

# CCS: DECARBONISING POWER GENERATION.

## ABOUT WILLIS

Part of the Global Markets Utilities Practice Group, we work for our clients, and liaise with leading markets in this sector. There are evolutionary and technological strides ahead fuelled by passion and necessity: We are ready.

**AGAIN AND AGAIN WE FIND  
THAT TECHNOLOGICAL  
SOLUTIONS FOLLOW THE PATH  
TRODDEN BY NATURE.**



As a leading broker to some of the worlds' largest power companies, we are positioned to identify and advise on emerging risks in this evolving sector.

Global and experienced, Willis can partner with your organisation to advise on the risk implications of the inevitable 'Green Tape' of bureaucracy – for example, the forthcoming EU Directive on Emission Trading Schemes. We assist in protecting fresh technologies and – where there is uncertainty – locking in confidence.

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# GENERATING INSURANCE SOLUTIONS... NATURALLY

## CCS: CARBON CAPTURE STORAGE

Willis



# CARBON CAPTURE STORAGE



## SNAPSHOT

Insurance adapts to the world: with emergent technologies such as Carbon Capture and Storage (CCS) insurance has to **anticipate** its markets' needs.

CCS is energising the environmental debate with the promise of vital technology to protect our future and harmonise with the planet's natural carbon balance.

## CCS IS THE ONLY TECHNOLOGY THAT WILL ENABLE THE CONTINUED USE OF FOSSIL FUELS IN A CARBON-CONSTRAINED FUTURE.

International concern over climate change has driven the growth of renewable energy. However, experts agree that reducing carbon emissions and meeting the expanding hunger for energy must incorporate strategies to reduce the carbon footprint of existing and future power stations that rely on fossil fuels.

CCS has emerged as the key to reducing global CO<sub>2</sub> emissions. CCS could contribute up to 20% of global CO<sub>2</sub> mitigation by 2050.

A number of small scale demonstration projects – both pre and post combustion – have been built and several are currently seeking approval, though commercial and regulatory hurdles remain.

## TACKLING CLIMATE CHANGE

Willis Engineers and insurance professionals can help identify the key risks and exposures facing power companies in CCS projects at the planning, development, construction, commissioning and operating phases.

We deliver class-leading loss prevention and risk management support, and provide expert consultation for insurance and risk transfer options available at each stage.

## WILLIS IDENTIFIES KEY RISKS

- **Power Plant:** nature of retrofit if applicable, abatement of CO<sub>2</sub>, cross liabilities arising from physical damage to capture plant, cross liabilities arising from loss of CO<sub>2</sub> to capture plant.
- **Carbon Capture:** Proximity/connection to power plant, physical damage to power plant, failure to abate CO<sub>2</sub>, knock-on effects to power plant operator and/or transport/storage operator.
- **Carbon Credits:** Failure to validate, register and issue CERs (Certified Emission Reductions) for CDM projects (Clean Development Mechanisms).
- **Transportation:** On/offshore pipelines/shipping, existing pipeline integrity, co-ownership of pipe, transfer of ownership of CO<sub>2</sub>, reinstatement post-loss.
- **Injection:** Nature of ownership of platform and well, platform operator, transfer of ownership of CO<sub>2</sub>, well control and blowout.
- **Storage:** Ownership of depleted field, lease/licensing agreement/joint venture, length of licence, reservoir operator, licence holder, transfer of ownership of CO<sub>2</sub>, long term liabilities, climate, safety.
- **Directors and Officers:** GHG disclosure (Greenhouse Gas).

## CCS TECHNOLOGY COULD REDUCE CO<sub>2</sub> EMISSIONS FROM FOSSIL FUEL POWER STATIONS BY UP TO 90%.