatives will necessarily involve an educational component, and they will contribute to community education through their implementation, so while important, this 'one planet living' educational strategy should be less of a priority as it will take longer to create change. Also, it costs a lot of money to develop effective educational strategies, and it's difficult to produce a lasting significant effect without consistent ongoing funding.
 - Need outcomes sought to be clear.
- DISAGREE
- We never seem to get value out of our environmental outreach programs.
- UNSURE
- Not sure what this means? I'm not sure that this phrase will resonate with the general public.

10.1.2 Set an ecological footprint target for Edmonton.

- AGREE
- Without any targets any strategies will remain pretty words on paper, on the other hand if the targets are too far off no one will take them seriously
- AGREE with conditions
- All public and private parties must agree to this target.
 - There IS NO definable SINGLE "target." The "ecological footprint" has numerous metrics, some currently recognized, most under development. Perhaps the policy should read "Characterize and measure the ecological footprint of the urban area with respect to energy, area, and other limited resources relating to the carrying capacity of the Earth."
 - Should be done eventually but will require much more study to develop a realistic number. It is more important is to stress that we have a very large footprint and we need to pursue the initiatives to reduce the size of that footprint
- DISAGREE
- As above, not much point in setting targets if we don't have policies. If you set them, and fail because of a lack of policies, that can create a sense of frustration.