

## Chapter 8

# Small and medium enterprises

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## 8.1 Introduction

Large companies are considered separately in Chapter 9. However, small and medium companies are important too. The Carbon Disclosure Project (CDP) has found that the propensity to disclose corporate strategies on climate change correlates very closely with the size of the company. 83% of large (FTSE 100) companies answered the CDP questionnaire in contrast to 36% of medium sized (FTSE 250) companies. Larger companies “are more likely to describe their strategy regarding climate change and are probably more likely to have the resources to do so.”<sup>1</sup>

It is not surprising then that as this chapter shows, small and medium sized companies are as yet not well prepared for the impacts of climate change and indeed many do not take the threat seriously, despite that fact that the smaller the business the more vulnerable it is to the impacts of climate related disasters.

## 8.2 The economic importance of small businesses

There were an estimated 4.3 million “Small and Medium sized Enterprises” (SMEs) in the UK at the start of 2005 with an estimated turnover of £2,400 billion. Of those, only 1.2m had employees, but they employed 22m people<sup>2</sup>.

Almost all of these enterprises (99.3 per cent) were small (0 to 49 employees). Only 27,000 (0.6 per cent) were medium-sized (50 to 249 employees) and 6,000 (0.1 per cent) were large (250 or more employees).

- SMEs together account for more than half of the employment (58.7 per cent) and turnover (51.1 per cent) in the UK.
- Small businesses alone (0 to 49 employees) accounted for 46.8 per cent of employment and 36.4 per cent of turnover.

The number of SMEs overall is growing. In the 11 years from 1995 to the end of 2005, the number of SMEs registered for VAT has increased by 265,000.

## 8.3 Mitigation and adaptation

Small businesses are a source of innovative ideas and there will be many opportunities for new businesses to grow from the increased demand from the public and government for new solutions to mitigate the increase in greenhouse gases. New forms of building construction, especially the use of timber in place of high embedded energy materials such as concrete, steel or glass, will provide opportunities for different building skills. Modular construction will replace much of the site work that is dominated by the big developers. Renewable energy will emphasise small scale local solutions to energy problems. Increased demand for bio fuels will benefit agriculture. There will be more home working to cut down on travel congestion using modern telecommunications. More shopping will be carried out on the internet, leading to the chance for small businesses to compete with large companies.

While there will be great opportunities from mitigation, there will be severe threats from climate change if small businesses do not adapt to the changing patterns of rainfall or storms, droughts and subsidence.

A report<sup>3</sup> by the specialist risk management consultancy Acclimatise and UK CIP anticipates a tipping point when businesses and investors become more aware of the realities of climate change and points out that:

- “Decisions taken by directors and professional advisers may be open to legal challenge.
- The tipping points on value, return and growth are likely to trigger credit rating revisions and increases in the costs of capital.
- Customer expectations, preferences and needs will change as the impacts of climate change become apparent.
- Governments are likely to resort to prescriptive regulation if businesses do not respond with adaptive action.”

It goes on to stress that even if there is a significant reduction in greenhouse gas emissions tomorrow, the climate will still change. “There is no choice between mitigation and adaptation – we have to pursue complementary actions on both – now.”

Acclimatise and UKCIP have analysed the Carbon Disclosure Project responses of businesses in the UK FTSE 350 (the CDP4 survey) to explore their understanding of the need for adaptation. Their findings are of concern:

<sup>1</sup> Carbon Disclosure Project and Trucost plc, 2007. “Carbon Disclosure Project Report 2006: FTSE 350. On behalf of 225 investors with assets of \$31 trillion.” Carbon Disclosure Project, London.

<sup>2</sup> Department of Trade and Industry, August 2006. “Small and Medium-sized Enterprise (SME) Statistics for the UK 2005”.

<sup>3</sup> Firth, J, and Colley, M., 2006 “The Adaptation Tipping Point: Are UK Businesses Climate Proof?” Acclimatise and UKCIP, Oxford. ISBN 0-9544830-9-X.

- “Only 10% of the FTSE 100 reported that they considered the impacts of climate change pose a high risk to their business operations.
- Adaptation is not as well understood as mitigation.
- Within some sectors, there are a small number of companies that have demonstrated an understanding of climate risks. These companies are setting the pace and will become the benchmarks.
- This contrasts markedly with other companies in the same sectors appearing not to recognise that they face any climate risks.
- Although the potential direct impacts of extreme events are recognised, there is less appreciation of the impacts, both direct and indirect, arising from changes in longer-term average conditions and seasonal variation in temperature, precipitation, etc.”

Changing markets, customer needs and investor expectations will apply just as strongly to small businesses but will also raise opportunities for innovation and taking steps to “climate-proof” their businesses to ensure survival.

In addition, in the case of small businesses especially, it is important to take climate change into account in long term planning. For example, many small businesses are tied into long term leases for their premises, generally around five to ten years, and should be planning for what type of premises they will need when those leases expire, especially if their existing premises are vulnerable to storm damage or are in flood risk areas. They should also be making contingency plans for the future. Insurance companies will have an increasingly important role in helping with risk management advice.

## 8.4 Main climate change threats to small businesses

There are many threats from climate change. Here is just a selection:

### Floods

Flooding is very much related to exposure. Small businesses often have little choice about their location if they are to remain in business. If their customers are in a flood hazard area then the business has to be there too. One problem is that while their customers may receive a flood warning, often the small business does not. The 2006 AXA survey of businesses which had been flooded found that only 8% of businesses received any form of flood warning. Focus groups of SMEs supervised by the author show a clear perception that warning systems are designed very much for domestic householders rather than small businesses. SMEs are unaware that they can sign up for warnings from the Environment Agency or the Scottish Environment Protection Agency and perhaps there is scope for these agencies to address this point in their annual “flood awareness week” campaigns.

Warnings are particularly important for small businesses to enable them to move stock and vehicles to a safe place. For example, in Carlisle in January 2005, a vehicle recovery company did not receive a flood warning and its fleet of recovery vehicles were flooded. Being specialist vehicles it took 18 months to get replacements, leading to a huge business interruption bill. A 30 minute warning would have been enough for them to move the vehicles to safety.

### Storms

Some research indicates that storms may be more severe and frequent<sup>4</sup>. In any event thunderstorms are more likely in the south of the country and storms are likely to be wetter, leading to water damage from leaking roofs. There is a growing body of research which suggests that storm tracks may move south owing to changes in blocking high pressure systems over continental Europe and shifts in the jetstream. The PRUDENCE Project<sup>5</sup>, involving nine leading European universities, suggests that storms which currently pass over the country North of 55 degrees latitude (for example Carlisle) may shift south and track between 45 degrees latitude (for example Milan) and 55 degrees, as happened in 1987 and 1990. The concern is that buildings in these latitudes do not have much experience of severe storms and are likely to be less resilient than buildings in more Northerly latitudes.

<sup>4</sup> Leckebusch, G., and Tin, T., 2006. “Stormy Europe; the power sector and extreme weather.” WWF-World Wide Fund for Nature, Gland, Switzerland.

<sup>5</sup> Defining European Climate change risks and Effects (“PRUDENCE”) See <http://prudence.dmi.dk/> accessed 25 May 08. See also Beniston, M, Stephenson, D.P., Christensen, O., B., Ferro, C.A.T., Frei, C., Go Defining European Climate change risks and Effects (“PRUDENCE”) See [http://prudence.dmi.](http://prudence.dmi.dk/)

dk/ accessed 25 May 08. See also Beniston, M, Stephenson, D.P., Christensen, O., B., Ferro, C.A.T., Frei, C., Goyette, S., Halsnaes, K., Holt, T., Jylha, K., Koffi, B., Palutikof, J., Scholl, R., Semmler, T., Woth, K., 2007. “Future extreme events in European climate: An exploration of regional climate model projections.” PRUDENCE Project. yette, S., Halsnaes, K., Holt, T., Jylha, K., Koffi, B., Palutikof, J., Scholl, R., Semmler, T., Woth, K., 2007. “Future extreme events in European climate: An exploration of regional climate model projections.” PRUDENCE Project.

## Heatwave

Warm temperatures in the summer of 2006 led to power cuts in London. It was the first year on record when electricity consumption in the summer exceeded consumption in the winter due to the use of air conditioning equipment.

Businesses in the hospitality industry can have problems with food preparation and storage in hot weather. There is a risk of liability for food poisoning. Climate change could bring longer and more intense heatwaves, such as the one in 2003 where 70,000 people died in Europe. Heatwaves not only have a direct effect on SMEs, they can have an indirect effect, making staff listless and less able to work, and increasing absenteeism.

## Drought

Water shortages can seriously affect some types of small businesses such as farmers, gardeners, window cleaners, car washes, etc. which are dependent on water usage. Already during an average July day in south Lancashire, 60 times as much moisture evaporates as on a typical January day<sup>6</sup>. In an average year, evaporation exceeds rainfall each month from April to August. In south east England it is from March to September which is why in most years summer watering is required in farms and gardens in the south east, and water shortages are common. Climate change will increase the severity of summer droughts, and subsidence will particularly impact on small businesses which may be operating from older premises.

## Secondary effects on staff

SMEs are more dependent on staff turning up for work, but if severe weather affects the families, schools, homes and transport of staff to work this has a knock on effect on the business. If the business is closed down by severe weather, it may not be able to pay wages unless it has business interruption insurance and staff may leave for other jobs.

## 8.5 Insurance of small businesses: surveys by AXA Insurance

So how prepared are small businesses for the impacts of climate change?

An unpublished survey of 2,420 businesses in 2006 by the Building Valuation Service for AXA Insurance found that 90% are under insured, in many cases by very substantial amounts. On a national basis this would represent a total under insurance of £865m. In many cases, Insurers have the right not to pay 100% of the claims costs which means that the customer may not have the funds to meet the deficit. In a disaster scenario many small firms could go out of business, leading to unemployment costs and widespread damage to the economy. Focus groups during 2006 explored this issue with small businesses which had suffered flood damage. It was evident that hardly any of them realised the implications of under insurance before they had made their insurance claim and did not realise that a claim could be reduced by 50% if the sum insured was 50% of the value and that this would apply even for partial losses. The problem seems to be a lack of professional insurance advice more than anything else, as most small businesses do not use specialist insurance brokers.

Excluding the self-employed, 1 in 3 of AXA small business customers do not have Business Interruption cover<sup>7</sup>. This means that there is a greater threat to business survival in the event of a significant loss. Focus groups organised by AXA asked small businesses why more did not take Business Interruption cover and the consensus was that they did not understand it. Again the problem may be that many small businesses do not use specialist commercial brokers to arrange their insurance. It is notable that when Axa repeated this research after the 2007 floods, the situation had not materially altered<sup>8</sup>.

AXA researched the risk management practices of over 1,200 SMEs and found that in many cases they are not meeting the very basic risk management standards to meet their insurance cover requirements. For example:

- 27% are not documenting risk assessments
- 16% are not recording accidents or incidents.

This provides a good indication of the lack of awareness of risk amongst small businesses and the extent of their understanding of, and attitude towards, safeguarding against loss. It also flags up a potential risk to society in the event of widespread losses through climate change.

<sup>6</sup> Eden, P., 2005 "Change in the Weather. Weather extremes and the British Climate" Continuum, London 214pp. Index. ISBN 0 8264 7973 1

<sup>8</sup> Unpublished follow-up survey of SME's and flooding, AXA 2007

<sup>7</sup> AXA Insurance Customer Base Analysis/PH Group

In 2006, AXA conducted a survey<sup>9</sup> of small businesses in recently flooded areas and recorded comments from focus groups of the managers and owners of small companies which have survived recent major floods. These are the businesses which should be particularly aware of the potential impacts of climate change. However, the survey found that while 85% of small businesses are aware that climate change is a problem for the world:

- 46% of small businesses think that climate change is blown out of proportion and
- only 26% think it is a real threat to them, despite having recently been flooded.

When the survey was repeated in 2007, although 30% (up from 26% in 2006) of managers said climate change is a real and serious threat to their business, as many as 65% of businesses do not have a practical contingency plan in case of being affected by severe weather. Similarly, only 27% have reviewed their commercial insurance to tackle the threat from severe weather conditions, only 24% have reviewed their weather proofing and 20% or fewer of all small companies have introduced home working or flexible working or sought advice from government on how to react to severe weather disruptions.<sup>10</sup>

The wider small business community will undoubtedly show even lower awareness of the threats. Indeed, the Small Business Council’s Annual Report for 2005 barely mentions climate change as an issue<sup>11</sup>, despite government concern on the subject, but suggests it is something to look at in the future.

This has to change: there are many things that SMEs can do to adapt to climate change impacts and to mitigate carbon emissions. The insurance industry must do much more to help and AXA Insurance has already published guidance on business continuity planning for small businesses.

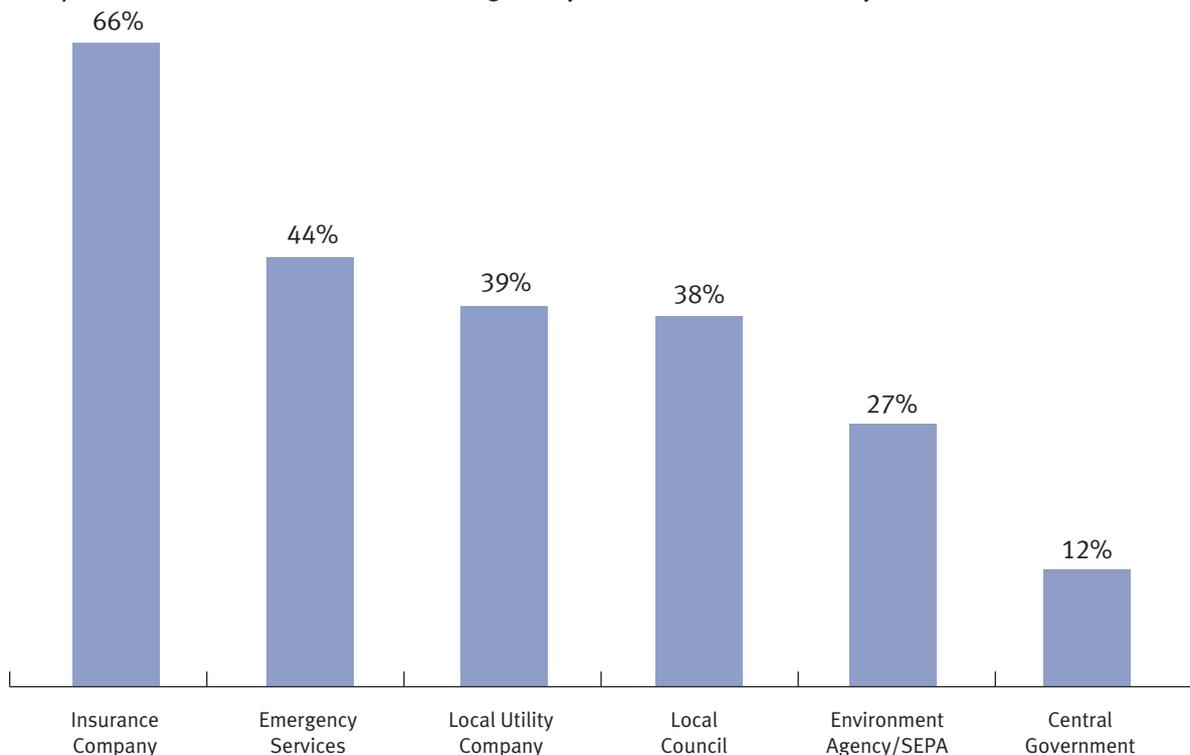
AXA surveys of small businesses which have been flooded recently show:

- 71% of small businesses in flood risk areas were not concerned or not at all concerned about flooding risks.
- 69% of small businesses in flood risk areas have no form of business continuity plan<sup>12</sup>,
- Few small businesses received help from the local council after they were flooded. Most assistance is going to domestic households. The most help for small businesses comes from their insurance companies.

Local authorities have a statutory duty under The Civil Contingencies Act 2004 to extend their civil protection duty beyond emergency planning to address risks to local businesses, but there is little sign of this happening.

**Figure 1: Sources of support for small businesses after a flood**

How helpful or otherwise was each of the following when your business was affected by a severe weather event?



Source: Axa Insurance

<sup>9</sup> Crichton, D. 2006 “Climate Change and its Effects on Small Businesses in the UK” AXA Insurance. ISBN 978 0 9554108 0 2. (condensed version available from [http://www.axa.co.uk/aboutus/corporate\\_publications/climate\\_change.html](http://www.axa.co.uk/aboutus/corporate_publications/climate_change.html))

<sup>11</sup> Small Business Council 2006. “Giving small business a voice” Annual Report for 2005. 68pp Small Business Council, London.

<sup>10</sup> Unpublished follow-up survey of SMEs and flooding, AXA 2007

<sup>12</sup> Guidance on preparing continuity plans for small businesses is available from <http://www.axa4business.co.uk/bc/guide.asp>

This contrasts markedly with the expectations that SMEs have: 81% say they think the emergency services will be most helpful if they were affected by severe weather, 65% local government and 64% their insurance company will be useful to them if they were affected. Only insurers live up to expectations, and indeed surpass other agencies.<sup>13</sup>

## 8.6 The social importance of small businesses

Small businesses are very important for maintaining social cohesion. The corner shop and the local hairdresser, public house or post office all help to bring communities together. Nearly half the working population work for small businesses and this is mainly local employment often in deprived areas.

Small businesses are often the source of innovation, where new ideas are tried out. They are particularly important in supporting ethnic communities by supplying specialist goods and services needed by different cultures.

## 8.7 Outlook for small businesses

SMEs are the main drivers of job creation, innovation, diversity, and growth in the UK economy. They are also arguably the most vulnerable to impacts from climate change, terrorism and taxation.

- More than 30% of small businesses are unable to survive the first three years of operation<sup>14</sup>, and in London the figure rises to 35%. Weather impacts will exacerbate this vulnerability.

The Small Business Council in its latest annual report<sup>15</sup> makes no fewer than 32 recommendations for Government. The Council say:

“We are also concerned at the impossibility of obtaining business insurance in the event of certain man-made or natural disasters. The Council urges the Government to consult the business community in order to explore the viability of establishing some form of emergency fund to assist businesses (to) recover from uninsurable events.”

Small businesses in flood hazard areas will be particularly badly affected. They rarely receive flood warnings and get no help with evacuation. There is anecdotal evidence from focus group meetings with small businesses which have experienced flooding that many cannot afford to renew their insurance and this is limiting investment in their businesses. In extreme cases, another flood will lead to bankruptcy. Communities in such areas will suffer badly if their local small businesses close down, not just with loss of jobs, but also blighted properties, loss of local goods and services, loss of respect, and a growing sense of social exclusion.

Not only will this have severe human impacts on communities already suffering from flooding and lack of insurance cover. It could also lead to social unrest and increasing crime as society becomes more divided between those who can afford to live in safe areas and those who cannot. Insurers cannot afford to ignore these threats to social cohesion, because the implications for a secure and stable economy are profound.

It is of concern that there appears to be very little drive from within the business community to take preventative steps such as relocation, temporary premises, weather-proofing or professional advice to tackle the threat posed by extreme weather conditions. The number of managers saying they will introduce any measures fell markedly between 2006 and 2007<sup>16</sup>.

Insurers are already helping not only by providing cover but also providing advice on such matters as business continuity planning<sup>17</sup>. Even in areas where flood insurance becomes unavailable or unaffordable for small businesses, there will be growing sales opportunities for insurers to offer risk management and disaster recovery services. AXA's research indicates that the most vulnerable businesses are the very small ones, and those involved in the leisure industry.

<sup>13</sup> Unpublished follow-up survey of SMEs and flooding, AXA 2007

<sup>14</sup> DTI Small Business Service, February 2006.

<sup>15</sup> Small Business Council June 2006. “Giving small business a voice” Annual Report for 2005. 68pp Small Business Council, London.

<sup>16</sup> Unpublished follow-up survey of SMEs and flooding, AXA 2007

<sup>17</sup> AXA Insurance, 2004. “Business Continuity Guide for Small Businesses” AXA Insurance, London. Available from <http://www.axa4business.co.uk/bc/guide.asp>

## 8.8 Conclusions

SMEs are arguably the backbone of the UK economy, in terms of diversity, innovation and social cohesion, but they are also the most vulnerable section of the UK economy to climate change impacts.

- The potential effect on SMEs of increasing severe weather damage and reducing insurance availability could be serious for the economy as a whole.
- Small businesses tend to be inadequately insured and need more specialist insurance advice.
- When it comes to flooding, the plight of small businesses tends to be ignored by the media and everyone else.
- Small businesses get little help from the authorities when it comes to severe weather damage, either in terms of warnings or assistance in recovery.
- It seems clear that despite their vulnerability to the impacts of climate change, SMEs are yet to take the threat posed by climate change seriously enough.
- Small businesses are very important for maintaining social cohesion.

## 8.9 Recommendations

Small businesses clearly need more help to adapt to climate change and to manage their risks generally. Insurers like AXA are already making a major contribution to understanding and researching the problem and they can provide small businesses with literature on request about managing their risks and also tailored risk management advice. Many small businesses operate using bank loans and arrange their insurance using banks as intermediaries rather than commercial brokers.

1. Insurers and intermediaries, including banks, should provide small businesses with professional advice about the importance of:
  - Adequate sums insured
  - The need for Business Interruption cover, especially to cover the cost of wages
  - Basic risk management procedures including business continuity plans.
2. Insurers should consider the potential for enhanced products that will help SMEs to adapt to the impacts of climate change. Insurers should recognise that SMEs often do not seek professional advice from insurance brokers and take this into account in their product design. For example, some insurers now offer package policies to small businesses which include a simple form of basic business interruption cover, including wages costs, and deal with average in a more sympathetic way as they do with household policies.
3. The Association of British Insurers should liaise with bodies like the Small Business Council and local authorities to ensure that there is an adequate framework in place to support SMEs during weather incidents like flood, storm, heatwave and drought.

## Biography

### Professor David Crichton

MA, FCII, Chartered Insurance Practitioner

David is an economist with 30 years experience in the insurance industry. He has held senior underwriting and claims management positions in both property and casualty business, and has won a number of insurance industry awards. He is currently visiting professor at both of Europe's leading universities dealing with research into flooding and natural disasters. He is also an honorary research fellow at the only UNESCO centre for water law research in Europe.

David has advised governments and insurers in four continents on climate change, and has worked for the OECD, various branches of the United Nations, and NATO. He is a founder member of every Flood Liaison and Advice Group in the country and has advised more than 30 local authorities in the UK on flooding issues. He has spoken to hundreds of flood survivors, and has given oral evidence at several parliamentary and local government inquiries, often as the only person from the insurance industry.

He has spoken at every major insurance institute in the UK and Ireland, and gave the centenary lecture at the Norwich Insurance Institute.

He is the author of the Flood Fact File on the CII web site, which he updates regularly.

He has served on national academic steering committees for climate change research, reservoir safety, sustainable drainage, and building standards for flood repairs, and represented data users on the NERC Earth Observation Expert Group, the DTI Earth Observation Programme Board, and the ESSRC Steering Committee.

He has written seven books and many peer reviewed academic papers, including one published by the Royal Society.