Insolvency Risk and Climate

Janis Sarra[*]

I see a bad moon a-rising
I see trouble on the way
I see earthquakes and lightnin'
I see bad times today
Don't go 'round tonight
It's bound to take your life
There's a bad moon on the rise
I hear hurricanes a-blowing
I know the end is coming soon
I fear rivers over-flowing
I hear the voice of rage and ruin

Creedence Clearwater Revival[1]

I. INTRODUCTION

There are numerous risks associated with climate change, including solvency risk. For example, there is a substantial shift in investment dollars away from carbon-intensive production activities towards new technologies in virtually every sector of the economy, which means diminished access to capital for some businesses. The Sustainability Accounting Standards Board has identified material financial impacts from climate

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1 John Fogerty, Creedence Clearwater Revival, *Bad Moon Rising*, Green River album, published 1969.

change for companies in 72 of 79 industries.[2] The breadth of these risks requires careful assessment of their impact on a debtor company's business. Effective governance of the transition to a low-carbon economy is critically important to the continuation of businesses. Directors and officers need the skills to navigate the company through these changes, and insolvency professionals and financiers will need to understand the complex dynamics underpinning climate-related risks and opportunities as they advise and support financially troubled companies. The judiciary will be faced with new types of claims in their supervision of Canadian insolvency proceedings. This article identifies some of these climate-related governance and oversight issues.

Although John Fogerty of the band Creedence Clearwater Revival wrote the song *Bad Moon Rising* more than 50 years ago, it could have been referring to climate change risk today. The song was inspired by a 1941 film noir, in which the main character sells his soul to the devil, initiating summer hailstorms and other destructive acute weather events.[3] Fogerty wrote the song to reflect the turmoil in 1968, including the assassinations of Martin Luther King Jr and Robert F Kennedy.[4] While I would not ascribe human activity creating anthropogenic climate change as selling one's soul, there is something to the notion of having benefited from tremendous short-term economic gains at a price that will be paid by future generations. The science is clear that the increase in frequency and severity of hurricanes, flooding, tropical

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2 "Climate Risk Technical Bulletin" (October 2016), at 1, online: *SASB* <https://www.sasb.org/wp-content/uploads/2019/08/Climate-Risk-Technical-Bulletin-web.pdf?__hstc=105637852.6fabd899859be753a3-ca820b7c8d7cdc.1569704493844.1569704493844.1569704493844.1&__hssc=105637852.1.1569704493844>.

3 Henry Yates, "The Story Behind The Song: Bad Moon Rising by Creedence Clearwater Revival" (28 May 2017), online: *Classic Rock Magazine* <https://www.loudersound.com/features/story-behind-the-song-bad-moon-rising-by-creedence>. The 1941 film was titled the *Devil and Daniel Webster.*

4 Yates, *ibid.*

storms, extreme heat, and sea level rise are directly linked to global warming.[5] There are indeed bad times ahead, but equally, there is potential to slow the destructive effects of greenhouse gas ("GHG") emissions if governments, the private sector and populations move collectively to undertake effective strategies.

For Canada, there will inevitably be insolvencies, but there is alsotremendouspotentialfordeveloping sustainableeconomic activity, and for Canada to become a leader in new technologies, sustainable infrastructure and energy efficiency. This idea of both solvency risk and upside potential was captured succinctly by Bank of England Governor Mark Carneyinhis recentwarning thatbusinesses thatfail toadaptto climate change, "including companies in the financial system, will go bankrupt without question, and yet there are great fortunes to be made" in the path to a low-carbon economy.[6]

The Intergovernmental Panel on Climate Change ("IPCC") reports that human activities have now caused 1ßC of global warming above pre-industrial levels andthere may be as little as ten years left to keep global warming to a maximum of 1.5ßC, beyond which even half a degree will significantly heighten risk of extreme events such as wildfires and floods, as well as exacerbate morbidity, mortality, and poverty for millions of people.[7] The World Economic Forum has observed that

5 Intergovernmental Panel on Climate Change, "Global warming of 1.5ßC – An IPCC Special Report on the impacts of global warming of 1.5ßC above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty" (October 2018), online: *IPCC* <https://www.ipcc.ch/sr15/> [IPCC 2018].

6 Mark Carney, Governor of the Bank of England and former Governor of the Bank of Canada, as quoted by David Milliken, "BoE's Carney warns of bankruptcy for firms that ignore climate change" (31 July 2019), online: *Reuters* <https://www.reuters.com/article/us-britain-boe-carney/boes-carney-warns-of-bankruptcy-for-firms-that-ignore-climate-change-idUSKCN1UQ28K>.

7 IPCC 2018, *supra* note 5. The IPCC represents the consensus of 800 scientists and their governments globally.

climate change will shape the way in which we do business for the coming decades.[8] Its alliance of chief executive officers has called for the private sector to take responsibility to cut GHG emissions across a range of areas, including replacing fossil fuels with renewable energy as the main source of power, making new infrastructure compatible with climate targets, working towards zero-emission transport, bringing iron, steel, cementandchemicalproductionintolinewiththe Paris COP 21 targets, and investing in low-carbon businesses.[9]

The Ontario Court of Appeal recently held that anthropogenic climate change poses an existential threat to human civilization.[10] The Saskatchewan Court of Appeal also noted that the accepted factual record confirms that climate change caused by anthropogenic GHG emissions is one of the great existential issues of our time, and that without additional mitigation efforts beyond measures in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread and irreversible impacts globally.[11]

The Ontario Court of Appeal observed:

> 7] There is no dispute that global climate change is taking place and that human activities are the primary cause. The combustion of fossil fuels, like coal, natural gas and oil and its derivatives, releases GHGs into the

8 World Economic Forum, "Two Degrees of Transformation" (11 April 2019), online: *World Economic Forum* <http://www3.weforum.org/docs/WEF_Two_Degrees_of_Transformation.pdf> [World Economic Forum].

9 *Ibid* at 3-4. United Nations Framework Convention on Climate Change Conference of the Parties ('COP 21'), Paris Agreement, (12 December 2015), at 1, online: *UNFCCC* <unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf>; *Adoption of the Paris Agreement*, UN Doc FCCC/CP/2015/L.9> [Paris COP 21 Agreement].

10 *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 (Ont CA) at para 104 [Ontario Court of Appeal *Reference re Greenhouse Gas Pollution Pricing Act*]

11 *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 SKCA 40 (Sask CA), at paras 4, 16 [Saskatchewan Court of Appeal *Reference re Greenhouse Gas Pollution Pricing Act*].

> atmosphere. When incoming radiation from the Sun reaches Earth's surface, it is absorbed and converted into heat. GHGs act like the glass roof of a greenhouse, trapping some of this heat as it radiates back into the atmosphere, causing surface temperatures to increase. Carbon dioxide ("CO2") is the most prevalent GHG emitted by human activities.
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> 11] This global warming is causing climate change and its associated impacts. The uncontested evidence before this court shows that climate change is causing or exacerbating: increased frequency and severity of extreme weather events (including droughts, floods, wildfires, and heat waves); degradation of soil and water resources; thawing of permafrost; rising sea levels; ocean acidification; decreased agricultural productivity and famine; species loss and extinction; and expansion of the ranges of life-threatening vector-borne diseases, such as Lyme disease and West Nile virus. Recent manifestations of the impacts of climate change in Canada include: major wildfires in Alberta in 2016 and in British Columbia in 2017 and 2018; and major flood events in Ontario and Québec in 2017, and in British Columbia, Ontario, Québec and New Brunswick in 2018. The recent major flooding in Ontario, Québec and New Brunswick in 2019 was likely also fueled by climate change.
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> 12] Climate change has had a particularly serious impact on some Indigenous communities in Canada. The impact is greater in these communities because of the traditionally close relationship between Indigenous peoples and the land and waters on which they live.[12]

In the transition to a low-carbon world, Canada is particularly vulnerable because 14.4 per cent of the Canadian economy is tied to the extraction, refining, transport and sale of oil, gas and coal.[13] Several sectors are especially vulnerable as global investors shift their investment portfolio mix towards renewable energy or zero-emission investments. The largest GHGemitters in Canadaby sector are oil andgas at 27 percent,

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12 Ontario Court of Appeal *Reference re Greenhouse Gas Pollution Pricing Act*, *supra* note 10 at paras 7, 11 and 12.

13 Environment and Climate Change Canada, "Canadian Environmental Sustainability Indicators: Progress towards Canada's greenhouse gas emissions reduction target" (January 2019), online (pdf): *Government of Canada* <http://publications.gc.ca/collections/collection_2019/eccc/En4-144-48-2019-eng.pdf> [Canada's Third Biennial Report]. This report is Canada's Third Biennial Report on Climate Change, as required under the Paris Agreement.

transportation at 24 per cent, mining at 14 per cent, and buildings and construction at 12 per cent.[14] Each of these industries will require capital to facilitate transition to a low-carbon economy. In reality, most sectors will be affected, but to different degrees and over different timelines.

The most effective strategies to address climate change are likely to be a combination of mitigation and adaptation. 'Mitigation' refers to efforts to reduce or prevent the emission of GHG, or to enhance the absorption of gases already emitted, thus limiting the magnitude of future warming.[15] The IPCC reports that "mitigation requires the use of new technologies, clean energy sources, reduced deforestation, improved sustainable agricultural methods, and changes in individual and collective behaviour", which can also benefit biodiversity, air quality and sustainable development.[16] 'Climate adaptation' refers to the actions taken to manage impacts of climate change by reducing vulnerability and exposure to its harmful effects and developing any potential benefits.[17] Mitigation and adaptation take place at international, national and local levels, which, the IPCC notes, are key to developing andreinforcing measuresforreducing weather- and climate-related risks.[18]

There are other signals that Canadian businesses need to pay attention to climate change risk prior to financial distress. In 2019, the Canadian Securities Administrators("CSA") issued a notice stating that "climate change-related risks are a mainstream business issue. Issuers should consider these risks as part of their ongoing risk management and disclosure processes and they must disclose any such risks that are material to their business."[19] The Bank of Canada has reported

14 *Ibid.*
15 IPCC 2018, *supra* note 5 at 70.
16 *Ibid* at 70.
17 *Ibid* at 51.
18 *Ibid*.
19 Canadian Securities Administrators, "CSA Staff Notice 51-358 Reporting of Climate Change-related Risks" (1 August 2019),

that climate change poses risks to both the economy and the financial system.[20] Both the Bank and the Office of the Superintendent of Financial Institutions ("OSFI") have announced that they are integrating climate-related risks into financial stability analysis and solvency review of financial firms.[21]

The Canadian Expert Panel on Sustainable Finance has estimated that the total necessary investment for Canada to meet its international commitments to tackle climate change is more than CAD $2 trillion.[22] While there are tremendous opportunities for businesses to generate upside value, the shift in both policy and capital investment towards sustainable finance means that there will be insolvencies where companies fail to address legacy liabilities or fail to act in a timely manner to address material climate-related risks.

In beginning to identify climate-related governance and oversight issues, this article discusses the implications for corporate governance and for insolvency law and practice. Part II examines climate change as insolvency risk, examining different aspects of physical and transition risk and how they are likely to impact solvency. Part III briefly examines the first

Canadian Securities Administrators, online: *OSC* <https://www.osc.gov.on.ca/en/SecuritiesLaw_csa_20190801_51-358_reporting-of-climate-change-related-risks.htm>. [CSA Staff Notice 51-358]. This report expands on the guidance provided in CSA Staff Notice 51-333 Environmental Reporting Guidance and should be read in conjunction with it; CSA Staff Notice 51-358, *ibid* at 1.

20 "Financial System Review – 2019" (May 2019), at 5, online: *Bank of Canada* <https://www.bankofcanada.ca/2019/05/financial-system-review-2019/>.

21 *Ibid.* "The Prudential Implications of Climate Change for Insurance Companies" (February 2019), online (pdf): *The OFSI Pillar* <http://www.osfi-bsif.gc.ca/Eng/Docs/pl201902.pdf> [OSFI 2019].

22 "Final Report of the Expert Panel on Sustainable Finance, *Mobilizing Finance for Sustainable Growth*" (June 2019) at 2, online (pdf): *Government of Canada* <http://publications.gc.ca/collections/collection_2019/eccc/En4-350-2-2019-eng.pdf> [Expert Panel on Sustainable Finance]. Canada is signatory to the Paris COP 21 Agreement, *supra* note 9.

major climate-related insolvency globally, Pacific Gas and Electric, currently in Chapter 11 United States ("US") *Bankruptcy Code* proceedings. Part IV canvasses some initial practice considerations regarding climate-related insolvencies. Part V concludes that successful insolvency proceedings will require insolvency professionals to develop knowledge and expertise in advising on climate-related risks.

II. CLIMATE CHANGE AS INSOLVENCY RISK

In 2016, the G20 leaders called on the Financial Stability Board ("FSB") to address the financial risks associated with climate change. A year later, the FSB's Task Force on Climate-Related Financial Disclosures ("TCFD") made a series of recommendations regarding climate disclosure and governance.[23] Its framework has now been endorsed by 833 organizations, including three-quarters of the world's globally systemically important banks, eight of the top ten global asset managers, the world's leading pension funds and insurers managing almost US $110 trillion in assets, and the 'big four' accounting firms.[24]

The TCFD reported that climate-related risks fall into two majorcategories: risksrelatedtothephysicalimpactsofclimate change and risks related to the transition to a lower-carbon economy.

1. Physical Risks

Physical risks resulting from climate change can be acute or chronic. Acute physical risks refer to those risks that are event-

23 Financial Stability Board, Task Force on Climate-related Financial Disclosures, "Final Report, Recommendations of the Task Force on Climate-related Financial Disclosures" (June 2017), at 5, online: *Task Force on Climate-related Financial Disclosures* <https://www.fsb-tcfd.org/publications/final-recommendations-report/> [TCFD Final Report].

24 "TCFD Supporters" (July 2019), online: *TCFD* <https://www.fsb-tcfd.org/tcfd-supporters/>.

driven, including from increased severity of extreme weather events, such as cyclones, hurricanes, or floods. Chronic physical risks refer to longer-term shifts in climate patterns, such as sustained higher temperatures, which may cause sea level rise orchronic heat waves.[25] The long-term risks can result in climate and weather outcomes in Canada thatwill increase in frequency and intensity. For example, it is now well-documented that extreme rainfall and flooding attributable toclimate change are disrupting manufacturing operationsand real estate investments, affecting different regions in different ways.[26]

Natural Resources Canada offers manyexamples of climate-related acute events, including the 2013 extreme flood event in southern Alberta, which displaced 100,000 people and resulted in CAD $6 billion in damage, and the 2016 Fort McMurray wildfire, which burned 6,000 square km of land area, resulting in evacuation of 80,000 people, halting oil production, and resulting in losses of CAD $4.5 billion. Physical risks result in direct losses, as well as having follow-on effects. The Insurance Bureau of Canada reports that payouts for insured damage for acute events such as severe fire and flooding events across Canada were CAD $5 billion in 2017 and CAD $2 billion in 2018.[27] Given the severity of effects and the damage caused, there are implications for the cost and availability of insurance and reinsurance for both businesses and consumers.

Anotherphysical risk is heat-related risk. NASA reports that Earth's global surface temperature in 2018 was the fourth warmest since 1880, after 2016, 2017 and 2015, in that order.[28]

25 *Ibid* at 10.

26 IPCC 2018, *supra* note 5.

27 Insurance Bureau of Canada: Insurance payouts from extreme weather have more than doubled every five to 10 years since the 1980s, email message on file with author, 10 May 2019).

28 NASA's temperature analyses incorporate surface temperature measurements from 6,300 weather stations, ship- and buoy-based observations of sea surface temperatures, and temperature measurements from Antarctic research stations. NASA, "Vital Signs of the Planet" (6 February 2019), online: *NASA News* <https://

In Canada, between 1948 and 2016, the mean annual temperature increase was 1.78C for the country as a whole and 2.38C for northern Canada.[29] Average warming projected in Canada in a low emission scenario, meaning a scenario in which we take aggressive steps to limit our carbon emissions, is still about 28C higher than the 1986-2005 reference period, whereas in a *status quo* high emission scenario, temperature increases in Canada are predicted to reach 3.78C by 2040 and 68C by late 21st century.[30] The IPCC reports that *any* additional increase in global temperature will negatively affect human health, including heat-related morbidity and mortality, and ozone-related mortality, and that 'urban heat islands' will amplify the impacts of heatwaves in cities.[31]

Physical risks create solvency risks to businesses. Companies in some regions of Canada have experienced direct damage to assets from flooding. There are significant new costs associated withchangesinavailabilityofsourcingandqualityofwaterand other inputs. Wildfires have resulted in complete loss of capital assets such as factories and equipment. Extreme temperature changes have increased the costs of both heating and cooling in productive processes, as well as costs associated with employee health impacts.[32] For businesses that are under-insured, the losses from acute events will require an injection of debt or equity capital if they are to remain solvent.

Companies are also experiencing financial strain from supply chain disruption, particularly where they are sourcing materials from regions or countries hard hit by the physical impacts of climate change.

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climate.nasa.gov/news/2841/2018-fourth-warmest-year-in-continued-warming-trend-according-to-nasa-noaa/>.

29 Canada's Third Biennial Report, *supra* note 13 at 122.

30 *Ibid.*

31 IPCC 2018, *supra* note 5 at 180.

32 *Ibid* at 6.

2. Transition Risks

Transition risks include risks associated with policy, legal, technological, reputational, and market changes relating to climate change mitigation and adaptation. Depending on the nature, speed and focus of these changes, transition risks may pose varying levels of financial risk for businesses.[33] While some aspects of climate risk are faced by most companies, the materiality of different types of risk will vary among companies and industries and between various regions of Canada.

i. Policy risk

Policy aimed at constraining actions that contribute to the adverse effects of climate change, or aimed at promoting adaptation to climate change, include implementing carbon-pricing mechanisms to reduce GHG emissions, shifting energy use toward lower emission sources, adopting energy-efficiency solutions, enhancing forests as 'carbon sinks', and promoting more sustainable land-use practices.[34] Rapid changes in government policy, globally and domestically, will have cost consequences for companies, and while there are many opportunities for economic growth, there are also financial risks.

Canada has an added layer of insolvency risk in that its federal and provincial governments are not aligned in terms of policy and regulatory approaches to shifting the economy to a lower-carbon footprint. There has been considerable litigation regarding Canada's carbon pricing legislation, which is still pending before the Supreme Court of Canada.[35] It involves a constitutional issue regarding the scope of federal and provincial authority to address climate change. There have

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33 *Ibid.*

34 *Ibid*.

35 *Greenhouse Gas Pollution Pricing Act*, Part 5 of the *Budget Implementation Act, 2018*, No 1, SC 2018, c 12. See eg, Ontario Court of Appeal *Reference re Greenhouse Gas Pollution Pricing Act, supra* note 10.

also been wild swings in provincial carbon policy based on outcomes of provincial elections, creating uncertainty for businesses. For companies that operate cross-border, such as operating in Canada and the US, there are likely to be different regulatory requirements with which the business needs to comply.

As companies move to comply with new policies and regulatory requirements, some will experience additional costs, either in terms of paying for their carbon emissions or paying higher costs for supplies, energy and other inputs that have higher prices due to carbon pricing or the cost of developing new products and services to meet policy shifts. While carbon pricing is viewed by the IPCC and many governments as the most effective way of reducing carbon footprint, companies starting to internalize costs of their carbonusethatwerepreviouslyexternalizedwillinevitablyface new financial challenges. Insolvency practitioners will need to be well-informed on new regulatory requirements and policy shifts if they are to help insolvent companies navigate these policy changes.

ii. Technology risk

Technology risk is also part of transition risk, as technological innovations that support the transition to a lower-carbon, energy-efficient economic system can have a significant impact on businesses.[36] The TCFD points to technologies such as renewable energy, energy efficiency, and carbon capture and storage, all of which are developing rapidly and will affect the competitiveness of certain companies, their production and distribution costs, and demand for their products and services.[37]

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36 Janis P Sarra, *Fiduciary Obligations in Business and Investment: Implications of Climate Change* (2018) University of Oxford Commonwealth Climate and Law Initiative Working Paper, at 12, online: *SSRN* <https://ssrn.com/abstract=3356024> or <http://dx.doi.org/10.2139/ssrn.3356024> [Sarra, *Fiduciary Obligations*].

37 TCFD Final Report, *supra* note 23 at 6.

Part of the risk is that new technology will displace or disrupt some parts of the existing economic system. The timing of technological development and deployment is a key uncertainty in assessing technology risk. Companies around the world are investing heavily to develop the technologies and skills to supply the world with lower-cost, cleaner energy. The Expert Panel on Sustainable Finance reports that a failure of Canadian high-emitting sectors to reduce their ecological footprints and set out innovative growth strategies creates risk to Canadian business' competitive standing in a rapidly evolving global economy.[38]

Even where the cause of adebtor company's insolvency is not directly related to climate change, as companies file insolvency proceedings in Canada, part of the assessment of whether there is a possible going-forward business plan will be an assessment of the company's existing carbon footprint and its capacity for technological innovation to meet expectations regarding low-carboneconomic activity. Attractinginterimandexit financing will depend, in part, on the ability of the company to redeploy productive assets to meet demands for a lower-carbon footprint and to capture the potential upside from introduction of new technology and energy-efficient processes.

Financiers will also want some assurance that the company has an effective governance structure in place for management and oversight of the technological shifts required to make the business viable. While assessing the technological capabilities of a company going forward has always been a role for insolvency professionals, they will need to be very adept at understanding a rapidly changing market for new technologies andatprovidinginformedadvicetothedebtorandtothecourts in respect of the debtor's governance and financial capacity to meet these challenges. Where the governance capacity is lacking, a chief restructuring officer will need to have the necessary technological expertise, or hire such expertise, to address these challenges.

38 Expert Panel on Sustainable Finance, *supra* note 22 at 6.

iii. Market and investment risk

Market risk is also a factor, in terms of shifts in supply and demand for certain commodities, products and services, as market preferences shift and climate-related risks and opportunities are increasingly taken into account.[39] In meeting the goals of the Paris COP 21 Agreement, it is estimated that two-thirds of the world's fossil fuel reserves will not be used and are at risk of becoming stranded assets, placing trillions of dollars of shareholder and creditor value at risk.[40] The TCFD observes that there may be a repricing of assets, such as oil reserves and land valuations.[41] The World Economic Forum observes that the average lifespan of a company listed in the S&P 500 index of leading US companies has shortened by more than 50 years in the last century, from an average lifespan of 67 years to just 15 today.[42] That shift is likely to accelerate as new industries emerge in a low-carbon economy and companies fail when they are unable to adapt.

Institutional investors are increasingly seeking additional information to quantify their exposure to carbon-linked assets. Climate change could substantially affect the valuation of assets of many Canadian companies. Pension plans and their investment managers, in particular, are fiduciaries charged with oversight and management of investment vehicles in the best interests of multiple generations of beneficiaries; they must

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39 TCFD Final Report, *supra* note 23 at 6.

40 University of Cambridge Institute for Sustainability Leadership, "Unhedgeable risk How climate change sentiment impacts investment" (2015), online (pdf): *Cambridge Institute for Sustainability Leadership* <https://www.cisl.cam.ac.uk/publications/publication-pdfs/unhedgeable-risk.pdf>. See also "Unburnable Carbon" (23 August 2017), online: *Carbon Tracker Initiative* <https://www.carbontracker.org/terms/unburnable-carbon/>.

41 TCFD Final Report, *supra* note 23 at 10.

42 World Economic Forum, *supra* note 8 at 4, citing a Yale University study by Richard Foster and Kim Gittleson, "Can a company live forever?" *BBC News Business* (19 January 2012) reporting that by 2020, more than three-quarters of the S&P 500 will be new companies.

therefore consider the intergenerational implications of their investment decisions and are now integrating climate change considerations in their investment portfolios.[43]

Investment risks are arising from downward pressure on the value of carbon-linked assets during the transition towards a lower-carbon economy. Companies that fail to disclose their risks and their business plans to address them could face problems accessing capital. The risks and attendant costs associated with stranded assets, such as abandoned wells, can accrue not only to companies, but to particular industries. There mayalso becosts borneby governments andtaxpayers as a whole, where there is no one else to pay for decommissioning, remediation and reclamation of these stranded assets.

Pension funds are major holders of long-term assets in Canada. They are now stress testing their existing asset portfolios to quantify the potential impact of changes in carbon-based asset prices, in order to guide their investment decisions. A number have commenced shifting their investment activities.

For example, Caisse de de´ poˆ t et placement du Que´ bec ("CDPQ") is factoring climate change into every investment decision. It is increasing its low-carbon investments by CAD $10 billion by 2020, having already invested CAD $18 billion in low-carbon investments.[44] It is aligning compensation of its portfolio managers to reaching low-carbon investment targets.[45] CDPQ is committed to reducing its carbon footprint by 25 per cent per dollar invested by 2025; and setting a carbon target covering all of its asset classes.[46] The

43 Sarra, *Fiduciary Obligations*, *supra* note 36 at 69-70.

44 Caisse de de´ poˆ t et placement du Que´ bec (CDPQ), "2018 Stewardship Investing" (2019), at 10-12, online: *CDPQ* <https://www.cdpq.com/sites/default/files/medias/pdf/en/ra/id2018_rapport_investissement_durable_en.pdf> [CDPQ 2018 Stewardship].

45 CDPQ has investment strategies to address climate change, built on four pillars; "Climate Change" (2019), online: *CDPQ* <https://www.cdpq.com/en/investments/stewardship-investing/climate-change>.

46 CDPQ 2018 Stewardship, *supra* note 44 at 10-12.

Ontario Teachers' Pension Plan's ("OTPP") Low Carbon Economy Transition Framework is integrating climate change considerations across its entire investment cycle, from opportunities, to assessment and decision-making processes before acquiring an asset, to how it manages an asset once it owns it.[47] One can see similar investment strategies being adopted by British Columbia Investment Management Corporation and Alberta Investment Management Corporation.[48] These four examples alone represent Canadian institutional investors with more than CAD $707 billion assets under management, a considerable amount of which is invested in Canada.

Canadian companies need to be keenly attuned to these shifts if they are to continue to attract capital to the business and reduce their risk of insolvency due to lack of sufficient capital investment.

In addition to the shifts by equity investors, institutional lenders are also signaling that their lending practices will reflect the need to address climate-related financial risk. For example RBC has reported that it will "accelerate the flow of capital to clients engaged in efforts to mitigate and adapt to climate change, and to those companies providing products and services that enable others to do so".[49] In September 2019, one third of global banks with more than US $47 trillion in

47 At the core of the framework are three scenarios that describe what the future could look like in 2030. OTPP has processes in place that consider material climate change impacts in its investments: Ontario Teachers' Pension Plan, "OTPP 2018 Climate Change Report" (June 2019), online: *OTPP* <https://www.otpp.com/documents/10179/859251/Climate+Change+Report+2018/152d6724-3d35-4f69-8971-641ec13ed737>.

48 British Columbia Investment Management Corporation, "BCI's Climate Action Plan and Approach to the TCFD Recommendations" (2018), online: *BCIMC* <https://uberflip.bci.ca/i/1024019-bcis-climate-action-plan-and-approach-to-the-tcfd-recommendations>; "Investment Philosophy" (2019), online: *AIMCo* <https://www.aimco.alberta.ca/How-We-Think/Investment-Philosophy>.

49 "Climate Change Position & Disclosure Statement" (2017), at 2, online (pdf): *RBC* <http://www.rbc.com/community-sustainabil-

assets under management adopted new United Nations-backed responsible banking principles to fight climate change, committing to shifting their loan portfolios away from fossil fuels and carbon-intensive activities and redirecting loanstocapitalingreenerindustries, includingsettingtargetsto increase positive impacts and reduce negative impacts on people and the environment.[50] These developments will also influence the ability of insolvency practitioners to assist the debtor in negotiating financing on a going-forward basis or in negotiating an appropriate price for the sale of all or part of the business.

iv. Reputational risk

Another transition risk is reputational risk, in terms of changing customer or community perceptions of a corporation's contribution to, or detraction from, the transition to a lower-carbon economy. There may be reduced demand for goods and services due to shifts in consumer preferences and increased production costs due to changing input prices and output requirements to align with customer preferences.[51]

Canadian companies are already experiencing some of the effectofshiftingsocialvaluesandconsumerattitudes. Oneneed look no further than the recent climate strike in September 2019, in which 85 Canadian cities and towns participated and almost one million people marched. Many of the signs being

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ity/_assets-custom/pdf/RBC_ClimateChangePosition_Disclosure_Statement_2017.pdf>.

50 "The Principles for Responsible Banking" (22 September 2019), online: *United Nations* <https://www.unepfi.org/banking/banking-principles/>. See also M Green, "130 banks worth $47 trillion adopt new UN-backed climate policies to shift their loan books away from fossil fuels" (22 September 2019), online: *Reuters* <https://www.businessinsider.com/banks-worth-47-trillion-adopt-new-un-backed-climate-principles-2019-9?fbclid=IwAR0r6-zeuPd9RKxiTeEWmsNpafzF5M4lF4Ozshl-_0zioH89HkxZ7lCd-ZEeg>.

51 TCFD Final Report, *supra* note 23 at 10.

carried were directed at specific Canadian companies, calling on them to reduce their carbon footprint. While the marches attracted consumers of all ages, it is evident that young people, both today's and tomorrow's consumers, will be quick to use social media, as well as their purchase power, to sanction companies that fail to undertake climate mitigation. Serious reputational damage could result ininsolvency.

Insolvency practitionerswill knowfromtheexperience of the Canadian Red Cross Society insolvency proceeding, in which there were mass tort claims related to morbidity and mortality fromtaintedblood, thatminimizingreputationaldamagewhen lives have been irreparably harmed or lost is extremely difficult.[52] Insolvencies from climate-related acute events are likely to cause as much or more damage to reputation, depending on the severity of the disaster. One of the goals of restructuring under Canadian insolvency law is to preserve going-concern value where possible, and reputational damage can hinder that potential.

v. Litigation risk

There is an increase in climate-related litigation claims being brought before the courts, alleging that the organization failed to mitigate impacts of climate change, failed to adapt, and failed to disclose material financial risks.[53] As loss and damage arising from climate change grows, litigation risk is likely to increase, as will insolvencies arising from such litigation. In addition to litigation directly against companies, there is litigation risk in respect of companies seeking regulatory approvals for development projects. Forexample, in Australia,

52 For a discussion of the Red Cross proceeding, see Janis Sarra, *Creditor Rights and the Public Interest* (Toronto: University of Toronto Press, 2003), at chapter 7 [Sarra, *Creditor Rights*].

53 Peter Seley, "Emerging Trends in Climate Change Litigation" (7 March 2016), online (pdf): *Law 360* <https://www.gibsondunn.-com/wp-content/uploads/documents/publications/Seley-Dudley-Emerging-Trends-In-Climate-Change-Litigation-Law360-3-7-16.pdf>.

there have been successful challenges to residential and business developments proposed in coastal areas, with the courts finding that land near the coast is unsuitable for development as it poses hazards for erosion, storm surges and inundation in the future due to climate change.[54]

Climate-related risk may be minor or highly significant to a firm's economic activities. The fiduciary duty of directors and officers, and the duty of care under corporations legislation, require that they have undertaken efforts to identify risks to their business from climate change in the same way that they must assess other financial risks.[55] They should have appropriate strategies in place to manage these risks where they are material tothe company's solvency, andshould have in place effective oversight and monitoring of the actions of individuals charged with managing these risks.[56] Mercer has observed that financial regulators, particularly with regulatory oversight of pension funds, are increasingly formalizing the expectation that investors should consider the materiality of climate-related risks and manage them accordingly, consistent with their fiduciary duties.[57]

While lawsuits against corporations have not yet appeared in Canada, as of May 2019, there are at least 1,328 climate change cases in 28 countries aroundtheworld, withthree-quarters filed in the US.[58] While early lawsuits against companies were

54 See eg *Rainbow Shores Pty Ltd v Gympie Regional Council & Ors*, [2013] QPEC 26 at para 360.

55 Sarra, *Fiduciary Obligations*, *supra* note 36.

56 Ibid.

57 "Investing in a Time of Climate Change, The Sequel 2019" (2019), online: *Mercer* <https://www.mercer.ca/en/our-thinking/wealth/climate-change-the-sequel.html>.

58 Joana Setzer and Rebecca Byrnes, "Global trends in climate change litigation 2019 snapshot" (July 2019), online (pdf): *Grantham Research Institute on Climate Change and the Environment (GRI)* <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2019/07/GRI_Global-trends-in-climate-change-litigation-2019-snapshot-2.pdf> [GRI, Global Trends]. Some estimates are over 1600 lawsuits, but the GRI and Columbia databases have documented 1,328.

dismissed based on challenges to standing or causation, developments in attribution science have meant that the tide could be shifting on finding liability.[59] Developments in science can now attribute proportional harms caused by the specific activities of GHG-emitting firms.[60] Satellite programs developed at Oxford University can now track and measure emissions by an individual building or plant.[61]

There are numerous recent examples of litigation in which attribution science is being used to bring tort and nuisance claims against fossil fuel companies, claiming damages based on their specific contributions to harms. In the past two years, cities and counties in more than ten US states have filed separate lawsuits against major fossil fuel companies, alleging that they have continued to produce fossil fuels while knowingly concealing their clear scientific evidence of the harms being caused to the climate.[62] The plaintiffs are seeking compensation for the portion of these firms' GHG emissions that have caused climate change and resulting damages from sea level rise, flooding and other catastrophes. All of these lawsuits are still pending, a number are currently at the appellate court level in terms of challenges to dismiss or to remand to state or federal courts. However, a number of courts of first instance have accepted the growing climate science.

For example, in a recent judgment in a lawsuit that the State

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59 For an in-depth discussion, see Janis Sarra, *Governance Paths to Net Zero* (Oxford: Oxford University Press, 2020) [forthcoming].

60 GRI, Global Trends, *supra* note 58.

61 Ben Caldicott, "Commonwealth Climate and Law Initiative" Presentation delivered at the Smith School of Business, Oxford University (October 2017) [on file with author].

62 See eg *County of Marin v Chevron Corp*, CIV-1702586, Complaint (Cal Super Ct filed 17 July 2017), *County of San Mateo v Chevron Corp*, 17-CIV-03222, Complaint (Cal Super Ct filed 17 July 2017), *Mayor & City Council of Baltimore v BP plc*, 18-CV-02357 (ELH), Document 192 Memorandum (D Md filed 31 July 2019), online (pdf): <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2019/20190731_docket-118-cv-02357_memorandum.pdf>.

of Rhode Island brought against 21 oil and gas companies, Judge William Smith, in ruling that the case should be heard in state court, observed that the defendants "understood the consequences of their activity decades ago, when transitioning from fossil fuels to renewable sources of energy would have saved a world of trouble. But instead of sounding the alarm, defendants went out of their way to becloud the emerging scientific consensus and further delay changes – however existentially necessary – that would in any way interfere with their multibillion-dollar profits".[63] If successful, the damages paid out of these lawsuits could force some of these companies into insolvency proceedings. Similar litigation is being considered in Canada.

Another example of litigation risk is allegations of breach of fiduciary obligation, as evidenced by a recent judgment in Poland where shareholders successfully challenged the directors' decision to proceed with a coal plant that was likely to become a stranded asset.[64] There are also lawsuits alleging that directors and officers beached their disclosure duties. For example, the Commonwealth Bank of Australia recently settled a lawsuit alleging that it violated its corporate law duties by failing to disclose climate change-related business

63 *State of Rhode Island v Chevron Corp et al*, 18-CV-00395 (WES), Document 122 Opinion and Order (DRI filed 22 July 2019) at 2, online: <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2019/20190722_docket-118-cv-00395_opinion-and-order.pdf>. Federal judges in Northern California and Baltimore have also ruled that these cases belong in state court.

64 Client Earth News Release, "Court win in world-first climate risk case puts future of Ostrołęka C coal plant in question" (1 August 2019), online: *Client Earth* <https://www.clientearth.org/press/court-win-world-first-climate-case-ostroleka-c-future-in-question/>; Client Earth, "Ostrołęka C: Energa's and Enea's Board Members' Fiduciary Duties to the Companies and Shareholders" (20 September 2018), online: *Client Earth* <https://www.documents.clientearth.org/library/download-info/ostroleka-c-energas-and-eneas-board-members-fiduciary-duties-to-the-companies-and-shareholders/>.

risks.[65] While litigation regarding fiduciary obligation in respect of climate change is at a nascent stage, once there is momentum in the judgments, companies will face insolvency as damages are awarded for such breaches. Directors may face personal insolvency where they are found personally liable for failure to act on material climate-related risk, their inaction has failed to protect them under the business judgment rule,[66] and the assets of the company or its insurance are not sufficient or appropriate to indemnify the results of their inaction.

vi. Insurance risk

Insurance risk relates to both cost and availability of insurance for companies. Being under-insured when catastrophic events occur may result in financial distress or insolvency. There may also be new categories of uninsurable risk, as the effects of climate change become more acute, frequent and widespread. Given the potential liability of directors and officers for failing to disclose or to manage climate risk, director and officer ("D&O") insurance, both prior to and during insolvency, may be increasingly expensive

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65 "Summary: *Abrahams*" (2019), online: *LSE* <http://www.lse.ac.uk/GranthamInstitute/litigation/abrahams-v-commonwealth-bank-of-australia/>, citing *Abrahams v Commonwealth Bank of Australia*, No VID/879 (2017), online (pdf): *Environmental Justice Australia* <https://envirojustice.org.au/sites/default/files/files/170807%20Concise%20Statement%20(as%20filed).pdf>. See also G Hutchens, "Commonwealth Bank shareholders drop suit over nondisclosure of climate risks" (21 September 2017), online: *The Guardian* <https://www.theguardian.com/australia-news/2017/sep/21/commonwealth-bank-shareholders-drop-suit-over-non-disclosure-of-climate-risks>, referencing "Annual Report" (2017) at 10-11, 24, 44-47, 151, online (pdf): *The Commonwealth Bank of Australia* <https://www.commbank.com.au/content/dam/commbank/about-us/shareholders/pdfs/annual-reports/annual_report_2017_14_aug_2017.pdf>.

66 For an example of the court declining to give deference to business judgment because of the inaction of the directors, see *UPM-Kymmene Corp v UPM-Kymmene Miramichi Inc*, 2002 CanLII 49507 (Ont SCJ [Commercial List]) at para 1, appeal dismissed 2004 CanLII 9479 (Ont CA).

oreven unavailable in respect of reasonably foreseeable climate risks.

There is also increasing solvency risk to insurance companies themselves. The Office of the Superintendent of Financial Institutions reports that climate-related catastrophes and weather-related losses are now a key solvency risk to insurance companies.[67] For property and casualty ("P&C") insurers, underwriting risk is growing as climate change is increasing the frequency and magnitude of catastrophic claims, with the Canadian P&C insurance industry suffering a 67 per cent decline of net income in 2016, mainly as a result of such losses.[68] The ability of insurers and reinsurers to survive will depend on increasing pricing and developing innovative strategies regarding products and services offered.

OSFI notes that while most insurers have geographically diversified portfolios and adequate reinsurance to cover these losses, that cushion is likely to change. For life insurers, as different approaches are developed to address climate change, investment decisions must be made with an eye to fluctuations in carbon-linked asset prices. OSFI has told all insurance companies to immediately analyze and quantify their exposure to carbon-based asset repricing and to develop strategic approaches for making the transition to fewer carbon-linked assets key to their management of solvency risk.[69] In the longer term, OSFI expects companies to include stress analyses and their responses in their own risk and solvency assessments.[70]

II. THE FIRST CLIMATE-RELATED BANKRUPTCY PORTENDS FUTURE INSOLVENCIES

Canada has not yet experienced an insolvency directly attributable to the above-discussed climate-related risks, but future cases are highly likely. The first case in which a debtor

67 OSFI 2019, *supra* note 21.
68 *Ibid.*
69 *Ibid.*
70 *Ibid.*

company has expressly acknowledged is related to climate change, PG&E, commenced in 2019 in the US. It is briefly discussed in this part as illustrative of some of the types of issues that debtors, creditors, insolvency practitioners and the courts may face in Canadian climate-related insolvencies.

1. PG&E's Bankruptcy

In January 2019, California's largest utility company, PG&E Corporation, and its primary operating subsidiary, Pacific Gas and Electric Company (together "PG&E"), filed voluntary Chapter 11 *Bankruptcy Code* petitions in the US Bankruptcy Court for the Northern District of California.[71] The bankruptcy was precipitated by the Camp fire, which started in 2018 in Butte County, California, when an old high-voltage transmission line snapped and a wildfire spread rapidly. The Camp fire was the deadliest wildfire in California's history, killing 85 people and destroying 18,800 buildings. PG&E admitted on filing bankruptcy proceedings that investigators would likely determine that its equipment ignited the fire, given worsening drought conditions due to climate change. The California Department of Forestry and Fire Protection has subsequently concluded that a failure of PG&E's equipment on a line known as the Caribou-Palermo line, built in 1921, caused the fire.[72]

At the time of filing, the debtors disclosed US $51.7 billion in debts, of which US $30 billion are claims related to the catastrophic and tragic wildfires, both in 2018 and an earlier 2017 fire. Fire victims suing PG&E claim that the company did not adapt quickly enough to the increased risks that climate

71 PG&E Chapter 11 Proceedings, Case No 19-30088, Chapter 11 Voluntary Petition (Bankr ND Cal filed 29 January 2019), online: *PG&E Case Portal* <https://restructuring.primeclerk.com/pge/Home-DocketInfo> [PG&E Proceedings].

72 K Blunt, "PG&E Caused Fire That Killed 85, California Concludes" (15 May 2019), online: *The Wall Street Journal* <https://www.wsj.com/articles/pg-e-caused-fire-that-killed-85-california-concludes-11557956373?mod=article_inline>.

change created. There are 750 lawsuits pending.[73] PG&E is also under criminal investigation over the Camp fire.[74] PG&E has assets of approximately US $71 billion. A debtor can file under Chapter 11 even if the value of its assets exceeds the value of its liabilities.

The Chapter 11 process is aimed at the orderly, fair and expeditious resolution of PG&E's potential liabilities resulting from the wildfires; aimed at enabling PG&E to continue extensive restoration and rebuilding efforts to assist communities; allowing it to work with regulators and policymakers to determine the most effective way for its 16 million customers to receive safe natural gas and electric service in light of climate change challenges; and at assisting PG&E in accessing the financial resources necessary to support ongoing operations.[75] The PG&E boards of directors concluded that a Chapter 11 proceeding was necessary to address the fundamental challenges PG&E faces, including the significant increase in catastrophic wildfire risk resulting from climate change, and the likelihood that future wildfires will result in additional claims against PG&E.[76]

The case is ongoing as this article goes to press in October 2019; however, there are a few interesting aspects that warrant mentioning, which may foreshadow issues that could arise in future Canadian insolvency proceedings.

Many features of the PG&E bankruptcy are typical for Chapter 11 proceedings, such as an order to pay employee

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73 R Gold, "PG&E: The First Climate-Change Bankruptcy, Probably Not the Last" (18 January 2019), online: *The Wall Street Journal* <https://www.wsj.com/articles/pg-e-wildfires-and-the-first-climate-change-bankruptcy-11547820006>.

74 Joel Rosenblatt, "Judge Demands PG&E Respond to Wall Street Journal Report that the Company Knew Its Lines Were Faulty" (10 July 2019), online: *Bloomberg* <https://time.com/5624105/pge-judge-wsj-report/>.

75 "PG&E Form 8-K Disclosure to SEC" (13 January 2019), online: *Securities and Exchange Commission* <https://www.sec.gov/Archives/edgar/data/75488/000095015719000032/form8k.htm>.

76 *Ibid.*

wages;[77] an order placing restrictions on acquisition of stock, notice and record date for ownership of claims;[78] approving payments to vendors, suppliers and service providers that are essential toprotecting public health andsafety andmaintaining the going-concern value of the debtors' business and operations;[79] an order regarding adequate assurance of payment to utility providers;[80] allowing payment of pre-

77 Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, Final Order Pursuant to 11 USC §§ 105(a), 363(b), and 507 and Fed R Bankr P 6003 and 6004 Authorizing Debtors to (I) Pay Prepetition Wages, Salaries, Withholding Obligations and Other Compensation and Benefits; (II) Maintain Employee Wage and Benefits Programs; and (III) Pay Related Administrative Obligations (Bankr ND Cal filed 28 February 2019).

78 Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, Final Order Pursuant to 11 USC §§ 105(A) and 362 Establishing (1) Notification Procedures and Certain Restrictions Regarding Ownership and Acquisitions of Stock of the Debtors and (2) A Record Date Regarding the Ownership of Claims Against the Debtors With Respect to Certain Notification and Sell-Down Procedures and Requirements, (Bankr ND Cal filed 27 March 2019), online: <https://restructuring.primeclerk.com/pge/Home-DocketInfo?DocAttribute=4146&DocAttrName=FIRST-DAYORDERS>.

79 Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, Second Interim Order Pursuant to 11 USC §§ 105(a), 363(b), and 503(b)(9) and Fed R Bankr P 6003 and 6004 Authorizing Debtors to Pay Prepetition Obligations Owed to Certain Safety and Reliability, Outage, and Nuclear Facility Suppliers, US Bank Crt Northern Dist of Cal, (Bankr ND Cal filed 4 March 2019), online: <https://restructuring.primeclerk.com/pge/Home-DocketInfo?DocAttribute=4146&DocAttrName=-FIRSTDAYORDERS> [Second Interim Order]. Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, Final Order Pursuant to 11 USC §§ 105(a), 363(b), and 503(b) and Fed R Bankr P 6003 and 6004, (Bankr ND Cal filed 28 February 2019).

80 Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, Order Pursuant to 11 USC §§ 366 and 105(a) Approving Debtors' Proposed Form of Adequate Assurance of Payment to Utility Providers, (II) Establishing Procedures Providing Adequate Assurance and Resolving Objections of Utility Providers, and (III) Prohibiting Utility Providers from Altering, Refusing, or Discontinuing Utility Service (Bankr ND Cal, filed 28 February 2019).

petition taxes;[81] and authorizing PG&E's financial institutions to honour cheques and other commitments.[82]

The Bankruptcy Court also ordered post-petition financing pursuant to a senior secured, super-priority debtor-in-possession new money credit facility in an aggregate principal amount of up to US $5.5 billion, comprised of a revolving loan and two term loans.[83] The Court was satisfied that the ability of the debtors to finance their operations, to preserve and maintain the value of their assets and to maximize the return for all creditors required the financing; that PG&E had met the tests under § 503 of the *Bankruptcy Code*; and that the debtors had been unable to obtain credit without granting the financing liens and super-priority.[84] The Court was satisfied that a competitive process had been conducted for the financing, that the loan documents were negotiated in good faith and at arm's length, and the fees were fair, reasonable, and the best available under the circumstances, reflecting the directors' exercise of

81 Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, Final Order Pursuant to 11 USC §§ 105(a), 363(b), 507(a), and 541 and Fed R Bankr P 6003 and 6004 Authorizing Debtors to Pay Prepetition Taxes and Assessments and Granting Related Relief (Bankr ND Cal, filed 28 February 2019).

82 Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, Final Order Pursuant to 11 USC §§ 105(a), 363(b), and 507(a)(7) and Fed R Bankr P 6003 and 6004(i) Authorizing Debtors to (A) Maintain and Administer Customer programs, Including Public Purpose Programs, and (B) Honor Any Prepetition Obligations Relating Thereto; and (II) Authorizing Financial Institutions to honor and process Related Checks and Transfers Granting Motion Regarding Chapter 11 First Day Motions (Bankr ND Cal filed 12 March 2019).

83 Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, Final Order Pursuant to 11 USC §§ 105, 362, 363, 364, 503 and 507, and Fed R Bankr P 2002, 4001, 6004 and 9014 (I) Authorizing Debtors to Obtain Senior Secured, Super-priority, Post-petition Financing, (II) Granting Liens and Superpriority Claims, (III) Modifying the Automatic Stay, (IV) Granting Related Relief (Bankr ND Cal filed 27 March 2019).

84 *Ibid* at 6.

prudent business judgment consistent with their fiduciary duties.[85]

In addition to the official committee of unsecured creditors, the US Trustee appointed an official committee of tort claimants pursuant to § 1102 of the *Bankruptcy Code.* The professional fees of insolvency professionals of such committees are funded out of the bankruptcy estate in US proceedings. The Bankruptcy Court authorized legal counsel for both committees and the US Trustee to be given weekly disclosure of payments for goods and services and other financials on a confidential basis.[86] The claims bar date has been set for 21 October 2019.[87]

i. Conflicts regarding regulatory authority over contracts during bankruptcy

One initial issue in the PG&E Chapter 11 proceeding was a conflict of law issue. The Federal Energy Regulatory Commission ("FERC") has jurisdiction over amending power purchase agreements ("PPA").[88] As of January 2019, the utility entity of PG&E was a counterparty under at least 387 PPA, with 350 counterparties, for a total of approximately 13,668 megawatts of contracted capacity, representing contractual commitments of US $42 billion. A number of

85 *Ibid* at 7.

86 Second Interim Order, *supra* note 79 at 4.

87 "Claims process notice" (August 2019), online: *PG&E* <https://www.pge.com/en_US/about-pge/company-information/reorganization.page?WT.pgeac=Alerts_Reorganization-Jan19> for claims that arose before 29 January 2019.

88 Gavin Bade, "Federal court denies FERC jurisdiction in PG&E bankruptcy case" (13 March 2019), online: *Utility Drive* <https://www.utilitydive.com/news/federal-court-denies-ferc-jurisdiction-in-pge-bankruptcy-case/550349/> [*Bade*]; Tom Marshall and Russell Kooistra, "US District Court Judge Denies Motions to Withdraw PG&E Adversary Proceeding from Bankruptcy Court" (21 March 2019), online: *Washington Energy Report* <https://www.troutmansandersenergyreport.com/2019/03/u-s-district-court-judge-denies-motions-to-withdraw-pge-adversary-proceeding-from-bankruptcy-court/>.

these contracts obligate the debtors to purchase energy at rates that are significantly higher than rates currently available to their competitors.[89]

Just before PG&E sought Chapter 11 protection, independent generators Exelon and NextEra asked the FERC to preserve the PPA they had signed with the utility. Immediately prior to PG&E filing for bankruptcy, the FERC issued two decisions that would conflict with the debtors' right to assume or reject executory contracts in bankruptcy proceedings.[90] The FERC orders concluded that FERC has "concurrent jurisdiction to review and address the disposition of wholesale power contracts sought to be rejected through bankruptcy."[91]

The same day as filing Chapter 11 proceedings, the debtors filed an adversary proceeding in the District Court against the FERC, seeking a declaratory judgment to enforce the automatic stay under Chapter 11, seeking preliminary and permanent injunctive relief.[92] The District Court held that district courts have "original but not exclusive jurisdiction" over all bankruptcy proceedings, and thatsuch proceedings fall into two categories: "core proceedings, in which the bankruptcy court may enter appropriate orders and judgment", and "non-core proceedings, which the bankruptcy court may hear but for which it may only submit proposed findings of fact and conclusions of law to the district court for *de novo* review."[93]

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89 Second Interim Order, *supra* note 79 at 8.

90 *PG&E Corporation, Pacific Gas and Electric Company v Federal Energy Regulatory Commission*, Nos 19-cv-00599-HSG and 19-cv-00781-HSG, Judgment of Judge Gilliam Jr (ND Cal filed 11 March 2019), online (pdf):<https://www.troutman.com/images/content/1/9/v2/199562/District-Court-Order.pdf> [PG&E District Court Judgment].

91 *Ibid*, citing NextEra Order at 14, 166 FERC ¦ 61,049 (2019).

92 11 USC § 362. PG&E District Court Judgment, *ibid*.

93 *Ibid* citing 28 USC § 1334(b) and *Farms v Int'l Bhd. of Teamsters, Chauffeurs, Warehousemen & Helpers*, 124 F 3d 999, 1008 (9th Cir 1997).

PG&E filed a motion on 31 July 2019, requesting the bankruptcy court to approve amending five renewable energy and energy storage PPA.[94] PG&E submitted that the adjustments, including contract price reductions of about 10 per cent per MWh, would create roughly US $20 million in savings across the life of the contracts.[95] Amendments included pushing back guaranteed commercial operations dates and adjusting other milestones, aimed at reducing risk and uncertainty. The FERC sought an injunction from the bankruptcy court approving amendments to the agreements.[96] The District Court held that the bankruptcy court need not look beyond the *Bankruptcy Code*, as § 365 does not allow FERC to second guess the bankruptcy court and impose its own decision on that court.[97] PG&E was entitled to seek bankruptcy court approval to renegotiate or cancel the PPA. The Court held that the most efficient use of judicial resources was to permit the bankruptcy court to rule in the adversary proceeding.[98] California regulators also challenged whether PG&E could cancel or renegotiate renewable energy contracts while in bankruptcy. The California Public Utilities Commission stated that PG&E needsits permission tobackout of any wind and solar deals, as they would arguably "interfere with the state's clean energy goals".[99]

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94 Robert Walton, "PG&E asks bankruptcy court to approve 'discounted' PPAs for 5 clean energy projects" (2 August 2019), online: *Utility Drive*<https://www.utilitydive.com/news/pge-asks-bankruptcy-court-to-approve-discounted-ppas-for-5-clean-energy/560066/>, reporting that PG&E also submitted as an advice letter to the California Public Utilities Commission.

95 *Ibid.*

96 Bade, *supra* note 88.

97 PG&E District Court judgment, *supra* note 92 at 5.

98 *Ibid* at 4-5.

99 Arocles Aguilar, Testimony, California Senate Committee hearing, (5 March 2019), as reported by Mark Chediak, "Three-Way Fight Erupts Over Bankrupt PG&E's Power Contracts" (5 March 2019), online: *Bloomberg Law* <https://news.bloomberglaw.com/bankruptcy-law/three-way-fight-erupts-over-bankrupt-pg-es-power-contracts-2>.

Responding to pressure from the Utilities Commission and state lawmakers' concern regarding the state's renewable energy goals, PG&E subsequently announced it would honour its roughly US $42 billion in PPA, most in legacy solar, wind and other renewable energy projects.[100] It has negotiated some voluntary modifications of contracts for a 10 per cent reduction.[101] PG&E's change of position was likely to limit further reputational damage, although the District Court ruling made clear that it could seek bankruptcy court approval for amendment of the contracts.

ii. Climate-related tort claims

The official committee of tort claimants was appointed to advocate for and defend the collective interests of all tort claimants in the PG&E bankruptcy case, including individuals who were injured or whose loved ones died, and individuals who suffered property or business damages.[102] The committee is comprised of eleven members appointed by the US Trustee to represent the interests of tort claimants. It is authorized to participate in the formulation of aplan, advise tortclaimants of its views of any plan formulated, and collect and file with the courtacceptancesorrejectionsofaplan. Thecommittee, andits members, serve as fiduciaries to all tort claimants. The committee wants PG&E's plan of reorganization to provide maximum compensation for tort claimants on fair terms, and is working to ensure that "the very human nature of these tragedies is kept at the forefront of the bankruptcy proceeding, including the continuing hardships faced by survivors, and to

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100 Jeff St John, "PG&E Pledges to Honor Renewable Contracts in Bankruptcy Plan" (9 September 2019), online: *GreenTechMedia* <https://www.greentechmedia.com/articles/read/pge-proposes- 18b-bankruptcy-reorganization-but-faces-setback-on-bond-legis-l#gs.64yo9f>.

101 *Ibid.*

102 Dennis Montali, US Bankruptcy Judge, PG&E Proceedings, *supra* note 71, PG&E Tort Claimants Committee (PGE TCC) (ND Cal filed 29 January 2019), online: <https://dm.epiq11.com/case/PGE2/info>.

ensure PG&E makes public safety its first priority, in the hope that these tragedies will not occur again".[103]

Separately, PG&E argues that California's 'inverse condemnation' laws, which make private utilities strictly liable for damage caused to private property by wildfires when their equipment is involved, without regard to negligence or fault, amount to an unconstitutional 'taking of property' that requires state compensation.[104] PG&E argues that this threshold issue must be resolved before PG&E gives anything to wildfire tort claimants.[105] However, while these proceedings are pending, PG&E received permission of the bankruptcy court in May 2019 to set up a fund of US $100 million to offer immediate wildfire assistance, plus US $5 million for the costs of administering the fund.[106] This development is similar to hardship funds that Canadian courts have approved in some cases.[107] If there is a climate-related disaster for a Canadian debtor company, insolvency professionals may have to deal with requests for interim compensation based on hardship if there are complex tort issues that may take an extended period to resolve.

iii. Climate-related investor lawsuits

Investors have initiated a wildfire-related securities class action lawsuit and another shareholder derivative lawsuit in federal court against the CEO, CFO and other officers of

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103 *Ibid.*

104 *Ibid.*

105 *Ibid.* See also J D Morris, "California's strict wildfire liability rule hangs over bankrupt PG&E" (10 February 2019), online: *San Francisco Chronicle* <https://www.sfchronicle.com/business/article/California-s-strict-wildfire-liability-rule-13604239.php>.

106 *Ibid.* Cathy Yanni has been appointed as the Administrator of the Wildfire Assistance Program, responsible for developing the specific eligibility requirements and application procedures for the distribution of the Wildfire Assistance Fund to eligible Wildfire Claimants; online: <www.norcalwildfireassistanceprogram.com>.

107 See eg, *Re Nortel Networks Corporation*, 2009 CanLII 80578 (Ont SCJ [Commercial List]).

PG&E, relating to their role in the Camp fire.[108] One lawsuit in respect of the 2017 wildfires alleges that the company and its directors and officers made false and/or misleading statements and/or failed to disclose that PG&E had failed to maintain electricity transmission and distribution networks in compliance with state safety regulations; knew that PG&E's electricity networks would cause numerous wildfires in California; and as a result, the defendants' statements about the company's "business and operations were materially false and misleading at all relevant times."[109]

The derivative action alleges that the company violated state safety requirements and regulations and failed to maintain its transmission and distribution networks; the company had made less progress on wildlife safety and vegetation management enhancements than directors had represented; its electricity transmission and distribution networks could foreseeably, andultimately did, cause anumberofwildfires; the company's dividend was not as secure as the directors and officers led the market to believe; the company failed to maintain internal controls; and due to the foregoing, defendants' statements regarding the company's business, operations, regulatory compliance and prospects were materially false, misleading, and lacked a reasonable basis in fact.[110]

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108 Kevin LaCroix, "Further Wildfire-Related Management Liability Litigation: Harbinger of Things to Come?" (26 November 2018), online: *The D&O Diary* <https://www.dandodiary.com/2018/11/articles/director-and-officer-liability/wildfire-related-management-liability-litigation-harbinger-things-come/>.

109 *David C Weston et al v PG&E Corporation et al*, Case No 3:18-CV-03509, Document 1 Class Action complaint for violation of federal securities law (ND Cal filed 12 June 2018), online (pdf): <http://securities.stanford.edu/filings-documents/1066/PEC00_02/2018612_f01c_18CV03509.pdf>, a federal securities class action on behalf of all investors who purchased or otherwise acquired PG&E common stock between 29 April 2015 and 8 June 2018.

110 *Ron Williams et al v PG&E Corporation and named directors and officers*, Case No 3:18-CV-07128, Document 1 Verified Shareholder Derivative and Double Directive Complaint (ND Cal filed 15

The complaint further alleges that directors and officers breached their fiduciary duties by failing to maintain internal controls and in failing to correct the company's misleading statements, rendering them personally liable. It alleges that the misleading statements inflated the company's share price, and while the share price was inflated, five individual defendants (officers of PG&E) traded in their personal shares of company stock.[111] The complaint seeks damages under § 14(a) of the *Securities and Exchange Act of 1934* for alleged proxy statement misrepresentations; damages from the individual defendants for alleged breaches of fiduciary duty; and damages from the individual defendants for alleged unjust enrichment.[112] These lawsuits are pending; they are an illustration of the liability risks discussed in Part II above.

iv. Employee and executive retention

In the US, as in Canada, the bankruptcy court considers proposals to retain key employees. Climate-related torts may affect how the court considers such requests. In PG&E, the bankruptcy judge approved a US $235 million employee incentive plan to ten thousand non-executive employees, aimed at promoting stability within the workforce and weighted heavily towards meeting safety goals.[113] However, the bankruptcy judge subsequently denied PG&E's proposal to pay US $16 million in bonuses to a select group of top executives. Bankruptcy Judge Montali ruled that, in light of the billions in wildfire claims and other problems the utility is facing, there was no justification for monetary incentives for

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November 2018), online (pdf): <https://www.dandodiary.com/wp-content/uploads/sites/265/2018/11/PGE-complaint-part-1.pdf> [Part 1] and <https://www.dandodiary.com/wp-content/uploads/sites/265/2018/11/PGE-complaint-part-2.pdf> [Part 2].

111 *Ibid.*

112 *Ibid.*

113 Dale Kasler, "Judge OKs $235 million in bonuses for PG&E employees, as company struggles with bankruptcy" (23 April 2019), online: *The Sacramento Bee* <https://www.sacbee.com/latest-news/article229603929.html>.

executives to improve PG&E's performance on safety and other issues.[114]

One question is whether key employee retention plans will be affected where Canadian courts conclude that the executives should have been proactive in addressing the climate-related risks and thus should not be offered retention incentives.

v. Competing Chapter 11 plans

Under US bankruptcy legislation, debtors have the exclusive right to devise a plan in the first 180 days of the proceedings.[115] In April 2019, a new CEO and board of directors were put in place at PG&E, thenew governancestructureaimed attryingto restore consumer trust and devise a viable plan.[116] However, there were pressures from two different groups of creditors for the court to set aside the exclusive period and consider their proposed plan of reorganization.

A group of PG&E noteholders sought the right to submit a reorganization plan. They proposed investing US $31 billion in new money, which would give them a majority stake in the company, offering US $16-18.4 billion to compensate the 2017 and 2018 fire victims and US $5 billion to a new insurance pool for future fires.[117] Then, in July 2019, a group of insurers with

114 Dale Kasler, "PG&E wanted to give top execs $16 million in bonuses. Here's what the judge said" (30 August 2019), online: *The Sacramento Bee* <https://www.sacbee.com/news/business/article234575112.html>.

115 Under § 1121 of the *Bankruptcy Code*, the debtor has the exclusive right for 120 days to file a plan, and if a plan is filed within that time period, it has an additional 60 days to confirm the plan. The court can, for cause, terminate or extend these dates, but not longer than 18 months and 20 months, respectively.

116 Rebecca Smith, "PG&E's Long Record of Run-Ins With Regulators: A 'Cat and Mouse Game'" (5 September 2019), online: *The Wall Street Journal* <https://www.wsj.com/articles/a-cat-and-mouse-game-pg-es-long-record-of-run-ins-with-regulators-and-courts-11567707731>.

117 George Schultze, "Equity Gets Smoked under Bondholder Plan, Even as PG&E Smolders" (22 July 2019), online: *Forbes* <https://www.forbes.com/sites/georgeschultze/2019/07/22/equity-gets-

US $20 billion in subrogated claims against PG&E from wildfire claims unveiled its own proposed plan, including a US $16 billion debt-for-equity swap.[118] The insurers argued that PG&E had made little progress in settling claims and their proposed plan would provide a viable path toward PG&E emerging from bankruptcy. The proposal would give them a sizeable share of the company's equity and allow them to establish what they termed a well-funded trust for wildfire victims.[119] The group of insurers asked the court to end PG&E's exclusive right to file a plan so that they could submit their plan to wildfire victims and other creditors. PG&E resisted the attempts to end its exclusive right to propose a plan. The bankruptcy judge ruled that it could continue in the exclusivity period.[120] The Courtheld, in denying the requests to terminate exclusivity, that the top priority in this case is "compensating victims of enormous and unimaginable tragedies".[121]

On 9 September 2019, PG&E filed a joint Chapter 11 plan of reorganization in the bankruptcy court for bothentities.[122] The proposed plan includes: compensation of wildfire victims and certain limited public entities from a trust funded for their benefit in an amount to be determined by the bankruptcy court,

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smoked-under-bondholder-plan-even-as- pge-smolders/ #6fb43a722b7b> [Schultze].

118 Insurance Journal, "Insurers Owed $20 Billion Offer Own Rescue Plan for PG&E in Bankruptcy Court" (25 July 2019), online: *Insurance Journal*<https://www.insurancejournal.com/news/west/ 2019/07/25/533895.htm> [Insurance Journal].

119 Ibid.

120 Nivedita Balu, "Court leaves PG&E with sole right to submit bankruptcy plan" (16 August 2019), online: *Reuters* <https:// www.reuters.com/article/us-pg-e-us-bankruptcy/court-leaves-pge-with-sole-right-to-submit-bankruptcy-plan-idUSKCN1V622H>.

121 *In re PG&E Corporation and Pacific Gas and Electric Company*, Case No 19-30088 (DM), Memorandum decision (Bankr ND Cal filed 16 August 2019) [*In re PG&E*].

122 "Reorganization Information" (10 September 2019), online: *PG&E* <https://www.pge.com/en_US/about-pge/company-information/ reorganization.page?WT.pgeac=Reorganization_Footer>.

not to exceed US $8.4 billion; compensation of insurance subrogation claimants from a trust funded for their benefit in an amount to be determined by the bankruptcy court, not to exceed US $8.5 billion; payment of US $1 billion in full settlement of the claims of certain public entities relating to the wildfires; payment in full, with interest, of all prepetition funded debt obligations, all prepetition trade claims and employee-related claims; assumption of all PPA and community choice aggregation servicing agreements; assumption of all pension obligations, other employee obligations, and collective bargaining agreements with labour; and future participation and satisfaction of a new statewildfire fund.[123] Theproposedplanwouldallow PG&Eto exit bankruptcy by mid-2020.

As the exclusivity period was due to expire, the noteholder group filed its proposal to invest US $29.2 billion to become controlling equity investors, with its plan creating two trusts, a US $14.5 billion trust for compensating individual wildfire victims and a US $11 billion trust for paying insurers with subrogation claims against PG&E for payments they made after the fires in 2017 and 2018.[124] The official committee representing the wildfire victims is supporting the noteholder group'sproposedplan. PG&E, joinedbymajorshareholders, is opposing efforts by the noteholders to be allowed to file their reorganization plan.[125] The debtors were granted an extension of the exclusivity period, but significantly, there will be a hearing in early October 2019 of a motion brought by an unusual alliance of noteholders and tort claimants. The motion

123 *In re PG&E*, *supra* note 121, Document 3841 Debtors' Joint Chapter 11 Plan of Reorganization (Bankr ND Cal filed 9 September 2019), online: *PG&E* <https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20190909_pge_files_-joint_chapter_11_plan_of_reorganization>.

124 K Singh, "PG&E noteholders ready to invest $29.2 billion as part of reorganization plan" (26 September 2019), online: *The Guardian* <https://www.theguardian.pe.ca/news/world/pge-noteholders- ready-to-invest-292-billion-as-part-of-reorganization-plan-356761/>.

125 *Ibid.*

has been jointly filed by the official committee of tort claimants and the *ad hoc* committee of senior unsecured noteholders asking the bankruptcy court to terminate the debtors' exclusive period.[126] The noteholders want permission to file a plan that will provide US $24 billion to the tort victims. What is new is that the US $24 billion, paid with a mix of cash and equity of the reorganized PG&E, will be paid to victims under the wildfire claims settlement, with fully committed financing provided by the members of the *ad hoc* noteholders committee.[127] This alternative proposed plan places governance of the mechanism by which wildfire victims will be paid in the hands of the representatives of those victims, aimed at a quick and fair process for victims to receive their recoveries, the applicants arguing that it is a fair and equitable plan.[128] The unsecured creditors' committee has apparently agreed to the termination.[129] The court's ruling will be significant in shaping the direction of the proceeding going forward.

One setback to PG&E's proposed strategy was that a bill, Assembly Bill 235, tabled in the California Assembly, which would have allowed California to sell US $20 billion in bonds to help PG&E cover its liability, was shelved until 2020.[130] It had come under criticism that it was a bailout, the plan's opponents spending large amounts in advertising[131] to counter PG&E's lobbying in support of the bill. PG&E claimed that the bill would have provided a faster way to pay back fire victims through bonds that would eventually be paid back by company

126 *In re PG&E*, *supra* note 121, Document 3940 Joint motion of the official committee of tort claimants and *ad hoc* committee of senior unsecured noteholders to terminate the debtors' exclusive periods pursuant to § 1121(d)(1) of the *Bankruptcy Code* (Bankr ND Cal filed 19 September 2019), online (pdf): <http://www.courthouse-news.com/wp-content/uploads/2019/09/PGECh11-TortBond-Plan9192019.pdf>.

127 *Ibid* at 6.

128 *Ibid* at 7.

129 *Ibid.*

130 *Ibid.*

131 See for example, "Stop the PG&E Bailout" (September 2019), online: *Stop the PG&E Bailout* <https://stopthepgebailout.com/>.

shareholders.[132] However, given the political fallout, the sponsoring member of Congress announced the bill would notbeheardthisyear, giventhelackoftimeforproperdebatein the remaining legislative session.[133]

vi. Pressure to resolve the issues

The stakes surrounding PG&E's bankruptcy exit plan have risen with California State's enactment of a new law in July 2019, Assembly Bill 1045 *Public utilities: wildfires and employee protection*.[134] It requires major utilities to spend at least US $5 billion on safety improvements and creates a fund to help pay out future wildfire victims.[135] The fund is intended to financially stabilize the state's three largest investor-owned utilities: PG&E, Southern California Edison and San Diego Gas & Electric, given concern that another utility might follow suit into bankruptcy. The new law creates a US $21 billion insurance fund for future fires, with US $10.5 billion paid by electricity consumers, and an equal amount funded by the utilities.[136] The new law does not address damage from previous fires. However, if PG&E doesn't emerge from Chapter 11 by June 2020, it will be ineligible to participate in California's new fire insurance scheme, which creates some pressure to finalize aplan.[137]

In addition to the bankruptcy approval process, PG&E's proposed reorganization plan must receive the approval of the California Public Utilities Commission, which opened

132 Singh, *supra* note 124.
133 *Ibid*.
134 California Assembly Bill 1054, *Public utilities: wildfires and employee protection*, 2019-2020 Reg Sess (Cal 2019), online: *Government of California* <https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB1054>.
135 "Governor Gavin Newsom Signs Wildfire Safety and Accountability Legislation" (12 July 2019), online: *Office of Governor Newsom* <https://www.gov.ca.gov/2019/07/12/governor-gavin-newsom-signs-wildfire-safety-and-accountability-legislation/>.
136 Schultze, *supra*, note 117.
137 Ibid.

proceedings to consider the plan in late September 2019.[138] In order for PG&E to be able to access the insurance fund, the Commission needs to find that PG&E's plan is neutral to customer rates, on average, and is consistent with California's climate goals, among other requirements.[139]

In addition to these myriad issues, it is evident that a climate-related bankruptcy proceeding can be costly. PG&E spent US $25 million on legal fees in its first two months in bankruptcy.[140]

While the issues in the PG&E bankruptcy proceedings will not manifest in the same way in future Canadian insolvencies, the same types of claims are likely to arise, such as claims from alleged directors' breach of fiduciary obligation, claims from debt and/or equity investors of misrepresentation, and tort claims from weather- or climate-related catastrophes. Insolvency practitioners will need to be attuned to these risks when advising companies on potential options for resolving their financial distress.

III. INITIAL PRACTICE CONSIDERATIONS REGARDING CLIMATE-RELATED INSOLVENCIES

The PG&E bankruptcy illustrates that climate-related impacts can suddenly manifest themselves in various sectors. Companies should be considering what the different types of risks may be, whether they are material in the short, medium or long term, and what strategies are available for addressing those risks. While there have not yet been Canadian insolvencies directly attributable to climate change, changing consumer preferences and fluctuating commodity prices are

138 J D Morris, "California regulators begin considering PG&E bankruptcy case" (26 September 2019), online: *San Francisco Chronicle* <https://www.sfchronicle.com/business/article/California-regulators-begin-considering-PG-E-14470550.php>.

139 *Ibid.*

140 Mark Chediak, "PG&E Spent $127 Million on Bankruptcy Costs, Fees in Two Months" (2 May 2019), online: *Bloomberg News* <https://www.bloomberg.com/news/articles/2019-05-02/pg-e-spent-127-million-on-bankruptcy-costs-fees-in-two-months>.

resulting in bankruptcies of coal companies and oil and gas companies.[141] In Alberta, thenumberoforphanwells increased from 80 in 2013 to over 2,000 new orphan wells in 2018, the Alberta Orphan Well Association observing that with decreased commodity prices, more companies are on a track to insolvency.[142] While not caused by climate change, resolution of these insolvencies will need to take account of technical, policy and other transition developments. Climate change may result in a further increase in insolvencies of oil and gas sector companies. The likelihood of insolvency in other sectors will depend on the responsiveness of companies to the risks identified above.

For insolvency practitioners, there are at least five non-industry specific issues that should be considered in the period leading up to and during insolvency, three of which relate to governance of the company. Ensuring effective oversight and management of these issues should help a company in financial distress identify both sector- and company-specific climate-related risks and, hopefully, going-forward opportunities.

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141 See eg, Quinsam Coal Corporation, British Columbia, which filed for bankruptcy in July 2019 due to a prolonged decline in thermal coal prices, changes in market demand and a decline in productivity; "Quinsam Coal Corporation Bankruptcy" (3 July 2019), online: *Insolvency Insider* <https://insolvencyinsider.ca/filing/quinsam-coal-corporation/>. PWC was appointed as the trustee in July 2019, and on 20 September 2019, The Bowra Group Inc was appointed as receiver and manager of all of the assets, undertakings and property of company pursuant to s 243 of the *BIA* and s 39 of the *Law and Equity Act*, RSBC 1996, c 253; Order of the British Columbia Supreme Court in *Re Quinsam Coal Corporation* (26 September 2019).

142 "Annual Report 2018" (2019) at 2, 4, online: *Orphan Well Association* <http://www.orphanwell.ca/wp-content/uploads/2019/07/OWA-2018-19-Ann-Rpt-Final.pdf>. While the industry-funded levy has been increased over the past two years, from CAD $32.4 million in 2016 to CAD $149.5 million in 2008, there will still be a challenge as wells need to be safely abandoned and reclaimed, *ibid* at 4.

1. Ensuring Directors and Officers Understand their Fiduciary Obligations in Respect of Climate Change

As noted earlier, litigation risk includes investors (debt and equity) alleging that the debtor company and its directors and officers failed in their duties to identify, manage and monitor climate-related solvency risk. While regulators have acknowledged that the precise impacts of climate-change-related risks may be difficult toquantify ormeasure, companies nevertheless should be considering what the risks are and what can be done to mitigate or adapt.[143] Ideally, this assessment should occur long before insolvency, but it will nonetheless immediately become an issue when a company becomes financially distressed.

As with PG&E, there is litigation risk associated with directors and officers failing to make timely inquiries in respect of whether there are climate-related physical ortransition risks, to ensure that there is a strategy in place to address any risks, and to ensure effective oversight of management and monitoring of the risks. As in the US, actions brought by investors could be in the form of allegations of breach of fiduciary obligation, including personal or derivative actions under corporate law, securities law actions alleging inadequate disclosure or misrepresentation, or tort class actions.

In addition, Canadian corporate law allows securities holders to bring an oppression action alleging that directors violated their reasonable expectations by conduct that was oppressive, or unfairly prejudicial to, or that unfairly disregarded their interests.[144] Given the breadth of policy, regulatory and market attention to climate-related financial risk, arguably, the reasonable expectations of securities holders are now that directors and officers are addressing material climate-related risks. It is important to be aware of how allegationsofmismanagementwillbeapproachedby Canadian

143 CSA Staff Notice 51-358, *supra* note 19 at 9.

144 *Wilson v Alharayeri*, 2017 SCC 39 (SCC) at para 24. For a detailed discussion see Sarra, *Fiduciary Obligations*, *supra* note 36 at 17-19.

courts in insolvency proceedings. The court supervising insolvency proceedings is likely to determine these actions in the context of a plan of arrangement or compromise, but where there has been massive damage to life, health or property, insolvencyprofessionals mayhavetoproposedifferentkindsof mediation or negotiation processes to address claims, particularly where claimants are seeking to hold corporate directors and officers personally liable for failure to address some aspect of climate change that precipitated the insolvency.

While there is not yet a Canadian judgment rendered on fiduciary obligation and climate change in Canada, it is well-established that directors and officers have a fiduciary duty to act in the best interests of the company.[145] The Supreme Court of Canada ("SCC") has held that directors and officers are to act in the best interests of the company in the period leading up to and during insolvency; and while directors' obligations do not shift to an obligation to consider the best interests of creditors, the directors and officers must act honestly and in good faith in the best interests of the corporation, and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances in supervising and managing the corporation's affairs.[146]

The SCC has held that directors must strive for a better corporation, observing that *best interest* of the corporation means maximization of its value.[147] The Court has further held that in determining whether directors are acting with a view to the best interests of the corporation, it may be legitimate, given the circumstances, for the board of directors to consider the interests of shareholders, employees, suppliers, creditors,

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145 *Peoples Department Stores Inc (Trustee of) v Wise*, [2004] SCJ No 64, [2004] 3 SCR 461 (SCC) [*Peoples Department Stores v Wise*]. See also the discussion in Janis Sarra and Ronald Davis, *Director and Officer Liability in Insolvency* 3rd ed, (Toronto: LexisNexis, 2015), at chapter 3.

146 *Peoples Department Stores v Wise*, *ibid* at paras 32-34.

147 *Ibid* at para 35.

consumers, governments, and the environment.[148] The SCC also held that when the company is financially troubled, the directors must be careful to attempt to act in its best interests by creating a 'better corporation', and not to favour the interests of any one group of stakeholders.[149] It held that courts must recognize that, on occasion, the broader public interest will be engaged by aspects of the reorganization and may be a factor against which the decision of whether to allow a particular action will be weighed.[150]

Provided that decisions are taken within a range of reasonableness, the courts will not substitute their opinion for that of the directors, even though subsequent events may have cast doubt on the directors' decision.[151] That deference is important for addressing climate change, in that directors and officers that assess the company's climate-related risks and make decisions based on the information reasonably available to them in a field that is rapidly developing, will not be second guessed, even if hindsight shows that they erred in the decisions made and actions taken.

Recent amendments to the *Canada Business Corporations Act*, which will come into effect November 2019, now specify that when acting with a view to the best interests of the corporation, the directors and officers of the corporation may consider, but are not limited to, considering the interests of different stakeholders, the environment, and the long-term interests of the corporation.[152] The provisions are a codification of the common law, and should assist with deference by the courts where they are satisfied that

148 *Ibid* at para 42.
149 *Ibid* at para 47.
150 *Ibid* at para 60.
151 *Ibid* at paras 64-65. See also *BCE Inc v 1976 Debentureholders*, [2008] SCJ No 37, [2008] 3 SCR 560 (SCC) at para 58.
152 Amendments to the *Canadian Business Corporations Act*, Royal Assent on 21 June 2019, now titled the *Budget Implementation Act, 2019, No. 1*, c. 29 of the Statutes of Canada, 2019, in force 1 November 2019), online: <https://www.parl.ca/DocumentViewer/en/42-1/bill/C-97/royal-assent>.

companies have actively tried to assess climate risks and responded reasonably.

There are some key questions that corporate boards should ask themselves if they are to be 'climate competent'. Does the company have a climate plan? Does the board have effective oversight of its climate strategy, including identifying climate-related risks that are emerging or increasing in significance for the company? Is oversight and management of climate-related risks and opportunities integrated into the company's strategic plan, over the short, medium and long term, and embedded in performance objectives, policies, annualbudgets, business plan andenterpriseriskmanagementsystem? Whointhecompanyis responsible for climate-related risk and accountable for implementing the company's strategy? Is the board approving the disclosure of the company's efforts to manage climate change to investors, creditors and other stakeholders, including integrating disclosure in its financial reporting? In planning for insolvency proceedings, what are the litigation risks, reputational risks and financial risks related to climate change for which there may need to be novel workout strategies?[153] Directors should be able to demonstrate that they have met their fiduciary obligation to consider and manage all material risks that may affect the solvency of their company.

When a company commences insolvency proceedings and one of the causes cited by the debtor or creditors is that the financial distress is due to one or more climate-related risks, these same governance questions will be an important guidepost for courts in approving the viability of restructuring plans and governance structure going forward,

153 Questions taken from Janis Sarra, *Effective Climate Corporate Governance* (Vancouver, CCLI, 2019), on file with author, and "How to Set Up Effective Climate Governance on Corporate Boards: Guiding principles and questions" (2019), online: *World Economic Forum* <https://www.weforum.org/whitepapers/how-to-set-up-effective-climate-governance-on-corporate-boards-guiding-principles-and-questions>.

as well as their consideration of any liability. Creditors may commence insolvency proceedings where the directors and officers haveneglected toidentify andaddressmaterialclimate-related risks such that the firm has become financially distressed, in order to seek protection from further diminution of the value of the debtor's assets and to realize on their claims.

2. Corporate Disclosure Obligations

Financially distressed companies that are publicly traded also need to be aware of growing concern by securities regulators regarding disclosure of climate-related financial risks. While National Instrument 51-102 *Continuous Disclosure Obligations* has not changed,[154] there have been recent clarifications by Canadian securities regulators in respect of climate change disclosure requirements.

Insolvency practitioners should take note of the August 2019 CSA Staff Notice 51-358 Reporting of Climate Change-related Risks, which clarifies disclosure requirements of publicly-traded companies ("issuers") of material risks posed by climate change.[155] The guidance is primarily focused on issuers' disclosure obligations as they relate to the management discussion and analysis ("MD&A") and the annual information form ("AIF"), the CSA noting that for purposes of those forms, information is likely material if a reasonable investor's decision whether to buy, sell or hold securities in an issuer would likely be influenced or changed if the information in question was omitted ormisstated.[156] The CSA observes that securities legislation imposes a different test for materiality in certain other contexts, and issuers should consider the

154 National Instrument 51-102 *Continuous Disclosure Obligations* (12 June 2018), online: *BC Securities Commission* <https://www.bcsc.bc.ca/51-102_[NI]_06122018/>.

155 CSA Staff Notice 51-358, *supra* note 19.

156 *Ibid* at 1.

applicable test when preparing disclosure in respect of climate change-related information.

The CSA is encouraging the board of directors and management to assess their expertise with respect to sector-specific climate change-related risks; to avoid vague or boilerplate disclosure; and to disclose relevant, clear and understandable entity-specific disclosure that will help investors understand how the business is specifically affected by all material risks resulting from climate change.[157] It offers a list of questions that should be addressed by directors and managers in their disclosures, including: Has the board considered the effectiveness of the disclosure controls and procedures in place in relation to climate-change-related risks? Does management have, or have access to, the appropriate expertise to understand and manage material climate-related risksthatmayaffecttheissuer? Hasmanagementappropriately considered how each of the different categories of climate-change-related physical and transition risks may affect the issuer? Is management aware of current climate-related litigation that may pose a litigation threat to the issuer now or in the future?[158]

The CSA notes that many issuers, including companies in non-carbon intensive industries, are, or will be, exposed to climate-related risks.[159] A company should not limit its materiality assessment to near-term risks.[160] As part of a materiality assessment, companies should consider the existence of material climate-change-related risks, and, where practicable, quantify and disclose the potential financial and other impacts of such risks, including their magnitude and timing.[161] Companies should consider both quantitative and qualitative factors in making their materiality assessments, using assumptions and estimates that have a reasonable basis

157 *Ibid* at 4.
158 *Ibid* at 5-6.
159 *Ibid* at 8.
160 *Ibid.*
161 *Ibid* at 9.

and are within a reasonable range.[162] In the AIF, they should disclose risk factors relating to the company and its business that would be most likely to influence decisions to purchase the issuer's securities, and include an analysis of the company's operations for the most recently completed financial year, including commitments, events, risks, or uncertainties that directors reasonably believe will materially affect the company's future performance in their MD&A.[163]

In terms of disclosure by publicly-traded companies during insolvency proceedings, the CSA's list of questions is a guide to the types of disclosures creditors, other stakeholders and the courts may expect. Moreover, debtor companies will run afoul of securities regulators if they have failed to make these disclosures. There are a number of questions the CSA has suggested. A few examples are: What is the exposure of the issuer's properties to risks, such as flooding or fires? What is the company's exposure to supply chain disruption from climate-related risks? How does the issuer incorporate emissions regulations and climate change considerations into its asset valuations? What are the company's largest risks associated with environmental compliance, disposal and recycling costs, and increased capital expenditure requirements?[164]

3. Early Identification of Financial Distress and Access to Interim and Exit Financing

An important issue for all companies – not just the legacy carbon-intensive companies – is early identification of financial distress. Much of the guidance being given by regulators, the TCFD and other organizations can assist in that early identification. That guidance will also assist financiers to

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162 *Ibid.*

163 *Ibid.*

164 *Ibid* at 15. Capital expenditures ("capex") are funds used by a company to acquire, upgrade, and maintain physical assets such as property, buildings, technology, or equipment.

assess whether or not, and on what terms, interim financing should be offered.

As the PG&E proceedings illustrate, if creditors or other investors believe there is going-concern value in the financially distressed entity, there is likely to be financing. However, for some legacy industries, the volume of claims from climate-related catastrophic events is likely to be difficult to price, and ultimately very expensive for the debtor company. In turn, it will affectthepriceandavailabilityofinterimandexitfinancing in insolvency proceedings.

These issues and uncertainties are not unique to carbon-intensive companies. Canada has now had several insolvencies of companies working with new lower-carbon technologies, such as processing organic waste and electricity-producing anaerobic digestion;[165] bio-innovation production;[166] marine-based renewable energy;[167] and geothermal heating.[168] As with any emerging sector, new technologies and processes produce new types of issues, including environmental concerns,

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165 *Re 0891775 BC Ltd (formerly Harvest Fraser Richmond Organics Ltd)* (17 April 2019) Doc Vancouver S-1811017 Sanction Order (BCSC) [*Harvest Fraser CCAA Proceeding*, Sanction Order]. See also Twelfth Monitor Report (12 April 2019), both online: <https://documentcentre.eycan.com/Pages/ Main.aspx?-SID=1436> [*Harvest Fraser CCAA proceeding*].

166 *Re BioAmber Inc, Bioamber Canada Inc & Bioamber Sarnia Inc* (2 July 2019) Doc Montre´ al 500-11-054564-188 Judgment in respect to further distributions and the termination of the *CCAA* proceedings (QCSC [Commercial Division]) online: <https://www.pwc.com/ca/en/services/insolvency-assignments/bioamber.html>.

167 *Re OpenHydro Technology Canada Ltd* (7 November 2018) Hfx No 480604 Initial Order (NSSC), in which the *BIA* proposal proceeding converted to *CCAA* proceeding. See also Second Report of the Monitor (6 June 2019) seeking termination of the *CCAA* proceedings, both online: <https://www.grantthornton.ca/en/service/advisory/creditor-updates/#Open-Hydro-Technology-Canada-Ltd>.

168 *Re Urbancorp Renewable Power Inc* (28 June 2018) File No CV-16-11389-00CL Endorsement Court Order (Receivership) (Ont SCJ [Commercial List]), online: <https://www.ksvadvisory.com/insolvency-cases/case/urbancorp-renewable-power-inc-2> in which the *CCAA* proceeding converted to receivership.

unknown or untested market potential, lack of financing to purchase or repair assets that are untested, and/or regulatory sanctions or the potential for tortious liability for new types of noxious emissions from organic processes. Trustees and monitors may have challenges in assessing financial outlook based on new technological processes and new or under-developed markets. Financing will be a challenge in terms of assessing viability of the particular business, particularly where the financial infrastructure has not yet developed. For pension funds and other prudential investors that have significant capital, exit financing for a plan may not be possible unless the debtor has addressed the future risks of climate-related harms, given their intergenerational fiduciary obligation to current and future plan members. Moreover, if they are prefiling creditors, they may oppose a plan that does not address these future risks to the debtor's assets.

One tool that might be used to assist the court, where the appointed monitor or other insolvency professional has not demonstrated attention to these issues, is the use of *amicus curiae* to assist the court in its consideration of restructuring plans or other new issues arising from climate-related insolvencies.

This tool has been used in Canadian insolvency proceedings. For example, in the recent *Companies' Creditors Arrangement Act* (*CCAA*)[169] proceedings of Harvest Fraser Richmond Organics Ltd, a company that converted food and yard waste into biofuel, compost and fertilizer, the supervising judge expressed concern with respect to consideration being proposed for a plan; whether the debtor was acting in good faith; the veracity of the claims; the value of the claims in relation to the broad releases being sought; whether the monitor, in evaluating the claims, could be truly objective and independent; and whether the monitor could give the court independent advice.[170] The British Columbia Supreme Court

169 *Companies' Creditors Arrangement Act*, RSC 1985, c C-36, as amended [*CCAA*].

170 *Harvest Fraser CCAA proceeding*, *supra* note 165 (26 March 2019).

had concerns about the integrity of the process, specifically, whether some disclosures had been misleading, and concern regarding the involvement of the monitor advising the management team beyond simply the *CCAA* filing. The Court wanted assurance that the debtor was acting in good faith and that the monitor had made an objective assessment of the claims. As a condition of a meeting order, the Court asked the debtor to bring a motion to appoint an insolvency lawyer as *amicus curiae* for the purpose of providing assistance to the court in assessing these issues, as well as the fairness and reasonableness of the proposed plan.[171]

Justice Walker held that the court has the authority to make such orders under s 11 of the *CCAA* and its authority to control its own process.[172] The *amicus curiae* was authorized to review the evidence provided by the parties and the court-appointed monitor, was authorized to request additional information as he considered necessary, and was to report to the court before the plan sanction hearing.[173] Subsequent to receiving this report, the Court approved the *CCAA* plan.[174]

4. Tort Claims, Representative Counsel and *Ad Hoc* Committees

When a debtor company's insolvency is related to climate change and it faces market, governance or operational failure

171 *Ibid*, (16 April 2019) Reardon Application Response of *Amicus Curiae* (re NOA re Sanction Order). Harvest Fraser Richmond Organics owned and operated a manufacturing facility in Richmond, British Columbia for processing organic waste, as well as an electricity-producing anaerobic digestion facility ('energy garden').

172 *Ibid*, (26 March 2019) Order appointing *Amicus Curiae* [*Harvest Fraser CCAA proceeding*, Order appointing *Amicus Curiae*]. Courts have also appointed *amicus curiae* in other insolvency proceedings, such as *Sun Indalex Finance*, [2013] 1 SCR 271 (SCC) and *Confederation Financial Services (Canada) v Confederation Treasury*, 2003 CanLII 46351 (Ont SCJ).

173 *Harvest Fraser CCAA proceeding*, Order appointing *Amicus Curiae*, *ibid.*

174 *Harvest Fraser CCAA proceeding*, Sanction Order, *supra* note 165.

from transition risks, insolvency proceedings will, in most cases, be treated in much the same way as they are currently. In the future, there may be a successful climate-related lawsuit where there has not been any catastrophic climate-related event. Examples include a successful securities law misrepresentation lawsuit, an oppression remedy action for unfairly disregarding securities holders' interests when directors fail to act to identify or address climate-related risk, or a tort action attributing a portion of damages from GHG emissions to the company or its officers. If the damages awarded precipitate the company becoming insolvent, the process in Canadian bankruptcy proceedings is likely to look much the same as it currently occurs. The damages will have already been quantified, thelaw specifies theorderinpriority of payment to all creditors, including judgment creditors, the company will be liquidated through an asset sale or sold as a going concern, and the realized value will be distributed to creditors.

Even where the debtor company seeks to restructure where the lawsuit has rendered the debtor insolvent, there will be certainty in the number and type of claims, and while there may be a greater unwillingness for claimants to compromise on damages awarded, the usual mechanisms of voting by class in the requisite numbers and value of claims are unlikely to depart from the norm.

However, it is also likely that there will be climate-related mass tort actions for acute events associated with climate change, particularly wildfires and massive flooding,[175] which

175 For example, although unrelated to climate change and not an insolvency proceeding, in May 2019, an Alberta judge has certified a $20-million class-action lawsuit against Atco Gas and Pipelines Ltd over an explosion in Fort McMurray after the devastating 2016 wildfire. "Judge certifies $20M class-action lawsuit in Fort McMurray gas explosion" (23 May 2019), online: *CBC News* <https://www.cbc.ca/news/canada/edmonton/atco-gas-explosion-fort-mcmurray-court-1.5147642>. The explosion in the subdivision happened shortly after Atco reinstated the gas supply to the community after the May 2016 wildfire.

precipitate a debtor company's insolvency, similar to PG&E. There may be complex claims against multiple parties. One advantage of Canadian insolvency proceedings is that companies facing significant claims from the consequences of acute weather and climate events have an organized means of collectively addressing the claims under Canadian insolvency legislation. In this respect, potential climate-related claims are reminiscent of the Canadian Red Cross Society tort claims relating to tainted blood[176] or the Chapter 11 asbestos cases in the US. If a plan can be negotiated and approved in a timely manner and with full notice, it can expedite payments to creditors, including tort claimants.

i. Representative counsel and ad hoc committees

Canadian courts have often appointed representative counsel where claimants in a *CCAA* proceeding do not have the resources to be effectively represented or where they face collective action problems. Both the *Bankruptcy and Insolvency Act* (*BIA*) and the *CCAA* have now codified the authority of the court to have the fees of these professionals paid in priority to secured claims where notice has been given to secured creditors likely to be affected and the court is satisfied that the security or charge is necessary for the effective participation of the interested persons in proceedings under the statutes.[177] The court has held that factors to consider in ordering such a charge include the size and complexity of the business, the proposed role of persons benefitting from the charge, the avoidance of duplication of roles, whether the amount of the proposed charge is fair and reasonable, the views of the monitor, and the views of secured creditors likely to be affected by the charge.[178]

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176 For a discussion, see Janis Sarra, *Rescue! The Companies' Creditors Arrangement Act* (2nd ed) (Toronto, Carswell: 2013) [Sarra, *Rescue*].

177 *CCAA*, *supra* note 169, ss 11.52 (1)(c) and (2); *Bankruptcy and Insolvency Act*, RSC 1985, c B-3, as amended (*BIA*), ss 64.2(1)(c) and (2).

178 *Re Canwest Publishing Inc* (2010), 63 CBR (5th) 115 (Ont SCJ [Commercial List]) at para 54.

Representative counsel have been helpful in providing information to a large number of claimants and in representing their interests in the insolvency proceeding.

In the rare case, the courts have ordered the professional fees of *adhoc* committees covered as apriority charge. While there is no formal statutory mechanism for such committees, they have occasionally been effective in offering one voice in the negotiations for a restructuring plan or other workout.[179] The role of the committee can vary, but can include reviewing financial information, assessing governance of the debtor, and monitoring the activities of the debtor company.[180] The use of committees may permit parties to co-ordinate motions and court appearances on a stream-lined basis.[181] In some cases, it can reduce the costs of legal and professional fees by collectivizing the voice of creditors.[182] Where the committee represents substantial claims and thus voting power, it may be easier to negotiate a plan that is likely to be confirmed on a creditor vote.[183]

Unlike an official creditors committee or tort claimants committee under US bankruptcy law, the participants in these *ad hoc* committees in Canada are not fiduciaries of the class of claimants. They are advocates for the committee members. That said, where representative counsel has been appointed to represent tort, pension or similar claimants, the counsel is an officer of the court and a fiduciary of the interested parties that she, he or it represents. Moreover, the monitor or the proposal trustee is a court-appointed officer and is to provide the court with accurate and impartial information and advice during the proceedings.

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179 For a discussion see Sarra, *Rescue*, *supra* note 176.

180 Sarra, *Creditor Rights*, *supra* note 52 at 82.

181 R Chadwick and D Bulas, "*Ad Hoc* Creditors' Committee in *CCAA* Proceedings: The Result of a Changing and Expanding Restructuring World", in Janis Sarra, ed, *Annual Review of Insolvency Law 2011* (Toronto: Carswell, 2012) at 119-134 [Chadwick and Bulas].

182 *Ibid* at 130.

183 Ibid.

The use of representative counsel is likely to continue in climate-related insolvencies, particularly in relation to proceedings arising out of catastrophic events. The benefits of representative counsel may include effective representation of the interests of individuals harmed by the debtor company in their negotiations with the company, assistance in dissemination of information, and coordination of claims processing. Insome cases, *adhoc* committees may also assist the process in sorting out complex claims arising from catastrophic climate-related events.

ii. Complex claims and third-parties releases

Where a climate-related insolvency involves complex claims and/or mass tort claims against the debtor company and a number of third parties, the *CCAA* may offer a helpful tool for resolving the insolvency and providing a somewhat efficient process for resolving claims.

In an insolvency case unrelated to climate change, the Canadian Red Cross Society *CCAA* proceeding, the debtor faced CAD $8 billion in tort claims as a result of contamination of blood and blood products.[184] Justice Blair of the Ontario Court considered the public interest in approving the sale of substantial assets of thedebtor company before aplanhadbeen put forward, finding thatthe sale was critically important to the continued viability and transfer of the blood supply operations in the interests of public health and safety.[185] Subsequently, in approving the plan of arrangement over the objection of some claimants, Justice Blair held that all insolvencies touch the lives of many and they may affect the fabric of a community itself, but "none, however, has been characterized by the deep human and, indeed, institutional tragedy which has given rise to the

184 *Re Canadian Red Cross Society / Société canadienne de la Croix-Rouge*, [1998] OJ No 3306 (Ont Gen Div [Commercial List]), where the issue was whether the court had jurisdiction to make an order approving the sale of substantial assets of the debtor company before a plan had been put forward.

185 *Ibid* at para 7.

restructuring of the Canadian Red Cross".[186] He held that thousands of innocent Canadians found themselves suffering devastating disease arising from the transfusion of contaminated blood products, for which the Red Cross was responsible; "many have died. Others are dying. The rest live in the shadow of death".[187] In approving the plan, the Court weighed the equities in the case, including weighing multiple public interests. Courts similarly will have to weigh different notions of the public interest when considering plans to resolve tort claims from climate-related insolvencies.

The more recent *CCAA* proceeding of Montre´ al, Maine & Atlantic Canada ("MMAC") was also unrelated to climate change. The insolvency arose from a catastrophic event – a train owned by Montre´ al, Maine & Atlantic Railway ("MMAR") carrying crude oil on a railway line owned by MMAC derailed and exploded in Lac-Me´ gantic, Que´ bec. Forty-seven people died and damage to property was massive, with over 30 buildings burning down.[188] Legal proceedings included a class action tort in Que´ bec, wrongful death, personal injury and property damage lawsuits in three US states, government orders to clean up and recover contaminants and recover CAD $400 million in cleanup costs incurred by the province, proceedings by subrogated insurers, and 5,000 claims in the *CCAA* and US Chapter 11 proceedings.[189] The insolvency proceedings were used to liquidate the assets, with a plan to pay professional fees, employees and secured creditors. The issue

186 *Re Canadian Red Cross Society / Société canadienne de la Croix Rouge*, 2000 CanLII 22488, 19 CBR (4th) 158 (Ont SCJ) at para 2.

187 *Ibid* at para 4.

188 For a discussion of the Montre´ al, Maine & Atlantic Canada *CCAA* proceeding, see Alain Riendeau and Brandon Farber, "Using the *CCAA* to Achieve a Global Resolution of Complex Litigation, To Infinity and Beyond!", in Janis P Sarra and the Honourable Justice Barbara Romaine, eds, *Annual Review of Insolvency Law 2016* (Toronto: Carswell, 2017) at 779-796 [Riendeau and Farber].

189 *Re Montréal, Maine & Atlantic Canada Co* (24 November 2015), SCJ No 450-11-000167-134 Twenty-first Report of the Monitor (QCSC [Commercial Division]).

was whether the *CCAA* could be used to resolve the tort claims when there was no business left to be restructured. The insolvency professionals engaged in a confidential solicitation process with third parties that were major stakeholders, resulting in a proposed plan that had CAD $207.8 million in commitments from third parties and the debtor's liability insurer, with settlement of all claims from a settlement fund totalling CAD $452 million.[190]

The plan ultimately supported by creditors and approved by the court released all settling parties from all claims and all litigation in Canada and the US, while not affecting claims against MMAC.[191] The *CCAA* court sanction order and releases were recognized by the US bankruptcy court.[192] While there was litigation challenging the jurisdiction of the court to approve such a plan, it was upheld.[193] While these proceedings have been thoroughly canvassed elsewhere[194] and are beyond the scope of this article, there are lessons for potential future climate-related insolvencies from acute or catastrophic events.

The first lesson from the above-discussed cases is that the *CCAA* may be used to resolve complex tort claims in a climate-related insolvency proceeding, even where there is no restructuring plan that envisions a going-concern business. It could control litigation costs associated with multiple class actions and other liability proceedings. It could resolve claims against directors and officers for personal liability for their

190 Riendeau and Farber, *supra* note 188 at 786-787.

191 *Ibid* at 787.

192 *Re Montréal, Maine & Atlantic Canada Co* Case No 15-20518 Orders recognizing and enforcing the Plan Sanction Order of the Que´ bec Superior Court (Bankr D Me issued 26 August 2015) and (21 October 2015).

193 *Montréal, Maine & Atlantic Canada Co / Montréal, Maine & Atlantic Canada Cie (Arrangement relatif à)*, 2015 QCCS 3235 (Que Bktcy). There was a motion for leave to appeal filed, but the parties settled prior to the Que´ bec Court of Appeal hearing the matter in exchange for a variation in the plan sanction judgment, Riendeau and Farber, *supra* note 188 at 794.

194 Riendeau and Farber, *ibid*.

failure to take action to manage and mitigate climate-related harms.[195] It could offer some measure of justice and compensation for the victims harmed by the activities of the debtor company, particularly where the harms were reasonably foreseeable. The stay order available under the *CCAA* prevents a race by the most sophisticated creditors to the assets, which may result in tort victims receiving a greater portion of the value of their claims than in multiple proceedings or a class action suit.

The releases from liability that may be available are what will bring third parties to the negotiating table to consider monetary contributions to resolution of the insolvency proceedings. The courts will have to be careful in weighing the value of compensation to parties harmed with the scope and nature of liability releases. Where broad releases from liability are being sought, particularly for climate-related harms, the court is likely to consider what value is being contributed in exchange for such releases and what harms are being remedied.

For the directors, officers, debtor company, and third parties potentially liable, a *CCAA* plan does not usually allow opt-outs that form part of the class action regime in a number of Canadian provinces, which means that an approved *CCAA* plan can resolve all litigation claims against them in one proceeding. While the parties need to garner creditor support, including tort claimant support, in the amounts specified under the statute, if creditors vote to support the plan in the requisite amounts and the court is satisfied the plan meets the other

195 For an example of discharge of such liabilities in the US, see *In re Peabody Energy Corp*, Bankruptcy Case No 16-42529-399, Case No 4:17-CV-2886 (RWS) Memorandum and Order (E D Mo issued 29 March 2019) at 2-3, online (pdf): <http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2019/20190329_docket-417-cv-02886_memorandum.pdf> and *In re Peabody Energy Corp*, Memorandum Opinion (24 October 2017). The federal Bankruptcy Court in Missouri enjoined claimants from pursuing their climate change lawsuits against PEC, finding that the claims were pre-bankruptcy petition claims had been discharged under the bankruptcy plan.

statutory requirements such as good faith, the plan may be approved over the objections of a minority of creditors.

For the courts being asked to approve such plans, in addition to being satisfied the plan meets the requirements of the *CCAA* (or the proposal provisions of the *BIA*), parties to the insolvency proceeding will have to persuade the court that the path proposed is fair and reasonable in the circumstances, including fair to individuals suffering devastating consequences from acute events. Courts will expect parties, and particularly, its court-appointed officers, to be forthright and in their disclosure and submissions. If insolvency professionals are not sufficiently knowledgeable regarding the issues arising from the climate-related aspects, or if they do not act impartially in their dealings with the debtor, secured creditors, employees, tort claimants and others, the court may rely on *amicus curiae* to provide it with an objective and informed opinion on the resolution sought. The court will consider whether the terms of a plan are fair and reasonable, and whether they appropriately and equitably balance the interests of all stakeholders, as well as whether they are in the public interest.

One aspect that may be new in the court's consideration of the fairness and reasonableness of proposed plans is the intergenerational nature of climate change. Just as pension funds, as institutional investors and pension fiduciaries, are required to manage their assets to consider the intergenerational implications in their decisions and the need to integrate climate change considerations in their investment portfolios,[196] the courts may wish to be satisfied that the harms caused by climate change are being addressed both in resolution of claims and in the debtor company's going-forward business strategy. The approach by regulators in the PG&E proceeding illustrates this concern.

The science underpinning climate change is clear; there will

196 Sarra, *Fiduciary Obligations*, *supra* note 36.

be severe consequences from more frequent and intense climate- and weather-related acute events, even if we manage to limit that severity in an effective transition to a lower-carbon economy. There will be catastrophes, with lives lost or irreparably harmed, and serious damage to homes, business and the environment. There will be insolvencies precipitated by those catastrophes. The challenge will be to meaningfully consider fairness in the balancing of interests, using the tools available.

5. Will the Paramountcy Doctrine Impact Climate-related Insolvencies in Canada?

The answer to this question is not yet clear. As evident in the constitutional challenges to orphan well abandonment and reclamation and the federal carbon pricing legislation, there will continue to be issues regarding regulatory oversight of climate-related issues and issues in respect of environmental liability when companies are insolvent.

We do know from the SCC judgment in *Orphan Well Associationv Grant Thornton Ltd*[197] (thedebtorwas Redwater), that provincial regulators can seek to enforce a debtor company's end-of-life responsibilities, abandonment and reclamation, with respect to oil wells, pipelines and facilities under a provincial licensing regime during insolvency proceedings.[198] Alberta legislation grants the regulator wide-

197 *Orphan Well Association v Grant Thornton Ltd*, 2019 SCC 5 (SCC) [*Orphan Well Association v Grant Thornton Ltd*].

198 *Oil and Gas Conservation Act*, RSA 2000, c O-6, s 1(1)(a) (*OGCA*), ss 11-12. *Environmental Protection and Enhancement Act*, RSA 2000, c E-12, s 1; *Pipeline Act*, RSA 2000, c P-15. Abandonment is the permanent dismantlement or deactivation of a well or facility in the manner prescribed by regulation to render it environmentally safe. Reclamation includes the removal or decontamination of equipment or buildings, land or water, and the stabilization, reconstruction and/or maintenance of the surface of the land. Reclamation also includes remediation of any harmful substance released into the environment. *Ibid* at para 16. The regulator is established pursuant to the *Responsible Energy Development Act*,

ranging powers to ensure that companies that have been granted licences to operate in the Alberta oil and gas industry will safely and properly abandon oil wells, facilities and pipelines at the end of their productive lives.[199] At the time that Redwater ran into financial difficulties and a receiver was appointed, it was licensed for 84 wells, 7 facilities and 36 pipelines.[200] Some were still operating and profitable, but the majority were spent and had abandonment and reclamation liabilities that exceeded their value. A financial firm, with full knowledge of the debtor's end-of-life responsibilities, advanced funds and was granted security in Redwater's present and after-acquired property.[201]

To examine this judgment is beyond the scope of this article, but what is important to note for purposes of future climate change and insolvency issues, is that the SCC held that the regulators' use of its statutory powers with respect to environmental protection does not create a conflict with the *BIA* so as to trigger the doctrine of federal paramountcy. The SCC held that "bankruptcy is not a licence to ignore rules, and insolvency professionals are bound by and must comply with valid provincial laws during bankruptcy."[202] The Court acknowledged the consequences for the bankrupt's secured creditors.[203] The Court applied both aspects of the paramountcy doctrine, finding that there was no operational conflict and the effect of operation of the provincial law did not frustrate the purpose of federal bankruptcy law.[204] The SCC

SA 2012, c R-17.3 (*REDA*) and exercises powers under the *OGCA* and the *Pipeline Act*, *ibid.*

199 *Orphan Well Association v Grant Thornton Ltd*, *ibid* at para 63.

200 *Ibid* at para 48.

201 *Ibid* at para 46.

202 *Ibid* at para 160.

203 The SCC held that bankruptcy is carved out from property and civil rights but remains conceptually part of it, and that valid provincial legislation continues to apply in bankruptcy until Parliament legislates pursuant to its exclusive jurisdiction in relation to bankruptcy and insolvency, at which point, the provincial law becomes inoperative to the extent of the conflict. *Ibid* at para 64.

204 *Ibid* at para 65.

held that the result of a trustee's disclaimer of real property where an environmental order has been made in relation to that property is that the trustee is protected from personal liability, while the ongoing liability of the bankrupt estate is unaffected.[205] In seeking to enforce Redwater's end-of-life obligations, the regulator was acting in a *bona fide* regulatory capacity and did not stand to benefit financially; its ultimate goal was to have the environmental work actually performed for the benefit of the public at large and in furtherance of the public good.[206] The regulator's public duties are owed, not to a creditor, but, rather, to fellow citizens, and were therefore outside the scope of provable claims.[207]

If climate-related insolvencies engage provincial regulatory authorities, the Redwater judgment indicates that regulators can act in the public interest and the insolvent company continues to be liable for harms and regulatory requirements that are not provable claims. While the tort claims arising from climate-related acute events will be settled in either a bankruptcy liquidation or pursuant to a restructuring plan, depending on the circumstances, there may be continuing public liabilities.

The SCC has yet to weigh in on whether climate-related carbon pricing is federal, provincial, or shared jurisdiction. It is in the process of hearing appeals from appellate court judgments in Ontario and Saskatchewan on references regarding the constitutionality of Canada's carbon pricing legislation. Both courts upheld the constitutionality, but there

205 *Ibid* at para 75.

206 *Ibid* at paras 128, 130, citing *Panamericana de Bienes y Servicios SA v Northern Badger Oil & Gas Ltd*, 1991 ABCA 181, 81 Alta LR (2d) 45 (Alta CA).

207 *Ibid* at para 135. For there to be a claim provable in bankruptcy, there must be a debt, a liability or an obligation to a creditor; the debt, liability or obligation must be incurred before the debtor becomes bankrupt; and it must be possible to attach a monetary value to the debt, liability or obligation. *Ibid* at para 119, citing *Newfoundland and Labrador v AbitibiBowater Inc*, 2012 SCC 67, [2012] 3 SCR 443 (SCC).

were dissents.[208] The Ontario Courtof Appealheld thatclimate change has become a matter of national concern; and the need for minimum national standards to reduce GHG emissions is a matter of national concern given the consequences of climate change, the pricing mechanisms aimed at incentivizing behavioural changes.[209] It held that the pith and substance of the *Greenhouse Gas Pollution Pricing Act* is to establish minimum national standards to reduce GHG emissions, the means chosen a minimum national standard of stringency for the pricing of GHG emissions.[210] The Court held that the legislation leaves open the ability of individual provinces to legislate more stringent standards or to adopt the federal minimum standard as their own.[211] It held that the international and interprovincial impacts of GHG emissions inform not only the national nature of the concern, but the singleness, distinctiveness and indivisibility of the matter of establishing minimum national standards to reduce GHG emissions.[212] The Court held that the environment is not a matter of exclusive jurisdiction, resting with one or other level of government, but rather, an area of shared jurisdiction.[213] Regardless of the outcome of the references at the Supreme Courtof Canada, insolvency practitionerswill need tobeaware ofdifferentregulatoryregimesandcarbon-pricingmechanisms that will impact climate-relatedinsolvencies.

IV. CONCLUSION

Canada's ability to transition effectively to meet new regulatory and market demands for sustainable economic

208 Ontario Court of Appeal *Reference re Greenhouse Gas Pollution Pricing Act*, *supra* note 10. Saskatchewan Court of Appeal *Reference re Greenhouse Gas Pollution Pricing Act*, *supra* note 11.
209 Ontario Court of Appeal *Reference re Greenhouse Gas Pollution Pricing Act*, *ibid*, at para 105.
210 *Ibid* at para 77.
211 *Ibid* at para 115.
212 *Ibid* at para 116.
213 *Ibid* at para 81.

activity will have an impact on the number of insolvencies and on the potential for restructuring as opposed to liquidation. Hopefully, in the wake of this 'bad moon rising', there will be creative efforts by governments, business and finance, and Canadians generally, to respond to the need for a more sustainable low-carbon economy, a 'new dawn' that will take time, given the current structure of our economy.

The role of Canadian trustees and other insolvency professionals in climate-related insolvencies will be important. While, to my knowledge, no Canadian insolvency has yet been attributed directly to climate change, many factors areplacing tremendous pressure onsome of thehighest carbon-emitting sectors. For companies that file insolvency proceedings, licensed insolvency trustees will be critically important in assisting with effective corporate governance, with interim and transition financing, in advising companies on director and officer liability claims, and in finding ways to manage myriad claims arising out of acute events or chronic climate impacts. Understanding the impact of climate risk on these factors will be crucial to their ability to successfully advise stakeholders and the court.

There is also a role for insolvency practitioners in early intervention – prior to insolvency – to help with financing, forbearance and a strategy for the financially distressed business going forward, where it is potentially viable. While restructuring is a public policy goal, liquidation is becoming more common, and trustees will need to effectively wind up businesses and address the range of stranded assets, as well as employee, supply chain and other claims arising out of these failures. Trustees will likely also have to address the potential domino effect of small business insolvencies, as communities dependent on insolvent larger companies experience financial distress from supply chain and other disruptions. The courts sitting in bankruptcy or supervising restructuring proceedings will be assessing the merits of proposed liquidation or restructuring plans based on these evolving public policies

andregulatoryframeworks, consideringthebestinterestsofthe debtor company, all stakeholders, and the public interest.

Although the Creedence Clearwater Revival song has long been a favourite, I decided to watch the 1941 movie on which it was based. Ironically, thefilm aboutselling one's soul forshort-term gain involved a group of insolvent farmers banding together to advocate for national insolvency legislation. It explores the harmful effects of individual action, rather than collective action mechanisms to address insolvency and creditor claims. Canada already has the collective action mechanisms in its insolvency legislation. We now need to use these mechanisms creatively in this time of transition, to preserve value where possible, and to deal with insolvent companies and their many stakeholders on a fair and equitable basis.