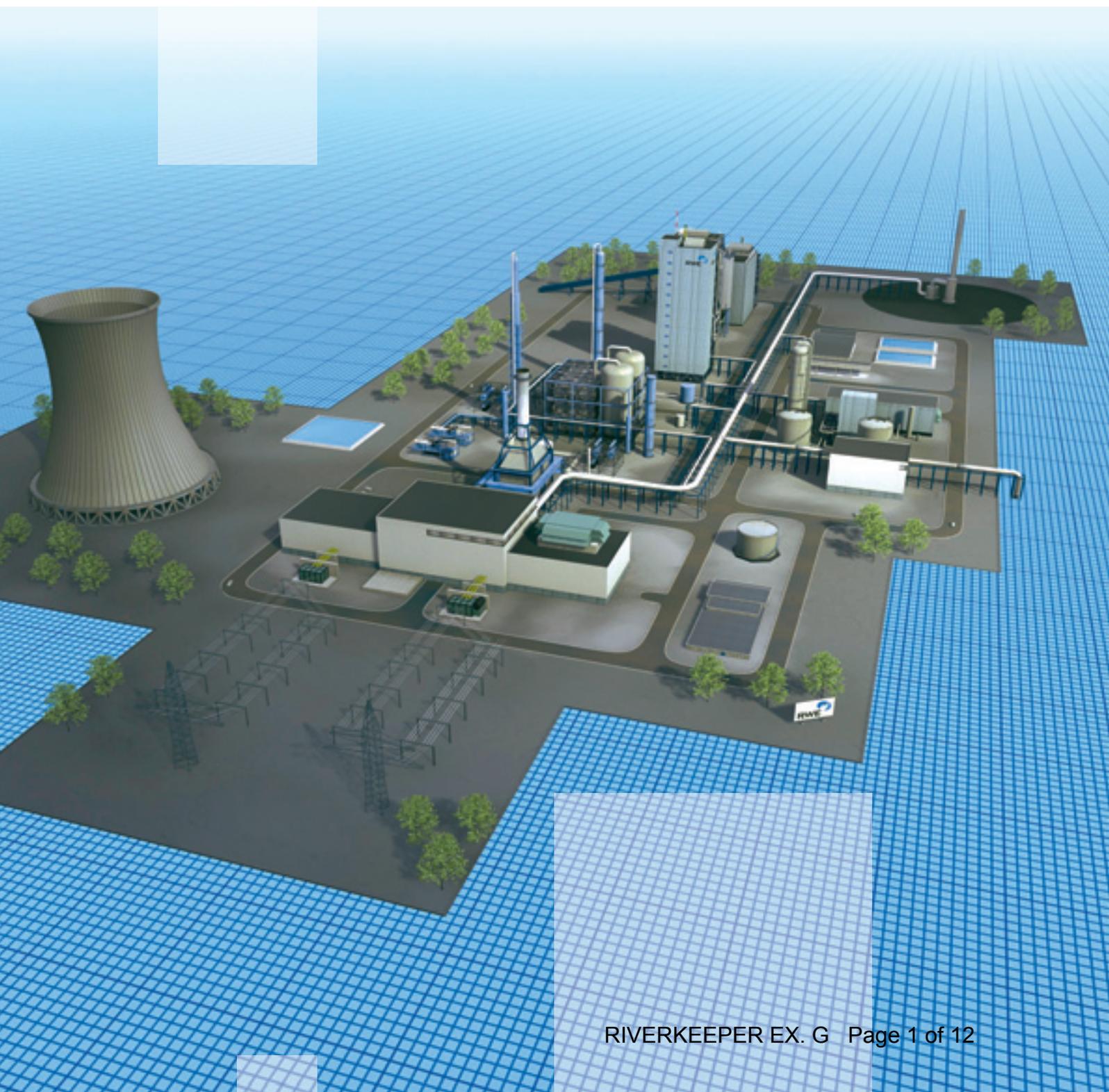
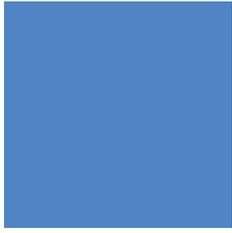


RIVERKEEPER EXHIBIT G

CLIMATE PROTECTION PROGRAMME

IGCC POWER PLANT WITH CO₂ STORAGE





Cover photo: Today, a project. But by 2014, the world's first commercial-scale IGCC power plant with integrated CO₂ capture and storage is to become reality. In this big trailblazing undertaking, considered a milestone in climate-sparing power generation on a coal basis, RWE Power is investing some € 1 billion.

Illustration by CCS Werbeagentur

With all our power: RWE Power

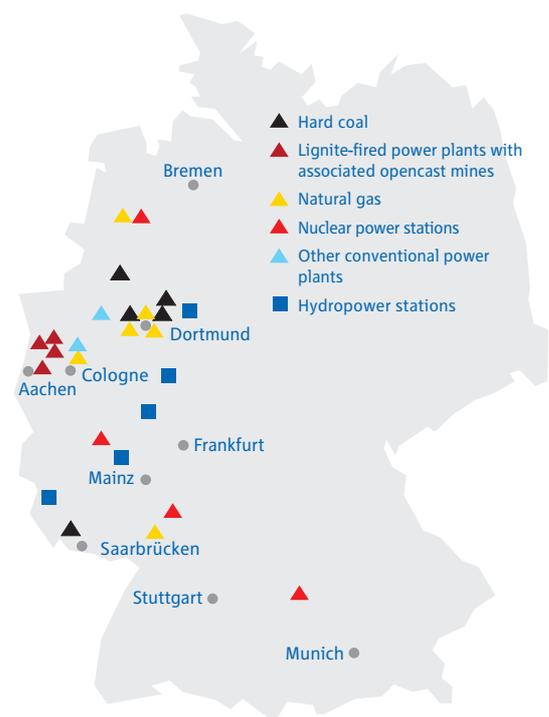
Energy is life. It is the nervous system of modern industrial society. We, the electricity producers in the RWE Group, do our considerable bit to ensure that the wheels don't stand still. We produce electricity and heat, and we extract coal – on a secure, economically efficient and environmentally sound basis. We are a global player today, although our roots lie by the Rhine and Ruhr rivers. We have traditionally had close links with the locations where we operate. That is because we have grown with the regions – and the regions with us.

Our commitment rests on this identity. Here, we are talking more than just electricity and heat. As important employers and investors, we underpin economic growth and jobs. In numerous projects and in close partnership with the regions, we support the residents and the economy at our locations.

We assume responsibility for things big and small. So we are just as committed to the environment “on our doorstep” as we are to global climate protection. Being Germany's biggest electricity producers, we are proactively involved in designing concepts for the energy supply of the future. Our aim: to square the triangle of economic efficiency, security of supplies and environmental compatibility. We provide impetus – with our know-how, innovative technologies and substantial investment in ultra-modern power plants. We are continuously working on making power generation even more efficient, while seeking solutions to the worldwide problem of a rise in energy needs and the growing scarcity of raw materials.

We combine all energy sources under one roof: from renewables like hydropower, wind and solar energy, via coal and gas, all the way to nuclear energy. With this balanced mix, we can create the best basis for long-term energy security.

Our power plants, with various output parameters, produce over 180 billion kWh of electricity every year. This enables us to cover some one third of Germany's electricity needs. A workforce of around 17,000 inside and outside Germany give their all for energy supplies in Germany and Europe. With all their power.



Clean-coal technologies: central module in our climate-protection programme

The energy source coal will remain indispensable in the foreseeable future. This being so, we are driving forward the ecological optimization of fossil-fired power plants.

Climate change and worldwide growth in our energy needs raise various issues. One is the demand for electricity, which will continue to rise in the coming decades. According to current forecasts, global electricity requirements will double by 2030.

The growing world demand for energy must be juxtaposed with ambitious climate-protection targets: as a signatory state to the Kyoto Protocol, Germany has given an undertaking to obtain a 21% reduction in its emissions of the most important greenhouse gases by 2012 compared with 1990 figures.

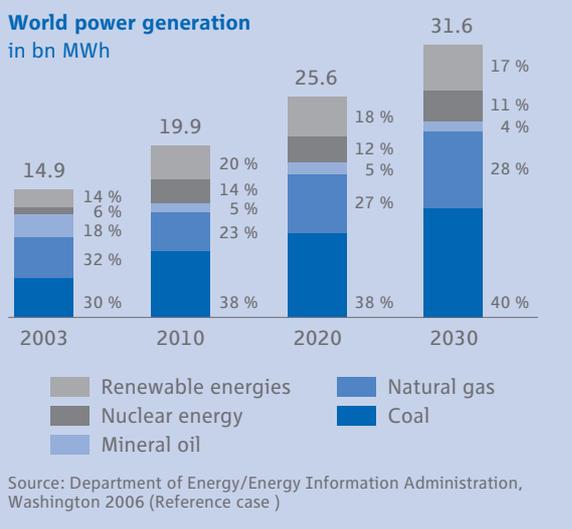
RWE Power supports these goals. We are playing our part in helping solve the central energy- and climate-policy challenges. With investment in innovative technologies running into billions, we are working steadily on making the input of valuable raw materials even more efficient, e.g. within the scope

of our broad-based power plant renewal programme. However, the modernization of our power station fleet is just one facet of our efforts on behalf of preventing climate change – a task to which we feel committed, not least owing to our responsibility as a large CO₂ emitter. In order to sustainably lower CO₂ emissions, we have developed a long-term strategy. For our ambitious climate-protection programme, we will be making € 2 billion available by 2014.

Module 1: Further development and implementation of clean-coal technologies

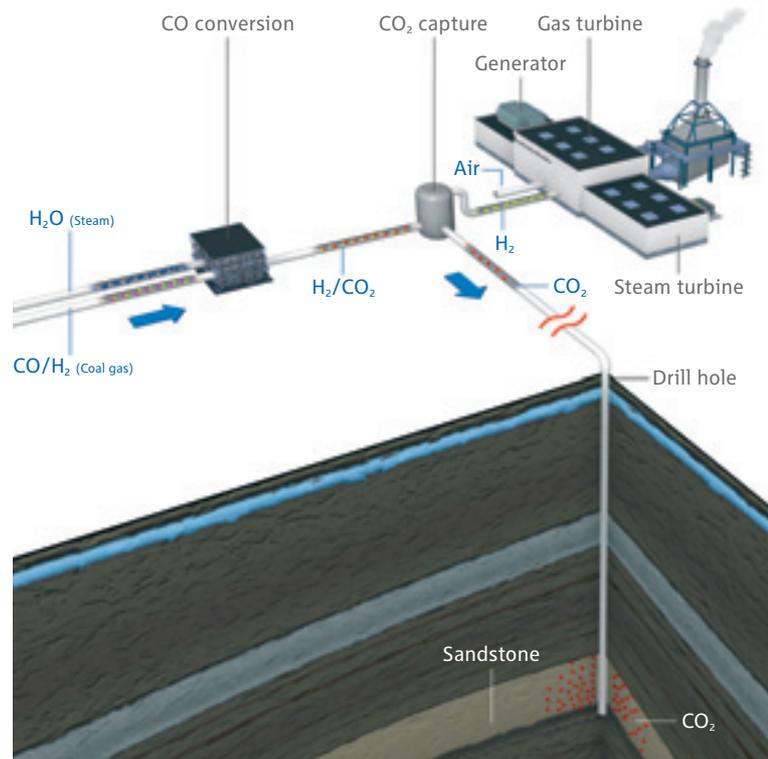
In the foreseeable future, fossil energy carriers will go on being indispensable in power generation. Today, nearly 47 percent of Germany's power requirements alone is covered by lignite- and hard coal-based power plants. Even if we succeed in raising the share of renewable energies in power generation to 20% by 2020, the remaining 80% will still have to be covered by conventional sources.

This is where coal, and lignite in particular, plays a key role. As a subsidy-free and economically efficient energy source, it will be available for generations to come. In times of growing geopolitical uncertainties and intensifying competition for finite resources, lignite will remain a cornerstone in the energy mix – and, hence, a guarantor of secure electricity supplies in Germany and Europe.



Our urgent task is to further develop the efficient and climate-sparing utilization of this invaluable energy carrier coal. Within the scope of a technological offensive, therefore, RWE Power, among other policies, is pressing ahead with increases in efficiencies and climate-friendly retrofits of existing plants.

The centrepiece of our clean-coal activities is the implementation of the world's first zero-CO₂ large-scale power plant with integrated coal gasification plus CO₂ capture and storage. Our aim: if everything goes well, we wish to commission the IGCC power plant as early as 2014. We are willing to invest substantial funds in this; the costs for this future-gearred major project are estimated to run into some € 1 billion. The construction of the zero-CO₂ power plant and CO₂ storage on a commercial scale will not only be a milestone in climate-sparing energy generation: we will at the same time be underscoring our claim to technological leadership in coal-based power generation. In a supplementary parallel project, so-called CO₂ scrubbing is being developed for conventional power plants; this offers an option for the retrofitting of existing plants.



The principle of CO₂ capture and storage. Illustration by CCS Werbeagentur

Module 2: Expanding renewable energies

We are pushing ahead with expanding renewable energies with an ambitious investment and research programme. In the next five years, we will be making € 650 million available to extend our portfolio. The aim is to make "green electricity" competitive.

Module 3: International measures to reduce CO₂

The implementation of ultra-modern energy technologies for CO₂ reduction in emergent countries and in economies in transition (EITs) is an effective and economically efficient instrument. RWE Power is playing a pioneering role here. For our stepped-up commitment in the area of Clean Development Mechanism (CDM) and Joint Implementation (JI), the appropriate instruments contained in the Kyoto Protocol, we will be expending € 150 million.

CLIMATE PROTECTION PROGRAMME

Milestone in sustainable climate protection: the zero-CO₂ power plant

We are implementing the world's first zero-CO₂ power plant on a coal basis – and are in the vanguard of the climate-protection movement.

RWE Power is working in depth on innovative technologies to increase efficiencies and on an ecological optimization of fossil-fired power plants. We are vigorously driving forward our beacon project within the scope of clean-coal technology: the implementation of the world's first zero-CO₂ coal-based power plant with a gross output of 450 MW and integrated CO₂ capture and storage.

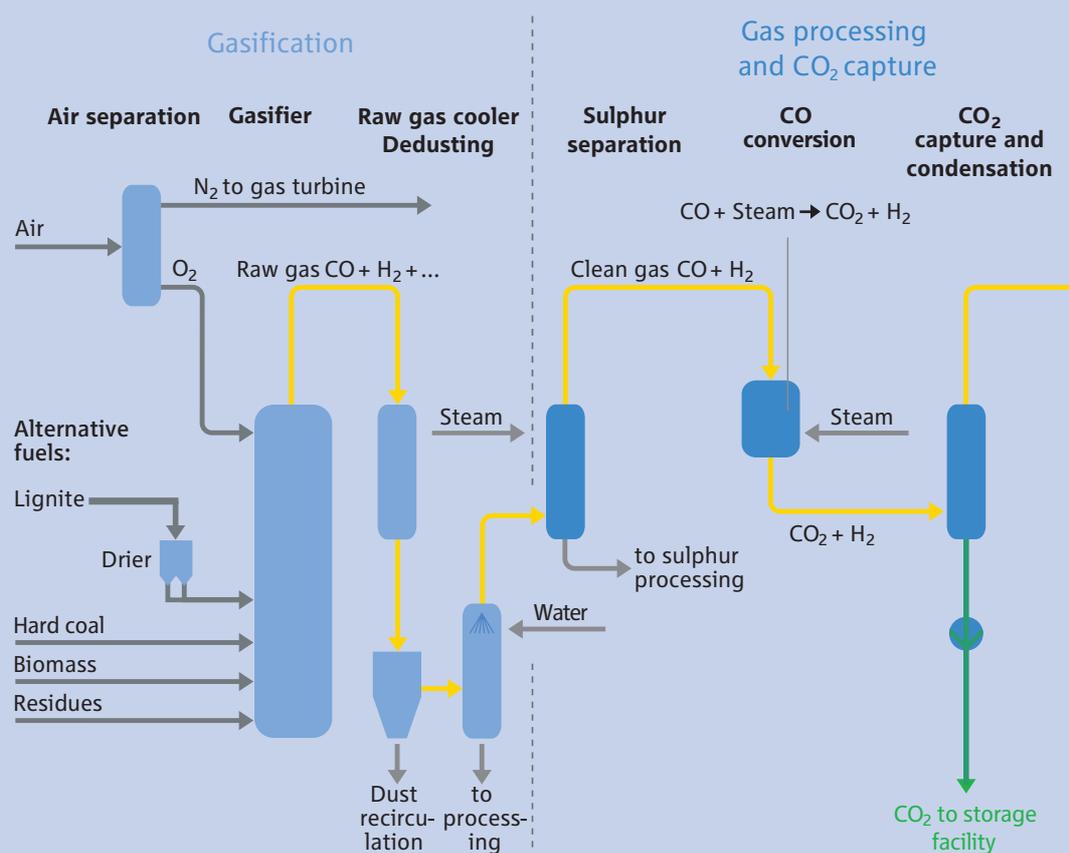
We are the only company to have the necessary know-how to tackle the entire commercial-scale

process chain for a zero-CO₂ power plant: from coal gasification for power generation and CO₂ capture, via pipeline transportation, all the way to storage.

IGCC technology can be implemented on an industrial scale

In implementing the zero-CO₂ coal-fired power plant, we are pinpointedly backing IGCC technology (Integrated Gasification Combined Cycle). This is because, among all the options for zero-CO₂ power plant engineering, IGCC technology is the

This is how the zero-CO₂ large-scale power plant with integrated coal gasification plus CO₂ capture and storage works.



only commercial-scale solution that is already available today. The technology is by no means new for RWE Power. In the 1990s already, it was the subject of in-depth research in the company. Then, increases in efficiency were to the fore. Today, we are further developing the IGCC technology owing mainly to the need to achieve long-term climate protection. The reason for this is that – unlike other methods – the IGCC process separates the CO₂ with relative ease, and the loss in efficiency is lower. With our planned IGCC power plant with CO₂ separation we wish to obtain a net efficiency of 40%.

In order to further develop our existing IGCC concepts for a zero-CO₂ power plant, we have supplemented coal gasification and gas processing with process steps that enable particularly efficient CO₂ separation. Using this key technology, we are simultaneously opening up options to make other marketable products, like fuels, in addition to electricity (see page 9).

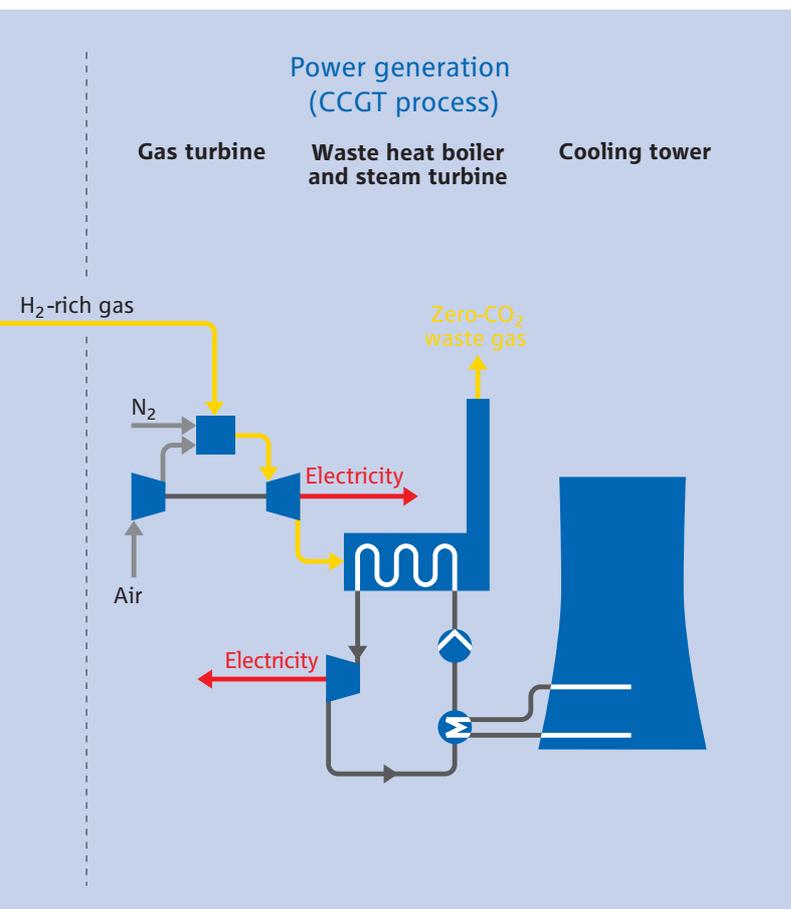
Technical data

Gross capacity	450 MW
Net capacity	360 MW
Net efficiency	40%
Stored CO ₂ quantity	2.3 mill. t p.a.

Coal gasification plus CO₂ capture

In our IGCC process, coal gasification is combined with CO₂ separation and the electricity generated in downstream gas and steam turbines. For this purpose, the coal is not combusted as in a conventional steam generator, but first converted into combustible raw gas in a gasifier at high temperatures and under a pressure of about 35 bar. This gas, whose main components are carbon monoxide and hydrogen, is then purified. In a next step – one that is crucial for preventing climate change – the CO₂ converted into carbon monoxide is separated and permanently stored (see page 8).

The remaining elementary hydrogen is burned in a gas turbine which drives a generator to produce power. The emerging hot waste gases consist mainly of atmospheric nitrogen and clean water vapour; they are used to generate steam. The steam, in turn, drives a steam turbine and a second generator to make electricity. Because the electricity is generated in a particularly effective combination of gas and steam turbine, this power station principle is referred to as “combined cycle power plant”.



Technological challenge: CO₂ capture and storage

Permanent and safe storage of CO₂ is a technically demanding task. We are facing up to it – with our own know-how and in cooperation with competent partners.

One of the key technological tasks that must be solved in implementing the IGCC power plant is the separation and permanent safe storage of the CO₂.

The CO₂ separated in the power plant is then condensed, liquefied and then hauled off by pipeline to the storage facility. In parallel, we are also dealing with options for increased, climate-compatible use and with conceivable bacteriological or photo-synthetic conversion of CO₂.

Optimal storage conditions

For the permanent storage of the separated CO₂ underground various options lend themselves. Storage in geological structures is being investigated in depth at international level in scientific research schemes; in the first major projects worldwide, practical experience has already been gained in underground CO₂ storage.

The world's largest storage potential by far is offered by saline aquifers (see box). Also being considered are depleted former oil and gas deposit sites. The total storage volume in Germany is estimated by the Federal Institute for Geosciences and Natural Resources (BGR) to some 20 billion tons of CO₂ (±8 billion tons).

Our own know-how and outside expertise

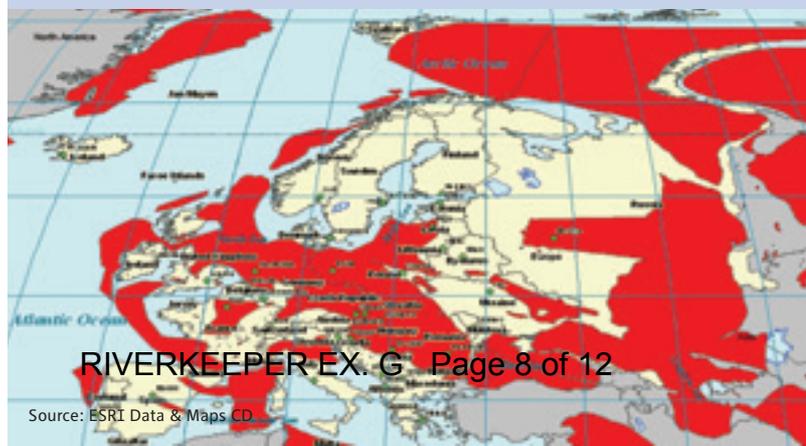
With RWE Dea under the same roof in the RWE Group, we have substantial expertise on tap in the exploration of oil and gas deposits and in the storage of natural gas. We use this know-how to implement CO₂ storage as a central component in our zero-CO₂ coal-fired commercial power station. We plan to safely store some 2.3 million tons of CO₂

annually after the IGCC power plant goes live – a scale that is virgin ground worldwide for us. The implementation of CO₂ storage is a mission-critical part of the overall project for a zero-CO₂ power plant. We wish to bring to full commercial maturity this bridging technology which is so important for achieving ambitious climate targets.

Protection of people and the environment has top priority here. For the development of potential storage facilities, we have launched an extensive technical/geological investigation programme. Here, we are cooperating closely with competent partners from science and research, e.g. with the Federal Institute for Geosciences and Natural Resources.

Keyword: Aquifers

Aquifers are deep salt water-bearing sandstone layers which, thanks to their porous formations and overlying covering strata, offer optimal conditions for the long-term, safe storage of CO₂. Owing to specific physical properties and chemical reactions of the CO₂ with the salt water, aquifers also have effective long-term retention mechanisms. In Germany, natural gas has been stored in aquifers for over 30 years now. The map gives an overview of their distribution.



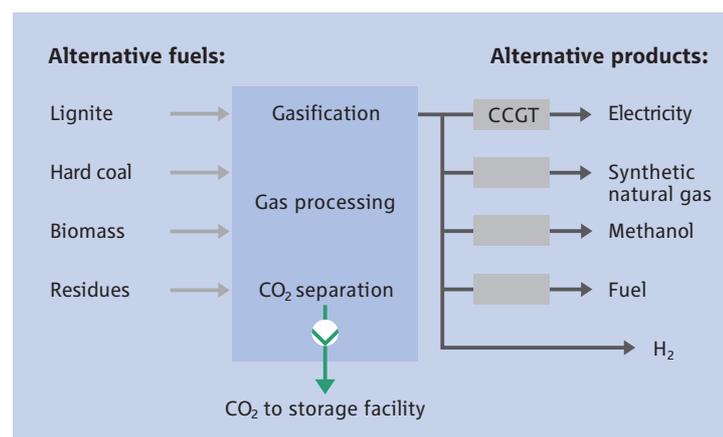
IGCC technology: new perspectives for secure supplies as well

The technology of a zero-CO₂ IGCC power plant makes us flexible – in both input materials and final products. This allows us to tap new market opportunities, while making a contribution toward energy security.

IGCC power plants can be operated not only with lignite and hard coal, but also with biomass or residues. Worldwide, over 100 refineries and power plants are currently using tried-and-tested gasification to generate electricity.

Since the IGCC process produces synthesis gas as an interim product, various chemical products or fuels can be made in addition to electricity. The raw gas with its main components carbon monoxide and hydrogen is the basis both for energy carriers and for basic chemical materials and final products.

Hydrogen as an interim product of the zero-CO₂ IGCC process can be removed without any further process steps. This opens up the possibility of using it as a fuel in the transport field as an alternative to power generation. Other products require additional conversion processes. If they are downstream of coal gasification and gas processing, the IGCC power plant can produce, among other things, methanol and synthetic natural gas (SNG), but also engine fuels like diesel and petrol.



With the pinpointed conversion of lignite into gas, IGCC technology can also be an interesting option should bottlenecks in oil supplies occur. The lignite deposits in the Rhenish mining area alone with 50 billion barrels oil equivalent – i.e. nearly 8 trillion litres – are roughly as high as the remaining energy deposits of crude oil and natural gas in the North Sea.

So, by constructing and operating a large-scale IGCC power plant, RWE Power will be able to respond flexibly to new market opportunities that go beyond electricity generation. At the same time, this technology will also enable us to provide answers in the medium term to the problem of sustainable energy security.



Implementation: a joint task for industry, politics and the authorities

Implementation of the zero-CO₂ IGCC power plant with integrated CO₂ storage by 2014 calls for huge efforts – and speedy planning and approval procedures.

With the construction of the world's first zero-CO₂ IGCC power plant, we have set ourselves an ambitious goal in time respects as well. If the IGCC power plant is to be commissioned in 2014, it and CO₂ storage must be pushed forward in parallel and technically dovetailed.

What is more, CO₂ storage requires the development of a legal and regulatory framework. We are counting on the fact that this clarification process is being tackled as a joint task in climate protection by all companies, policymakers and the authorities concerned.

We wish to obtain all requisite approvals for the project by 2010. They are the preconditions for a decision in favour of building the power plant and for the expansion of an optimal CO₂ storage facility. Jointly with outside experts, we will be systematically seeking suitable storage formations in the run-up. Safety and sustainability of the storage will be to the fore here. Comprehensive seismographic investigations help us meticulously examine the tightness of potential storage facilities. Three-dimensional simulations permit robust forecasts on storage behaviour across thousands of years. Storage formations will be examined and assessed by close review with the authorities in charge. In order to connect the zero-CO₂ IGCC power plant

to the grid on time, it is necessary to obtain clarity early in 2009 especially about the legal framework for CO₂ storage at national or, as the case may be, European level. Here we are counting on the support of policymakers and the authorities to meet the ambitious timetable. For implementation of such an innovative power plant project, which is virgin territory in many respect, we are also counting, of course, on financial support from German and EU research funds. Implementation of the zero-CO₂ power plant requires tremendous technical and financial efforts. We are willing to bear this high entrepreneurial risk and are assuming that such an extraordinary burden in achieving climate-policy targets will be recognized within the scope of future trade in CO₂ emissions.

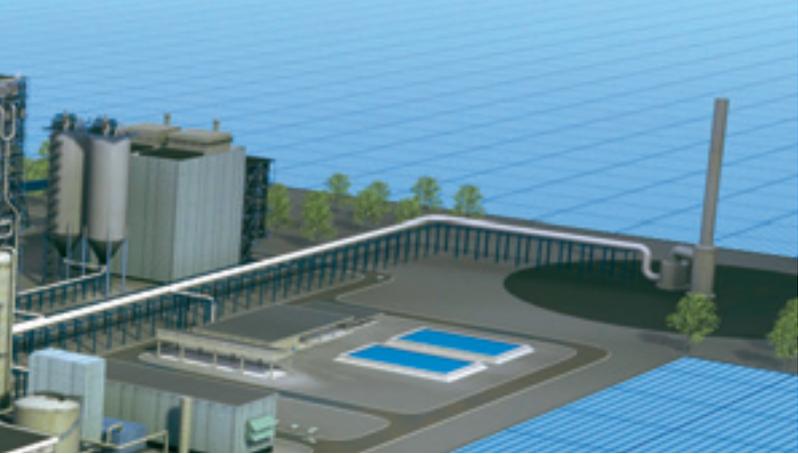


Illustration by CCS Werbeagentur

Climate-protection programme: achieving ambitious targets by dialogue

- As a signatory to the Kyoto Protocol, Germany has given an undertaking to sustainably lower its CO₂ emissions. We have embraced this goal. And we are making available € 2 billion for our extensive climate-protection programme until 2014.
- We are facing up to the task of driving forward the ecological optimization of power generation on a fossil basis.
- The centrepiece of our clean-coal activities is the implementation of the world's first zero-CO₂ IGCC power plant, which we wish to switch live in 2014. We are willing to invest some € 1 billion in this future-gearred project.
- The biggest technical challenge is the storage of CO₂. Implementation of this politically desired technology on a commercial scale is viewed by us as a joint task designed to prevent climate change. So, we expect constructive collaboration of industry, policymakers and the authorities.
- With our plans for a zero-CO₂ IGCC power plant, we are aspiring to technology leadership and tapping export potentials for Germany. And we are making an important contribution on behalf of our economic location.
- In implementing this innovative and, in scale, unique project, we are counting on the cooperation of all those involved. Transparency, information and constructive dialogue are important concerns.

Time schedule

