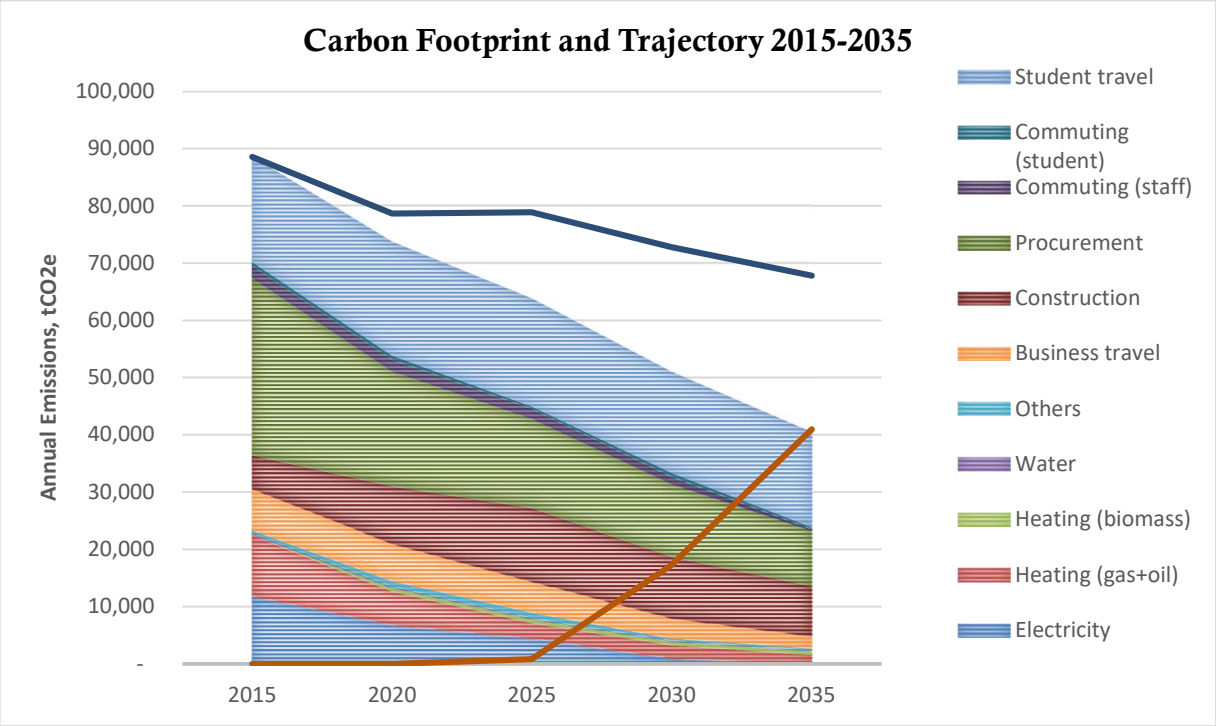
University of St Andrews Annual Sustainability Report 2021/2022

University of St Andrews | FOUNDED 1413



Executive Summary

2021 to 2022 saw many challenges and successes as we began moving towards a new normal. This Annual Sustainability Report seeks to lift the veil on the sustainable work of the University of St Andrews' and highlight our achievements and progress toward our Sustainability Strategy.

While 2020-2021 saw marked reductions in the University's carbon emissions, it was to be expected that this would rise post-pandemic. This past year our emissions rose just shy of our 2019-2020 reported emissions.

On 17 November 2021 St Andrews saw great success as the University won 'Sustainability Institution of the Year' in the UK and Ireland Green Gown Awards. The awards recognise leadership and innovation in sustainability by universities and colleges, and we saw off tough competition including from the universities of Cambridge and Edinburgh. The Third Generation Project, directed by Professor Ali Watson from the School of International Relations, won in the Student Engagement category, and both entries went forward to the International Green Gown Awards in July.

This report shares our key activities, actions and achievements from the Academic Year 2021/22 under our 'three pillars for sustainability'. These are:

Sustainability Positive, establishing a net positive impact on the environment, and our wider influence through research and teaching.

Carbon Net Zero, emitting no more greenhouse gases than we sequester.

Climate Adaptive, planning our future estate and operations cognisant of a changing climate.

Net zero by 2035 *means net zero impact on the planet, encompassing emissions as well as stopping other forms of environmental degradation.*

Our Carbon Net Zero 2035 Pathway

Achieving carbon Net Zero at St Andrews will require a combination of behavioural change to drive down demand and waste, investment in more sustainable systems and products, and wider societal investments in major infrastructure. Even if we and our societal partners reach our goals, we will need to offset our remaining carbon.

The University plans to improve the efficiency and utilisation of its estate, reduce the amount of business travel undertaken, and will emphasise sustainability in the construction activities that must be undertaken to deliver our core services.

There is an expectation that there will be a significant bolstering of the local energy network, including power storage, and that by 2035 the grid will be substantially greener. Even then, the University may have to invest in local power generation solutions such as wind, solar and biomass to meet what will be an increased need for power from non-fossil fuel sources.

The University expects that natural gas will be eliminated as a fuel supply for heating the estate and replaced through either biomass or alternate green fuels or the electrification of all buildings and transport. This transition will be planned in combination with a more efficient use of our space and enhanced building maintenance.

We will seek to reduce business and commuter travel and will work with our community and partners to improve public transport options for staff and students alike to reduce carbon emissions from commuting.

Additionally, the University will seek to avoid unnecessary procurement alongside identifying more sustainable purchasing options to reduce our carbon footprint further.

In terms of the University's supply chain, aside from local energy provision, the University expects that society will drive a reduction in the carbon footprint across all of the University's emission sources by an average of 25% by 2035.

The balance of our carbon footprint will be offset by a combination of nature-based carbon sequestration activities, such as the St Andrews Forest, and the development of carbon capture from the biomass boiler and other facilities, with that carbon reused to create new fuels to replace the need for fossil fuels.

Liter of Light installation to provide messages of hope © The University of St Andrews

2021-2022 Highlights

COP26

The University sent a delegation of academic staff – including Professor John Irvine, Dr Mette High, Professor William Austin, Dr Bennett Collins, Dr James Rae, and Dr Louise Reid – students, and members of the Principal's Office to the blue zone at COP26 in Glasgow, and staff and students joined events both within and around the conference. The suite of activities at St Andrews in the run up to COP and a programme of communications from the event itself ensured the impact of COP was felt on campus too.

During COP the University hosted guests for a successful demonstration of a hydrogen powered train at the Bo'ness and Kinneil railway. As part of the Scottish Hydrogen Accelerator, Professor John Irvine and the School of Chemistry led the management and delivery of this train in partnership with a number of commercial companies. The conversion and re-use of a 40-year-old three car class 314 train to a hydrogen fuel cell electric powertrain illustrates how existing as well as new stock can be made sustainable.

On 29 November a University of St Andrews initiative, delivered with project partners Grundfos, was recognised with the award of a coveted national, gold-level Green Apple Environment prize – an award which celebrates environmental best practice. The project at the Medical Science Building identified significant energy savings by using the latest digital analytics platform and replacement high technology pumps.

Golden Dandelion Awards

The Golden Dandelion Awards recognises modules that meet criteria for excellence in education for sustainable development, as assessed by the Sustainability in the Curriculum Prize panel of submitted modules. These awards help students and academic advisers find courses in environmental sustainability. They also highlight the scope of sustainability modules at St Andrews, which range across all academic subjects.

The Principal recognised this year's Golden Dandelion Prize winners, Dr Alice König from the School of Classics and Dr Bridget Bradley from the School of Philosophical Anthropological and Film Studies, at a special event. Dr König launched the 'Classics for the Modern World: Interventions and Applications' module to enable students to connect the subject matter of Classics with the current environmental crisis. Dr Bradley won the prize for the best new module addressing sustainability for 'The Anthropology of Planetary Health'.

St Andrews Prize for the Environment

The final of the St Andrews Prize for the Environment took place virtually on 4 and 5 October. The three finalists were Snowchange Cooperative, a landscape rewilding programme focusing on indigenous community activities and based in Finland; Cities Without Hunger Brazil, an organic urban garden initiative based in São Paulo; and Planet Indonesia, a project which supports at-risk ecosystems. Snowchange Cooperative won following an outstanding presentation to the judges, and this was announced at a live public event – where the winner of the 2020 prize, Dr Gladys Kalema-Zikusoka, also joined.

Snowchange Cooperative received $100,000 in prize money, and the runners up $25,000.

Scotland's Future Series

The Principal was glad to announce the launch of the St Andrews Scotland's Future Series on 31 January 2022. The initiative illustrates the University's commitment to playing an active and apolitical role by supporting our staff and students to bring their ideas and voices to wider public discourse on the range of issues and opportunities which Scotland currently faces. Funding of up to £1000 for small projects and up to £3500 for larger pieces of work is available to explore themes which will have an impact on the future of this country, such as how we emerge from a global pandemic, how we confront the climate emergency, how the UK crafts a new relationship with the rest of Europe, and how Scotland shapes its own relationship with the rest of the UK.

Ecosia

On 24 January 2022 and in partnership with students and staff stakeholder groups, the University introduced the eco-friendly search engine Ecosia across its computer network, as part of our ambitious strategy to reach net zero by 2035. Ecosia uses the advertising revenue gained from searches to plant trees, donating 80 per cent of its profits to non-profit organisations that focus on reforestation.

Investments

The Investment Subcommittee of the Trustees for the University of St Andrews Superannuation and Life Assurance Scheme has appointed new fund managers selected with their sustainable investment strategies in mind, with the Trustees disinvesting from previous fund managers who did not state goals in sustainability.

Recognition

Professor Sir Ian Boyd, Chair of the Environmental Sustainability Board, has been appointed by the First Minister as her co-chair on the Scottish Government's Scottish Environmental Council. Professor Boyd's role will enable the University to engage further with the national vision and policy environment on sustainability.

Annual Report

Introduction

As St Andrews and its university has slowly reopened with the easing of COVID-19 restrictions, business activities have return with a renewed sustainability focus. The pandemic, and humans reaction to it, has shown the incredible effect collective action has on reducing carbon emissions and improving local biodiversity. Last year, our emissions dropped to 50,336 tCO2e (for 2020-21) which are close to our 2030-35 emissions target. This demonstrates the immense level of change required to achieve Net Zero.

With this in mind, flexibility in the ways we work (i.e., our processes, supply chains, and development plans) and how we work (i.e., a hybrid set up) was essential to our return to 'business as normal'. Nevertheless, it was expected that as our carbon measurements and reporting became more accurate and the world bounced back from its static state so would our carbon emissions. For 2021-22, the University's total carbon emissions rose to approximately 71,000 tCO2e, 29% more than 2020-2021 but 4% less than 2019-2020 figures.

2021-2022 highlights:

- Glasgow's hosting of the 26th UN Climate Change Conference of the Parties (COP26) represented a clear opportunity for the University to showcase our world-leading environmental and sustainability-related scholarship, our plans for carbon reduction, and act as a leader and agent of change within the community. COP26 sparked numerous actions and events, some of which included:
    - Speaker sessions – Presentations covered three key themes looking at the power of nature-based solutions, the future of energy and St Andrews own journey to net-zero, and putting people first through climate justice.
    - Messages of hope - Artistic community engaging activities promoted action through dramatic visuals. This was a joint collaboration with the Liter of Light charity.
    - The University's delegation played various roles within the conference as expert attendees, with a conference on the potential of Blue Carbon as a nature-based solution to climate change being particularly well received. These activities led to the announcement of a joint project on blue carbon with UK-CEH, acquiring £190,000 in funding over 3 years.

- Since January 2022, the 1MW solar farm has been in operation at our Eden Campus site. This site feeds into the new Walter Bower House, Professional Support Services Building. The site officially opened in May 2022 by Kate Forbes (Cabinet Secretary for Finance and Economy) and Professor Dame Sally Mapstone FRSE.

- The NatureScot grant-funded Meadows in the Making project has enabled the University's Ecological Conservation team, in conjunction with Grounds, to convert over 5 ha of closely-mown grassland to meadow habitat; create 0.76 ha of new woodland; and plant over 2,600m of hedgerow. This is the first step towards our 2035 target of managing more than 60% of our land for biodiversity.

- This year saw the development of a 6000-tree miniature forest at the front of Eden Campus, a 2000-tree and hedgerow development surrounding the Eden solar farm, and the creation of the Sports Wood by the Sports Centre, with an Olympic fruit orchard planted down the side of the path from David Russell Apartments to North Haugh.

- Winning success saw St Andrews being named 'Sustainability Institution of the Year' in the UK and Ireland Green Gown Awards, and being awarded the 2022 Fairtrade University Award. The latter was in conjunction with the Fairtrade Foundation and National Union of Students, and Students Organising for Sustainability (SOS-UK).

The sustainability work currently being carried out at St Andrews links closely to many of the UNs 17 Sustainable Development Goals (SDGs) – we have highlighted how our work relates to the appropriate SDGs at the end of each section.

The Environmental Sustainability Board

The Environmental Sustainability Board (ESB) was formed in February 2020 to accelerate the University's response to environmental change and the climate emergency announced by the Scottish Government and Fife Council, providing institutional leadership on the environment through five focus groups: Research; Teaching and Learning; Students and Community; Estate, Energy and Environment; and Operational Adaptation. It continues to be chaired by Professor Sir Ian Boyd.

The ESB has addressed the 17th SDG (Partnership for the Goals) and in particular 17.14

(Enhance policy coherence for sustainable development) by establishing and approving sustainability policy at the highest levels of University governance. The ESB will continue this role within the University.

Operation Adaptation

Operational Adaption was established to enhance the University's approach towards dealing with Scope 3 emissions. Since initiation in 2020, OA has identified and developed 42 initiatives to meet their 20 KPI's. 11 of these initiatives have been completed, 22 are underway and 9 are either on hold or require additional governance. Over the last 2 years, the OA group has had several key achievements such as embedding sustainability into HR hiring and promotional processes, ITS and procurement facilities and supply chains, staff training.

Research

The Research working group works closely alongside its Steering Group and the St Andrews Network for Climate, Energy, Environment and Sustainability (STACEES). This group's formation was primarily to develop research strategy modules, which aim to bring the University to the forefront of cutting-edge environmental sustainability research. Several of the Research group's key achievements include their hosting of various networking and speaker events (with more than 30 speakers from 16 units), as well as their involvement with student co-led sustainability fayres. One on-going project is the group's proposal for an institute of advanced studies for climate, energy, environment, and sustainability (The Sustainability Institute).

Estates, Energy, Environment (E3)

Many of E3's projects and achievements are covered within the wider body of the report, but in summary, E3's activities are based of their 15-year action plan which sets the estates roadmap to net zero and the sustainability interventions required to achieve our 2035 targets. Infrastructure and planning include incorporated travel, biodiversity and climate adaption visioning. The highlight of the year was the opening of the Eden Campus 1MW solar farm by Kate Forbes (Cabinet Secretary for Finance and the Economy) the Professor Dame Sally Mapstone FRSE in May 2022. This provides a step-change in E3's approach to utilities on our Eden Campus site and will act as an enabler to the innovations and future technologies planned on site.

Student & Community (S&C)

Student and Community group prioritises the inclusion of all St Andrews residents and their views on sustainability. Student leadership is the backbone of this group, as they chair, organise activities and motivate the greater student population to take charge of their sustainable futures. In response to feedback from Training in Environmental Sustainability Action (TESA) calling for more direct, motivating action, ESB S&C has been working on developing Sustainability Pledges. This concept mirrors other universities software which prompts, records and analyses students and staff to commit to various sustainable behaviour change actions.

Sustainability in the Curriculum (SitC)

The University of St Andrews is committed to teaching sustainability in its broadest terms across the whole curriculum. The SitC Committee has successfully implemented the Golden Dandelion Stamp; an initiative which promotes courses incorporating environmental sustainability and that are nominated for the SitC Prize. This year's winner are Dr Alice König from the School of Classics and Dr Bridget Bradley from the School of Philosophical Anthropological and Film Studies.

Sustainability Positive

Biodiversity

The Biodiversity Working Group continues to spearhead biodiversity action around the University Estate and Eden Campus. Guided by the Biodiversity Action Plan, the group has coordinated the completion of 20 actions and has begun work on 40 others. This has been achieved through responsible habitat infrastructure, planting, and management to improve the conditions for species living on our grounds.

Sustainable land management offers an exciting and important opportunity to enhance biodiversity and sequester carbon. NatureScot grant-funded the Meadows in the Making project which has been able to convert over 5 ha of closely-mown grassland to meadow habitat, create 0.86 ha of new woodland and plant over 2,600m of hedgerow. We are putting a transformational grassland management programme into practice, requiring time and careful management. Specifically, this programme involves less frequent mowing, a reduced carbon footprint and richer spaces for biodiversity.

Meadows in the Making offers lots of opportunity to get involved in practical conservation activities such as hay raking and seed gathering, wildlife surveys and monitoring, events, and training. The factor critical to the success of this work has been having an Ecologist within Estates working alongside a designated practical conservation worker within Grounds team. This has enabled key decision on implementation and management of green spaces to be undertaken quickly and efficiently whilst enabling students and staff to engage in the practical conservation work that is much valued by employers.

Over 684 people including students, staff and local residents got involved in 71 meadow sessions, including practical conservation activities, events such as guided walks, and training initiatives such as meadow management and monitoring, butterfly identification and scything.

The Biodiversity Working Group have been working in partnership with St Andrews Botanic Gardens, Fife Coast & Countryside Trust, Fife Council and Crail Community Partnership. The Meadows in the Making initiative also supports the Fife Council's Grassland Management aims for the Kingdom, converting 10% of amenity grassland to more natural landscapes to increase biodiversity and reduce carbon emissions.

Other biodiversity projects include **BioBlitz, Green Corridors, Hedgehog Friendly Campus**, the latter of which has achieved Bronze Accreditation from the British Hedgehog Society.

Creating log piles at Sports Wood

As part of **St Andrews Forest**, this year saw the development of a 6000-tree **miniature forest** at the front of Eden Campus. Due to potential risk of soil contamination, 1000T of soil was brought in and reused from the St Andrews West development site to raise the ground level and to ensure the roots do not penetrate the underlying soil for the first few years. Additionally, 2000 trees and hedgerows were also planted around the Eden solar farm.

Further tree planting occurred at the Sports Centre, creating the Sports Wood. An Olympic fruit orchard was also planted down the side of the path from David Russell Apartments to North Haugh. Over 179 local residents, students, staff and schoolchildren helped plant Sports Wood in November 2021. A further 120 local people, students and Guardbridge Primary School pupils attended a week of planting events to create Eden Forest in March 2022.

The St Andrews Forest Promotion © The University of St Andrews

Our Biodiversity Action Plan is linked to target 15.5 (Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species), 15.8 (By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species)

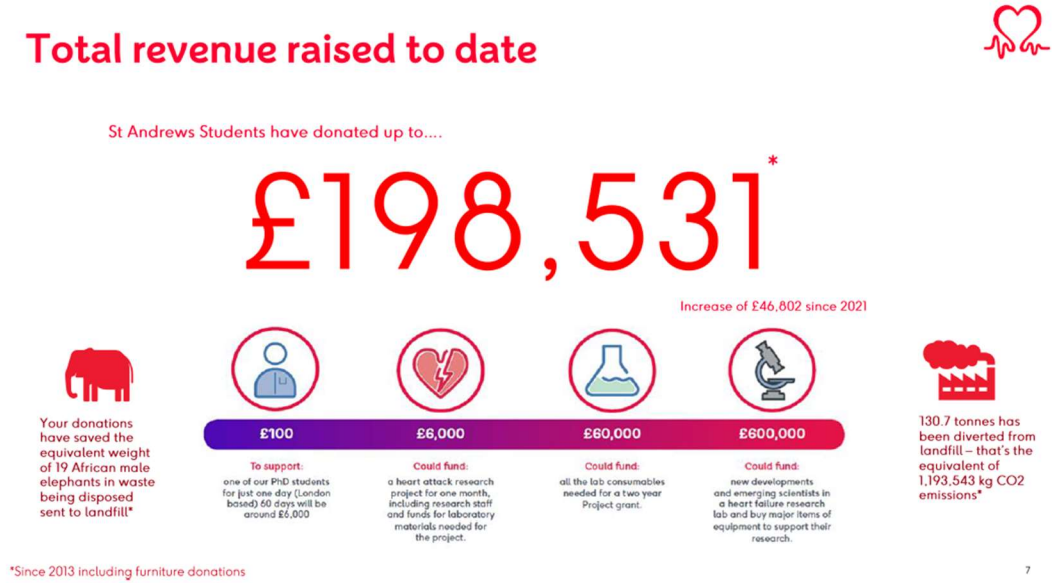
Circular Economy

The University is moving from a linear to a circular waste management. This means that we are reducing what we buy, reusing what we have, and recycling what we can no longer use. Adopting a circular waste economy aligns with the Scottish Government's targets and is key to becoming a carbon net zero university by 2035.

Minimising and Reusing Waste

There are three key pathways in which the University is preventing the arrival of new system into are ecosystem. This includes:

- Reducing **unnecessary purchasing** of furniture, and common goods. Some University furniture and office equipment is stored and supplies University staff and the wider community when individual items are required.
- Students and staff can be a part of the town's circular economy through Transition's **St AndReuse** project which offers clothes, kitchen items, books, furniture and more. Close to 1,000 individuals are engaged in St AndReuse, preventing 5,000kg of items going to landfill every year.
- Together with 70 business, the University is a part of a town-wide **plastic-free campaign**. We avoid plastic straws, single-use cutlery and packaging, raising awareness of the impact of litter on the marine environment.
- 21 **British Heart Foundation donation banks** are spread throughout St Andrews. Donation of clothes, shoes, books, electrical items, and homeware raises money for life-saving research and prevents items going to landfill.
- **Skillshare** is a local Transition initiative that teaches the St Andrews University and public community skills to extend the life of items through shared learning.
- **Tool Share** works like a library where you can find, loan, use and return tools and equipment. This not only reduces the amount of new objects entering our circular economy, but it is also extremely cost and space effective.



British Heart Foundation Donations

Recycling

Items that cannot be avoided, reused or remanufactured are recycled were possible.

- **Bin the bin** is a recycling initiative makes recycling easier by removing individual office desk bins in place of a centralised recycling bin system. This provides staff and students a better overview of what they use on a daily basis.
- Where single-use material is required, **Vegware** is used in all University cafes and at events. Due to the nature of this material, specified Vegware bins are spread across the Estate to capture this

product for in-vessel composition (a different composting system to food waste, which goes into anaerobic digestion).

Bin the Bin Style

Highlight

Spearheaded by ESB's Student and Community group and Catering, this spring saw the introduction of Eco-Takeout Reusable Containers in halls. The scheme sought to remove veg ware packing from halls - *although compostable, Vegware is still a single-use item and should be used as a positive step toward reusables* - tackle packaging and food waste and offer flexibility to catered students. The initiative's initial single-hall trial saw approximately 300 containers in circulation. The popularity of this scheme has seen its expansion to all University halls with an extended variety of products (containers, cups and silicon lids) for use.

The University circular economy strategy is addressing the 11th (Sustainable Cities and Communities) and 12th (Responsible Consumption and Production) SDGs. The University's dedication to the sustainable reduction, recycling, and reuse of materials reflects targets 11.6 (By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management) and 12.5 (By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse). The reduction in food waste in our residential catering is linked to target 12.3 (By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses).

Environmental management and compliance

The University has embraced the task of environmental management, and there have been no compliance issues during the year (e.g. no infringements of environmental legislation and no enforcement notices). The University fully complies with the terms of the Zero Waste (Scotland) Regulations which require us to segregate and manage recovery of our food waste.

Organisational Culture

The University's new normal is focalised through flexibility and hybrid working. Video conferencing and working from home is commonplace in this new working culture. This ultimately changes our travel behaviours; most obviously reducing commuting emissions for many. However, the pandemic, social distancing, and covid-anxiety has also seen fewer people investing in our using shared transport.

During 2021-2022 we have seen large uptake in electric vehicles. As well as the 25 charging points located on the University Estate, a further 6 charging points for fleet vehicles have been added at Eden Campus, Walter Bower House.

The **Transition UStA** team supported sustainable development at the University through an income grant £75,408 and 208,000 through University funds such as smarter choices, smarter places, campus cycling officer, cycling UK and biodiversity projects and staff.

Commuting

Transition's increasing pool of volunteer bike mechanics has been key to delivering a busy programme fixing 256 bikes over 50 sessions. The bike rental income has increased by 225% to £6769 through 64 rentals. This income enables costs for bike refurbishments and supports the wider Transition programme. Additionally, a grant from Cycling Scotland allowed the purchase of 10 new Gazelle city bikes that will reduce maintenance load and standardise parts. With over 120 in the Bike Pool fleet, having the correct parts is a challenge.

This year saw 3 cargo bikes purchased with 15 riders trained to use them, including delivery riders to support with covid related activities. Cargo bikes offer an excellent opportunity for engagement and were thus present for 2 festivals where 140 people engaged with them and 20 local businesses were invited to utilise them.

Although interest in cycling rose nationally during the covid pandemic, our 2022 staff travel survey saw a 5% decline in the number of people using bikes as a method of commute compared to 2019 figures. However, this may have been because fewer overall people were commuting during 2021-22. This year, 52% of staff were reported to travel by car to work.

Bikes outside halls © The University of St Andrews

Movement as a Service (MaaS)

The University has been successful in obtaining £400,000 from Transport for Scotland to support sustainable travel through a scheme called Movement as a Service (MaaS). This project will develop and implement an app-based system, allowing us to look at the opportunity for supporting a shared economy system (i.e., shared car and bike scheme). MaaS will help individuals navigate the most sustainable forms of travel, improving route planning for staff, students and local residents.

Engagement and behaviour change

Training in Environmental Sustainability Action (TESA) is an online course for all students at the University. This initiative was created by students, for students, with the support of the Environment Team to provide an introduction to local and global sustainability. By making TESA accessible for the whole student

population as a part of matriculation, the University has created a springboard for local action, with global reach and a sustainable legacy. During 2021/22 over 700 undergraduate and 200 postgraduate students passed TESA's final quiz by 90+% on their first attempt.

In addition, the School Sustainability Rep (SSR) programme bridges the gap between students and staff when it comes to the curriculum and school practices, drawing in 22 reps for the 2021-2022 election period. In the last year, SSR has become an integral and integrated component of the University of St Andrews student representatives and has laid the foundation for several successful projects, such as:

- The creation of a Carbon Management and Sustainability Curriculum Design course with CEED, drawing in 43 students across schools, disciplines and years.
- Initiating recycling conversations and using feedback to initiate Bin the Bin, a university wide centralised recycling scheme with over 100 bins in circulation.

On the other hand, Hall Environmental Representatives is a constantly evolving opportunity for 1st year students living in halls to network amongst their peers and engage with eco-initiatives. Over the 2021-2022 academic year, Hall Environmental Reps' activity has been honed through the Interhall Environment Competition (IHEC) that sought to provide an interactive setting for students to deliver behaviour change and climate action. Some of the most popular projects were the Green Week pub quiz, sustainable secret santa, and the bamboo toothbrush giveaway. Critically, the IHEC also:

- Campaigned and placed 300 recycling bins within students' bedrooms; this streamlined recycling processes and promoted correct sorting of waste, emphasising individual responsibility.
- Successfully proposed the University's Ball Committee to switch to reusable decorations.

While the IHEC programme had many successes, there were also several challenges regarding competing time commitments and lack of university structural knowledge among students. Thus, the IHEC programme will be adapted in favour of a more constructive skill development programme, in line with the current School Sustainability Rep model for 2022-2023.

Climate Vision and Fresk Workshop with Hall Environment Rep

The Sustainability Intern programme has shifted shape over the last year with initial 1 week internships for postgraduates, extended to the end of term and 6-week undergraduate appointments. This extended timeframe was conducive for our students who carried out extensive research projects. These culminated with proposals informing University operational, procurement, and design conduct. 2021 to 2022 saw 13 internships with projects ranging from sustainability marketing to biodiversity mapping and KPIs, and vertical farms. The latter two projects have seen promising implementation; proposed biodiversity KPI metrics are a springboard to inform future North Haugh

development and vertical farming is being trialled to support hall vegetable procurement.

Town Cleans © The University of St Andrews

The large range of behaviour change activities with which members of the University engage and promote address various aspects of SDGs 2 (Zero Hunger) and 12 (Responsible Consumption and Production). Edible Campus and The Tree contribute to target 2.3 (By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) by increasing the knowledge and practice of growing in the local community and providing opportunities for local farmers to reach a wider market for their products. The StAndRe-Use project addresses target 12.5 (By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse) as thousands of kg of goods are diverted from landfill. The Kernel, and in particular the Toolshare, provides resources that also address target 12.5 as it allows tools to be re-used by a whole community. The other various behaviour change activities undertaken at the University work towards target 12.8 (By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature) as students, staff, and the wider community are educated about sustainability and the environment.

The University's strives to provide various forms of safe and environmentally-friendly transportation contribute to achieving SDG 11 (Sustainable Cities and Communities) and in particular target 11.2 (By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons).

Sustainable Food

With easing restrictions, food waste reducing initiatives were slow reintroduced, including tray free dining, reusable cups, water filters and reusable Tupperware.

Fairtrade

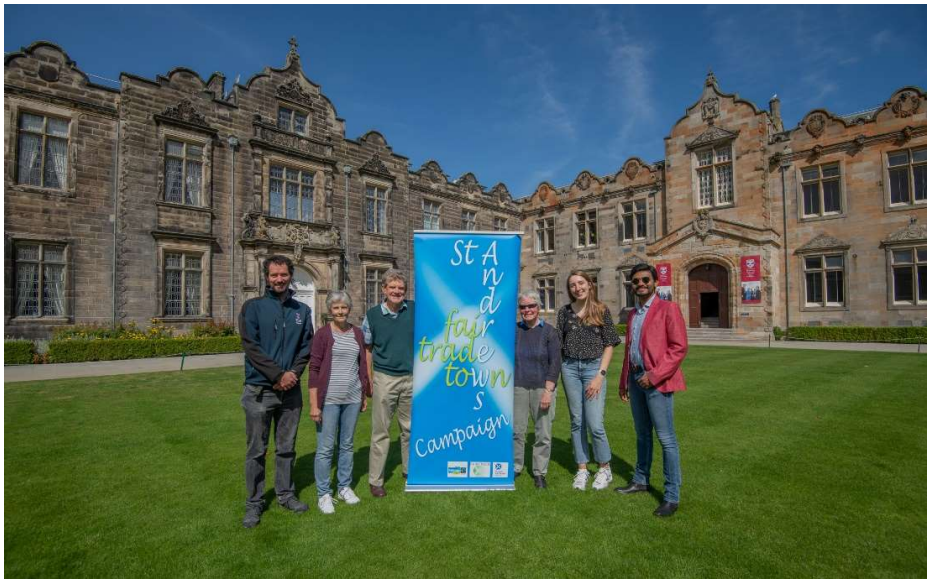
In November 2021, the University was awarded the **Scottish Fair Trade Forum's Fairtrade and Sustainability Award**, the only higher education institution to have been recognised for this award in Scotland. This set St Andrews on excellent footing to approach Fairtrade Fortnight and excel in our renewal of Fairtrade accreditation for this year. The University of St Andrews was awarded the 2022 Fairtrade University and College Award, in conjunction with the Fairtrade Foundation and National Union of Students (NUS), and Students Organising for Sustainability (SOS-UK), after being audited for the academic years 2020/21 and 2021/22. The University's Fairtrade Steering

Committee took an innovative approach to Fairtrade engagement in 2021 and 2022, diversifying events to include aspects of environmental and social sustainability with a continued focus on 'fairer futures'.

For example, last year's Fairtrade Fortnight focused on the climate crisis and, in particular, providing support for farmers and workers in countries such as Kenya, Ethiopia and Honduras, who have contributed least to climate change but are often most affected by it. In response, a TED-style series of talks were organised to form the basis of a Climate Justice Conference to share work and projects ongoing around environmentalism. The conference aims to bring together a wide range of environmentally conscious organisations and individuals across St Andrews for the benefit of connecting and uniting our environmental efforts, particularly surrounding the topic of climate justice.

This work continues to draw on and engage with the local Food Cooperative 'The Tree' to spread information about Fairtrade relating to female empowerment, fast fashion, social justice, and socio- cultural aspects of the banana industry, and our Residential Business Services dissemination of information.

The university has continued to serve Fairtrade tea, coffee, hot chocolate, and juices at our cafes, distribute locally made face masks of Fairtrade cotton and meeting quarterly with the Student Union president and the Fairtrade Steering Committee to keep up to date with Fairtrade action in the University.



Fairtrade Steering and Town Group Members Celebrating the University's Success

The reduction in food waste in our residential catering is linked to target 12.3 (By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses) and 12.5 (By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse). The success with Fairtrade through collaboration is linked to target 17.6 (Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries).

Transition University St Andrews

The Transition University of St Andrews (Transition UStA) team has seen £208,000 worth of funding go into biodiversity and cycling projects predominately through NatureFund Scot and SESTRANS. As a student led Community Interest Company linked to the Estates Environment Team it also raised £75,408 of grant funding in this period to deliver its programme of work that covers University and community outcomes. Its team of 6 staff was complemented by 2 externally funded summer internships and the support of 2 external consultants as well as paying partners at the St Andrews Botanic Garden and Fife Coast and Countryside Trust for roles within partnership projects. They have also been successful in the Movement as a Service funding, supported by the Eden Campus team for £400,000 of Transport for Scotland funding for working on shared mobility projects around St Andrews.

Transition UStA has also been active this year in supporting the Fife wide Climate Action Fife programme which is delivered by a partnership including Fife Council, Greener Kirkaldy and the Fife Communities Climate Action Network. Its role has included the development of the Fife Community Woodland project to identify community planting sites that may potentially assist with the St Andrews Forrest. Transition UStA is also part of the Transition Town movement which has recently received the largest "climate action fund" lottery grant to date and hopes to engage with the network more to ensure resources and support come to St Andrews.

StAndReuse: This Transition UStA household waste reuse programme has had a challenging but busy year and gained a large number of local residents as volunteers which has been vital over the busy summer months. During the end of term reuse campaign period, there have been 2.24T of donated items with an estimated carbon saving of 21.6TCO2e from the items that were saved from landfill and reused, resulting in future students not requiring to purchase new products.

Edible Campus The 15 growing sites continue to operate across campus, but the programme of activities has reduced as capacity in the transition team was lost with external funding closing. The transition team promote the project, coordinate safe garden sessions and resources. Harvest was much reduced this year due to activity across sites being hampered by covid but things are picking up with the new term and return to face-to-face work.

The Tree Food COOP This service links local producers with mainly student customers via an online shop front. Deliveries of food continued through Covid but have been re-established from September. It provides real life business experience for students with a number going on to set up or work with similar projects when they leave St Andrews.

Toolshare: This year saw 270 tool loans and 43 members sign up to become part of the scheme. The figures are almost double the previous year.

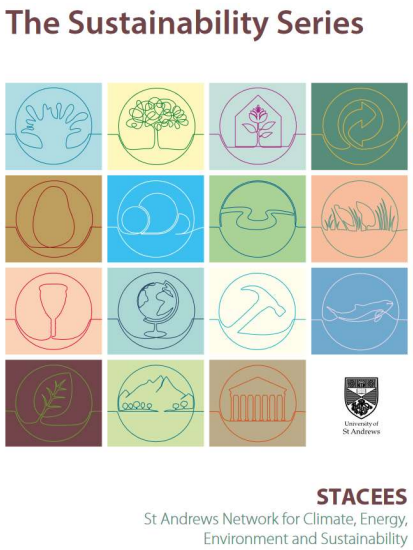
Go E Bike: The scheme saw 45 members of staff being inducted with 435 bike rentals being carried out throughout the year.

The St Andrews Green Film Festival: This year saw a return to a face-to-face festival, which featured 4 film screenings across town. The Byre Theatre was hired out for 2 film showings, along with the Irvine Building and Aikmans, to help draw in a variety of audiences. The festival ran from 7-12 February, with other events occurring outside this time. This year also saw the introduction of the Leafies film competition, for short films. The subgroup of Transition is made up of local residents and students who are interested in showing films that link to action on sustainability.

Skillshare: Ongoing with a focus on repair and sustainable food this programme continues to deliver around 2 peer led sessions per week (102 sessions this period) whilst enabling students and local residents to work together. Due to Covid, a lot of this program moved online and continues to be developed by the community. The program builds capacity of participants whilst engaging them in discussion on Climate Action.

Research at St Andrews

The Research Working Group of the ESB has continued to work alongside its Steering Group and the St Andrews Network for Climate, Energy, Environment and Sustainability (STACEES) to enhance the visibility and impact of the University's research on climate change and environmental sustainability. The efforts of the working group and STACEES relate primarily to the research strategy modules developed by the group, which aim to bring the University to the forefront of cutting-edge environmental sustainability research. In particular, STACEES has been instrumental in establishing a strong network of researchers across the University and has continued to lead a wide variety of initiatives designed to share knowledge and build research capacity in sustainability both within and beyond the University.



Strategic Development of the Network

In autumn 2021, work began on the strategic development of the network. Building on the successful activities of STACEES and a scoping study conducted to look at successful sustainability research structures in other institutions, the Research working group developed an outline proposal for an institute of advanced studies for climate, energy, environment and sustainability (The Sustainability Institute). Early consultation across the University in spring 2022 was met with widespread enthusiasm and interest, but it was agreed that funding potential needs to be further scoped and developed before moving to a more comprehensive proposal and business plan.

External Partnerships

The STACEES team were delighted to host Dr Sandra Gilgan, Managing Director of the Bonn Alliance for Sustainability Research in May 2022 at the University of St Andrews.

On 30 May 2022, Sandra was joined by over twenty researchers and students from across the University's Schools (plus some from the University of Bonn!) for a lunchtime STACEES networking event entitled 'Connecting with Bonn: Sustainability Research & Cooperation'. During her visit, the STACEES team enjoyed multiple brainstorming sessions with Dr Gilgan about opportunities for collaboration and cooperation with the Bonn Alliance team. The first resultant collaborations include co-organising a virtual event series on the 1972 'Limits to Growth Report' and a collaborative research event on indigenous approaches to environmental sustainability.

Supporting Student-led and Student-focused Initiatives

In February 2022, STACEES participated in a student co-led sustainability fayre. Hosted by The Environment Subcommittee and Transition, the fayre's goal was to equip and empower students/attendees to integrate aspects of sustainability into their everyday lives. STACEES ran a stall at the event held in the Union where students picked up copies of the Sustainability Series and found out about sustainability research at the University.

Our research supports SDGs 4 (Quality Education) and 17 (Partnership for the Goals) by increasing and sharing knowledge of climate change and mitigation efforts, as well as collaborating with other research partners across the globe.

The actions taken by the University support SDGs 4 (Quality Education) and 13 (Climate Action). The University's dedication to incorporating sustainability into all aspects of education will address targets 13.3 (Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning) and 4.7 (By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development).

Students and the Community

It has been a busy year for those involved with student and community sustainability in St Andrews, despite the pandemic. Achievements of the Students' Association Environment Subcommittee and ESB Student and Community working group (S&C) are set out below.

Students on West Sands © The University of St Andrews

ESB Student and Community Working Group

Over the last year, the ESB Student and Community Group (S&C) engaged the St Andrews community through a variety of projects, particularly over COP26. Some of these are detailed below:

The St Andrews project proposal was developed in the first year of the ESB by S&C members and led by Deanna Coleman. The project aimed to sequester the equivalent carbon emissions as student travel to and from the University at the start and end of semesters. The University took on the Forest project and this is now being project managed by David Toy. Thousands of trees have been planted thus far, on University and other landowners' property, with a Saints Funder also open. Many students and community members have had the chance to plant trees. This project is enabling the University to create its own regulated offsetting project for Scope 3 student travel emissions, whilst providing educational and research opportunities. Members of the ESB S&C were involved with the official launch of the St Andrews Forest and the planting of the first trees, with the Principal and TRH Duke and Duchess of Cambridge.

As part of the project, the S&C entered the Global University Climate Forum in 2021, to run a project which would be showcased at COP26. The S&C ran a workshop series for students on the topic of offsetting, with international speakers. The students who participated were put into groups and each group created a module proposal based on their University subject for the Forest. These were then presented to senior University staff. Prof Bill Austin will lead on basing a VIP project off these project proposals.

Student and community engagement is a key component, if not one of the major corner stones, of the S&C group. Digital interfaces are the easiest and most effective way of reaching large audiences and as such they have a strong Facebook/Instagram and Twitter presence with over 5000 combined followers. One of the most direct ways of transferring information to students is through email. While frequent emails is not possible, the S&C have capitalised on beginning of year newsletters to introduce new students to Sustainable St Andrews, including sending out a dedicated email on sustainability in 2021 and have plans on using a wider University newsletter in 2022. They have also encouraged increased sustainability communication across the University by

creating the 'University of St Andrews Sustainability' social media platforms, which act as a platform for all sustainability news, events and activities. These are assisted by the 'Sustainable Saints' team, which helps increase internal communication about sustainability.

During 2021 S&C took on a new project, working towards a Sustainable Saints Award system. This awards scheme would recognise sustainability work across the University and bring all sustainability awards under one 'roof'. This would include awards for student sustainability action, sustainable societies, operational groups championing sustainability, sustainable research (of students and staff), sustainability teaching practices (the SitC awards), among many others. A review of existing sustainability awards has been undertaken, and results are pending. This framework would work to recognise effort and incentivise the wider community to get involved with sustainability. With the same goals in mind, the S&C is also working on integrating Sustainability Pledges into TESA.

Team Development

The development of resource always plays a critical role in our success over a coming year. It is with great pride that Estates has supported the roles of Ecological Projects Manager and Grounds Conservation Worker with a 6 month extension to their funded project. The aim will be to get these positions made permanent over the coming year. The Environment Team also saw adverts for a new Environment Manager and Energy Manager. These were appointed and will be in post in September 2022.

Raisin

Raisin is always an exciting tradition that welcomes first year students into their academic families with the renowned shaving foam fight. A key part of the raisin tradition are academic parents' choice of costume and raisin receipt, the latter of which gains academic children access to the foam fight. To reduce waste, each year the university promotes the creation of handmade costumes from recycled materials or old-clothes, and the collection of food donations as receipts. Over time this has drastically reduced the number of bulky items and general waste produce by raisin activities. Implementing food donations has also transformed the idea of raisin receipts which are now a symbol of social sustainability.

Collection of 'raisin receipts' at Raisin

Carbon Net Zero

The University's total carbon footprint for 2021-22 is 71,680 tCO_2e. Due to a more accurate procurement report through the APUC's HESA Scope 3 carbon report.

Carbon Footprint:

Greenhouse Gas (GHG) Emissions (CO_2e tonnes)		2018/19	2019/20	2020/21	2021/22
Scope 1	Fossil fuels: Non-residential (tCO_2e)	3,224	2,967	6,964	5,066.2
	Residential (tCO_2e)	4,451	1,842	1,437	2,649.8
	Fleet Vehicles (tCO2e)	125	123	32	16.6
	Refrigerant losses (tCO2e)		187	262	421.9
Scope 2	Non Residential Electricity Purchased (tCO_2e)	5,090	4,373	4,066	4,241.9
	Residential Electricity Purchased (tCO_2e)	1,631	1,324	1,125	1,163.7
	Non Residential Heat Purchased (tCO_2e)	130	346	312	71
	Residential Heat Purchased (tCO_2e)	306	359	369	80.2
Scope 3	Water & Sewerage (tCO_2e)	288	227	91	89.9
	Waste sent to landfill (tCO_2e)	381	728	863	5.4
	Waste to EfW (Energy from Waste) (TCO2e)				46.26
	Waste recycled (tCO_2e)	37	16	15	19.27
	Waste Composted (TCO2e)				0.53
	Non Residential Electricity Transmission	432	376	360	388
	Residential Electricity Transmission	138	114	100	106.5
	Business Travel (tCO_2e)	5,877	4,418	123	1,097.1
Sub-total Scope 1 to 3 Emissions (minimum requirement for external reporting)		22,113	17,268	16,119	15,464.26
Scope 3 (extended)	Construction (tCO_2e) *	13,023	10,000	7,500	2,921.1
	Procurement (tCO_2e) *	20,725	25,000	17,500	42,896.1
	Staff daily commuting (tCO_2e)	2,103	1,240	500	1,722.4
	Student daily commuting (tCO_2e)	720	450	250	250
	Student semester commuting (tCO_2e)	19,531	19,851	7,940	7,940.4
	Homeworking estimate (tCO_2e)**	-	-	526	485.8
Total institutional Scope 1 to 3 Emissions		78,198	73,809	50,336	71,680.06

**Based on DEFRA 2013 emission factors for associated construction & procurement spend, until 2021-22 where data is based on APUC Scope 3 analysis*

***Based on SSN methodologies provided under PBCCD and assumed 65% FTE, until 2021-22 where data is based on 60% of staff working full time at home.*

Sub-total emissions reflect our previous reporting standard (as minimum external reporting requirement) and has been included for reference, total institutional Scope 1 to 3 includes our full operational footprint which will be taken forward as our emissions scope as part our science-based net zero carbon target.

We continue to work through EAUC Scotland with the FE/HE sector in Scotland to have agreed scopes and standard calculation methodologies for all expanded methods.

Refreshed carbon metrics are being developed under the Sustainable St Andrews strategic pillar and will be included in next year's Annual Sustainability Report.

Carbon Performance

Solar Farm: This year has seen the opening and operation of the 1MW solar farm at Eden Campus that current supplies the site with approximate 200KW to Walter Bower House. Since January 2022, the 1MW solar farm has been in operation at our Eden Campus site. This site feeds into the new Walter Bower House, Professional Support Services Building. Currently there is no export option to the grid, however additional buildings will be added to the network. The current building uses approximately 200KW of the solar, therefore there is opportunity to increase the amount of solar going to future buildings across the site. The site officially opened in May 2022 by Kate Forbes (Cabinet Secretary for Finance and Economy) and Professor Dame Sally Mapstone FRSE.

Biomass Plant: Now in its sixth year of operation. It delivers heat and hot water to over 42 university buildings and 3000 student rooms in St Andrews and provides low-carbon heat to meet 40% of the University's heat demand. During 2021, the district heating network was extended to include Walter Bower House at Eden Campus. The operation of the biomass plant has now been changed from Vital Energy to our own Estates Trades team operating the facility. This has created 4 new local jobs as a result of this change. There have been a number of repairs required, therefore the plant has been off for part of the year so far. As a result, the biomass plant only contributed 121 tCO2e to this year's total. Once these repairs are completed, the biomass plant will be back online early to mid Autumn 2022.

Estate Masterplan: Work on the Estate Masterplan has commenced with a baseline assessment of our planned capital development works. This will set priority areas of focus and allow us to understand where early projects can begin. A draft energy strategy will provide an overarching vision to decarbonise the University's energy needs. This has subsequently been fed into the North Haugh (NH) Development Framework and Energy Strategy to be tested and refined next year. This will occur prior to the creation of an energy and infrastructure enabling works package for the NH. This work package started in the summer 2022. These will conclude in Spring 2023 and provide a masterplan for NH development to ensure future developments are aligned with our net zero aspirations. Similar projects will be carried out in the Town Centre and Eden Campus following NH – which was selected first due to maximising the opportunities for carbon reduction and sustainability positive.

District Heat Network: A temporary bid team was formed, led by Geoff Morris, to explore potential opportunities and options to extend the University's district heating network in response to the planned release £300 million over the next parliamentary session to support the development and rollout of zero emission heat networks across Scotland. An expression of interest was submitted to ScotGov's Heat Network Fund in May 2022 and following a positive response works are planned to continue in Autumn 2022.

Fusion Project: The University has embarked on a project known as Fusion with Scottish Power Energy Networks (SPEN). This is to look at demand reduction and reducing our reliance on the grid during periods of peak energy, where carbon emissions will be higher. This project has resulted in 15 Heat Ventilation

and Air Condition units being switched off during peak times and Combined Heat and Power used in BMS and Fife Park during peak time. SPEN provide funding to organisations who can actively show they are reducing demand during peak times, which will benefit the University.

The Fusion project has also been working to introduce battery storage at Eden Campus, to utilise excess energy from the solar farm, in order for this energy to be used during peak energy demand. This is due to be installed during 2022-23 year and if the trial is successful, the project will look at expanding this opportunity to other sites across the University.

Kenly Windfarm: The proposal to build a windfarm at Kenly is continuing, with many students engaged with the project, keen to see the scheme developed. After support from Wendy Chamberlain MP, there is engagement with the Ministry of Defence again and a new planning application was approved at Fife Council.

Operational Adaptation

The Operational Adaptation WG, co-chaired by Dr Louise Reid and Dr Lindsay Wilson, works across four key areas to influence/ reduce the University's scope 3 emissions; Procurement, Travel, Development & Engagement and Digital. Scope 3 emissions are indirect emissions that occur in relation to our business as usual, for instance, the impact of our travel and consumption.

Procurement

Procurement is the largest contributor to the University's carbon footprint (42,896 tCO_2e in 2021-22). OA has begun the journey of addressing this, by monitoring and reviewing procurement processes. However, larger university scaled policies restricting purchases are required, as well as influencing behaviour change amongst staff and students. To achieve the latter, the University continues to engage with its community and informing them of our circular economy (reduce, reuse and recycle) system.

Travel

Travel is the 2nd largest contributor to the University's carbon footprint with student flights making up over 60% of the total travel emission. Business Travel and Commuting are areas for most direct action with reduction targets of 47% and 76% by 2035 respectively.

To improve uptake of shared vehicle transport we have attracted additional funding (£400,000) to implement a new University MaaS-ter plan. The Mobility as a Service (MaaS) approach will ensure we make efficient use of assets and fleet, encourage a shift to lower carbon modes and improve route planning for staff, students and local residents.

To support the need to reduce energy use during peak time, vehicle to grid chargers have been installed. Energy can be exported into the grid during peak times for unused fleet vehicles, which are then charged again in the middle of the night, during lower energy demand. Two have currently been installed this year at Walter Bower House, for IT, and North Haugh for the Estates Grounds Team.

By taking extensive measures to reduce the University's carbon footprint, we are working towards addressing various targets of the 7th SDG (Affordable and Clean Energy). The Eden Campus biomass plant contributes to target 7.2 (By 2030, increase substantially the share of renewable energy in the global energy mix) by diversifying the University's energy mix.

Carbon Offsets

Carbon offsetting programmes will be required to achieve net zero, as we recognise some emissions will not be decarbonised by 2035, and other carbon emissions are unavoidable and will continue.

The level of offsets required in 2035 is dependent upon the University meeting its carbon reduction targets (as detailed in the previous section), and we are currently forecasting a 40,000 tCO_2e requirement for 2035. This will be best achieved by a blend of market purchased carbon credits and University owned sequestration projects, to offset those emissions not yet offset and our unavoidable carbon emissions respectively.

The carbon offset market is relatively immature, and the forecast cost per carbon credit is £100/t. It is likely to increase beyond this as we approach 2035, as many others purchase to meet their net-zero targets. It is forecast we will require to purchase 20,000 tCO_2e of credits from the market in 2035, with the aim of reducing this requirement in the years thereafter.

The following sections outlines University owned projects we are progressing now to ensure we meet the required in-house credits and avoid the requirement for additional purchases.

The St Andrews Forest

The St Andrews Forest will form a tapestry of woodland and other nature-based projects across the globe, which will reduce carbon dioxide in the atmosphere.

The goal of the Forest is to sequestrate about 20,000 tonnes of carbon per year, equivalent to the emissions from student semester travel, forming a core part of the University's vision to be net zero by 2035.

The Forest is built around three pillars – Carbon, Nature, and People. This year has seen projects through the Cambo Estate, Craigtoun Park and on our own campus, with the development of Sports Wood, Eden Campus Miniature Forest and the Solar Farm.

While carbon offsetting is the primary driver, creation of additional woodlands also benefits the natural environment. This includes increased habitat leading to enhanced biodiversity, additional ecosystem services (clean air and water), and improved flood mitigation.

Beyond immediate health and well-being benefits, the 'people' pillar will be key for the long-term future of the Forest. By developing projects that will continue to provide benefit to generations to come, the people who come after us will have a reason to manage and preserve the trees, keeping the carbon locked-up for longer.

The Forest was launched by The Duke and Duchess of Cambridge planting the first tree in St Salvator's Quadrangle. The central location of the tree within the University was deliberate - a living symbol of the importance of sustainability to the University's future. Donors have also contributed areas of woodland in Scotland and planted individual trees in their own gardens.

Professor Dame Sally Mapstone with members of Estates developing Sports Wood

Climate Adaptive

We continue work to evaluate and mitigate the impact of climate change on the University and have Adaptation Capability Framework benchmarking tool to highlight governance and adaptation issues. The tool clearly outlines actions for improvement in the operation of the University to increase its resilience to climate change. These include:

- Organisational Culture and Resources – identifying opportunities to include climate adaptation in future plans
- Understanding the challenge – undertaking strategic climate risk assessments
- Planning and Implementation – Identifying potential adaptation measures
- Working together – develop communication and engagement with partners such as Fife Council / Fife Environment Forum

An internship project was carried out two-year's ago to discuss and capture historical events and communicate future climate projections to Estates staff and highlight the case for action across our core functions.

Findings were recorded as part of our draft Climate Adaption Plan and are included as part of the North Haugh masterplanning exercise. This ensures future development is carried out taking into account future climate risks and it is intended this exercise will be replicated in other estate areas, masterplans and functions following on.

One other element of Climate Adaptive, is the readiness and understanding of our community. Our movement towards net zero and a more sustainability future is intertwined with our community's ability to make and accept change. This change as well as our world's climate change can be an alarming prospect. As a result, a university-wide survey on eco-anxiety levels, with over 360 participants found that the majority of students (and some staff) worry about climate change on daily or weekly time scales. The Rector's Committee, Transition St Andrews, and the S&C group initiated eco-anxiety cafes, a safe space where people can discuss these worries. The survey has also led to meetings with the Mental Health Task Force, resulting in the implementation of 'Eco-anxiety Champion' role, currently held by Rosalyn Clase. This role is to ensure that consideration of eco-anxiety is embedded into discussions the Task Force has, and is recognised as a problem within the student, staff and community body.

By preparing for the effects of climate change on our organisation we are addressing the 13th SDG (Climate Action) and in particular targets 13.1 (Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries) and 13.2 (Integrate climate change measures into national policies, strategies and planning) although on an institutional scale rather than national.

Conclusion

This last year has shown our community's resilience in the face of the current pandemic and our ability to move forward. Despite various challenges, the University continues to strive towards its net zero emissions, encompassing all greenhouse gas emissions, as well as stopping other forms of environmental degradation. In addition to our net zero targets, exceptional effort has also been placed within our sustainability positive pillar and ensuring ensure we generate a positive impact on the planet, through rebuilding natural habits, preventing resource depletion, and educating our community on sustainability matters.

Where all University of St Andrews students complete sustainability training on their arrival to start their St Andrews sustainability journey, it is with great hope a similar course will become available for staff and the wider community. This would ensure our whole St Andrews community remain united towards are net zero, sustainability positive targets and attain a clear sense of social responsibility.

Our approaches will need to become more data and target focussed over the next few years. We will also need to ensure we have the budget and resource (or divert current budget and resource) to implement the required action to meet our goals in a controlled and measurable manner.