

Investigating 15 minute Cities

Using Kamloops BC as an Example

Disclaimer

- Some of this information may be wrong and its definitely incomplete
- Attempt to stick to the facts and show what is known to be happening for sure, and what could happen, or how these policies could be abused



Research Held Online

- All of this information and more will be online for public access at:

<https://www.getawake.ca/community/smart-cities/>



- Home of citizen research

How this is going to go

Give brief background on where these policies are coming from

Link to programs and information

Talk about Climate Action programs, and the Climate Charter

Kamloops Community Climate Action Plan, how it related to the Official Community Plan

Smart City & 5G Intro

Conclusions

Strategies to keep benefits and retain personal freedoms

Why do we suck at explaining and understanding this?

- Complicated and segmented on purpose
- There's a logical reason for everything
- Most of the changes are highly regarded by the public
- View from 30,000 ft
- “Teaspoon of sugar with a drop of Cyanide”

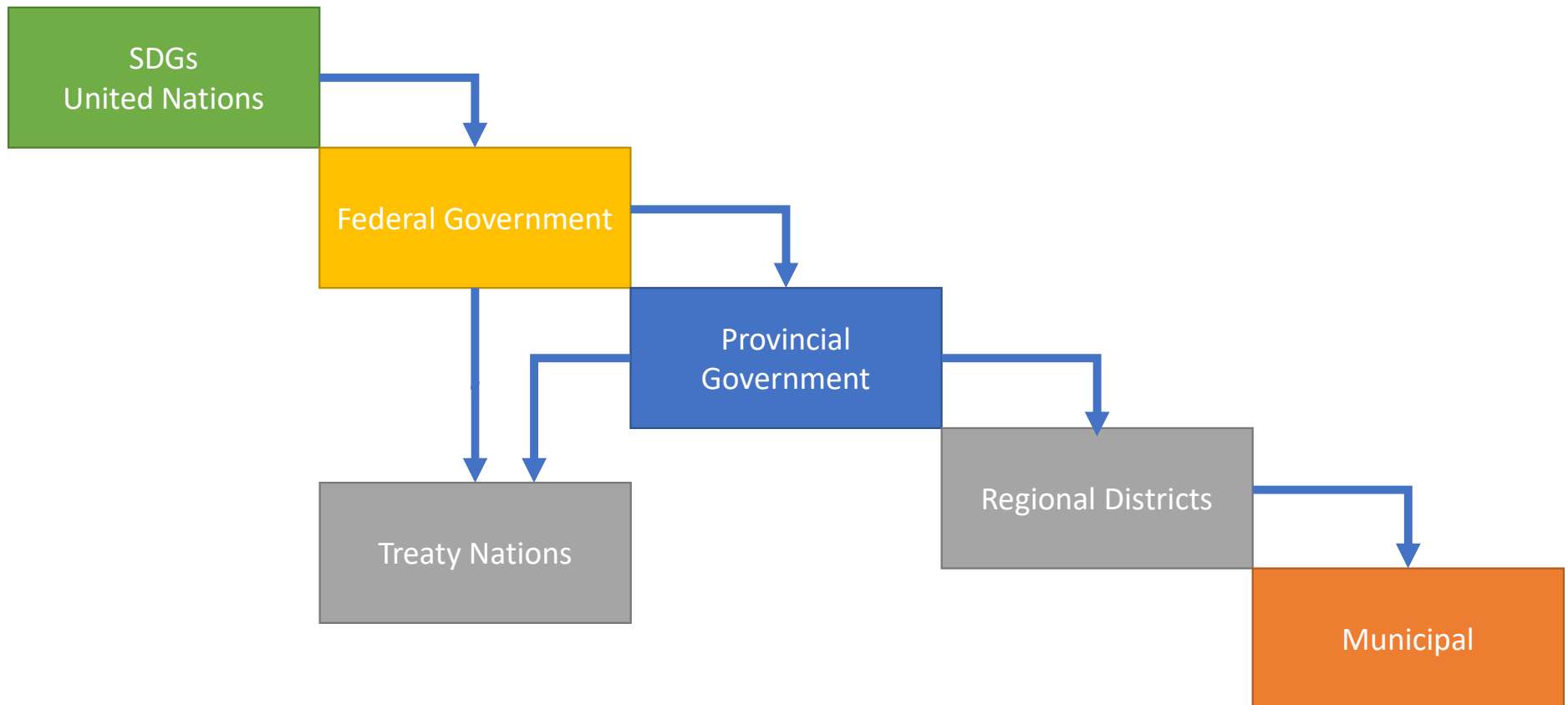


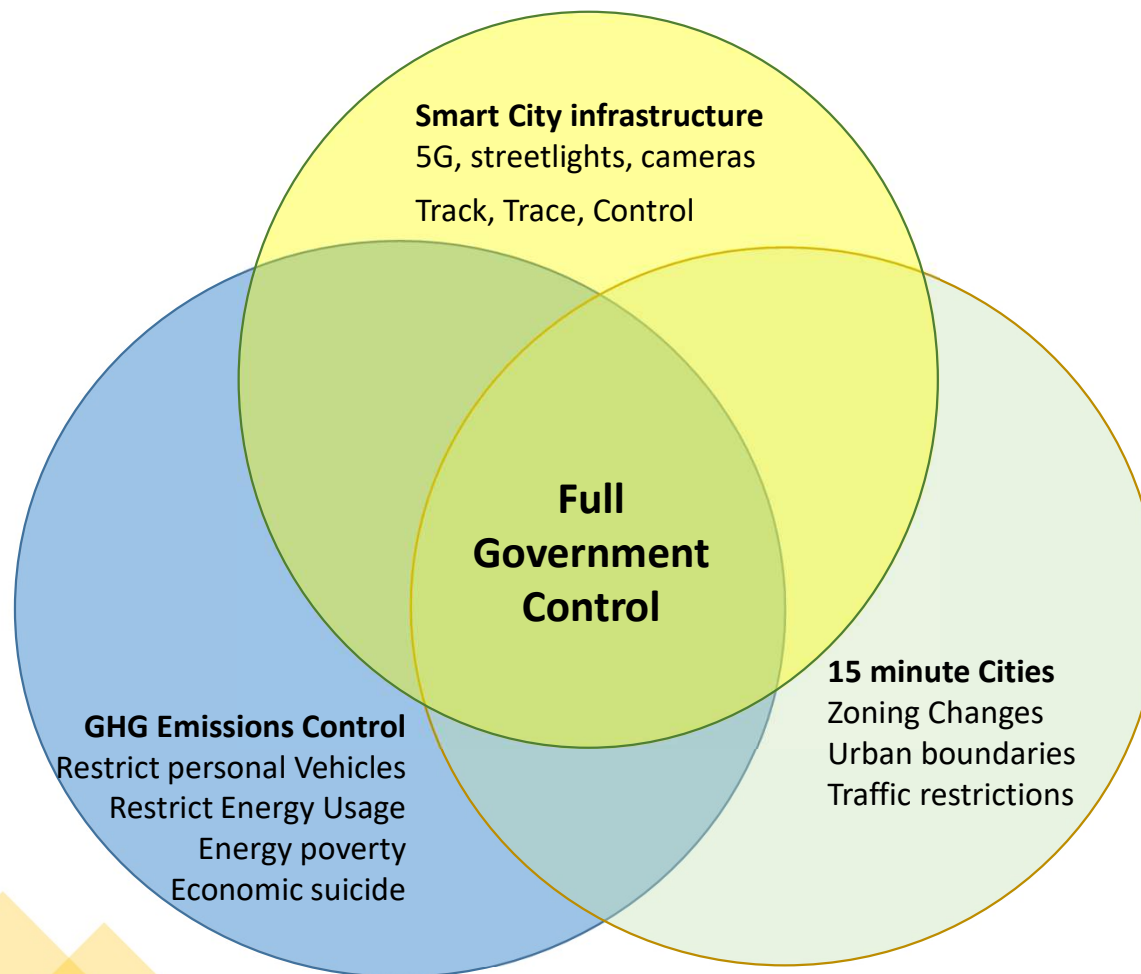
United Nations SDGs (The 2030 Agenda)

- <https://sdgs.un.org/goals>
- 17 Goals which sound good in theory, but will ultimately result in people giving up their freedom to central government control
- **Why can't we be sustainable without communism?**



Policy & Incentive Structure for BC





Also coming:

- CBDCs
- Digital ID

Duncan, BC OCP

POLICIES

1. The City adopts the 17 *United Nations Sustainable Development Goals* as a framework for overarching community sustainability and acknowledging the City's global responsibilities.
2. To work towards creating a sustainable city and community, the City expects all development to include sustainable development features, including (but not limited to):
 - reduction of greenhouse gas (GHG) emissions;
 - reduction of energy consumption and support for clean, renewable energy;
 - reduction of water consumption;
 - reduction of impact on existing infrastructure and City services;
 - prioritization of low emissions transportation (transit, active, electric vehicles);
 - prioritization of native, drought-tolerant plant species;
 - incorporation of place-making elements and contributions to the public realm;
 - designed to be universally accessible and safe;
 - designed to integrate with the adjacent public realm;
 - designed to conserve and enhance biodiversity;
 - designed to incorporate leisure and recreation opportunities; and
 - designed to enhance the aesthetic qualities and character of Duncan.



BC Climate Action



- **Clean BC**

- Sets out the targets and roadmap for radical changes to British Columbia
- <https://cleanbc.gov.bc.ca/>
- Clean BC Road Map 2030: https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc_roadmap_2030.pdf
- Climate Preparedness Strategy: <https://www2.gov.bc.ca/assets/gov/environment/climate-change/adaptation/cpas.pdf>

- **BC Climate Charter**

- Pledge your non legally binding allegiance to anthropogenic climate change
- Municipalities, Regional Districts can both sign
- https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/planning-land-use/bc_climate_action_charter.pdf
- Been around since 2007

- **Climate Emergency Declaration (not in Kamloops)**

Changes to BC Legislation

- **Zero Carbon Step Code:**

- Series of steps in BC building code requires higher efficiency and reduced GHG
- Target zero emissions from new builds after 2030 (no gas, no wood)

- https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/construction-industry/building-codes-and-standards/bulletins/20_better_ee_zcsc.pdf

Initially, the Zero Carbon Step Code requirements will be voluntary. The CleanBC Roadmap to 2030 commits to requiring increasingly stringent emission requirements for new buildings in 2024 and 2027. In 2030 the BCBC will require all new buildings to be zero carbon.

- **NDP Government wants ZERO gasoline vehicle sales by 2035**

- **Zero-Emission Vehicles Act**

- It will be ILLEGAL to sell vehicles with emissions after 2040
- <https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/19029>

BC Legislation on Climate Action Registry

<https://www2.gov.bc.ca/gov/content/environment/climate-change/planning-and-action/legislation>

[Carbon Tax Act \(gov.bc.ca\)](#)

[Climate Change Accountability Act \(gov.bc.ca\)](#)

Environmental Management Act

Greenhouse gas Industrial reporting and control Act

Oil and Gas activities act

[Zero-Emission Vehicles Act - Province of British Columbia \(gov.bc.ca\)](#)

[Greenhouse Gas Reduction \(Renewable and Low Carbon Fuel Requirements\) Act \(gov.bc.ca\)](#)

[Clean Energy Act \(gov.bc.ca\)](#)

[Energy Efficiency Act \(justice.gc.ca\)](#)

[Bill 27 – 2008: Local Government \(Green Communities\) Statutes Amendment Act, 2008](#)

[COMING SOON \(Clean Transportation Action Plan\)](#)

Zero Emission Vehicles Act

Provincial targets

7 The following targets are established for the purpose of reducing greenhouse gas emissions in British Columbia:

- (a) in 2025 and in each subsequent year, at least 10% of all new light-duty motor vehicles sold or leased in British Columbia must be zero-emission vehicles;
- (b) in 2030 and in each subsequent year, at least 30% of all new light-duty motor vehicles sold or leased in British Columbia must be zero-emission vehicles;
- (c) in 2040 and in each subsequent year, 100% of all new light-duty motor vehicles sold or leased in British Columbia must be zero-emission vehicles.

Provincial targets report

- 8 (1) On or before March 31 in each year, the director must publish a report respecting the zero-emission vehicle targets described in section 7 that meets the requirements set out in subsection (2).
- (2) A report under subsection (1) must
- (a) cover the immediately preceding calendar year,
 - (b) set out the following:
 - (i) the number of consumer sales of light-duty motor vehicles;
 - (ii) the number of consumer sales of light-duty motor vehicles that are zero-emission vehicles, and
 - (c) include any other prescribed information.

Prohibition in 2040 and subsequent years

- 9 On or after January 1, 2040, a person must not make a consumer sale of a light-duty motor vehicle that is not a zero-emission vehicle.

Climate Action Programs

- **LGCAP – Local Government Climate Action Program:**

- Started in 2022, replaced CARIP (Climate action revenue incentive program)
- Requires ideological allegiance to Climate Charter, GHG and financial reporting
- Access to funding for ‘Climate Action’ or Roadmap projects
- <https://www2.gov.bc.ca/gov/content/environment/climate-change/local-governments/local-government-climate-action-program>
- LGCAP Presentation:
https://www2.gov.bc.ca/assets/gov/environment/climate-change/lg/lgcap/lg_climate_action_program_webinar_may_2022.pdf

- **Provincial Climate Change Adaptation Program (CCAP)**

- <https://www.bcclimatechangeadaptation.ca/>
- Do not confuse with the Community Climate Action Plan (CCAP)

Kamloops Chronology

**THIS
STARTED
IN 2007**

2007: Kamloops signs Climate Charter adopting officially adopting the climate cult

2008: LOCAL GOVERNMENT (GREEN COMMUNITIES) STATUTES AMENDMENT ACT:
Requires municipalities to include GHG reporting and planning in the OCPs

2010: Kamloops releases 'Sustainable Kamloops' plan mirroring the UN SDGs

2018: Kamloops releases updated OCP including GHG reductions, commitments to
reduce transit, urban densification

2021: Kamloops releases CCAP Community Climate Action Plan

Local Government (Green Communities) Statutes Amendment Act (2008)

20 Section 877 is amended by adding the following subsection:

(3) An official community **plan** must include targets for the reduction of greenhouse gas emissions in the area covered by the **plan**, and policies and actions of the local government proposed with respect to achieving those targets.

SUSTAINABLE KAMLOOPS

In 2007, the City of Kamloops signed on to the *British Columbia Climate Action Charter*—an agreement between the Province, the Union of BC Municipalities (UBCM), and local governments. Signatories to the charter agreed to measure and report on GHG emissions, with the goal to reduce emissions and become carbon neutral by 2012. With the adoption of the *Local Government (Green Communities) Statutes Amendment Act* in 2008, local governments are now required to include targets, policies, and actions to reduce GHG emissions in their OCPs.

Kamloops Specific

- **LGCAP** – Local Government Climate Action Plan (TNRD)
- **OCP** – Official Community Plan aka “**KAMPLAN**”
 - OCP Implementation Strategy
- **TMP** – Transport Master Plan
- **CCAP** – Community Climate Action Plan
- **Future Transit Plan**
- **Future Transit Action Plan**
- **EV and Ebike Strategy**
- **Kamloops Sustainability Plan** (2010 – SKP) Kamloops version of the SDGs

Search Words in Documents

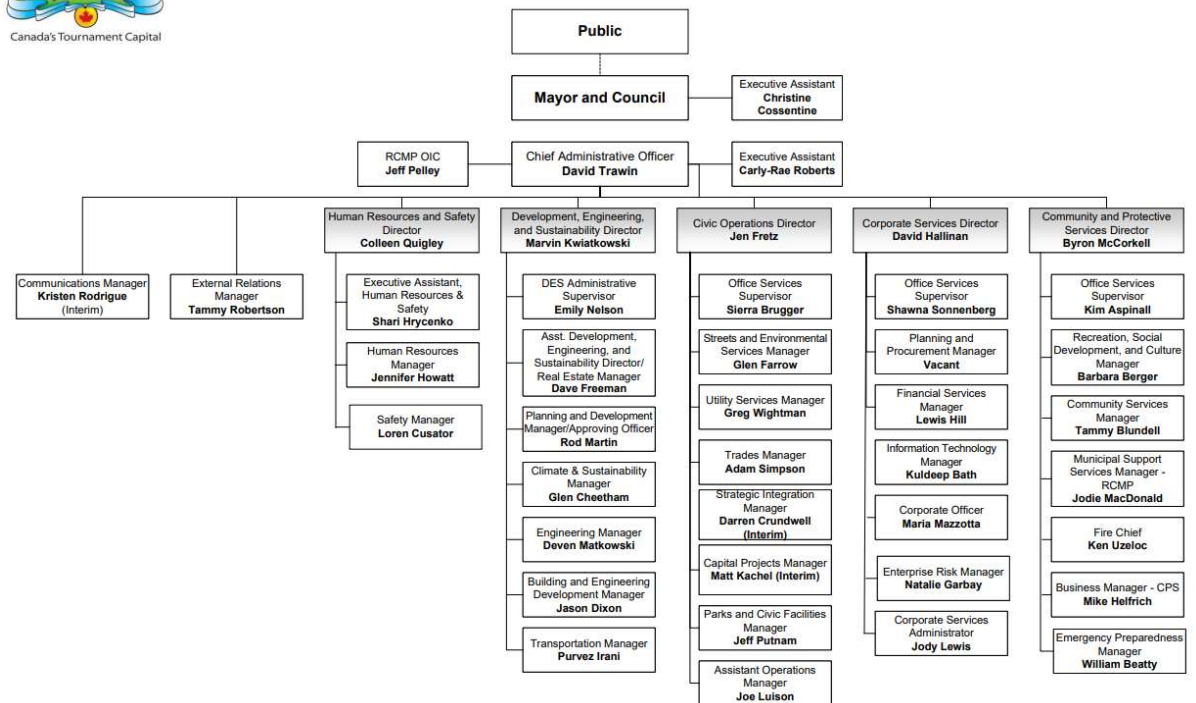
- Reduce, Restrict, Decrease
- Traffic Calming
- Sustainable
- GHG
- Emission
- Implementation
- Growth Boundary
- Urban Densification
- Mixed-use centres
- Compact neighbourhoods
- Complete Streets, Complete Neighbourhoods
- Community GHG Action Strategy
- Thin Streets aka diet streets
- MaaS – Movement as a Service

Talk to the city!

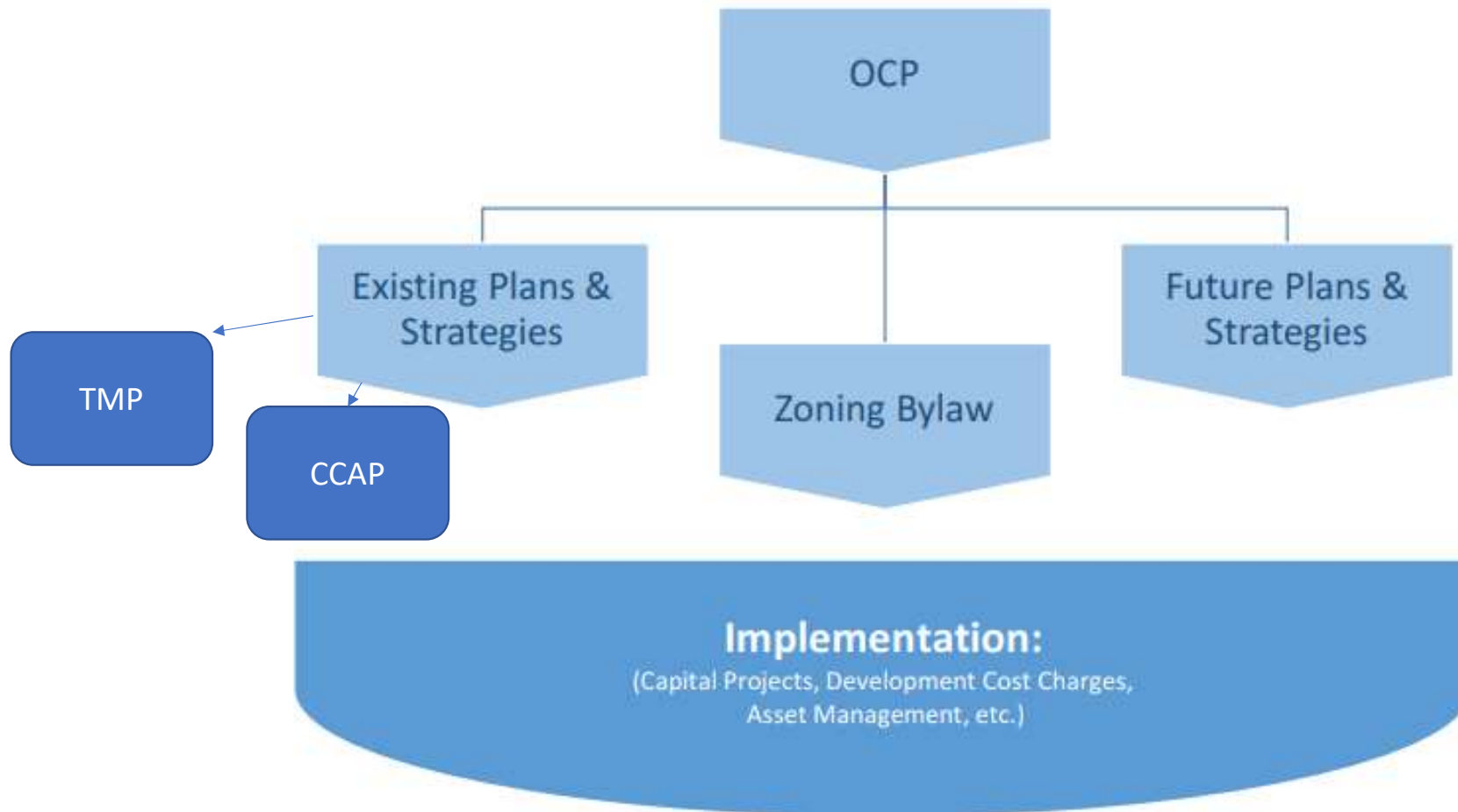
- Find the ORG Chart
- Look up who's in charge of each department and go talk to them
- Visit and ask questions



City of Kamloops Management



OCP: The plan to rule them all



Transportation and Mobility

This section links to the following Community Values:

- *improve transportation and connectivity*
- *optimize existing municipal infrastructure*
- *promote environmental stewardship*
- *support urban densification*

The way people move around Kamloops and the movement of goods and emergency services contribute greatly to how the city grows and how residents connect to the community. A well-functioning transportation network accommodates daily commuting and lifestyle needs by providing a range of safe, efficient, affordable, and accessible transportation options for people of all ages and abilities. It also allows for efficient movement of goods and emergency services that support the social and economic well-being of the community.

Transportation can have a significant impact on the environment through the consumption of land for roads, air pollution, and GHGs from vehicle emissions. Mobility patterns will evolve with changes in demographics as Kamloops residents adapt to growth, respond to traffic congestion, and aim to reduce GHG emissions.

Adapting to growth will require increased emphasis on more sustainable forms of mobility such as walking, bicycling, transit, and carpooling; supportive infrastructure such as sidewalks and bike lanes; and policies that prioritize *complete streets* and *complete neighbourhoods*.

Land use and transportation are integrally connected, and the key to a well-functioning transportation network is providing residents with a variety of transportation options.

The transportation policies in the OCP are consistent with the underlying principles and directions in the *Transportation Master Plan*, which is the City's guiding document for planning and implementing transportation improvements over the next 20 years.



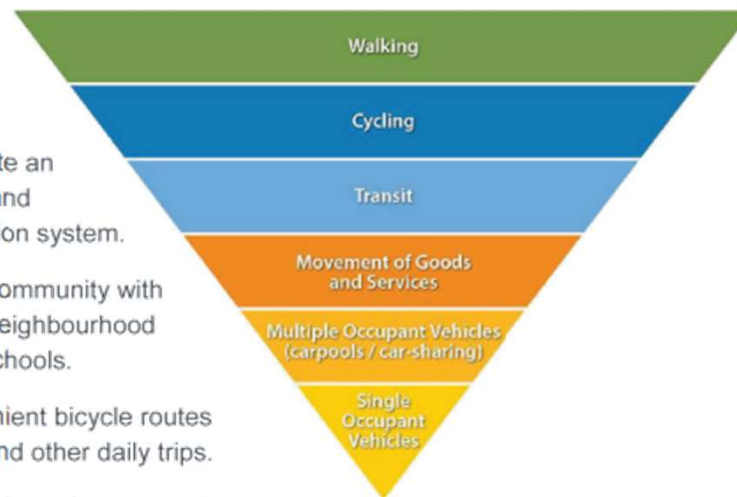
TMP – Transportation Master Plan

2.3 TRANSPORTATION GOALS

The vision of transportation in Kamloops will be achieved by implementing strategic directions under the following six goals and their supporting objectives. The TMP goals are aligned with the transportation goals within the OCP:

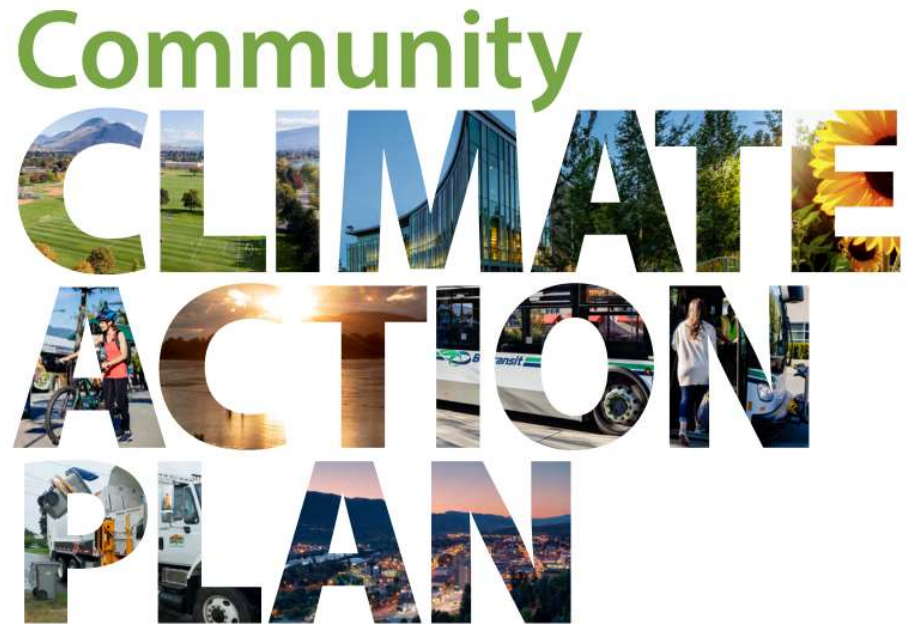
- ▶ **Sustainable Transportation** – Create an environmentally, socially, culturally, and economically sustainable transportation system.
- ▶ **Walking** – Be a pedestrian-friendly community with networks that integrate with transit, neighbourhood amenities, parks, open space, and schools.
- ▶ **Bicycling** – Provide safe and convenient bicycle routes suitable for commuting, recreating, and other daily trips.
- ▶ **Transit** – Foster an efficient, affordable, safe, and accessible transit system that is an attractive alternative to the private vehicle and integrates with other transportation modes.
- ▶ **Goods and Emergency Services** – Maintain and enhance the efficient movement of goods and emergency services.
- ▶ **Integrated Transportation System** – Sustain the responsible planning and development of roads and transportation connections to facilitate the efficient movement of people.

Figure 2.1: City of Kamloops Hierarchy of Transportation Modes



What is the Community Climate Action Plan?

- The CCAP was created with help from consultants as a reactionary measure to prevent global climate change
- It was authorized by a city council motion in 2019 (although the work on it started previously and ground work was laid out by Sustainable Kamloops Plan)
- It lays out 8 'Big Moves' which are ambitious strategies to remake Kamloops and the economy to meet government targets



OBJECTIVES & TARGETS



Community **CLIMATE ACTION PLAN**

The Kamloops City Council Resolution that was adopted on June 25, 2019, stated:

Therefore be it resolved that Kamloops City Council:

- a) set a strategic goal for reducing community greenhouse gas emissions that is in line with Kamloops' portion of global efforts to keep global temperature rise to 1.5°C
- b) mandate staff, through the work on the Community Climate Action Plan, to outline a series of actions that would reduce greenhouse gas emissions in Kamloops to align with the global efforts to keep global temperature rise to 1.5°C

In response, 8 Big Moves and 24 strategies were created, which have the potential to reduce community GHG emissions at a pace consistent with Council's resolution. Further, a set of short-, medium-, and long-term actions to implement the Community Climate Action Plan's (CCAP's) Big Moves were identified along with interim and long-term targets to help focus local commitment towards clear and measurable outcomes.

8 BIG MOVES

24 STRATEGIES

66 ACTIONS



CO-BENEFITS



Improved
Public Health



Enhanced
Livability



Improved
Air Quality

BIG MOVE 2:

CAR-LIGHT COMMUNITY

In 2017, 66% of Kamloops' greenhouse gas (GHG) emissions came from transportation, with the majority (49%) coming from passenger vehicles.

Reaching the CCAP targets will require a significant shift to transit, cycling, walking, car sharing, and carpooling. While cars can be convenient, they have many hidden costs, from air pollution and vehicle collision mortalities to the space required and high cost to build and maintain roadways and parking amenities. By contrast, active modes of transportation (walking and cycling) have a net benefit to society.

This Big Move lays out the actions to become a car-light community, where people of all ages and abilities can safely and conveniently get around without needing to own a vehicle. In the future, most Kamloops residents will live close to their daily needs, with reliable and frequent transit service, protected bike lanes, and sidewalks to connect all key destinations. E-bikes are already helping to displace some trips that are made using larger

vehicles due to their efficiency, assistance with hills, and in the case of cargo E-bikes, storage capacity. Micro-mobility devices, such as E-scooters, are also emerging as potential transportation solutions that can be easily complemented by transit for longer distances (i.e. carried onto buses and used to get around at a destination). Programs and incentives will support the transition to sustainable transportation modes, and for those who need a car, carpooling and car sharing offer lower-carbon options, especially when zero-emissions vehicles (ZEVs) are used. With less private vehicle traffic, streets will be safer and some can be redesigned to prioritize socializing, active transportation, and green space. Owning and operating fewer vehicles increases household disposable income, while active transportation use also improves physical and mental health, lowers air pollution, reduces parking demand, and minimizes road maintenance costs.



TARGET

By 2050, 50% of trips in Kamloops are to be by active transportation and transit.

CURRENT & PROJECTED EMISSIONS

Key Emissions Sources in Kamloops

Understanding where our emissions are coming from is key for identifying emissions reductions opportunities. An inventory of GHG emissions was undertaken using data from internal sources and external sources such as BC Hydro, FortisBC, ICBBC, BC Transit, and Statistics Canada. While emissions come from a variety of GHGs (e.g. methane and nitrous oxide), they are reported in tonnes of carbon dioxide equivalent (tCO₂e), which is a standard measure that converts any non-CO₂ GHGs to an equivalent measure based on their global warming potential.



Transportation:

gas and diesel fuelled vehicles*



Buildings:

natural gas space and water heating*

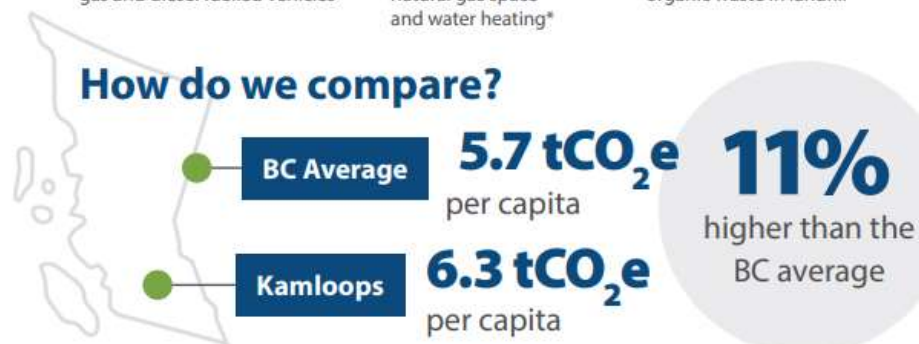


Solid Waste:

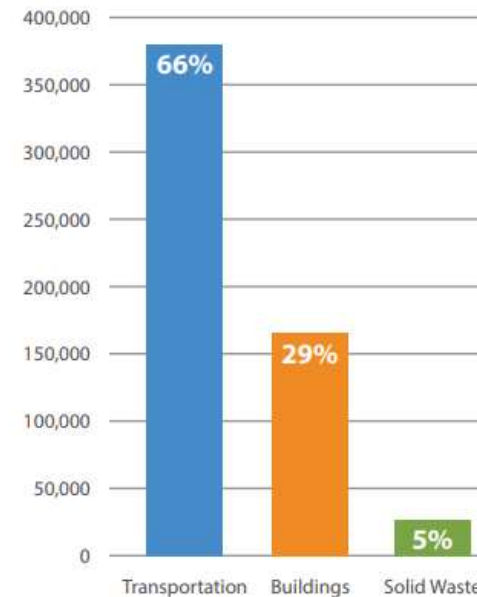
organic waste in landfill*

*primary sources

How do we compare?



2017 Greenhouse Gas Emissions (tCO₂e) per Sector



Registered vehicles per household in 2019

1.5 Canadian Average
1.9 in Kamloops

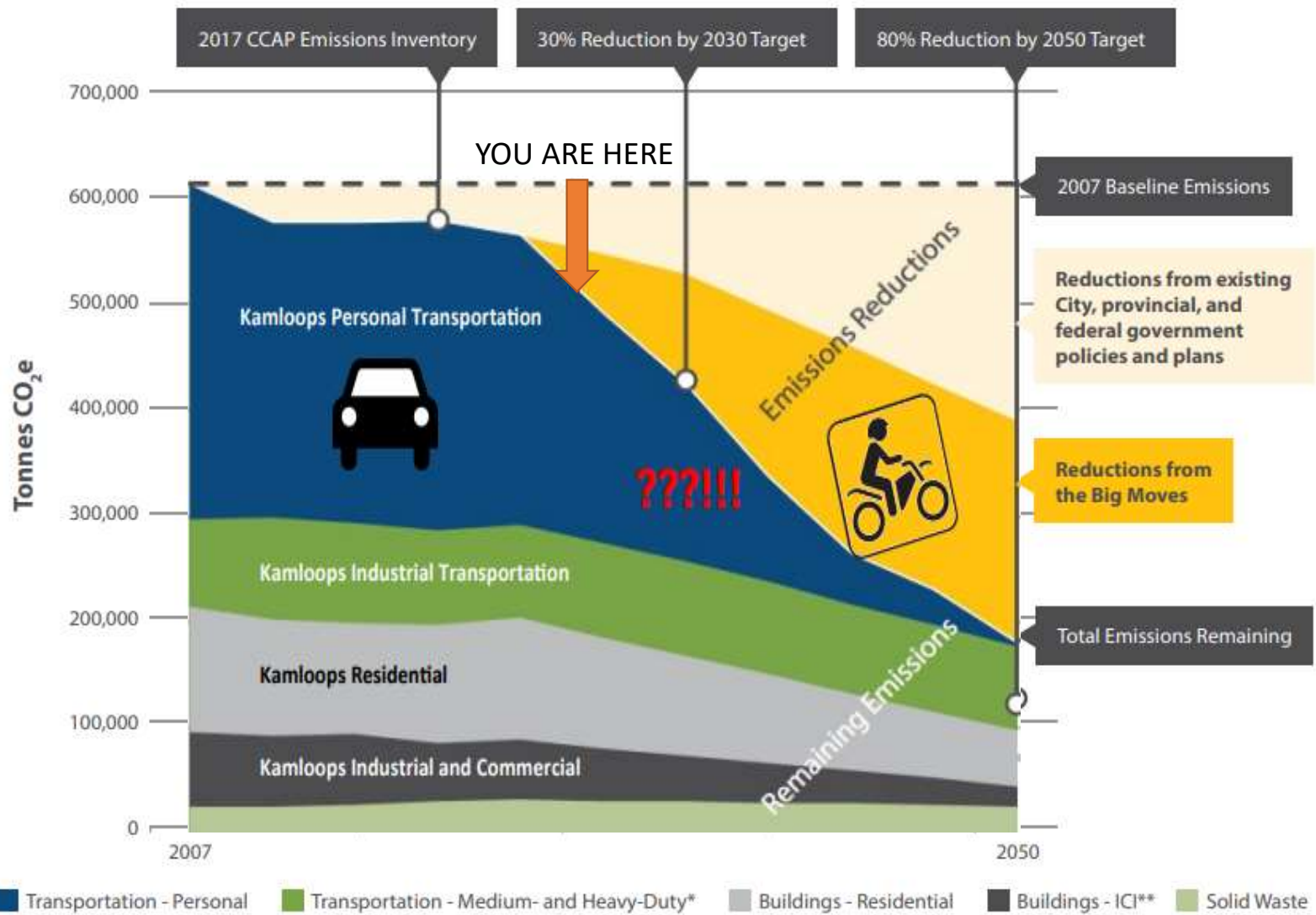


3 main sources of GHG Reduction

1. Personal Transportation
2. New development densification and zone changing (15 min cities)
 - Which also reduces need for vehicles and will reduce travel
3. Efficiency requirements, and ZERO EMISSION requirements in the building code

All three of these sources, and the measures to control them affect the public first and foremost.





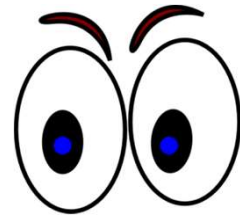
Its all just pie in the sky... Right? 🤔

- The people behind this at the city level believe this will be implemented and the targets reflect what they think they can achieve
- City Employee:
“The changes will be on par with World War 2 and the Covid Lockdowns”
- *Is this even possible by switching to all EVs?*



Whos Responsible for BC Hydro?

- Ministry of Energy, Mines and Low Carbon Innovation
 - Read their latest report
 - [https://www.bcbudget.gov.bc.ca/Annual Reports/2021 2022/pdf/ministry/emli.pdf](https://www.bcbudget.gov.bc.ca/Annual%20Reports/2021%202022/pdf/ministry/emli.pdf)
- 2023 to 2026 Service Plan
 - <https://www.bcbudget.gov.bc.ca/2023/sp/pdf/ministry/emli.pdf>
- Ministers Mandate Letter:
 - [https://www2.gov.bc.ca/assets/gov/government/ministries-organizations/premier-cabinet-mlas/minister-letter/emli - osborne.pdf](https://www2.gov.bc.ca/assets/gov/government/ministries-organizations/premier-cabinet-mlas/minister-letter/emli_-_osborne.pdf)



*BC has included site C, now has 18,250 MW capacity for Generation:
<https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/provincial-territorial-energy-profiles/provincial-territorial-energy-profiles-british-columbia.html>

Energy Calculations

- <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2310006601&pickMembers%5B0%5D=1.11&cubeTimeFrame.startYear=2017&cubeTimeFrame.endYear=2021&referencePeriods=20170101%2C20210101>

| Geography | British Columbia ³ (map) | | | | |
|---|---|-----------|-----------|-----------|-----------|
| Type of fuel sales | 2017 | 2018 | 2019 | 2020 | 2021 |
| | Litres | | | | |
| Net sales of gasoline ⁴ | 4,935,834 | 4,789,165 | 4,822,252 | 4,344,971 | 4,699,080 |
| Gross sales of gasoline ⁵ | 5,182,517 | 5,024,318 | 5,060,063 | 4,571,720 | 4,928,709 |
| Net sales of diesel oil ⁴ | 1,910,156 | 1,963,507 | 1,819,262 | 1,850,987 | 2,086,759 |
| Net sales of liquefied petroleum gas ⁴ | 85,669 | 208,883 | 270,958 | 240,036 | 329,821 |

The NET number excludes forestry and farming etc

This table is in Liters (x1,000) so 2021 there were 4.7 Billion liters gasoline, and 2.08 billion liters of Diesel sold in BC

1 liter gas = 8.7kWh * 4.7billion L = 40.8 Terrawatts

1 liter diesel = 10.8kWh * 2.08billion L = 22.5 Terrawatts

Back of Napkin Calculations

- In 2019 BC hydro generated a total of 64 TWH (TerraWattHours)
<https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/provincial-territorial-energy-profiles/provincial-territorial-energy-profiles-british-columbia.html>
 - Switching BC to 0 emissions will double the needed electricity output from 63 to $(22+40) = 126$ TWH.
 - <https://www.youtube.com/watch?v=7E8pYLAOJyI>
 - EVs are said to be 50-70% efficient (Tank to Wheels), ICEVs are 20-50%
 - When you consider energy transport, all said they are equal (unless EV is running on renewable power from renewable grid)
-
- Note: BCs estimated capacity is $\sim 18,250$ MW * 8740 hrs per year = 159 TWH at 100% capacity with zero downtime not accounting for water levels, maintenance etc.

Well to Wheels & Tank to Wheels (EXTRA READING)

- Energy efficiency can be measured taking the fuel from the tank to the wheels (TTW), or it can also include the efficiency of producing the energy, transporting that energy (WTW)
- EVs are more efficient only when they have a high efficiency renewable grid source
- <https://www.researchgate.net/publication/344860096> Comparison of the Overall Energy Efficiency for Internal Combustion Engine Vehicles and Electric Vehicles

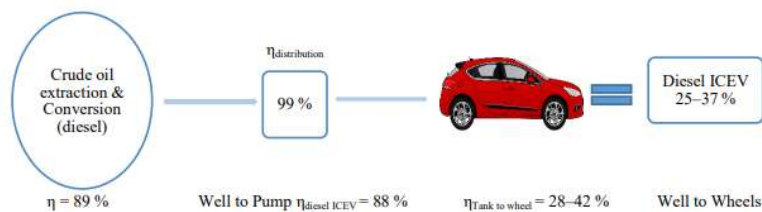
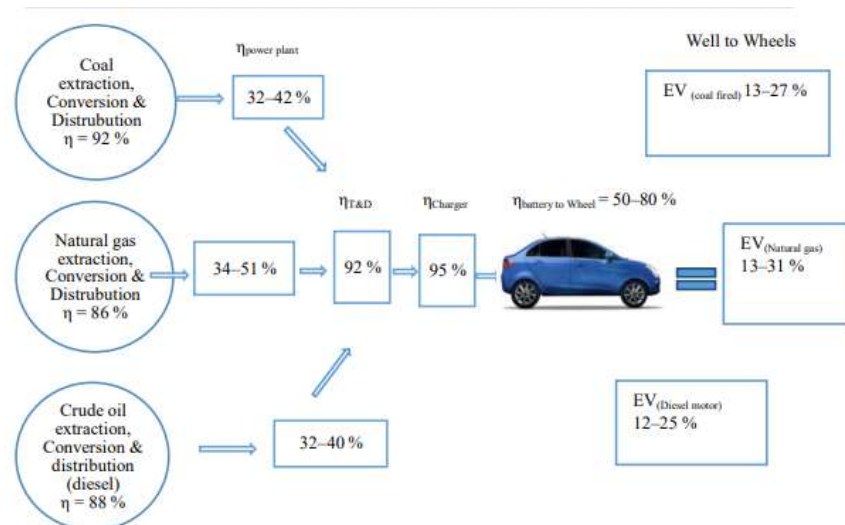
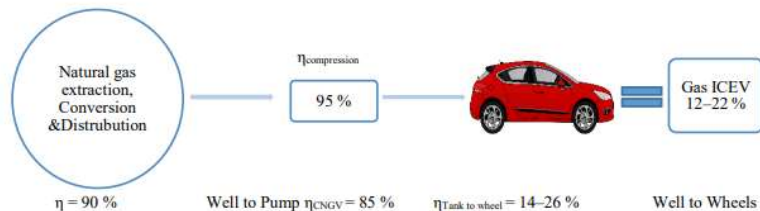
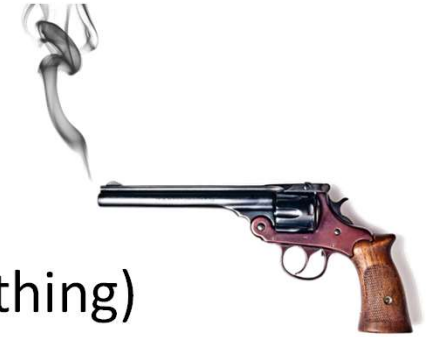


Fig. 2. WTW efficiency of diesel ICEV.



Victoria BC (Smart Mobility Plan)



- Stake holder Capitalism (its 2030 and you will own nothing) masquerading as environmentalism

PROJECT 1 – INTEGRATED MOBILITY AS A SERVICE (MAAS)

Mobility as a Service (MaaS) represents an innovative shift from a personal vehicle ownership model to mobility solutions that are consumed as a service. Bringing all available modes of transportation together into a single, centralized technology platform enables this shift into a new mobility future, particularly for the user. MaaS focuses on moving people, not vehicles, and is gaining traction globally.

2.1.2 PROJECT 2 – SMART TRIP PLANNING AND UNIVERSAL PAYMENT PLATFORM (STP)

While Project 1 is the platform to link people, communities, education and employment opportunities together through a broader range of mobility options, Project 2 is the tool to make those mobility services convenient—a critical element to improving multimodal adoption rates. Our trip planner is the critical technology interface between the end user and the MaaS platform. Project 2 will enable a user to plan, book and pay for travel through a single MaaS account. These core functions will be developed and available to all participating MaaS providers in order to establish a single, shared technology platform.

1A - Ten-Minute City

GOAL:

To support the integration of daily needs amenities in existing neighbourhood centres and, wherever possible, to concentrate housing near existing and proposed transit, cycling, and walking networks.

ECONOMIC CONSIDERATIONS:

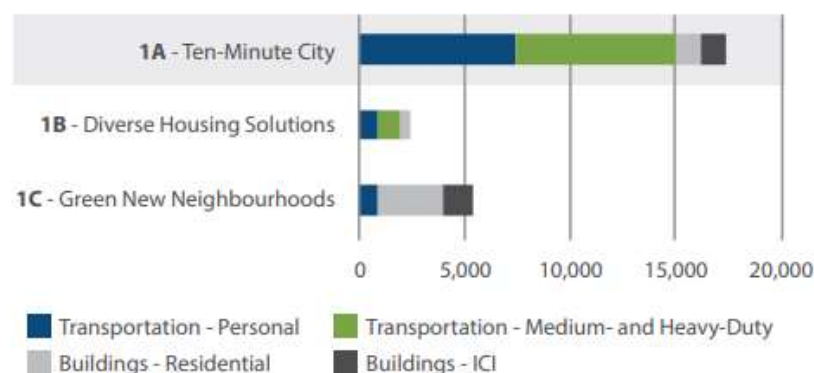
- Providing incentives for infill development is more equitable and reflective of service provision and infrastructure costs.¹ A shift from peripheral single-family development to higher-density urban housing results in relative reductions in City infrastructure and service costs.⁸ For instance, if multi-family units were to account for 40% of new construction (3,890 units) by 2050, this would result in City infrastructure and service cost savings of \$8.7 million per year.¹⁰
- Households in higher-density areas spend, on average, 25% less on transportation due to better access to transit and active transportation infrastructure. This represents a savings of \$3,600 per year in Kamloops, which increases disposable income and consumer spending.¹¹
- Increasing access to daily needs has the potential to reduce inequities in the community by improving walkability for all.
- Housing affordability provisions will be necessary to mitigate the impacts of gentrification on lower-income households.

ACTIONS:

- ❑ Identify priority areas to support infill projects that further increase housing density, mixed uses, and access to transit and active transportation infrastructure in existing neighbourhood centres.
- ❑ Increase incentives to promote infill development (e.g. revitalization tax exemptions and reduced development cost charges [DCCs]).
- ❑ Increase availability of affordable market housing options that also contribute to higher density (e.g. density bonus for rental-only multi-family buildings).

PROJECTED ANNUAL GHG REDUCTIONS BY 2050:

This level of emissions reductions relies on 90% of new development being infill.



17,400
tCO₂e
(High)

2C - Shared Streets



GOAL:

To create street space that is accessible to all ages and abilities, enhances pedestrian safety and comfort, and prioritizes active transportation.

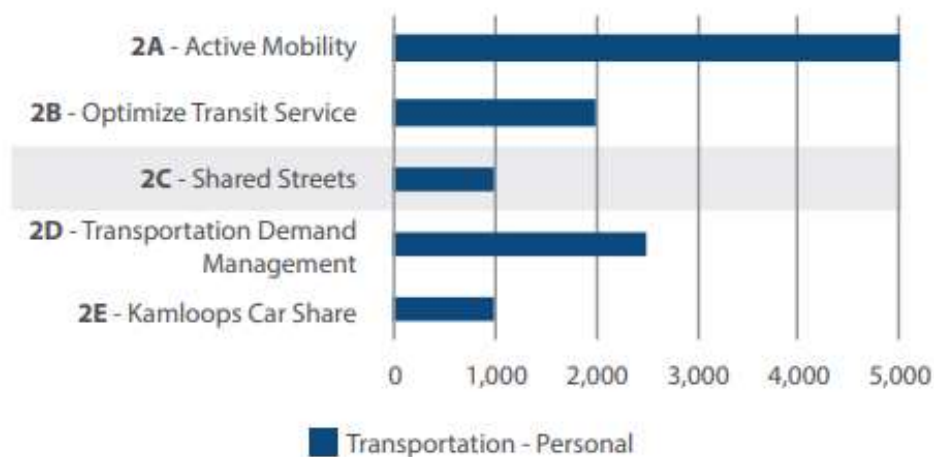
ECONOMIC CONSIDERATIONS:

- Local businesses may benefit from increased foot and cycle traffic in pedestrian-friendly areas.
- Reduced road widths can slow traffic and create economic vibrancy in commercial areas.

ACTIONS:

- ❑ Pursue opportunities to convert select street space (temporarily at first) into areas that prioritize pedestrian-only or pedestrian-friendly areas with public amenities such as trees and gardens, seating, art installations, and bike parking and with vehicle access limited to local residents, businesses, and emergency vehicles.
- ❑ Identify suitable streets to implement reduced road width initiatives that contribute to traffic calming and convert space for community benefit (e.g. active transportation infrastructure, parks, community gardens, daycares, or affordable housing).
- ❑ Implement low-traffic neighbourhood projects that extend pedestrian zones to multiple urban blocks (with emergency vehicle access only).

PROJECTED ANNUAL GHG REDUCTIONS BY 2050:

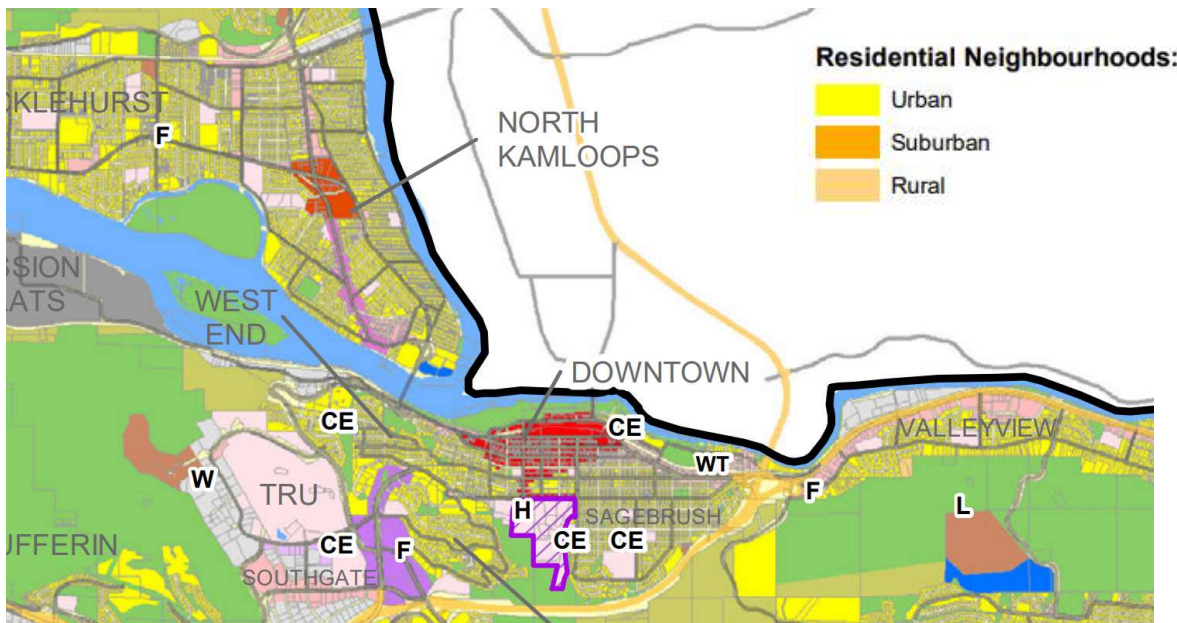


1,000
tCO₂e
(Moderate)

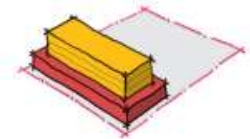
Understand City Speak

- Urban vs Suburban
- In Kamloops ITS ALL “URBAN”

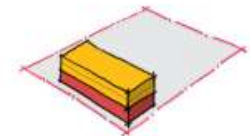
“Implement low-traffic neighbourhood projects that extend pedestrian zones to multiple urban blocks (with emergency vehicle access only)”



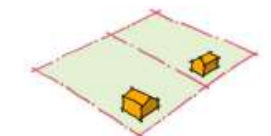
Urban – Major Neighbourhood Centres³²



Urban – Minor Neighbourhood Centres³³



Suburban



Examples in Real Time

-
- Kamloops “temporarily” blocking road access in perimeter around Elementary School May 15th, 2023

<https://www.castanetkamloops.net/news/Kamloops/426508/High-hopes-for-temporary-car-free-perimeter-around-North-Kamloops-school>

- No more dropping off kids at school
- Local residents who live in the perimeter will also be restricted
- “Programs of this nature often start with a pilot project and have developed **into seasonal and permanent implementation** depending on the school. So we’re really excited about this”
- “The purpose is to improve safety and encourage active modes of travel by prioritizing walking, and cycling and rolling for children, their caregivers, and then of course, teachers.”



Don't pit yourself against parents who want a safer school for their kids



Other GHG Reductions

- **New Buildings**
 - Changes to the Building Code “**Zero Carbon Step Code**”
 - No gas installed after 2030
 - 100% efficiency (HIGH COST)
 - Reduced or no requirements for parking
- **Old Buildings (everything before 2030?)**
 - Retrofit ALL old buildings
 - Install smart meters?
 - Everything electric, no gas
 - PACE program (coming soon?)



Smart Meters and Smart Thermostats

- Colorado Utility Company locks customers out of their smart thermostats to control energy demand
<https://www.foxbusiness.com/politics/colorado-utility-company-locks-22000-thermostats-in-90-degree-weather-due-energy-emergency>
- 22,000 customers locked out of their thermostats by power company



Tony Talarico, an Xcel Energy customer in Arvada, Colorado, told KMGH-TV that he attempted to turn up the air conditioning as temperatures crept into the 90s on Tuesday but was greeted with a message from this thermostat declaring an "energy emergency" and prevented from turning the dial.

PACE Program (Remodelling old Homes)

- Property Assessed Clean Energy
- Not implemented in BC... Yet
- Government will change legislation allowing them to take first place lien/mortgage against your house for you to pay for energy efficient upgrades
- Will this be attached to smart meters or smart thermostats?
- Is this a vector for 2030 and you will own nothing?
- <https://www.pembina.org/reports/property-assessed-clean-energy-2020.pdf>

4.1 Primary lien status

PACE assessments are secured against the value of your home and because they are repaid through property taxes, they have the same primary lien status as property taxes. This has caused friction with the mortgage industry and has been a barrier to PACE adoption (particularly R-PACE) in the U.S. and Canada.^{36,37} Liens are typically prioritized by the order in which they are filled except for property taxes (and in some cases federal taxes), which have priority. Primary lien status means that in the case of default, the entire PACE assessment is repaid before a first mortgage, which is a subordinate lien. Figure 1 provides an example of a typical lien prioritization.

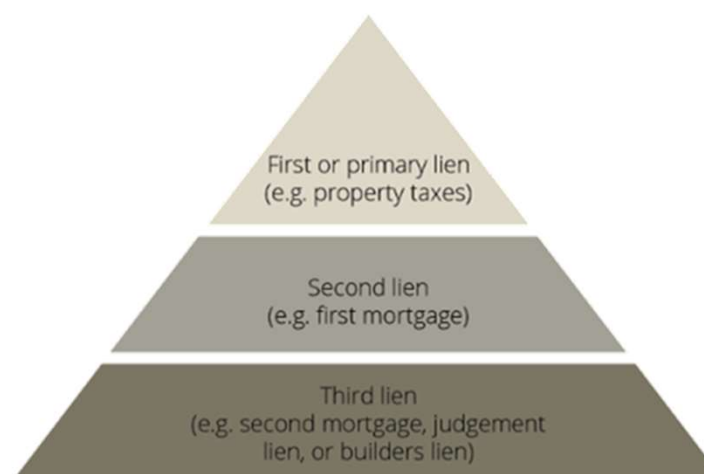
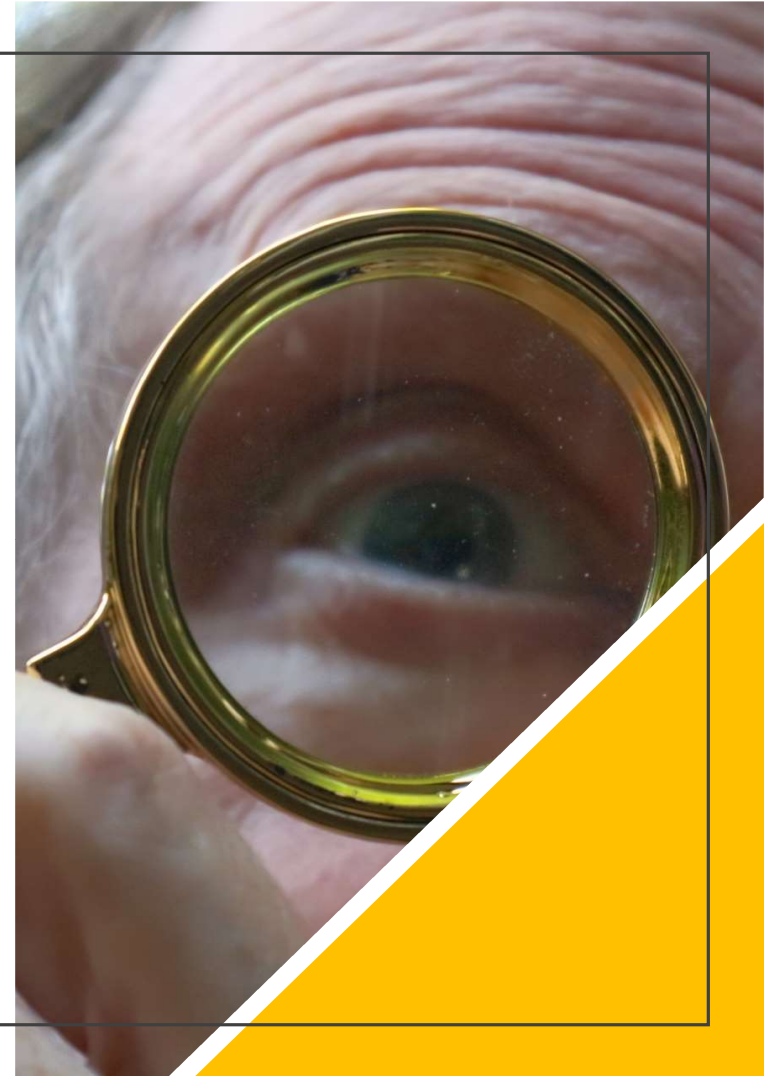


Figure 1. Example of a typical property lien prioritization

Programs and Grants (Not all Bad)

- NRCan Retrofit Grants and loans up to 40,000:
<https://natural-resources.canada.ca/energy-efficiency/homes/canada-greener-homes-grant/start-your-energy-efficient-retrofits/plan-document-and-complete-your-home-retrofits/eligible-grants-for-my-home-retrofit/23504>
- CleanBC Rebate Search: <https://www.betterhomesbc.ca/rebate-search-tool/>
- Renovation Rebates: <https://www.energyhub.org/incentives/#british-columbia>
- **Teaspoon of Sugar:**
 - free money to improve your homes air tightness and insulation
- **Drop of Cyanide:**
 - Installing smart meters and smart thermostats as a requirement for the funds, taking loans against your house putting ownership in jeopardy



Questions

How will access be limited to local residents only?

- Armed guards? Gates? Or Electronic Surveillance and tracking (easiest cheapest)

Why restrict full size vehicles (including EVs)?

- How does this help the environment?
- Freedom of movement? Economy?

What will people do in the winter time?

- Ebikes and ride sharing in the snow?

The Grid Infrastructure can't handle the extra load

- Whos paying for the extra grid?
- Even if the grid is installed, where will the extra power come from?

How will you afford to heat your home?

- Will smart meters and smart thermostats control the temperature in your home?
- Electricity heating is more expensive than nat gas

Why is the answer to everything more government control?

- Why communism?

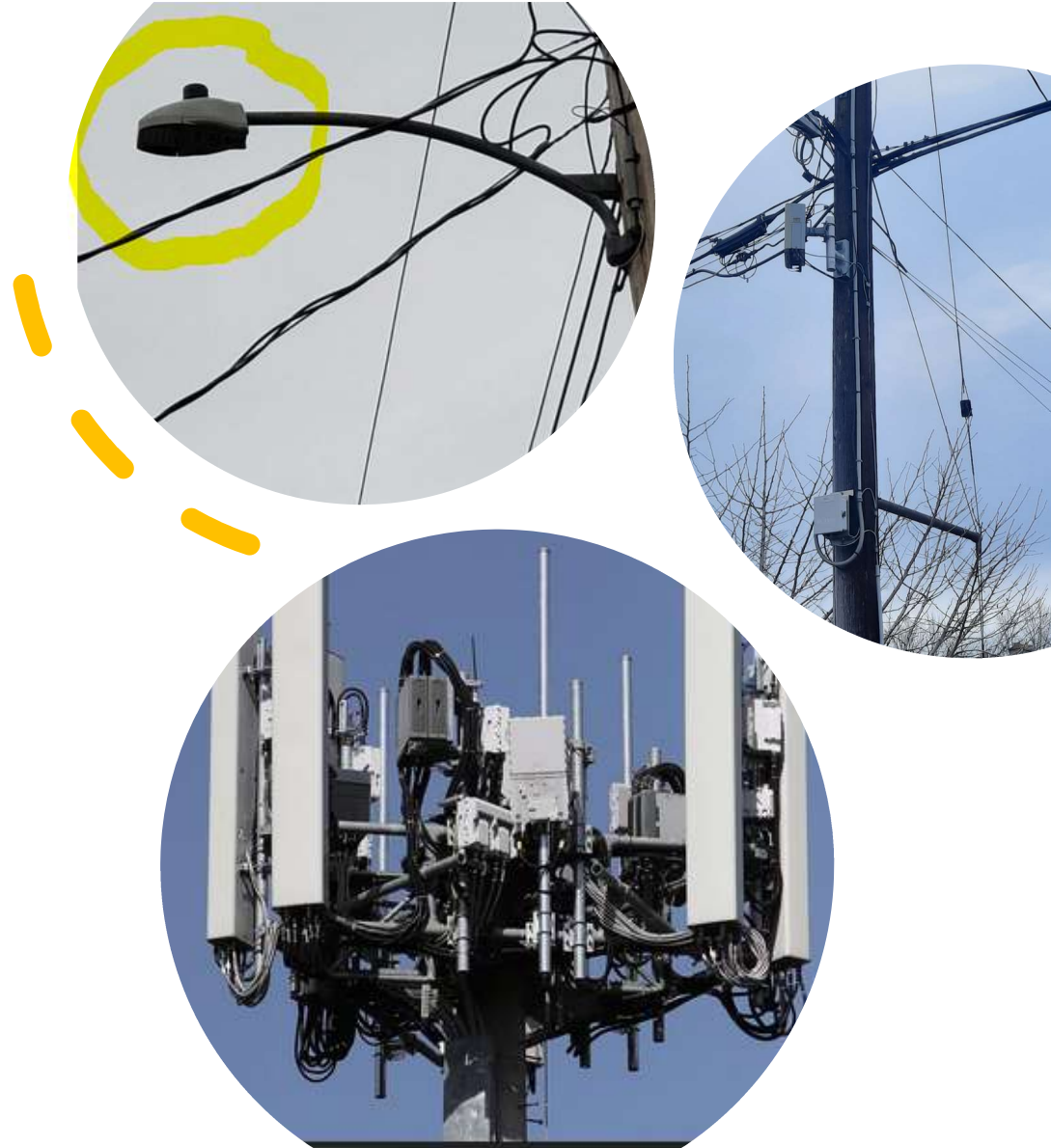


How this could be abused

- PACE program pushed on majority of home owners (all houses pre 2030)
 - Large renovation loans taken out against homes, Government has right to foreclose, abuses this at a later date
- Banning all gas and wood, all citizens 100% reliant on smart grid
 - Everything is controlled in your home, temperature, electricity/GHG credit
 - You are put into energy poverty because of 'Climate emergency'
- Traffic Calming, full size vehicle bans, careless neighbourhoods
 - Citizens lose ability to travel long distances independently
 - Become reliant on government for transportation
 - Next lockdowns could be electronic and physical (single points of entry/exit)

Smart City Infrastructure

- 5G Big Towers
- 5G Repeaters (every 100m)
- LED Streetlights with full suite of sensors on 5G
- What's possible:
 - AI tracking vehicle movement
 - WIFI pinging your digital ID, Car ID (To come?)
 - Could be used to restrict access to certain neighbourhoods



Smart device

A smart device is an electronic device, generally connected to other devices or networks via different wireless protocols that can operate to some extent interactively and autonomously. [Wikipedia](#)

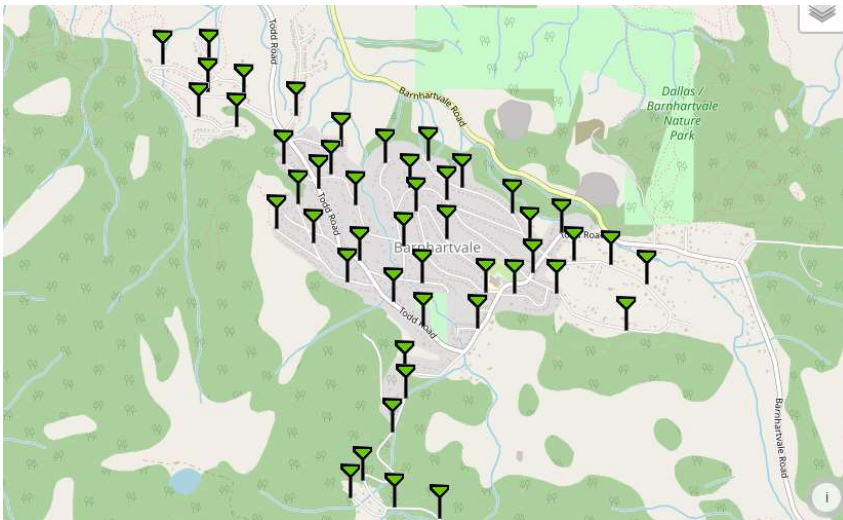


What is a SMART Device?

- SMART means it can operate autonomously
- Means its been programmed and records & shares data
- WHO PROGRAMMED IT?

How to identify 5G Towers in your neighbourhood

- <https://www.getawake.ca/community/whats-up-with-5g/5g-how-to-find-it-in-your-neighbourhood/>



Telus has monopoly on 5G in Kamloops
This is Barnhartvale neighbourhood
1 year ago there were no antennas, now there
is more than 40

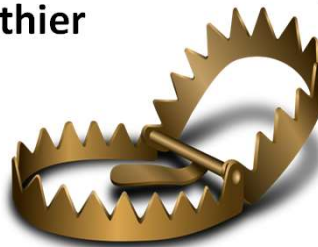
5G Repeaters

- Every 100m in your residential neighbourhoods



LED Smart Street Lights

- The unit on the top can be replaced with many different sensors that follow the smart city protocols to communicate back to central control
- There is the potential for this to be abused: *imagine cameras every 100m being monitored by an AI, or remote sensors pinging of your digital ID, or EV ID tracking your every move.* But this is not explicitly written anywhere, **so what do you have to argue against: Healthier more efficient streets?**





For Speed Monitoring



For Air Quality Measurements



For Noise Monitoring



For Safety



For Traffic Analysis

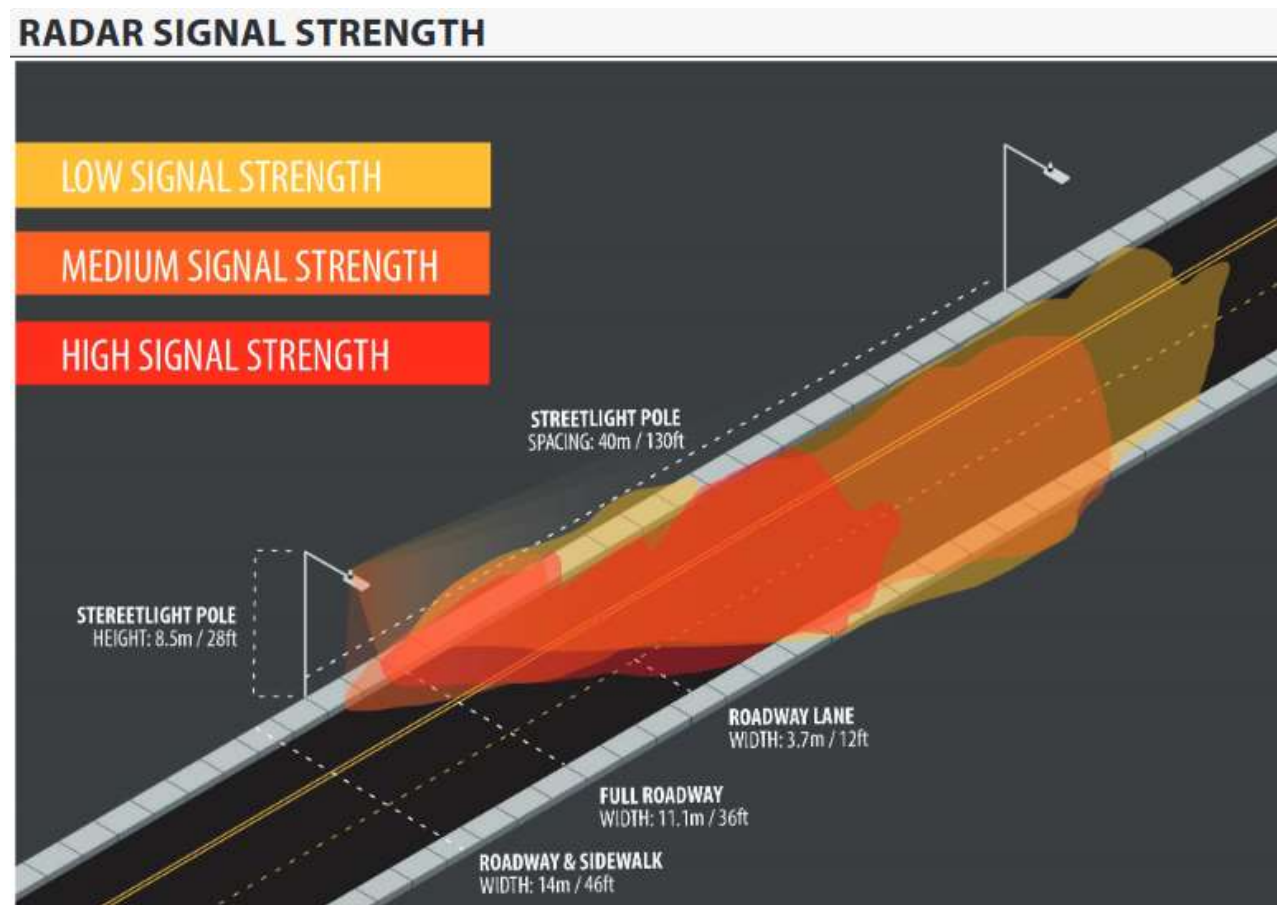
Multiple Sensors,
ANY* Streetlight

- Watch this video:
<https://vimeo.com/637510804>

- Any brand sensor can be installed on any brand streetlight with same plug type



Speed Monitoring





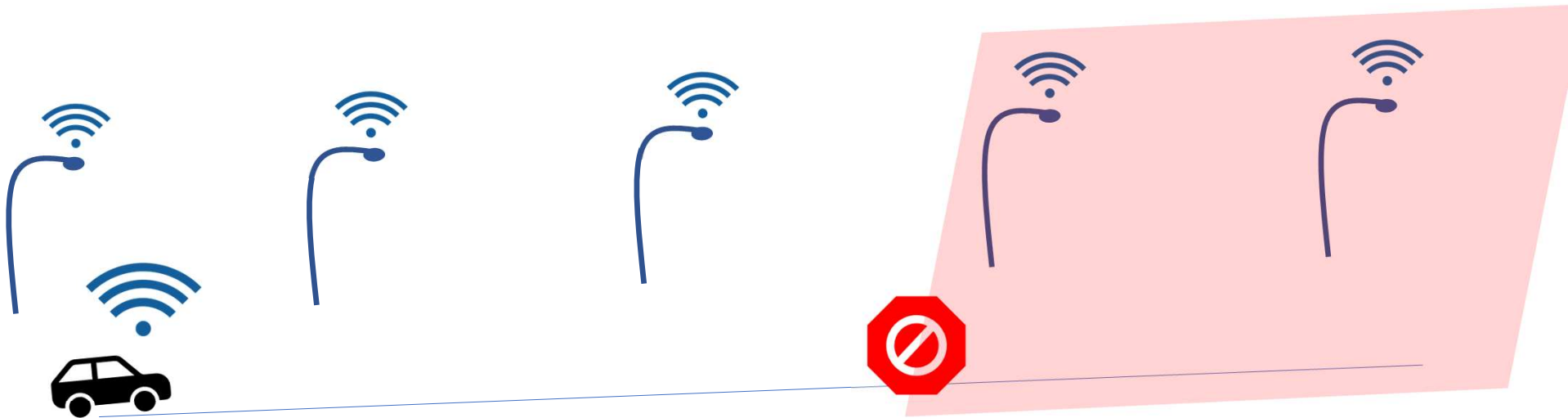
How this is being used today

- City of London:
 - Drivers are fined for driving petrol vehicles in emission free zones by network of cameras
 - [The London street where so many drivers got fines for having certain types of cars the council made £2.2million – MyLondon](#)
 - [EU driver slapped with London emissions fines totalling £25,000 | London | The Guardian](#)

How this could be abused

Imagine During the next lockdown if this infrastructure was in place

- If you travel outside of your zone you are fined
- If you travel too many kms you are fined
- All of your vehicle movements will be recorded and monitored forever, AI will track you
- EVs in the future could be set with boundaries where they turn off or stop if you go outside of your area.
- Most vehicles today can be hacked. Is there a kill switch in your car?





CSIS Warns Against Smart Cities



- Unauthorized access to Utilities
- All utilities remotely controlled (denial of service)
- Foreign enemies can attack city infrastructure with computer
- Tracks and traces everything citizens does
- CSIS Recommendations to city Councils:
 - Engage citizens early to ensure awareness and understanding of the privacy and security implications to facilitate meaningful public consultation.
 - Be transparent with citizens about the data collected in smart cities and the ways it is used and handled, where it is stored, and how it is protected.
 - Do your due diligence. Smart city technology and software vendors, and their supply chains, should be assessed very carefully to ensure that data access, storage, transfer, and use will take place in a manner and location that protects the safety, security and privacy of Canadians.

- Read more, Organize, Share your research:

<https://www.getawake.ca/community/smart-cities/>



SMART CITIES AND NATIONAL SECURITY

Did the city Conduct a PIA?

- https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/96165_06#section69
- Under the the Freedom of Information and Protection of Privacy Act (FOIPPA) any government or public institution is required to conduct a Privacy Impact Assessment
- Get a copy of the PIA



IEEE Standards for Smart Cities

Helping Enable Smart City Technologies for Humanity

Smart City
Standards

- Smart City infrastructure will follow international standards
 - <https://engagestandards.ieee.org/smart-cities.html>
 - <https://www.iso.org/standard/69050.html>
 - **TALQ2 Protocol for Smart Cities.**
Open Smart City Protocol (OSCP)
- READ MORE ABOUT THESE LIGHTS HERE:
<https://coap.ca/therewaslight/>



Can't Stop Technology

- Personal mmWave sensors are cheap and easy to buy.
- Tell you number of people in a room, and their locations

pping



Human Presence
Mmwave Radar
Precision Sensing...

om

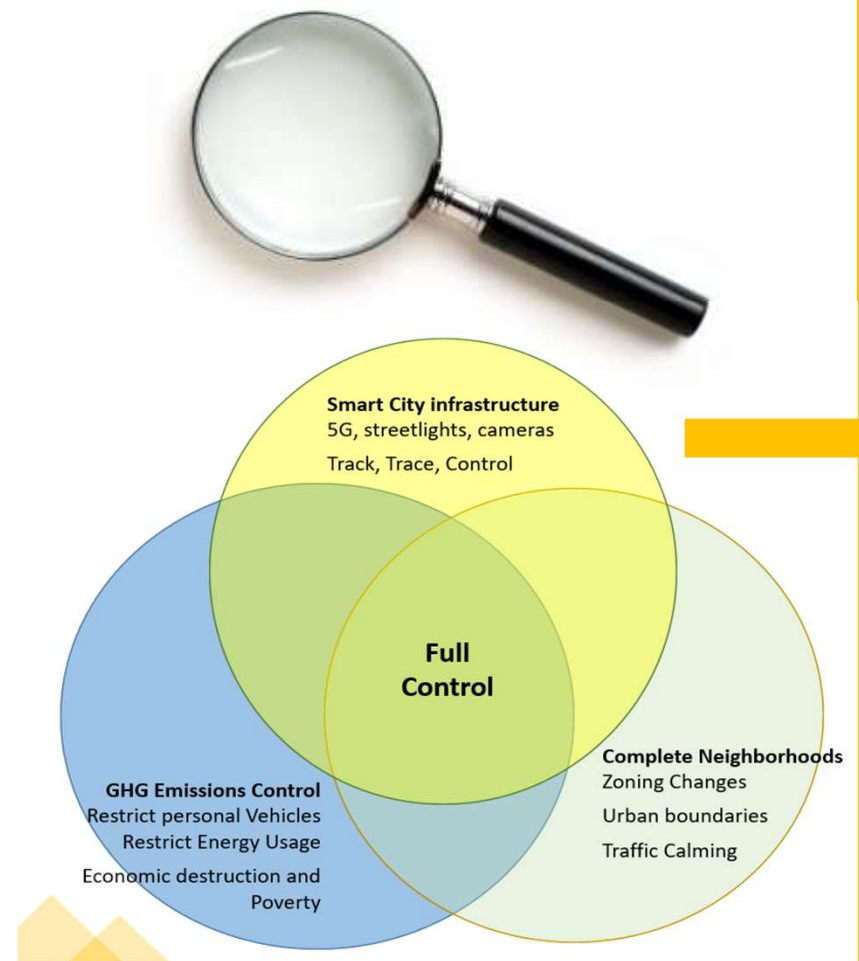


Wifi Human Presence
Sensor Mmwave High
Precision Sensing Hom...

\$28.20
eBay

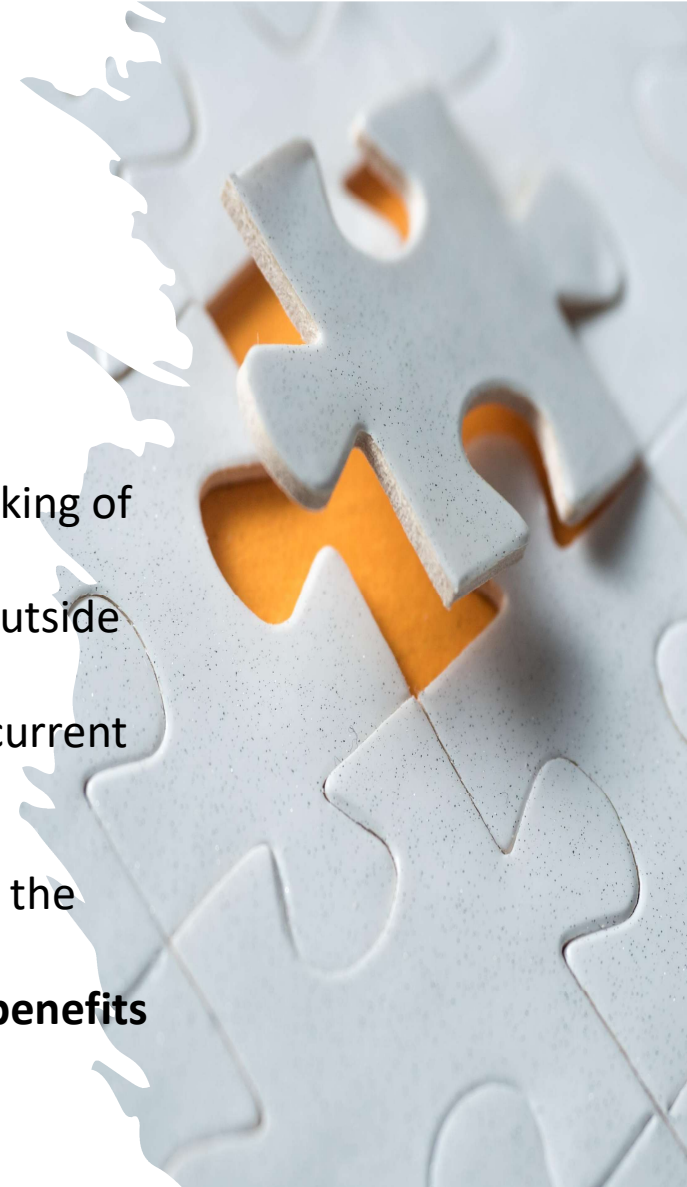
Where is the Danger?

- SDGs, Feds, BC Gov, Climate Plan, OCP, CleanBC are all aligned.
 - Not “IF” or “WHEN” This is happening NOW.
- There is no explicit dangers of the 15min city
 - Must combine everything and think: “how could this be abused”
- Money that comes with strings (PACE)
- The focus is always on:
 - Limiting personal transportation
 - Creating more dense housing
 - Digitizing everything you own (so it may be controlled)



Conclusions

- SDGs and SMART Cities are being implemented NOW
- Most of the changes in city plans DESIREABLE AND GOOD for urbanization
- But... plan also includes items which consolidate control and tracking of people. This can be abused.
- Create growth boundaries and limit development and land use outside of urban areas.
- The plans goals cannot be met in reality with electrical grid and current supply, therefor not only will vehicles switch to EV, there must necessarily be less vehicles and less travel.
- There is no legal requirement for the cities to follow these plans, the plans can be changed (**CHANGE THE OCP!**)
- **The potential for abuse can be removed or limited leaving the benefits of these plans and preserving personal freedom**



OPINION -

- These changes are ushering in a radical change in society and the economy, transferring individual ownership and control to corporations and the Government
- Used as an excuse to implement 'Stake Holder Capitalism' as defined by Klaus Schwab
- Smart Cities

ACTION PLAN – Reality Check

1. To stop all of this you will need to completely overturn and replace council and amend the OCP
2. *You'll be swimming against the current:*
 1. *Public opinion*
 2. *Most of the changes ARE GOOD* ←
 3. *Differentiate risks from benefits*
 4. *Local, Provincial, Federal Govs*
3. *Its going to happen... But we can change how it happens*





ACTION PLAN –

DON'TS

1. Run into city hall hootin' and hollering
2. *Be Rude, Lead with grand conspiracies*

DO:

1. ***Learn the lingo, familiarize yourself with the city plans***
2. ***Talk to City and confirm facts***
 1. *What equipment? What model? What's in the OCP? Where's the economic assessment?*
 2. *Compliment them and LISTEN*
3. ***Speak to council members, business community, find out what's going on and what people think***




Action Plan - Strategy

Avoid the trap

1. Most of the changes talked about in the 15 minute city plans are actually good, will increase quality of life and have large support from the community
2. **DON'T** – Be the people rallying against clean air, less traffic, and walkable neighbourhoods.
3. **DO** – Be the people pointing out that we can have both improved quality of life AND privacy, liberty, Cheap Clean energy and freedom of movement
4. **DO** – point out these changes are committing economic suicide

If its not a conspiracy to take away your freedom, then they can add amendments to the OCPs to preserve citizens freedom and privacy in the plans.



Action Plan – Update OCP

CHANGE THE OCP NOW!

Lobby council to insert amendment that states:

- The OCP affirms and recognizes that Kamloops citizens are free to travel and have a right and expectation to privacy when in the City. The city will not undertake any measures, projects, or install any equipment that has the ability to:
 1. Track and identify people as they move throughout the city
 2. Track and identify vehicles as they move through the city
 3. Outright BAN all facial recognition and biometrics
 4. Electronically control or restrict vehicle movements to certain areas of the city
 5. Fine vehicle owners or drivers for operating their vehicles in certain areas
 6. Carbon tracking, carbon reduction, climate action policies or emergencies are not an excuse to track, trace, control, fine, nudge, discourage, the otherwise free movements of Kamloops citizens and vehicles
 7. Kamloops will never undertake any project to physically restrict access of full size vehicles to residential areas
 8. Kamloops will never undertake any permanent project that could be used to physically restrict vehicles from travelling on existing roads such as:
 1. Electronic monitoring systems
 2. Physical gates
 3. Excessive fines on certain types and classes of passenger vehicles



Action Plan – Keep Free Market

Lobby City Council For:

1. Amendment to Bylaws stating:

1. All businesses operating within the municipality must always offer:

- A human checkout
- A way for people to pay in cash
- Must always allow full access to the store and services without a digital ID

• 2. Must never:

- Restrict access to a business on the basis of a digital ID
- Require scanning or tracking of ID to enter or use the store
- Install biometric or facial recognition in a merchant store

• 3. This applies to:

- Grocery & food stores
- Any store which sells merchandise
- Exceptions would have to be made for some service businesses

Questions for council

- Where and how will rural people live?
- These plans get implemented into municipalities because municipalities have slowly lost their autonomy. For instance, where I live was a logging and mill town, but under the environmental initiatives, these jobs became less and less, even though wood usage has only gone up. The city, mine and yours, now typically rely on fed and prov grants, which all have strings attached. Also, many local counselors believe that they are actually saving the planet with initiatives like LED street lights .

What can we do

- Get ahead of infostructure. For instance, coap has a petition to but a bylaw into effect stopping facial recognition. So far there is none in place by council, however we know it is coming, and wouldn't it be great to have one win that sets precedence? And do it on-line AND on paper. On-line is great to share to local FB neighbourhood groups, but the paper, you can hit the streets and educate people as they sign.
- Ask questions we have listed here – constantly.
- Read your upcoming agendas and if you see anything that make you feel “this is a part of the plan” go and take your three minutes to speak against it. Example natural gas to fossil gas letter
- Hold town halls and work hard to attract people NOT in the eco chamber. We are holding two this month, one called “ climate” is the science settled, a second in our series. We always send out invitations to all local governments, reserve them seating, and then take a picture of the empty seats. Why does this matter? Because most governments now have declared a climate emergency, and all policy must go through a climate lens. Their only reference is the IPCC, which we all know is junk science and debunked by hundreds of other scientist.
- Do FOIA requests. We just did one asking for the science, data, phone calls, emails etc that led them to declare a climate emergency . Yes we know they don't have any, but the more you can show your government are incompetent, the more your side gains in popular opinion. We all know talking about Trudeau's incompetence is popular, bring it done to a local level – that's where stuff gets done.

- Make posters or flyer, with the most shock value ie “could you live without your wood stove?”, “could hold your current job without a vehicle?”, “can you afford to retrofit your home if it was mandated?” and drop in coffee shops and the like. Have a link to more information, or to your town hall.
- Mock the policies. Make funny videos of you loading up two kids and ten bags of groceries on your scooter, make FB posts in local neighbourhood groups that mock plans such as shutting off all gas to homes or whatever. Make posters that show the mayor as a fool who would ruin your lifestyle for some government kickbacks – place his face on the monopoly mans body or something.
- Write letters to council and to the newspaper . Continue to educate council and area directors as to the larger picture of, what I call to their faces, their ‘poverty plan’.
- Tape posters to the lamp posts sating “look up – these are the attachments that can be put on that lamp” with a picture.
- Resist 5G towers in neighbourhoods they ask to place them in – one area here was successful and it was not placed there.
- Educate just your block if you can. I can help with a flyer that is needed. If you live in a growth centre, you can get neighbours on board against ugly in-fill housing, and in the meantime educate them as to your area becoming a 15 min city and what that is.

FURTHER RESEARCH NEEDED – VOLUNTEERS?

- <https://www.weforum.org/agenda/2021/11/15minute-city-falls-short/>
- <https://biv.com/article/2023/03/csis-whhttps://www.weforum.org/agenda/2021/11/15minute-city-falls-short/arns-smart-city-technology-can-open-door-attacks-foreign-interference>
- Gov of Canada website <https://www.innovatingcanada.ca/environment/canada-is-leading-the-way-to-smart-cities/>
- A 10 min video on a little town that pushed back <https://youtu.be/5yEFsayQib4>
- A local town that pushed back against their agriculture part of the OCP (part 1)
<https://youtu.be/NBUeanMZ9iM> (Part 2 on COAP.ca)
- A very good article for point in the roadmap for example, my muni has just ordered new garbage bins, will they be tracking waste ? for a carbon footprint ?
- <https://privacyinternational.org/case-studies/800/case-study-smart-cities-and-our-brave-new-world>
- A slide show about smart cities with a ton of info but US based https://drive.google.com/drive/mobile/folders/1cK32oHI3d4c1TN86dNJIW0hnqUR_X5KR
- An article on Kitchner 15 min cities (this is also where some of that software is being implemented as a trial run - specifically eleven x company) <https://kitchener.ctvnews.ca/121-000-homes-15-minute-neighborhoods-approved-for-waterloo-region-s-official-plan-1.6034831>
- List of public/private partnership software companies that were on the zoom call : eleven x Moivision, Locomobi
- This is the presentation - part three was what I was specifically talking about <https://www.smartcitiescouncil.com/article/global-affairs-canada-webinar-series>
- **FORUM FOR PUBLIC RESEARCH AND SHARING:** <https://www.getawake.ca/community/smart-cities/>



Questions