Executive summary

In Germany, the costs of supporting renewable energies are spread out by means of reallocation to the power consumer in accordance with the renewable energies act (EEG). Firms with high electricity consumption can be partly relieved of this if they fulfil the strict quantitative and qualitative requirements of the EEG's special equalisation scheme. The aim of the scheme is to protect companies that use a lot of power due to the nature of their processes from losing their competitiveness vis-à-vis competing locations in other countries inside and outside of Europe. Recently there has been much heated discussion on the amount and distribution of costs under the EEG. Alongside the promotion of renewable energies, the relief of power-intensive firms has been subject to criticism.

The present study by EEFA-Forschungsinstitut GmbH & Co. KG, Münster empirically investigates the international competition situation of the German cement industry in this context. The focus of the analysis is on the intensity of power costs for cement manufacture, the exposure of cement companies to international competition – both inside and outside of Europe – and the significance of EEG relief for the preservation of cement production and employment in Germany. The latter is evaluated in view of the expected effects of a potential increase in power costs on the sector and the German economy as a whole.

Cement manufacture as a power and fuel-intensive process

The EEG equalisation scheme was introduced back in 2003 by the government in power at the time, a coalition between the Social Democrats and the Greens, in order to guarantee competitive production costs for power-intensive firms in Germany. Companies in the cement industry have fulfilled the strict criteria of the scheme from the beginning. For them, this relief is essential for economic and employment-related reasons – now more than ever.

With energy costs (fuel, electrical power) representing more than 52% (2011) of the gross value added, the manufacture of cement is one of the most energy and power-intensive production processes in the manufacturing industry. The proportion for power (taking into account all of the



relief currently provided) alone is around 25%. At approx. 250 million euros p.a., the production factor of power is therefore one of the most significant cost factors for the German cement industry today. Without the relief provided by the special equalisation scheme, the power costs for the sector would increase by an additional approx. 220 million euros (2014) a year, therefore almost doubling. Calculated across the employees in the cement industry, this would correspond to over 30,000 euros per job, or more than 45,000 euros per job for production staff.

German cement industry in intensive international competition

The results of the present study show that cement manufacturers in Germany are in direct international competition through the export as well as the import of cement. In 2012, 1.2 million tonnes of cement were imported into Germany, whilst just under 6.8 million tonnes of cement were delivered to clients abroad. The (value-based) trade intensity of the German cement industry was therefore around 30% on average for the years 2008 to 2012. Foreign trade in cement largely concentrates on foreign markets within the EU. The reason for this is primarily the comparably high transport costs as compared with the product price, at least in terms of transport by lorry. Due to lower freight costs, cement is also transported over longer distances (including inter-continentally) by ship in particular. This may explain the fact that recently there have been increased imports of the intermediate product of cement clinker from third countries into the European market. These imports also indirectly increase the competitive pressure on German cement manufacturers for the end product of cement finished within the EU.

In light of this, cement works that are located near to the borders or coastlines of neighbouring European countries or have a direct connection to inland ports, in particular, are directly subject to foreign competition. For these production sites, it is not possible to pass on the higher power costs that would be incurred through loss of the EEG equalisation scheme onto customers. Calculated roughly, the expected increases in power prices would directly threaten the competitiveness of around 57% of German cement production (approx. 19 million tonnes), particularly in the border regions, and lead to an immediate or medium-term shut-down of operations.

Over 20,000 jobs threatened in the event of loss of EEG relief

A slump in cement production on this scale would not just bring considerable disadvantages for the regional economy in terms of value creation and employment. Considering the multiplier effect, this "power cost shock" (full EEG reallocation) would lead to total economic damage of around 2.6 billion euros a year. The reduction in production would, of course, also not be without effect on the employment market. A 57% drop in cement production in Germany could lead to the loss of over 20,000 jobs, many highly qualified (including 4,200 directly in the cement industry, 14,000 indirectly in upstream and downstream sectors and 3,200 due to income-induced effects).

To summarise, the present study shows that the German cement industry is in intensive international competition, both inside and outside of Europe, and that EEG relief is essential for the preservation of cement production and employment in Germany. Loss of the special equalisation scheme would not only have a negative effect on the production sites of the cement companies; there would also be significant production and employment loses for the entire economy.