Engaging with
The United Nations
Sustainable
Development Goals

A Pilot Study

January 2020

CONTENTS

1. EXECUTIVE SUMMARY

In May 2018 the University of Liverpool began a pilot study to consider the United Nations Sustainable Development Goals (UNSDGs) and how they relate to the University across all areas of its activity.

The pilot study asked five key questions:

1. Are the SDGs compatible with the University's aims and objectives?
2. Can engagement with the SDGs advance the University's aims, objectives and strategic priorities?
3. What is the University's current contribution to and engagement with the SDGs?
4. How can that engagement and contribution be enhanced?
5. What is the route map for the University to become an SDG-Leader university?

The study found a strong correlation between the University's strategic aims and the aims of the SDGs. In particular the University's mission 'for the advancement of learning and ennoblement of life' strongly resonates with the overarching objective of the global goals.

There are many ways that engagement with the SDGs can contribute to the University's strategic aims. In particular, engagement with the goals can help to position the University's impact, across all areas of activity, within a global framework and provide the opportunity for a unifying University SDG narrative.

Several areas of University activity already have some engagement with the SDGs. Many researchers, for example, who apply for Overseas Development Aid (ODA) funding, identify the contribution their research will make to the SDGs in the application process. From an Estates perspective, the University currently utilises the Sustainability Leadership Scorecard developed by EUAC, the Alliance for Sustainability Leadership in Education, to monitor its progress against key goals. Whilst, from an educational perspective, engagement with the SDGs is identified within the new Curriculum 2021 review process as an important way to embed Education for Sustainable Development and enable graduates to become effective global citizens.

In terms of impact, it is clear from initial mapping exercises carried out as part of this study that the University makes a strong, positive contribution to the goals through the impact of its research activities, through the knowledge, skills and attributes of its graduates and through its activities as an employer, land holder, regional partner and civic leader.

However, the University's education and research activities also have negative impacts, in Liverpool and in other places across the world, leaving an environmental footprint through energy consumption, the creation of waste and pollution. This raises the important question of how the University can maximise its positive impact and minimise the negative. The UN SDGs provide a useful framework for carrying out this sort of holistic analysis.

There are many opportunities for the University to engage more strongly with the goals, to make that engagement more visible, to utilise the SDGs as a strategic driver and to embrace the goals as the basis for collaborations. Perhaps most importantly of all there is an opportunity for the University to understand its unique contribution to the goals and to the individual targets that sit beneath them, and to understand the areas where it is strong and the areas that could be developed.

The SDG Accord

In January 2020 the University of Liverpool and the Liverpool Guild of Students signed the global higher education sector's commitment to the SDGs, the SDG Accord. By signing the SDG Accord, the University and the Guild have made a public commitment to:

1. Align all major efforts with the Sustainable Development Goals, targets and indicators,including through our education, research, leadership, operational and engagement activities;

2. Aim to involve members from all key stakeholder groups in this endeavour, including students, academics, professional staff, local communities and other external stakeholders;

3. Collaborate across cities, regions, countries and continents with other signatory institutions as part of a collective international response;

4. Using our own unique ways, inform, share our learning and account to both local and global communities our progress toward the Sustainable Development Goals;

5. Annually report on 'how does my institution contribute to the Goals and what more can we do'.

This report provides an initial snapshot of where we are now and provides a route map that will guide our progress as we move forward with these commitments.

The United Nations Sustainable Development Goals (2016-2030)

Source: United Nations, 2016

2. THE SUSTAINABLE DEVELOPMENT GOALS

In September 2015 the United Nations adopted the resolution 'Transforming Our World: the 2030 Agenda for Sustainable Development.' The resolution sets out a bold and ambitious plan for Peace, People, Planet, Prosperity and Partnerships and it pledges to leave no-one behind.

"Leave No-one Behind"

To achieve these ambitious aims the UN has developed 17 Sustainable Development Goals (SDGs), which are interdependent and indivisible.

The goals are focused on tackling the huge social, environmental and economic challenges we face. From eradicating poverty and hunger, to building a just and peaceful society which enables good health and well-being, inclusive economic growth and an environmentally sustainable planet.

There are a total of 169 individual targets and more than 200 indicators that sit beneath the SDGs. These set out the actions we urgently need to take in order to achieve the goals. Addressing any one of the goals can simultaneously have an impact on many others because each goal is complex, inter-linked and multi-faceted. Goal 12 - Responsible Consumption and Production, for example, has been shown to be linked with at least fourteen other SDGs.

The SDGs recognise that addressing the challenges we face will require a response from a wide variety of sectors and explicitly call on business, civil society, and the academic sectors among others to collaborate on the achievement of the goals.

Whilst the SDGs are not legally binding, it is highly likely that they will increasingly shape the actions of governments, businesses and civic societies. This is particularly true since the goals were developed through extensive global consultation and they have been adopted by all 193 UN member states. The SDGs are applicable across all nations, including both developed and developing countries, and the actions needed to achieve the goals are required at a local, regional and international level.

169 Targets
Detail what needs to done to achieve the goals (includes mechanisms)

17 Goals

200+ Indicators
Highlight key data sets for governments to monitor to achieve the goals

3. SDG ALIGNMENT WITH THE UNIVERSITY'S MISSION

Strategy 2026 sets out the University's overarching mission as the 'advancement of learning and ennoblement of life'. The 'advancement of learning' element of the mission, in terms of both education and research, is a core component of the SDGs (particularly Goals 4 and 9) and is considered to be an important driver for change, impacting on many other goals. The 'ennoblement of life', with its aims to enhance, to respect and to value also has clear synergies with the SDG mission. In many ways the 17 SDGs, which collectively capture the universal aims of Peace, Prosperity, People, Planet and Partnerships could be thought of as a framework for the

OUR STRATEGY

2026

For advancement of learning and ennoblement of life

"We are resolved to free the human race from the tyranny of poverty and want and to heal and secure our planet. We are determined to take the bold and transformative steps, which are urgently needed to shift the world on to a sustainable and resilient path. As we embark on this collective journey, we pledge that no one will be left behind."

United Nations

Transforming Our World: The 2030 Agenda for Sustainable Development

4. SDG ALIGNMENT WITH THE UNIVERSITY'S ETHICS AND VALUES

Ethics and Values:
The University's Five Principles

Principle 1:

We will put ethics and integrity at the heart of our decision-making

Principle 2:

We will work in partnership with our students to ensure their interests and aspirations inform our activities

Principle 3:

We will deploy our resources creatively and with care, to maximise our positive impact locally, nationally and internationally

Principle 4:

We will develop a staff framework (now People's Framework that sets out clearly the employment offer and expectations for all our employees)

Principle 5:

We will work in partnership with our collaborators to ensure their interests and aspirations inform our activities

Strategy 2026 also sets out the ethics and values that will underpin all areas of activity. The Ethics and Values are described as five principles.

The pilot study found that there were strong synergies between each of the five principles and individual goals at a headline level. Each principle is synergistic with many more goals than are depicted here because of the inherent interconnectivity of the issues that are being addressed.

5. SDG ENGAGEMENT AND THE UNIVERSITY'S STRATEGIC PRIORITIES

SDG ENGAGEMENT

OUR STRATEGY

2026

SDG engagement provides an opportunity to demonstrate research impact against international goals and targets
→ **GLOBAL KNOWLEDGE LEADERSHIP**

Provides opportunities for students to engage with real world issues in core, extra and co-curriculum activities
→ **EDUCATIONAL EXPERIENCE**

Helps to cultivate focused and effective partnerships as SDGs become more common as a shared global framework
→ **PARTNERSHIPS**

Helps to ensure linkages between course modules and global issues are fully recognised by graduates
→ **GRADUATE PROSPECTS**

Helps to create linkages between all areas of University activity and helps to foster collaborations
→ **BUSINESS EXCELLENCE**

Increases profile through leadership, contributing to the global SDG framework and through civic engagement
→ **NATIONAL AND INTERNATIONAL PROFILE**

6. THE UNIVERSITY'S KEY AREAS OF ACTIVITY AND THEIR IMPACT ON THE SDGS

RESEARCH AND IMPACT

EDUCATION

PROFESSIONAL SERVICES

Impacts on the goals through the outcomes of research which directly contribute to addressing key global challenges

Impacts on the goals through the cultivation of graduates who go out into the world as agents for change

Impacts on the goals through activities as a landholder, an employer and as a civic partner within the region

7. PROFESSIONAL SERVICES IMPACT ON THE SDGS

Each of the University's services and departments can support the development and delivery of the its operational and strategic aims and can make a positive contribution to the SDGs. From computing services to widening participation and civic engagement functions, human resources as well as the management and development of the estate.

The University's widening participation activities, for example, make a significant, positive contribution to a number of SDGs at the local level. The University has a strong track record in this area and has the highest number from Low Participation Neighbourhoods (LPN) in the Russell Group. It has a strong strategic commitment to build on and improve this positive performance and sets out the key actions it is taking in the 'Access and Participation Plan, 2020-2021 to 2024-25'.

"We are an inclusive institution, committed to the provision of opportunity for those with the capacity to benefit as individuals but also as members of a community dedicated to a sustainable and just society."

OUR STRATEGY

2026

Access and Participation Plan, Entry 2019 - 2020

Sustained outreach from early years onwards - focusing on awareness-raising/progression to HE as an option and a choice.

Post-16 and Community Outreach: focus on attainment- raising activities linked directly to choice and attainment as well as preparation to apply.

Fair Admissions: Scholars, Realising Opportunities, Go Higher and Year 0/2+2 schemes, which allow for well-articulated progression routes for learners (16+ years and adults returning to education).

ACCESS

Ensuring that students from disadvantaged backgrounds can access HE

10 REDUCED INEQUALITIES

5 GENDER EQUALITY

Student Success and Retention: Peer Mentoring programmes, transition and induction events, financial support to support retention.

Student Support: established range of universal, targeted and specialist support services for students, Wellbeing framework to provide information and structures for all students, Mental Health First Aid training, Disability Support, Education Strategy.

SUCCESS

Activities to support students in achieving their potential

4 QUALITY EDUCATION

3 GOOD HEALTH AND WELL-BEING

Placements and internships: employer engagement links, targeted support for WP groups.

Mentoring: mentoring from alumni and relevant professional links for second years.

Financial support: employability bursary for students from low-income households to attend interviews, support with internships.

PROGRESSION

To further study and/or employment suited to their qualifications and potential

8 DECENT WORK AND ECONOMIC GROWTH

1 NO POVERTY

COLLABORATIONS

Shaping Futures (NCOP), IntoUniversity North Liverpool, Advancing Access, National Education Opportunities Network, Higher Education Access Tracker (HEAT)

17 PARTNERSHIPS FOR THE GOALS

University of Liverpool campus

Source: Estates Strategy & Masterplan 2026+

The University of Liverpool's main campus is located in Liverpool City Centre with additional campuses located on the Wirral. It also has a number of international collaborations, including Xi'an Jiaotong-Liverpool University (XJTLU) in China. As a physical presence within the landscape the built estate has has an impact on several of the goals and in particular SDG 11 Sustainable Cities and Communities.

In terms of:

- The management of resources required to develop and maintain the estate including energy, water, the physical materials contained within the buildings themselves and the wastes that arise

- Its interaction with the natural world including mature trees, green spaces and pocket parks that impact on wildlife and biodiversity

- The provision of social, recreational and well-being spaces for those who visit, live, work or study on campus

- The preservation and stewardship of important cultural heritage sites as well as the development of facilities that enhance research and educational activities

- The impact of travel to, from and within each campus as well as the digital and communications infrastructure.

Local and Global SDG Impacts of the Built Estate

Both negative and positive environmental impacts arise from the day to day operations of the estate. The University achieved **ISO 14001** certification in 2017 which seeks to minimise the negative impacts and enhance the positive.

The **Estates Strategy & Masterplan 2026+** sets out a vision for the development of the estate that seeks to support and enhance the University's key strategic aims through the built environment. This includes the provision of state of the art facilities which enable researchers to increase the global impact of their work and engages students in real world issues.

Estates Strategy and Master Plan 2026+

Pocket Parks

Development and enhancement of multiple small pockets of greenery around campus

Protecting and enhancing cultural heritage and improving air quality

Enhancing biodiversity and making space for nature

Opportunities to grow food on campus

Enhancing aesthetics, and spaces for socialising

Creating space for exercise and well-being activities

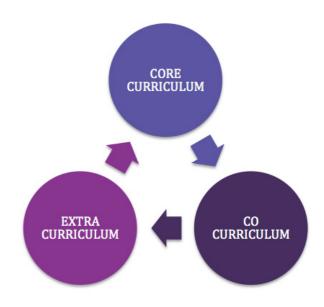**Source:** Estates Strategy & Masterplan 2026+
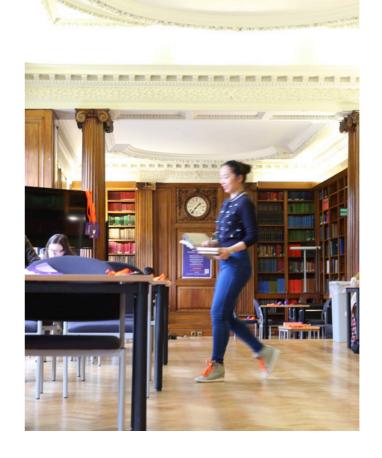
8. EDUCATION IMPACT ON THE SDGS

Educational activity at the University can be broadly clustered into three distinct forms, each of which can make a positive contribution to the SDGs and provides opportunities for SDG engagement.
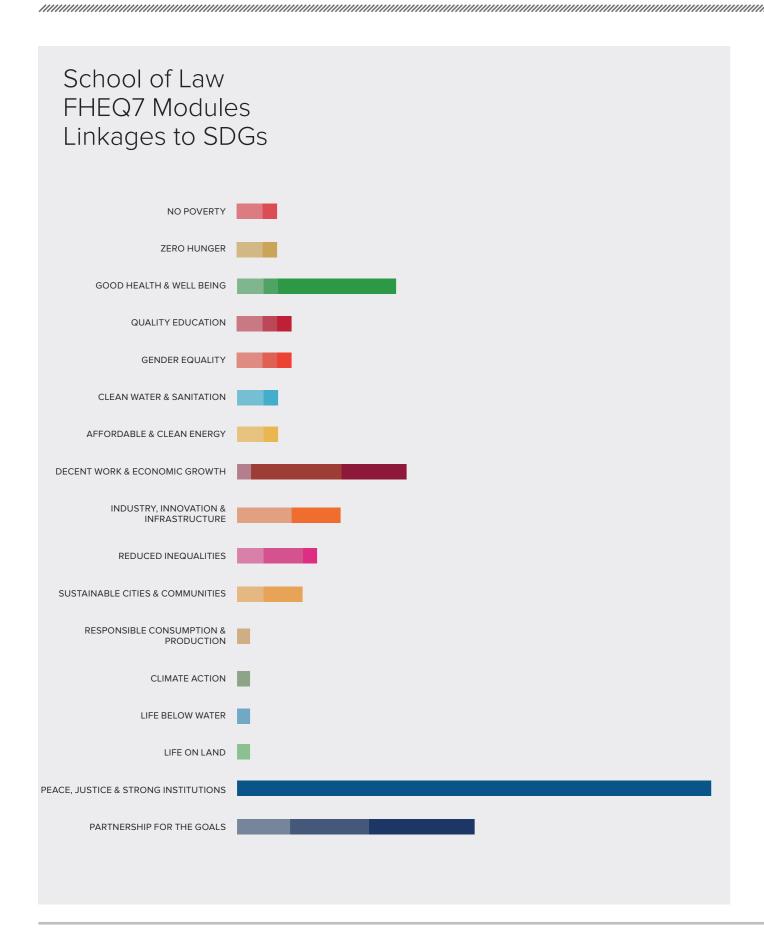
Curriculum 2021 is the main framework for the development of the core curriculum. Through this process of curriculum review the University aims to cultivate three Liverpool Hallmarks and three Graduate Attributes, including the development of graduates as global citizens who see themselves as 'part of a community at every level from the local to the global and recognise that this comes with responsibilities based on equality, respect and valuing diversity'.

School of Law
FHEQ7 Modules
Linkages to SDGs

NO POVERTY

ZERO HUNGER

GOOD HEALTH & WELL BEING

QUALITY EDUCATION

GENDER EQUALITY

CLEAN WATER & SANITATION

AFFORDABLE & CLEAN ENERGY

DECENT WORK & ECONOMIC GROWTH

INDUSTRY, INNOVATION &
INFRASTRUCTURE

REDUCED INEQUALITIES

SUSTAINABLE CITIES & COMMUNITIES

RESPONSIBLE CONSUMPTION &
PRODUCTION

CLIMATE ACTION

LIFE BELOW WATER

LIFE ON LAND

PEACE, JUSTICE & STRONG INSTITUTIONS

PARTNERSHIP FOR THE GOALS

Initial mapping exercises have begun to reveal the linkages between undergraduate and postgraduate taught modules and the SDGs. In the School of Law, for example, the FHEQ7 level modules were found to have connectivity, to varying degrees, with all of the goals.

Of particular note is the connectivity to Goal 16 Peace, Justice and Strong Institutions, which aims to 'promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels'. The modules address this aim from a number of perspectives including human rights, international trade law and the workings of the international regulatory and law making bodies such as the European Union.

Other goals of note include Goal 3 Good Health and Well-being and Goal 8 Decent Work and Economic Growth. Modules focus on a diverse range of issues that affect Goal 3 including ethics in health care decision-making and medical malpractice litigation. Whilst modules affecting Goal 8 consider issues such as patent and copyright laws as well as competition law and commercial contract law.

SDG-focused core, co and extra-curricular activities can support and enhance the aims of Curriculum 2021 and the on-going curriculum development activities. This includes engaging students in curriculum mapping exercises, which can help to emphasise the international perspective of course modules, raise awareness among students about the SDGs and how their study and future careers can impact on them. Understanding the connectivity between SDGs and course modules will also be a core part of the curriculum review process.

9. RESEARCH IMPACT ON THE SDGS

The University has clustered its diverse research portfolio into six research themes: advanced materials; infectious diseases; personalised health; heritage; digital; and starting well, living well, ageing well. Each of these research themes can be linked to at least one headline SDG. Three of the themes directly link with Goal 3, Good Health and Well-being, which reflects the University's expertise and focus in this area. Two directly link with Goal 9, Industry and Innovation, again reflecting a focus within the University on developing innovative technologies, which can give rise to a wide variety of benefits.
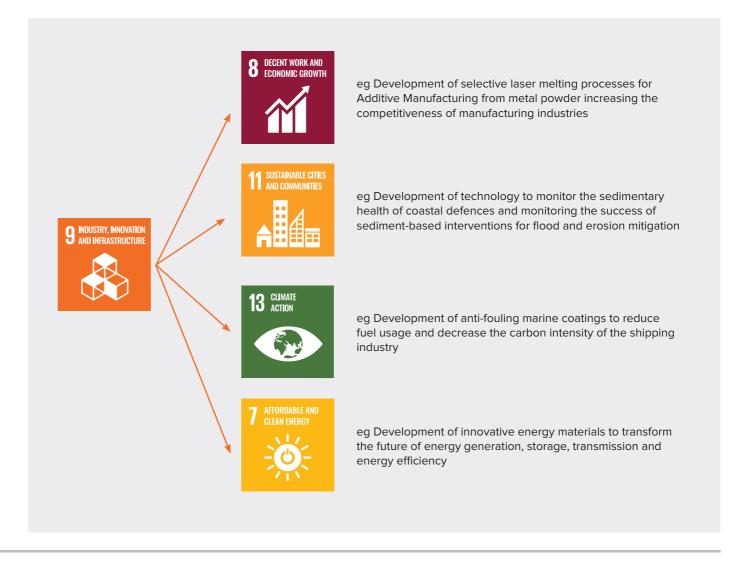
The remaining theme – Heritage - is directly linked with Goal 11, Sustainable Cities and Communities, although this also has a strong and direct link to Goal 16 Peace, Justice and Strong Institutions. Underpinning all of these themes and goals is a core mechanism for the delivery of the SDGs, which is Goal 17, Partnerships for the Goals.

These headline SDGs provide a starting point to understand not only the *extent* to which the University contributes toward the global goals but also the *unique way* in which it contributes. For example, there is a clear synergy between the Advanced Materials research theme and Goal 9, Industry, Innovation and Infrastructure.

However, if we explore this more deeply, we can see how the University's Advanced Materials research theme is also having a positive impact on many other SDGs.

The University is currently in the process of developing a number of case studies for submission to the Research Excellence Framework (REF) 2021. These will capture the University's areas of highest demonstrable impact and potentially, therefore, its greatest research contribution to the SDGs.

Partnerships for the Goals

Health, Wealth & Social Justice

Advanced Materials	Infectious Diseases	Digital	Personalised Health	Heritage	Starting well, living well and ageing well
• Computational materials discovery • Surface Science • Renewable energy materials • Nano-medicines	• Combatting drug resistant infections • One Health • Global health	• Bayesian informatics • AI systems • Social, economic • Environmental Big Data	• Pharmacogentics • Digital/informatics • Bench-to-bedside medicine	• Heritage materials • Dark Heritage • space, Place and Memory	• Ageing Resilience • Children & Childhood

eg Development of selective laser melting processes for Additive Manufacturing from metal powder increasing the competitiveness of manufacturing industries

eg Development of technology to monitor the sedimentary health of coastal defences and monitoring the success of sediment-based interventions for flood and erosion mitigation

eg Development of anti-fouling marine coatings to reduce fuel usage and decrease the carbon intensity of the shipping industry

eg Development of innovative energy materials to transform the future of energy generation, storage, transmission and energy efficiency

For example, the study found that 83% of the Faculty of Health and Life Sciences' case studies contribute to Goal 3, Good Health and Well-being and 88% contribute to Goal 17, Partnerships for the Goals. There are also notable contributions to Goal 2, Zero Hunger, Goal 10, Reduced Inequalities and Goal 16, Peace, Justice and Strong Institutions.

This analysis is based on the case study narratives available at the time of the pilot study, once more detailed information is available then the actual contribution to each of the goals may well increase. This is particularly the case where an indirect contribution may be present, which is not yet reflected in the text. In particular there may be a greater contribution to Goal 8, Decent Work and Economic Growth through the development of new products or patents, for example, or a greater contribution to Goal 10, Reduced Inequalities through improved health outcomes.

When we dig down deeper into the individual targets sitting beneath the SDGs we can begin to get a clearer picture of exactly how the University contributes to their progress.

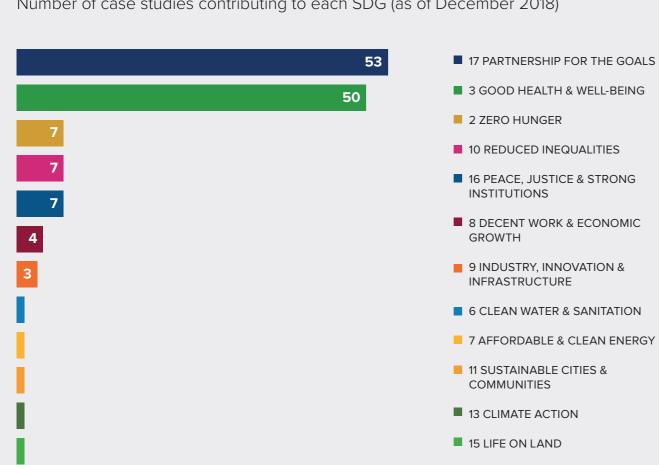For example the Faculty makes a significant contribution to the Goal 3 targets including 3.2 (infant mortality), 3.3 (communicable diseases) and 3.4 (non-communicable diseases and well-being). Whilst an important way in which the Faculty contributes to Goal 2, Zero Hunger is through the development of sustainable agricultural practices.

The Faculty also makes a strong contribution to targets in Goal 17, Partnerships for the Goals, which seek to enhance policy coherence for sustainable development (17.14), share technology and expertise (17.16) and promote effective public, public-private and civil society partnerships (17.17).

REF 2021 Case Studies
Faculty of Health and Life Sciences
Number of case studies contributing to each SDG (as of December 2018)

53	■ 17 PARTNERSHIP FOR THE GOALS
50	■ 3 GOOD HEALTH & WELL-BEING
7	■ 2 ZERO HUNGER
7	■ 10 REDUCED INEQUALITIES
7	■ 16 PEACE, JUSTICE & STRONG INSTITUTIONS
4	■ 8 DECENT WORK & ECONOMIC GROWTH
3	■ 9 INDUSTRY, INNOVATION & INFRASTRUCTURE
	■ 6 CLEAN WATER & SANITATION
	■ 7 AFFORDABLE & CLEAN ENERGY
	■ 11 SUSTAINABLE CITIES & COMMUNITIES
	■ 13 CLIMATE ACTION
	■ 15 LIFE ON LAND

REF 2021 Case Studies
Faculty of Health and Life Sciences
Examples of case studies contributing to Goal 17 and its individual targets

Examples REF 2021 Case Studies

Equitable access to clean energy for the prevention of non-communicable disease → 17 .14 Enhance policy coherence for sustainable development (9)

Construction of an international database of allele frequencies in different populations of HLA and associated immune related genes → 17 .16 Sharing knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries (41)

Development of sleep mask using OLEDs, UoI research into non-toxicity. → 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships (47)

→ 17 PARTNERSHIPS FOR THE GOALS

Faculty of Health and Life Sciences

10. ROUTE MAP

Drawing on work that has been completed internationally and on the findings that have emerged from this pilot study, we have identified five key hallmarks or characteristics of an SDG engaged University. These key characteristics will provide a route map for our work going forward.

1. Meaningful mapping and analysis
SDG mapping and analysis will allow not only the extent of the University's contribution to the goals to be understood but also the unique nature of that contribution. This will enable the development of a whole organisation narrative. The extent and nature of the mapping will vary depending upon the activity involved and will be more relevant to some areas than others.

2. Strong engagement and ownership
The University is a large and complex organisation with many and varied contributions to the SDGs. Ensuring that there is strong engagement and ownership across different activities and departments within the University will be critical to the ongoing effectiveness of SDG delivery.

3. Clear visibility and profile
In order to be able to raise awareness about the SDGs and about the contribution the University is making to them it will be important for the SDGs to be highly visible in communications, case studies, reports and online. The SDG icons lend themselves to this and are beginning to emerge as an easily recognisable international framework for sustainability.

4. Effective collaborations and partnerships
The interrelated nature of the goals and the issues they address make collaborations between internal and external partners critical to their success.

5. Strategic monitoring and reporting
For the University to be fully engaged then progress made against the SDGs needs to be fully incorporated into strategic decision-making. The SDGs can help to shape and guide development so that the University's overall contribution to the goals can continue to grow.

Each of these characteristics can then be benchmarked against four levels of achievement:

Level 1: Getting started
Level 2: Making progress
Level 3: Integrated and embedded
Level 4: Strategic driver

Progress within each area of University activity will be benchmarked against the route map individually (Professional Services, Education, Research). This will then provide the basis for a whole-University progress report.

Progress will be monitored through a qualitative assessment but also through key quantitative route map Key Performance Indicators (KPIs). The route map KPIs will sit alongside KPIs that will measure progress in terms of the University's impact on the SDGs themselves, made up from a combination of existing University KPIs as well as agreed new or adapted SDG-specific KPIs.

University of Liverpool SDG-Leader Route Map

	GETTING STARTED	MAKING PROGRESS	INTEGRATED AND MAINSTREAMED	STRATEGIC DRIVER
Mapping and Analysis	Some initial mapping work undertaken	Growing levels of mapping and analysis completed	Substantial level of mapping and analysis completed with patterns and interconnectivity understood	Comprehensive mapping and analysis completed with patterns and interconnectivity understood - informs strategic decisions
Engagement and Ownership	Some engagement and ownership of SDG activity	Growing levels of engagement and ownership of SDG activity	Significant levels of engagement and ownership of SDG activity	Comprehensive levels of engagement and ownership of SDG activity at strategic and operational levels
Visibility and Profile	Low levels of SDG visibility	SDGs starting to become visible in communications, website, modules	SDG visibility now common in all areas of activity	SDGs clearly visible throughout all areas of activity
Collaborations and Partnerships	Low levels of SDG badged collaborations	Growing number of SDG badged collaborations	Significant number of collaborations and partnerships now take place within the context of the SDGs	SDGs act as a foundational basis for collaborations and partnerships
Monitoring and Reporting	Low levels or no SDG monitoring and reporting	SDG Annual Report produced shared internally and externally	SDG monitoring and reporting integral part of business processes	SDG monitoring and reporting integral part of business processes and inform strategic decisions