Solutions for managing weather risks
Weather can hurt your business. The Weather team of Swiss Re Corporate Solutions offers tailor-made, structured weather products that protect your earnings against those risks.

**Your business and ours**

Since the creation of weather risk management products over 20 years ago, more companies have realised that it pays to manage weather-related risk. The Weather team of Swiss Re Corporate Solutions provides customised weather and weather-contingent commodity price solutions that protect your company’s profits against adverse weather. These solutions can be insurance, reinsurance or derivative-based, and are built to match upon your specific requirements.

A wide range of businesses uses weather hedges:

- **Power/Energy**
  Mild winters or cool summers diminish consumer demand for heating or cooling and erode profit margins for utility companies.

- **Agricultural**
  A Florida citrus farmer worries about freeze risk in January; an unexpected hard freeze could wipe out the farmer’s entire crop and livelihood.

- **Tourism (hotel, ski resorts, beach)**
  Ski resorts depend on adequate snowfall during the winter. Warm, dry winters result in lower attendance and increased snow-making costs.

- **Construction**
  Abnormally hot, cold, or rainy weather slow or stop progress on a construction project, causing missed deadlines, increased costs, lower labor efficiency and work stoppage.

- **Food & Beverage**
  A brewer has lower-than-expected earnings as a cool, wet, summer triggers lackluster demand during the most lucrative sales period of the year.

- **Mining**
  Heavy rains force mining pit pumps to shut down and result in lower-grade material extracted from the mine.

- **Retail**
  A cold, wet summer decreases store traffic and results in lower-than-expected sales of summer apparel, including shorts, tank tops and swimsuits.

- **Aviation**
  Flight delays are costly for airlines, airports and passengers. Delays lead to increased fuel consumption, crew time and the need for additional ground personnel. For passengers, airline delays can trigger a loss of wages, productivity and goodwill.

**Our solutions**

To mitigate the financial consequences of weather-related effects on your business, the Weather team of Swiss Re Corporate Solutions can provide two types of customised weather solutions specifically tailored to your requirements:

(i) volume-related solutions and
(ii) volume and commodity price-related solutions.

Volume-related solutions are based on weather indices over a specified risk period. These hedges can be structured as insurance contracts, swaps, floors, caps, collars, etc.

**Example**

Suppose a utility company wants to hedge against a warm winter. Management can use a Heating Degree Days (HDD), a weather index for a put structure. The tick is set to match the company’s incremental revenue per HDD, as temperature is the main unknown driving natural gas demand. The strike is chosen to reduce the company’s downside risk related to a drop in energy sales volume to match its risk appetite.

**Volume and commodity price-related (quanto) solutions**

are based on indices covering both weather and commodity prices over a specified calculation period.

**Example**

Using the same HDD structure, the utility replaces fixed tick amount with a variable natural gas price index reflecting the actual value of the drop in energy sales volume during a warm winter. The structure can be tailored to the specific needs of a company, reducing its basis risk. Swiss Re Corporate Solutions offers the full range of weather indices, in combination with various commodity price risks (electricity, natural gas, heating oil and propane), across a wide variety of hedging structures.
Our weather solutions

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<td>◦ Options: Put, Call, Compound option, Collar Quanto structures</td>
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<td>◦ Combined volume and price risk (quanto) solutions</td>
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<td>◦ Options: Put, Call, Compound option, Collar Quanto structures</td>
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<td>◦ Products covering a complete array of weather variables and commodity prices</td>
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<td>◦ Precipitation-based indices: aggregate precipitation, river flow, snow fall/snow depth, critical days</td>
<td>◦ Large risk appetite to match significant exposure needs</td>
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<td>◦ Wind-based indices: average wind speed, critical days</td>
<td>◦ World-wide presence and execution capabilities</td>
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<td>◦ Solar Irradiance-based indices: average irradiance</td>
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<td>◦ Multi-index: combinations of above</td>
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Our team

Our Weather & Energy underwriters have years of experience in structuring solutions for customers across the globe.

Operating from offices in Houston, London, New York, Sydney, Luxembourg and Zurich, the team draws on the expertise of members with deep knowledge of energy and emissions markets. The Weather & Energy team is part of the Environmental and Commodity Markets department of Swiss Re Corporate Solutions.

Contact us today to learn more

For more information about the Weather & Energy team and the wide array of innovative services and solutions we can offer, please contact:

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Swiss Re Corporate Solutions provides risk transfer solutions to large and mid-sized corporations around the world. Its innovative, highly customised products and standard insurance covers help to make businesses more resilient, while its industry-leading claims service provides additional peace of mind. Swiss Re Corporate Solutions serves clients from offices worldwide and is backed by the financial strength of the Swiss Re Group.

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