

**OFFICE DE CONSULTATION PUBLIQUE DE MONTRÉAL
OCPM**

LA RÉDUCTION DE LA DÉPENDANCE MONTRÉLAISE AUX ÉNERGIES FOSSILES

Perspective de l'O Ouverte

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**Montreal's Fossil Energy Dependency Reduction
Contextual Approach**

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Montréal, March 2016

Montreal's Fossil Energy Dependency Reduction. Contextual Approach.

1. Current Situation

In this document¹, and in the presentation done by the City of Montreal last 29th of October², we can see on page 8 that there are four main sectors of fossil fuels consumption defined.

Transport, industries, commercial, institutional and residential buildings.

For this analysis these last ones can be grouped under the Buildings Sector.

An obvious priority is established. (Transport)

But when we look at the other two sectors, which apparently have about the same magnitude, we notice that the industrial sector oil consumption is actually larger, more than double.

Priorities should then be established.

On the contrary that just one sector is completely excluded from the "Clues to Solutions" throughout the rest of the document.

On page 9, it is explained why the actions and intervention of the municipality is limited in regards to this sector.

These reasons may be valid but are insufficient.

Especially if agriculture is an important part of the sector.

Let's not forget that the problem is not about the consumption of fossil fuels, per se; it is about the Greenhouse Gas Emissions they produce when transformed into other forms of energy, for example when they're burnt.

2. GHG Emissions

As exposed in the same presentation, when seen from this perspective, the percentage of influence of the same sectors is different. Being buildings almost equivalent to transportation, and agriculture presented as less than 1%.

Is this percentage attributed only to Urban Agriculture?

Is the agriculture that generates this percentage (of GHG) what is feeding all the population of Montréal?

Obviously not. Most of our food comes from elsewhere.

As example let's see our region, as if Montréal only ate products from Quebec.

Buildings account only for 9%, and industry, including agriculture 49%; more than transportation.

Agriculture has become 10% and Montréal must be responsible for an important part of it.

1 3.1 Réduction de la dépendance aux énergies fossiles à Montréal. http://ocpm.qc.ca/sites/dev2015-v2.ocpm.qc.ca/files/pdf/P80/3.1_version_finale.pdf

2 3.3 Présentation de la Ville de Montréal à la séance d'information du 29 octobre 2015. http://ocpm.qc.ca/sites/dev2015-v2.ocpm.qc.ca/files/pdf/P80/3.3_20151029_ocpm_energies_fossiles.pdf

From the Food System perspective, all sectors are interconnected, and these are the areas where our food system has influence.

To which percentage, is yet to be determined.

And from a global perspective (climate change), food systems are responsible for up to 30% of the Emissions³. Agriculture (production) being about 80% of this percentage⁴.

The remainder it's attributed to processing, packaging, distribution, consumer practices, waste management, etc⁵.

Agriculture is also the largest contributor of non CO₂-GHGs (56%).

In other words, agriculture is visualized as a small fraction when observed from the fuels consumption point of view, but in reality it is important when looked at from the food system, and a GHG Emissions perspective.

The reasons provided for this "limitation of action from the municipality" are insufficient, and cannot be applied to agriculture as to the rest of the Industry Sector because agriculture influences directly our food system.

The Montréal's food system –SAM, permeates all four economic sectors in the five themes proposed by this public consultation: *“Les Transports, Les Bâtiments, Les Industries, Les Services de la Ville, Les Habitudes de Vie des Personnes”*⁶.

3. The Individual

The concentration on macro, multimillionaire solutions has generated that the most important core (individual - family) is forgotten or isolated from the research of solutions.

As mentioned by M. Réal Ménard, in the presentation of this public consultation⁷, the role of individual is “key”, and his inclusion fundamental towards reaching the objectives.

In the “Clues to Solutions”, as well as in most of the ongoing efforts of the PDDM⁸, the individual/family is being displaced from the actual problem.

The food issue is left out completely, and action from the municipality cannot be “limited” in this respect.

Within the challenge of this consultation the immediate **needs of the individual** which define his environmental carbon footprint can be simplified to:

Shelter, Energy and Food.

3 <https://ccafs.cgiar.org/bigfacts/#theme=food-emissions&subtheme=direct-agriculture>

[http://www.fao.org/resources/infographics/infographics-](http://www.fao.org/resources/infographics/infographics-details/en/c/271780/?utm_source=twitter&utm_medium=social%20media&utm_campaign=FAOnews&utm_content=ac)

[details/en/c/271780/?utm_source=twitter&utm_medium=social%20media&utm_campaign=FAOnews&utm_content=ac](http://www.fao.org/resources/infographics/infographics-details/en/c/271780/?utm_source=twitter&utm_medium=social%20media&utm_campaign=FAOnews&utm_content=ac)

4 <https://ccafs.cgiar.org/news/press-releases/agriculture-and-food-production-contribute-29-percent-global-greenhouse-gas#.VuCBw8djrsM>

Min. 14:40. <http://ghginstitute.org/2015/03/10/6-food-choices-and-your-carbon-footprint/>

5 http://credemontreal.qc.ca/wp-content/uploads/2014/03/brochure_SAM.pdf

6 <http://ocpm.cap-collectif.com>

7 6.1 Transcriptions de la séance d'information du 29 octobre 2015. P.9; 1.255-260. [http://ocpm.qc.ca/sites/dev2015-](http://ocpm.qc.ca/sites/dev2015-v2.ocpm.qc.ca/files/pdf//6.1_ocpm-151029.pdf)

[v2.ocpm.qc.ca/files/pdf//6.1_ocpm-151029.pdf](http://ocpm.qc.ca/sites/dev2015-v2.ocpm.qc.ca/files/pdf//6.1_ocpm-151029.pdf)

8 3.1.1 Plan de développement durable de la collectivité montréalaise (2010-2015). [http://ocpm.qc.ca/sites/dev2015-](http://ocpm.qc.ca/sites/dev2015-v2.ocpm.qc.ca/files/pdf/P70/5c1.pdf)

[v2.ocpm.qc.ca/files/pdf/P70/5c1.pdf](http://ocpm.qc.ca/sites/dev2015-v2.ocpm.qc.ca/files/pdf/P70/5c1.pdf)

3.1.2 Plan de réduction des émissions de gaz à effet de serre de la collectivité 2013-2020.

http://ville.montreal.qc.ca/pls/portal/docs/page/enviro_fr/media/documents/plan_collectivite_2013-2020_vf.pdf

The consumption effects of Shelter, would be absorbed by residential architecture itself (5 %), and the construction industry (14%). Energy, considered in the operation of the residential buildings (5%), and in addition, it influences the transportation and other kind of buildings, when the individual moves to work, or other activities (58 % and 14 % respectively).

But the Food component remains isolated, with the tacit pretext that it is mostly integrated to the health (DSP⁹), and education systems (CSDM¹⁰).
In consequence, its direct relationship to the GHG food system carbon footprint, remains neglected.

This individual/family core, inscribed in the **socio-economical and political structure**, which is a pyramid, creates two main effects:
Traditionally, the implementation of solutions come from the higher levels and, individuals with less accessibility, become “passive”.
But, at the end of the day, we all go home, and have to eat something.

4. Sustainable Development Approach

Most solutions proposed are considering the environmental and economic aspects as priorities; but for solutions to be truly sustainable, they need to affect all three dimensions of sustainable development^{11 12}. Especially in search of a sustainable food system¹³.

How to guarantee sustainability?

To be able to guarantee sustainability it is imperative that Government, Industry (Institutions, corporations), as well as the Academy (research and education) work in collaboration.

The individual (community) is to be placed in the centre of this interaction, and the efforts of these three agents to be focused towards this common goal priority.*

The food system, and the CPA (*Conseil des Politiques Alimentaires*) as well.

“The massive discussions in Paris largely neglect agriculture, which is odd, given that food and farming systems are both major emitters of greenhouse gases and particularly vulnerable to climatic shifts”¹⁴

5. The Individual Footprint Characterization

In order to satisfy the primary needs of the individual as described, the individual's footprint is defined considering only two basic dimensions: Conscience and Accessibility.
Certainly, there are other factors that might be considered, such as cultural values, geographic location, etc.

9 Directeur de santé publique de Montréal. <http://www.dsp.santemontreal.qc.ca/>

10 Commission scolaire de Montréal. <http://csdm.ca>

11 These dimensions are seen as "economic, environmental and social" or "ecology, economy and equity"; United Nations (2014). *Prototype Global Sustainable Development Report* (Online unedited ed.). New York: United Nations Department of Economic and Social Affairs, Division for Sustainable Development. <https://sustainabledevelopment.un.org/globalsdreport/>

12 http://ville.montreal.qc.ca/pls/portal/docs/page/d_durable_fr/media/documents/PSDD_2007-2009F.pdf

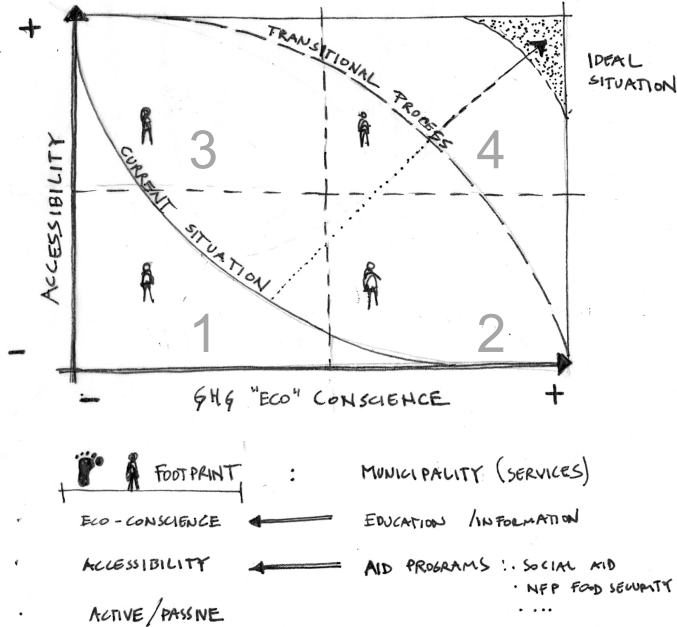
13 <http://btfsblog.weebly.com/1/post/2012/07/new-series-starts-today-focus-on-food.html>

Image: Goals of a Community Food System. <http://smallfarms.wsu.edu/wsufpdfs/WREP0135.pdf>

14 [#COP21](https://feedingninebillion.com)

Consciousness is the understanding of the situation (eco-conscience). And accessibility is the possibility to reach the resources, including information, to impact towards a solution.

The City has strategies, programs and services to support in these two dimensions. This matrix shows the relationship between them, and how individuals can be characterized by being located in four main quadrants ranging from low to high levels of accessibility and eco-consciousness¹⁵.



Low accessibility individuals are usually located towards the lower end of the pyramid while those with higher access are distributed in other levels.

While the existing municipality efforts (social assistance, public health, food security, etc) are usually oriented towards assisting this lower end (Q1), those with "less consciousness but higher accessibility" are being excluded (Q3).

6. Impact

Instead of using our energy and limited resources on "mega solutions" that normally are costly and take time to be implemented, it is important to execute punctual actions oriented towards those individuals who have influence to generate more impact by creating a chain reaction effect.

¹⁵ About the characterization matrix, and how to support each of the individuals:

- Quadrant 1. To continue supporting social assistance programs guaranteeing their quality and relevancy.
- Quadrant 2. To reinforce their accessibility through specific programs and tools.
- Quadrant 3. To implement actions or interventions to increase their level of consciousness.
- Quadrant 4. To implement programs of high impact through the individuals and organizations (type NFP Os) located in this quadrant to orient them towards the evolution of other quadrants. Guarantee that the agents have access to the necessary implementation resources.

RECOMMENDATIONS

To effectively reduce Montreal's dependency on fossil energies:

1. If the municipality is to establish programs to reduce dependency of fossil energy, these programs should analyze the issue from a wider perspective in consideration, not just of the consumption of these resources, but the emissions generated as well as other collateral consequences.
2. Industry Sector needs to be taken into account. And even if there are some measures for the reduction of emissions from this sector, they should be monitored and information to be available to the public.
3. Agriculture has to be considered, either as part of the Industrial sector, or as a category on its own.
4. The environmental impact of the food system needs to be carefully monitored, not just from the economic and environmental perspective, but also from the health point of view. They are inseparable and transparency of information to the public is requested as imperative.
5. The food system of Montreal, not only affects the territory within the island's limits, but it is related to a much more larger territory, the interactions with these other territories are to be observed and considered in the proposal of solutions.
6. When implementing solutions, they need to consider all dimensions of sustainable development, economic, environmental, social, and even cultural by giving priority to the individual's needs as representatives of the whole community.
7. Government, Institutions (Industry, corporations) and the Academy (research and education) should work in collaboration with clear objectives in hand. And the efforts of these three agents should be focused on the wellbeing of the individuals in the community.
8. If the food system environmental impact is to be monitored by a coordinating entity, such as the CPA (Conseil des Politiques Alimentaires), this entity needs to be independent from other government or industry agencies to guaranty its perennality.
9. This entity should start operations immediately.
10. This coordinating agency needs available funding, not just from the municipality, but from other influential actors in all related industries, in order to establish self-sufficient programs to assist smaller yet well-oriented organizations by creating project execution agreements which will guarantee their growth and therefore their sustainability.
11. Urban Agriculture needs to be included as part of the economic policy agenda of Agriculture, to be able to access financial support from the pertinent Ministries.
12. The different existing housing agencies, public and private, should be included in the program because housing, food, and environment go hand by hand. (i.e. Cooperatives, such as the *OMHM - Office municipal d'habitation de Montréal*¹⁶, *Société d'habitation et de développement de Montréal -SHDM*¹⁷, and the *Société d'habitation du Québec -SHQ*¹⁸. These institutions, for example, should be encouraged to implement self-sufficient urban Micro-Farms within their zones of influence with the fossil energies dependency reduction in the agenda from the start).

It is understood that most of our energy consumption is hydroelectricity based. Presently, water appears to be an infinite resource because our region counts with the privilege of access to it. As this may not be the case in the long term, it is important to include water into both, food and energy agendas. Relying only on hydroelectricity as a main supply for Montréal may promote other collateral dependencies (corporative, economic)¹⁹ when Montreal should strive to be self-sufficient.

¹⁶ <http://www.omhm.qc.ca/en/partner-organizations-services-offered>

¹⁷ <http://www.shdm.org/en>

¹⁸ <http://www.habitation.gouv.qc.ca/accueil.html>

¹⁹ In the current global food system it takes at least 10 calories of energy to produce 1 calorie of food.

O Ouverte

A vivid example of one-to-one execution of “small projects with large impact” can be seen in existing organizations such as the O Ouverte, which, since conception, has included these multi-disciplinary issues in its mission and program of activities.

The O Ouverte, or the Open O-rganization, is a NFP organization, which promotes wellbeing by using mainly the Food Practices as social and educational instruments to connect people and to sensitize them about the subjects of healthy food and food quality.

These practices include all aspects of the complete circular process: from growing, production, preparation and distribution, within the contexts of nutrition and health; to the economic and cultural aspects, including waste management, composting and clean energy efficiency. The O's main intention is to invite people to explore the possibility of a conscious lifestyle oriented towards wellbeing from an individual scale.

The O's space, activities and interactions are based on sustainable, responsible, and inspirational models. In collaboration with our members, partners and the participants of our activities, we strive for collective steps towards an uncertain future as the necessary response towards the circumstances of our time.²⁰

CONCLUSION

To reduce the GHG emissions, by reducing the dependency of fossil energies, it is important to consider making decisions from an integral perspective, by including the food system and its environmental implications as a central condition.

To do it effectively, it is necessary to use a hybrid model (public/community + government agencies) for the appointment of an independent body (CPA). The new / future CPA will need to consider the GHG Emissions, and fossil energy dependency within the environmental impact of its mandate from the very beginning in order to illustrate the municipality with measures that not only will allow us to reduce this dependency but to promote health and wellbeing to society in general.

The programs established by the municipality to implement this reduction, in counterpart, will need to consider the CPA's recommendations and programs in their strategies as well. A cross-pollination of solutions from both parties will render each one stronger and more successful.

This exchange may be more effective if its intermediation is done through smaller community based entities, such as independent NGOs and NFP organizations that know the territory already. These entities can touch directly the people as individuals and can assist with the implementation of the proposed solutions at both ends, from the global perspective but also taking into consideration the individual's circumstances and specific needs.

We invite the municipality to consider, in parallel to the macro interventions, the implementation of smaller scale projects and the empowerment of already existing social-focused organizations through appropriate funding. These “human-scale” interventions should happen at various levels of the socio-economic structure to guarantee society's awareness as a result, through a chain reaction effect, rather than through the imposition of long-term projects and legislation.

²⁰ The premise is to take full responsibility on “the problem”, including it's less direct implications, and to pioneer implementing radical measures at our reach, instead of waiting for the solutions to come, or to be proposed, from the government, or municipality's infrastructure.

Moreover, we propose to consider the O Ouverte, as a resource at the epicenter of these interactions, or even within the CPA itself, because it can bring in an integral vision to the issues under discussion. This organization is also in capacity to propose hybrid and multidisciplinary realistic short-term alternative solutions which will generate impact at various levels of society in the different spheres concerned (Food and Environment), by including the interrelated Energy, Growing and Building factors.