

JULY 2024

PLAYING WITH FIRE CANADIAN INSURERS & FOSSIL FUELS

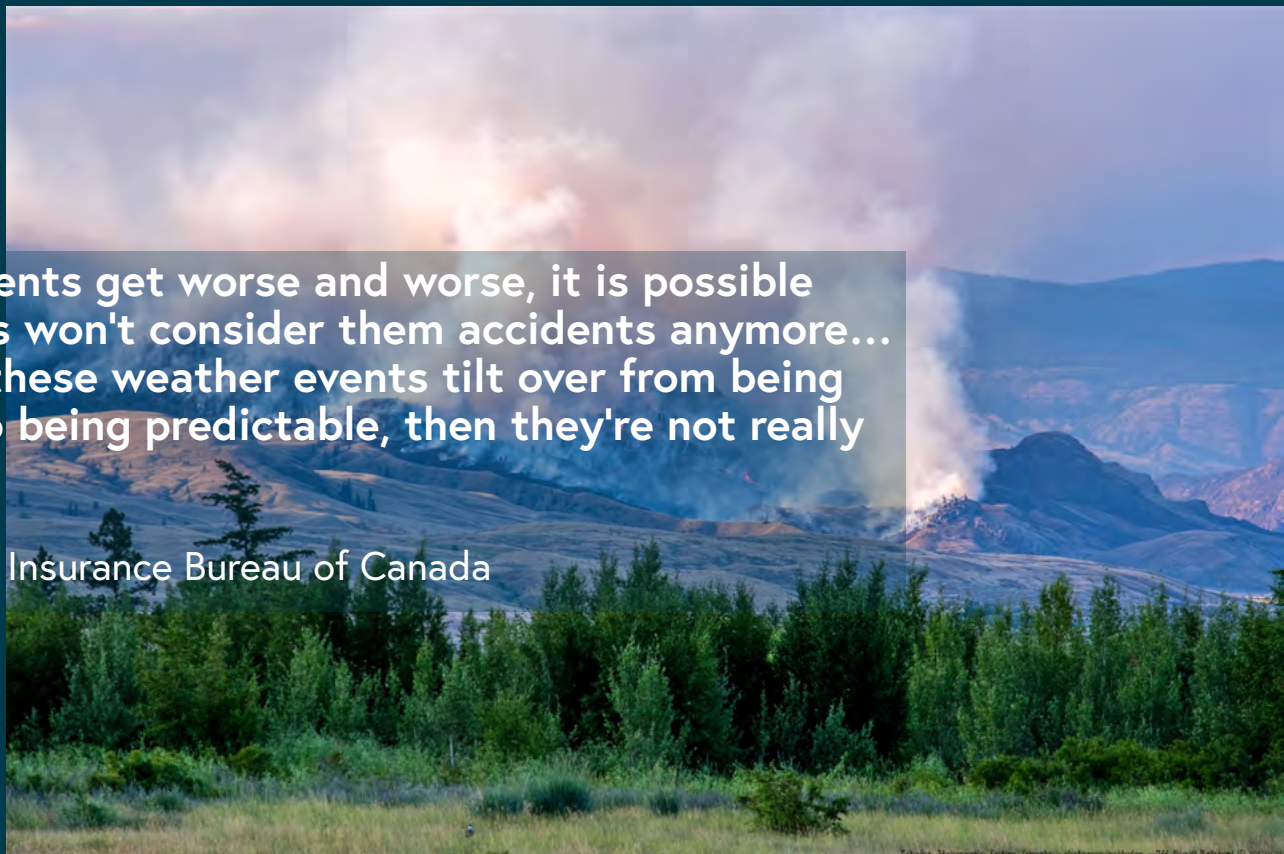
INVESTORS *for*
PARIS COMPLIANCE

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"As these events get worse and worse, it is possible that insurers won't consider them accidents anymore... As soon as these weather events tilt over from being accidents to being predictable, then they're not really insurable."

Craig Stewart, Insurance Bureau of Canada



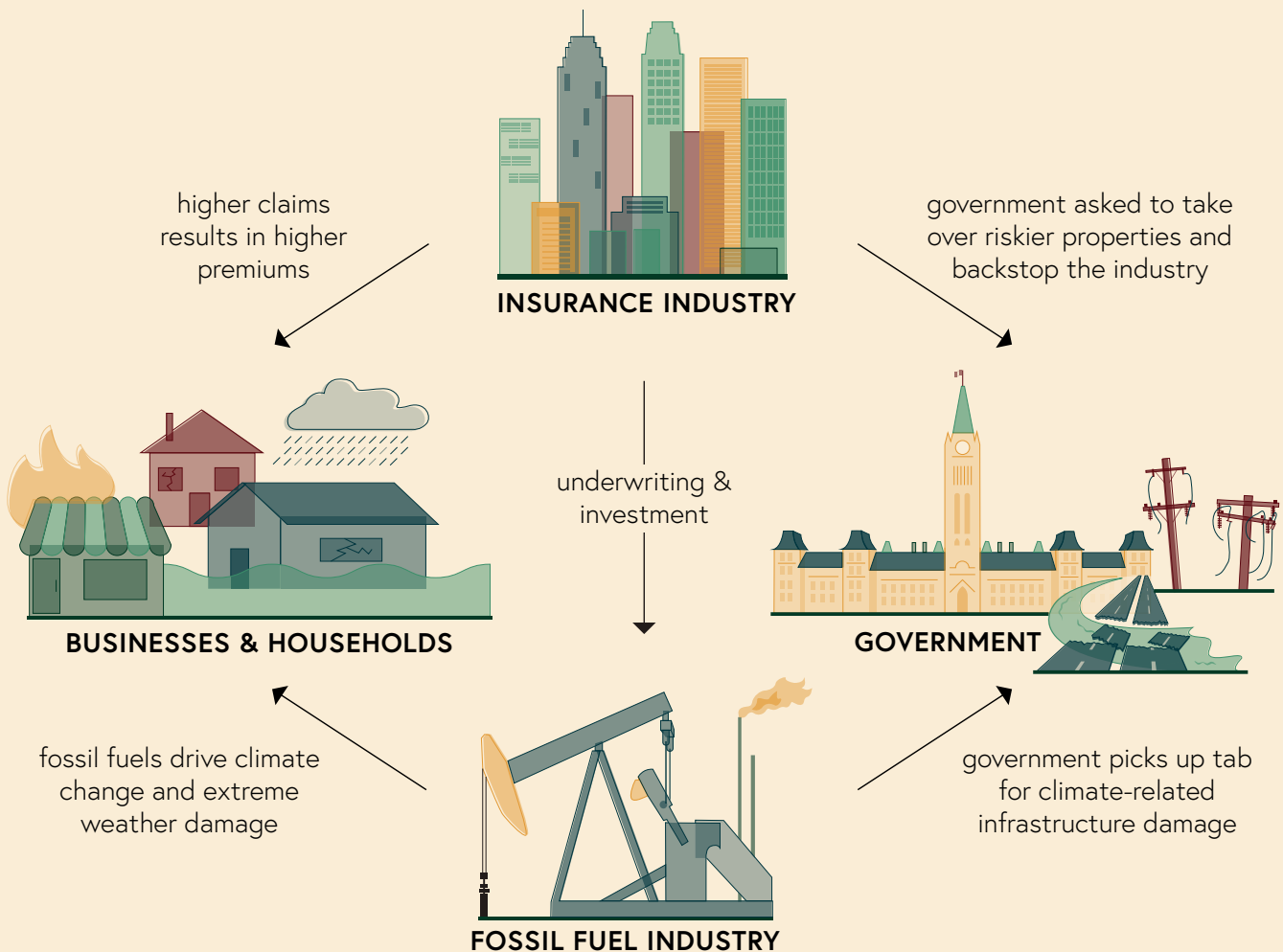
EXECUTIVE SUMMARY

There is a contradiction within Canada's property and casualty (P&C) industry. By its own admission, climate change is threatening the industry's business model with increased risk and rising claims, yet it is complicit in increasing this risk via its underwriting of the fossil fuel industry.

Canadian P&C companies are also major investors in fossil fuel companies. Our conservative estimate is that the top seven P&C companies in Canada and their parent companies invested over \$19.5 billion in fossil fuel assets in 2023. This results in a cycle of risk creation and risk redistribution reflected in this diagram.

\$19.5 BN
in fossil fuel
assets in 2023

SPREADING CLIMATE RISK: INSURANCE AND FOSSIL FUEL DAMAGE



The insurance industry drives a damaging cycle, insuring and investing in the fossil fuel industry which causes climate change and damages from extreme weather. Higher resulting claims translate into higher premiums, and taxpayers also pick up the tab for infrastructure damages.

Extreme weather events are resulting in greater property damage across the country. The insurance industry estimates that it paid out \$3.4 billion in catastrophic damages in 2023, including hundreds of millions for fire damage, making 2023 the second straight year of claims above \$3 billion.

Insurance companies are responding by raising rates to maintain profits. Home and mortgage insurance rates in Canada have increased by over 73% over the past decade with an average increase of 7.7% across the country last year alone, and higher in some regions — 18% in BC. Intact, the largest P&C insurer, raised its home insurance rates by 8% in 2023 while raising the dividends it pays to its shareholders by 10%. The burden of increased rates falls disproportionately on vulnerable families, with thousands turning to crowdfunding to cover insurance costs.

The industry is also responding by offloading risk and costs to governments. A new federal flood insurance program will take on risk from the riskiest properties in floodplains, and there is discussion of an overall federal backstop for the industry in the face of growing catastrophic risk. Governments continue to pick up the tab for growing climate damages to public infrastructure.

Meanwhile, P&C companies continue to seek profits from activities supporting the fossil fuel industry. Canada's Fairfax is a major underwriter of fossil fuels, ranked in the top 10 globally, with its subsidiary Allied World acting as an insurer of last resort for coal projects, including several in Asia. Other Canadian insurers also maintain active programs underwriting fossil fuels.

Internationally, other insurance companies have begun to recognize the threat to their industry from their own high carbon activities and adopt voluntary measures to address this. Dozens of insurers have policies restricting or ending their underwriting or investing in coal and oil and gas. Meanwhile, five of the seven largest Canadian P&C insurers have set a goal to reach net zero emissions by 2050, and only two have some restrictions on underwriting fossil fuels. No insurance company with a net zero commitment should be underwriting any fossil fuel expansion projects.

Ultimately, regulators need to step in to ensure that the Canadian insurance industry fully aligns with net zero, particularly as the industry is seeking government support to mitigate climate risk. The Office of the Superintendent of Financial Institutions has begun to require better disclosure of financed emissions from insurance companies, and asks that they have climate transition plans — but without determining what a credible plan looks like. Regulators must align incentives through climate-related capital requirements and transition plan enforcement to achieve true progress.

Canadian insurers can be a positive force in the energy transition. A hundred years ago, the industry helped with the rollout of electricity, setting standards so that new companies could access underwriting. Such innovation is again needed today to encourage the development of renewable energy and climate solutions.

PART ONE — THE CLIMATE CRISIS AND THE INSURANCE INDUSTRY

The Canadian property and casualty (P&C) insurance industry offers protection to individuals and companies against the damages from severe weather events and natural disasters. The climate crisis is amplifying severe weather events, which are becoming more intense, frequent, and costly.¹ This trend is already causing some regions and assets to become uninsurable while in all regions it is driving up insurance rates.² This is shrinking the P&C industry's client base as it responds by offloading risk to individuals and/or the government. Yet, the industry continues to underwrite and invest in the principal driver of climate change — fossil fuels.

This report will examine the degree to which this climate contradiction is present within the largest actors in Canada's \$232 billion P&C industry, listed below in order of magnitude of premiums written in 2022:^{3 4}

- Intact Financial Group (\$12.6 billion)
- Desjardins Group (\$6 billion)
- Co-operators Group (\$4.1 billion)
- Wawanesa Mutual Insurance Company (\$3.8 billion)
- Definity Insurance Company (\$3.5 billion)
- Security National Insurance Company [subsidiary of TD Bank] (\$3.3 billion)
- Northbridge Financial Corporation [subsidiary of Fairfax Financial] (\$2.7 billion)

These companies are the financial backstop of the Canadian economy, providing stability in times of physical, cyber, legal, and political shocks and uncertainties. As society's risk managers, P&C insurers influence the flow of capital for residential, corporate, and industrial developments.

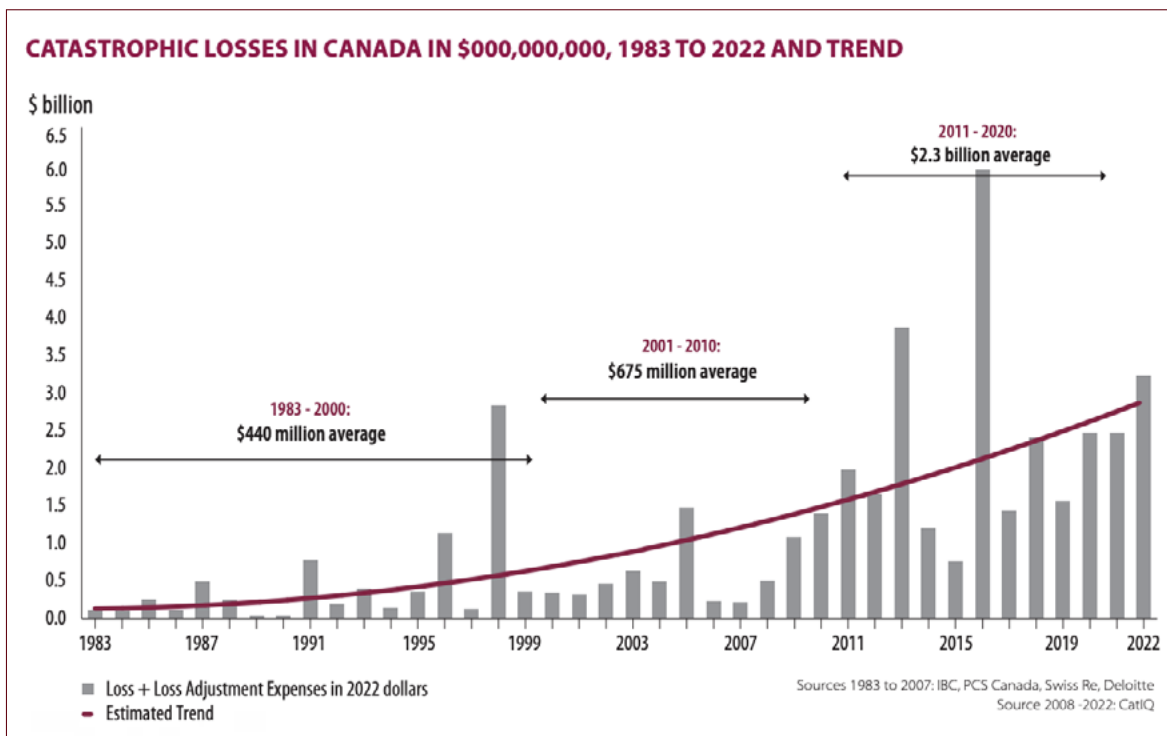
However, despite its unique position as predictors and mitigators of risk, the insurance sector has yet to fully embrace climate science in its underwriting and investment strategies. Instead of aligning with a credible 1.5°C pathway, Canadian insurers still seek revenues from coal, oil, and gas. As a result, they are accelerating the very risk they are supposed to mitigate.

The Intact logo consists of the word "intact" in a lowercase, sans-serif font, enclosed within a red square frame with rounded corners.The Desjardins logo features a green hexagonal icon with a white outline, followed by the word "Desjardins" in a bold, green, sans-serif font.The Co-operators logo includes a blue icon of two arrows pointing right, followed by the word "co-operators" in a blue, lowercase, sans-serif font.The Wawanesa Insurance logo features a blue circular icon with a white tree-like shape, followed by the word "Wawanesa" in a blue, serif font and "Insurance" in a smaller, blue, sans-serif font below it.The Definity logo consists of the word "definity." in a blue, lowercase, sans-serif font, with a period at the end.The TD logo is a green square with the letters "TD" in white, bold, sans-serif font.The Fairfax Financial Holdings Limited logo features the word "FAIRFAX" in a large, bold, serif font, with "FINANCIAL HOLDINGS LIMITED" in a smaller, sans-serif font below it.

The ramifications extend beyond the insurance sector, impacting investments in infrastructure, influencing dynamics in the real estate market, and directly impacting people's livelihoods and health, particularly the most vulnerable. The industry's financial support of the fossil fuel industry contradicts the urgency of addressing the disruption of its business model due to climate change. As the P&C industry seeks government assistance managing climate risk, taxpayers are right to ask for P&C companies to stop contributing to this risk themselves by rapidly decarbonizing their underwriting and investment practices.

1.1 GROWING CLAIMS DUE TO CLIMATE CHANGE

Climate change is driving increased weather-related instability, which results in higher claims for the P&C insurance industry.⁵ 2023 was the second consecutive year above \$3 billion and fourth worst year for insured catastrophe losses in Canadian history.⁶ The rise in catastrophic losses is due to extreme weather events such as floods and wildfires that are intensified due to climate change, seen in the figure below.⁷



Historically, a single catastrophic event or particular region has caused the bulk of losses in outlier years. For example, 75% of national losses in 2016 were attributed to the Fort McMurray wildfire alone.⁸ This wildfire remains Canada's most costly catastrophic event, at about \$4 billion in insured damages and about 30% of GDP growth that year.⁹ However, in recent years, disasters have been spread both geographically and across the course of the year and have been driving higher annual damages. Over the last decade, weather-related disasters and catastrophic losses have risen to cost around 5-6% of annual GDP growth each year.¹⁰

7 Insured losses are considered catastrophic when they total \$30 million or more. Annual catastrophic losses are the sum of these insured losses.



2023 saw over a dozen catastrophic events hit Canada.¹¹ The 2023 Okanagan and Shuswap fires in British Columbia cost \$720 million in insured damages, the costliest events in the province's history.¹² Intact Financial attributed half of its \$252 million catastrophe losses in 2023 to wildfires alone, amounting to \$1.79 per share after tax.¹³

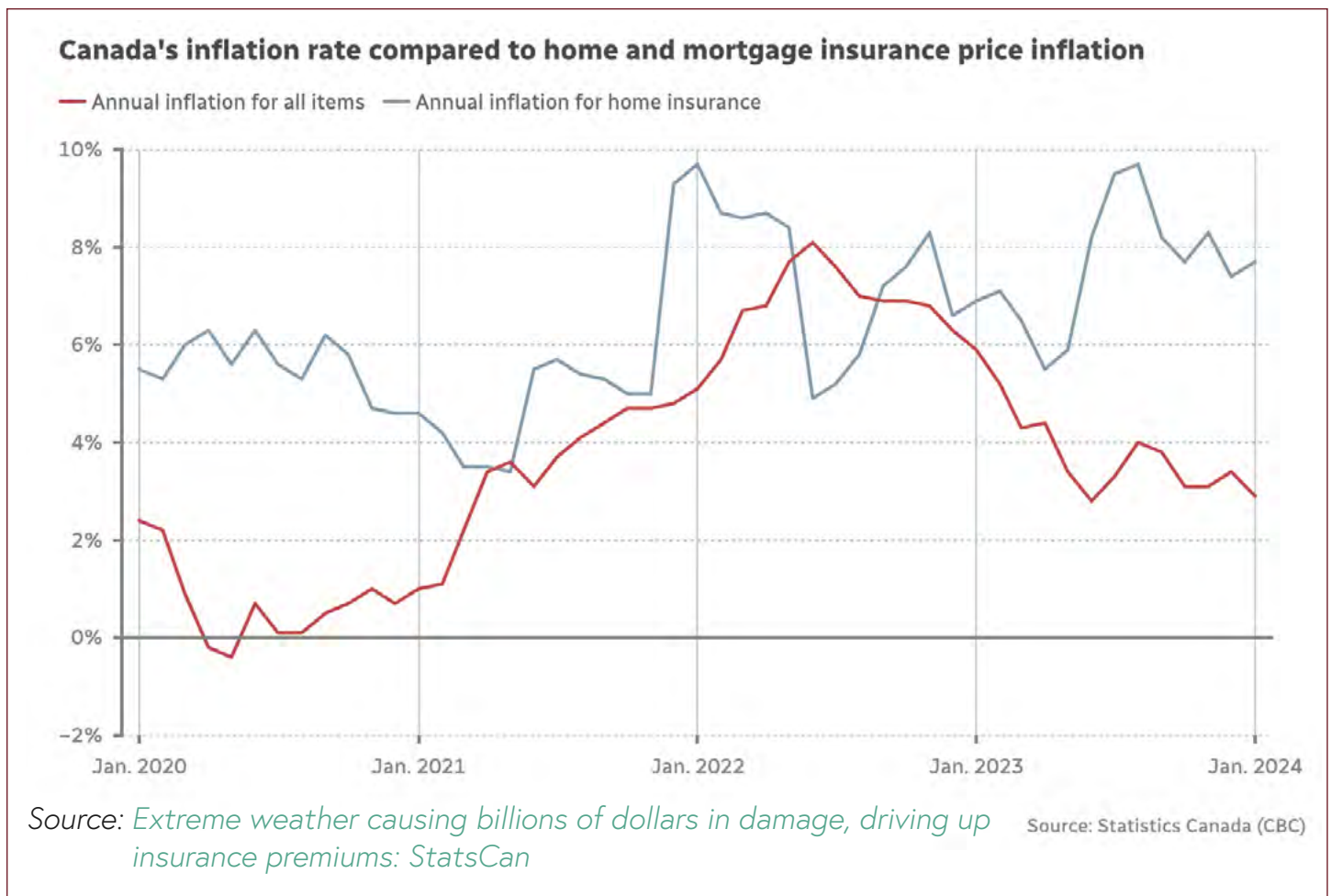
The 2023 April ice storm in Ontario and Quebec incurred \$330 million in insured damages,¹⁴ was described as the worst ice storm since 1998, and caused mass power outages and two deaths.¹⁵ Severe storms and flash floods also struck parts of Ontario over the summer, leading to over \$340 million in insured losses.¹⁶ In the Northwest Territories, over 70% of the population were displaced due to severe weather and many properties destroyed.¹⁷

The first catastrophic event of 2024 was a deep freeze event in January causing over \$180 million in insured damages.¹⁸ Canada entered the 2024 wildfire season early due to holdover fires from last year after a dry winter.¹⁹ In May, over 4,000 people in Fort Nelson, B.C. were evacuated from their homes and Fort MacMurray again came under an evacuation alert. Air quality alerts were triggered in four U.S. states due to Canadian wildfire smoke.²⁰ Logging took place within Banff National Park in order to create a firebreak.²¹ Canada is also bracing for an above-average hurricane season in 2024.²²

Looking ahead, Craig Stewart of the Insurance Bureau of Canada, says, "As these events get worse and worse, it is possible that insurers won't consider them accidents anymore...As soon as these weather events tilt over from being accidents to being predictable, then they're not really insurable."²³

1.2 SHIFTING RISK AND COST TO CONSUMERS

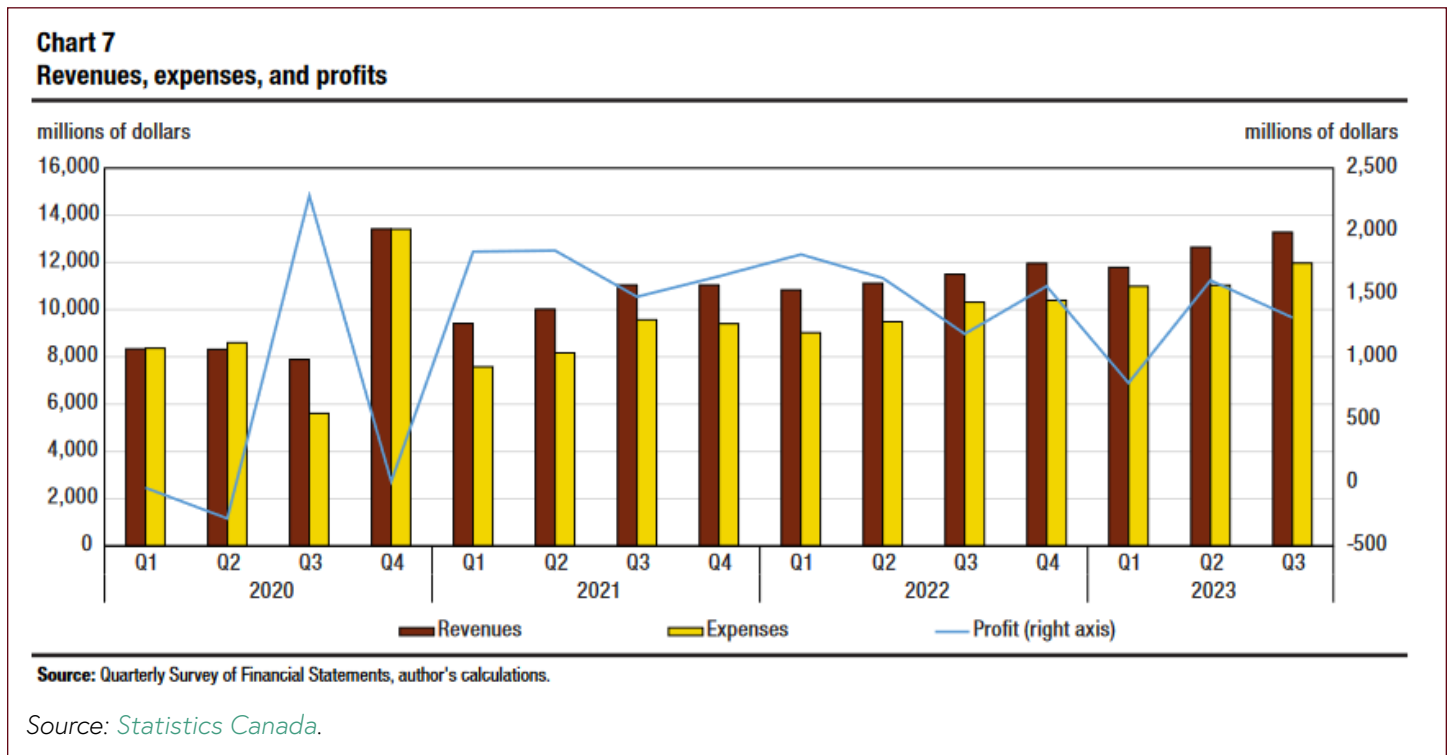
How are P&C companies reacting? Their first response is to increase rates. According to figures from Statistics Canada, home and mortgage insurance rates jumped 73% between 2013 and 2023, or by 36% when adjusted for inflation,²⁴ with an average increase of 7.7%²⁵ across the country this past year alone. Certain regions experienced larger hikes, like 18% in BC.²⁶ As seen in the figure below, from 2020 to 2023 Canadian homeowner insurance premiums rose faster than inflation.²⁷



Canada's largest insurer, Intact, which faced higher climate-driven claims in 2023, increased personal property premiums by 8% and raised shareholder dividends for the 19th consecutive year, this year by 10%

Increased premiums have assured the industry's continued profitability in the face of increasing claims. For example, Canada's largest insurer, Intact, which faced higher climate-driven claims in 2023, increased personal property premiums by 8%²⁸ and raised shareholder dividends for the 19th consecutive year, this year by 10%.²⁹ Similarly, Fairfax Financial raised their annual dividend by 50% in 2023,³⁰ while its North American subsidiaries saw a 12.2% year-over-year increase in losses on claims.³¹ The figure below reflects this trend across the industry.

RIISING RATES ENSURES REVENUES OUTPACE EXPENSES AND MAINTAINS PROFITS



In addition to hiking rates, Canadian insurance companies are also withdrawing coverage. When extreme weather happens, insurance companies must cover the losses they have legally committed to, but once the annual policy lapses, premiums can be re-priced or coverage withdrawn.³²

In Canada, withdrawal of coverage is primarily associated with flooding, historically Canada's costliest severe weather impact.³³ Over 1.5 million Canadian households now lack affordable flood coverage.³⁴ An estimated 6-10% of Canadian homes are currently uninsurable against flooding,³⁵ with 20% of the population exposed to some degree of flooding.³⁶ 94% of Canadians living in a high-risk flood area are unaware of that risk.³⁷

In February 2024, Desjardins pulled its coverage for mortgages on homes with a 5% chance or more of flooding each year, impacting over 3,000 homes in just one borough of Quebec.³⁸

Desjardins was the last major lender to offer mortgages in higher-risk flood zones.³⁹ Some homeowners in Ottawa also can't get flood insurance if they are situated close to the Ottawa River.⁴⁰

The real estate market is directly impacted when insurers pull out from high-risk areas, as this withdrawal not only leaves homeowners vulnerable but also deepens the housing crisis, further exacerbating the affordability and availability of housing. This trend contributes to the rising cost of renting, as landlords pass on the higher insurance costs to tenants. As the COO of Cooperators has said, "There are going to be fewer and fewer people that can actually afford insurance."⁴¹

Vulnerability to flooding is not equally distributed. Lower-income families can face difficult decisions between purchasing costly flood insurance and meeting basic needs, particularly during times of increased living expenses.⁴² The burden without insurance is drastic; the average cost of remediating basement flood damage in Canada was over \$40,000 in 2022.⁴³

The inability to pay for insurance is not unique to flooding. Fire insurance rates more than doubled in one year in Kamloops BC,⁴⁴ and home insurance nearly doubled in Carleton Place, Ontario.⁴⁵ Some resort to crowdfunding, including one Halifax family who did this to supplement insurance after their home was destroyed in the 2023 Halifax wildfire.⁴⁶ There have been 10,000 such crowdfunding campaigns in Canada in the past 5 years.⁴⁷

In 2023 insurance companies temporarily stopped issuing new home, auto, and other policies in parts of Nova Scotia because of wildfires, which delayed the sale of some homes in areas up to 50 kilometers outside the fire zones.⁴⁸ While companies like Aviva say that pulling back from wildfire areas is "not the right solution," not all companies provide coverage in these areas and it is not affordable for all owners.⁴⁹ Wildfire coverage can be difficult to get in areas close to ongoing wildfires, even if they are outside the evacuation zone.⁵⁰

Finally, insurers are encouraging homeowners to take on more costs in order to lower their premiums, including investing in flood-proofing or fire-proofing their homes.⁵¹ At the same time, insurers are committing capital to adaptation and resilience research and action. Intact has implemented a free service for fireproof homes in Western Canada, sending fire-suppression specialists to homes in active wildfires areas.⁵²

10,000
crowdfunding
campaigns for
severe weather
damages in the
last 5 years



1.3 SHIFTING RISK AND COST TO TAXPAYERS

The Canadian P&C industry is also responding to climate change by passing along risk and costs to taxpayers. Governments are being asked to step in to take responsibility for extreme weather risks to property.

Insurers have been lobbying for resilience measures from the various levels of government for over a decade, including infrastructure investments, retrofit programs, and funding for the National Adaptation Strategy through Climate Proof Canada, a coalition advocating for disaster-resilient measures.⁵³ In 2019, The Insurance Bureau of Canada called for \$5.3 billion in annual climate adaptation funding.⁵⁴

Over the past six years the Canadian P&C industry has advocated for a national flood insurance program, asking taxpayers to shoulder more burden for flood risk.⁵⁵ In 2023, in collaboration with the P&C industry, the federal government announced Canada's first National Flood Insurance Program (NFIP) targeting high risk properties.⁵⁶

The National Task Force on Flood Insurance and Relocation devised four insurance models for the NFIP, each with a federal backstop for the industry.⁵⁷ The program will subsidize high-risk homeowners' premiums and allocate federal funds to properties deemed uninsurable by private insurers, managed by a Crown corporation for a fee.⁵⁸

While waiting for the NFIP to be finalized, federal Disaster Financial Assistance Arrangements (DFAA) have bailed out those who cannot access insurance. Since the inception of DFAA in 1970, 62% of the over \$8.5 billion disbursed has occurred in the last decade.⁵⁹ Flood-related claims comprise 48% of distributions.⁶⁰

In the absence of affordable insurance, taxpayer dollars flow through government programs such as the federal DFAA, such as for the \$3.4 billion disaster recovery payout for the Fraser Valley flooding in November 2021.⁶¹ Two years after the disaster, only around 40% of homeowners have received payment. However, the program typically takes an average of seven years post-catastrophe for payments to arrive, with some cases stretching as long as 10 to 15 years.⁶²

Filling in where private insurers are backing out is adding to a growing climate liability burden for taxpayers.

In June 2023, a \$530-million grant program, part of the National Adaptation Strategy, was launched to fund municipal infrastructure adaptation projects, offering up to \$1 million per grant over eight years.⁶³ While the Federation of Canadian Municipalities welcomed this support, noting the high costs of climate adaptation, many communities still face rejections for disaster relief funding.⁶⁴ A 2020 report estimated municipalities need \$5.3 billion annually to mitigate the worst impacts of climate change.⁶⁵

Filling in where private insurers are backing out is adding to a growing climate liability burden for taxpayers. Governments also pick up the tab for climate damages to public infrastructure. For example, repairs to highways alone following the 2021 flooding in BC are expected to cost governments \$1 billion.⁶⁶ For the same event, the town of Merritt estimated its infrastructure damage at \$100 million, Abbotsford at \$1 billion, and Princeton at \$25 million.⁶⁷

The Canadian Climate Institute projects⁶⁸ the following increases in damages to public and private infrastructure due to climate change:

- Flood damage to homes and buildings could increase fivefold in the next few decades and by a factor of ten by the end of the century, with costs as high as \$13.6 billion annually.
- Temperature and rainfall damage to roads and railways could increase by up to \$5.4 billion annually by mid century and by as much as \$12.8 billion annually by the end of the century.
- Heat and rainfall damage to electrical transmission and distribution infrastructure could more than double by mid-century and triple by the end of the century, costing utilities and ratepayers up to \$4.1 billion annually.

In addition to offloading insurance of riskier properties to the government, there is also an emerging debate regarding an overall federal backstop for the insurance industry. In a September 2023 speech, the Superintendent of Financial Institutions Peter Routledge floated the idea of reforming Canada's insurance resolution framework to provide capital to the insurance industry in the case of catastrophic losses.⁶⁹ He cited the example of Lytton, BC which was destroyed by fire in June 2021 and imagined a similar event hitting larger cities with greater insured losses.

Routledge stated that such a federal backstop could be modeled on the Canada Deposit Insurance Corporation where banks contribute to a fund capable of absorbing small bank failures, and the federal government provides a backstop for larger failures, billing back the cost over time, assuming that industry is still able to pay.⁷⁰

Overall, as climate impacts increase, the Canadian P&C insurance industry is seeking to pass along risk to taxpayers in the form of government programs for high risk properties, and in the form of an overall federal backstop. This may increase the financial health of the industry in the short term, but threatens the industry in the longer term by potentially shrinking the size of the private insurance market, as we see today in places like Florida⁷¹ and California.⁷²

1.4 GLOBAL TRENDS

The Canadian P&C insurance industry is not alone in dealing with growing climate risk. On a global level, the insurance industry is witnessing a profound shift, marked by a growing affordability crisis in home insurance due to escalating frequency and severity of extreme weather events attributed to climate change.⁷³ Some countries are experiencing worse extreme weather than Canada which serves as a potential taste of things to come. Insurers across the US, Europe and Australia, are confronting how climate change impacts their bottom line, seen in skyrocketing premiums and insurers pulling out of vulnerable areas.

The head of the Insurance Council of Australia says that over a million Australian households now face insurance affordability stress, with many dropping policies and leading to a situation where the government will need to pick up recovery costs.⁷⁴ Australian insurance prices are up more than 16% over the past year and insurance companies are being criticized for contributing to a jump in the cost of living while protecting profits.⁷⁵

Perhaps the biggest cautionary tale for insurance can be seen in the United States. Florida and California are experiencing a crisis in insurance due to hurricanes and fires dramatically driving up claims, leading to exorbitant rate hikes and the withdrawal of many insurance companies from those markets. The company Farmers alone dropped 100,000 policies in Florida, and home insurance premiums in the state increased by an average of 35%. In California, a growing list of insurers, including State Farm, Allstate, and The Hartford, are either retreating or pausing coverage in wildfire-prone areas.⁷⁶

But, the trend extends beyond Florida and California. Insurers lost money on homeowner coverage in 18 states in 2023, up from 12 states five years ago, and eight states in 2013.⁷⁷ Bill Montgomery, CEO of Celina Insurance Group, said, "Climate change is real... We can't raise rates fast enough or high enough."⁷⁸ The exodus of major insurers is pressuring state regulators to accommodate insurers by allowing them to increase rates with fewer barriers, in an effort to prevent more companies from leaving these markets altogether.⁷⁹

Global trends have an impact on Canada via reinsurance. Canadian P&C insurers in turn buy reinsurance from global firms which adjust their rates based on incurred costs and risk projections. Over the past years, reinsurers have been taking heavy losses due to rising claims,⁸⁰ and have raised rates for Canadian P&C companies — between 25% and 70% in 2023 alone.⁸¹

The models that the insurance industry uses to predict climate losses have come under fire for underestimating damages.⁸² Some note that the industry has less incentive to tackle this issue due to its practice of writing one-year terms rather than insuring for the long-term, and potentially facing higher capital requirements from regulators if the true risks are acknowledged.⁸³ "The reality is that climate change is essentially a slowburn," says Steve Bowen, chief science officer at reinsurance broker Gallagher Re. "The general trend [in losses] is going to continue to go up."⁸⁴

PART TWO — CANADIAN P&C COMPANIES AND FOSSIL FUELS

Despite rising claims and the growing uninsurability of properties due to climate change, the Canadian P&C insurance industry continues to actively foster and support the climate crisis with its fossil fuel activity. Through underwriting and investing, insurers support the operation and expansion of fossil fuel projects — a clear contradiction given the threat that climate change poses to the P&C industry.

The insurance industry is complex and insurance itself constitutes just one aspect of the broader operations of insurance companies. Our analysis extends beyond individual insurance entities to encompass their parent organizations, which make related decisions regarding investing, underwriting, and for some, banking. For instance, while our report may highlight Fairfax's underwriting behaviour, it is Northbridge, its subsidiary, that is the primary insurer in Canada. Further details on how our analysis regards investment management are provided in the section dedicated to investing.

2.1 UNDERWRITING

Insurance companies underwrite property, casualty, and specialty insurance for fossil fuel projects and offer coverage for oil spills, refinery explosions, and environmental lawsuits. Insurance companies also provide property insurance to safeguard physical infrastructure, operational insurance, and general liability insurance. Reinsurance spreads these risks further, allowing primary insurers to cover more projects by transferring part of the risk to reinsurers.

P&C insurance is critical to the ongoing viability of the fossil fuel sector. Although this report focuses on Canadian headquartered P&C insurers, it is worth noting that Canadian branches of global insurers such as Chubb, Lloyds, Liberty Mutual, and Travelers, alongside Canada's Fairfax Financial, backstop billions of dollars of global fossil fuel projects.⁸⁵

The details of insuring the fossil fuel industry are opaque. There is no easily accessible dataset outlining which insurance companies are underwriting which fossil fuel projects at any given time and to what degree. Instead, information is only shared between energy regulators, project operators, and insurers, and is often shrouded in confidentiality agreements.

In Canada, the Canada Energy Regulator (CER) is at the center of the fossil fuel insurance process for Canadian energy projects. Developers must submit an application for the approval of their projects, which includes a certificate of insurance. This is intended to ensure development plans are backed by sufficient financial resources, and was once a source of public data on underwriting.

In 2021 the CER granted a request by the developer of the Trans Mountain pipeline to keep the identities of its insurers secret due to activists' use of public filings to pressure them into withdrawing coverage for the project. Other developers followed suit and this information is now scarce.

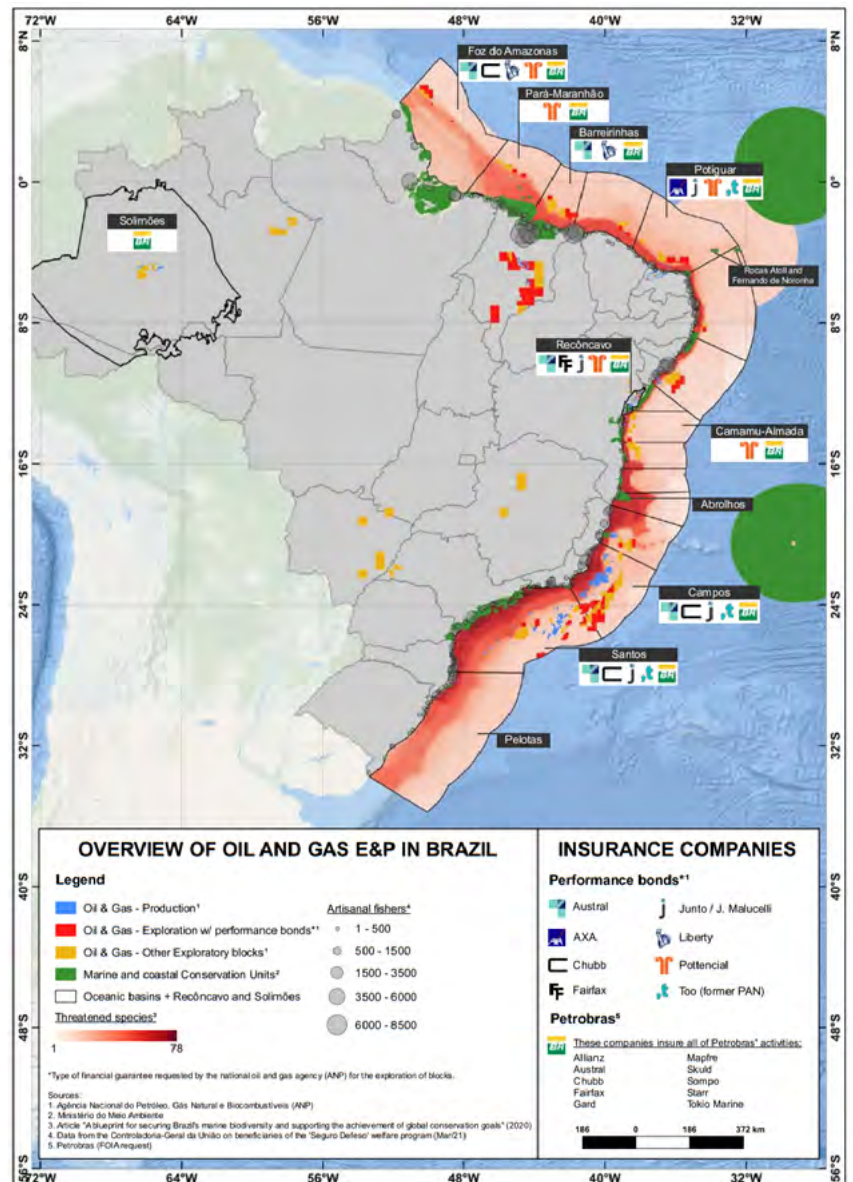
Below is a summary of what little publicly available information does exist for Canadian companies underwriting fossil fuels in Canada and globally. We focus primarily on Fairfax, given their prominence on this front, and then briefly outline other Canadian P&C insurance companies active in fossil fuel insurance.

1. FAIRFAX FINANCIAL

Insuramore, an insurance sector market intelligence firm, ranks Canada's Fairfax Financial as one of the largest carriers of coal insurance, and within the top 10 fossil fuel insurers globally, insuring somewhere between C\$585 million and C\$975 million in fossil fuel projects in 2022.⁸⁶

Two subsidiaries of Fairfax, Northbridge and Crum & Forster, offer specialty fossil fuel insurance, while Northbridge is often found on the same insurance certificates as the large global insurers. They appear on the insurance certificates of eight fossil fuel projects in Canada in 2023.⁸⁷

In 2022, it was revealed that Fairfax was playing a significant role in expanding offshore oil exploration in Brazil by issuing performance bonds for the project.⁸⁸ These offshore oil activities adversely affect the Quilombolas and other Indigenous peoples and are situated near ecologically important ecosystems along the Great Amazon Reef System.



Despite the need to rapidly phase out coal use to secure a safe climate,⁸⁹ Fairfax subsidiary Allied World is a coal insurer of last resort. Here are known coal projects that Allied World is involved with:⁹⁰

- Nghi Son Coal Power Plant, Vietnam. Located in Thanh Hoa province, this project uses old technology, leading to higher carbon dioxide emissions compared to average generating plants in Vietnam. Allied World underwrote US\$395 million for this project in 2018.
- Suralaya Thermal Power Plant, Indonesia. Allied World provided US\$201 million in underwriting for this project in 2019.
- Vung Ang Power Station, Vietnam. An environmental impact assessment for Vung Ang 2, one of the units within the complex, failed to meet international environmental standards. Allied World underwrote US\$122 million for this project in 2021.
- Cebu Power Complex, Philippines. Also known as the Naga power complex, the amount of underwriting by Allied World remains undisclosed, but was notably attached to the project in 2021.

In 2023, Allied World announced it would align its underwriting guidelines with the Paris Agreement, which included a commitment to exclude some coal projects.⁹¹ The practical implications of that announcement are unclear at this point.

2. OTHER P&C INDUSTRY FOSSIL FUEL UNDERWRITING

Other Canadian insurance companies are also involved with fossil fuel underwriting, albeit to a smaller degree than Fairfax. Here is a summary:

INTACT FINANCIAL	Intact Financial Group offers oil and gas underwriting itself, while its subsidiary, Royal & Sun Alliance (RSA) was found on the Insurance Certificates of five fossil fuel projects in Canada between 2022 and 2023. ⁹²
WAWANESA	Western Financial Group, a subsidiary of Wawanesa, offers speciality oil and gas coverage. ⁹³ Wawanesa also offers specialty oilfield coverage. ⁹⁴
DEFINITY FINANCIAL	Definity Financial Corporation offers speciality oil and gas coverage through its subsidiary, Economical Group. ⁹⁵
COOPERATORS	Cooperators offer speciality oil and gas coverage itself and through its subsidiaries, Federated Insurance, The Premier Group, and Sovereign Insurance. ⁹⁶

⁹⁶ Cooperators does not underwrite oil and gas production, only oilfield services companies; Federated Insurance, [Oil and Gas](#); Premier Group, [Oil and Gas](#); Sovereign Insurance, [Oil and Gas](#).

2.2 INVESTING

In addition to underwriting, Canadian P&C insurers and their parent companies play a significant role as institutional investors in the global fossil fuel industry, with the top seven investing over C\$19.5 billion into fossil fuel assets in 2023.⁹⁷

Insurance is one aspect of the broader operations of insurance companies, and corporate structures vary. As a holding company, Fairfax invests in businesses through a wholly owned investment management company which manages all of its subsidiaries' investments.⁹⁸ Definity also manages all subsidiaries' capital through an investment arm. Meanwhile entities such as Intact, Wawanesa, and Cooperators (through Addenda), invest both premiums and manage external assets of institutional investors. TD and Desjardins parent companies also engage in banking and investing services, which, on top of investing insurance premiums, invest on behalf of other clients and offer corporate loans.

P&C insurers invest the premiums they receive from policyholders primarily into short-term assets, to match the average time frame of their liabilities. Fairfax and Intact place 70% and 82% respectively of their total investments in a combination of cash and cash equivalents, short-term notes, fixed-income securities, loans, and bonds.⁹⁹ The remaining assets are invested in equities and real estate.

Our conservative estimate of fossil fuel shares held by the larger Canadian P&C insurers and their parent companies in 2023 is \$19.5 billion. This sum is derived from either the self-reporting of companies, and if that is not available then from the 13F disclosures submitted to the U.S. Securities and Exchange Commission. Our calculations can be found [here](#).

However, 13F disclosures do not capture all of the institutions' fossil fuel financing. Only 41% of Fairfax's total invested assets are disclosed on the 13F form.¹⁰⁰ Similarly, TD's lending and underwriting to fossil fuels amounted to US\$20.6 billion in 2023,¹⁰¹ whereas only C\$14.5 billion in fossil fuel investments appeared in its 13F filing. Desjardins also reported over C\$1 billion in fossil fuel-related loans in 2023.¹⁰² Taking this additional data into account, the publicly available fossil fuel financing by the top seven Canadian property and casualty (P&C) insurers or their parent companies totaled over C\$33 billion in 2023.

Fairfax listed its top 26 investments in its 2023 annual report, with 10% of the invested value in fossil fuel companies. Fairfax owns a 48% stake in EXCO Resources (oil and gas) with a C\$587 million investment, invests C\$444 million in Occidental Petroleum, and C\$364 million in Mytilineos (gas-fired power).¹⁰³

Compared to its underwriting amounts, Fairfax almost doubles those in shares held of fossil fuel entities in 2023 at C\$1.5 billion.

97 All values are in CAD unless otherwise noted. USD values were converted at the BoC 2023 exchange rate of 1.3497.

TD stands out as the leading fossil fuel financier among insurers. This is because the TD parent company is larger and more complex compared to the parent companies of other insurers. Without TD's contribution, the estimated fossil fuel investments by insurers would total C\$5.6 billion.

While investments by parent organizations are greater than the direct funding from insurance entities, this data is meaningful as the parent companies control financial strategy, resource allocation for their subsidiaries, and investment decisions. This financial interdependence influences the capacity and viability of both the parent and insurance entity. Regulatory bodies also assess insurance companies within the context of their parent companies. Moreover, parent companies integrate climate risk into their strategic planning, which can enhance or harm subsidiaries' ability to manage these risks.

2.3 VOLUNTARY NET ZERO POLICIES

Globally, insurers are starting to recognize the need to accelerate actions to achieve net zero and join other financial institutions in setting industry standards for disclosure, commitments, and action plans.

For example, in April of 2024, the Zurich Insurance Group, a leading global insurer, announced fossil fuel restrictions, excluding the underwriting of new oil and gas extraction and metallurgical coal projects.¹⁰⁴ Zurich is the world's sixth biggest fossil fuel insurer, underwriting a similar amount in direct written premiums from fossil fuels as Fairfax.¹⁰⁵

Another global leading insurer, Aviva PLC, is a leader in voluntary net zero policy. The UK insurer provides a comprehensive overview of the company's ambition and action for its investments, underwriting, and operations. Its plan aligns with the Glasgow Financial Alliance for Net Zero transition plan guidance for financial institutions, and outlines a trajectory towards achieving net-zero across all scopes of emissions by 2040. Notably, Aviva demonstrates a commitment to regularly updating its plan, recognizing the imperative of immediate actions and the importance of ongoing adjustments to align with the ever-evolving industry standards and risk landscapes. Moreover, it incorporates policies that exert influence on governments and policy makers.

Many global P&C insurance companies have reduced their exposure to coal and other fossil fuels, as of 2024:¹⁰⁶

- 46 insurers have committed to end or restrict insurance services for coal.
- 26 insurers have committed to end or restrict underwriting for oil sands projects.
- 19 insurers have committed to end or restrict underwriting for Arctic fossil fuel development.
- 18 insurers have committed to end or restrict underwriting for oil and gas production, including some of the biggest global insurers (Allianz, Asr, Aviva, AXA, Chubb, Fidelis, Generali, Hannover Re, IAG, KBC, Mapfre, Munich Re, SCOR, Suncorp, Swiss Re, Talanx, Uniqa, and Zurich).
- At least 70 companies have committed to divest from the coal industry or end new investments in the sector and at least 16 have restricted investments in oil sands.

Some Canadian P&C insurers have started to follow suit, Definity, Desjardins, Co-operators, and Intact have an exclusion policy regarding some coal investments, and Desjardins and Intact have exclusions for some coal underwriting. Though there has been some progress, overall Canadian P&C insurers lack comprehensive credible transition plans.

Desjardins Insurance's coal underwriting policy is the strongest in Canada, stating, "it will not invest its own funds in, or provide financial products (including corporate financing, financial intermediation, loans and insurance) to companies that:

- Operate or develop coal mines.
- Have greater than 10%, or 5 GW, installed coal power generation capacity.
- Are building, extending or renovating coal mines, power plants or infrastructure."

Intact and Co-operators are the only Canadian Property & Casualty (P&C) insurers with a stance on oil and gas activities. Intact has committed to exclude Arctic oil and gas exploration, extraction, and production from its investment and underwriting portfolios.¹⁰⁷ Additionally, Intact will not underwrite standalone oil sands accounts. The company is also unique in its commitment to engaging with its underwriting clients to review their transition plans, focusing on emissions disclosure and net zero ambitions. Co-operators aligns with the Net-Zero Asset Owner Alliance's position on oil & gas, and does not invest directly in oil & gas infrastructure.

Besides Intact, Desjardins and Co-operators (through Addenda) have policies to engage with investees regarding their transition plans. Addenda, in particular, is a leader in this area, with a comprehensive transition plan aimed at achieving emissions reductions from portfolio companies and actively engaging investees to align with net zero goals.¹⁰⁸ Addenda does not exclude fossil fuels, however.

The voluntary policy behavior of the top seven actors is summarized in the table below.

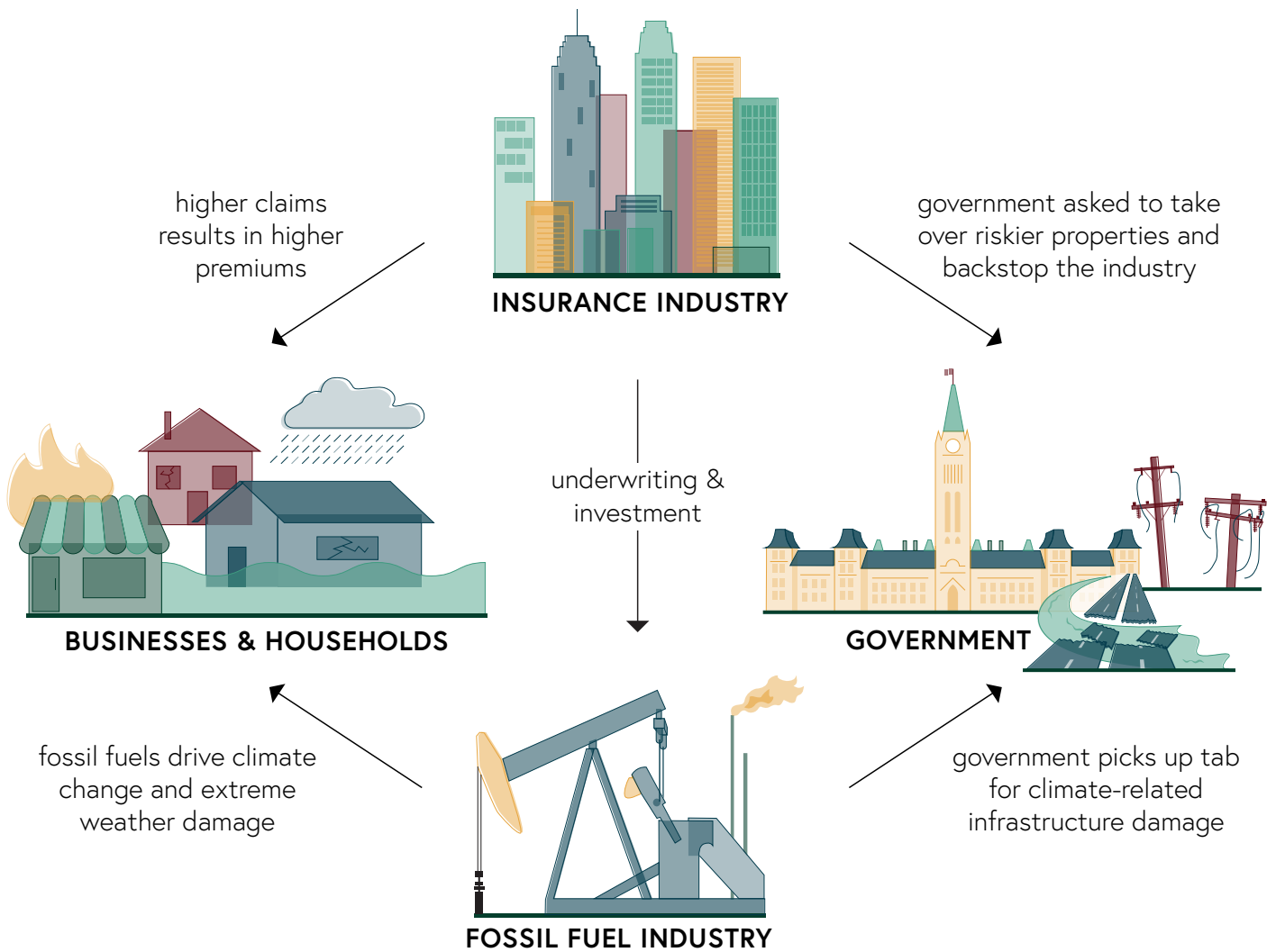
	INTACT	DESJARDINS	COOPERATORS	WAWANESA	DEFINITY	TD	FAIRFAX
UNDERWRITING							
Fossil Fuels \$M	N/A	N/A	N/A	N/A	N/A	N/A	809.8 ¹⁰⁹
Net Zero Commitment?	No	No	No	No	No	No	No
Exclusion Policy?	Multiple FF exclusions	Strong coal policy	No	No	No	No	No
Engagement Policy?	Yes	No	No	No	Weak	No	No
INVESTMENTS							
Fossil Fuels \$M	1,483.3 ¹¹⁰	298.7	0.4	N/A	0.3	15,472.4	1,538.8
Net Zero Commitment?	Yes	Yes	Yes	No	Yes	Yes	No
Exclusion Policy?	Multiple FF exclusions	Strong coal policy	Yes	No	Thermal coal mining exclusion	Weak	No
Engagement Policy?	Yes	Yes	Yes	No	No	Yes	No

109 Midpoint between estimated range of \$585 million and \$975 million.

110 Intact disclosed its fossil fuel investments decreased to \$742M as of its unaudited Q1 2024 disclosures.

The following diagram depicts the contradiction that while the P&C industry faces rising climate change driven claims, Canadian P&C insurers continue to support fossil fuel projects through billions of dollars in underwriting and investments, exacerbating climate risks. Notably, Fairfax is a major actor in this area, with significant involvement in underwriting fossil fuel projects around the world. Although some insurers like Intact have started implementing exclusion policies and engaging with clients on transition plans, the Canadian P&C industry as a whole lacks comprehensive and credible strategies to phase out fossil fuel support and align with net zero. More robust policies and greater transparency are needed to mitigate the industry's contribution to the climate crisis.

SPREADING CLIMATE RISK: INSURANCE AND FOSSIL FUEL DAMAGE



The insurance industry drives a damaging cycle, insuring and investing in the fossil fuel industry which causes climate change and damages from extreme weather. Higher resulting claims translate into higher premiums, and taxpayers also pick up the tab for infrastructure damages.

PART THREE — THE PATH FORWARD

The Canadian P&C insurance industry is at a crossroads, grappling with a contradiction that poses an existential threat to its future. Insurers are underwriting and investing in the fossil fuel sector which is driving climate change, in turn driving up insurance claims. Rather than addressing this root cause, the industry's main response to date has been to shift risk and costs onto consumers and taxpayers.

While some Canadian insurers have begun acknowledging climate risk and setting net-zero commitments, comprehensive and credible transition plans across the industry are needed, supported by regulatory mandates.

3.1 ROBUST TRANSITION PLANS

Robust climate transition plans from insurers are critical as governments and companies worldwide look to insurers to manage climate-related financial risks and support decarbonization. These plans should also adhere to just transition principles, ensuring that the shift away from fossil fuels is equitable and supports affected workers and communities.¹¹¹ This approach is particularly crucial in Canada, where the fossil fuel industry is a significant employer.

Guidance for credible climate transition plans is emerging from various sources, including:

- The Glasgow Financial Alliance for Net Zero (GFANZ) Transition Plans
- The UK Transition Plan Task Force's Insurance Sector Summary
- Finance Watch's Transition Planning for Insurers

Here is a summary of common elements that make up a robust transition plan:

1. SET TARGETS AND MEASURE PROGRESS

A plan begins with a clear sense of the destination. Establishing a 2050 net zero goal is a good signal of general intent, and this must then be complemented with shorter term targets and milestones to drive action today. For insurance companies, targets concern both financed emissions and insurance associated emissions (IAE). Here are key considerations:

- Measure and disclose progress towards targets using accepted methodologies, including reporting on an absolute emissions basis.
- Targets should be based on scenarios in line with 1.5 degrees, use specific sectoral pathways, and prioritize high-carbon sectors in target-setting
- Targets should account for all material forms of scope 3 emissions, including financed emissions and IAE.
- Set short (1-3 years) and medium (3-5 years) term targets to drive action today.
- If reporting emission removals or avoided emissions, disclose them separately from scope 1, 2, and 3 inventories.
- Consider certification of targets by the Science Based Targets initiative (SBTi).

Table 10. Resources for metric methodologies

CATEGORY	RESOURCES
Definition of portfolio company emissions	GHG Protocol ²⁵² and jurisdiction-specific guidance ²⁵³
Calculation of financed emissions	PCAF ^{254, 255}
Definition of physical and economic intensity metrics	SBTi, ²⁵⁶ TPI, ²⁵⁷ PCAF ²⁵⁸
Portfolio alignment metrics	PAT, ²⁵⁹ GFANZ, ²⁶⁰ SBTi, PACTA ²⁶¹
Selection of reference scenario and/or sectoral pathway	Sector-specific alliance guidance, ²⁶² GFANZ guidance, ²⁶³ IEA, ²⁶⁴ Mission Possible Partnership, ²⁶⁵ NGFS ²⁶⁶
Tracking and disclosure of use of carbon credits ²⁶⁷	SBTi, ²⁶⁸ Sector-specific alliance guidance, carbon markets initiatives ²⁶⁹

Source: Page 83, *Financial Institution Net-zero Transition Plans*

In addition to financed emissions metrics, disclosure of complementary metrics help triangulate whether a company is making progress. Such complementary metrics could include:

- Value of premiums related to energy efficiency and low carbon technology.
- Proportion and number of business lines with specific net-zero objectives.
- Proportion and number of clients who have set their own science-based targets and specific carbon reduction objectives.
- Exposure to carbon-related assets, as a percentage of underwriting and investing activity.

2. ESTABLISH A ROBUST PROGRAM OF POLICIES AND ACTIVITIES TO REACH TARGETS

With targets in place, insurance companies need a set of policies and activities to achieve them. Transition activities generally fall into four categories:

- Portfolio realignment
- Client/investee transformation
- Climate solutions promotion
- Public policy lobbying

Portfolio alignment is about the choices a company makes regarding who its clients and investees are. An insurance company being in alignment with net zero necessitates a client and investee base that are also net zero aligned.

Portfolio alignment is most important for high carbon clients and investees. Some may have a reasonable transition pathway, while others — particularly those currently expanding oil and gas or failing to phase out coal within a few years — do not. Such business relationships are candidates for elimination.

For example, Aviva no longer offers insurance for new coal-fired power stations or thermal coal mines.¹¹² Allianz no longer issues new single-site policies or funding for projects in exploration and development of new oil and new gas fields, construction of new midstream infrastructure related to oil, construction of new oil power plants, Arctic and Antarctic oil, coal-bed methane, extra-heavy oil and oil sands, as well as ultra-deep sea oil.¹¹³

No insurance company with a net zero commitment should be underwriting any fossil fuel expansion projects.

Client/investee transformation concerns an active program to press misaligned clients and investees to align on a timeline consistent with the targets that the insurance company has set. Insurance companies have an opportunity to engage both clients and investees, with an escalation strategy that begins with sharing information about climate targets, and moves through phases promoting alignment, with clarity regarding time-bound consequences, including divestment.

The life insurer NatWest, for example, combines client/investee transformation with portfolio alignment with its commitment to "stop lending and underwriting to all major oil and gas producers unless they have a credible transition plan aligned with the 2015 Paris Agreement in place by the end of 2021."¹¹⁴

Aviva Investors have also launched a climate engagement escalation program targeting 30 major carbon emitters responsible for 30% of global scope 3 emissions.¹¹⁵ They warned companies that they may vote against Directors' re-election if adequate climate plans are not made, and might divest from non-compliant companies within two years.

Climate solutions promotion concerns the active encouragement of emissions reducing activities by an insurance company via its underwriting and investing activities. This may include:

- Underwriting or financing clean energy, low-emission technologies and nature-based solutions to accelerate the net-zero transition.
- Underwriting or financing entities committed to 1.5°C-aligned pathways with robust net-zero plans.
- Underwriting or financing projects of early retirement of high-emitting assets to reduce emissions.

While there is a trend for insurers to cancel coverage for property owners in climate vulnerable areas, this can create a coverage gap for clean energy projects and hinder investment in the energy transition.¹¹⁶

The insurance industry has led on standard setting for transition before, for example during electrification.¹¹⁷ That leadership is necessary now, to backstop the energy transition. By 2030, the market for new insurance in new energy infrastructure is projected to reach US\$10-15 billion.¹¹⁸

Finally, an insurance company's **public policy lobbying** should promote its net zero commitment, including publicly calling for and supporting specific measures that governments enact to reduce emissions. This should extend to memberships in industry associations, which should also be aligned with this goal.

Good public policy disclosure practices can help. Disclosures should include a summary of lobbying activities, including topics and positions taken and details on outcomes. Memberships in industry associations should also be disclosed, with an account of the lobbying positions and activities of those associations, and efforts to align those with the net zero goals of the company.

Insurers can refer to Ceres' Blueprint for Responsible Policy Engagement on Climate Change for guidance on auditing lobbying positions and systematizing decision-making on public policy engagement, Influence Map's LobbyMap Methodology to assess financial institutions' lobbying activities, and The Global Standard on Responsible Climate Lobbying.¹¹⁹

An example of aligned public policy lobbying is from Aviva. Aviva Investors' CEO wrote to 37 finance ministers and central bank governors for countries whose sovereign debt the company held, asking for their active participation in climate change and biodiversity investment ambitions.¹²⁰

3. ACCOUNTABILITY ON PROGRESS THROUGH CLEAR MANAGEMENT RESPONSIBILITY, CAPABILITIES, AND INCENTIVES.

Transition plans work when they are a core part of routine company decision making. Companies should recruit Board members and senior management with climate expertise and assign them relevant roles to oversee and implement the transition plan. Remuneration incentives should be designed to reward progress towards climate goals, revising those that are working at cross-purposes by rewarding high-carbon business relationships. Training and education should be provided at all levels of the organization.

Good disclosure can also help in this regard. Relevant metrics may include the number of training sessions completed by employees, Board members, and management with specific responsibilities in the net-zero transition plan, and the number of individuals, including at senior levels, with remuneration linked to progress against and achievement of targets.¹²¹

3.2 REGULATORY ACTION

The collapse of the Net-Zero Insurance Alliance in May 2023 highlights the fragility of voluntary action by the insurance industry. Moreover, as the Canadian insurance industry seeks to offload climate risk to the government, taxpayers are right to demand that the industry stop contributing to that risk via its fossil fuel activities, and to ensure this happens via regulation.

Canadian P&C companies are currently regulated to safeguard against undue risk exposure, restricting investment across activities such as commercial lending, property, and equities.¹²² However, the current regulatory framework falls short in adequately addressing the increasing risk associated with climate change.

Provincial regulators, primarily strengthened by the industry association Canadian Council of Insurance Regulators (CCIR), could strengthen consumer access to climate-risk data such as mandating widespread dissemination of flood maps to prospective homeowners.

Additionally, provincial regulators could address the short-term practice of annual risk repricing, which has been called out for being inadequate for addressing the climate transition.¹²³ Insuring with one-year terms prevents meaningful climate action that considers long-term risks and impacts. Provincial regulators have the authority to influence insurance contractual requirements, compelling insurers to integrate a long-term perspective on climate into their risk assessments.

At the federal level, the Office of the Superintendent of Financial Institutions (OSFI) is the industry's primary prudential regulator. In 2023, OSFI adopted *Guideline B-15: Climate Risk Management*, which applies to federally-regulated financial institutions, including insurance companies and banks.

Under B-15, insurers are expected to publicly disclose scope 3 financed-emissions and insurance-associated emissions as at fiscal year-end 2025, to go live in 2026.¹²⁴ OSFI is requiring financial companies to file climate risk returns, but these will be kept confidential. Moreover, B-15 also requires that financial companies have a climate transition plan. Unfortunately, OSFI does not determine what should be in such a plan in order to make it credible, instead only signaling to guidance from TCFD, nor does it spell out consequences for transition failure.

OSFI is also engaging in a Standardized Climate Scenario Exercise for federally-regulated financial institutions, including insurance companies.¹²⁵ The current draft exercise will require companies to analyze transition risk and conduct physical risk exposure assessments on parts of their investment and underwriting portfolios.

Ultimately, Canadian regulatory action needs to deal with the perverse incentives driving up climate risk in the insurance sector. As long as P&C companies can profit from underwriting and investing in fossil fuels while offloading the risk and costs resulting from climate damage, they will continue driving that destructive cycle. Regulators need to use prudential capital requirements to change these incentives.

Here are the two ways that regulators can best align insurers with their net zero commitments:

1. REALIGN INCENTIVES REGARDING FOSSIL FUEL FINANCING

The International Association of Insurance Supervisors (IAIS), a global standard-setting body, states that, "an adequate response from supervisors to climate-related risks will support the objectives of insurance supervision of protecting policyholders, contributing to financial stability and promoting the maintenance of a fair, safe and stable insurance market."¹²⁶

Currently, IAIS suggests that insurers consider how investment decisions, especially at a large scale, could in turn also negatively impact climate change, potentially leading to financial impacts on insurers' investments.^{127 128}

Regulatory action can foster this consideration by enhancing prudential capital requirements for insurers to account for the climate-related financial risks of fossil fuel-related financing and investments.¹²⁹ This can be done through introducing a macroprudential tool, such as a capital surcharge for fossil fuel exposures at risk of stranding.¹³⁰

2. MANDATE PUBLIC DISCLOSURE OF DETAILED TRANSITION PLANS

B-15 should mandate the disclosure of detailed climate transition plans. By mandating detailed public disclosure, regulators can enhance prudential risk management, provide legal certainty, and level the playing field across the industry.

B-15 should require that transition plans comprehensively cover investment and underwriting activities, have credible short and medium-term targets based in science, monitor progress towards these targets, and evaluate the speed of implementation, reasons for deviations, and corrective actions.¹³¹ OSFI should outline penalties on insurers failing to meet their net-zero objectives, ensuring accountability and adherence to transition plans.¹³²

Clear, standardized definitions and frameworks for transition plans should be in line with guidelines from international bodies such as the UK Transition Plan Taskforce and emerging IAIS guidance.

CONCLUSION

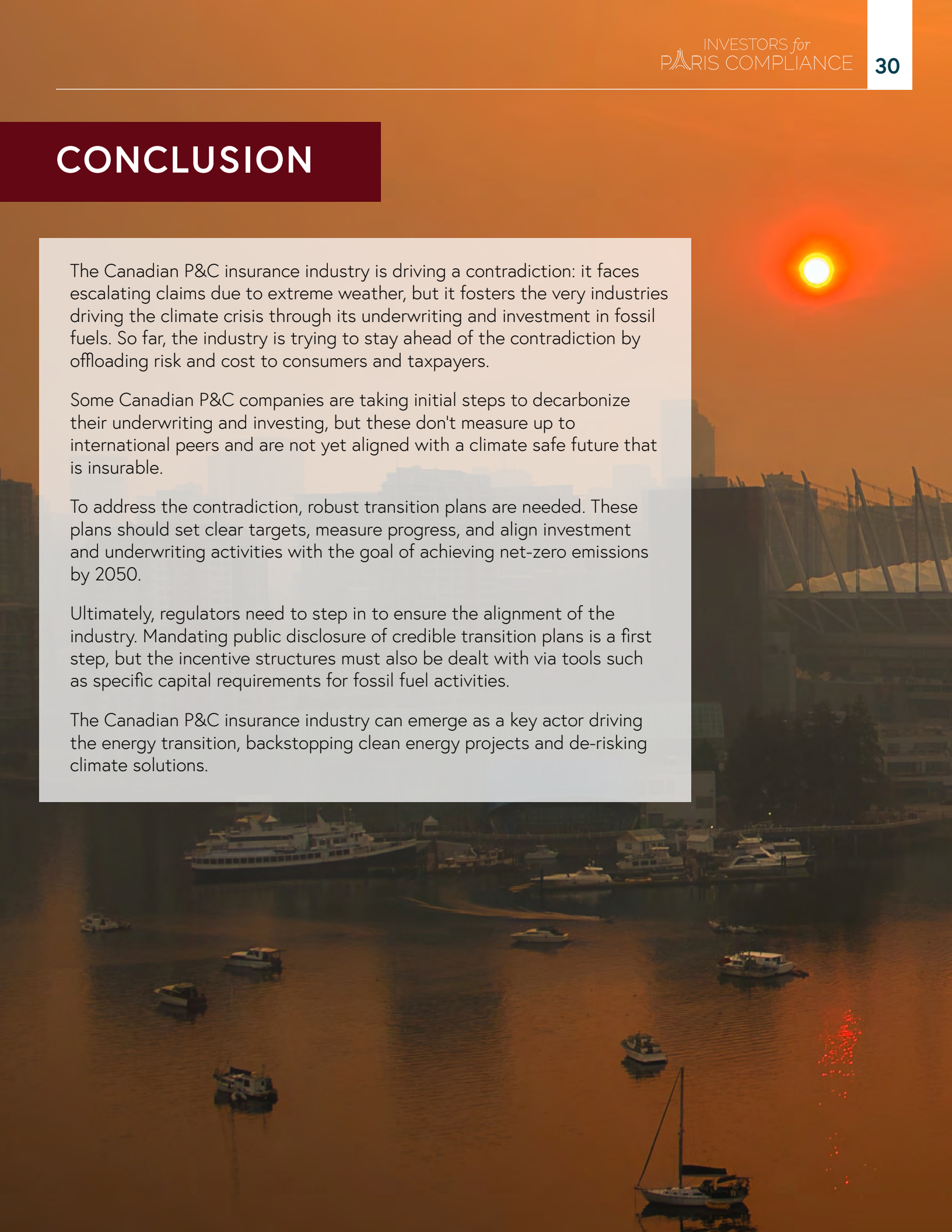
The Canadian P&C insurance industry is driving a contradiction: it faces escalating claims due to extreme weather, but it fosters the very industries driving the climate crisis through its underwriting and investment in fossil fuels. So far, the industry is trying to stay ahead of the contradiction by offloading risk and cost to consumers and taxpayers.

Some Canadian P&C companies are taking initial steps to decarbonize their underwriting and investing, but these don't measure up to international peers and are not yet aligned with a climate safe future that is insurable.

To address the contradiction, robust transition plans are needed. These plans should set clear targets, measure progress, and align investment and underwriting activities with the goal of achieving net-zero emissions by 2050.

Ultimately, regulators need to step in to ensure the alignment of the industry. Mandating public disclosure of credible transition plans is a first step, but the incentive structures must also be dealt with via tools such as specific capital requirements for fossil fuel activities.

The Canadian P&C insurance industry can emerge as a key actor driving the energy transition, backstopping clean energy projects and de-risking climate solutions.



END NOTES

- 1 IPCC, [Climate Change 2023 Report](#) (Mar, 2023);
- 2 BBC, [Climate change is fuelling the US insurance problem](#) (Mar, 2024).
- 3 BBC, [Climate change is fuelling the US insurance problem](#) (Mar, 2024). Insurance Bureau of Canada, [2023 Facts of the Property and Casualty Insurance Industry in Canada](#) (Nov. 2023); Canadian Underwriter, [July 2023 Annual Statistical Guide](#) (July, 2023).
- 4 According to the Canadian Underwriter July 2023 Statistical Guide, the top 10 insurers in Canada by Net Premiums Written are Intact Financial, Lloyds Underwriters, Desjardins, Cooperators, Wawanesa, Definity, Security National (TD), Northbridge (Fairfax), Allstate, and Beneva Group. For the purposes of this report, only insurers with headquarters in Canada were assessed. If the listed company was a subsidiary, then the overall parent company was assessed. Insurers with less than C\$2 billion premiums written, in 2022, were not assessed, resulting in the top seven list of P&C insurers listed above, representing over 50% of the market.
- 5 Bloomberg, ['Canada is becoming a riskier place to insure,' says IBC vice president](#) (Aug, 2023).
- 6 Ibid, Page 11.
- 8 IBC, [Severe Weather in 2022 Caused \\$3.1 Billion in Insured Damage — making it the 3rd Worst Year for Insured Damage in Canadian History](#) (Jan, 2023).
- 9 Canadian Underwriter, [Is Fort McMurray still insurable?](#) (Apr, 2024); Canadian Climate Institute, [Tip of the iceberg](#)
- 10 Canadian Climate Institute, [Tip of the iceberg](#)
- 11 IBC, [Severe Weather in 2023 Caused Over \\$3.1 Billion in Insured Damage](#) (Jan, 2024).
- 12 Ibid.
- 13 Financial Post, [Intact Financial Catastrophe Losses Reach Almost Half Billion](#) (July, 2023).
- 14 IBC, [Severe Weather in 2023 Caused Over \\$3.1 Billion in Insured Damage](#) (Jan, 2024).
- 15 Ibid.
- 16 Ibid.
- 17 National Observer, [Northwest Territories evacuation could soon lift as fires shift](#) (Aug, 2023).
- 18 IBC, [Western Canada deep freeze causes over \\$180 million in insured damage](#) (Mar, 2024).
- 19 Narwhal, [Western Canada is on fire - again](#) (May, 2024)
- 20 NBC News, [Canadian wildfires trigger air quality alerts across 4 U.S. States](#) (May, 2024)
- 21 New York Times, [Logging in Canada's Most Famous National Park to Save It From Wildfires](#) (May, 2024)
- 22 Government of Canada, [Environment and Climate Change Canada's Canadian Hurricane Centre expects a very active hurricane season](#) (May, 2024).
- 23 City News, [Canada's insurance industry warns of higher rates, denied claims as climate crisis persists](#) (Aug, 2023).
- 24 Statistics Canada, [Consumer Price Index \(filtered for Home Insurance and Mortgage Insurance\)](#).
- 25 Canadian Underwriter, [How home insurance premiums are trending](#) (Mar, 2024).
- 26 Canadian Underwriter, [Home and auto rates harden in 2024 Q1](#) (May, 2024).
- 27 CBC, [Extreme weather causing billions of dollars in damage, driving up insurance premiums: StatsCan](#) (May, 2024).
- 28 Canadian Underwriter, [Cats scratch Intact's bottom line in 2023](#) (Feb, 2024).
- 29 Intact Financial Corporation, [Annual Report](#) (Mar, 2024) Page 61.
- 30 Fairfax Financial, [Fairfax Declares Annual Dividend](#) (Jan, 2024).
- 31 Fairfax Financial, [Letters To Our Shareholders](#) (Mar, 2024).
- 32 Forbes, [Why The Insurance Industry Must Wake Up To The Harsh Reality Of Climate Change](#) (Mar, 2024).
- 33 Insurance Bureau of Canada, [Severe Weather in 2023 Caused Over \\$3.1 Billion in Insured Damage](#) (Jan, 2024).
- 34 Canadian Underwriter, [Six to 10% of Canadian homes aren't insurable for flooding, industry stats show](#) (Mar, 2023).
- 35 Ibid.
- 36 Financial Post, [Rising water: Quebec lender ending new mortgages in flood zones 'just the beginning'](#) (Mar, 2024).
- 37 National Observer, [Keeping new homes out of harm's way](#) (Mar, 2024).
- 38 CBC, [Homeowners in Île-Bizard 'panicked' after Desjardins cuts mortgages in some flood zones](#) (Feb, 2024); Global News, [Montreal homeowners respond as Desjardins eliminates new mortgages in flood zones](#) (Feb, 2024).
- 39 Saanich News, [Quebec lender ending new mortgages in flood zones 'just the beginning'](#) (Mar, 2024)
- 40 Globe and Mail, [Do you need flood insurance? As deluges become more common, here's what home owners should know](#) (Nov, 2021).
- 41 Insurance Business, [Home insurance prices in Canada continue to face climate change pressures](#) (Jun, 2024).
- 42 Canadian Climate Institute, [Turning the tide](#) (Jan, 2024); National Observer, [When water comes a-knockin'](#) (Mar, 2024).
- 43 Intact Centre on Climate Adaptation, [Treading water: impact of catastrophic flooding on Canada's housing market](#) (Feb, 2022).

- 44 CBC, [Wildfires have lit up home insurance costs. So what's needed to spark an interest in fireproofing?](#) (Oct, 2023)
- 45 CTV, [Carleton Place, Ont. homeowners facing sky-high home insurance increases](#) (Mar, 2024).
- 46 CBC, [In face of extreme weather, Canadians increasingly turn to crowdfunding for help](#) (May, 2024).
- 47 Ibid.
- 48 CBC, [Wildfires stop sales of new auto, home insurance policies well outside evacuation zones in N.S.](#) (June, 2023).
- 49 Insurance Business, [Pulling back from cat-exposed areas 'not the right solution' for Aviva Canada](#) (Mar, 2024).; Timmins Today, [Active spring wildfire season may be in store for B.C. as drought persists](#) (Mar, 2024).
- 50 Ibid.
- 51 Co-operators, [Prevent water damage](#) (Accessed site May 2024).
- 52 Globe and Mail, [Property insurer Intact rolls out pilot project to fireproof homes when wildfires are near](#) (May, 2024).
- 53 Insurance Bureau of Canada, [Helping to protect Canadians and build resilient communities](#) (Accessed site May 2024).
- 54 Insurance Bureau of Canada, [The Cost of Climate Adaptation](#) (Sept, 2019).
- 55 Insurance Bureau of Canada, [It's time for the federal government to launch the National Flood Insurance Program](#) (Accessed site May 2024). ; University of Waterloo, [Experts address gaps in proposed flood insurance program](#) (May, 2024).
- 56 Insurance Bureau of Canada, [IBC welcomes the federal government's leadership on Canada's first National Flood Insurance Program](#) (Mar, 2023).
- 57 Public Safety, [Adapting to Rising Flood Risk: 6.3 Insurance Models for Actuarial Costing](#) (Aug, 2022); Waterloo Climate Institute, [Maximizing the public value of Canada's new flood insurance program](#) (May, 2024).
- 58 Public Safety, [Adapting to Rising Flood Risk: 6.3 Insurance Models for Actuarial Costing](#) (Aug, 2022). ; Waterloo Climate Institute, [Maximizing the public value of Canada's new flood insurance program](#) (May, 2024).
- 59 Ibid.
- 60 CTV News, [By the numbers: Canada's disaster financial assistance program](#) (Mar, 2024).
- 61 CBC, [Federal disaster aid for 2021 B.C. floods taking too long: MP](#) (Mar, 2024).
- 62 CBC, [Insurers and claimants under strain as weather-related disasters mount in B.C.](#) (Mar, 2024).
- 63 Government of Canada, [Building stronger, more climate-resilient communities](#) (June, 2024).
- 64 Globe and Mail, [Ottawa rolls out \\$530-million fund to help municipalities adapt to climate change](#) (June, 2024).
- 65 FCM, [Investing in Canada's future: The cost of climate adaptation](#) (Feb, 2020).
- 66 Global News, [B.C. highway flood repair costs expected to balloon to \\$1 billion](#) (Feb, 2023).
- 67 Globe and Mail, [Cost of rebuilding B.C. after flooding nears \\$9-billion](#) (Feb, 2022).
- 68 Canadian Institute for Climate Choices, [The Costs of Climate Change for Canada's Infrastructure](#) (Sep, 2021).
- 69 OSFI, [Preserving confidence in Canada's financial system](#) (Sep, 2023).
- 70 Financial Post, [Major disaster could pose 'systemic' problem for insurance industry, warns OSFI head](#) (Feb, 2024).
- 71 Orlando Weekly, [Citizens Insurance, Florida's insurer of 'last resort,' adds 4,000 policies](#) (Apr, 2024).
- 72 The Bee, [California's property insurer of last resort adds record number of policies in February](#) (Apr, 2024).
- 73 FT, [The uninsurable world: what climate change is costing homeowners](#) (Feb, 2024).
- 74 Bloomberg, [Australia Insurance Head Sounds Alert on Spiraling Climate Costs](#) (Nov, 2023).
- 75 The Guardian, [Why insurance premiums are squeezing Australians and fuelling inflation](#) (Feb, 2024).
- 76 Public Citizen, [Hurricanes, Severe Weather, Climate Change, and an Unfolding Insurance Crisis](#) (May, 2024).
- 77 New York Times, [As Insurers Around the U.S. Bleed Cash From Climate Shocks, Homeowners Lose](#) (May, 2024).
- 78 Ibid.
- 79 Axios, [Homeowner's insurance policy terms tighten as Louisiana loosens regulations](#) (May, 2024).
- 80 Financial Times, [The Uninsurable World](#) (June, 2024).
- 81 Canadian Underwriter, [What P&C execs predicts for 2024 reinsurance rates](#) (Oct. 2023).
- 82 Financial Times, [The Uninsurable World](#) (June, 2024).
- 83 Ibid.
- 84 Ibid.
- 85 Insure our Future, [Fifty Years of Climate Failure](#) (Nov, 2023).
- 86 Ibid. Canadian exchange rate for 2022 applied at 1.3.
- 87 Canada Energy Regulator, [REGDOCS](#) (Search "Northbridge").
- 88 Insure our Future, [Fueling Climate Change The Insurers Behind Brazil's Offshore Oil Expansion](#) (Jan, 2022).
- 89 IEA, [Coal in Net Zero Transitions](#) (Nov, 2022).
- 90 Insure our Future, [The Coal Insurers of Last Resort](#) (Jun, 2022).
- 91 Allied World, [Social Impact](#) (2023).
- 92 Canada Energy Regulator, [REGDOCS](#) (Search "Royal Sun").
- 93 Western Financial Group, [Oil and Gas](#).
- 94 Wawanesa Insurance, [Oilfield Insurance](#).
- 95 Economical group, [Oil and Gas](#).
- 98 Fairfax Financial, [2023 Annual Report](#).
- 99 Fairfax Financial, [2023 Annual Report](#); Intact Financial, [2023 Annual Report](#).
- 100 Fairfax Financial, [2023 Annual Report](#).
- 101 RAN, [Banking on Climate Chaos](#) (May, 2024).
- 102 Desjardins, [2023 Annual Report](#) Page 69.

- 103 Fairfax Financial, [Letters To Our Shareholders](#) (Mar, 2024).
- 104 Bloomberg, [Zurich Insurance to Halt Coverage of New Fossil-Fuel Exposures](#) (Apr, 2024).
- 105 Insure our Future, [Fifty Years of Climate Failure](#) (Nov, 2023).
- 106 Insure Our Future, [Insurance Company Fossil Fuel Underwriting Policy Overview](#) (Mar, 2024).
- 107 Intact Financial Corporation, [2023 Social Impact & ESG Report](#) Page 56
- 108 Addenda Capital, [Profit with Purpose](#).
- 111 GFANZ, [Financial Institution Net-zero Transition Plans](#) (Nov, 2022).
- 112 GFANZ, [Financial Institution Net-zero Transition Plans](#) (Nov, 2022).
- 113 Ibid.
- 114 Finance Watch, [Transition Planning for Insurers](#) (Apr, 2024).
- 115 Ibid.
- 116 FT, [Why insurance is key to speeding up the energy transition](#) (May, 2024).
- 117 Ibid.
- 118 Ibid.
- 119 GFANZ, [Financial Institution Net-zero Transition Plans](#) (Nov, 2022).
- 120 Aviva, [Climate-related Financial Disclosure 2022](#) (July, 2023) Page 42.
- 121 GFANZ, [Measuring Portfolio Alignment: Driving Enhancement, Convergence, and Adoption](#) (Nov, 2022)
- 122 Government of Canada, [Insurance Companies Act](#) (May, 2024); OSFI, [Prudent Person Approach](#).
- 123 Howden Group & Boston Consulting Group, [The bigger picture](#) (June, 2024).
- 124 OSFI, [B15, p 10, Ch 2, ss 1-2]
- 125 OSFI, [OSFI announces second phase of the Standardized Climate Scenario Exercise consultation, April 2024.](#); OSFI, [Standardized Climate Scenario Exercise – Draft for consultation](#) (2024).
- 126 IAIS, [IAIS launches public consultation on climate risk supervisory guidance](#) (Nov, 2023).
- 127 IAIS, [Climate Risk Consultation Package 3 - Proposed supporting material to reflect climate risk](#) (Mar, 2024).
- 128 Ibid.
- 129 Finance Watch, [A guide to the next sustainable finance agenda](#) (Jan, 2024).
- 130 Ibid.
- 131 Finance Watch, [A guide to the next sustainable finance agenda](#) (Jan, 2024).
- 132 Ibid.
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