

WHITEPAPER

The missing translation: why the CFO ignores your climate infographic – and what would change her mind

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Climate hazards are now mapped, scored and published in great detail. What they mean for one company's revenue, margin and capital plan is, in our experience, rarely published. That gap isn't mainly a hazard-data problem. It's a translation problem – and translation is a finance task that needs the company's own data.

In our invented example, one bad harvest costs about 17% of EBITDA – and roughly three-quarters of that arises outside the company's own walls.

The worked example in this paper is illustrative: the company is invented and the figures are not based on any company's data.

There's no shortage of information about climate hazards. The shortage is in turning it into decisions. A heat map tells a finance team that the world is getting hotter. It doesn't tell them whether **their** margin is at risk, by how much, where in the value chain, or what it would cost to act or to wait. Until someone does that translation, the CFO is right to set the infographic aside. And once the translation is done, she has a much harder time ignoring it.

In brief. Climate maps show where it is getting hotter, but they do not show what that means for a particular company. To find out, you follow the heat through your own supply chain – where you buy, from whom and on what terms – and put a price on what could go wrong: lost sales, higher purchase prices and extra costs. Our invented example, a wine importer, illustrates how most of the loss can sit with suppliers far from the company's own buildings, and why buying a large share from a few regions is the main exposure in this set-up. The answers are ordinary business decisions: spreading purchases across more origins, writing better contracts, and deciding in advance how much of a price increase to pass on to customers.

An infographic that answers a question finance never asked

Infographics on extreme heat, such as those shared by the UN Office for Disaster Risk Reduction (UNDRR), circulate widely on LinkedIn. They deserve to. The underlying facts are serious. The World Meteorological Organization calls extreme heat "the deadliest of all climate-related hazards" and also "the least recognized and least managed" [1]. Between 2000 and 2019 heat caused roughly 489,000 deaths a year, and as of 2023 only about half of national weather services issued heat warnings [1].

Now put the infographic on a CFO's desk. She reads it and agrees with every word. Then she asks the three questions her job consists of. What does this do to our numbers? Where in our business does it land? What should we do differently, and what will it cost? The infographic answers none of them, because it was never built to. Its audience is governments and the public. Its unit is lives, regions and degrees. Hers is cash flows, margins and capital.

So she files it with the hundreds of other infographics that look relevant and lead nowhere. That isn't indifference to climate. It's professional discipline: a finance function that acted on every unquantified risk would never stop acting. The trouble is that the infographic is right, the CFO is also right, and the gap between them is where the money is lost.

Even the best macro numbers stop at the company's front door

The obvious answer is better numbers, and there are now some very good ones. In September, Allianz Research estimated the annual output cost of Europe's 2026 heatwaves at around EUR 113 billion across 30 countries, about 0.46% of their combined projected GDP – a modelled estimate, and from one hazard alone [2]. A study by the University of Mannheim with economists from the European Central Bank estimated losses of EUR 43 billion in 2025 alone from that summer's extreme weather, and EUR 126 billion cumulatively by 2029 [3]. The International Labour Organization projected in 2019 that, if warming stays within 1.5°C, heat stress will cost the equivalent of 80 million full-time jobs by 2030 [4].

Those figures make the case that heat is an economic event, not just a health event. They still don't reach the company. Allianz notes as much: heat "can reduce output without causing visible damage to buildings or equipment", and its population-weighted national results do "not directly measure occupational exposure, access to cooling or firms' capacity to reorganize work" [2]. That is a precise list of what a CFO would need to know, and it's exactly what a macro model can't see. The national number is the sum of thousands of company numbers that nobody has worked out.

So the second-best answer, a commercial climate-risk score on every address you own, doesn't solve it either. We come back to why below.

Five places the chain breaks between hazard and money

Getting from "it is getting hotter" to "this is what it does to our EBITDA" means getting past five weak points. Each can break the chain, and each break is a reason a CFO sensibly discounts what she's shown.

Hazard isn't damage. A heat index is an intensity in a grid cell. What turns intensity into loss is vulnerability: the process, the building, the people, the product. A bottling line in a cooled hall and a warehouse with a tin roof sit in the same grid cell and have completely different exposures.

Precision is often an illusion. Climate models run at coarse resolution, and the commercial scores built on them disagree with each other. A peer-reviewed comparison found "substantial divergence" between providers' physical-risk scores, including those built on similar methods [5]. A number that changes with the vendor isn't something you can underwrite.

Protection isn't in any database. Whether the warehouse has cooling with backup power, whether the supplier has irrigation rights, whether staff schedules shift in a heatwave – these decide the loss, and only the company knows them. A public-data assessment that can't see protection has to guess at it, and the guess can be wrong in either direction. So can the generic score your bank or insurer may already be using.

The loss is often interruption, and it often sits outside your walls. Physical damage is the visible part. The bigger part is often lost output, delayed supply and higher input prices, and it builds up at the tier-1 or tier-2 supplier, at the port, at the grid connection. It also isn't linear. Three days of disruption can be absorbed, three weeks hurt, and a lost season changes the year.

The time horizons don't match. Climate signals are framed around mid-century. Bank loans typically run for a few years, insurance cover is usually renewed every year, and a budget covers twelve months. A risk framed for 2050 will lose to every risk framed for next quarter unless someone restates it on the CFO's timetable.

None of these breaks is fixed by more hazard data. They're fixed by putting the hazard together with what the company already knows about its own operations, suppliers, contracts and protection. In our experience, much of that information already exists – in the insurance broker's annual valuation, in procurement files, in the operations manager's head – but it's scattered and unverified, and nobody has collected it for this purpose.

The translation, in four steps

We approach this the way we approach every business condition that has to compete for capital: **signal → value chain → money → decision**. It's the same logic as our first paper, After the Omnibus [6], which argued that sustainability work only keeps its budget when it can show its effect on growth, cash flow and risk.

1. Signal. Start from the hazard, but read it as a trend in the conditions the business runs in, not as a headline. For heat: more and longer hot spells in the regions where you grow, source, produce and ship, and more humid ones. Humidity matters alongside temperature: Allianz's model estimates a larger growth loss for Italy's humid heat (1.19 percentage points) than for Hungary's hotter but drier heat (0.51) [2].

2. Value chain. Map where the business actually touches that signal: your own sites, and also suppliers, sourcing regions, logistics routes and the people doing the work. In our experience, this is where much of the heat exposure of a Nordic company sits. A factory in Denmark is rarely the place that stops in a heatwave; the vineyard, the farm, the component supplier and the port that feed it are more likely to. Value-chain mapping is the same groundwork that makes a credible Scope 3 inventory or a product footprint possible. A company that has done one has half done the other.

3. Money. Translate each touchpoint into one of three channels a finance team already watches. **Growth:** volume you can't sell because you couldn't source or make it. **Cash flow:** higher input costs, cooling, freight, working capital tied up in buffer stock. **Risk:** concentration, contract terms, insurability and the cost of being wrong. Express the result over three durations – days, weeks, a season – and as a range, never as a single point estimate, because the loss isn't linear.

4. Decision. Finish with the choices the numbers support, each with a cost: sourcing diversification, price-adjustment clauses, forward cover, cooling capex, an insurance conversation, or the explicit choice to accept the risk. A translation that doesn't end in a decision is just a more detailed infographic.

Two rules keep the translation honest. First, **confidence belongs to each conclusion, not to the report**. A finding based on your own supplier volumes is stronger than one based on a regional average, and the reader has to be able to tell which is which. Second, **the evidence decides which way you're allowed to conclude**. Public data can

support "no material concern" or "can't be ruled out without the company's own data". It can never support "material risk confirmed". Claiming a confirmed loss from data that can't see your protection is how analyses lose credibility with the people who have to act on them.

A worked example: a northern European wine and spirits business in a hot year

To make this concrete, here's an illustrative case. The company is invented. Its cost structure is plausible for the sector, but every parameter below is an assumption, stated with a range, and none of it describes a real business.

The business imports and distributes wine and spirits from a northern European base. Almost everything arrives as finished, bottled product; less than 10% of volume comes in bulk for local bottling. Revenue is EUR 150 million (net of excise), gross margin 32%, EBITDA EUR 13.5 million. About 30% of volume comes from two southern European sourcing regions. Its own warehouse sits in a temperate climate.

Read the UNDRR infographic against this business and the first reaction is relief: our buildings aren't in a heat zone. Run the translation and a different picture appears.

Signal. Recent seasons show what heat and drought can do to a harvest. In 2022, when almost two-thirds of European territory was in drought or on alert, average European wine output was expected to hold up, but only because good harvests in Italy, France and Germany offset low harvests in Spain and Greece [7]. A continental average can hide a regional shortfall that is very concentrated for an individual buyer.

Value chain and money. We stress-test a severe year that we have assumed, not taken from a source: a heat-and-drought harvest that cuts output in the two sourcing regions by a fifth (range 10–30%). Price effects apply to the ex-cellar purchase price only, assumed to be 75% of cost of goods (range 65–85%); freight, warehousing and the small local bottling share are not repriced. All figures are effects on EBITDA in EUR million, before tax and gross of any price pass-through to customers.

Channel	What happens	When it lands	Duration	Central effect, EUR m	Range, EUR m	Basis
Growth	Half of the shortfall is replaced from other origins. The other half, EUR 4.5m of revenue, is lost as sales at a 32% margin.	This harvest year	A season	1.44	0.72–2.16	Assumed
Cash flow	Replacement wine is bought at short notice at a 15% premium (range 0–25%).	This harvest year	A season	0.34	0.00–0.98	Assumed
Cash flow	Extra cooling and temperature-controlled transport are needed through the summer.	This harvest year	Weeks	0.30	0.15–0.45	Assumed
Risk	Stock is damaged and loads are rejected during a peak-season heatwave.	This harvest year	Days	0.20	0.10–0.30	Assumed
Cash flow	The remaining volume from the two regions is repriced 8% higher (range 4–12%) when contracts are renewed.	Following year	Until prices normalise	1.47	0.72–2.18	Assumed

Read as a stress test, not a forecast, the table says that losses of this order can't be ruled out. In the harvest year itself: about EUR 2.3 million, or 17% of EBITDA (range EUR 1.0–3.9 million, 7–29%; the top of the range is the worst case we test). At the next contract renewal a further EUR 1.5 million a year arrives (range 0.7–2.2, about 11% of EBITDA at the central value), and stays until prices normalise. The ranges move together: the low end of each line combines the low settings of the assumptions behind it, and the high end combines the high ones. They are not independent draws.

The replacement premium is the least certain line, which is why its range runs from zero to 25%. After the very short 2023 harvest, Italian and Spanish white bulk prices rose even though demand was soft, while French prices softened with no comparable shortage [8]. In the record-hot summer of 2026, by contrast, Ciatti reports that grape and bulk wine markets have not responded frenziedly to news from the vineyards, given weak wine sales and good inventories [9]. So a premium is plausible where supply is tight and may be absent where it is not, and where it is absent the lost sales carry the harvest-year effect. At a 0% premium the harvest-year effect is about EUR 1.9 million (14% of EBITDA); at 25% it is about EUR 2.5 million (19%). If half of the cost increases can be passed on to customers, the two price lines halve. Only the company's own data can confirm any of these numbers.

Three observations follow from the table that the infographic couldn't have shown. Each is a result of the assumptions above, not a measurement.

In this set-up, the exposure isn't where people were looking. Roughly three-quarters of the harvest-year effect (the lost-sales and replacement-premium lines, EUR 1.78 million of 2.28 million) arises outside the company's own walls, in sourcing regions and supplier pricing. A climate-risk score on the company's addresses would see a warehouse in a temperate climate and would miss the value chain entirely. The underlying exposure is concentration: with 30% of volume from two regions, one bad harvest moves the whole year, and spreading purchases across more origins is what lowers it.

The shock comes in two waves. The first year hits volume and margin. The second arrives through contract prices at renewal, after the heat has gone and when nobody links it back to the harvest. That second wave is where procurement and contract terms – where the CFO already has influence – make the difference.

The durations behave differently. The heatwave days are small and may be insurable or absorbable. The season and the renewal are what matter, and in this set-up no warehouse investment protects against them.

Decision. With the money visible, the choices sharpen: spread sourcing across more origins before it becomes urgent; write price-adjustment and allocation terms into multi-year supply contracts while the market is calm, and clarify how those contracts treat a heat-hit harvest – including whether a heatwave can count as force majeure, which is a question for the lawyers, because a recurring heatwave is hard to call unforeseeable; decide in advance how much of a price increase the business will pass on; size buffer stock against the working capital it ties up; and, in this set-up, leave cooling capex for later, because it addresses one of the smallest lines. Each of these has a cost, and each can now be compared with the exposure it reduces. That's a capital decision, which is the only kind a CFO is set up to make.

A real engagement would replace every assumption in the table with the company's own data: supplier volumes and prices, contract renewal dates, margin by product, pass-through history, the broker's valuation. The structure would stay the same. Confidence would go up, and the numbers would usually move in both directions.

Same heat, different business model. The numbers above belong to this illustrative business model, not to the sector. Take an importer that buys 80% of its wine in bulk and bottles it locally. It faces the same infographic and the same harvest, but a different financial impact and different options to act.

	Bottled-import model (the case above)	Bulk-and-bottle model (80% bulk)
What it buys	It buys finished bottles that are tied to a brand and an appellation.	It buys wine in tanks and bottles it at its own plant.
Cost exposed to harvest prices	The purchase price of the wine is most of its cost of goods, so a harvest shock reaches most of its costs.	The wine is a smaller share of its costs, because glass, packaging and labour are added later.
Supply lines exposed	It depends on one supply line: the finished wine.	It depends on two supply lines: the wine, and the empty bottles and other packaging, which may also have to be sourced from outside the region.
Speed of the price shock	The shock arrives more slowly, mainly through contract renewals.	The shock can arrive within the same season, because bulk prices move with the harvest, although weak demand can dampen them, as in August 2026 [9].
Ability to substitute	Substitution is hard, because a missing appellation usually becomes lost sales.	Substitution is easier, but only within EU labelling rules; for example, EU wine may not be blended with wine from outside the EU [10][11].
Own-site exposure	Its own site is a warehouse.	Its own site is a bottling plant that depends on energy, cooling and water during hot spells.
Main levers	Its main levers are contract terms and a clear policy on how much of a price increase to pass on to customers.	Its main levers are forward buying, tank stock, blend specifications and securing the supply of bottles and packaging.

The bottled importer takes the hit as lost sales now and a price wave later, and manages it through contract terms. The bulk importer takes a faster price shock on a smaller share of its costs and can substitute around more of it, but it depends on a second supply line for bottles and packaging, and it manages the risk through purchasing timing, stock, blend specifications and packaging supply. The infographic is the same for both. The numbers and the decisions are not – which is the whole case for doing the translation company by company.

Why waiting doesn't mean nobody is assessing your risk

There's a reason to do this before anyone asks. Your lenders are expected to look. Since 11 January 2026, the European Banking Authority's guidelines on ESG risk management apply to larger EU banks. They ask banks to assess how vulnerable their borrowers are to environmental hazards, temperature-related ones included, with the location of key assets such as production sites as one input [12]. Banks are also expected to consider third-party data, provided they understand its sources and methods [12]. Data of that kind is typically built on hazard data and location, so it cannot see your protection, your sourcing strategy or your contracts. In our experience, a bank or insurer that cannot see these has to make assumptions about them, and those assumptions can cut either way.

So the choice isn't between being assessed and not being assessed. It's between your own documented number and someone else's assumption. If you're better protected than the generic score assumes, your own number is upside, and you choose when and how to use it. If you're worse, you find out first, privately, and you get a capex priority list instead of a surprise at renewal. This is the same logic as our second paper, The carbon-adjusted balance sheet [13], applied to transition risk: compute it early and it's cheap and private; leave it to others and it's expensive and public.

One more point for the capital plan. Money spent on resilience and money spent on decarbonisation come out of the same budget. A site that needs the biggest transition investment may also be the most exposed physically – or the one you should exit. Weighing those trade-offs means seeing both risks side by side. It doesn't mean adding them

into a single figure: carbon exposure is a balance-sheet question at group level, while physical exposure is an operating cash-flow question that's specific to each site and non-linear. Adding them together produces a false sum.

Five questions for your next finance review

1. Which three suppliers, sourcing regions or logistics nodes would hurt most if a hot season disrupted them – and what share of our margin runs through them?
2. What does a lost season cost us, compared with a lost week? Has anyone calculated both?
3. How much of our protection – cooling, backup power, alternative suppliers, contract terms – is documented, and how much is assumed?
4. What score do our bank and insurer hold on our physical risk, and on whose assumptions?
5. Where would one euro of resilience spending reduce more exposure than one euro of anything else on the capex list?

A finance team that can answer these doesn't need another infographic. A finance team that can't has the infographic, and not yet the number.

The implication

For a CFO, none of this asks for a view on climate science. It asks for what finance already does with every other material exposure: locate it, size it on the business's own timetable, and set it against what it costs to reduce. For a sustainability lead, it's the way to stop sending infographics up the line and start sending decisions.

The hazard data is public and getting better every year. The translation isn't, and it can't be done from the outside. It needs the company's own knowledge of where it sources, how it's protected and what its contracts say. That's the work we do. If you aren't comfortable with the five questions above, it's worth talking before the next hot season rather than after it.

The authors

This paper was written by Christian Honoré and Christian Boserup, Founding Partners of Priced Advisory (formerly ESG Implementation) – a Danish advisory firm that helps companies work out what changes in their business conditions are worth in money and risk.

Business conditions. Priced into decisions.

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