

## Environment and Climate Advisory Committee Meeting Agenda

Wednesday, January 19, 2022, 5:00 p.m.  
Electronic and in Meeting Room G  
Lower Level, City Hall

We recognize and respect that New Westminster is on the unceded and unsurrendered land of the Halkomelem speaking peoples. We acknowledge that colonialism has made invisible their histories and connections to the land. As a City, we are learning and building relationships with the people whose lands we are on.

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	Pages
1. <u>CALL TO ORDER AND LAND ACKNOWLEDGEMENT</u> The Chair will open the meeting and provide a land acknowledgement.	
2. <u>INTRODUCTIONS AND ICEBREAKERS</u>	
2.1. Icebreaker Question	
3. <u>CHANGES TO THE AGENDA</u> Additions or deletion of items.	
4. <u>ADOPTION OF MINUTES FROM PREVIOUS MEETINGS</u>	
4.1. Adoption of the Minutes of November 17, 2021	3
5. <u>REPORTS AND PRESENTATIONS</u> Staff and guest reports and presentations for information, discussion, and/or action	
5.1. Energy Save New West: 2021 Year in Review and 2022 Program Plans Ryan Coleman	10
5.2. Community Energy and Emissions Plan (CEEP) 2050: Action Mapping Workshop Nayel Halim	26
6. <u>UNFINISHED BUSINESS FROM PREVIOUS MEETINGS</u>	
7. <u>STANDING REPORTS AND UPDATES</u>	

Regular and ongoing reports from staff or members for information and discussion.

**7.1. Acting Supervisor of Land Use Planning and Climate Action's Update**  
Lynn Roxburgh

**8. NEW BUSINESS**

Items added to the agenda at the beginning of the meeting.

**9. END OF MEETING**

**10. UPCOMING MEETINGS**

Remaining scheduled meetings for 2022, which take place at 5:00 p.m. unless otherwise noted:

- March 16
- May 18
- July 20
- November 16



## NEW WESTMINSTER

### Environment and Climate Advisory Committee Meeting Minutes

#### MEMBERS PRESENT:

Councillor Nadine Nakagawa  
Danison Buan\*  
Karen Crosby\*  
Colleen Gillespie\*

Teresa Morton\*  
Patrick Parkes\*  
John Ragone  
Raunaq Singh\*  
Bryanna Thiel\*

- Chair, City Council Member (*left at 5:57 p.m.*)
- Representative, Local Business Association
- Community Member
- Representative, Professional in Environment or Climate Field, Business, Government, or Non-Profit
- Representative, Local Environment Association
- Community Member (*left at 6:00 p.m.*)
- Community Member
- Community Member
- Representative, Professional in Environment or Climate Field, Business, Government, or Non-Profit

#### REGRETS:

Meesh Bono  
John Lekakis

- Community Member
- Representative, Local Institution (SD40)

#### GUESTS:

#### STAFF PRESENT:

Sadaf Ghalib  
Britney Dack  
Benjamin John  
Matthew Pilfold  
Lynn Roxburgh

Eugene Wat  
Katie Stobbart

- Senior Climate Action Planner
- Senior Heritage Planner
- Corporate Energy and Emissions Specialist
- Arborist Technician
- Acting Supervisor, Land Use, Planning and Climate Action
- Manager, Infrastructure Planning
- Committee Clerk

\* Denotes electronic attendance.

## **1. CALL TO ORDER AND LAND ACKNOWLEDGEMENT**

Councillor Nakagawa opened the meeting at 5:00 p.m. and recognized with respect that New Westminster is on the unceded and unsurrendered land of the Halkomelem speaking peoples. She acknowledged that colonialism has made invisible their histories and connections to the land. She recognized that, as a City, we are learning and building relationships with the people whose lands we are on.

## **2. INTRODUCTIONS AND ICEBREAKERS**

### **2.1 Icebreaker Question**

Committee members and staff responded in turn to the icebreaker question, "What is your favourite fall drink?"

## **3. CHANGES TO THE AGENDA**

There were no changes to the agenda.

## **4. ADOPTION OF MINUTES FROM PREVIOUS MEETINGS**

### **4.1 Adoption of the Minutes of September 15, 2021**

#### **MOVED and SECONDED**

*THAT the Minutes of the September 15, 2021 Environment and Climate Advisory Committee meeting be adopted as circulated.*

**CARRIED.**

All Committee members present voted in favour of the motion.

## **5. REPORTS AND PRESENTATIONS**

### **5.1 Heritage Revitalization Agreement Policy Refresh**

Britney Dack, Senior Heritage Planner, provided a presentation entitled "HRA Refresh: Principles for Small-Scale Residential Heritage Developments".

In response to questions from the Committee, Ms. Dack provided the following comments:

- These principles are primarily targeted at low-density areas in the city;
- There is an approximately equal mix of owner applicants and developer applicants;
- This program builds on current policy and practice. The City has a strong body of practices, but needs to have enforceable rules;

The Committee provided the following comments on the presentation:

- Consider electric vehicle charging facilities;
- Consider type of green space, i.e. monocultures such as grass vs. more diverse species of greenery;
- Concerned about preventing hardscaping and enforcing HRA principles when property ownership changes; and
- Encourage less reliance on natural gas.

## **5.2 Update: E-mobility Strategy**

Benjamin John, Corporate Energy and Emissions Specialist, provided a presentation entitled “eMobility Strategy Update.”

In response to questions from the Committee, Mr. John provided the following comments:

- There will need to be a regional approach to micro-mobility options to ensure things are consistent among neighbouring municipalities;
- The budget aspects of the strategy are still being refined; updated numbers will come back to the Committee in the future;
- Public charging stations will be pay per use, following the current rates for EV charging. Part of the rationale is cost recovery, and part is to encourage turnover at charging stations; and
- There is still work to be done to identify policies and supports that can be put in place to make things happen in multi-unit residential buildings.

The Committee provided the following comments on the presentation:

- In many cases, EV users can access a regular outlet without the need to install a charging station; and
- Private business should take on as much of the cost related to charging stations as possible.

**Procedural Note:** Councillor Nakagawa left the meeting at 5:57 p.m. John Ragone, Community Member, assumed the role of Chair.

## **5.3 Update: Urban Reforestation and Biodiversity Enhancement Initiative (URBEI)**

Matthew Pilfold, Arborist Technician, Parks and Recreation, Operations provided a presentation entitled “Urban Reforestation & Biodiversity Enhancement Initiative: Fall 2021 Progress Update & Workplan Review.”

In response to questions from the Committee, Mr. Pilfold provided the following comments:

- Caliper-size trees are between four and six centimetres across, which usually means a tree that is two to three metres in height. Age of the tree depends on the species, but in general the trees will be between five and eight years old;
- The City is working with arborists who track trees removed from private property, as well as tree planting and loss on public lands in parks and on City boulevards. Mr. Pilfold will provide an update on whether there is net gain in trees planted over trees lost;
- The City has developed a palette of trees that meet certain requirements—variables considered in tree selection include environmental resilience, provision of shade, tree size at maturity, whether or not the tree bears fruit and makes mess, and whether we are increasing the species diversity in our urban forest;
- 200 of the 2200 have been specifically earmarked as native species; the City needs to be careful where and when native species are planted, as we want trees that are size-appropriate, and adaptive to the artificial environment of the landscape.

The Committee provided the following comments on the presentation:

- Focus the signage content on values of trees, as people may not understand the value we get from trees;
- Include calls to action for people to have trees on their own properties;
- In the long term, it might be valuable to consider partnering with schools, health facilities, places of worship, etc. to encourage more trees planted in the public realm, aside from parks;
- Outreach to schools could be useful in educating the community about trees;
- Have signage in grocery stores, banks, or other places the community visits;
- Could use social media to have an Instagram page featuring trees in various seasons with information;
- A website people can visit to see where trees are being planted and to get more information would be useful to have on signage;
- Apartments or strata adopting trees might be easier to manage than individuals taking on that responsibility;
- Tree-planting events tend to be popular among families and neighbourhood residents;
- Updates to the Committee on this topic should be quarterly, but no less than twice a year. An email sent to the Committee would work as well as a presentation in some cases.

## **6. UNFINISHED BUSINESS FROM PREVIOUS MEETINGS**

There were no items.

## **7. STANDING REPORTS AND UPDATES**

There were no items.

## **8. NEW BUSINESS**

**Procedural Note:** The Committee addressed this item before item 5.3. The minutes are recorded in chronological order.

### **8.1 Harmonized Approach to Municipal Single-Use Item Reduction Bylaws**

Eugene Wat, Manager, Infrastructure Planning, provided an overview of the harmonized approach to municipal single-use item reduction, referring to the document entitled, "Harmonized Approach to Municipal Single-Use Item Reduction Bylaws".

In response to questions from the committee, Mr. Wat advised:

- Businesses will collect fees for themselves, not as a tax.
- The ministerial order allows a phase-in period, which should help small businesses to make the switch. However, in consultation some businesses felt an immediate change was preferred to a gradual one.

The committee advised that the City should go forward with what it has, then make amendments as needed once further information is available.

### **8.2 Community Livability and Social Equity Grant Committee Representative**

Katie Stobbart, Committee Clerk, advised that the Community Living and Social Equity Grant Committee needs a new representative from the Environment and Climate Advisory Committee.

### **MOVED and SECONDED**

*THAT Danison Buan be appointed as the Environment and Climate Advisory representative on the Community Living and Social Equity Grant Committee for 2022.*

**CARRIED.**

All Committee members present voted in favour of the motion.

### **8.3 NWEF Questions**

Teresa Morton, Representative, Local Environment Association, raised questions on the following topics for staff response:

#### **a) Heat Pump Program**

Benjamin John, Corporate Energy and Emissions Specialist, advised:

- The pilot implemented in 2022 will be targeted to single-family homes; and
- Lessons learned from that pilot will inform the development of a potential future program that targets multi-family buildings, townhomes, etc.

#### **b) Carbon Reduction Targets**

Benjamin John, Corporate Energy and Emissions Specialist, advised:

- In 2020 the City's corporate emissions decreased by 22% from the 2010 baseline, which is an 11.5% decrease from what was achieved in 2019;
- COVID-19 did have an impact, which is difficult to quantify, on the City's emissions; and
- There is not a target for 2021 because the target year is 2030, for which the City is targeting a 45% reduction in emissions. To meet that target, the total emissions reduction from the 2010 baseline would be 24.75%.

#### **c) Road Monitoring**

Lynn Roxburgh, Acting Supervisor, Land Use, Planning, and Climate Action Team, advised that road monitoring is not in the City's work plan as we recognize Metro Vancouver's jurisdiction; New Westminster will continue to advocate to Metro Vancouver, and will consider incorporating it into the work plan in the future.

#### **d) Energy Save**

Sadaf Ghalib, Senior Climate Action Planner, advised that Energy Save New West does not currently provide any incentives or rebates specific to lighting technology.



#### **8.4 The Non-Proliferation of Fossil Fuels Treaty**

Karen Crosby, Community Member, provided a brief overview of the non-proliferation of fossil fuels treaty and its history. Ms. Crosby welcomed Committee members to contact her via email for more information.

#### **9. END OF MEETING**

**ON MOTION**, the meeting adjourned at 6:56 p.m.

#### **10. UPCOMING MEETINGS**

The next meeting time is to be determined.

# ENERGY SAVE NEW WEST:

## Program Update

*Prepared by:*

Ryan Coleman, Program Coordinator, Energy Save New West

Steven Faltas, Business Process Manager, Electric Utility

Nayel Halim, Community Energy & Emissions Specialist, Climate Action

*Prepared for:*

Environment and Climate Advisory Committee





January 19<sup>th</sup>, 2022

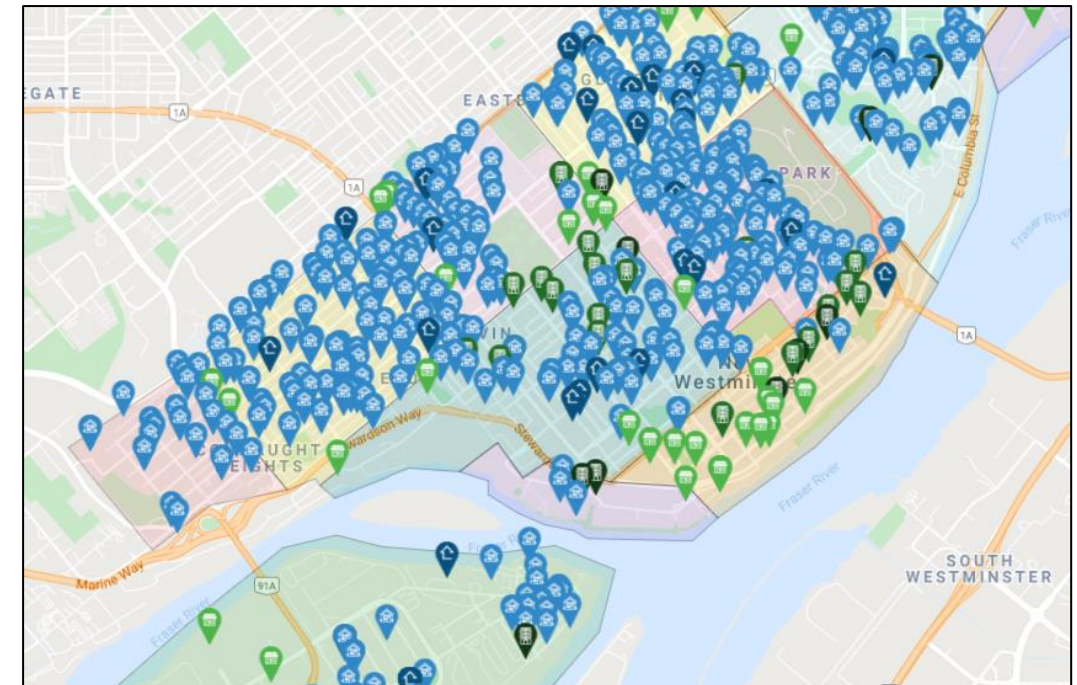
# AGENDA

## 1. Energy Save New West

- 2021 Program Evolution & Enhancements
- ESNW Achievements and Analytics
- ESNW in 2022

## 2. Questions & Discussion

Business	
Existing Homes	
Multi-Unit Residential	
Multi-Unit Residential Strata	
New Homes	



# 2021 PROGRAM EVOLUTION & ENHANCEMENTS



## EQUITY & INCLUSION

Program Augmentation & Enhanced Language Support

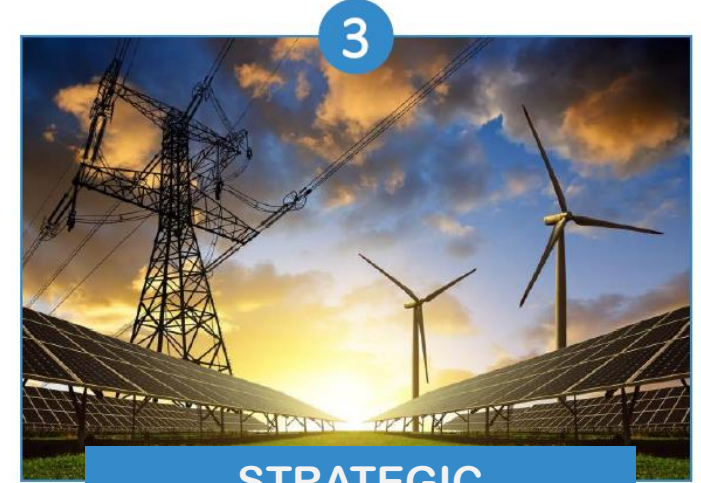
- ✓ Empower Me
- ✓ ESNW Website Multi-Language Support



## INTEGRATION & COLLABORATION

City Collaboration & Program Integration

- ✓ Heat Pump Pilot with CEA
- ✓ Proposed Step Code Adoption
- ✓ CleanBC Better Homes
- ✓ Canada Greener Homes Grant
- ✓ NRCan Video / Case Study



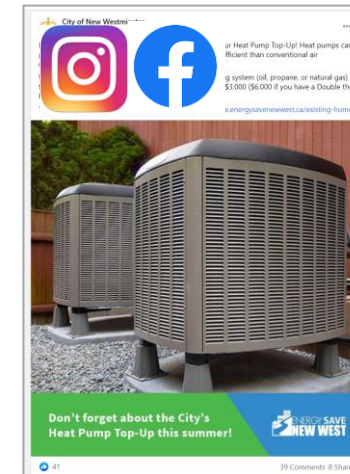
## STRATEGIC ALIGNMENT

Maximizing Opportunity

- ✓ Proactive Marketing & Enhanced Communications
- ✓ Workshops / Knowledge-Sharing
- ✓ New Pilot Program - Properate
- ✓ Asset Development

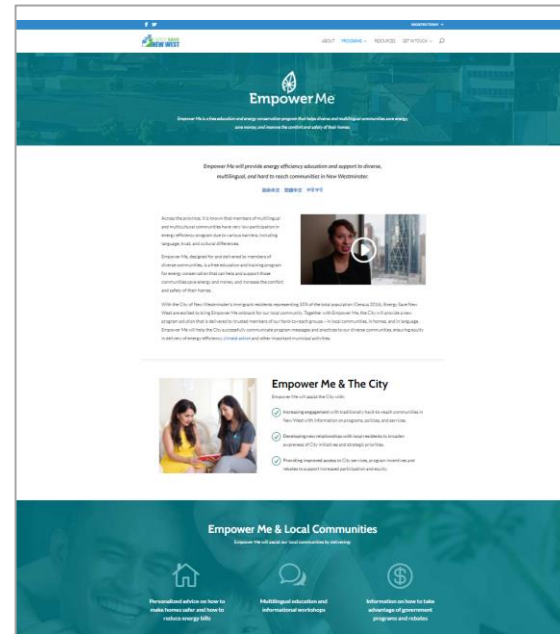
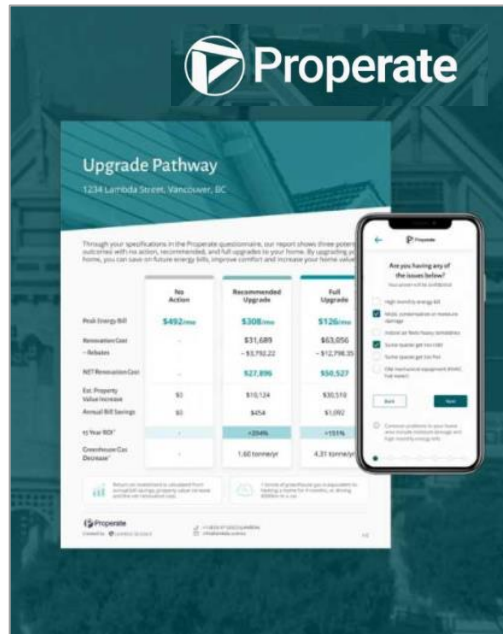
# ENHANCED MARKETING & COMMUNICATIONS

- ✓ More Frequent and Easier Communications
  - City's Social Media Channels
  - Multi-language Support
  - E-News Updates (e.g. Survey /Webinar Reminders)
  - Program Infosheet (Available in English, Mandarin, Cantonese, Punjabi)
  
- ✓ Asset Development for Better Engagement
  - Photos of Local Homes and Streets
  - Redesign of Touchpoint Materials





# ENHANCED MARKETING & COMMUNICATIONS

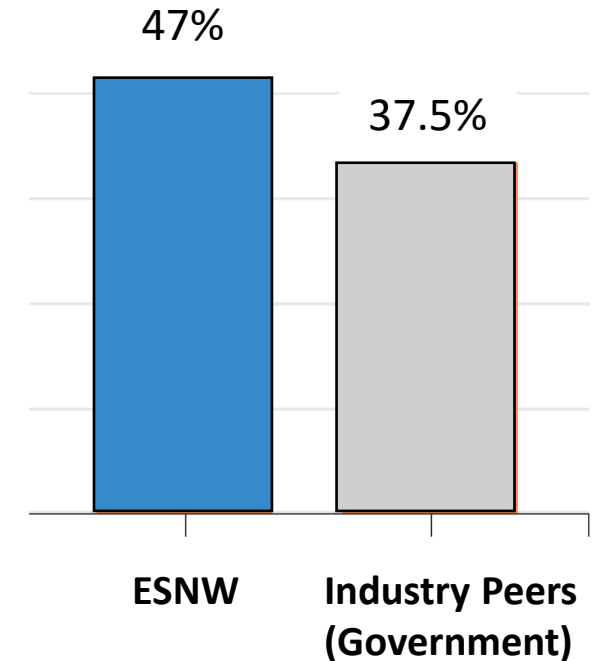


- ✓ **ESNW Website Enhancement**
  - New Program Webpage - Empower Me
  - Further Website Review/ Enhancement in Progress
- ✓ **New Pilot Program – Properate**
  - 19 Participants
- ✓ **Heat Pump Webinar for Residents (Oct. 21)**
  - Over 90 Registrants & 40+ Attendees

# ESNW ANALYTICS - PARTICIPANTS

		2021 (Jan. 1 – Dec. 31)	2020 (Jan. 1 – Dec. 31)
Existing Homes Program Registrations		165	50
New High-Performance Home Construction		8 (Requirements changed in 2021)	10
e-News Subscribers	Existing Homes	852	754
	New Homes	245	211
Heat Pump Top-Ups		6 (4 in April – June)	2

## E-Newsletter Open Rate



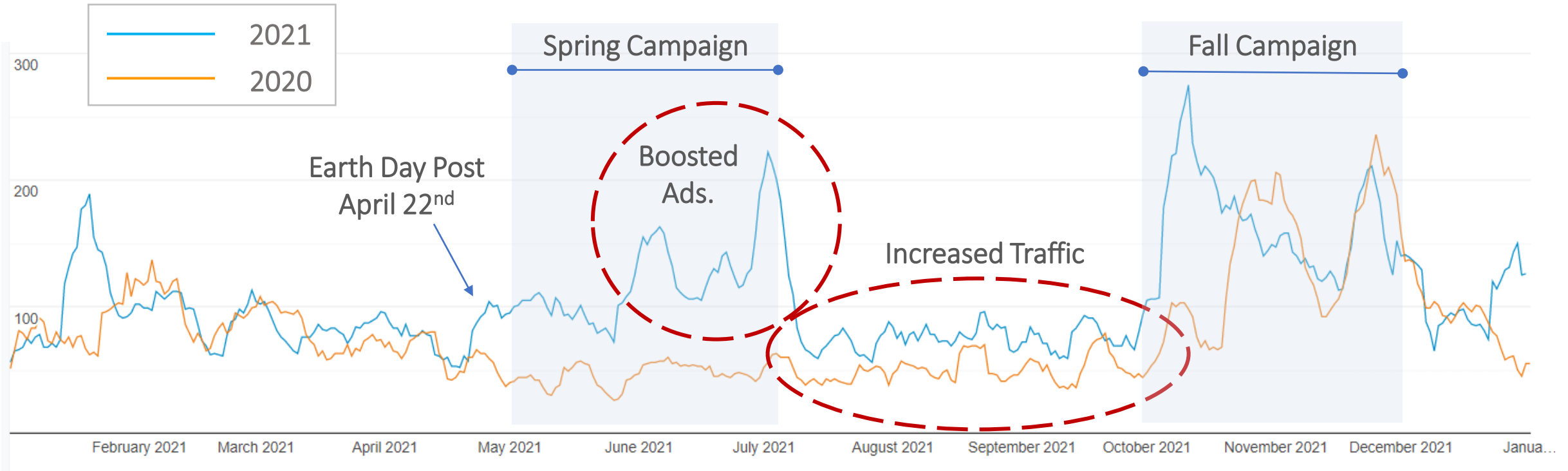
# ESNW ANALYTICS - FACEBOOK/INSTAGRAM

Post Date	Post Topic	Boosted (No. of Days Boosted)	Reach	Engage-ment	Link Clicks
April 22, 2021	Earth Day	N	N/A	N/A	N/A
May 7, 2021	\$Free Pre-Retrofit Home Energy Assessment	N	N/A	N/A	N/A
May 15, 2021	General Rebates Up To \$15,000	N	875	1	N/A
May 22, 2021	Climate Emergency	Y (5)	3,938	248	23
May 29, 2021	Rebates – Multiple Measure Bonus	Y (5)	3,409	120	23
June 5, 2021	Empower Me	Y (5)	2,951	75	33
June 12, 2021	\$Free Pre-Retrofit Home Energy Assessment	Y (5)	2,430	62	37
June 19, 2021	New Pilot Program – Properate	Y (5)	2,134	74	20
June 26, 2021	Rebates – Heat Pump Top-Up	Y (5)	4,663	227	99
Aug. 16, 2021	Empower Me Workshop (Greener Homes)	Y (4)	7,111	96	85
Oct. 5, 2021	Fall Campaign	Y (12)	7,278	262	243
Oct. 18, 2021	Free Heat Pump Webinar	Y (8)	4,990	145	28
Oct. 30, 2021	Greener Homes / Solar Panel Rebate	Y (7)	6,059	165	31



# ESNW ANALYTICS - WEBSITE

## 7-Day Active Users (2021 vs. 2020)



% Increase

Users

**44.79%**

4,018 vs 2,775

New Users

**45.54%**

3,985 vs 2,738

7-Day Active Users

**129.09%**

126 vs 55

Page Views

**49.54%**

10,822 vs 7,237

# EXISTING HOMES

- Enhanced Marketing/Communications
- Introduction of Empower Me Program
- Integration of New Federal Greener Homes Grant Program
- New Pilot Program: Pushing Up Savings in Heating (PUSH)



# EMPOWER ME ACTIVITIES

## Workshops and Events

- 10 workshops - 100% target met
- 109 participants – 106% target met
- 125% target met for community partner communications

## Program Awareness / Marketing

- Social Media - City Channels
- ESNW Media (e.g. blog, e-news)
- Local WeChat / Facebook

## ESNW [Empower Me Webpage](#)

- Launched in June
- Available in Multi-Lingual Versions



New Westminster	Q1	Q2	Q3	Q4	Total	Annual Target	% Target	Definition
Participants	21	19	0	66	106	100	106%	Received 90 minutes of energy efficiency education including CNW education
Workshops	2	2	0	6	10	10	100%	90-minute online workshops
Community Partner Communications	3	0	5	2	10	8	125%	CNW messaging shared with community organizations

[Empower Me Activities]

# 'GREENER HOMES GRANT' PROGRAM INTEGRATION



## Canada Greener Homes Grant

- Launched in late May
- ESNW supported through various marketing media. (e.g. blog post, e-news, City's social media channels)

# SMART THERMOSTAT OFFER & PUMPING UP SAVINGS IN HEATING



## Smart Thermostat Offer with Mysa

- 100%+ target met
- Subsidies issued for 375 thermostats for electric baseboards & in-floor heating.



## Pumping Up Savings in Heating (PUSH)

- One-stop solution for heat pump installation: To better support existing homeowners in fuel-switching by providing a more accessible and affordable pathway to electrification.
- Proposed Implementation – Spring 2022 (TBD)



# ESNW IN 2022

## More Enhancements Proposed:

- Rental Apartment Efficiency Program
- BCIT High Performance Program Subsidies
- Strata Energy Advisor w/ Metro Vancouver
- Homeowner Education/Workshops
- Smart Thermostats for Heat Pumps
- MyHEAT - Further Discussions in Progress
- Website Further Enhancements




MyHEAT



# ESNW 2021 Year End Infographic

- Highlights notable achievements from 2021 and new initiatives for 2022.
- Shared through emails, e-news, blog post and social media post.





# QUESTIONS?



# Thank You!

## Ryan Coleman

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## Nayel Halim

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# Community Energy & Emissions Plan (CEEP) 2050 Workshop

Wednesday January 19<sup>th</sup> 2021



NEW WESTMINSTER

# Objectives

- CEEP Updates
- Low Carbon Pathway
- Action Mapping Exercise
- Next Steps



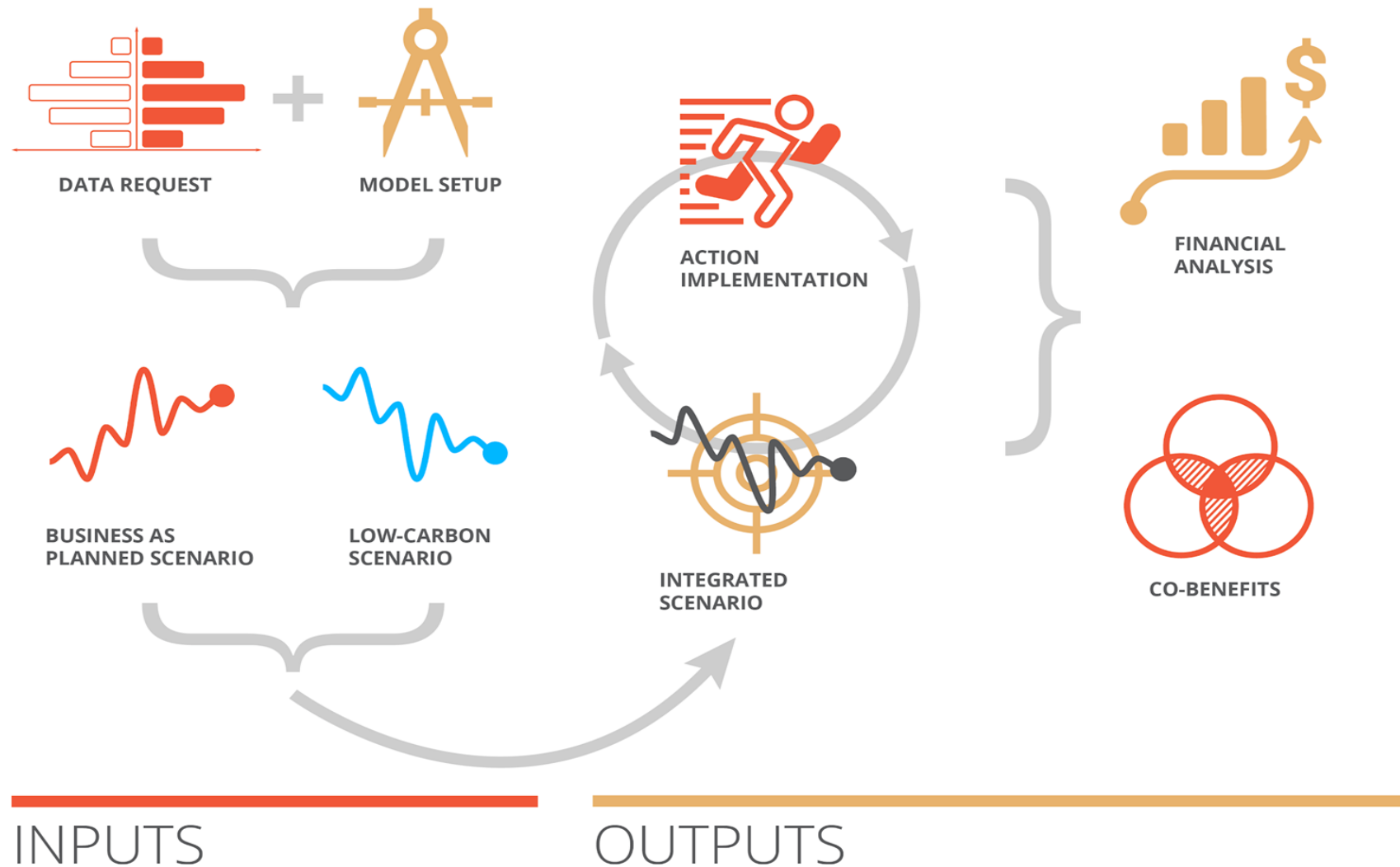
# Project Timeline



## What is the Low-Carbon Scenario?

*A purposeful scenario exploration that combines best available technical knowledge, community expression, and staff and stakeholder expertise in determining potential actions and measures that will achieve meaningful emissions reductions, reaching a set emissions reduction target.*

# Developing the Low Carbon Scenario – Methodology Overview



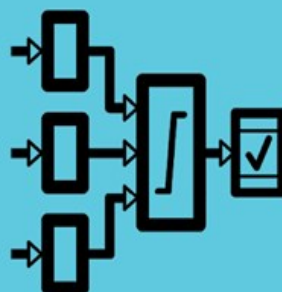
# Reduce-Improve-Switch Paradigm

## 1. Reduce



Reduce or avoid energy consumption in the first place.

## 2. Improve



Improve the efficiency of the energy system (supply and demand).

## 3. Switch



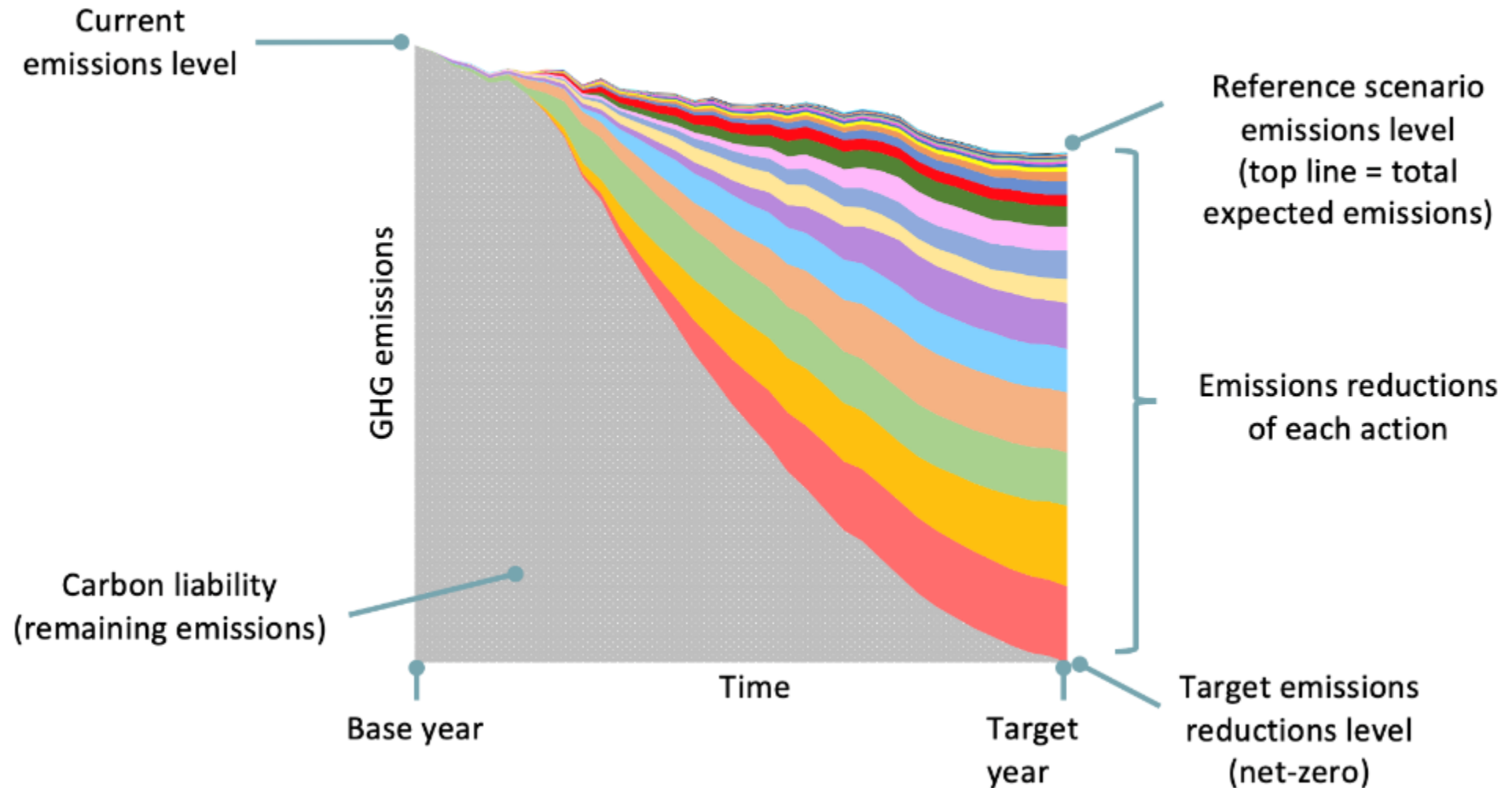
Fuel switch to low-carbon or zero-carbon renewable sources.



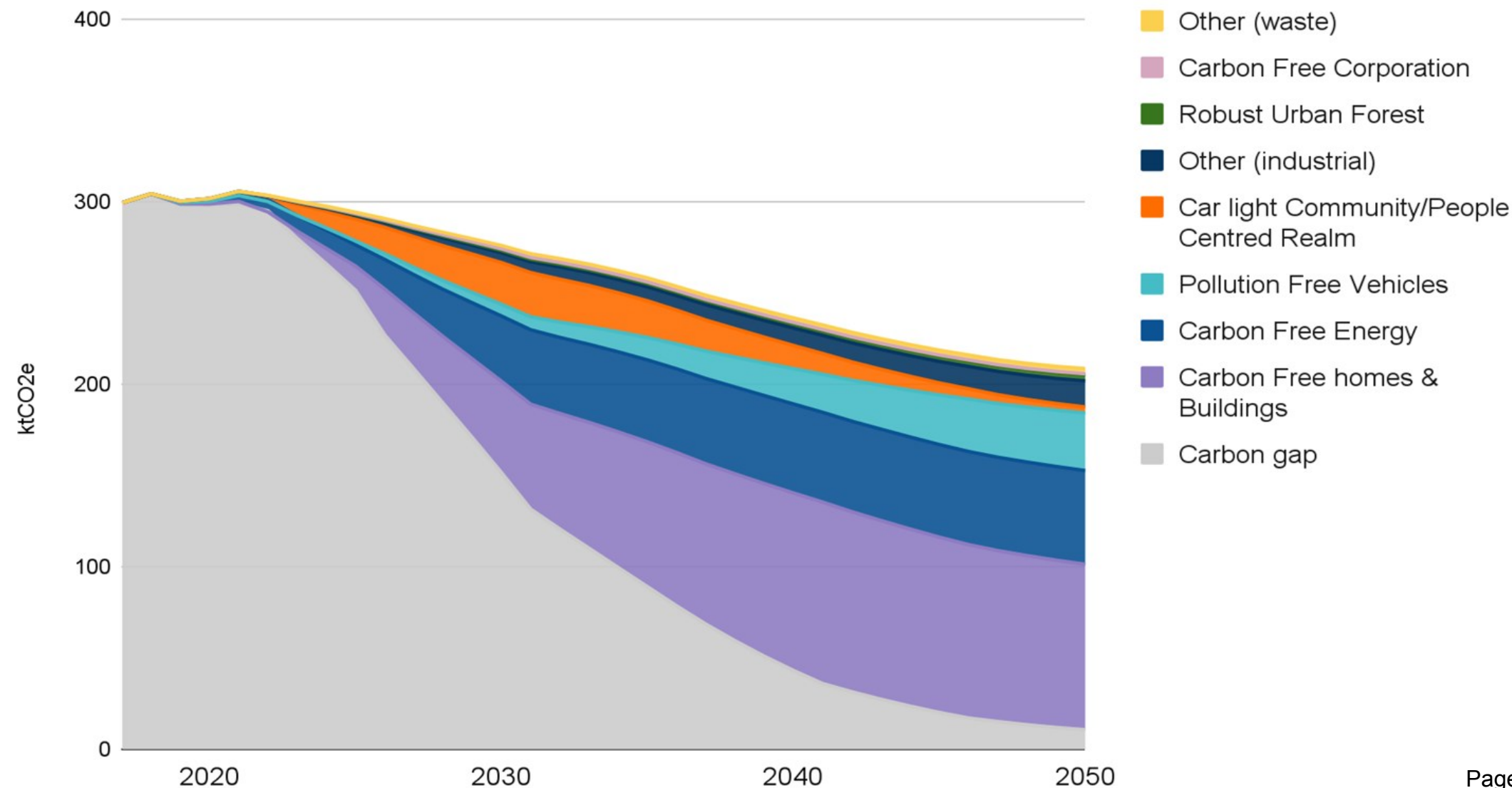
# Low Carbon Trajectory – Draft Results



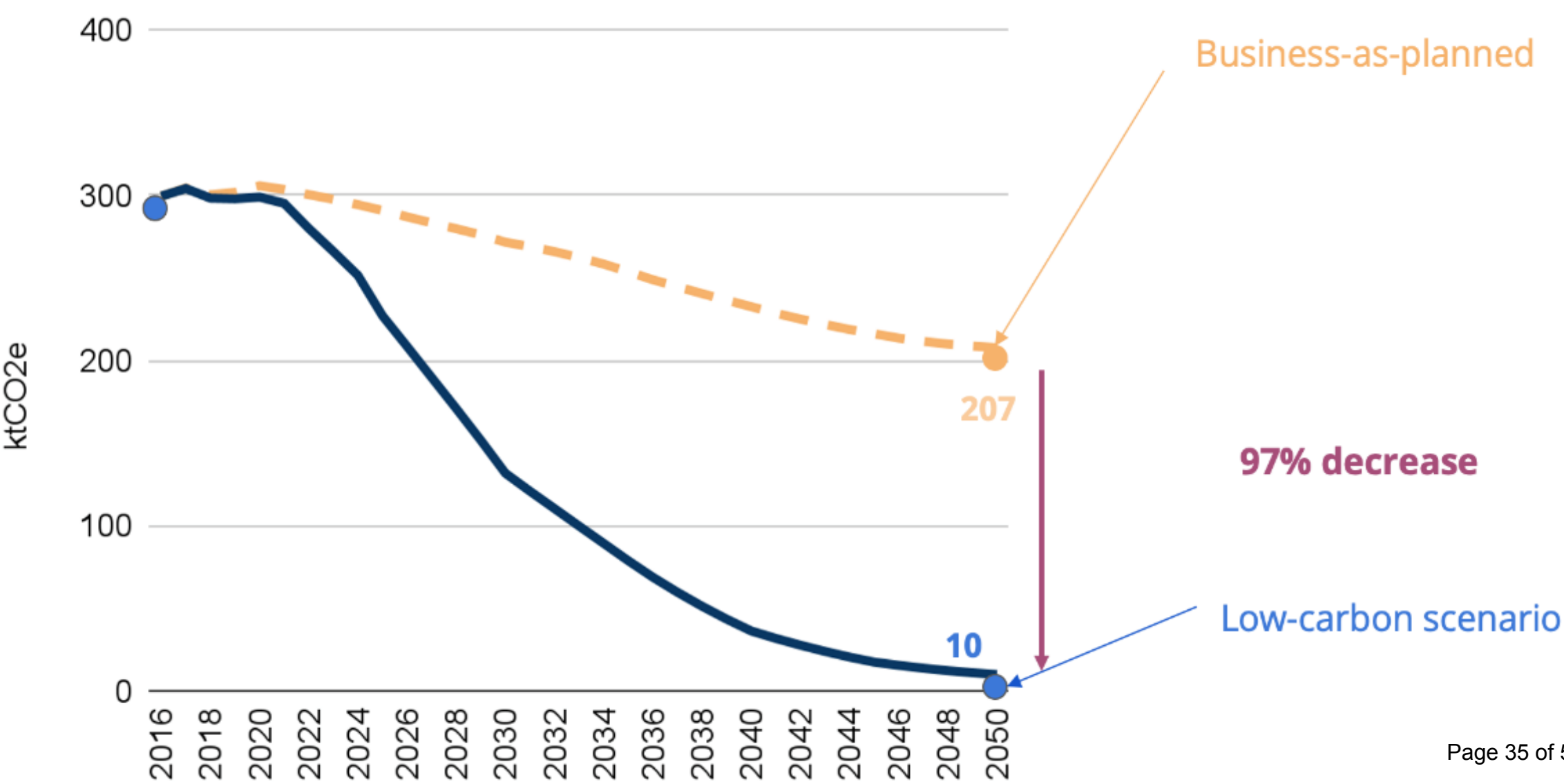
# Anatomy of a Low-Carbon Trajectory

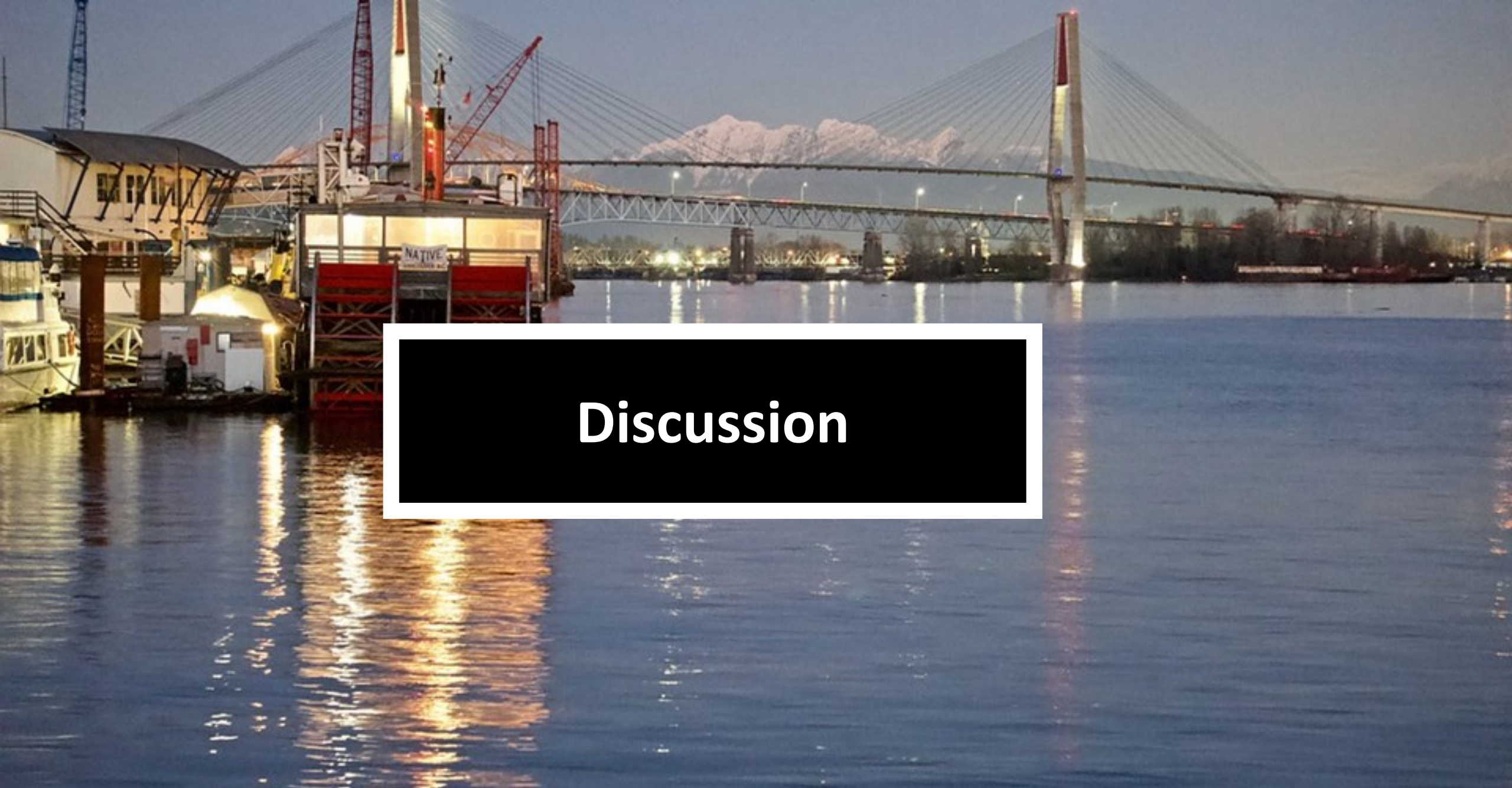


# Wedges – Seven Bold Steps



# Results – Emissions Profile of Low Carbon Scenario





# Discussion



# Action Mapping Exercise

## Purpose:

- **Examine the impacts and ambitions of achieving our low-carbon targets**
  - Based on baseline & Business-As-Planned analysis
  - Review of global best practice
  - Work with dozens of other municipalities
- Your input will help prioritize the low carbon actions included in the CEEP.



# CEEP Actions: Transportation

## Transportation

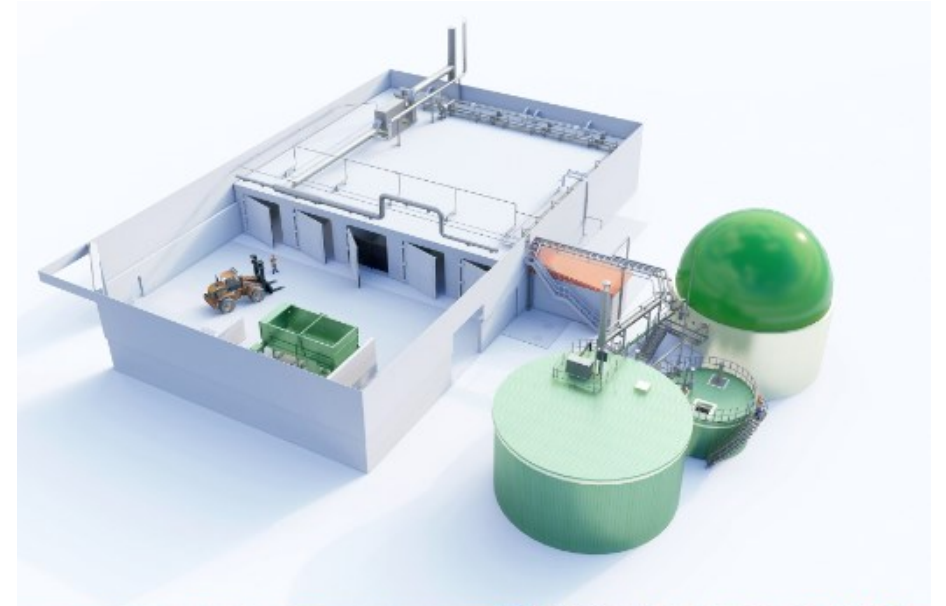
- 100% of new vehicles are electric by 2030
- 100% of new commercial vehicles (heavy-duty) are electric or hydrogen based by 2045

## Transit / Active Transportation

- Expand transit and car-share use between “nodes”
- Transit is 100% electric by 2038
- Walking/biking/transit trips are 60% of modal split for internal trips
- Shared e-bikes within some zones
- 10% of road space is pedestrianized

## CEEP Actions: Waste, District Energy, Electrification, etc.

- Further electrify pulp and paper industry and switch remaining fuel to renewables (Renewable Natural Gas /Hydrogen)
- Improve efficiency of water/ wastewater pumps by 10% by 2030
- Divert solid organic waste to an anaerobic digester
- Install a District Energy System at Braid and maximize the use of Sapperton/ Royal Colombia Hospital
- Q2Q is electric



# CEEP Actions: Buildings

## New Buildings

- All new buildings are net-zero before 2030
  - Step-code aligned
  - Low-carbon heating
- Green roofs on all multi-family and non-residential by 2030

## Existing Buildings

- 95% of buildings have deep retrofits by 2050
- Municipal buildings are decarbonized by 2030 (CEERS)
- Incentivize builders/ developers to electrify heating/cooling systems (heat pumps and water heating)





# Action-Mapping Exercise Instructions

Objective:

**Place** the low-carbon actions on the “Impact vs. Effort” matrix.

**Discuss** why you placed them there, and note any major concerns



# Action-Mapping – BUILDINGS

**Action Bank:**

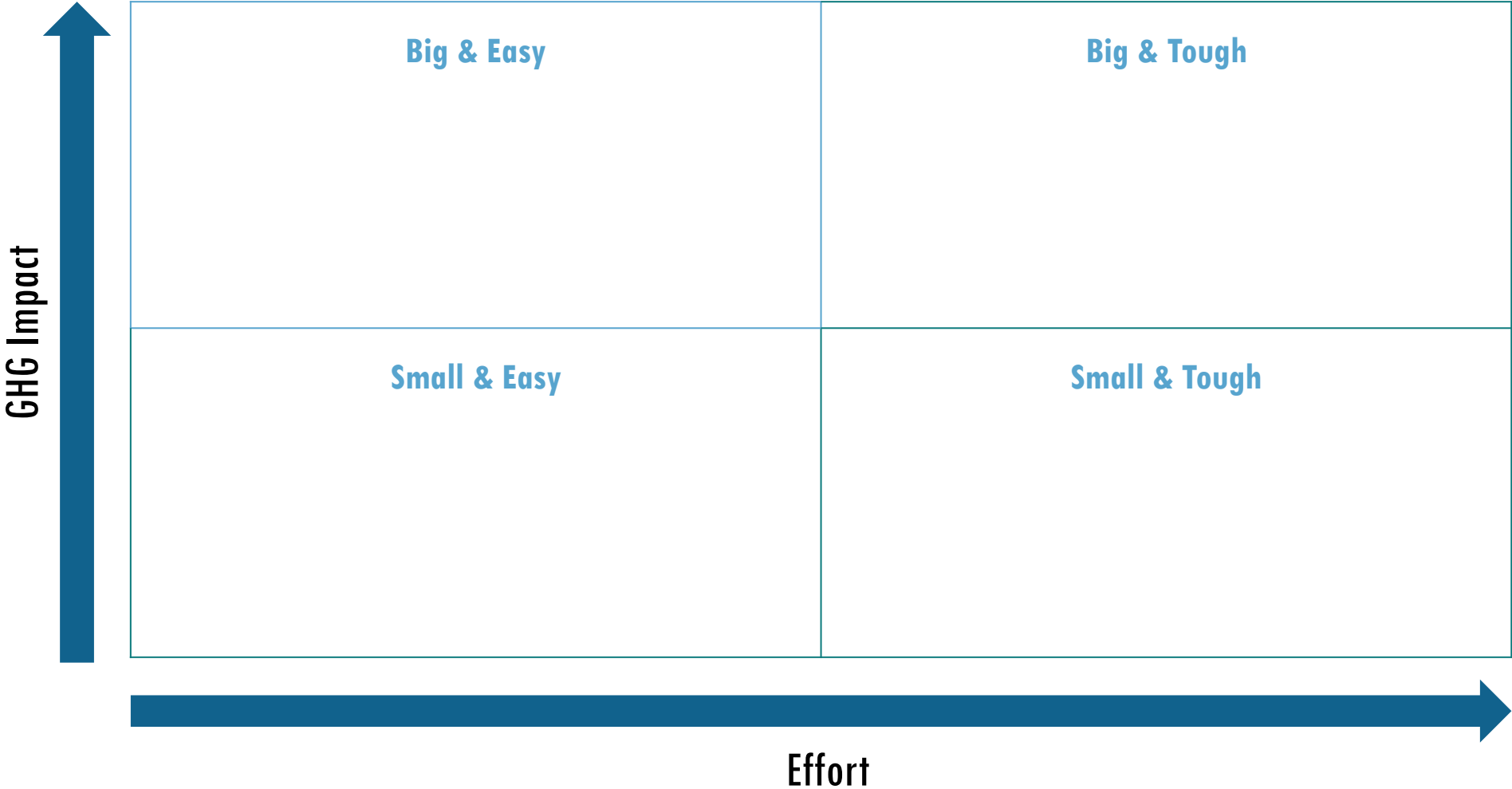
New Residential Buildings meets Step 5 (Net Zero) of Energy Step Code before 2030

New Non-res. Buildings meets step 4 of BC Energy Step Code before 2030

Retrofit 50% of homes by 2030, 95% by 2050, fuel switch to electric

Retrofit 50% of non-res buildings by 2030, 95% by 2050, fuel switch to electric

Green roofs on all multi-family and non-residential by 2030

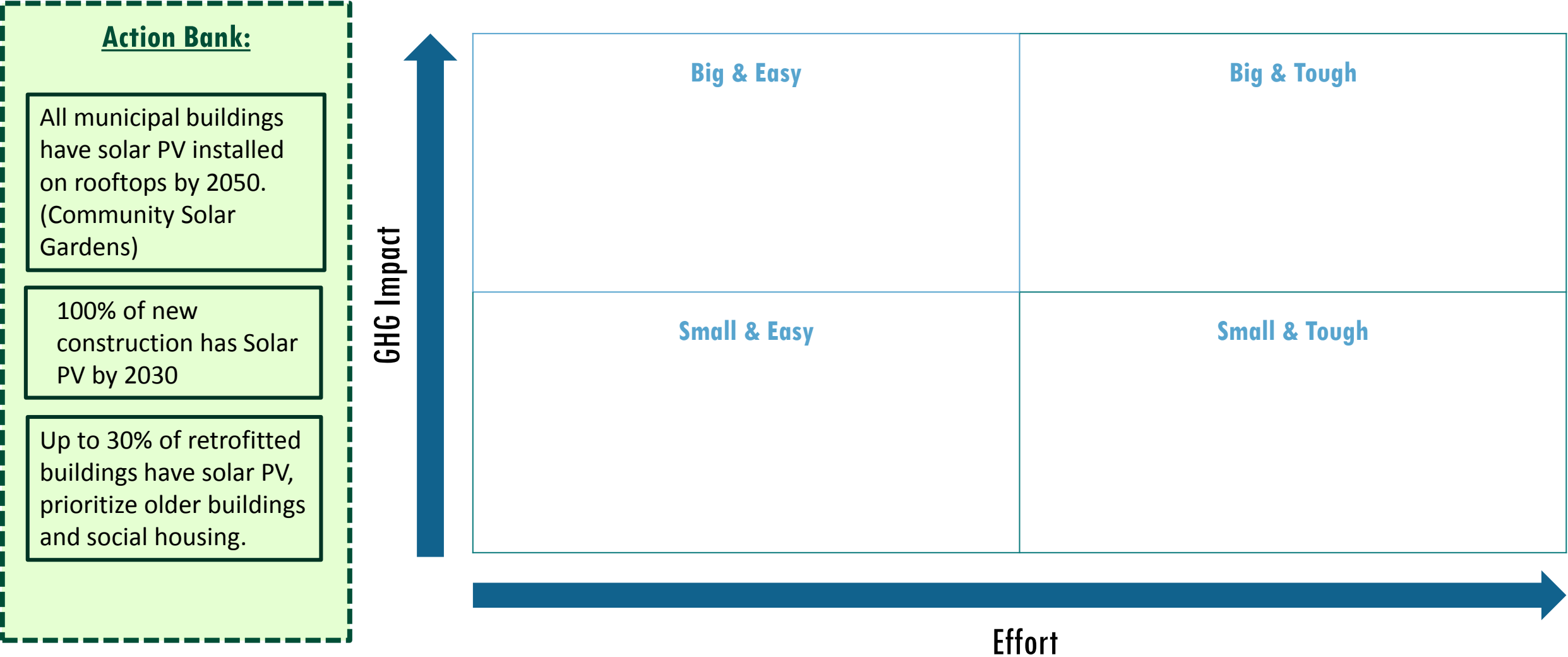


## CEEP Actions: Renewable Energy

- All municipal buildings have solar PV installed on rooftops by 2050. (Community Solar Gardens)
- 100% of new construction has Solar PV by 2030
- Up to 30% of retrofitted buildings have solar PV, prioritize older buildings and social housing.
  - Providing 50% of demand



# Action-Mapping – RENEWABLE ENERGY







**Next steps**





# Thank You!

[Nayel Halim](#)

Community Energy & Emissions Specialist

City of New Westminster

[nhalim@newwestcity.ca](mailto:nhalim@newwestcity.ca)

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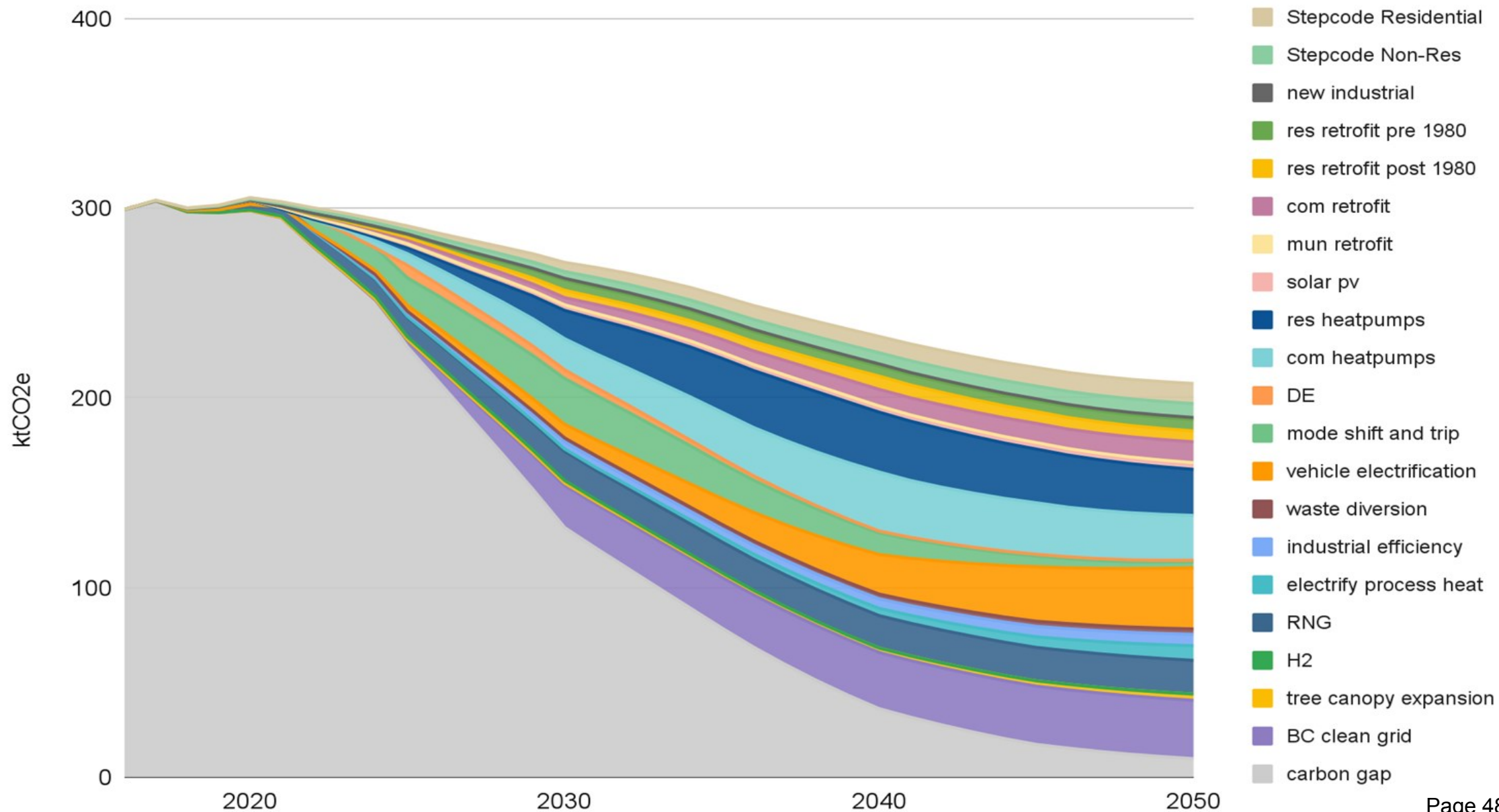
NEW WESTMINSTER



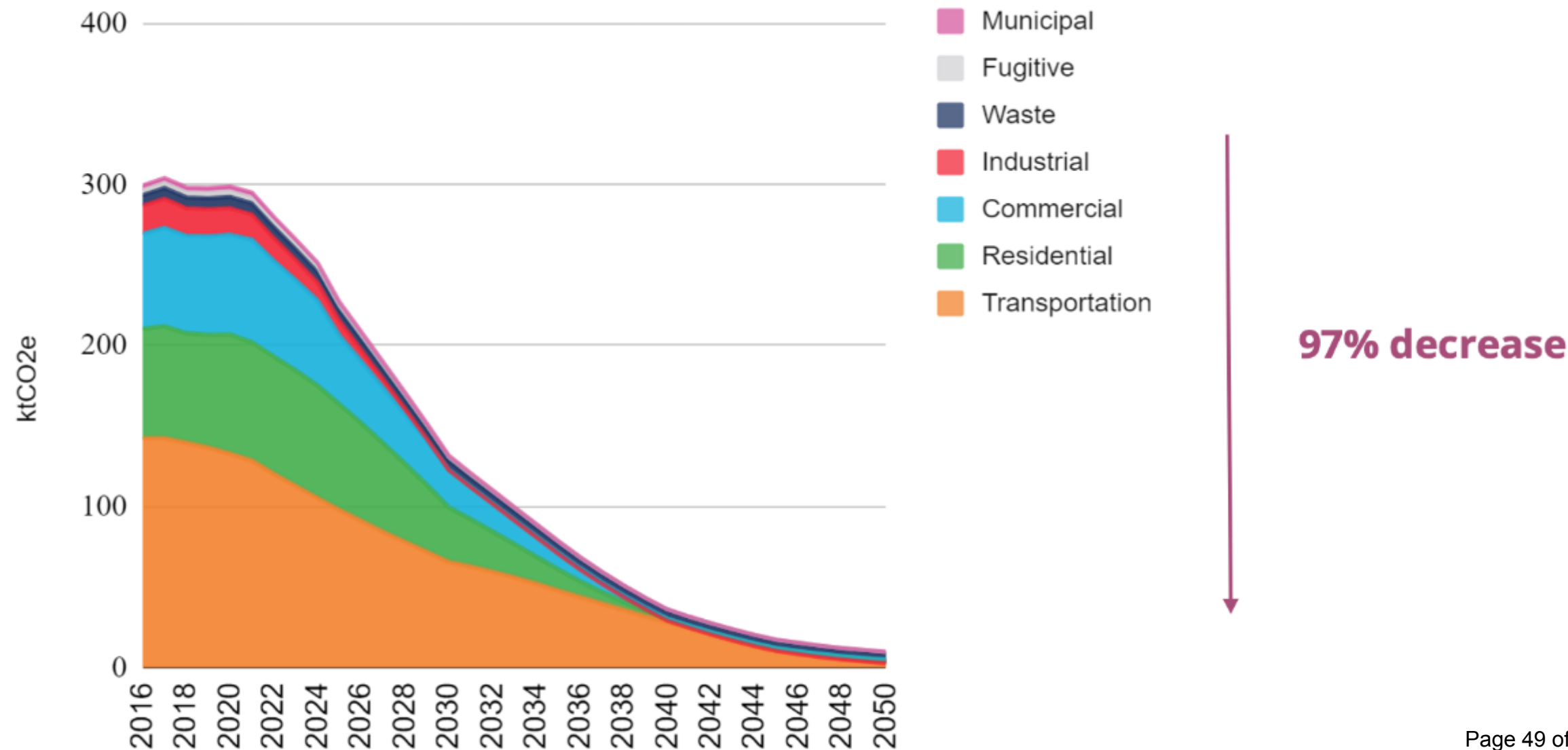


# Extra Slides

# Low Carbon Wedges

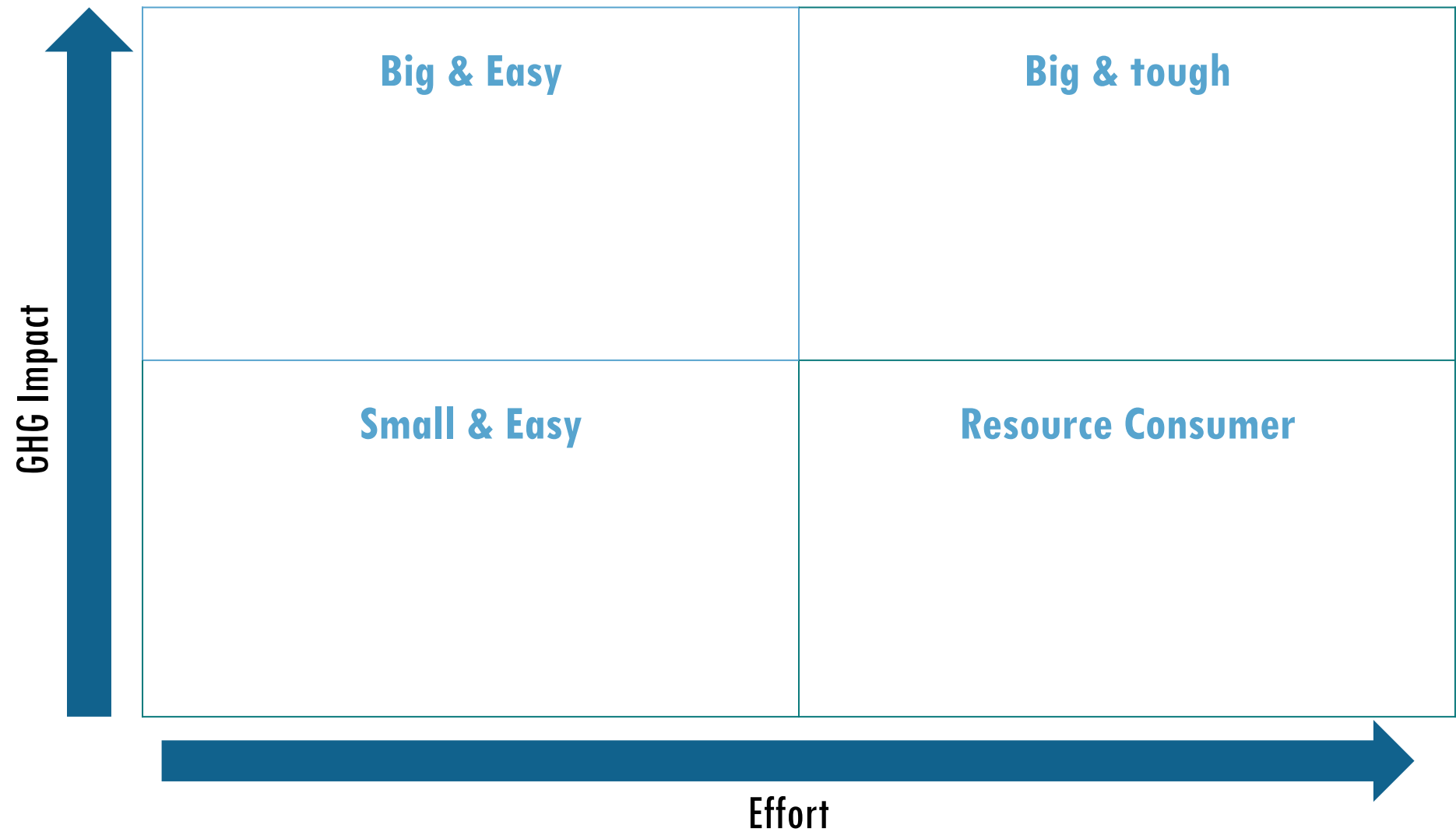


# Net-Zero Scenario – GHG Emissions by Sector



**CEEP Action Bank: Transportation**

- 100% of new vehicles sales are electric by 2030
- 100% of commercial vehicles are electric or hydrogen-powered
- Teleworking reduces home to work trips by 7.5% by 2030, 15% by 2050. (Prioritize non-active modes)
- 60% of trips are non-vehicle based for trips commencing in NW





**CEEP Action Bank: Waste, District Energy, Electrification, etc.**

