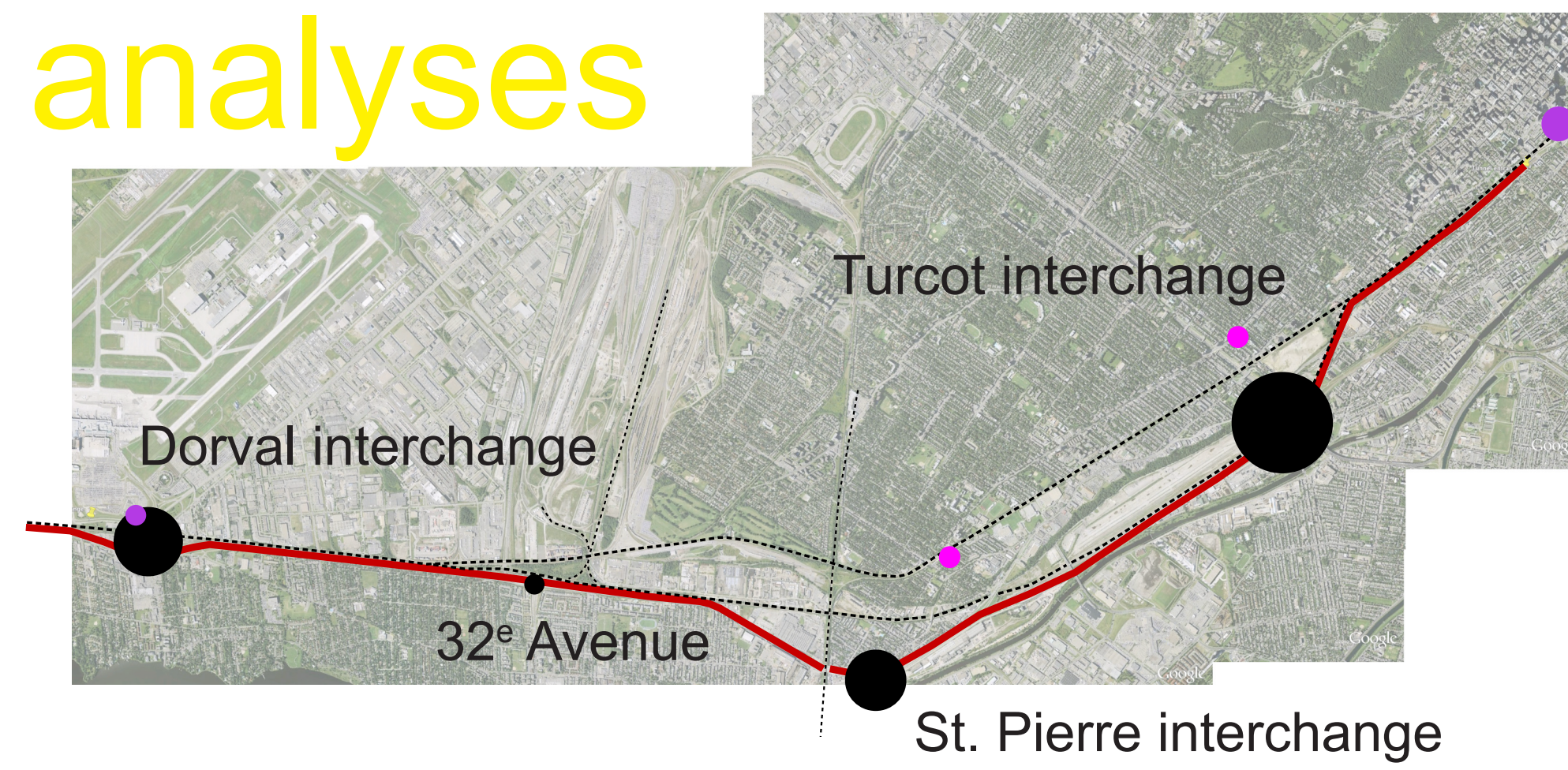# CORRIDOR D'OR

analyses

main car flow
The local neighbourhood traffic mixes with the regional traffic.

Dorval interchange
Turcot interchange
32e Avenue
St. Pierre interchange

bottlenecks
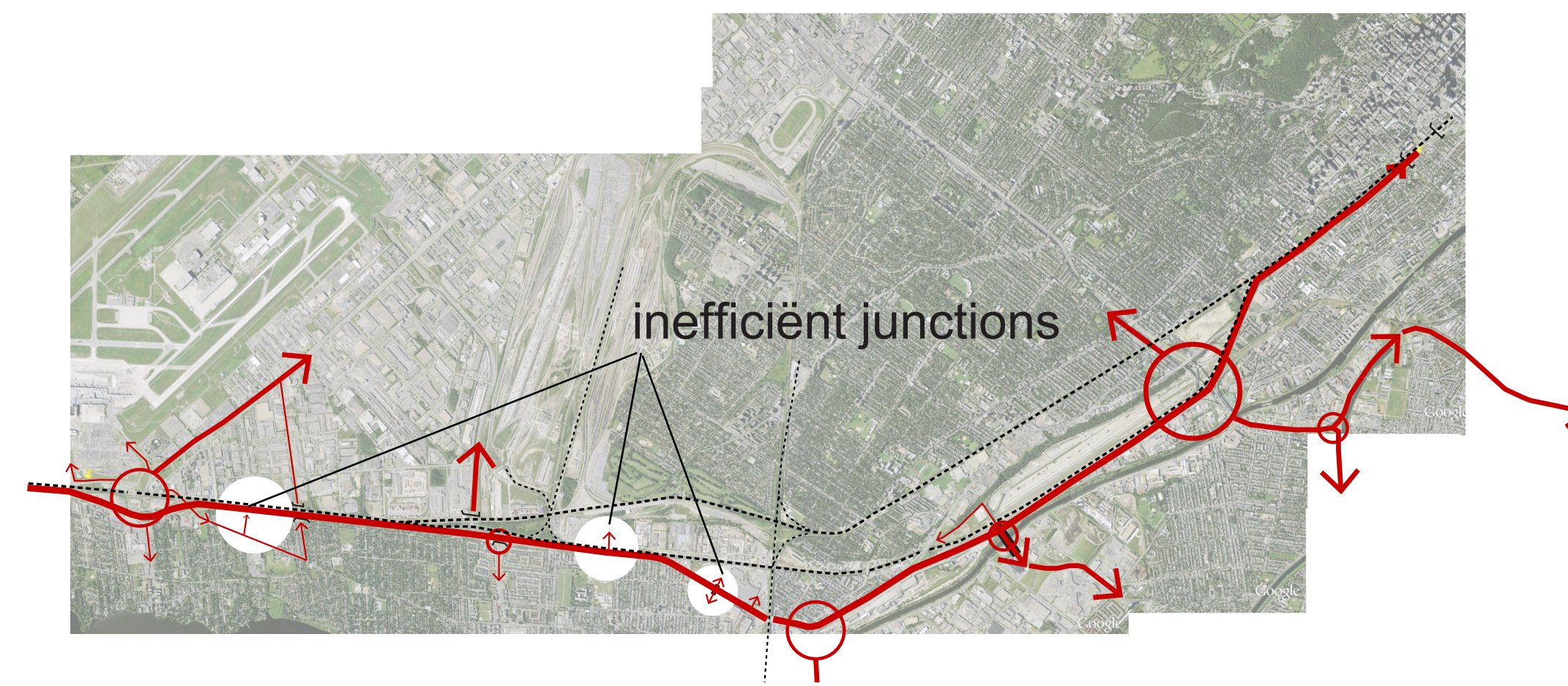Less local junctions, more efficient flow.

inefficiënt junctions

main rail network
The airport needs direct acces to the trainnetwork.
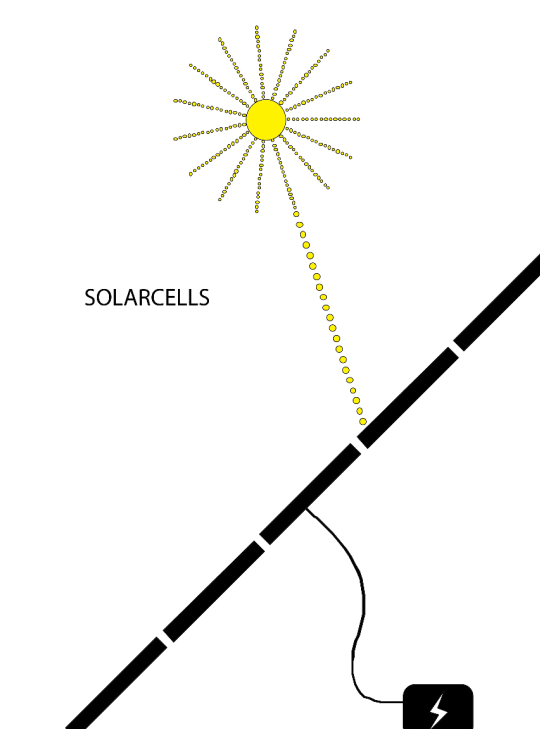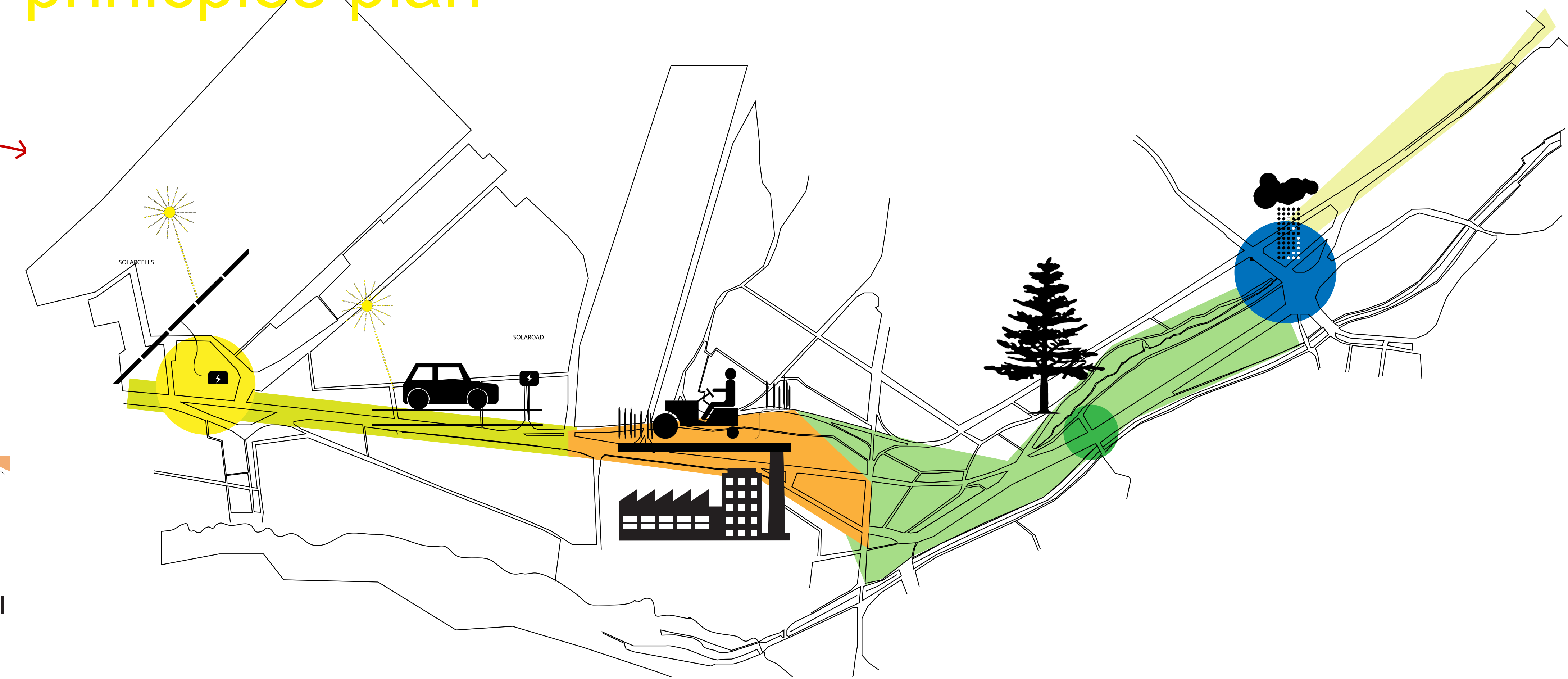We make more multimodal efficiënt interchanges.

Station Lucien -L'Allier
Station Vendôme
Station Georges Vanier
Station Dorval
Station Montreal Ouest

spatial framework
Redeveloping orphaned territories. Industrial and business area's will be a part of a larger energy generating system.

parking area's
business area's
residential
industrial
orphaned territories
industrial heritage

principles plan

scenario concept

Etape 1
Paysages sur le toit/
Roofscapes

Etape 2
Un long chemin/
A long road

Etape 3
Parc St. Pierre/
St. Pierre Park

Etape 4
Le Lac Turcot
Turcot Lake

Etape 5
Mur de vie/
Lifewall

Solar cells:
10 m2 of solar panels can cover the electricity needs of one household.

The total area with solar cells is 180,000 m2. This wil generate 328,500,000 kWh.

The energy produced bij the cells needs to be saved when it's abundant and released later when is needed.
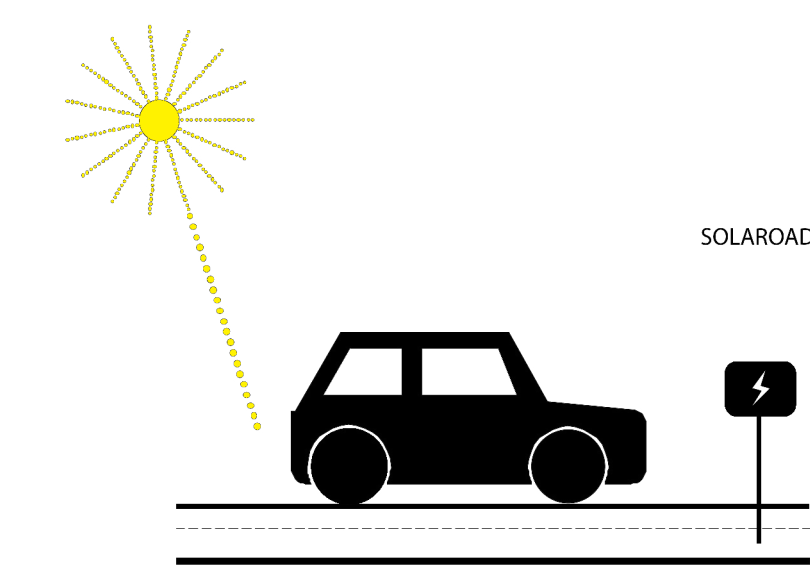
Solaroad:
Using asphalt to generate energy
This type of road (a combination of layers of glass, solar cells, optical layers and concrete) is able to generate 50kWh a year per m2.

An average family of 4 in Canada consumes 50kWh a day.

The total area of the road in the corridor d'or is at least 400,000m2. That will induce 20,000,000 kWh per year.
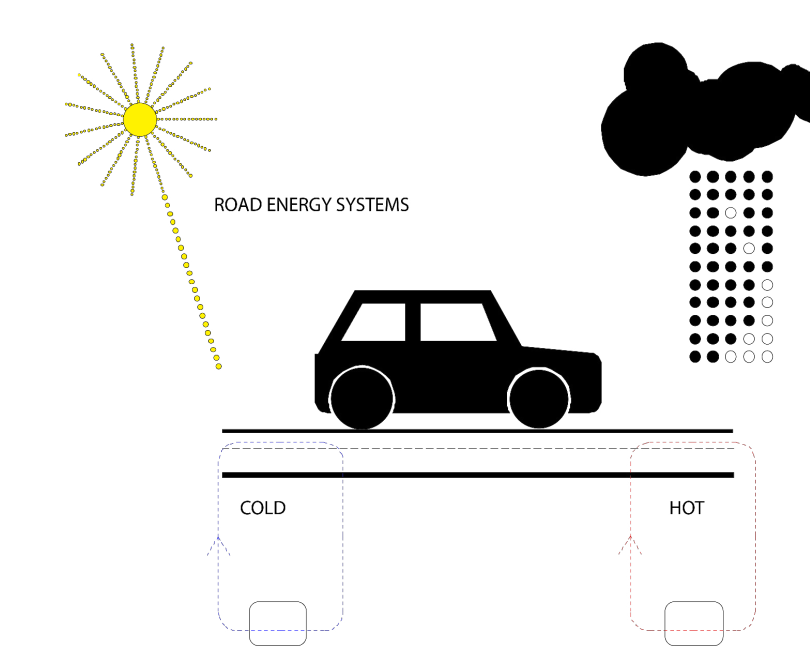
Road energy systems:
The road will be used to store and re-use warmth. With a heat pump the roads (and/or surrounding buildings) can be cooled during summer and heated during the winter.

Especially for the roads this will enhance safety and reduce the amount of work/energy that will be needed to keep the roads snow free.

Biofuel:
Biofuel plants and production units will produce energy and release the pressure on the food producton fields.

The plants are next to the road, on top of buildings and in the park.
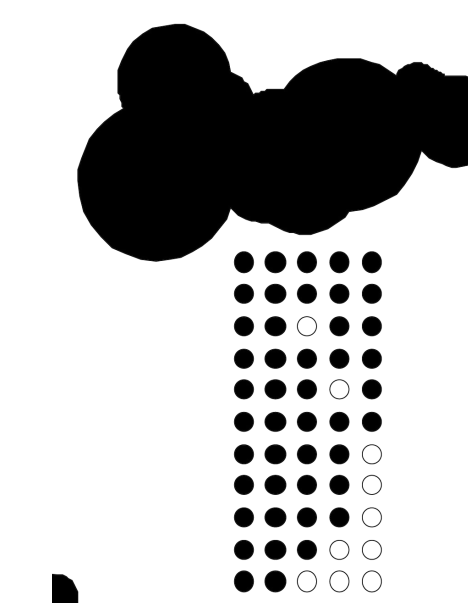
Water:
Local rainwater can be stored in the Turcot lake. This wil have an positive effect on the local climate in the area.

The water also can be used for industrial purpose. The lake has the capicity to store 51,000 m³.

Nature:
Additionally, adding a large amount of different types of trees will also greatly improve the quality of the air and has a biomass potential.

Broad leaved trees can be used to clean the air from gaseous pollution like NOx and O3.

Also the rainwater will be partly absorbed by the trees and filtered by the soil beneath the trees. This will lead to a better quality of water in the ground and will reduce the need for drainage systems.

All these, relative simple, solutions will greatly enhance the quality of life around the corridor.

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