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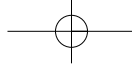
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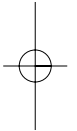
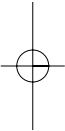
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# **Building from the Bottom, Inspired from the Top: Accounting for Sustainability and the Environment Agency**

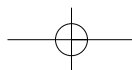
Ian Thomson and Georgios Georgakopoulos

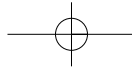


## **Introduction**

If you were looking for a good example of accounting for sustainability in the UK, a sensible place to start would be the Environment Agency. As well as being responsible for the licensing, regulation and enforcement of environmental protection legislation in England and Wales, it is tasked with transforming businesses and public-sector organizations into more sustainable operations. There are high levels of expertise in sustainable development and environmental protection across the organization, including board members and accounting staff. The Environment Agency has been awarded UK Greenest Organization 2009, won many awards for its environmental practices, including the pension fund, and has published a number of reports on environmental reporting.

Unlike many large multinational corporations, there is no glossy sustainability report, dripping with good intentions, carefully worded mission statements,

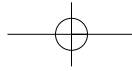




full of self-praise, high on narrative, low on evidence, with selected stories of good practice. Instead, the Environment Agency includes a four-page sustainability accounting and reporting appendix in its *Annual Report and Accounts*, detailing key environmental performance data and the financial costs associated with these impacts. It would be misleading to assume that these four pages within the *Annual Report* are the total extent of the accounting for sustainability work undertaken in the Environment Agency. Digging deeper into the website uncovers a number of important initiatives, potential best practice operations and valuable lessons for other organizations attempting to account for their sustainability impacts. Some of these practices have been part of the Environment Agency's management systems since its inception in 1996 and some even predate the Environment Agency, having been part of the organizations that were merged to create the Environment Agency (e.g. environment reporting from the National Rivers Authority since 1987).<sup>1</sup>

The Environment Agency's environmental accounting practices have been built carefully from the bottom, underpinned by careful, robust data collection, management and reporting at all relevant organizational levels, and focus on negative environmental impacts. It concentrates on the rather unglamorous, but critical, end of the accounting cycle and is working systematically to solve a number of problems (e.g. working with suppliers to provide physical details, breakdown of costs on invoices, capturing resource use in expense forms or department returns, educating staff in their environmental impact, and maintaining commitment to reducing their negative environmental impact). Senior managers and board members appreciate the need for alignment between organizational outcomes, activities, culture, performance measurement, resource use and costs. Paul Leinster, chief executive, summed this up as 'wanting to maximize the environmental outcomes per pound of funding'.

The next section of this chapter provides background information on the Environment Agency. This is followed by an overview of the Environment Agency's environmental management systems and strategy and its approach to accounting for sustainability. A more detailed description and evaluation of how it accounts for and manages staff travel-related impacts follows, together with examples of other environmental accounting and performance measurement. A discussion of the impact of The Prince's Accounting for Sustainability Project (A4S) in the context of the Environment Agency is provided and the chapter concludes with observations on the key lessons that can be learned from the Environment Agency's environmental accounting practices and its pilot implementation of the HM Treasury guidance, adapted for use from the Connected Reporting Framework (CRF).



## The Environment Agency: Background information

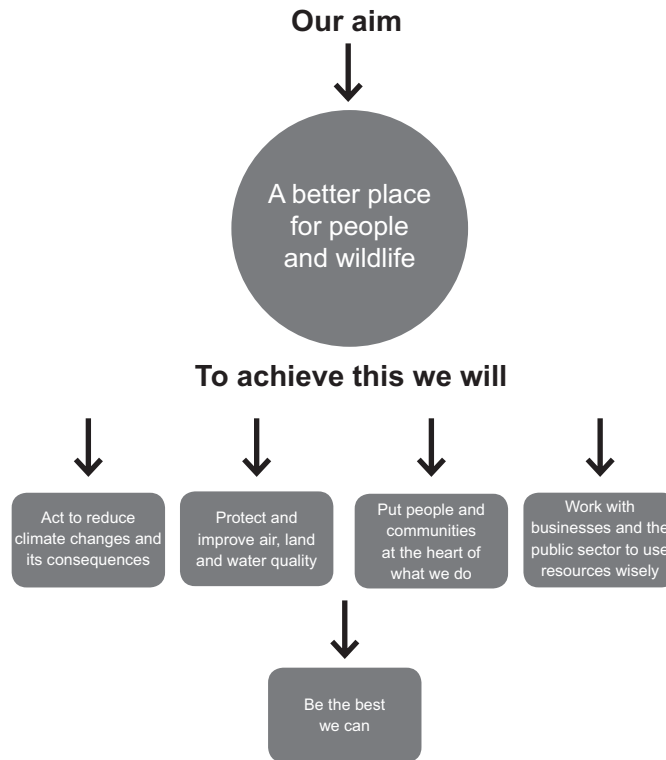
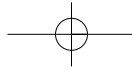
The Environment Agency is an executive non-departmental public body responsible to the secretary of state for environment, food and rural affairs and an assembly-sponsored public body responsible to the National Assembly for Wales. Its principal aims are to protect and improve the environment and to promote the sustainable development of England and Wales. It is also responsible for protecting communities from flooding risks, managing water resources and enforcing and monitoring the carbon reduction commitments arising from the Climate Change Act 2008. The Environment Agency plays a central role in delivering the environmental priorities of central government and the Welsh Assembly.<sup>2</sup>

The Environment Agency currently employs 13,500 employees with an annual budget of more than UK£1.1 billion a year, of which around 60 per cent comes from government. The remainder of its finance mainly comes from various charging schemes. Details of its main functions<sup>3</sup> are as follows:

- protecting people from flood;
- working with industry to protect the environment and human health;
- concentrating effort on higher-risk businesses: those that run potentially hazardous operations or with unsatisfactory performance;
- helping business use resources more efficiently;
- taking action against those who don't take their environmental responsibilities seriously, including court action and fines;
- looking after wildlife – around 400 projects are completed every year to improve the habitat of threatened species;
- helping people to get the most out of their environment;
- working with farmers to build their role as guardians of the environment, tackling pollution that cannot be seen, as well as adding to the beauty of the countryside;
- helping to improve the quality of inner-city areas and parks by restoring rivers and lakes;
- influencing and working with government, industry and local authorities to make the environment a priority.

The Environment Agency is currently finalizing its strategy for 2010 to 2015, but has as its vision 'a better place for people and for wildlife', which contains five themes, four of which focus on environmental outcomes.

The Environment Agency's head office is split between Bristol and London. Head office functions include the determination of national policies and ensuring that policies are carried out consistently across the country, taking into account the environmental, social and economic differences in each region. In



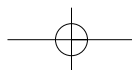
**Figure 6.1** The Environment Agency's Strategic Vision 2010–2015

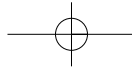
Source: extracted from Environment Agency (2009a)

the head office there are a number of support functions, such as finance, resources, environmental management and operations. The Environment Agency operates a number of national services and is subdivided into eight regional offices (Southern, Thames, South-West, Midlands, Anglian, Wales, North-West and North-East), which are the responsibility of a regional director. These regional offices support the area offices and coordinate their activities. There are 22 area offices across England and Wales. The people who work in these offices are responsible for the day-to-day management of the area, ensuring that local community needs are met and responding to emergencies and incidents.

## Environmental management and strategy

Environmental management and environmental management systems are an integral part of the management systems and were described from the inter-

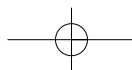
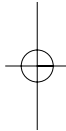
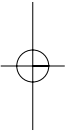


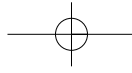


views conducted for the purposes of this project as being part of the Environment Agency's 'DNA'. Central to its identity and culture is minimizing the environmental impact of its operations. Since 1996 the Environment Agency has sought to be an exemplar organization in this regard. Internal environment management and environmental management systems are not bolted on, ad hoc, fragmented or decoupled, but are fundamental to the way in which the Environment Agency has been managed. Prior to its involvement in the public-sector sustainability reporting project, led by HM Treasury, the Environment Agency had a robust, extensive environmental management system in place that regularly gathered and internally reported on a much wider set of social and environmental impacts than contained in its 2008 and 2009 sustainability accounting and reporting appendices. Since 2002 the Environment Agency has been fully accredited for all its activities throughout England and Wales under the international environmental and quality management system standards ISO14001:1996 and ISO9001:2000.

The Environment Agency has undertaken a number of environmental accounting initiatives since 1996 and has a number of key staff with specific responsibilities in this area. For example, it has an Environmental Finance Team. This team has two main functions. There is the environmental finance side, which is outward looking and seeks to engage and influence through the Environment Agency's pension fund, general networking, research projects and involvement in standard-setting processes. One active area of interest is on corporate environmental disclosures, where a number of reports have been published with plans to further extend this type of research.<sup>4</sup> Environment Agency staff are involved in promoting and establishing environmental accounting standards for use in UK public-sector organizations. In particular, they are involved with the Financial Reporting Advisory Board (FRAB), which establishes standardized accounting and reporting practices for public-sector organizations. Within this team is an objective to drive and encourage more public-sector environmental management and accountability. There is a strong feeling within the Environment Agency that it is rather hypocritical to be such a strong advocate of environment disclosures from the private sector, yet not subject the public sector, which is a significant consumer of resources and producer of pollution, to similar pressures. The selection of the CRF by the FRAB for initial piloting in the public sector with a view to adopting a version of it as part of its accounting regulation was the reason the Environment Agency became more actively involved with A4S.

The other function within the Environment Finance Team is environmental management accounting, which is inward looking. This team integrates the Environment Agency's financial and environmental performance data throughout its financial systems and reports, both internally and externally. The Environmental Finance Team utilizes the techniques, concepts and skills of accountancy to report, verify and highlight the agency's environmental impacts.





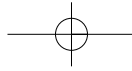
The Environment Finance Team also recognizes the importance of promoting the cost savings associated with reducing its negative environmental impacts in driving change.

The Environment Agency has had a well-established set of environment accounting initiatives for many years and has been developing systems and engaging with others to drive change in this area. For example, on its webpages<sup>5</sup> it describes its environmental accounting philosophy, techniques and a number of important outcomes. The Environment Finance Team has considerable experience in this field and is aware of the challenges ahead, as well as the weaknesses in the current systems. However, it does not perceive these weaknesses negatively, but as part of the programme to develop further the current system in an evolutionary fashion. The Environment Agency is clear that what it is doing in some ways falls short of fully accounting for sustainability, but rather is accounting and reporting on some of its negative environmental impacts. It does not claim to have solved the problems of accounting for sustainability, but has a long-term system for solving these problems in a pragmatic, systematic fashion. The finance and operations staff have a clear idea of what they could and should be doing in the future. This critical reflection on current practices and awareness of how things can be further developed is an important element of the successes achieved so far.

## **Environmental accounting: A systems approach**

The Environment Agency describes its approach to developing environmental accounting as simple, using a standard systems approach: plan, do, check and act. Its environmental accounting system has evolved through the application of basic accounting principles, concepts and techniques to the problem of reducing environmental impacts. It has been building its environmental accounting systems since 1997 using a basic development strategy, which involved:<sup>6</sup>

- the integration of data requirements into management systems (including corporate planning, management accounts, financial accounts, environmental monitoring, health and safety, and business planning);
- monitoring and reporting of in-year performance to management (using management accounts and environmental monitoring);
- the production of a year-end performance report (utilizing a wide range of existing processes);
- ensuring that the output is as robust as possible by independent auditing, verification and internal review;
- working with suppliers to provide environmental data in electronic form which allows the matching of environmentally significant cost and usage information;

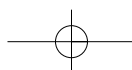


- publishing environmental accounting disclosures (budgets are published in the Environment Agency's Corporate Plan, detailed year-end performance in the *Environmental Report*, summary information in the *Annual Report and Accounts* and *Annual Review*);
- integrating processes within existing financial systems in order to reduce implementation costs and gain the support of staff for the environmental accounting activities; and
- reviewing environmentally significant expenditure categories to ensure that they cover both environmentally significant activities and areas of significant spend, and match a prioritized aspects register with a list of expenditure categories.

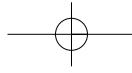
The Environment Agency's website lists a number of key benefits from the development and operation of its simple systematic application of basic accounting techniques to environmental management, and these include:

- the tracking of UK£60 million of internal environmentally significant expenditure;
- providing information on the costs and savings associated with the implementation of environmental management systems;
- demonstrating cost savings and reduced resource use over four years in case studies on energy, water and business mileage;
- developing its *Annual Environmental Report*, which has been short-listed twice for the ACCA Environmental Reporting Awards;
- learning valuable lessons and developing tools that enable it to work in partnership with a wide range of groups, including accounting bodies, financial institutions, government bodies and expert working groups, nationally and internationally, on the further development of environmental accounting;
- tracking the UK£1.5 million savings from local environmental improvement initiatives and reduced consumption of over 16 million kilowatt hours of electricity;
- tracking the 39 per cent reduction in carbon dioxide (CO<sub>2</sub>) emissions from buildings' energy use over the last five years;
- identifying the 46 per cent cut in printing costs in the last five years.

The following section provides more detailed description of how this general approach to environmental management and accounting is operationalized in the Environment Agency, initially in relation to staff travel, with a subsequent discussion of some other examples.







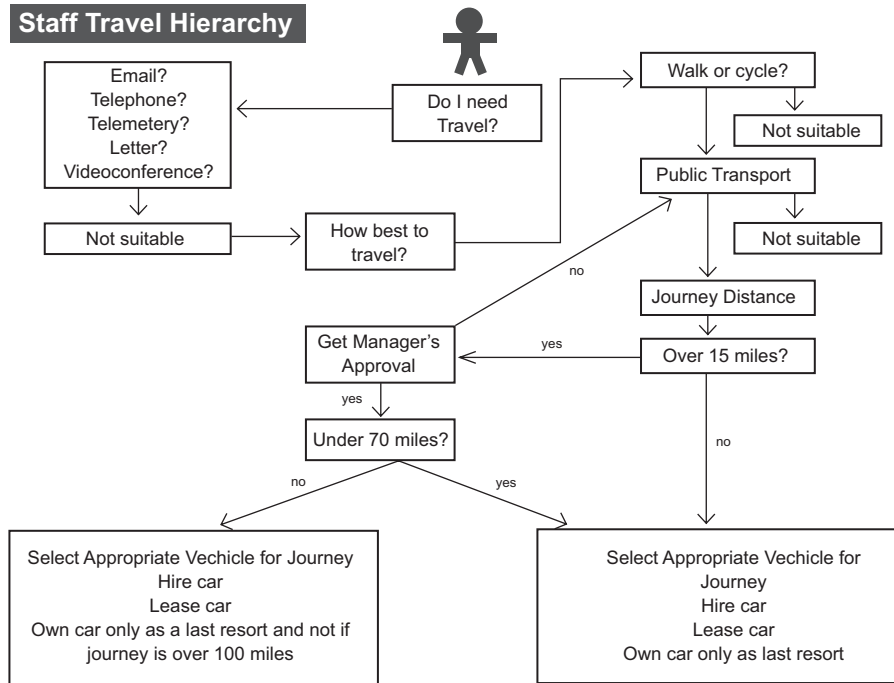
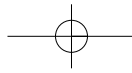
## **Connected actions, connected reporting, carbon reduction, staff mileage, key performance indicators (KPIs) and corporate scorecards**

While the Environment Agency demonstrates a high level of connectedness in its accounting system in a number of areas (waste, energy, water and resource use), it also has a high level of connectedness between strategic objectives, operational decision-making, performance measurement, accounting systems, and organizational routines and practices. A good example of its systematic approach can be found in relation to staff travel, an activity with clearly identifiable social and environmental consequences, where changes in practices can generate measurable financial, social and environmental benefits. This involves an overall commitment to reduce carbon emissions within the Environment Agency, which is then translated into reduction targets for each directorate and subsequently into reduction targets for each area and department. One important aspect of how the Environment Agency sets these targets is to ensure that there is total buy-in to any target. Paul Leinster, chief executive, stated that he 'would rather have a target, which was slightly lower or slightly less tough and somebody who was absolutely committed to going to get that, than a target which they knew they couldn't reach'.

During the planning stage each director commits to achieving their targets, which include internal environmental targets on water, waste, power, resources and staff mileage. This was referred to by Bob Branson, head of financial management, as 'eight shakes of hands'. The regional targets for mileage are subsequently allocated out to the areas, then down to individual teams. Individual teams will have a mileage reduction target and eventually every individual will have a target mileage, although within teams they can barter those with other team members.

In order to help achieve these targets, senior finance staff, in conjunction with the director of operations, developed a staff travel decision protocol to contribute to the achievement of the Environment Agency's carbon emissions reduction targets. This protocol is considered to be highly effective and embedded throughout the organization. At the core of this protocol is a framework of choices.

The default position of this protocol is that staff shouldn't need to travel to fulfil their function. The first consideration is whether the task can be done by telecommunications, email, video conferencing or telemetry. If it cannot be done remotely, then public transport would be the preferred option. If it is not possible to avoid driving, then efforts should be made to car share. If the journey is under 113km and no lease cars are available, then use of a personal car is still an option, but only as a last resort. If the journey is over 161km, then rental



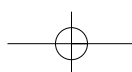
**Figure 6.2** The Environment Agency's staff decision protocol

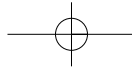
Source: Ian Thomson and Georgakopoulos

cars are preferred. The Environment Agency makes extensive use of leased cars as this allows it to have a pool of the most fuel efficient vehicles with the lowest emissions that are fit for purpose. The use of leased cars allows the Environment Agency to keep its fleet as up to date as possible and provides it with a degree of flexibility in case of technology changes. For example, it has a number of hybrid cars used by regular users and a mix of liquefied petroleum gas (LPG) and conventional fuel vans. The Environment Agency attempts to enable staff to reduce travel-related emissions by providing them with the right kit.

As mentioned earlier, if the journey is over 113km, then staff should use hired cars. The Environment Agency has contracts with hire companies that allow them to match the most fuel-efficient cars for each journey. This creates greater flexibility in staff travel compared to purchasing its own vehicles and being trapped with a potentially out-of-date fleet of vehicles with a five- to six-year replacement cycle. There is also a requirement that if a member of staff is going to use their own car for a journey of over 24km, then this requires approval from their line manager.

There appears to be a link between reducing staff travel and reducing cost in the Environment Agency's travel protocol; however, this breaks down when the public transport option involves train travel. Train travel is regarded as the





preferred travel option; but in the current rail pricing regime it is often the most expensive option. This creates a dilemma in that the desired mode of travel is the worst financial option. However, a decision was made centrally in the Environment Agency to avoid creating incentives against train travel. Even though it costs more to travel by train, train travel is classified as beneficial to the organization, partially justified by the fact that employees can work on the train, whereas they can't in a car.

### Integration of financial and non-financial measures of performance

Within the Environment Agency it was considered that financial figures were not always the best way to motivate behavioural change in its employees. Non-financial measures more directly related to operations and operational decision-making were considered more effective. Once a decision protocol has been centrally evaluated and approved, then at an operational level it is not always necessary to use financial measures or to directly consider the financial consequences at the time of the operational decision. For example, targets are set to reduce staff mileages, not just the cost of staff travel.

After the decision regarding the travel choice by an individual employee, then the details of the costs and relevant staff mileage are captured in the financial ledger. Each employee has to fill in an expense claim which specifies the mode of travel and mileage. The Environment Agency has a system that pulls the mileage out of its financial systems in order to report it every month and account for individual employee mileage. This system required some investment in staff time, training and information technology (IT) systems; but it allowed the necessary information to be captured in the financial systems.

Once the non-financial data is input into the system, selected indicators are collated and reported alongside the financial out-turns for departments, teams and areas, and compared with the key performance reduction targets. League tables of selected indicators, based on the Environment Agency's current priorities, are also prepared, enabling internal benchmarking to take place. For example, each region and head office can compare how many kilometres per staff member were used against their targets and compare staff mileage with performance data from other regions, areas or teams. Managers and directors benchmark this information in order to identify best practice and methods of reducing their staff travel while still achieving their other operational targets. The league tables encourage collaborative internal competition to learn about alternative methods and innovations. Solutions tend to evolve as a consequence of measuring and comparative performance analysis.

Selected environmental indicators form part of the directors' corporate scorecards, which are discussed quarterly at board meetings where each director has to provide an account of their performance. Staff mileage currently

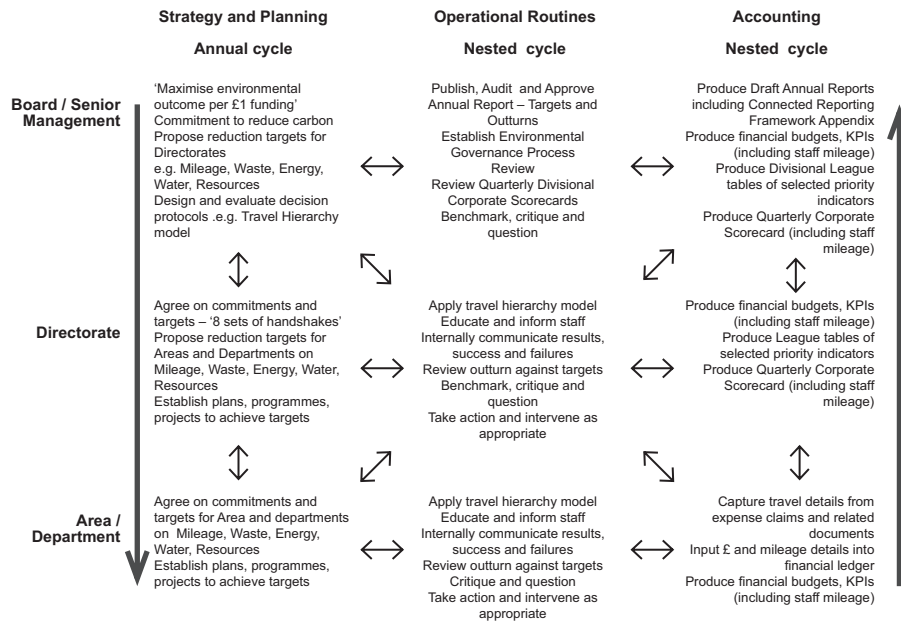
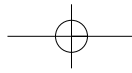


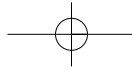
Figure 6.3 The Environment Agency's staff mileage system overview

Source: Ian Thomson and Georgios Georgakopoulos

forms part of these scorecards. The Environment Agency has been reporting the costs associated with staff mileage for between six to seven years, and on the non-financial performance indicators at a regional, team and individual level for at least the last five years. With the introduction of the sustainability accounting and reporting appendix in the recent *Annual Report*, costs and indicators on staff mileage are now included in the Environment Agency's carbon emissions reporting.

The system in place in the Environment Agency means that the staff mileage reported in the *Annual Report* can be disaggregated into regions, areas, departments, teams, individual members of staff and individual journeys. Therefore, the data is reliable, verifiable and auditable, with full traceability.

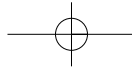
What appears to make the Environment Agency's management of staff travel effective is the combination of a set of simple ideas and techniques. It has constructed a system that motivates, inspires, enables, empowers, rewards, monitors, disciplines, educates and simplifies the attainment of a simple objective, which is to reduce the environmental impacts of essential staff travel.



## Evaluation of the Environment Agency's approach to staff travel and other examples

None of the individual techniques or accounting methods that the Environment Agency utilizes in relation to staff travel is earth-shattering, unique or novel. However, its approach does seem to work effectively. It has taken a number of well-established techniques and assembled them in a systematic and coherent fashion that eliminates most of the perverse incentives to act in an environmentally damaging way. Its systems reward, recognize better environmental performance and make the better environmental practices the simplest and easiest option for staff to adopt. We argue that what makes the Environment Agency's approach different is the linkages and careful orchestration of these techniques from different management disciplines and expertises. There is coherence throughout the organization in relation to reducing staff travel. This includes strategic intent, operational routines, investment in appropriate technologies, information systems and procurement policies. This coherence also extends to board and top management support and commitment, identity and culture, as well as management systems, decision support protocols, performance measurement and reward systems. This is further supported by the alignment of organizational learning systems, financial systems, cooperative benchmarking, environmental visibility and transparency within the organization and environmentally aware staff. In addition, particularly within the Environment Finance Team, there is a commitment and realization of the need for persistence and considerable efforts to make the basic systems work properly, rather than on high-profile externally facing initiatives. This approach is not restricted to staff travel.

Similar approaches to capture relevant non-financial information in the financial systems exist for water and energy. This has involved a considerable amount of work with suppliers in order to provide a breakdown of meter readings for specific departments and buildings. While this has proved successful with energy suppliers, it has not been universally successful with other utilities. The Environment Agency does track water usage through its financial system. While it endeavoured to get the water companies to provide this level of disaggregated detail on their invoices and to build the necessary data fields into its financial systems, unfortunately, due to the way in which the majority of water bills are produced, it has been unable to capture non-financial data on water through this route. Information on water consumption is collected through meter readings by local staff and this data is used to allocate costs and usage to buildings and departments, leading to a reduction in the water use throughout the Environment Agency. For example, waterless urinals started to appear in buildings when toilet systems need replacement. It was claimed that this change was a result of water usage being measured, reported and internally benchmarked.



Waste is more problematic in that it is difficult to establish a reliable physical measure. There are different waste streams (such as volume, weight, toxicity, organic matter and recyclability) and a range of different waste contractors. This requires the Environment Agency to weigh and measure its waste prior to it being collected by waste contractors. These measurements are used to allocate the physical quantities of waste to individual offices.

The Environment Agency places high importance on thinking through and designing systems of data collection in ways that facilitate the maximum use of the data. The capture of relevant, reliable, consistent data at the lowest possible level is a key element in the Environment Agency's approach, which enables the management of the environmental impacts of its operations.

Another good example of the agency's approach can be observed in the building of its new head offices, which demonstrates, in a practical manner, what can be done by using simple techniques cost effectively and not throwing resources at small isolated, high-profile 'demonstration' projects.

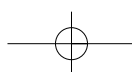
The agency's new head office, Bristol 2010, is currently under construction. This new corporate office recently achieved a score of 85.06 per cent from the Building Research Establishment: the highest score ever awarded. No UK office building has achieved such a high rating under either BREEAM 2006 or BREEAM 2008, making this the 'greenest' office in the UK. This building has not cost any more than a conventional build. The approach was not to make it an exemplar environment building by throwing money at it. It was a brownfield development with modern office facilities, commercially viable with the highest environmental standards and a good place in which to work.

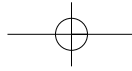
Technologies used in the building range from rainwater harvesting, intelligent lighting systems and ground-source heat pumps. Environmental impact during construction was reduced through the use of recycled materials and careful management of energy and resources on site. Paul Leinster, chief executive, commented:

*This achievement demonstrates how organizations can work with developers to build exceptional offices which meet their needs while reducing their impact on the environment. By relocating to a more efficient building, the Environment Agency will save around 10 per cent every year on operational and energy costs, an estimated UK£180,000 saving per year.*

The Environment Agency is using Bristol 2010 as an example of how to develop office buildings that reduce their environmental impact, while saving resources and costs.

The Environment Agency's efforts in becoming an exemplar organization in minimizing its environmental impacts and communicating its externalities in a connected manner does not stop with the above examples. Work is undertaken to measure and set environmental targets and to report on the carbon and environmental impacts of its supply chain and on sustainable products that go





into its flood defence schemes. The Environment Agency has a fund set aside for environmental innovations, such as ground heat pumps or wind turbines in buildings. Teams can bid for these funds, which then become test programmes, and outcomes are monitored in order to see if there is any merit in the wider implementation throughout the organization. The Environment Agency has initiatives under way in developing life-cycle costing methods, incorporating requirements in supply and building contracts to capture and record physical data measures, as well as supplying carbon calculators to suppliers.

The one area of challenge for the Environment Agency in accounting for its environmental impact is that a lot of its work is contracted out. A substantial amount of spending is on flood defence work. Flood defence work is outsourced to large construction companies and involves pouring vast amounts of concrete, wood and steel over the countryside. Getting hold of reliable information from third-party suppliers down the supply chain is quite a challenge. The Environment Agency's National Capital Programme Team is trying to develop systems that capture data on these environmental impacts, as well as incorporating environment mitigation requirements in its contract specifications.

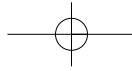
The Environment Agency is also concerned with future developments in its environmental systems to incorporate embedded energy and water in its procurement, as well as identifying any off-shored carbon and other environmental impacts.

## **The Prince's Accounting for Sustainability Project (A4S), the Connected Reporting Framework (CRF) and the Environment Agency**

In the case of the Environment Agency, the CRF did not initiate accounting for sustainability or create any significant change in its practices; but it did provide strong legitimacy as to the validity of current practices and a focus to promote future accounting for sustainability system developments. In all interviews conducted it was stated that there was no shortcut for effective connected accounting for sustainability systems. These systems had to be built upon effective financial, environmental and social management and accounting systems, integrated with programmes designed to reduce the organization's social and environmental impacts. Within the Environment Agency the purpose of accounting for sustainability was to bring about change in organizations and not to just to improve reporting practices.

The sustainability reporting framework developed by the FRAB sustainability working group was seen to contribute to the Environment Agency's accounting for sustainability initiatives in ways aligned with the initiatives under





way. Even though the Environment Agency did not consider the CRF to be a perfect framework: it found it useful in helping to reinvigorate the debate on sustainability reporting within the public sector. It was deemed as useful to 'sell' the notion of sustainability reporting to the rest of the organization, as well as having the potential to work in both the public and 'for-profit' sector. There was a feeling in the organization that it was time for action in sustainability reporting, rather than seeking the 'perfect' accounting for sustainability standards.

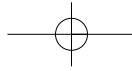
One useful principle within the CRF is the importance of focusing on the most material sustainability impacts, within the organization as well as their downstream and upstream impacts. The Environment Agency has developed processes within its existing environmental accounting practices for identifying and prioritizing impacts based on environmental impact and spend. Paul Leinster, chief executive, stated that he was not convinced that the Environment Agency's sustainability accounting and reporting appendix currently accounts for all of its most material impacts – for example, in relation to civil engineering contracting works or reporting on their sustainable outcomes.

Another important point involved the Environment Agency not reporting on the contribution that is made to society by its actions, but rather reporting on the negative environmental impacts of its operations. The Environment Agency and other public-sector organizations generally consume energy and resources to deal with the negative externalities of for-profit organizations. Much of the public-sector environmental footprint is about remediating, mitigating or improving the social, economic and environmental state of the nation and cannot always be regarded as 'bad'.

Simply measuring this footprint without linking it to the consequences of the resource consumption is only providing a partial account of the sustainability of an organization. For example, the Environment Agency measures the mileage used by staff in carrying out regulatory visits, but not the improved environmental impact of the regulations that it is enforcing. As mentioned previously, the Environment Agency uses a considerable amount of concrete and steel, not to make profits for shareholders, but for building flood defences to reduce the social and environmental risks and costs of flooding. Reporting the environmental impacts of its activities without linking it to the purpose and impact of its activities arguably creates a partial and misleading account of the organization. Further development is therefore required if the Environment Agency is able to provide an account that helps with the stated goal of wanting to maximize the environmental outcomes per pound of funding.

There is a clear recognition of the lack of system completeness; but the Environment Agency has a strong vision of the next set of challenges to be addressed within its sustainability accounts. This includes further developing full costing methods, carbon accounting, better waste metrics and accounting





for the impact of its contractors. However, it has in place a number of systems/metrics that could be further evolved and integrated with the current environmental accounting systems.<sup>7</sup>

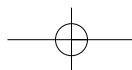
An important factor in the Environment Agency's piloting of the CRF was the potential inclusion of a version of this framework as part of the public-sector accounting standards, backed by the Treasury and subject to audit by the National Audit Office. An adapted version of the CRF was seen as an ideal starting point for developing a public-sector sustainability reporting standard. The CRF has a holistic dimension and incorporates a range of accounting techniques intended to deliver more sustainable outcomes, while recognizing the essential changes in the way that businesses and organizations work. The CRF contains a set of principles that link strategic planning, decision-making, actions and performance with the need for clear, concise external reporting. However, the Environment Agency identified a need for those principles to be translated into standards and guidance to help achieve this change in the short to medium term.

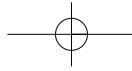
Within the FRAB, the Treasury and public-sector organizations, it was felt that a principles-based approach (looking at policy and other material aspects of performance) was too difficult to achieve. A standards-based approach, with a core set of metrics calculated, defined, normalized and measured in a consistent format that all public-sector organizations could apply, was a necessary first step. The Environment Agency staff believed that a clearly defined standards approach needed to be in place so that organizations could not simply 'pick and use' or arbitrarily define issues to be reported. There was consensus within the FRAB for a strategy of starting with the CRF, establishing a core set of indicators, reflecting on the outcome, modifying their practices, engaging with the standard to develop it further, and then standardizing its use across the public sector.

There was a strong and consistent view that without some form of regulatory backup or assurance process the CRF could be abused or captured by organizations not fully committed to meaningful sustainable change. While financial accounts were not considered to be the most effective method of communicating, there was support for the power of the technology in providing accounts of organizational behaviour (at all levels, internal and external), as the discipline of being held to account was felt to make a difference to behaviour. However, reporting without reliable data or meaningful programmes of action was regarded as problematic since it runs the risk of covering up and/or misleading external and internal stakeholders.

## Conclusions

The Environment Agency is a special case. It is an unusual organization in relation to social and environmental sustainability, as its core mission is to





minimize the environmental damage done by others in England and Wales. Environment Agency staff have a very high commitment to environmental issues and very high levels of environmental expertise. The Environment Agency has expressed an objective to be an exemplar sustainable organization where good environmental management is an 'act of faith'. It seeks to demonstrate practical sustainable changes by doing the things that it expects others to do, showing, where possible, that this does not involve excessive expenditure and, in many cases, will reduce costs. Bob Branson, head of financial management, stated that the Environment Agency's strategy is to 'show ourselves to be a good example of what anybody could do and it not to be something you've got to pump loads of money into'.

The Environment Agency also sees a need for the public sector to improve its environmental impact and wishes to lead change in this field. Part of this change process includes reforming internal and external accounting systems, an area which has been sidelined in the past and acted as an obstacle to change.

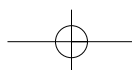
The Environment Agency believes that external reporting could have a direct role in changing organizations' behaviour and performance, and for this reason it calls for meaningful and mandatory sustainability reporting, building on the CRF. It believes that the consistent reporting of a narrow, yet clearly defined, core set of indicators and costs could contribute to a transformation of UK public-sector organizations. Basic comparative data need to be in place, with organizations incorporating environmental performance indicators and costs within their annual reports before they can reflect on how they can become less unsustainable and how to embed sustainability in their 'DNA'.

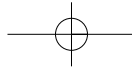
If one were trying to sum up the key lessons from this short investigation of the Environment Agency, one would conclude that it is important to do the simple things well. Organizations should not wait until they have a perfect environmental or sustainability accounting system in place before they attempt to report on their sustainability, simply because it is not possible at this point in time to design such a system. However, organizations must think carefully about how to reduce their impacts, what specific purpose they want to achieve, design an appropriate accounting system, and then just do it. It is critical that organizations continually reflect upon and review the performance of this system in order to for it to evolve based on experience with its operation.

The Environment Agency feels that too many organizations are using this quest for perfection prior to action as an excuse to keep doing what they have always done with potentially disastrous consequences for people and the planet. It believes that in order to create a better place, organizations should do the small, seemingly trivial, things correctly.

In summary, the key lessons are:

- establishing environmental accountability methods and measures throughout the organization;





- the importance of solid, reliable, consistent data management systems and integrating non-financial information within accounting systems;
- clear environmental decision protocols built into organizational routines;
- ensuring that the most sustainable options are properly rewarded and the easiest to adopt;
- making visible the potential cost savings associated with certain sustainable options;
- integrating environmental improvement targets with performance measures and peer benchmarking;
- an evolutionary approach, building on organizational successes from the bottom, but inspired from the top;
- persistence, attention to detail and the continual need to educate staff and suppliers;
- awareness of limitations of current systems, clear vision of necessary changes and not resting on laurels;
- the importance of conventional 'old-fashioned' accounting values in accounting for sustainability – consistency, reliability, verifiability, relevance;
- awareness of how effective systems can emerge from the intentional assemblage of small, apparently simple, reforms;
- a need for external standards and regulatory underpinning for meaningful sustainability reporting.

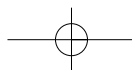
'Inspire from the top and build from the bottom' seems to be the best description of accounting for sustainability and environmental management in the Environment Agency and a pragmatic implementation of the well-worn but important environmental mantra 'think global, act local'.

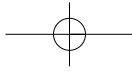
## Acknowledgements

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## Notes

- 1 The Environment Agency was created by the Environment Act 1995 and assumed the functions of the National Rivers Authority (NRA), Her Majesty's Inspectorate of Pollution (HMIP) and the waste regulation authorities in England and Wales
- 2 See [www.environment-agency.gov.uk/aboutus/default.aspx](http://www.environment-agency.gov.uk/aboutus/default.aspx)





- 3 See [www.environment-agency.gov.uk/aboutus/work/35696.aspx](http://www.environment-agency.gov.uk/aboutus/work/35696.aspx)
- 4 Full details of these publications can be found at [www.environment-agency.gov.uk/business/topics/performance/32348.aspx](http://www.environment-agency.gov.uk/business/topics/performance/32348.aspx)
- 5 See [www.environment-agency.gov.uk/business/topics/performance/36974.aspx](http://www.environment-agency.gov.uk/business/topics/performance/36974.aspx) and [www.environment-agency.gov.uk/business/topics/performance/36979.aspx](http://www.environment-agency.gov.uk/business/topics/performance/36979.aspx)
- 6 This information was sourced from [www.environment-agency.gov.uk/business/topics/performance/36979.aspx](http://www.environment-agency.gov.uk/business/topics/performance/36979.aspx)
- 7 Examples of these can be found in 'Appendix B: Performance measurement review' in the Environment Agency's 2008/2009 *Annual Report* Environment Agency, (2009)

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