

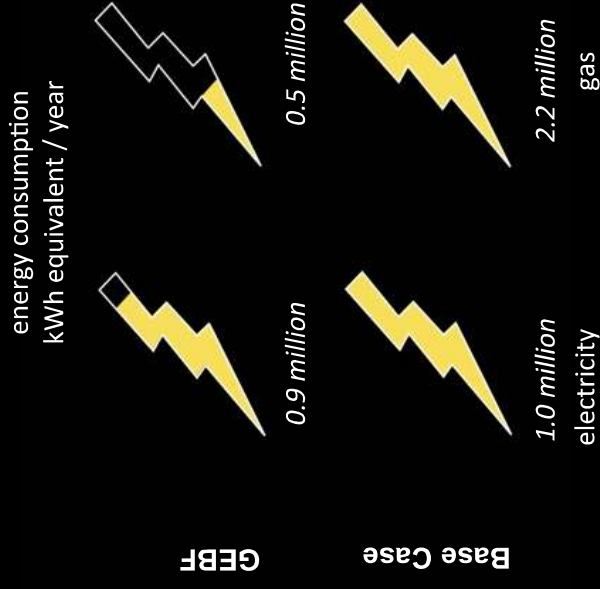


on-site energy production

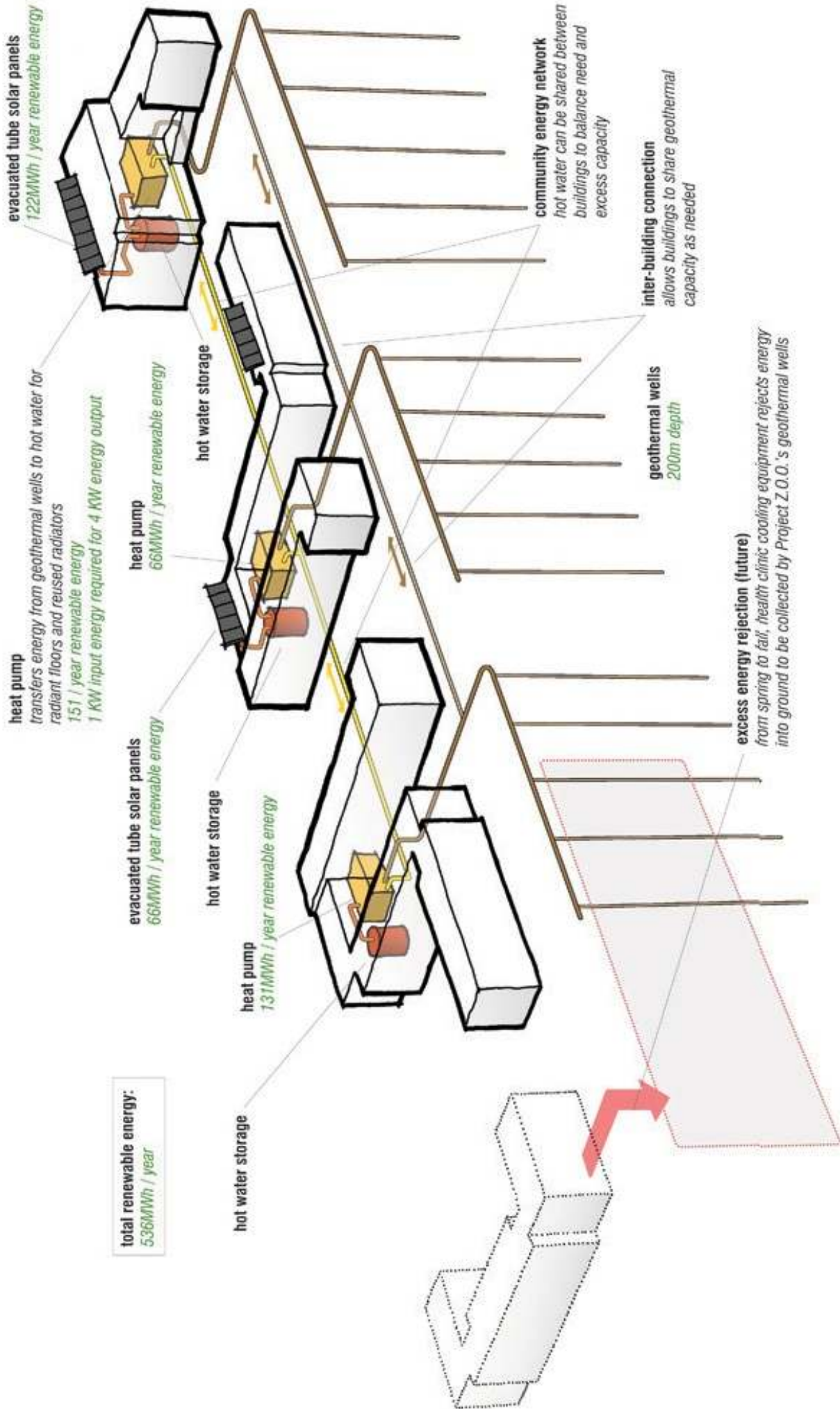
Most energy in Quebec comes from hydroelectric power. The James Bay hydroelectric power plant in Northern Quebec flooded 11 000 sq. km of land and caused widespread mercury contamination



75% of this project's energy does not rely on external infrastructure. It is generated and transformed on-site from the renewable sources of geothermal and solar energy, and distributed by a shared infrastructure.



Resilience and Future-Proofing



evacuated tube solar panels
122MWh / year renewable energy

heat pump
transfers energy from geothermal wells to hot water for
radiant floors and reused radiators
151 / year renewable energy
1 KW input energy required for 4 KW energy output

total renewable energy:
536MWh / year

evacuated tube solar panels
66MWh / year renewable energy

heat pump
66MWh / year renewable energy

hot water storage

hot water storage

hot water storage

heat pump
131MWh / year renewable energy

hot water storage

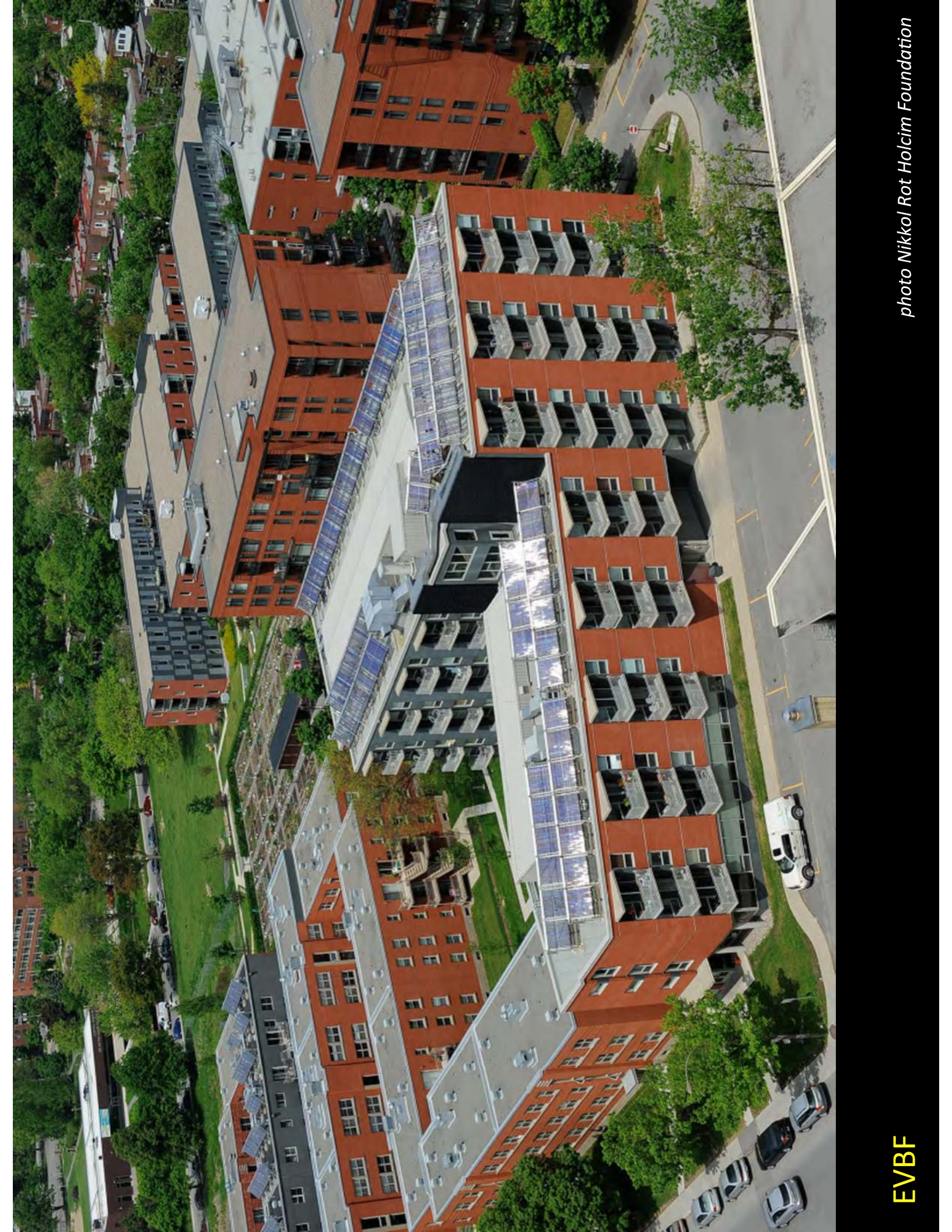
hot water storage

community energy network
hot water can be shared between
buildings to balance need and
excess capacity

inter-building connection
allows buildings to share geothermal
capacity as needed

geothermal wells
200m depth

excess energy rejection (future)
from spring to fall, health clinic cooling equipment rejects energy
into ground to be collected by Project Z.O.O.'s geothermal wells



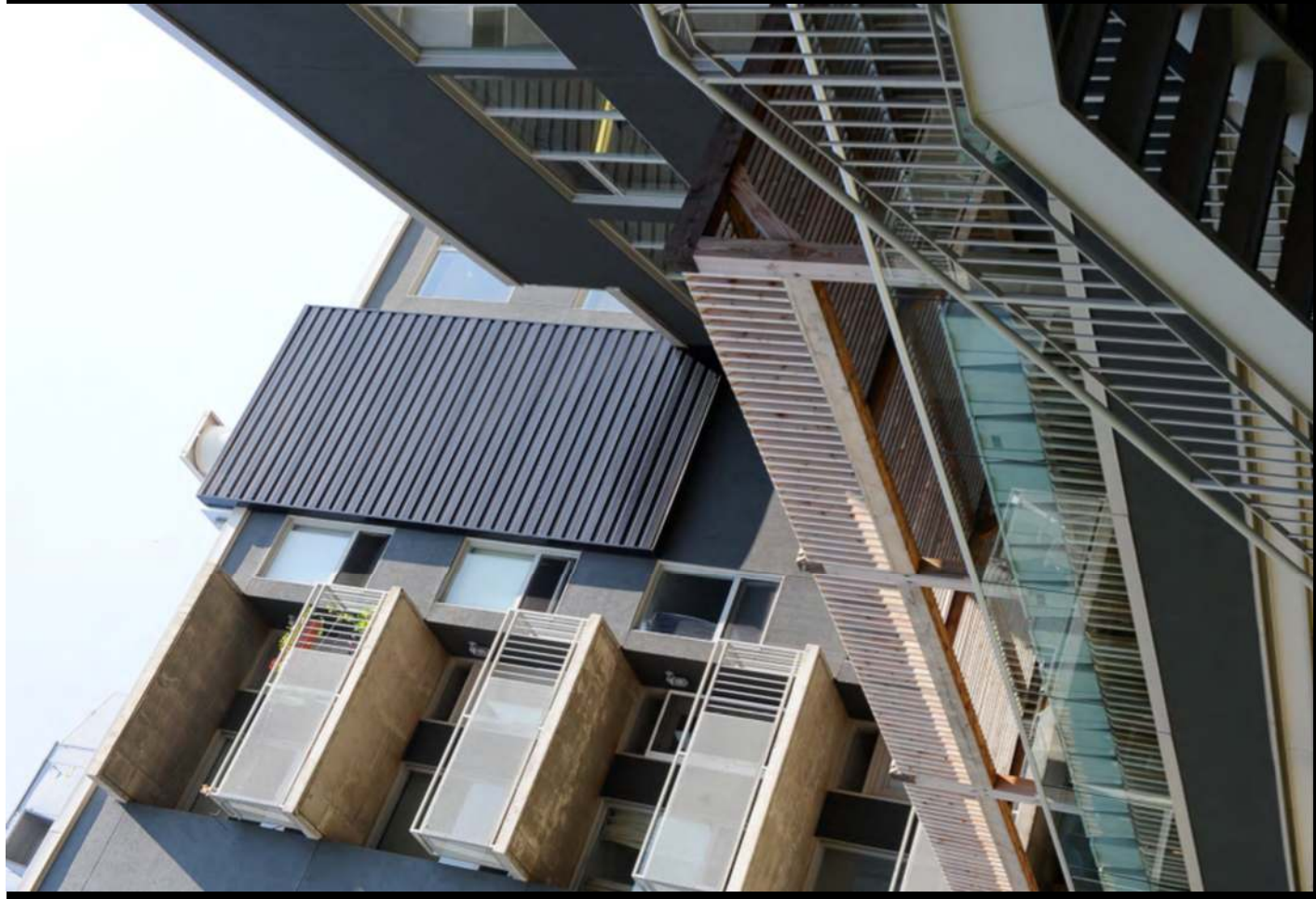
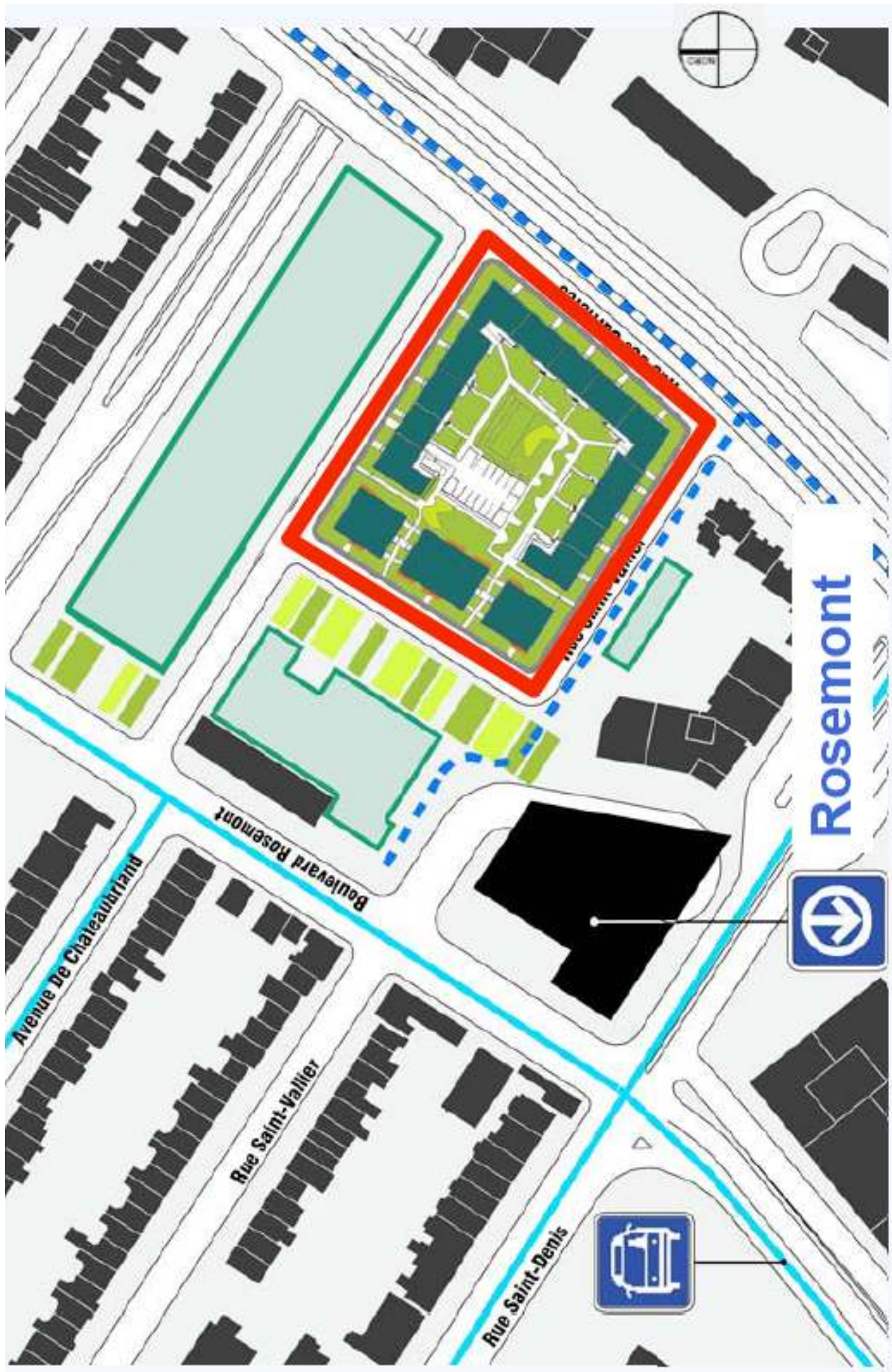


photo Nikkol Rot Holcim Foundation



Project Chez soi

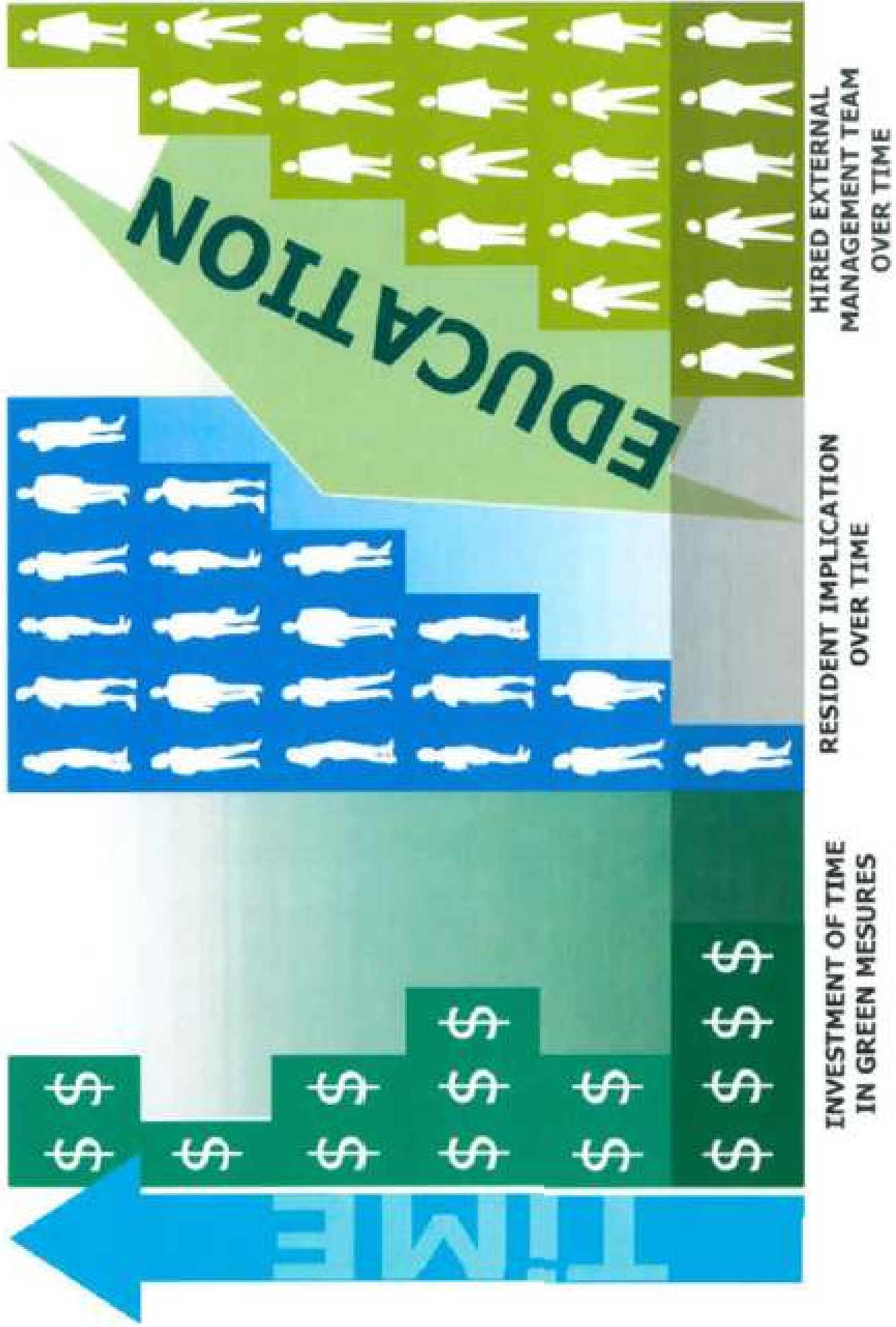


Rosemont

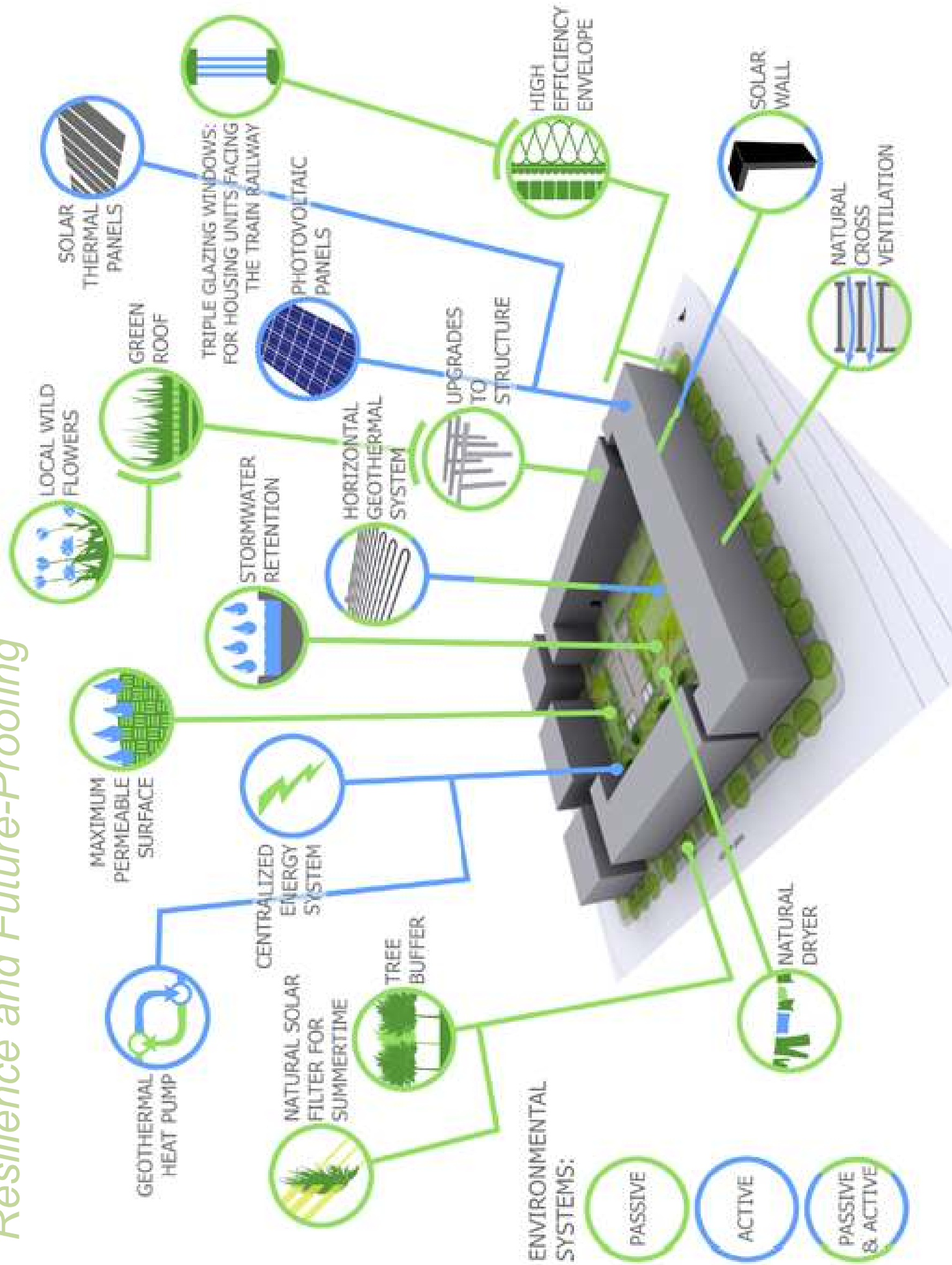
OBNL UN TOIT POUR TOUS 60 logements
COOP LE COTEAU VERT 95 logements
Site des anciens ateliers municipaux de Rosemont - La Petite-Patrie



THE PROJECT **LONG TERM SUCCESS** IS BASED ON **RESIDENT IMPLICATION** INCREASING OVER TIME AS THEY APPROPRIATE AND GUIDE THE PROJECT'S DIRECTION AND DESTINY.



Resilience and Future-Proofing





Ateliers d'habitation saine à Rosemont, Montréal

photo Nikkol Rot Holcim Foundation

**ON SITE ENERGY
PRODUCTION**

**RENEWABLE
ENERGY
SYSTEMS FOR
HOT WATER**

92%

**RENEWABLE
ENERGY
SYSTEMS FOR
HEATING**

60%

GREY WATER

42%

**UPGRADED
BASE PROJECT**

36%

BASE PROJECT

0%



LEGEND

CIRCULATION PATH
UN TOIT POUR TOUS / COTEAU VERT
PLAYGROUND / PARKING
COMMUNITY PARK
COMMON AND FAMILY GARDENS

BY CHANGING THE ZONING BY-LAW, THE PROJECT IS ABLE TO HAVE A SIGNIFICANT, GREEN, CENTRAL COMMUNITY SPACE

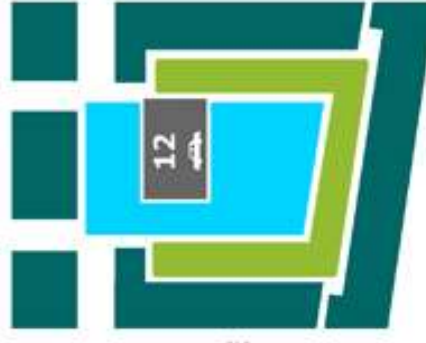
NUMBER OF PARKING SPOTS NEGOTIATED FOR THIS PILOT PROJECT =

12

2 SPOTS ARE FOR REDUCED MOBILITY VEHICLES AND THE OTHER 10 SPOTS ARE RESERVED FOR "COMMUN-AUTO", A SHARED CAR SERVICE

TOTAL OF 155 RESIDENTIAL UNITS

TYPICAL RATE FOR MONTRÉAL ZONING = 0,5 TO 1 CAR PER RESIDENTIAL UNIT (78 TO 155 PARKING SPACES) WHICH WOULD HAVE ELIMINATED ANY COMMUNITY SPACE FOR THE PROJECT





Ateliers d'habitation saine à Rosemont, Montréal

photo Nikkol Rot Holcim Foundation

Avenue De Chateaubriand

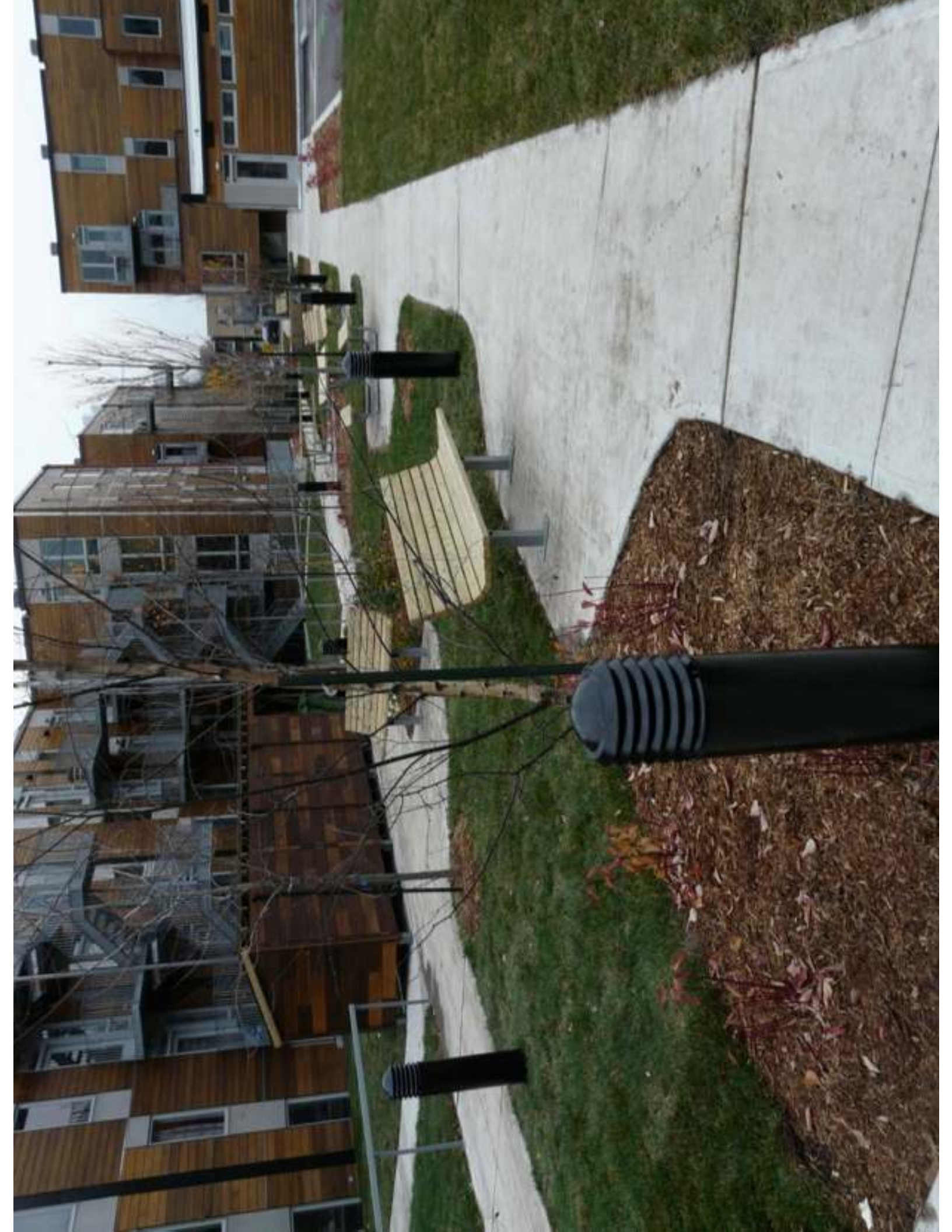
Rue des Ateliers

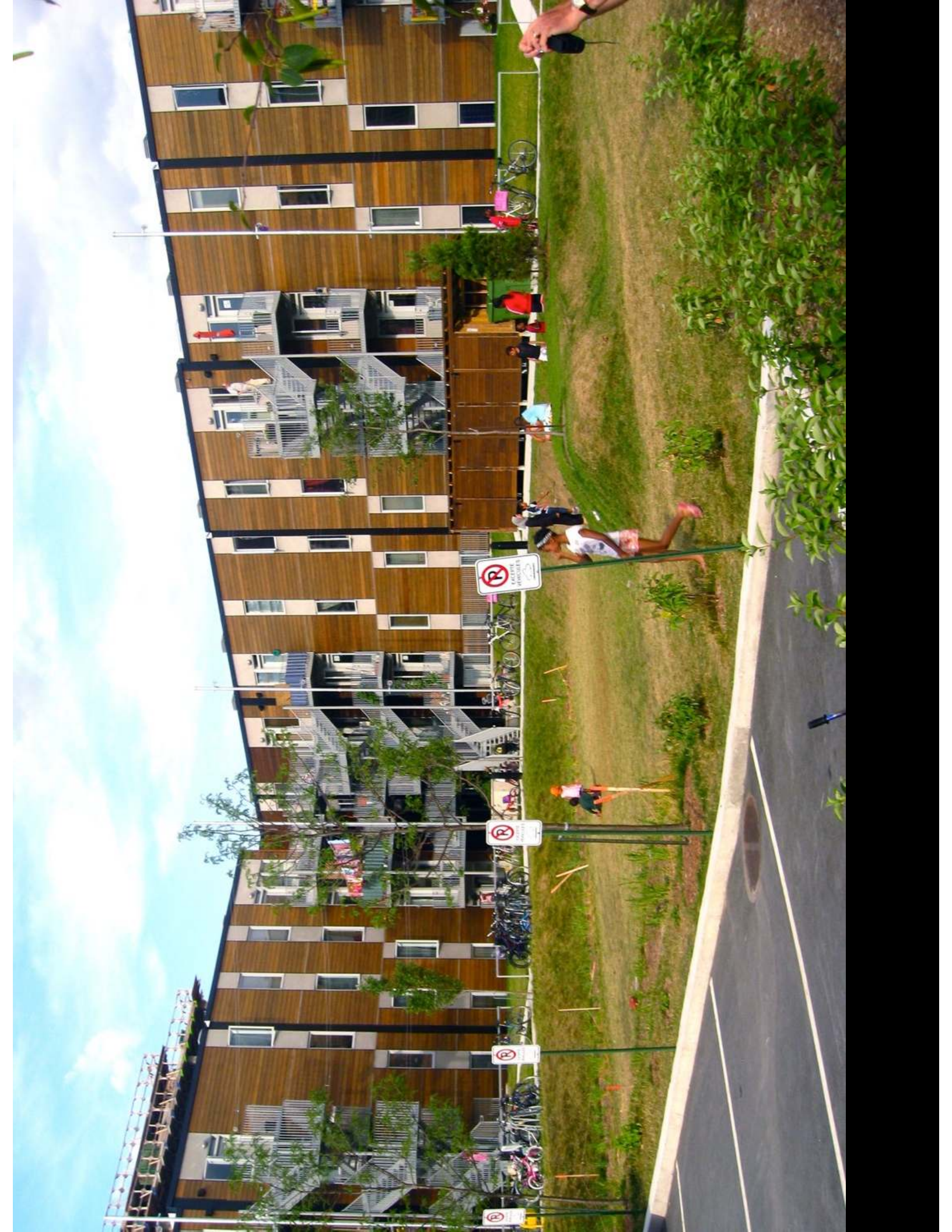


Rue Saint-Vallier

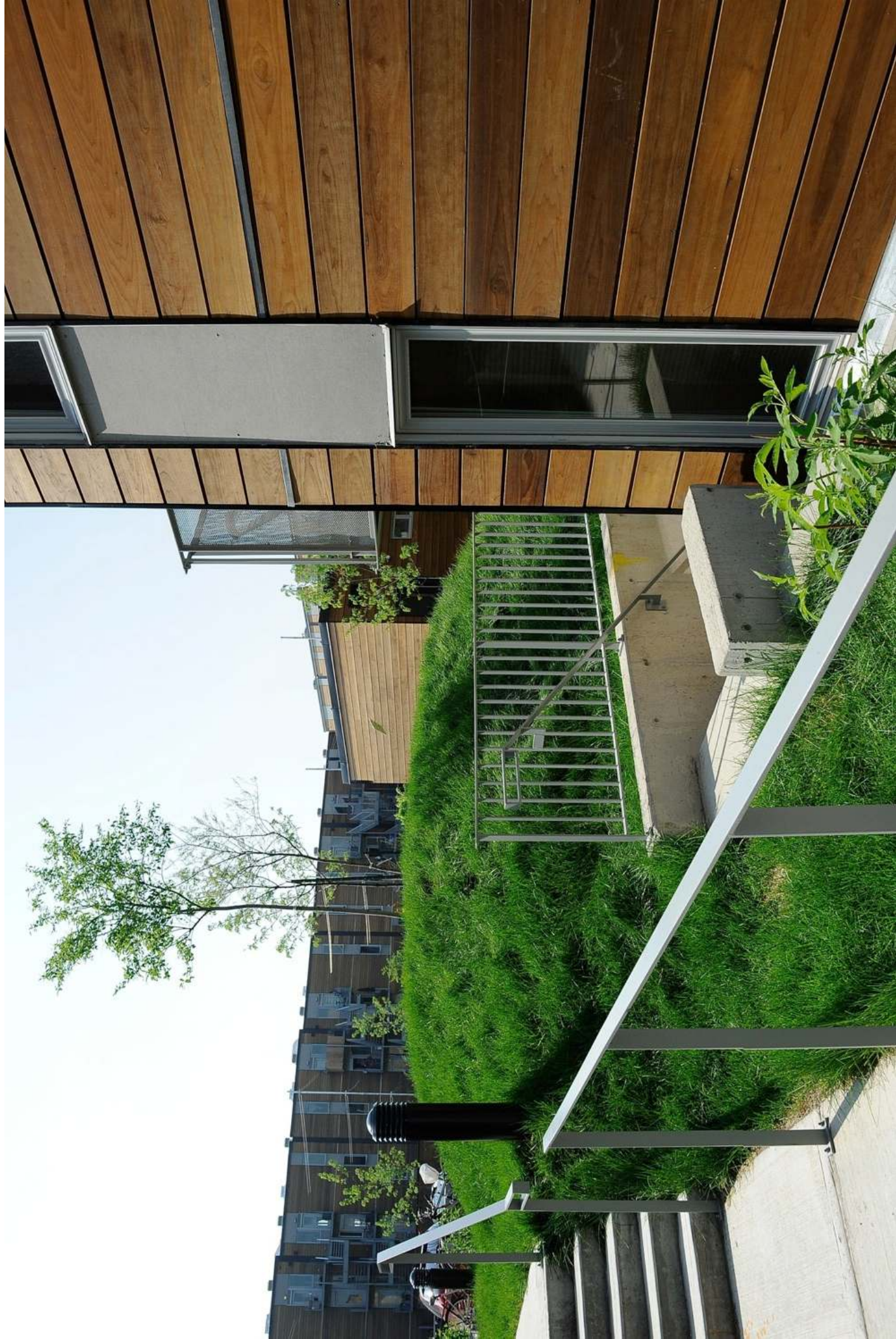
Rue Des Carrières





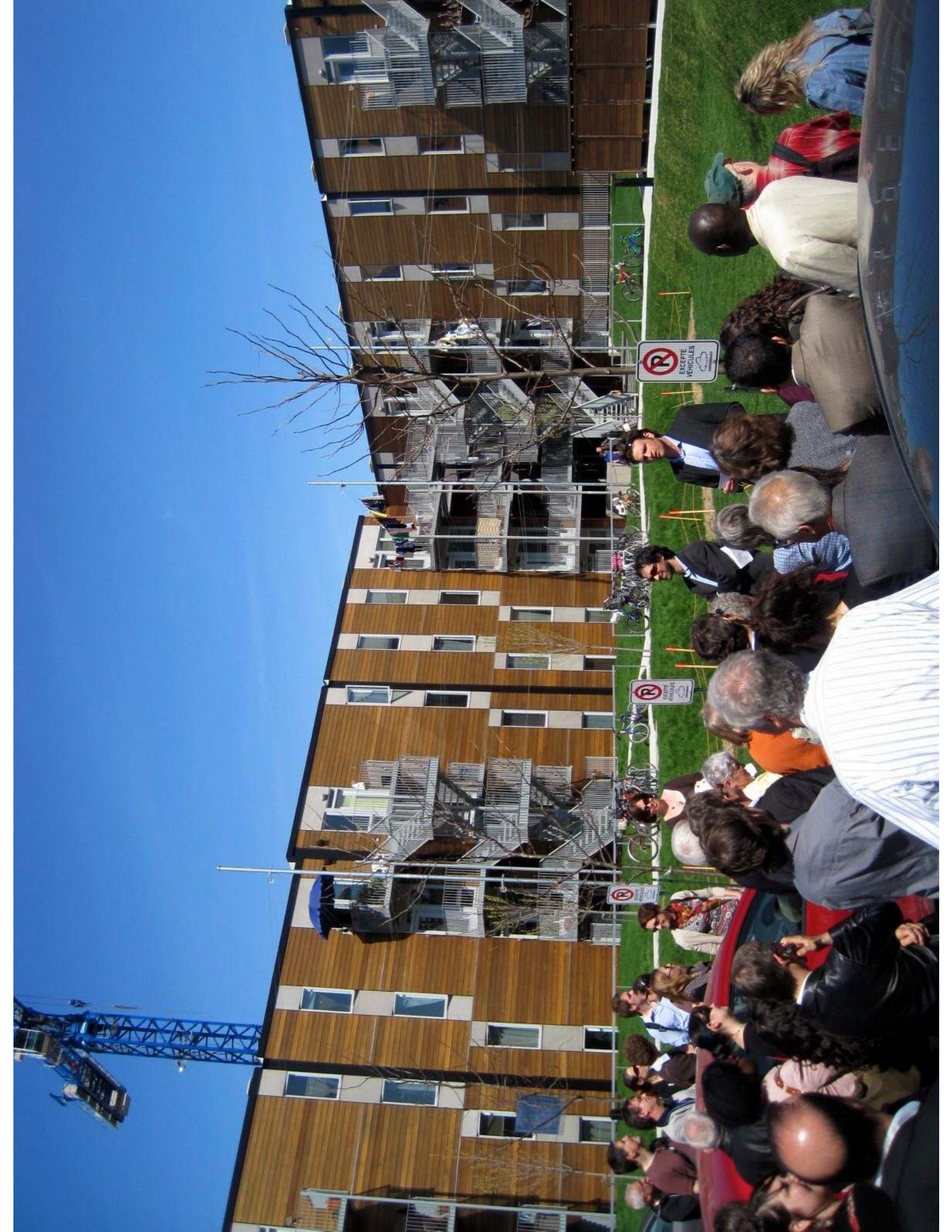






Ateliers d'habitation saine à Rosemont, Montréal

photo Nikkol Rot Holcim Foundation



Community Partnerships

benefit

city-wide benefit

neighbourhood benefit

GEBF community benefit

80%

savings to residents

re-investment in infrastructure

maintenance cost

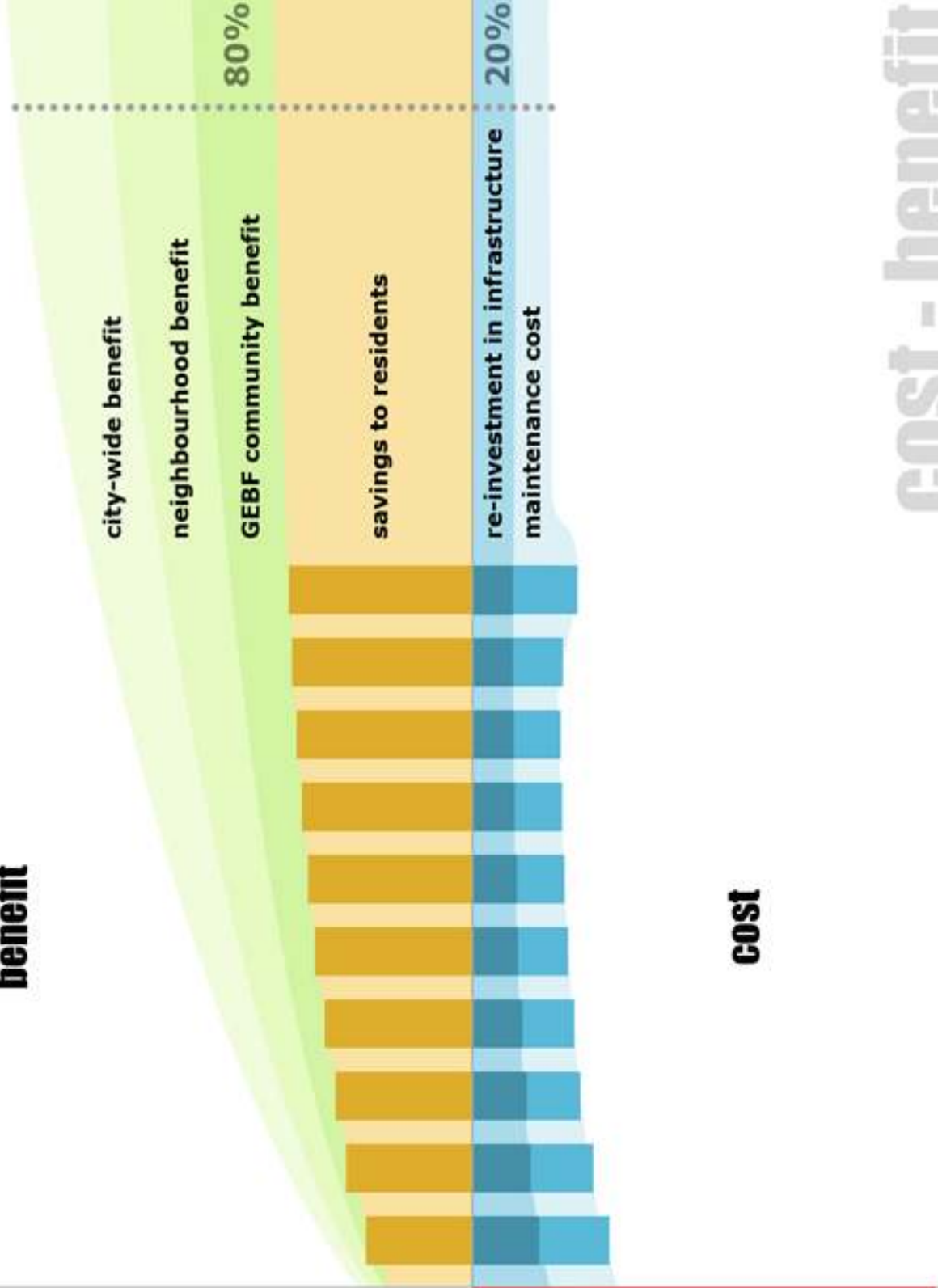
20%

COST

time

capital cost

COST - benefit



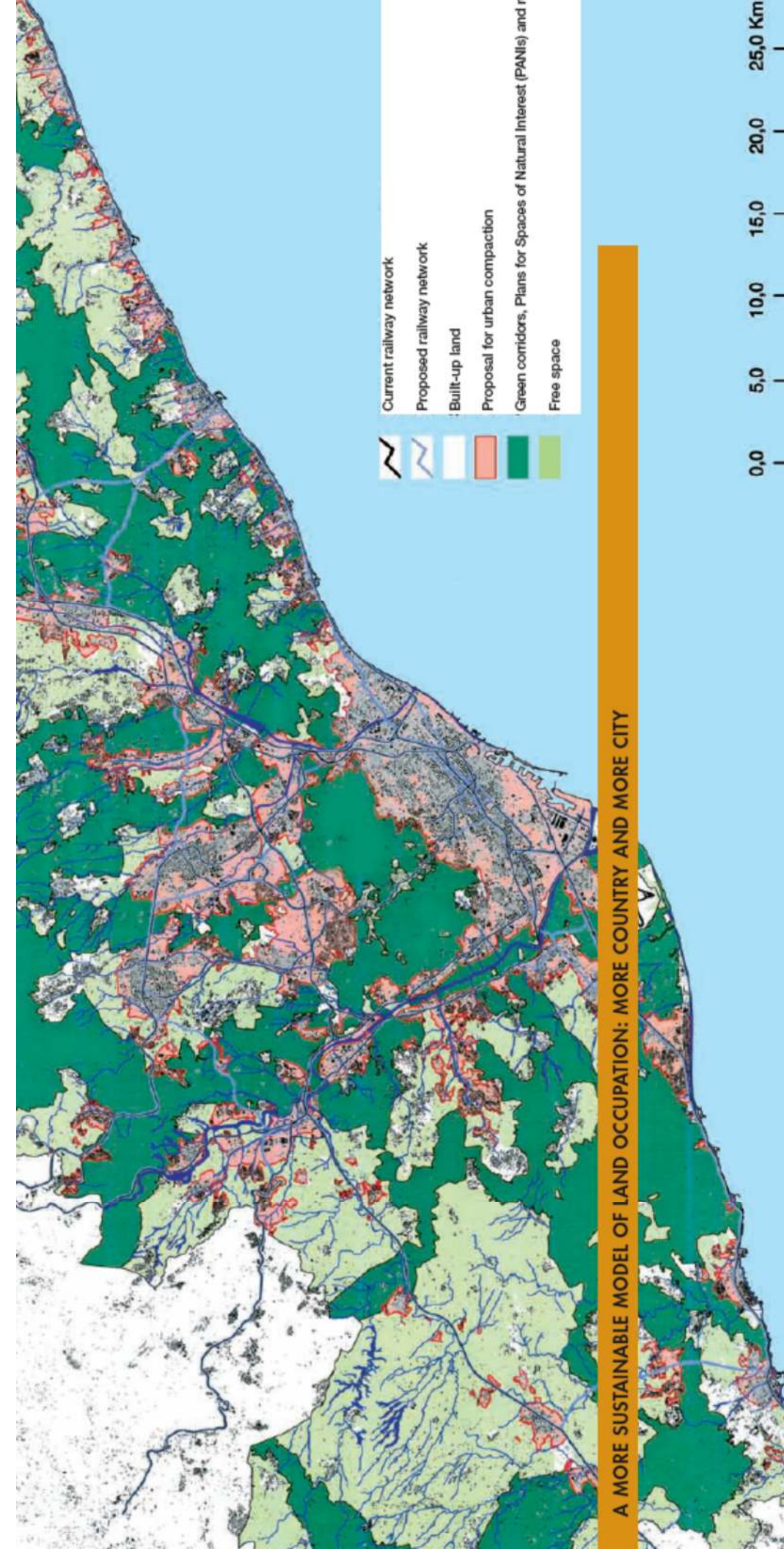
**URBAN SPRAWL REACHING INTO THE SUBURBAN AND RURAL CONTEXTS
TECHNOLOGY ALONE WILL NOT SOLVE THE LARGE SCALE CHALLENGE.**



Drake Landing Solar Community, Alberta



Image : Phoenix, Arizona : book « Drosscape »



The formal solutions adopted in the compact city, both in its public spaces and in its buildings, allow a separation to be made between the city and the country; this is not possible in the diffuse city, which is configured as an immense suburb.

Salvador Rueda, Director of the Urban Ecology Agency of Barcelona





PETITE RIVIÈRE REGENERATIVE PLAN

RESTORE, CONNECT, SIMPLIFY...THRIVE