Towards a Carbon Neutral and Sustainable City Achieving an Ecological and Unified Transition Synthesis of recommendations

The Montreal Climate Coalition asks the city of Montreal and all the candidates who hope to represent the city, to adopt the recommendations developed at the public consultation on "The reduction of dependence of Montreal on fossil fuels" organized by the Public Consultation Office of Montreal, published May 30, 2016. These recommendations align perfectly with the inevitable changes that will ultimately be necessary to shift to an ecological and equitable carbon neutral city.

The adoption of a coherent and ambitious action plan, with many measures to be implemented throughout the city of Montreal is essential. As has been the case so far, boroughs (or other cities) can provide leadership on several issues. Some legislative and financial support from higher levels of government will also be required. Here are some of the elements of the action plan.

Four strategic focus points for carbon neutrality are needed, followed by several recommendations:

1. Ensure public participation in the planning and implementation of an ecological and communitybased transition, and in the allocation of the financial resources required (from consultation to partnership), and allow the evaluation of the results by an independent organization.

2. Adopt a rigorous, ambitious and systematic carbon budget, based on science and aimed at rapidly decarbonizing the economy.

3. Optimize the open collection of data to make an annual inventory of GHG emissions to be able to measure progress towards reaching our target (Carbocount City.)

4. Apply a "climate test" to any major project proposed in Montréal, including those off island, starting with REM, to evaluate the GHG emissions for the entire life of the project, while comparing it with alternative projects (Legislative Reform - CQDE).

1. Environment-friendly buildings : « GESTE »

Montreal must follow the recommendations of its own *Commission sur l'eau, l'environnement, le développement durable et les grands parcs* regarding the construction or renovation of buildings with sustainability in mind. Likewise, it should follow the recommendations of the EcoQuartiers program for new developments, and adopt appropriate policies for renovation of existing buildings.

"GESTE" is a strategy incorporating geothermal heating, energy efficiency, solar power, eco-friendly roofs (green or reflective), water conservation measures and efficient use of space. Every new building should meet or exceed Quebec's Novoclimat standard; an incentive program could reward the creation of zero energy or energy-generating buildings. A certain standard of energy efficiency should also be required for every commercial building being sold or undergoing major renovations.

2. An EcoQuartiers program for new developments

Montreal should instigate a program in which promoters who respect the three pillars of sustainability (environmental protection, economic development, social equity) are rewarded with an EcoQuartiers (**Quartier durable**) designation. This program could be modeled on Vivre en ville's *Charte des écoquartiers*, France's *ÉcoQuartiers* program, the American Ecodistrict program, and the LEED-ND standard for neighbourhood planning.

The aim is to create sustainable neighbourhoods which make a significant contribution to carbon neutrality.

Creating such programs may take time: in the interim these measures should be adopted as soon as possible:

- A minimum biotope coefficient of 0,30 should be required for all new developments. While allowing promoters flexibility, this measure is an incentive to preserve green space
- All developments should include 25 40 per cent of social and affordable housing
- All new developments should rely on multi-unit geothermal heating
- Rain water should be managed in an environmentally friendly fashion on site
- New residential developments should be built near existing transit hubs (TOD) to counter urban sprawl and car dependency
- New residential developments must be created with the participation and for the benefit of nearby inhabitants to be seamlessly integrated into the urban fabric

3. Municipality transitions movement

Working in solidarity with its boroughs and associated municipalities, Montreal must support the ecological transition and in particular:

- Greening initiatives and water conservation
- Urban agriculture and permaculture
- Traffic calming in residential neighbourhoods
- Propose a Climate Pact with businesses operating within the City, as Stockholm has done, to stimulate commitment and collaboration against climate change
- Promote barter and support local producers of goods and services
- Create a local currency for Montreal and its boroughs
- Impose a tax on parking lots, especially those with more than ten spaces
- Adopt other measures to internalise the social costs of automobile use such as a toll at the city limits
- Reduce the fiscal burden for local businesses, especially PME's
- Ensure that the technological innovations meant to create the digital city movement are coherent with Montreal's climate neutrality goals

In addition, the following three steps will ensure a framework for the future :

- Energy producing city and adoption of community geothermal heating
- Sustainable planning and transportation
- Conservation of natural spaces

4. Energy producing city and adoption of community geothermal heating & cooling

Climate objectives cannot be met without finding a way to reap the exceptional opportunities represented by the earth's heating and cooling potential.

Municipalities could supply their own energy requirements by using community geothermal heating & cooling systems in all new developments. All public and private buildings heated by forced air should be converted, starting with those using fossil fuels such as heating oil or natural gas.

At the level of the Montreal Metropolitan Community (CMM), this would reduce GHG emissions by almost one million tonnes yearly from 2030 on, or 20 million tonnes by 2042. Member municipalities as well as the Quebec government, according to estimates, would gain 150 million yearly *ad vitam aeternam* after the amortization period of ten years or so.¹

No other measure slashes energy consumption by half, replaces fossil fuels, and prioritizes high performance buildings at the same time as sharing the burden of energy refitting with the purchasers of buildings. The result is a socially equitable transition towards highly energy efficient "eco-neighbourhoods" with affordable homes for all.

5. Sustainable planning and transportation

Montreal must henceforth allocate the lion's share of infrastructure budgets to structuring public transportation and active transportation networks.

transportation technology appropriate to each situation must be chosen (metro line extensions, light rail, tram train) and priority given to densely populated sectors where buses are overcrowded, such as the east end of Montreal and the southwest.

We recommend, therefore:

- Prioritize city plans incorporating train or subway stations a walkable distance from residential neighbourhoods while offering a wide range of destinations to provide a real alternative to car dependency. The potential for reducing GHG's is at least 1.3 M tonnes of CO2 in the initial phase.
- **Double the bicycle path network over the next seven years** (adding 100 km per year), especially dedicated lanes rather than those shared with motorized vehicles.
- All boroughs which have not already produced their **local mobility plan** (*plan local de déplacement*) must do so within four years a commitment from Montreal's 2008 transport plan.
- In line with their respective mandates all public bodies and their decision makers must collaborate with the new metropolitan transport agency (*Agence régionale de transport métropolitain ARTM*) to evaluate which options are optimal for citizens' transportation requirements. On this basis only, calls for tenders from private companies wishing to provide services could eventually be made.
- The Skytrain or REM proposed by the *Caisse de dépôt et placement du Québec (CDPQ-Infra)* is directly counter to the aforementioned principles: a quasi-private company has selected the technology and the routes without consultation, and the profitability is heavily dependent on public subsidies which will be diverted from other transit needs. We demand that the REM project be submitted to a real climate test which considers all emissions generated during the construction phase, the subsequent urban sprawl, and the cancellation of other transit services such as the Vaudreuil-Hudson train line. The project must be re-evaluated based on where transit improvements are most needed.
- The Mount Royal Tunnel must remain publicly owned and its accessibility for different train types maintained, notably to favour the possibility of a rapid link between Montreal and Quebec.
- Anyone and any organisation dedicated to climate action must clearly state their opposition to the construction of new autoroutes or the widening of existing ones including routes A19 and A30. These are outdated transportation solutions from another era and counter to modern climate

1 Lefebvre, J.-F. et D. Dumoulin (2016), *Bâtiments durables pour une ville carboneutre*, Mémoire déposé à la Commission sur l'eau, l'environnement, le développement durable et les grands parcs de la Ville de Montréal, par Imagine Lachine-Est et la Coalition climat Montréal, le 9 novembre 2016, 8 p. (+ ppt de présentation). objectives. The REM promoted by *CDPQ-Infra* is now being used as a pretext for the widening of A30, further proof that the project will aggravate urban sprawl.

• All transit providers must include an economy fare for low-revenue users in their fare schedules and avoid passing on fare hikes likely to result from cost overruns from the REM project.

6. One Hundred Per Cent Renewable for our 400th

Following the example of Vancouver, Montreal must adopt a 100 % Renewable Energy strategy by 2042².

Natural gas cannot be promoted as a "transition fuel"³:

"To attain the goal set for 2030 Quebec's new energy policy proposes the replacement of petroleum with natural gas (...) which will require considerable investment in technology and infrastructure which in turn will have to be replaced to satisfy the objectives for 2050. This approach is both expensive and confusing: the choices of only a few years earlier will be rejected."

This reinforces the pertinence of adopting geothermal heating for our energy needs.

7. Preservation of Natural Spaces

"Montreal set itself a very concrete goal in its last urban plan : preserve ten percent of its territory as natural space. One percent of the island is equivalent to 500 hectares, two and a half times Mount Royal Park.

Currently less than six per cent of the agglomeration territory is protected. To reach the 10 per cent, more than two thousand hectares would need to be protected on Montreal Island. Considering the urban sprawl which has gobbled up so much of our natural spaces, it is urgent to preserve what is left⁴." The only way to achieve Montreal's preservation goals is to protect every single remaining space with ecological value including Anse-à-l'Orme in Pierrefonds west, Île Bizard, the northern sector of Sainte Anne de Bellevue, and several other sites threatened in the short or medium term by urban sprawl.

8. Democracy and transparency

Montreal must encourage citizen participation and respect our consultation tools, the *Bureau d'audiences* publiques sur l'environnement (BAPE) and the Office de consultation publique de Montréal(OCPM).⁵

2 City of Vancouver (2015) *Renewable City Strategy,* 63 p.

3 Mousseau, Normand (2007) Gagner la guerre du climat, 12 mythes à déboulonner, éditions Boréal, 255 pages.

4 Sue Stacho et Sylvia Oljemark - respectivement porte-parole de Sauvons l'Anse-à-l'Orme et porte-parole de la Coalition verte, *Il est temps d'agir: nos espaces naturels disparaissent*, lettre publiée dans le Devoir le 9 août 2017.

5 Réalisé par la Coalition climat Montréal avec le support de Jean-François Lefebvre, Mohamad Ali Samadian, Aro Ratoejanahary et France Levert, avec la collaboration d'Imagine Lachine-Est, octobre 2017.