

British Columbia Low Carbon Regulations



“One-Two-Three Economic Knockout?”

The Low Carbon Suite - 'RLCFRR'

Carbon Tax on Fuels	2008 — \$5/tonne 2012 — \$30/tonne Applies to 70% cent of total greenhouse gas emissions.
Renewable Fuel Standard	2010 5% gasoline, 4% diesel
Low Carbon Fuel Standard	2010 reporting July 1, 2013 into force 10% by 2020*

Carbon Tax – Select Fuel Types (2012)

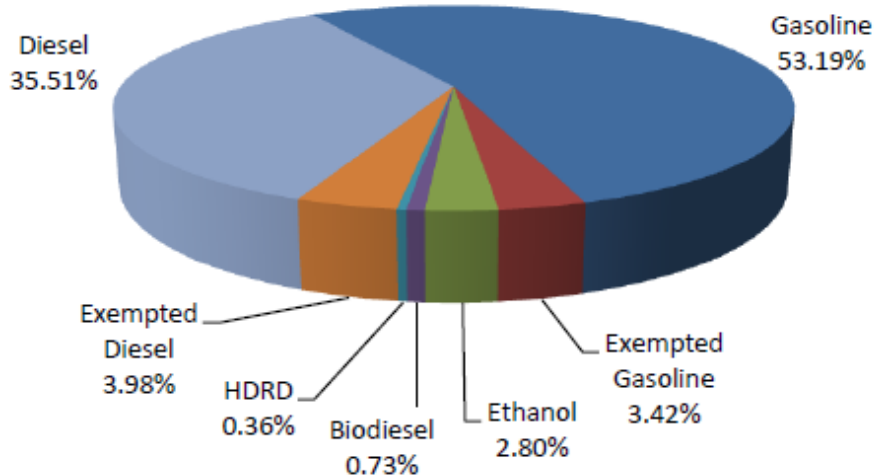
Gasoline	C\$ 0.067/L	US\$ 0.237/gal
Diesel	C\$ 0.077/L	US\$ 0.273/gal
Jet Fuel	C\$ 0.078/L	US\$ 0.279/gal

Results to Date

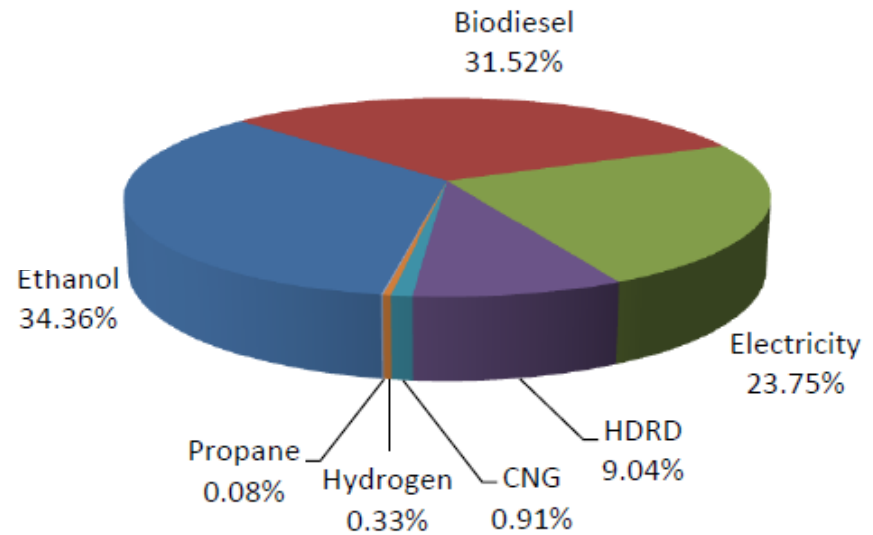
- + RFS in force 01/2010 has functioned as 'early compliance years' LCFS
- + RFS and LCFS have significantly reduced transportation emissions
- + Infrastructure investments to blend low CI fuels
 - + Biodiesel, ethanol, renewable diesel, LNG, hydrogen, e.charging
- + LCFS has been delayed, and amended to provide further flexibility

RFS and LCFS are working to reduce carbon from transportation fuels (2010)

Fuel Consumed



Emissions Avoided



Why the Delay 2010-2013?: FUDD

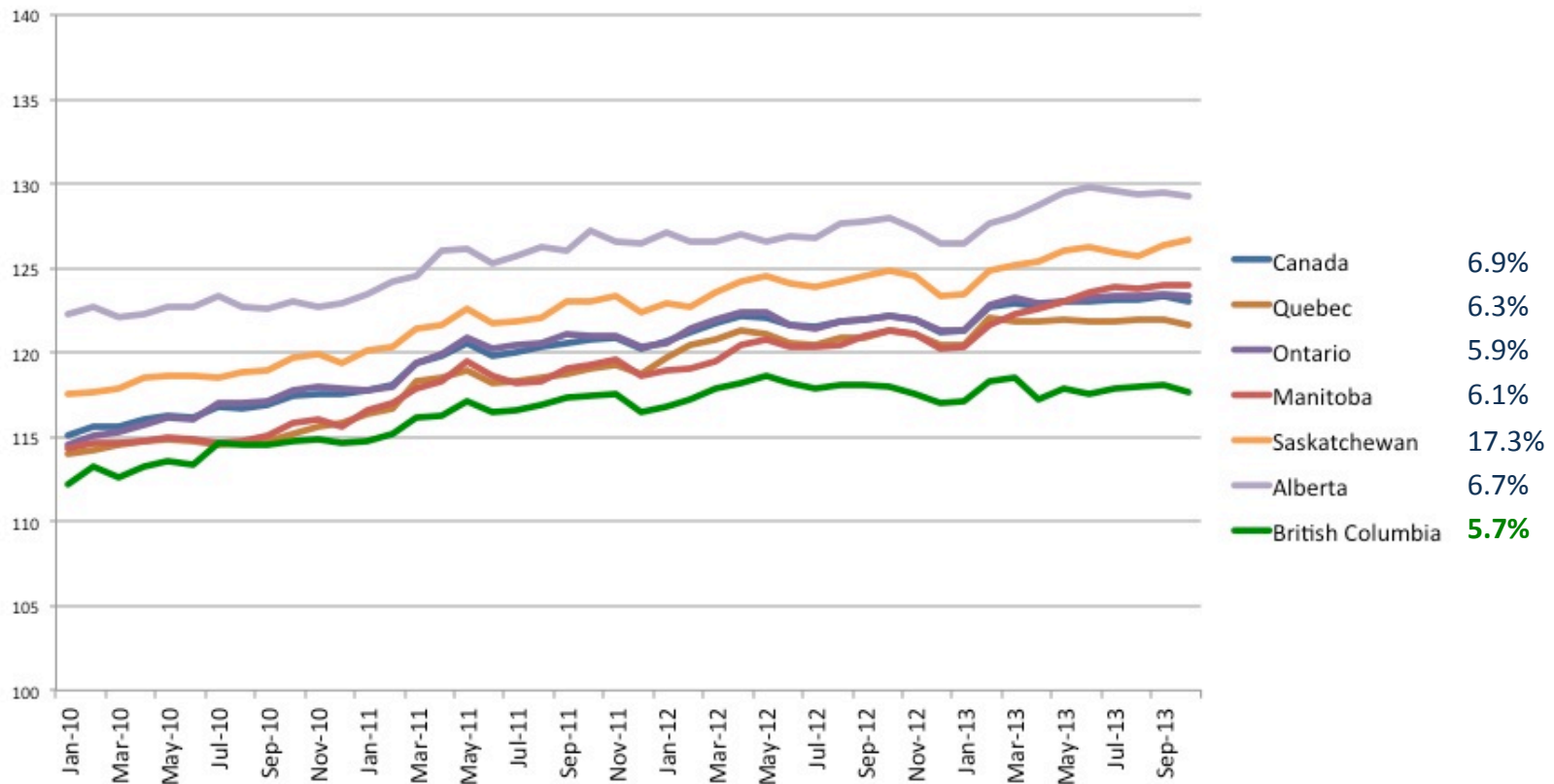
- + “Development of the technology and markets of the required compliance paths (i.e. very low carbon intensity biofuels, electric vehicles) **are outside of members’ control.**” (CFA)
- + “The LCFRR is complex and **costly relative to other GHG reductions**” (CFA)
- + “Regional LCFS programs increase the risk of restricting transportation fuel supplies (i.e., **rationing**), and of **creating competitive disadvantage** vs. neighboring jurisdictions” (Exxon)
- + “When **exiting the market** becomes the only compliance option there is a problem” (Shell)

Fear • Uncertainty • Doubt • Distraction

Provincial Consumer Price Index — All Items

2010-2013

BC Lowest Inflation Rate

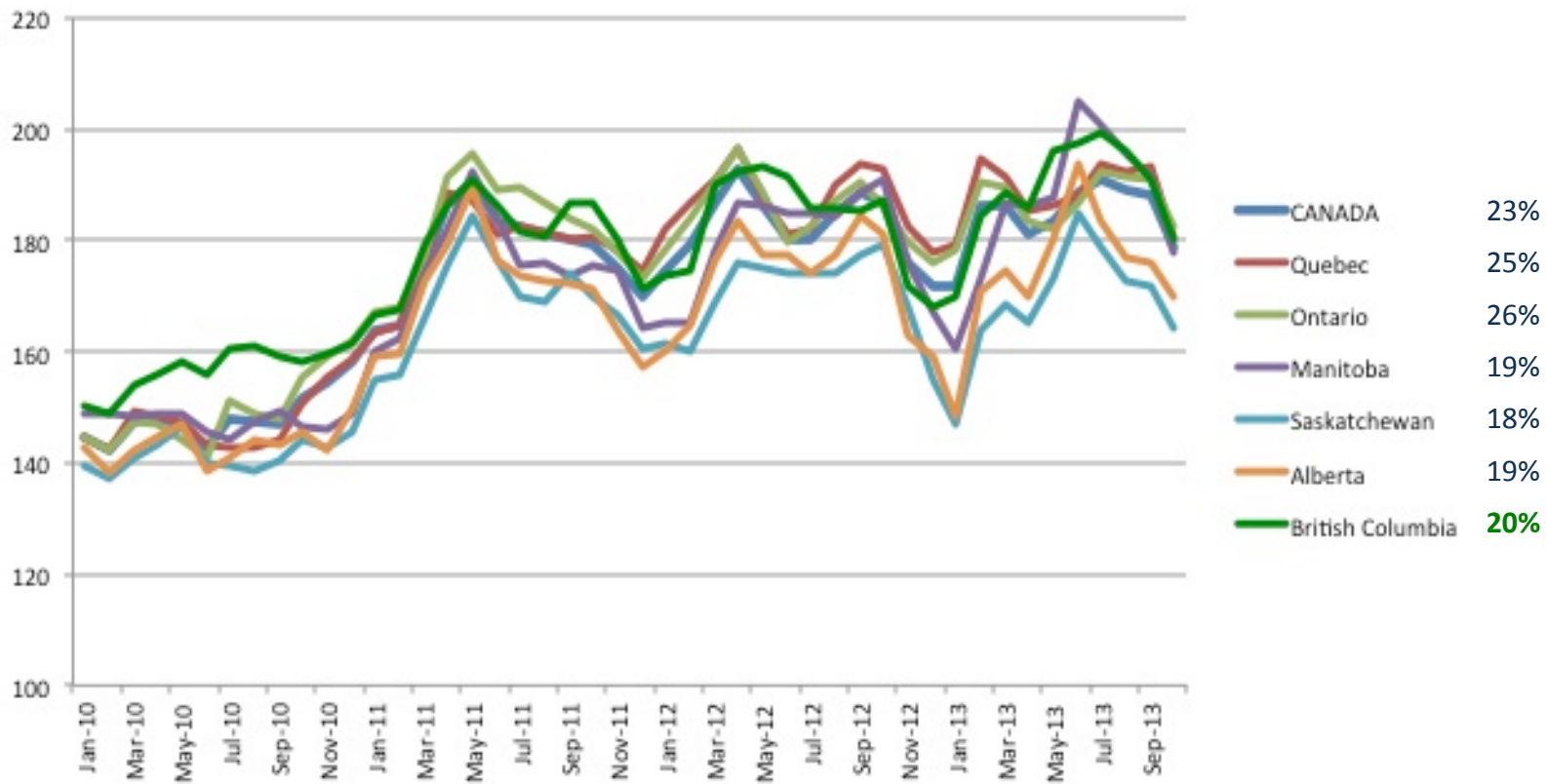


Statistics Canada. Table 326-0020 - Consumer Price Index (CPI), 2011 basket, monthly (2002=100)

Provincial Consumer Price Index — GASOLINE

2010-2013

BC Below Average

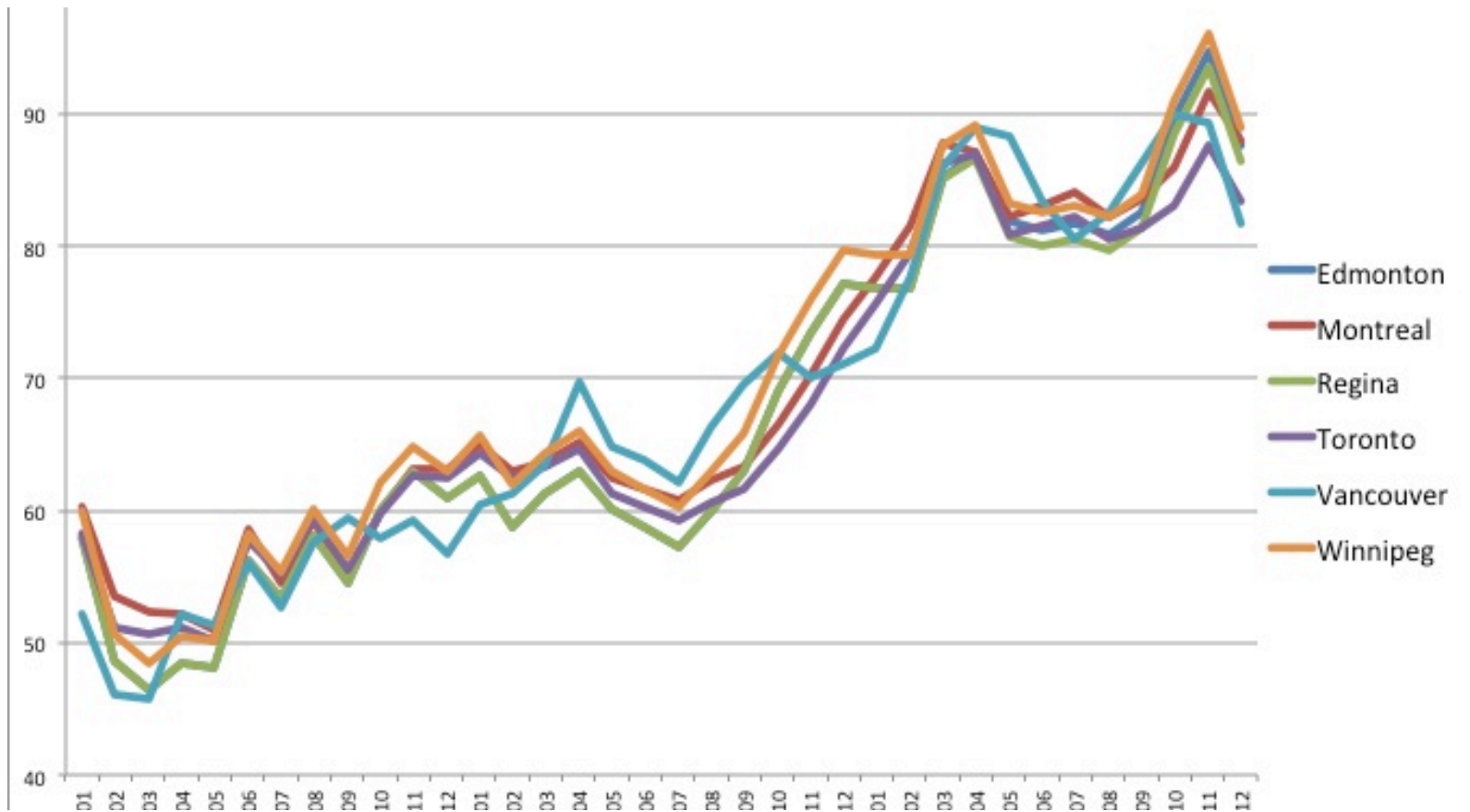


Statistics Canada. Table 326-0020 - Consumer Price Index (CPI), 2011 basket, monthly (2002=100)

Lessons 'from the road'

- + Fuel prices show no discernable difference in provinces with LCFS, w/o LCFS
- + Investments in lower carbon pathways – lag between infrastructure investments & realized GHG reductions
- + Delay risks self-fulfilling outcomes
- + Accuracy of claims need to be examined
- + Resolve and clarity about intent are CRITICAL

Wholesale Diesel Racks – 2010 – 2013 BC No Discernable Variance



Ian Thomson
Waterfall Group
ithomson@waterfall.ca