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The sustainable development goals and the University of Bath: An opportunity

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Abstract

The United Nations (UN) has designated the 2020s as the “decade of action” to meet the Sustainable Development Goals (SDGs). This paper responds to the call for universities to join this effort by reviewing how the University of Bath could support the SDGs more fully. A first step is monitor alignment of teaching and research with the 17 SDG goals. Having reviewed how to do this, we then review their role in relation to university management and stakeholder engagement, considering in turn how this can be linked with action on climate change, local collaboration and civic partnerships, engagement with the business sector, international networking, and the role of the SDGs in University league tables and rankings. We conclude with eight recommendations. These cover steps to strengthen a sense of shared purpose among staff and students, increase public awareness of what the University does, and facilitate cross-disciplinary research collaboration and innovative teaching. Universities can choose how far to align themselves with the SDGs over the next decade, but not how far the SDGs will be used by others to evaluate them.

Keywords: Sustainable Development Goals, universities, climate change, higher education, league tables.

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Introduction

2020 has been marked by crises - Covid-19, extreme weather events and social conflicts rooted in climate change, deeply entrenched and growing inequality, failures of the Western liberal-democratic model of governance, and the weakness of international organisations mandated to address global problems. Radical rethinking is needed at many levels, even as the need to respond to new crises consumes time and resources. Many reactions to these problems will continue to be divisive and to exacerbate conflict, as global, national, corporate and civil society voices seek to defend historical entitlements and competing interests.

Mindful of this wider context, this paper focuses narrowly on one modest proposal for one organisation: that the University of Bath should align itself more closely and clearly with the globally agreed Sustainable Development Goals (SDGs). These are themselves not without internal contradictions, but we argue they nevertheless provide a useful normative framework through which to coordinate diverse responses to global challenges, underpinned by a commitment to 'leave no one behind'. The paper explores how the SDGs can be explicitly linked to teaching, research, university management (including their use in league tables) and stakeholder engagement. It concludes that there are substantial potential benefits to doing so. These include strengthening a sense of shared purpose and social identity among staff and students, rendering University activities more transparent to external stakeholders, and facilitating cross-disciplinary research collaboration and more innovative teaching. Like it or not, we argue, others will also increasingly assess the University on the basis of its performance against the SDGs. Hence whether we do this well, or not, will have a growing influence over the University's reputation and international standing.

In September 2015, 193 countries of the United Nations signed the 2030 Agenda for Sustainable Development. This set out 17 sustainable development goals (SDGs) and 169 targets for making progress towards a world where 'no one is left behind' (see Figure 1). The SDGs go beyond the Millennium Development Goals (MDGs) that they replaced, as the leading framework for coordination of official development cooperation (Chaturvedi et al., 2021). But their scope is also broader, being applicable to all countries irrespective of their wealth and income, and through integration of socio-economic development and environmental goals within a single framework that

encompasses five 'Ps' - people, planet, prosperity, peace and partnership (Brown and Rasmussen, 2019; Caballero, 2019).

While primarily a product of the United Nations system, many other international and national organisations, corporations and NGOs have also adopted the SDGs as a framework for organising and monitoring their development activities. Their use in the higher education sector worldwide is highly variable but also growing fast. Pioneers - including the University of Manchester, University College Dublin, Carnegie Mellon in Pennsylvania and Monash University in Australia - are using them to map, coordinate and publicise their teaching and research. The SDGs also underpin two league tables for ranking universities, and feature increasingly in the ranking of business schools.

Figure 1: The 17 Sustainable Development Goals



The SDGs are not above criticism. Joseph and McGregor (2020:116) point out that while they provide a yardstick for monitoring global challenges there has been no corresponding increase in global governance capability to address them – indeed accountability for their achievement is even weaker than it was for the MDGs that preceded them. Gabay and Ilcan (2017) view them as tokens of a top-down and technocratic approach to development that provides political cover for a broadly neo-liberal 'business-as-usual' approach to global development. Others have noted contradictions between the SDGs, a tendency to downplay the trade-offs between them, particularly when

financing of necessary investment is increasingly reliant on private for-profit financing (Mawdsley, 2021).

This briefing takes a constructive stance towards the SDGs for three reasons. First, they are the product of one of the most extensive processes of political deliberation in human history. This involved many thousands of civil society organisations as well as national governments and UN agencies. While this process was far from perfect it confers on the SDGs a level of procedural legitimacy unmatched by any other available normative framework for global action, such as the ‘doughnut’ model (Raworth, 2017). This is a particularly valuable give the rise of narrower ideologies inimical to the very idea of global collaboration based on mutual interdependence and the universality of human needs. Second, the internal inconsistencies negotiated into the SDGs do not undermine their value as a shared framework and language for identifying and contesting trade-offs, and particularly for challenging advocates of them to be more explicit about how these will be managed in a way that is also consistent with signatories’ commitment ‘to leaving no-one behind’. Third, the SDGs are likely to focus more prominently in the way universities both see themselves and are seen by other stakeholders, including student unions and potential applicants. One role of the SDGs is to link societal challenges at global, national and local levels, and universities have a particularly important role to play in exploring and promoting these vertical linkages through internationally networked research. The focus of the SDGs on longer-term goals also fits well with the role of universities as centres for intergenerational exchange of ideas (SDSN Australia/Pacific, 2017; Association of Commonwealth Universities, 2015, 2019, 2020; Tord, 2020; Leal Filho et al., 2019; Fleaca et al. 2018).

The rest of this paper is organised as follows. The second section explores how the SDGs can be utilised to interrogate university curricula, involve students and foster innovation in teaching and learning. The third section reviews their potential for monitoring and managing research. The fourth turns to management and stakeholder engagement by looking in turn at the following: action on climate change; supporting local partnerships; engaging with the business sector; participating in national and international networks; and incorporation of the SDGs into league tables and rankings. The final section concludes that the University of Bath can and should do more in all these areas. It also makes eight specific recommendations, as follows.

1. To encourage and support students and staff to map their learning and teaching more explicitly onto the SDGs;
2. To monitor how coverage of the SDGs across the curriculum changes, and compare findings with those for other institutions;
3. To encourage and support researchers to map research activities and outputs onto the SDGs as a foundation for more proactive steps to confer over how to promote them;
4. To monitor how coverage of the SDGs within the research portfolio of the University changes, and compare findings with those for other institutions;
5. To sign up to the SDG Accord, the Sustainable Development Solutions Network and the Higher Education Sustainability Initiative in order to align UoB with peers across the higher education sector;
6. To hold a '17-rooms event' or similar, to facilitate links between researchers working on the same SDGs;
7. To commit to producing to a Voluntary University Review that profiles SDG activities in relation to the SDGs;
8. To feature the University's contribution to the SDGs more prominently in its communication and marketing strategies, including the website, and take related steps to improve its position in international university rankings.

This paper draws on interviews with University of Bath staff conducted by the first named author during the course of 2020. The mapping of teaching and research activities followed the methodological steps proposed by the Sustainable Development Solutions Network report "Getting Started with the SDGs" (SDSN Australia/Pacific, 2017). The authors are grateful to many members of staff¹ for engaging joining the discussion of the SDGs, particularly Charles Larkin (research director of the Institute for Policy Research) and Judith Randel (visiting fellow of the Centre for Development Studies) for commenting on an earlier draft.

Teaching and Learning

People study for many reasons, including to acquire skills and strengthen employment prospects, but also to develop a personal “moral narrative” that links their own identity and actions to wider societal values and goals (White, 2017). Bourn (2011:563) also argues that there is a public interest in equipping students with the skills to understand the relationship between their own actions and global processes of change. Explicit links between courses of study and the SDGs can assist in supporting both goals, providing a wide menu of options to choose from, and a common reference point through which to forge connections with others across disciplinary and departmental boundaries. Embedding the SDGs within and across the curriculum also extends education beyond extending and enhancing human capital to fostering a sense of global as well as national and local citizenship, increase the numbers of students aiming to live sustainably (Leal Filho et al., 2018:4; Bourn, 2011).

Surveys conducted over the last decade by the National Union of Students (NUS) consistently find that “students expect their universities to be taking action on sustainable development, both in terms of their impact and in terms of teaching” (NUS 2018 slide 1).² For example, in 2018 the NUS found that 90% of UK students agreed that their institution should actively incorporate and promote sustainable development, with 67% stating that they would like to see sustainable development incorporated into and promoted in all courses (NUS 2018 slide 11). 73% stated that sustainable development was something they would like to learn more about, but only 19% said it has been covered in detail in their respective courses (NUS 2018 slides 12 & 13). The National Student Survey for 2020 for the University of Bath found that only 51% and 40% respectively agreed with the statement that “*my course has encouraged me to think about environmental sustainability*” and that “*I have had opportunities to take part in activities supporting environmental sustainability.*”

A pilot mapping exercise confirmed that the vast majority of courses or units at the University of Bath can indeed be mapped onto the SDGs, it is just that the University chooses not to do so explicitly. The methodology used to demonstrate this is set out in a report by the Sustainable Development Solutions Network entitled *Getting Started with the SDGs* (SDSN Australia/Pacific, 2017), which provides a set of key words associated with each SDG. These were systematically

checked against all 2,692 undergraduate and postgraduate courses listed in the Curriculum Monitoring Information System (CMIS) for the 2019/20 academic year.³ Overall, no fewer than 85% of courses already aligned to at least one SDG, with many courses mapping onto more than one. Figure 2 shows the results for each of the 17 SDGs, compared with a very similar mapping exercise conducted for the University of Manchester (University of Manchester, 2019). This suggests that teaching at Bath is no less aligned to the SDGs than Manchester (a leading advocate in the UK in favour of promoting the SDGs), but also that there is a lot of variation in alignment by SDG across the two universities. Figures 3 and 4 use the same dataset to illustrate variation in course alignment to the SDGs across different parts of the University: the first showing shares between the School of Management and four Faculties, and the second zooming in on links between one SDG and departments in the Faculty of Humanities and Social Sciences.

Figure 2: Percentage of courses linked by at least one key word to each SDG

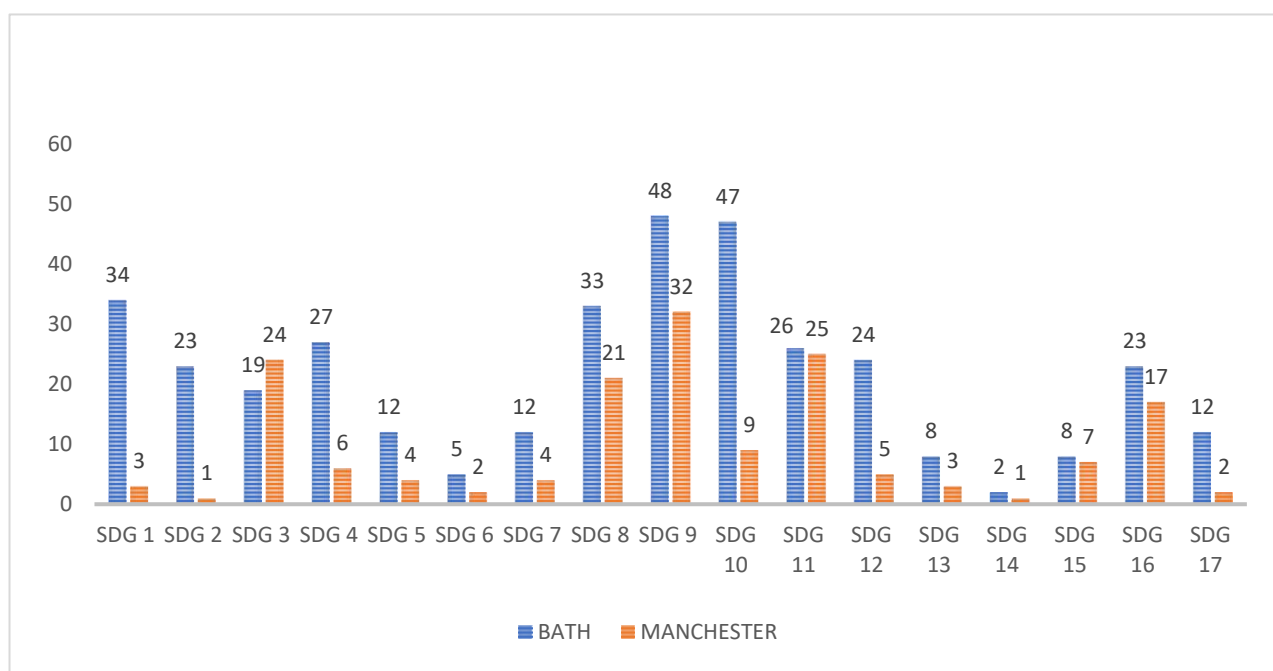


Figure 3: Percentage of courses with SDGs content by Faculty

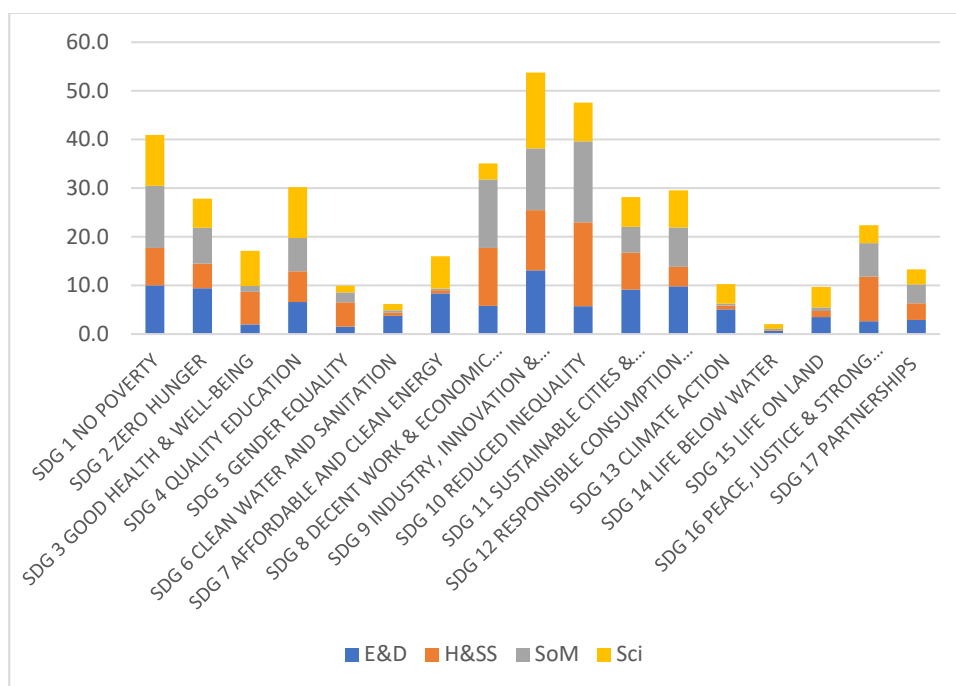
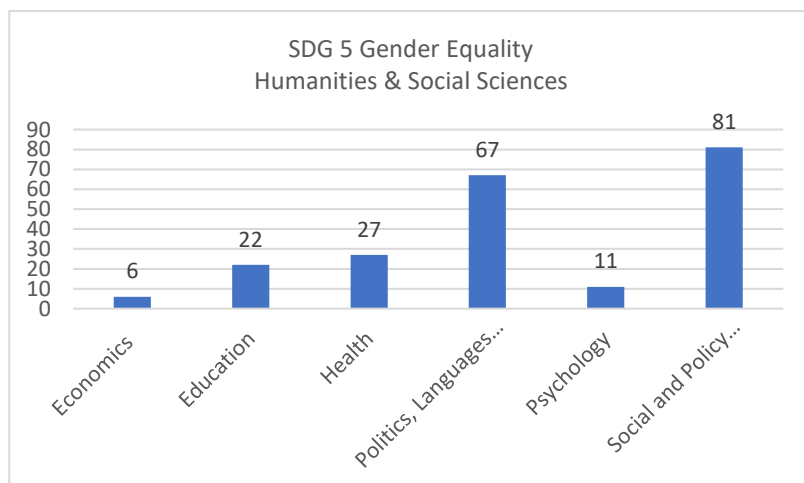


Figure 4: SDG 5 - Gender Equality, Faculty of Humanities & Social Sciences



The purpose of this exercise was exploratory: to examine the extent and distribution of alignment of the curriculum to the SDGs across the entire University. But it does also suggest scope for further research and discussion. For example, a champion member of staff might be identified for each SDG in each Faculty to review gaps, overlaps, tensions and potential synergies in its coverage between courses. Using the SDG framework will allow for easier identification of themes and provide a

starting point for drawing comparisons to course content, possibilities for interdisciplinary collaboration and wider sustainability issues. “Real sustainability challenges do not respect disciplinary boundaries or theoretical models, and therefore cannot be effectively addressed through these narrow lenses” (Purcell 2019:1354 cross referenced Budwig, 2015 and Brundiers and Wiek, 2011). Innovative approaches to interdisciplinary working could include use of the university estate as a living lab and development of Vertically Integrated Projects (VIPs). The SDGs can also provide a hook for Virtual Exchanges: six-week programmes that involve collaborating with other universities on a shared project (an approach being used by University College Dublin, for example). As companies align themselves more strongly with the SDGs, curriculum mapping can feed into corporate links, including placements, recognising that “There is ... a growing demand from business for graduates to be sustainability literate, with company leaders increasingly seeing sustainability as one of the top three priorities (Reid 2020:27 cross referenced McKinsey, 2014).”

Research

Advocates of the SDGs emphasise the potential contribution that University-based research can make directly to progressing towards achieving the SDGs (e.g. Stern, 2019:17). There is also a role for research that addresses them more critically. Bain et al. (2019), Baek (2019) and Dawes (2019) all analyse the internal consistency of the SDGs, drawing on insights from psychology, political economy and mathematics respectively. Examples of published research that critically examine the SDGs in relation to specific policy fields include Kamruzzaman (2016), Lauber et al. (2020), and Hilson and Maconachie (2019) who focus on their relation to poverty eradication, the governance of non-communicable diseases, and small-scale mining in sub-Saharan Africa, respectively.

These examples are just the tip of an iceberg. As with teaching, our core suggestion is that both individual researchers and the University as an institution, could make more effort to link what they are doing more explicitly to one or more specific SDGs or targets. The potential pay-off to doing so is to foster transparency, including potential for specialists with different disciplinary and organisational affiliations to connect, to identify gaps, and facilitate debate over the synergies and trade-offs between different goals and targets (El-Jardali et al. 2018; Mori Jr et al. 2019). Such mapping can highlight research with potential to contribute to achieving one or more SDGs, but also contesting them.

To illustrate the possible size of the ‘iceberg’ Figure 5 presents data from an audit of research outputs from the University of Bath between 2010 and 2019, as reported in the SciVal database.⁴ This suggests Bath has comparative strengths in research relating to SDGs 1,4,7 and 12, with research into clean water and sanitation standing out for its relatively high level of international and corporate collaboration.

Figure 5: Summary of research output for the University of Bath, 2010-2019

	Research output 2010-2019	Ranking within top 100 UK academic institutions	Field-weighted citation impact	International collaboration (percentage of outputs)	Academic-corporate collaboration (percentage of outputs)
SDG1. No poverty	50	15	0.9	40.0	0
SDG2. Zero hunger	72	43	1.95	50.0	1.4
SDG3. Good health & well-being	2,799	38	2.4	48.6	5.4
SDG 4. Quality education	95	10	1.93	32.6	0
SDG 5. Gender equality	80	36	1.45	30.0	0
SDG 6. Clean water & sanitation	61	26	3.22	62.3	16.4
SDG 7. Affordable & clean energy	735	17	2.35	42.6	5.7
SDG 8. Decent work & economic growth	209	22	1.45	30.1	2.4
SDG 9. Industry, innovation and infrastructure	75	21	2.3	46.7	1.3
SDG 10. Reduced inequality	111	36	2.07	29.9	0.9
SDG 11. Sustainable cities & communities	114	42	2.77	56.1	6.1
SDG 12. Responsible consumption & production	188	17	2.48	39.4	3.2
SDG 13. Climate action	263	42	2.19	43.7	4.2
SDG 14. Life below water	103	47	1.88	58.3	3.9
SDG 15. Life on land	74	55	2.75	52.7	6.8
SDG 16. Peace, justice and strong institutions	282	52	1.74	34.8	2.1

This data is not straightforward to analyse, and more research would be needed to do this fully. For example, a striking feature of the table is the dominance of publications in the health and well-being category, which partly reflects the orientation of this particular data source. 53% of all reported outputs are linked to good health and wellbeing, despite Bath not having a medical school. Table 6 indicates that academic outputs are even more skewed towards health and wellbeing at other universities in the region – accounting for 63.2% of the 50,488 publications archived for the GW4 (Bath, Bristol, Exeter and Cardiff) during this period. This partly accounts for Bath's relatively low overall share of outputs (10.5%) across the GW4. The only SDG for which Bath had the highest proportion of outputs across the GW4 using this data was SDG1 (no poverty). However, Table 7 indicates that its highest ranking among top 100 universities in the UK is 10th for SDG4 (education).

Figure 6: Summary of research output across the GW4, 2010-2019

SDG	Total (no.)	Total (%)	University shares (%)			
			Bath	Bristol	Exeter	Cardiff
SDG1. No poverty	132	0.3	37.9	18.9	23.5	19.7
SDG2. Zero hunger	606	1.2	11.4	25.4	36.1	27.1
SDG3. Good health & well-being	31,886	63.2	8.7	38.5	19.2	33.6
SDG 4. Quality education	347	0.7	27.4	36.9	16.4	19.3
SDG 5. Gender equality	568	1.1	13.9	48.8	16.7	20.6
SDG 6. Clean water & sanitation	455	0.9	13.4	20.2	47.3	19.1
SDG 7. Affordable & clean energy	2,736	5.4	26.8	16.2	23.2	33.7
SDG 8. Decent work & economic growth	948	1.9	22.0	23.8	18.5	35.7
SDG 9. Industry, innovation and infrastructure	315	0.6	23.8	16.8	19.7	39.7
SDG 10. Reduced inequality	690	1.4	16.1	38.4	22.5	23.0
SDG 11. Sustainable cities & communities	1,057	2.1	10.8	24.8	30.5	34.0
SDG 12. Responsible consumption & production	781	1.5	23.9	17.2	25.9	33.0
SDG 13. Climate action	4,580	9.1	5.6	27.9	41.8	24.7
SDG 14. Life below water	1,956	3.9	5.1	33.1	42.9	18.9
SDG 15. Life on land	1,327	2.6	5.6	36.5	58.0	0.0
SDG 16. Peace, justice and strong institutions	2,104	4.2	13.2	31.4	23.4	32.0
Total	50,488	100.0	10.5	34.5	24.3	30.7

Figure 7: University rankings in top 100 across UK by SciVal research output, 2010-2019

	Manchester	Bath	Bristol	Exeter	Cardiff
SDG1. No poverty	2	15	32	24	29
SDG2. Zero hunger	16	43	26	20	25
SDG3. Good health & well-being	7	38	15	26	18
SDG 4. Quality education	6	10	7	26	19
SDG 5. Gender equality	5	36	6	28	19
SDG 6. Clean water & sanitation	11	26	15	3	18
SDG 7. Affordable & clean energy	3	17	27	19	9
SDG 8. Decent work & economic growth	4	22	19	31	11
SDG 9. Industry, innovation and infrastructure	2	21	32	28	10
SDG 10. Reduced inequality	5	36	11	27	25
SDG 11. Sustainable cities & communities	3	42	19	16	14
SDG 12. Responsible consumption & production	1	17	26	15	8
SDG 13. Climate action	10	42	11	4	13
SDG 14. Life below water	18	47	9	4	21
SDG 15. Life on land	17	55	11	5	21
SDG 16. Peace, justice and strong institutions	6	52	16	26	14

Armed with a preliminary mapping of how the University's research output relates to the SDGs there may be scope for further analysis and reflection on how this research is both presented to the wider public. A foundation for this is the linkage, already established, between the Universities' use of funds obtained through the Global Challenges Research Fund (GCRF) to the SDGs. In line with the University's international strategy funding this aims "to increase the University's international research power and address global challenges by focussing international activities around research strengths... and prioritising international collaborations which focus on (the) strongest research areas". While all GCRF funded research contributes to international collaboration (SDG17), the University has also identified seven priority areas for GCRF funding, all of which can be closely linked to one or more of the SDGs, as indicated below.

1. Clean air water and sanitation (SDG6)
2. Affordable, reliable and sustainable energy (SDG7)
3. Understanding and responding to forced displacement and refugee crises (SDG17)

4. Resilience and response to short-term environmental shocks and long-term environmental change (SDG13)
5. Sustainable production and consumption of materials and other resources (SDG12)
6. Sustainable health and wellbeing (SDG3)
7. Inclusive and equitable quality education (SDG4)
8. Reduce poverty (SDG1) and inequality (SDG10), including gender inequalities (SDG5).

Management and Stakeholder Relations

From its establishment in the 1960s, the University of Bath has sought to combine excellence in research and teaching with relevance to contemporary societal issues through direct engagement with them, often in collaboration with other stakeholders. This mandate is reflected, for example, in the very high proportion of undergraduate students who combine their degree with a one year work placement. No less than with teaching and research, the SDGs provide a framework for mapping these activities, rendering them more transparent and highlighting synergies and trade-offs between them. The University is also itself a significant employer, provider and consumer of services. Its direct involvement in providing accommodation and catering services, estate management and procurement of other services provide opportunities for it both to serve as an example of good social and environmental good practice, and develop and test models of more sustainable living and working. This section highlights some leading examples of how such activities can also be usefully mapped onto the SDGs.

Action on climate change (SDG 13)

The University has a long record of seeking to improve the environmental sustainability in its operations, having been the first UK University to take part in the Carbon Trust Higher Education Carbon Management Scheme in 2003. In 2011, a Carbon Management Plan set out targets with a plan to achieve them, and in October 2019 the University went further by declaring a climate emergency and forming a climate action forum to formulate a strategic plan for further reducing emissions. Figure 8 reproduces its agreed principles for informing future action.

Box 1: University of Bath climate action framework principles, 2020

1. CARBON EMISSIONS REDUCTION · Being Net Zero Carbon in its Scope 1 and 2 emissions by 2030. · A 50% reduction in its Scope 3 emissions by 2030. Being Net Zero Carbon in its Scope 1, 2 and 3 emissions by 2040.
2. RESEARCH AND INNOVATION: Supporting world-class research activities at the UoB, and in wider collaborations, to deliver impactful research and innovation supporting the transition to the net zero carbon economy.
3. LEARNING AND TEACHING: Developing educational initiatives to build a world class reputation for high quality education on climate related issues with global reach and scale, for example by: providing opportunities for every student to study and work on climate related issues; delivering programmes with a sustainability agenda; delivering pedagogically innovative teaching practices to reduce carbon emissions.
4. UNIVERSITY STRATEGY: Supporting the transition to the net zero carbon economy through the university's strategy, sub-strategies and its core decision-making, and throughout its core values and its commitments.
5. UNIVERSITY GOVERNANCE: Ensuring there is clear leadership and governance for implementation of the Climate Action Framework, with public accountability through transparent disclosure of progress against our principles.
6. UNIVERSITY CAMPUS EMISSIONS REDUCTION AND CLIMATE CHANGE ADAPTATION: Reducing all university campus carbon emissions, in a manner that is consistent with the broader principles of sustainability and in a Just Transition. Understanding and responding to the consequences of climate change adaptation on the campus and the university's supply chain.
7. INTERNATIONALISATION STRATEGY: Supporting and encouraging carbon responsible international engagement to ensure sustainable collaborations that meet our strategic internationalisation goals.
8. CARBON MANAGEMENT: Improving the data quality relating to the university's carbon emissions, recognising that this is a strategic tool to understand and systematically reduce its carbon footprint.
9. UNIVERSITY FINANCES: Taking the principles of the Climate Action Framework into account in all key funding and investment decisions.
10. UNIVERSITY COMMUNITY AWARENESS AND ACTION: Supporting behavioural and cultural changes to enable carbon reduction targets through engagement with the university community.
11. UOB: LOCAL LEADER AND PARTNER: Working with key partners from the local community, industry, public sector bodies and third sector organisations, to support the transition to the net zero carbon economy.

Progress towards eliminating carbon emissions will entail cooperation with university students, staff and other stakeholders, and hence on their perceptions of whether the proposed transition is fair or offers a 'just transition'. For this reason, climate change action is not only itself a leading example of work aligned to the SDGs, it is also an entry point for developing frameworks for contributing to progress on other SDGs. In January 2020 the University published a consultation paper entitled 'Our University Our Future' (2020), expressing the views of students and staff around the future direction of the University. This confirmed widespread support for a more inclusive approach to sustainable development framed in global terms. It reports that students aspire to being part of a University whose graduates are *"...empowered as global citizens, not just graduates"* (pg. 47). Staff also *"...wanted to see the University creating the diverse and ethical leaders of tomorrow, making a positive impact on the world and transforming societies (p51).*

Promoting sustainable local development

In support of SDG11 ("sustainable cities and communities") the University's Strategic Engagement Team is in the process of developing a Civic University Agreement (CUA), providing an opportunity to forge stronger links with the local authority of Bath and North East Somerset (B&NES) along with Bath Spa University, CURO Housing and the Royal United Hospital. While immediate priorities will necessarily focus on what the University can do to help the Bath area to recover from Covid-19 crisis (see UPP Foundation, 2020a), this can readily be framed in ways that also makes explicit links to the SDGs at the same time (Goddard, 2016). Priority actions to support the University's relationship with the region identified by staff and students as part of the 'Our University Our Future' consultation included: supporting better transport; promoting decarbonisation; improving off campus accommodation and generating more local employment opportunities for students. A joint report, produced by the Institute for Policy Research (IPR) and The Good Economy Ltd, elaborates on the scope for the University to collaborate with other local "anchor institutions" in forging a "place based" economic recovery pathway that addresses multiple SDG goals and supporting a "just transition" to a low carbon economy (Copestake et al., 2020). Similar collaboration has already begun in other cities, including Bristol (see Fox and Macleod, 2019).

The University proudly celebrates the UNESCO world heritage status of the architecture of the city in which it is located. By working with other stakeholder in the city to promote the SDGs it can do more to contribute to the city's international profile with respect to more than its buildings.

Engagement with the business sector

The influence of the SDGs on business organisations is growing, with many of them seeking closer and deeper alignment to them. For example, in a report by the Business and Sustainable Development Commission entitled *Better Business, Better World Report*, leading finance and business leaders committed to incorporating the SDGs into their core growth strategies, value chain operations and policy positions and The UN Global Compact, the world's largest corporate sustainability initiative has enlisted the support of more than 12,000 companies in more than 160 countries.

Schemes such as One Young World, Young SDG Innovators, and the UN Global Compact Young Pioneers that promote the SDGs among graduates and newly recruited employees are indicative of a growing link between the SDGs and the University's goal of promoting graduate employability. Interest in the SDGs is also growing among longstanding corporate partners of the University, including AB InBev, Airbus, BMW, BP, Deloitte, GSK, Lloyds Banking Group, ONS, Santander and Unilever. In addition, the European Foundation for Management Development (EFMD), an important accreditation body for business schools, has also endorsed the SDGs as a framework for assessing university engagement with the business sector (Tord, 2020). The School of Management, ranked third in the Knights Better World Rankings, already demonstrates strengths in sustainable development through EQUIS accreditation and affiliation to The Principles of Responsible Management Education (PRME) initiative.

Growing business interest in the SDGs opens up new opportunities for the University to build on historical strengths in engaging constructively with the private sector directly through placements, sponsored and collaborative research. It also strengthens its ability as an autonomous civil society organisation to challenge business practices that are antithetical to the SDGs and to highlight trade-offs and contradictions within them. A leading example is the STOP (Stop Tobacco Organisations

and Products) research into how leading tobacco firms resist public health measures sponsored by the Bloomberg Foundation, where claims to ‘promote responsible consumption and production’ (SDG 12) collide with the goal of promoting ‘good health and well-being’ (SDG 3).

National and International networks and collaborative partnerships

Three umbrella organisations exist specifically to promote incorporation of the SDGs in the higher education sector. The largest is the Sustainable Development Solutions Network (SDSN), set up under the auspices of the UN Secretary-General to mobilize global scientific and technological expertise to promote practical solutions for sustainable development, including the implementation of the Sustainable Development Goals (SDGs) and the Paris Climate Agreement. In 2016, its secretariat shifted from the Earth Institute at Columbia University to regional offices in New York, Paris and Kuala Lumpur. By the end of 2020 its website reported 1,388 institutional members, many now affiliated to national and regional networks. UK university membership was 25, but the UK does not yet have a national network. Leadership from within the UN system also comes from the Higher Education Sustainability Initiative (HESI). Established in 2012, as part of the run up to the 2012 UN conference on Sustainable Development (‘Rio+20’), this counts over 300 organisations as signatories.

A third body is the Global Alliance, a network-of-networks for tertiary education and student sustainability networks established by Environmental Association for Universities and Colleges (EAUC). As a member of the EAUC, Bath was due to host its annual conference in June 2020, but this was cancelled due to the covid-19 epidemic. It also contributed three SDG case studies to a recent EAUC report entitled “The Sustainable Development Goals (SDGs) in Higher and Further Education: What does this look like?” (EAUC, 2020). These referred to skills training by the Student’s Union (SDG1), Employee health, safety and wellbeing (SDG11) and research into biodegradable microbeads (SDG14). In 2017 the Global Alliance established the SDG Accord as a “HESI endorsed partnership initiative... to allow the tertiary education sector to demonstrate its commitment to playing its part in meeting the SDGs, and sharing best practice” (SDG Accord, 2020). By 2020 the SDG Accord had attracted 1,566 signatories, including 178 higher education institutions and 12 student unions. These span Europe (73%), Asia (13%), Africa (6%) and the Americas (8%).

Other tertiary sector umbrella bodies have also aligned themselves to the SDGs. For example, in 2020 the Association of Commonwealth Universities endorsed promoting the higher education sector as a key delivery partner in Agenda 2030 as a strategic goal, arguing that “none of the 17 Sustainable Development Goals can be achieved without the contribution of higher education – through research, teaching, and community engagement” (ACU 2020:1). Other organisations actively promoting the SDGs in Higher Education include TEFCE (“Towards a European Framework for Community Engagement in Higher Education”) and the Global University Network for Innovation (GUNI) (Vilalta et al. 2018). Many other networks also focus on one or a sub-set of the SDGs. For example, the University of Bath is a member of the COP26 Universities Network, focused on climate change action. It has also signed up to the UN ‘Race to Zero’, a global campaign to promote the transition to a zero-carbon society and sustainable growth.

League tables and Rankings

Done well, league tables for universities offer useful evidence to inform performance management, enhance transparency and public accountability. When based on poor data, weak proxy indicators and dodgy aggregation they can be highly misleading (Hazelkorn, 2008). Standardization of criteria, indicators and weights are particularly dangerous when applied to a sector that celebrates diversity and plurality of values. Whatever the balance of arguments, they are now a fixture in the governance of UK universities, with three independent national rankings produced each year (the *Complete University Guide* produced by Mayfield Consultants, the *Good University Guide* produced by The Times and Sunday Times, and the *Guardian Guide*) provide subject-specific rankings that aim primarily to inform students’ degree choices. Supplementing these is the *University League* that ranks universities by environmental and ethical performance, produced by the student advocacy network People & Planet.

The most widely recognised international league tables are the QS World University Rankings and the THE (Times Higher Education) World University Rankings, both first produced in 2004. In 2020 the latter ranked more than 1,500 institutions against 13 indicators. In 2019 THE also launched the World Impact Rankings, which specifically assess universities against the 17 SDGs, taking into

account research, outreach and stewardship. The second edition of the ranking, for 2020, covered 768 universities in 85 countries. When submitting information for the rankings, universities must submit information on SDG 17 (partnerships) and at least three other SDGs of the university's choice.

Figure 9 compares the affiliations of selected universities to the various groups and league tables discussed above. The first two columns indicate that it does not perform well compared to its GW4 partners (Bristol, Cardiff and Exeter) despite routinely ranking higher than them in the three UK university league tables. The University of Bath is the only one not to have signed up to the SDG Accord, and is in last place in the People & Planet (P&P) rankings. It has not joined the Sustainable Development Solutions Network, nor the THE Impact Rankings. None of this necessarily means that it is doing less to contribute to the SDGs compared to the other universities, but it does leave the appearance of doing so. It also suggests that a more proactive approach to engaging with the SDGs might be one strategy for strengthening its international rankings. For example, in the P&P university league it scores just 22.5% for Education for Sustainable Development and scored 0% for their sustainability strategy. This is in no way representative of the work going on within the University, and this metric would immediately improve if communications about its work in relation to sustainability were strengthened, including on the website.

Figure 8: Affiliation of selected university to sustainability league tables and groupings

University	QR World University ranking (2020)	THE World University ranking (2021)	Climate Emergency declared	SDG Accord signed?	SDSN member?	People & Planet ranking (2019)	THE Impact ranking 2019/2020
Bath	172	201-250	Oct 2019	No	No	70 th (2:2)	Not joined
Bath Spa	n.a	n.a	Feb 2020	Yes (2017)	No	26 th (First)	201-300
Bristol	49	91	Apr 2019	Yes (2017)	Yes (2018)	11 th (First)	Not joined
UWE	751-800	401-500	Feb 2020	Yes (2017)	No	39 th (2:1)	Not joined
Exeter	=163	=174	May 2019	Yes (2019)	Yes (2019)	36 th (2:1)	Not joined
Plymouth	651-700	401-500	Jul 2019	Yes (2017)	No	15 th (First)	Not joined
Cardiff	=154	=191	Dec 2019	Yes	No	46 th (First)	Not joined
Manchester	27	=51	Jul 2019	Yes	Yes (2019)	59 th (2:1)	8th

Conclusions and Recommendations

The Sustainable Development Goals were launched in 2015 with a 15 year time horizon, one third of which has already passed. They always took a highly optimistic view of collective human capability to address global challenges, and that is even more painfully evident after the calamitous events of 2020. This paper has argued that it nevertheless remains useful for different agencies, including universities, to clarify what their priorities and goals are within the common framework that the SDGs provide. Indeed, it is particularly important for universities to do so, to the extent that they are better equipped to acknowledge what is not known, expose what is hidden, and reflect more openly, consistently and where necessary critically on what they and other agencies are trying to achieve. The university sector has been slow to do this, and the University of Bath slower than others, but we believe that doing so can still help it to achieve greater clarity and unity of shared purpose among its diverse stakeholders over the next decade. In this section we elaborate on the eight specific recommendations for doing so set out in the introduction.

1. *Encourage and support students and staff to map their learning and teaching more explicitly onto the SDGs.*

Our exploratory mapping exercise confirms that much of the curriculum currently covered across the University can indeed be connected to the different SDGs. Further top-down mapping of these linkages would be useful, but it would be more useful to invite unit convenors (with support from the Centre for Learning and Teaching) to supplement existing course/unit descriptions in the SIMS (the Syllabus Information Management System) with data that sets out the main links. This would provide a stronger foundation for network analysis through which to facilitate cross-programme connections. Another option might be to appoint an academic champion as a contact person and facilitator for each of the 17 SDGs. Sub-groups convened by this person might then explore scope for bringing together groups of staff and students interested in critically exploring particular targets.

2. *Monitor how coverage of the SDGs across the curriculum changes, and compare findings with those for other institutions;*

There is particular scope for exploring further how the profile of teaching and learning at Bath compares with its immediate neighbours and peers – e.g. with Bristol, Exeter and Cardiff in the GW4.

This might usefully start with research postgraduates and be facilitated by doctoral training partnerships. At the very least, the University could usefully appoint a member of staff to act as a point of contact within the University, and with counterparts in other universities who are using the SDGs to monitor the curriculum.

3. Encourage and support researchers to map research activities and outputs onto the SDGs;

Our exploratory mapping exercise again confirmed that much of the research currently being produced across the University can indeed be connected to the different SDGs. There is scope for further top-down mapping of these linkages, with potential to produce one or a series of reports that showcase what the University is doing in relation the SDGs. This could parallel a process of establishing academic champions (incorporating those already supporting the Climate Action Framework) to facilitate interaction between researchers working on the same SDG.

4. Monitor how coverage of the SDGs within the research portfolio of the University changes, and compare findings with those for other institutions;

As with teaching, there is again scope for exploring how the profile of research at Bath compares with its immediate neighbours and peers, including within the GW4. Leadership in this could come from existing research centres, including the Centre for Development Studies.

5. Sign up to the SDG Accord, the Sustainable Development Solutions Network and the Higher Education Sustainability Initiative in order to align UoB with peers across the higher education sector;

At the very least this would avoid the University being perceived as a laggard in responding to sector-wide initiatives to promote the SDGs. If other initiatives suggested here were also taken forward then these would strengthen the positive role the University could make within these networks, and contribute to strengthening its international profile

6. Hold a '17-rooms event' or similar, to facilitating links between researchers working on the same SDGs;

An event of this kind could work alongside the first four recommendations by providing a forum for those interested in specific SDGs to examine it in more depth, explore problems with the targets

associated with it, and scope for addressing them. For more information about what this might look like see <https://www.brookings.edu/events/2020-17-rooms-global-flagship-meeting/>

Box 2: Outline of the 17 Rooms Methodology

17 Rooms offers a new way of channelling collaborative energy and ideas into practical steps for the 17 Sustainable Development Goals (SDGs). The Brookings Institution and The Rockefeller Foundation first launched the initiative in September 2018 in New York City, on the eve of the U.N. General Assembly, as an experimental gathering with more than 100 people joining. The meeting aimed to foster a fun and action-oriented approach to convening 17 disparate specialist communities, all under the same roof. Within the 17 Rooms process, each SDG-focused working group meets as a “Room” to identify, in parallel and in concert, opportunities for cooperation over the subsequent 12-18 months. Guided by the pursuit of “a next step” rather than “a perfect step,” participants meet in their personal capacities to engage in candid and informal discussions. By identifying openings for progress within an SDG, rather than attempting to cover the waterfront of each entire SDG, Rooms generate a mix of expert-driven insights plus momentum for practical action. As of the second annual flagship session in New York in September 2019, Rooms meet both to consider their own priorities for near-term action and to explore perspectives on opportunities across Goals. In 2020, 17 Rooms went entirely virtual. Most Rooms met a couple of times from June through mid-September. Then, on September 21st, a culminating virtual summit brought all the Rooms together to offer feedback on each other’s proposals, to explore opportunities for collaboration, and to report out on priority opportunities in 2021. U.N. Deputy Secretary-General Amina Mohammed joined as “keynote listener,” providing feedback on all the Rooms’ lead ideas.

Source: 17 Rooms Secretariat (2020)

7. Commit to producing to a Voluntary University Review that profiles University activities in relation to the SDGs.

Carnegie Mellon University claims to have been the pioneer in producing one of these in September 2020 (CMU, 2020), although the University of Manchester (2019) is possibly an earlier example. CMU describe the process they undertook as “investigating and making an inventory of current and recent (over the last two years) education, research, and practice activities at CMU related to the SDGs, and then mapping the various activities to the SDGs in consultation with the CMU community. The goal was to obtain a snapshot in time of already ongoing SDG activities at CMU, and to provide insight into SDG areas with lots of activity and those with much less activity at CMU.”

8. To feature the contribution of the University to the SDGs more prominently in its communication and marketing strategies, including within the University’s website

Progress in implementing the other recommendations listed above would provide a platform for communicating what the University is doing in this space overall. Interest in the SDGs has been expressed from within the Institute of Policy Research, The Centre for Development Studies, The Centre for Teaching and Learning, International Relations Office, International Partnerships (Research), Climate Action Group, Employability Strategy Group, International Partnerships (Teaching & Learning), Department of Development and Alumni Relations, Director of International Relations, GW4 and The Strategic Engagement Team. However, there is currently no central point to galvanize and coordinate this interest. Hence an over-arching recommendation is to establish some clear leadership to promote the University's engagement with sustainable development. Leal Filho (2017) found that lack of support from senior management was the greatest obstacles to the integration of sustainable development into HEI, while a Harvard case study of three universities (Purcell et al., 2019) found that the overriding element of success in each case was that leadership from the top. Leal Filho (2017) concludes that “universities should establish formal structures to guide the implementation of sustainable development policies and programmes, with specific personnel, instead of trying to pursue them on an ad hoc basis, as seen in many cases” (p103).

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NOTES

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² See Haines et al. (2019) for a more comprehensive analysis of how prominently the SDGs feature in the websites of student’s unions across Europe. This concludes that a lack of representation of

the SDGs to student contributes to “potential inequality of sustainability skillsets required by graduates on a global scale to tackle global challenges.”

³ The ‘miscellaneous’ key words were not analysed, and generic words such as ‘work’, ‘ICT’, ‘class’, ‘produce’, ‘aids’ and ‘school’ were omitted because these flagged up nearly every unit in the catalogue. Courses entitled ‘dissertation,’ ‘placement’ were omitted as were those offered by the Academic Skills Centre. A list of all courses for each of the key words under each SDG was compiled with the following headings: ‘SDG’, ‘key word’, ‘course code’, ‘course title’, ‘department’, ‘faculty’ and ‘degree level’. The list was then sorted by faculty to delete duplicate courses (mapped onto the same SDG by more than one key word).

⁴ There are limitations using SciVal. It is not comprehensive of all publications: leaving out some humanities subjects, for example. And while it reports international and corporate partnerships is does not produce specific data for SDG 17. There is also no facility for filtering authors according to faculty or specific interdisciplinary collaborations.