

Chapter 18

Sustainability as a principle in risk management of climate change

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18.1 Introduction

This chapter studies the impact of sustainability for the Insurance Industry in terms of Risk Management and related matters. Other chapters cover the detail of the science of climate change, so much of that is assumed here. In addition detailed studies of the impact of changes in the climate on Insurance are also covered in other chapters and that will not be repeated here.

The chapter discusses the nature of sustainability in section 18.2 and then moves on to consider the challenges that sustainability throws up for the industry in section 18.3. Section 18.4 looks at the impact on some specific markets, in particular household, commercial property and private motor insurance. There is brief consideration of the impact of carbon trading, but in detail this is covered elsewhere, before some considerations on product design for sustainability are considered in section 18.5. Sections 18.6 and 18.7 draw together the key conclusions, and present the recommendations that flow from them.

18.2 Sustainability

The best-known definition of sustainability is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”¹.

As many of the activities that mankind undertakes are shown to have an environmental impact, the need to identify sustainable ways to operate becomes increasingly important. However, sustainability means embracing change and new techniques and materials that, taken together, ensure that the climate is not affected in the long term. Sustainability for insurers is affected by other factors, commercially and socially. Insurers need, not just a sustainable solution, but also commercially achievable and efficient and resilient in the longer term, they need to take account of other changes and the effect of other human activity, including the impacts of climate change. We might define it as resilient eco-efficiency.

The UK Government’s sustainable development unit (part of the Department for the Environment Food and Rural Affairs) has developed 68 sustainability measures. These are made up of 20 UK Framework Indicators and 48 indicators relevant to the UK Government Strategy and fall into one or more of the four priority areas.

- Sustainable consumption and production
- Climate change and energy
- Protecting our natural resources and enhancing the environment
- Creating sustainable communities and a fairer world

In summary, the aim is to provide the resources and support that populations need without adversely tipping the climate into an irreversible change, now or at any point in the future.

In simple terms, human activity will only be sustainable when the activity produces no more greenhouse gases (GHG) than the global ecosystem can absorb and sequester over the same period as they are produced, meaning that global GHG concentrations remain static and at the long term average rather than either today’s levels or even those of 1990 - 5% as envisaged by the Kyoto Protocol. Kyoto alone is only a first step to reach levels of carbon dioxide which are sustainable. Although the exact amount of GHG emission that would be sustainable may be subject to some debate, many advisors suggest a level of emissions at least 80% lower than 1990 levels.

The Government has stated in its review² of one of the 68 targets on sustainability that “Emissions of the ‘basket’ of six greenhouse gases in 2005 were provisionally estimated to have been about 14 per cent below the base year. (The base year is 1990 for carbon dioxide, methane and nitrous oxide, and 1995 for fluorinated compounds.) Progress, but a long way from sustainable levels.

Thus we can see that there remain significant challenges to even moving towards sustainability, let alone achieving it in the medium to long term.

The task ahead is even harder than that implies though. As the world population continues to grow, sustainability actually means constant change, as consumption per capita needs to continually fall to create a sustainable outcome of stable aggregate consumption. Only when the impact of population (and population growth) and their consumption (perhaps measured by GDP) is low enough for the climate to be relatively unchanging can we really claim to have a sustainable

¹ Brundtland, G(ed.), (1987), Our common future: The World Commission on Environment and Development, Oxford, Oxford University Press.

² The Department for Environment Food and Rural affairs – Sustainable Development Unit - <http://www.sustainable-development.gov.uk/progress/national/index.htm>

model. The impact of GHG driven climate change is, of course, complicated by other long cycle climate change effects, that need to be included in the climate change models.

So, sustainability is a key to balancing the long term needs of the planet with the long term needs of the people on that planet, i.e. the well being of a growing global population with its constant need to seek to develop and grow its GDP.

One effect of the greater focus on sustainability is that there is an ever increasing recognition of the need for robust corporate social responsibility in business. The environmental reputation of firms is beginning to be seen as at least as important as, if not more important than, the price of the products they sell³.

On the 4th May 2007 the Intergovernmental Panel for Climate Change issued its fourth assessment report⁴ which in the Executive Summary states:

“Climate change and other sustainable development policies are often but not always synergistic. There is growing evidence that decisions about macroeconomic policy, agricultural policy, multilateral development bank lending, insurance practices, electricity market reform, energy security and forest conservation, for example, which are often treated as being apart from climate policy, can significantly reduce emissions”.

This statement highlights that globally the importance of insurance in addressing the issues of climate change and particularly in developing sustainable practices is now actively recognised.

Insurers (as businesses) do not, in themselves, create as significant an emissions footprint, compared to, for example, manufacturing. This chapter does not consider actions for sustainability that could be undertaken by insurers themselves to make their operations more sustainable. (This is not to suggest that actions to make insurers’ businesses more eco-efficient are unimportant.)

18.3 Challenges

Life-cycle carbon

In order to meet international commitments Government is keen to achieve an overall carbon saving by particular dates. In addition political pressure is leading to a general commitment that it is making to targets for environmental goals. One issue with date driven measurements is that it can drive short term behaviour, and that short term behaviour may not be beneficial.

For example, if changes in building regulations require more ecologically friendly materials to be used in the future, and Insurers have to effect more extensive repairs after a claim in line with those regulations, then this can lead to increased re-work and additional short term carbon costs. Some elements of a damaged building may not require repair, but require upgrading, to meet new requirements. Although in their rebuilt state the ongoing carbon cost might be lower there is an additional carbon load created by removing the old, non-compliant material and replacing it with new, compliant material. The overall carbon cost might even be higher as a result when the carbon savings in operation are compared to the additional up-front manufacturing and replacement emissions. Generally, there is no flexibility in regulations, to allow these considerations to be taken into account in the choices taken.

The chart (a theoretical representation of the issue) below demonstrates that if the carbon emissions to manufacture products that decrease emissions for the future are too high there is a long period when total emissions are actually raised compared to the ‘do nothing’ option. There is a risk that some regulations to require energy efficient materials may actually permanently increase the carbon load if the materials’ lifespan is, in practice, shorter than the period needed to accumulate carbon savings in operating the replacement configuration (see Figure 1).

Further, with manufacture often located remotely or in other territories, the local calculation of impact may ignore the manufacturing load, and so focus only on the saving that results afterwards. This is sometimes referred to as ‘exporting pollution’ or ‘carbon leakage’. A recent report found that measuring emissions on a consumption basis resulted in the UK being responsible for GHG emissions in 2004 that were 37% higher than those generated within the UK⁵.

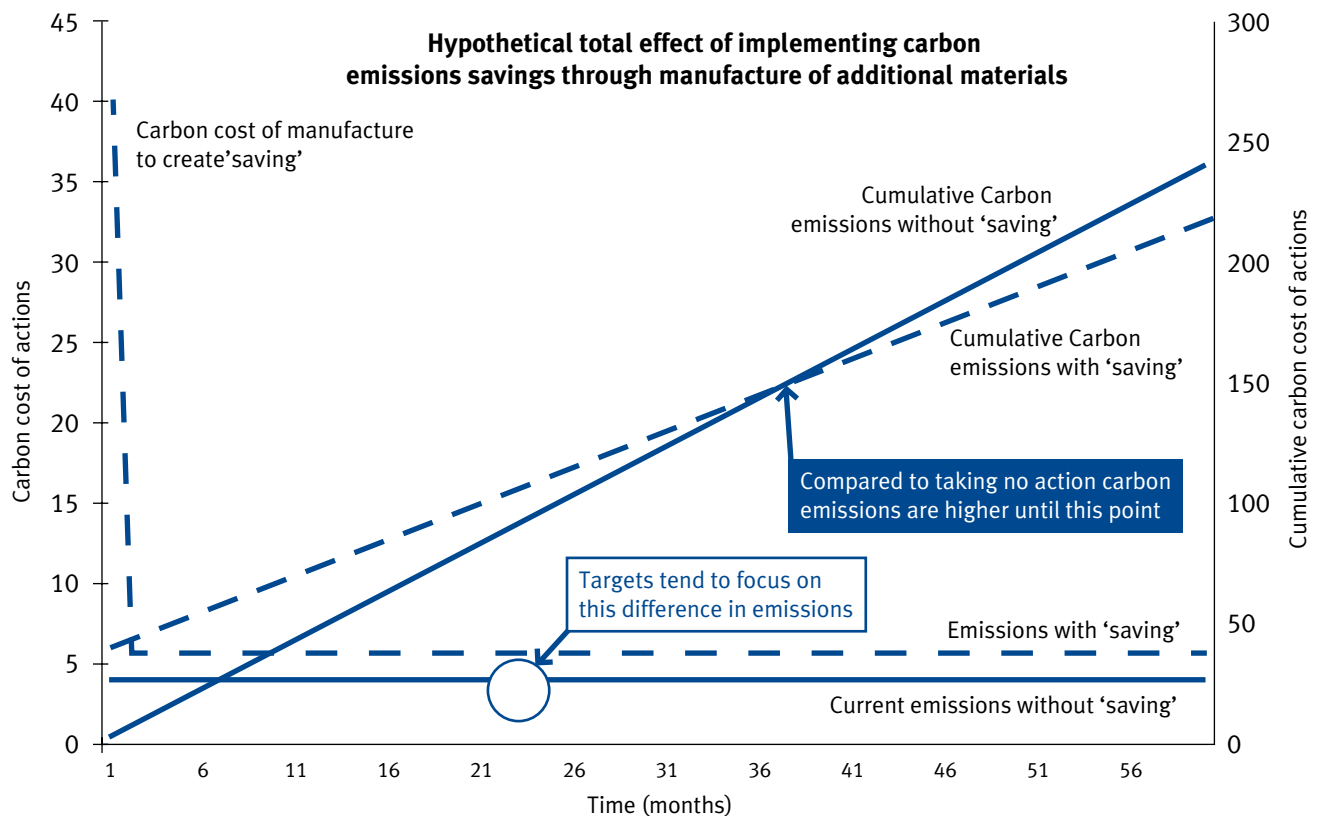
One aspect which regulators and insurers can influence is the formulation of Regulations and ensuring that society properly accounts for the whole of life carbon cost of changes that are proposed.

³ The Journal of Consumer Marketing Volume 14 no 6 pp 421-432 Creyer EH

⁴ IPCC Fourth Assessment Report, Working Group III, Summary for Policymakers

⁵ SEI, 2008

Figure 1: Impact of manufacturing on total savings (illustrative only)



As an example, there is no doubt that insulating homes reduces the ongoing energy requirements to maintain the homes at their desired temperature, but the manufacture of insulating material and its transport, distribution and fitting all have significant costs in terms of carbon. Insulating a home, therefore, creates a short term spike in carbon load for the environment, followed by a tail that has a lower carbon footprint. A key aspect of making the decision to insulate for most homeowners is the ‘payback’ period which measures how long after fitting additional insulation the reduced costs of heating recover the costs of the insulation. These calculations rarely take account of the carbon element of the equation, focusing only on the monetary cost. Governments recognise that the introduction of a carbon tax in a way that properly recognises the costs of manufacture and transport might change behaviour in these areas and need to be sure that the impact encourages the right behaviour for homeowners and for the environment.

Another example can be found in the change in approach being taken to large-engined heavy vehicles such as 4x4 cars. Increasing fuel costs, Vehicle Excise Duty, insurance costs and congestion and parking charges is intended to have a deterrent effect on the purchase of these vehicles. If government policy is successful in the longer run this will have the impact of driving down the numbers of these vehicles which are manufactured, but in the shorter run it may prompt people to change their vehicles early and accelerate the manufacturing carbon load, thus increasing short term emissions. Although the House of Commons Environmental Audit Committee⁶ recently reported that these changes would actually have limited impact, manufacturers are changing their build practices and vehicles are lighter and engines more efficient in order to meet stricter controls.

It is likely to be some time before the full cost of carbon is embedded in products and services, for two reasons. Firstly, it is not politically feasible to move from the current position of zero costing straight to full costing. There needs to be a transitional period to avoid economic dislocation. The second point is that often manufacturing is located in developing countries, which are unlikely to be subject to carbon pricing soon. For the next decade or so decisions to reduce carbon in the supply chain may have to rely on carbon labelling, i.e. informational datasheets about the carbon content of products and processes.

⁶ Vehicle Excise Duty as an environmental tax - Tenth Report of Session 2007–08

Governments could promote research into the concept of product carbon intensity, with the ultimate aim of carbon labelling so that procurement decisions could be based on facts about the emissions implications of alternative products and services. This is such a massive task that it is likely to be tackled in parts, looking at the most intensive products or the most frequent purchases first. For example, in the UK, attention is focused on the retail food sector⁷. At EU level the CO₂ Star project aims to deliver carbon-content information in the fuel, lubricant, vehicle and freight sectors⁸. Plans for a comprehensive EU carbon labelling scheme appear to have suffered a setback recently, but EU governments do seem prepared to back a call for the development of a common carbon footprinting methodology⁹. To that extent, therefore, insurers may have to limit their attention to readily available data in a few areas. One positive development in this area is the Supply Chain Initiative of the Carbon Disclosure Project, which focuses on the climate change issues within the suppliers of major companies, but again that is unlikely to result in any significant body of codified data.

Holistic assessment

Too often, a technology is promoted because of its carbon-reducing benefits, without considering the wider aspects. Returning to the example of insulation, one can also require that, in addition to being carbon-efficient, any insulation should be resistant to weather and water damage, and easily replaced. Sodden insulation adds considerably to the costs and waste of a flood.

When one considers hybrid cars, the much-touted alternative to the internal combustion engine, insurers might raise several objections: they are a potential pollution risk due to use of heavy metals¹⁰; increasingly all vehicles are incurring higher repair costs due to the use of specialist materials and techniques to reduce weight without compromising safety, meaning more complex repair techniques and higher accident write-off rates.

Roof-mounted solar and wind energy machinery can weaken a structure. Insurance data shows that houses built after 1971 are already more vulnerable to storm damage, mainly to roofs (see Chapter 7), and such devices could make matters much worse.

On the issue of flood defences, agencies often favour hard defences, but more concrete means more emissions. A more sustainable approach might require “soft” solutions using landscaping and vegetation, together with buildings that are more resilient to flood and storm.

There are examples wherever one looks; Chapter 13 discusses the benefits and disadvantages of biofuels. The important message is that insurers often have a different perspective, due to their concern for unintended effects, and resilience, and this can be valuable in assessing proposed solutions to sustainability.

Cost

Apart from the long term issues of climate change and the impact that climatic change may have on insurers, there are short term impacts too. Any regulations that requires additional reinstatement work during the claims process on the grounds of increasing sustainability have an additional cost which insurers should lobby to ensure is justified from a sustainability point of view. These aspects should be considered, particularly in relation to exported pollution, when insurers seek to influence policymakers.

For example, insurers should seek to ensure that regulatory impact assessments take account of the change in behaviour that is likely to result from the regulation and include a specific short term and long term impact analysis from a climate change and sustainability point of view. Insurers may also wish to consider further increasing their links to and involvement in materials research for those aspects of their business.

Regulation tends to be both inflexible and long lasting. With the continuing investment of capital and resources into climate change issues, the working environment on which regulations are brought to bear is changing quickly. There is a real risk that the regulatory burden could inadvertently constrain Insurers and others from taking the best action possible when knowledge of currently underdeveloped or unknown alternatives is developed.

Global warming is a long term issue, and one which will have impacts over many years, perhaps centuries and millennia. Political focus rarely if ever has such a long timeframe and decisions inevitably are guided by relatively short term considerations. It is therefore important that someone pleads the long term case.

If the sustainable options remain significantly more expensive in the medium term or if costs of unsustainable work are raised through, for example, carbon taxes, then the cost of insurance will also have to rise. This may lead to financial exclusion for the poorer parts of society who are already significantly under-insured, or pressure to adopt the “cheapest” short-term solution in monetary terms. Matching affordability with sustainability is therefore a real challenge for Insurers.

⁷ Energy Research Council. Carbon labeling. Report on roundtable, 3rd-4th May 2007, St Anne's College, University of Oxford

⁹ The European Council for an Energy Efficient Economy. French Presidency to Drop Carbon Labelling Plan. News item, 9 September 2008

⁸ www.co2star.eu website

¹⁰ Similar considerations apply to the mercury in long-life light-bulbs

18.4. Ongoing impact

When we look closely at the operation of individual markets the pressures change. For insurers, the challenge in settling insurance claims is to ensure that the activities that are undertaken to provide indemnity are both sustainable and commercially sensible at the same time. The increasing public focus on environmental issues may mean that in the medium term insurers ought to take responsibility for greater oversight in repairs and reinstatement of property to ensure that their environmental reputation is protected

Household

In Chapter 7 the issues of increased flooding, both via the effects of storm surge and riverine flooding were discussed. The need to improve the ability of properties to withstand flooding through more resilient reinstatement was also discussed.

To reiterate some of the points raised there (looking from the point of view of sustainability) we need to consider what happens when damage occurs to property. Damage can either be repaired or the property, or parts of it, replaced. Insurers have an option to choose to make repairs in a way that both minimises the impact on the environment from the action that they choose, but also with a view to long term protection. Consumers and in particular claimants may support such decisions or reject them. The question for claimants is whether the building is returned to them in a condition similar to the pre-damage property, but resilient reinstatement may require changes in the layout or construction of the property. Those changes can become hotly debated if the claimant feels they act against their own interests of ‘utility’.

For example if a property is in a flood risk area, it might be beneficial to the long term claims cost and environmental impact to undertake more extensive developmental repairs by making the building more flood resilient. Lifting all electrics away from the floor and routeing electrical circuits down from the first floor rather than up from below the ground floor, could have a significant impact on the cost of future claims and the level of damage (and therefore future environmental damage from wastage). However, insurers are faced with a dilemma in that this increases the cost of repairs now without any guarantee of future revenue and the associated future reduced claims costs to offset the additional spend now.

In extreme cases the need for resilience is obvious and immediate. In some areas of the country flash floods are becoming more common and for a few properties flooding is frequent, but unpredictable. For an (additional) cost of around £30,000 one property in Lowestoft was reinstated after such a flood with a resilient approach and withstood future floods with minimal damage – mostly only requiring a clean – whereas typical costs to reinstate could be expected to be as high as £60,000.

Subject to competitive considerations, insurers may need to consider how to develop an equitable system to encourage the sensible use of such higher-cost risk-reducing activity following claims. The problem is that the costs be borne by the insurer at the time of claim and the benefits realised by insurers in future periods. Resolving that issue at a market level, would, in the longer term, benefit the industry through lower claims costs. It would also have a positive long term impact on the environment. This may become particularly important if areas of the country become progressively less insurable (something which was considered in Chapter 7 in relation to the need to consider introducing an equivalent of the Australian Blue Book).

Effectively this is a continuation and development of the ideas discussed in the last CII Climate Change report which suggested rationalisation of claims handling procedures to introduce more economic working through standardisation.

Commercial property

Commercial property is generally exposed to almost identical issues in relation to the physical effect of increased risks from climate change as domestic property, but in addition the properties tend to have further aspects due to their intended use.

Finding sustainable solutions, for both the building of new commercial property and the repair of existing stock damaged by an insured event, to assist in the reduction of energy usage are key here, because commercial buildings tend to have much higher energy requirements than homes. In Chapter 7 passive air conditioning systems were mentioned where the use of “chimneys” to pull cool air into the building, using the convectional draw created by the waste heat in the building, make good sense and require little or no energy to operate.

Chapter 10 discussed conventional Construction in relation to climate change. One novel example is the construction of the Pines Calyx, a commercial exhibition and business meeting venue constructed from rammed chalk at St Margaret’s bay near

Dover. The chalk excavated to create the level ground and foundations was used (in a process called ramming) to create chalk blocks from which the building is constructed. No material travelled more miles than necessary – creating the lowest environmental impact new build in the UK - and long term there will be minimal environmental impact too. Design care ensures that natural light provides sufficient illumination for most of the day.

This building developed a number of new building techniques and skills which are now being utilised in many other areas. It is anticipated that the techniques and experience will be used to help build some of the buildings for use in relation to the 2012 Olympic Games in East London.

Examples of similar projects become more common as new ideas are tried out, but the important element here is that post-loss repairs will require the specialist knowledge of these new techniques which may be both difficult to secure and expensive. Loss resiliency and severity is also untested.

Motor

EU Environment Commissioner Stavros Dimas originally announced plans for a compulsory 120g/km limit (but this was later increased to 130g/km) on average CO₂ emissions from new cars from 2012¹¹. Even at the increased level this is a stringent limit which is significantly below the current European average emissions. The current average across Europe is 163g/km, (UK 167.2g/km)

It is likely that to meet these limits, engine and car design will need to change significantly by that time.

Such regulatory change tends to increase pressure to scrap working vehicles because they are relatively more polluting, without taking account of usage or the carbon cost of manufacture of the replacement. In particular, pressures of increasing corporate social responsibility tend to mean that companies seek to be seen to be as compliant as possible as quickly as possible. As shown in Figure 1 on page 5, focus is placed on the ongoing emissions saving, rather than the total emissions load, especially where manufacture is partly or wholly from other countries.

Overall pollution might be lower if replacement was deferred for two reasons. Firstly, the immediate increase in carbon and other pollutant releases from manufacturing would not take place. So although the in-use pollution from the old vehicle is higher than the in-use pollution from the replacement, it is much lower than the combined cost of manufacture and usage of that replacement. Secondly (as manufacturing continues to reduce its own carbon footprint) the replacement manufacture in the normal lifecycle – when it finally takes place – is likely to be less polluting than it is today.

Currently, insurers do not take account of sustainability issues when determining whether to repair a vehicle or write it off. In future those considerations may start to influence these decisions, particularly for vehicles whose emissions are (comparatively) low in use, but high in manufacture, indicating that, for those vehicles, a repair is a 'preferable' option from a sustainability point of view.

In the UK motor insurance market between 300,000 and 400,000 vehicles a year are damaged beyond their value and subject to an insurance claim although they are still capable of being safely repaired.

This level represents 1 to 1.5% of the vehicle stock. Many of these damaged but repairable vehicles are not repaired and returned to the owner but are replaced with new(er) vehicles. Those that are not repaired are put into the salvage trade and either reconstructed and returned to the road, or broken up for parts. This is a heavily regulated area requiring environmentally sound practices by licensed practitioners.

When considering the whole of life carbon cycle and the impact of waste disposal (which will happen anyway but perhaps some years hence), insurers tend to act purely on economic grounds. Since the costs of vehicles and repair of damaged vehicles probably do not reflect climate change accurately in their pricing it is possible that, until environmental costs are fully integrated into economic costs, claims decisions may not act in the best interests of the environment. However, a number of other issues (including liability for improperly repaired vehicles) affect the claims decisions in this area and they are not easily resolved.

Storm, falling trees, flooding and windborne impact damage are all likely to increase the incidence and frequency of Motor Total Loss claims and bring more frequent aggregation of risk, but this is not likely to be significant enough to drive policy decisions on its own merits.

A consistent approach and common guidelines (subject to competition law constraints) to the recycling of parts and repair of salvage to take sustainability into account would be helpful.

¹¹ European Commission 2007

Motor manufacturing is often undertaken at considerable distances from the place of use, resulting in additional carbon emissions from the delivery of spares. Insurers will utilise locally sourced recovered parts where it is safe and meaningful to do so and could consider extending both repair and reuse of parts required for repair to help minimise the carbon costs of repairs

Creating sustainability through carbon trading and other actions

Energy (Chapter 12) and Carbon Markets (Chapter 17) cover this aspect in some detail.

Marsh, the world's largest broker, and AIG, the world's largest insurer, have launched carbon emissions credit guarantees and other new renewable energy-related insurance products that are allowing more companies to participate in carbon offset projects and the growing carbon emissions trading markets. The carbon trading market in the European Union alone was \$24.6 billion in 2006 rising to \$50.1 billion in 2007 according to the World Bank

It is possible that in the longer term the ability to trade carbon credits could be an important aspect of dealing with the aftermath of a large natural disaster. Although speculative at this stage, a high carbon price will reinforce the trend to 'just-in-time' manufacturing, with minimal stocks. Thus the raw materials supply chain may have decreasing resiliency to dramatic demand change, for example after a natural disaster. In particular, this might mean a sudden requirement for carbon credits to match a higher level of manufacturing, or to supply unsatisfied demand for the credits themselves. Insurers may need to take action to ensure preferential supply or to develop alternative measures to ensure resiliency for their customers and policyholders.

Insurers also have an opportunity to take direct action to protect the risks and areas that are at risk through joint investment or individual action. One example of this is Tokio Marine & Nichido Life, which has reforested more than 7,500 acres of mangroves in Indonesia, Thailand and several other countries to minimise losses from rising cyclone-related risks¹².

On January 29th 2007 at the World Economic Forum in Davos a new international partnership of organisations was agreed with the aim of establishing standards of reporting and a "generally accepted framework for climate-risk related reporting by corporations". One aspect of that framework is sustainability reporting designed to ensure that corporations accurately record the impact that they have on the environment and the actions they have taken to offset it. That standard has now been defined in four main areas by Ceres. (Ceres is a coalition of over 110 investor, environmental and public interest organisations working with companies and the capital markets to address sustainability challenges such as global climate change.)

18.5 Product design

Many insurance claims are settled through the provision of cash to the insured, and so take little account of environmental impact of the activity that follows the loss. Clearly in major losses such as fire and flooding a much more proactive approach is possible and more environmental impact assessment is also possible. In the longer run is it likely that reinstatement of property will have to include more reuse of existing material leading to changes in the way that reinstatement take place?

Deconstruction of buildings which are damaged, and separation of reusable and waste materials (to maximise the materials which can be reused and minimise emissions), is more expensive at present. When the full energy costs of materials such as concrete, blockwork and bricks is reflected in their price, is deconstruction, i.e. salvaging the structural components, as opposed to demolition, likely to become more widespread?

If the costs of replacement materials or the need for sufficient carbon credits to enable manufacture of them make deconstruction and reconstruction an economically viable alternative compared to demolition and re-build, then Insurers will need to consider the impact on both the time and methods used in loss reinstatement.

These aspects of claim handling will require development of existing products to encompass the alternatives and give insurers the contractual rights they need to enforce the decisions that they take.

Insurers know that the design of products influences consumer behaviour. For example, the move to greater security, more secure locks and approved alarm installation demonstrates that consumers are prepared to take action to reduce risk, in order to receive commensurate savings in insurance premium (not to mention the avoidance of intangible costs). Clearly that principle can be applied where risk and environmental impact are aligned.

Examples of where product design could begin to influence behaviour might relate to things like actual mileage driven for Motor Insurance and some recent innovations including incorporating automatic mileages recording equipment as part of the insurance package point to the early adoption of these schemes.

¹² CERES – A group of Institutional investors working on sustainable prosperity.
(See www.ceres.org)

Insurers' interests, and those of the environment, are clearly aligned in risk reduction activities as this reduces the need to take reinstatement, remanufacture and repair activities into the equation at all. In-car telematics to enable the monitoring of usage allow insurers to charge premium not just according to traditional risk assessment factors but also to factors such as time of day. Younger drivers, for example, can avoid high insurance costs by avoiding their high-risk times of day (45% of road fatalities are between 11pm and 6am), and by doing so the overall number of accidents is reduced. Recently, however, Norwich Union discontinued such an experiment, due to the high cost of installing the technology in vehicles, and low demand due to consumer unease on issues like privacy with a 'spy in the cab'.

If such concerns can be overcome, then similar initiatives to align product design to help change individual risk management behaviours could play a significant role in insurers' responsibilities from a sustainability point of view.

As environmental concerns are taken more seriously by the general public there is a tendency for manufacturers to adapt their technology through demand-led change. Key examples of the sorts of changes that have already been seen are domestic wind turbines and hybrid cars with both battery/fuel cell powered electric motors and traditional fuel powered internal combustion engines.

Both of these developments change the risks faced by insurers, with potentially new causes of loss (and therefore increasing frequency), for example, by fixing generating rotors to chimney stacks and through higher vehicle repair costs.

However, climate-friendly goods and equipment may not merit a favourable premium rate compared to the conventional alternative if repairs are more costly, e.g. hybrid cars could be more expensive to insure, not less, based on claims cost in an accident, and that makes consumer behaviour harder to influence. The higher risks faced by insurers inevitably means higher premiums, therefore penalising those who seek to take action to restrict the impact of their activity.

In London where such vehicles can avoid congestion charging, the increased cost of insurance is offset by the decreased taxation of driving, but that benefit is not widespread. To avoid an unfair press, insurers may want to take an active part in policymaking discussions in this area.

Taking a holistic view across all aspects of the sustainability by a society requires governments to take appropriate action to drive change whilst providing a framework in which it remains in an individual's interests to make a change even where some of the associated costs (such as insurance) are adversely affected by the decision.

A recent study commissioned by CERES¹³ identified 190 real world examples of the insurance industry taking actions that will promote sustainability. Examples include:

- Insurer-initiated hurricane-loss prevention methods
- 'Green Covers', e.g. offering rate reductions to building owners who re-build damaged property using green and LEED-certified building practices
- Investment in climate change science
- In-house energy management programmes
- Building public awareness
- Participating in public policy process
- Investments in the clean technology sector.

However, the report noted that these initiatives were atypical: most insurers ignore sustainability, to the detriment of their clients and themselves.

18.6 Conclusions

- Sustainability means changing techniques from unsustainable to sustainable ones. The drive to sustainability means that new materials and new uses of old materials are being championed. These changes modify the post-implementation risk.
- Increasingly, re-use and recycling of materials means that there will be pressure on insurers to dismantle and deconstruct damaged property to salvage re-usable parts in order to minimise the carbon costs of remanufacture. These activities are likely to increase the costs of claims and raise the costs of insurance.
- Increasingly, sustainability is seen by consumers as a minimum requirement and insurers should seek to embed sustainability in their own businesses.

¹³ CERES

- Too often a narrow definition of sustainability is adopted when selecting new solutions. Aspects like whole-life carbon, resilience, and cost are ignored.
- Sustainable techniques are being developed in many areas of building and building repair and maintenance, and insurers need to ensure they take proper account of these techniques when settling claims.
- Significant improvements can be expected in some areas where environmental damage is an inevitable by-product such as motoring. These developments are happening quickly.
- Insurers are faced with a double challenge of needing to become more aware of the environmental impact of their activity in handling and settling claims, often having to make choices between environmentally sustainable responses and economic cost.
- The Fourth Assessment report by IPCC¹⁴ highlights the role insurers have to play in sustainability and suggests that there is an opportunity to increase their influence on policymakers.
- New techniques and skills are being developed rapidly which can help inform and change the approach taken.
- Regulation needs to be carefully introduced to ensure that it does not drive behaviour which leads to short term increases in impact. Sustainability demands a holistic overview, and regulation should be developed and implemented with both a short term and a long term overview of how the regulatory environment will change behaviour in relation to sustainability.
- Carbon labelling could make it easier for insurers to develop sustainable procurement practices.

18.7 Recommendations

- In view of the fundamental shift towards sustainability that is starting, Insurers may wish to identify collectively a series of sustainability targets of their own and agree those standards as an industry, measuring their performance against those targets regularly.
- Insurers will need to take account in their pricing and claims management activities of changes in risk caused by the use of sustainable techniques and materials.
- Insurers should collaborate collectively with appropriate agencies and government consultations on the effect of different approaches to sustainability to assist the research and development of those new techniques and materials. Particular concerns are : whole-life carbon, resilience and cost.
- Insurers should seek appropriate support for promoting the use of sustainable techniques in the context of carbon taxing and pricing, and regulation, from Government to encourage a financial/legal environment that enables sustainable techniques to be used without unfair financial penalty.
- Governments and public agencies should press forward with research and regulations that would embed issues like carbon-content and resilience into private market processes. Two particular examples are to address carbon labelling more urgently, and to adopt building regulations that mandate resilience in repair work and major refurbishments.

¹⁴ Intergovernmental Panel on Climate Change - IPCC Fourth Assessment Report (AR4).
"Climate Change 2007"

Biography

William Buist

Chartered Insurer, A.C.I.I. B.Sc

William has had a 22 year career in Insurance, concluding as the Head of Business Risk Management and Chief Underwriter for Lloyds TSB Insurance. He was responsible for the development and implementation of various Risk Management Initiatives within the organisation and the Insurance sector as a whole through the Association of British Insurers, where he also engaged with a number of consultations with Government on behalf of insurance industry bodies. William is a strong innovator and has worked with the teams to help develop the personal lines insurances sold by Lloyds TSB and utilise risk management techniques to improve the service provided and the results of the business. The study of Climate Change and the likely impact of weather related claims were key inputs to the strategy and design of the property claims process, with sustainability as a key driver to changes in those areas.

In 2004, he formed Abelard Management Services Limited, a consultancy company that focuses on sustainable and collaborative development within and between businesses. Supporting corporate teams delivering major change is a key focus of his business, and William has achieved substantial success with many medium and large clients. For example, he has assisted the Insurance Industry to meet new regulatory requirements arising out of changes in Vehicle Legislation, particularly the Vehicle Identity Check Scheme and was instrumental in facilitating significant improvements in an industry wide initiative for the sharing of data on behalf of the Industry to help track and minimise fraud.