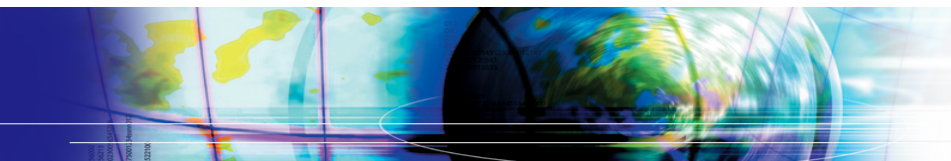


Energy & Efficiency:

The worldwide drive to 'green'

Insurance



Date : 21st August 2008
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Introduction

During April & May 2008, we interviewed 400 respondents from enterprise-scale companies across seven countries, on a range of issues around green IT. This paper examines the responses from the 100 insurance industry respondents. Where appropriate, we have inserted charts to compare the insurance results with respondents from the other industry sectors – energy/utilities, banking, and the government sector.

We have developed a set of six benchmarks that cover all the issues in this paper. You can use the benchmarks to see how your organization stacks up against the respondents in this study.

To test yourself online, with instant graphic output of your scores, visit <http://ibmgreen.bathwick.com>. The assessment is free of charge.

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Executive Summary

Environmental or 'Green IT' issues have been much in the spotlight over the past two years. Despite a rapidly growing realization that green IT encompasses a range of issues across the whole IT infrastructure and its application to the processes and supply chain of any organization, most organizations are still in the early stages of thinking, and are focused primarily on cost and energy efficiency.

This study looks primarily at that first stage – whether there is a strategy in place, and how far advanced their thinking and action is, primarily in relation to the data center.

The first thing that is clear is despite the challenging economic conditions that beset us all today, green issues are firmly on the agenda for both corporate and public sectors. This report details the study results in relation to the insurance sector, and contains a number of key findings:

- *The most important green driver is changing user behavior – teaching employees to turn off equipment at night for example, followed closely by saving money*
- *58% of respondents are implementing green strategies only in a piecemeal or ad hoc fashion, which does not bode well for achieving strong results*
- *Surprisingly, a greater number of insurance respondents are focused on new and emerging technologies than on either the data center or on their desktop and networked infrastructure (or even across the whole infrastructure); less surprising is the popular and entirely sensible approach of focusing on reduction, through re-using, recycling, and re-engineering*
- *Energy costs, having 'greening' IT as part of their overall environmental strategy, and power availability are the most important green IT drivers in the insurance industry*
- *After those factors, legislative or regulatory demands, and growing customer demand are the next fastest growing issues*
- *The main barrier to achieving change for insurance respondents is budgetary constraints, although raising awareness in the organization, obtaining commitment from employees and building a business case are also problematic*
- *More than three-quarters of respondents (76%) say that environmental projects must be linked to saving money*
- *More than half of insurance respondents (53%) agree that their company does everything possible to be environmentally responsible, but nearly half (46%) agreed that their organization is only interested in green projects for PR purposes*
- *55% of respondents use energy saving as the primary measure for tracking energy efficiency projects compared with 38% using cost as the measure, and just 7% carbon saving*
- *Despite this, only 19% of respondents actually know the real power consumption of their data center*
- *The four most widely used techniques for saving energy are 'Turning off obsolete equipment', 'Educating users to turn off their PCs when not in use', 'Turning off server equipment not in use for some time', and 'Using system management tools that enable powering down during times of low utilization', clearly illustrating the focus of insurance companies on doing the simplest things first – which is not true of all industries*
- *The techniques being most piloted in the insurance industry today relate to new strategies for data and storage, which is unsurprising given that the quantity of storage required is still exploding*

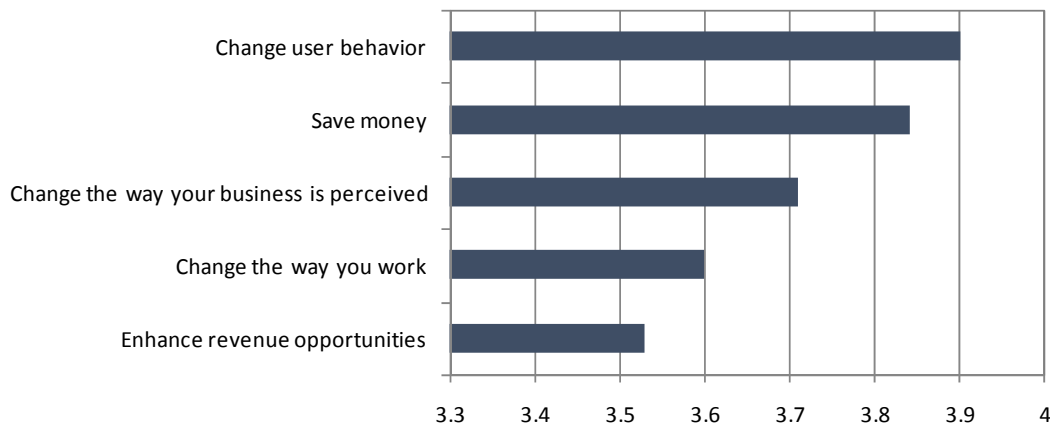
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- *Five of the top six techniques being most assessed in the insurance industry today relate to cooling and alternative energy sources*
- *Only 17% of respondents have any external audit of their energy efficiency or carbon footprint*
- *There is still tremendous scope for consolidation activity – just 35% have consolidated most or all of what they can on their mainframe, and even lower for UNIX and Intel estates*

Green strategy

We first need to establish how respondent organizations regard environmental issues ('going green'). The stand-out result here is that 'Change user behavior' is reported to be the most important issue to insurance companies, which includes encouraging employees to switch off equipment at night, recycling paper, etc. 'Save money' is the second most important driver, and in line (as far as importance is concerned) with other industries. 'Change the way your business is perceived' means making customers and other stakeholders perceive the business in a more positive light. 'Change the way you work' describes various techniques and processes to lessen the environmental footprint of carrying out your day job – videoconferencing rather than travel, home-working rather than commute miles, and so on. The relative importance of these drivers is translated quite clearly into what action the firms are taking (later in this paper).

Figure 1 How organizations are approaching the opportunity of going 'green' in the insurance industry



Respondents rated the relevance of each issue from 1 to 5 where 5 is the highest. Figure shows mean rating across the group.

Figure 2 shows how the other three industries in this study responded. This figure looks at those respondents rating the opportunity 'critically important'. This analysis, rather than averaging the weightings in figure 1, shows which the most important issues to respondents are.

Banking and the public sector both rated saving money as the most critical factor, though the public sector were equally interested in changing the way they were perceived. The insurance industry seems to be highly focused on changing user behavior, and seems least advanced in changing working practices. In that regard, it might be said to be missing an opportunity to effect positive change by not doing so. While we would not suggest that insurance organizations are not interested in garnering benefit from improved working practices and processes, this result would suggest that respondents are possibly too focused on shorter-term gains at the expense of longer-term (and greater) benefits.

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Figure 2 How organizations are approaching the opportunity of going 'green' (industry comparison)

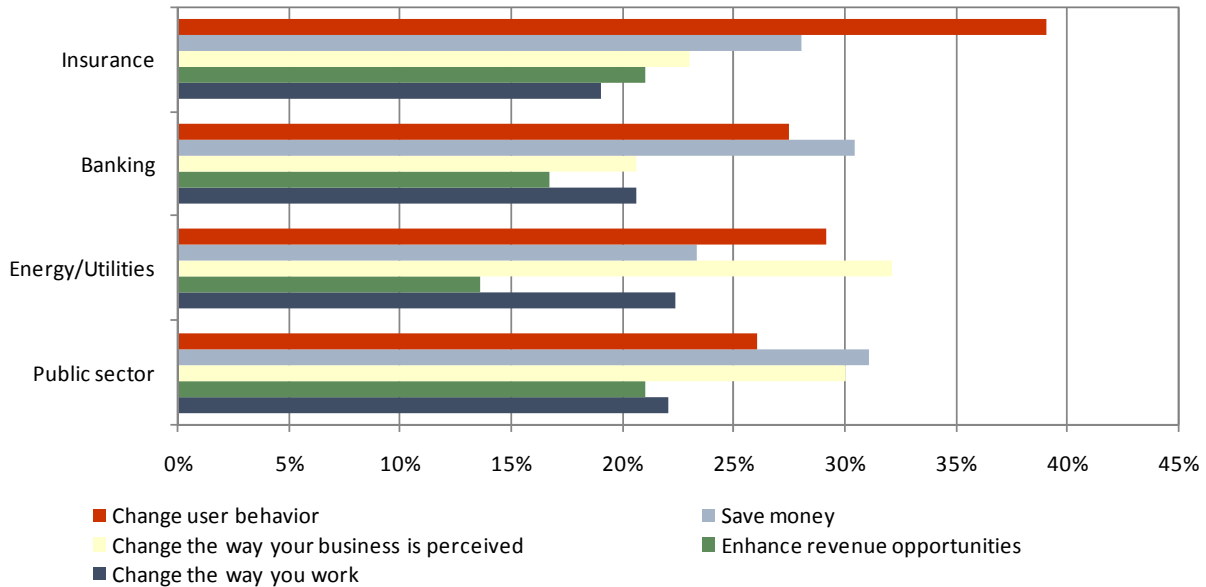
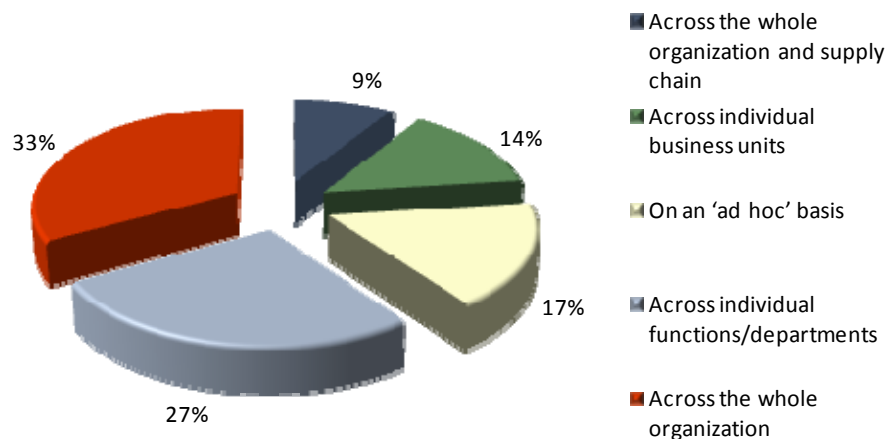


Chart shows respondents rating critical only.

Of equal interest to the results concerning primary drivers is whether environmental strategies are being coherently planned and implemented. Figure 3 below illustrates the point. Only 42% of insurance respondents are applying their green strategy across their whole organization (33%) or also including their whole supply chain (9%). Forty-one percent are executing green activities piecemeal, either in individual business units or functions. The remaining 17% is only doing things in an ad hoc manner.

Figure 3 Where green initiatives are being applied



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This is an important piece of information, and one which frames all the rest of the results in this paper. If organizations are not applying green strategies across their entire organization, they will be unlikely to gain the maximum benefit from the activity, and will find it difficult over time to demonstrate to their stakeholders that they are serious about environmental issues.

So how are green efforts being translated into action within the domain of IT? Figure 4 shows an unanticipated result from insurance respondents. More respondents are focused on emerging and new technologies than on any aspect of their existing infrastructure, including the data center. Given that insurance respondents don't seem to be any further forward than peers from other industries, they seem already to have moved their focus to potential answers from the technological world. Is that at the expense of more prosaic projects in (for example) the data center? It is eminently sensible to focus on the 'Four Rs' of reduce, re-use, recycle and re-engineer – eliminating unnecessary wastage must be the best idea for every organization, but it would appear insurance companies are then looking beyond investing in existing infrastructure to new technologies to make further progress.

Figure 4 Where green initiatives are focused within IT

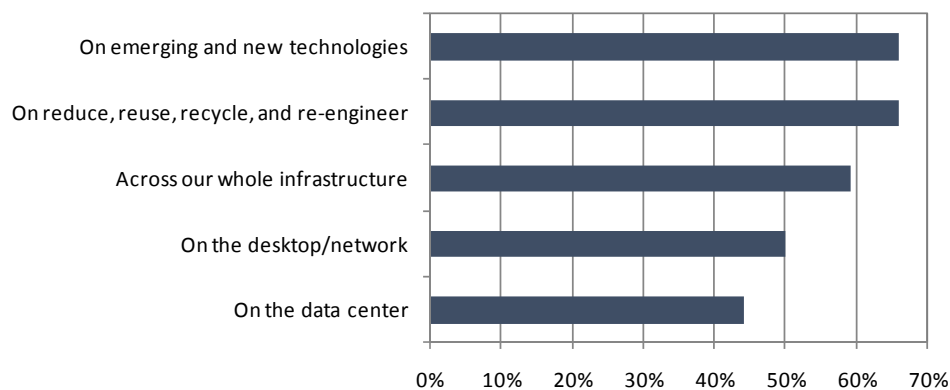


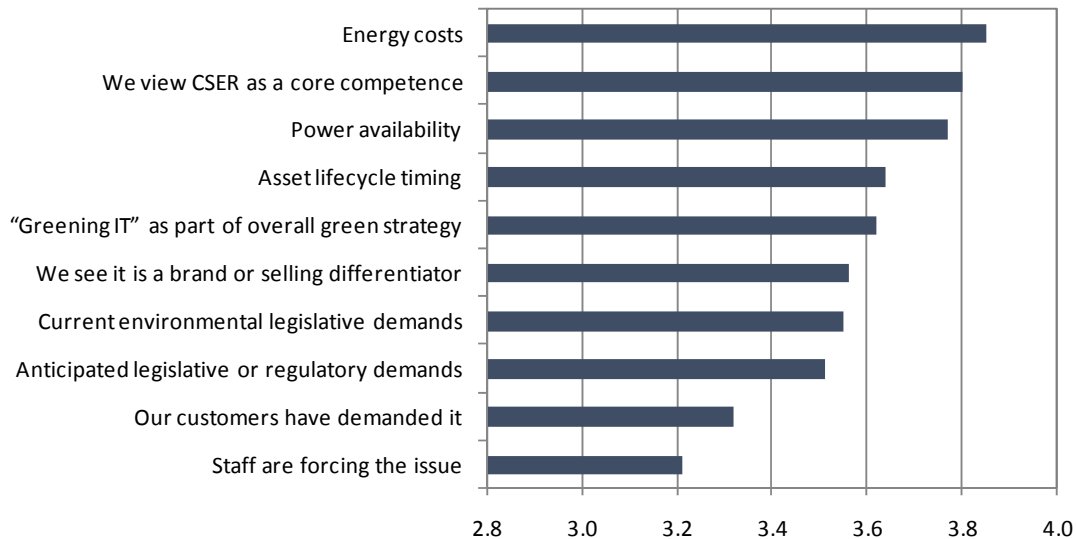
Chart shows the total of respondents rating the focus area important and very important.

Is this because much work has already been carried out in the data center, or is it because some of the 'easier' things to do are more focused on individual users and their highly underutilized equipment (including local or departmental servers)? Does it mean that existing infrastructures are too difficult or too expensive to make more 'green'? Does it mean that respondents see sustainability as not being focused on just the IT element, but rather takes in the whole organization? This would appear to be true for those 42% in the previous chart who are considering that level. Some answers to that question may be found in the later section 'What's going on?', but it would appear from this result and those later that there has (understandably) been a focus on the 'simple' issues to date.

In order to understand what respondent organizations are doing, it is important to understand what is driving them to do it. Figure 5 illustrates the key issues for respondents today, and the cost of the energy is the key motivator. Availability of power – simply being able to get enough power for needs – is still a very important concern, but is slightly outweighed by seeing CSER (Corporate Social and Environmental Responsibility) as a core competence. Perhaps that may help to explain the focus on changing user behavior – insurance respondents seem to be genuinely keen to alter their organizational behavior – and to be seen to be doing it.

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Figure 5 Important green issues in the insurance industry today



Respondents rated the relevance of each issue from 1 to 5 where 5 is the highest. Chart shows mean rating across the group.

Despite the insurance industry experiencing fairly heavy regulatory demands, current and anticipated legislation is not so important as a factor.

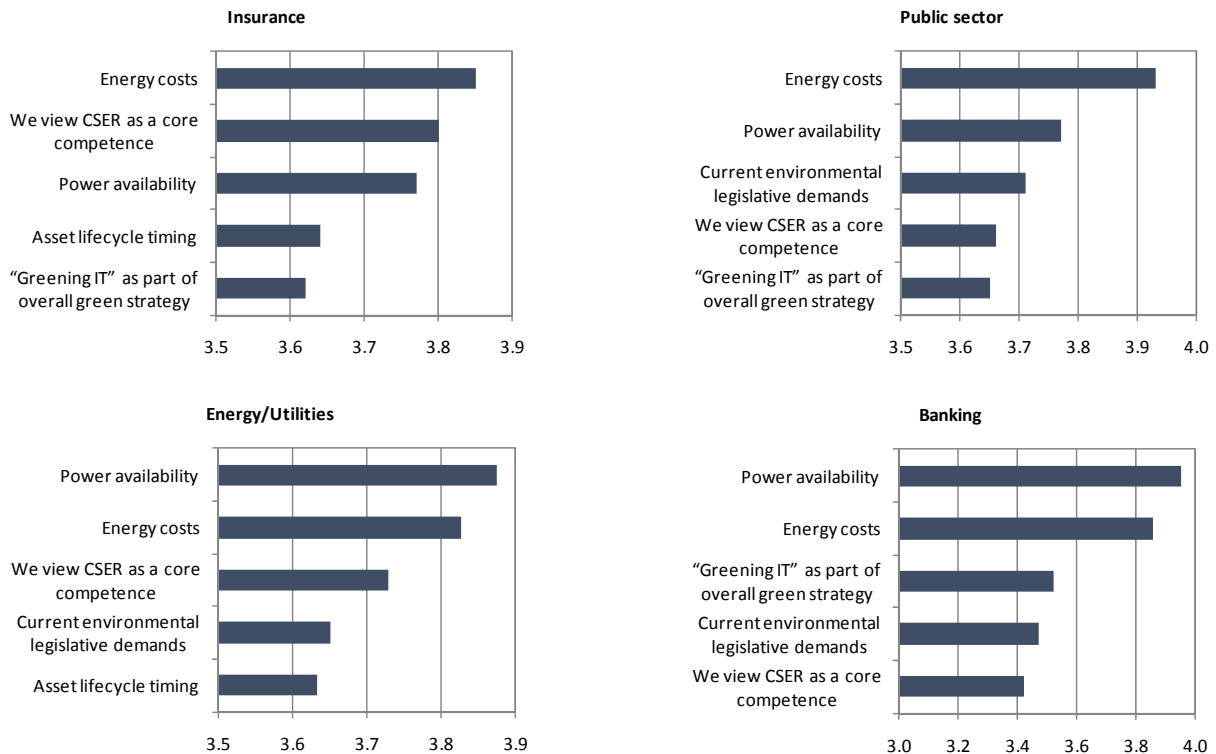
But for all the talk of a strong environmental reputation being important for attracting and/or retaining employees, respondents saw all the other issues and drivers we asked about as more important. Similarly, customer demand seems not to be an important factor to insurance companies today.

Figure 6 below shows the top five drivers for each of the four industries in this study. Comparing results across other industries, there were some interesting differences in the detail, but energy costs, power availability and CSER as a core competence are common across each industry (albeit in different positions).

Insurance companies have long required large and powerful data centers; this would appear to be having its effect, with energy costs clearly now an important concern. It is interesting however that banks have a reversed focus – with power availability being even more important than the cost of that power. Perhaps insurance companies are a little less able or willing to absorb spiraling energy costs.

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Figure 6 The importance of green issues today by industry



Charts show average weighting.

How will these factors grow in importance in the coming years? Figure 7 shows the proportion of respondents rating the issues as becoming 'a bit more important' and 'much more important'. These results seem to show that every issue is becoming more important to nearly all the respondents in this study, which highlights the growing impact of environmental concerns across the board.

The issue of power availability is expected to continue growing strongly, but it is energy costs that are still of most concern, with more than half the respondents expecting it to be a *much* more important issue in the coming two years, and another third as a bit more important. The remaining top issues are rated in roughly the same order as they are currently, with the exception of the customer issue – insurance companies are clearly expecting green issues to grow in importance to their customers in the coming two years, and therefore as a differentiator in the products and services that they are offered.

Figure 8 shows the split by industry, this time only showing the proportions rating each issue as 'Much more important'. The cost of energy is the clear 'winner' in each industry.

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Figure 7 How green issues will grow in importance over the coming two years

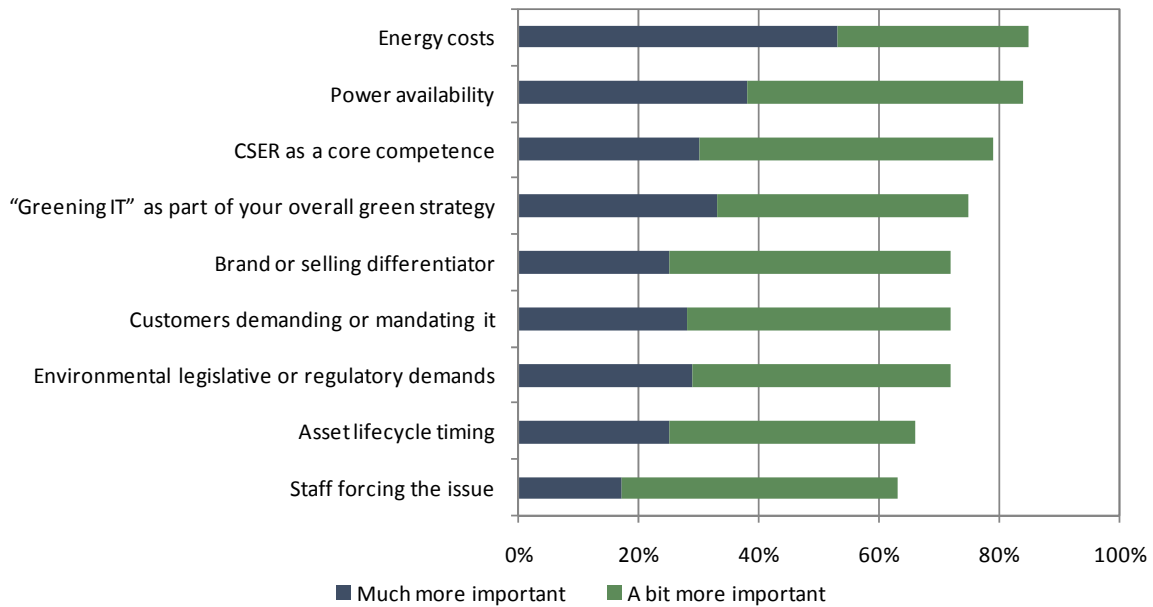


Figure 8 How green issues will grow in importance over the coming two years (industry comparison)

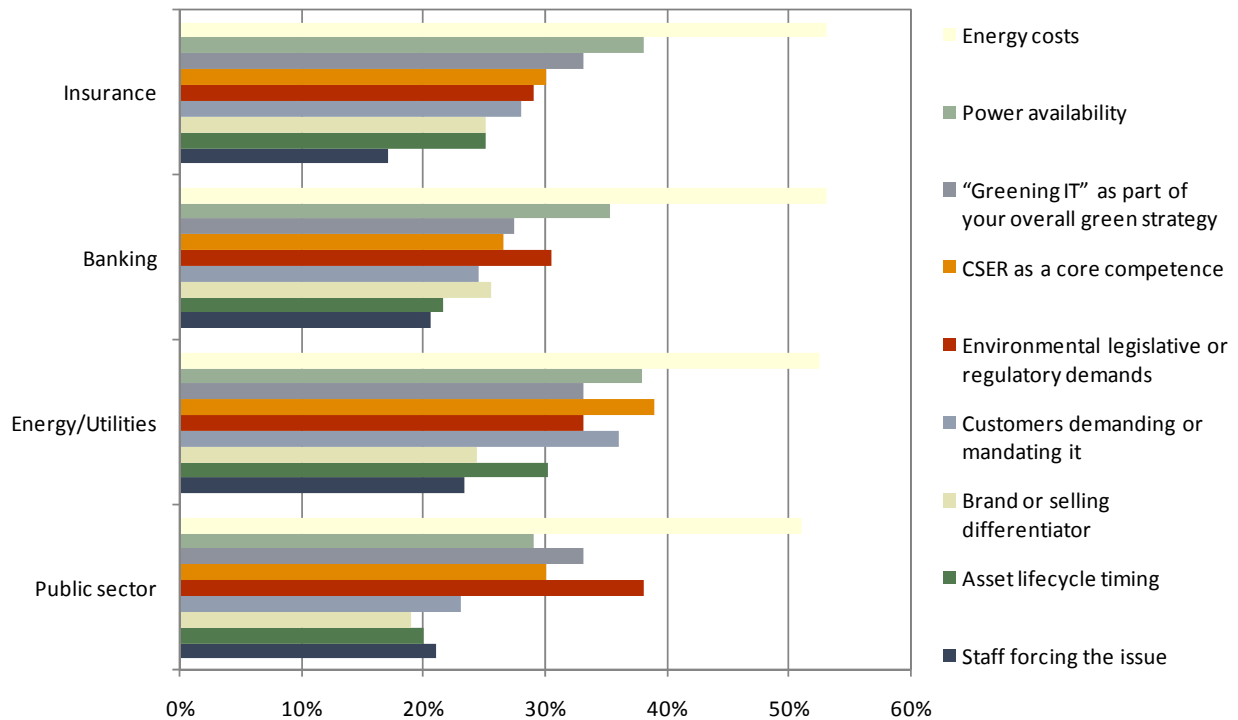
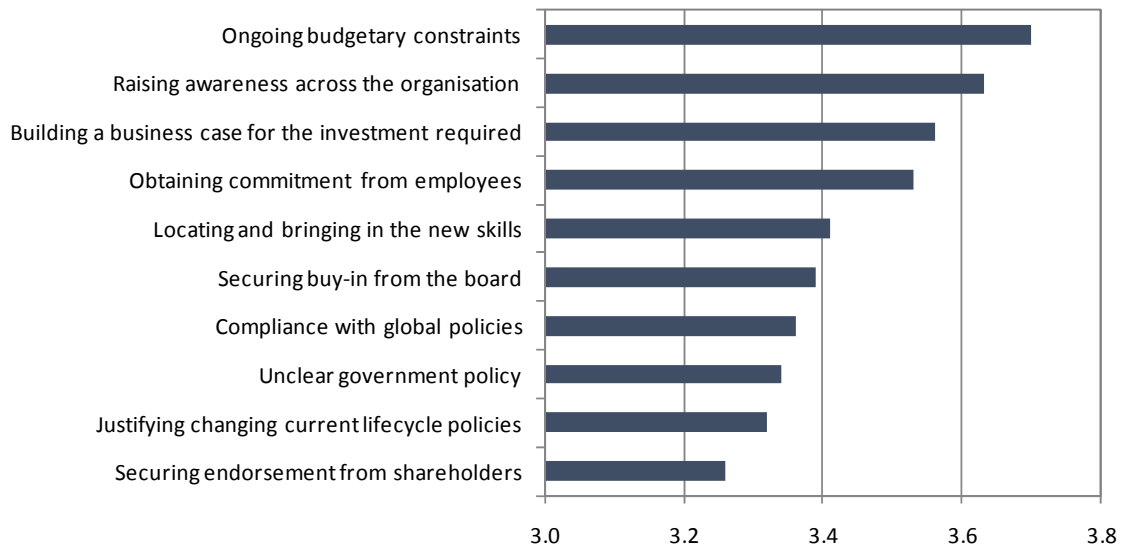


Chart shows respondents rating much more important only.

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What of the challenges that respondents face? Figure 9 shows the weighted response from respondents rating on a '1 to 5' scale of difficulty, and the reason for the focus on energy costs becomes a little clearer. The greatest obstacle is budgetary constraints. If anything, given the ongoing (and in some case, deepening, impact of the credit crunch) this primary financial concern is going to grow. Secondary, but also important, barriers would seem to be internal communication and employee commitment, although the challenge of building a solid business case to ensure support from the board came high up the list also – almost certainly related to the budgetary issue.

Figure 9 Challenges faced in 'going green'



Respondents rated the relevance of each issue from 1 to 5 where 5 is the highest. Chart shows mean rating across the group.

Again, we have compared the insurance industry with other industries in figure 10, using only the data of those rating each challenge 'critical'. As in figures 5 & 6, this shows which challenges are seen as truly critical and which are generally important enough to rise up the weighted rankings. In the case of insurance, there is an even clearer focus on raising awareness and support within their employees, suggesting that in many of the organizations responding to this study, it is at the center of their efforts. That would appear to correspond with the importance of changing user behavior as a driver for green efforts.

Insurance companies are not alone in this challenge however: across all the industries, only raising awareness and obtaining commitment from employees are consistently in the top 5 challenges.

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Figure 10 Challenges faced in 'going green' (industry comparison)

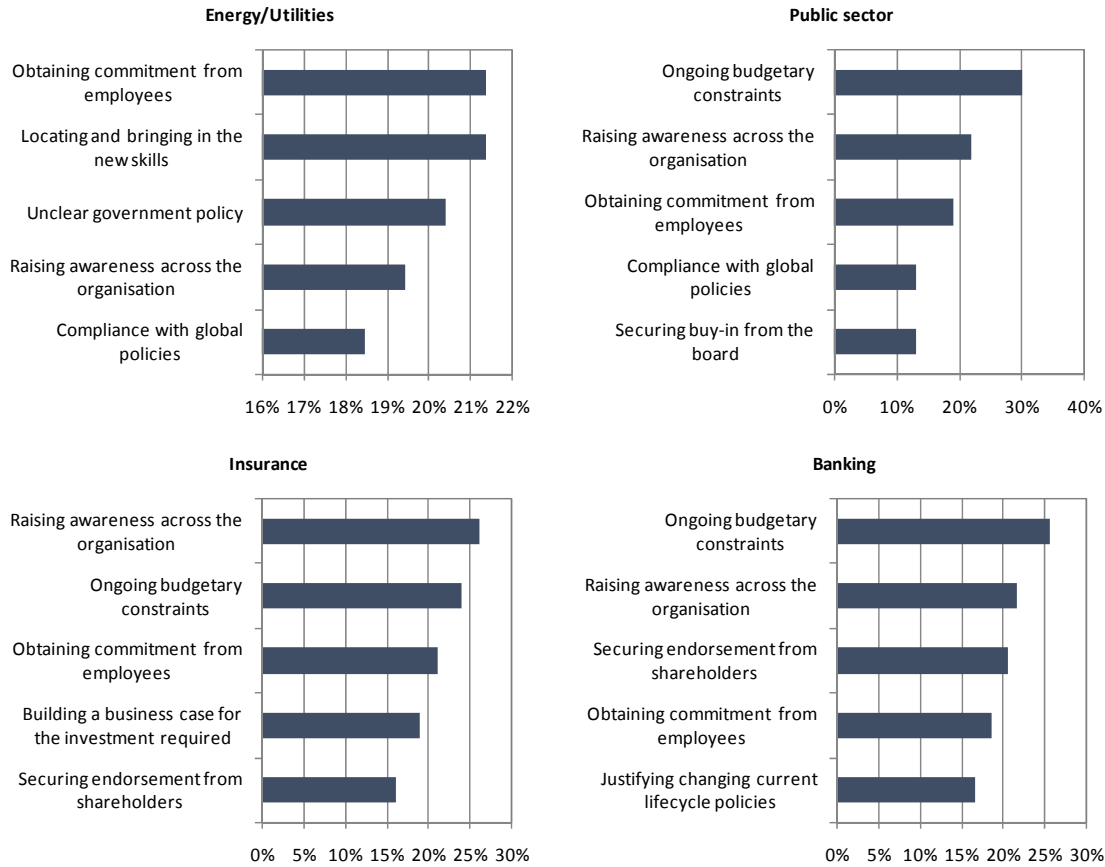
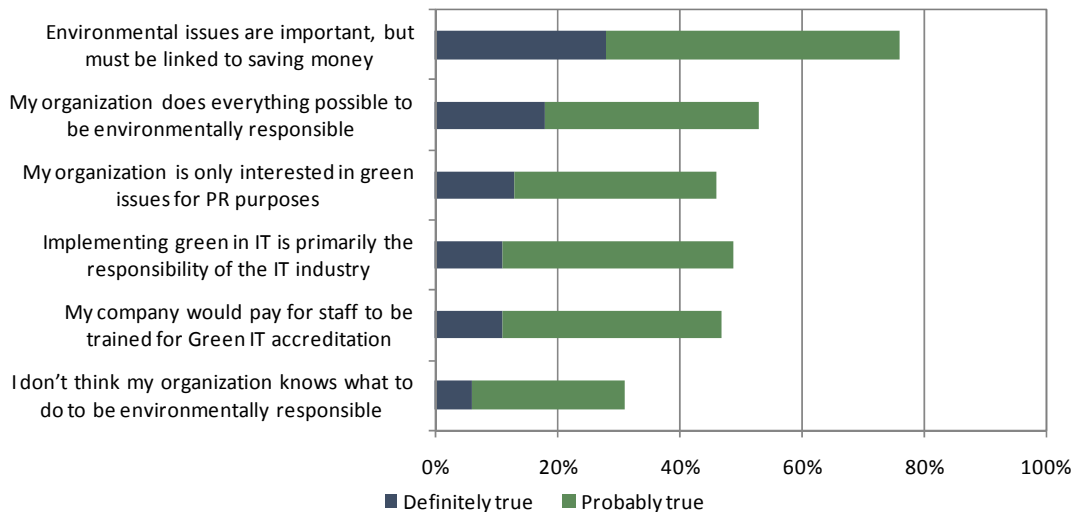


Chart shows respondents rating Critical only and the top five issues for each sector.

Figure 11 Agreement with environmental statements about the organization



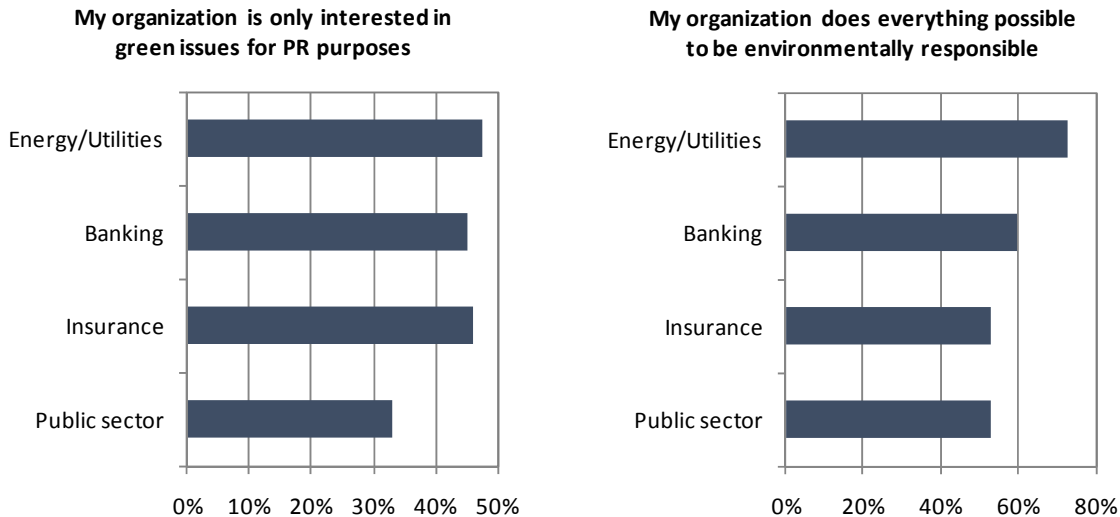
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Finally in this section, we wanted to understand how respondents assessed their own organizations' attitudes to environmental efforts. The stand-out result is that three-quarters of insurance respondents note that environmental projects must save money to be valued in their organization. In fact, across each of the four industries, most agreed that environmental projects needed to make money, with more than 70% of respondents agreeing with the statement in each case.

Less positively however, nearly half of insurance respondents – 46% - admit that it is at least **probably** true that their companies are only interested in environmental issues for PR purposes. While this is to some extent understandable for commercial organizations, it is not an attitude or culture that will be able to endure in the long term, given the range of pressures relating to the environment that are present and growing today.

Having said that, looking at two of the results from this question (figure 12), insurance respondents are no worse than the other commercial sectors in being 'only interested in green for PR purposes'. But insurance respondents were a little less likely to agree that their organization is doing everything possible to be environmentally responsible – less even than the banking sector. The strong energy/utilities finding is likely to be a direct result of both the energy industry's direct impact on the environment through the carbon footprint of generation, and its (earlier) stated need to change its environmental image over time.

Figure 12 Green PR versus overall environmental responsibility (industry comparison)



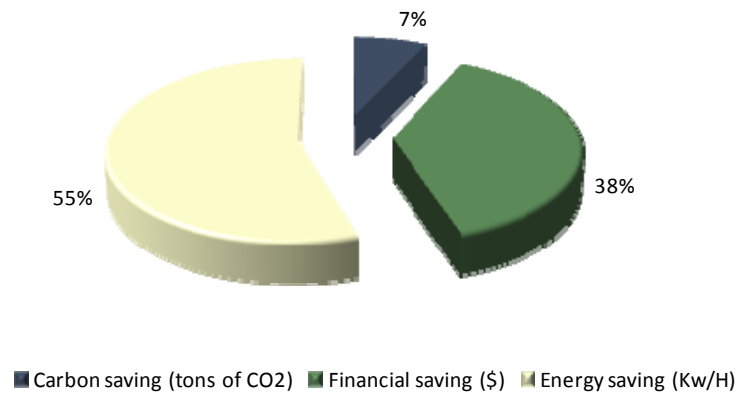
Charts show the total of respondents rating the statement as 'definitely' or 'probably' true.

Actual measures

A good indicator of how organizations really feel about environmental issues is how they set the targets for and measure the outcome of environmental projects. Unsurprisingly, given earlier results, the insurance industry is focused either on saving energy (the cost of power being the leading issue) or directly on financial goals.

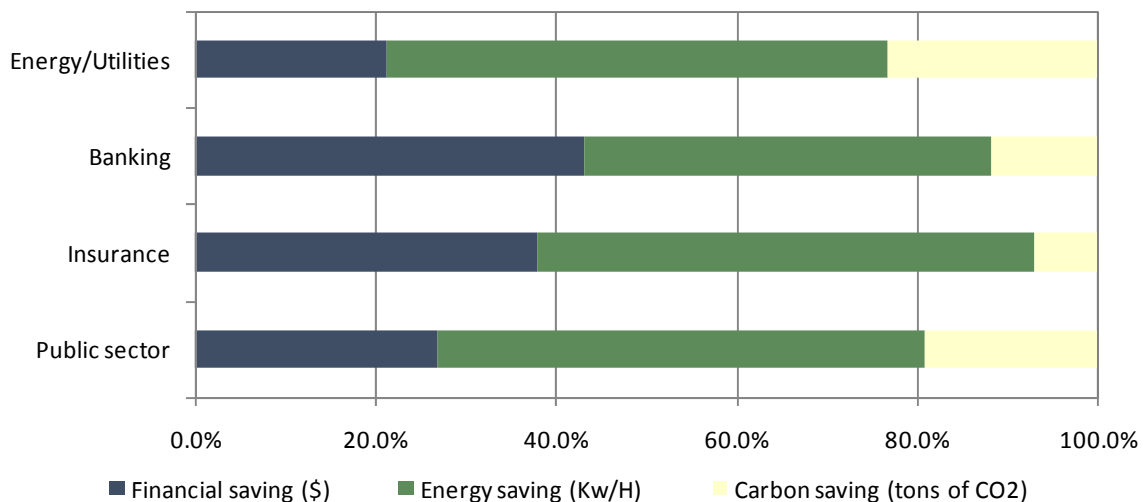
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Figure 13 The measure most used to express green targets



Other industries have quite different results. Energy/Utilities respondents are about half as likely to use financial savings as a measure of 'green' targets, and nearly four times as likely to consider carbon savings as the main measure, for example. In fact, insurance respondents seem particularly disinterested in measuring carbon (CO₂) savings, which might suggest that they are far more focused on the financial implications than on environmental concerns.

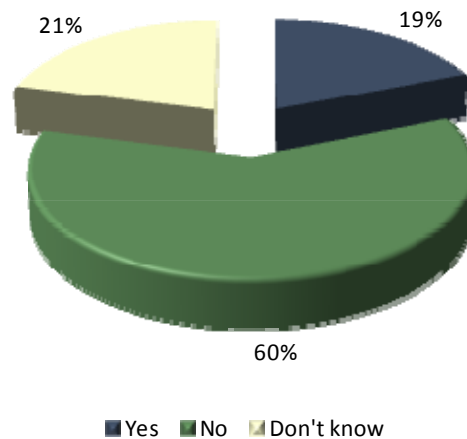
Figure 14 The measure most used to express green targets (industry comparison)



Of course, it would be easier to determine cost or energy savings if you had an idea of current energy expenditure. Given that only 19% of insurance respondents know accurately the actual power consumption of their data center facilities, it may well prove challenging to clearly illustrate project success. This is an important result – clearly, insurance respondents badly need to improve measurement facilities as part of their tactical planning.

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Figure 15 Knowledge of data center power consumption within respondent organizations



In fact, insurance respondents are the least likely to be able to measure energy usage; this would appear to be at odds with their firm focus on reducing energy costs, or at least with their ability to understand whether they are actually reducing those costs where and when possible.

Figure 16 Knowledge of data center power consumption by industry

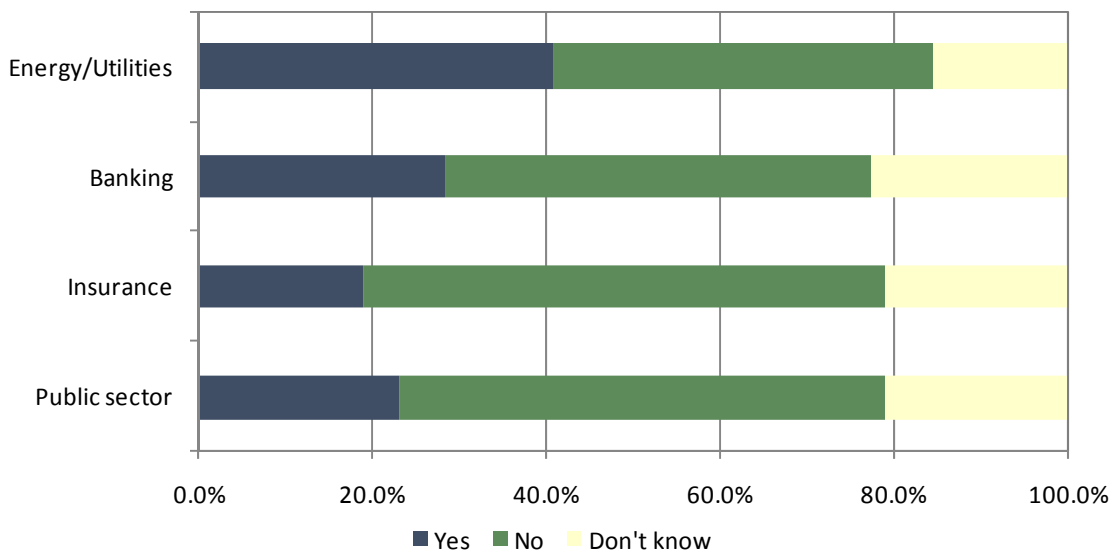
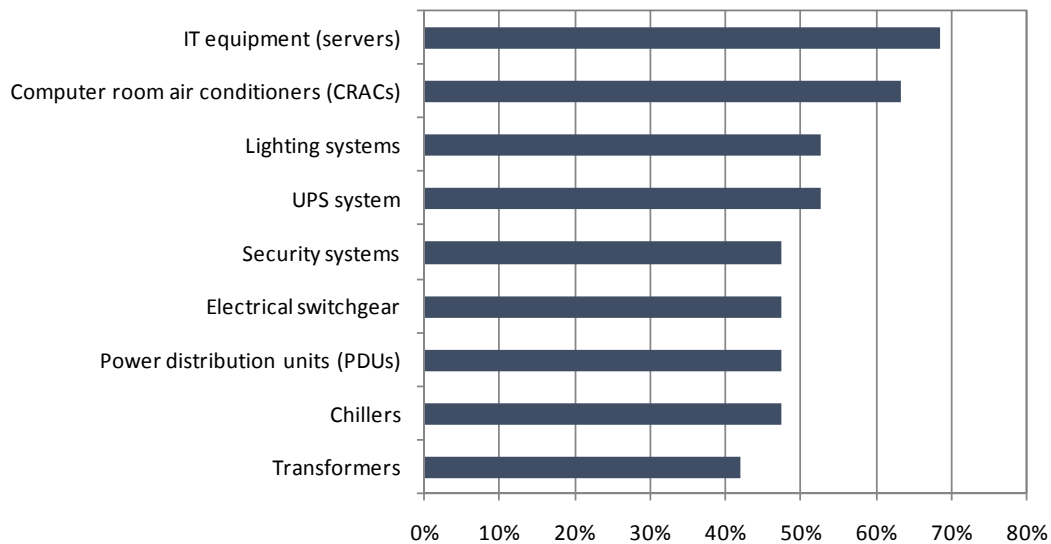


Figure 17 shows for which pieces of data center equipment energy usage is monitored (insurance industry only). It seems clear that in addition to being unaware of overall power consumption few companies know how and where their power is being used – the only equipment monitored by a majority of respondents are servers and CRACs

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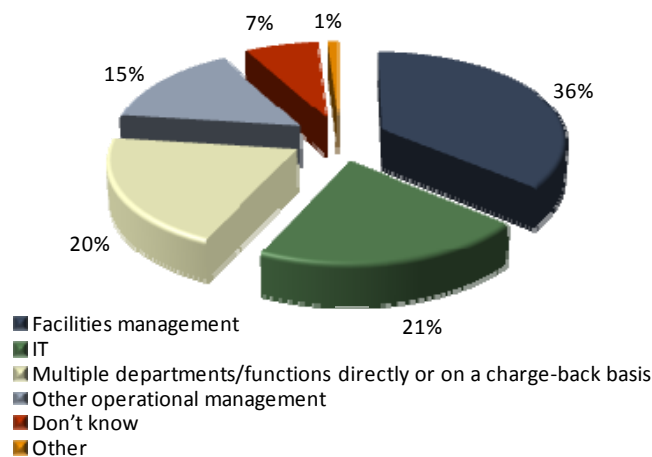
(lighting and UPS systems are just over 50%). Measurement is a key part of assessing and planning projects, and assessing success, and the ability to measure is something that is evidently lacking.

Figure 17 Power consumption monitoring of individual data center components



Perhaps there would be more of a motivation if more IT departments paid their own energy bill. Only a fifth – 21% - do so directly. When this number rises, as it must do when organizations become more aware of their energy expenditure overall, power measurement will surely follow. Of the other industries, both energy/utilities and banking respondents better this result (with around 30%). The public sector only manages 16% of IT departments that are paying their own energy bill.

Figure 18 Departments responsible for data center energy bills



What's going on today?

Figure 19 Green technologies and techniques currently used in the insurance industry

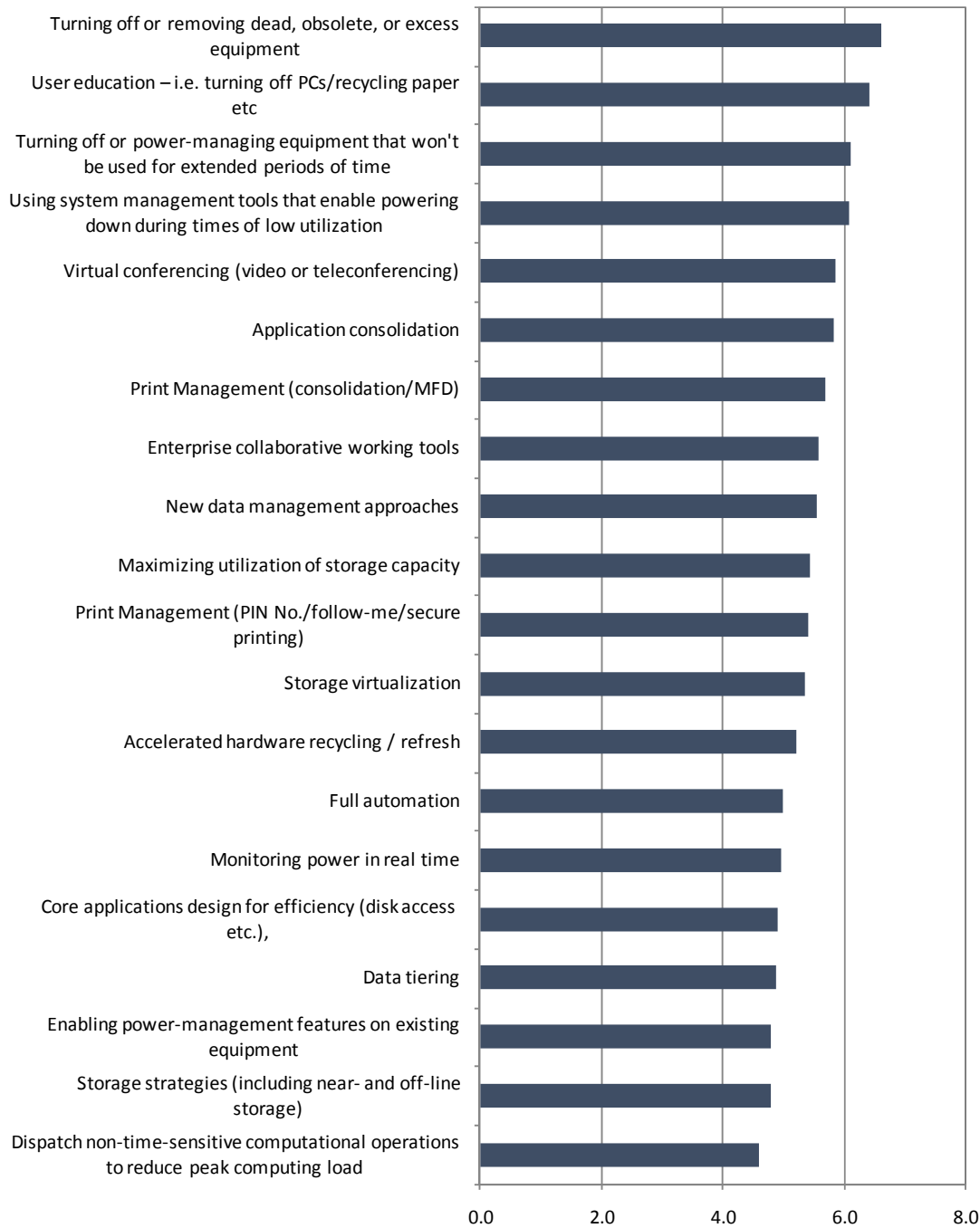


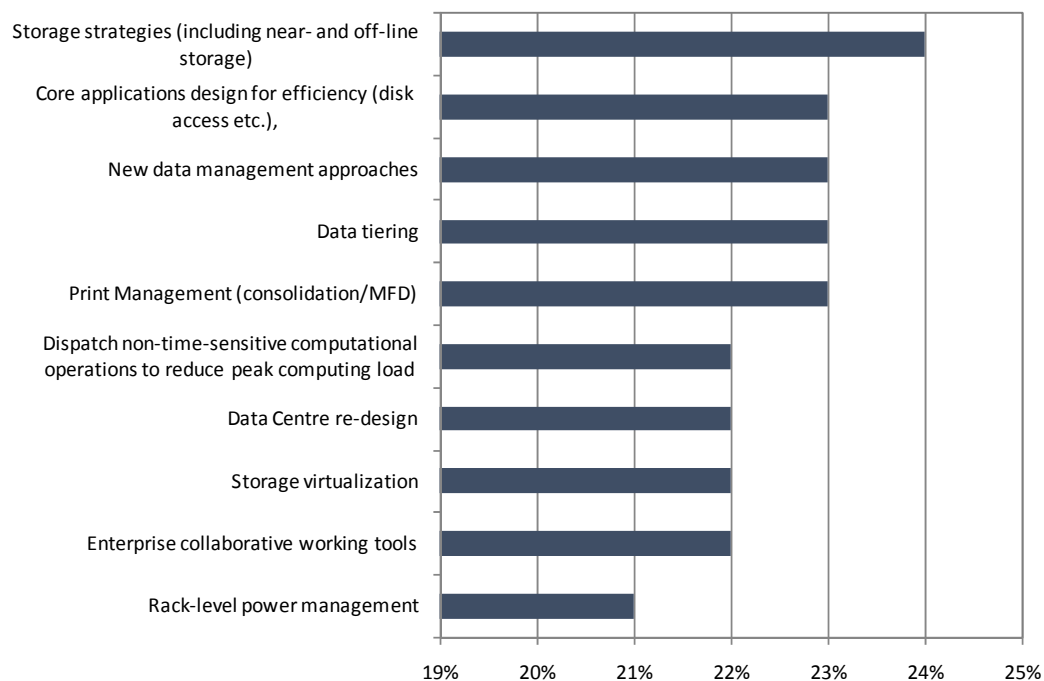
Figure 19 is a composite result; we have synthesized a weighted rating based what proportions of insurance respondents said they had done the maximum possible (high weighting), carried out some projects (medium weighting), are piloting, or are actively assessing (lower ratings) each of the 40 green technologies and techniques about which we asked. The chart is therefore a combination of what has already been done modified by the momentum of what is being assessed and planned.

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It is apparent that the relatively 'easy' options have garnered the most attention up to now – simply turning things off! There is a mix of other activities including work with servers, management techniques, storage strategies, minimizing printer estate wastage, and so on. There are some positive signs in this listing however – the use of new enterprise collaboration tools and virtual conferencing show that IT is being applied at least in some ways to reduce the overall environmental footprint of the organization, as well as potentially reaping productivity benefits. The drive to application consolidation is a good sign also, which may be related to the number and age of existing core applications in the typical insurance company.

To more clearly understand which technologies and techniques are growing most rapidly in respondents' organizations, we have also highlighted the top 10 being piloted today (figure 20) and the top 10 being assessed today (figure 21).

Figure 20 Top 10 green technologies or techniques being piloted today in the insurance industry



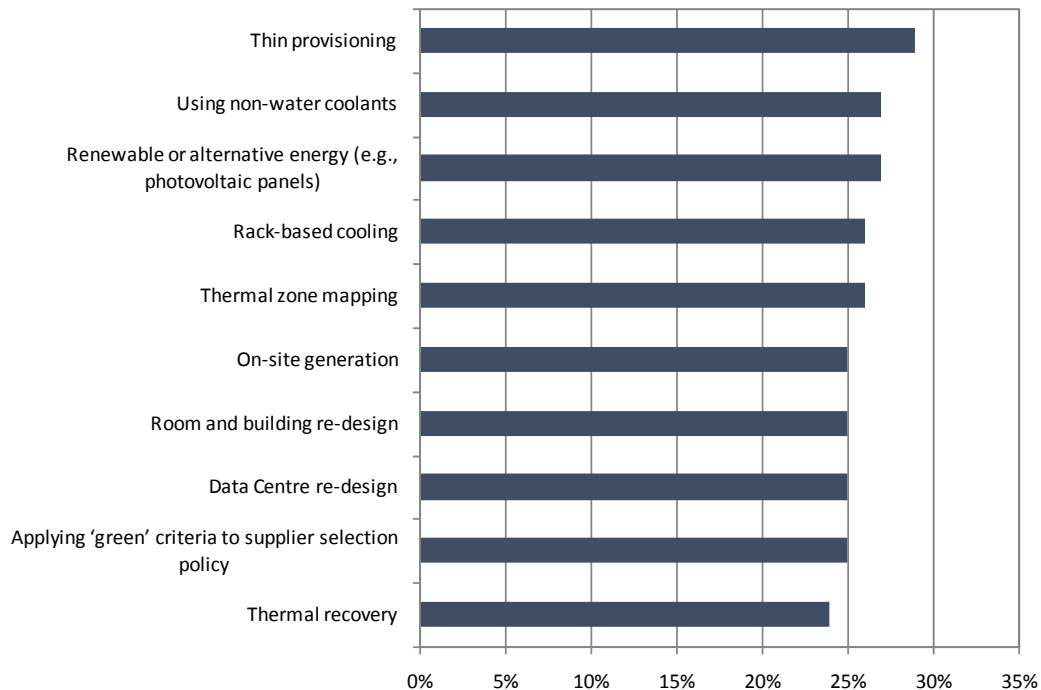
It seems clear that both figures show that much of the simplest actions have already been taken, and organizations have turned their thoughts to harder technologies and more complex projects to achieve their goals. Most notable in the 'piloting' list are the results relating to data and storage – the top four most piloted techniques today in the insurance industry. The industry, with its explosively growing storage requirement, is obviously sensitive to the cost of both acquisition and operation of burgeoning storage facilities.

The growing importance of cooling and alternative energy sources is evident in the 'assessing' phase in figure 21, taking five of the top six places on the list, although another storage technique is number one.

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Few technologies or techniques appear in more than one of the three lists, with the exception of some storage approaches, which would seem to indicate that the industry is approaching the problem in a fairly consistent manner, moving each approach through the discover-assess-pilot-implement phases in a similar order.

Figure 21 Top 10 green technologies or techniques being assessed today in the insurance industry



So how do respondents themselves rate their organizations' performance in the field of energy conservation and data center operational improvements?

Although Figure 22 shows some relatively positive results, there would appear to be a number of areas of concern. The confirmation that fewer than a fifth of insurance companies know their data center energy consumption is balanced by nearly half of respondents that are part of the way to gaining that understanding. Despite this, apparently a quarter of respondents have clear plans for energy conservation measures – presumably however, they are not all going to be able to measure the actual outcome of those plans.

And 53% of respondents accept that they have only achieved a token improvement (in some cases or across the organization) from energy initiatives so far. Of course, this does mean that the majority of organizations have a great deal of opportunity if they have the internal will and support to grasp it. Only 17% of respondents (not shown in the figure) have obtained any external assessment or audit of their organizational carbon footprint (although a further 29% are 'planning to') so it is not clear whether the majority of respondents have any clear idea of how they are really doing. Perhaps it is only the small proportion that does that know how their energy efficiency compares with others in their industry in figure 22.

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Figure 22 Self-assessment of overall progress in energy conservation measures

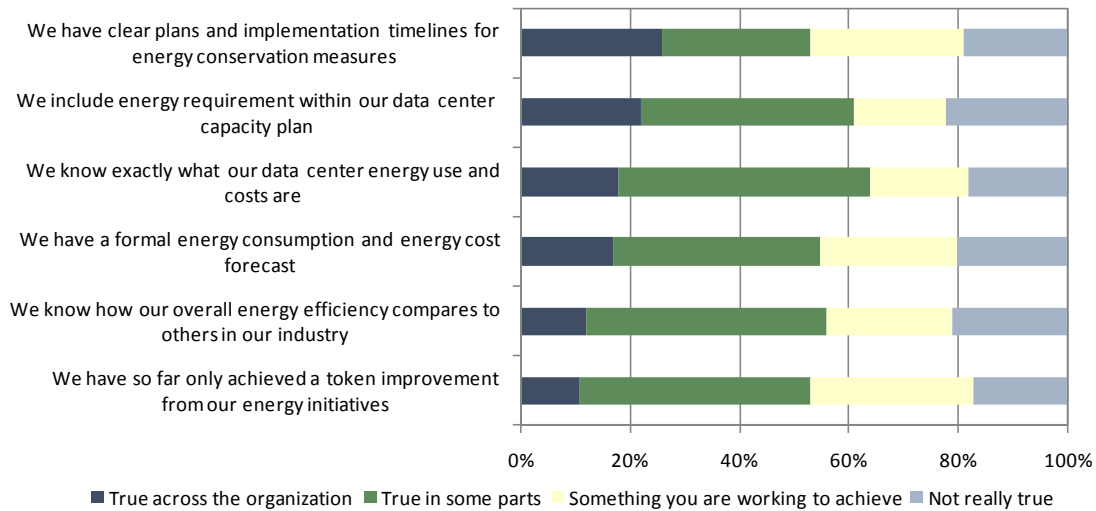


Figure 23 shows how the self-assessment results vary across the industries in this study. It would appear that the insurance industry is underperforming the other three across the board in progress assessment. Despite that, they are a little more confident that they have plans for the future.

Figure 23 Self-assessment of overall progress in energy conservation measures (industry comparison)

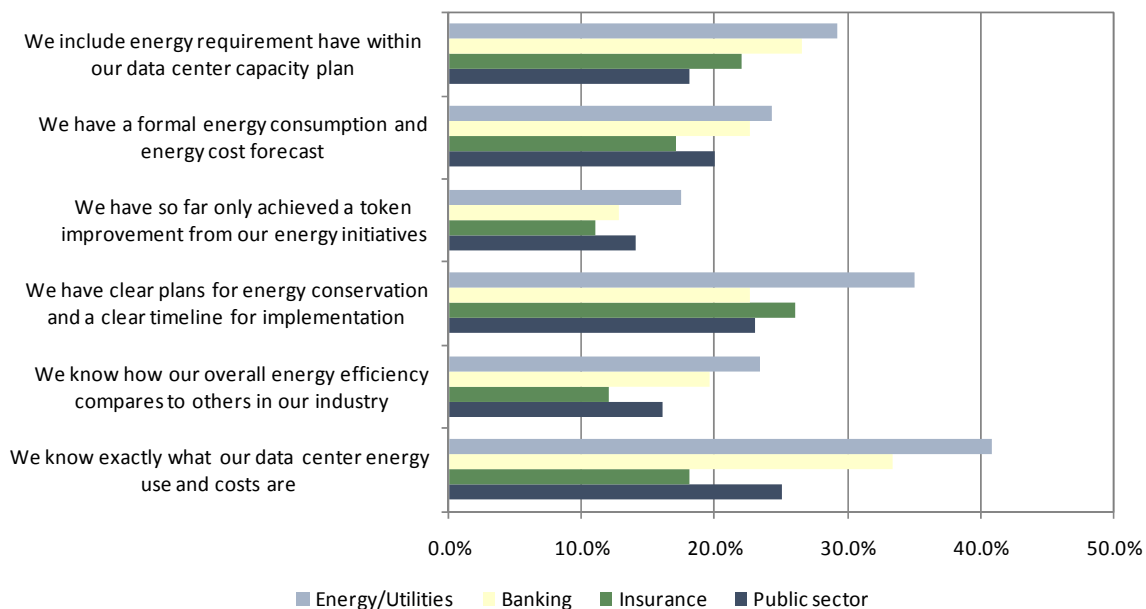


Chart shows respondents rating 'true across the organization' only.

Perhaps insurance respondents should aspire to achieve more of the clarity of the energy/utilities companies; they are much more likely to know how much energy they are using, and are therefore much more likely to have clear

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plans for conservation, and timelines for execution. This surely must be an area in which all other respondents should be focusing more resources.

Data center realities

It is important to understand how environmental priorities are driving actual data center strategies. While the figures in figure 24 seem paradoxical in comparison with the green drivers in figure 5, we believe that they are not. Figure 5 shows what is driving *environmental* strategy; figure 24 shows what is driving *overall* data center strategy. Systems availability is the most critical issue – as it has been since data centers were first implemented, particularly in mission-critical applications such as those in the insurance industry. The next three are all about energy consumption and costs, showing just how important energy has become as a financial issue. Cooling is of top importance to 22%, and 19% cite shortage of space, reflecting the growth of high-density server equipment.

Figure 24 Important drivers of data center strategy today

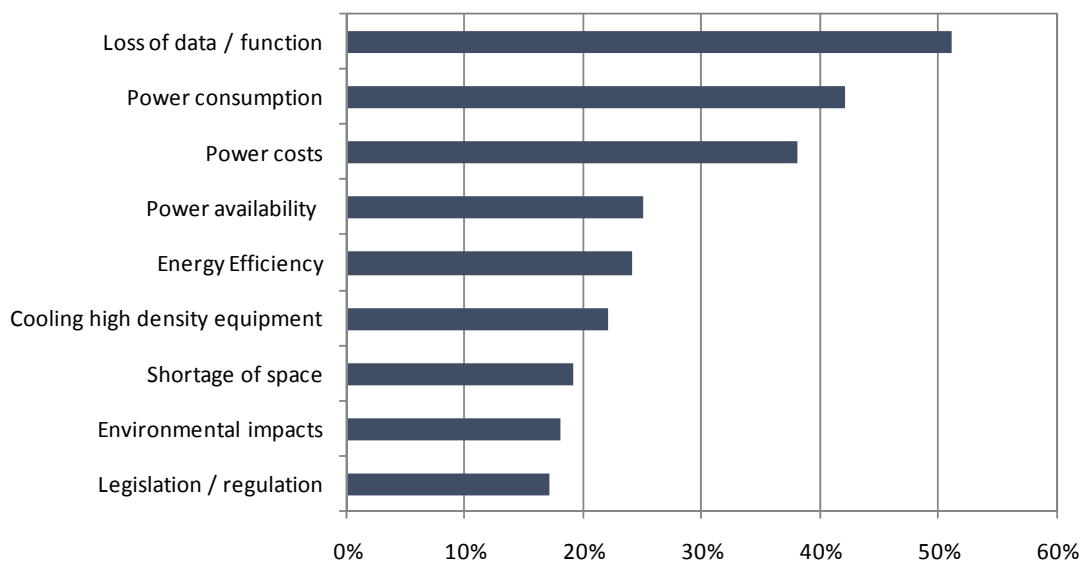


Chart shows respondents rating issues of most importance. Closed option list.

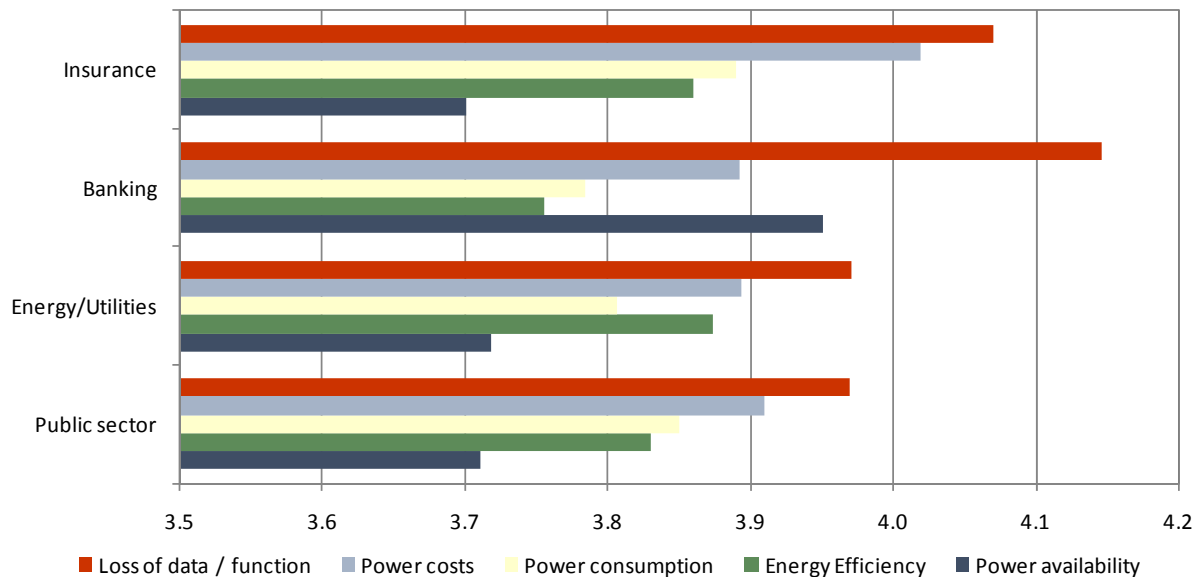
Environmental impact was still rated as critical by nearly a fifth of respondents (18%); five years ago, environmental impact was not on anyone's radar, so it is interesting how far the issue has come in a short space of time.

Figure 25 shows how these overall data center drivers compare across the industries in the study. For this chart, we have considered only the five most important drivers overall and looked at the average importance rating. Clearly, systems availability is the most important issue in all, but in the insurance industry is closely followed by power costs. Power availability is a far more important an issue in banking than other industries, knocking energy efficiency into last place. This makes sense given that banking respondents, who historically have enjoyed more generous IT budgets than any other industry, are much more closely concerned with availability than cost control,

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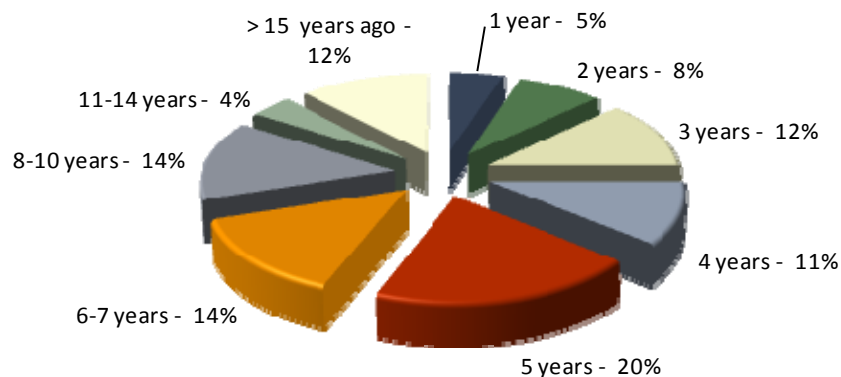
but it might be seen as a little short-sighted. Perhaps if energy efficiency received more direct attention, the power availability problem might, over time, be mitigated.

Figure 25 Important drivers of data center strategy today (industry comparison)



It was also important to establish the age of respondents' data center facilities, to frame some of the responses in this study – particularly those relating to which projects are being considered or executed.

Figure 26 Age of data centers in the insurance industry



Fully 64% of data centers in the insurance industry are five or more years old, which is an age at which we can be fairly certain that energy and environmental issues were not viewed as particularly important. Consequently, their design and layout will not necessarily be ideal now that those issues are important.

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Only 13% are less than three years old, and the average age is 6.9 years. It is not surprising therefore, that so many organizations are looking at cooling and power technologies today, and that data center re-design appears on both the piloting and assessing top 10 lists. Despite this result, insurance company data centers are not as old as those in the banking industry (7.8 years), or the public sector (8.1 years). Only the energy/utilities industry (6.1 years) fared better.

Figure 27 Age of data centers (industry comparison)

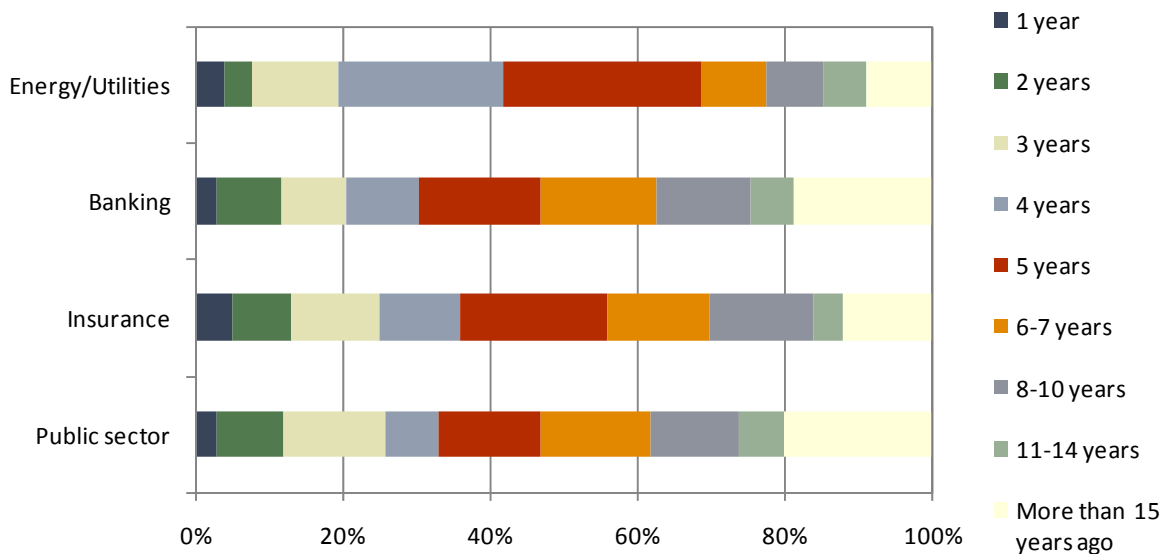
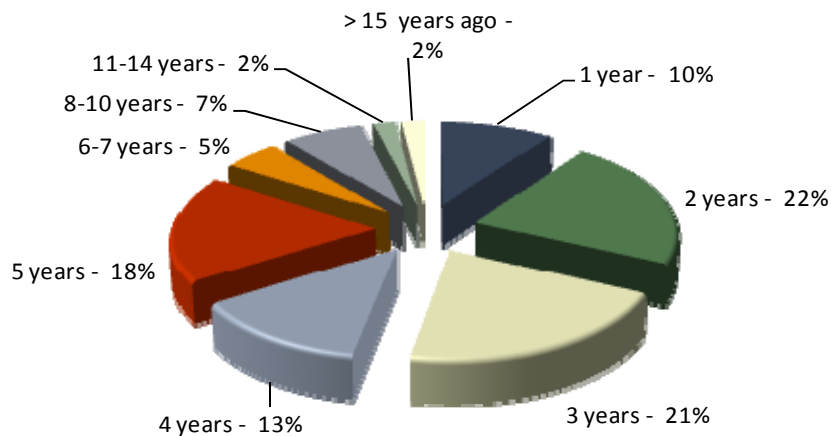


Figure 28 Age of data center power and cooling infrastructure



According to figure 28 above, the average age of power and cooling infrastructures is only 4.2 years, which would suggest that many data centers have had in-life upgrades over the past few years. The proportion of cooling infrastructures five or more years old drops to just 34% (from 64% of overall data centers more than 5 years old).

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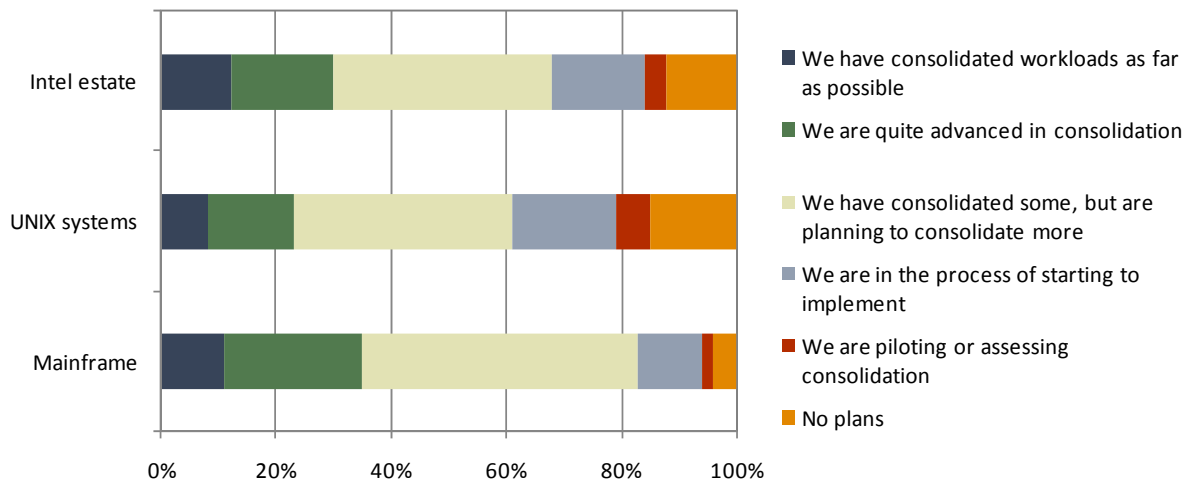
Unlike the overall data center age results, the power and cooling infrastructure ages are a little more uniform, with average ages by industry ranging from the insurance industry low of 4.2 years up to 4.8 years (banking).

Consolidation and virtualization

Perhaps the key technologies/techniques that can be used by organizations to save both money and energy are consolidation (fewer servers and storage), and virtualization – both cut real energy usage per application or transaction through higher hardware utilization. Although both have been talked about extensively for a number of years, there is clearly a long way to go to reach maximum efficiency goals.

Consolidation projects are mostly driven by poor utilization and high management overheads of multiple, heterogeneous and distributed server estates. As such, it is the lowest utilization servers that should be the prime targets, and as figure 29 shows, Intel-based server estates are (just) catching up with mainframe facilities in consolidation terms, despite the required technologies having, until recently, lagged some way behind market need. UNIX systems are reported to have progressed remarkably little in this regard, with the fewest respondents feeling confident about their efforts to date, and the largest proportion with no plans in place, which perhaps could be a cause for some concern for insurance respondents.

Figure 29 Extent of consolidation projects today in the insurance industry



The same is true for efforts in virtualization. Consolidating workloads and system images seamlessly onto larger more energy-efficient and manageable servers requires the abstraction that virtualization technologies provide. Mainframes have had advanced consolidation and virtualization capabilities for many years (decades), but true virtualization has only been available for Intel servers in recent years, and on the Windows platform very recently.

Nevertheless, the will to considerably expand both the consolidation and virtualization of all three server estates that we asked respondents about is clearly there, with an average of 70% of respondents at least at the early stages of implementation.

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Figure 30 Extent of virtualization projects today in the insurance industry

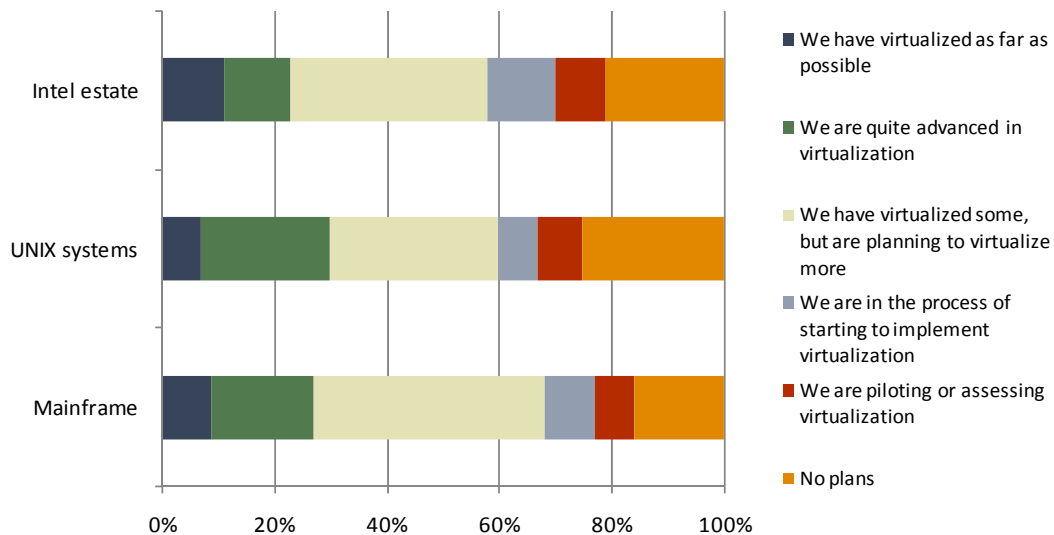
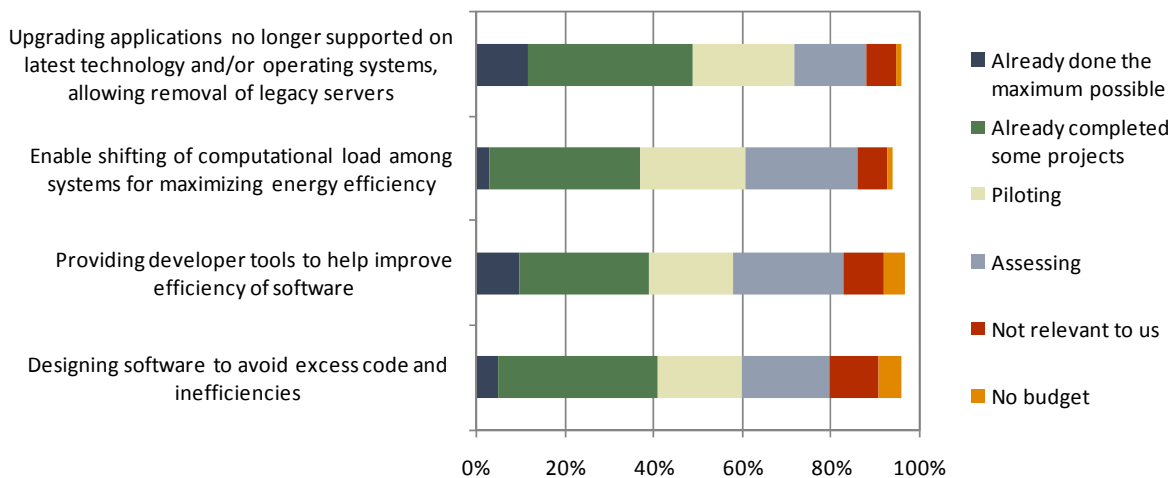


Figure 31 The place of software in energy efficiency efforts in the insurance industry



Finally, adjacent to the consolidation and virtualization stories is the effect of software, which has generally not been a focus in considering green issues despite having a major role to play in gaining operational efficiencies. Figure 31 shows attitudes to a number of project possibilities in the software arena. In the same way that simpler approaches have taken precedence in the hardware arena, upgrading older applications to support the renewal of the server estate has been executed to some extent by around half of insurance respondents. But of greater interest here is the extent to which software design has been considered in the search for greater efficiencies. 'Bloatware' has long been recognized as a problem in its use of hardware resources; by definition therefore, it

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could have a significant detrimental effect on energy utilization, and has been addressed to at least some extent by 40% of respondents.

There is clearly recognition of the importance of software design across the board – more than 80% of insurance respondents are at least assessing each of the techniques that we asked about in the study.

Conclusion

This study shows that environmental issues have climbed rapidly up the corporate agenda in recent years to be amongst the most important considerations for both the business and IT. Despite this fact, efficiency is still trumped as an issue for insurance respondents by the requirements to maintain mission-critical reliability and availability.

The core driver of cost reduction in terms of power usage required by ever more dense facilities and spiraling storage facilities are very important to insurance companies however, and respondents would appear to be responding at an increasing rate through both improved efficiency techniques, and a focus on new and emerging technologies.

There is not yet a belief that customers' views on energy efficiency are a particularly important issue, possibly because there is not yet a perception that insurance services and their effect on the environment are linked – customers are more likely to be impressed with reducing paper usage through electronic interaction than on energy usage in IT. But that situation is changing – consumer perceptions are evolving rapidly and, combined with legislative demands (which are recognized today), will add pressure to insurance companies already struggling with an increasingly competitive commercial environment and general economic slowdown.

Perhaps because of these observations, the majority of companies are implementing green projects in a piecemeal or ad hoc fashion, don't know what their actual IT-related usage of power is, and have no external audit of energy efficiency or carbon footprint. More than three-quarters also require green projects to present significant cost savings to gain approval.

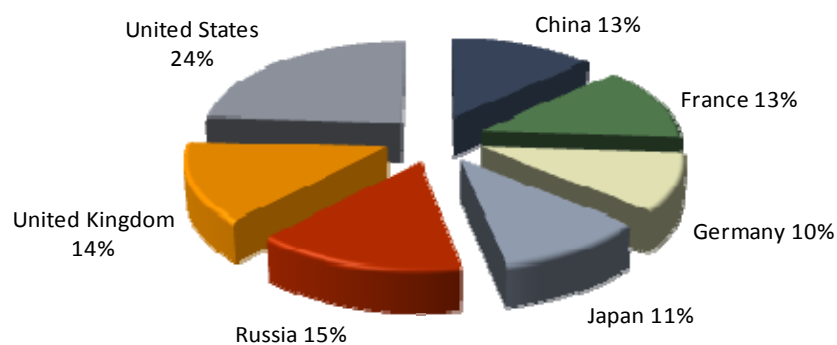
On the positive side however, this leaves a great deal of room for improvement, and it is evident from the results pertaining to what companies are already doing, piloting, or assessing, that a large variety of green-related technologies and techniques are coming down the pipeline in the next few years. In addition, the majority of organizations have still not done all they can with tried and tested approaches to optimization, such as workload consolidation and virtualization, and a significant minority haven't even addressed the simplest things, like turning off obsolete or unused equipment.

Therefore, despite the challenging economic conditions which much of the world is now experiencing, we would expect strong progress to be made in IT-related energy efficiency over the next 2-3 years in the insurance sector, particularly in projects that exhibit a clear and rapid financial return.

Demographics

100 respondents from the insurance industry responded to this study, from a total of 405 respondents overall. Organizations responding to this study were all of enterprise scale, which in this case mean that they employ more than 2,000 people. Respondents were drawn from a range of seven countries around the world, split as illustrated in the chart below.

Figure 32 Countries represented in this study



Respondents were all senior managers, drawn mostly from the IT/CIO side of companies, although around a fifth were senior business managers with line responsibility for IT.

About The Bathwick Group

Bathwick researches how businesses actually buy and apply IT to their business, how they innovate using technology, and how IT is supporting changes in market and organizational models. Our research framework is split into four key domains, each focusing on a feature that client organizations aspire to be: Dynamic, Smart, Open, and Green.

Combining primary research with trend analysis in enterprise, mid-market and small business sectors, Bathwick provides research models, benchmarking tools, market analysis, and strategic consultancy services to a variety of IT, communications, government and media clients, and helps enterprise organizations plan for technology-driven change.

The Bathwick Group also includes:

- **The ThinkAgain Partnership LLP**, a global collaborative research network, which brings together academics, writers, business and political leaders to generate new insights into business productivity and performance, geo-political and environmental issues
- **Bathwick Press LLP**, which publishes books designed to help business leaders gain insight into how IT can help to change and drive value in their organizations.