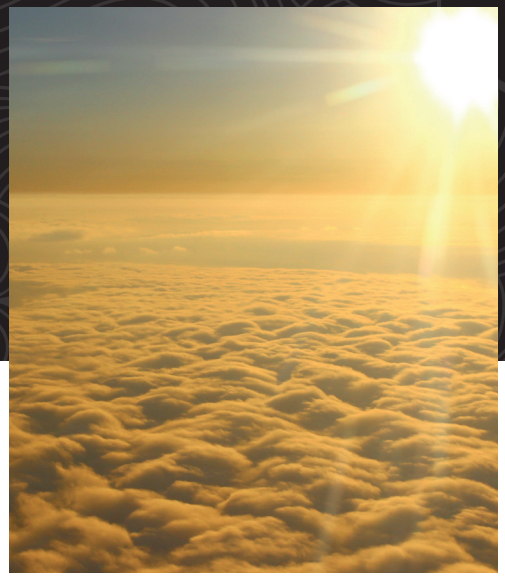
Insight

Allianz Coffee Guide to:
Solar Geoengineering

Broking business is busier than ever, and staying on top of the latest insurance and risk management buzzwords can sometimes fall by the wayside. So, harking back to the coffee shop origins of insurance, Allianz is offering a series of short and snappy insights that pull on our expertise. A perfect way to catch up on what's hot!



On this week's agenda: Solar geoengineering. We hope the following comes in handy next time you're awaiting a cappuccino in your local coffee house and a fellow coffee customer turns to you and says…

***Coffee Customer:* Solar Geoengineering. What's the deal?**

You: Also known as Solar Radiation Management (SRM), the idea is to deliberately intervene with Earth's natural systems to help combat climate change. It's well understood that the burning of fossil fuels increases greenhouse gases in the atmosphere. These absorb energy, in turn warming the earth. By reflecting some sunlight away from the planet, the contentious SRM techniques could deflect energy back into space.

***Coffee Customer:* Sounds far-fetched. What's the science behind it?**

You: The basic science behind SRM is relatively simple. Stratospheric aerosols – small, reflective particles in the upper atmosphere – reflect some sunlight away before it reaches the surface of the Earth. Naturally, large volcanic eruptions do this by blasting millions of tons of sulphur into the upper atmosphere where they remain for a few years, reflecting light away and cooling the planet. For example, the Philippian Mount Pinatubo eruption in 1991 reduced global temperature by 0.5 degrees Celsius for a year post-eruption. Other SRM methods include space reflectors acting like sunshades to block out a small proportion of light and Albedo enhancements increasing the reflectiveness of clouds and landmasses.

***Coffee Customer:* Ok but how would it work in practice?**

You: First discussed in 1965, the technique could be deployed by planes or balloons spraying the aerosols or developing bespoke nanoparticles. However, it's rightly a contentious issue. With potential unknown impacts on the environment, us as a species and the issue of ocean acidity remaining unaddressed, scientific research, discussions and considerations will be the key.

***Coffee Customer:* This isn't going to solve climate change though is it?**

You: The impacts of climate change on the insurance industry are easily imagined. The only long-term solution to reducing greenhouses like carbon dioxide is to eliminate adding carbon into the atmosphere. This may take many years and many difficult socio-political decisions. Geoengineering may not be the 'silver bullet' but it may give a bit more time and help to lessen some of the impacts.

At this point, your drink will be served and you can smile modestly knowing that your coffee catch up went well.

Insurance implications at a glance:

- Climate change is a significant concern for the insurance industry.
- Natural disasters, increasingly unsettled weather patterns and 'freak' events cause widespread damage and loss of life with the pecuniary impact picked up by the industry.
- The industry supports climate change awareness and potential mitigation methods both financially and by leading risk analysis.

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