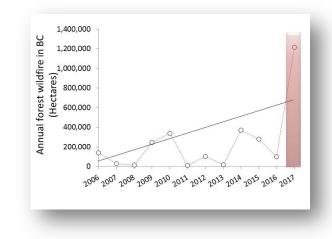
Toxic exposure mediated via AIR in BC(II)-BCTOX

Wildfires in BC since 2006

Mean (min - max) wildfire in BC from 2006 to 2016 were:

- Total fires was 1,844 (653 (2011) 3064 (2009)),
- Total hectares 154944 (12604 (2011)-369 (2014))
- Total cost 182 (54 (2011) 297 (2014)) millions dollars

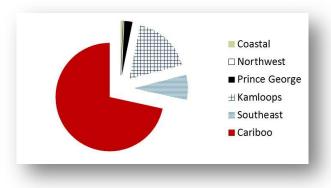
Among them 39% caused by people and 61% caused by lightning. Total wildfire from April 1, 2017 (past fiscal year) to Dec 31, 2017 in BC was 12,154 km².



Annual forest wildfire in BC (Hectares) (2006 to 2017)

Depicts wildfire from April 1, 2017 (past fiscal year) to Dec 31, 2017 (1,215,494 hectares) Source of data BC Wildfire Service [BCTOX Graph]

--- Values related to 2017 are released as estimates and subjected to modification (increase or decrease) in later stages.



Distribution of wildfire in BC

Current Statistics from BC Wildfire service shows that a total of 1,215,452 hectares burned from April 1, 2017 to Dec 31, 2017 (current fiscal year) in BC.

Distribution of wildfires in BC from April 1, 2017 to Dec 31, 2017 is shown in the figure. Source of data BC Wildfire Service [BCTOX Graph] (BC-Wildfire-Service)

Climate change in BC

Climate change Historical data from 1900-2013 in BC

Historical data in BC from 1900-2013 (gov.bc.ca) shows that:

- > Average annual temperature warmed by 1.4 °C across the province
- The night-time minimum average temperature in winter in B.C. increased by 3.1 °C
- > Annual precipitation increased across the province overall
- Average sea level has risen along most of the B.C. coast
- Lakes and rivers become free of ice earlier in the spring
- Water in the Fraser River is warmer in summer

(Read more)

Western U.S. States to form united front with B.C. in fight against climate change

"Washington is learning from B.C.'s carbon pricing system, and that the state intends to have a similar model in place down the line" according to Washington Gov. Jay Inslee. (CBCNews-2018-03-16) Health of ocean and fisheries a priority!

(Read more)

Electrification to decarbonize future in BC

Electrification the best way to bridge the gap to meet our greenhouse gas reduction goals. (Observer-208-03-26)

- In 2007 B.C.'s total carbon (equivalent) emissions were 65 million Tonnes (Mt).
- Current emissions is 62 million Tonnes
- 2030 target is 39 million Tonnes, which is a 40 per cent reduction.
- We need to find another 23 million Tonnes (37%) of reduction over the next 12 years.

What to do?

- Transportation: electric vehicles, hybrids, plug in hybrids, bio-fuels, hydrogen internal combustion, fuel cells, renewable fuels etc.
- Improved built environment: electrification of heating such as air source heat pumps and a geoexchange system
- Industry: Electrifying the natural gas industry
- Mining Association of BC is committed to taking advantage of our electricity resource (expected to be the lowest carbon minerals in the world).

(Read more)

Electricity use actually increased during 2018 Earth Hour!

For the first time since tracking electricity use in the province during Earth Hour, Electricity use actually increased during 2018 Earth Hour! According to BC Hydro. (CBCNews-2018-03-25)

B.C. residents cut power use by just 0.3% in 2017, which was only 15% of the energy savings recorded in the first event in 2008. (CPKGToday-2018-03-23)

(Read more)

Q1. In your view what could be the reason?

Trans Mountain pipeline protest

19 arrested at Trans Mountain pipeline protest site in Burnaby.(CBCNews-2018-03-19) including Green Party Leader Elizabeth May. (TheStar-2018-03-23)

(Read more)



Photo adopted from (CBCNews-2018-03-19) (Rafferty Baker/CBC) (Read more)

Air quality advisory in in Smithers

Woodstove was prohibited during advisory unless it's the only heat source.

Northern Health said people with chronic underlying medical conditions should postpone strenuous exercise until the advisory is lifted. (BCLocalNews-2018-03-07)

(Read more)

Paying to replace old wood stove in Vanderhoof

Deputy Director of Community Development for the District of Vanderhoof:

"We offer \$500 toward the replacement of the old wood stove for a pellet burning appliance, and \$800 for the conversion to gas, but the cost of those conversions is a lot more so we haven't really captured the interest of people". (BCLocalNews-2018-03-07)

(Read more)

Q2. In your view what could be the reason? What can be done about it?

Reference

BCLocalNews-2018-03-07. 'Update: Air quality advisory in Smithers ended. https://www.bclocalnews.com/news/update-air-
quality-advisory-in-smithers-ended-2/'
CBCNews-2018-03-16. 'Western U.S. states disregard Trump to form
united front with B.C. in fight against climate change.
http://www.cbc.ca/news/canada/british-columbia/western-
<u>u-s-states-disregard-trump-to-form-united-front-with-b-c-in-</u>
fight-against-climate-change-1.4580727'.
CBCNews-2018-03-19. '19 arrested at Trans Mountain pipeline protest
site in Burnaby, B.C. <u>http://www.cbc.ca/news/canada/british-</u>
columbia/19-arrested-at-trans-mountain-pipeline-protest-
site-in-burnaby-b-c-1.4583138'.
CBCNews-2018-03-25. 'Electricity use actually increased during 2018
Earth Hour, BC Hydro says.
http://www.cbc.ca/news/canada/british-
columbia/electricity-use-increases-earth-hour-2018-bc-
1.4592670'.
CPKGToday-2018-03-23. 'Earth Hour Sees Decline In Participation In BC.
http://ckpgtoday.ca/article/521777/earth-hour-sees-decline-
participation-bc'.
gov.bc.ca. '
Government of British Columbia. Impacts of Climate Change.
https://www2.gov.bc.ca/gov/content/environment/climate-
<u>change/adaptation/impacts</u> (accessed Mar 26, 2018)'.
Observer-208-03-26, National. 'Western U.S. States to form united front
with B.C. in fight against climate.
https://www.nationalobserver.com/2018/03/26/opinion/ele
ctrification-our-way-decarbonized-future'.
TheStar-2018-03-23. 'Green Party Leader Elizabeth May, NDP MP
arrested at Trans Mountain pipeline protest in
B.C.https://www.thestar.com/news/canada/2018/03/23/gre
en-party-leader-elizabeth-may-ndp-mp-arrested-at-trans-
mountain-pipeline-protest-in-bc.html'.