

A Comparison between Germany and the United Kingdom

# Obstacles to the Greening of SMEs

**Kleine und mittlere Unternehmen haben bei der Umsetzung von Umweltschutzmaßnahmen mit speziellen Problemen zu kämpfen. Ein EU-Projekt hat in einem Mehr-Länder-Vergleich am Beispiel der Sektoren Möbel, Textilverarbeitung und Nahrungsmittel einige wesentliche Hindernisse identifiziert.**

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How can small and medium sized enterprises (SMEs) become more environment friendly? Should they be enabled, motivated, lured, prodded or can they only be forced by command and control policies? The EU-funded project „The relationship between competitiveness, environmental performance and management of small and medium sized European manufacturing firms“ shed some light on the question from a number of directions (1). The aim of the project was to develop detailed and empirically grounded policy advice for this difficult clientele. Of course, the findings vary to a large degree between sectors, countries and even within sectors. This is true for the encountered economic, environmental and cultural facts as well as the resulting policy implications. Yet a select few findings about what SMEs themselves hold to be the most important barriers to the adoption of environmental initiatives shall be outlined. These show that only some obstacles have comparable relevance in the three studied countries, namely Britain, Italy and Germany.

The objective of our research was to identify factors which promote and constrain the adoption of environmental initiatives by SMEs with the objective of detailing how policy can overcome obstacles and promote the adoption of environmental initiatives by industry. The policy significance lies in the investigation of the importance of the contribution of specialist environmental services to the environmental performance of firms in addition to the services' impact on manufacturing competitiveness and employment.

The research tried to identify (figure 1):

- those factors varying between industries and firms which influence the adoption of clean technologies (meso level),
- those factors which influence differences in environmental performance among similar companies (micro level),

- costs and benefits arising from the adoption of environmental initiatives,
- major customers, strengths and weaknesses encountered in the SME sector, and to
- undertake case studies on the process of adoption as well as to
- investigate expected costs and benefits, identify obstacles and factors facilitating adoption from suppliers of clean technologies including service suppliers.

## ► Key Variables

Concerning key variables, we distinguish hypotheses related to input and output factors. The input-related hypotheses include the impact of

- external driving forces (market, legislation, public),
- the age of plants and machinery,
- skills and R&D,
- management values and strategy and
- informational sources, in particular advisors,

on the environmental and economic performance of the company. Driven by these forces and motivations a company might implement initiatives, which only target environmental performance or, if possible, implement initiatives which integrate economic and environmental aims. These would in turn produce environmental as well as economic results. The output-related hypotheses then include the assumption, that best practice firms will find eventually achieve a double dividend and there will probably be an impact on employment. The empirical approach employed a number of instru-

ments, including postal questionnaires, 100 face-to-face interviews in each sector with SME manufacturing firms, and 100 interviews with consultants, advisors, suppliers and customers. The industries covered were chosen for their significant environmental impacts and costs. These were furniture manufacturing, textile finishing and fruit and vegetables processing.

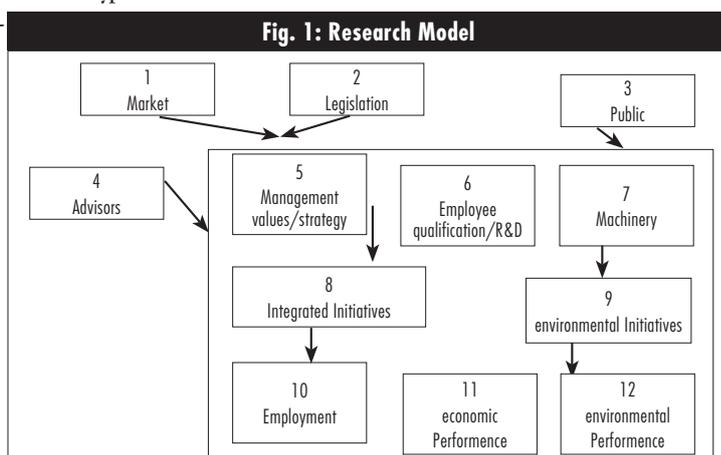
## ► Identification of environmental performance

There are different approaches to measure environmental performance and this research used a mix of methods. It had to be taken into account that controlling procedures in SMEs are rarely elaborated and environmental performance indicators like those proposed by ISO 14 031 (Environmental Performance Evaluation) cannot be expected to be readily available in the average SME.

After all, a set of questions was identified, which provoked meaningful, comprehensive and comparable responses in most interviews. The general idea of environmental performance measurement was to evaluate:

- the effort behind environmental management systems,
- the number and quality of process-oriented environmental protection activities, taking into account to what degree the firm is aware of their success, and
- the range and quality of product oriented environmental protection activities and the related activity concerning marketing and market communication.

The individual activities taken into account varied from sector to sector. Air protection was e.g. an important activity in furniture production, due to solvent emissions, but was of no importance in fruit and vegetable processing. In that sector, it



Source: own representation

**Fig. 2: Most important problems associated with environmental initiatives in Germany and the United Kingdom (up to three answers allowed)**

The most important obstacles to the adoption of environmental initiatives as proposed by SME's	Totals by country							
	Furniture		Textiles		Fruit&Veg.		(N=99)	(N=95)
	G	UK	G	UK	G	UK	G	UK
It is hard to find the capital for investment	19	13	19	19	18	20	56	52
Clean technology investments do not show an adequate return (payback period is too long)	8	3	12	4	12	13	32	20
Environmental consultancy services cost too much	1		4		4		9	0
<i>Financial</i>	<b>28</b>	<b>16</b>	<b>35</b>	<b>23</b>	<b>34</b>	<b>33</b>	<b>97</b>	<b>72</b>
Making a profit is more important than env. protection		3	3	6	4	7	7	16
Management does not have enough time	5	5		7	4	15	9	27
Management has other priorities	3	6	1	3	3	17	7	26
<i>Time / Priorities</i>	<b>8</b>	<b>14</b>	<b>4</b>	<b>16</b>	<b>11</b>	<b>39</b>	<b>23</b>	<b>69</b>
It is hard to get good advice	2	9	2	3	1	7	5	19
Clean technology is still risky and unproven	11	1	7		8	1	26	2
We do not have the right skills and expertise in-house (e.g. R&D)	7	2	5	3	8	5	20	10
<i>Information</i>	<b>20</b>	<b>12</b>	<b>14</b>	<b>6</b>	<b>17</b>	<b>13</b>	<b>51</b>	<b>31</b>
Regulation does not support initiatives			8		5	1	13	1
The regulations are too uncertain to plan for new technology	16	9	10	1	9	2	35	12
<i>Regulation</i>	<b>16</b>	<b>9</b>	<b>18</b>	<b>1</b>	<b>14</b>	<b>3</b>	<b>48</b>	<b>13</b>
Suppliers do not provide any help in adopting environmental initiatives	1	3			1		2	3
<i>Total</i>	<b>83</b>	<b>54</b>	<b>71</b>	<b>46</b>	<b>76</b>	<b>88</b>	<b>221</b>	<b>188</b>

Source: own compilation

was subsequently replaced by water protection, which in turn is unimportant in furniture manufacturing.

### ► Environmental performance and competitiveness

A number of indicators of competitiveness were examined. With regard to the data obtained by the face-to-face interviews with the manufacturing firms, it was not possible to show that firms more active in environmental protection are more competitive than other firms in terms of profit, export or value added. In all three countries and sectors the comparison of economic indicators between environmental performance groups delivered ambiguous results. This finding could be due to the small share of environmental costs in the overall cost framework of the sample firms, and the equally small pull effects in their respective markets attributable to products' environmental qualities. But if questioned about the economic outcome of individual initiatives, the picture described by the firms was different. Initiatives carried out for cost reasons really reduced cost and subsequently very often contribute to the firms profit in a satisfactory way. Initiatives carried out for market reasons – the biggest group – very often need investments in new

or modified machinery, or labour input has to be increased. But these initiatives very often create advantages in terms of increased market share, higher price and improved image as well as position in the market. They may also contribute to profitability. Only initiatives carried out because of regulatory pressure – the smallest group – were reported to be a significant economic burden. It can be shown, that most environmental initiatives today are quite well integrated in firms' (investment) strategies and that the general perception that these initiatives are a burden on competitiveness does not apply to the companies sampled in these three sectors. Nevertheless, there are still a lot of obstacles for SMEs, which have to be overcome in order to put them into a more active position.

### ► Obstacles to the Adoption of Environmental Initiatives

In Germany as well as in the UK, financial obstacles were the most common to be mentioned by the interviewees (see figure 2 above). Lack of capital and the failure of investments in clean technology to deliver adequate payback periods are very prominent complaints in this category as well as in the overall picture. We found many initiatives that were cheap in monetary terms and delivered excellent

return on investment. But a relevant share of environmental initiatives can only be put into practice with completely new machinery, and in this respect the complaints are highly relevant.

British firms much more often state that environmental issues are not relevant enough to obtain adequate amounts of management time. With respect to information, British firms find it harder to obtain good advice while German firms more heavily insist on the risky and unproven nature of clean technology and are relatively more sensitive to their own lack of in-house expertise. Obviously, German firms put greater emphasis on developing and maintaining problem-solving expertise in-house than British SMEs do.

Also, German firms are much more focussed on regulation, either as a means to support initiatives or, especially, as a source of uncertainty. The German eco-tax scheme may have a lot to do with this, because it affects the payback period of investments in clean technology. Higher rates of taxation obviously shorten the payback period of energy saving machinery. The public discussion of the scheme may also have given environmental issues a higher priority compared to the UK. Yet while (short) payback periods are quite probably a necessary condition, they do not suffice. Making capital available to SMEs and helping them in the building up of necessary management capacities and skills, especially in small companies, would obviously be necessary first steps. Yet many individual interviews with managers and advisors hint that quite often the very first step would be to 1. make SMEs realize that support is available and 2. that it is worth the bureaucratic effort.

### Reference

(1) The detailed results for Germany of will be published later this year in the IÖW-Schriftenreihe while the combined results from Great Britain, Italy and Germany will be released as a book.

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