



# **Design Council European survey of manufacturing companies' attitudes towards Design for Sustainability.**

Fieldwork completed by IFF Research March 2001  
Research conducted by Hannah Curtis and Jeremy Walker  
© Design Council 2001

## Contents page

1.	Summary	2
2.	Survey Sample	3
3.	Survey Results	4
3.1	Awareness of Design for Sustainability	4
3.2	Use and Influence of Designing for Sustainability	4
3.3	Business Strategy	8
3.4	Implementation of Design for Sustainability	11
3.5	The cost of Designing for Sustainability	14
3.6	Governmental Influence	18

In case of enquiries please contact;  
Hannah Curtis  
Design Council  
34 Bow street  
London  
WC2E 7DL  
Tel: 020 7420 5200  
Email: [hannahc@designcouncil.org.uk](mailto:hannahc@designcouncil.org.uk)

## 1. Summary

**Designing for sustainability is seen as a key strategic direction for manufacturers in the UK, Sweden, Germany, Holland and France with the majority believing investment in developing products incorporating designing for sustainability will reap rewards in terms of improved profit, competitiveness and market position.**

The Design Council conducted a European quantitative telephone survey among 600 manufacturers in Sweden, Holland, Germany, France and the UK to explore attitudes and practices towards design for sustainability.

The results of this survey indicate that the days of merely reacting to regulation are in the past and manufacturers are actually attempting to embrace design for sustainability principles in order to reap positive financial rewards. Of all companies surveyed, designing for sustainability was ranked higher than design for an e-commerce solution.

Customers, both business and the buying public were seen as key drivers in adopting a sustainable design approach. Refreshingly public relations and cost were less of a driver illustrating a maturity in the manufacturing sectors attitude towards design for sustainability.

Sweden leads the field in using designing for sustainability for competitive advantage. Germany and Netherlands have also engaged in this activity to a greater extent than the UK or France. These countries have been responding to design for sustainability for a longer period and, having worked through some of the pragmatic issues are now able to explore the wider picture. These countries are questioning what design for sustainability means for company brand values and recognise the benefits of working in partnerships.

All European countries believe design for sustainability is going to be a major issue in the future both internally within their organisation and externally for all companies in the next 5 years. This indicates that activity related to this field is going to increase and for this to happen all companies recognise that in-house knowledge and information has to increase. This is an area where government could offer real value and help UK companies by providing information from a European perspective which is easily accessible. We can then learn from Sweden and Germany and make the substantial leaps necessary to gain that competitive advantage.

## 2. Survey Sample

The sample for all the countries was randomly selected. The sample is based on manufacturing companies only and has been weighted to reflect a common distribution by number of employees for all countries. The size bands were 20-49, 51-199 and 200+ employees. The following are the sample sizes for each specific country.

UK	200
France	100
Sweden	100
Germany	100
Holland	100

The respondents interviewed represented Design, R&D, NPD, Technical and Managing Directors. They were contacted via the telephone to complete a questionnaire lasting approximately 15 minutes. The fieldwork was conducted by IFF Research during March 2001.

### 3. Survey Results

#### 3.1 Awareness of Design for Sustainability

The majority of UK companies did not spontaneously understand the phrase 'designing for sustainability'. 79% of UK small companies (20-49 employees) interviewed had no awareness of the term.

**Table 1: Spontaneous understanding of the term 'designing for sustainability'**

	% spontaneously understanding
UK	32%
France	15%
Germany	17%
Sweden	34%
Holland	48%
Non-UK	29%

Base: All companies in sample (n=600)

Companies were then provided with a short definition of design for sustainability:

*"Designing for sustainability involves balancing social, ethical and environmental issues alongside economic factors within the product or service development process. It ensures that the needs of both the business customer and society are met whilst protecting the ecosystem."*

#### 3.2 Use and Influence of Design for Sustainability

Once this standard definition had been explained, the companies were asked if they were 'currently developing any products incorporating design for sustainability'.

**Table 2: Are you currently developing any products incorporating design for sustainability?**

	% developing products
UK	71%
France	73%
Germany	56%
Sweden	82%
Holland	71%
Non-UK	70%

Base: All companies in sample (n=600)

The larger companies in the UK were most active in incorporating design for sustainability. 81% of UK companies interviewed employing 200+ staff were currently producing products incorporating design for sustainability. The level of design for sustainability activity is generally positively correlated to the size of company for all countries surveyed.

Sweden has the highest uptake and the following quote suggests why this is the case.

*"Sweden is highly developed in designing for sustainability and has been including this thinking for the last 20 years. It is extremely important to our customers and all companies in this country."*

*Swedish company*

Germany shows a surprisingly low result. However, comments collected suggest that design for sustainability is already on the agenda for these companies and this may explain why 'current' levels of activity are low.

*"...because in Germany, environmental issues have been addressed for a long time – it's not like in Britain where they are only starting now. We have already dealt with this and there are the means and regulations for sustainable design in our production."*

*Hoffmann & Engelmann AG; German Company*

Of those companies viewing design for sustainability to be important, the areas listed in table 3 were identified as being the most important drivers.

**Table 3: In what ways is designing for sustainability important to your company?**

	UK	France	Germany	Sweden	Holland
Meeting customer demands	36%	44%	24%	24%	25%
Regulatory compliance	30%	28%	6%	9%	18%
Environmental benefit	22%	33%	33%	26%	30%
Production/design efficiency	18%	21%	26%	9%	27%
Competitiveness	18%	9%	35%	27%	15%

Base: All companies viewing design for sustainability as important

There appears to be two main types of influence for companies adopting design for sustainability. Both the UK and France highlight meeting customer demands as the top driver for change, where as Germany and Sweden are striving for competitiveness, suggesting a more pro-active attitude towards the benefits of design for sustainability.

Regulatory compliance is also highlighted as a key driver for the UK and France when compared to the other countries, especially Germany and Sweden where the figures are considerably lower. It may indicate that for the UK and France adopting and reacting to design for sustainability is due in part to legislation imposed upon them.

*"We have to follow regulations. It is better not to be behind in relation to our competitors, it is better to anticipate and to be forward compared to our competitors."*

*French company*

History may have an influence here; countries such as Sweden and Germany have been forced to deal with these issues for some time longer and are now able to find the competitive advantage that sustainable development can offer. France and the UK have to take advantage of the lessons learned by the countries where design for sustainability has been established if they want to be able to compete with countries such as Sweden and Germany in a global market place.

When looking at the size of company, the following trends are identified.

- For the UK, regulatory compliance increases by company size and production/design efficiency decreases
- In France regulatory compliance decreases by size of company whereas meeting customer demand increases by size of company

- Meeting customer demand decreases by size of company in Sweden, but competitiveness remains unaffected.
- Germany sees meeting customer demand decrease by size, but competitiveness does not appear to be size related
- Holland shows production/design efficiency and meeting customer demand decreasing by size of company

It was refreshing to see that *'improving public relations'* was one of the least important issues for all the countries interviewed. It appears to not even be a consideration for companies in Germany and Sweden, both showing a nil response.

In the UK, the only companies to mention *'corporate responsibility'* were over 200+ employees. In other countries it showed a low to nil mention with only Sweden and Holland listing this as an influence. This raises an issue that many companies may still be unaware of the full scope of sustainable development. But it may also highlight that the terms are still in the realm of government and business 'jargon' and not distilled into the manufacturing world.

For those companies who do not perceive design for sustainability to be important table 4 shows the issues that were raised.

**Table 4: In what ways is designing for sustainability not important to your company?**

	UK	France	Germany	Sweden	Holland
Lack of customer demand	46%	20%	39%	26%	23%
Not applicable to product/industry	35%	25%	17%	29%	31%
Cost prohibitive	16%	2%	8%	3%	9%
Lack of concern	12%	11%	11%	13%	-
Not yet considered/too recent	8%	8%	18%	15%	11%
Already addressed issues	1%	13%	15%	14%	20%

Base: All companies viewing design for sustainability as not important

Interestingly, cost does not appear to be a significant prohibitor for any of the countries surveyed although it is highest in the UK.

There appear to be two main trends for all countries surveyed for *NOT* adopting design for sustainability. The first is that there is a perceived lack of customer demand for products incorporating design for sustainability and the second that it is not applicable to specific industry sectors. This last point



highlights the need for greater awareness raising among manufacturers that design for sustainability is an issue for *ALL* industry sectors.

The Design Council's sustainable strategies project will be working with a variety of industry sectors to demonstrate that there are design for sustainability activities that can be undertaken by all.

### 3.3 Business Strategy

All companies developing or already offering existing products incorporating design for sustainability were asked what influence this had had to their business strategy.

**Table 5: Would you say that designing for sustainability, whether explicitly or implicitly has influenced your company's current *business strategy*?**

	UK	France	Germany	Sweden	Holland
Has influenced (slightly to significant)	89%	78%	85%	92%	85%
Has significantly influenced	17%	25%	20%	27%	27%
Has had NO influence	10%	19%	14%	7%	11%

Base: All developed or developing products incorporating design for sustainability

87% of all companies believed that design for sustainability had influenced their business strategy.

When all respondents were asked whether they saw designing for sustainability as an opportunity or a threat the responses listed in table 6 were given.

**Table 6: Regarding your current product offering, do you see designing for sustainability as an opportunity for your business or as a threat?**

	UK	France	Germany	Sweden	Holland
<b>Opportunity</b>	55%	58%	51%	74%	67%
<b>Threat</b>	7%	5%	1%	-	5%
<b>Both</b>	12%	8%	4%	9%	11%

Base: All developed or developing products incorporating design for sustainability

60% of all companies surveyed see design for sustainability as an opportunity; the non-UK average is 63%. It is encouraging to see that the majority of all companies in each country see design for sustainability as an opportunity, when in previous years, environmental issues have often been seen as a cost burden. The following quotes support this result.

*"It's a long term concept and guarantees economic success by taking into account wants and needs of customers and suppliers."*

*Swedish company*

*"It is for us a new expanding market with new possibilities."*

*Dutch company*

*"It brings us an opportunity for creativity and take our company to a higher level."*

*Koninklijke Hulshof BV Dutch*

For companies who thought design for sustainability was an opportunity the top three reasons given are presented in table 7.

**Table 7: Why do you see designing for sustainability as an opportunity for your business?**

Top 3 Opportunities	UK	France	Germany	Sweden	Holland
<b>Market opportunity</b>	22%				
<b>Competitiveness</b>	20%	25%	13%	20%	
<b>Meets customer demands</b>	20%		15%		12%
<b>Product/design development</b>		18%			18%
<b>Environmental issues/benefits</b>		12%			13%
<b>Core/key to business</b>				18%	
<b>To appeal to customers</b>			20%	14%	

Base: All who see design for sustainability as an opportunity

All countries apart from Holland identify competitiveness to be a key driver. This possibly reflects a change in attitude from perceiving design for sustainability as a reactive cost for a company, towards a more pro-active revenue generating opportunity. It is also interesting to note that environmental issues/benefits were not the key drivers, suggesting that there is a strong business case for design for sustainability. Although this may support the notion that customer driven preferences are also at play in developing a company's response to sustainable design.

Of the 47% of UK companies who saw design for sustainability as a threat, this was mainly due to prohibitive costs. However, Sweden, which the survey suggests are more advanced in this field, disproves this notion by indicating that design for sustainability is an investment in both company profits and product development. This is discussed further in section 3.5 relating to *'The Cost of Designing for Sustainability'*.

*"It is a threat because it creates margin but also an opportunity as it forces us to move on and create new products to follow the demands we have from certain countries like Germany who are more proactive on this subject"*

*French company*

## Design Strategies

To enable us to explore design for sustainability in a wider business context all respondents were asked to rank the design strategies listed in table 8 in order of priority.

**Table 8 :Importance of design strategies**

	UK	France	Germany	Sweden	Holland
Designing an innovative culture	80%	57%	66%	47%	60%
Designing a flexible working environment	77%	53%	62%	74%	61%
Designing for new technological breakthroughs	66%	53%	57%	72%	66%
Designing for sustainability*	48%	46%	33%	65%	64%
Designing an e-commerce solution	34%	20%	29%	23%	27%
Inclusive design*	23%	5%	2%	4%	13%

Base: All developed or developing products incorporating design for sustainability

\* Respondents were provided with a definition

Of all the countries surveyed, designing for sustainability was ranked higher than designing an e-commerce solution.

### 3.4 Implementation of Design for Sustainability

Of all those companies surveyed developing products incorporating design for sustainability principles, 84% of these are a core strategic direction /offering as opposed to a pilot study.

**Table 9: Are your product developments a pilot or are they a core strategic direction or offering?**

	% offering as core strategic direction/offering
UK	81%
France	64%
Germany	88%
Sweden	99%
Holland	90%
Non-UK	86%

Base: All developing products incorporating design for sustainability

The staggering statistic of 81% of UK companies offering design for sustainability as a core strategic offering could suggest that this is a principle specific approach (i.e. waste management and recyclable materials) rather than a holistic business strategy.

However this does indicate that the majority of the UK manufacturing sector are open to the idea of creating a more sustainable business, many doing or attempting to do so already. This activity should be highlighted, encouraged and aided with help from the relevant industry and governmental bodies. 74% of UK companies claim that the government should be doing more on this issue.

All companies surveyed were asked in the last three years what percentage of their product offering used design for sustainability principles. 38% of all companies surveyed stated that 76% or more of their current product range had incorporated design for sustainability principles, with Sweden being the highest at 55%.

21% of all companies surveyed said none with Holland showing the least activity (28%).

**Table 10: Approximately what percentage of your products in the last 3 years have used the principles of designing for sustainability in their development whether explicit or implicitly?**

	% developing majority of products in last 3 years using design for sustainability principles	% developing no products in last 3 years using design for sustainability principles
UK	50%	19%
France	30%	23%
Germany	38%	21%
Sweden	60%	15%
Holland	36%	28%
Non-UK	41%	22%

Base: All companies in sample

These results are in slight conflict with previous findings with Germany and Holland being significantly lower than the UK in levels of activity. This could be associated with Germany and Holland's wider understanding of a more 'strategic' based approach to design for sustainability as opposed to a more 'issue' based approach.

Respondents were then asked how design for sustainability would be incorporated into future product offerings. Germany, Holland and Sweden are paying considerably more attention to incorporating design for sustainability into future product development than the UK. This supports the notion that Germany, Sweden and Holland are approaching design for sustainability more strategically.

**Table 11: Which of the following best describes how actively your company is seeking to incorporate designing for sustainability in the future into your product offering, whether explicitly or implicitly?**

	UK	France	Germany	Sweden	Holland
Major consideration for all products	18%	17%	25%	32%	46%
Major consideration for some products	12%	20%	20%	20%	29%
Consideration for all products	31%	21%	18%	25%	3%
Consideration for some products	24%	24%	23%	14%	9%
Not a factor	16%	19%	14%	10%	14%

Base: All companies in sample

Companies were asked to cite who had influenced them to adopt design for sustainability principles. The table 12 clearly shows that 'business clients' were the most important factor.

**Table 12: Have any of the following been an influence to your company adopting designing for sustainability?**

	UK	France	Germany	Sweden	Holland
Business clients	83%	88%	68%	72%	77%
Industry or trade bodies	56%	43%	34%	52%	49%
National government	53%	45%	33%	41%	66%
EC/EU	54%	51%	33%	41%	34%
End customer	44%	70%	67%	77%	62%

Base: All developed or developing products incorporating design for sustainability

For all the countries, business clients were the largest influence across all sizes of company. However, the influence of national government, trade bodies and the EC/EU has more impact on the large companies (200+ employees) with the only exception being Germany where governmental influence is irrespective of company size.

This suggests that governmental and trade activity is presently hitting the larger companies more effectively and there is considerable scope for the UK

to address the small and medium manufacturing sector which comprises 99% of the UK manufacturing sector and 12% of UK companies overall.

### 3.5 The Cost of Designing for Sustainability

All companies developing or with existing products incorporating design for sustainability were asked as to whether they see design for sustainability as a cost or investment in the predefined areas outlined in table 13.

**Table 13: Do you see designing for sustainability as a cost or as an investment in a number of areas?**

	UK	France	Germany	Sweden	Holland	Non-UK
Product development cost	21%	12%	24%	3%	9%	12%
Product development investment	38%	68%	36%	76%	67%	62%
A cost to the company	27%	17%	25%	1%	9%	13%
An investment for the company	41%	53%	40%	77%	63%	59%

Base: All developed or developing products incorporating design for sustainability

The majority of companies see design for sustainability as an investment, both in terms of future company profits and more specifically an investment for future product development. The cost factor is highest in the UK with Sweden once again appearing to understand the benefits of investing in design for sustainability more than any other country.

*"...survival in a long-term perspective...."*

*Hydro Polymers AB*

Along with a positive view of investing in design for sustainability, the majority of companies in all the countries surveyed also believe it will have a positive effect on their profits.

**Table 14: What impact do you expect designing for sustainability to have on your company's profits?**

	UK	France	Germany	Sweden	Holland	Non-UK
<b>A positive effect on profits</b>	61%	70%	66%	80%	70%	72%
<b>No effect on profits</b>	19%	23%	25%	16%	17%	20%

Base: All developed or developing products incorporating design for sustainability

Table 15 shows the range of expected increases on company profits. This may also indicate why competitiveness is a big issue in terms of incorporating design for sustainability into a company.

**Table 15: Expected % increase on profits as a result of designing for sustainability**

	UK	France	Germany	Sweden	Holland	Non-UK
<b>1-2%</b>	30%	32%	32%	24%	20%	27%
<b>3-4%</b>	20%	13%	15%	-	3%	7%
<b>5%+</b>	32%	28%	17%	13%	23%	20%

Base: All developed or developing products incorporating design for sustainability to have a positive effect on profits

Evidence that companies are getting profits within the first 12 months is very interesting because the longer pay back period has sometimes been associated with the design for sustainability approach.

82% of UK companies were expecting to see profits ranging from 1-5%+. So although cost/profit was not specifically detailed as an original driver it appears to be an underlying benefit.



**Table 16: Expected timescale to see positive profit returns**

	UK	France	Germany	Sweden	Holland	Non-UK
<b>Within a year</b>	33%	14%	17%	18%	28%	19%
<b>Within 3 years</b>	46%	31%	33%	33%	28%	31%
<b>Within 5 years</b>	15%	17%	25%	17%	10%	17%
<b>More than 5 years</b>	3%	20%	2%	6%	9%	9%

Base: All developed or developing products incorporating design for sustainability to have a positive effect on profits

40% of UK small companies expected a return within 12 months whereas of the larger companies (200+) 50% thought it would be within 3 years. This supports the notion that smaller companies have more flexibility and hence are more adaptive than larger scale manufacturers in adopting sustainable design.

69% of all companies surveyed agree that the importance of designing for sustainability will increase significantly for THEIR company over the next 5 years.

77% agreed when asked if design for sustainability will be increasingly significant in the next 5 years for ALL companies,

All European countries believe design for sustainability is going to be a major issue in the future both internally within their organisations and externally for all companies in the next 5 years. This indicates that activity related to design for sustainability is predicted to increase.

**Table 17: The importance of designing for sustainability will increase significantly for ALL companies in the next five years**

	UK	France	Germany	Sweden	Holland
<b>Agreeing design for sustainability increasing significantly for YOUR company in the next 5 years</b>	75%	66%	58%	71%	70%
<b>Agreeing design for sustainability increasing significantly for ALL companies in the next 5 years</b>	79%	64%	83%	82%	74%

Base: All companies in sample

For all companies who agreed that the importance of design for sustainability would increase for their company over the next 5 years, they were asked what impact this would have to the predefined areas in table 18.

Increasing in-house knowledge and information was seen to be key to all European companies surveyed. This shows a demand for information that needs to be filled.

*<Garfield, sustainable strategies case studies should be applicable to all countries and help provide information in this area>*

**Table 18: Do you expect to have to do any of the following over the next 5 years?**

	UK	France	Germany	Sweden	Holland	Non-UK
<b>Increase in-house knowledge and information</b>	94%	88%	97%	90%	75%	87%
<b>Review strategic direction</b>	78%	54%	79%	79%	45%	64%
<b>Increase resources</b>	64%	65%	68%	61%	53%	61%
<b>Increase number of related jobs</b>	39%	40%	54%	41%	30%	41%

Base: All companies agreeing that importance of design for sustainability will increase for their company over the next 5 years

Table 19 details information sources that were identified as providing ideas/practices in the area of design for sustainability. These results show a variance in the means for distributing information on design for sustainability.

**Table 19: What information sources are you aware of that provide current ideas/practices in the area of designing for sustainability?**

	UK	France	Germany	Sweden	Holland	Non-UK
Industry Trade Associations	21%	8%	12%	5%	18%	11%
Government/regulatory authorities	18%	8%	13%	11%	28%	15%
Fairs/suppliers /parent company	15%	16%	18%	18%	21%	18%
Trade press	14%	16%	27%	11%	13%	17%
Customers	7%	12%	9%	4%	7%	8%

Base: All companies in sample

### 3.6 Governmental Influence

The percentages in table 20 show the number of companies who have *NOT* been influenced by their respective governments in their approach to design for sustainability

**Table 20: Companies who have *NOT* been influenced by their respective governments in their approach to design for sustainability**

UK	72%
France	75%
Sweden	74%
Germany	75%
Holland	52%
Non-UK	69%

Base: all companies saying 'no, the government has not influenced approach to design for sustainability

Of the companies who were influenced by their respective government, the main impetus was regulation followed by awareness raising activities.

These two results show that if the government does have an influence, its role is primarily in legislating rather than advising.

Companies were also asked whether their government should be doing more to promote design for sustainability. The results in table 21 show nearly three quarters of companies in the UK would like the government to be more proactive in promoting design for sustainability.

**Table 21: % Companies agreeing their government should do more to promote design for sustainability.**

UK	74%
France	48%
Sweden	53%
Germany	40%
Holland	38%
Non-UK	45%

Base: All companies in sample saying 'yes'

Table 22 shows the areas suggested by companies as areas the government should direct their activities towards in terms of promoting design for sustainability. These figures are supported by a selection of quotes collected from the respondents.

**Table 22: What sort of things should your government be doing more of to promote designing for sustainability?**

	UK	France	Germany	Sweden	Holland	Non-UK
Raise general awareness	21%	24%	23%	37%	52%	33%
Provide financial/tax incentive	19%	16%	58%	12%	42%	33%
Legislate	10%	11%	22%	11%	7%	13%
Raise industry awareness	17%	7%	-	5%	2%	4%
Be proactive/set example	6%	14%	5%	3%	11%	11%

Base: All companies who feel the government should be doing more

*"Help small businesses and make sure there is information in all countries about this issue."*

*Anders Wiman AB Swedish Company*

*"Make more information available. If one never sees any information about a subject, one is less likely to think about it and possibly change one's strategy."*

*German company*

*"We need good understandable information. There are some arrangements at the moment, but you have to know your way around."*

*Suselbeek BV Dutch Company*

*"We need a framework to be presented to us rather than thinking it up ourselves."*

*AFL Telecommunications Ltd UK Company*

*"I think we have to do more projects with Europe, make more connections."*

*Bray Technologies plc UK Company*