

Allianz Global Corporate & Specialty

Global Engineering

Customized solutions for engineering
and construction projects worldwide



Allianz 

Engineering and Construction: an Allianz tradition

As the industrial specialists of Allianz Group, Allianz Global Corporate & Specialty (AGCS) has a long-standing tradition of supporting the engineering and construction industry worldwide. We combine many years of technical experience with market-leading financial strength and the ability to cover the largest and most challenging global projects – supporting clients in more than 150 countries.

Standard & Poor's

AA

A.M.Best

A+

With teams of engineering specialists – including underwriters, claims experts and risk engineers – in AGCS offices worldwide, we are one of the few insurers that offers truly global coverage – be it for a single project or for a multi-national program. Combining this worldwide reach and our expertise with Allianz's highly rated **financial security** and large capacity, we offer clients and brokers a distinct advantage in complex engineering risks.

Allianz has played a key role in the development of engineering insurance since this coverage was first offered early in the 20th century. We continue this tradition today, and now this technical expertise allows us to cover a wide range of construction and project challenges, from well-established risks to the latest prototypes and new technologies, including:

- Power & Utilities
- Oil & Gas Construction
- Buildings & Construction
- Heavy Civils
- Heavy Industries
- Rolling Stock/Transportation, Tracks & Signaling
- Renewable Energies
- IT & Cyber Risks



Allianz is insurer of the Gotthard-Ceneri tunnels, which, when complete, will be the longest railway tunnel in the world.

© AlpTransit Gotthard AG

Power and Utilities

One of today's major global challenges is reliable energy provision for private and commercial use. Demand is growing, particularly in the emerging economies. As insurers, we play our part in helping meet this demand with a specialist team focused on power and utility risks.

This Power and Utilities Expert Team provides continuous coverage for all phases of power generation projects, from erection to commercial, including machinery breakdown insurance. Our experience ranges from open to combined cycle turbines, from conventional to large hydro plants, and utility companies such as water and gas suppliers. Every company has different risk and exposure requirements. This is why we offer insurance solutions geared specifically for client needs, using specially developed tools that allow us to analyze complex risk and natural catastrophe exposures worldwide.

New frontiers in power risk

Advances in technology bring new risks for clients and insurers alike. Our team has extensive experience with prototypes and new technologies, for which we offer individually tailored policies. These are based on detailed dialogue between our risk consultants, underwriters and the client. Such policies can be designed for one-off projects or for more complex and long-term, open coverage needs.

In short, AGCS can take on the largest and most challenging projects in all areas of the industry. This project phase experience ensures that everyone involved is well prepared for the handover to the principal and subsequent operational phases of coverage.

AGCS covers a wide range of projects, including hydro-electric power generation projects.



Case study: Prototype gas turbine

AGCS worked with Siemens to design an Erection All Risks policy for the world's largest combined cycle gas turbine. The turbine has set a world record in power generation with a maximum electrical output of 578 mega watts in combined cycle operations and a net electrical efficiency of 60.75 percent.

Oil and Gas Construction

The fast growth of the international oil and gas industry requires truly global insurance capabilities. AGCS offers specialty services for both the construction and operational phases of projects through two expert teams – our Global Engineering Team, which supports clients during the erection, testing and commissioning phases for on-shore projects with Erection All Risks (EAR) coverage, and our Global Energy Team, which supports clients during operational phases.



Case Study: Woodside

AGCS is lead insurer for Woodside's Pluto Liquefied Natural Gas project, one of the largest gas development projects in the Australian on-shore energy sector. The plant is expected to deliver 4.3 million metric tons of liquefied natural gas a year.

Recent AGCS clients include: Linde, Mitsubishi, Petrobras, Samsung and Woodside.

AGCS specializes in the insurance of midstream and downstream oil and gas production projects such as:

- Oil and Gas Separation Units
- Tank Farms and Underground Gas Storage
- Pipelines
- Refineries
- Petrochemical Plants
- Liquefied Natural Gas Plants
- Chemical and Pharmaceutical Plants
- Bioethanol and Biodiesel Plants
- Chemical Fertilizer Plants

Oil and gas construction takes a very specific set of skills, and poses unique risks. Our global expert team works in close collaboration and shares knowledge to best support client needs. As each project is distinct, solutions are designed to suit each client and for each phase of construction. Additionally, our understanding of technology enables us to insure plant scale-ups.

AGCS Global Energy

AGCS Global Energy insures on- and off-shore operational oil and gas businesses, including some of the world's largest energy risks - upstream, midstream and downstream, from production platforms to storage and refineries.

For more information visit www.agcs.allianz.com/services/energy



Building and Construction

AGCS offers Contractors All Risks (CAR) insurance for building and construction projects. CAR provides comprehensive protection against physical damage – technical or other – from construction site activities, and extends financial security for owners and contractors.

All project construction phases – whether building construction or civil engineering – are insured under CAR. In contrast to “named perils,” CAR insurance covers all unforeseen physical damage, unless specifically excluded. We also offer project-related third-party liability insurance coverage, contractor plants and equipment insurance, and Advance Loss of Profits insurance.

Our international network and experience sets us apart, as clients benefit from AGCS’s ability to deliver worldwide underwriting, claims and risk consulting support. Such global reach and experience makes us a trusted insurance partner for our clients year after year.

Claims and risk consulting services are especially important on a construction site, particularly with increasingly complex projects. The close evaluation of past claims is essential in preventing potential future claims (see page 14). Allianz Risk Consulting conducts extensive pre-loss activities and joins underwriters when visiting large construction sites to assess and analyze risks.

Examples of recent construction projects insured by AGCS include high-rise office buildings and internationally renowned projects such as the Athens and Munich airports, the Petronas Towers in Kuala Lumpur and the Burj Khalifa in Dubai.



After Construction: Latent Defects Coverage

With more than 20 years of experience in the Inherent Defects Insurance (IDI) market, AGCS offers valuable technical insight to help protect client interests and provide peace of mind. Our IDI policies, also known as Latent Defects Insurance (LDI) or Buildings Defects Insurance (BDI), protect policy holders against physical structural damages arising from defects in design, materials or workmanship, and is a first-party insurance that does not require proof of negligence.

Heavy Civils

The heavy civils sector includes large infrastructure projects, such as roads, highways, tunnels and bridges – a specialist construction sector requiring long-term partnerships and worldwide expertise.



Located southwest of Seoul, the Incheon Bridge is one of the world’s longest bridges and was completed in 2009.

Photo: AMEC/Incheon Bridge Company

AGCS draws on extensive experience in this field. We not only provide lead insurer expertise for many high-profile heavy civil projects, but also offer risk consulting services to accompany project construction. One notable project and civil engineering feat to which AGCS acted as lead insurer was the Incheon Bridge in South Korea.

Additionally, in cooperation with Allianz Suisse, AGCS has insured the longest Alpine crossing – the **Gotthard-Ceneri tunnels**. The project will continue until 2019, and with a total length of 57 km, the Gotthard Base Tunnel (GBT) is expected to become the world’s longest railway tunnel.



The Gotthard-Ceneri tunnels consist of an intricate infrastructure system that includes air conditioning and ventilation, water supply and drainage, and electrical and fire protection installations.

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Heavy Industries

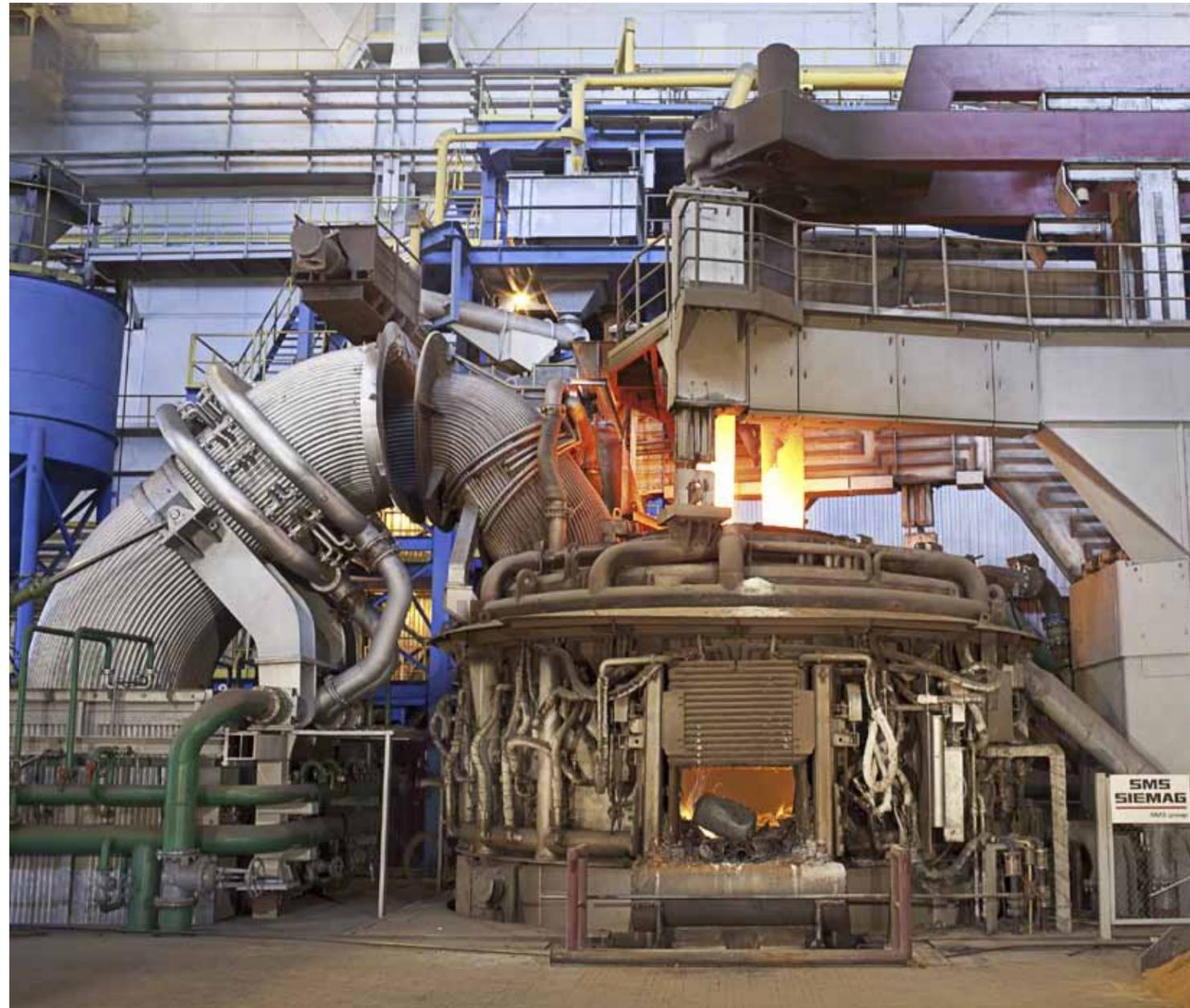
AGCS has extensive experience, technical expertise and the capacity to lead complex heavy industry construction projects. We cover all types of risks for construction and refurbishment projects through our Erection All Risks (EAR) and Advance Loss of Profits policies, as well as for operational facilities through our machinery breakdown policies, which include business interruption coverage.

Among others, our client list includes plant owners, contractors, suppliers and operators of:

- Mining Equipment
- Steel Plants
- Aluminum Smelters
- Raw Metal Production Plants
- Cement Factories
- Printing Industry Premises
- Glass Factories
- Pulp and Paper Industry Sites

Each industry presents specific risks and exposures, which AGCS monitors closely to provide the best and most comprehensive insurance coverage with tailor-made policies for our clients.

SMS, a global leader in plant construction and mechanical engineering for the industrial processing of steel, aluminum and nonferrous metals, partners with AGCS to develop global programs to protect the activities of SMS subsidiaries worldwide.



Project Cargo

AGCS is a global leader with the expertise, network and capacity to provide coverage for transporting large infrastructure components. Our Project Cargo policy not only covers such critical pieces, but can also be used to protect against losses from business interruptions in cases of transportation glitches. Failure of a shipment to arrive on-time or intact can easily turn a \$10 million cargo-loss into a \$100 million Loss of Income, also known as a Delay in Start-Up (DSU) loss. Such extended coverage is critical for clients to secure the necessary funding needed for projects. Project Cargo insurance is offered as part of our Marine and Transport insurance services.

For more information:

<http://www.agcs.allianz.com/services/marine/project-cargo/>





Rolling Stock, Transportation, Tracks and Signaling

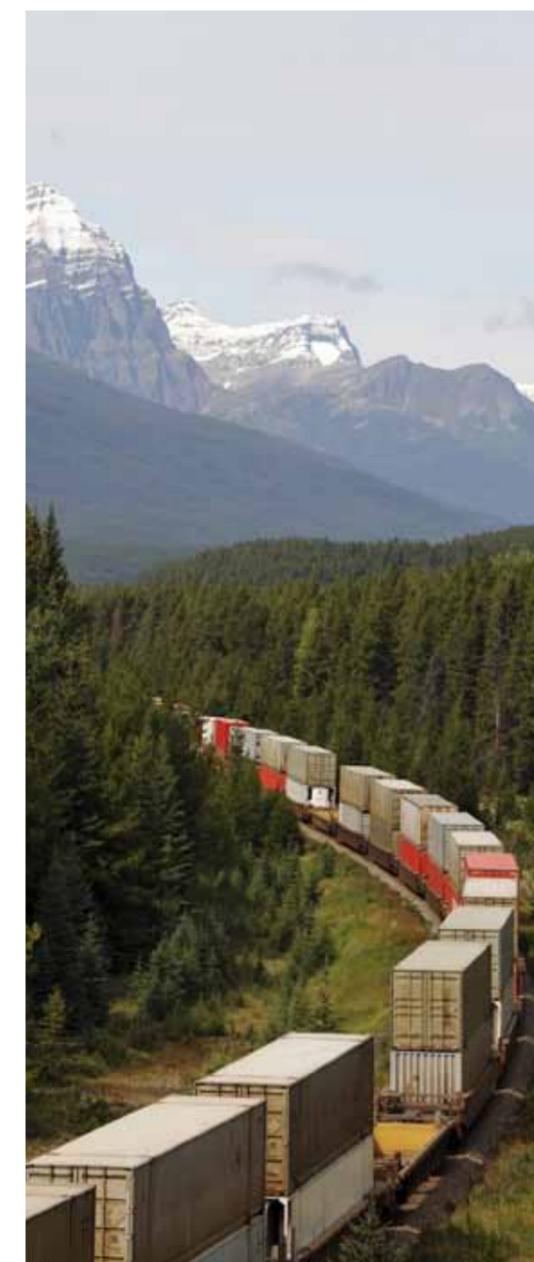
Rolling stock incorporates all means of transport moving on rails, including tram, subway, surface, electric and diesel-engine, regional, long-distance and high-speed trains. AGCS insures not only the manufacturers of rolling stock and their suppliers, but also the track and signaling industries.

Rolling stock coverage focuses on long-term commitments; that is, contracts which extend 10-years or more. AGCS's excellent financial strength ratings are key in offering our clients long-term accountability and confidence. A particular strength of ours is the ability to offer a manufacturer's warranty to clients and our international reach through the extensive Allianz network. Based on project specifications, we can offer tailor-made coverage throughout the entire value chain.



Case study: Eurostar

The Eurostar, a high-speed train service, links London with Paris and Brussels. In 2010, Eurostar awarded Siemens a contract to supply 10 new trains that are to travel speeds of up to 320 kph. AGCS insures Siemens and the new trains, which are scheduled to be put into service in 2014.



Meeting new challenges: Renewables and Cyber Risks

Renewable Energy

With a world population of more than seven billion, we are increasingly reminded of the depletion of our natural resources. Faced with climate change, renewable energies are growing in importance and attract increasing levels of investment. To meet the challenges of the future, AGCS Global Engineering offers in-depth expertise in renewable energies.

Our focus is on clients in on- and off-shore wind, solar, thermal and photovoltaic energy, but we also insure clients in hydropower and emerging technologies worldwide.

AGCS currently insures more than 20 off-shore wind parks and works with clients such as E.ON, Vattenfall, RWE and Siemens worldwide.



Case study: FCC

AGCS is lead insurer of two thermo-solar power plants: Soluz Guzman and Villena, both owned by FCC (Fomento de Construcciones y Contratas), one of our largest Spanish clients. Power is created with parabolic trough generation technology, which makes use of rotating mirrors that capture sunlight to generate up to 50 mega watts per plant.



IT & Cyber Risks

In today's interconnected world, cyber risks tend to be underestimated. In 2010, European companies lost an estimated 17 billion euros to IT outages, according to the "Avoidable Cost of Downtime 2010 Report" from CA Technologies. AGCS offers innovative IT insurance products that are available in select markets.

Flexibility is our highest priority, which is why we use a modular approach to address this fast changing risk. For instance, we extend coverage beyond physical damage from cyber attacks or malicious software, and are increasingly focusing on software issues, as these are becoming more and more important for our clients.

Among our clients is Deutsche Telekom, one of the world's leading telecommunications companies, for whom AGCS developed customized IT insurance policies.

Global & ESI Net

Global and ESI Net is a combined liability and engineering product that has been introduced in Germany and is increasingly being offered internationally. It is a modular system that lets you tailor insurance protection to your company's needs with hardware and hardware business interruption, software and software business interruption, liability insurance for third-party risks and a fidelity guarantee insurance.



Risk Consulting

Our expert teams consist of engineers from different markets with extensive local knowledge. These dedicated Engineering Risk Consultants focus on power generation, renewables, oil and gas, heavy industries, transportation, building and construction, IT, pre- and post-loss and detailed loss analysis. Our consultants meet regularly to discuss emerging risks topics and to develop new approaches to risk consulting in their specialized areas.

Allianz Risk Consulting has an established reputation for advising clients on all aspects of engineering and construction risks. Our risk consulting experts are close to new developments in the construction industry, as they work hand-in-hand with our clients. They bring with them many years of experience to assess risks in specialized fields such as construction, fire protection engineering, oil and gas, and many other areas. One great advantage of having such expertise in-house is that client requests are turned around very quickly, allowing for fast responses and an open dialogue with clients.



Case study: BARD

AGCS has provided risk consulting services to a variety of renewable energy clients. BARD Offshore 1, located about 90 km northwest of the island of Borkum, is Germany's first commercially viable off-shore wind farm.

The key to a successful client relationship is the close collaboration between risk consulting and underwriting, which starts at the very beginning of any project and continues until completion, working in partnership with the client throughout.

Allianz Center for Technology

The Allianz Center for Technology (AZT) has a longstanding tradition of providing independent technical assistance in claims and loss prevention. Founded in 1932, it is the leading Allianz research institute for risk engineering, safety and technology. Specialized engineers with a background in materials sciences, process and chemical engineering, and electrical and mechanical engineering, are involved with pre-loss, preventive and post-loss damage investigations.

Renewable energies are a growth area for the AZT. We are involved in fields such as condition monitoring for wind farms and evaluations of boilers for biomass and recycled materials, as well as photovoltaic and geothermal energy sites. AGCS and the AZT are at the forefront of research and actively engage in establishing industry standards. We offer our clients personal service, answering their specific damage-related questions to help get to the bottom of their claims and to prevent similar incidents in the future.

Claims: On-Site Within 24 Hours

Claims are what insurance is all about. It is the key element in our service-offering for when clients need us most – during the time of a loss. This is why we field one of the most experienced engineering claims teams in the industry.



Our global team of dedicated claims engineers is coordinated through AGCS's worldwide network, enabling us to deliver local services and to be there with our clients. Engineers are ready to respond promptly in the event of a claim and aim to visit sites to evaluate damage within 24 hours. They are trained to work in close coordination with external experts, such as loss adjusters, to ensure claims are settled quickly and simply, no matter where in the world.



Case study: Vasilikos Power station, Cyprus

On July 11, 2011, a major explosion took place at the Evangelos Florakis Naval Base in southern Cyprus due to incorrect storage of ammunition that was ignited by heat from the sun. Our AGCS General Adjusters were quickly on-site to examine a portion of a project that AGCS reinsured, which, even though far removed from the explosion's epicenter, suffered considerable damage.



Case study: Earthquake in Chile

On February 27, 2010, an earthquake measuring 8.8 on the Richter scale struck in Chile. A team of AGCS Adjusters and Engineers was onboard the first commercial flight from Europe to support our client on-site.



About Allianz Global Corporate & Specialty

Allianz Global Corporate & Specialty is part of Allianz Group, one of the world's leading insurance and financial services providers. Established in 1890, the Allianz Group now serves more than 76 million customers with Allianz companies over 70 countries.

Allianz Global Corporate & Specialty AG, a wholly owned subsidiary of Allianz SE, is one of the leading insurers for corporate and specialty clients. Dedicated teams of account managers, expert underwriters, risk consultants, engineers and claims specialists are located worldwide to meet the needs of our clients, combining local know-how with global reach and in-depth industry expertise.

In addition to the Engineering & Construction services described we offer a full range of products and services covering corporate and specialty business, including:

- Alternative Risk Transfer
- Aviation
- Energy
- Financial Lines
- Liability (Casualty)
- Marine (including Project Cargo)
- Property
- Captive Services
- Claims
- Global Programs
- Risk Consulting*

* Provided by separate Allianz Service Entities

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