Swiss Re Global Engineering
Enabling progress
Engineering projects often push the boundaries of the tried and tested. They entail risks that are hard for the insurance industry to assess, and harder still to underwrite.

Over the coming years, the world needs vastly expanded urban infrastructure for a growing population, clean energy supply and sustainable, new transportation systems. Improved building standards, methods and risk management may reduce incidents. That said, projects will continue to get bigger and more complex. The risks associated with them need to be understood, reduced, mitigated and ultimately insured.

Reliable, competent re/insurance is a key enabler of the infrastructure investment that our world needs so urgently. To close the gap on both fronts, Swiss Re Global Engineering is at the frontier of technology. As new technologies and exposures evolve, we constantly develop and tailor protection products with our clients.

Swiss Re Global Engineering writes both treaty and facultative reinsurance. Our broad product offering and capital strength enable us to work with our clients beyond standard insurance solutions. We are committed to making the world more resilient by developing innovative protection products for advancing sustainable infrastructure and energy solutions.

Being at the forefront of technology, we’re able to support our clients’ success and enable the advancement of society.
At Swiss Re Global Engineering we leverage local access and knowledge with global capacity and experience. In us, our clients have a reliable partner to work and grow with in 15 locations in mature and emerging markets.
On the strength of this expertise and track record, Swiss Re was selected to serve as the lead reinsurer for Project MOSE. We assessed the risks for the insurer and provided large-capacity cover during construction (a period in excess of ten years). We also offer an option for inherent defect insurance (IDI) for an extra ten years once Project MOSE is completed and the gate system is in use.

Once completed, Project MOSE will prevent damage and devastation from high tides. We are proud to play a part in making Venice a more resilient city.

Venice is renowned for the beauty of its setting and its history, art and architecture. Along with its lagoon, the whole city is listed as a World Heritage Site. Yet the city is in peril.

To protect Venice and the lagoon from flooding, an ambitious project currently under way will employ an integrated system of mobile flap gates. Named Project MOSE, the system is designed to work in concert with other measures, including coastal reinforcement and the raising of quaysides to contain the lagoon.

At Swiss Re, we know about assessing and underwriting prototypical risks like this. It’s what we did for the flood barriers protecting London and the port of Rotterdam. And when a loss called for some heavy lifting, we were quick to lend a strong hand with that, too.

Protecting beautiful Venice from high tides
Managing wind and solar energy risks

The world over, industrial sector growth and economic expansion have put tremendous strain on fossil fuel resources and the environment. Governments and corporations have been investing heavily in renewable energy sources, above all wind and solar.

Yet new technologies come with a new set of risks. The construction of solar or on- or offshore wind farms is a complex undertaking. Demanding technical requirements, construction risks, high costs and extreme weather conditions are just some of the challenges these projects typically involve. We work together with our clients to understand and manage such risks and ultimately insure them.

The viability of wind or solar power depends on large-scale, long-term investment. As renewable energy generation continues to grow globally, so does the financial risk posed by the inherent volatility of the resources that make it possible. This risk affects not only renewable energy producers, but also players throughout the value chain.

Swiss Re develops customised, index-triggered protection products that safeguard against loss of income due to adverse high or low wind conditions, lack of solar irradiation or variations in water levels. A case in point is the Solar Irradiation Index, an annual insurance product, which protects photovoltaic plant operators against a financial loss if solar irradiation is less than expected.

We’re at the forefront of technology to advance sustainable energy solutions.

The world over, industrial sector growth and economic expansion have put tremendous strain on fossil fuel resources and the environment. Governments and corporations have been investing heavily in renewable energy sources, above all wind and solar.

Yet new technologies come with a new set of risks. The construction of solar or on- or offshore wind farms is a complex undertaking. Demanding technical requirements, construction risks, high costs and extreme weather conditions are just some of the challenges these projects typically involve. We work together with our clients to understand and manage such risks and ultimately insure them.

The viability of wind or solar power depends on large-scale, long-term investment. As renewable energy generation continues to grow globally, so does the financial risk posed by the inherent volatility of the resources that make it possible. This risk affects not only renewable energy producers, but also players throughout the value chain.

Swiss Re develops customised, index-triggered protection products that safeguard against loss of income due to adverse high or low wind conditions, lack of solar irradiation or variations in water levels. A case in point is the Solar Irradiation Index, an annual insurance product, which protects photovoltaic plant operators against a financial loss if solar irradiation is less than expected.

We’re at the forefront of technology to advance sustainable energy solutions.

Offshore Code of Practice
The construction of an offshore windfarm is a complex undertaking. So Swiss Re led a task force of members of the German Insurance Association (GDV) and wind power manufacturers and contractors to develop an Offshore Code of Practice (OCoP).

The Code helps insurers and project participants reduce their risk exposure and ensure project quality. It supports our clients worldwide with English, German and Chinese versions.

Solar Code of Practice
Many solar panels carry a 25 year guarantee on the amount of energy they produce. But who actually pays if the panels fail to fulfil their promise? Will the producer still be in business to help out?

A Swiss Re and PV research institutions’ initiative, the Solar Panel Code of Practice (SPCoP) sets out international guidelines to better manage these risks and offers sustainable options for solar panel warranty insurance. This allows buyers of PV installations to make more informed purchasing decisions and provides greater certainty to an industry faced with long payback periods.
Partnersing for the long-term

Big, bold, and built by prestigious architects, many new building projects promise to deliver iconic headquarters for their high-profile principals. Such state-of-the-art projects also tend to be long, under cost pressure and complex. In any of them, there’ll be myriad structural and logistics challenges along the way – some known, many unknown. We collaborate with insurers to develop solutions for the construction phase of these cutting-edge technical projects.

Once completed, however, the challenges don’t disappear. Building defects due to design, workmanship or materials in the structural works, undiscovered at the time of project completion, can cause damage or threaten imminent collapse. Inherent (or latent) Defect Insurance (IDI) provides building owners with a long-term warranty – usually 10 years – against material damage caused by such structural defects.

At Swiss Re, we’re committed to partner with our clients for the long-term. While IDI or decennial insurance are compulsory in a handful of markets, owners lack this protection in others. We’re closing this protection gap by sharing our experience and products in markets where regulation is being developed, such as China, India, Algeria or Colombia. This is another instance of how we make the world more resilient.

Structuring tailor-made protection

In today’s complex and challenging world, our clients require unique protection products beyond standard reinsurance solutions. We provide flexibility with a wide range of tailored solutions and variable features to optimise our clients’ capacity. We understand the specificities of the heterogeneous engineering products. Together with our clients, we tailor the reinsurance solutions to match their risk appetite, protection needs and operational requirements.

“The Swiss Re Engineering Team have a great capacity to assess and suggest alternative programme structures. They combine local market insights with their global perspective and can deliver unique solutions beyond the traditional products. In fact, they’re a thought leader for Engineering reinsurance.”

Ian McLeish, Head of Global Engineering, Willis Re
Contact information

Daniel Tobler
Chief Engineering Underwriter
Tel: +41 43 285 63 69
Email: Daniel_Tobler@swissre.com