



Biodiversity Duty Report
Scottish Enterprise
2018-2020

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Section 1: Introductory information about your public body

Scottish Enterprise (SE) is Scotland's national economic development agency and a non-departmental public body of the Scottish Government (SG). Working with our partners, SE seeks to identify and exploit opportunities for Scotland to create a more resilient and thriving economy, building a world-class business environment where people want to come to live, work, study and invest - creating and taking up high value job opportunities.

Our Strategic Framework is set within the context of Scotland's overall economic agenda – the Scottish Government and Enterprise and Skills Strategic Board's vision of creating a more successful country with opportunities for all of Scotland to flourish through increased wellbeing, and sustainable and inclusive economic growth.

SE's approach to Net Zero and Natural Capital

As an economic development agency, SE's strategic approach is to focus on realising climate-related economic opportunities.

We are building on strong foundations. SE has actively addressed low carbon opportunities that have delivered economic impacts for well over a decade: for example, supporting a thriving renewables industry, providing specialist support on business sustainability and circular economy innovation.

In our recent Framework for Action – 'From Climate Emergency to Climate Opportunity' we set out our priorities for climate opportunities now and over the period to 2025. This Framework prioritises seven themes:

1. Stimulating climate opportunities
2. Addressing major economic opportunities
3. Adopting a values-led approach to business support
4. Facilitating sector transitions
5. Aligning trade and investment support
6. Supporting CoP26
7. Reducing SE's own carbon footprint

Our approach will also result in a range of environmental benefits, including emissions reduction (in Scotland and internationally) and support for nature-based solutions including biodiversity restoration.

One of our interests as an economic development agency is in developing and having available market ready sites that support sustainable economic growth. This need underpins our approach to biodiversity. Understanding sensitivities associated with the sites and addressing these early through survey, assessment and a clear strategy to facilitate future development ensures a high level of assurance to potential development partners, purchasers and inward investment inquiries.

SE manages a significant number of assets across Scotland, many of which have been subject to a range of environmental and ecological surveys to identify sensitivities relating to natural capital and how these need to be protected and managed during the development process and enhanced where appropriate. Biodiversity, ecology and nature conservation are considered fully at key stages in our operations.

Section 2: Actions to protect biodiversity and connect people with nature

The actions we have taken towards the protection of biodiversity and connecting people with nature are summarised below.

Partnership Working

SE is working closely with SEPA, NatureScot and other partners to consider interventions to abate and mitigate some of the most severe consequences of biodiversity loss. Martin Valenti, SE's Head of Climate Enterprise is on secondment from SEPA to support SE in driving the ideas and initiatives that support biodiversity including developing thinking on using our natural capital with a key focus on identifying nature based solutions for businesses to deploy as part of their Net Zero actions.

Cairngorms National Park Green Recovery Plan

SE is part of the Cairngorms Economic Steering Group. The Park Authority recently published its **Cairngorms National Park (CNP) Green Recovery Plan**, in response to the significant economic challenges it is facing due to the pandemic, with a heavy reliance on tourism. The Plan, which is aligned to the Scottish Government's recovery plan to deliver a fairer, greener and more equal society, aims to protect and restore the natural and social capital of the park, ensuring that the recovery plan helps to tackle the climate emergency and biodiversity crisis working closely with business and communities. SE is a key partner in the following areas:

- Development of Growbiz 'Smart Villages' to enhance digital connectivity and business resilience post Covid. A Smart Village can be a driver for change making a village better economically, socially and physically.
- Seek resource (people, partners) to research, investigate and plan for how the Park builds resilience, sustainability and diversification into the Cairngorms economy – a new approach to economic development with climate and sustainability at the centre. This will form part of the next National Park Partnership Plan.

Local Action Groups

SE Chairs the **South Aberdeenshire Local Action Group (SALAG)**, a partnership of community, private and public sector organisations, supported by a dedicated Secretariat, which established the Ury Riverside as a park and restored the wetland environment. The now established park covers 61 hectares, located at the edge of Inverurie, and is part of the green corridor along the River Ury linking the rural areas of Aberdeenshire with the urban community of Inverurie, forming an important part of the natural floodplain of the River Ury and the wider River Don catchment. The project allowed the protection of the floodplain but has also provided habitat for birds and animals in the area. There are also educational and information boards to inform the public about planting, biodiversity and the environment.

The SALAG is part of the LEADER 2014-2020 programme and is the latest (and last) in a series of programmes funded by the EU for rural development. LEADER has been part of the Scottish Rural Development Programme (SRDP) funding allocation. SRDP 2014-2020 funds economic, environmental and social measures for the benefit of rural Scotland. Approximately £2.8m was allocated to SALAG to support a bottom-up, community-led approach to delivering the South Aberdeenshire Local Development Strategy.

Another example of a project benefitting from this support is the Rural Perth and Kinross Local Action Group (RPK LAG) which delivered the Coupar Burn Community Biodiversity Project. The purpose of the project was to provide balanced management to enhance the area for nature conservation and biodiversity, provide a new amenity for residents and to help reduce the risk of flooding.

CAN DO Innovation Challenge Fund Projects

The CAN DO Innovation Challenge Fund is led by SE but managed through a partnership with Highlands and Islands Enterprise (HIE), SG and the Scottish Funding Council (SFC). The national fund supports Scottish public sector organisations to co-develop innovative solutions to operational service and policy delivery challenges with SMEs. The following case studies of funded projects have a core focus of activity related to biodiversity protection, enhancement or engagement. Each of the following examples have received funding and support from SE through the CAN DO fund.

Encouraging and supporting engagement with our natural environment

The challenge: NatureScot were seeking innovative solutions to one of the greatest societal challenges of our time - how to better connect people, especially the young, with nature - it is well known that spending time in nature has enormous benefits for health and well-being, educational attainment and personal development. NatureScot also required an innovative way to help them to reduce the resource required to facilitate visits to their sites, as their budget for the activity was being increasingly squeezed.

The project: Glasgow based tech innovator Oxido received SE funding of £216K to develop a [digital app](#) to support NatureScot to facilitate site visits and to provide a wider nature based educational role. The app provides users with information on species in their location and encourages exploration of the natural environment wherever you are, through gamification techniques. The company are currently commercialising the app out with NatureScot – aiming their product at school education, green prescribing and other markets.

Eliminating Invasive Species

The challenge: The British Waterways Board operating as Scottish Canals in Scotland, was looking for a solution to control the spread of a non-native invasive amphibious plant, New Zealand Pigmy weed (NZZP), recently found growing in the Caledonian Canal. The plant has the potential to have significant economic, recreational and environmental impacts. NZZP is known to establish dense, floating or submerged populations that displace native aquatic plants, decrease biodiversity, alter water conditions including flood risk, and harm the aesthetic and recreational water bodies. The Caledonian Canal contributes significantly to the economy of the Highland region and is an important environmental asset. In the past 3 years, NZZP was introduced and has already colonized over 1200m of the Caledonian Canal in Inverness.

The project: 4 innovative concepts were developed by companies during the phase 1 CAN DO project, with the support of £150k funding from SE and Scottish Canals and the companies are keen to move forward to phase 2 which will develop and test the prototype solutions.

Improving tree seed yields – Forest & Land Scotland

The challenge: Forest and Land Scotland (FLS) grow saplings in tree nurseries from seeds collected from special seed orchards which take 20 years to establish. There are inherent challenges in maintaining a supply of seed. Therefore, the existing seed stocks must be used more efficiently. FLS's challenge is to develop innovative solutions that can increase the yield from existing and limited seed stock. The CAN DO Fund provided funding and the challenge was ran through SG's Civitech process.

The project: An innovative new system called '[Tree Tape](#)' was developed, which is a modification of leading vegetable growing technology, with £120K of support from SE through the CAN DO fund. FLS conducted full scale field trials at their Newton Nursery (near Elgin). The trials of this revolutionary new seed propagation and planting system have proved to be a huge success – achieving an almost 2000 percent increase in per person productivity compared with conventional methods. Josh Roberts, FLS's innovation manager, said "This technology will certainly help FLS to make a big contribution to Scotland's future climate emergency effort, but it's also a technology that could deliver benefits to forestry around the world.

Scottish Forum on Natural Capital

SE is a member of Scotland's Natural Capital Forum, an initiative which brings together public, private and third sector organisations to protect and enhance Scotland's natural capital. The forum currently chaired by NatureScot has hosted four high-level public sector roundtables since they were first convened in 2017. These roundtables are used to shape how we progress the SG commitments on natural capital, share expertise, explore approaches and develop joint actions.

SEFARI Fellowship

In liaison with SE and NatureScot, a new Knowledge Exchange and Impact Fellowship with the Scottish Forum on Natural Capital, has been established. SE is part of the steering group for this Knowledge Exchange, providing access to rural businesses through the rural leadership programme.

This fellowship offers the chance to contribute to the Scottish Forum's work to help businesses understand how they rely on, have an impact on and can develop business opportunities from natural capital, and encourage action to protect and enhance Scotland's natural wealth. Specifically, it will aim to work with businesses to understand how taking account of these connections with nature can provide benefits, such as improving the long-term productivity and viability of their business, managing risk and demonstrating their green credentials.

It will focus on the SMEs and micro-businesses in the food and drink sector and findings will be connected via SEFARI Gateway and the Scottish Forum on Natural Capital into post COVID-19 Food and Drink and rural sector green recovery discussions where appropriate.

Agri –Tourism Monitor Farm Initiative

SE's Agri Tourism Monitor Initiative is working with over 60 land-based businesses over a three-year period. Part of this work involves helping these land-based businesses use the promotion of the environment and wildlife to visitors and to consider new opportunities offered by our natural capital.

The Leven Programme

The Leven Programme is a regeneration initiative, involving many key government agencies, non-government organisations, private sector and local communities including SE, working closely together to help deliver environmental improvements in and around the River Leven in Fife. SE is a partner at programme level, with a supporting role in a number of the identified themes: Productive People and Place; Connectivity; and Decarbonisation. Most notably the Connectivity Project seeks to establish a green network to connect people and communities with the River Leven. To date there has been a wide degree of community engagement on this, together with a number of events to highlight and raise awareness of the local nature such as otter spotting tours.

The aim of the programme is to help deliver a range of environmental enhancements in and around the River Leven that will breathe life back into the river and improve the areas within the catchment, making them great places to live, work and visit. This will be achieved by improving the physical and ecological conditions of the river, creating better access to the river and between communities, and creating opportunities to improve people's health, well-being and economic prospects.

The theme activity which SE will support is still at an early stage, as is the overall programme and therefore the first recorded benefits are anticipated to follow in the next reporting period.

Alba Trees

[Alba Trees](#) located in East Lothian near Edinburgh have grown rapidly in recent years, thanks to the current demand for wild native tree species. SE support to Alba Trees included introductions to potential sites and renewables developers including East Lothian Council's Blindwells and Cockenzie development areas, to allow for expansion. Alba Trees has two tree nursery sites covering a total of 13 hectares, which produce over 10 million trees a year.

Scottish Water Horizons

SE supported Scottish Water Horizons (SWH) to explore the opportunity to use heat from their anaerobic digester to heat a large horticulture project that aims to grow wild trees to rewild some of Scottish Water's large land holdings. SE support included linking the project with potential developers and EFRS assistance with identifying data sets highlighting potential customers for rewilding species. Anaerobic digestion technology is used to generate green renewable energy from food waste at the recycling facility near Cumbernauld and is controlled by strict environmental regulations.

SE Place Portfolio

As outlined in the introduction, SE manages a number of assets across Scotland. Highlighted below is the approach we take and the work we do to identify biodiversity assets on the sites we own and manage.

Early Feasibility and Due Diligence:

Sites are usually subject to early due diligence to determine any environmental and ecological constraints to future development prior to purchase:

- Baseline data collation - review of available desk top data, biodiversity reports and historical records
- Commissioning early environmental and ecological walkover surveys to establish possible constraints to development and requirements for further survey and assessment / mitigation
- Establishing other environmental features with links to biodiversity – surface water features and drainage, trees and woodland cover, ground conditions, Invasive Non-Native Species (INNS)

Consultation and Engagement:

We have regular contact with relevant Local Authority teams as well as environmental consultees (NatureScot, Historic Environment Scotland (HES), Scottish Environmental Protection Agency (SEPA) and Royal Society for the Protection of Birds (RSPB)).

- We provide data to others through partnership arrangements on biodiversity – ecological survey findings and access to sites for research
- We work closely with SG Directorates including Marine Scotland on projects which affect our coastal sites

Ecological Survey, Assessment and Reporting:

Where environmental or ecological interests are identified, SE regularly commission detailed ecological surveys to inform investment decisions, planning or site disposal / sales. Many of our sites have been subject to a level of ecological assessment with surveys commissioned including Extended Phase 1 Habitat Survey, National Vegetation Classification (NVC) Survey and Protected Species Surveys (badger, otter, water vole, great crested newt, breeding birds, wintering birds together with more specialist surveys) based on agreed methodologies. SE has commissioned:

- Detailed bat surveys based on Preliminary Roost Assessment, full activity surveys and in some cases, use of AUTOBAT technology.
- Physical survey and DNA testing for Great Crested Newt
- Tree surveys in accordance with the appropriate British Standard, with advice on protection and compensatory planting implemented
- Detailed INNS surveys for Japanese Knotweed and Giant Hogweed, with subsequent action on appropriate treatment and in some cases licensed disposal

A range of reporting and assessment has been produced to support development of our assets including Ecological Impact Assessment (EclA), Environmental Impact Assessment, Habitats Regulation Appraisal and Sustainability Assessment.

Biodiversity, Habitat Enhancement & Management Plans:

- We have commissioned a Habitat Management Plan (HMP) and Habitat and Biodiversity Action and Enhancement Plan (HBAEP) to support re-development of the former power station site at Longannet in recognition of proximity to the Firth of Forth Site of Special Scientific Interest (SSI) / Special Protection Areas (SPA) / Special Areas of Conservation (SAC) /Ramsar.
- We have recently committed to a 5-year Voluntary Management Plan on our site at Gartcosh to manage the habitats on site following over 15 years of work with North Lanarkshire Council and NatureScot to deliver the neighbouring Gartcosh Nature Reserve. We meet annually to discuss ongoing matters and provide input to the Gartcosh Reserve Management Plan.
- Some of our sites have been subject to Licences from NatureScot where Species Protection Plans and mitigation and enhancement have been agreed
- SE produced an INNS Strategy in 2016 which continues to be implemented by SE's Property and Asset Management Consultants and Landscape Contractors. This set out a treatment strategy for 20 sites with known INNS and a survey and treatment strategy for a further 66 sites across Scotland.
- Production of Site Wide and Phase specific Construction Environmental Management Plans (CEMPs) to support development and inform Construction Site Licence requirements which include ecological and biodiversity interests such as protected species, tree protection and sustainable drainage systems (SUDs).

BREEAM:

- SE has both built and specified buildings with BREEAM (the world's leading sustainability assessment method) ratings for sustainable design and construction.

- BREEAM Land Use and Ecology credits require consideration of ecological value and biodiversity at all project stages from design to construction and on to operation.
- SE has commissioned a 'suitably qualified ecologist' to advise on requirements where necessary.

Support to Purchasers / Developers / Lessee / Inward Investment Interests:

- Available ecological, environmental and other technical information is typically packaged up and issued to interested parties to highlight constraints and opportunities as part of due diligence.
- SE ensure ecological protection as part of 'Licence to Occupy' agreements for elements such as Site Investigations where there are sensitivities and require pre-start survey, detailed methodologies and Ecological Clerk of Works (ECOW) oversight on sites with known interest.
- SE in many cases have progressed sites through planning to secure consents in which cases, environmental and ecological mitigation plus biodiversity enhancements are committed through planning conditions e.g. landscape planting, native planting, newt friendly SUDs, tree protection and replacement, bat boxes etc.

Case Study – Former Longannet Power Station, Fife (2019 – Current)

Longannet Power Station currently owned by Scottish Power closed in 2016 and work to progress the demolition of the various building structures is underway and scheduled for completion in 2021. SE commissioned a consultant team to deliver planning permission in principle for the development of manufacturing facilities. The development comprises a flexible mix of Class 4 (Business), 5 (General Industrial), 6 (Storage & Distribution) and ancillary development. Consent was granted in 2020.

Working with partner organisations

SE conducted extensive consultation with wider stakeholders and interested parties, including NatureScot, SEPA, RSPB, and HES, as well as community consultation through consultation events. Consultation with the Scottish Power team was carried out at all stages of the planning application process and current discussions post consent to discharge planning conditions.

The regeneration and development of the Longannet site is being driven by SG, through organisations such as SE and the government appointed Longannet Task Force, in an effort to create employment and economic opportunities in Fife. SE are working with Fife Council to explore options for the future of the Longannet site based around a range of employment opportunities. Extensive ecological surveys - including habitats (Phase 1) and protected species (badger, otter, water vole, great crested newt) were undertaken based on agreed methodologies. Detailed bat surveys using remote AUTOBAT technology and DNA testing for great crested newt.

As part of the Environmental Impact Assessment (EIA), the likely consequences of the proposed development on all aspects of the environment and on public health and welfare were identified. The EIA Report informed the design through detailed site audits and surveys including air quality; noise; transport; disruption due to construction; landscape and visual; cultural heritage; ecology and species and habitat studies; geology; and the water environment. The EIA included a range of recommendations for mitigation where required including retention of trees and woodland planting and landscape and ecological measures to protect and enhance the site as it is re-developed.

Creation, enhancement and protection of wildlife and natural habitat

SE has commissioned a Habitat Management Plan (HMP) and Habitat and Biodiversity Action and Enhancement Plan (HBAEP) to support re-development of the former power station site at Longannet in recognition of proximity to the Firth of Forth SSSI/SPA/SAC/Ramsar.

Section 3: Mainstreaming biodiversity

Our biodiversity statement will be updated according to the three-year cycle to set out the priorities for the next three years. This statement will recognise changes to:

- New climate and environmental legislation
- Best practice guidelines
- Changes in practice e.g. INNS treatment
- Organisational change and priorities

As outlined in the introduction to this report in our recent Framework for Action – ‘From Climate Emergency to Climate Opportunity’ we set out our priorities for climate opportunities now and over the period to 2025. Those priorities included our support for nature-based solutions and ensuring we take into consideration biodiversity as part of our ongoing work and environmental responsibilities. We are working on developing a new operational policy that provides clear and ambitious direction to SE’s net zero activities which has our natural capital and biodiversity embedded at the heart of it.

SE Sustainable Procurement Strategy 2019-22

SE Procurement aims to make a meaningful contribution to Scotland's Economic Strategy and our Strategic Framework through the delivery of a transparent, efficient and effective procurement service which contributes to Scotland’s inclusive growth, offers value for money, is legally compliant and follows best practice. To strengthen our commitment to sustainable procurement, a member of the team has been identified to take forward the role of Sustainability Champion to ensure it is embedded within all relevant work.

SE Procurement recognises that procurement delivered in a sustainable way, can make a significant contribution in realising sustainable economic growth and achieving long-term social, economic and environmental benefits for all.

In 2019/2020 we reviewed our procurement processes in relation to sustainability and completed further sustainability training. This included reviewing Scottish Government’s sustainability assessment tools and examining how sustainability can be realised throughout the procurement process. As part of this commitment to ensuring that sustainability is embedded throughout the procurement life cycle, SE Procurement has implemented Scottish Government’s sustainability test.

Where appropriate, SE Procurement, for projects involving physical construction work, demolition, site enhancement and/or landscaping, will ensure that biodiversity is given due consideration. In these cases, an ecological assessment will be included as part of any site strategy.

In 2020/21, SE Procurement is working with a Sustainable Procurement expert to review and strengthen our approach and application of sustainability.

Project Life Cycle

As part of SE’s project approval process, all projects are required to complete a Carbon Assessment. As part of this assessment there are specific questions relating to the environmental impacts arising as a result of the project. Each project submission must outline how it will seek to minimise the environmental impact and maximise any environmental benefits.

Consideration of Biodiversity in Estate Management

The SE place portfolio team are well informed on ecological, nature conservation and biodiversity matters through the course of their work, as well as statutory duties. Our approach is based on:

- **Site Specific Knowledge** – many of our sites are long term assets and have been subject to a level of ecological survey and assessment as part of site management, development and acquisition and disposal. This information is made available to interested parties e.g. tenants / purchasers to inform their activities
- **Due Diligence** – early work to determine any environmental and ecological constraints to future development
- **Management and Maintenance of Estate** - working with our Asset Management Agents we regularly undertake bat surveys and other protected species surveys when undertaking building repairs or demolition / site clearance works. Similarly, we work with our landlords and tenants to ensure management and repairs are done in an appropriate way to avoid impacts on biodiversity e.g. landscape works, out with bird nesting season, mowing regimes, surveys where necessary
- **Partnership Approach** – we work closely with Local Authorities and their teams (Biodiversity Officers / Environmental Protection), statutory bodies (NatureScot / HES / SEPA and RSPB) and we have a network of external specialist consultants with whom we work regularly who we can also contact for advice and guidance on specific sites
- **Strategic Thinking** - SE produced an INNS Strategy in 2016 which continues to be implemented by SE's Property and Asset Management Consultants and Landscape Contractors. This set out a treatment strategy for 20 sites with known INNS and survey and a treatment strategy for a further 66 sites across Scotland
- **Sustainability** - SE has both built and specified buildings with BREEAM ratings for sustainable design and construction. BREEAM Land Use and Ecology credits require consideration of ecological value and biodiversity at all project stages from design to construction and on to operation
- **Promoting Awareness** - SE ensure ecological protection as part of 'Licence to Occupy' agreements for elements such as site investigations where there are sensitivities and require pre-start survey, detailed methodologies and ECOW oversight on sites with known interest
- **Planning and Consenting** - SE in many cases have progressed sites through planning to secure consents in which cases, environmental and ecological mitigation plus biodiversity enhancements are committed through planning conditions e.g. landscape planting, native planting, newt friendly SUDs, tree protection and replacement, bat boxes etc
- **Landscape Management** – working with our Asset Management Agents and Landscape Contractors, we actively manage and maintain our landscaped areas / trees etc. to ensure they are healthy. This work is informed by biodiversity considerations e.g. avoiding hedge cutting works during bird nesting season, surveys for bats in trees requiring work
- **Drainage and Water Management** – We work closely with others (Scottish Water / SEPA) to ensure we protect and manage our sites in accordance with relevant legislation and guidance on drainage, SUDs, flood risk, use of herbicides and pesticides and general management of our estate infrastructure. We often undertake ground condition assessment and remediation on sites in our portfolio

Case Study – INNS Strategy (2016 – Current)

SE commissioned an environmental consultant to deliver an Invasive Non-Native Species (INNS) Strategy for the SE network of sites. This included:

- A review of current Best Practice Guidance and Legislation relating to INNS in Scotland with a focus on Japanese Knotweed (*Fallopia* spp.) but also included Giant hogweed (*Heracleum Mantegazzianum*)
- Production of an INNS Strategy for the SE Site Portfolio to aid decision making on treatment options and to facilitate tendering under the next Landscape Maintenance Tender
- Strategy to cover the SE sites plus consideration of the nature of adjacent sites to determine risk of spread from other sites when feasible and safe

The purpose of this Strategy was to provide SE with a reference document in respect of obligations and actions in relation to invasive non-native plant species at sites where such plants are known or are likely to be encountered during landscape works. This was produced with input from SE's Asset Management Consultants and Landscape Consultant.

The aim of the strategy was to:

- Support SE in assessment of the biosecurity risk for every site
- Deliver management action where a risk is present
- Ensure that appropriate methods of control and/or disposal are employed
- Comply with current legislation and guidance

SE have a portfolio of 20 sites on which INNS management action is taking place to control Japanese knotweed (16 sites), Giant hogweed (3 sites) and New Zealand pygmy weed (1 site). In addition, there is a current portfolio of 66 sites which require assessment and potential action to maintain biosecurity as a responsible landowner and manager.

Section 4: Nature-based solutions, climate change and biodiversity

Much of the work we do at estates level addresses many of the local nature-based solutions identified by NatureScot as helping to deliver a range of socio-economic outcomes.

Nature-Based Solutions (from NatureScot 'People, Place and the Climate Emergency' document)	What we do?
Inclusive Economic Growth	Managing our property investment portfolio includes marketing our sites for inward investment and disposal of land and property to support sustainable economic growth in Scotland. We support a number of companies to identify, develop and deliver projects which lead to improved business efficiency. We use a diagnostic tool which uses a question set covering 5 general areas of activity: Management Commitment; Resource Management; Compliance & Risk; Customers & Supply Chain; and Corporate Social Responsibility. The Corporate Social Responsibility section contains questions relating to biodiversity activities undertaken by the company being assessed. We regularly undertake quality Masterplanning and use the Place Standard Tool for sites to identify sustainable development options which include measures to protect biodiversity and landscape.
Health and wellbeing	We seek to ensure our network of sites contribute to green networks through protection of existing and creation of new green infrastructure. We work in partnership with others to deliver projects that provide community as well as socio-economic benefits.
The Climate Emergency and loss of nature	We ensure we invest in green infrastructure and networks as part of management and investment in our sites – landscape management including trees and woodland, drainage and protection of the water environment through SUDs, protection of habitats and species (INNS treatment / habitat management) and commitment to securing advice from partner organisations, statutory consultees and specialists where required.
Young people, learning and play	Many of our sites are in urban areas and as part of Masterplanning we aim to develop sustainable places for communities, including young people. We undertake community engagement as part of projects, and this often includes engagement with young people and schools.
Stronger communities and sustainable places	We work with partners to tackle socio-economic issues through driving sustainable economic activity and securing quality inward investment opportunities which in turn support investment in communities, local infrastructure as well as greenspace, where appropriate.

As one of the biggest contributors to climate change, the built environment has the potential to make the biggest impact in reducing the world's carbon emissions. Incorporating green infrastructure, sustainable drainage / protection of water resources / soil management / woodland protection and addressing INNS are all areas we are currently working on both individually and with our partner organisations.

Soil Protection and Remediation - Many of our sites are post-industrial or have historical land uses which require investigation and in some cases remediation. Through Masterplanning where this is done, we look at cut and fill balances to ensure sustainable use of soils. We are currently looking at options for sustainable upfill on one of our sites – bringing in material from other sites to avoid material going to landfill.

Sustainability in Buildings - SE has both built and specified buildings with BREEAM ratings for sustainable design and construction. BREEAM Land Use and Ecology credits require consideration of ecological value and biodiversity at all project stages from design to construction and on to operation.

Green Infrastructure - Working with our Asset Management Agents and Landscape Contractors, we actively manage and maintain our landscaped areas / trees etc to ensure they are healthy. We also ensure management is done in a way which protects biodiversity. Masterplanning allows for identification of green networks and infrastructure and promotes native planting / appropriate species mixes for biodiversity as well as climate / disease resilience.

Drainage and Water Management - We work closely with others (Scottish Water / SEPA) to ensure we protect and manage our sites in accordance with relevant legislation and guidance on drainage, SUDs, flood risk, use of herbicides and pesticides and general management of our estate infrastructure.

SE is involved in a number of projects and areas of research and guidance relating to the Circular Economy and Net Zero by 2045. These include the SE Decommissioning Action Plan and Decommissioning Circular Economy Study: Oil and Gas Decommissioning – Opportunities to Increase Circular Economy Activity (December 2017). SE have been working closely with Zero Waste Scotland and other specialists on these projects. SE and Fife Council are working together with CessCon to secure oil and gas decommissioning at Energy Park, Fife. The project secured funding from the SG Decom Challenge Fund. As part of this project, a range of work was completed to demonstrate appropriate protection of the environmental and ecological sensitivities associated with the Firth of Forth SPA/SSSI/SAC.

Main climate change related challenges for biodiversity over the next three years

Key climate change related challenges for biodiversity over the next 3 years are considered to be changing conditions (temperature / rainfall / extremes of weather) and how these impact on aspects such as species and habitat range, success of INNS, and pressure for infrastructure upgrades to address resilience e.g. flooding and coastal erosion / slope stability etc.

Invasive Non-Native Species - Warmer and wetter conditions allowing INNS, to establish or spread further. We have already seen this in action within our portfolio of sites where areas have increased. Reduction in treatment options can be problematic and need for greater management / resource (time and cost). We continue to monitor through our INNS Strategy. We are taking advice from our Landscape Contractor as to success of measures and may need to revisit our strategy as a result.

Flood Risk / Erosion / Weather Extremes – Across our network of sites we have those that are located adjacent to watercourses as well as coastal sites. We have already seen impacts from greater intensity storm systems affecting coastal protection at Energy Park Fife (gabions washed away and greater wave intensity at quayside infrastructure) as well as localised issues at other locations (surface water flooding / drainage issues etc). We have other sites where groundwater levels have been problematic. We will continue to monitor these with our Asset Management Team. In the future, we would apply relevant scenarios to assessments we undertake such as Flood Risk Assessment, approach to SUDS and drainage capacity etc. In particular, need to consider impacts on biodiversity through any works undertaken.

Changing Conditions and Impacts on Estate – Wider land management practices may change e.g. using species which are more resilient to climate change in landscape schemes which could in turn impact on local biodiversity. We may see a change in distribution of species found on our sites.

Case Study – Orchardton Woods Masterplanning (2020)

The site covers approximately 27.33 hectares of land at Orchardton Woods, adjacent to Drum Mains Park and the Blackwood residential area of Cumbernauld, North Lanarkshire. Part of the site is allocated as a Regeneration Area (ref: LDP Site 13/02), falling within the Cumbernauld & Kilsyth Local Area Partnership. The area is identified for regeneration, encouraging a mix of uses across the site.

SE are working with North Lanarkshire Council to develop a bold and clear vision for land at Orchardton Woods, Cumbernauld that reflects the emerging Modified North Lanarkshire Local Development Plan and the ambitions and aspirations of both organisations. A Masterplan Framework has been prepared by consultants on behalf of SE.

The southern part of the site includes trees protected by a Tree Preservation Order and adjacent to the site is a **Site of Importance for Nature Conservation (SINC)**. Key development and design parameters applicable to the site, demonstrated through an outline masterplan. These have been informed through a contextual site appraisal and available technical information – ecological surveys and tree survey.

Creation, enhancement and protection of wildlife and natural habitat

- Landscape and Open Space (including Business Amenity Space) - The landscape strategy seeks to provide a co-ordinated green space network that builds on the existing landscape and environmental assets. Protection of existing woodland planting.
- The greenspace network integrates woodland, structure planting, biodiversity and habitat enhancement, SUDS, core path and local path networks with the new employment and residential greenspace and streetscape. Habitat connectivity with the adjacent SINC (Site of Importance for Nature Conservation).
- No development zone within 10 metres of woodland to be protected – in accordance with guidance from arboriculturists and ecologists.
- In addition to avenue tree planting, extensive use of hedge planting is proposed to add additional landscape as well as biodiversity interest.

Section 5: Public engagement and workforce development

Staff Volunteering

As part of our rewards package, we have a volunteering policy allowing employees to take up to 21 hours of paid volunteering leave per year. As part of our policy, volunteering projects should aim to primarily have a benefit to the environment or young people. Over the last three years (2018-2020), SE employees have undertaken a total of **733 hours** of volunteering activity with environmental and biodiversity benefits.

In 2018, during National Volunteers' Week from the 1 – 7 June, 44 employees spent a total of 308 hours cleaning our beaches. A group of 7 got together to clear litter from Rockcliffe Beach near Dalbeattie. A team of 7 spent the day at Maidens Beach; and 8 spent a day collecting litter at Donmouth Beach in Aberdeenshire.

Other examples of volunteering activity include:

- A community garden project at Dunmore Village, Falkirk
- Assisting/Managing Clydesdale Bank Volunteers at local community woodland project. Clearing paths, laying bark, planting hedgerows and trees
- Supporting Trees for Cities volunteers in planting fruit and woodland trees as part of Mount Vernon Community hall community garden and woodland area development
- Tidying up grounds at Caledonia Primary School

Naturally, due to the ongoing pandemic staff have been unable to engage in volunteering activities for the past 9 months, this has resulted in a lower number of volunteering hours being recorded in comparison to previous reports.

Workforce Skills and Training

The SE Procurement team undertook sustainability training in April 2018 with an external sustainability expert. To continue to develop and improve our sustainable procurement, two members of SE's Procurement team have recently been involved in a further sustainability review and mentoring project with the external sustainability expert.

The project brief included a review of:

- SE's procurement policies, strategies and Procurement Annual Report;
- Guidance on the implementation of SG Sustainable Procurement tools;
- Monitoring and reporting related to sustainability; and
- Sustainability process in procurement including Sustainability Test results and specifications.

The aim of the review and the subsequent recommendations was to assist SE Procurement to continue to develop our good practice around sustainable procurement in new and challenging circumstances.

A sustainability training day for the full Procurement team plus other colleagues, including Facilities Management Contract Managers, was scheduled to be held in March 2020. This has now been rescheduled to take place virtually in March 2021.

SE staff have access to OpenLearn, a free learning platform from the Open University, accessed from through the SE learning and development platform – SE Academy. Through this platform colleagues

can access a wide array of courses on nature and the environment from introductory through to advanced level.

We communicate regularly with staff in relation to Climate Change and Biodiversity, through our employee communication channels. We recently raised awareness of how we can improve biodiversity in our gardens at home through New Today (our employee news feed) and Yammer, as part of using nature to help improve our mental health and wellbeing during the Covid-19 lockdown.

We also actively encourage available volunteering opportunities to all staff, highlighting volunteering as part of our rewards package.

Section 6: Research and monitoring

Research

Great Crested Newt

We have worked closely with NatureScot and North Lanarkshire Council (NLC) on our site at Gartcosh for over 20 years and have provided a significant volume of data on Great Crested Newts during this time. The latest work under European Protected Species (EPS) Licence 72322 (13th April 2016 – 31st December 2021) relates to salvage and translocation of remnant newts on Gartcosh Business Interchange. Data from the overall Gartcosh project informed a Glasgow University PhD thesis on the population (McNeil, D. (2010) Translocation of a Population of Great Crested Newts (*Triturus cristatus*): a Scottish case study. PhD Thesis). The work has informed the Gartcosh Nature Reserve Management Plan and SE continue to liaise with NatureScot and NLC on the site and surrounding area. It is a well-known project within SE and also provides 'lessons learned' for future projects.

Monitoring

We continue to monitor the known INNS on 20 sites within our property portfolio, to effectively manage the treatment of those sites, through our INNS Strategy.

Our Property Portfolio team have highlighted the following areas of concern from our current level of monitoring:

- Warmer and wetter conditions allowing INNS, to establish or spread further. We have already seen this in action within our portfolio of sites where areas have increased. Reduction in treatment options can be problematic and need for greater management / resource (time and cost). We continue to monitor this through our INNS Strategy and take advice from our Landscape Contractor as to the success of measures and may need to revisit our strategy as a result
- Across our network of sites, we have those that are located adjacent to watercourses as well as coastal sites. We have already seen impacts from greater intensity storm systems affecting coastal protection at Energy Park Fife (gabions washed away and greater wave intensity at quayside infrastructure) as well as localised issues at other locations (surface water flooding / drainage issues etc). We have other sites where groundwater levels have been problematic. We will continue to monitor these informally with our Asset Management Team

Data collected

SE does not routinely provide data collated as part of our operations to the National Biodiversity Network or to the Local Records Centres, but we will explore this further to understand how we might provide this data on a more regular basis.

We currently record data across our network of sites on aspects such as:

- 20 sites with known INNS under management / treatment / monitoring
- European and UK Protected Species – Bats, Badger, Water Vole, Red Squirrel, Wintering and Breeding Bird data is collected during surveys for sites within our portfolio
- Data on Great Crested Newt – salvage and monitoring data has been shared with NatureScot and North Lanarkshire on our Gartcosh site
- Habitat Data – Phase 1 and NVC surveys plus GWDTE
- Tree and Woodland survey information

Case Study – Former Gartcosh steelworks now known as the Gartcosh Business Interchange (GBI), North Lanarkshire (1998 - Current)

SE is committed to the ongoing regeneration and redevelopment of the former Gartcosh steelworks now known as the Gartcosh Business Interchange (GBI). There is a significant legacy associated with Great Crested Newts at Gartcosh Business Interchange and SE has invested extensive time and financial resources in the site to date to achieve a 'newt free status' and agreement with NatureScot regarding approach to current and future site management and development.

The management responsibilities for the Gartcosh Nature Reserve were defined under a 'Minute of Agreement between SE, Scottish Natural Heritage and North Lanarkshire Council (SE, 2002). SE has undertaken monthly daytime monitoring of the Gartcosh Nature Reserve (GNR) wall and Site 3 newt fence under Licence 72322 and this has been on-going since 2013. Monthly reports by SE appointed environmental consultants are submitted to SE and action taken in agreement with NatureScot and, in the case of the GNR wall, with North Lanarkshire Council (NLC). Under the current EPS Licence (72322), one of the commitments is to make the Gartcosh Business Interchange site unattractive for newts, either for breeding, foraging or hibernating, through habitat denigration and this is part of a rolling programme implemented by SE's Asset Management Consultant and Landscape Consultant.

SE has recently produced a Voluntary Management Plan (2020) for ongoing site management as part of GCN Licence surrender. As part of this Licence return, all data produced as part of agreed salvage and translocation has been supplied to NatureScot. Mitigation and enhancement of biodiversity were key requirements of the Masterplan and Planning Consents and subsequently informed the creation of the Gartcosh Nature Reserve and associated works.

SE developed proposals for the Gartcosh Nature Reserve and provided the land, created the habitat and translocated the Great Crested Newt into the reserve. The land was transferred to North Lanarkshire Council together with funding to secure ongoing management of the resource through the Management Plan. The GNR represents the largest population of Great Crested Newts in Scotland.

SE are committed to continue to advise potential purchasers of plots at GBI of historical interest and sensitivity of the wider area for great crested newts to ensure this is considered as part of any development proposals at an early stage.

Gartcosh Nature Reserve is recognised as a Great Crested Newt stronghold in Scotland and knowledge gained from innovative approach which has informed Best Practice as well as 'lessons learned' on other sites.

Section 7: Biodiversity highlights and challenges

Highlights

We have worked to the strategic aims within our Biodiversity Statement (2018 – 2021). SE's role is to create sustainable economic growth, whilst recognising the need for a more cohesive and resilient economy that ensures opportunities for all. Our focus continues to be on the critical role of boosting Scotland's international competitiveness to support long-term economic growth. We work with businesses across Scotland in this role and seek to promote environmental best practice across key sectors. We lead by example by working to an Environmental Management System and achieved ISO 14001:2015 Environmental Management certification. We embed environmental criteria in our procurement processes, and we share environmental and ecological information about our portfolio of sites with interested investors.

Our Managing Agents and Landscape Contractors work with us to manage and maintain our sites and through this, we ensure awareness of ecological sensitivities and measures to promote biodiversity. We take specialist advice as required and consult with NatureScot where we have protected species habitats to address.

When working in partnership with others, we seek to promote biodiversity best practice in a range of ways from simple measures (bird boxes, bat boxes etc) through to significant commitments (Habitat Management Plans, Biodiversity Plans).

We recognise the link between climate change and biodiversity and our carbon management plan outlines our climate change strategy and governance arrangements and includes:

- The production of an annual climate change report
- An expanded role and remit for our climate change group which sets our policy and strategy in climate change including biodiversity
- Internal Audit review and verification of all our carbon reporting
- Completion of a Low Carbon assessment as a mandatory part of the approval of all SE projects including identification of wider environmental impacts arising as a result of project delivery

SE manages a significant number of assets across Scotland and the team are well informed on ecological, nature conservation and biodiversity matters through the course of their work as well as statutory duties. We regularly work with other organisations to ensure compliance including; NatureScot, RSPB, SEPA and Local Authorities. Many of our sites are long term assets and have been subject to a level of ecological survey and assessment as part of site management, development and acquisition and disposal. This information is made available to interested parties e.g. tenants / purchasers to inform their activities.

We seek to protect or enhance our portfolio of sites where possible:

- Invasive Non-Native Species – 20 sites with known INNS under management / treatment / monitoring
- We have agreed a Voluntary Management Plan for habitats at Gartcosh Business Interchange
- We commission technical studies to inform Masterplans for sites which include environmental and ecological mitigation measures such as greenspace / open space / habitat protection and creation / green networks

Our portfolio of sites holds both European and UK Protected Species including Bats, Badger, Water Vole and Otter, as well as multiple bird species.

Challenges

The main challenges for SE over the next three years include:

Economic and resource pressures

All organisations are doing 'more with less' in the current climate and that is likely to continue for the foreseeable future. This reduces the opportunity for innovation and challenging traditional ways of thinking/working including moving to an 'ecosystem approach' (a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way).

Volunteering

In the short to medium term, there will be a significant impact on both the ability for staff to participate in and the willingness to be involved in future volunteering opportunities, as a result of the pandemic. This has already been evidenced in the reduced volunteering hours recorded for this year. Depending on the progression of the pandemic, and the length of time required before everyone can safely return to a 'new normal' will directly impact on our volunteering capability. It will be necessary to address this as part of our future volunteering approach with awareness raising, appropriate risk assessment, safety guidelines, as well as the promotion of what volunteering opportunities are still available to safely take part in.

European Funding

As a direct consequence of the UK's departure from the European Union (EU) a significant amount of funding which currently provides support to the enhancement and protection of nature and biodiversity will no longer be allocated to the UK, such as the European Agricultural Fund for Rural Development and the European Regional Development Fund.

In terms of access to the competitive funding programmes (which are managed centrally by the European Commission and are accessed by submitting a bid to individual published calls) such as Horizon Europe, the participation of the UK in these as a third country is still unclear, with negotiations between the UK and the EU still ongoing on the arrangement of the future relationship. Therefore, it is unclear to what extent the UK will have access to any funding from the EU in the future. This may result in a significant gap in funding for projects.

Property Portfolio

Warmer and wetter conditions are allowing INNS, to establish or spread further. This has already been identified as a trend within our portfolio of sites where areas have increased. Reduction in treatment options can be problematic and need for greater management / resource (time and cost). As already highlighted, this will continue to be monitored through our INNS Strategy.

Fly-tipping on our sites has also become an increasing issue and challenge to address.

