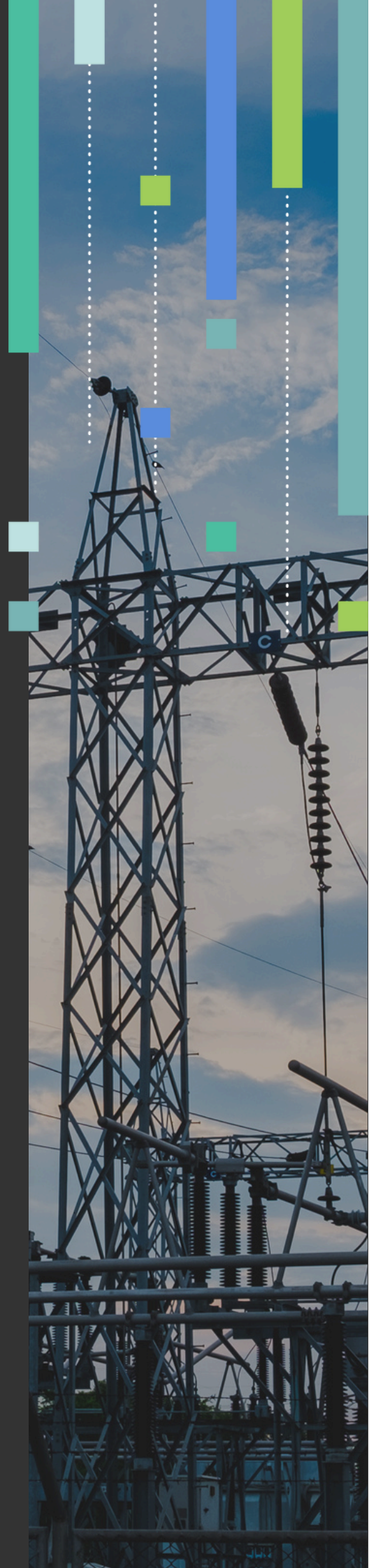


Quantifying Climate Transition Risk in Canadian Utilities

Scenario-Based Insights from
the Asset Level Up

July 2025



Introduction

Transition risk is fast becoming a boardroom priority for Canada's utility companies. As the federal Net Zero mandate exerts increasing pressure on them, firms must rethink strategies to stay ahead of regulatory, technological, and societal change, or risk significant financial and reputational exposure. For investors, a central question emerges: **are companies on track to transition, or not?**

While there are several ways to assess a company's transition readiness, asset- and technology-level data enables a detailed and forward-looking view of each firm's operations, decarbonization capabilities, and CapEx plans. This granularity allows investors to move beyond sector averages or high-level disclosures and gain insight into what is actually happening on the ground, asset by asset and technology by technology, supporting targeted engagement and capital allocation.

In this spotlight, we examine three major Canadian utility companies: Fortis, Capital Power, and Emera. Each, a key player in the national energy landscape, with different geographic asset exposures within Canada, market structure (regulated vs. deregulated), and operational history.

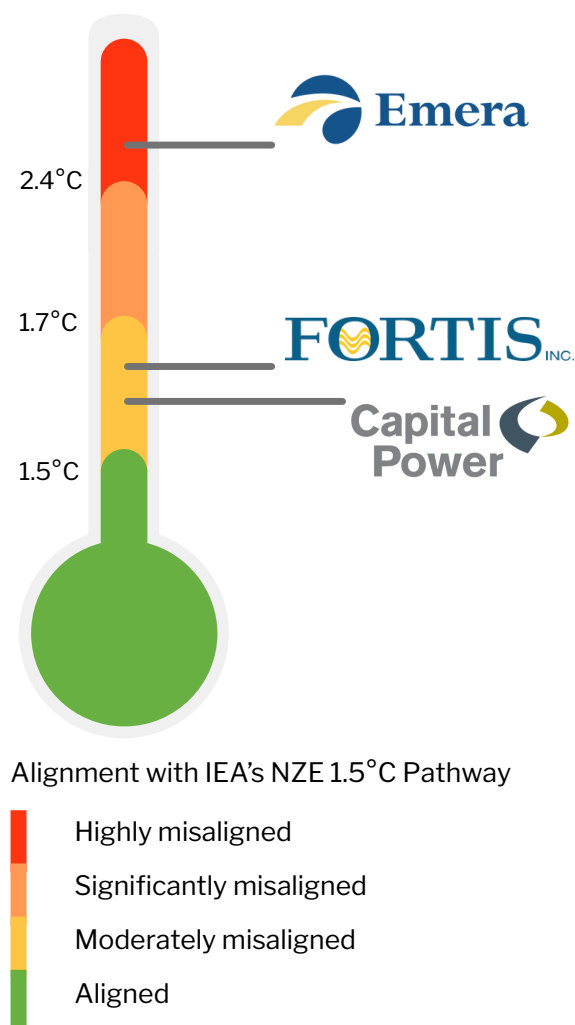
We begin by analyzing each company's Implied Temperature Rise (ITR) using Asset Impact's data, mapped against scenarios in the IEA's World Energy Outlook. Alignment metrics like ITR provide a benchmark for assessing whether companies are currently on a 1.5°C-aligned trajectory, or if they must undergo significant transformation to meet that goal.

We evaluate how each company's projected absolute emissions based on our asset-level data - and consolidating on a financial control basis - compare with the IEA's Net Zero Emissions Scenario (NZE), Announced Pledges Scenario (APS), and Stated Policies Scenario (STEPS).

We then conduct a detailed review of their electricity capacity mix, leveraging our forward-looking, asset-level technology forecasts to estimate the degree of alignment with each pathway.

Finally, we zoom in on Fortis, comparing its disclosed decarbonization targets with scenario-aligned benchmarks and our own granular forecasts. This offers a clearer picture of the credibility and ambition behind its transition strategy.

Implied temperature rise



The ITR is calculated using an aggregate value with the base year 2022 vs. 2029 end year

Source: Asset Impact

Emissions Spotlight

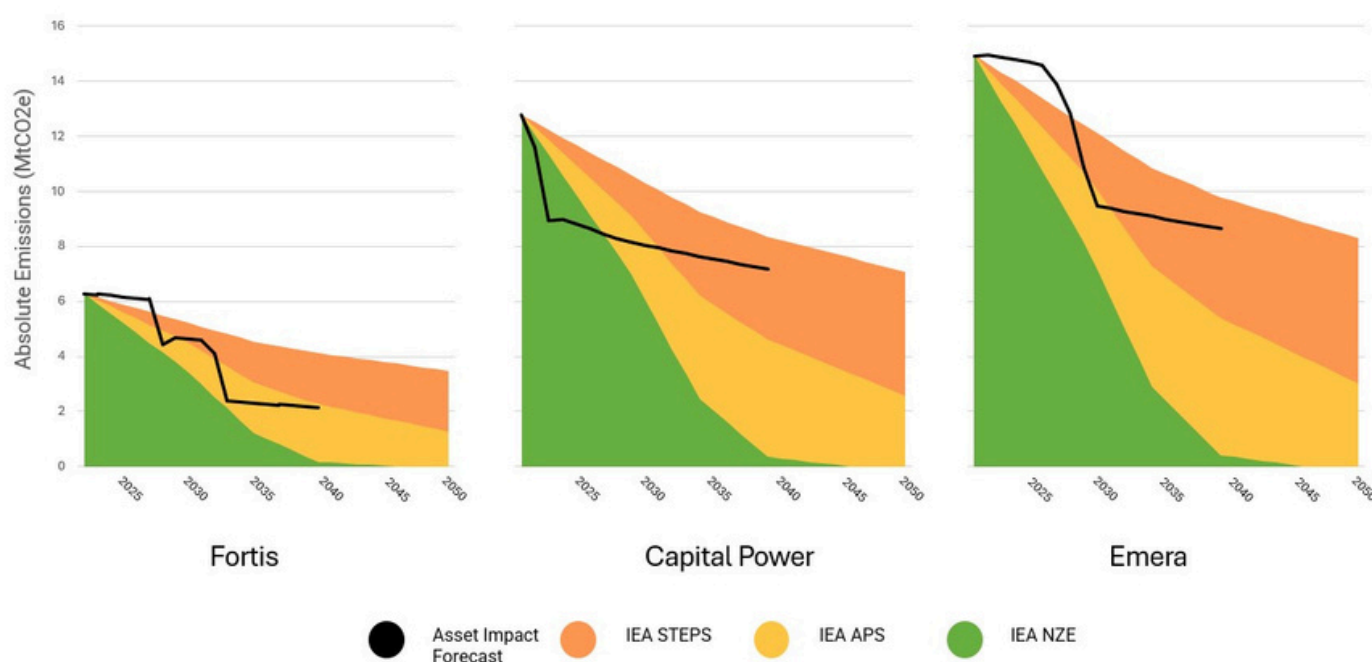
Emissions data forms the foundation of any climate scenario analysis. It provides a baseline for assessing current conditions and helps determine the starting point for future scenarios. But, to really understand how a company aligns with a given pathway or whether it is likely to achieve its stated objectives, granular forecasts – rather than sector averages – are imperative.

At Asset Impact, we use our asset-based approach to provide forward-looking emissions forecasts grounded in asset-level public disclosures and proprietary and third-party production modeling to offer a transparent and detailed view of a company's trajectory. This provides insights into how Fortis, Capital Power, and Emera perform against key IEA pathways on an absolute emissions basis, and whether they are really making progress towards a low-carbon economy. In our full product we also include the long- and short-term NGFS Scenarios and regional pathways.

Our data shows that all three companies are projected to reduce their emissions, however the scale and pace differs. Fortis delays meaningful reductions until around 2027, after which it will reduce sharply, whereas Capital Power begins to reduce emissions rapidly in the near term before plateauing later in the decade. Highlighting the need for longer term forecasts for deeper engagement with companies around resource planning and allocation. Emera follows a similar delayed path to Fortis, ramping up decarbonization only towards the end of the decade to align with the IEA's less ambitious climate pathways.

These differing emissions trajectories reflect each company's distinct transition strategy. In the next section, we will examine how each firm's installed power base is evolving year over year – focusing on coal, gas, and renewables, showcasing the operational changes driving emissions.

Absolute emissions



Source: Asset Impact

Electricity Mix Outlook

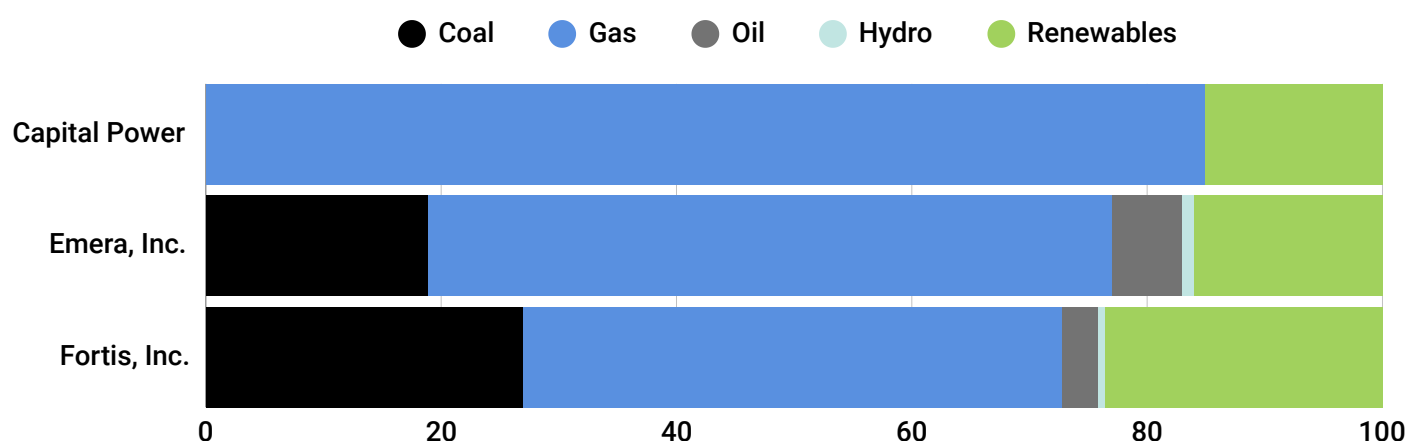
Underpinning our emissions data is asset-level intelligence which takes into consideration information on asset characteristics by sector and technology. In the power sector, we drill down to the power source and installed capacity for each unit within a power plant. After integrating regional load factors, we model annual power generation taking into consideration the asset's unique characteristics, such as age and condition.

Our forecasts are based on expected power plant commissioning and retirement years, and account for any temporary suspensions of normal activity (e.g. for maintenance or retrofits).

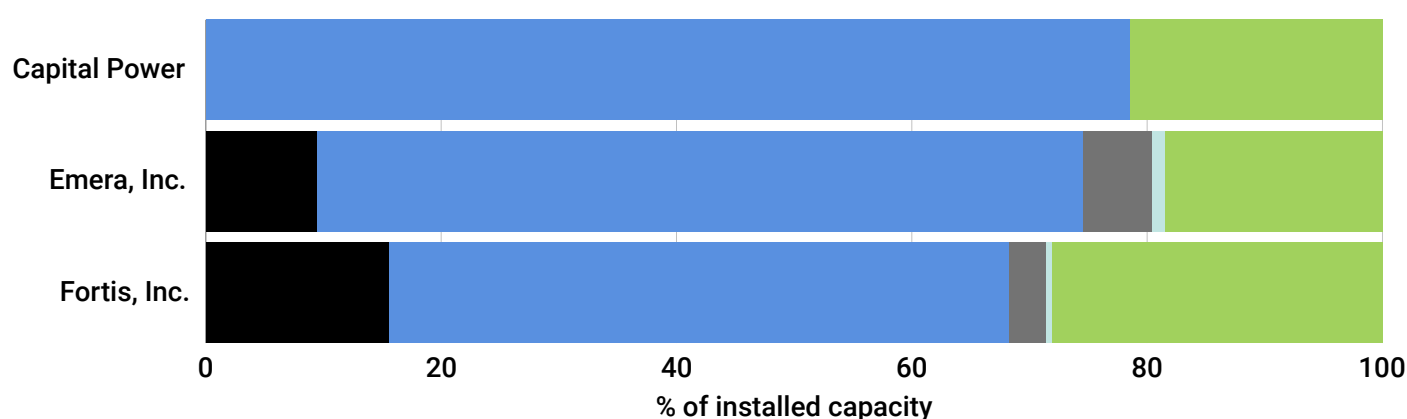
Below we've broken out Fortis, Capital Power, and Emera's technology mix of capacity on a 2024 vs 2030 (%) basis. The breakdown shows several shifts, most notably a shift away from coal, accompanied by an increase in natural gas capacity.

With policy shifts, such as the implementation of Canada's Clean Electricity Regulations (CER) which progressively limits emissions from fossil fuel-based sources, including natural gas, from 2035 onwards, utilities like Fortis, Emera, and Capital Power must adjust their energy mix in the coming years to avoid costly fines and penalties. This includes prioritizing low carbon sources and renewable energy development to ensure reliability, security, and competitiveness of supply.

2024



2030



Source: Asset Impact, Enerdata, GEM

Coal

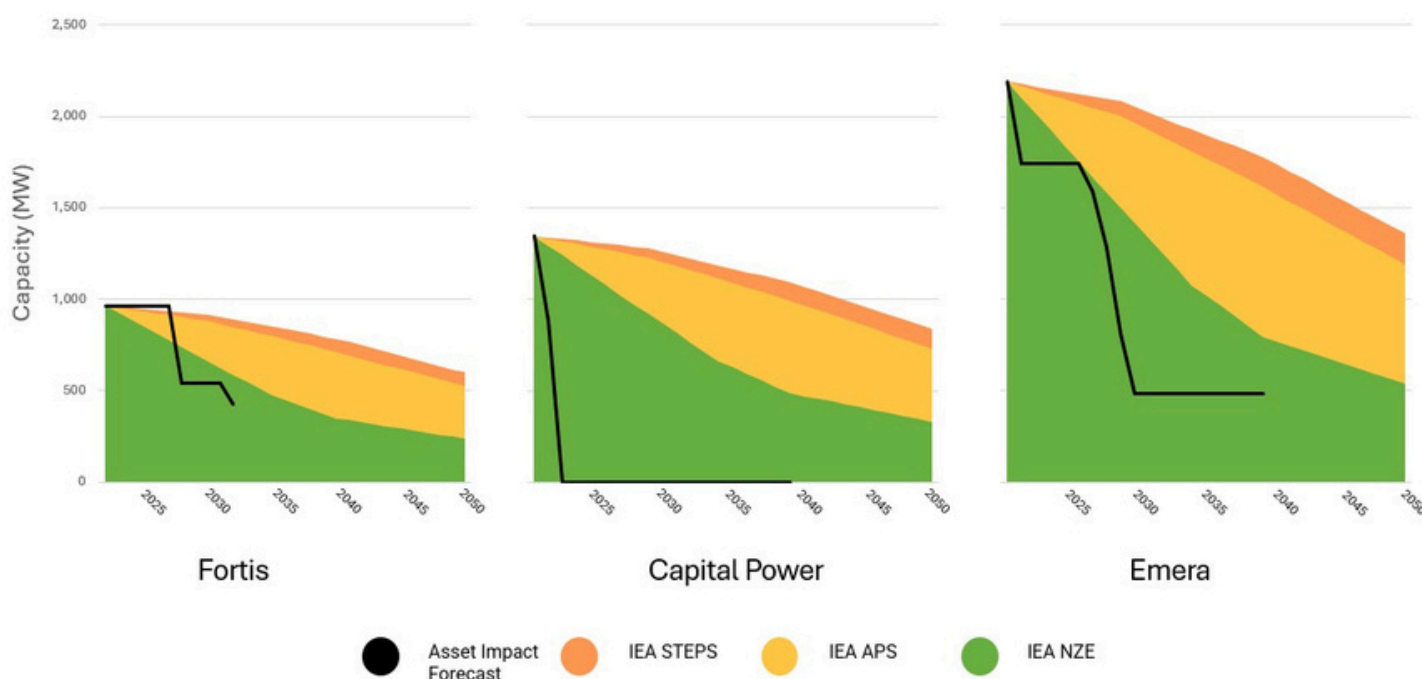
Accelerating the retirement of coal capacity is a key way for utilities to decarbonize their operations and meet country-level targets, such as Canada's goal for a complete phase-out by 2030. However, Fortis and Emera are currently expected to fail to meet national targets, likely due to surging electricity demand from data centers, manufacturing, and consumers.

On the other hand, Capital Power has successfully completed a full phaseout of coal at its Genesee

Generating Station, but it has done so by transitioning to 100% natural gas-fueled operations at the plant.

While there is a clear trend towards phasing out coal, the persistent reliance on coal-fired power plants as a source of baseload power reflects the ongoing challenges of meeting growing energy demand while transitioning to a fully renewable energy grid.

Technology: Coal



Source: Asset Impact, Enerdata, GEM

Natural Gas

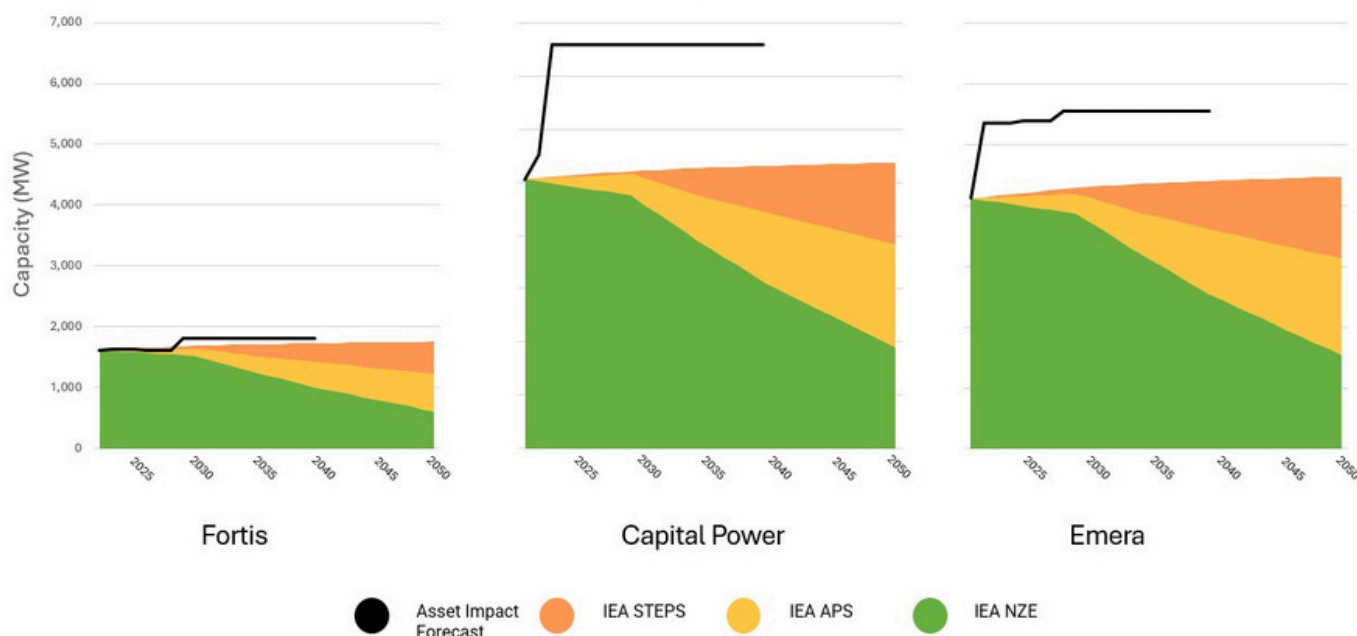
Decommissioning coal-fired plants can support direct emissions and emissions intensity reductions, but focusing on coal alone provides a very limited view of individual energy transitions.

Although natural gas combustion releases less carbon dioxide per unit of energy than coal, the overall climate impact can be similar or even higher due to hidden upstream emissions, particularly methane leaks during extraction, processing, and transportation.

The data shows that Fortis plans to continue with a business-as-usual approach. In contrast, both Capital Power and Emera pivot toward a far greater reliance on gas infrastructure, either by expanding the capacity of existing assets or by investing in new gas-fired generation through acquisitions or construction.

The significant growth in gas-fired power capacity by Capital Power and Emera puts them completely out of alignment with the IEA's energy technology targets.

Technology: Gas



Source: Asset Impact, Enerdata, GEM

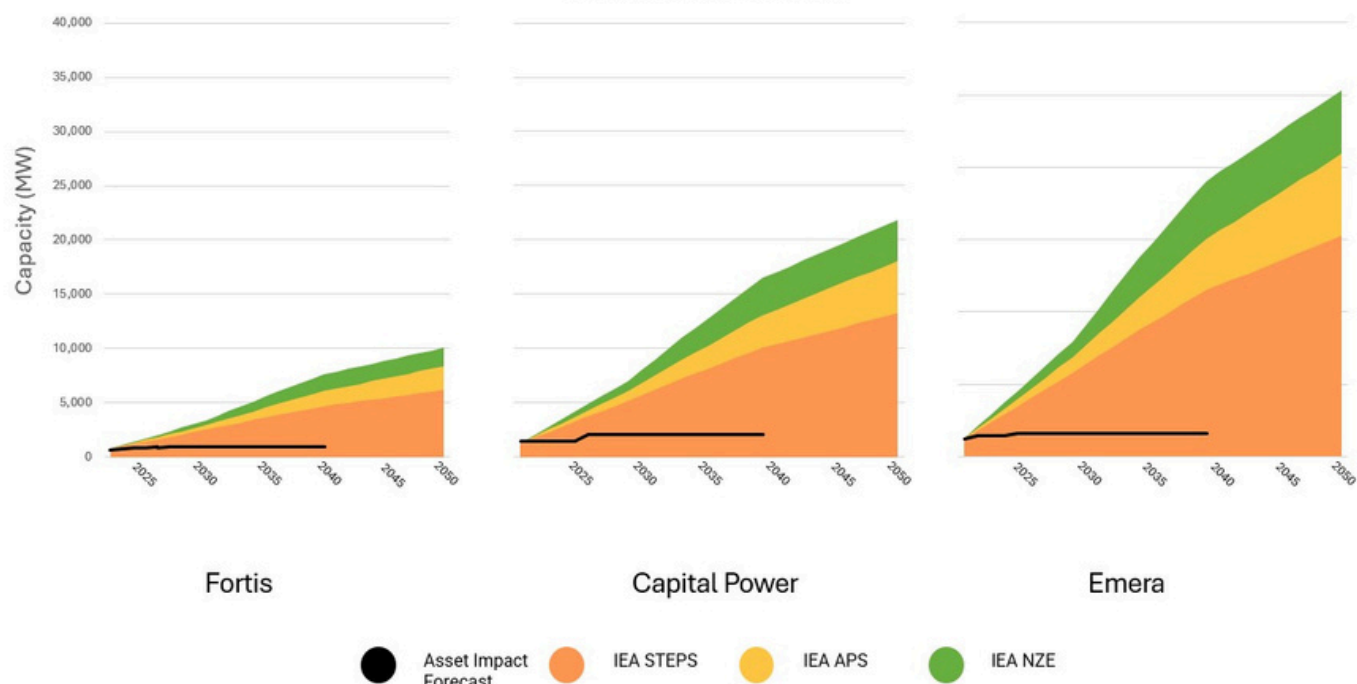
Renewables

As each company continues to shift its energy mix share between different fossil fuels, unsurprisingly significant net growth in installed renewable power capacity and/or storage is needed to align with the IEA's NZE, not least because capacity factors of new wind and solar installations are typically much lower than of existing coal and gas. Based on what we know today, none of the three companies are making sufficient investments in renewables in the next

5 years to bring them in line with the more ambitious IEA technology targets.

Our tracking of renewable CapEx provides an up-to-date and transparent view into commissioned, planned, delayed, or cancelled projects. Particularly large assets, such as offshore wind farms that will have an outsized impact on the installed capacity base and emissions profile of utility providers for years to come.

Technology: Renewables



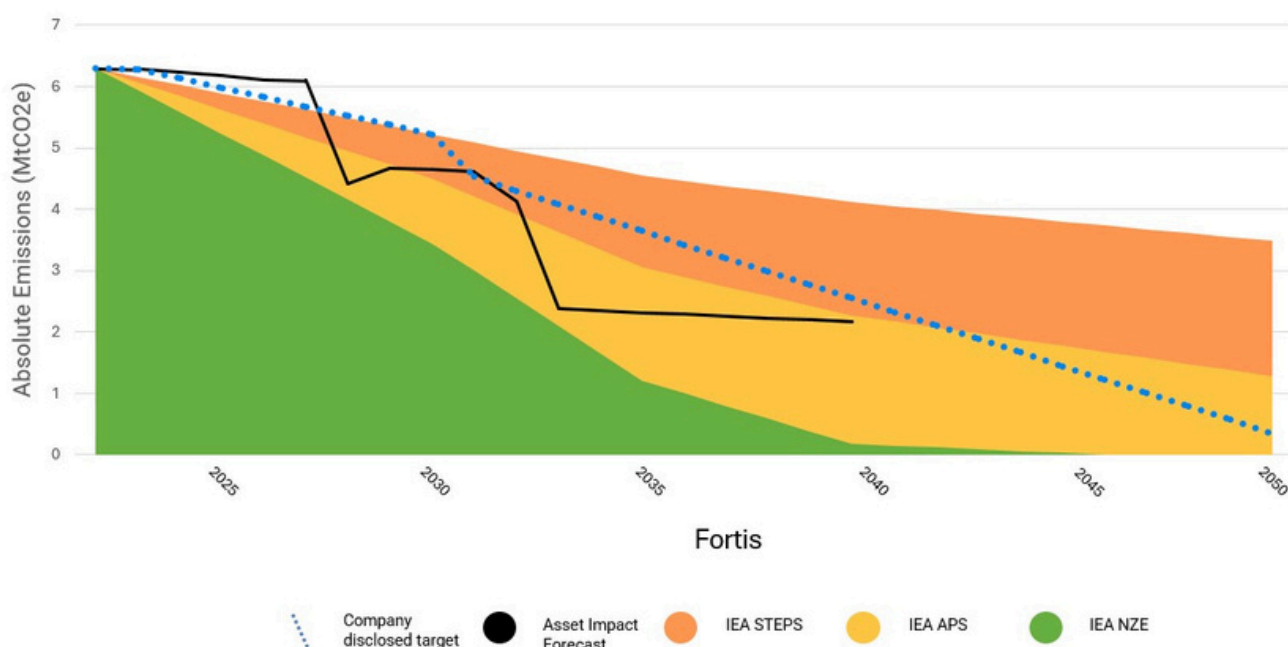
Source: Asset Impact, Enerdata, GEM

Company-Stated Targets

Once an investor or lender determines whether a company's future CapEx is aligned with specific climate scenarios, the next step is to assess whether the company's disclosed emissions targets are consistent with (a) its own CapEx plans and (b) the scenarios underpinning the investor or lender's portfolio-level strategy. This alignment exercise tracks not only the credibility of company progress toward net-zero goals, but the corresponding impact at a portfolio level.

Fortis has publicly committed to reducing its direct GHG emissions by 50% by 2030 and by 75% by 2035 against a 2019 baseline, as well as net-zero emissions by 2050.

As shown below, Fortis' targets through 2035 are most closely aligned with the IEA STEPS pathway. Our forecasts also show that Fortis is currently on track to meet – and even exceed – its own 2030 target to reduce Scope 1 emissions from electricity generation by 50%.



Source: Asset Impact, Tracenable

Conclusion

Understanding transition risk at the asset level is no longer a nice-to-have – it's increasingly a prerequisite for robust sustainable finance strategies and meeting regulatory requirements such as OSFI's Guideline B-15. As this analysis shows, not all utilities are progressing at the same pace, and technology choices today will define emissions profiles for decades to come.

Asset Impact's asset- and technology-based approach provides a uniquely granular and forward-looking view of each company's real-

world operations and transition plans. Integrating this level of detail into portfolio analysis and stewardship activities enables investors to move beyond static disclosures and high-level pledges, and instead assess actual alignment with climate scenarios and policy trajectories.

For investors and lenders looking to future-proof their portfolios through financing an orderly and effective transition, these insights offer a sharper lens on where risk – and opportunity – truly reside.



What is an asset-based approach?

An asset-based approach to decoding climate impacts within a financial portfolio starts with collating a range of data points from a wide range of sources on the physical assets – like power plants, factories, and production facilities – within the real economy that are responsible for greenhouse gas emissions.

In combination with contextual data, each asset's production profile is run through proprietary models that estimate the carbon emissions associated with its activities. Crucially, all of the data gathered on physical assets is normalized and standardized at the outset to allow for easy cross-company and cross-sector comparability.

Then, to allow users to analyze financial portfolios, each individual asset is linked to a corporate ownership structure – from direct owners up to parent companies and then to financial securities and globally recognized identifiers.

Asset Impact's database spans 13 high-emitting sectors, encompassing a vast array of emissions-intensive activities from coal mining and power generation to heavy-duty vehicle and steel manufacturing. Covering 75% of global emissions, the datasets paint a comprehensive picture for investors, spanning more than 300,000 assets and 65,000 listed and unlisted companies.

What is Scenario Analysis?

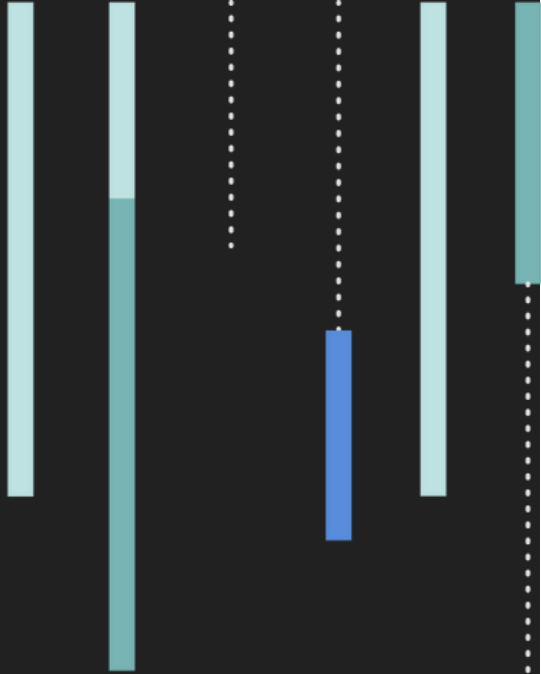
Scenario analysis is a tool for assessing how financial portfolios and individual companies may perform under various future climate and policy pathways. While traditional models rely heavily on backward-looking data or sector-wide assumptions, Asset Impact's approach uses forward-looking, asset-level data. By linking companies to their real-world physical assets, we provide granular visibility into future emissions, technology plans, and capacity shifts. This enables financial institutions to model risks and opportunities with far greater precision, transparency, and comparability, particularly important for Canadian institutions managing climate-related exposures in high-impact sectors like utilities and oil and gas.

Our methodology supports alignment with evolving regulatory and disclosure frameworks such as OSFI and ISSB. It also complements net-

zero portfolio strategies by allowing users to identify transition risks and engagement opportunities.

Our product includes the following key climate scenarios:

- IEA NZE: A pathway to net-zero by 2050 with rapid policy, technology, and behavior shifts.
- IEA APS: Models the impact if all climate-related pledges (e.g. NDCs, net-zero targets) are met in full and on time.
- IEA STEPS: A baseline scenario based on currently implemented policies only.
- NGFS: Includes various transition and physical risk pathways (e.g. "Orderly", "Disorderly", "Hot House World").
- NGFS short-term scenarios: 1–3 year transition risk scenarios to capture near-term shocks like sudden policy action, energy price spikes, or carbon taxes.



Asset Impact provides asset-based climate data and analytics for the financial sector, with a focus on high-emitting industries. By linking portfolios to real-economy assets, companies, and securities, it enables detailed climate impact assessments.

The database covers 300,000+ assets tied to 70,000+ public and private companies across 13 energy-intensive sectors – representing over 75% of global GHG emissions. Since 2022, Asset Impact has been part of GRESB, the global benchmark for sustainability in real asset investments.

Visit asset-impact.com or contact Paul Vozzella, Director – Americas (paul.vozzella@asset-impact.com).



G R E S B

