

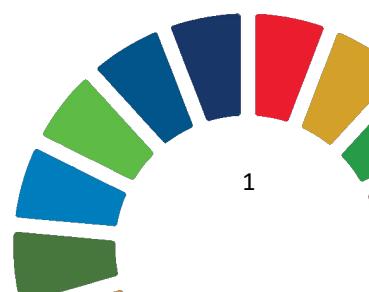
## Project Report

# SDGs @ G+PS

**Integrating the Sustainable Development Goals  
into the Graduate & Professional School  
- Challenges and Opportunities**

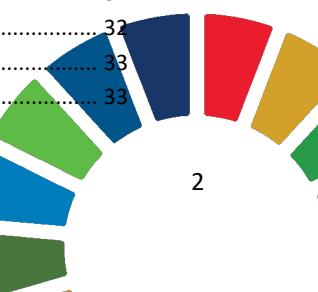
**Tim Goydke (ed.)**



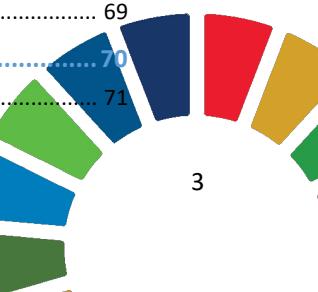


## Table of Content

<b>Preface.....</b>	<b>5</b>
<b>Executive Summary .....</b>	<b>6</b>
Dive into the present for a better future .....	6
A Better Tomorrow - General Recommendations.....	6
Measurement and Reporting Framework.....	7
<b>Summary of Recommendations .....</b>	<b>8</b>
<b>SDG 1: No Poverty .....</b>	<b>12</b>
1.2 Reduce poverty by at least 50% .....	12
1.3 Implement social protection system.....	13
1.4 Equal rights to ownership, basic services technology, and economic resources .....	13
1.5 Building resilience to environmental, economic, and social disasters .....	13
Gaps that need to be filled.....	14
Recommendations for a better future .....	14
Actions in progress.....	15
<b>SDG 2: Zero Hunger .....</b>	<b>16</b>
2.1 Universal Access to Safe and Nutritious food .....	16
2.2 Maintain the genetic diversity in food production.....	17
2.3 Sustainable food production and resilient agricultural practices.....	17
Impact of Covid on SDG 2 .....	17
Contribution of G+PS in SDG 2 .....	18
Recommendations for a better future .....	18
<b>SDG 3: Good Health and Well-Being.....</b>	<b>19</b>
Reduced household income for a long time .....	20
Discontinuation of health activities .....	21
Effects on Medical and surgical emergencies get neglected.....	21
Increased Psychological distress .....	21
<b>SDG4: Quality Education.....</b>	<b>23</b>
Effect of Covid-19 over SDG 2030- Education Goal.....	23
4.1 Equal Access to Affordable Technical, Vocational, and Higher Education .....	24
4.2 Build and Upgrade Inclusive and Safe Schools .....	24
4.3 Expand Higher Education Scholarships For Developing Countries.....	25
Conclusion.....	25
<b>SDG 5: Gender Equality.....</b>	<b>26</b>
Goals and Objectives supported by 9 targets.....	26
The pandemic as an obstacle delaying achievement of the goal .....	27
Value unpaid care and promoted shared domestic responsibilities.....	27
Contributions and recommendations of the G+PS to Gender equality.....	28
Recommendations .....	28
<b>SDG 6: Clean Water &amp; Sanitation .....</b>	<b>29</b>
6.1 Provision of safe and affordable drinking water .....	29
6.2 End open defecation and provide access to sanitation and hygiene .....	30
6.3 Improve water quality, wastewater treatment and safe reuse .....	30
6.4 Increase water use efficiencies and fresh water supply.....	31
<b>SDG 7: Affordable &amp; Clean energy.....</b>	<b>32</b>
7.1 Universal access to modern energy .....	32
7.2 Increase global percentage of renewable energy .....	32
7.3 Double the improvement in energy efficiency.....	33
7.4 Promote access to research, technology and investments in clean energy.....	33



7.5 Expand and upgrade energy services for developing countries.....	33
<b>SDG 8: Decent Work and Economic Growth .....</b>	<b>35</b>
8.1 Sustainable Economic Growth .....	35
8.2 Diversify, innovate, and upgrade for economic productivity.....	35
8.3 Promote policies to support job creation and growing enterprises.....	36
8.4 Improve resource efficiency in consumption and production .....	36
8.5 Full employment with decent work and equal pay.....	37
8.6 Promote youth employment education and training.....	37
8.7 End modern slavery, trafficking and child Labor .....	38
8.9 Promote beneficial and sustainable tourism .....	39
8.10 Universal access to banking, insurance and financial services.....	40
<b>SDG 9: Industry, Innovation and Infrastructure .....</b>	<b>41</b>
9.1 Develop sustainable, resilient and inclusive infrastructure .....	41
9.2 Promote inclusive and sustainable industrialization.....	42
9.3 Increase access to financial services and markets .....	43
9.4 Upgrade all industries and infrastructures for sustainability .....	44
9.5 Enhance research and upgrade industrial technologies .....	45
9A, 9B and 9C.....	45
<b>SDG 10: Reduced Inequalities .....</b>	<b>47</b>
10.1 Reduce income inequalities .....	47
10.2 Promote universal social, economic and political inclusion.....	48
<b>SDG 11: Sustainable cities and communities .....</b>	<b>50</b>
11.1 Safe and affordable housing .....	50
11.2: Affordable and sustainable transport system.....	51
11.6 Reduce the environmental impact of cities .....	52
11.7 Provide accesses to safe and inclusive green and public spaces.....	54
11.C: Support least developed countries in sustainable and resilient building.....	54
Conclusion.....	55
<b>SDG 12: Responsible production and consumption .....</b>	<b>56</b>
Introduction .....	56
How can institutions like the Hochschule Bremen address this goal? .....	56
What is the Hochschule Bremen to reach the SDG 12? .....	57
Some recommendations, how can the HSB improve? .....	57
<b>SDG 13: Climate Action .....</b>	<b>59</b>
Integrate Climate Change Measures into Policies and Planning .....	59
Build Knowledge and Capacity to meet Climate Change .....	60
Promote Mechanisms to Raise Capacity for Climate Planning and Management .....	60
Recommendation.....	61
<b>SDG 14: Life below water .....</b>	<b>64</b>
Role of Education in Achieving SDG Goal 14 .....	64
Role of Business Schools on SDG 14.....	65
What IGC Bremen Can contribute in order to achieve SDG-14 Goals? .....	66
Conclusion.....	66
<b>SDG 15: Life on Land .....</b>	<b>68</b>
Significance of Land.....	68
Life on Land Targets .....	68
Recommendations .....	69
Way Ahead.....	69
<b>SDG 16: Peace, Justice, and Strong Institutions .....</b>	<b>70</b>
Why Education is crucial to achieving SDG 16 .....	71



16.1 Research on peace and justice .....	71
16.2 University governance structure .....	72
16.3 Working with government .....	73
Suggestions to IGC .....	74
Conclusion.....	75
<b>SDG 17: Partnerships for the Goals .....</b>	<b>77</b>
What is the significance of this? .....	77
What are our options for dealing with this? .....	77
Problems with the system.....	78
17.6 Knowledge sharing and cooperation for access to science, technology, and innovation .....	80
17.7 Promote sustainable technologies to developing countries .....	80
17.8 Strengthen the science, technology, and innovation capacity for least-developed countries.....	81
Conclusion.....	81

## Preface

TIM GOYDKE

With the United Nations Summit on Sustainable Development in 2015 adopted the resolution "Transforming our world: Agenda 2030 for Sustainable Development" a new global sustainable development strategy based on 17 Sustainable Development Goals (SDG) was framed, replacing the Millennium Development Goals (MDG) of 2000. With its 169 sub-goals and 232 monitoring indicators the SDG focus on a wide array of economic, social and environmental issues.

The actual involvement of the Higher Education Institutions (HEI) sector with the SDGs took off in 2002, when the concept of "Education for Sustainable Development (ESD)" was enacted at the Summit on Sustainable Development in Johannesburg and the United Nation announced a UN Decade on ESD for 2005-2014 and was further triggered by the follow-up program, the UNESCO Global Action Programme (GAP) on Education for Sustainable Development launched in 2014 at the World Conference on Education for Sustainable Development. Publications on SDGs in higher education has significantly increased in recent years and there is evidence that SDGs have been integrated into higher education in a number of countries.

In order to assess to what extent the Graduate & Professional School already contributed to the SDGs and where is room for improvement, the editor of this publication involved the students of the MBA in Global Management in his course on "Business Ethics and Sustainability". In teams of about five, the students worked on a group of SDGs. In order to identify practices that contribute towards SDG implementation and potential areas of improvement, data were collected through interviews with the case institution's stakeholders, like the board of directors, program directors and managers, administrative staff, building management, employees, community representatives, partner universities etc. The data collection process was further supported by document analysis. Finally, the results were presented orally and in writing at a student conference in which representatives from various stakeholder groups took part.

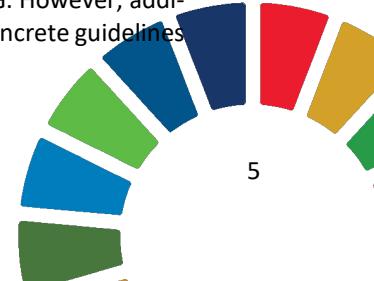
The project brought results on different levels. On the one hand, there is the difficulty of transferring the SDGs to the university context. As only SDG4 explicitly refers to education, in all other cases own questions must be developed or indicators found. There is a number of efforts on how to translate the SDG to the HEI context but no commonly agreed set of questions and/or indicators exist – instead, all initiatives or reporting tools use their own sets.

Moreover, if it is a business school, as in our case study, SDGs which deal with technical or scientific topics, such as SDG14 and 15, are difficult to transfer. Only indirect questions can be formulated here, which are generally aimed at increasing awareness. While the research revealed a number of practices in teaching, research, community engagement and campus operations management that are already well aligned with the SDGs in some areas the case institution clearly lacks behind:

On the one hand, this is due to structural deficits. So far, neither the university as a whole nor the school has a comprehensive data management and clear responsibilities. The data and information required to review the SDGs were not collected centrally and not processed in a way that would have made them usable. Rather, they had to be obtained from a variety of documents and websites. Due to the unclear responsibilities, it proved to be extremely time-consuming to obtain them.

On the other hand, it can be seen that the systematic integration of sustainability topics into teaching has so far been the exception. Only a few programs have a corresponding course in the core curriculum, some programs have electives related to the topic. Otherwise it depended heavily on individual lecturers whether the topics are dealt with. The case institution has not yet its own master's degree in the field of sustainability. In the field of research, too, there are individuals who have published on the subject. So far, there have been no institution-wide approaches or a platform for exchange, neither for teaching nor for research.

Furthermore, the SDGs are very present in public announcements - including those of the university - but a real discussion of the concrete implementation has not yet taken place. But since the ECG is already deeply rooted in the organization, we believe that this creates a good basis for a stronger integration of the SDG. However, additional measures are required in order to improve perception on the one hand and to develop concrete guidelines for action on the other hand.



## Executive Summary

ABDELBASSET BOUDJERDA

VALLABH KALGAONKAR

AMAR SHAM

### Dive into the present for a better future

IGC part of Graduate & Professional School G+PS of the Bremen University of Applied Sciences since 2004 embraces the idea of a participatory and socially responsible society and act as a role model in how to deal with the contribution to achieving the SDG where it is reflected in six pillar: Active involvement, engaging the staff members and the students with the concept of sustainability. Economy for the common good member, Focusing on the common good and on cooperation instead of profit-orientation and competition. Internationality and Diversity, having about 500 students from more than 60 nations and having several partner universities around the world. Corporate responsibility, fixing sustainability as a trademark of education system and a main strategic element and by being also the first college to prepare and publish a Common Good Matrix. Human dignity, where every employee and every student are precious and unique within the IGC.

While the IGC was doing immense efforts on the contribution to achieving the SDG's, the pandemic came and overturned the financial plans of the universities in the state of Bremen in general and IGC. The pandemic has also affected all the Sustainable Development Goals and was seeing as a big delaying obstacle to that, the poverty rate in Germany reached a new high in 2020 of 16.1 percent. In absolute figures, this means that 13.4 million Germans lived in poverty in the first year of the pandemic, 200,000 more than a year before, Bremen shows the highest rate, more than one in four people are officially afflicted by poverty. The unemployment rate increased from 5 to almost 6 percent in 2020, one in five people was affected by income losses. That's why if IGC want to keep going with the participatory and socially responsible society idea, it needs to start focusing first on the near circle (Bremen and Germany) and then looking out of the circle (the rest of the world).

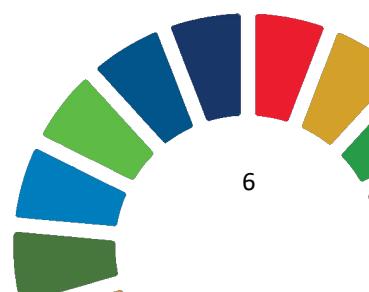
IGC has been committed to the SDG, on the one hand, the topic of sustainability is considered in numerous projects and on the other hand, the actions of the IGC itself regarding the first five SDG need to be checked to see whether IGC is in harmony with sustainability or not. So how the IGC is contributing to the achieving of the first five SDG? what are the challenges? and what are the gaps to fulfil?

### A Better Tomorrow - General Recommendations

The following recommendations are applicable at a general level to the Graduate and Professional School notwithstanding any specific goals or sub-goals. It is the endeavor of these recommendations to help G+PS increase their alignment with the SDGs at a general level and bring about a process change that helps the institution in the long term. The recommendations are to be understood within the scope of G+PS as an institution imparting education in a specific field and limitations within the realm of practicality apply. These recommendations are also made with the understanding that the achievement of SDGs is only possible when the whole world makes significant efforts to realize them rather than some countries putting in a majority of the effort.

#### SDG Internships

We recommend that a program for mini-internships be introduced in the curriculum where the students are required to work with communities and bodies across the world to make valuable recommendations and support in the form of research and technical knowledge. The contribution of these students will help bring about a positive change aimed at greater alignment with the SDGs and help communities and bodies with valuable information that might have been out of their reach or missed out due to lack of availability of resources.



## Partnerships in LDCs

The G+PS can explore partnerships with other institutions in LDCs in areas that contribute directly towards SDGs. The support provided by our institution can be in the form of technical knowledge, research and support. Such partnerships can accelerate efforts at a larger level through a consortium of institutions.

## Reporting

We recommend that G+PS along with the entire Hochschule Bremen adopt and formally implement a reporting framework for SDGs. Such reporting will help make the actions measurable and sustained and well directed efforts can be organized in the future in line with the long-term vision of SDG alignment of G+PS.

## Prioritization

The G+PS is recommended to identify and subsequently prioritize SDGs that are most relevant to it within the mandate of being an educational institution. Since all the SDGs are not within the purview of an institution like G+PS, a strategy of prioritization will help focus efforts on the goals where the maximum amount of change can be implemented.

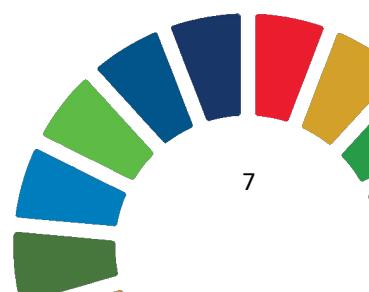
## Measurement and Reporting Framework

The IGC does not formally track or report its progress and contribution towards SDGs. Instead, it has an 'Economy for Common Good' (ECG) framework which outlines its commitment to sustainability and social responsibility. Reporting for the ECG framework is irregular. So far only the report has been published on the IGC website. As a conscientious and socially engaged institution, the IGC must formally declare its intent to support the SDGs by adapting and adopting a measurement and reporting framework. In the absence of a formal commitment to SDGs, it is difficult to outline the various SDGs where IGC plays a part, measure progress, or report any achievements. Therefore, formal adoption of a robust measuring and reporting framework is necessary to ensure institutional alignment with the SDGs.

There are several easily accessible frameworks that IGC can adopt. These include the Times Higher Education impact ranking, the QS World University Ranking, the Green Metric World University Ranking, and the Association for the Advancement of Sustainability in Higher Education (AASHE). The ranking systems serve as a guideline for contextualizing the SDGs in a university context. They also provide standardized templates which, in addition to simplifying the reporting of progress against SDG, also help in benchmarking the progress against peer institutions. (United Nations Academic Impact, 2021)

AASHE, on the other hand, is a network of socially conscious universities. Membership of this network will open numerous avenues for the IGC for collaboration and partnership with other institutions. The network also offers technical assistance to universities in becoming more sustainable and offers a vast repository of resources that can be used to increase alignment with SDGs.

Formally adopting measurement and reporting framework will also enhance IGC's institutional reputation while, simultaneously, improving its ability to create a greater positive impact.



## Summary of Recommendations

**1** NO POVERTY



- Plan and implement local service-learning and engagement opportunities for empowering poor people
- Reduce vulnerability and increasing resilience by offering scholarship in partnership with private stakeholders
- Offer free access to some courses for refugees
- Create offers and framework conditions for students with physical disabilities
- Provide work opportunities to refugees
- Student's voluntary group focusing on reporting the IGC's contribution
- Publish awareness video on the IGC's social medias focusing on SDG's and how student and IGC's member are contributing

**2** ZERO HUNGER



- Collect the partially opened food every week and prepare some food for poor people, and distributing them on weekends near Bahnhof or near Dohmsheide, Bremen
- Open a charity which will be dedicated to saving unused food

**3** GOOD HEALTH AND WELL-BEING



- Awareness campaign for substance abuse
- Promotion of a healthy lifestyle
- Focus on individuals' social health

**4** QUALITY EDUCATION



- Divert focus towards industry-oriented skill development certification and programs
- Inculcate teacher's exchange programs to developing countries Focus on planning to make the buildings and premises friendly for blind and deaf
- Set up a team to cater to the needs of these specially-abled students, making classrooms efficient for them so they have equal access to quality education
- Setting up a social group to discuss and spread awareness in the community
- Teach children of refugees to give them a better life and realize the importance of education
- Make scholarships available for students from developing countries through funding programs, partner with banks or private companies

**5** GENDER EQUALITY

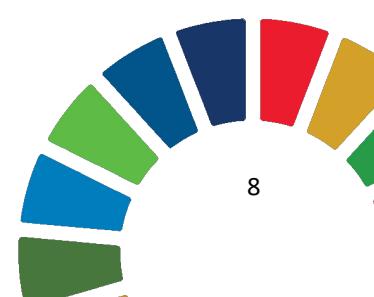


- Provide facilities for young children of lecturers who are not able to find short- or long-term solutions for childcare
- Offer more full-time jobs to women in the institution
- Offer solutions of childcare
- Enforce and promote paternal leave for men as well

**6** CLEAN WATER AND SANITATION



- Place drinking water and taps and bottle refilling stations around the campus
- Promote provision of safe and accessible hygiene facilities to other institutions and bodies across the world
- Increase efficiency in the use and reuse of the water from the campus
- Install slow flow manual taps for refilling of water bottles



## 7 AFFORDABLE AND CLEAN ENERGY



- Shift to green energy alternatives
- Make energy saving top priority for employees and the whole campus
- Save energy with energy performance contracts

## 8 DECENT WORK AND ECONOMIC GROWTH



- Adopt a more direct approach by partnering with businesses in developing countries in an advisory capacity
- Work with state institutions in developing countries to establish and share best practices and devise action plans that can help these organizations grow
- Add a module dedicated to innovation in businesses
- Set up a social enterprise incubator that promotes and nurtures ideas for socially responsible startups and helps students turn these ideas into a reality
- Explore partnership possibilities with similar professional schools in developing countries and share experience and insights regarding efficient resource consumption
- Help students build their self-awareness through skills-development
- Provide online course for free
- Spread awareness by taking whole G+PS on tour in which they will take care of environment by avoiding plane, tram, bus and taxi
- Encourage students to include a research project in a developing country
- Creates an opportunity for a virtual internship in such way that it can create a big impact

## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

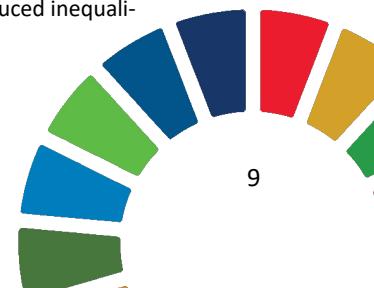


- Create a Business Continuity Plan to be prepared for risks
- Set up an E-waste recycling drive
- Host a sustainability fair
- Set up sustainability short courses online
- Increase the options for students to obtain credit by involving private lenders
- Create a Financial Advisory Team that helps students and applicants on scholarship, student loans, various loan possibilities and with financial difficulties
- Create green laboratories adding sustainability in research and technology aspects
- Include more structured and research-oriented internships with industry partners
- Partner with institutions that share the same ethos in developing countries: offer courses that are co-taught, conduct collaborative graduate-level research and offer solutions to business challenges

## 10 REDUCED INEQUALITIES



- Commit to the elimination of discrimination ensuring that all employees have a voice in the decision-making process
- In order to measure inequality, statistical measures need to be specified
- Make efforts to reduce gender inequality and expand opportunities for women a necessary aspect of any effort to reduce overall inequality whether in income or access to other resources or services
- Appreciate the varied opinions and perspectives on disability and address disability discrimination, and form constructive attitudes
- Address disability discrimination at all levels, including the admissions process, assessment, didactic, and, in a wider sense, mobility
- Promote awareness of the different models of discrimination and promote the social model as the best way of overcoming discrimination against disabled students
- 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
- Implement an equity agenda and plan that commits to equal opportunity and reduced inequalities in all processes and activities





- Build safe and affordable housing instead of giving only information
- Arrange seminars and conferences for integrated housing frameworks that support economic, social, and environmental policy
- Establish or collaborate with organizations that provide more affordable and sustainable transportation options, as well as high-quality and quick service
- Promote mobility and make it easier for people to commute
- Organized communal activities for their students, e.g. for planting the trees
- Organize cultural events and discussions for different people from different nationalities and culture
- Provide online webinars with the help of students and members for educating people from different nations
- Create partnerships with universities or professional schools in developing countries



- Actively invest and redirect resources in order to reach to the people that really matters
- Train more employees and students on this matter
- Provide more information in English
- Name contact persons and assign clear responsibilities
- Better practices, informing, teaching, giving the support that students, lecturers and scholars, might need



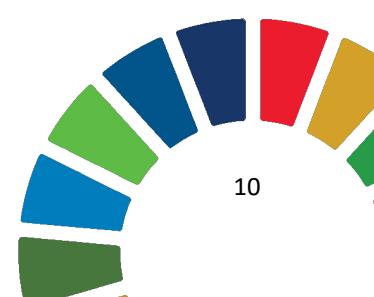
- Divert resources and research towards discovering more environment friendly source of energy
- Organize open science exhibition where students of any university can participate and show models related to sustainability and have some price for the best model
- Campaign on social media to create more awareness
- Intergrade policies in code of conduct and staff and management, like use of public transport and sharing of cars, staff travel policy, use of more recyclable clothing
- Reduce consumption of paper to a minimum
- Create an introductory lecture regarding climate action to new admission students
- Invite researchers or company which are doing something for climate
- Set up one single website in which all information should be there also in English
- Sponsor trip to students and professors who are researching regarding climate action to non-develop countries & have awareness camp in their universities or cities



- Educate students, staff, and fellow colleagues through seminars, interviews, and collaboration conferences to take responsibility for sustainable development
- Improve existing research capacity and increase the importance of scientific knowledge to enhance ocean health and support marine biodiversity
- Create local and regional collaborations relating to the ocean and a multidisciplinary education program
- Monitor engagements on plastic pollution and its contributors and Operations: Designing efficient, ecologically friendly systems, business methods, and sustainable operations
- Join major international institutional associations working towards SDG-14 goals
- Built a virtual incubation center and collaborate with regional waste management and non-profit organization
- Implement a strong culture when it comes to banning the use of plastic-based items
- Adopt social media as a tool to educate, influence a larger audience, host webinars, virtual events, and online conferences at the national and international level



- Work closely with governments in drafting of policies and plan of action for sustainable future
- Adapt Environment Social Governance subject modules into the core learning of the subject modules
- Work on industry – institution support model, and provide consultancy to governments as well as industry to tackle reduction of wastage and air pollution
- Organize symposiums and seminars for the leading industries, governmental agencies and international policy makers for the benefits of students and society as a whole
- Strengthen alumni network so as to reached wider audience for spreading awareness into the society
- Ask for R&D grants from industry and governments for research into ESGs





- Use marketing in social media as a strategy to reach young people over the world with peace and justice messages
- Organize activities in sports, art or culture to promote topics like preventing children abuse
- Promote G+PS by selecting every year a theme to support for the example year 2022 the year of supporting children the next year prevent the abuse of childhood and so on
- Collaborate with private and public institutions, especially in developing countries, on one of the global issues and try to find solution by interacting, discuss or organize activities
- 



- Strengthen global partnerships for sustainable development, reinforced by multi-stakeholder partnerships that mobilize and exchange knowledge, skills, technology, and financial resources
- Encourage and support effective public, public-private, and civil society partnerships, based on partnership experience and resource allocation methodologies
- Increase the availability of high-quality, timely, and reliable data
- Improve on existing initiatives to produce measures of progress on sustainable development
- Invest more in knowledge-sharing techniques and new advanced technology



## SDG 1: No Poverty

ABDELBASSET BOUDJERDA

IGC is committed to work towards achieving the first SDG (no poverty) through its way of serving as a role model at least in how students and staff are treated within IGC, while every employee and every student is precious and unique, IGC, whose goal is to ensure equality, financial support, integrated health management, social and technological access to all and effective food management system.

In this context and from the IGC's commitment to the contribution to the NO POVERTY goal form, there are four targets which IGC targets most: Reduce poverty by at least 50%; Implement social protection system; Equal rights to ownership, basic services technology, and economic resources; Building resilience to environmental, economic, and social disasters

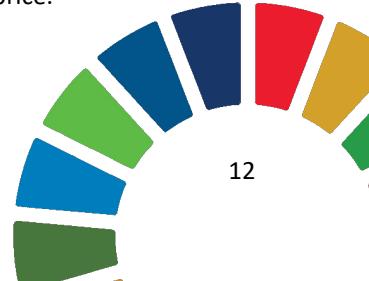
### 1.2 Reduce poverty by at least 50%

What the institution is doing to contribute to achieving this goal is to generally maintain the wages of its workers, create job opportunities and to help students with low incomes.

All employees are paid according to the "Collective agreement for the public service of the federal states", TV-L. That's means that payment is very transparent, and all positions are assessed accordingly. So, every employee knows exactly what will earn. The salaries at IGC range from E6 to E13. The managing director is a civil servant and has a monthly salary of appr. 6,000 € (gross salary). Professors also have a base salary of 6,000 € and the university pays also for further education for employees. The university also offer part time job opportunities for both employees and students, the student's assistant who works as a part time job are paid not less than the minimum wage per hour (12 euro per hour) which is hard to find such a wage for student part time job. There are also part-time employees that work only 3 or 2 days a week and have staff that works only the evenings or on weekends for the part-time master's and have day offs during the week.

In IGC there are also very strict rules regarding corruption, there is a central staff position for internal audit and budgets which means that the wages and the budget to use for different payments in the benefit of employees are highly protected and. The federal Court of auditors is regularly monitor the expenditures. IGC has been checked twice by the Court in the last 10 years.

Compared to different private universities, IGC offers affordable programs where the price is below the average, as it does not make any significant profit from tuition fees, in general, the income results in the expenses, so that no high profits are generated and mainly use surpluses for purchases and the further development of the premises or to finance student loans for all students who don't have the ability to pay the tuition in advance, and these loans can be paid off in instalments by the end of the standard period of study. The student has also the option of paying the tuition fees in monthly, quarterly, or semi-annual instalments. IGC offer also flexible individual study model and part-time courses to enable large amount of people to study and it is also cooperating with landlords in Bremen to create a regional network of cheap and central living opportunities for the foreign students who they have also the possibility of taking a German course at the Bremen University of Applied Sciences where IGC bear the costs for this if the course is passed. Students can also receive a voucher of 500 euro granted if they apply for further studies. Students have also access to the "MENSA" the university canteen and cafeteria which they serve warm food, drinks for the students and all the employees with an affordable price.



### 1.3 Implement social protection system

IGC's contribution to achieving this goal is by providing a good and safe workplace for employees and providing them with the necessary protection, also insure equality within the institution.

IGC provide affordable health services and implement social protection system for staff, students, and employees, all the employees are insured against accidents at work. Maternity benefit is paid during maternity leave, legally health insurance pays a maximum of 13 euros per calendar day. The employer pays the difference to the average net wage.

In recruiting there is a general rule in IGC, if there are females' candidates or candidates who have a disability IGC take them if they have basically the same qualification as direct competitors and that to ensure an Active positive participation to provide opportunities for those most affected by poverty especially those with disability and the opportunity to eliminate their financial handicap, as well as to ensure gender equality.

As a state university IGC is not allowed to make donations to others however for students in need, IGC'S members have already raised some funds from the company partners, especially from the members of IGC's Business advisory Council consisting of 12 companies from the area.

In the time of pandemic Hochschule Bremen HSB which IGC is a part of provided test possibility on campus, the students and employees can have an official rapid antigen test taken on the campus without any appointment. Legally insured parents who care for their children at home due to the pandemic can apply for 30 days of child sick pay per child and parent. For single parents, the entitlement increases by 40 to 60 days per child. entitlement also exists if a child must be cared for at home because day-care centres are closed due to Corona or access to the day-care facilities of the day-care centre has been restricted. If parents take care of their minor children in need of care themselves due to the failure of childcare and closed schools (officially ordered closure of schools, day-care centres, or crèches) and are therefore unable to fulfil their work obligations, special leave is granted with continued payment of remuneration.

### 1.4 Equal rights to ownership, basic services technology, and economic resources

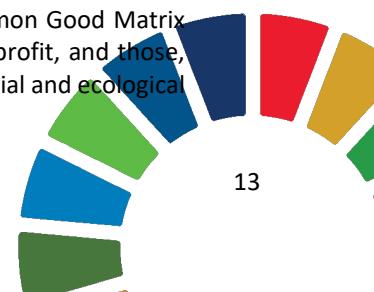
The method that the institution uses to participate in achieving this goal is to ensure equality between workers and students in terms of both rights and incentives, and to access to the different services and resource within the institution.

All employees of IGC have a free bus and train ticket (BOB), which employees can use free of charge during working hours if required, and all enrolled students after paying the semester fees obtain transport card which they can use to travel all around Bremen and some places outside free of charge. Also, the General Student Committee (AStA) offers specific services for students, such as social advice, legal advice, a bicycle self-help workshop and a car and music system rental, Fees for the AStA amount is 9.50 euros per year per student, beyond that there are no further costs. IGC also offer a lot of training in different fields for all the employees on which they can decide to take or not, and free access to the campus WIFI, Eduroam, Library, research journals and publications and all physical resources on campus.

### 1.5 Building resilience to environmental, economic, and social disasters

In contributing to the achievement of this objective, the IGC is contributing indirectly but actively as it is keen on acting sustainability reducing negative environmental impacts that lead to environmental disasters that primarily affect the poor and vulnerable.

To meet its demands of a fair and sustainable economy, IGC joined the movement "Economy of the common good" (ECG). Since the foundation of the ECG in the year 2010 this program has developed into a growing and dynamic movement around the world, it is the first university institution in Germany to have been audited for the common good and the first to give lectures on the subject of (ECG). IGC directors board and all staff members believe that been successful in sustainability implementation in the present, is only a first step towards sustainable quality development. IGC has been also the first college to prepare and publish a Common Good Matrix which is applicable to any company size and form of organization, private or public, or non-profit, and those, which follow moral ethics. The activities mentioned in the matrix are used to measure their social and ecological impact on the society.



IGC has also participate in the European environmental management and audit system EMAS which supports organisations in finding the right tools to improve their environmental performance. Participating organisations voluntarily commit to both evaluating and reducing their environmental impact. During purchases, IGC always approaches suppliers who deal sustainably, and the products and services are largely ordered through the central procurement office at Bremen University of Applied Sciences HSB to avoid unnecessary environmental pollution caused by frequent deliveries. IGC aim also to provide ecological design of products and services in the future and give regular training by the coordination office for employees for effective and efficient use of energy within the IGC's departments.

In HSB campus there is a various installation that are sustainable while the extension of Neustadtswall campus align with climate change and sustainability goals. HSB is offering also approaches for industries and commerce to contribute to more sustainable production process through plastics recycling, and its co-founder of new European higher education alliance which has been made between six universities from six EU countries, at the same time the alliance locations, including HSB, are linked by their importance for the transformation topics in Europe like the "the Green Deal"

## Gaps that need to be filled

The IGC has shown a fairly active commitment to the four objectives analysed above. However, there are still many gaps to fill, referring to the first goal "No poverty" noticeable gaps are:

First, and with reference to the first target of the goal "eradicate extreme poverty", the IGC still has a long way to go in this regard, the target which allows the individuals most affected by poverty especially those who live by less than 1.25 \$ a day, the most vulnerable and those with physical disabilities to have the opportunity to study and work. Within the IGC there are no supportive programs to this category and no free program to support them, there is also no support to the refugees around Bremen or Germany in general which is known as the county of refugees.

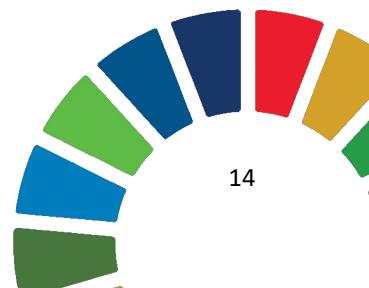
Second, another gap to fil is the lack of information regarding the evaluation of the contribution of IGC in achieving the goal and that it is due to the absence of a department specialized with collecting the information and identifying key gap in the university into the SDGs

Third, the contribution of students within IGC in achieving the goal is low comparing with the partner universities while the students there are more active and contributing to high degree regarding the goal.

## Recommendations for a better future

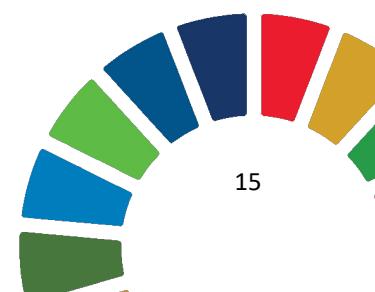
Education as a public good, a global common good, a fundamental human right and a basis for guaranteeing the realization of other rights and to ensure an effective contribution to the goal and an equality in access to education IGC need to plan and implement local service-learning and engagement opportunities for empowering poor people, reducing their vulnerability to different hazards and increasing their resilience, some ways to do that is by offering scholarship in partnership with the different partners and private stakeholders, focusing more on more poor individuals and refugees, offering free access to some courses for refugees present in Bremen especially, Create offers and framework conditions for students with physical disabilities, or also by enrolling 2 or 3 poor individual from around the globe in each programme in every intake. IGC can also study the possibility to provide work opportunities to refugees.

Success in achieving the SDGs will depend on action and collaboration by all actors. both individually and collectively who can help to lead, guide, and support the goal, to ensure an effective improvement year by year in the contribution by the IGC a department for benchmarking need to be held, its role will be: First, to map what the IGC is already doing. Second, identify priorities, opportunities, and gaps. Third, integrate, implement, and embed the SDGs and then monitor and evaluate the contribution. And those steps will be supported by the student's voluntary group which the IGC will held also to be more active in every intake, the student group will be focusing on reporting the IGC's contribution on the same year of their intake to provide the ability of comparison within the years, the student could alson base that on the IGCs common good balance which should be written and published before the new students arrive. This would help us indeed to improve IGCs performance and helps to understand what is done in areas where it is difficult to investigate, especially the lectures as well as the students' opinions. It also helps due to timely constraints.



## Actions in progress

Providing ideas and thinking from the students every year is always good for the contribution's performance however it is considered only as indirect contribution, the idea behind our contribution to the SDGs in this year intake is to start in action, that's way we started 2 supportive action which are in progress and hopefully will be done before the end of summer semester. First, the indicative of creating the student group is already in the way to be implement, Ms Franzeck is really supporting the idea and think that will help both the IGC and her contribution to be more effectively done. Second, an awareness video will be published on the IGC's social medias before the end of the semester focusing on the SDG,s and how the student and IGC.s member are contributing to the matter.





## SDG 2: Zero Hunger

TILAK JOARDAR

End Hunger, achieve food security, improve nutrition, and promote sustainable agriculture.

After decades of steady decline, the number of people who suffer from hunger – as measured by the prevalence of undernourishment – began to slowly increase again in 2015. Current estimates show that nearly 690 million people are hungry, or 8.9 per cent of the world population – up by 10 million people in one year and by nearly 60 million in five years.

The world is not on track to achieve Zero Hunger by 2030. If recent trends continue, the number of people affected by hunger would surpass 840 million by 2030.

According to the World Food Programme, 135 million suffer from acute hunger largely due to man-made conflicts, climate change, and economic downturns. The COVID-19 pandemic could now double that number, putting an additional 130 million people at risk of suffering acute hunger by the end of 2020.

With more than a quarter of a billion people potentially at the brink of starvation, swift action needs to be taken to provide food and humanitarian relief to the most at-risk regions.

At the same time, a profound change of the global food and agriculture system is needed if we are to nourish the more than 690 million people who are hungry today – and the additional 2 billion people the world will have by 2050. Increasing agricultural productivity and sustainable food production is crucial to help alleviate the perils of hunger.

Now let's discuss a few targets of this goal:

- By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious, and sufficient food all year round.
- By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.
- By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists, and fishers, including through secure and equal access to land, other productive resources, and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

There is a total of 8 subgoals but among that, for our convenience, we have selected 3 subgoals which are:

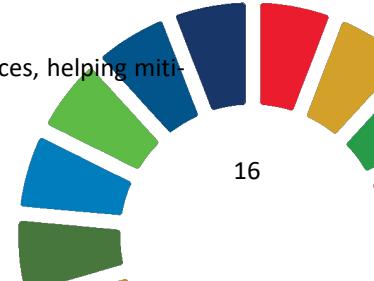
### 2.1 Universal Access to Safe and Nutritious food

By 2030, end hunger and ensure access by all people, in particular, the poor and people in vulnerable situations, including infants, to safe, nutritious, and sufficient food all year round.

Collection matter indicators:

- Number of educational programs incorporating food security, nutrition, and seasonal diet perspectives.
- Collections development related to food security, nutrition, and seasonal diets, as appropriate.
- Number of targeted educational, awareness-raising, and partnership programs relating to food and nutrition, drawing on collections, aimed at vulnerable and marginalized groups.

Number of research activities drawing on collections that relate to resilient agricultural practices, helping mitigate and adapt to climate change, flooding, and other disasters.



## 2.2 Maintain the genetic diversity in food production

By 2030, maintain the genetic diversity of seeds, cultivated plants, and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional, and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

Collection matter indicators:

- Collections development related to the genetic diversity of seeds, cultivated plants, farmed and domesticated animals (notably of local or at-risk varieties), and related wild species, for example in herbaria, museums, seed, and gene banks, and seed libraries.
- Number of educational programs related to the genetic diversity of domesticated plants, animals, and wild relatives.
- Number of educational programs related to fair and equitable benefits of the use of genetic resources and associated traditional knowledge, following international agreements

## 2.3 Sustainable food production and resilient agricultural practices

By 2030, ensure sustainable food production systems to implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding, and other disasters, and that progressively improve land and soil quality.

Collection matter indicators:

- Collections development related to sustainable food production where appropriate.
- Number of educational and awareness-raising programs incorporating sustainable food production perspectives, and that aim to reduce the impact of disasters on communities.
- Number of targeted programs that support those most exposed and vulnerable to disasters, whether locally or farther afield.

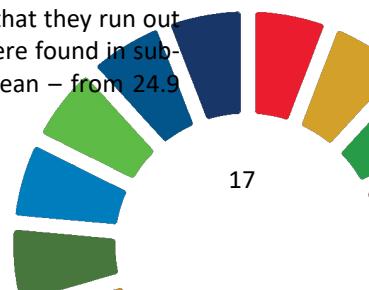
## Impact of Covid on SDG 2

COVID-19 is an unprecedented global health crisis with serious implications for achieving Sustainable Development Goal 2 by 2030. With lockdowns preventing the harvesting of crops and reducing incomes to make food less available and affordable, there are new challenges arising to ending hunger, achieving food security and improved nutrition, and enduring sustainable agriculture. The SDG2 advocacy landscape has also been turned on its head with key 2020 moments such as Tokyo Nutrition for Growth 2020 Summit or SDG2 Momentum postponed or canceled completely.

Furthermore, Covid has had a further and profound impact on hunger and food security, triggered by disruptions in food supply chains, income losses, widening social inequities, altered food environment, and price hikes. Between 720 and 811 million people in the world faced hunger in 2020, an increase of as many as 161 million from 2019.

The prevalence of undernourishment increased from 8.4 percent in 2019 to 9.9 percent in 2020. Hunger affects 21.0 percent of the population in Africa, compared with 9.0 percent in Asia and 9.1 percent in Latin America and the Caribbean. More than half of the world's undernourished are found in Asia (418 million) and more than one-third in Africa (282 million).

Achieving food security goes beyond the eradication of hunger. Nearly one in three people in the world (2.37 billion) were affected by moderate or severe food insecurity in 2020, an increase of almost 320 million from 2019. Such levels indicate that people are unable to eat a healthy, balanced diet regularly, or that they run out of food and, at worst, go a day or days without eating. The highest levels of food insecurity were found in sub-Saharan Africa (66.2 percent), while prevalence rose fastest in Latin America and the Caribbean – from 24.9



percent in 2014 to 40.9 percent in 2020. The prevalence of moderate or severe food insecurity is 10 percent higher among women than men in 2020, compared with 6 percent in 2019.

When it comes to Germany, it has also faced challenges when it comes to the pandemic. There was a rise in homeless people who put pressure on the welfare system of the government. The government has also taken various steps to feed the poor nutritional food and provide them with proper shelter and clothing.

## Contribution of G+PS in SDG 2

SDG goals are taken very seriously in Hochschule Bremen and they are being implemented in every process. Discussing SDG 2 and correlating it with Mensa, they plan their menus every week and prepare a well-balanced meal for students to enjoy. The nutritional values of the food are given utmost importance so that a well-balanced and nutritional meal is available to the students.

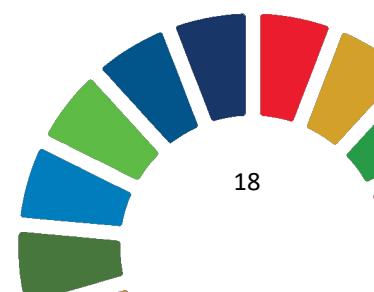
When it comes to the raw materials for these foods, the products are sourced locally from local vendors. When asked about the reason for this it was mentioned that locally sourced foods are normally fresher and more nutritious than canned or store-bought produce. Also, local vendors are preferred so that the local business can also be supported and some value can be added to the local businesses. Coffee and tea are 100% fairtrade and the share of MSC-certified fish is increasing.

When Mensa prepares food in large quantities it is bound to have some wastage or surplus food in its hands and needs to think about a proper disposal system for the excess food. As per our talk with Dr. Goydke, the student union claims that they have a very efficient and effective food management system so that very little or no food is wasted.

Also, Germany has very strict rules on food that can be donated. Only unopened food can be donated and partially opened food cans cannot be donated as it is against the law. The unopened food cans are donated by the student union to Bremen food bank named Bremen Tafel which is a charity organization. And then the food further gets donated to people in need.

## Recommendations for a better future

After a lot of intense discussions with our team, we found a solution to solve the problem of food wastage. Although a very little portion of unopened food gets wasted, we can save that little portion that is wasted by collecting the partially opened food every week and preparing some food for poor people, and distributing them on weekends near Bahnhof or near Domsheide, Bremen. We also came up with the idea of opening a charity which will be dedicated to the cause of saving unused food so that it can be disposed of sustainably. But this idea itself is not sustainable in the long run as it requires a lot of commitment from students and professors. Also, there would be a lot of funding required which we all know is very difficult to obtain. So we finalized the idea of making food every week and sharing the food with the less deprived people.





## SDG 3: Good Health and Well-Being

MANALI AVINASH RANE

SDG 3 seeks to ensure health and wellbeing for all, at every stage of life. It aims to improve reproductive, maternal, and child health; end epidemics of major communicable diseases; and reduce non-communicable and mental diseases for all people of all ages. SDG 3 also asks for the reduction of both behavioral and environmental health risks.

In most affluent countries, health services are well developed. Even in industrialized countries, however, substantial work continues to be done to guarantee that poorer and more marginalized populations have adequate access to health care, encourage healthier lifestyles, eliminate key causes of illness, and provide fast and equitable access to health services. This should be an element of their long-term development strategy.

SDG3 is supported by nine targets that are divided into distinct but overlapping groups: reducing morbidity and mortality in vulnerable groups (mothers, new-borns, the elderly, and children), reducing communicable and non-communicable diseases, reducing risk factors (tobacco, substance abuse, road traffic injuries, and hazardous chemicals and pollution), providing universal health coverage, and strengthening the health sector.

In addition, we will discuss the following three objectives in this report:

### **1. Prevent and Treat Substance abuse**

Prevention is the best technique and tool for new and old drug abusers. Family, friends associations, relatives, society, and government rules are the key prevention weapons against drug abuse. They can play an active role in counseling against drug use. Some may know the nature of the drug addict, who may have such characteristics as distrust, protectiveness, unrealistic expectations, resentment, etc.

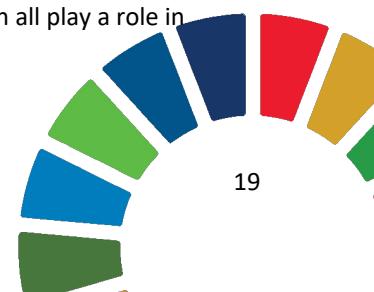
### **2. Achieve Universal Health Coverage:**

Universal health coverage means that everyone can get the health care they need, when and when they need it, without having to pay a lot of money. It covers the entire spectrum of basic health services, from prevention to treatment, rehabilitation, and palliative care.

Strong, people-centered primary health care should underpin universal health coverage. Health-care systems that work well are based in the communities they serve. They are concerned not only with the prevention and treatment of disease and illness but also with the enhancement of well-being and quality of life.

### **3. Fight Communicable Diseases:**

By 2030, this objective aims to eradicate tuberculosis, malaria, hepatitis, water-borne infections, and other infectious diseases. These infections cause 4 million deaths each year, and as with other issues of health and well-being, communicable diseases disproportionately affect women, children, and those living in poverty. Communicable diseases can spread by the air, water, or through other forms of human interaction. They can also spread when humans come into touch with certain animals. Access to appropriate, affordable healthcare, vaccinations and treatments, clean water and nutritional foods, and sanitation all play a role in the transmission of infectious illnesses.



## Goals and Objectives

Universal health coverage, access to sexual and reproductive healthcare services, and access to safe, affordable, and effective medicines and vaccinations for all are the most important prerequisites for achieving these goals. Support for vaccine and medicine research and development increased health financing and health workforces in developing countries and strengthened capacity for early warning and management of health risks are all important steps in addressing persistent and emerging health issues, according to SDG 3.

In a European context, monitoring SDG 3 focuses on progress in enabling European residents to live healthy lives by measuring health determinants, causes of mortality, and access to health care.

This goal's objectives are health and well-being, but they are also the result of other objectives that enable individuals to progress in various social, economic, and productive domains. The SDG 3 is a multifaceted and universal resource that may be used to inform sustainable development plans, especially in the most vulnerable nations, and can contribute to long-term well-being and health. However, because SDG 3 has a high level of sectorization, there is a risk of not being able to meet the set goals.

Only a national and international reflection on the human population and animal health surveillance devices, environmental health, implementation of appropriate indicators, and specific research funding will ensure the balance between the legitimacy of society's demands and the needs of scientific and medical excellence. The health and well-being indicators required to meet the agenda's objectives are based on trustworthy and relevant quantitative data, which is currently scarce or non-existent in some areas. As a result, a more comprehensive worldwide animal and public health and research plan are now required to acquire new data, particularly on current emerging infectious illnesses that harm human and animal health, particularly in poor nations.

Good health is essential to sustainable development and the 2030 Agenda reflects the complexity as follows:

- Strengthen substance abuse prevention and treatment, particularly narcotic drug misuse and hazardous alcohol use.
- Achieve universal health coverage for all people, including financial risk protection, access to high-quality essential health-care services, and safe, effective, high-quality, and cheap essential medicines and vaccinations.
- End AIDS, TB, malaria, and other neglected tropical illnesses epidemics by 2030, and combat hepatitis, water-borne infections, and other infectious diseases.

## The pandemic as a stumbling block to achieving the aim

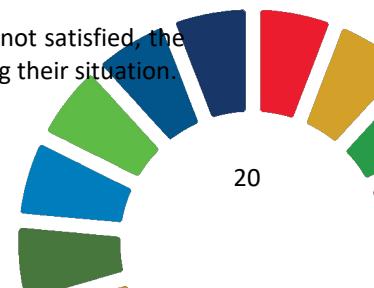
The COVID-19 pandemic and its accompanying limitations wreaked havoc around the world. Individuals with long-term physical health concerns are at a higher risk of serious illness and are frequently subjected to the most stringent pandemic guidance, therefore they may be disproportionately affected. The purpose of this report is to look at how people's mental health and well-being were affected by the COVID-19 pandemic.

## Reduced household income for a long time

When we discuss a person's health and well-being, we must regard financial well-being as a key component of health. We never imagined that a public health disaster would bring this issue to the forefront before the Pandemic. The present pandemic has put the financial well-being of families at the forefront of the discourse, threatening the worldwide population's general health. Low-income earners have been particularly hard hit by the pandemic, as they were already at a disadvantage before it began.

While existing government policies will give immediate assistance to all taxpayers as well as additional unemployment benefits, many workers will continue to face financial and health issues. For example, many "necessary" jobs, such as supermarket, fast food, food production, and other service industry jobs, are frequently held by low-income employees. These professionals are often low-wage workers with few safety safeguards. The majority of these jobs do not provide benefits such as paid sick time or comprehensive health insurance. These workers' health and financial well-being could be jeopardized if they become unwell. They can also transfer the virus to others if they are unable to take sick leave.

This crisis has shown us that when one social determinant of health, such as employment, is not satisfied, the rest of them suffer as well, putting individuals who were already vulnerable at risk of worsening their situation.



## Discontinuation of health activities

The manufacturing and equitable distribution of vaccinations to immunize the whole world population against the COVID-19 pandemic is a major problem in reacting to the pandemic. This has been the focus of a people's Vaccine campaign that is growing in momentum.

The large-scale and global nature of the immunization disruption raises the possibility of future epidemics of vaccine-preventable diseases. Trends showing partial restoration of services underscore the critical importance of continuing to assess recovery, implementing catch-up vaccination strategies for vulnerable populations, and ensuring vaccine coverage equity and health system resilience. Routine healthcare disruptions are expected to raise morbidity and mortality, putting women and children in particular danger.

Modeled projections of disruptions to regular childhood immunization coverage due to the COVID-19 pandemic in 2020 revealed that even more than 8 million children will miss their third dose of diphtheria–pertussis–tetanus-containing vaccine (DTP3) and the first dose of measles-containing vaccine (MCV1). Although understanding these immunity gaps is critical for countries to determine how to address the problem, a more precise evaluation of global vaccine interruptions would provide a more complete picture.

## Effects on Medical and surgical emergencies get neglected

The Coronavirus Disease (COVID-19) epidemic is causing chaos in healthcare systems around the world. To treat an extremely high number of contagious patients with respiratory symptoms, hospitals and emergency departments were compelled to quickly respond to this radically new situation.

HIV, TB, and malaria services are projected to be disrupted and affected as a result of the COVID-19 pandemic. The region still faces significant problems in the fight against HIV/AIDS, tuberculosis, and malaria, as well as delivering services to the poor and vulnerable. As a result, countries will need to keep up their efforts to reduce HIV, tuberculosis, and malaria, as well as focus on early detection and treatment, to minimize onward transmission and mortality.

However, something else altered as quickly as the spread of SARS-CoV-2 as a result of the pandemic. In reality, the pandemic resulted in a large drop in non-COVID-19 individuals seeking care due to life-threatening medical issues. This decrease in emergency departments visits could affect the health of non-COVID patients with acute and chronic illnesses.

## Increased Psychological distress

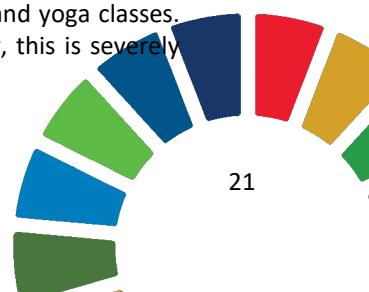
The current Covid-19 pandemic has wreaked havoc on the population's psychological and social well-being. Children, college students, and health workers, for example, are more prone to acquire post-traumatic stress disorder, anxiety, depression, and other distress symptoms, according to research.

Children and young adults are most vulnerable to acquiring worrying symptoms, according to a new poll conducted during the Covid-19 pandemic. Health-care workers (HCWs) are another group of people who are particularly stressed. Health-care workers are in danger of developing symptoms such as post-traumatic stress disorder, burnout syndrome, physical and emotional weariness, depersonalization, and dissociation, which are common in disasters. Overworked health workers had a significant level of psychophysical stress as a result of the pandemic. Secondary traumatic stress disorder is the sensation of discomfort experienced in the helping relationship when treatments are not available for all patients and the professional must choose who can and who cannot receive them.

According to recent research, it is necessary to promote psychological interventions for a specific demographic that is more susceptible to acquiring diseases and suffering.

## Contributions of the G+PS to Good Health and Well-being

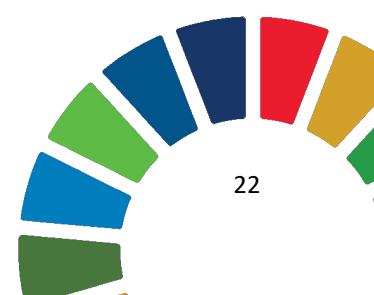
- **Sports and Yoga classes for staff and students:** Employees can participate in sports and yoga classes. Students generally have a wide selection of sports courses to choose from, however, this is severely limited during pandemics.



- **Delivering quality keeping in mind the mental health of professors and students:** Several feedback sessions have been organized, and lecturers have been instructed to minimize their input to encourage more in-class debate, as well as take breaks every 50-60 minutes.
- **Social interaction and foster collaborative learning:** One of the core elements of IGC's overall strategy is to adapt teaching and learning approaches that actively support student mental health and enhance the wellbeing and educational experiences of all students, not just those at risk of experiencing mental health difficulties, during their time at IGC. The epidemic raised the need to address well-being while also limiting possibilities for social connections between students and instructors. IGC strives to enhance social contact and foster collaborative learning, as evidenced by the previous two years.
- **Development of Mensa Vital:** IGC is working on the development of Mensa Vital, which will help people eat healthier. Balanced recipes produce healthful, long-lasting foods made with natural and fresh ingredients.

## Recommendations to make the future a better place

- **Awareness campaign for substance abuse:** The goal of good health and wellbeing aims to strengthen the prevention and treatment of substance abuse, including drugs and alcohol. If this goal is achieved individuals will be provided with knowledge and thus have access to knowledge, health, and resources for a decent standard of living. This addresses sustainability as it meets the needs of the present without compromising the ability of future generations to meet their needs. It does this through educating individuals on the dangers and risks of substance use, this knowledge can be passed down to future generations and thus reduce rates of substance use and related deaths.
- **A healthy lifestyle to lower mortality rate in the Community:** This goal will increase life expectancy in developing countries by encouraging good health and wellbeing, it will then decrease the burden of disease, which means there would be fewer premature deaths due to diseases and illnesses (communicable and non-communicable diseases) in communities/developing countries - therefore the mortality rates of the diseases and illness will decrease. This goal ensures that individuals continue a healthy lifestyle and help to aim in lowering the morbidity rates in the community.
- **Focus on individuals' social health:** Ending epidemics of AIDS, tuberculosis, malaria, and neglected tropical disease and combating hepatitis, water-borne diseases, and other communicable diseases is another aim of goal three. By ending these diseases and illnesses, it will improve an individual's social health by allowing them to participate in community activities such as sporting events and weekly mass'. They can participate as they will not be feeling the symptoms of the illnesses and therefore these individuals can improve their social skills by communicating with others.





## SDG4: Quality Education

SUMIT KUMAR SRIVASTAVA

Education for sustainable development is a dynamic concept that utilizes all aspects of public awareness, education, and training to form or enhance an understanding of the linkages among the problems of sustainable development and to develop the knowledge, skills, perspectives, and values which can empower people of all ages to assume responsibility for creating and enjoying a sustainable future.

Estimates show that among children attending schools and colleges, 1 in 5 of them had dropped out and recent studies reflect that 2 in 5 of them have never set foot in a classroom. The goal specifically recognizes the need for filling this gap and imparting a fair and just flow of knowledge for future generations. Progress has been very slow in some developing countries due to the high level of poverty, economic conditions, and conflict state in the countries. Children from the poorer household are four times more likely to drop out of school compared to the richest household simply because of the notion that one can earn money rather than wasting resources and time in school leading to more child labor. Achieving inclusive growth and quality education reaffirms that education is the most powerful weapon towards sustainable development.

**SGD 2030** goal in context to quality education focuses on basic education, tertiary education, adult learning, and digital skills. The goal seeks to ensure equitable and quality education for all stages of life to develop skills and knowledge required for employment, decent jobs, Entrepreneurship, and learning should not stop throughout life. The universal agenda for SDG 2030 is framed by the objective to ensure to end poverty, hunger and to foster peaceful life ensuring all human beings can enjoy prosperous and fulfilling lives regardless of income/ development status.

### Objectives of SDG-Education 2030:

**Broad Scope of lifelong learning opportunities:** The goal aims to ensure equitable opportunities to education from a lifelong learning perspective. Ensuring universal primary, secondary and tertiary education for children, youth, and adults.

**Focus on Equity and Gender Equality:** The goal includes a broader focus on inclusion, equity, and gender equality. With aim of eliminating gender disparities and equal access to education at all levels of education and vocational training for a vulnerable population and persons with disabilities.

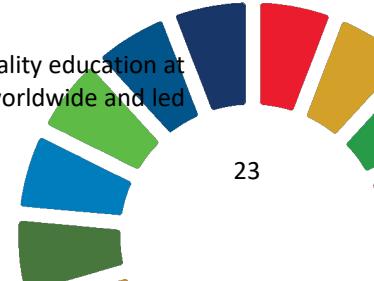
**Focus on Effective Learning:** The goal aims to ensure focus on effective methods of teaching and learning that constructively involve the individuals in their learning and personal development. The aim also prioritizes effective teaching methods, that impart and grow confident learners and ready to explore new skills.

**Literacy for Youth and Adults:** The aim seeks to ensure that all youth and a significant proportion of men and women achieve literacy. The support to ensuring a level of competence in communication, social engagement, and contribution in society and the workplace.

With the clearly defined agenda and objectives, SDG: 2030 Education intends to a global effort towards achieving human rights, peace, and responsible citizenship. The content of such education is relevant in both cognitive and non-cognitive aspects of learning. The values and attributes intended to impart by the goal will help solve global problems like poverty and inequality.

### Effect of Covid-19 over SDG 2030- Education Goal

The covid-19 pandemic has caused a global crisis, which has taken its toll on the delivery of quality education at universities and schools. The report also undertakes the extent to which lockdown triggered worldwide and led



to the suspension of presence-based teaching. According to the figures (**Unicef for every Child**), Covid-19 disrupted the learning of 325 million children, more than 75 million children have not been in school for more than a year and 3 million are at risk of never returning to school. These figures are from the Asia region alone, giving a vague idea about the detrimental effect on the world. The lockdown has led to a surge in online-communication tools as partial replacement to interactions via face-to-face student engagement, which is necessary for effective teaching.

The pandemic brought into attention the difficulties and challenges related to upgrading the higher education system to take better advantage of digital technologies. The change needs to be internalized and absorbed by the universities at least in part. Governments and institutions will need to make a greater effort and pursue further investments to ensure ideal conditions of learning and teaching for students and professors (Internet access, technological resources).

The main idea of SDG - Quality education is to impart children, youth, and adults worldwide with dynamic concepts, knowledge, and skills for a sustainable future. As the agenda is to globally achieve the goal, which is massive so the goal is divided into further subgoals which will be discussed further in the report. Efforts are being made to achieve these subgoals, and how education institutions can come forward together towards a sustainable future, one such educational institution is Hochschule Bremen. The implication of this report is two-fold, firstly it will describe the purpose of each subgoal and what educational institution like Hochschule Bremen is doing to achieve the goal. Secondly, it describes recommendations for what further initiatives Hochschule Bremen can take towards a sustainable future.

#### 4.1 Equal Access to Affordable Technical, Vocational, and Higher Education

The subgoal by 2030 aims to ensure equal access for all women and men towards affordable quality education equipping them with skills, knowledge, and technical education and trying to reduce barriers to skill development starting from the secondary level as well as tertiary education.

Hochschule Bremen Initiatives towards equal access to Affordable Higher Education can be attributed through sustainability consideration into the future. Hochschule offers a range of different Bachelor's and Master's programs in their agenda towards quality education delivery. Courses in Science, Management and Arts, most of the courses are free of cost for both EU and Non-EU students.

With equal access to quality education, HSB is participating in ``Open Universities'' program funded by the German Federal Ministry of Education and research, the program aims to promote innovative, demand-oriented, and sustainable strategies in the higher education sector to integrate new knowledge into everyday practice and ensure a permanent supply of skilled personnel.

Hochschule with its partner universities around the world also offers a ``Student Exchange Program'', whereby students can experience different cultures, learning in different countries widening their spectrum of knowledge and skill development.

Our recommendation to Hochschule Bremen, the institution needs to divert its focus also towards industry-oriented skill development certification and programs which will help students have a smooth sail in their carrier ahead. Regarding exchange programs, the college can also inculcate teacher's exchange programs too in developing countries which would widen their horizon of experience and for students in other countries to gain valuable knowledge from highly designated professors.

#### 4.2 Build and Upgrade Inclusive and Safe Schools

The goal aims to build and upgrade facilities that are child, disability and gender sensitive and provide a safe, nonviolent inclusive, and effective learning environment for all. The purpose of the planned assistance is to create considerably improved conditions for high-quality education provision and the reconciliation of work and family life.

**Hochschule Bremen** has done architecture and interior design so as inculcate minimum disruptions, has strict control over the entrance with state of an art security systems for entering the premises. Students are not discriminated and expectations are clearly defined, with consequences for infractions. The university has been very active towards tackling the effects of pandemics, with students coming from all over the delivered, Hochschule has been successfully able to deliver quality education with state-of-the-art equipment to deliver hybrid classes.

The institution has also been able to make the college environment friendly for disabled people, with wheelchair-friendly mobility facilities. Washrooms are made in such a way that is convenient for disabled people. There have been significant initiatives taken by IGC to promote mobility keeping in mind Environmental Protection by spreading awareness regarding mobility with bicycles, making parking spaces for bicycles. The institution also has a Cycle Café funded by the federal government to organize events and workshops on bicycle repair and spread the idea of Sustainability.

Our college recommendation is to understand that there are different forms of disability like Blind, Deaf, etc. The institution should also focus on planning to make the buildings and premises friendly for these disabled people, like brail efficient sign languages and notice boards. A team that is helpful to cater to the needs of these specially-abled students, making classrooms efficient for them so they have equal access to quality education.

The institution should also focus on setting up a social group headed by the management, for community help and awareness. The social group can discuss and spread awareness programs on current issues in the community and teach children of refugees to give them a better life and realize the importance of education.

#### 4.3 Expand Higher Education Scholarships For Developing Countries

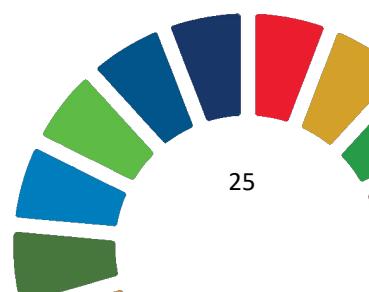
The goal aims to substantially expand globally number of scholarships available for developing countries. Scholarships play a vital role in young students and adults to gain quality education who would otherwise not be able to afford to continue education. There should be for Developing countries to provide scholarships and for developed countries to invest in scholarships for people from disadvantaged groups.

Much like the German policy to provide Zero tuition fee courses, **Hochschule Bremen** also provides various technical courses free of cost to students from all over the world, which has made significant development for students to gain quality education by expert teachers and enhance their career further. But there are some courses like Business, Management which require students to pay tuition fees, but the cost involved is very less compared to the fees charged by other universities around the world. Hence leading to gain Sustainable Education goals.

Our college recommendation is that they can make scholarships available for students for the paid courses as the institution currently does not have any funding or finance activity programs available for students. Some of them come from developing countries, the institution can propose funding programs, partner with banks or private companies to provide scholarships to deserving candidates.

#### Conclusion

In conclusion, education and training are key drivers for growth and jobs because they help to improve employability, productivity, innovation, and competitiveness. Institutions like Hochschule Bremen which has actively been taking measures to achieve Sustainability, there are a lot of measures and considerations that it needs look into. The quality of education provided by them is at far the best, they have highly trained professional Lecturers coming from various fields of academia with the requirement to have at least a doctorate. With technology and innovation, more focus should be made towards research and development into achieving sustainability, providing on-the-job training to teachers. To promote equal opportunities, the development should also strive to ensure full participation of children and others with disabilities as well as inclusively designed education systems.





## SDG 5: Gender Equality

DORINA KACCORI

Women's equality and empowerment is one of the 17 Sustainable Development Goals, that aims to provide equal rights and opportunity for women and girls everywhere in the world. This goal seeks to ensure a life free of violence and discrimination. Furthermore, this goal is an integral to all dimensions of inclusive and sustainable development and a successful achievement of SDG goals is depended on the achievement of Goal 5.

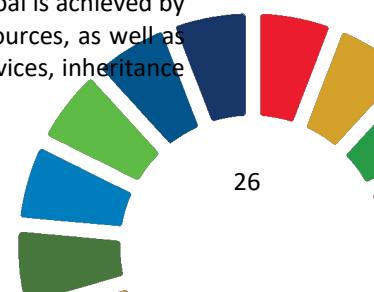
Securing gender equality rights is a very important factor in achieving a just and sustainable world. However, there are many problems that come when seeking to tackle gender inequality due to the established and often institutionalised cultural beliefs and behaviours. These actions play out at different aspects on different levels such as personal, societal, institutional and political. Therefore, it is needed to establish strong legal frameworks in order to provide a strong basis for policies that seek to improve the circumstances of women and girls.

Gender equality by 2030 calls for urgent action to eliminate the many causes of discrimination that continue to restrict women's rights in the private and public spheres. For example, discriminatory laws need to be changed and laws need to be enacted to prevent inequality. However, 49 countries do not yet have laws to protect women from domestic violence. The elimination of gender-based violence is a priority, as it is one of the most widespread human rights violations in the world nowadays. Based on data from 87 countries, 1 in 5 women and girls under the age of 50 have been physically and / or sexually abused by a partner in the last 12 months. Harmful practices such as child marriage deprive 15 million girls under the age of 18 of their childhood each year.

### Goals and Objectives supported by 9 targets

Goal 5 aims to achieve gender equality and empowerment of all women and girls as it is a fundamental human right. It is also a prerequisite for achieving all the goals in the 2030 Agenda for Sustainable Development. Although girls and boys on average face similar challenges in early childhood, gender differences become more apparent as children grow older. Women face a disproportionate workload at home, marital expectations, the risks of early pregnancy, and sexual and gender-based violence. The onset of the COVID-19 pandemic exacerbated gender inequalities, especially in the least developed societies. This goal focuses on incorporating gender equality outcomes into all programs to ensure that growth and success regardless of gender through 9 targets as presented below.

- End all forms of discrimination against all women and girls everywhere.
- Eliminate all forms of violence against all women and girls. This aims to end the violence in the public and private spheres, which includes trafficking and sexual and other types of exploitation.
- Eliminate forced marriages, child marriages, genital mutilation and all other forms of harmful practices.
- Value unpaid care and promote shared domestic responsibilities within the household. This is possible to be done by providing public services, infrastructure and social protection policies.
- Ensure women's full participation in leadership and decision making. The participation must be effective by providing equal opportunities at all levels of decision making in political, economic and public life.
- Ensure universal access to reproductive and health rights. These rights must be ensured according to the agreement made with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action.
- Equal rights to economic resources, property ownership and financial services. This goal is achieved by providing reforms that allow women and girls to have equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.



- Promote empowerment of women through technology, which means enhancing the use of technology, in particular information and communications technology.
- Adopt and strengthen policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

## The pandemic as an obstacle delaying achievement of the goal

On the section below, we will further discuss the below targets in accordance to how Covid19 pandemic delayed achievement of these goals:

### **1. End all violence against exploitation of women and girls**

Violence against women persists at high levels and has been intensified by the pandemic. Nearly one in three women (736 million) have been subjected to physical and/or sexual violence at least once since the age of 15. Women often face challenges in leaving abusive relationships, due to insufficient economic resources, limited availability and access to formal support services, weak social support networks fear of repercussions associated with social stigma.

Furthermore, COVID-19 threatens global progress against child marriage despite the fact that over the past decade, the practice of child marriage has declined significantly (15 per cent). However, during COVID-19 pandemic girls have been put at higher risk of early marriage due to a combination of economic shocks, school closures and interruptions in reproductive health services.

### **2. Ensure full participation in leadership and decision making**

Women's equal participation in decision-making, which is crucial for COVID-19 response and recovery, remains a distant target. The pandemic has exacerbated gender inequalities and threatens to undermine progress on women's empowerment. More than ever, women are needed as equal partners in crafting gender-responsive laws, policies and budgets

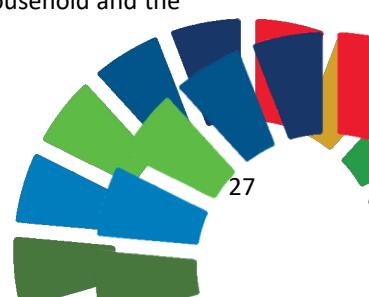
1 January 2021, women's representation was far from parity. The global average of women in single or lower chambers of national parliaments was only 25.6 per cent, and 36.3 per cent in local deliberative bodies. At the current rate, it will take around 40 years to achieve gender parity in national parliaments. Most achieved progress is done through the use of gender quotas. In 2020, the share of parliamentary seats won by women in countries with legislated quotas was 27.4 per cent, compared with 15.6 per cent in countries with no quota systems. At the local level, the use of legislated quotas increased a country's representation of women by 7 percentage points. Women accounted for nearly 39 per cent of the global labour force in 2019, but they occupied only 28.2 per cent of managerial positions, only 3 percentage points higher than in 2000. The pandemic's disproportional impact on women in the workforce, and especially on women entrepreneurs, threatens to roll back the little progress that has been made in reducing the global gender gap in managerial positions.

## Value unpaid care and promoted shared domestic responsibilities

Women do 2.6 times more unpaid care and housework than men. While families, societies and economies depend on this work, for women, this translates into lower wages and less time for outside work. In addition to the fair distribution of financial and economical resources, which is not only a right but accelerates growth in many areas, the responsibility for unpaid care work must be shared fairly between men and women.

During pandemic, women suffered a disproportionate share of job losses and increased care work at home. The pandemic continues to add to the burden of women's unpaid work while squeezing them out of the labour, considering that women are more often to have been hired in the sectors and in industries which were affected more by the pandemic.

This goal aims to recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and promotion of shared responsibility within the household and the family as nationally appropriate.



## Contributions and recommendations of the G+PS to Gender equality

Universities are in a unique position to bring gender equality into our social and employment systems, and yet this influence is misunderstood and sporadically exploited. We want universities to make better use of their place in the world to help make gender equality the norm in both our social and employment environments. Beyond competency-based education, universities can develop and implement models of how the world works and transfer them to students, who then take them into the world of work and implement them further.

Hochschule Bremen and IGC are ensuring gender equality through different channels. IGC is doing a fundamental job in ensuring gender equality in all aspects, such as lectures, employment, safe and welcoming environment and promoting women towards natural sciences and technology.

Women already hold an above-average number of professorships at HSB (31 %). With the help of the "5th Action Programme for Equal Opportunities for Women in Academia at Hochschule Bremen", HSB aims to increase the proportion of women as professors.

Women in the fields of hard sciences are being promoted through the MINT project at the early stage. With the Mentoring MINT project the HSB promotes women in the fields of mathematics, engineering, the natural sciences and technology that have so far been occupied predominantly by men. The meetMINT offer already provides students still at school with access to STEM subjects in an environment free from clichés and stereotypes. The project "Gender and Diversity in Teaching" aims to enable HSB lecturers to design their own teaching in a gender-and diversity-reflective way.

Furthermore, women are represented in the directing board where 1 out of 4 Board Members is a woman. Even though there is still work to do in terms of representation, this is an indication of good participation and decision making.

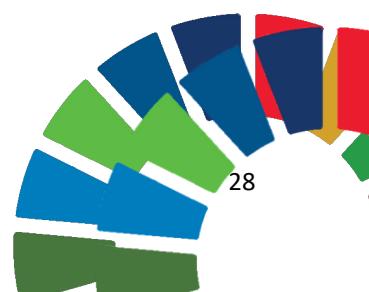
IGC ensures that there are no difference in wages between men and women. In addition to that IGC takes gender equality as criterion in decision making for the students and also workers. Women are given advantages in recruitments in case of same qualifications with men. For every recruitment it is a general rule that if male and female applicants have the same qualification, females have to be preferred. There are women representatives present in all job interviews.

Furthermore, ethical approach to gender equality in teaching, and all environments are provided in IGC.

## Recommendations

The pandemic added to the burden of women taking into consideration that they are the ones who bear the most of unpaid work, such as child care and domestic responsibilities. So IGC could provide facilities for young children of professors who are not able to find short or long term solutions for childcare.

Another way IGC could improve in terms of providing solutions for the gender equality is by offering full time jobs to women in the institution. Usually women are the ones who tend to be offered more often temporary or halftime jobs due to the fact that they have to take care of children. Therefore, offering solutions of child care, would be an incentive to stay full time at work and grow faster professionally. Another way in promoting gender equality, would be enforcing and promoting the paternal leave for men as well. In this way, there are no differences between the time men and women have a paternal break in their career. This tackles the sometime unfair belief that due to childbirth, women are the ones who will need to interrupt their career and will leave a void in the workplace.





## SDG 6: Clean Water & Sanitation

VALLABH KALGAONKAR

Of the many different facets of sustainable development that the SDGs aim to address, one of the extremely important ones comes in the form of SDG 6 which covers the topic of clean water and sanitation. It aims at ensuring availability and sustainable management of water and sanitation for all. This goal is further divided into 8 sub-goals out of which the first 4 have been evaluated in this report based on their relevance and applicability. The remaining 4 sub-goals have been excluded from the purview of this study due to their inapplicability to the mandate of G+PS or the lack of available information on them.

### 6.1 Provision of safe and affordable drinking water

This sub-goal aims to achieve universal and equitable access to safe and affordable drinking water for all by 2030. The right to clean water is fundamental and imperative for the development of any human being and community. While some countries have made progress in this sub-goal, a lot needs to be done to achieve this target by 2030. This sub-goal is measured by evaluating the proportion of the population using safely managed drinking water services (United Nations, 2015).

While it might appear that the role of an institution is limited in terms of this sub-goal, there is a lot that can be done as a large number of students attend such institutions and spend a considerable amount of time there away from their homes. This becomes critical in the case of institutions in LDCs with poor population. As a standard measure, institutions can provision drinking taps and water refilling stations which are conveniently accessible across their campuses. Additionally, areas where the water supply is not potable, investment in a water filtration plant and storage tanks will further help with the achievement of this sub-goal. The quality of tap water in Germany is generally very good and fit for human consumption. In light of this fact, the necessary action by an educational institution is limited to providing access to this water.

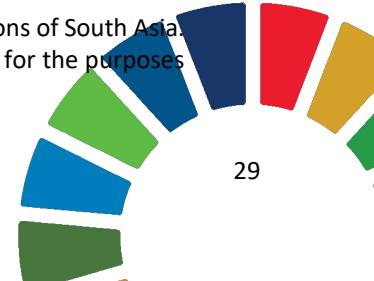
#### Observed Alignment of the Graduate and Professional School

As mentioned earlier, the potable quality of tap water available in Bremen and Germany makes the task of G+PS a lot easier. The provision of access to this water is through the taps available in bathrooms and kitchen across the campus which provide free and clean water to the staff and students. It is observed that these access points are available in multitude across the campus as each floor has multiple bathrooms and kitchen area as well in the building. In addition to these, the Mensa, a state-run food provisioning facility, which is in the vicinity of the G+PS campus has water refilling stations and bathrooms to ensure free and clean supply of water to the students, faculty and other visitors.

#### Recommendations

The contribution of G+PS towards the achievement of this sub-goal is considerable as the students and faculty have free and convenient access to safe drinking water. However, as an institution that works towards educating people and creating global future generations, it can go a step ahead and take a page out of the book from other countries. It is recommended that G+PS place drinking water and taps and bottle refilling stations around the campus as well that it can manage. This will expand the access of safe water to citizens beyond the students of the institution.

The placement of such water drinking taps in public areas is a common practice in the hot regions of South Asia. The success of these taps is measured by the fact that this practice is now adopted commonly for the purposes



of charity by individuals. While it may not be a charitable cause here, it is definitely in line with the achievement of the said sub-goal.

## 6.2 End open defecation and provide access to sanitation and hygiene

This sub-goal aims to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations. Even today, 46% of the world population lack safely managed sanitation. Of these, females are more vulnerable to the ill-effects of the lack of availability of safe sanitation. They are more susceptible to health problems and safety issues that could possibly arise out of open defecation. This metric is measured by looking at the proportion of population using safely managed sanitation services, including a hand washing facility with soap and water (United Nations, 2015).

The provision of sanitation facilities by an educational institution is essential to the conduct of education. It is one of the basic human needs that needs to be met in a safe and hygienic way. The issues arising in its provisioning are usually faced by institutions in poor and underdeveloped countries. As a solution, low investment bio-toilets can be installed which are now available due to the social innovations done by certain brands. An example for the same is Sato-Lixil, a bath ware brand that has developed low-cost toilets for the regions of Asia and Africa. In the case of Germany, by virtue of being a developed country, the problem of access to sanitation and hygiene is far lower as compared to other parts of the world.

### Observed Alignment of the Graduate and Professional School

It has been observed that gender specific washrooms are available across the campus of G+PS. These washrooms are equipped with modern toilets eliminating the need for open defecation at the institution. In the interest of convenience and easy access, these washrooms have been built on every floor along with provisions for disabled toilets as well. Additionally, these washrooms are also equipped with soap, water and even hand sanitizers to ensure a high standard of hygiene for the users. Within the purview of the institution's mandate to adhering to the sub-goal, the G+PS has sufficient provisioning and access to sanitation and hygiene facilities.

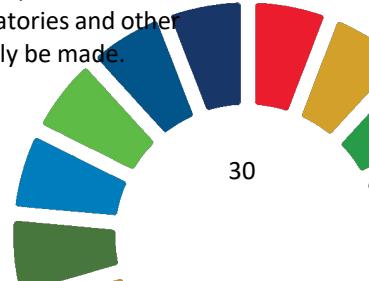
### Recommendations

As established above, sufficient investments have already been made with regard to provisioning of safe and accessible hygiene facilities, the G+PS does not need to make any further investments in this area. However, in the interest of provisioning of such facilities to all, G+PS can play a support role to other institutions and bodies across the world. Research in the form of suppliers, availability and negotiated pricing can be done keeping in mind the educational nature of the institution and this information can then be made available freely to all the interested parties. This will cut down the research and information process for anyone looking to install these facilities. Also, technical information and research on the use of smart bio-toilets can be made available as well.

## 6.3 Improve water quality, wastewater treatment and safe reuse

This sub-goal aims to improve water quality by reducing pollution, eliminating dumping and minimize release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally by the year 2030. The fact the fresh water is a scarce resource is an axiom now. As much as we need to conserve water, the need to recycle and reuse water is no less. The only way to sustainable manage the water resources of the world is to control consumption and increase recycle and reuse. The measurement of this metric is two-fold. First, we need to measure the proportion of domestic and industrial wastewater flows which have been safely treated. Second, the proportion of bodies of water with good ambient water quality will give us the complete understanding of the progress made on this sub-goal (United Nations, 2015).

From the perspective of an educational institution, there are limited actions that can be taken to adhere to this sub-goal. Since they are hardly responsible for the effluence of hazardous chemical and materials, the actions to improve are limited to ensuring safe disposal and treatment of chemicals of any kind from laboratories and other departments. Efforts in the form conserving water and its reuse within the campus can definitely be made.



### **Observed Alignment of the Graduate and Professional School**

Apropos to the understanding derived from the above information, there is little that the G+PS can do to contribute significantly to this sub-goal except manage the disposal and treatment of chemicals from departments that use it. This is done in accordance with the state laws that dictate the procedure for the disposal of such chemicals.

#### **Recommendations**

In addition to abiding by the state laws on the subject of disposal of wastewater, G+PS can increase efficiency in the use and reuse of the water from the campus. One such effort could be done in the form of collecting run off water from basins in the bathrooms and kitchens and treated at a rudimentary level. This water could then be used to water the greens around the campus as well as cleaning and floors and other non-food consumption areas which do not directly come in contact with human hands.

### **6.4 Increase water use efficiencies and fresh water supply**

This sub-goal aims to substantially increase water use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity. Throughout the evaluation of these sub-goals of SDG 6, it is evident one of the biggest crises that the world faces today but does not talk about enough is the scarcity of water for large parts of the global population. It is imperative for us to increase our efforts towards water conservation so the future generations can have access to fresh water. The measurement of this metric is done by evaluating the change in water use efficiency over time and the level of water stress i.e., freshwater withdrawal as a proportion to available freshwater (United Nations, 2015).

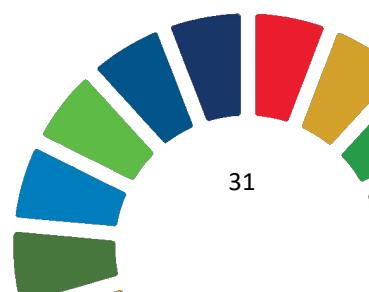
This is one sub-goal where the institution can play an important role in reducing water wastage to conserve local water levels as well as set an example for other institutions and bodies to follow. Incidentally, this is also an area where large investments are not required for institutions such as G+PS to achieve efficiency. The use of smart innovations which can be used with the existing infrastructure greatly help in controlling the wastage of water and increasing efficiencies.

#### **Observed Alignment of the Graduate and Professional School**

The freshwater supply to the institution is ensured by the state water supply. The water supplied is of potable quality. It has been observed here that the presence of auto shut-off taps and standing urinals in the bathrooms contribute significantly to saving water and increasing water use efficiencies. The auto shut-off taps mitigate the chances of the taps being left on accidentally and the standing urinals contribute to increasing the efficiencies by consuming less water for flushing as compared to regular WC. Additionally, the general nature of western bathrooms where use of toilet paper is the norm contributes further in efforts towards making water use efficient.

#### **Recommendations**

The G+PS though fairly efficient in its water usage, can take steps to further reduce wastage and increase efficiency. One such measure can be to install small nozzle; slow flow manual taps for refilling of water bottles. Currently, the exercise of refilling water bottles is done in the bathrooms using the available taps. The wide mouth of the tap and the speed at which it effuses water results in spillage and therefore, wastage. The new taps will help reduce this wastage and make the exercise of refilling easier as well. An additional measure can be implemented in the form of installing spray heads to existing bathroom taps. These heads dissipate a small quantity of water over a relatively larger area and reduce the per unit time flow of water. A combination of the above two measures will help greatly in increasing water use efficiency at the campus of G+PS.





## SDG 7: Affordable & Clean energy

BHUPENDER S SANDHU

### 7.1 Universal access to modern energy

The first target of SDG 7 is Target 7.1: "By 2030, ensure universal access to affordable, reliable and modern energy  
This target has two indicators:

- Indicator 7.1.1: Proportion of population with access to electricity
- Indicator 7.1.2: Proportion of population with primary reliance on clean fuels and technology (United Nations, 2022)

Reliable and reasonable access to power saves and further develops lives. Among its many advantages, electricity powers PCs in schools, charges Smartphones, keeps food cold and organizations and fundamental infrastructure working. Energy proficiency in campus grounds can save schools cash and speed up the change to a clean energy future.

What initiatives IGC has taken in order to achieve this goal?

#### Findings

**Energy:** Used is 100 percent 'Green energy' which plays a key part in the energy change because of its low natural effect. It offers an alternative in contrast to non-sustainable power and helps battle global warming change by not producing ozone harming substances or expanding carbon emission.

IGC firmly believe that caring for the environment always pays off. In day-to-day work, emphasis more on careful use of resources and their efficient and effective use. To implement All HSB lights have a high energy efficiency rating. Energy efficiency rating not available. To the extent possible, IGC has Motion detectors which are installed so that lights turn off automatically when not needed. Quantum of cost saving not available. This appliance tools that empower them to work when they are required and for the perfect proportion of energy. With this innovation, we can have similar degrees of lighting, cooling, warming and portability utilizing not exactly 50% of the energy per unit of administration.

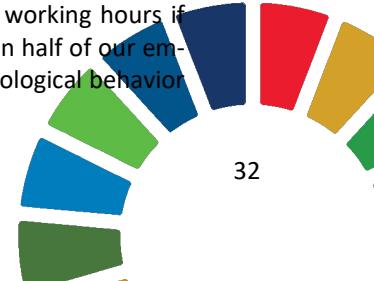
### 7.2 Increase global percentage of renewable energy

The second target of SDG 7 – "By 2030, increase substantially the share of renewable energy in the global energy mix. "Energy consumption in of the three end uses of renewables (electricity, heat, and transport) It has only one indicator: Indicator 7.2.1 is the "Renewable energy share in the total final energy consumption" in the global energy mix." (United Nations, 2022)

#### Contribution

As mentioned above HSB- use 100 percent Renewable energy for consumption which directly contribute to this target as well but in my research, I also found out that for mobility:-

The IGC is very centrally located and only a few minutes' walk from downtown. The connection to the public transport network is optimal, so that it can be reached quickly and easily by public transport and/or bicycle. All employees have a free bus and train ticket, which employees can use free of charge during working hours if required. Mostly do not use a business car. Due to the good and central connection, more than half of our employees regularly use their bicycles to get to work and within the upper management level, ecological behavior



is exemplified in some areas. For example, the scientific director, for example, uses bicycle to get to his workplace. to work. Also, many of the lecturers are active cyclists.

### 7.3 Double the improvement in energy efficiency

By 2030, double the global rate of improvement in energy efficiency (Subratty Djaheezah, 2017)

Energy efficiency basically implies utilizing less energy to perform the same task - that is, killing energy waste. Energy productivity brings an assortment of advantages: decreasing ozone depleting substance outflows, lessening interest for energy imports, and bringing down our expenses on a family and economy-wide level. There are enormous opportunities for efficiency improvements in every sector of the economy, whether it is buildings, transportation, industry, or energy generation. (national people's part, n.d.)

#### Observed Alignment

While the IGC building facade is old, it has been renovated from the inside to ensure that it is energy efficient. For instance, the building does not lose temperature. So, when it is warm it stays warm using only a limited amount of energy. Temperature efficiency gains not available.

The offices are equipped with daylight and in order to insulate heat and save energy, the blinds are lowered every evening.

Transitioning to LED lights. -LED's can work at 80% effectiveness while incandescent bulbs just work around 20%, the leftover level of energy in the two bulbs is lost as heat. Alongside decreasing energy cost, the LEDs more proficient utilization of energy makes them more secure to use in your home than other lights which can be fire dangers.

When procuring IT and computer systems, use environmentally friendly methods. Devices that have a long guarantee period, low energy consumption and low operating costs.

### 7.4 Promote access to research, technology and investments in clean energy

The product or administration of the IGC is the educational qualification and along these teaching the instructing inside the separate courses. Courses range from an assortment of financial matters subjects to European studies, tourism, aeronautical and cultural management.

The Corporate Social Responsibility (CSR) and Sustainability modules are key cross-cutting issues, especially inside our European Studies and Tourism Management expert's courses.

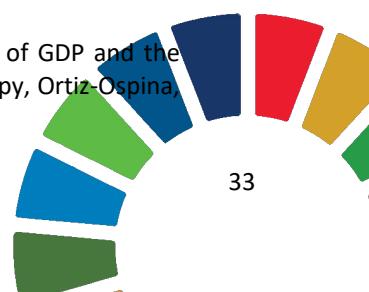
The students are taught how and within what framework social and ecological aspects can be combined with economic activity. The aspect is supplemented by the Applying for Funds module. The module focuses on practical teaching of how EU funds can be applied for social and ecological programs. In modules such as Business Ethics and Sustainable Development taught.

IGC contribution to the development of a more social and ecological awareness by drawing up the balance sheet and communicating it to stakeholders. The first lectures on the common good economy were given as part of the first International Student Conference on IGC held. In addition, one of The IGC employees is a co-founder of the first GWÖ energy field in Bremen. As part of her commitment, she regularly gives free lectures on the Common Good Economy and the Common Good Balance Sheet project at the IGC and regular training by the coordination office for employees for effective and efficient use of energy.

Also, Participate in the European environmental management and audit system EMAS. But can also involve GWÖ more in marketing.

### 7.5 Expand and upgrade energy services for developing countries

It has one indicator: Indicator 7.5.1 is the "Investments in energy efficiency as a proportion of GDP and the amount of foreign direct investment in financial transfer for infrastructure (Ritchie, Roser, Mispy, Ortiz-Ospina, 2008) and technology to sustainable development services".



This sub goal is not applicable on IGC or G+PS.

How other German university has contributed towards this goal

Saving energy successfully- university of Stuttgart

With students and staff encouraged to utilize energy wisely and through variety of energy saving projects, the University has effectively decreased its energy footprint.

Initiative 1000: "Switch Smart" (university of stuttgart , n.d.)

Saved almost 1000 megawatt hours of electricity with the 1000 campaign. How it happened. As part of this campaign, all employees and students at the University were called upon to contribute with their behavior to saving 1000 megawatt hours of electricity in six months. The university should be happy about a new purchase in the amount of the electricity coats saved in this way campaign was accompanied by various activities such as a series of lectures the setting up of model rooms and various competition on the topic of saving electricity ideas use of funds there were many smart suggestions and on the day the result was finally announced to science compared to the reference period, the power consumption was 982,8 megawatt hours lower the winner of the competition were chosen and the new purchase from the saved electricity costs was published they are energy saving lights for two growth chambers in biology overall, campaign 1000 was a complete success.

### **Recommendation**

While most modern measures have been adopted in IGC, there are a few more measures that can be considered. This are general recommendation not specific to any sub-goals.

#### *Shifting To Green Energy Alternatives*

While the majority of energy will undoubtedly have to be purchased to ensure a stable supply, making a gradual shift to renewable energy such as wind or biomass is a prudent move. Colleges with huge grounds that loosen up across open regions will have numerous amazing chances to bridle free energy that exist inside nature all while decreasing the organization's carbon footprint.

#### *Employ Sustainability Initiatives & Policies*

Perhaps the significant method for saving energy is to get everybody associated with focusing on energy saving top priority employees and the whole campus included. campus wide strategies, for example, switching off electrical points and dimming lights during lectures can be a decent begin to acquaint energy saving habits with staff and students alike.

#### *Saving energy with energy performance contracts*

Energy Performance Contracting (EPC) is a type of 'innovative financing' for capital improvement which permits subsidizing energy upgrades from cost decreases. Under an EPC plan an outside association (ESCO) executes a task to convey energy productivity, or renewable power undertaking, and uses the surge of pay from the cost saving, or the renewable power created, to reimburse the expenses of the project, including the expenses of the investment. Basically, the ESCO won't accept its instalment except if the undertaking project delivers energy saving as expected.



## SDG 8: Decent Work and Economic Growth

AMAR SHAM

### 8.1 Sustainable Economic Growth

#### Introduction

Sustainable economic growth particularly aims for at least a 7% GDP growth rate for developing countries by 2030. The GDP growth rate of developing economies stood at 4.3% prior to the global COVID-19 pandemic. In the aftermath of the pandemic, this growth has been adversely impacted. For an institution such as the International Growth Center (IGC), which is situated in one of the strongest global economies, the contribution towards this goal is indirect at best. (United Nations Economic and Social Council, 2020)

#### Observed Alignments

The G+PS at Hochschule Bremen produces graduates that are expected to be productive members of the market who will eventually assume leadership positions and drive economic growth. Many G+PS students come from developing countries and return to their countries upon completion of the course. Armed with the skills to succeed in businesses, these graduates can play a productive part in their home economies. The curriculum at G+PS directly equips students for business success which, in turn, leads to economic success.

#### Recommendation

Several other universities within and outside Germany have adopted a more direct approach towards tackling this sub-goal. The University of Gothenburg in Sweden, for instance, is working to create a global research network that contributes to knowledge and solutions for sustainable growth in collaboration with a host of other universities. (Gothenburg, 2020)

G+PS can also amplify its impact by adopting a more direct approach towards this sub-goal by partnering with businesses in developing countries in an advisory capacity. More specifically, G+PS can work with state institutions in developing countries to establish and share best practices and devise action plans that can help these organizations grow.

### 8.2 Diversify, innovate, and upgrade for economic productivity

#### Introduction

The indicator for this sub-goal measures the annual growth rate of real GDP per employed person. This sub-goal there is directly concerned with the productivity of business which drives innovation and labor productivity. While the United States of America and most European countries have a relatively high GDP per employed person, countries such as India and China have recently experienced a significant boost in this metric as well. Several countries in the global south unfortunately still lag behind in terms of productivity. (O'Niell, 2022)

#### Observed Alignments

As a predominantly business school, the IGC plays a significant and relatively more direct part in contributing towards this sub-goal. The IGC expands the skill set of its students allowing them to become productive members of the labor force. Graduates of the IGC are equipped to add significant value to businesses as managers and future leaders. They are also primed to drive innovation and growth within these businesses. To that end, the



academic programs, curriculum, and faculty are aligned to impart a diverse range of skills to an equally diverse body of students that comes from a large number of countries.

### Recommendation

There are numerous other examples of how a university can meaningfully contribute towards this sub-goal. The University of Essex in the United Kingdom, for example, frequently organizes lectures that highlight the role of vocational training programs for youth through intergenerational collaboration at the workplace. (Essex, 2022)

One of the ways in which the G+PS at Hochschule Bremen can further enhance its contribution towards increasing economic productivity is by adding a module dedicated to innovation in businesses. While innovation is discussed in various modules across all the programs, a more direct focus on fostering and managing innovation is missing. Programs such as the International MBA and the Global Management MBA can benefit tremendously through this module which will inspire and enable graduates to value and facilitate innovation which, consequently, will increase economic productivity.

## 8.3 Promote policies to support job creation and growing enterprises

### Introduction

Although the indicator for this sub-goal specifically relates to the proportion of employment in the informal sector, a broader conception of this sub-goal creates several possibilities for organizations and countries to create a significant impact. The proliferation of the internet and social media offers unprecedented opportunities for fostering an entirely new cadre of small and medium enterprises that not only make a cumulative dent in the economy but also create a large number of jobs.

### Observed Alignments

In a similar vein as the SDG 8.2, G+PS has a rather long-term impact on this goal. The school's graduates are expected to be managers and leaders in businesses and once they assume these positions, they are expected to grow these enterprises and create jobs. In some cases, G+PS graduates also start their own enterprises which directly create employment opportunities. The academic programs and their curriculum are specifically tailored to ensure these outcomes. However, G+PS has room to create a far more profound impact under this goal by following the example of its peers in Germany and elsewhere around the world.

### Recommendation

As an institution that is committed to sustainability and social responsibility, the IGC must seriously consider setting a social enterprise incubator that promotes and nurtures ideas for socially responsible startups and helps students turn these ideas into a reality. Examples include Judge Business School's Social Venture Incubator and University of Melbourne's Social Enterprise Incubator among a large number of other similar setups. Establishing an incubator that supports social enterprises will prominently signal the G+PS' commitment to SDGs and its own mission of sustainability. More importantly, it will provide students a platform to think innovatively about their service to the community while, at the same time, giving a distinctive edge to G+PS over its peers.

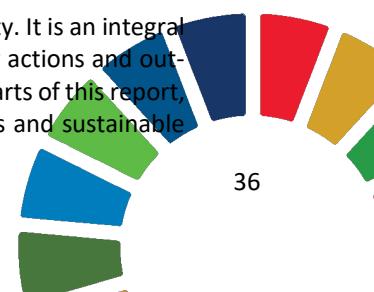
## 8.4 Improve resource efficiency in consumption and production

### Introduction

This subgoal aims to decouple economic growth from environmental degradation. The operating principle behind this subgoal is to minimize material footprint to the extent possible.

### Observed Alignments

As stated earlier, the G+PS is committed to social responsibility and environmental sustainability. It is an integral part of its mission. To demonstrate its commitment to this mission, the G+PS has outlined key actions and outcomes in the 'Economy of the Common Good' report. A number of steps, highlighted in other parts of this report, show that G+PS is constantly trying to minimize its environmental footprint through judicious and sustainable



consumption of energy and materials. These practices are consistent with the general concern about the environment among German universities.

### Recommendation

Beyond the recommendations that have been highlighted under SDGs 6,7 and 9 of this report, the G+PS is in a unique position to share its practices with universities in other parts of the world. In particular, G+PS must explore partnership possibilities with similar professional schools in developing countries and share its experience and insights regarding efficient resource consumption.

## 8.5 Full employment with decent work and equal pay

### Introduction

Unemployment and massive disparities in working conditions and pay are mammoth problems across developing countries, particularly in Africa, South America, and South Asia. This SDG aims for full employment coupled with dignified working conditions, no wage gap between genders, and discriminatory practices. In order to meet the 2030 target for this subgoal, a staggering 600 million new jobs need to be created. While universities do not create jobs in the same fashion as industries, they are important vehicles for improving productivity, fostering innovation and driving economic growth. Therefore, universities do have a significant role in contributing towards this subgoal. (United Nations Economic and Social Council, 2020)

### Observed Alignments

As far as the G+PS, its contributions towards these subgoals have already been discussed under the previous four subgoals. In addition to those, the G+PS has a robust policy framework that ensures that all employees – including faculty and administrative staff – are offered decent living wages that are consistent with government income stipulations and receive the benefits that are commensurate with their position. During interviews with G+PS staff, it was evident that the staff is content with the working conditions, the workload and the compensation. There are no perceived differences in the pay gap among genders and clear policies to ensure there is no discrimination of any kind. As a public institution, these policies at G+PS are consistent with government regulations which already have a comprehensive set of provisions and regulations to ensure decent and fair working conditions.

TANISH TARA

## 8.6 Promote youth employment education and training

### Double Down on Lifelong Learning

As the latest research shows that a skill a person learns has an average life of five years. University can make the validity of course double or for lifelong because sometimes what happens that a person cannot understand the context that he has been taught so he would not be able to get a job and that would be a problem because unemployment level would increase. If a person has an option of lifelong learning he might go back to university and brush up his skill or might gain it so that he would be able to get an employment and it would really great role that a university can play.

### Provide a Dedicated Portal to Jump-Start Careers-

Students ask for connections. According to the Connected Student Report, nearly one in three students say that having more virtual connections to employers would get them ahead in the job world. One way to bring students and employers closer together is a dedicated online portal. Providing students with the tools and support to develop their skills, prepare for their job search, and connect with potential employers in one place is a game changer. So, university can act as a bridge between them and their dream labour market. They can also set up an online portal with their links and alumnae including so that can connect and help the students.



## Make Your Course Offering Workforce-Relevant

University can make the course or modify the course that is relevant to todays because sometime what happens is that university don't update their course according to demand of market and its constantly changing. According to our Connected Student Report, 58% of institutions are offering more course offerings on digital skill sets, but only 11% of students feel they get a good value from the digital skills their university teaches. And beyond the concept of soft and hard skills, universities need to teach durable skills. This includes, but is not limited to, global citizenship skills, technology skills, and interpersonal skills.

The Institut Químic de Sarrià has accelerated their student employability by doing exactly that. They built a portal to enable students to browse and apply to job opportunities, and follow their progress with intelligent notifications. Companies can directly post their job offers and even manage each application from the same portal. As well as Emyon Business School is another institution that created a bridge between students' dreams and the labor market while boosting their career services productivity with an online portal built in Salesforce. Their career center sits at the crossroads between learning and careers; allowing students to quickly get their internships, and tutors to review internship experiences in an automated way.

We can have look at TUM they are 10 graduates among the top 10 for employability worldwide and as per their present reason behind this is "For one, degree programs at TUM are exemplary in combining the most exacting scientific standards with real-world applications. That includes opportunities for students to work with top companies early on in their studies. But the real-world approach also means aligning what we teach in our programs with the big issues confronting society today. We are also constantly modernizing our teaching methods on the basis of empirical findings and in an ongoing dialogue with our students."

## Observed Alignment of the Graduate and Professional School

G+PS is already an applied science college so the program of study at a university of applied sciences, unlike at a university, is extremely practice oriented. They will prepare you for future professional life, rather than just simply philosophizing with various theories. Employers require work experience that qualifies applicants for a position, and the programs of study at universities of applied sciences are designed to prepare you professionally. we can say that G+PS is doing good in this.

G+PS also has ISA like committee that employees the student to give a professional experience moreover G+PS also sends the student regularly email with an opportunity of internship. IGC also initiate the virtual job fair in these corona time for example few weeks back our collage organized PWC meeting in which they offer different internship. G+PS organized the industrial visit so that student can get insight about how things work in industry for instance few weeks back our collage took us to becks. They also tell us everything in detail.

## Recommendations

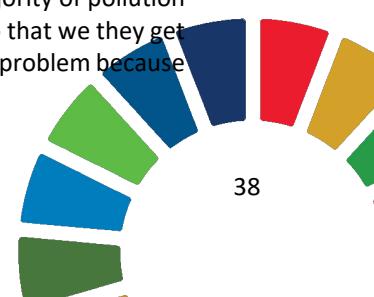
Helping student build their self-awareness-Some time what happens is that student after their graduation they are not aware of their skills. They don't know what to do where to go whether they should study further or they should start job or do business this is big problem basically what IGC can do is make student aware of their skill so they can easy sell them in market or showcase them and get a job offer.

Showing students how to learn from their mistakes- Student used to get afraid doing new things and the main reason behind that is fear of doing mistake so basically fear of doing mistake stops student of doing new things which will help them grow in future so what G+PS can do is change mind set of student by making them feel mistake as opportunity to grow rather than to fear them must learn from their mistake and learn in such way that they might not repeat it so that it can productive for them

## 8.7 End modern slavery, trafficking and child Labor

This call to action presents a unique opportunity to bring about a world free of forced labor, modern slavery, human trafficking and child labor.

Spread awareness- University can bring a big impact with spreading of awareness because majority of pollution or big business of developing countries goes to university. If they have awareness about this so that we they get in power they are aware of it that it's not the good thing to do as well as they will try to cure this problem because this problem mainly exists in developing countries



Reservation to children who suffered human trafficking and child labor- university can create reservations for child who suffer with these problem as well as train them in such way that they can create a solution because they know problem from its root so that by giving reservation in university can create a big impact

The University of Nottingham has created a team with name of right lab response to target 8.7 The Rights Lab is supporting this mission through social science: its data-driven research is informing the robust, evidence-based strategies that governments need to deliver abolition, and secure a humane, productive future for the liberated.

Rights Lab experts have also advised the UN on how the global community can better share knowledge. Its scholars - sociologists, political scientists, geographers and historians, mathematicians and statisticians, experts in law, business and education - are fighting slavery from every angle: whether exposing it in developed countries through scrutiny of supply chains, or mapping slavery from space in countries with fish farms, brick-making kilns or deforestation camp more

over Professor Zoe Trodd of The University of Nottingham says "The University of Nottingham will play a key role in ending slavery."

### **Observed Alignment of the Graduate and Professional School**

Not applicable to our G+PS

### **Recommendations**

Student who are pursing the Global management course or IMBA in their course module should be added related to it this topic because many of them would future manager and they might go a country a where this is a problem so with this knowledge, they would try to solve it or at least make situation better

IGC can also make online course and make it free for whole world because it is very much needed in countries like Pakistan where these kind of problem still exists moreover this course would do greater good to a general public

As far as 8.8 is concerned the recommendations would be same as 8.7.

## **8.9 Promote beneficial and sustainable tourism**

University can create a module in their all course so that whole university can know about the reason why it's needed and why it is important of a person to follow the sustainable travel if university create such kind of module, then everyone will know how to do and what do so basically give them power to travel in a sustainable way

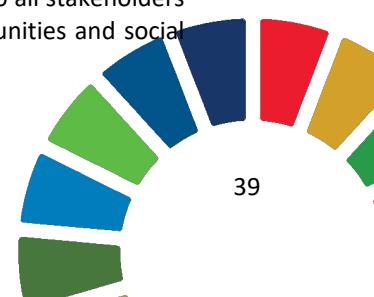
University can organize open tour for every one in which they will create a whole tour in a sustainable way moreover they can also take one guide with them who has all the knowledge about the travelling in sustainable way

University of Derby has designed to improve the institution's travel behaviors, reduce the need for travel, and encourage staff, students and visitors to choose more sustainable travel modes.

The plan aims to encourage more active, healthy and environmentally friendly decisions when making travel and transport choices. It also seeks to assist the surrounding communities, local authorities and the global impact by reducing traffic congestion and the associated harmful effects on the environment from single car usage and higher carbon-emitting modes of travel.

CBS International Business School has created tourism & Sustainable Management Master's Degree (M.A.) and the main objective is that

- Optimizing environmental resources in ways that constitute a crucial element in tourism development while maintaining essential ecological processes, helping to conserve natural heritage and biodiversity.
- Respecting the socio-cultural authenticity of host communities, conserving their built and living cultural heritage and traditional values while contributing to transcultural understanding and tolerance.
- Ensuring viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.



### Observed Alignment of the Graduate and Professional School

G+PS has master program of tourism in which there is module in which they teach sustainable travel. Which is very good step in way it gives them power of sustainable travel

#### Recommendations

Spread awareness by taking whole G+PS on tour in which they will take care of environment while traveling. They should make local tour and tell them not take airplane while travelling locally and walking where ever possible avoiding tram, bus and taxi as well as making tour under the name of GO GREEN as well as Support legislation that promotes sustainable tourism

### 8.10 Universal access to banking, insurance and financial services

Motivate student to go help the developing countries where this is a big problem and do the work what is need to done to rectify the problem moreover give them knowledge them do the work what need to be done to correct the target issue

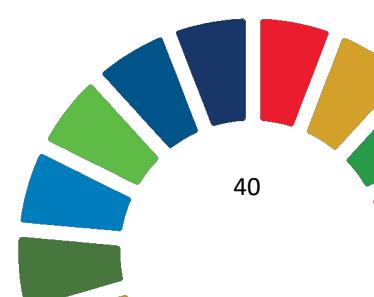
### Observed Alignment of the Graduate and Professional School

G+PS is not taking any action related to this point

#### Recommendations

G+PS can Encourage the student reach in global finance model which should include a research project developing in the country which suffer this problem how to handle it furthermore G+PS can give them specific education which will help them reach that goal faster in more efficient way.

IGC creates an opportunity for MBA in European and Asian management student a virtual internship in Asia in their target sectors so that indirectly university can play a major role resolving the problem in such way that it can create a big impact.





## SDG 9: Industry, Innovation and Infrastructure

FAHD MALEK

SDG goal 9 aims to achieve sustainable development of infrastructure and industrialization in addition to enhancing technological aspects that ultimately is also the key towards achieving former fields. The three pillars industry, innovation and infrastructure are considered to be interlinked. The objective of SDG goal 9 aims at achieving environmentally sustainable economic development and socially inclusive. This goal further has 8 sub goals that ranges from building resilient and inclusive infrastructure to technological developments. As we know, a well-functioning and resilient infrastructure forms the basis of a successful community. In the drive to meet future challenges it is crucial we develop sustainably our infrastructure and industries. And to do this we need to promote innovative sustainable technologies which is accessible universally thereby maintaining equal rights (United Nations, 2016).

While this goal has also focused on industrialization which is not the direct mandate at university level, however ample effort has been made to link it to what a university can do in order to achieve this goal and hence measures shall be discussed in the later part of this topic. Universities are crucially responsible for sharing knowledge, this is done through teaching, and aims for the new knowledge through research.

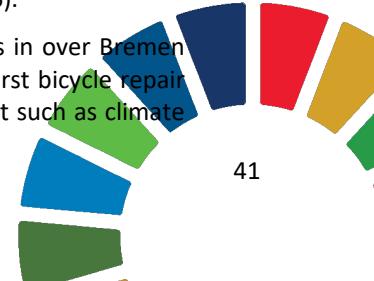
### 9.1 Develop sustainable, resilient and inclusive infrastructure

This sub goal focusses on developing sustainable, resilient and inclusive infrastructure. By now, it has been understood what is sustainable infrastructure, thus let's understand what is resilient. Resiliency deals with the continuity of a process in the same original format as it was during pre-crisis state. If any calamity or situation arises, being resilient would enable universities to operate at the same pace as it was prior to the crisis. Having inclusive infrastructure has to do with social inclusiveness thereby no person, group or any community is left behind to make the use of improved infrastructure (United Nations, 2016).

Universities to an extent can maximize their potential in achieving this sub goal as they are considered to be an integral part towards building a strong and also promoting sustainable, resilient and inclusive infrastructure. Graduate professional school (G+PS) should maintain its infrastructure to be more sustainable, resilient and inclusive so that it can be environmentally friendly, be able to over any situation of crisis through resumption of its activities and develop such facilities that allows every student to access the education provided or any facility associated with university.

If we put some focus on what other universities are doing then Mc Gill university is following a climate and sustainable strategy which aims at attaining a platinum sustainability rating by 2030, becoming zero waste by 2035 and achieving carbon neutrality by 2040. McGill has over 200 buildings and they follow strict measures. It has a comprehensive set of design standards that involves sustainable design requirements that is followed in all new projects they carry out. The food systems they follow involves procurement from vendors that source sustainably produced food and also support fair wages for their workers. It is also supporting regenerative agricultural practices by following purchasing standards and gradually eliminating food packaging. They have community gardens that emphasize on urban agriculture, green spaces that elevate their living and learning experience. Installation of 475 multi stream waste sorting stations across downtown campus. The lower campus is a pedestrian zone which has restricted access to vehicles and reduced parking, which results in safer and more physically active environment. Various workshops and events are being held like Managing stress in uncertain times, The student wellness hub which ultimately helps the participants to be more resilient (McGill, 2016).

At IGC, several measures are currently being undertaken to achieve this. The three locations in over Bremen Neustadt contains additional bicycle parking spaces and e bike charging stations. Bremen's first bicycle repair café was set up with glass walls. It hosts various events and invites passersby to join an event such as climate



change. Being in a prime location, it encourages employees to use bicycle at work. At most times, procuring any tech appliances, environmentally friendly methods are used. There is traffic calm area at the Neustadt wall campus and usage of an environmentally friendly natural gas vehicle in administration.

### Recommendations

**Business continuity plan** – A BCP is a set of procedures that enables an organization to continue operations at the same rate which it was prior to crisis stage. In this manner the university can keep functioning and providing value education. Thus, making more resilient.

Train staff to be first aiders would also add to be more resilient.

**E-waste recycling drive** – IGC can host an e waste recycling drive that will help in a lot of electronics to be sent at stations that would further work on such waste to recycle if possible.

## 9.2 Promote inclusive and sustainable industrialization

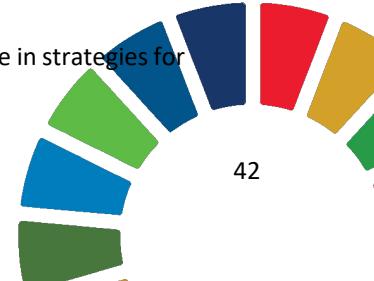
This goal is associated with the objective as to how inclusive and sustainable industrialization can be promoted. This will ultimately raise industry's share of employment and GDP streamlined with national circumstances and improve the share in least developed countries. Utmost focus has been given to link this sub goal at university level.

If we look into how G+PS can do to add value to this sub goal is by including and taking up initiatives that would help in sharing information and knowledge about how inclusive and sustainable industrialization can be achieved. While certainly as the medium of teaching and with the mandate to share knowledge, it becomes crucial as to how and what activities can be carried in order to showcase or inhibit activities/courses are integrated in the modules that inform the users the need and importance for inclusive and sustainable industrialization.

The mission of McGill university is the advancement of learning and dissemination of knowledge. For enhancing this goal, it aims to be an institution in which learning of faculty, staff and also community partners are also actively supported. It identifies strategies that increase learning and research opportunities in sustainability. Its flagship action is the implementation of sustainability online module available to all students, staff and faculty members. As it defines sustainability in a three-pillar mode that incorporates social, economic and environmental dimension. Some of their actions explicitly help to promote the aim of this sub goal by being more social in nature for example, represent black and indigenous presence throughout the campuses physical space, lead units are expected to integrate social sustainability and the transversal theme of equity, diversity and inclusion in every action they perform. This ultimately means accessibility, health and wellbeing, diversity and equity are integrated during project designs, project management.

Some of the ways in which it helps to promote is as follows:

1. **Exhibiting sustainable events** – There are many ways in which any event can be made sustainable. The McGill sustainable events certification program is an initiative from the office of sustainability that provides three-pillar resources that encourage and support different responsible events at McGill. It focuses on events' environmental impact (generally the carbon footprint and waste management), inclusivity (diversity of organizers, programming and participants) and accessibility (reducing barriers).
2. **Conducting workshops and training** – Various workshops and training related to sustainability and climate change are held at McGill. It shows how students can participate in the sustainability movement on campus and will introduce sustainability programs, events and resources that are available to students. Participants can also learn basic tools to start their own sustainability initiatives. The climate action workshop enables the students to understand different ways in which they can get involved in helping the university achieve its carbon footprint reduction mission.
3. **Sustainability Ambassador program** – It allows students to lead any activities related to sustainability on campus together with McGill community. It enables the students to apply their skills and creativity in order to grow the sustainability movement at McGill.
4. **Online short course – Business sustainability management**.
5. **MBA programs at Desautels** allows students to select elective courses that are available in strategies for sustainability.



The role of IGC in promoting sustainable and inclusive industrialization has been pinned down to what it can do to promote this.

1. Climate protection and sustainability project of the HSB – It is made accessible to public in open campus events. Representatives of organized civil society were invited to develop the integrated climate protection concept and promotes citizen participation was also carried out during the planning of the model bicycle street.
2. Couple of courses integrate CSR and sustainable development topics

### Recommendations

We have come across some recommendations that help in promoting sustainable and inclusive models to an extent:

1. Host a sustainability fair – This will enable the participants to learn about energy conservations, green conservations, green products, renewable energy, local and sustainable food choices, habitat restoration and more. It could also give the opportunity to join other non-profit organizations, city agencies as they will have already enough information on environmental conservation and sustainability.
2. Involve sustainability short courses online – Offering 6 months online courses on sustainability with the easy to apply from anywhere and inclusion of anyone.
3. Include sustainability topics also in the engineer courses.

### 9.3 Increase access to financial services and markets

The objective of this sub goal is to increase the overall access of small scale and other enterprises in particular in developing countries, they should have more options in obtaining financial services, the credit engagement should be more affordable, and their integration in value chains (United Nations, 2016).

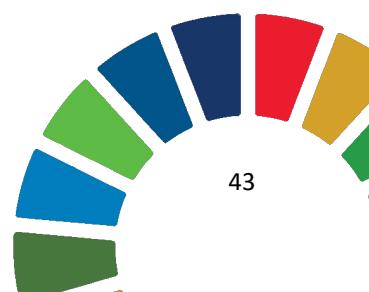
As far as what university can do to make sure this sub goal is touched upon, maximum effort has been given to fix this at the university context. Not all students are able to get access to education or enroll through modules as they are not financially strong. In a few cases, students also tend to obtain high debts without realizing the need or having any advisory undertaken. This puts them in a situation that affects them with debt. Given the fact that not every student can access the modules due to incapacity to fund it, there arises a situation when they take absurd decisions due to which they find themselves caught in debt. Universities are trying ways that would enable them provide wide range of financial tools to fund the education and also aim to start advisory teams that would answer to basic and complex decisions of the students.

One such university that is performing this well is the Technical university Munich. It performs the following activities- (Technical university Munich, 2015)

1. Education loan – Those students who have successfully completed the intermediate examinations or comparable midpoint of their degree can apply for education loan through German state.
2. non-revolving loan – The loan office of the Bavarian student unions offers loans that could cover important expenses related to studies- from research material to deposits or tuition fees during semester abroad.
3. Independent advising – Offering confidential and free of charge advisory benefits. This includes, free and independent advice on various student loans, advice on planned and existing student loans, tips to avoid over indebtedness, on-binding advice on various credit options.

Looking upon what IGC is offering currently is as follows

1. Financial aid and student loan can be availed by students
2. For certain master programs, range of payment options are available that help students to start their education without the burden to pay immediately.



## Recommendations

1. Private lenders - G+PS could increase the options for students to obtain credit to fund their education by involving private lenders that offer loans at competitive rates
2. Increasing private loans - The current availability at which IGC is providing private loans is limited, additional options within university could be embedded that would provide student loans to wide range of students.
3. General advisory team- A general advisory team needs to be set up that helps students and applicants' advice on what can be done if your scholarship, befores support from parents or the part time jobs are not sufficient. Free and independent advice on various student loans, advice on various loan possibilities without any obligation, loan advice if you are experiencing short term financial difficulties.

## 9.4 Upgrade all industries and infrastructures for sustainability

The objective of this goal is to upgrade all infrastructure and retrofit industries to make them sustainable, with increased resource. It focusses to use efficiency and greater adoption of clean and environmentally sound technologies and industrial process, with all countries taking action in accordance with their respective capabilities. It involves all activities that would help in upgrading the infrastructure so that the goal is achieved.

Universities must strive to deploy activities and developments to upgrade all infrastructure in way that aim towards being more sustainable. While it is not feasible to demolish all existing campuses to quickly improve in all terms as certain areas (buildings) require prior permissions from government as they are rich in heritage. Focus can be given that new developments of campuses or extensions should be sustainable.

If we look at the measures adopted at McGill university,

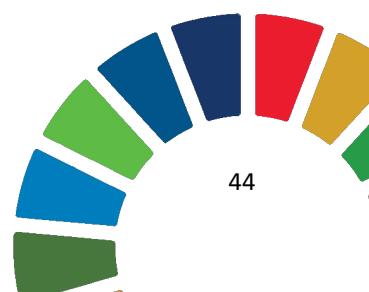
1. Reducing emission – Its approach to carbon neutrality is to prioritize emissions reduction first, followed by increasing carbon sequestration and then incorporating carbon offsets.
2. Landscape – Community gardens that emphasize urban agriculture, prevention of agricultural land one the Macdonald campus farm, green spaces that elevate the McGill living and learning experience flourish across the university's campuses.
3. Squares, terraces and green space- Replacing under-used grey spaces with functional green spaces. McGill has recently transformed James Square and Stewart Terrace into well-landscaped, thoughtfully designed social spaces. James Square, seen by many as a focal point of campus, now has terraced green spaces, paving stones and a sculpture garden. McGill is in the process of redesigning Redpath Terrace.

IGC is following the below measures that aim towards upgrading sustainable infrastructure:

1. Upgrading facades at campuses – Energy efficient façade – Extension of Neustadt wall campus is aligning with the sustainable measures. The practice of CO2 sensors and solar roof are practiced.
2. Residential complex and the façade renovation of the Overstressed residential complex
3. Windows are being successively replaced, the existing lights are replaced by LED lights and water saving fittings are replaced.
4. Catering - In university catering, the constant replacement of old devices with the latest energy-efficient device technology ensures considerable energy savings.

## Recommendation

While much is being done to ensure new campuses are meeting the goal of sustainability but one such recommendation could be thought of is the inclusion of green laboratories. This will add to the sustainability in research and technology aspects.



## AMAR SHAM

### 9.5 Enhance research and upgrade industrial technologies

#### Introduction

The aim of this subgoal is to increase scientific research activity that leads to improvement in industrial and technological capabilities in developing countries. The indicators under this subgoal pertain to increasing research expenditure as a percentage of the GDP as well as increasing the number of researchers per capita. Universities can play an important role in achieving this subgoal as they help in carrying out research which often leads to technological and industrial innovation.

#### Observed Alignments

G+PS at Hochschule Bremen, however, is not a research-focused institution since it does not offer any Ph.D. programs or research-based fellowships. Nevertheless, there is a strong focus on graduate-level research. Students in all G+PS are required to produce a thesis in order to graduate and a large number of courses require students to conduct small-scale research. G+PS does not have any industry linkages or collaborations which limit its ability to solve urgent and real-world problems.

#### Recommendation

As a professional school, the IGC can include more structured and research-oriented internships with industry partners where students work to solve a real-world problem. Most German universities lack a robust industry engagement framework which leads to a wide gulf between academia and industry. In proactively creating more dynamic linkages with the industry where industrial partners also serve as co-creators of academic content, IGC can pioneer a way to bridge the industry-academia divide and increase its contribution to this subgoal.

## 9A, 9B and 9C

#### Introduction

In addition to the subgoals, the UN points out distinct means for achieving the subgoals under this category. These include

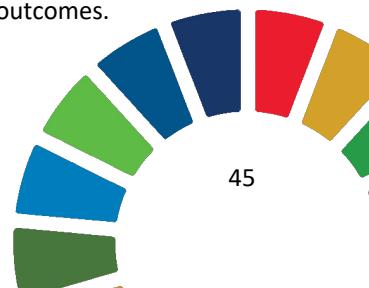
- 9A: facilitate sustainable infrastructure development in developing countries
- 9B: support domestic technology development and industrial diversification
- 9C: Universal access to information.

#### Observed Alignments

The G+PS has limited scope in the areas listed above. While it is not in the manageable interest of the school to support infrastructure development in developing countries, it does indirectly support domestic technological and industrial diversification since its graduates have the potential to innovate and add value as managers and leaders in businesses in these sectors. As far as universal access to information is concerned, the G+PS offers free internet and access to the library for all its students. These resources can also be accessed by students even when they are not physically on campus through virtual private networks.

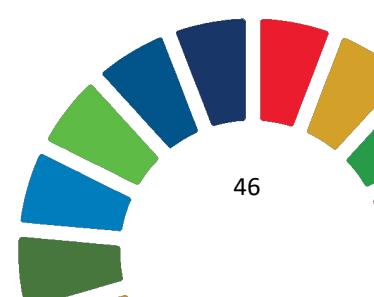
#### Recommendation

One of the areas where the G+PS lags behind considerably is its outreach to developing countries which is a missed opportunity. G+PS can partner with institutions that share the same ethos in developing countries. Through these partnerships, the G+PS can offer courses that are co-taught, conduct collaborative graduate-level research and offer solutions to business challenges. Such collaboration also facilitates the transfer of knowledge that can be mutually beneficial and opens possibilities for several other unanticipated positive outcomes.



## Bibliography

- Ritchie, Roser, Mispy, Ortiz-Ospina, H. (2008). SDG-Tracker. From SDG-Tracker.org: <https://sdg-tracker.org/energy>
- un. (n.d.). 2. From un.org: <https://www.un.org/millenniumgoals/pdf/SEFA.pdf>
- UNITED NATIONS. (n.d.). UNITED NATIONS. From Sustainable Development Goal: <https://www.un.org/sustainabledevelopment/energy/>
- United Nations. (2022). 1. From unstats.un.org: [https://unstats.un.org/sdgs/metadata/?Text=&Goal=7&Target=Subratty\\_Djaheezah, O. \(2017, October 17\). UN Environment. From sustainabledevelopment.un.org: https://sustainabledevelopment.un.org/content/documents/26309Ms.\\_Djaheezah\\_Subratty\\_UN\\_Environment.pdf](https://unstats.un.org/sdgs/metadata/?Text=&Goal=7&Target=Subratty_Djaheezah, O. (2017, October 17). UN Environment. From sustainabledevelopment.un.org: https://sustainabledevelopment.un.org/content/documents/26309Ms._Djaheezah_Subratty_UN_Environment.pdf)
- national people's part. (n.d.). energy-efficiency. From nppindia.in: <https://nppindia.in/energy-efficiency/>
- iccrom. (n.d.). promote-access-research-technology-and-investments. From International Centre for the Study of the Preservation and Restoration of Cultural Property: <https://ocm.iccrom.org/sdgs/sdg-7-affordable-and-clean-energy/sdg-7a-promote-access-research-technology-and-investments>
- university of Stuttgart . (n.d.). Energy savings. From .uni-stuttgart.de: <https://www.uni-stuttgart.de/en/university/profile/sustainability/energy/saving/>
- environmentamerica. (n.d.). 1. From environmentamerica.org: <https://environmentamerica.org/energy-101/energy-efficiency-campus-buildings>
- United Nations. (2015). Goals. From United Nations - Department of Economic and Social Affairs: <https://sdgs.un.org/goals>
- United Nations Economic and Social Council. (2020). Progress Towards the Sustainable Development Goals. United Nations.
- Gothenburg, U. o. (2020). University of Gothenburg. From University of Gothenburg: <https://www.gu.se/en>
- O'Niell, A. (2022). Global Gross Domestic Product (GDP) at Current Prices. From Statista: <https://www.statista.com/statistics/268750/global-gross-domestic-product-gdp/>
- Essex, U. o. (2022). University of Essex. From University of Essex: <https://www.essex.ac.uk/>
- United Nations. (2016). Department of economic and social affairs. From SDGS: <https://sdgs.un.org/>
- United Nations. (2016). Global goals. From SDG: <https://www.globalgoals.org/goals/9-industry-innovation-and-infrastructure/>
- McGill. (2016). Climate and sustainability strategy. From <https://www.mcgill.ca/sustainability/sustainability-strategy>
- Technical university Munich. (2015). student loan. From <https://www.tum.de/en/studies/fees-and-financial-aid/student-loans>
- United Nations Academic Impact. (2021). Why Join? United Nations.





## SDG 10: Reduced Inequalities

PREETI SHARMA

The goal focuses on identifying and promoting the conditions for more inclusive and fair work culture and employment arrangements. It addresses the challenges for equality, fairness, and sustainability in the workplace, and considers how employees are adjusting to the new work regimes and their related environmental changes. The focus lies on the need to enforce fair rights and responsibilities at work.

Inequalities at the workplace can come based on age, sex, disability, race, ethnicity, origin, religion or economic or other factors. This SDG calls for reducing inequalities in income and the factors just mentioned. This report tries to capture some of the important sub-goals which can be implemented at the university level to make sure challenges are dealt with in a better way.

Universities are already making important contributions to the achievements of the SDGs through their 'business-as-usual' activities in education, research, and operations. However, for the SDGs to be truly successful at a university level, university boards need to become champions of sustainable development and play a leading role in the implementation of the SDGs. Universities are often hindered by external structural factors and internal limitations. Yet, the SDGs provide a framework to work towards structural solutions, as well as accelerate contribution to overall wellbeing. Thus, mapping what the 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.

### 10.1 Reduce income inequalities

As the name suggests this sub-goal prioritizes the income factor of an employee. The focus is on ensuring equal opportunity and reducing income inequalities by eliminating discriminatory laws, policies, and practices.

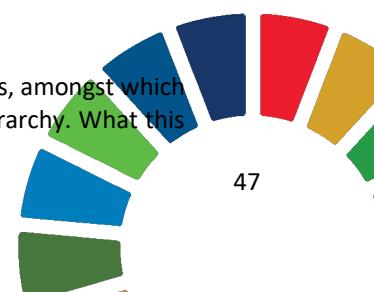
#### Role of HSB

HSB follows the policy of "Collective agreement for the public service of the federal states" (TV-L) which makes sure that employees are paid in a very transparent and all positions are assessed and employed accordingly. In Germany, there are two categories of public service workers: civil servants and public employees. The Wage for public servants is established through a basic salary grade into which the post is classified and 65 additional grades, with a 4% increase between grades. Each post also has a tariff group that reflects difficulty, education and training required for the position, with a minimum salary established through collective agreements. Thus all employees are aware of how much income they can generate. HSB negotiates wage increment regularly between the representatives of the federal states and the trade unions.

However, the implementation of TV-L also means that there is very little scope for individual promotion as the matrices for performance analysis differ for the full-time professors because they are public servants. In their salary, there is a surcharge included that reflects the local price level. There have been a couple of incidents where employees have expressed their concerns regarding their income disparity in terms of their qualifications and eligibility. An example stated was the income disparity between HSB faculties and Bremen University faculties. Employees reported having no or little backing and support from the management to raise their salaries.

#### Recommendations

The feeling of income disparity and discrimination can be instigated by a number of root causes, amongst which is failing to attribute the right market values to jobs and correctly put their organizational hierarchy. What this



signifies is that an employee's relative importance to a business and a sense of belonging might not be perfectly reflected in an individual's salary.

University may not be able to ensure that all employees, all the time, feel compensated for their value, but management must focus on what they can do to counter employees' perception of being underpaid. University should focus on pay structure in a way that its structure remains competitive and communicate within the university.

If HSB follows reward performance on an annual basis, the effort must directly be tied to the university's success and what individuals and teams have contributed to accomplishing the priorities and goals. Also emphasises must be on managing the pay gap between lowest and highest paid staff so that employees feel attached enough with their work. A commitment to the elimination of discrimination across the university requires ensuring the diversity of the population has the opportunity to be represented and have a voice in the decision-making process.

### Examples

The University of Canberra has bagged the top world rankings for its work to reduce inequalities in the 2021 Times Higher Education (THE) Impact Rankings.

University has done abundantly well in the reduced inequality category. University has engaged itself heavily in research on social inequalities, policies on discrimination, and commitment to recruiting staff and students from under-represented groups.

## 10.2 Promote universal social, economic and political inclusion

**Focus:** Reducing inequality and ensuring the inclusion of all regardless of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

**Pledge:** no one will be left behind.

### Measures taken by HSB

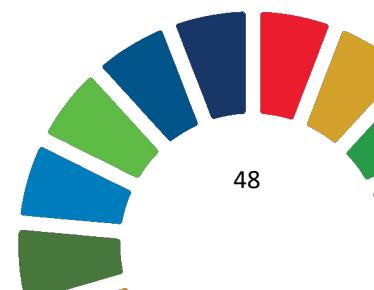
The General Equal Treatment Act (AGG) aims to prevent or eliminate disadvantages on grounds of race or ethnic origin, gender, religion or belief, disability, age or sexual identity.

Following its policies, HSB has touched upon diversity and inclusion by implementing different programs for different representation of groups. These are:

- Women's representative according to the Bremen Higher Education Act
- Gender equality office
- Staff council
- Severely disabled representation
- Sports representative

The IGC benefits from this prestigious policies framework committed to excellence in teaching, promotion of national and international student mobility and research, by a great deal of collaboration and comparison. The severely disabled representation of the Bremen University of Applied Sciences supports integration, represents the interests, and provides them with advice and assistance.

However, the sad part is the fact that various grounds of discrimination and dimensions of inclusion make assessment difficult. This target is multidimensional, covering all types of discrimination, making it challenging to interpret in a quick review process. In a couple of areas, employees at HSB experience their income as too low in comparison to their responsibilities and lower than comparable positions. Also there is little scope of complaints being heard and acted upon. For e.g. Employees reported to have no or little backing and support from the management to raise their salaries. Moreover, employees do not experience support if they ask/engage for promotion. In some cases, they even feel hindered when applying for higher positions within G-PS.



## Recommendations

In order to measure inequality, statistical measures need to be specific. Different dimensions of inequality, such as income, wealth, power, occupation prestige, education, gender, race or ethnicity all have different measures. Depending on what precisely is to be measured, a variety of indexes can be used.

The disadvantages facing women and girls affect half of the world's population. This makes efforts to reduce gender inequality and expand opportunities for women a necessary aspect of any effort to reduce overall inequality whether in income or access to other resources or services.

Additionally, progress towards SDG 10, especially the reduction of horizontal inequalities, can help advance peace and reduce the risk of conflict and violence among employees.

### 10.3 Ensure equal opportunities and end discrimination

#### Measures taken by HSB

HSB condemns all forms of discrimination on the grounds of ethnic and cultural diversity. Students are affected by discrimination on the grounds of ethnic and cultural diversity on a daily basis arising from the effect of national laws, the actions of institutions such as universities, and the activity of individual.

There is clear scope for the student movement to engage the media and other pressure groups fighting discrimination on the grounds of ethnic and cultural diversity in promoting awareness.

## Recommendations

In addressing the issue of disability equality in higher education, it is important to appreciate the varied opinions and perspectives on disability that exist within society. Attitudes are everything in addressing disability discrimination, and forming constructive attitudes relies on starting from an even playing field. In the context of higher education, disability discrimination can arise at all levels, including the admissions process, assessment, didactic, and, in a wider sense, mobility.

HSB should promote awareness of the different models of discrimination and promote the social model as the best way of overcoming discrimination against disabled students.

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.

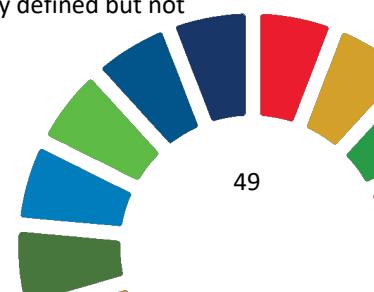
Instituting an equity agenda and plan that commits to equal opportunity and reduced inequalities in all processes and activities.

#### Points to be noted

Policy on equality should be a multidisciplinary combination of approaches and strategies, focusing not only on access but also on progress and success. HSB can also contemplate on mainstreaming all dimensions of equality. Integrate a minority or discriminated group into the main educational process rather than creating a separate process or educational methods, to accommodate the diversity of needs of individuals. This should be done with true regards to the implementation of unnecessary segregation within education, which can bring the feeling of inclusion of these individuals and groups and enhance the spirit of diversity in education. One main drawback of this is that it fails to offer a critic or challenge of the norms of the mainstream.

Student Union have an integral part to play in ensuring that all students receive the support and help they require. Student unions ensure that there are structures available to protect all students from discrimination. There should also be awareness raising campaigns about the different forms of oppression and discrimination that students can face and help tackle people's prejudices.

The process of obtaining equality is an ongoing one, which involves working on regional, national and international level. It is important to acknowledge that equality measures and actions should be clearly defined but not prescriptive and should be flexible and provide for cultural sensitivity.





## SDG 11: Sustainable cities and communities

AHSAN JAVED

There is a robust hyperlink among the excellent lifestyles in cities and the way cities draw and control the natural assets which is to be had to them. SDG 11 recognizes the need to make cities and human settlements inclusive, safe, resilient, and sustainable. By 2030, ensure access for all to adequate, safe, and affordable housing and introductory services and upgrade slums. Integrated housing frameworks economical reinforcing, social, and environmental policy planning, and infrastructure linkages across the urban-rural ecosystem such as transport, energy, health care, sanitation, water, building increased resiliency. Furthermore, to make safe and resilient is to control the climate change, sustainable urbanization, and natural disasters. Similarly, for controlling environmentally sustainable they have to ensure environmental footprint of cities which does not exceed planetary limits, the smartest land which needs to use and for transport planning and the last one is to reduce water, pollution, and natural resources consumption. To date, the trend in the direction of urbanization has been observed through accelerated pressure on the surroundings and expanded demand for fundamental services, infrastructure, jobs, land, and inexpensive housing. Due to their excessive awareness of people, infrastructures, inexpensive housing and financial activities, cities are mainly susceptible to weather alternate and natural failures impacts. Building city resilience is essential to keep away from human, social and monetary losses even as enhancing the sustainability of urbanization tactics is needed to shield the surroundings and mitigate catastrophe hazard and weather alternate. Resource green cities integrate extra productiveness and innovation with decrease expenses and decreased environmental impacts, even as supplying accelerated possibilities for people alternatives and sustainable lifestyles.

### 11.1 Safe and affordable housing

Safe and affordable housing has an essential role to build, resilient, and sustainable society. Its aim to ensure and access for everyone to get safe and inexpensive house in the surrounding with all facilities, such as the basic services, school or colleges or university, superstore or market, hospitals, and transport system. Moreover, inclusive, and accessible, green, and public spaces, in particular for women children, senior citizens as well as the one who is having any disability.

University of Hochschule Bremen has a department ISA (International Student Associate) in which they deal in all kinds of matter. Their mission is providing the safe and affordable house to their students, teacher, and other persons. For making assure of safe and affordable house, Hochschule Bremen focus on some key factors, rent and cost of house, they send their employee to visit the place for making ensure the house is safe for living. In addition, they see all the primary necessities such as, superstore, hospital and transport system are near in their surroundings, after getting satisfied, they prefer these safe and affordable houses to students and teachers.

For instances, many universities are playing their role providing the safe and affordable housing for their people.

University of Bayreuth is providing the safe and affordable house with complete facilities to their students and teachers. In addition, they also control the average rent of house which is also affordable for every individual.

University of Erasmus organizes seminars for their students to create the society resilience, strengthening and social cohesion and inclusion into global and technological perspectives. They organize conference for overcoming the poverty, pollution and social conflicts beside these conferences are the route for coming together in the matter of saving the planet and allow the future generation to prosper. Also, they are helping the construction's organization for developing the sustainable, safe, and affordable house for their people where they will get all kind amenities for spending the life.



Hochschule Bremen is supposed to work with the organization to build safe and affordable house for upcoming generation instead of giving only information. To achieve this goal by 2030, they will provide safe and inexpensive house for every individual. In the matter of achieving this target, they could work with local and regional governments and civil society's organizations in their city. Moreover, they should plan the infrastructure linkages across the urban-rural ecosystem and increased resiliency building for getting more success. All stakeholders are to be together and work with generously. Furthermore, they ought to arrange seminars and conferences for integrated housing frameworks that support economic, social, and environmental policy.

## 11.2: Affordable and sustainable transport system

Affordable and sustainable transport system has the major role to form the cities and human settlements for inclusive, safe, resilient, and sustainable. Furthermore, by reinforce efforts for providing access to safe, affordable, accessible, and sustainable transport systems for all. It is also highlighted that the need to give attention to necessitate of those in vulnerable situations, women, children, persons with disabilities and older persons. Components that include into sustainable transport system are vehicles used for the road, water, and air transport. Infrastructures that used for the transport such as road, railways, airways, and waterways should be more effective and efficient into environmental and climate impact of the system. Although sustainable transport system always provides the positive impact on contribution to the environmental, social, and economic sustainability of the communities. Sustainable transport system manages to provide the social and economic connections to the individual rapidly take up the opportunity offered by increased mobility. The edge of the increased mobility needs to be considered against the environmental, social, and economic costs that transport systems pose. Activity which are last for short time duration promotes incremental development in fuel efficiency and vehicle emissions control which long term activity indulge moving transportation from fossil-based energy to other alternatives such as renewable energy and resources. The complete life cycle of the sustainable transport system is concern to sustainable measurement and optimization.

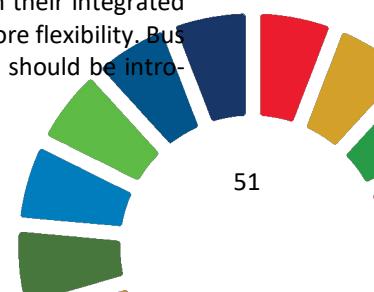
Hochschule Bremen has been contributing to establish an economical and sustainable transportation system by Student, as well as teachers and other staff are facilitated with this card facility, everyone enjoys a free fair when travelling. Students can also go to intercity destinations such as Hamburg, Hannover, Bremerhaven, Munster, and Eldersburg. Nonetheless, the university's building is nearby the train station, from where all trains depart for various destinations. As a result, woman, children, disabled individual, and senior citizen will be able to travel without any piece of difficulty. For disabled individuals, the building is providing an elevator and a ramp with railings facility. Bicycle parking is also available. They offer free bicycle parking zone and a car parking space, even though people ought to pay to park their car.

To demonstrate, other university is partnering to create a system of transportation which is both economical and sustainable for all individuals.

The University of Oldenburg is encouraging sustainable transportation by providing a bike travel to Greece. They can actively pursue and expanding networks among educational institutions, teachers, and staff not only in Europe but also around the world in this way. Furthermore, to encourage a sustainable transportation system. Students who travel with a university reference and utilize ecologically friendly modes of transportation such as buses or trains, for example, it may be eligible for a special incentive of 100 euros. This grant program also attracts a huge number of people who are intended to travel by bike in different places and learn about their transportation systems.

Hochschule Bremen should also establish such programs so that their students can participate in such events and can travel to different cities or countries. They would also be able to become economically and socially powerful. By travelling to different places, one can learn new techniques and obtain knowledge about renewable energy and resources. Learn about transforming buses, trains, and cars to be 100% emission-free, using green electricity for a sustainable transportation system, and providing outstanding public transportation for their citizens.

Hochschule Bremen should organize the seminar or webinar or different platforms where students can learn to establish or collaborate with organizations that provide more affordable and sustainable transportation options, as well as high-quality and quick service. While working with transports organizations they must set the goal of converting all diesel vehicles to green electric vehicles by 2030. Their strength should be in their integrated network, which seamlessly connects various modes of transportation and allows passengers more flexibility. Bus connections should be improved and enhanced in the entire region. Cycling and bike sharing should be intro-



duced near bus and train stations to promote mobility and make it easier for people to commute from one location to another. By helping to improve the region's quality of life, cities and communities become stronger and more connected. A metro connection should be constructed, as well as newer and better transportation options such as bike and bike-sharing charging stations. In order to make passengers feel safe and comfortable when travelling, there is supposed to be the specialist team established to ensure the safety of the station, platform, and people's automobiles. For the passenger, staff should be hospitalized. Every passenger should have access to high-speed internet and music services. Fast internet services and music services should be there for every passenger while travelling. Therefore, economically megacity becomes further stronger by its seductive technologies and further sightseer or passenger desire to visit and to enjoy these installations.

## 11.6 Reduce the environmental impact of cities

Climate alternate is an international phenomenon that particularly effect the urban lifestyles. Increasing the worldwide temperature reasons sea ranges to rise, amplify wide variety of excessive climate occasions specifically floods, droughts and storms and risen to unfold of tropical diseases. These environmental effect on city regions with inside the shape fundamental services, infrastructure, housing, human livelihood, and health. On the other hand, towns are a key contributor to weather alternate, as city sports are an important supply of inexperienced residence has emissions. Cities are accountable of world carbon dioxide emissions; the biggest contribution is shipping and building. Success can most effectively be found out via way of means of a coordinated method and attempt at the worldwide, regional, national, and nearby ranges. As a result, towns need to emerge as a critical a part of the solution to fight weather alternate. Many groups are already taking steps to lessen business emissions by using renewable electricity sources, greener production practices, and regulations or incentives. Cutting emissions will assist lessen nearby pollutants from industries and transportation, so enhancing city air first-class and residents' health.

As a systematic institution, the Bremen University of Applied Sciences bears a unique social duty wording, because it trains and shapes destiny selection makers in our society. Bremen University of Applied Sciences created a framework for long-time period environmentally pleasant behavior, and environmental policy. The environmental hints are the concepts of environmental safety on the Bremen University of Applied Sciences. So, each inside and out of doors of the college, they shape a self-dedication of shielding the environment. Though in relation of funding and procurement, eco-friendly choice enterprise selection is taken, and it helps into renovation and construction of the building. To manage water usage, washroom is equipped with water saving installations. To manage waste management, they use different bins such as blue bin paper and clipboard, green and white bins for glass, yellow or orange bin for plastic and metal, and brown bin for biodegradable things. Also, they brought recycling gadget the wastage with the intention to assist to supply new things. The Compliance with all environmental rules on the college is the minimal requirement for any movement in phrases of precautionary and sustainable management. In addition, university operations ecological factors are taken in a manner that preserves the herbal foundation of lifestyles and the everlasting use of herbal resources.

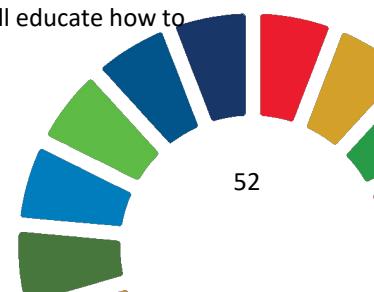
To illustrate, approximately the university is gambling on their credential position to lowering the environmental effect and weather alternate.

University of Nottingham has been working a lot to reduce the environmental impact of city. They have extensive green space and parkland inside and outside the university. There are different program and courses which are mainly designed to teach students sustainability and environmental impact. They have their carbon-neutral lab for which carbon footprint is to be controlled and could concentrate on the sustainability of the city.

Hochschule Bremen is supposed to organized communal activities for their students for planting the trees into the society it absorbs CO<sub>2</sub> from the air and storing it. While releasing oxygen, trees do purify the air it also is the reason of absorbing pollutant gases such as nitrogen oxides, ammonia, sulfur dioxide from the air it could reduce the incidence of dementia in future years.

Hochschule Bremen is supposed to demonstrate different forum for their students where they ought to have cognizance to make environment impactful for people, as well as reduce its pollution and make the city sustainable.

Furthermore, they are to arrange various seminars and organizes conferences in which they will educate how to make city, building, infrastructure environmental free and living friendly such as,



Smog-eating tower (Standing at 7 meters tall, this smog-eating tower can clean enough air to fill one football stadium each day. Located in Beijing, the structure is the largest smog vacuum cleaner in the world. It works by creating a “bubble” of air that is 40% to 70% cleaner than the air around the rest of the city).

Solar trees (Rooted on Singapore’s Gardens by the Bay, these 18 man-made trees stand at tall as 50 meters high and catch the eyes of anyone who visits the city’s waterfront. They deliver a three-fold effect to the environment: generating solar power, collecting rainwater, and working as air ducts for local flora and fauna).

Forest city (This magical-looking city could be out of a scene from a movie set in another world. Yet, construction on two towers called the Nanjing Green Towers is in China’s eastern city. Together, the towers will hold 1,100 trees and 2,500 shrubs, which cascade from their balconies and roofs) which could be advantageous.

Moreover, about carbon footprint it could reduce by introducing different forum for everyone, in which providing knowledge and awareness to reduce the car emission for this people would prefer to go by walk either use a E bike or use public transport to make environment or atmosphere people friendly, ratio of getting flight is supposed to be reduced for minimizing toxin which would surely be beneficial.

One of the other things is diet, dietary preference is a key determinant of each fitness results and environmental impacts. Human meals structures play a key position in weather change, so people have to follow the vegetable diets and decreases the use of meat in their structure plan. Globally contributing approximately, a quarter of all greenhouse fuel line emissions.

#### **SATYAVRATA SINGH GAUR**

Sustainable Urbanization can be referred as the long-term study of cities and their development. According to the document of social affair of United nation which was published in 2019 the level of urbanization is determined by taking the population which resides in the urban areas of the world. It refers to both increase of the population in the residing areas and their associated growth in the number of urban areas. It includes the size of the cities and the total area occupied by urban areas all around the world. The concept of urbanization and the number of people living the urban areas has changed to a large extent over the number of years and, as of now, more than half of the world’s population lives in the urban areas which is projected to increase more in the future. The population of urban slums itself is estimated to increase by 2 billion by the year 2030 (UN 2003). The major three components of why the urban growth takes place in the first place are natural increase, migration and reclassification of them.

The role of HSB and other universities here majorly affects the factor of migration as most of the migrants who moves from rural areas to urban areas are younger in age or in working ages. A large portion of this migrant population moves in search of higher education that can lead to better employment prospects. HSB and other institutes offer great quality of education and international exposure, which is a major attraction for most of the people around the globe seeking education. Hence, it also results in many students coming from rural areas in order to have a better career. The other contribution of HSB is creation and facilities of new buildings and bicycle parking at the locations of Neustadswall, Werderstrasse and airport avenue and facilities for E- bike charging stations. This has enhanced the opportunities of urbanization in the region.

Although the university has been doing very well in terms of education and attracting people from various parts of the world through the various social media handles and its own website there’s still room for improvement in terms of provision of rental bicycle and cargo bike which it tried to implement as per the reports but was not able to develop more due to various reasons. So, the first thing which should be implemented here is instead of developing and focusing on any new goal the HSB should work on its ongoing processes. This can be achieved by figuring out a structural plan before implementing so that projects like second construction phase at the EW building, Werderstrasse do not get delayed in the future. In terms of education and other opportunities HSB can come up with some consulting seminars where it can offer consultation to the wider public about their salary growth and career opportunities they may have after successfully completing their studies. It will not only motivate people to move towards a quality life but will also reduce the poverty and encourage the economic development of the world.

## 11.7 Provide accesses to safe and inclusive green and public spaces

This subgoal focuses on providing global access to green and safe public spaces. In particular for women, children, older people and persons with disabilities. It has been seen that the cities which consist sufficient public spaces functions more efficiently as compare to the ones which don't. it suggests the correct way which is required for streets and infrastructure specifically their connectivity. Green spaces are also necessary for recreation and provision of ecosystem and its services. A designated green area has accesses for all the visitors to that space regardless to their income, class, gender, age or abilities. Green spaces help to improve the quality of life and overall well-being of the people.

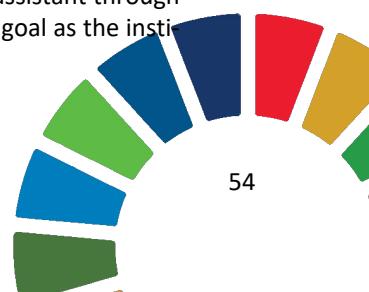
Universities and educational institutions contribute to this goal on a very large scale. They practice these goals on daily basis on and off the campus. personal involvement, group activities, sports and other cultural events help to engage people with one another and makes them feel more comfortable in such an environment. Also, during the time of pandemic many educational institutes across the globe decided to offer their spaces for free as a quarantine centre for the people in need which was a very helpful gesture especially when we are talking about inclusive green and public spaces.

Likewise, HSB also possesses a very wide impact in terms of providing access to safe and inclusive green spaces as according to its environmental report – 2019 the Environmental Management System (EMS) of Bremen university of applied sciences covers spaces on Neustadtwall, Flughafenallee and Werderstrasse with a total area of approximately 45,000 m<sup>2</sup> and the university contains of more than 2,500 rooms in 20 buildings out of which approximately 13,000 m<sup>2</sup> is open or green spaces. The infrastructure of the university is also very much in support of the given title as the facilities provided by the HSB can be easily accessible by any age, gender and especially comfortable for the people with physical disabilities as there are automatic doors and well-designed lifts which provides easy accesses to the whole sort of people. Also, the ramps outside the university are very easy to access by the people with disabilities. Other than this the university also provides open access to libraries and arranges different sort of activities where everyone takes part regardless of their gender, age and abilities which again creates a very friendly environment for all the people and promotes the idea of safe and inclusive green and public spaces. Hence, HSB is doing pretty well in terms of completing its responsibilities towards the given goal.

However, to talk about the recommendations the first step should be to talk about access to safe and inclusive green and public spaces in its webinars as many students and other people are still not fully aware about the topic and the importance of it. Many people underestimate the importance of public spaces and their accessibility without realizing their importance. They are unlikely to think about it in general and will most probably avoid to do anything about it. As there are not much people who consider this as an issue which needs to be taken care of but just a lifestyle. Therefore, making people aware and talking to them by performing webinars and similar events is important. The other thing which can be done in order to address the issue is by organising cultural events and discussions, although there are different people from different nationalities and culture studying at the university and interactions between them also takes place when meet during different events arranged by the university but still there is a need of understanding the culture of the colleagues as it gives a better understanding of not only the cultures but also the approaches of the nationalities. Hence, the HSB can conduct cultural events during the start of the new semester which people from different nations perform their arts and interact with one another representing their cultures. Although it is understood that having these kinds of events is a bit difficult during the time of pandemic but still online webinars and meet ups with a cultural background can be a interesting activity to conduct and will also enhance the global exposure for all the members of the university.

## 11.C: Support least developed countries in sustainable and resilient building

According to the reports of UN nations least developed countries also known as LDCs are the group of countries with has the least amount of socioeconomic development. A country comes under the LDCs if it is facing issues like poverty, human resource weaknesses and economic vulnerability the goal intends to provide financial support to least developed countries allocated towards construction and retrofitting of sustainable, resilient and resource efficient buildings utilizing local materials. The platform facilitates engagement among cities for knowledge exchange and approaches for building inclusive cities, making cities and human settlements inclusive, safe, resilient and sustainable highlights this approach can also include financial and technical assistant through the institutions worldwide. Although HSB does not play any direct role in order to support this goal as the insti-



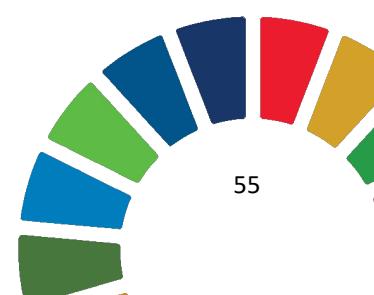
tution does not possess the technical knowledge or relevant human resources to make any significant contributions towards this goal. Still there can be some indirect approach and steps which can be taken in order to support the development in the given topic.

The first one could be by providing pro bono assistance to universities in developing countries. The goal is to improve the quality of life in spontaneous settlements according to existing resources, including time, skill and expertise which can be achieved solutions based on local materials which are easily available and also linked with the environment and people. HSB can provide online webinars with the help of its students and members by educating these people from different nations about their issues regarding the topic and help them find the possible approaches to solve it. Hence, HSB and its members can make people aware by promoting these sorts of webinars. It will not only help the people and countries and people in need but will also help to enhance the critical thinking of its own members by exposing them to vastly diverse global perspectives.

The other one could be by creating partnerships with universities or professional schools in developing countries. HSB does not have any major partnership with similar professional schools in developing countries. The major drawback of lack of partnerships with institutions in developing countries is that HSB will continue to have a very geographically limited impact and the other major drawback is that HSB will not be able to meaningfully make any kind of contribution towards a large portion of SDGs and sub goals with specifically relate to developing countries. Therefore, HSB needs to explore partnership with similar schools in the developing countries as these partnerships will open pathways for coloration that can increase the scope of HSB's impact towards SDGs. Example could be partnerships co-teach modules on the role of businesses in increasing resilience.

## Conclusion

To conclude for better or for worse the world is urbanizing. By the end of the century a vast majority of humankind will shift to modern cities and the efforts to support small cities will be more sustainable for the planet and communities living within them. Improving the rural areas is also equally important as there are billions of people around the globe who live in rural communities by their own choice and do not wish to move to the modern cities. Their needs must be acknowledged and addressed. However, there is an absence of the issue violence and crime in SDG 11. There are certain cities where there is crippling level of violence which also needs to be controlled in order to have a sustainable cities and communities. The issue of sustainable cities and the numerous issues that accompany urbanization pose some of the biggest challenges to livelihoods, standards of living and the environment. The role of universities in unpacking and identifying potential solutions for these problems cannot be stressed enough. It is, therefore, imperative that institutions of higher learning play a serious and more dedicated role in achieving the subgoals under this SDG.





## SDG 12: Responsible production and consumption

FLORENCIA DÍAZ CANO

### Introduction

The Sustainable Development Goal number 12 (the SDG 12), called Responsible Consumption and Production encourages the different countries and institutions to be more sustainable in terms of consumption and production patterns through several sustainability measures that can be implemented and developed within its regular activities and infrastructure, likewise as some specific policies, international agreements and organizations that provide guidelines and raising awareness activities for the achievement of this goal around the world.

Seeks to promote resources and energy efficiency, though sustainable actions and thus its implementation helps to achieve overall development plans to reduce future economic, environmental, and social cost, while at the same time, because of its implementation, the economic competitiveness improves.

Thus, we can simplify its main goal as the “doing more and better, with less”.

Moreover, the SDG 12 also pursues the welfare gain from economic activities that are underlined by the reduction of resources use, degradation and pollution as well. Its application will not only reduce the damage that certain activities might cause to our environment but will also permit to the economies grow and be more efficient while utilizing resources and minimizing waste generation. Therefore, we can say that growth that contaminates the environment, sets the development back, as it is a practice that cannot continue in the future as the resources we have are limited.

While understanding the aim this goal and the IGC's active participation while trying to achieve it, we can highlight some of its sub goals that help us to understand the right path to follow in order to be sustainable, these sub goals include: Sustainable management and use of natural resources, Responsible management of chemicals and waste, Substantially reduce waste generation, Promote universal understanding of sustainable life cycles and others.

### How can institutions like the Hochschule Bremen address this goal?

Sustainable consumption and production call attention for the efficient use of resources and energy, by adopting a sustainable infrastructure and providing access to basic services. While accompanying the opportunity to access to green and decent jobs and a better quality of life for everybody.

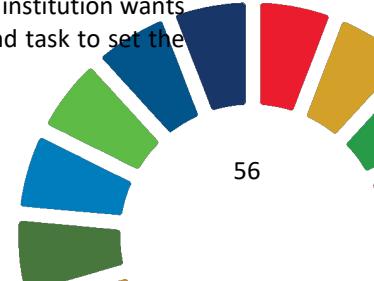
Universities must play their part in ensuring that their consumption is minimized, especially where resources are not renewable.

Within the goal and sub goals of the SDG 12, we can find measures and indications regard the different practices that institutions can implement in order to be more sustainable and improve its environmentally friendly approaches, as well as modalities about how to control and measure the progress.

For instance, the United Nations define 11 targets and 12 indicators for the SDG 12, where the targets specify the goals and indicators metrics to track whether these targets are achieved or not.

The IGC is one active player while talking about this field.

The first step on the right direction would be to analyze what would be the objectives that the institution wants to reach under the SDG 12, and starting from this, the organizations has the responsibility and task to set the action plan in order to be successful within this matter.



Furthermore, it is very important that the entity actively develop measurement approaches and control its compliance, thus it can be aware of the current status and if it's necessary to realize certain changes.

Another important aspect is to engage every actor related to the institution as the people will generate the energy necessary and the means to accomplish the goals.

## What is the Hochschule Bremen to reach the SDG 12?

While developing this research we are pleased to say that the HSB is an active player while reaching to be sustainable in consumption and production terms.

The university has been implementing different actions among all its building and campus to improve its performance and it is going into the right direction.

First of all, the Hochschule developed an overall Sustainable Plan that underlines the different dimensions and aspects that are involved and required to modify to finally enhance its consumption and production patterns. Moreover, university has Environmental Programs and an Environmental Management System where guidelines are included in order to develop sustainable and environment friendly activities, and also to control and measure compliance.

This included, remodeling and construction of the university facilities, pursuing pollution and energy reduction. Different refrigeration systems and special windows were added, to maintain a desire temperature in the building and at the same time to reduce the need of using of heaters or AC systems.

Besides, the university added LED lighting detectors in corridors and function rooms, that work only when is people in the place, so the lighting was only used when is really necessary.

To encourage the use of other transportation alternatives, as bicycle transportation or the use of public transport that are more environmentally solutions, the University constructed bicycle facilities, and inform in regard of the use of the semester ticket (a pass for students to utilize public transport in Bremen).

The modifications had a positive impact in the electricity and gas consumption, besides, the CO2 emissions, that are directly linked to the energy consumption, were also minimized.

It is also important to highlight that since January 1st, 2009, the University utilizes green electricity that comes only from renewable sources (as Wind, Sun, biomass, and Water).

Another initiative that the HSB applied, is the education in regard waste reduction and how to recycle, a task that includes all university's members (students, employees, and even external companies), by teaching how to do this and by placing many recycling containers in the buildings, where it is very visible and clear where to deposit the different disposals.

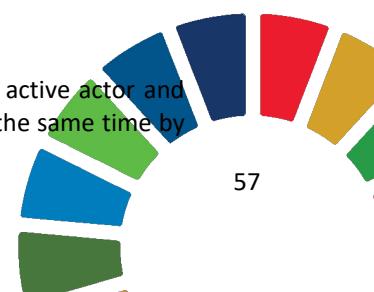
On the other hand, the Hochschule is also performing well while raising awareness, as it has some programs that handle the topic of sustainability and encourages the public to develop researches and investigations to make this possible.

While talking about the study programs in the different careers that the institution offers, we can also find that the Sustainability theme is also included, in some cases in a higher grade than others, but in general it is included. In addition to this, the Lecturers and Professors are also playing an important role as they act as the main motors while successfully transmitting the message to the students, that at the end will be the most important actors in the society while developing a sustainable word in the present and future.

The HSB is capable of promoting and teaching how to be better and more responsible while consuming and producing to the relevant actors in the society. As students are and will be the professionals that at the end will reach and influence the rest of the different sectors of the society; at their different workplaces, at home with their families, in their different countries, and also when we talk about the stake holders like government and institutions that have also a relationship with the university.

## Some recommendations, how can the HSB improve?

After all the areas brought by this investigation, we can assume the university is already an active actor and playing a very important role in the whole society by raising awareness of this matter and at the same time by



being an example for the society of the impact and importance of this. Actions cause more impact than words and when the matter is about trying to motivate and encourage; being an active example of the change is a very relevant and advantageous factor.

We reviewed some points about the actions and plans that the university is taking on place and developing, although we can see many positive aspects and implementations, there is always room for more and better improvements. Not only in the dimension of infrastructure but while considering the people that interact every day with the HSB, the intellectual capital is a very valuable aspect.

Because of this, within our recommendations we will highlight as the most important factor, to achieve the SDG 12, the human capital, the students, professors, and lecturers.

The university has the responsibility of influencing and prepare them to follow the guidelines in regard of consumption and production patters. Therefore, they should actively invest and re direct resources in order to reach to the people that really matters, as sometimes isn't clear the offers that the institution provides, so it would be a good approach that the institution invest to be more proactive while searching volunteers for these projects.

Another aspect is that the Hochschule should train more its employees and students on this matter (I experienced the lack of training and information on this matter when worked there. Even the emergency measures weren't explained so I think there is a lot room of improvement).

In the induction is important to share the HSB values and vision as well as the task that are required to develop, but to be completely sustainable is very important to transmit this to the people that are starting their interaction with, since the beginning of the relationship; this way every activity that the individual will develop will be underlined by the sustainability measures, and also will transmit this idea to its peers as well. Specially while talking about the teachers and lecturers, as they will be the main players while transmitting this to the students, in addition, they will motivate them to participate of these measures.

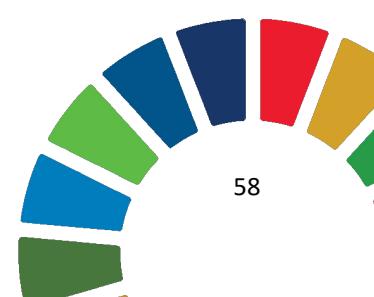
Hence, it is very important to keep the professors updated and motivated as well. Maybe through seminars, the opportunity of starting a project, etc.)

On the other hand, it is important to have in consideration of the language barrier, the IGC of the HSB is constituted also by students from all around the world. These students are usually also very motivated and exited in order to develop themselves on these areas, but unfortunately most of the information in regard it is only in German, while speaking English is the only requirement to be part of international programs, so of course most of the students won't be able of understanding the language. Besides, it isn't clear either to whom contact to reach for help or information. So, it will be a great improvement to consider both aspects while promoting sustainability plans.

We as international students from several and different backgrounds, and myself as a formal ex-employee at the IGC, witnessed these aspects in the first line, not only by researching but through experiencing how everything works, so we believe it is very important to consider these things in order to improve and reach to every possible change actor, that will help with the reaching of the sustainable goals overall.

To conclude, we can say that the most important aspect of this project and analysis of the HSB in relation with the SDG 12, is the feedback and recommendations in the dimension of human capital and knowledge. It has to be conscious of the power of influence that a prestigious institution as the Hochschule Bremen has.

The knowledge and power of influence represents a powerful weapon while pursuing to raise awareness and an overall change in our consumption and production patters as in the society, so the university must act in that direction with this special "power that it has" while spreading better practices, informing, teaching, giving the support that students, lecturers and scholars, might need, and also as being an active actor in the society.





## SDG 13: Climate Action

VIBHOR ADHRAN

### Introduction

There is no country in the world which is not experiencing effects of climate change you can see in the news about heat waves in Canada, Southern California, Australia etc. Australia recorded hottest temperature which is about 50.7C. Even summer in Europe is getting hotter every year & climate is becoming unpredictable. CO<sub>2</sub> emission is rising every year its 50 % times higher than 1990. Average economic losses from climate related is more than hundreds of billions of dollars. With climate change we are losing species and resources consumption is also increasing it requires urgent attention of everyone to save our planet.

Germany starts taking all the measures and their government included 17 SDGs agenda for 2030 into their sustainable policy. The only way to achieve SDGs focused effort by the international community and each individual state to move faster in implementing the 2030 agenda.

1. German Government putted six principles for SDGs:
2. In all decisions sustainable development is going to show the way.
3. Have global responsibility
4. Become stronger with natural resources on which life depends
5. Sustainable economic activity
6. Enhance and preserve social facts in open society
7. Education, science and innovation should be used as drivers of sustainable development

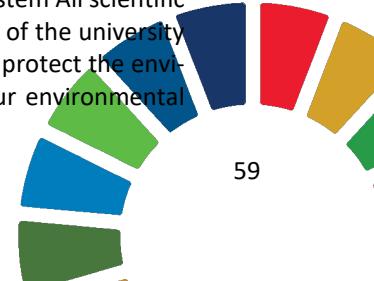
Germany is taking many steps for climate action the Federal Climate Change is going to set limits for individual sectors by 2030. All the electricity generates or consumed must be greenhouse gas neutral by 2050 also decarbonising in industry sector must be reduced and avoided where possible. Using of less plastic and more recycling products. Taking incentives for electric cars and trucks also building more charging station. Building sustainable product design which consumes less energy and resources.

### Integrate Climate Change Measures into Policies and Planning

Climate change is a risk to human health, species, social and cultural system and economic development. But it's also providing opportunities. The main goals of climate policy are to reduce the risk and have advantage at the same time.

HSB main policies and planning is to reduce water, use of renewable energy, raise awareness, change mode of transport, energy saving by heat and power & waste separation.

Our university HSB with the support of the Bremen Energy Consensus Agency in 2015/16 together with employees and students, the student union, canteen management, neighbouring institutions, the local advisory board and NGOs. A total of 72 measures are proposed that would result in a calculable CO<sub>2</sub> reduction of around 4,140 t/a. The catalogue of measures contains a total of 72 measures, with 31 measures to be implemented in the short term, 25 in the medium term and 16 in the long term. HSB has environmental management system All scientific and non-scientific institutions are involved in the environmental management. The chancellor of the university is responsible for the environmental management. The environmental guidelines are made to protect the environment both internally and externally at university. New employees are made aware of our environmental



management system during the introductory talks also staffs get to know about waste separation in their occupational course. Also, college is providing employees hybrid method to teach or to work.

HSB is using green electricity from 100% renewable sources - from wind, sun, biomass and water since 01/01/2009. University is installing cooling systems and solar and heat protection film on the shaft windows which is helping in heat reduction in elevators.

In the sanitary area, continuous attention has been paid to the use of water-saving fittings. Water-saving fixtures such as flow restrictors, quick-acting faucets with appropriate running times, and flush-stop buttons are installed on washbasins and WC flushes. The quality of waste separation at HSB depends to a large extent on the commitment of all university employees. In corridors, stairwells and large event rooms, the HSB has already had marked waste separation systems for paper, packaging and residual waste for many years.

HSB offer bicycle parking spaces at HSB: 842 of which 61 covered and 42 lockable also places for cargo bikes, 42 rental bikes are integrated and each HSB location there is e-bike charging and an air pumping station. Also, the project bicycle model district which is funded by Federal Ministry for the Environment with the bicycle repair café, a climate-friendly building in which climate protection is taught in courses and as a real laboratory for climate-friendly building. Also, open events about climate protection, bicycle self-repair workshop and start and end point for cycling tours. In future charging station going to visible on digital maps of Germany.

## Build Knowledge and Capacity to meet Climate Change

Education is an important consideration in the ever more urgent global fight against global climate change. Knowledge regarding this phenomenon helps people to grasp and tackle the implications of worldwide warming, encourages them to alter their behaviour and helps them to adapt to what's already a world emergency.

HSB is doing everything in their capacity to raise awareness about climate action by providing knowledge and information about climate action integrating it into courses or in modules like our project to research about our SDGs increasing our knowledge as well as making us understand that how important is this. HSB also does conference/webinars like-The EU Green Deal and its Implementation. Open campus events in the bicycle café about climate protection.

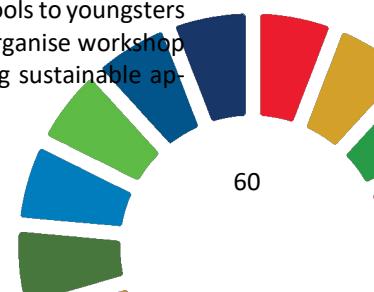
In 2018, the lecture series Facets of Sustainability started under the title Energy, Mobility & Food for the City. In this the experts will present and discuss current projects and activities in Bremen, such as food sharing, urban gardening, generation of solar and wind energy, bicycle and car sharing.

HSB provides information about the environment management system as part of the introductory event for all the new employees. Updating the relevant information on the university's homepage, brochure, as well as in the study guide and the annual report. Intensification of environmental protection related public relations work. Further consolidation of the network of stakeholders in the fields of climate protection, ecological sustainability and the environment.

## Promote Mechanisms to Raise Capacity for Climate Planning and Management

This sub goal is to raise awareness or help least develop countries or building institution for women, youth and local and marginalized communities. To keep global warming within 2C or less requires all countries to be prepared for decarbonization strategy by 2050, by covering all sources of greenhouse gas emissions including energy, industry, agriculture, forest, transport, building, and other sectors. All these strategies should be transparent and detail oriented on how countries can achieve emission cuts, to reduce energy consumption, power sector can be decarbonized and all should clarify the energy uses.

While IGC is not directly linked to this goal because our college is about business studies and management programs but our college can promote this to HSB that policies and planning we integrated which I mentioned above can be shared to other universities because HSB has engineering, science based programs that students and professors can work as consulting or advisor to other universities in least develop countries or they can provide free courses to women's those who are housewives or provide lectures in the local government schools to youngsters to raise awareness. Also, university can partner with teachers with local native languages to organize workshops or to spread words about it. University can provide funds to build schools in villages by using sustainable approach it will give them opportunity to earn as well as to set an example to other areas.

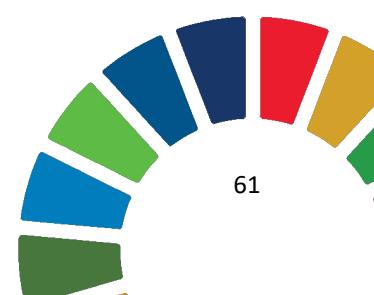


## Recommendation

Overall Recommendation from my observation or the information I got from the university. HSB is already doing almost everything but some things can be improved or integrate them in future:

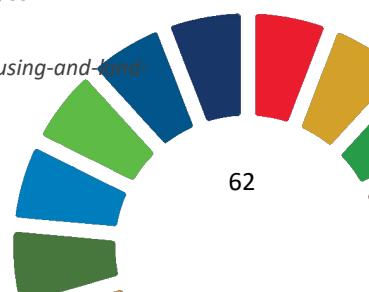
- Resources and research should be diverted towards discovering more environment friendly source of energy not be depend on what we have its better to find other sources. University should fund students and professors to conduct experiments. Also, research on Monitoring climate change impacts on human health.
- Organize open science exhibition where students of any university can participate and show models related to sustainability and have some price for the best model.
- College should do more active campaign on social media because everyone specially youngsters are active on social media post photos or make short videos like tips to reduce co2 emission etc. It will create more awareness and people will also get an idea about university is doing.
- College should intergrade Policies in their code of conduct of their staff and management like use of public transport and sharing of cars justified use of electricity both at home and office or establish a staff travel policy that's includes sustainability and co2 emission redetection criteria and use of more recyclable clothing.
- Consumption of paper should be minimum we can avoid this by doing everything digitally whether it's an admission enrolment, taking notes in class and semester ticket also can be digitalized.
- College should work on Improved prediction, warning and response about Extreme heat because temperature is rising every year and it can cause temperature related illness.
- There should be one introductory lecture regarding climate action to new admission students because majority of students are international, and we don't know about waste separation also about water usage how to reduce water pollution and conserve.
- HSB should invite researchers or company which are doing something for climate, and it should be open to everyone so any one from the world can join.
- When we go for events, we deposit some fees and it get return after the event we can ask student who want to contribute to climate, and we can collect it and organize awareness event in the city.
- Our campus should be a smoking free area or small smoking zone which should be covered and have air filter in it.
- There should be one single website in which all information should be their also it should have English language as well.
- Have module/courses in which we can get knowledge regarding modern agriculture practice and ending food waste around the world because by burning fossil fuel to produce energy most of the most greenhouse gases go into the atmosphere.
- HSB should perform periodic maintenance and inspections of all employees' cars and maintain check-list and records of inspection.
- HSB can sponsor trip to students and professors those who are researching regarding climate action to non-develop countries & have awareness camp in their universities or cities to give them ideas what they can do to reduce Co2 emission.

To conclude this, I want to say this SDG is not just related to one place, its about whole world and it's an urgency and we need to take action as soon as possible. We all need to take responsibility as an employee or a student to fight against climate changes university can't do anything alone it requires our support as well. But I want to request university to help other least develop countries to educate them in any time of medium whichever is possible.



## References:

- United Nations Human Settlements Programme. (2022). [unhabitat.org](https://unhabitat.org/11-c-sustainable-buildings). Retrieved from <https://unhabitat.org/11-c-sustainable-buildings>
- Beatriz Acevedo, R. M. (2021, 01 05). Aesthetics and education for sustainability. *Culture Organization*, p. 10. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/14759551.2022.2028147>
- Change, L. (Director). (2017). 2030- SDG 11- Sustainable Cities and Communities- Ted talks [Motion Picture]. Retrieved from <https://www.youtube.com/watch?v=OKtLNTQqG3A>
- eLearning, U. (Director). (2020). Sustainable Development Goal 11 - Sustainable Cities and Communities - Tommy Wiedmann [Motion Picture]. Retrieved from <https://www.youtube.com/watch?v=Awu3JJC3A0k>
- Filho, W. L., Shiel, C., Paço, A., Mifsud, M., Avila, L. V., Brandli, L. L., . . . Caeiro, S. (2019). Sustainable Development Goals and sustainability teaching at universities: Falling behind or getting ahead of the pack? *Journal of Cleaner Production*, 285-294.
- German Federal Government. (2021, 12). [www.bundesregierung.de](https://www.bundesregierung.de/resource/blob/974430/1940716/1c63c8739d10011eb116fd1aecd61ca/german-sustainable-development-strategy-en-data.pdf?download=1). Retrieved from <https://www.bundesregierung.de/resource/blob/974430/1940716/1c63c8739d10011eb116fd1aecd61ca/german-sustainable-development-strategy-en-data.pdf?download=1>
- Global Citizen. (2022). [www.globalcitizen.org](https://www.globalcitizen.org/en/content/9-clean-energy-innovations-that-arent-ugly/). Retrieved from <https://www.globalcitizen.org/en/content/9-clean-energy-innovations-that-arent-ugly/>
- Habitat for Humanity® International. (2022). [www.habitat.org](https://www.habitat.org/about/advocacy/sustainable-development-goal-11). Retrieved from <https://www.habitat.org/about/advocacy/sustainable-development-goal-11>
- Hochschule Bremen. (2019). Umwelterklärung 2019. Bremen.
- Hochschule Bremen. (2022). [www.hs-bremen.de](https://www.hs-bremen.de/die-hsb/aktuelles/projekte/). Retrieved from <https://www.hs-bremen.de/die-hsb/aktuelles/projekte/>
- Housing Rights Watch. (2022). [www.housingrightswatch.org](https://www.housingrightswatch.org/news/access-all-adequate-safe-and-affordable-housing-mentioned-un-17-sustainable-development-goals). Retrieved from <https://www.housingrightswatch.org/news/access-all-adequate-safe-and-affordable-housing-mentioned-un-17-sustainable-development-goals>
- International Centre for the Study of the Preservation and Restoration of Cultural Property. (2022). [ocm.iccrom.org](https://ocm.iccrom.org/sdgs/sdg-11-sustainable-cities-and-communities/sdg-117-provide-access-safe-and-inclusive-green-and). Retrieved from <https://ocm.iccrom.org/sdgs/sdg-11-sustainable-cities-and-communities/sdg-117-provide-access-safe-and-inclusive-green-and>
- Naciones Unidas. (2022). [sdgs.un.org](https://sdgs.un.org/es/goals/goal12). Retrieved 02 1, 2022, from <https://sdgs.un.org/es/goals/goal12>
- Our World Data. (2021). [ourworldindata.org](https://ourworldindata.org). Retrieved from <https://ourworldindata.org/>
- REGIONAL TRAINING WORKSHOP ON HUMAN SETTLEMENT INDICATORS. (2018). Indicator 11.c.1 Sustainable, resilient and resource efficient buildings utilizing local materials. UN Habitat. Bangkok, Thailand.
- Rotterdam School of Management . (2022). [www.rsm.nl](https://www.rsm.nl). Retrieved from <https://www.rsm.nl/sdgs/11/>
- SDG Resource Centre. (2022, 2). [sdgresources.relx.com](https://sdgresources.relx.com). Retrieved from <https://sdgresources.relx.com/goal-12-responsible-consumption-and-production>
- SDG Tracker. (2022). [SDG-Tracker.org](https://sdg-tracker.org). Retrieved from <https://sdg-tracker.org/>
- Studentenwerk Oberfranken. (2022). [www.studentenwerk-oberfranken.de](https://www.studentenwerk-oberfranken.de). Retrieved from <https://www.studentenwerk-oberfranken.de/en/housing.html>
- Study.eu. (2022). [www.study.eu](https://www.study.eu). Retrieved from <https://www.study.eu/article/the-most-sustainable-universities-in-europe>
- The Economic TImes. (2022). [economictimes.indiatimes.com](https://economictimes.indiatimes.com/industry/services/education/indias-premier-colleges-give-out-space-for-quarantine-facilities/article76706885.cms?from=mdr). Retrieved from <https://economictimes.indiatimes.com/industry/services/education/indias-premier-colleges-give-out-space-for-quarantine-facilities/article76706885.cms?from=mdr>
- UN Women Deutschland. (2022, 02 01). [www.unwomen.de](https://www.unwomen.de). Retrieved from <https://www.unwomen.de/informieren/gleichstellung-der-geschlechter-in-der-agenda-2030/die-17-ziele-fuer-nachhaltige-entwicklung/sdg-12-verantwortungsvoll-konsumieren-und-produzieren.html>
- United Nations Development Programme. (2022). [www.undp.org](https://www.undp.org). Retrieved from <https://www.undp.org/sustainable-development-goals#climate-action>
- United Nations Development Programme. (n.d.). [www1.undp.org](https://www1.undp.org/content/seoul_policy_center/en/home/sustainable-development-goals/goal-13-climate-action.html). Retrieved from [https://www1.undp.org/content/seoul\\_policy\\_center/en/home/sustainable-development-goals/goal-13-climate-action.html](https://www1.undp.org/content/seoul_policy_center/en/home/sustainable-development-goals/goal-13-climate-action.html)
- United Nations Economic Commission for Europe. (2022). [unece.org](https://unece.org). Retrieved from <https://unece.org/housing-and-land-management/events/adequate-safe-and-affordable-housing-pillar-sustainable>



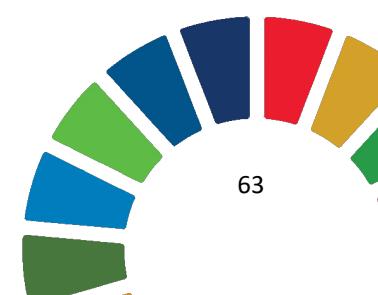
*United Nations Environment Programme. (2022, 02 01). www.unep.org. Retrieved from https://www.unep.org/explore-top-ics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-12*

*Universität Bayreuth. (2022). uni-bayreuth.de. Retrieved from https://uni-bayreuth.de/en/sdg-goals#afffc484*

*University of Oldenburg. (2022). uol.de. Retrieved from https://uol.de/en/news/article/sustainable-mobility-across-europe-5653*

*University of Saskatchewan. (2021). WHY IT MATTERS: RESPONSIBLE CONSUMPTION AND PRODUCTION. Canada. Retrieved from https://healthsciences.usask.ca/news-and-announcements/announcements/2019/sdg-spotlight-goal-12.php*

*World University Rankings. (2022, 02 01). www.timeshighereducation.com. Retrieved from https://www.timeshighereducation.com/impact-rankings-2021-responsible-consumption-and-production-sdg-12-methodology*





## SDG 14: Life below water

DIBYAJYOTI SARMA

Life below Water is “conserve and sustainably use the oceans, seas and marine resources for sustainable development.”

An estimated 8 million tonnes of plastic waste enter the oceans every year. The billions of facemasks and gloves used during the coronavirus pandemic are making the problem worse. This pollution threatens estuaries, coral reefs, fish, and millions of families that rely on the oceans. Most of the plastics in the oceans come from waste thrown on the ground or washed into rivers. Two billion people around the globe do not have good waste collection systems to catch these plastics. Better wastewater treatment and stormwater management in many developing countries would stop some of the 1.5 million tonnes of microplastics that end up in the oceans every year. Fast population growth in many cities around the world is increasing plastic pollution.

This harms coral reefs, and species living in the oceans, it is estimated more than 100 million marine species have been depleted from the ocean surface in the last couple of centuries. And by the year 2050, there will be more plastic in our oceans than fish.

SDG 14: Life below Water is “conserve and sustainably use the oceans, seas and marine resources for sustainable development.”

Sustainable development Goal 14 or SDG 14 is one of the 17 goals with 169 targets set by the United Nations General Assembly. Passed in 2015 with a target achievement date of 2030. SDG 14 aims to guard and make sure the sustainable use of oceans. This includes the reduction of marine pollution and therefore the impacts of ocean acidification, the ending of overfishing, and therefore the conservation of marine and coastal areas and ecosystems. SDG 14 has strong dependencies directly or indirectly with a broad range of other SDGs, as oceans sustain coastal economies and livelihoods, contribute to food production and function as a carbon sink.

In this report, we will be analyzing the possible initiatives taken related to SDG 14 till now and the role of education and educational institutions in order to achieve the SDG goals by 2030.

## Role of Education in Achieving SDG Goal 14

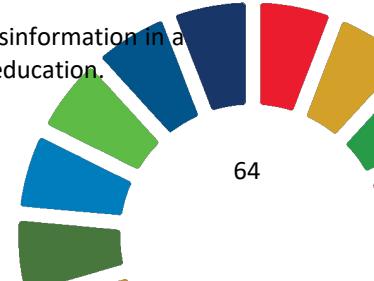
Education is a tool for societal transformation and growth. It is also a critical instrument for the individual's and society's advancement and growth. It is both a critical transformational tool and a formidable socio-economic empowerment tool. To satisfy the demands of the Sustainable Development Goals 14, education is important in developing awareness of the marine environment and building proactive consensus regarding wise and sustainable use.

This is where higher education played an important part in accelerating the Sustainable Development goals across the world through a diverse portfolio of teaching, extensive research, and Increased scientific knowledge, developing variety in research capacity technology with respect to marine conservation studies.

According to the United Nations Increase in scientific knowledge, develop research capacity, and transfer marine technology by 2030.

The aim by 2030 is to highlight research and higher education that creates opportunities to connect and involve as many as possible in the work towards ocean sustainability.

Pollution and ecological imbalances have always been seen as a hoax and current levels of misinformation in a public debate show the dire need and enormous potential for science-based information and education.



In order for mega-development and contribution by the academic sector on SDG -14, steps must be taken by each and every university, schools where graduates and interns will need a new set of skills, which will invariably necessitate changing types of pedagogical practices from teachers in the educational system, ICT, digital literacy, and non-cognitive abilities, in particular, have become vital skills for daily life and employment, in addition to the core cognitive skills (including literacy and numeracy) that have been emphasized throughout the years. Furthermore, these abilities have evolved into tools that everyone requires in order to perform effectively in today's world.

Despite having to overcome several challenges, universities and other advanced education institutions, their leadership, academic, and executive staff and scholars, in all corridors of the world, are getting increasingly apprehensive of and laboriously engaged in the United Nations Agenda 2030 and the affiliated Sustainable Development Goals (SDGs).

Research and tutoring, lot life and community engagement are given significant importance and investments are made by many universities and clusters of groups focusing and working towards the same goals. Countries must ensure that everyone has equal access to high-quality education and learning, leaving no one behind. Education should foster mutual understanding, tolerance, friendship, and peace by promoting the full development of the human personality.

Here are a few examples of technical universities and their academic and research-based contribution to SDG-14:

- 1. Ocean Sustainability Bergen (OSB) is a virtual center established by the University of Bergen to enhance knowledge and understanding of a sustainable ocean.**

The University of Bergen's goal with this center is to make education, research, and science diplomacy a vital part of Norway's contribution to a sustainable ocean as part of the UN's 2030 Agenda for Sustainable Development.

OSB has aided in the enhancement and dissemination of scholarly research on the laws.

The University of Bergen is also the SDG 14 lead universities with the International Association of Universities (IAU) global Higher Education and Research for Sustainable Development (HESD) Cluster.

The SDG is also the University of Bergen14 universities are at the top of the rankings.

- 2. The South African Floating University SEAmester — South Africa's Floating University and a cooperative venture between the government and universities – began in 2009. The strength of SEAmester is that it allows postgraduate students from South Africa to integrate theoretical and practical knowledge.**

- 3. ETH Zurich: Extensive research nearby the ocean and coasts.**

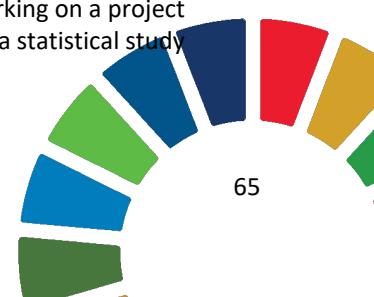
- 4. Monash University - Research on Coastal Habitats and ecological preservation.**

## Role of Business Schools on SDG 14

Although the government plays an important role in achieving the goals, businesses will play a major part in achieving the individual targets via the way they operate, establish new business models, invest in communities, innovate, and interact. Successful implementation of the SDGs would increase the enabling environment for doing business, reducing risks while also opening up a plethora of new opportunities for businesses.

Many schools are actively following suit in a number of ways as the SDGs become a larger part of what the wider corporate and social world is engaged in, indicating that they want to be viewed as a vital player in the SDG agenda:

- Faculty at Canada's Sobey School of Business is working to include the SDGs into their courses, as well as through assignments and debates.
- In Brazil, ISAE/FGV publishes an annual report on how they are trying to achieve the SDGs in their operations, including those linked to water, waste, gender equality, and educational access.
- A group of academics from Bournemouth University Business School has been working on a project to look into the (sustainable) development of the marine industry, which includes a statistical study of all key industries as well as an in-depth look at the boatbuilding value chain.



- Students from Nottingham Business School took part in an effort in which they proposed creative solutions to assist businesses in recycling, reusing, and upcycling plastics, as well as switching to more sustainable materials, to lessen the impact of plastics on our oceans and marine life.
- Water conservation behaviors in the Hunter region are being studied by Newcastle Business School researchers in order to better understand the elements that influence them.

## What IGC Bremen Can contribute in order to achieve SDG-14 Goals?

IGC Bremen is being one of the premier business schools in Germany with its diverse portfolio of courses and degrees. Being a Business school it's perfectly positioned to influence sustainability, yet there is a lot to do. The United Nations' Sustainable Development Goals (SDGs) have increased from 11% in 2015 to 74% in 2020.

In consideration of the above subgoals of 14.1, 14.2, 14.5, 14.7, and 14.8 the university should primarily focus to be an example for the neighborhood.

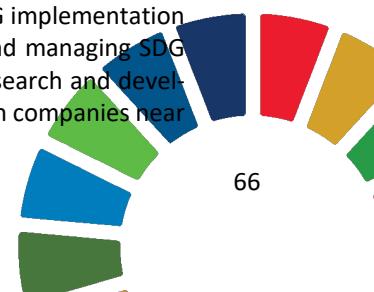
IGC has done a tremendous job when considering a litter-free, semi-plastic-free environment across its campus buildings and cafe, however, the ideology of adapting and impacting larger audiences such as Staff, Students, guests, and others the practice need to tighten.

For the following here are the direct goals the IGC Bremen can achieve:

- IGC can diversify its portfolio of teaching SDG -14 basecourses with various modules, where instead of just following the rules, students can actually understand the importance of marine biology and ecological threats, they can differentiate the defining factors of effects and impacts.
- IGC can extensively conduct research on sustainably managing the nearby water bodies, map the habits of waste generation and waste dumping into the nearby water bodies as well as in the ocean.
- IGC can educate Students, staff, and fellow colleagues through seminars, interviews, and collaboration conferences to take responsibility for sustainable development.
- IGC can also contribute to improving the existing research capacity and increasing the importance of scientific knowledge to enhance ocean health and support marine biodiversity.
- IGC can contribute to dissemination, and education along with ocean and climate monitoring, local and regional collaborations relating to the ocean, and a multidisciplinary education program can really make a change.
- IGC and its student can collaborate with various educational and scientific institutions so that scientific research can be carried out and information and joint initiatives can happen.
- They can monitor Engagements on plastic pollution and its contributors and Operations: Designing efficient, ecologically friendly systems, business methods, and sustainable operations.
- IGC need to join major international institutional associations working towards SDG-14 goals, where the exposure and resources are easily available to execute different type of projects.
- Building a virtual incubation center and collaborating with regional waste management and non-profit organization can be a better way.
- IGC can focus more on implementing strong culture when it comes to banning the use of plastic-based items, especially single-use plastics at its campus so that littering can be controlled.
- IGC can also focus on going digital when it comes to teaching, presenting, and interviewing.
- Limiting the use of paper can also help in indirectly cutting down of energy it has taken to recycle and the amount of water used for the recycling process.
- Adopting Social media as a tool can help to educate, influence in bulk by covering a larger audience, hosting webinars, virtual events, and online conferences can help in building better connections at the national and international level.

## Conclusion

Our oceans are unconcerned about national or international boundaries. As a result, we must use a joint strategy to address coastal and ocean challenges globally building a cross-university framework for SDG implementation and delivering practical tools including SDG mapping, reporting, stakeholder engagement, and managing SDG interlinkages assisting in the development of SDG-based policies; promoting SDG-oriented research and development; incubating new sustainable development businesses, such as hosting startup high-tech companies near



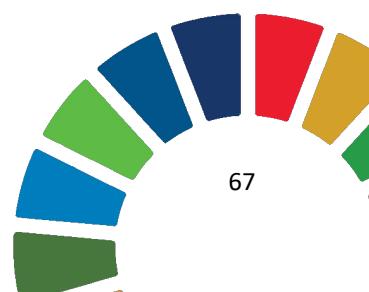
our university research programs; SDG-based training of future sustainable development leaders through cross-disciplinary and experiential learning; and fostering multi-stakeholder engagement.

Until now business school research capabilities are an underutilized resource by both the business and global community when it comes to advancing sustainability.

The SDGs should be seen as an opportunity for business schools and, in particular, centers and professors to coordinate their research agendas in and around the targets. Many corporate sectors around the world are still figuring out how they will contribute and what they can do, despite their increasing commitment to the aims. The new objectives will assist to refocus research in a way that is more relevant to today's industry and society, which has been a critique of much of the research coming out of business schools. When it comes to increasing sustainability, business school research talents are underutilized by both the business and global communities. With their long implementation timelines and hurdles, the SDGs provide a unique opportunity for new universities like IGC Bremen to stand out contribute and be a role model for many others across the country.

## References:

1. <http://sdg.iisd.org/news/reports-focus-on-role-of-universities-in-achieving-sdgs/>
2. <https://www.condorferries.co.uk/marine-ocean-pollution-statistics-facts>
3. <https://www.timeshighereducation.com/impact-rankings-2021-life-below-water-sdg-14-methodology>
4. <https://www.globalgoals.org/goals/14-life-below-water/>
5. <https://primetime.unprme.org/2021/02/03/how-are-business-schools-engaging-in-the-sdgs-examples-from-sdg-10-to-17/>
6. <https://www.uib.no/en/sdgbergen/139994/higher-education-engages-sdg-14-life-below-water#:~:text=By%20juxtaposing%20and%20interlinking%20SDG14,the%20work%20towards%20ocean%20sustainability>
7. <https://en.unesco.org/themes/education/sdgs/material/14>
8. <https://link.springer.com/article/10.1007/s10734-020-00652-w>
9. <https://www.oecd.org/education/achieving-sustainable-development-goal-for-education-by-2030-will-be-major-challenge-for-all-countries.htm>
10. [https://www.eib.org/attachments/publications/the\\_clean\\_oceans\\_initiative\\_en.pdf](https://www.eib.org/attachments/publications/the_clean_oceans_initiative_en.pdf)
11. <https://sdgs.un.org/2030agenda>





## SDG 15: Life on Land

SINGH, MANPREET

The Earth is estimated to be around 4.54 billion years old with the first organism (microbes) originating around 3.7 billion years ago. With number of evolutions taking place, the first Homo-Sapiens walked the earth around 2.4-1.4 millions of years ago in the Eastern & Southern Africa. However, since the Industrial revolution in 1700s, the condition of earth has started to deteriorate with humans tapping the natural resources for the needs. Second industrial revolution, taking place between 1870 – 1914, has exerted tremendous pressures on the earth resources both on land and on oceans. It is quite apparent that humans in the last 100 years have created so much burden on the mother earth that it has started falling apart.

### Significance of Land

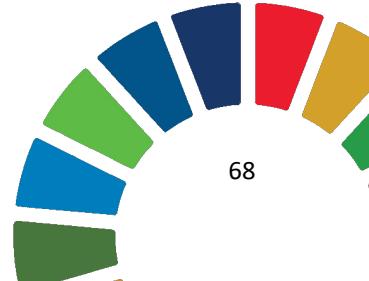
Humans, animals, fish and insects all depend on the land and oceans for their sustenance. Land provides all resources for the existence of the life on earth in forms of food, energy and minerals. Plants alone comprises of the 80% of the human diet, and the rest 20% on animals and fish, which are also supported by land and oceans. Also the agriculture has always been the most important economic & financial resource providing around 2.6 billion people their livelihood. Intact ecosystems not only provide food and shelter to humans but also function as an instruments to absorb CO<sub>2</sub> (Carbon Dioxide) which is the main pollutant and the major cause of global warming. It is a natural source to provide clean air and water. The wetlands, oceans, rivers all contribute directly by absorbing CO<sub>2</sub> and forests absorbing CO<sub>2</sub> and releasing Oxygen into the atmosphere by filtering it. Also the intact ecosystems provide a protection against the environmental catastrophes like landslides, soil erosion and flooding. The sound ecosystems automatically provides resilience towards many infectious diseases and fight climate changes.

Mitigation of problems of deforestation is a crucial step towards stopping the effects of climate change. Deforestation, desertification and draughts are on rise at a yearly average of 12 million hectares of land.

### Life on Land Targets

The SDG 15 aims at comprehensive protection and preservation and restoration and sustainable use of terrestrial ecosystems such as forests, wetlands, deserts, mountains and species living and dependent on the land. Combating desertification, halt and reversing land degradation and biodiversity loss has been the core of this Sustainable Development Goal. The brief description against each sub-goals is as follows: -

- Sub-Goal 15-1: It focuses on conservation and restoration of terrestrial and freshwater ecosystems
- Sub-goal 15-2 & 15-3: These focuses on ending deforestation and desertification and restoration of degraded land
- Sub-goal 15-4: It focuses on ensuring conservation of mountain ecosystem
- Sub-goal 15-5 to 15-8: These targets loss of biodiversity and promoting fair and equitable use and sharing of resources, mitigation of problems of poaching and illegal trafficking of endangered species. Prevention of entry of invasive alien species which provides irreversible damage to host ecosystems.
- Sub-goal 15-A: Aims at providing significant financial resources to conserve and sustainable use ecosystems and biodiversity.



## Recommendations

Sustainable management studies are becoming popular with entire world emphasising on the need to reach the agenda 2030, with more and more G+PS colleges working towards mitigating the risks associated with climate change. Many of the B-schools have integrated the sustainability management in the MBA programs, such as Hochschule Bremen, wherein Business Ethics are not only linked with business as an on-going concern, but sustainability as the core of it. Some of the writer's recommendations are as follows:

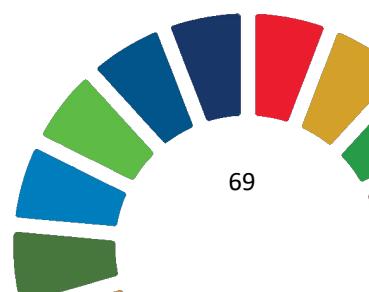
- The G+PS institutions must work closely with governments in drafting of policies and plan of action for sustainable future.
- The G+PS institution must adapt Environment Social Governance subject modules into the core learning of the subject modules
- The G+PS institutions must work on industry – institution support model, and to provide consultancy to governments as well as industry to tackle the problems associated with sustainable development goals and operational consultancy to reduce wastage and air pollution as a starter
- The G+PS must organize symposiums and seminars for the leading industries, governmental agencies and international policy makers for the benefits of students and society as a whole
- The G+PS at Germany must strengthen their alumni network so as to reached wider audience for spreading awareness into the society
- The G+PS institutions must ask for R&D grants from industry and governments for research into ESGs

## Way Ahead

Many of the educational institutions, governmental agencies, industries, and individuals are contributing immensely towards the achievement of these goals at the same time but not in unison. All these institutions require to work in harmony so as to achieve these goals at the wider perspective and at global levels. Many of the underdeveloped countries rely on financial support from the well of countries. Individual governments are taking actions through their government-industrial partnerships, but these actions are required to be translated into the national policies and legislation, action plan, and also accordingly allocate the budget. Industries, G+PS educational institutions and governments must work together for the achievement of sustainability of life on land and to garnish the forthcoming generation with the beautiful gift we call "Life."

## References

1. <https://www.undp.org/sustainable-development-goals>
2. <https://stories.undp.org/protecting-the-great-ape-whose-culture-isnbsppeace?source=share-UNDP>
3. [https://www.boredpanda.com/brazilian-couple-recreated-forest-sebastiao-leila-salgado-reforestation/?utm\\_source=google&utm\\_medium=organic&utm\\_campaign=organic](https://www.boredpanda.com/brazilian-couple-recreated-forest-sebastiao-leila-salgado-reforestation/?utm_source=google&utm_medium=organic&utm_campaign=organic)
4. <https://www.youtube.com/watch?v=06S3tQ6n4OM>
5. <https://www.bundesregierung.de/resource/blob/974430/1940716/1c63c8739d10011eb116fd1aecb61ca/german-sustainable-development-strategy-en-data.pdf?download=1>
6. <https://www.news18.com/news/education-career/iim-ahmedabad-sets-up-centre-for-research-and-innovation-to-launch-courses-in-sustainability-4510958.htm>





## SDG 16: Peace, Justice, and Strong Institutions

### RAZIYEH ZAMANBAR

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 16 of the Sustainable Development Goals is dedicated to the promotion of peaceful and inclusive societies for sustainable development, the provision of access to justice for all, and building effective, accountable institutions at all levels.

Peace is the lack of conflict and the absence of violence between heterogeneous social groups. Justice refers to two things: the notion of giving to everybody what they have the right to; and the organization of human beings to ensure that: judges, lawyers, ministries of justice and tribunals.

People everywhere need to be free of fear from all forms of violence and feel safe as they go about their lives whatever their ethnicity, faith or sexual orientation. Conflict, insecurity, weak institutions and limited access to justice remain threats to sustainable development.

The world is still a long way from achieving the goal of peaceful, just and inclusive societies. Hundreds of millions of people are living in fragile and conflict-affected States. At the end of 2020, about 1 percent of the global population – 82.4 million people – had been forcibly displaced as a result of persecution, conflict or generalized violence. The COVID-19 pandemic has exposed and intensified inequality and discrimination. In fact, the crisis has created major disruptions in government functioning and has tested, weakened and sometimes even shattered countries' systems of rights and protection. The pandemic is disproportionately affecting the most vulnerable worldwide, with children at high risk. Recovery from the crisis and sustainable development must be built on a foundation of peace, stability, and respect for human rights, effective governance and the rule of law.

### KARIM MEDANY

Promoting peaceful and inclusive societies for sustainable development peace and justice are fundamental prerequisites for prosperity. Without peace and justice, there is no developing, profitable or booming economy. As we live in a world that has two sides, some countries enjoy peace and justice and others face catastrophic conflict and fight. Invasion of Ukraine effect innocent people, the stock market, and the economy for not only Ukraine and Russia but also most of the world will be affected.

The main goal of the university besides having a high-quality Curriculum is to educate people, correct misconceptions and behaviours. Very important to encourage universities and colleges to educate the communities, not only young people because youths are part of the communities and they can share what they learned in the university with their small communities "family, relatives and friends" especially for educational institutions like IGC a place for an international student makes the message more globally. Because each student has his/her own circles of communities, the university can make each one is like ambassadors of the university transferring the knowledge to their communities in Germany or in their own countries. Using open discussions, organizing sports activities and art or culture events are great tools to send a message. In addition to using social media power to send an education message all over the globe. Collaborating with different universities, colleges, private or public institutions or even governments locally or internationally also will help to spread the information between different communities.

Injustice is the environment of corruption, bribery, and violence against the law therefore there is an individual responsibility besides institutional responsibility. The United nation plays a big role with the national governments putting crisis prevention, civil conflict management and engagement in international peace work. "Helps in Africa to produce sustainable agriculture, helps farmers to get reasonable income agonist the abuse of giant companies pays less money for their products". Companies gradually have social responsibilities, adhere to legal

norms, laws, and fulfil international standards. Requesting and supporting their business partners to do the same. (Reuter, n.d.)

## Why Education is crucial to achieving SDG 16

An educated society ensures that its citizens are consulted and that its government takes decisions with the interest of children and adults at heart. For example, children and young people must be consulted before a legal law affecting their lives is signed. The likelihood of public free access to information being ensured and of fundamental freedoms being protected is higher in educated societies.

Higher education can play the important role in promoting and enhancing the rule of law and sustainable development, in particular SDG 16. Through strong and innovative collaboration, and dynamics in higher education and between higher education and society in general, it can address the global challenges identified in the United Nations Agenda 2030 and the 17 Sustainable Development Goals and build a more sustainable future together.

In other words, the potential impact and influence that higher education might have on society in addressing sustainable development is strong. They should be seen as essential drivers of education for sustainable development by exploring, testing, developing and communicating conditions for transformative change.

In the current report we are focusing on how Graduate & Professional School (G+PS) (of which the IGC is part of) of Hochschule Bremen can support, and be, strong institution in its country and promote peace and justice. It bases on four main criteria in the case of SDG 16: research on peace and justice topics and international relations, university governance measures, and working with governments as experts or through policy focused research.

Universities are institutions trying to help by playing a social role besides educating people. There are good examples of how universities collaborate with the societies inside the country or sometimes they are doing activities in different countries. For instance:

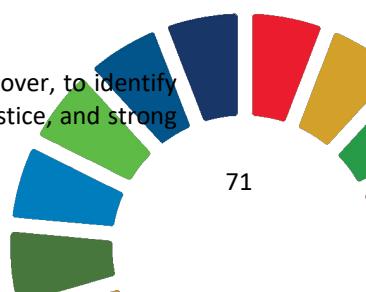
- Queen's University in Belfast represents the first positive Peace Leadership Workshop to explore post-conflict resilience. "Belfast the Irish city, and Cali and Medellin the Colombian cities". The three cities identify ways of solving shared urban problems. The training was part of five days visit to Belfast supported by senior representatives from Cali and Medellin cities to facility at the city level in the north of Ireland to make a strong network. The queen's university collaborated with the institute for economics and peace (IEP). "People might wonder what Belfast has in common with two Colombian cities but we are facing remarkably similar challenges in post-conflict societies. And we are all focused on finding better way to support communities leadership, improve mental health, and give more inclusive access to skills development and jobs "quoted by Ms. Grainia Long the Commissioner for Resilience for the city of Belfast, and co-Chairs the Belfast Climate Commission (Queens delivers first Positive Peace Leadership Workshop, 2019)
- Deakin University is a public university in Victoria Australian started a new program taking an artistic approach to counter terrorism. Financially supported by the Australian government the Deakin business school to exchange ideas, skills and experience about how to use arts and culture as a soft power strategy to prevent extremism and social harmony. Using the potential art and culture to address the problems of social exclusion between youths and communities.
- Bangladesh has diverse culture as well as youths have a lot of potential power needs to be used in the right direction. Using music, arts and community engagement to counter terrorism thoughts is a good approach.

"Like many other countries, Bangladesh is seeing an increase in religious extremism, particularly with socially excluded young adults who are easy targets for extremist groups," Said by Dr Fara Azmat (An associate professor in the department of management in Deakin business school)

The program includes two weeks in Australia, the participants will hear from experts about arts and visit different arts organizations like Outer Urban projects and Western Edge youth arts in Melbourne in addition information cultural exchange and casual powerhouse arts Centre in Sydney through the two weeks they are engage in activities to build their confidence, resilience and self-esteem.

### 16.1 Research on peace and justice

Higher education can contribute as a primary actor in SDG-related research production. Moreover, to identify the challenges of Sustainable Development Goals (SDGs) and particularly in terms of peace, justice, and strong



institutions, universities need to promote academic research and publications. IGC has done appropriate researches on some of the SDG's goals which are as follow:

- Lydia Scholz (Volume Co-editor) (2015): Renewable Energy Law in Europe - Challenges and Perspectives
- Christiane True (2021): "Economic and Legal Issues of Climate Change in the EU", in: European Studies - the review of European Law, Economics and Politics, vol. 8, no. 1, 2021, p. 161 – 176.

Further to above publications, IGC faculty members have organized a conference, "The EU Green Deal and its Implementation", regarding the importance of EU's contribution to mitigating climate change. Due to lack of law study programs at IGC, students and researchers pay less attention to do researches particularly on Goal 16 and its relevant subgoals. Therefore, IGC should then be an important driver to encourage the engagement of students in SDG 16 to conduct related research, by holding conferences or include the SDG 16 in the learning objectives of programs and syllabuses of different area.

### International relation

Internationalization requires adapting the structures and the culture of the university to a more open world, as well as the development of partnerships and agreements with foreign universities, and this can have positive effects on sustainability. Universities that are more attractive to foreign students are more likely to contribute to SDG development from an overall perspective, with a better performance for SDG3 and SDG 17 in particular and consequently on SDG 16, due to the global partnerships achieved through the internationalization of the university. IGC international activities includes international study programs and engagement in Erasmus+ program.

IGC offers two programs strongly related to Europe, the MBA European/Asian Management (EAM) and the Master in European Studies (MES). The IMBA program is a joint Double Degree programs including partners in Valencia (Spain), Paris (France) and Hatfield (UK). The partners' faculty members, deans, program coordinators and program directors meet 1-2 times a year to further develop the program. MES has every year a study visits to Brussels while EAM is going on an immersion trip to Luxembourg. Both activities have been deferred during the pandemic.

In term of partnership with other organizations and universities, IGC has developed a strong cooperation with the European Business School in Luxembourg and the University of the West of England in Bristol. Faculty members from both institutions are regular lecturers in IGC programs. It also set up together with the European Business University in Luxembourg a peer-reviewed journal, the "European Academic Journal" with the first issue planned for 2022.

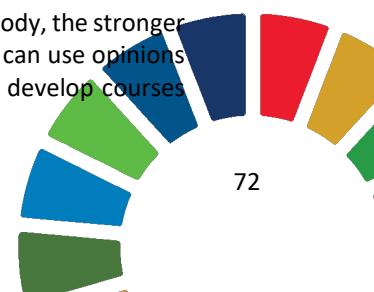
Another program that can play an important role in achieving SDGs goals and in particular goals 4 and 16, is the Erasmus+ program. Erasmus+ aims to support the objectives of the European Education Agendas, to promote the modernisation, internationalisation and qualitative improvement of the higher education sector in Europe, to strengthen international competences, personal development and employability of students, to increase the attractiveness of the EU as a location for study and science and to promote the sustainable development of higher education in third countries contribute.

An important component in the internationalization of universities is the establishment and implementation of joint strategic partnerships and cooperation projects. Erasmus+ offers various instruments and programme lines for this purpose, with which partnerships and cooperation projects can be promoted. All HSB employees have the opportunity to complete short stays at European guest institutions for teaching purposes, further education, training purposes, and to strengthen the internationalisation of the university in all areas of work and to expand the international skills of its employees.

### 16.2 University governance structure

One of the criteria for measuring the achievement of universities to SDG 16 is University governance structure. Universities governance measure look at activities around elected representation of university stakeholders on the governing body as well as policy and processes to involve local non-university stakeholders.

The greater the participation of students and local stakeholders in the university's governance body, the stronger the relationship between the university and its external environment. In this way, universities can use opinions of these institutions to make better decisions for their strategy and management, as well as develop courses directed to real-world collaborative projects for change relative to SDG 16.



IGC seeks to increase collaboration between faculty, staff, students, and industry leaders in decision-making and advancing the university goals through a variety of means. The IGC is governed by the Board of Directors, comprising of the Dean, two Vice Deans and a Managing Director. The board oversees the implementation of the mission and the strategic plan of the unit and puts the measures and instruments to achieve the goals envisaged into action.

In addition to the IGC Board of Directors, the central unit of academic self-administration is the Program Directors' Conference, which meets at least once per semester to discuss all topics related to strategic and academic issues, as well as the general plan of action.

Each program is headed by a Program Director, managed by a Program Coordinator, and supported by an Office Management staff member. The Program Director is in charge of the overall curriculum development and all topics related to academia, including the regular revision of the modules' content and the curriculum as a whole, academic advisory, and the compilation of accreditation reviews. The Program Coordinator, supported by the Office Management staff member, takes on the responsibility for the overall management of the program, including course planning, communication with lecturers and students, student counselling, and all organizational matters with regard to the respective program.

Every academic and administrative employee of the IGC is part of the General Assembly, the third body envisaged in IGC's Statute. The General Assembly is informed on the overall development of the IGC, discusses the plan of action, and the allocation of financial and human resources.

The IGC Industry Board hosts several CEOs from well-known companies in Bremen. Once they are elected, they support IGC activities and give guidance in industry-related matters. The IGC has made a change from a regular meeting once a year towards a direct link to the CEOs to make sure that just companies involved that could support in relevant topics.

Due to the modest size of the academic and administrative staff, coordination paths at the IGC are short, allowing for direct communication and consensus building, and enable the school to be entrepreneurial and efficient in decision-making.

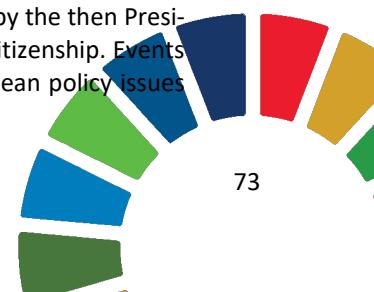
### 16.3 Working with government

Achieving progress on the SDGs will undoubtedly require the involvement of governments to work across policy areas; however, political commitment alone will not suffice without mechanisms to steer their implementation. Universities have the capacity to generate, translate and disseminate knowledge relevant to achieving the SDGs. They can work with policy-makers and other stakeholders to identify policy priorities/problems, assess policy options, implement solutions and evaluate policies. Importantly, they can help translate the SDGs into measurable and country-specific targets by actively matching academic capital with public policy priorities and making knowledge and resources readily available to the government and community.

Supporting and engaging with academia is therefore critical for governments to implement and monitor progress on the SDGs, especially SDG 16. There are many different ways of doing so. For example, governments can involve researchers with specific expertise in policy development, provide them with access to government data and support universities' efforts to educate students on the SDGs.

IGC is collaborated some project with government departments which could pave the way achieving the SDGs approaches to some extent. There is an ongoing cooperation with the Senator for Economics, Labor and Europe (Bremen Federal Ministry for Economics, Labor and Europe). Planned is a joint pilot projects for qualification/transformation together with the newly established agency for further vocational training. Furthermore, a joint training program for "Professionals in AI" is planned as well as a training of works councils, together with the Chamber of Labor and Work and Life at the German Federation of Trade Unions.

IGC also established a good connection with government departments through its study programs, give the Master in European Studies (MES) as an example that has a strong link to the EuropaPunktBremen (EPB), which also belongs to the Senator for Economics, Labor and Europe and is the contact point for all questions relating to the European Union - whether it is about European policy-making, European legislation, living, working, learning and studying in Europe or EU initiatives and funding programs. The EPB, was opened in May 2007 by the then President of the European Commission, Manuel Barroso. It is located in the house of the Bremen citizenship. Events are held regularly at the EPB. The aim is to contribute to the public debate on current European policy issues



with well-founded information and new impulses. MES had some joint lectures and projects with them prior to the pandemic.

## Suggestions to IGC

The International Graduate Centre (IGC) has a great advantage that because of the diversity of students in different stages of study. Students come from different countries with different cultures to study in Germany with a graduation plans to either milt in the German culture and stay by finding a job and being settled down or back to their own countries in both scenarios; it is a good chance to fix and maintain the wrong conception they might have.

Using marketing in social media as a strategy to reach young people over the world has two advantages, first, the university can you peace and justice messages to educate people. "Sharing videos, for example, to promote sustainable sports activities like running around the city event and using a slogan like for example, stopping children abuse". The second advantage is; its benefit for the IGC as they take the initiatives. It will let media share their activities will increase the demand of people to study in an institution take good care of the society. To make a good spread of a message must be very specific and consistently send, for instance, adopt one topic like childhood abuse and organize activities "sport, art or culture" using attractive title preventing children abuse "as a marketing slogan" like football tournament between different universities or drawing workshops or music concert and post those activities in the social media.

For instance, Dubai city does every year a month of sports activities "free of charge for everyone living in Dubai during this event". Called Dubai fitness challenge for its fifth anniversary year in 2021, the challenge was simple: complete 30 minutes of activity each day for 30 days, from 29 October to 27 November. During the month, all the health clubs in the city give free sports sessions "promotion to their GYMs and help the

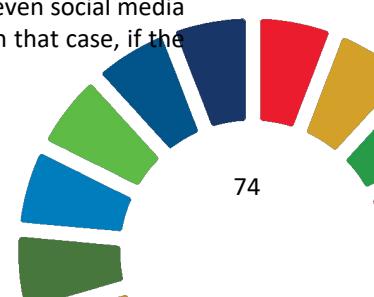
community to be fit" in addition to companies like Nike, Fitbit, Adidas and many more compete together by organizing events with prizes from the companies.

During the month the government organize a free-running challenge the last one was on Friday 26 of November 2021 with a total of 146,000 participants running, walking or jogging on the main road of the city called Sheikh Zayed Road. A massive number of crowed from professional runners to the ones who just got encouraged to do his/her first run. A great feeling and every time people make it a discussion topic even after the event for a couple of days because if you went then differently you will meet by chance someone you know. People take pictures to record these moments and of course, share them on social media; therefore, Dubai gets indirect strong marketing to the city.

The month converted to be a sports festival all and if you there during the month you will feel the good vibes of the people being active around you. Sometimes you will see celebrities beside you doing the exercise or doing the run challenge with you like Well Smith "the famous actor" or John Terry "the former football player". It is a great atmosphere to encourage everyone to do sports and at the same time promote Dubai as a sports city attract young people.

The University of Bremen can do the same in the city "promote the city and promote the university as an international graduate centre promoting social" by selecting every year a theme to support for the example year 2022 the year of supporting children the next year prevent the abuse of childhood and so on". Then by the time the sports industry companies will get attracted to promote their products or maybe making tournaments in different sports but maybe in the beginning start by one sport like running "cheap equipment to start, just secure a route for a safe run with start and finish lines" between students. Moreover, the tickets price goes to support children in the shelters. Collaborating with the police and the city government to secure a running event on weekend morning time easy to convince. The good intention comes from public university to support social activities that will make anyone welcome to make the event done.

Collaborate with private and public institutions especially the United Nations or other universities in the country or out of the border. Probably will be a high impact if the collaboration reaches the developing countries "most of the people in the developing countries not well educated about the global issues, for example, the global warming or how to go against briberies". They are simply have heard from the local media or even social media about that term but not consciously not really aware of the real impact of the global issues. In that case, if the



University of Bremen take the initiative of collaborating with other universities, colleges, or schools in the developing countries, by selecting one of the global issues and try to find solution by interacting, discuss or organize activities. That will put the university in the list of the initiative universities have global social responsibilities.

## Conclusion

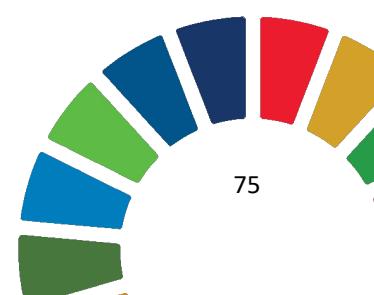
Universities, as significant influencers and agents of change, must play a significant and more prominent role in the change process catalysed by SDGs. The expertise of universities is crucial for the achievement of all these goals. In general, the potential impact and influence that Higher Education might have on society in addressing sustainable development is strong. They should be seen as essential drivers of education for sustainable development by exploring, testing, developing and communicating conditions for transformative change.

Strong and innovative collaboration and partnerships in higher education and between higher education and society at large are essential to address the global challenges identified in the UN Agenda 2030 and the Sustainable Development Goals and to build a more sustainable future together.

In addition, better understanding what fosters but also what hampers sustainable development for all is of crucial importance for the future. IGC need to stimulate students and researchers to undertake the much-needed researches in term of SDGs in particular SDG 16. Researchers need to be granted the autonomy and responsibility to do so and to be provided with the infrastructural and financial means required to meaningfully contribute to finding solutions to challenges related to sustainable development, and, in particular, to issues affecting peace, justice and strong institutions and the rule of law (SDG 16).

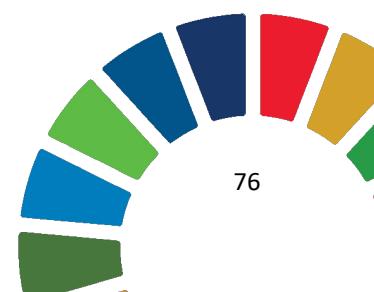
SDGs will not be attained without relation between universities and government. Governments need to be encouraged to be involved and see the importance of higher education so in one hand that they fund it and actually put it forward in their policies, in the other hand they can also use the scholar's viewpoints in their policy making procedure. IGC also required to undertake projects relative to SDG 16 with the Government or state departments.

Finally, in addition to devising and implementing projects and initiatives, it is necessary to thoroughly evaluate the level of SDGs especially SDG 16 implementation in IGC own activities and initiatives to formulate recommendations for further actions to support the 2030 Agenda. It is also essential that IGC map the coverage of SDGs in a particular platform (e.g., through its website) and publish the results to professors, researchers, and students to enhance their working knowledge of SDGs and the underlying principles and use that knowledge in their future careers and personal lives.



## References:

- Deakin. (2017, October 18). new-program-taking-an-artistic-approach-to-counter-terrorism. Retrieved from www.deakin.edu.au: <https://www.deakin.edu.au/about-deakin/news-and-media-releases/articles/new-program-taking-an-artistic-approach-to-counter-terrorism>
- dubaifitnesschallenge. (n.d.). about. Retrieved from dubaifitnesschallenge: <https://www.dubaifitnesschallenge.com/about-us/>
- Higher education - Erasmus+ (erasmusplus.de)
- <https://doi.org/10.1016/j.jclepro.2019.05.309>
- <https://en.unesco.org/themes/education/sdgs/material/16>
- <https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-018-0318-9>
- <https://www.hs-bremen.de/informationen-fuer/beschaeftigte/fort-und-weiterbildung-bildungszeit/erasmus-hochschulpersonal/>
- <https://www.iau-aiu.net/Higher-Education-engages-with-SDG-16-Peace-Justice-and-Strong-Institutions-1314>
- <https://www.qub.ac.uk/News/Allnews/2019/QueensdeliversfirstPositivePeaceLeadershipWorkshoptoexplorepost-conflict-resilience.html>
- <https://www.sdg16hub.org/landing-page/academia>
- internationaldayofpeace. (n.d.). Colleges and Universities. Retrieved from international day of peace: <https://internationaldayofpeace.org/get-involved/colleges-and-universities/>
- peacedayphilly. (2016, May 1). WCYD-Colleges-Universitie. Retrieved from www.peacedayphilly.org: <http://www.peace-dayphilly.org/wp-content/uploads/2016/05/WCYD-Colleges-Universities.pdf>
- Queens delivers first Positive Peace Leadership Workshop. (2019, May 17). Retrieved from www.qub.ac.uk:
- Reuter, D. K. (n.d.). ECG-promotes-SDGs. Retrieved from ecogood.org: <https://www.ecogood.org/wp-content/uploads/2021/03/ECG-promotes-SDGs-210225-web-1>
- Roadmap | A call to action on SDG 16 targets and indicators
- SDG Indicators (un.org)





## SDG 17: Partnerships for the Goals

**SONAL RATHOD**

*"Strengthen the means of implementation and revitalize the global partnership for sustainable development".*

Goal 17 Lifelong learning builds the capacity to understand and promote sustainable development policies and practices.

The Ted Rogers School of Management is investigating whether public-private partnerships benefit businesses. According to the findings, national culture infiltrates organizations such as public-private partnerships, affecting the enterprises that participate in those partnerships. In 2018, the Wellington School of Business and Governance in Vanuatu introduced a new multilingual bachelor's degree in Tourism and Hospitality Management, the outcome of collaboration between the two schools.

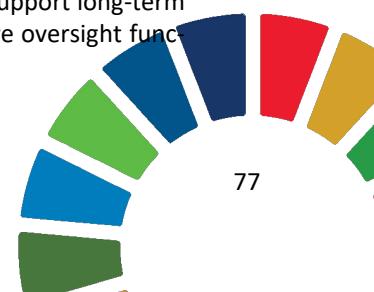
This is the challenge that will bring all of our other 16 goals together. A new global collaboration is required to achieve an ambitious and integrated global development agenda, which involves funding development, networking through information systems networks, increasing international trade flows, and improving data gathering and analysis. Even as the world comes together for global development – official development assistance was USD 153 billion in 2018, down 0.6 percent in real terms from 2016 – just five OECD-DAC countries met the UN target of providing official development assistance equal to 0.7 percent of their gross national income in 2018. People all over the world are becoming more connected as a result of physical and digital networks – more than half of the world's population (over 4 billion users) is now online, with the most recent data showcasing that nearly a quarter of a billion newbies joined the internet for the first time in 2017.

### What is the significance of this?

The partnership between governments, the commercial sector, and civil society is required for a successful sustainable development strategy. These 17 lofty goals, as well as the complicated difficulties they strive to address, don't fit neatly into neatly defined industries or across national lines. Climate change is a worldwide issue, and corporations are equally as vital as governments in combating it. Unlike universities and scientists, and especially without knowledge sharing across continents, innovation is impossible. Gender equality is about communities as much as it is about legal tools. Our epidemics, like their remedies, are worldwide. At the global, regional, national, and local levels, inclusive partnerships based on a shared vision and shared goals that prioritize people and the environment are required.

### What are our options for dealing with this?

To achieve sustainable development goals, immediate action is required to mobilize, channel, or unleash the wider implications of billions of dollars in private resources. In essential industries, particularly developing countries, lengthy investments, particularly foreign direct investment, are required. Sustainable energy, infrastructure, and transportation, as well as telecommunication technologies, are all examples. The government sector will need to establish a clear course. Frameworks for review and monitoring, as well as legislation and incentives systems that enable such investments, must be retooled in order to attract investments and support long-term development. National oversight institutions, such as supreme audit institutions and legislative oversight functions, should be enhanced.



There are a total of 19 targets of partnership with goals from finance, technology, increasing capacity, trade, problems with the system. They are focusing on mainly the topics below

## Finance

- To boost domestic capability for tax and other revenue collection, strengthen domestic resource mobilization, especially through international assistance to poor nations.
- Developed countries should fully fulfill their official development aid pledges, including several developed countries' promises to provide 0.7 percent of ODA/GNI to developing countries and 0.15 to 0.20 percent of ODA/GNI to LDCs. Providers of ODA are encouraged to consider setting a goal of providing at least 0.20 percent of ODA/GNI to LDCs.
- Increase the amount of money available to developing countries from a variety of sources.

## Technology

- Improve North-South, South-South, and triangular regional and international cooperation on and access to science, technology, and innovation, as well as knowledge sharing on mutually agreed terms, including through better coordination among existing mechanisms, particularly at the UN level, and through a global technology facilitation mechanism.
- Encourage the development, transfer, dissemination, and dissemination of environmentally sound technology in developing countries on favorable conditions, including concessional and favorable terms, as mutually agreed upon.
- By 2017, fully operationalize the technology bank as well as the science, technology, and innovation capacity-building mechanism for LDCs, and increase the utilization of enabling technology, particularly information and communications technology.

## Increasing capacity

- Increase international support for effective and targeted storage in poor countries, especially through North-South, South-South, and triangular cooperation, to support national strategies to achieve all of the Sustainable Development Goals.

## Trade

- Under the World Trade Organization, promote a worldwide, rules-based, open, non-discriminatory, and equitable multilateral trade system, especially through concluding discussions under the Doha Development Agenda.
- Boost the exports of developing countries significantly, with the aim of doubling the percentage of world exports held by the least developed countries by 2020.

Realize duty-free and quota-free market access for all least developed countries on a long-term basis, in accordance with World Trade Organization decisions, including by ensuring that preferential regulations of origin for imported goods from least developed countries are transparent and simple, and contribute to market access facilitation.

## Problems with the system

### 1. Coherence in policy and institutions

- Improve global macroeconomic stability, notably by coordinating and cohering policies.
- Improve policy coherence for long-term development
- Respect each country's policy space and leadership in developing and implementing policies to eradicate poverty and promote long-term development.

### 2. Multi-stakeholder collaborations

- Strengthen the global partnership for sustainable development, which is reinforced by multi-stakeholder partnerships that mobilize and exchange knowledge, skills, technology, and financial resources to help all countries, particularly poor countries, accomplish their sustainable development goals.



- Encourage and support effective public, public-private, and civil society partnerships, based on partnership experience and resource allocation methodologies.

### 3. Monitoring, data, and accountability

- Increase the availability of high-quality, timely, and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location, and other characteristics relevant in national contexts to developing countries, including least developed countries and Small Island developing States, by 2020.
- By 2030, improve on existing initiatives to produce measures of progress on sustainable development that aren't based on GDP and boost developing nations' statistical capacity-building.

#### Foreign direct investment

Private investment capital flows in an economy are referred to as foreign direct investment (FDI). It is the total of equity capital, earnings reinvestment, and other capital. This series is segmented by GDP and displays net outflows of investment from the reporting economy to the rest of the globe.

By 2030, the goal is to mobilize extra financial resources for developing countries.

This indicator does not have a specified goal level of financial resource mobilization.

Internationalization necessitates adjusting the university's institutions and culture to a more open world, as well as the formation of collaborations and contracts with foreign universities, all of which can contribute to long-term survival. Universities that are more appealing to international students are more important in contributing to SDG development in general, with higher results for SDG 3 and SDG 17, thanks to the global partnerships formed as a result of the university's internationalization. International study programs and participation in the Erasmus+ program are among the IGC's international activities.

Internationalization necessitates the adaptation of the university's institutions and culture to a more open world, as well as the formation of collaborations and partnerships with foreign universities, all of which can contribute to long-term survival. Universities that are more appealing to foreign students are more likely to lead to SDG development in general, with greater performance for SDG 3 and SDG 17, global partnerships are established through the university's internationalization. Foreign study programs and participation in the Erasmus+ program are two of IGC's international efforts.

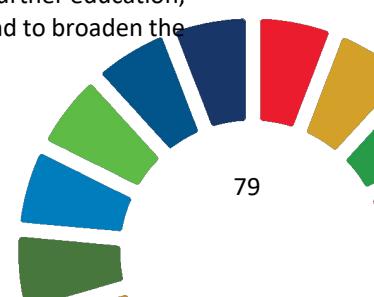
IGC offers two programs strongly related to Europe, the MBA European/Asian Management (EAM) and the Master in European Studies (MES). The IMBA program is a joint Double Degree program including partners in Valencia (Spain), Paris (France), and Hatfield (UK). The partners' faculty members, deans, program coordinators, and program directors meet 1-2 times a year to further develop the program. MES has every year study visits to Brussels while EAM is going on an immersion trip to Luxembourg. Both activities have been deferred during the pandemic.

IGC has created strong collaborations with various organizations and universities, including the European Business School in Luxembourg and the University of the West of England in Bristol. Regular teachers in IGC programs come from both institutions' faculties. It has established a peer-reviewed publication, the "European Academic Journal," in collaboration with the European Business University in Luxembourg, with the first issue scheduled for 2022.

The Erasmus+ program is another program that has the potential to help achieve the SDGs, particularly goals 4 and 16, and 17 goals.

Erasmus+ aims to support the European Education Agendas' goals by promoting the transformation, internationalization, and qualitative improvement of Europe's higher education sector, strengthening international skills and knowledge, personal development, and employability of students, increasing the EU's attractiveness as a study and research destination and promoting the sustainable implementation of high education in third countries.

Establishing and implementing collaborative strategic partnerships and cooperative projects is an important part of universities' internationalization. For this reason, Erasmus+ provides a variety of instruments and program lines via which partnerships and cooperative projects can be encouraged. All HSB employees have the opportunity to participate in quick trips at European guest institutions for the purposes of teaching, further education, and training, as well as to strengthen the university's internationalization in all areas of work and to broaden the international skills of its employees.



## 17.6 Knowledge sharing and cooperation for access to science, technology, and innovation

Technology is required for knowledge sharing.

Technology plays a critical transformational role in transforming company culture to information sharing by facilitating sharing and collaboration among coworkers all over the world. The correct sharing knowledge platform allows users to access information at any time and from any location, as well as automate and standardize knowledge management. However, there are various obstacles to overcome when putting this system in place. The most significant obstacle is establishing a culture of information sharing and collaboration. As a result, a knowledge-sharing tool must be capable of supporting all phases of the knowledge life cycle.

The knowledge life cycle defines the building, preserving, pooling, and extending of knowledge and is primarily concerned with data organization. In this case, technology plays a critical role in assisting this learning community. Communication, conversations, knowledge sharing, and much more may all be streamlined with the use of technology.

A knowledge life cycle aids in the development of processes and the promotion of knowledge transfer within an organization.

Enhance North-South, South-South, and triangular 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.

Knowledge sharing is the most important part of any institute. IGC shares knowledge through many activities in the classroom like doing many case studies, paper presentations, current event discussions and projects, and Thesis. All these are very important for increasing the knowledge of the student. HSB applied science is working on science and technology and innovation so that students can learn more about technology. Still, on the website, the data is not provided.

IGC currently arranging virtual classes for students so that they could not fail to attend classes. It becomes very easy for students to attend classes across the globe. It is one of the best examples that IGC and HSB currently do for students for the knowledge sharing with using technologies and the whole world is using this technique to share the data, knowledge.

### Recommendations

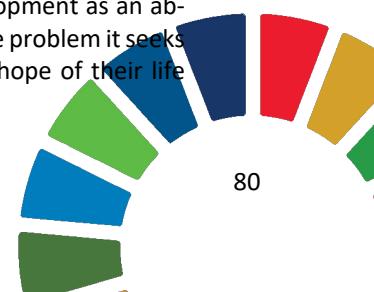
IGC should look more into knowledge sharing techniques because a new updated syllabus, as well as an updated version of tricks and techniques, are required like more technical aspects in the management field so that students from management could also have the required knowledge of technology and also sharing of knowledge from the different platform should be involved.

Economic growth will be at faster pace if all the new advanced technology will be involved in the education system as well.

## 17.7 Promote sustainable technologies to developing countries

Promote the development, transfer, dissemination, and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.

Sustainable development is a phrase we hear from time to time to emphasize our ideal picture of the future — one that is free of all of the difficulties that humanity faces today. Natural resources are being depleted. Inequality between men and women. A wealth distribution that is unequal. These are just a few, but they correctly depict the problems we are attempting to resolve. However, many people regard Sustainable Development as an abstract, unachievable concept, owing to the term's all-encompassing nature and the gravity of the problem it seeks to address. They often consider the shocking images of over-polluted oceans or the loss of hope of their life situation as a result of being born female.



IGC offers different courses that are mostly focused on sustainability programs to learn about sustainability

- Sustainability course offerings 9 MBA and further education Master programs at G+PS, plus 15 consecutive masters at other faculties.
- A number of graduate courses offered that are sustainability-focused are International Degree Programme Sustainable Leisure and Tourism Development M.A.
- All 5 faculties + Graduate & Professional School
- Name of the sustainability-focused graduate-level degree program:
- International Degree Programme Sustainable Leisure and Tourism Development M.A.,
- Sustainable Energy and Environment Systems M. Eng.
- Civil and Environmental Engineering M.Sc. (Infrastructure)

## 17.8 Strengthen the science, technology, and innovation capacity for least-developed countries

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.

The proportion of individuals using the Internet.

Internet users are individuals who have used the Internet (from any location) in the last 3 months. The Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc.

The goal is fully operationalized the technology bank and science, technology, and innovation capacity-building mechanism for least developed countries, in particular information and communications technology.

For now, IGC doesn't have any technical innovation in its management field but in the future, I am hoping that new technologies and innovative ideas would help more and more people in the future to understand the technology and will ease the rest of the process from admission to everything so that it will help the country to work remote-friendly as I saw many countries are still lacking in the development. Today everything is remote-friendly so new innovative ideas should come up so that students also learn and apply them to their lives.

## Conclusion

The Sustainable Development Goals (SDGs) are a global initiative aimed at achieving a socially equitable and environmentally sustainable future in which no one is left behind. The COVID-19 pandemic has demonstrated, with disastrous results, what a future threatened by new pandemics or climate and ecological disasters might look like.

In a world where nature-society imbalances can jeopardize economic and social stability, sustainable development is primarily about people, their well-being, and equity in their interpersonal interactions.

Government and all people should work to achieve the SDG goals for a better future.

## References:

1. <https://sdg-tracker.org/global-partnerships>
2. <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-17>
3. Higher education - Erasmus+ ([erasmusplus.de](http://erasmusplus.de))
4. <https://www.hs-bremen.de/informationen-fuer/beschaeftigte/fort-und-weiterbildung-bildungszeit/erasmus-hochschulpersonal/>

