Executive Summary

The EU Emissions Trading Scheme (EU ETS) remains by far the largest trading programme for greenhouse gas emissions, and as such has a key influence on the global market in emission certificates. In Germany, some 1,656 plants emitting 428 million tCO₂ were registered under the EU ETS in 2009. This meant that almost 50 % of Germany's greenhouse gas emissions were covered. Since 2009 the KfW/ZEW CO₂ has annually surveyed the companies regulated by emissions trading in Germany on the effectiveness and efficiency of the system. Now, in 2010, the EU Emissions Trading Scheme (EU ETS) has reached the midpoint of the second trading period (2008–2012) – a good point in time at which to both conduct a first evaluation of the trading period, and look ahead to the changes due from 2013 onward. The emissions trading year 2009 was shaped by the economic crisis. A decline in production caused by a downward economic trend was the main reason for the significant reduction in emissions in 2009, which overshadowed the incentive effect of emissions trading. This year's KfW/ZEW CO₂ Barometer 2010 focuses on corporate carbon management, i. e. the information base used and the organisation of emissions trading within the surveyed companies, and preparation for the auction of emission rights during the third trading period.

The key results in brief:

CO₂ abatement gaining ground (Chapter 2)

- Since emissions trading began, 63 % of the surveyed companies have implemented CO₂ abatement measures. The dominant abatement measure was process optimisation. Only 7 % of survey participants implemented measures designed chiefly to reduce CO₂; so far, emission reductions have largely been a secondary effect of implemented measures. One in five companies encountered financing problems in the implementation of abatement measures.
- At present 57 % of respondents plan to implement a measure that will reduce CO₂ during the period from 2010 to 2012. Here, emission abatement is gaining ground rapidly: 20 % of respondents stated they were planning a measure designed chiefly to reduce CO₂. Investment in energy efficiency was the planned abatement measure mentioned most frequently.

Emission rights trading: only used by half the companies (Chapter 3)

- In 2009, only half the respondents traded in emission rights. Large emitters and energy companies are active on CO₂ markets more frequently than other types of company. The reasons most often given by respondents for not engaging in emission rights trading were a sufficient allocation of certificates, and a desire to avoid speculative transactions.
- Only around one third of companies in Germany trade in Certified Emission Reductions (CERs) generated in UN-certified Clean Development Mechanism (CDM) projects in developing countries. These are used mainly by large emitters.
- The surveyed carbon trading experts see the largest potential for new CDM projects as being in Africa and Asia (excluding China and India).

Significant price increases not expected until the third trading period (Section 3.2)

- The respondent firms anticipate that prices for emission allowances (EUAs) will move laterally until July 2011 und might rise up to a good EUR 18 by the end of 2012. For the third trading period (2013–2020) an average price of just under EUR 26 is expected.
- The spread between the prices for emission allowances (EUAs) and Certified Emission Reductions (CERs) from CDM-projects is predicted to rise up to EUR 3.60 until the end of 2012 by the experts. A spread of EUR 4.80 is expected for the third trading period.

Carbon management: deficits in the evaluation of abatement potentials (Chapter 4)

- The majority of companies is well informed about the general external conditions of carbon trading (market situation, legal foundations etc.), though not about the potential use of CDM and JI projects.
- There is, however, a significant lack of internal information in the companies. The majority of firms (65 %) have so far not evaluated their internal possibilities for reducing their CO₂ emissions. Only in 50 % of responding firms a risk analysis and reporting is done on emissions trading.
- 43 % of companies concentrate solely on compliance in the emissions trading system.
 They are not aiming to minimise costs by realising emission reduction options or trading emission certificates, i.e. they are not practising an active carbon management.
- Small emitters show disproportionately high transaction costs per emitted ton of CO₂. These transaction costs impede the integration of emissions trading in company operations and can reduce the overall efficiency of the emissions trading system.

Companies are not yet prepared for the auction of certificates from 2013 onward (Chapter 5)

Just under two thirds of the surveyed companies have not yet evaluated the additional
cost burden arising from the changes in emissions trading due from 2013 onward. As a
result, many companies may underestimate the cost risks they will face over the coming
years.

Heterogeneity of companies also reflected in corporate strategies for abatement and trading (Chapter 6)

 Types of company (by emission volume, sector and size) and emissions trading activities correlate only partially. The pronounced heterogeneity of the companies involved in emissions trading is also reflected in the diversity of strategies.