Handbook on Sustainable Development Goals

SDGS: THE BEST PRACTICE OF JSS ACADEMY OF HIGHER EDUCATION &RESEARCH

https://sustainabledevelopment.un.org

https://jssuni.edu.in/

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JSS Academy of Higher Education & Research (JSSAHER)

Social Responsibility Statement

'Touching the lives of Millions'

JSSAHER'S Social Responsibility is an approach of ethical and intelligent management, which involves both its impact on its human, social and natural context, and its active role on the promotion of Sustainable Human Development of the country. Within this approach, "Sustainable Campus" is a strategy that strives to reduce the ecological footprint of the Institution via a rational use of resources and to educate the JSSAHER community on the ethics of sustainability.

JSSAHER with the legacy of more than 1000 years of its Founding organization Sri Suttur Math and the sponsoring society–JSS Mahavidyapeetha is acutely aware of its social responsibilities and is confident in stating that it already goes well beyond what is expected of an organization.

JSSAHER is committed :

1. To promote ethical standards to be adopted by students, staff and other members of JSSAHER community.
2. To raise the educational aspirations of people in the community, as well as across the country and encourage their greater participation in higher education.
3. To encourage an inclusive environment without barriers to achievement, where students and staff are highly valued, based on mutual respect.
4. To provide a Higher Education Institute campus environment and range of facilities, both educational and recreational, which are attractive, accessible and stimulating.
5. To integrate with and support the needs of our community and our region.
6. To embrace environmental responsibility and sustainable development principles, to make a positive contribution to urban regeneration and to ensure that any adverse environmental impact of our activities is minimized.

Introduction:

The United Nations' *Transforming Our World: The 2030 Agenda for Sustainable Development* is one of the most ambitious and important global agreements in recent history. The agenda, with the 17 Sustainable Development Goals (SDGs) at its core, is a guide to tackling the world's most pressing challenges – including ending poverty and bringing economic prosperity, social inclusion, environmental sustainability and peace and good governance to all countries and all people by 2030.

There is already a strong interest in, and response to, the SDGs by governments, businesses and organisations in most countries. The SDGs will be a major influencer on the strategies and actions of these stakeholders – as well as on development finance flows – over the next 15 years. The SDGs also have strong relevance to university, and the tertiary and academic sectors more broadly.

The SDGs cover a wide range of complex social, economic, and environmental challenges and addressing them will require transformations in how societies and economies function and how we interact with our planet. Education, research, innovation and leadership will be essential in helping society address these challenges. University, with their broad remit around the creation and dissemination of knowledge and their unique position within society, have a critical role to play in the achievement of the SDGs. Arguably none of the SDGs will be achieved without this sector.

Engaging with the SDGs will also greatly benefit university by helping them demonstrate university impact, capture demand for SDG-related education, build new partnerships, access new funding streams, and define a university that is responsible and globally aware.

Education and research are explicitly recognised in a number of the SDGs and university have a direct role in addressing these. However the contribution of university to the SDGs is much broader, as they can support the implementation of every one of the SDGs as well as the implementation of the SDG framework itself. Some of these main areas of contribution are:

- Learning and teaching: Providing students with the knowledge, skills and motivation to understand and address the SDGs (broadly 'education for sustainable development'); providing in-depth academic or vocational expertise to implement SDG solutions; providing accessible, affordable and inclusive education to all; providing capacity building for students and professionals from developing countries; and empowering and mobilising young people.
- Research: Providing the necessary knowledge, evidence-base, solutions, technologies, pathways and innovations to underpin and support the implementation of the SDGs by the global community – through both traditional disciplinary approaches and newer interdisciplinary, transdisciplinary and sustainability science approaches; providing capacity building for developing countries in undertaking and using research; collaborating with and supporting innovative companies to implement SDG solutions; improving diversity in research; and student training for sustainable development research.

- Organisational governance, culture and operations of the university: Implementing the principles of the SDGs through governance structures and operational policies and decisions, such as those relating to employment, finance, campus services, support services, facilities, procurement, human resources, and student administration.
- External leadership: Strengthening public engagement and participation in addressing the SDGs; initiating and facilitating cross-sectoral dialogue and action; ensuring higher education sector representation in national implementation; helping to design SDG based policies; and demonstrating sector commitment to the SDGs.

Though university are making important contributions to the achievement of the SD, for the SDGs to be truly successful at a global scale, university need to become champions of sustainable development and play a leading role in the implementation of the SDGs.

For this, a whole-of-university approach is essential and Colleges & Departments can use the following Steps to start and deepen their engagement with the SDGs:

- Mapping what they are already doing
- Building internal capacity and ownership of the SDGs
- Identifying priorities, opportunities and gaps
- Integrating, implementing and embedding the SDGs within university strategies, policies and plans
- Monitoring, evaluating and communicating their actions on the SDGs

> “We can use the global network of university, your university, my university, a thousand-and-more university around the world, to be an active ‘solutions network’ to help governments, business, and civil society to chart out the pathways to successful sustainable development, and also to be the incubators for the rapid development and rapid fusion of sustainable development technologies. University around the world should be in the lead of helping society to find the technical solutions to achieve these goals.”
>
> Jeffrey D. Sachs,
> Director, Sustainable Development Solutions Network
>
> [Sachs, JD 2015, ‘Achieving the sustainable development goals’, *Journal of International Business Ethics,* vol. 8, no. 2, pp. 53–62 (p.61).]

WHAT ARE SDGS?

In September 2015, world leaders at the UN unanimously adopted *Transforming Our World: The 2030 Agenda for Sustainable Development* , one of the most ambitious and important global agreements in recent history. The agenda, which came into effect on 1 January 2016, aims to set the world on a path towards a better future for all by 2030.The SDGs are a set of priorities and aspirations to guide all countries in tackling the world's most pressing challenges .

- SDG 1 End poverty in all its forms everywhere
- SDG 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- SDG 3 Ensure healthy lives and promote wellbeing for all at all ages
- SDG 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- SDG 5 Achieve gender equality and empower all women and girls
- SDG 6 Ensure availability and sustainable management of water and sanitation for all
- SDG 7 Ensure access to affordable, reliable, sustainable and modern energy for all
- SDG 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- SDG 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- SDG 10Reduce inequality within and among countries
- SDG 11Make cities and human settlements inclusive, safe, resilient and sustainable
- SDG 12Ensure sustainable consumption and production patterns
- SDG 13Take urgent action to combat climate change and its impacts
- SDG 14Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- SDG 15Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- SDG 16Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- SDG 17Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development Finance

* A full list of targets for each goal can be found at http://www.un.org/sustainabledevelopment/sustainable-development-goals/.

Goal 1
No Poverty

Goal 2
Zero Hunger

Goal 3
Good Health and Well-Being

Goal 4
Quality Education

Goal 5
Gender Equality

Goal 6
Clean Water and Sanitation

Goal 7
Affordable and Clean Energy

Goal 8
Decent Work and Economic Growth

Goal 9
Industry, Innovation and Infrastructure

Goal 10
Reduced Inequalities

Goal 11
Sustainable Cities and Communities

Goal 12
Sustainable Consumption and Production

Goal 13
Climate Action

Goal 14
Life Below Water

Goal 15
Life on Land

Goal 16
Peace, Justice and Strong Institutions

Goal 17
Partnerships for the Goals

UNIVERSITY ENGAGEMENT IN THE SDGS

University occupy a unique position within society. With a broad remit around the creation and dissemination of knowledge, university have long been powerful drivers of global, national and local innovation, economic development, and societal wellbeing . As such, university have a critical role in the achievement of the SDGs and will also greatly benefit from engaging with them .

How do the SDGs help university?

Create increased demand for SDG related education

Provide a comprehensive and globally accepted definition of a responsible university

Offer a framework for demonstrating impact

Create new funding streams

Support collaboration with new external and internal partners

How do university help the SDGs?

Provide knowledge, innovations and solutions to the SDGs

Create current and future SDG implementers

Demonstrate how to support, adopt and implement SDGs in governance, operations and culture

Develop cross-sectoral leadership to guide the SDG response

WHY THE SDGS NEED UNIVERSITY

The higher education and scientific research sectors are explicitly recognised in a number of the SDGs; however, university contribution is needed much more broadly to achieve all of the SDGs. The SDG agenda covers a wide range of interconnected social, economic, and environmental challenges and the unique functions and expertise of university are critical for overcoming all of these. Arguably the SDGs will not be achieved without this sector. The key roles for university are:

Providing the knowledge and solutions to underpin the implementation of the SDGs

Addressing the challenges of the SDGs will require new knowledge, new ways of doing things, hard choices between competing options, and in some cases profound transformations. University drive technological and societal progress through research, discovery, knowledge creation, and adoption. They attract and nurture talent and creativity and are central players in regional and national innovation systems. These services are critical for helping the global community understand the challenges, opportunities, and interactions between the SDGs; develop and implement solutions; develop and assess policy options and transformation pathways; and monitor progress.

Creating current and future SDG implementers

University provide people with professional and personal skills and capabilities. They have access to large concentrations of young and curious people who are passionate, creative and have a desire for a better world. They also increasingly influence global development through international students and alumni, international campuses, and capacity building activities. Achieving the SDGs will need everyone to contribute. University therefore need to ensure that they are equipping current and future leaders, decision-makers, teachers, innovators, entrepreneurs, and citizens with the knowledge, skills and motivation that will help them contribute to achieving the SDGs.

Embodying the principles of the SDGs through organisational governance, operations and culture

University is a complex and diverse institutions. Through the staff, students, campuses, neighbourhoods and supply chains, university has significant social, economic and environmental footprints. By implementing the principles of the SDGs within the own governance, operations and culture, university will directly contribute to the achievement of the SDGs within these extensive spheres.

Providing cross-sectoral leadership in implementation

University hold a position of neutral and trusted stakeholders within society. As such, it has the capacity and responsibility to guide and lead the local, national, and international response to the SDGs through cross-sectoral dialogues and partnerships. The University also has a key role in educating the public and other sectors on the SDGs and in advocating for the importance of the SDGs.

WHY UNIVERSITY NEED THE SDGS

The SDGs are a global framework with strong buy-in and adoption among governments, business & corporate , NGOs , other university and the community. University can draw a range of benefits from this broad support by engaging with the SDGs. Key benefits include:

Demonstrating university impact

The SDGs provide a new and integrated way to communicate and demonstrate to external stakeholders including government, funders and the community – how university contribute to global and local wellbeing and therefore their impact and relevance.

Capturing demand for SDG-related education

The SDGs speak to both young and old people, as global citizens wanting to make meaningful contributions to society and the environment. Additionally, as government increasingly embed the SDGs as a strategic focus, the demand for graduates to understand and implement the SDG agenda. Early adoption of SDG-related education will future proof an institution for these changing circumstances.

Building new external and internal partnerships

One of the strengths of the SDG is that it provides a common framework for different sectors and organisations to connect and work together on shared interests. This will give university opportunities to form new collaborations with government, industry, and the community in both research and education. Equally, the framework can help identify common interests across different areas of the university, helping to drive cross-disciplinary partnerships, collaboration, and innovation.

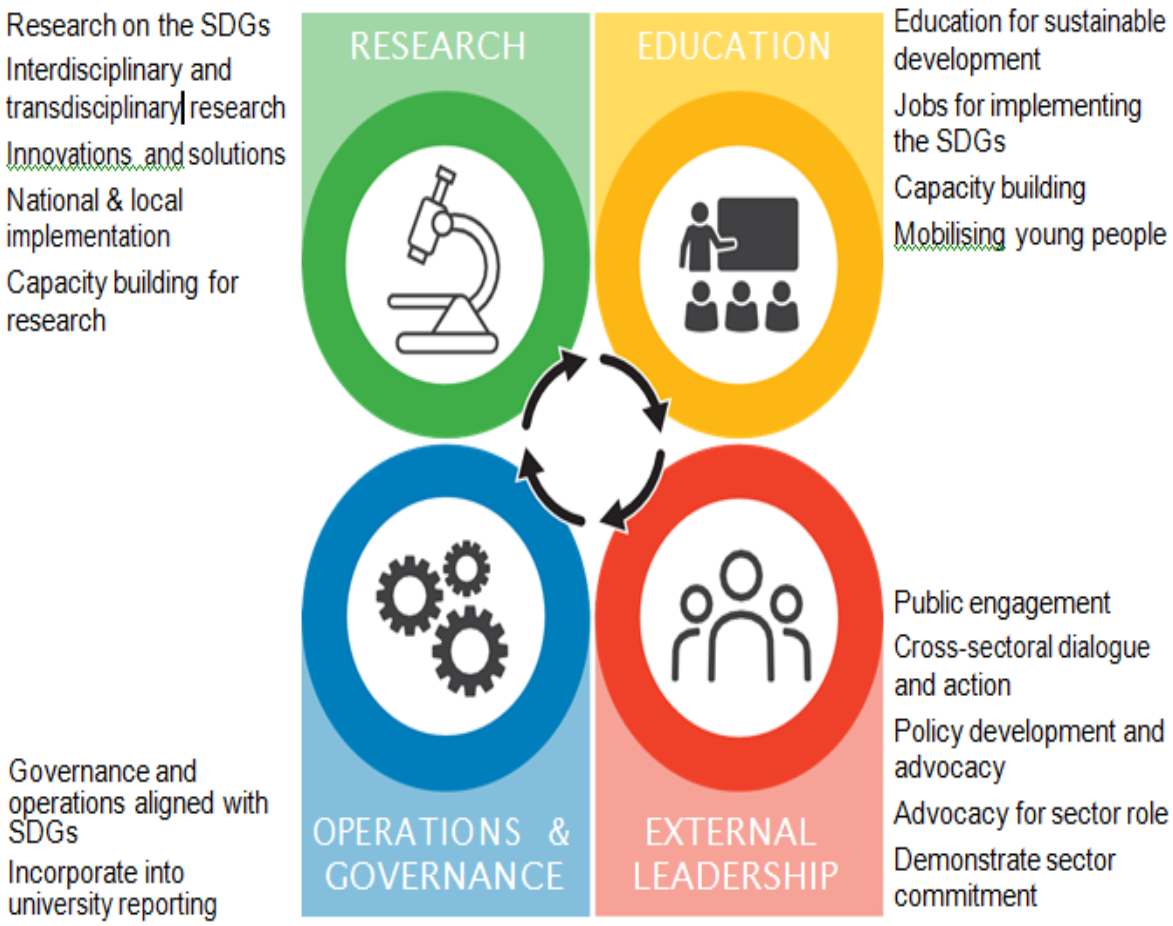
Accessing new funding streams

Funds/grants – including government agencies, international banks, and philanthropists – are increasingly framing funding calls around the achievement of the SDGs.

Adopting a comprehensive and globally accepted definition of a responsible and globally aware university

University is looking to be both more responsive to societal needs and to become agents of change towards solving global challenges. As a universally agreed framework, the SDGs provide an organising structure for what this looks like for a university. Furthermore, given the critical role university has in ensuring the success of the SDGs, university has a moral imperative to embody support for the SDGs as part of their social missions and core functions.

HOW UNIVERSITY CAN CONTRIBUTE TO THE SDGS



TEACHING AND LEARNING
SDG-4 QUALITY EDUCATION

Education is one of the bedrocks of the SDGs. In and of itself, quality education leads to significant sustainable development benefits for individuals, communities and countries . It is also a critical means of supporting and accelerating global capacity to implement the SDGs . As such, university, through its extensive learning and teaching activities – including undergraduate and graduate teaching, professional training, executive and adult education, online learning, co-curricular activities, and student clubs and societies – have a very important role to play in SDG implementation.

The SDGs recognise the importance of education to sustainable development through SDG 4, which calls for providing “inclusive and equitable quality education and promoting lifelong learning opportunities for all.” Some of the targets within this goal explicitly call for action by university, and many others have direct relevance to teaching and learning activities within university.

SDG targets relating directly to teaching and learning

Goal	Target
	By 2030, ensure equal access for all women and men to affordable and quality education. By 2030, substantially increase the number of youth and adults who have relevant skills, including technical skills, for employment, decent jobs and entrepreneurship. By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations. 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. Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all. By 2020, substantially expand number of scholarships available for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries.

What can university do?

At a glance…

- Provide students with the knowledge, skills, and motivation to understand and address the challenges of the SDGs
- Empower and mobilise young people
- Provide in-depth academic or vocational training to implement SDG solutions
- Enhance opportunities for capacity building of students and professionals from developing countries to address challenges relating to the SDGs

Provide students with the knowledge, skills, and motivation to understand and address the challenges of the SDGs

To become effective SDG implementers, students need :

Cross-cutting skills and 'key competencies' that are relevant to addressing all of the SDGs: systems thinking, critical thinking, self-awareness, integrated problem-solving, and anticipatory, normative, strategic and collaboration competencies; creativity, entrepreneurship, curiosity and learning skills, design thinking, social responsibility, partnership competencies, and being comfortable in inter-disciplinary settings.

A basic understanding of the subject areas of each of the SDGs.

Knowledge and understanding of the SDG framework itself and its purpose and uses.

Education for the SDGs is closely aligned with the more general and well-established field of education for sustainable development (ESD), and can build on its approaches and methodologies. ESD is also increasingly focused on the SDGs and is developing resources and tools especially for them, such as learning objectives and literacy tests.

To contribute to education for the SDGs, university can:

- Integrate the SDGs and the principles of ESD into all undergraduate and graduate courses, as well as graduate research training
- Provide training on the SDGs and ESD to all curriculum developers, course coordinators and lecturers
- Offer executive education and capacity building courses for external stakeholders on the SDGs and the knowledge and skills needed to address them
- Advocate for national and state education policies that support education for the SDGs
- Engage students in the co-creation of learning environments and opportunities that support learning on the SDGs
- Structure courses around real-world collaborative projects for change, in which the students have the opportunities to act and reflect iteratively, and to develop adaptive capacity while working towards a purpose

Empower and mobilise young people

Young people have both a critical stake in ensuring the SDGs are achieved and also a critical role in contributing to their achievement. They are creative, energetic, idealistic and optimistic about the future and want to make global, challenging and meaningful contributions. As such they have the potential to be the key drivers of sustainable development not just in the future, but *now*[i]. University can harness their unique access to large concentrations of young people to directly contribute to all the SDGs:

- Give young people opportunities to be heard and participate in university governance decisions relating to the SDGs
- Use the SDG framework and the identification of solutions to the challenges of the SDGs as the basis for student co-curricular activities, such as courses, learning and teaching programs, student leadership programs, hackathons, innovation and entrepreneurship challenges, and study tours, as well as for recruitment activities for high schools students
- Encourage and support all student clubs and societies to engage with the SDGs and collaborate with each other on SDG-related events and activities
- Promote student volunteering activities that address the SDGs
- Help students set up a network or club to mobilise the campus and student groups behind the SDGs through events, campaigns and projects
- Support students to engage in national and global leadership programs for young people on the SDGs

Provide in-depth academic or vocational training to implement SDG solutions

University can contribute to all of the SDGs by ensuring that they are training graduates for the jobs that are needed for SDG implementation. University need to ensure they are agile, change-ready and future focused, so that they remain relevant not just for the jobs that exist today, but for those that will exist in the future. To support this, university can:

- Form strong links with business and industry to monitor employer trends and skills requirements, for example through business communities of practice.
- Enhance opportunities for lifelong learning, such as executive education, online learning, and vocational training.

  Enhance opportunities for capacity building of students and professionals from developing countries to address challenges relating to the SDGs

  Capacity building through education is an important ‘means of implementation’ to help developing countries address their own sustainability challenges.

  University have extensive links to developing countries through international students and alumni, international campuses, academic exchange programs, study tours, and partnerships with university in developing countries. University can leverage these links to support capacity building for the SDGs through a variety of ways, such as:

  1. Engage international students on the SDGs
  2. Develop free quality online courses on sustainable development and how to address

SDG challenges

3. Develop exchange relationships with university in developing countries and in-country training programs around addressing the SDGs
4. Provide SDG-related scholarships for students from developing countries
5. Advocate for overseas development assistance funding towards scholarships and improved in- country education to support the achievement of the SDGs

Case studies- Examples:

1. Student engagement through Take One Step (Monash University)
2. Doctorate in Sustainable Development for the SDGs (Curtin University)
3. The Development Practice Program (James Cook University)
4. Student Leadership Forum on the SDGs (Monash University)
5. Teaching SDG 1 (The University of Sydney)
6. Mapping curriculum through the SDGs (Victoria University of Wellington)

Publications

- UNESCO 2017, *Education for Sustainable Development Goals: Learning objectives*, UNESCO, Paris, unesdoc.unesco.org/images/0024/002474/247444e.pdf.
- Morin, E 1999, *Seven complex lessons in education for the future*, UNESCO, Paris, unesdoc. unesco.org/images/0011/001177/117740eo.pdf.
- SDSN General Assembly 2017 *The role of Higher Education to foster sustainable development: Practices, tools and solutions,* Position paper, www.sdsn-mediterranean.unisi.it/wp-content/ uploads/sites/30/2017/08/Testo-positional-CON-FIG-1.pdf.

Networks and websites

- Education for Sustainable Development (UNESCO): Useful information on news, events, and publications on sustainable development in the context of education. en.unesco.org/themes/ education-sustainable-development.
- Global Action Programme on Education for Sustainable Development (UNESCO): A useful resource on how to generate and scale-up concrete actions on education for the SDGs. en.unesco.org/gap.
- Principles for Responsible Management Education (PRME): A business school initiative within the United Nations Global Compact to advance social responsibility and the SDGs by incorporating universal values into curricula and research. www.unprme.org.
- SDSN Youth: The youth arm of the Sustainable Development Solutions Network (SDSN) works to empower youth globally to create sustainable development solutions. sdsnyouth.org.

SDGs & RESEARCH

To achieve the SDGs, the global community will need to overcome many difficult and complex social, economic and environmental challenges, some of which will require transformations in how societies and economies function and how we interact with our planet. University, through their extensive research capabilities and activities, have a critical role in providing the necessary knowledge, evidence-base, solutions and innovations to underpin and support this task .

How is research relevant to the SDGs?

Addressing research-related SDG targets

A number of SDG targets directly refer to the need for research-related activities as key components of addressing the SDGs. Many of these targets are considered the 'means of implementation' of the SDGs.

SDG targets relating directly to research.

Goal	Target
	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
	SDGs 2, 3, 7, 12, refer to the need for scientific research and input on sustainable agriculture, vaccines development, and sustainable consumption and production, respectively. SDGs 14 refer to the need for scientific input in addressing ocean and fisheries management.
	Enhance regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

What can university do?

At a glance…

- Encourage and promote the SDGs as a topic of research within the university
- Support the full spectrum of research approaches needed to address the SDGs, including interdisciplinary and transdisciplinary research
- Support and incubate innovation for sustainable development solutions
- Actively support national and local implementation of the SDGs
- Advocate for national support and coordination of research on the SDGs
- Support capacity building for developing countries to undertake and use research on the SDGs

Encourage and promote the SDGs as a topic of research within the university

- Raise awareness and the profile of the SDGs among researchers, including Early Career Researchers looking to build their profile and presence in new spaces
- Help researchers to understand how their research currently relates and connects to various goals
- Map how the university's research and research strengths align with the SDGs and identify the key researchers
- Prioritise research relating to the SDGs and recruit suitable academic staff
- Develop academic promotion criteria that value contributions to the SDGs
- Showcase research relating to the SDGs and highlight the SDGs in major flagship projects
- Regularly report on how university research is contributing to the SDGs
- Encourage and support researchers to engage in global research community efforts to support the SDGs

The SDG framework also aligns well with the strong push globally for university to report on research impact. Support the full spectrum of research approaches needed to address the SDGs, including interdisciplinary and transdisciplinary research.

Newer approaches are crucial for addressing the complexity and real-world context of the SDGs. These approaches help to explore 'what is possible' and are guided by values to achieve the SDGs equitably. They include:

- *Sustainability science* – or more broadly research for sustainable development – a new branch of research which seeks to understand how interactions and emergent properties between natural, social and economic systems shape sustainable development challenges, and how to create transformations towards more sustainable outcomes.
- *Interdisciplinary and transdisciplinary approaches* that bring different disciplines, sectors, and types of knowledges (traditional, practitioner, expert, citizen, and so on) together to help illuminate all aspects of complex social, environmental and economic challenges.
- *Co-design and co-production approaches*, which work closely with policy makers and users of knowledge from the start to define the problems, plan the research methodology, and carry out the research.
- *Inclusive approaches* that recognise and engage with important groups – such as women, indigenous people, and diverse cultures, worldviews and ideologies – and forms of knowledge – such as traditional knowledge – that are often under-represented in research.
- *Policy-relevant advice* that uses existing knowledge and research to assist policy makers understand the implications of different policy options and design new policies.

These new research approaches can be more challenging to carry out than traditional approaches, particularly within traditional university structures. Building trust and relationships among people from different disciplines and stakeholders from other sectors takes time; and research funding and journals are at times biased towards discipline-based research. Research on highly applied problems and policy advice is challenging as the methodology and timing often change significantly as the nature of the complex space becomes clearer. In addition academic performance and reward structures, which are generally based on publications and grants, do not often incentivise collaborative engagement.

However, in order to help address the SDGs, it is crucial for university to encourage and support these research approaches, particularly interdisciplinary and transdisciplinary approaches. University can use the SDGs to address this task. They can:

- Map university research onto the SDGs and identify opportunities for interdisciplinary linkages
- Identify existing SDG-related interdisciplinary research efforts and capabilities within the university
- Build capacity of all researchers (including Early Career Researchers and graduate students) in interdisciplinary research and other new research approaches
- Provide seed funding and scholarships towards interdisciplinary and transdisciplinary work on the SDGs
- Provide structures and forums to encourage interaction, idea generation, and integration across disciplines
- Reflect the value and validity of collaborative research and integrative, systems design, and solutions oriented approaches in research incentive structures, and promotional opportunities

Support and incubate innovation for sustainable development solutions

University are centres of innovation, invention and discovery, has played a role in the development of almost every major technology and can help drive the development of social and technological innovations and solutions across SDG challenges. University can expand its role as hubs of innovation to support and host businesses – such as start-up high tech companies located near university research programs – that provide technologies and services for sustainable development. To do this they can:

- Collaborate with businesses to develop new technologies and solutions to address the SDGs
- Incubate start-up high-tech companies associated with university research programs inspired by the SDGs and evaluated by their contribution to the SDGs
- Establish innovation hubs focused on SDG-related challenges, partnering businesses and university based research
- Develop 'proof-of-concept' SDG solutions for take-up by business
- Develop SDG-related exchange programs between university and business
- Arrange innovation challenges to address the SDGs for researchers across the university and external stakeholders
- Encourage processes to assess the impacts of proposed solutions on all other SDGs and seek to maximise co-benefits and minimise negative impacts

Actively support national and local implementation of the SDGs

- Use the SDGs to develop collaborative relationships with industry, government, communities, private sector, and non-governmental organisations around specific SDG challenges
- Play a lead role in policy development for sustainable development, including initiating projects to identify problems and challenges, develop policies and strategies, model likely futures with and without interventions, monitor and report on interventions, and enable adaptive management
- Provide expert advice on SDG implementation to other sectors, such as business, state governments and local governments
- Provide expert advice on localised SDG targets and indicators and monitoring and reporting mechanisms
- Use the SDGs as the basis for place-based learning and where the university is seeking to engage the community in learning programs or in research
- Help set national research agendas and priorities around addressing the SDGs

Support capacity building for developing countries to undertake and use research on the SDGs

Capacity building for scientific research is needed and relevant in all areas of the SDGs. University already play a significant role in capacity building for research and can build and expand on these existing activities.

Form partnerships and exchange programs with university in developing countries around areas of relevance to the SDGs

Encourage joint research projects on the SDGs and build capacity for conducting cross-cultural research

Facilitate knowledge exchange with and among communities or countries on how to address common SDG challenges

Share expertise in data collection and interpretation, and access to high-powered facilities and software for managing large data sets to help countries manage the huge challenges of monitoring progress on the SDGs

Case studies: Examples

1. Achieving SDG 6 discussion paper series (University of Queensland)
2. The UTS Development Network (University of Technology, Sydney)
3. SDG Ideation Forum (Victoria University of Wellington)
4. SDG research website (University of Western Australia)
5. Safe Families Research Study (Monash University)
6. Mapping research to the SDGs (Institute for Sustainable Futures, UTS)

Publications

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- Dena, F, Palmer, J, Riedy, C & Mitchell, C 2017, *Transdisciplinary research and practice for sustainability outcomes,* Routledge, London. www.routledge.com/Transdisciplinary-Research-and-Practice-for-Sustainability-Outcomes/Fam-Palmer-Riedy-Mitchell/p/book/9781138119703.
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GOOD HEALTH & WELL BEING
SDG 3: ENSURE HEALTHY LIVES AND PROMOTE WELLBEING FOR ALL AT ALL AGES

The goals within a goal: Health targets for SDG 3

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100 000 live births.

3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births.

3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.

3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

3.a Strengthen the implementation of the WHO Framework Convention on Tobacco Control in all countries, as appropriate.

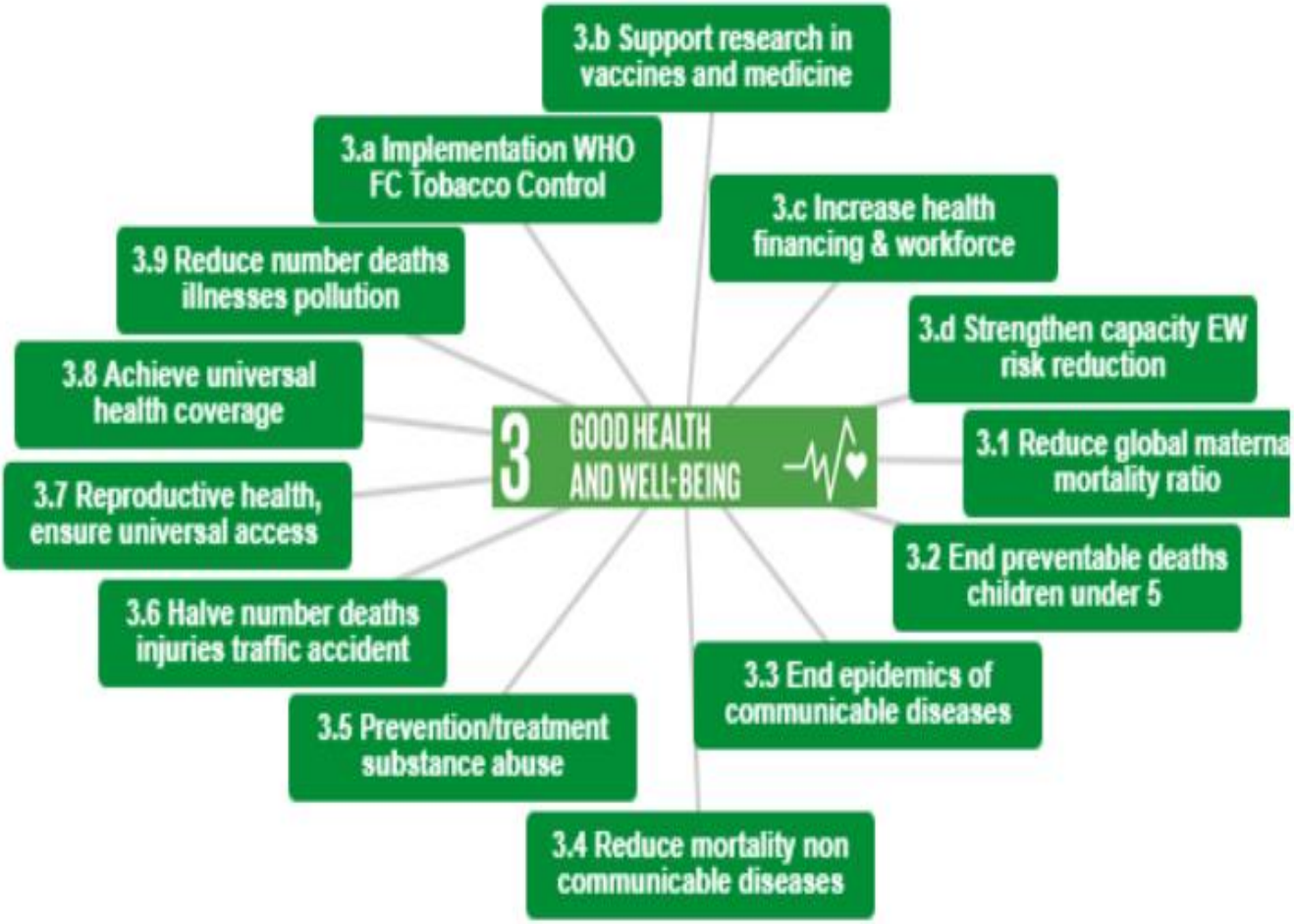
3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

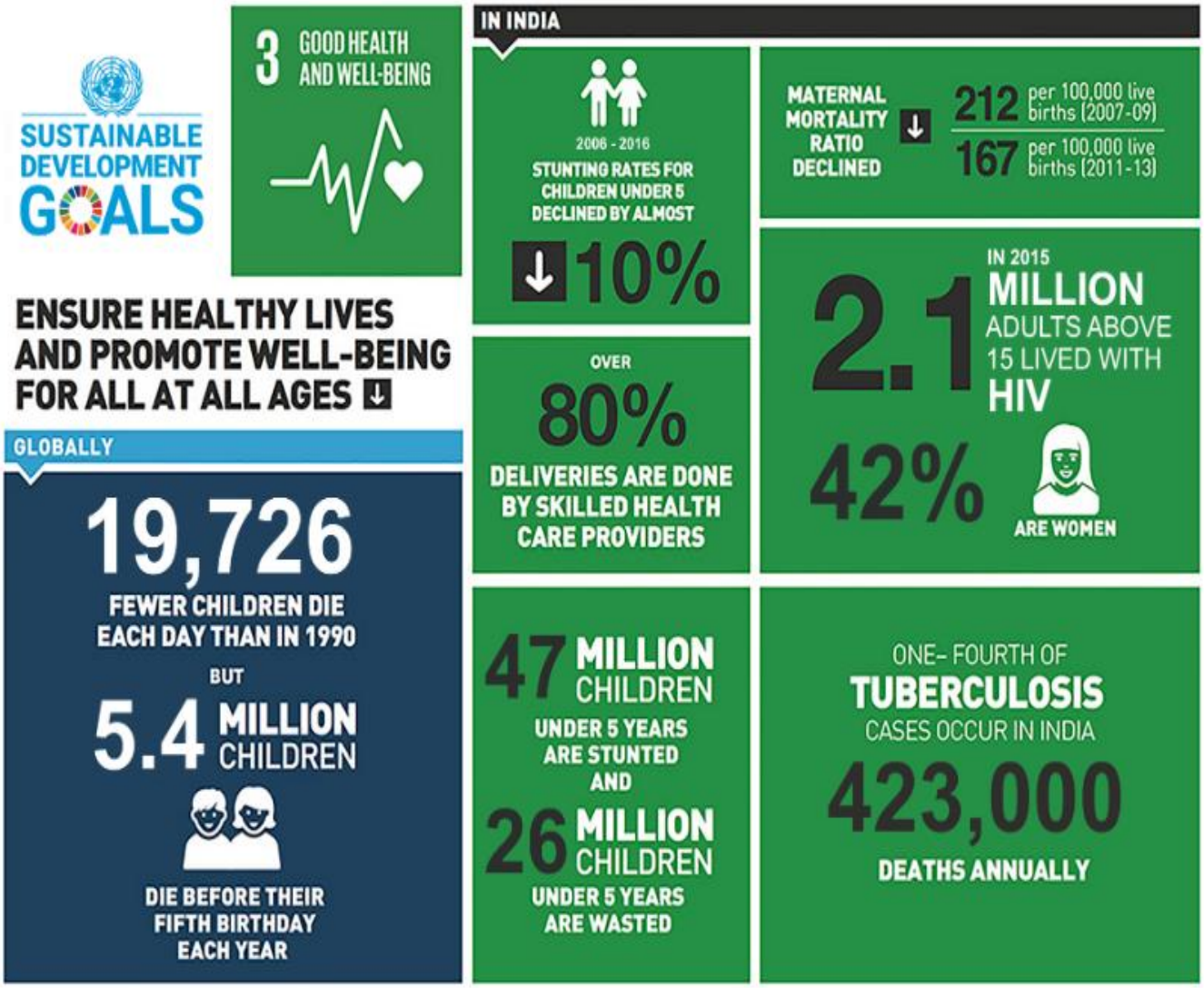
3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.

3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

SDG 3: Ensure healthy lives and promote wellbeing for all at all age

By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.





The Indian government's National Health Mission prioritises national wellbeing and is leading change in this area, in addition to targeted national programmes against HIV/AIDS and sexually transmitted diseases.

Case Study: Example

NOVA University Lisbon contributes to tackle the SDG3 with initiatives including, but not limited to:

- NOVAHEALTH – a NOVA initiative to create value in healthcare by science production, innovative solutions and knowledge dissemination.
- An extensive number of Partnerships and Collaborations with Health Institutions to improve health & wellbeing outcomes.
- The Social Welfare Services (SASNOVA) – providing health & wellbeing, nutrition, sports, sexual and reproductive healthcare and mental health support to NOVA's students and staff.

- Other initiatives:

Unit	Initiative
Nova SBE	Healthy Market Cascais
NMS|FCM	Services to the community Sexual and Reproductive Health Info
ITQB NOVA	Health and Safety at ITQB
ENSP-NOVA	Seixal, Município Saudável

Publications and projects

NOVA contributes significantly to the research into the area of SDG3. Publications and projects in this area are in our NOVA Research Portal.

Learning

NOVA University Lisbon has a strong formative offer, distinguished by quality and variety, linked to the SDGs. We support the integration of interdisciplinarity and sustainability in all our study cycles.

SDG	**Learning**
	Bachelor in Nutrition Science (NMS) Master in Nutritional Phytotechnology for Human Health (FCT, NMS) Master in Metabolism and Human Nutrition (NMS) Master in Primary Care Mental Health (NMS) Masters and PhDs of IHMT and ENSP PhD in Tropical Knowledge and Management (SBE, IHMT)

ORGANISATIONAL GOVERNANCE, CULTURE AND OPERATIONS OF THE UNIVERSITY

University is often large entities and can have significant impacts on the social, cultural, and environmental wellbeing within their campuses, communities, and regions – and sometimes far beyond. These impacts directly relate to all areas of the SDGs and by acting responsibly university can make significant contributions to their achievement.

Why are organisational governance, culture and operations relevant to the SDGs?

All organisations will have some impact on how the SDGs are manifested within their operational sphere of influence. Depending on the nature and size of the organisation, its impacts on some – and sometimes all – of the SDGs can be significant. By identifying these impacts and acting responsibly to address them, all organisation can contribute to the SDGs.

University are often major employers, consumers, investors, and real estate holders. They oversee large communities of staff, students, and contractors. Their campuses can function like and be the size of small cities. They can create significant flows of people and goods that necessitate infrastructure investment in surrounding areas. They can also have an influence far beyond their regions through their supply chains and increasingly international reach. As a result, university have an impact across each and every one of the SDGs, and this impact can be large.

What can university do?

Align university governance structures and operational policies with the aims of the SDGs

By addressing their impacts within each area of the SDGs through their internal policies and operations, university can make a significant contribution to achieving the SDGs within their spheres of operation. Examples of actions university can take are listed in Table 3.

There is significant overlap between the SDG agenda, as it applies to internal operations within university, and the Corporate Social Responsibility (CSR) and Sustainable Campus activities that many university are already deeply engaged with. The SDGs are an opportunity to link, showcase and build on these activities.

These actions are largely managed through governance structures and operational policies and decisions, such as those relating to employment, finance, campus services, support services, facilities, procurement, human resources, and student administration. Ensuring these align with the SDGs will lead to flow-on actions and accountability across all areas. Actions university can take to get this started include:

- Map how high-level university strategies, policies, plans and reporting indicators align with the SDGs and identify which organisational units are relevant to which SDGs
- Identify and address any key gaps in the university response across the SDG
- Incorporate the SDGs into university organisational reporting

University can draw on the extensive resources and networks that exist around CSR and Sustainable Campuses for support in further implementation.

Goal	Examples of actions
GOAL -1	• Ensuring Fair Trade and ethical supply chains • Investment policies that promote Environment, Social and Governance (ESG) principles • Providing support structures for students living in poverty, such as scholarships and assistance packages
GOAL- 2	• Providing sustainable, nutritious and affordable food choices on campus • Facilitating food production on campus • Offering fresh food markets on campus • Introducing measures to reduce food waste on campus
GOAL- 3	• Providing access to affordable health and wellbeing services on campus • Providing wellbeing programs for staff and students to reduce incidence of non- communicable diseases and promote mental health • Implementing 'no smoking' policies on campuses • Ensuring appropriate practices are in place for dealing with hazardous substances
GOAL- 4	• Supporting vulnerable and disadvantaged people to access and participate fully in the university, including persons with disabilities, indigenous peoples, and people experiencing financial difficulty • Providing programs to enhance literacy and education in communities and schools in the university's local area and beyond • Providing facilities that promote and encourage inclusivity in learning
GOAL- 5	• Implementing workplace gender equity strategies, including those for improving the representation of women in university leadership positions and senior academic roles • Working to close the gender pay gap • Providing childcare on campus and promoting workplace flexibility • Participating in national campaigns for preventing violence against women and committing to report on the number of sexual assaults that have taken place at the institution

Goal	Examples of actions
	• Incorporating aspirational environmentally sustainable design aspects into capital works • Providing free drinking water for students, staff and visitors • Instituting zero-net emission policies and investing in on-campus renewable energy production • Putting climate mitigation and adaptation strategies in place • Including climate change risk in risk reporting frameworks • Developing long term resource efficiency and management plans • Developing management and guardianship plans for on-campus and surrounding waterways • Developing management and guardianship plans for on-campus biodiversity and ecosystems • Installing appropriate drainage traps to minimise pollution • Installing water harvesting, storage and reuse systems • Reducing all waste (including hazardous waste) and increasing recycling • Ensuring safe practice expectations for hazardous waste handling and disposal • Increasing use of sustainable transport • Incorporating sustainability and ethical considerations into purchasing policies, procedures and activities • Monitoring and reporting on sustainability performance through to Council level • Engaging staff and students in all sustainable campus activities
	• Aligning employment, training and regulation policies to be consistent with commitments to equity and access strategies and targets • Providing appropriately positioned and supported scholarship and financial assistance schemes for students in need • Supporting creativity and innovation through a culture of acceptable risk-taking, providing the appropriate space and process for ideas to flourish • Monitoring employment outcomes and academic workload management • Implementing socially and environmentally responsible procurement policies and procedures, affecting up and down the supply chain • Critically querying the role of economic growth • Issuing only green bonds where bonds are required

- Testing and piloting innovative solutions to improving operations on campus
- Committing to building sustainable and resilient infrastructure that supports wellbeing and minimises environmental impact
- Ensuring retrofits of existing buildings increase resource efficiency and adopt clean and environmentally sound technologies
- Committing to sustainable and reliable Information and communications technology processes and services

- Managing the pay gap between lowest and highest paid staff
- Instituting an equity agenda and plan that commits to equal opportunity and reduced inequalities in all processes and activities, most notably pay
- Committing to the elimination of discrimination across the university by ensuring the diversity of the population has the opportunity to be represented and have a voice in the decision-making process
- Providing a supportive, inclusive and safe working and learning environment for people from financially and socially disadvantaged, backgrounds, people from rural and regional areas, people with disabilities, women in the workplace, people of diverse genders and sexualities and people from diverse cultural and faith communities

- Scaling up and delivering sustainable solutions to global challenges developed by the university for the wider community and industry
- Providing safe and affordable on-campus and/or university supported housing
- Committing to the development of and investment in the university's local community and areas of greatest influence (where possible)
- Allowing fluid campus boundaries to encourage the use of green space by local community members as a public amenity
- Committing to ensure the campus always remains safe, green, and provides accessibility for all levels of mobility
- Implementing best practice pollution control (including air) and waste management processes and policies
- Working with local and state government to advocate for greater access to and provision of sustainable transport systems including public transport .

- Developing policies, procedures and plans to ensure the campus is safe for all staff, students and visitors
- Ensuring that procurement policies and procedures clearly indicate an intolerance to working with any companies known or found to be involved in exploitation of people
- Ensuring that investment policies preclude investment in industry that deals in arms, human trafficking and/or modern slavery
- Ensuring that the policies and culture of the institution clearly indicate that bribery, corruption, violence, crime and acts of terrorism is unacceptable
- Organising cross-cultural and inter-faith activities on campus
- Ensuring that all staff and students have access to justice and information about their rights
- Involving staff, students and key stakeholders in university governance decisions

- Building strategies and culture that openly supports developing, maintaining and enhancing partnerships both internally and externally

Overview of the step-by-step SDG integration process.

STEP 1: MAP WHAT YOU ARE ALREADY DOING

Mapping what your university is already doing to support and contribute to the SDGs across all areas or within specific areas of the university is a great starting point for discovering possibilities for deeper engagement. It is also a powerful tool for showcasing what is already in place, as well as for identifying synergies across the university.

By using the SDG framework to guide the university's mapping exercise you will be able to:

- Identify key stakeholders and potential champions for the SDGs
- Identify strengths and gaps as a basis for identifying priorities and actions on the SDGs (Step 2)
- Help build a business case for further university engagement in the SDGs

Before beginning to map university activities, you should have a clear understanding of the purpose of your mapping exercise and what data you are seeking for it and from it. This will help you to identify sources and will help focus your area of enquiry.

The following tools will help you achieve this Step:

- Mapping university contributions to the SDGs
- How to run a stakeholder engagement workshop

STEP 2: BUILD CAPACITY AND OWNERSHIP OF THE SDGS

Taking a participatory approach is key to working towards the SDG agenda. This includes collaboration and partnership within and across organisations and communities by bringing all of those involved in the life and work of the university on board to both champion the work already underway and to create substantial ownership of actions taken.

Building capacity and ownership of the SDGs requires understanding the current knowledge of and commitment to the SDGs across research, learning, teaching, operations, governance and culture. Reaching this understanding could include a stock-taking of the information gathered in Step 1. This may indicate where existing knowledge gaps lie and how you might advocate for the importance of the SDGs to the work and life of the university. Workshops involving various areas of the university are also a great way of understanding current knowledge of the SDGs while raising awareness about the SDGs and their relevance for the university community.

By discussing the global and local relevance of the SDGs, people involved in the university can develop a shared understanding of the SDGs, learn about the work and interests of others, begin to identify areas for collaboration and action, and nurture a collective and individual ownership of the process and community of practice. Engaging with the student body in particular is key to this Step. You may start by holding student workshops on the SDGs and engaging directly with student organisations.

To get started on Step 2, the following tools will be helpful:

- Running a stakeholder engagement workshop
- Building the business case for university engagement
- The University Commitment to the SDGs

STEP 3: IDENTIFY PRIORITIES, OPPORTUNITIES AND GAPS

Step 3 will allow you to build on the commitment to the SDGs established in Step 2 and begin to progress and integrate the SDGs at your university. This Step is central to setting whole-of-university intentions and commitments to the SDGs.

Key to the completion of this Step will be setting a realistic and incremental foundation for any actions that the university takes to integrate its commitment to the SDGs. Cultivating a solid and cohesive base from which to act will safeguard against ad hoc or reactionary decisions. Step 3 involves bringing
together key stakeholders – students, staff, community members – to arrive at a common

determination of priorities for action on the SDGs and to identify opportunities for working cohesively and collectively on achieving the SDGs.

The following tasks can help to pave the way for implementing integrated action on the SDGs:

• Review the information gathered in Steps 1 and 2 (or through other university processes) to identify and understand the gaps and opportunities for working towards the SDGs that exist in your university

• Identify the priorities for implementing the commitment to the SDGs. Crucial to this will be dialogue with all key stakeholders. You might consider holding an agenda-setting workshop. This could bring together representatives from across the university or from discrete areas to start work setting an agenda for action towards the SDGs

STEP 4: INTEGRATE, IMPLEMENT AND EMBED

The previous Steps set the scene for the university to move forward. This Step looks to identify the best way of integrating and implementing commitment and actions on the SDGs. This will ensure your university moves towards a leadership role and can become a champion for the SDGs.

Depending on your institutional context, this Step will involve including the SDGs in various vehicles for governance, establishing coordination mechanisms for your actions on the SDGs and implementing policies, strategies and/or action plans. To complete this Step, you need to make decisions that are clear and widely supported about how the SDGs will be mainstreamed in all key university strategies and policies. These strategies and policies might include your university's strategic plan, research framework, learning and teaching framework, corporate engagement framework, future students messaging, and so on.

Mainstreaming the SDGs in all key strategies and policies means either:

- Embedding commitment and actions on the SDGs into a whole-of-university strategy and its supporting elements; or
- Commitment and actions on the SDGs are reflected in a university policy that governs a whole-of- university approach to sustainable development

The real transformational power takes place when the SDG framework is integrated within the whole university, becoming 'business-as-usual'.

These tools will enable you to complete this Step:

- Building the business case for university engagement
- The University Commitment to the SDGs

STEP 5: MONITOR, EVALUATE AND COMMUNICATE

The way in which university evaluate and celebrate their contributions to the SDGs is key to informing and shaping future engagement and action. A cohesive and well-grounded monitoring, evaluation and communications plan will enable university to create and share compelling stories to draw both the necessary support for their future engagement with the SDGs and to widen the shared understanding of the SDGs.

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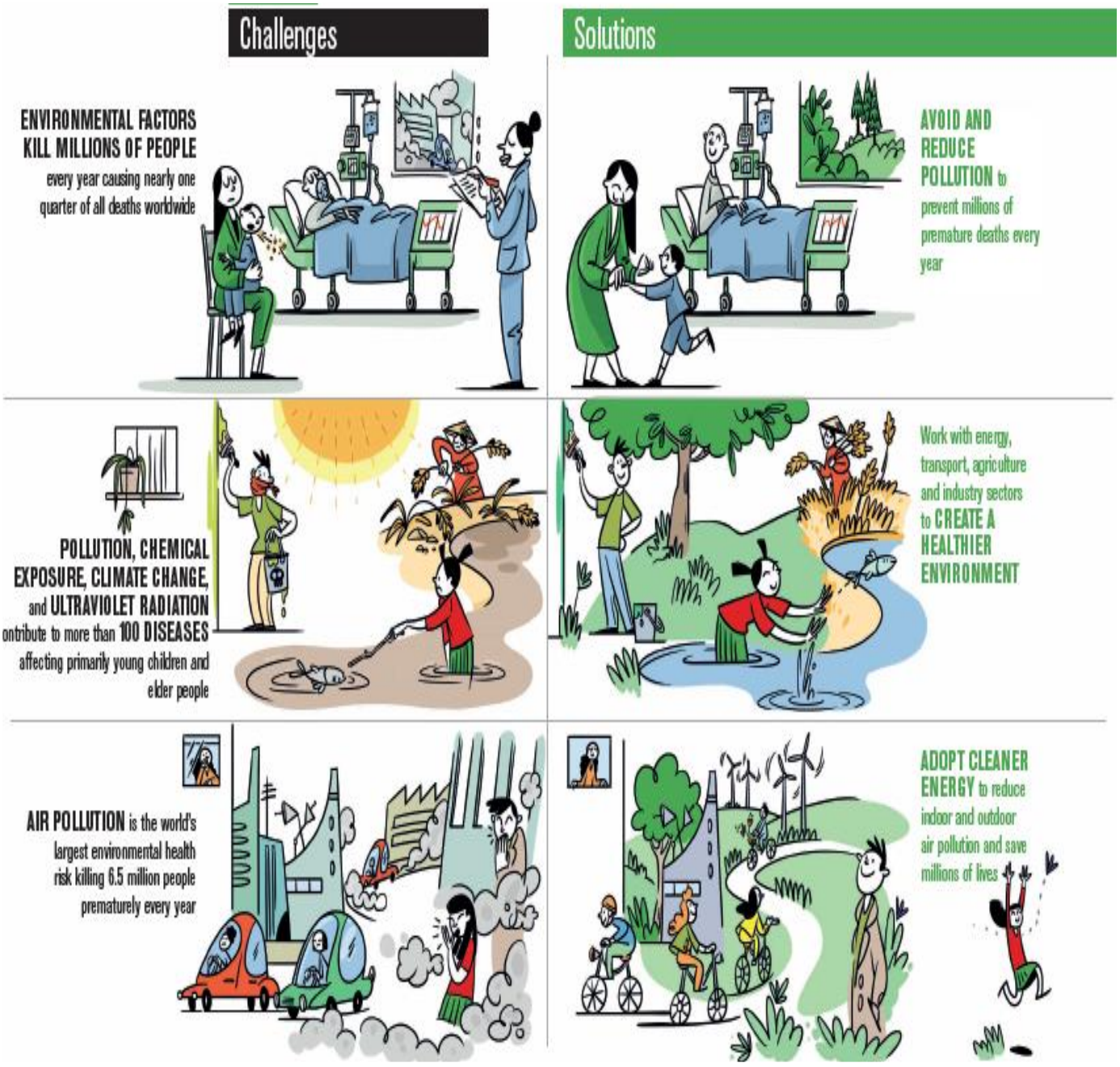
Unpacking

Sustainable Development Goal

Education 2030

UNITED NATIONS

TRANSFORMING OUR WORLD:

THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT