Do local governments really embrace change? A sentiment analysis



Meeting the Climate Change Challenge (MC3)

GOALS



Sentiment analysis of the word 'change' on:

- Climate Change (CC) impacts
- Local climate innovation
- Development path change

- ☐ To further enrich the understanding of the stance of local governments (LG) regarding change
- ☐ To determine whether changes were actually occurring in LG development paths.

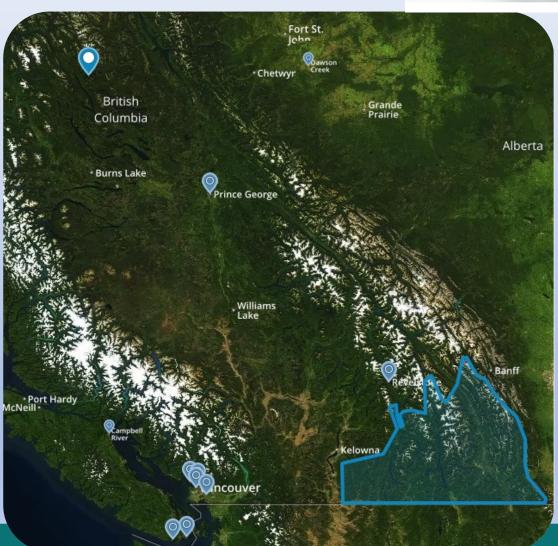


CASE STUDIES

Masting the Climate Change (MC3)

Meeting the Climate Change Challenge (MC3)

- Dawson Creek
- Prince George
- Revelstoke
- Carbon Neutral Kootenays
- Campbell River
- T'Sou-ke First Nation
- Victoria
- West Vancouver
- North Vancouver
- Vancouver
- Surrey







METHODS



- Open-ended, semi-structured interviews with LG officials (from BC) involved in the design of CC initiatives.
- Text mining approach applied for sentiment analysis of the word 'change'.
- Relevant excerpts assorted in 12 major topics & attitudes.



MAJOR TOPICS

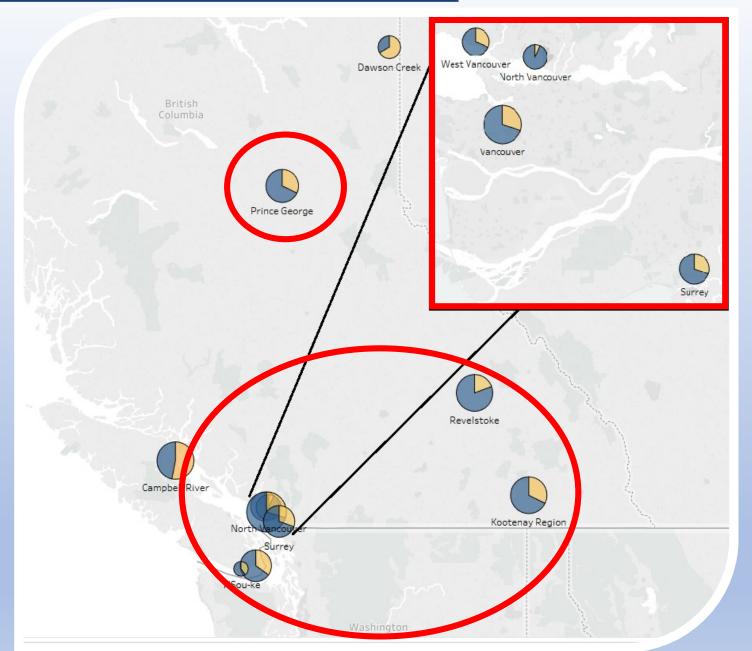
- Natural environment
- Leadership and staff champions
- Strategic planning
- Integration of the CC agenda
- Mitigation measures implemented
- Measures linked to residential development
- Adaptation measures implemented
- Perception of CC in the LG
- Perception of CC among community members
- Behavioral change towards CC
- Knowledge dissemination
- Avoiding CC related terms (focus on co-benefits)



Meeting the Climate Change Challenge (MC3)









Positive sentiments:



Negative sentiments:



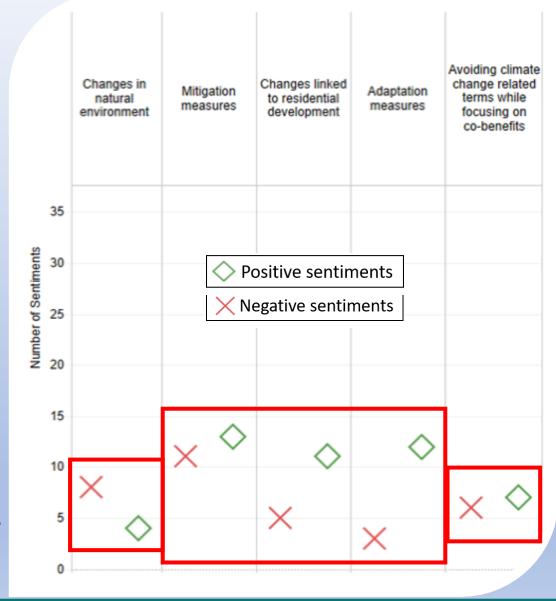


OUTCOMES 1/3

Least frequent claims

- Natural environment
- Mitigation measures implemented
- Residential development
- Adaptation measures implemented
- LG Avoiding use of CC related terms

-> focus on sustainability & co-benefits.





FINDINGS 1/3



Positive sentiments:

- Adaptation measures against flooding & forest fire
- Measures focused on co-benefits
- Mitigation measures on transportation

Negative sentiments:

- Insufficiency of the measures implemented.
- Clear frustration over the scale and pace of chang





OUTCOMES 2/3

Most positive sentiments linked to institutional changes.

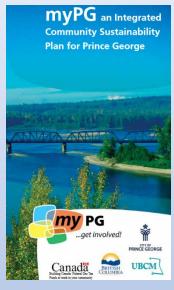
- Integration of CC agenda & collaboration
- Leadership and staff champions
- Strategic planning
- Knowledge dissemination

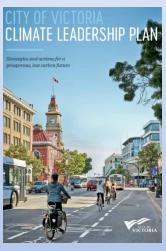




FINDINGS 2/3









Clear positive changes prompted by voluntary Climate Action Charter.

- Climate action agenda less prone to challenges despite political leadership changes.
- Common goals increased collaboration between municipalities.

Provincial government & external support crucial for strategic planning.



OUTCOMES 3/3

Most frequent claims

- Perception of CC in LG
- Perception of CC among community members
- Behavioral change towards CC





FINDINGS 3/3





- Climate Crisis considered positive change
- Perception of LG vis-à-vis CC: lack of political will <- lack of common understanding
- LG continuing climate innovation is strongly dependent on the public acceptance of change.
 - Importance of raising awareness and gain public support







Sentiment analysis contributed to the understanding of:

- ✓ Several drivers and barriers to change
 - Leadership & external support identified as critical drivers
 - Reluctance to change
- ✓ Better ways to address & normalize change
- ✓ Sense that urgent action must be taken
- ✓ Measures focused on small achievements



FURTHER RESEARCH



 Target areas where negative sentiments are taking place
 Indicate local limitations to change

 Draw upon experiences in areas w/ highest ratio of positive to negative changes







THANK YOU

Source:

Jost, F., Dale, A., Schwebel, S. 2019. How positive is "change" in climate change? A sentiment analysis. Environmental Science & Policy. Vol 29: 27-36.

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