

Guidance for how to measure and report your greenhouse gas emissions Water UK response

Introduction

1. Water UK is the industry association that represents regulated UK statutory water supply and wastewater companies at national and European level. We are a policy-based organisation and represent the industry's interests with Government, regulators and stakeholders in the UK and in Europe. Our core objective is sustainable water policy – actions and solutions that create lasting benefit by integrating economic, environmental and social objectives.
2. The water industry is energy-intensive and contributes around 1% of national greenhouse gas (GHG) emissions. The industry recognises the effects of its activities and the need to quantify, manage and reduce this impact.
3. The water industry has collectively measured and publicly reported its greenhouse gas emissions for many years. Information is provided in Water UK's sustainability indicators report and in individual water company reports.
4. We have, in conjunction with the Carbon Trust, developed a Carbon Accounting Workbook to measure and report operational emissions. The tool does not provide outputs in the format proposed in the draft DEFRA guidance (e.g. scope 1, 2, 3), but it is consistent with the GHG reporting protocol and has recently been updated to ensure it is compatible with 2008 DEFRA emissions factors. The tool includes industry specific conversion factors and methods. We have also developed guidelines on embodied (capital) emissions that have been used by all companies in developing business plan submissions. A further report by UKWIR (UK Water Industry Research) on identifying uncertainty and reviewing emissions factors for non-CO₂ has recently been completed.
5. We continue to work with the supply chain (e.g. the chemicals industry) to try and obtain better information on the carbon content of key industry materials and services supplied to us by others. However, supplier data availability and willingness to provide data if it is available is generally poor.
6. We have worked closely with the Ofwat, the economic regulator for the water industry in England and Wales, to develop robust regulatory reporting guidelines that take account of the work described above and are consistent with existing government reporting requirements.
7. Water is also one of the first sectors in the UK to explicitly include carbon in business planning. We believe that the water industry is now widely and rightly recognised as a sector leader in carbon accounting.

General comments

8. The water industry welcomes this consultation and strongly supports the need to develop a single, unified approach to GHG reporting, something we have advocated for many years and which can encourage and facilitate emissions reduction. However, we do have some reservations about the draft guidance and offer some comments which we believe would improve the proposals as they stand.
9. The water industry will be a key player in the Carbon Reduction Commitment (CRC) and our key concern is that the current proposals are inconsistent with the CRC in many areas. We believe it is imperative that the government sets out a clear and consistent vision of GHG accounting and reporting, and ensures that all its policies, schemes, regulations and frameworks are consistent with this. Most people would find it incomprehensible that organizations will be expected to provide info on GHG emissions, using government guidance, in two different ways. As they stand, the current proposals will confuse business and consumers alike, create inefficiency and unnecessary additional costs. We recommend that in crucial areas (e.g. minimum level of reporting, size threshold for inclusion, updating emissions factors) the proposals should be revised so as to be consistent with the CRC as far as possible.
10. A further concern is that, whilst we understand the desire for flexibility, the current proposals allow organizational discretion and judgment in so many areas that it will be impossible to compare GHG emissions across organizations, even within the same sector. We recommend that, subject to our suggested changes throughout this response, standard level reporting should quickly become mandatory for organizations above a certain size (e.g. all CRC organizations and those in Climate Change Agreements or the EU ETS).
11. We do not agree with the term ‘best practice’. In particular, we note that reporting of scope 3 emissions is double-counting and it seems quite bizarre that, by encouraging organizations to take direct responsibility for scope 3 emissions, the government is positively encouraging double-counting in this area, whilst in others (e.g. renewable energy in the CRC) it is strongly opposed to this. We know from experience that there is a great deal of work to be done to develop coverage and consistency around scope 3 emissions. We recommend that the focus should be developing the right framework for scope 1 and 2 emissions and that reporting of scope 3 emissions is removed from the guidance or included as ‘voluntary’ (rather than ‘best practice’).
12. We are concerned about the timing of the proposals and note that DEFRA intends to undertake a review on the impact of the reporting framework in 2010, which will inform the decision (to be made by April 2012) as to whether reporting should be

made mandatory. To inform such a review would mean that organizations have to use the guidance from 2009, which is not practicable or realistic.

13. Finally, we are concerned about the proposals for reporting generated and purchased renewable energy. We have commented on this below, but note that DEFRA and DECC are continuing to explore this area. As a major generator of renewable energy in the UK, we would expect to be involved in these discussions.

Response to specific questions

Q1. Does the guidance provide enough detail? Are there any issues on which you would welcome further guidance?

We think further guidance may be needed around operational boundaries. A significant part of water industry emissions are process-based and it would be difficult to draw activity-based boundaries around them. The main example is wastewater, and particularly sludge, treatment. Depending on the process used (e.g. digestion with gas capture, incineration with energy recovery, landfill, etc), the emissions can be quite different and the responsibility for those emissions may also change. For example, the use of treated sewage sludge (biosolids) on agricultural land as a soil conditioner results in emissions both from the treatment process and also from the land. Currently, water companies report both of these and we effectively take responsibility for them as an industry. However, the emissions from land are actually the land owners 'owned' emissions (as they would otherwise use an artificial fertiliser or something else which also led to emissions) although the water industry clearly has some impact.

In addition, it would be useful to provide guidance on how companies might indicate the level of accuracy of their reported emissions. The confidence grade approach set out by Ofwat is one that is proven and appears to work well. From a national viewpoint type 1 and 2 emissions are inherently more important (and also easier) to report accurately. Having a mechanism for capturing the accuracy of reporting would broaden understanding of this. It would also allow organisations to focus on the bigger gaps in both the quantity and quality of their emissions measurement, by making this more visible.

Other than this, the guidance does provide sufficient detail but we are concerned about a number of specific issues (see above and response to other questions).

Q2. Do you agree with all the recommendations? It would be helpful if you could comment on any recommendations with which you disagree (Guidance: page 76).

We agree with the majority, but not all, of the recommendations.

Recommendation 1

Standard practice: Use the financial control approach. Once you have chosen your approach, apply this consistently.

We agree it should be based on financial control, as this is closest to the CRC.

Recommendation 2

Standard practice: Measure or calculate your total emissions on a global basis.

We do not agree entirely with this recommendation. We recognize that climate change is a global issue and that organizations should endeavour, using the emission factors of the country in which they take place, to take account of overseas emissions where appropriate (e.g. outsourced activities). This can also help prevent off-shoring of emissions. However, non-UK emissions may be double-counting with reporting of emissions in other countries. In addition, conversion factors are likely to vary from country to country, making clarity and consistency of reporting in this area difficult. Finally, whilst overseas scope 3 in particular emissions could be significant for many organizations, it would be very difficult to derive accurate emissions for all such overseas activities. In such circumstances, a pragmatic, best endeavours approach should be appropriate. We suggest that scope 1 and 2 UK and overseas emissions are ‘standard practice’ (mandatory) and scope 3 UK and non-UK emissions are removed from the guidance or become optional.

Recommendation 3

Standard practice: Measure or calculate emissions that fall into your scopes 1 and 2

Best practice: Measure or calculate your ‘significant’ scope 3 emissions in addition to your scopes 1 and 2

We strongly disagree that reporting of scope 3 emissions should be termed ‘best practice’. Scope 3 emissions are double counting and it seems completely inconsistent and illogical that, by encouraging organizations to take direct responsibility for scope 3 emissions, the government is positively encouraging double-counting in this area, whilst in others (e.g. renewable energy in the CRC) it is strongly opposed to this. We would like the government to clarify its approach to double-counting.

In addition, organisations may not correctly distinguish between Scope 1 and Scope 3 emissions and there is likely to be significant variation between companies in the scope of emissions included within Scope 3, due to differences in data availability. As such a comparative measure that includes Scope 3 may be misleading.

The water industry has done a huge amount of work on carbon accounting, including embodied emissions. An understanding of these emissions can help to inform more sustainable business decisions. Yet we would still struggle to measure and report scope 3 emissions with any degree of confidence or accuracy. Although the supply chain is getting better at reporting *organisational* emissions (buildings, etc), what we really need is *product-based* emissions to feed into our understanding of embodied emissions. We

think that the focus of the guidance should be on getting the maximum number of organisations to report scope 1 and 2 emissions properly and consistently. Attaching levels of confidence and accuracy to scope 3 emissions, with no indication of uncertainty or potential range, is likely to give rise to spurious and misleading results and conclusions.

It would be phenomenally difficult to calculate and report scope 3 emissions with any degree of accuracy. For example, in the case of water, the (potentially very significant) emissions associated with the “use of goods or services by consumer downstream” depend on how that water is used (emissions will be much higher if it is heated). Whilst these may be very significant in terms of emissions and whilst water companies can try to influence water consumption, they cannot influence whether the water is heated or the efficiency of how it is heated. In addition the proposed approach is inconsistent with the way emissions from electricity are handled as scope 2 emissions (where the consumer chooses the amount and how a product is used). We suggest that the “use of goods or services by consumer downstream” should therefore be excluded from the guidance.

We suggest that emissions within the direct control of an organization (scope 1 and 2) should be subject to mandatory reporting, and scope 3 emissions, which an organization can influence (but not control), should be removed from the guidance or, at the very least, described as ‘optional’. In parallel, the government should encourage suppliers to measure and provide product-based, rather than organization-based emissions data.

Recommendation 4

Standard practice: Measure or calculate emissions from all six GHGs covered by the Kyoto Protocol.

Best practice: Measure or calculate emissions from other gases in addition to the six covered by the Kyoto Protocol.

We agree with the proposals but think the guidance should refer to ‘optional’ rather than best practice reporting. This would take account of the fact that most organizations (which do not have other GHGs) could not achieve best practice. In addition, the Kyoto gases are those where activity should be focused and encouraging organizations to spend time and resources measuring and reporting other emissions may not be efficient and make comparison even more challenging.

Recommendation 5

Standard practice: Where your organisation is using standard emission factors, you should use the Defra / DECC emission factors for UK emissions.

If you require other emission factors, you should refer to the emission factors in the GHG Protocol calculation tools.

We agree with this recommendation. However, it is difficult to compare emissions over time as government emissions factors keep changing. The guidance should clarify how organizations can compare emissions over time as emissions factors change.

In addition, the guidance should be consistent with the CRC in this respect. The CRC will only change emissions factors at the end of a phase, which means that in future organizations may find themselves reporting the same emissions to government using two separate factors. This is likely to be confusing to organizations and consumers.

Recommendation 6

Standard practice: Report total GHG emissions as a gross figure in tonnes of CO₂e.

We agree with this recommendation.

Recommendation 7

Optional: Report where applicable on purchased or sold emissions reductions that meet Defra's emission reduction criteria. Then report a net figure in tonnes of CO₂e, in addition to the gross figure.

We agree with this recommendation but think it is crucial that not just generated *and consumed* electricity (REGOs), but *any* generated electricity (including where ROCs are obtained) should be reported (see response to Q7).

Recommendation 8

Standard Practice: Report on total scopes 1 and 2 emissions using an intensity ratio.

We agree with this recommendation, which is consistent with existing water industry reporting of tones CO₂e per megalitre water supplied or wastewater treated. Other ratios (e.g. turnover) would not be appropriate for our industry.

Recommendation 9

Standard practice: Set a reduction target and choose the approach to use. The target should be:

- **Organisation-wide (including all UK and overseas emissions);**
- **Inclusive of all emissions (scope 1, 2 and 3) that you measure and report on;**
- **Based on the most recent base year data is available; and**
- **Achieved over 5 to 10 years.**

Best practice: Set an absolute target.

We do not agree with this recommendation. We believe that the government should not be prescriptive and that any form of target setting, whether normalised or absolute, should be optional, and dealt with separately to reporting. Organizations should

be able to decide the organizational level and scope (e.g. UK or global) of any targets. In addition, the EU ETS and CRC schemes will determine the most cost-effective ways of reducing emissions. Targets which are not cost-effective will damage the UK economy and the credibility of the UK's approach to GHG emissions reductions. For reasons stated previously, we also do not agree with the inclusion of UK and non-UK scope 3 emissions.

We would also note that targets in themselves are insufficient. Organizations that do opt to set their own targets should also be encouraged to develop a plan setting out how it plans to meet the target.

Q3. Do you agree with the criteria given to determine which scope 3 emissions are significant? If you disagree, please suggest additional or alternative criteria (Guidance: page 55).

We would reiterate that we do not believe scope 3 emissions should be included in the guidance.

If included (as optional), we would suggest that a de-minimis approach is taken, as in the CRC. We would also note that the criteria are likely to conflict. For example, around 90% of water-related emissions are thought to be related to the energy used to heat water in the home. On this basis, the guidance would clearly suggest that water companies should report these as scope 3 emissions. However, these emissions are not within the direct control of water companies and reporting of them could divert attention from managing those emissions (e.g. from water treatment processes) that companies do control. At present, it is unclear how organizations are expected to balance the criteria proposed.

Q4. Your comments are sought on the emissions data that we recommend you report? (Guidance: page 23-25)

We would reiterate comments made in response to question 2, in particular that we do not think reporting of scope 3 emissions represents 'best practice'. We support proposals for reporting of gross/net emissions, all GHGs, an intensity ratio and information from previous years (although this not be applied retrospectively, i.e. prior to 2009/10). However, we would note that it is difficult to compare emissions over time as government emissions factors keep changing. The guidance should clarify how organizations can compare emissions over time as emissions factors change. We wonder how emissions data can be compared over time if emissions factors are changed annually.

In addition, a significant part of water industry emissions are process-based and it would be difficult to draw activity-based boundaries around them. The main example is wastewater, and particularly sludge, treatment. Depending on the process used (e.g. digestion with gas capture, incineration with energy recovery, landfill, etc), the emissions can be quite different and the responsibility for those emissions may also change. For

example, the use of treated sewage sludge (biosolids) on agricultural land as a soil conditioner results in emissions both from the treatment process and also from the land. Currently, water companies report both of these and we effectively take responsibility for them as an industry. However, the emissions from land are actually the land owners 'owned' emissions (as they would otherwise use an artificial fertiliser or something else which also led to emissions) although the water industry clearly has some impact.

There is abundant and growing evidence that peatland and forestry management can deliver significant carbon benefits and we would suggest that peatland carbon and forestry management are specifically included within 'biologically sequestered carbon'. We would welcome guidance from DEFRA on what evidence would be required to support this.

Q5. What is your view on the supporting explanations that it is suggested organisations should include in their report? (Guidance: page 25-29)

We support the proposals in this section.

Q6. Your comments are sought on the external emission reductions activities that we have identified and the 'good quality' criteria that these reductions activities should meet (Guidance: Page 58-65)

We agree with the proposals in this area. However, we would welcome clarification on what is meant by a 'carbon credit'. Does this refer to credits under specific mechanisms, e.g. JI/CDM, or is it used in a more general sense?

Q7. Your comments are sought on how organisations should account for renewable electricity that they generate. (Guidance: Page 58)

We do not agree with the proposals in this area. We are concerned with the requirement to report emissions for renewable electricity claiming subsidies, which gives the impressions that producing renewable energy actually produces GHG emissions. This could undermine the Government's plans to rapidly increase the uptake of renewable energy in the UK. We believe that renewables should be able to claim both ROCs and zero emissions for the on-site renewable electricity generation they use.

Q8. We welcome your comments on the attached impact assessment for this policy? Do you have any estimates for how long it would take you to follow the guidance? We welcome information on costs and benefits for both policy options.

For reasons of consistency and transparency, we would prefer option 2 (mandatory reporting). If the Government is to ensure that it has the data to demonstrate that the UK

is reducing its emissions and is on track to meet its legal targets then it is essential that all companies are required to report their scope 1 and 2 emissions on an annual and mandatory basis. The case studies in the RIA show that organizations derive significant benefits from understanding and reporting their GHG emissions, and that these benefits generally outweigh the costs. However, we believe that the current impact assessment significantly underestimates the time and cost involved in undertaking the proposed GHG reporting.

We are disappointed that DEFRA has not explored the costs/benefits of option 2 in any detail and would urge the government to reconsider this.

Q9. Please provide any general comments on the guidance, especially any issues where you would welcome further explanation.

We would highlight the issue of auditing. If reporting becomes mandatory, some auditing may be required. However, this could place significant burdens on organizations and, as water industry emissions are already independently audited by Ofwat, we believe this should be sufficient for the purposes of national reporting and there is no need for additional regulatory burdens on the water industry in this area.