



Scottish Water
Trusted to serve Scotland

Sustainability report 2017



Doing the right thing for Scotland

Our vital role

Scottish Water provides vital water and waste water services, essential to daily life, to 2.5 million households and 156,000 business premises across Scotland.

Each day we provide 1.35 billion litres of clear, fresh drinking water and take away 945 million litres of waste water, which we treat before returning safely to the environment.

The quality of drinking water provided to customers was sustained at a high level and our investment helps to support jobs and economic growth while protecting and enhancing the environment.

All of this is done at a cost which is among the lowest in Great Britain. Our average household charge is £38 lower per year than the average household charge in England and Wales.

2016/17 was the second year in the 6 year programme which will see £3.5 billion invested in maintenance and further improvements to drinking water quality, protecting the environment and supporting the Scottish economy.

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Customer charges go towards maintaining and improving:

30,124
miles of water pipes

31,814
miles of sewer pipes

245
water treatment works

1,848
waste water treatment works

Icon key

We have developed the 3 icons shown below to represent the **Environment**, **Society** and the **Economy**. We have used the dark blue icons throughout this report to help you quickly identify the areas where our activities are having a positive impact.



Environment



Society



Economy

Foreword

“We are pleased to set out how we are furthering the conservation of biodiversity, and how we can operate to support the natural and social capital of Scotland.”

Douglas Millican, Chief Executive



Water and waste water services are vital to a sustainable society. Our challenge is to find ways to be increasingly sustainable in how we deliver those services.

Our purpose is to support the protection of public health and the environment through providing high quality affordable drinking water and safely managing society's waste water. We do this whilst ensuring that our services are affordable and they support Scotland's economy. These are integral to a sustainable society.

We have a vast asset base that requires significant investment to maintain and enhance services to improve our resilience and meet customer, societal and environmental needs. Our assets will last for many decades, serving both current and future generations.

In striving to fulfil our vision of being trusted to care for the water on which Scotland depends, it is critical we fully understand what society and our customers expect of us, and that we respond to meet their needs.

This, our sixth Sustainability Report, focuses on Natural and Social Capital. It includes our three-yearly Biodiversity Report, in accordance with the duty on Public Bodies to report actions in supporting the Scottish Government's Biodiversity Strategy. Within this, we explain how we are working to understand where and how we contribute to Scotland's Natural Capital.

Our operational carbon footprint has further reduced this year due to the anticipated reduction in the emissions factor for grid electricity.

We continued to improve our services while our household customers continue to enjoy one of the lowest average charges in Great Britain. Our focus remains on doing the right thing for our customers, the economy and Scotland's environment.

Natural and social capital

Natural capital considers the 'services' we gain from the environment – the water we drink, the air we breathe, the food we eat and the land on which we live, work and play – in terms of the health and resilience of the environment.

Social capital is harder to define. From a water industry perspective, it could be described as the relationships within and between organisations (including businesses), communities, groups of stakeholders (including customers) and other networks.



Supporting a sustainable society

The water and waste water services we provide play a key role in supporting a sustainable, resilient Scotland. Our core purpose supports the 3 principles of sustainable development:

- **Society** – we provide vital public health protection through affordable access to safe, wholesome drinking water and safe sanitation, and we are committed to creating the right environment for our people to succeed.
- **Environment** – we work to ensure the sustainable use of many of Scotland's water resources and catchments, and to safely treat and return society's waste water to the environment.
- **Economy** – we provide efficient, effective services and help Scotland's communities grow and thrive while delivering value for money to our customers, and we support thousands of construction jobs across Scotland.

We must ensure we deliver our services in a sustainable way. This requires us to work with our customers and stakeholders to balance the demands of society, the environment and the economy.

As we continue to improve efficiency throughout the business, our customers can be reassured that we are delivering more for less as we fulfil our vision of being trusted to care for the water on which Scotland depends.

The average Scottish household pays less than £1 a day for water and waste water services – £38 lower per year than the average bill in England and Wales. We continue to invest, when required, in enhancing our assets to deliver benefits for our customers and to support sustainable economic growth across Scotland.

We also work to improve our environmental performance through maintenance, operation and enhancement of our assets.

We rely on services from the environment: for the water we use to treat and supply to customers; and a good quality environment to consume society's treated waste waters.

In making decisions about our future services and investments, we are increasingly aware of natural capital, as well as the social capital (prosperity, wellbeing and behaviours) of our customers. We believe that engaging further in these areas will help us to make better decisions that support a more sustainable society.

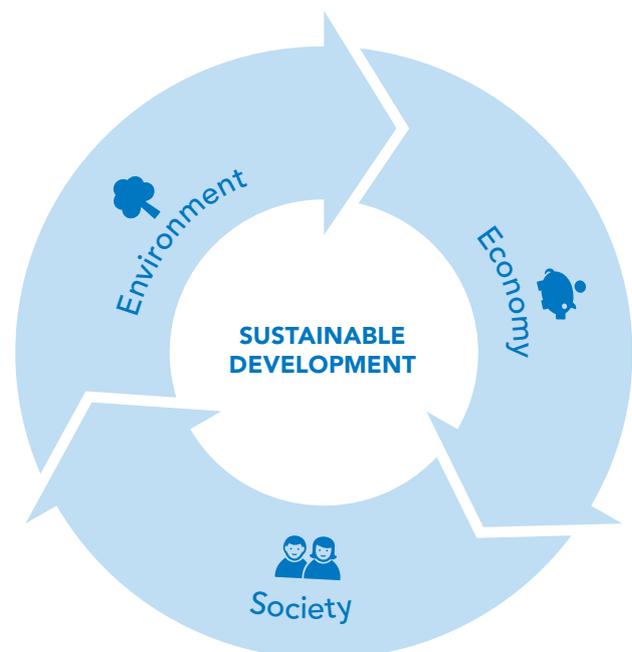
In this report we consider how some of our activities help to support the natural and social capital of Scotland, including:

- Eradication of an invasive non-native species from a loch in Dumfries & Galloway
- Restoration of peat on Shetland
- A range of volunteering activities undertaken by Scottish Water employees

We also provide a particular focus on biodiversity within this report, in keeping with the requirement of the Scottish Government for public bodies to report every three years on their activities.

The work we do today and the developments we make will continue to contribute to Scotland's natural and social capital for years to come. We will continue to work in a more sustainable way to deliver your water and waste water services.

Principles of Sustainable Development





Sandmartins take advantage of a temporary sandbank at construction work in Ayrshire



Scottish Water volunteers undertaking work in the local community

Highlights of the year

-  Our carbon footprint continues to reduce, supported by further decarbonisation of grid electricity.
-  2016/17 saw us pass the milestone of 25,000 volunteer hours since the inception of our volunteering programme in 2011.
-  Peat restoration work is protecting drinking water and improving habitat at Sandy Loch, Shetland.

How did this activity contribute to natural and social capital?

At the end of each chapter we explain how the initiatives we've explored have helped support the natural and social capital of Scotland.



Natural and social capital accounting for better outcomes

Water companies, perhaps more than most, interact directly with the water environment across the entire range of water catchment types. From managing water sources in upland areas through to urban drainage and waste water recycling to rivers and seas, we rely on and work with the services provided by nature.

The life of our assets is measured in decades, and the social, environmental, and sustainability implications of decisions we make today will be felt by future generations.

As a sector, UK water companies have been exploring how Natural and Social Capital Accounting may offer a new approach to decision making, supporting more sustainable outcomes for customers and the environment. This has led to the development, over the past year, of new tools and techniques to consider natural and social capital in our activities.



Still from Keep the water cycle running campaign

What is Natural and Social Capital?

Natural Capital is a concept that considers the 'services' we gain from the environment – the water we drink, the air we breathe, the food we eat and the land on which we live, work and play.

The health and resilience of the Natural Capital 'stock' – the quality of the physical environment and its ecosystems – determines the extent to which it can support society and economy. Put simply, an environment that is biodiverse with stable, healthy soils and naturalised watercourses will better support the needs of society and be more resilient to climate change.

As a public water and waste water service provider we touch the lives of every person in Scotland, supporting a sustainable society. We must therefore also consider Social Capital alongside Natural Capital.

We can consider **Social Capital** in terms of the prosperity, health and wellbeing of society; as well as in terms of how our customers can contribute by way of responsible water use and recycling of waste materials. We support our customers in this through, for example, our Keep the water cycle running campaign. We thereby collectively support a sustainable Scotland.

We use a range of criteria to support decision making in strategic and project level planning. These help us to consider a broad range of factors when evaluating options and include: capital and operational costs, service and environmental benefits, carbon emissions, the ability to deliver, and the impact of the options on our customers.

Natural and Social Capital can be regarded as an extension of the things we already consider. It has the potential to support a wider consideration of the benefits and impacts of the decisions we make, and the way they might impact or contribute to the sustainability and resilience of natural systems.

We will use the tools we have helped develop over the last two years to work with regulators, government and customers and explore how, building from what we already do, we might use Natural and Social Capital in our future planning.



Managing invasive non-native species

We have been working in partnership¹ to eradicate American Signal Crayfish from Buittle reservoir in Dumfries & Galloway, and to prevent their spread into the wider environment to protect native species.

Invasive non-native species are recognised as a significant threat to the biodiversity of Scotland. As well as impacting biodiversity, some species can impact on operational activities and processes, and even cause structural damage to our assets².

Buittle is a dammed, spring-fed, 12 acre reservoir near Dalbeattie. The overflow from the dam forms a small 2km tributary that flows to the Urr Water. The Urr Water supports several species of freshwater fish, including salmon, brown trout, sea trout, eels and lamprey. Buittle reservoir itself supports trout and coarse fish angling and, whilst still owned by Scottish Water, is no longer used for water supply.

American Signal Crayfish is an invasive non-native species that is a priority for eradication from Scotland. American Signal Crayfish can have a significant adverse impact on native freshwater plants and animals. Their burrows can destabilise banks, causing erosion and bank collapse. They prey on fish eggs and young and compete with native species for food and habitat.

The first report of American Signal Crayfish in Buittle reservoir was in September 2013 by the Angling Association and Galloway Fisheries Trust. The American Signal Crayfish had colonised the crevice habitat between the large rocks of the dam wall. There was significant risk that they would spread from the reservoir and extend their range into the Urr Water, threatening the natural ecosystem.



Buittle Reservoir when drained

Three months of trapping downstream of the reservoir demonstrated that they had not yet spread to the Urr Water, hence a strategy to eradicate them from the reservoir was agreed.

In July 2016 work was carried out to prepare the site. The reservoir water level was carefully drawn down to concentrate the various animal populations allowing for capture of fish for temporary relocation, and creating a smaller volume of water to be treated. It also gave good access to the banks, dam wall and submerged equipment for application of biocide.

¹ Partners involved in the ASC work at Buittle were: Scottish Water, Scottish Environment Protection Agency, Scottish Natural Heritage, Police Scotland, Dumfries & Galloway INNS Working Group, Environment Minister, Local Councillors, George Leslie Ltd, Bell Ingram, Dalbeattie Angling Association, Urr District Salmon Fishery Board and Galloway Fisheries Trust, Nith Catchment Fisheries Trust, Rivers and Fisheries Trusts of Scotland, Marine Scotland and APEM, the eradication contractor.

² UKWIR Report 16/DW/02/82 – INNS Implications on the Water Industry.

Given the need for careful management of chemical treatment, licences and consents were granted by Scottish Natural Heritage, Scottish Environment Protection Agency, Marine Scotland and Health & Safety Executive. A plan was prepared, and the method rehearsed with water to ensure that all controls worked well. This included silt control, closing the reservoir to visitors and measures to ensure the downstream environment was protected, i.e. any seepage was pumped back into the reservoir.

After treatment, monitoring was carried out and eradication work appears to have been successful. To confirm this, monitoring of the reservoir for American Signal Crayfish will continue.

Angling interests and other stakeholders in the reservoir continue to be involved in discussions on the progress of the work.

How did this activity contribute to the natural and social capital?

By controlling the spread of invasive non-native species, the biodiversity and resilience of the local environment is protected, increasing its natural capital.



American Signal Crayfish



Peat restoration project at Sandy Loch

A degradation of Scotland's peatlands can impact water quality in the catchments we use to produce drinking water. Through partnership working we have taken steps to protect the source drinking water around a Shetland Loch by restoring exposed peat, improving the habitat and thereby contributing to the delivery of Scottish Government sustainability objectives.

Peat has long been harvested for fuel; and its rich organic composition makes it desirable as a compost base, delivering nutrients for plants to thrive.

However, peat has greater value when it remains part of the environment. Here it can provide a number of ecosystem services, supporting habitats and biodiversity, stabilising land and in storing carbon sources that might otherwise contribute to climate change.

Deteriorating peatland (where vegetation or peat soil is being lost) is a well-known issue for fresh water reservoirs. As peat erodes, it seeps into the water bringing with it high levels of dissolved organic carbon (DOC), which negatively affects water quality for drinking. It means more intense water treatment (more energy and chemicals) to maintain the required standards. The water produced at Sandy Loch water treatment works (WTW) is perfectly safe, but stabilising and improving the quality of the water environment may reduce the need for additional treatment in the future.

Scottish Water's Sustainable Land Management Team works across Scotland, monitoring pollution, assessing risks and advising on strategies to support safe, sustainable sources of drinking water.

Monitoring peat conditions, where they affect our water supplies, is a key task for the team. During routine survey work, the team identified a large area of exposed peat at Sandy Loch, on Shetland, that would benefit from restoration.



Local partners at Sandy Loch peat restoration area: landowners, the Shetland Amenity Trust and Scottish Natural Heritage.

Sandy Loch is an area of rugged beauty. Located next to the town of Lerwick, on the Shetland Mainland, it provides water to Sandy Loch WTW, which supplies high quality drinking water to 12,000 customers within Lerwick and across the island.

Scottish Water worked with landowners and local contractors, the Shetland Amenity Trust and Scottish Natural Heritage to develop and deliver actions to improve the environment and hence the quality of the water.

Machinery was used to re-profile areas and improve stability by creating gentle slopes around faces of eroded peat. On some of the larger areas of exposed peat, small scrapes were created to act as water pools and encourage sphagnum to grow. Sphagnum plugs were also transplanted from healthy areas of peat to speed up the restoration.



Sandy Loch and the peatland landscape

How did this activity contribute to the natural and social capital?

Investing in natural capital through peat restoration protects the local environment from further degradation, improving water quality, quantity and providing improved resilience to climate and environmental change.

By restoring the eroding peat in the area, it has been possible to begin the process of reversing the erosion that may lead to the need for further water treatment at Sandy Loch WTW.

The water levels in the loch are unlikely to be affected, however we anticipate that the water table will rise as the peat comes into a better condition, increasing the resilience of the catchment to environmental change.

Within a few weeks the restoration work was complete and we can now rely on natural processes to fully restore the peat. The eroded area has been transformed into bog pools and replanted with native plants. This has created conditions for new peat to form, increasing carbon storage, aiding biodiversity, helping to provide quality drinking water to our customers and saving resources on treatment – overall delivering a significant environmental benefit.

Scottish Water was acknowledged for the peat restoration work at Sandy Loch – we were winners in the Shetland Environmental Awards 2017. The biennial awards recognise projects that have contributed to Shetland's rich and diverse environment whilst demonstrating sustainability, innovation and best practice.



Volunteering for natural and social capital

Our volunteering programme has been running since 2011 and gives each employee a minimum of two days per year to carry out approved voluntary work. We are keen that the social capital of our people supports and strengthens the natural and social capital of Scotland's environment and society.

During 2016/17, 400 of our people contributed over 2,300 volunteering hours to conservation, local community and education. Here we focus on some activities that tie-in with our natural and social capital theme.

Dams to Darnley

The Dams to Darnley country park covers over 1,350 acres of green space around the East Renfrewshire and Glasgow City boundary. Owned by the two councils, it encompasses the green belt separating Barrhead, Darnley and Newton Mearns. The Barrhead dams are the most striking feature within the country park, dominating its southern half and covering over 220 acres. The dams are made up of a series of interconnected reservoirs owned and managed by Scottish Water.

In September 2016, seven Scottish Water volunteers returned to the park to continue the creation and enhancement of ponds that other Scottish Water volunteers had started to construct in April 2016.



Dams to Darnley work team

CLEAR Buckhaven

Community-Led Environmental Action for Regeneration (CLEAR) Buckhaven is a voluntary community association established by local residents interested in improving their surroundings and the quality of the local environment. They work to improve the townscape and create sustainable initiatives in the adjoining countryside.



CLEAR Buckhaven group

Scottish Water has been working with CLEAR Buckhaven for a few years. Most recently, in May 2016, a group of six volunteers helped with maintaining the wild orchard and food bearing hedgerow adjoining the Fife Coastal Path, which they did by clearing grass and weeds, checking (and replacing where necessary) stakes and ties, and feeding the trees and hedge plants. They also undertook community gardening at Buckhaven's Community Growing Space, where they tidied up the edging around beds, weeded, did some potting up, and turned compost.

Judy Shand, one of the volunteers, said:

"As well as making the place look better, CLEAR Buckhaven also provides food to members of the local community in need. A really worthwhile day and it is good to maintain the link with Scottish Water by sending other volunteers."

Elder Park, Govan

Elder Park was gifted to the people in Govan in 1885. Friends of Elder Park promote education and community development, support environmental protection and improvement, and provide recreational facilities and activities.

Thirteen Scottish Water volunteers helped out by litter picking around the library/visitor centre, and digging over many of the borders in the park in preparation for planting up flower beds. David Adam, one of the volunteers, said:

“We had a good day for it and got a lot done turning soil around the southern and eastern perimeter of the park. The volunteers from Friends of Elder Park were lovely and kept us supplied with refreshments.”



Scottish Water volunteer at Elder Park



Trees for Life, Ben A'an

Trees for Life

Dundreggan is a 10,000 acre Conservation Estate that is owned by Trees for Life in Glen Moriston, near Loch Ness. Dundreggan has been described as a ‘lost world’ for biodiversity with frequent discoveries of rare species not found anywhere else in the UK. The nursery grows a range of native trees for planting at Trees for Life project sites.

Four Scottish Water volunteers helped by pricking out young seedlings such as Scots pine, downy birch and rowan; sowing willow seeds; weeding and mulching outdoor tree beds; and clearing stone footpaths and drainage channels.

How did this activity contribute to the natural and social capital?

Our volunteer programme provides invaluable assistance to many local non-profit groups and charities, allowing them to support the communities within which they are based. This increases social capital locally and within our own workforce. It also improves natural capital where the activities are focused on the environment. Volunteering is a good example of how natural and social capital can come together.

Biodiversity report

In keeping with our Duty under Scotland's Nature Conservation Act, we have submitted a biodiversity statement to Scottish Natural Heritage outlining where our activities support the objectives of Scotland's Biodiversity Strategy. Our progress against these objectives is reported in tables on the following pages.

Introduction

Scottish Water relies on a good quality environment both to supply drinking water and to accept treated waste water. Our Vision is to be 'Trusted to care for the water on which Scotland depends', reflecting the trust placed in Scottish Water to deliver vital water and waste water services.

We do this by stewarding many of Scotland's water resources and providing the interface between society's waste water and the environment. Our statutory duty to further the conservation of biodiversity sits alongside the statutory functions for water and waste water services, and our core purpose to:

- Provide high quality affordable drinking water
- Protect and enhance our environment
- Support Scotland's communities and economy

Biodiversity Progress

Scottish Water's Biodiversity Report explains how, in the discharge of our duties, we have supported the goals of Scotland's Biodiversity Strategy reflected in the six Big Steps for Nature.

Our regulatory investment programme comprises many projects that may also contribute to the objectives outlined in the Scottish Biodiversity Strategy (SBS) and River Basin Management Plans (RBMP). Where investment is required, we take appropriate steps to protect terrestrial, freshwater and marine environments during planning and delivery.

Investment in water and waste water to meet regulatory compliance has consequential biodiversity benefits and supports the achievement of Good Ecological Status (GES) in water bodies under the Water Framework Directive (WFD). With many hundreds of projects in the programme, we do not report them here, but note some of the projects more relevant to biodiversity objectives, including those with specific natural heritage drivers.

We manage landholdings across Scotland primarily to protect rivers and reservoirs that supply drinking water in Drinking Water Protected Areas (DWPA). We work with landowners and tenants to protect healthy ecosystems and maintain landscape value. Our work to manage rural and urban catchments to prevent pollution at source demonstrates how multiple benefits in terms of drinking water quality, customer service, the environment and biodiversity can be delivered, supporting natural and social capital.

We are pleased to report progress in supporting the goals of Scotland's biodiversity Strategy in the following pages.

Big Steps for Nature
from Scotland's Biodiversity -
A Route Map to 2020

Contributing actions, Scotland's Biodiversity Priority
Projects & Targets for Ecosystem Restoration and Actions
identified by Scottish Water

1. Ecosystem restoration

1.1	Encourage and support ecosystem restoration and management, especially in catchments that have experienced greatest degradation.	<p>Scottish Water is a active member of the Moorland Forum; this enables us to increase our understanding of current issues affecting moorlands and to highlight the importance of protecting source water quality to other land managers.</p> <p>Scottish Water has completed a project which examined the condition of peat in 21 water supply catchment, and the consequent impact on raw water quality. We are working with SNH to identify potential joint restoration projects.</p>
1.2	Use assessments of ecosystem health at catchment level to determine what needs to be done.	<p>Scottish Water investment to improve the environment is primarily focussed on needs identified in River Basin Planning under the Water Framework Directive, along with other legislation. We are active participants in river basin planning and work with SEPA and SNH to agree actions required of Scottish Water to support Good Ecological Status.</p>
1.3	Government and public bodies will work together towards a shared agenda for action to restore ecosystem health at a catchment scale across Scotland.	<p>Scottish Water liaises with a number of bodies to manage catchments in accordance with good practice to support ecosystem health. For example, Scottish Water leases Loch Katrine reservoir catchment to Forestry Commission Scotland. This is managed through a Forest Plan which includes large scale tree planting and ongoing management of the catchment. A good relationship is maintained with the mutual aim of catchment and biodiversity protection.</p>
1.4	Establish plans and decisions about land use based on an understanding of ecosystems and take full account of land use impacts on the ecosystem services that underpin social, economic and environmental health.	<p>Scottish Water's Drinking Water Protection Scheme focuses on prioritising activities and locations to tackle key pressures on drinking water quality. Current areas of interest include the Ugie catchment, Orkney and the catchments around Lintrathen Loch.</p> <p>Scottish Water participated in the development and implementation of the Land Use Strategy through consultation and Regional Pilot meetings. We worked with the Tweed Forum on a pilot project to demonstrate the benefits of opportunity mapping, helping focus where water quality mitigation opportunities should be located.</p> <p>Scottish Water's Specialist Services Environment Team (SSET) identifies, advises on and manages environmental risks and constraints associated with the development and delivery of our capital and commercial projects. They engage with relevant environmental stakeholders, secure necessary permissions and ensure constraints are managed in compliance with legislation.</p>

Big Steps for Nature
from Scotland's Biodiversity -
A Route Map to 2020

Contributing actions, Scotland's Biodiversity Priority
Projects & Targets for Ecosystem Restoration and Actions
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2. Investment in natural capital

2.1	Encourage wide acceptance and use of the Natural Capital Asset Index including a comparable measure for the marine environment.	<p>Scottish Water has promoted a UK water industry approach to Natural and Social capital accounting through UK Water Industry Research Ltd. (UKWIR). A draft framework for the water sector has been developed and we will be exploring how to apply this at project and programme level for rural and urban decision making.</p> <p>We will continue to engage stakeholders and regulators in how Natural and Social Capital Accounting might be deployed in our sector.</p>
2.2	Use this index to influence decisionmaking and market-based approaches, so that wider monetary and non-monetary values for ecosystems are recognised and accounted for.	<p>Through UKWIR, Scottish Water has been working in partnership with other water companies to develop a natural and social capital framework for the water sector. We will work to understand how this can apply to decision making and engage with SEPA and SNH to determine how we may use it in future.</p>
2.3	Undertake a major programme of peatland conservation, management and restoration.	<p>Scottish Water provides technical advice regarding all activities that take place in or near drinking water sources. These include: forest management and felling; wind farms; hydro schemes and aerial/non-aerial spraying of pesticides. We assess the potential impact of these activities and make recommendations on how to protect source water quality. A particular focus at present is the degradation of peatland.</p> <p>Scottish Water has reviewed the increase in natural organic matter in raw water with regards to climate and environmental change. We routinely measure for organic carbon in our source waters, and six sites were selected for more intensive monitoring, where organic carbon concentrations were also determined in the watercourses supplying the reservoirs. Our work in this area is being used to plan future actions and to identify suitable projects for peat restoration. We have also been working closely with SNH and the peatland action fund to identify potential joint peat restoration projects in our drinking water catchments.</p>



Good catchment management

Big Steps for Nature
from Scotland's Biodiversity -
A Route Map to 2020

Contributing actions, Scotland's Biodiversity Priority
Projects & Targets for Ecosystem Restoration and Actions
identified by Scottish Water

3. Quality greenspace for health and education benefits

3.1	Provide opportunities for everyone to experience and enjoy nature regularly, with a particular focus on disadvantaged groups.	Scottish Water's volunteering programme supports employee involvement in education, conservation and community activities. As well as directly benefitting the environment, it also develops skills and teamwork, and strengthens the relationship we have with our communities and customers.
3.2	Support local authorities and communities to improve local environments and enhance biodiversity using green space and green networks, allowing nature to flourish and so enhancing the quality of life for people who live there.	<p>The primary function of our reservoirs is to support public water supplies. Catchment management is therefore focussed on efficiently supporting water quality, and to limit pollution risk in the reservoir catchment. There is a public right of access to our catchments, but restrictions on activities (e.g. use of motor boats). Information on access and safety around reservoirs is available on our website.</p> <p>Scottish Water sites may also be designated as Special Protection Area for birds e.g. Gladhouse. In addition, we have created a wetland habitat for birds at Tarland waste water treatment works.</p> <p>Scottish Water holds fishing rights at our reservoirs and many Angling Agreements are in place; these, along with certain aspects of forestry, land, estate and renewable projects are managed by agents on our behalf. The Angling Agreements take account of natural heritage considerations, such as protected sites, to ensure that all appropriate permissions, consents etc. are in place. This provides an important recreational and amenity resource enjoyed by local fisherman and anglers and we ask that other visitors keep a safe distance and avoid disturbing them.</p>
3.3	Build on good practice being developed by the National Health Service (NHS) and others to help encourage greenspace, green exercise and social prescribing initiatives that will improve health and wellbeing through connecting people with nature.	See 3.2

Big Steps for Nature from Scotland's Biodiversity - A Route Map to 2020

Contributing actions, Scotland's Biodiversity Priority Projects & Targets for Ecosystem Restoration and Actions identified by Scottish Water

<p>3.4</p>	<p>Increase access to nature within and close to schools, and support teachers in developing the role of outdoor learning across the Curriculum for Excellence.</p>	<p>Scottish Water has prepared educational modules that provide support learning and teaching for the school curriculum from P1 to S3. All About Water provides additional information on topics such as Saving Water and Pollution. There are also games to play and advice on aspects of healthy living relating to water; all the material is available to download.</p> <p>www.scottishwater.co.uk/clearer-fresher-learning</p> <p>Scottish Water's Volunteering Programme supports Education, our keep the water cycle running campaign messages are the basis for interactive talks to younger children.</p> <p>Scottish Water attends just under 36,000 blocked drains and sewers every year across Scotland, potentially causing flooding that can affect homes or pollute rivers and sea. Approximately 80% of these blockages are caused by inappropriate items being put down toilets, or fat, oil and grease being put down sinks. We believe the best way to tackle blocked drains and sewer flooding is to work with our customers to help prevent blockages in the first place, we hope that pupils will take our message home and help to protect our environment.</p>
<p>3.5</p>	<p>Encourage public organisations and businesses to review their responsibilities and action for biodiversity, and recognise that increasing their positive contribution to nature and landscapes can help meet their corporate priorities and performance.</p>	<p>Through our core duties we invest in the protection of the environment, nature and landscapes. Environmental enhancement needs are agreed each regulatory period with SEPA and set out in Scottish Minister's objectives for Scottish Water and in our regulatory business plans. Our Delivery Plans and commitments can be viewed in the Key Publications section of our web-site at www.scottishwater.co.uk.</p>



Scottish Water education modules available on our website (see 3.4 above)

Big Steps for Nature
from Scotland's Biodiversity -
A Route Map to 2020

Contributing actions, Scotland's Biodiversity Priority
Projects & Targets for Ecosystem Restoration and Actions
identified by Scottish Water

4. Conserving wildlife in Scotland

4.1	Ensure that the management of protected places for nature also provides wider public benefits.	Scottish Water has regard to all appropriate designations both on our own land and in areas where we are delivering new projects. Capital delivery activities are managed with appropriate support from environmental specialists to ensure compliance with all regulatory requirements such that natural heritage sites and protected species are appropriately protected.
4.2	Align habitat restoration on protected areas with national goals for improving ecosystem health, with local priorities determined at the catchment or landscape scales.	Scottish Water own, have an interest in, or occupy many designated sites across Scotland and are a member of the Scottish Landowners Group (SLG), through which we are implementing the Action Plan on delivering Favourable Condition within designation sites. The SLG reports to the Protected Areas Group which provides strategic oversight of initiatives within protected areas that contribute to the delivery of Scottish Biodiversity Strategy. Over 80% of features on Scottish Water sites are currently in favorable condition; and if sites where there is no on-site remedy are discounted, this figure rises to over 90%.
4.3	Integrate protected areas policy with action for wider habitats to combat fragmentation and restore key habitats.	Not applicable.
4.4	Develop a wildlife management framework to address the key priorities for sustainable species management, conservation and conflict issues, including reintroductions and invasive nonnative species.	<p>In addition to the management approaches associated with planned projects, Scottish Water issues internal guidance annually to ensure protection for all wild birds during the nesting season, highlighting that certain maintenance activities and operations must be avoided or, when essential, risk assessments are carried out and specialist advice is taken when licencing options must be considered.</p> <p>Scottish Water is a corresponding member of the National Species Reintroduction Forum to understand advice as appropriate in relation to species, such as Beaver and Lynx that may impact on our assets or staff attending to operational activities.</p> <p>During 2016 Scottish Water delivered a project to control American Signal Crayfish (ASC) in Buittle reservoir. Working with multiple stakeholders we commissioned a survey to determine ASC population status within and in the vicinity of the reservoir, determine possible pathways of spread and recommend an action plan or programme of measures to prevent this happening. These actions are now being delivered.</p>
4.5	Involve many more people than at present in this work and improve our understanding of the poorly known elements of nature.	Not applicable.

Big Steps for Nature
from Scotland's Biodiversity -
A Route Map to 2020

Contributing actions, Scotland's Biodiversity Priority
Projects & Targets for Ecosystem Restoration and Actions
identified by Scottish Water

5. Sustainable management of land and freshwater

5.1	Promote an ecosystem approach to land management that fosters sustainable use of natural resources and puts biodiversity at the heart of land-use planning and decisionmaking.	<p>Scottish Water's supplies of raw water can be affected by land management practices such as pesticide and nutrient application, inappropriate cultivation or livestock access to watercourses. We are looking for new and alternative approaches through sustainable land management, providing the opportunity to enhance and maintain high quality supply drinking water, providing even greater value for money for our customers and delivering real environmental improvements.</p> <p>Scottish Water has delivered our first peat restoration project to help improve source water quality at Sandy Loch in Orkney, and has received a local environmental award.</p>
5.2	Ensure that measures taken forward under the Common Agricultural Policy encourage land managers to develop and retain the diversity of wildlife habitats and landscape features.	Scottish Water manages the land it owns at Lintrathen Loch for arable farming and forestry in a way compatible with the provision of drinking water.
5.3	Support 'High Nature Value' farming and forestry.	Scottish Water operates in key catchments to promote responsible practice by engaging with farmers and landowners to promote an understanding of current legislation and guidelines.



View of Loch of Lintrathen, showing forestry and farmland

Big Steps for Nature from Scotland's Biodiversity - A Route Map to 2020

Contributing actions, Scotland's Biodiversity Priority Projects & Targets for Ecosystem Restoration and Actions identified by Scottish Water

<p>5.4</p>	<p>Put in place the management necessary to bring Scotland's protected areas into favourable condition and improve the ecological status of water bodies.</p>	<p>Scottish Water engaged with SNH to inform the development of the 2015-21 investment programmes which identified a number of actions to support ecological quality through Water Framework Directive (WFD).</p> <p>In discharging our water and waste water services we operate to thousands of regulatory permissions to protect the environment. Sites with designations such as Special Areas of Conservation inform these regulatory permissions. We work with SEPA and SNH to apply a scientific and evidence based approach to ensure investment has direct beneficial outcomes for the environment and for customers. Current actions relevant to protected areas include:</p> <ul style="list-style-type: none"> • Study to determine the need and cost solutions for an abandoned Scottish Water weir for the benefit of a Special Area of Conservation (SAC) and population of Fresh Water Pearl Mussels. • Study to assess the feasibility, impact and investment needs of lowering water levels at Gladhouse Reservoir during the wintering period for visiting pink-footed geese. • Studies (hotspot and environmental quality assessments) in the Moray Firth to support appropriate actions to protect bottle nosed dolphins in the Moray Firth SAC. We were able to use data from acoustically monitored dolphin activity from 31 acoustic pod sites and determine statistically significant areas for dolphin activity. This work has informed waste water investment activities in the Moray Firth, including installing ultra violet disinfection and extending outfalls into deeper water. • Two studies to assess whether there is sufficient fish habitat upstream of impoundment sites have been completed. • Five Water Framework Directive (Fish Barriers) studies are in progress to assess impact and provide options for potential delivery of fish passages at impoundment sites. • Seven Water Framework Directive studies for Abstraction projects are in progress to assess compliance of existing licensed maximum abstractions and where required, provide options, identify needs and actions for delivery of compliance at abstraction sites to sustain appropriate environmental conditions. • Scottish Water has delivered four projects where the compensation release from four reservoirs was increased to bring the downstream water bodies to Good Ecological Potential (for Heavily Modified Water Bodies) or to Good Ecological Status.
<p>5.5</p>	<p>Ensure that biodiversity and ecosystem objectives are fully integrated into flood risk management plans, and restore wetland habitats and woodlands to provide sustainable flood management.</p>	<p>Scottish Water's Sewers for Scotland 3rd edition – Technical specification for developers when designing and constructing sewerage infrastructure, e.g. sewers, pumping stations and Sustainable Urban Drainage Systems (SUDS) which may then be vested with Scottish Water. The provision and ongoing maintenance of public urban drainage systems is important for flood mitigation, public health and to protect the environment; there is also some scope for some amenity and ecological benefits.</p>

Big Steps for Nature from Scotland's Biodiversity - A Route Map to 2020

Contributing actions, Scotland's Biodiversity Priority Projects & Targets for Ecosystem Restoration and Actions identified by Scottish Water

5.6	Restore and extend natural habitats as a means of building reserves of carbon and to help mitigate climate change.	<p>Scottish Water's work to update climate change risk assessment includes putting in place additional water catchment monitoring to better understand how drinking water catchments are responding to climate change. Collectively with the work to restore peatlands and advise on catchment sensitive farming, it is hoped that this investment in natural capital will increase the resilience of catchments to support good water quality.</p> <p>Scottish Water has been carrying out trials at waste water treatment works to investigate the potential to vary the level of treatment during specified environmental conditions as a prospective method for reducing carbon emissions and energy consumption. This may also improve operational resilience to climate change, without adversely affecting receiving water quality within the regulatory framework.</p>
5.7	Provide clear advice to land and water managers on best practice.	Scottish Water regularly engages with landowners and farmers to provide support and advice on water quality, regulations and best practice.



Example of a SUDS retention pond in Dunfermline, Fife.

Big Steps for Nature
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Contributing actions, Scotland's Biodiversity Priority
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6. Marine and coastal

6.1	Adopt a Scottish Marine Plan and develop regional marine plans to aid balanced decision – making in the marine environment.	Scottish Water will contribute to the review of the National Marine Plan in terms of how it may operate within the waste water sector.
6.2	Establish a coherent network of Marine Protected Areas, promoting sustainable use and conservation.	Scottish Water consults with SNH and other stakeholders when an MPA may be affected by proposals in a development project.
6.3	Collate information on the location and sensitivity of priority marine features, and make this information available to support their protection.	As noted in 5.4 we will work with SEPA, SNH and others to understand the natural heritage needs in the marine environment where it is associated with potential investment needs for our assets.



Bottle-nosed dolphins in the Moray Firth.

**Big Steps for Nature
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**Contributing actions, Scotland's Biodiversity Priority
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6.4	Achieve good environmental status for Scottish seas.	<p>Scottish Water operates and supports compliance at around 1,800 waste water treatment works, each with regulatory permissions intended to protect the environment. Licences are set to protect the ecological status of receiving waters under the Water Framework Directive and, where appropriate, bathing water and shellfish water designations. Where enhancement needs are identified, we work with SEPA and others to prioritise investment in our regulatory programme. A key focus at present is supporting Scotland's Bathing Water objectives through significant investment to improve sewer networks and treatment works at several locations around Scotland.</p> <p>Scottish Water is a member of the Marine Litter Strategy Group and contributed a Case Study to the Draft Scottish Marine Litter Strategy Consultation in September 2013. We have initiated a Forth Estuary Study (FES) to undertake monitoring and survey work to understand the impact of our assets on marine litter in the Forth. This will cover the asset performance and tools to understand the hydrodynamics of the Forth to inform future needs, due to complete in June 2018.</p>
6.5	Bring Common fisheries Policy fish stocks to levels consistent with Maximum Sustainable Yield wherever possible, and take into account biodiversity in managing inshore fisheries.	Not applicable.
6.6	Implement a rapid response framework to prevent colonisation of new invasive species in Scotland's seas and islands.	Scottish Water maintains awareness through working with SNH, Scottish Government and SEPA and attending events such as SNH Sharing Good Practice (SGP).
6.7	Improve the monitoring of the marine environment to identify changes and guide progress towards the above outcome.	Not applicable.
6.8	Improve understanding of how coastal ecosystems are likely to adapt to climate change and develop strategies for coastal zone management.	Not applicable.

Operational carbon footprint 2016/17

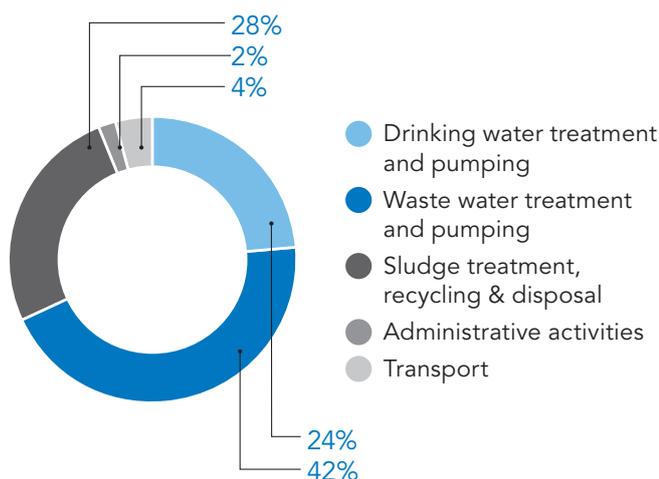
We are pleased to report that our operational carbon footprint (CFP) for 2016/17 was 352,000^{1,2}, tonnes of carbon dioxide equivalent (tCO₂e); a decrease of around 38,000 tCO₂e or nearly 10% compared to 2015/16. We have seen our CFP fall by nearly 24% since we started reporting in 2006/07.

This, our 11th annual operational footprint report, covers the greenhouse gas (GHG) emissions associated with the delivery of water and waste water services to customers across Scotland. In keeping with all other UK water companies, we use the Carbon Accounting Workbook (CAW) developed by UK Water Industry Research (UKWIR). This was developed in partnership with the Carbon Trust and is updated annually to reflect the latest emissions factors, accounting rules and guidance from the Department for Environment, Food & Rural Affairs (Defra) and the Department for Business, Energy and Industrial Strategy (BEIS).

Our footprint is externally verified in accordance with ISO 14064-3, a process that provides assurance that our reporting is relevant, complete, consistent, accurate and transparent.

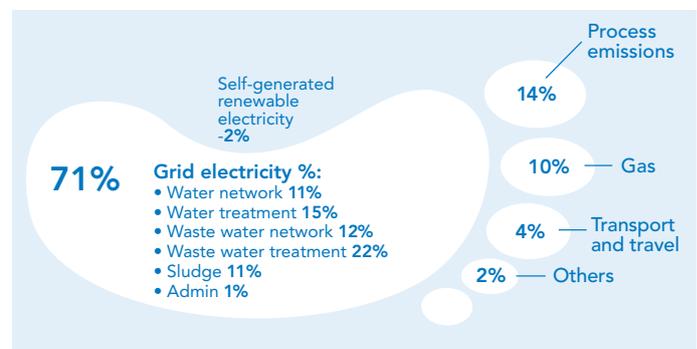
The chart below shows our CFP broken down by the types of **activities** that deliver our services. It shows that the majority of our emissions, 70% of the total, are produced through the treatment of waste water and sludge (the treatment and pumping of waste water and the treatment and recycling of sludge). Our emissions relating to transport make up only 4% of our CFP, despite operating a large fleet across a wide geographical area.

GHG emissions by activity 2016/17



Another way to look at the CFP is to examine the **sources** of emissions, as shown in the foot diagram below. We can see that grid electricity is by far the largest contributor at 71%. Process emissions (GHGs such as methane and nitrous oxide formed from organic matter breakdown), and natural gas use also make significant contributions at 14% and 10%.

GHG emissions by source 2016/17



Defra advises reporting GHG emissions in terms of **'Scope'**:

- Scope 1 – Direct emissions: on-site combustion of fossil fuels; process emissions; and emissions from vehicles owned or leased by Scottish Water.
- Scope 2 – Indirect emissions: use of grid electricity.
- Scope 3 – Indirect emissions: business travel by public transport and private vehicles used for company business; outsourced activities (including sites run by PFI companies³ on our behalf, including their electricity use); emissions associated with electricity lost in the electrical transmission and distribution system.

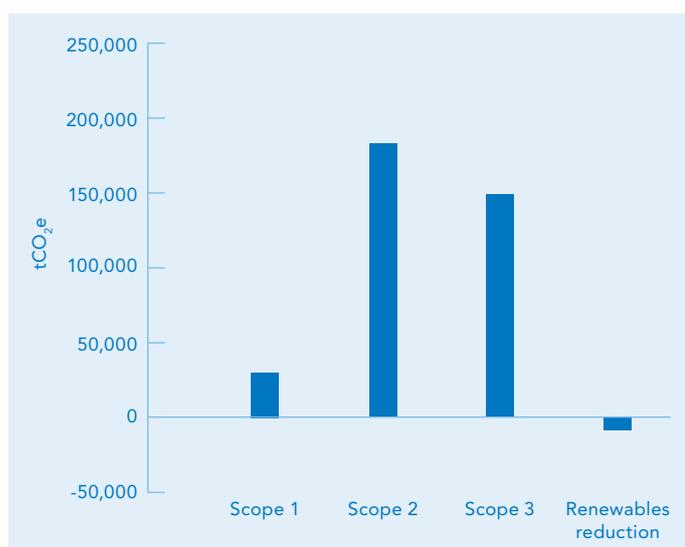
We show our emissions by scope in the chart on the following page. This confirms that most emissions are from our own use of grid electricity (scope 2). It also shows that scope 3 emissions are high. This is due to electricity use at many of the largest waste water treatment works, which are PFI operated.

¹ This value is rounded to the nearest thousand tonnes.

² Our CFP includes waste sent to landfill, which is excluded by water companies in England and Wales. Therefore for comparison purposes, our 'water industry comparable' CFP is 350,000 tCO₂e.

³ Some of our waste water treatment works are run on our behalf by Private Finance Initiative (PFI) companies. The emissions from these sites are included in our CFP as Scope 3.

GHG emissions by scope 2016/17



Carbon Intensity of Water and Waste water

It is useful to understand the carbon intensity of our service – the amount of carbon emitted to treat and supply a litre of water, or collect and treat a litre of waste water.

Our water service has the lowest carbon intensities in the UK. This is mainly due to more opportunity to use gravity to supply our customers (rather than pumping).

The carbon intensity of our waste water service is below the UK average. The metric takes account of the 'flow to full treatment' (i.e. it includes much of the rain water that enters our sewers) and is a more accurate reflection of the carbon intensity of pumping and treatment than calculations using only foul discharges to sewer.

Customers who know how much water they use and waste water they produce (in litres or megalitres) can use the carbon intensity figures in the table below to calculate their water and waste water CFP (CO₂e in grams per litre (g/l) or tonnes per mega litre (t/MI))^{4,5}.

Customer footprinting

Emissions Sources	CO ₂ e emissions (g/l or t/MI)
Drinking water services – includes extraction, treatment & pumping of drinking water supply	0.15
Waste water services – includes pumping & treatment of waste water and transport & treatment of sludges	0.29 ⁶

Changes to the Carbon Accounting Workbook v11.3

The Carbon Accounting Workbook (CAW) is updated annually to take into account changes to emissions factors (EFs) or to reflect changes to reporting guidelines. For version 11.3 there were two areas where changes to emission factors had a significant impact:

Grid electricity emissions factor – This emissions factor (EF) represents average annual emissions (in KgCO₂e per kWh) for electricity in the UK national grid. It changes year to year as the fuels mix (coal, gas, nuclear, renewable etc.) used in power stations changes. The grid electricity EF decreased by just over 10% between 2015/16 and 2016/17, contributing directly to a fall in our carbon emissions.

Other fuels (diesel, kerosene & gasoil) – The EFs for these fuels increased by around 9%, 3% and 2% respectively. This had an impact on transport, and on on-site fuel emissions discussed on page 26.

⁴ Figures include emissions associated with administration, transport and waste sent to landfill; i.e. our whole operational footprint shared between water and waste water. They are indicative and based on the best available information. They will change over time and customers should ensure they use the latest figures if calculating emissions associated with their water and waste water services.

⁵ Water industry comparison: As with overall CFPs, UK water industry carbon intensity ratios exclude waste to landfill. Our 'water industry comparable' carbon intensity figures are: Water = 0.13; Waste water = 0.28.

⁶ The carbon intensity figure for waste water is comparable to 2014/15 onwards but not the years prior to that because the metric has changed as explained in previous reports.

Changes to our carbon footprint

Across the first eight years we reported our CFP (2006/07 to 2013/14) we saw a consistent downward trend in our emissions, leading to an overall reduction of over 18%. The majority of this reduction (almost 15%) was attributable to Scottish Water activities such as leakage reduction, investment in energy efficiency and renewable generation. The remaining 3% was due to changes to the grid electricity EF.

Due to increases in the grid electricity EF in 2014/15, there was a partial reversal in the downward trend. The grid electricity EF then decreased again in 2015/16 and 2016/17. The emission factor fell by 10% between 2015/16 and 2016/17, and is forecast to continue to fall in the coming years. Overall, since 2006/7 our footprint has fallen by 24%.

Differences in carbon footprint compared to 2015/16 CFP

Our carbon footprint fell by nearly 10% compared with 2015/16. It is important to understand changes between years and whether they are genuine or caused by a change in the accounting methodology. When we analyse changes between years, we split them into three categories. Often more than one category can have an impact on emissions from the same area of the CFP. The three categories we use are:

- **'Genuine'** – real changes in CO₂e emissions (i.e. from operational changes).
- **'Baseline'** – the inclusion of previously unavailable data or the exclusion of previously available data sources or changes in emissions factors. These changes may mask genuine increases and decreases.

- **'Reallocation'** – moving emissions from one part of the CFP to another (affecting the relative size of the divisions in the GHG emissions by activity diagram, on page 23, but not the total CFP).

Although we saw our carbon footprint decrease by around 38,000 tCO₂e in 2016/17 we saw increases and decreases across different sections of our carbon footprint:

- Grid electricity (decrease)
- Renewable electricity (increase)
- Other fuels (increase)
- Natural gas (increase)

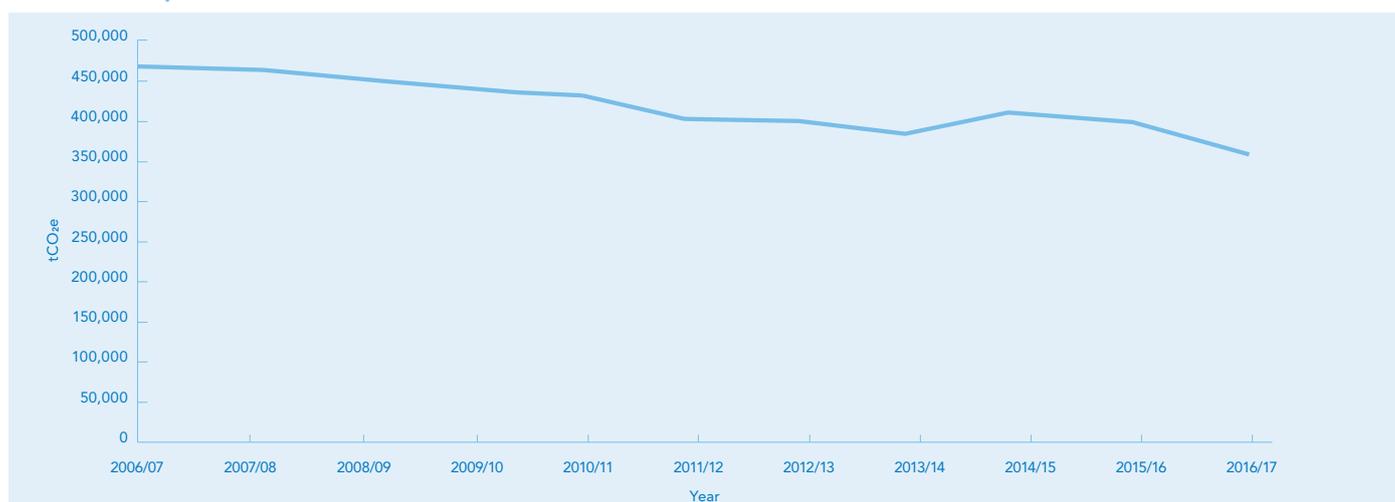
Grid electricity

We saw a decrease in the emissions relating to the use of grid electricity of 15%. Electricity emissions now make up 71% of the total carbon footprint, down from 76%. This reduction is a combination of baseline and genuine changes.

The decrease in the grid electricity EF discussed above accounted for around two thirds of the reduction in electricity emissions (around 30,000 tCO₂e). Around one third of the reduction (around 15,000 tCO₂e) resulted from a decrease in electricity used.

The total amount of grid electricity used decreased by 33 GWh (5%) There are two factors at play in this. 2016/17 was a drier year overall compared to 2015/16, this resulted in a decrease in the amount of waste water pumped and treated, hence electricity used. We also saw an increase in the amount of electricity produced by Combined Heat and Power (CHP) plants which reduced reliance on grid electricity.

Carbon footprint trend 2016/17



Renewable electricity

Scottish Water generates renewable electricity at a number of its sites. The electricity produced is either used on-site or exported to the grid. When we use REGO⁷ accredited renewable electricity that has been generated on one of our sites, no emissions are accrued for the use of this electricity. If the REGO accredited electricity is exported, we have a carbon saving. Where the renewable electricity used is not REGO accredited, the emissions are accounted for in the same way as when grid electricity is used.

In 2016/17 the carbon saving (subtracted from our carbon footprint) due to the export of REGO accredited renewable electricity was over 6,000 tCO₂e. This reduction is smaller than 2015/16 (by around 1,200 tCO₂e). The reduction in the grid EF reduced the carbon saving from exporting REGO electricity. Therefore, despite an increase in REGO accredited renewable electricity used on-site or exported, the carbon benefit to Scottish Water decreased.

Other fuels (diesel, gasoil, kerosene & propane)

Emissions from fuels used on-site, such as gas oil, kerosene, diesel and propane, are aggregated and reported as 'other fuels'. Emissions from 'other fuels' account for less than 2% of our total carbon footprint. We did however see an increase of over 3,000 tCO₂e compared to the previous year.

One cause of this is the increase in the emissions factors for diesel, kerosene and gas oil, as noted on page 25. However, the main cause is due to an increased amount of these fuels purchased in 2016/17.

These fuels are most often used in generators and mobile plant or, in the case of propane and kerosene, for heating. The amount used depends upon operational reasons, for example a reduced need for heating, or an increased in the use of mobile plant such as pumps and generators.

The change covers a number of sites, so it is difficult to clearly attribute this increase precisely. It is likely to be a combination of increased use of mobile plant and bulk purchase to replenish stocks. It should be noted that 'other fuels' are a measure of fuels purchased in that year, not necessarily used.

Natural Gas

Emissions relating to the use of natural gas have increased by over 2,000 tCO₂e (6%). This is due to a genuine increase in the amount of natural gas used. This increase occurred at sites operated on a PFI basis and was caused by increased use of thermal driers for drying sludge.

Verification

Once completed, our CFP was externally verified by a consultancy experienced in GHG inventories, who stated:

"Scottish Water's 2016/17 Carbon Footprint is materially correct and a fair representation of the organisation's footprint, based upon the data available, and has been calculated in accordance with the relevant UKWIR methodology. As such, it can be published with a reasonable degree of confidence."

Conclusion

2016/17 saw our lowest ever carbon footprint, and the largest percentage drop in emissions since we started reporting our carbon footprint a decade ago.

Our carbon footprint is now 24% lower than it was in 2006/07. Over that time, most of the reductions have been genuine due to operational efficiency, leakage reduction and renewable power generation. The main contributor to the reduction since 2015/16 is a reduction in the carbon intensity of grid electricity; with further savings made through reduced grid electricity use due to lower flows and increased electricity production from CHP.

The electricity EF is forecast to continue to decrease year on year. In 2017/18 the EF will decrease by around 14% which will have a significant impact on our reported footprint.

⁷ Renewable Energy Guarantees of Origin

Carbon footprint report glossary

CAW – Carbon Accounting Workbook

This is the tool that all UK water companies use to calculate their operational carbon footprint. Using the same accounting tool ensures consistency of approach for Regulators.

CFP – Carbon Footprint

This is the reportable amount of carbon that we have emitted as a result of our operations. It is expressed as tonnes of carbon dioxide equivalent.

Defra – Department for Environment, Food and Rural Affairs

BEIS – Department for Business, Energy and Industrial Strategy

EF – Emissions Factor

A figure used to calculate GHG emissions resulting from a unit of material or fuel, such as kilowatt hour of grid electricity or litre of diesel.

PFI – Private Finance Initiative

A number of large waste water treatment works are operated on Scottish Water's behalf by private companies. The emissions associated with these works are reported as part of our operational carbon footprint.

GHG – Greenhouse Gas

Greenhouse gases, including carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) as well as some refrigerant gases.

ISO 14064

The international standard that specifies how organisations should quantify and report their greenhouse gas emissions. ISO 14064-3 specifies the verification process for emissions reports.

GWh – Gigawatt Hour

One thousand kilowatt hours.

MWh – Gigawatt Hour

One hundred kilowatt hours.

kWh – Kilowatt Hour

A standard measure of energy, used to report consumption of electricity or natural gas.

REGO – Renewable Energy Guarantees of Origin

Ofgem issues to generators of renewable electricity, one REGO certificate per megawatt hour (MWh) of eligible renewable output.

tCO₂e/kgCO₂e – Tonnes/ Kilograms of Carbon Dioxide Equivalent

This measure allows us to express the impact of different greenhouse gases in terms of the amount of carbon dioxide that would create the same amount of warming.

UKWIR – UK Water Industry Research Ltd

A not-for-profit company that conducts research on behalf of the UK water industry. UKWIR develops the Carbon Accounting Workbook used to calculate carbon footprints

The water industry in Scotland

Regulators provide assurance that Scottish Water meets the interests of our customers, protects the quality of drinking water and the environment, and is accountable for our performance.

The water industry in Scotland is regulated as shown in the diagram on this page.

The Scottish Parliament

Holds Scottish Water and Scottish Ministers to account and regularly calls executives to its committees to give progress updates.

The Scottish Government

Scottish Ministers set the objectives for Scottish Water and appoint the Chair and Non-executive Members.

Scottish Water

Responsible for providing water and waste water services to household customers and wholesale Licensed Providers Delivers the investment priorities of Scottish Ministers within the funding allowed by the Water Industry Commission for Scotland.

Water Industry Commission for Scotland (WICS)

Economic regulator. Sets charges and reports on costs and performance.

Drinking Water Quality Regulator (DWQR)

Responsible for protecting public health by ensuring compliance with drinking water quality regulations.

Scottish Environment Protection Agency (SEPA)

Responsible for environmental protection and improvement.

Scottish Public Services Ombudsman (SPSO)

Responsible for investigating complaints about public services in Scotland, including Scottish Water, once the services' complaints procedure has been completed and sharing lessons from complaints to improve the delivery of public services.

Citizens Advice Scotland (CAS)

Represents the interests of consumers within Scotland's water industry.

Customer Forum

Responsible for ensuring that customers have a clear voice in the business planning and price setting processes and at the heart of key decisions that affect the services Scottish Water customers pay for.

Other regulators

Like other companies and utilities, Scottish Water is also regulated by a variety of other bodies such as the Health and Safety Executive (HSE), Environmental Health Officers and the Scottish Road Works Commissioner.



For more information on Scottish Water and our services visit www.scottishwater.co.uk or contact our Customer Helpline on **0800 0778778***.

* We record all calls for quality and training purposes.