

Impact of Heat Stress on Labour Productivity

Quantify the impacts of heat exposure on the productivity of your workforce across countries and business operations.

Exposure to high temperatures decreases labor productivity leading to less tasks achieved in the same amount of time. Some governments have also implemented policies that limit physical outdoor work and mandate breaks during periods of heat to protect workers health and safety. As climate change progresses, heat events become more frequent and severe increasing the economic loss of companies due to reduced employee productivity without the implementation of adaptation strategies.

Our Solution

We screen your portfolio to identify locations and business activities which experience the highest economic loss caused by the reduction in employee productivity due to heat exposure at present and under different climate change scenarios such as the Shared Socioeconomic Pathways (SSPs): SSP1-2.6, SSP2-4.5, SSP3-7.0, SSP5-8.5 scenarios.

We perform a deep-dive on metrics such as hours of productive work lost for different worker profiles ranging from office work to heavy physical labor.

We provide detailed climate metrics such as the annual number of high heat stress days which can negatively impact employee attention and cause increased error and accident rates.

What You Get

Identification of locations and business activities most vulnerable to the impacts of extreme heat at present and under different climate change scenarios and future time periods.

Detailed productivity and climate metrics to support adaptation planning.

Impact



Supports strategic decision making on business operations, workforce planning, and investments to counter climate-related decrease in productivity.



Helps risk assessment of workforce health and safety to reduce heat related health problems, absenteeism, accident rates and errors. Contributes to increased employee wellbeing, talent retention, and brand reputation.



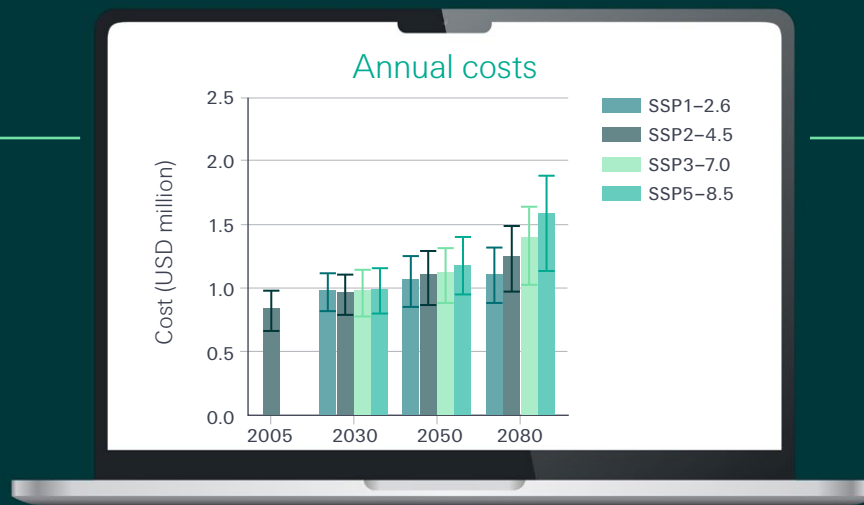
Promotes increased supply chain resilience by identifying suppliers most vulnerable to extreme heat enabling proactive adjustments to sourcing strategies.

Key outputs:

- Annual economic loss of reduced labor productivity caused by exposure to extreme heat* for all portfolio locations and business activities.
- Annual productive time lost due to exposure to extreme heat* at present and under different climate change scenarios.
- Climate metrics to support adaptation planning. For example, the increase in extreme temperatures, number of heatwave days, number of high heat stress days, or annual cooling degree days.

Productive time lost 2050,
SSP5 – 8.5 climate change scenario

Paris	1.1 weeks
Phoenix, AZ	6.1 weeks
New Delhi	16.6 weeks



* Analysis does not cover heat exposure from industrial processes, for example from furnaces.

Interested in finding out more?

Contact your local Swiss Re Corporate Insurance representative.

**Annemarie Büttner**

Lead Climate Risk Solutions,
Risk Engineering Services
Annemarie_Buettner@swissre.com
+41 43 285 55 56

**Naika Meili**

Climate Risk Specialist,
Risk Engineering Service
Naika_Meili@swissre.com
+65 6428 1822

Learn more



corporatesolutions.
swissre.com/insurance-
services/climate-risk-
services.html

This publication was prepared by Swiss Re for general information purposes only and does not constitute legal, regulatory, financial, or insurance advice. All content is provided without warranty as to accuracy or completeness. The guidance contained in this document, in the opinion of Swiss Re Corporate Solutions, is sound, reasonable and may help to reduce the risk of property loss and business interruption. Swiss Re Corporate Solutions does not warrant that all losses will be avoided or that all reasonable preventive measures have been taken if advice in this document is followed. By sharing its opinion as to certain sound and reasonable practices, Swiss Re does not relieve the insured of its own duties and obligations with respect to assessing and implementing loss prevention measures and Swiss Re disclaims any liability as respects loss prevention.