

Recovering Climate Costs

Presentation to City of Richmond

Apr. 23, 2019

Gordon Cornwall, for West Coast Environmental Law

BC interior, 2017



Grand Forks, 2018



Climate change is here,
it's **costly**,
and it's going to cost more.

Fort MacMurray, 2016



Vancouver, 2018



Some examples:

Record BC wildfire season in 2017

- **\$668M** in fire fighting costs (not counting military) ¹
- 1.2 M hectares forest lost
- 400,000 hectares rangeland damaged
- hundreds of homes and other structures destroyed
- impact on tourism economy
- physical and mental health impacts on British Columbians from smoke inhalation and anxiety
- **New record in 2018 (here and in California)**

New and enhanced infrastructure to combat rising sea levels in Metro Vancouver:

- **\$9.5B** for dykes, sea-gates, property acquisition ²

Potential costs of a Fraser River flood:

- **\$32.7B** in interrupted cargo shipments, commercial and residential damages, etc. ³

1 Globe and Mail, "[BC wildfires stoked by climate change, likely to become worse: study](#)," Jan 9, 2019.

2 BC Ministry of Forests, Lands and Natural Resource Operations, "[Cost of Adaptation - Sea Dikes & Alternative Strategies](#)," October 2012.

3 Fraser Basin Council, "[Lower Mainland Flood Management Strategy - Phase 1 Summary Report](#)," May 2016.

RICHMOND RISKS

Rising sea levels

Fraser River flooding

At-risk areas: "low lying shoreline with no dyke"

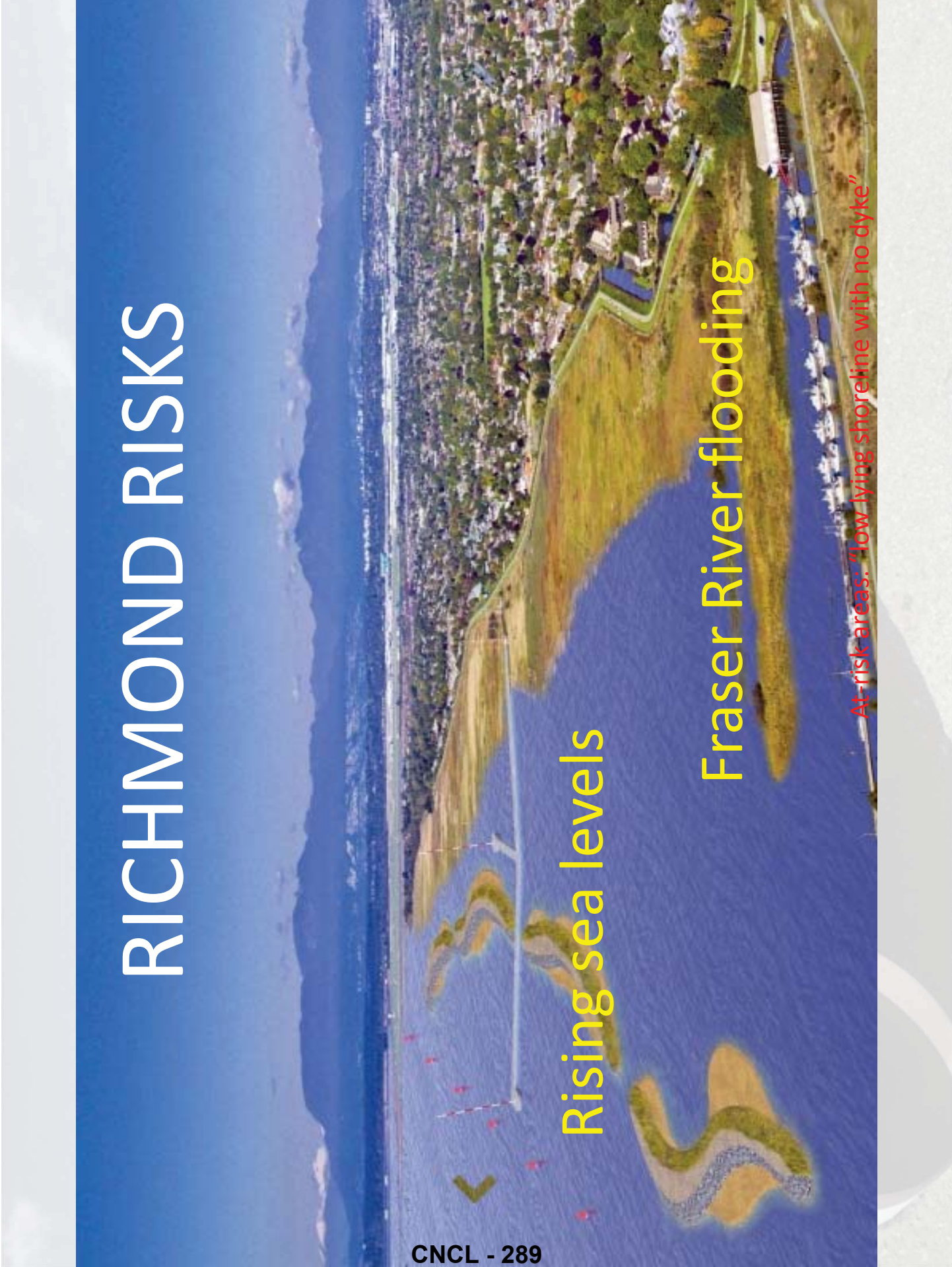
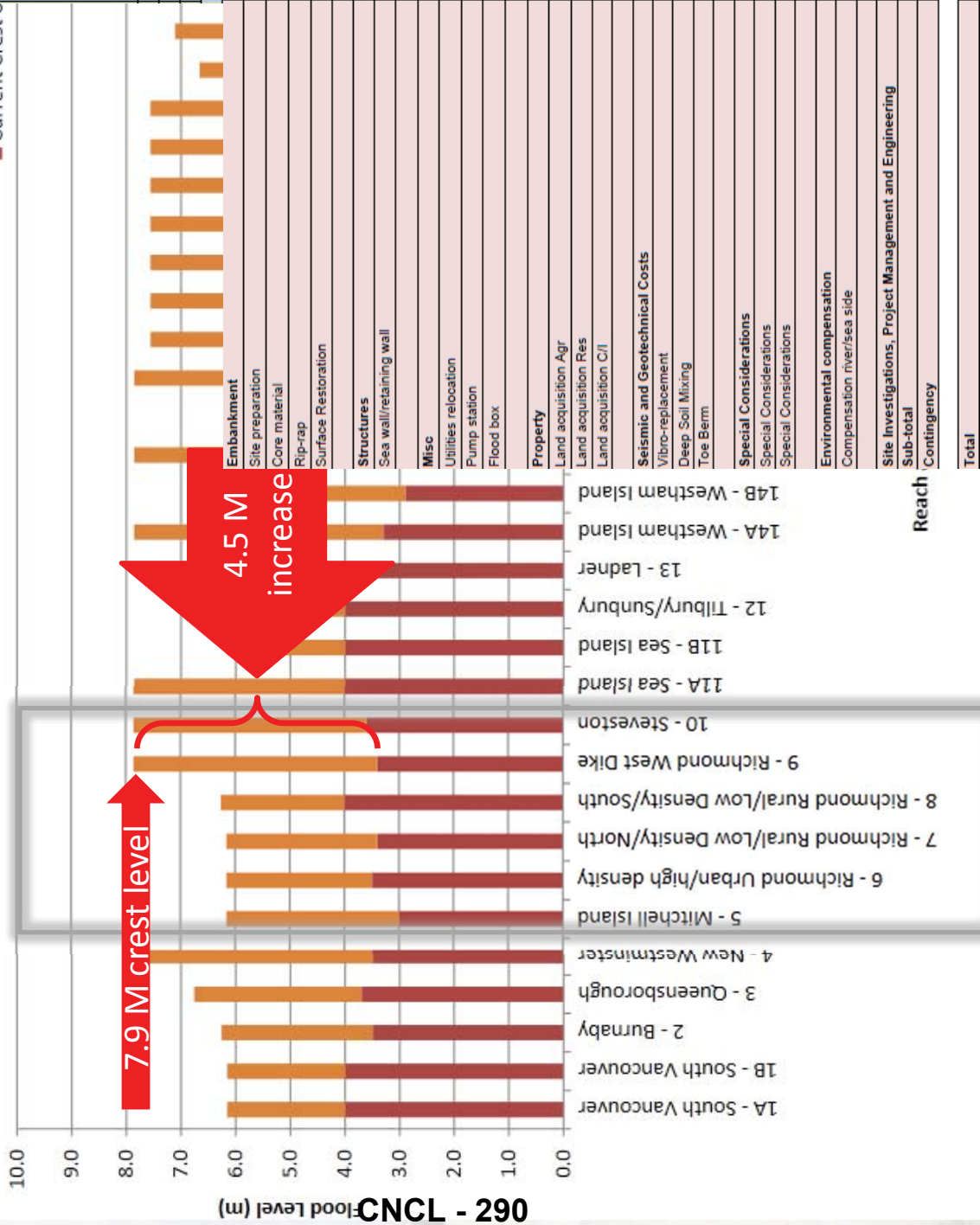


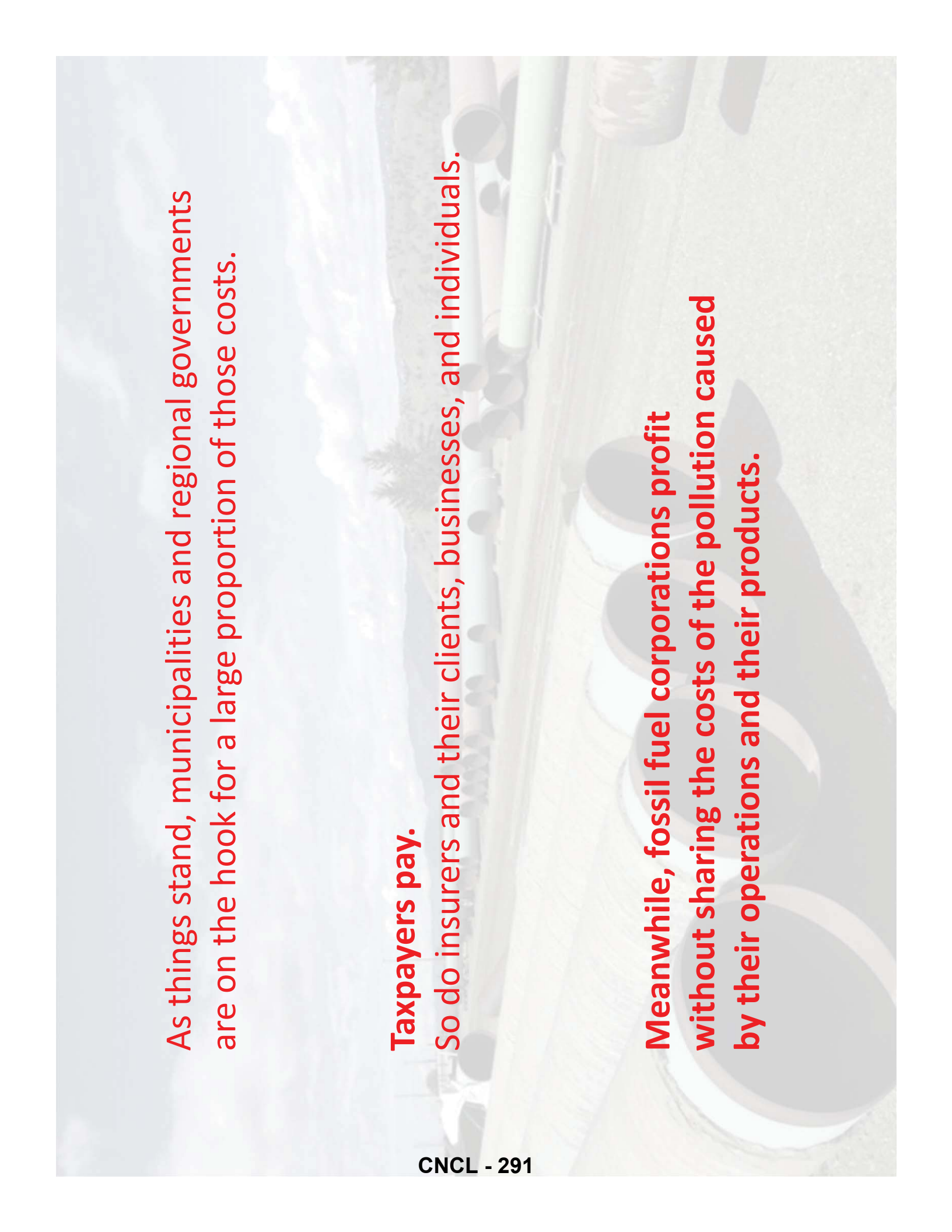
Figure 2.2: Flood Protection Level

Cost of Adaptation - Site Specific and Alternative Structures

■ Increased crest
■ Current Crest



\$3.9B

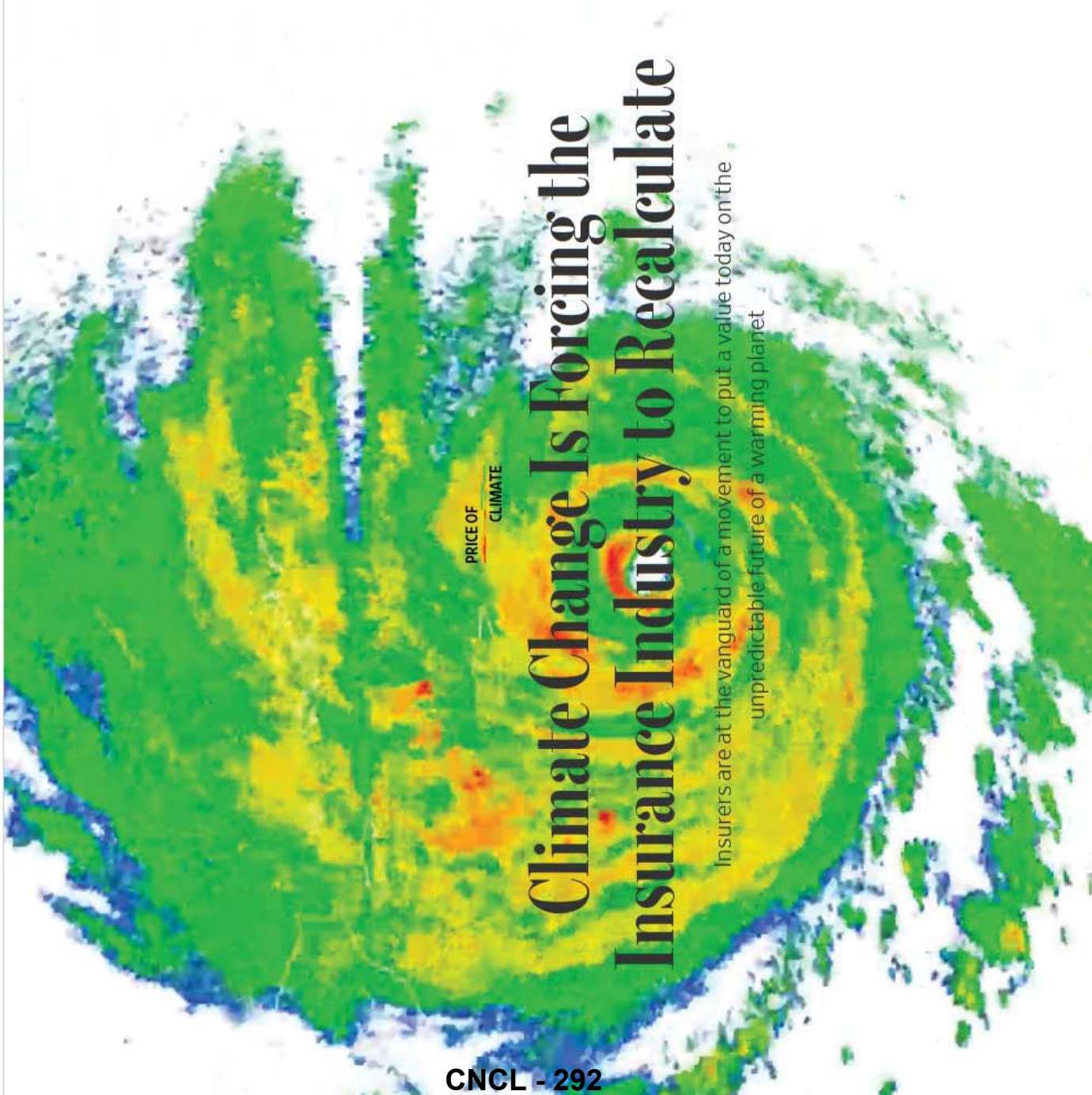


As things stand, municipalities and regional governments are on the hook for a large proportion of those costs.

Taxpayers pay.

So do insurers and their clients, businesses, and individuals.

Meanwhile, fossil fuel corporations profit without sharing the costs of the pollution caused by their operations and their products.



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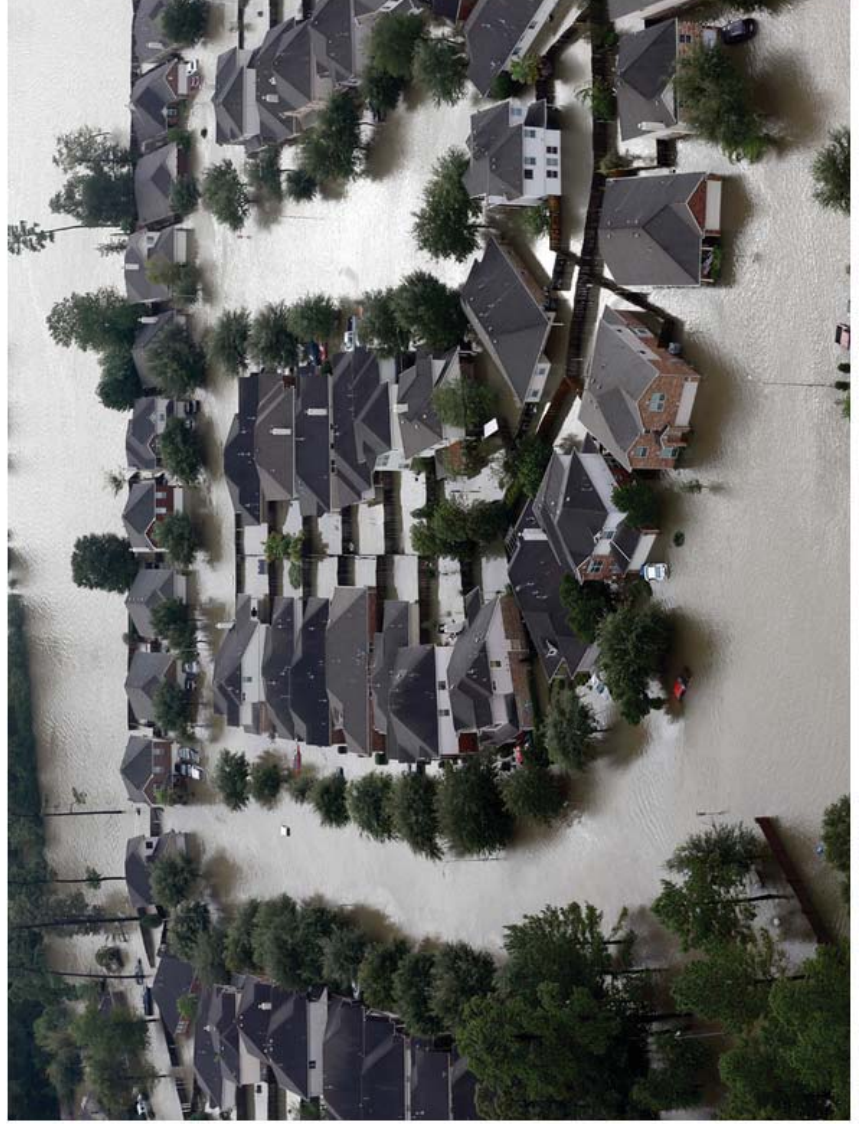
The global insurance industry has raised premiums, and is increasingly refusing to cover damages due to sea level rise, storm surges and flooding.

The State of Florida was forced to set up its own insurance pool to protect against losses from windstorms, thereby transferring risk to its taxpayers.

Los Angeles Times, Jun 16, 2014.

Moody's for first time warns cities to address climate change or face credit downgrades

Texas, Florida, Georgia and Mississippi are among the states most at risk from climate change



Nov. 30, 2017

'In a report to its clients Tuesday, Moody's Investors Service Inc. explained how it incorporates climate change into its credit ratings for state and local bonds. If cities and states don't deal with risks from surging seas or intense storms, they are at greater risk of default.

"What we want people to realize is: **If you're exposed, we know that. We're going to ask questions about what you're doing to mitigate that exposure,**" Lenny Jones, a managing director at Moody's, said in a phone interview. "That's taken into your credit ratings."

Some cities are managing their exposure by suing companies that have contributed the most to climate change.

Sept. 19, 2017: [San Francisco and Oakland sue for damages](#) in California Superior Court from five fossil fuel companies over sea level rise. Case dismissed June 25, 2018. The cities appealed.

Dec. 20, 2017: [Santa Cruz and Santa Cruz County file lawsuits](#) in California Superior Court against 29 fossil fuel companies, seeking compensation for climate change-related damage.

Jan. 9, 2018: [New York City files suit](#) in federal court against five fossil fuel companies over climate change-related costs. Dismissed July 19, 2018. NYC appealed Nov 8, 2018.

Jan. 22, 2018: [City of Richmond, California files lawsuit](#) in California Superior Court against 29 fossil fuel companies.

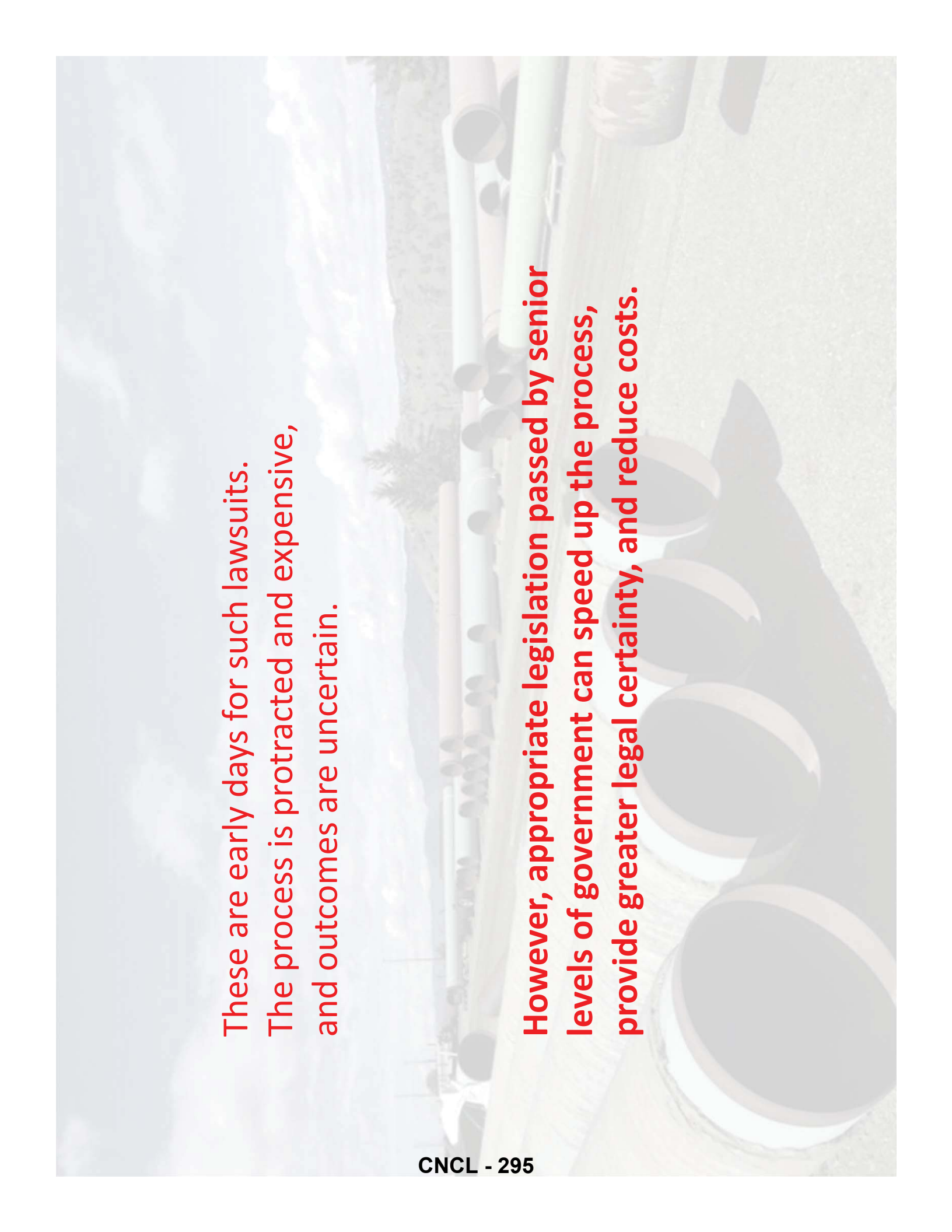
April 17, 2018: In Colorado, the city of [Boulder](#), [Boulder County](#) and [San Miguel County](#) [file a lawsuit](#) in District Court seeking to hold Exxon and Suncor accountable for costs related to climate change.

July 20, 2018, [Baltimore](#) [sues](#) 26 fossil fuel companies in Maryland state court for putting their investment in waterfront infrastructure at risk. ¹

February, 2018, Paris, France, passed a resolution “to examine suing oil and gas companies to pay for the costs of climate impacts.” ²

Nov 14, 2018, California crab fishermen associations file suit against 30 fossil fuel companies for harm caused to California’s fisheries by ocean warming. ³

1. [“Fossil Fuels on Trial: Where the Major Climate Change Lawsuits Stand Today,”](#) Insideclimatenews.org, accessed Nov 15, 2018.
2. [“Paris, Inspired by New York City, Considers Climate Suit Against Oil Companies,”](#) ClimateLiabilityNews.org, accessed June 8, 2018.
3. [“Claws out: crab fishermen sue 30 oil firms over climate change,”](#) The Guardian, Nov 14, 2018, accessed Jan 9, 2019.



These are early days for such lawsuits. The process is protracted and expensive, and outcomes are uncertain.

However, appropriate legislation passed by senior levels of government can speed up the process, provide greater legal certainty, and reduce costs.



Bill 21

An Act respecting civil liability for climate-related harms

Mr. P. Tabuns

Private Member's Bill

1st Reading March 26, 2018
2nd Reading
3rd Reading
Royal Assent

To this end,
NDP MPP
Peter Tabuns
introduced
Bill 21 to the
Ontario
legislature
in March
2018.
(Reintroduced
in October, 2018
as Bill 37.)

Key excerpts from the Ontario Bill

Strict liability for climate-related harms

2 (1) Every corporation, partnership, trust or other entity that is engaged in the production of fossil fuels and to which a globally detectable level of greenhouse gas emissions can be attributed, as determined in the regulations, is **strictly liable** for climate-related harms that occur in Ontario.

Level of greenhouse gas emissions

(2) The determination of a producer's level of greenhouse gas emissions shall be based on,

- (a) emissions resulting from the producer's production of fossil fuels; and
- (b) emissions resulting from the use of those fossil fuels.

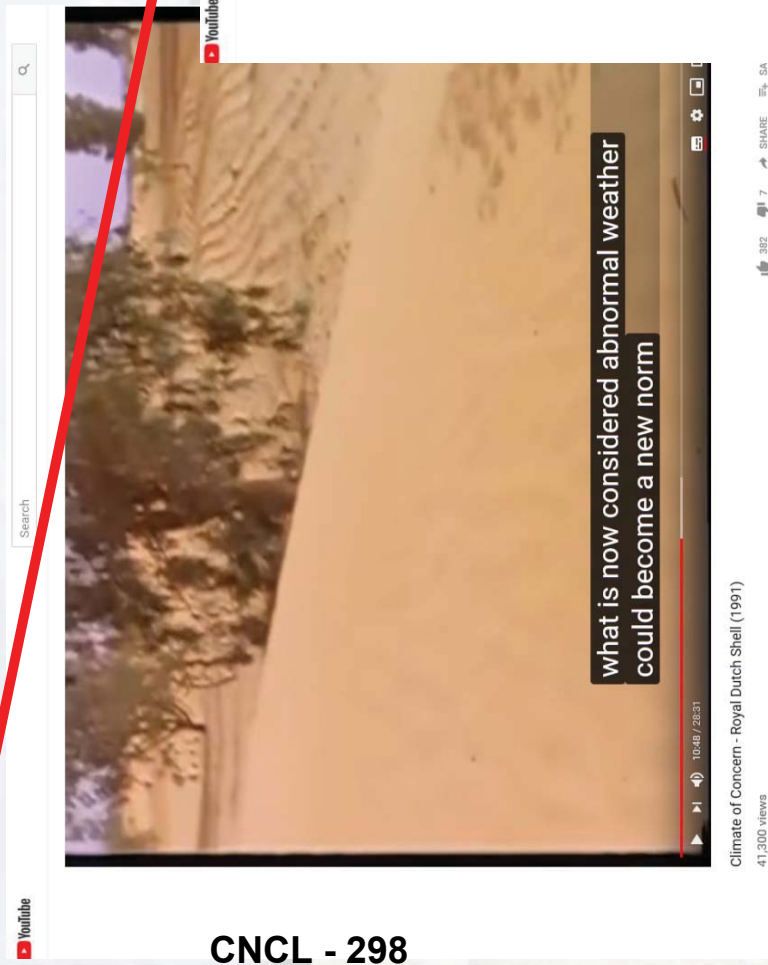
"climate-related harms" means harms arising from climate change, including, without limitation,

- (a) economic loss or physical loss of property, infrastructure, structures, resources, or other assets,
- (b) the costs associated with obtaining and maintaining insurance reasonably required due to the risk of the losses described in clause (a),
- (c) death, injury, illness or other physical or psychological harms and the costs associated with treating or caring for persons suffering from them,
- (d) harm related to ocean acidification,
- (e) loss of land or damage to infrastructure due to rising sea levels, including slow-onset loss,
- (f) the costs of monitoring, researching and analysing the climate and the weather if the costs are reasonably incurred to provide information about the effects of climate change and appropriate adaptation measures,
- (g) the costs of responding to emergencies arising from natural disasters associated with climate change,
- (h) the costs of constructing, renovating, repairing or improving infrastructure in order to minimize further such harms and costs, and
- (i) the costs of carrying out public education campaigns to inform the public about reducing and avoiding such harms and costs; ("dommages liés au climat")

In the 1970's, the largest fossil fuel companies knew their products caused climate change. But they suppressed that information, and spread doubt about the science.

In their eight-month-long investigation, reporters at InsideClimate News interviewed former Exxon employees, scientists and federal officials and analyzed hundreds of pages of internal documents. They found that the company's knowledge of climate change dates back to July 1977, when its senior scientist James Black delivered a sobering message on the topic. "In the first place, there is general scientific agreement that the most likely manner in which mankind is influencing the global climate is through carbon dioxide release from the burning of fossil fuels," Black told Exxon's management committee. A year later he warned Exxon that doubling CO₂ gases in the atmosphere would increase average global temperatures by two or three degrees—a number that is consistent with the scientific consensus today. He continued to warn that "present thinking holds that man has a time window of five to 10 years before the need for hard decisions regarding changes in energy strategies might become critical." In other words, Exxon needed to act.

Scientific American, Oct 26, 2015



Stills from "Climate of Concern," an educational video produced by Royal Dutch Shell in 1991 (with YouTube subtitles).



Same

(3) Even if the costs described in clauses (f) to (i) of the definition of “climate-related harms” in section 1 have not yet been incurred, subsection (1) applies with respect to those costs if the court determines that they are reasonably required for the planning, initiation or completion of the activities mentioned in those clauses.

Evidentiary matters

3 (1) In determining whether particular harms or costs constitute climate-related harms and in determining the quantum of damages or costs related to them, the court may have regard to,

- (a) scientific or statistical information or modelling;
- (b) historical experience; and
- (c) information derived from relevant studies, including information derived from sampling.

Evidence re climate change causing particular events

(2) In a case in which it is alleged that a particular weather event, flood or other event or series of such events was caused by climate change, evidence that climate change has doubled the likelihood of that type of event occurring is sufficient to demonstrate, on a balance of probabilities, that the event was caused by climate change or that climate change worsened the impact of the event.

Regulations

4 The Lieutenant Governor in Council may make regulations respecting,

- (a) the determination of the greenhouse gas emissions that can be attributed to a producer; and
- (b) the determination of whether a producer’s greenhouse gas emissions level is globally detectable.

Commencement

5 This Act comes into force on the day it receives Royal Assent.

Short title

6 The short title of this Act is the *Liability for Climate-Related Harms Act, 2018*.

The contributions of individual fossil fuel companies to increased atmospheric GHG concentrations can be determined, as a measure of their responsibility for climate change. A 2014 peer-reviewed study by Rick Heede, published in the journal *Climatic Change*, identified 90 entities that have contributed nearly 2/3 of the CO₂ and methane that has been released into the atmosphere since the start of the industrial era.¹

Studies of this kind can be used to assign legal responsibility fairly to individual companies.

1. Heede, Richard, "Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010", *Climatic Change*, Jan 2014.

| Top 20 investor- and state-owned entities and attributed CO ₂ & CH ₄ emissions 2010 | | | | |
|---|-----------------------------------|---|----------------------------|--|
| Entity | 2010 EmissionsMtCO ₂ e | Cumulative 1854–2010MtCO ₂ e | Percent of Global1751–2010 | |
| 1. Chevron, USA | 423 | 51,096 | 3.52% | |
| 2. ExxonMobil, USA | 655 | 46,672 | 3.22% | |
| 3. Saudi Aramco, Saudi Arabia | 1,550 | 46,033 | 3.17% | |
| 4. BP, UK | 554 | 35,837 | 2.47% | |
| 5. Gazprom, Russian Federation | 1,371 | 32,136 | 2.22% | |
| 6. Royal Dutch/Shell, Netherlands | 478 | 30,751 | 2.12% | |

Excerpt from Executive Summary on [Carbon Majors website](#), accessed June 8, 2018

Under the current BC government, Climate Liability legislation similar to Bill 21 might have a good chance of passing.

Would that be helpful to the City of Richmond?

We respectfully ask Council to consider taking two actions:

- 1. Send Climate Accountability Letters to the twenty largest fossil fuel companies**
- 2. Sign on to the letter to Premier Horgan requesting Climate Liability legislation.**

April 17, 2019

His Worship Malcolm Brodie and Councillors,
City of Richmond

Dear Mayor Brodie and Councillors,

Thank you for agreeing to hear our delegation on *Recovering Climate Costs*, which I, a volunteer with West Coast Environmental law, along with Dustin Klautd of Power Law and Anna Barford of Georgia Strait Alliance, will present at the April 23rd regular council meeting. Our presentation concerns how municipalities can defend against costs of climate change. Accompanying this letter are several supporting documents.

Climate change is no longer just a future threat. Municipalities now face mounting costs due to rising sea levels, wildfires, and spring flooding. Richmond, a city already on the forefront of the fight against climate change, confronts \$3.9B of the \$9.5B which must be spent to combat sea level rise in Metro Vancouver, according to a 2012 BC government report¹. And a 2016 report from the Fraser Basin Council says that the risks of catastrophic floods – both winter coastal floods and Fraser River spring freshets – are increasing because of climate change, with potential damages as high as \$32B.²

Some municipalities and other groups are trying to recover costs by suing fossil fuel companies for harms resulting from greenhouse gas emissions. Such lawsuits are expensive, protracted, and uncertain. But the time, cost and risk can all be reduced if senior levels of government enact appropriate legislation, such as the Liability for Climate Related Harms bill which was introduced to the Ontario legislature in 2018.

West Coast Environmental Law's Climate Law in Our Hands campaign aims to help protect local governments from high climate costs, while hastening the transition to a sustainable energy economy by sucking some of the profits out of the fossil fuel industry. It has two main parts.

The first part invites municipalities to send Climate Accountability letters to the twenty largest fossil fuel companies, which are collectively responsible for 29.4% of historic greenhouse gas emissions.³ A Climate Accountability letter from the City of Richmond would ask the fossil fuel companies to pay their fair share of Richmond's climate-related costs. Its purpose is, first, to put the companies on notice that you expect them to share these costs for which they bear significant responsibility, and second, to increase public awareness and spark a conversation on the subject of how climate costs should be paid.

The second aim of the campaign is to persuade the BC government to enact Climate Liability legislation holding fossil fuel companies liable for a fair share of the harms caused by greenhouse gas emissions from their operations and products. If enacted, this provincial legislation would make it easier and less costly for municipalities, including Richmond, to sue fossil fuel companies for the recovery of costs related to human-caused climate change – costs

¹ BC Ministry of Forests, Lands and Natural Resources Operations, "Cost of Adaptation – Sea Dikes & Alternative Strategies," 2012.

² Fraser Basin Council, "Lower Mainland Flood Management Strategy – Phase 1 Summary Report," 2016.

³ Heede, Richard, "Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010", *Climatic Change*, Jan 2014.

which otherwise would devolve on the municipalities and their taxpayers – and give you greater certainty of success.

Our delegation will ask Council to consider taking two actions:

- (1) sending Climate Accountability Letters to the 20 largest fossil fuel companies.
- (2) endorsing a letter, prepared by West Coast Environmental Law, to the Province of BC requesting the government to enact Climate Liability legislation to hold fossil fuel companies strictly liable for a share of the climate-related harms caused by their operations and products.

I should emphasize that we will *not* ask Richmond to launch a legal action. The purpose of Climate Accountability legislation is to establish a legal framework which would strengthen your hand if there ever were a prospect of a lawsuit (which would likely be a joint action with other municipalities). The stronger your position in law, the better your chances of settling favourably out of court.

The accompanying documents are:

- 1) **Climate Accountability Letters: An Introduction for Local Governments**, a West Coast Environmental Law backgrounder on the whys and wherefores of sending accountability letters to fossil fuel companies.
- 2) Template for a **Climate Accountability Letter** addressed to fossil fuel companies from a municipality.
- 3) A few examples of Climate Accountability letters sent by other BC municipalities.
- 4) A spreadsheet with names and addresses of the 20 fossil fuel companies responsible for the greatest greenhouse gas emissions historically.
- 5) **Bill 21, An Act Respecting Civil Liability for Climate-Related Harms**. This private member's bill introduced by Peter Tabuns to the Ontario legislature is a model for the legislation we propose in BC.
- 6) **A sign-on letter addressed to Premier John Horgan requesting Climate Liability legislation**. We will ask the City of Richmond to consider signing on to this letter, along with other BC municipalities and community groups.

We appreciate the opportunity to speak to Council on this subject, and look forward to the evening of April 23.

Best Regards,



Gordon Cornwall

Volunteer, West Coast Environmental Law
1048 Canyon Blvd.,
North Vancouver, BC
V7R 2K4

604-970-3843



CLIMATE ACCOUNTABILITY LETTERS

AN INTRODUCTION FOR LOCAL GOVERNMENTS

Andrew Gage, Staff Counsel

“Wildfires. Drought. Flooding. Rising sea levels. Climate change is already reshaping and impacting BC communities in profound and frightening ways. As unchecked fossil fuel pollution continues to push global temperatures ever higher, we are frightened for our communities, for communities around the world, and for the world we leave our children. Vulnerable groups - the poor, Indigenous communities, women and children - are often hardest hit by climate impacts.” – Letter from BC Community Groups to Local Governments, 25 January 2017

On 25 January 2017, over 50 community groups from around BC – organizations focused on health, faith, human rights and environment – wrote to all of BC’s local governments asking that they take action to hold the fossil fuel industry accountable for its role in causing climate change and in the climate costs being caused by fossil fuel pollution.

In the short term, we are asking your municipality (or regional district) to send “Climate Accountability Letters” to 20 of the world’s largest fossil fuel companies asking them to pay for climate costs that are being incurred by your community. This brief will answer some questions that you may have about why your community should send these letters.

Why does it matter to your community?

All our communities are facing a rising tide of costs, debt and claims for disaster relief arising from the many effects of climate change. With more frequent wildfires, 100-year storm events now coming every 25 years, snowpacks and aquifers disappearing, our communities are spending scarce taxpayer dollars to prepare for and respond to climate change. The situation is only going to get worse.

As it stands, the costs of building climate resilient communities fall to the taxpayer, as do the costs of re-building communities after floods or fires. Municipal governments bear much of the burden for these climate costs, because municipal infrastructure is frequently affected. In at least one case, municipalities in the U.S. were sued (by their insurers) for failing to prepare adequately for known climate impacts.¹

It is time to ask whether taxpayers alone should be solely responsible to pay climate adaptation and damage costs, or whether costs should be shared with the companies that have made billions of dollars creating this situation. The products and operations of the **20 fossil fuel companies** are collectively responsible for roughly 30% of the greenhouse gases in the atmosphere today. That greenhouse gas pollution is changing the climate, and costing your community money as it is forced to respond and adapt.

It is essential that we have this conversation now. Communities need to know how much they can expect the fossil fuel industry to pay for their climate costs. The fossil fuel industry and its investors need to be able to make informed decisions about the future of the industry once they factor in the real costs of their activities.

Why does it matter to our planet?

Fighting climate change only works when everyone does their fair share. We all share the same precious atmosphere.

Right now the world's largest fossil fuel companies are making hundreds of billions of dollars from products that cause greenhouse gas pollution and put communities around the world at risk. There are powerful economic incentives for those companies, their investors and the governments of the world to continue producing fossil fuels without regard to the consequences for our planet. In many cases these companies have known since the late 1960s that their products were likely causing climate change. Since that time many have funded climate misinformation and lobbied hard against global rules that would protect our communities from climate change.

When companies make massive profits from pollution and products that cause pollution, this is known as an “externality.” It creates an economic system where some parties make money while the rest of us pay for the harm that they cause. Conversely, when companies are made to pay for the harm they cause, they, and their investors and governments, will start to have questions about the profitability of the industry.

Our efforts to reduce the greenhouse gases of our own communities (or even our own country) will only be a small drop in the global bucket. But if our communities demand accountability from **global** fossil fuel companies, the industry will finally have an incentive to stop opposing climate action – or, better yet, to start working for a sustainable future.

What is a Climate Accountability Letter?

A Climate Accountability Letter is a letter written by the representatives of a community to a fossil fuel company asking them to be accountable for the harm caused to that community by their operations and products. These letters are extremely flexible. A community can decide which climate impacts they wish to highlight, whether to demand that the company pay its fair share of current, or future, climate impacts or demonstrate its accountability in some other way.

We provide templates for accountability letters for your community to adapt on the climate law in our hands website.ⁱⁱ We also provide a spreadsheet with the addresses and share of global greenhouse gas emissions of 20 of the world's largest fossil fuel companies.

Is this within local government jurisdiction?

Municipalities and regional districts are incurring and will continue to incur costs related to climate change. Prudent management of their financial resources requires local governments to at least consider the possibility that some of those costs can be recovered from fossil fuel companies and, if appropriate, to take steps to do so.

One of the purposes of municipalities (according to the BC Community Charter) is “fostering the economic, social and environmental well-being” of the community – so Council also has a clear mandate to play its part in addressing climate change globally.

Why target fossil fuel companies?

Some argue that we're all responsible for climate change, but if so, surely we can agree that some of us are more responsible than others?

In 2013 a peer-reviewed paper "Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010"ⁱⁱⁱ estimated the emissions from the operations and products of 90 entities – primarily fossil fuel companies. Just 20 of those fossil fuel companies – the 20 that we are asking you to write to – are responsible for almost 30% of the fossil fuels in the global atmosphere today.

But for the actions of these companies in extracting fossil fuels from the ground, and (in many cases), processing, transporting, marketing, and selling them for use by end consumers, these emissions would not have

ended up in our atmosphere. That's doubly true if you consider the impact of some of these companies in lobbying against action on climate change and in funding public misinformation on climate science. Had these companies acted, when they learned of the science of climate change in the 1960s, to shift the economy towards renewable energy, we would live in a very different, and more sustainable, society.

In addition, a focus on local impacts caused by fossil fuel companies creates new opportunities for local communities to have a global impact. Rather than focusing only on reducing the comparatively small amounts of greenhouse gases created in our own communities, we can also have a conversation about 30% of global emissions.

Shouldn't the Canadian (or BC) government be taking action?

Yes, of course all levels of government should be taking action to fight climate change. But the Canadian and BC governments still rely on the fossil fuel industry in many ways – from campaign contributions to hopes of economic growth.

The fact that the senior levels of government have not yet taken action to hold fossil fuel polluters accountable does not mean that local governments cannot take action to recover their own climate costs. Indeed, a community concerned about local costs of climate change may be more willing to show leadership to protect its residents and environment, and may be more willing to

have a discussion about the role of the fossil fuel industry in contributing to those costs.

Sometimes when people look to the provincial or federal governments for climate leadership, they are looking for regulation of sources of greenhouse gases. While such regulation is important, such laws can only regulate emissions or other activities that take place in Canada (or in BC). The claims for compensation related to climate accountability that we recommend use legal tools that can cross borders and address global sources of emissions.

Do you drive cars (or use gas)?

In response to the 25 January 2017 letter, three mayors independently wrote to us with variations on the message that if we use fossil fuels, we cannot ask for the fossil fuel industry to be held accountable.

We are not denying that individuals play a role in reducing their own greenhouse gas emissions (while recognizing that the options available to individuals to entirely eliminate their fossil fuel use in today's society are limited). Nor are we suggesting that fossil fuels could be eliminated tomorrow.

What we are suggesting is that the responsibility of fossil fuel companies is at least as great as that of the individual, and they should pay their fair share of the costs. We are further suggesting that once the industry realizes that it may be required to pay its fair share, there will be a powerful incentive for the system to change – creating more options for individuals seeking to reduce their greenhouse gas emissions. This is a crucial step in helping society as a whole move away from gas-powered vehicles (and uses of fossil fuels involving combustion).

In the fight to phase out ozone-destroying HFCs, no one ever told those concerned about the ozone layer: “Yeah, but do you own a refrigerator?”

Am I signing up for a lawsuit?

By sending Climate Accountability Letters, your community is simply initiating a conversation, not a lawsuit, about the role of the fossil fuel industry in causing climate harm to your community.

In the 25 January 2017 letter sent to your government, we did also encourage you to consider the possibility of a class action by all BC local governments against some fossil fuel companies. However, sending letters to the fossil fuel companies does not commit your government to participate in or support such a court case.

If your community is interested in exploring the possibility of a lawsuit against the fossil fuel industry, please do contact us for more information.

How do I find out more?

Contact Andrew Gage at agage@wcel.org or 250-412-9784 or learn more on the Climate Law in our Hands initiative website at www.climatelawinourhands.org.

ⁱ <http://www.eenews.net/stories/1059999532>; The insurance company subsequently dropped the lawsuit, but the case stands as a warning to local governments that fail to prepare for climate change.

ⁱⁱ www.climatelawinourhands.org/demand-accountability

ⁱⁱⁱ Heede, R. "Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010" *Climatic Change* (2014) 122: 229. doi:10.1007/s10584-013-0986-y

«Responsible_Company»
«Address_1»
«Address_2»
«City», «State» «Postal»
«Country»

Attn. CEO of «Responsible_Company»

Dear Sirs/Mesdames:

Re: Climate Adaptation in [Community] – Your company’s responsibility

As you know, fossil fuel pollution from your products is the main cause of climate change. Like other communities around the world, our community is already seeing the harmful effects of climate change, and we are being forced to prepare for progressively more serious impacts. As the elected government of [Community], we have a responsibility to our citizens to ensure that our infrastructure and services are developed and maintained in ways that will be able to withstand the “new normal” that climate scientists have predicted for our region, and that our citizens are well protected from future climate impacts.

We write to inform you that we are committed to the process of preparing for the impacts that our community is projected to experience due to climate change. Climate change – as a result of pollution from your products – is now inevitable, and growing more severe as you continue to market them and work against a transition away from fossil fuels. However, we know that by planning for and adapting to these measures at an early date, we can minimize future economic and other impacts of climate change.

As a community, we will expect you to pay your fair share of the costs associated with developing and implementing adaptation plans. It has been estimated that products produced by [your company] are responsible for fully «M__of_GHGs_to_2013»% of historic greenhouse gas emissions.¹ Your industry has been aware of the role of fossil fuels in causing climate change and the types of impacts that communities such as ours would suffer as a result from the 1960s at least.²

Since then, however, your company has continued marketing your harmful products and many within your industry have worked, directly or indirectly, to delay or prevent the transition to a carbon free economy.³ While we recognize that individual consumers do play a small (although individually insignificant) role in the fossil fuel economy, your company has had the power to lead the transition away from that economy, but has instead profited to the tune of many billions of dollars from products that use our global atmosphere as a garbage dump, at the expense of our communities.

¹ Heede, R. “Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010” *Climatic Change* (2014) 122: 229. doi:10.1007/s10584-013-0986-y, updated to 2013 at http://climateaccountability.org/carbon_majors_update.html, last accessed 23 September 2016.

² <https://www.smokeandfumes.org/fumes>, last accessed 23 September 2016.

³ <http://www.ucsusa.org/sites/default/files/attach/2016/03/backgrounder-fossil-fuel-industry-climate-science-deception.pdf>, last accessed 23 September 2016; <http://www.fossilfreemit.org/wp-content/uploads/2014/08/FossilFreeMIT-Lobbying-Disinformation.pdf>, last accessed 23 September 2016.

It is our position that you – in marketing a product that you knew would cause harm to our community and in opposing alternatives to that product – have played a key role in degrading the global atmosphere and creating a range of threats to our community. Your contribution is readily detectable globally and is therefore considered legally significant and actionable.

It is our responsibility – as one of the communities that face the consequences of that public nuisance to take action to protect ourselves and our citizens from the public nuisance that you have contributed to. The common law recognizes this responsibility and confirms that expenses associated with mitigating the risks of a nuisance can be recovered from those who have caused them.

Accordingly, as we undertake the task of planning for, and building and modifying our infrastructure and services and developing a community that can withstand current and anticipated climate change, we expect you to pay your fair share of the resulting costs – which we assert is equivalent to your proportionate contribution to climate change (ie. «M__of_GHG_s_to_2013»% in the case of your company). You cannot make billions of dollars selling your product, knowing that it is causing significant financial harm to communities around the world, and not expect to pay at least that much.

If you do not agree that «M__of_GHG_s_to_2013»% is your fair share, please inform us what proportion is your fair share, and why. In addition, we would like to hear what steps you plan to take to reduce or eliminate the future impacts of your company’s products on our community.

Even if fossil fuel companies like yours do pay your respective shares (either voluntarily or through legal recourse), our community will still bear the costs of climate change – for example, costs that cannot be recovered from now defunct companies or loss and damage that are not prevented through adaptation. However, we are committed to doing our part to minimize those costs and impacts, and we look forward to your confirmation that you will do your part as well.

Sincerely,

Mayor of [Community]



Chevron
6001 Bollinger Canyon Road
San Ramon, CA 94583
USA

November 28, 2017

Attn. CEO of Chevron

Dear Sirs/Mesdames:

As Mayor and Council of the City of Victoria, in British Columbia, we are writing to secure your commitment to pay your fair share of the costs of climate change that face our community. Climate change is the direct result of pollution caused by the burning of fossil fuels, including from your products.

We are beginning to see the impacts of climate change directly affect our region and the infrastructure and services that we provide as a local government to our residents (detailed below). It would be financially irresponsible of us to assume that our taxpayers will bear the full costs of these impacts of fossil fuel pollution, while your shareholders continue to benefit financially from the sale of fossil fuels.

We know that individual consumers, and our community members, use fossil fuels. However, your industry has played a large role in creating the risks and costs that we now face as a community. Your company has made many billions of dollars from products that you presumably knew would harm our communities.¹ You have had the power to move your company towards a more sustainable business model since you first became aware of the impacts of climate change, decades ago, but have not done so. You cannot make billions of dollars selling your product, knowing that it is causing significant financial harm to communities around the world, and not expect to pay for at least some of that harm.

When James Douglas of the Hudson's Bay Company selected the southern tip of Vancouver Island as the site of Fort Victoria, the region's Garry Oak meadows reminded him of the cultivated fields of England. He didn't realize at the time that this unique ecosystem had been managed for thousands of years by the Songhees and Esquimalt First Nations, who harvested Camas bulbs from the meadows as an important food source.

¹ <https://www.smokeandfumes.org/fumes>, last accessed 23 September 2016.

The Garry Oak Meadow ecosystem – although unfortunately much diminished and one of the most endangered ecosystems in the world – remains a central feature of the City of Victoria, and we take seriously our responsibility to pass it on to future residents. Numerous studies have shown that that climate change will put that goal at risk² – and that our work to ensure that the ecosystem can survive shifts in our regional climate is urgent.³

Of course, climate change brings with it other, direct impacts on our infrastructure and services, and on our residents. We offer the example of the Garry Oak Meadow ecosystem to illustrate an important climate impact, and associated costs, that are unique to our region.

In addition, like other coastal communities in BC and around the world, sea-level rise is a serious concern. Our Inner Harbour, a central feature of our downtown, is the point of arrival for many tourists and a source of pride for our residents. For this business and tourism district, higher sea-levels, especially when combined with storm-surge events, will mean huge economic cost. It has been estimated that 1 metre of sea level rise in combination with a storm surge would result potential business disruption losses of Cdn \$415,557 per day (based on annual averages).⁴

Outside of the downtown, much of our coastline is characterized by cliffs, much of it soft and vulnerable to increased coastal erosion. The needed protection efforts will likely result in significant costs to our community.

Drought and increased winter storms associated with climate change are also predicted for our region.

Planning, building and maintaining local infrastructure is made more costly by climate change. Victoria is in the process of developing a Climate Leadership Plan to do our part to reduce greenhouse gas emissions from transportation, buildings and waste. The City is also investing in our own infrastructure to ensure we are able to maintain resilience and adapt to the changing climate and the impacts to our operations, utilities and services. At present we are only beginning to understand the potential magnitude of increased local costs for both climate change mitigation and adaptation. We know that cities didn't cause the climate problem on their own and we can't solve it on our own. And we know that costs will increase as climate change impacts worsen.

As a community Victoria has committed to work towards 100% renewable energy by 2050. We recognize that everyone is going to need to do their part to address climate change. We

² Pellatt MG, Goring SJ, Bodtke KM, Cannon AJ (2012) Using a Down-Scaled Bioclimate Envelope Model to Determine Long-Term Temporal Connectivity of Garry oak (*Quercus garryana*) Habitat in Western North America: Implications for Protected Area Planning. *Environ Manage* 49:802–815; Bachelet D, Johnson BR, Bridgham SD, Dunn PV, Anderson HE, Rogers BM (2011) Climate Change Impacts on Western Pacific Northwest Prairies and Savannas. *Northwest Sci* 85:411-429.

³ Pellatt, M.G. & Gedaïof, Z. *Biodivers Conserv* (2014) 23: 2053. <https://doi.org/10.1007/s10531-014-0703-9>.

⁴ AECOM. Capital Regional District: Coastal Sea Level Rise Risk Assessment (Victoria, BC: Capital Regional District, 2015), p. 36.

are asking you to take responsibility for the harm caused by your products and to take action to move to a more sustainable business model.

The peer-reviewed research of Richard Heede reveals that 3.34% of the greenhouse gas emissions already in the global atmosphere originate from your company's operations and products.⁵ In our view, this represents your fair share of the costs facing Victoria. Will you confirm that you are willing to pay 3.34% of Victoria's climate-related costs going forward?

Sincerely,



Lisa Heaps
Victoria Mayor

⁵ Heede, R. Climatic Change (2014) 122: 229. <https://doi.org/10.1007/s10584-013-0986-y>; See also http://climateaccountability.org/carbon_majors_update.html.



City of Powell River

City Hall – MacGregor Building
6910 Duncan Street, Powell River, BC V8A 1V4
Telephone 604.485.6291 • Fax 604.485.2913
www.powellriver.ca • info@cdpr.bc.ca

File No. 0220-01

April 9, 2018

Sonatrach Petroleum Corporation
5 Princes Gate
London, United Kingdom
SWJ 1QJ

Attention: Mr. Mohamed Meziane, Chief Executive Officer

Dear Sir:

Re: Sonatrach Petroleum Corporation Fair Share of Climate Change Costs in Powell River, BC, Canada

We write as the Mayor and Council of the City of Powell River, a municipality on the Sunshine Coast of British Columbia. Like other communities around the world, we are increasingly concerned about the harmful effects that climate change will have on our community and on other communities around the world. We are being forced to prepare for progressively more serious and frequent impacts. Among other impacts we are presently facing increased fire risk, extended summer droughts and extreme winter rain events. Increased winter precipitation is impacting our roads and stormwater management and increasing our costs as a local government. A coastal community, we are concerned about rising sea-levels and coastal erosion as well, although most of our lands are well above sea-level.

We expect the climate change costs facing our community to rise as global temperatures increase and as we examine how best to help our residents withstand the current and expected impacts. Climate change – as a result of fossil fuel pollution – is occurring now and growing more severe as you continue to market your products without aggressively moving to a different, more sustainable business model. Because of this pollution, we need to plan for and adapt to ongoing changes in our local climate, caused by rising global temperatures, so as to avoid future negative economic and other impacts of climate change in our municipality. As we move forward with preparing our community and infrastructure for climate change, we will be incurring additional costs and inconvenience as a result of the increased severity of climate change attributable to your products and operations.

While we recognize that individual consumers, and our community, do play a role in responsibility for the fossil fuel economy, your company has had the power to lead the transition away from that economy, but has instead profited to the tune of many billions of dollars from products that you have known, or should have known, would harm our communities. You cannot make billions of dollars selling your product, knowing that it is causing significant

financial harm to communities around the world, and not expect to pay at least some of that harm.ⁱ

All communities will expect you to pay your fair share of the costs associated with preparing for climate change. It has been estimated, by the source noted below, that the emissions from those products and operations amount to fully 0.66% of historic human-caused greenhouse gas emissions and we suggest that this figure is a reasonable basis for estimating your company's fair share of costs incurred due to climate change.ⁱⁱ

We expect your industry to take cradle to grave responsibility for your product – and that starts by taking responsibility for its effects in the atmosphere and the resulting harm to communities. In addition, we would like to hear what steps you plan to take to reduce or eliminate the future negative impacts of your company's products on our community. We know that our community will end up sharing some of the costs of climate change even if you and other fossil fuel companies do pay your fair shares. These would include costs that cannot be recovered. We will do our part to minimize these costs and impacts, and we look forward to your confirmation that you will do your part as well.

Sincerely,
CITY OF POWELL RIVER

David Formosa, Mayor

DF/rp

ⁱ <https://www.smokeandfumes.org/fumes>

ⁱⁱ http://climateaccountability.org/carbon_majors_update.html



APPENDIX A

THE CORPORATION OF THE
DISTRICT OF WEST VANCOUVER
OFFICE OF THE MAYOR

«Responsible_Company»
«Address_1»
«Address_2»
«City», «State» «Postal»
«Country»

Attn. CEO of «Responsible_Company»

Dear Sirs/Mesdames:

Re: Climate Adaptation in the District of West Vancouver – Your Company’s Responsibility

As you know, fossil fuel pollution from your products is the main cause of climate change. Like other communities around the world, our community is already seeing the harmful effects of climate change, and we are being forced to prepare for progressively more serious impacts. As the elected government of the District of West Vancouver, we have a responsibility to our citizens to ensure that our infrastructure and services are developed and maintained in ways that will be able to withstand the “new normal” that climate scientists have predicted for our region, and that our citizens are well protected from future climate impacts.

We write to inform you that we are committed to the process of preparing for the impacts that our community is projected to experience due to climate change. Climate change – as a result of pollution from your products – is now inevitable, and growing more severe. We know that by planning for and adapting to these measures at an early date, we can minimize future economic and other impacts of climate change.

It is our position that you have played a key role in degrading the global atmosphere and creating a range of threats to our community. Your contribution is readily detectable globally and is therefore considered legally significant and actionable.

It is our responsibility to take action to protect ourselves and our citizens, to the degree possible, from the effects of climate change that you have contributed to.

Accordingly, as we undertake the task of planning for, and building and modifying our infrastructure and services and developing a community that can withstand current and anticipated climate change, we request you to pay your fair share of the resulting costs.

750 - 17th Street, West Vancouver, B.C. V7V 3T3 • Telephone: 604 925 7000 • Fax: 604 925 5999

In addition to financially contributing to the mitigation of climate change, we would like to hear what steps you plan to take to reduce or eliminate the future impacts of your company's products on our community.

We are committed to doing our part to minimize those costs and impacts, and we look forward to your confirmation that you will do your part as well.

Sincerely,

Mary-Ann Booth
Mayor

% of
GHGs to

| 2013 | Responsible Company | Address 1 | Address 2 | City | State | Postal | Country |
|-------|-------------------------------|--------------------------------------|--------------------------------|-------------------------|--------------|--------------|--------------------|
| 3.34 | Chevron | 6001 Bollinger Canyon Road | | San Ramon | CA | 94583 | USA |
| 3.29 | Saudi Aramco | P.O. Box 5000 | | Dhahran | | 31311 | Saudi Arabia |
| 3.1 | Exxon Mobil | 5959 Las Colinas Boulevard | | Irving | Texas | 75039-2298 | USA |
| 2.38 | BP p.l.c. | 1 St James's Square | | London | | SW1Y 4PD | United Kingdom |
| 2.33 | Gazprom | 16 Nametkina St. | | Moscow | | GSP-7, 11799 | Russian Federation |
| 2.06 | Royal Dutch Shell plc | PO box 162 | 2501 AN | The Hague | | | The Netherlands |
| 2.02 | National Iranian Oil Company | Hafez Crossing | Taleghani Avenue | Tehran | | | Iran |
| 1.39 | PEMEX | Avenida Marina Nacional #329 C 3, | Col. Verónica Anzui Hidalgo, | Del. Miguel Newtown, | Distrito Fed | 11300 | Mexico |
| 1.16 | Coal India Limited | Coal Bhawan, Premise No-04 MAR | Plot No-AF-III, Actic Rajarhat | | Kolkata | 700156 | India |
| 1.12 | Conoco Phillips | 600 North Dairy Ashford (77079-1175) | P.O. Box 2197 | Houston | TX | 77252-2197 | USA |
| 0.89 | Peabody Energy | Peabody Plaza | 701 Market St. | St. Louis | MO | 63101-1826 | USA |
| 0.88 | Petroelios de Venezuela, S.A. | Av. Libertador La Campiña 169 | Ed. Petróleos de Ve | Caracas | | 1010-A | Venezuela |
| 0.82 | Total SA | Tour Coupole - 2 place Jean Millier | Arche Nord - Coup | Paris | La Défense | 92078 | France |
| 0.78 | PetroChina (CNPC) | 9 Dongzhimen North Street | Dongcheng District | Beijing | | 100007 | P.R.China |
| 0.75 | Kuwait Petroleum Corp. | P.O. Box: 26565 | | Safat | | No. 13126 | Kuwait |
| 0.7 | Murray Energy Corporation | 46226 National Road | | St. Clairsville | Ohio | 43950 | USA |
| 0.66 | Sonatrach | Djenane El Malik | | Hydra | | 160335 | Algeria |
| 0.59 | CONSOL Energy Inc. | CNX Center | 1000 Consol Energ | Canonsburg | PA | 15317-6506 | USA |
| 0.55 | BHP Billiton Limited | BHP Billiton Centre | 171 Collins Street | Melbourne | Victoria | 3000 | Australia |
| 0.51 | Iraq National Oil Company | c/o Iraq Ministry of Oil | PO Box 6178 | | Baghdad | | Iraq |
| 29.32 | Combined Total | | | | | | |

Key Privately Owned Corporation
State Owned Corporation

Notes:

The estimates of responsibility for greenhouse gases from 1854-2013 are based on the "Carbon Majors" research of Richard Heede, found at http://www.climateaccountability.org/carbon_majors_update.html (last accessed 12 January 2017) which is an update of Heede's peer reviewed paper: Heede, R. "Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010", *Climatic Change* (2014) 122: 229. doi:10.1007/s10584-013-0986-y.

West Coast Environmental Law has made reasonable efforts to identify the appropriate address for each corporate entity, but makes no guarantees. Anyone seeking to rely upon the above addresses should confirm the addresses themselves.

Legislative
Assembly
of Ontario



Assemblée
législative
de l'Ontario

3RD SESSION, 41ST LEGISLATURE, ONTARIO
67 ELIZABETH II, 2018

Bill 21

An Act respecting civil liability for climate-related harms

Mr. P. Tabuns

Private Member's Bill

1st Reading March 26, 2018

2nd Reading

3rd Reading

Royal Assent

EXPLANATORY NOTE

The Bill enacts the *Liability for Climate-Related Harms Act, 2018*. The Act provides that a fossil fuel producer is strictly liable for climate-related harms that occur in Ontario if the producer is responsible for greenhouse gas emissions at a globally detectable level. The Act contains a definition of “climate-related harms”. Certain evidentiary matters are provided for.

An Act respecting civil liability for climate-related harms

Preamble

Climate change is real. It is already affecting Ontarians' lives as increased wildfires and flooding create significant and costly damage. Climate change threatens to make life more expensive as people and governments are required to pay for the harm it causes and for the protection of schools, roads, hospitals and homes from unprecedented flooding and other extreme weather events.

Enhanced legal tools are required so that governments, businesses and individuals can ensure that coal, oil and gas producers contribute their fair share to paying for the harms to which their products contribute and for the necessary steps to prevent future harms.

Therefore, Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

Interpretation

1 In this Act,

“climate change” means a long-term change in the Earth’s climate caused by the alteration of concentrations of greenhouse gas in the global atmosphere; (“changement climatique”)

“climate-related harms” means harms arising from climate change, including, without limitation,

- (a) economic loss or physical loss of property, infrastructure, structures, resources, or other assets,
- (b) the costs associated with obtaining and maintaining insurance reasonably required due to the risk of the losses described in clause (a),
- (c) death, injury, illness or other physical or psychological harms and the costs associated with treating or caring for persons suffering from them,
- (d) harm related to ocean acidification,
- (e) loss of land or damage to infrastructure due to rising sea levels, including slow-onset loss,
- (f) the costs of monitoring, researching and analysing the climate and the weather if the costs are reasonably incurred to provide information about the effects of climate change and appropriate adaptation measures,
- (g) the costs of responding to emergencies arising from natural disasters associated with climate change,
- (h) the costs of constructing, renovating, repairing or improving infrastructure in order to minimize further such harms and costs, and
- (i) the costs of carrying out public education campaigns to inform the public about reducing and avoiding such harms and costs; (“dommages liés au climat”)

“production”, when used in respect of fossil fuels, includes exploration for sources of fossil fuels, exploitation of fossil fuels and sale of fossil fuels. (“production”)

Strict liability for climate-related harms

2 (1) Every corporation, partnership, trust or other entity that is engaged in the production of fossil fuels and to which a globally detectable level of greenhouse gas emissions can be attributed, as determined in the regulations, is strictly liable for climate-related harms that occur in Ontario.

Level of greenhouse gas emissions

(2) The determination of a producer’s level of greenhouse gas emissions shall be based on,

- (a) emissions resulting from the producer’s production of fossil fuels; and
- (b) emissions resulting from the use of those fossil fuels.

Same

(3) Even if the costs described in clauses (f) to (i) of the definition of “climate-related harms” in section 1 have not yet been incurred, subsection (1) applies with respect to those costs if the court determines that they are reasonably required for the planning, initiation or completion of the activities mentioned in those clauses.

Evidentiary matters

3 (1) In determining whether particular harms or costs constitute climate-related harms and in determining the quantum of damages or costs related to them, the court may have regard to,

- (a) scientific or statistical information or modelling;
- (b) historical experience; and
- (c) information derived from relevant studies, including information derived from sampling.

Evidence re climate change causing particular events

(2) In a case in which it is alleged that a particular weather event, flood or other event or series of such events was caused by climate change, evidence that climate change has doubled the likelihood of that type of event occurring is sufficient to demonstrate, on a balance of probabilities, that the event was caused by climate change or that climate change worsened the impact of the event.

Regulations

4 The Lieutenant Governor in Council may make regulations respecting,

- (a) the determination of the greenhouse gas emissions that can be attributed to a producer; and
- (b) the determination of whether a producer’s greenhouse gas emissions level is globally detectable.

Commencement

5 This Act comes into force on the day it receives Royal Assent.

Short title

6 The short title of this Act is the *Liability for Climate-Related Harms Act, 2018*.

Premier John Horgan,
PO BOX 9041 STN PROV GOVT
Victoria BC V8W9E1

*** BY FAX @ 250 387-0087 AND MAIL ***

Dear Premier Horgan:

Re: Liability for Climate-related Harms Act and Climate Leadership

We write to ask your government to take immediate action to hold global fossil fuel companies accountable for climate change-related harm and costs that occur in British Columbia, through the enactment of a *Liability for Climate-related Harms Act* – a statute to clarify the legal rules of liability for harm caused by climate change.

This statute is essential both to protect BC taxpayers against a rising tide of climate change costs and to give global fossil fuel companies financial incentives to work to solve the climate crisis.

Climate impacts in BC

We are frightened about what climate change means for our planet, British Columbia and our communities. As a result of fossil fuel pollution, the world has already seen a 1°C increase in average temperatures. In BC we are already seeing:

- droughts and heat threatening us with increased wildfires and water shortages,
- extreme weather and early melting of snow-pack leading to flooding, landslides, and resident evacuation,
- sea level rise requiring expensive coastal protection measures, and
- the spread of diseases and pest species, such as Lyme Disease and the Mountain Pine Beetle.

As unchecked increasing fossil fuel pollution continues to push global temperatures ever higher, climate impacts like these, which hit poor and vulnerable groups especially hard, will only get worse. The government of British Columbia and other levels of government are on the hook to fund infrastructure upgrades and changes to services, in efforts to shield British Columbians from the worst of these climate impacts. Estimates of the potential costs to British Columbia run in the tens of billions of dollars.¹

Polluters must pay

¹ Figures for the costs of coastal flooding to BC illustrate the point. Paying the Price, a 2010 report of the National Roundtable on Environment and Economy (NRTEE) estimates the costs to Canada by 2020 at \$5 billion per year, rising to \$21-43 billion per year by 2050 (and much more than that if global temperature increase is not kept to below 2°C). The same report estimates that flooding in BC by 2050 is likely to cost the province an average of between \$0.8 and \$7.6 billion **each year** if the world is **successful** in keeping temperature increases below 2°C. (p. 72). If governments build infrastructure to deal with the potential flooding, this figure will be reduced, but the infrastructure needed for the Lower Mainland has been estimated at \$9.5 billion by 2100 to deal with a 1 metre sea-level rise (Delcan. Cost of Adaptation - Sea Dikes and Alternative Strategies (Province of BC, 2012)). Some models suggest that the actual sea level rise may be considerably higher and faster than 1 metre by 2100. Economic loss figures for the Mountain Pine Beetle are also instructive. It has been estimated that the epidemic will see BC's GDP lose \$57.37 billion over a 45 year period: L. J. Corbett, P. Withey, V. A. Lantz, T. O. Ochuodho; The economic impact of the mountain pine beetle infestation in British Columbia: provincial estimates from a CGE analysis, *Forestry: An International Journal of Forest Research*, Volume 89, Issue 1, 1 January 2016, Pages 100–105, <https://doi.org/10.1093/forestry/cpv042>.

Until now, governments, industry and the public have largely assumed that these costs will be fully borne by taxpayers – much as it was at one time generally assumed that smokers and health care systems would bear the full health costs of smoking.

Not only is that unfair to taxpayers, but it also means that fossil fuel companies and their investors lack economic incentives to transition to a more sustainable business model.

Fossil fuel companies have made massive profits selling products that they know contribute to climate change. Ninety fossil fuel producers are responsible (through operations and products) for about two-thirds of greenhouse gases in the global atmosphere today.² Many of these same companies knew about the impacts of their products as early as the 1950s or 1960s. Instead of acting on this information to address the effects of their products, they funded misinformation campaigns about climate change, lobbied against action on climate change and sat on renewable energy patents that would have significantly reduced greenhouse gas emissions.³

While individual lifestyles and consumer choices play a role in causing greenhouse gas pollution, the contribution of, and the choices available to, individuals are insignificant compared to the role of fossil fuel companies. And yet currently taxpayers and individuals are on the hook for 100% of climate costs, while fossil fuel companies pocket their profits. In effect, fossil fuel companies are transferring costs of managing the climate impacts of their products to taxpayers.

To prepare for the coming climatic changes from fossil fuel pollution, BC communities will need funding at levels that are only beginning to be appreciated. Already, credit ratings agencies are warning governments that their credit ratings are at risk if they fail to prepare for expected climate risks.⁴ Fossil fuel companies, who have profited most from the climate crisis, should pay their fair share of those costs.

BC can hold fossil fuel companies accountable

The province of British Columbia has the legal power – through a *Liability for Climate-related Harms Act* – to define the legal consequences associated with climate costs and impacts that are currently being incurred within its borders. The Act can ensure that global fossil fuel companies pay a fair share of those costs – even where the companies that contributed to the impacts are outside the province’s borders.⁵

² Heede, Richard, “Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010”, *Climatic Change*, Jan 2014.

³ Muffet, C. and Feit, S. *Smoke and Fumes: The Legal and Evidentiary Basis for Holding Big Oil Accountable for the Climate Crisis*. (Washington, DC: Center for International Environmental Law, 2017), available on-line at <http://www.ciel.org/wp-content/uploads/2017/11/Smoke-Fumes-FINAL.pdf>, last accessed 30 April 2018; Union of Concerned Scientists. *The Climate Deception Dossiers*. (Washington, DC: Union of Concerned Scientists, 2015).

⁴ Moody’s Investor Services Inc., Announcement: Climate change is forecast to heighten US exposure to economic loss placing short- and long-term credit pressure on US states and local governments, Nov 28, 2017.

⁵ See Gage, A. and Wewerinke, M, *Taking Climate Justice into our own Hands* (Vancouver, BC: West Coast Environmental Law, 2015); Byers, M., Franks, K. and Gage, A. *The Internationalization of Climate Damages Litigation*. *Washington Journal of Environmental Law & Policy*, Volume 7, issue 2, July 2017, <http://hdl.handle.net/1773.1/1709>, last accessed 23 April 2018.

BC was the first province in Canada to enact a *Tobacco Damages Recovery Act*, to enable lawsuits to recover health care costs from cigarette manufacturers,⁶ a precedent noted recently by Ontario NDP Environment and Climate Change Critic, Peter Tabuns, when he proposed a *Liability for Climate-related Harms Act*⁷ in the Ontario Parliament.

While fossil fuel companies could be sued under existing common law principles,⁸ there are significant advantages to the Legislature, rather than the courts, clarifying the legal rules for liability in such cases. Enacting a *Liability for Climate-related Harms Act* may clarify the legal rules more quickly and cheaply than could occur through protracted litigation, as well as giving the public's representatives an important opportunity to investigate and quantify the costs of climate change and to discuss the role of the fossil fuel industry in paying for those costs.

Conclusion

BC's government, communities, taxpayers and individual victims cannot afford the rising tide of climate costs that is bearing down upon us. Communities in BC and around the world are demanding that fossil fuel companies pay their share of climate costs.⁹ As the City of Victoria wrote in a letter to 20 fossil fuel companies about its expected climate impacts: "It would be financially irresponsible of us to assume that our taxpayers will bear the full costs of these impacts of fossil fuel production, while your shareholders continue to benefit financially from the sale of fossil fuels."¹⁰

A relatively small number of companies have the resources, scale, knowledge, technology and expertise to either block or advance climate action. We must ensure that they have every incentive to use that power to build the sustainable economy that we need.¹¹

In enacting a *Liability for Climate-related Harm Act*, you would protect BC taxpayers and individuals from massive costs, avoid the need for protracted and expensive litigation to clarify legal responsibility for climate impacts, and, perhaps most importantly, you would send a global message to the fossil fuel industry that its business model can no longer ignore the harm that it is causing.

⁶ S.B.C. 1997, c. 41. For commentary on the potential for a climate act based on the Tobacco Damages Recover Act, see Olszynski, Martin and Mascher, Sharon and Doelle, Meinhard, From Smokes to Smokestacks: Lessons from Tobacco for the Future of Climate Change Liability (April 24, 2017). Georgetown Environmental Law Review, 2017. Available at SSRN: <https://ssrn.com/abstract=2957921>; Also Gage and Wewerinke, above, note 2 at p. 9; L. Collins & H. McLeod-Kilmurray. The Canadian Law of Toxic Torts. (Canadian Law Book, 2014), pp. 290-291. #

⁷ Bill 21, the *Liability for Climate-related Harms Act*, 2018, available at http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=5835&detailPage=bills_detail_the_bill; the Bill was referred to committee, but has since died with the 2018 Ontario election.

⁸ Communities in California, Colorado, Washington and New York have sued fossil fuel companies for local climate costs in their own state's courts. In addition, a German court is currently considering a claim brought on behalf of a Peruvian community against a German coal company for climate costs.

⁹ Here in BC, over 10 local governments, plus the Association of Vancouver Island and Coastal Communities (representing 53 local governments) have voted to send letters to 20 fossil fuel companies demanding that they pay their share of local climate impacts. A human right complaint is being investigated in the Philippines against many of these same companies for their contribution to climate change. Also the lawsuits referenced in note 6.

¹⁰ Letter from City of Victoria to Chevron, November 28, 2017.

¹¹ In many other contexts, the BC government has long required industry to pay for the full costs of their products, as through Extended Producer Responsibility which is a well-established principle of BC's laws regarding recycling and waste management.

Signed by: