# ANALYSIS OF UNIVERSITY OF GALWAY'S RESEARCH OUTPUT ALIGNED TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGS) 2024



# Planning & Institutional Research Office May 2025

SDG 1: No Poverty

SDG 2: Zero Hunger

SDG 3: Good Health & Wellbeing

**SDG 4:** Quality Education **SDG 5:** Gender Equality

SDG 6: Clean Water & Sanitation SDG 7: Affordable & Clean Energy SDG 8: Decent Work & Economic Growth Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10

Sustainable Cities & Communities: SDG 11

Responsible Consumption & Production: **SDG 12** 

Climate Action: **SDG 13** Life Below Water: **SDG 14** 

Life on Land: SDG 15

#### Analysis of University of Galway's SDG Research Output 2019-2023

**Purpose**: The purpose of this paper is to analyse the distribution of research output that University of Galway is contributing to across the 16 of the 17 UN Sustainable Development Goals (SDGs). Using SciVal data to assess the quality and impact of University of Galway's research towards the UN SDGs and to help highlight our research strengths and opportunities for growth across the University. It can also serve as a tool to help find current and potential collaboration in multi-disciplinary research areas.



SciVal (the interface to the Scopus database) introduced a mapping of all publications on its database to the SDGs in 2020, using a key phrase search analysis mapping key phrases to each of 16 the 17 UN SDGs (no SDG 17). It updated their methodology in 2021 introducing a different methodology "Machine Learning" to supplement their search query terms. Therefore, the data in this report is not directly comparable with our 2020 report given the different mapping methodology.

16 of these United Nations (UN) SDGs can be viewed as Research areas within SciVal and can be broken down by country and by institution. Each of the SDGs can be individually analysed further in terms of keywords, key topics, key authors and key collaborations.

We would highlight that this report is not the complete reflection of University of Galway's contribution to the UN SDGs, as much of our research, particularly in the Arts & Humanities and Social Sciences is not captured in the Scopus database. Hence this is a snapshot of only a section of it.

Note Scopus is Elsevier's abstract and citation database which covers 27,950 active titles from approximately 7k publishers, of which 292k are stand-alone books, 148k conference events and 26,591 are peer-reviewed journals in top-level subject fields: life sciences, social sciences, physical sciences and health sciences)

SDG 1: No Poverty

SDG 2: Zero Hunger

SDG 3: Good Health & Wellbeing

SDG 4: Quality Education

**SDG 5:** Gender Equality

**SDG 6:** Clean Water & Sanitation

SDG 7: Affordable & Clean Energy
SDG 8: Decent Work & Economic Growth

Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10

Sustainable Cities & Communities: SDG 11

Responsible Consumption & Production: SDG 12

Climate Action: SDG 13 Life Below Water: SDG 14

Life on Land: SDG 15

## Contents

1	Intr	oduction:	4
2	Uni	versity of Galway publications per SDG 2019-2023	4
3	Pro	portion of Output across the SDGS	9
4	Don	nestic comparison of Research output per SDG	.11
5	Asse	essing Impact per SDGs	.14
į	5.1	Impact per SDGs' in University of Galway	14
į	5.2	Assessing Impact per SDG in University of Galway, Ireland and the Globe	15
į	5.3	FWCI per Irish University	16
6	Per	centage Highly Cited Papers per SDG, University of Galway	.17
(	5.1	University of Galway's output and impact per SDG	18
7	Sun	nmary	.19

**SDG 1:** No Poverty **SDG 2:** Zero Hunger

SDG 3: Good Health & Wellbeing

SDG 4: Quality Education

**SDG 5:** Gender Equality

SDG 6: Clean Water & Sanitation SDG 7: Affordable & Clean Energy

SDG 8: Decent Work & Economic Growth

Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10

Sustainable Cities & Communities: **SDG 11**Responsible Consumption & Production: **SDG 12** 

Climate Action: **SDG 13** 

Life Below Water: **SDG 14** Life on Land: **SDG 15** 

#### 1 Introduction:

The data in this report summarises University of Galway's research output across the 16 UN SDGs and compares it at an Irish level and at a global level, to identify which SDGs University of Galway is performing well in and which present an opportunity for further development.

In the analysis below the number of Publications are examined to indicate which UN SDGs University of Galway is contributing to, and how it compares on a national and global level.

The Field Weighted Citation Ratio (FWCI) and the % of papers in the top 10% most cited per SDG is also investigated (to highlight which SDGs University of Galway's research is being heavily cited in) as a measure of the impact of our research.

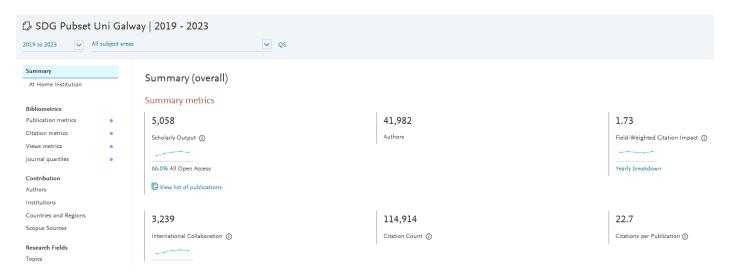
# 2 University of Galway publications per SDG 2019-2023

Over the 5-year period 2019-2023, per SciVal, University of Galway published **5058** (up from 4,490 papers in 2018-2022) related to the UN SDGs, as detailed in Graph 1 and Table 1 below. This is an increase of 51% from 2019 (an average of 11% per annum over the 5 years) and this growth has accelerated in the past three years.

These SDG related publications represented **41.7%** of all University of Galway's publications over the same 5-year period, and 42.6% of the university's total output in 2023.

Also of note is the higher FWCI of SDG related publications – at **1.73** compared to the University's FWCI of 1.58 for the same period 2019-2023.

Graph 1: University of Galway - SDG related publications:

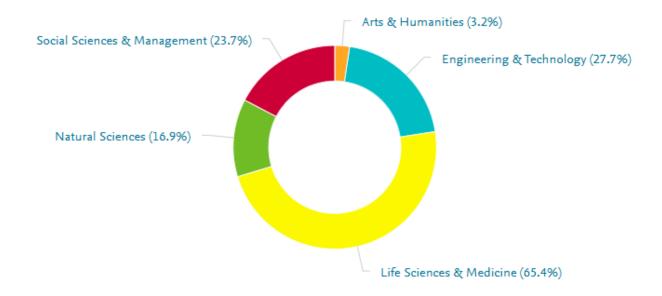


SDG 2: Zero Hunger
SDG 3: Good Health & Wellbeing
SDG 4: Quality Education
SDG 5: Gender Equality
SDG 6: Clean Water & Sanitation
SDG 7: Affordable & Clean Energy
SDG 8: Decent Work & Economic Growth

SDG 1: No Poverty

Reduced Inequalities: SDG 10
Sustainable Cities & Communities: SDG 11
Responsible Consumption & Production: SDG 12
Climate Action: SDG 13
Life Below Water: SDG 14
Life on Land: SDG 15

Industry, Innovation & Infrastructure: SDG 9



Coronary Artery Obstruction
Qualitative Research Wastewater Treatment
Coronary Artery Disease
Coronary Artery Disease
Thrombectomy Ireland Fractional Flow Reserve
Percutaneous Aortic Valve Replacement
Ticagrelor Drug-Eluting Stent Coronavirinae
Rapamycin Processor Coronavirus 2

Secondary Prevention
Cardiovascular Disease
Human Rights
Systematic Review Antiplatelet Drug
Revascularization Everolimus
Gestational Diabetes
Thrombectomy Ireland Fractional Flow Reserve
Percutaneous Aortic Valve Replacement
Ticagrelor Drug-Eluting Stent Coronavirinae
Antiplatelet
Percutaneous Coronavirus 2

Malignant Neoplasm Aortic Valve Stenosis Brain Ischemia
Aortic Stenosis Anaerobic Digestion Biochemical Reactor

SDG 1: No Poverty SDG 2: Zero Hunger

SDG 3: Good Health & Wellbeing

**SDG 4:** Quality Education **SDG 5:** Gender Equality

SDG 6: Clean Water & Sanitation SDG 7: Affordable & Clean Energy SDG 8: Decent Work & Economic Growth Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10

Sustainable Cities & Communities: **SDG 11**Responsible Consumption & Production: **SDG 12** 

Climate Action: **SDG 13** Life Below Water: **SDG 14** 

Life on Land: **SDG 15**Peace, Justice & Strong Institutions: **SDG 16** 

Table 1: University of Galway – Overall v's SDG related publications 2019-2023:

No of Pubs	2019	2020	2021	2022	2023	2019- 2023	CAGR* 2019-20
All Uni Galway Pubs	2025	2372	2609	2595	2529	12130	6%
SDG related Pubs	713	965	1124	1178	1078	5058	11%
% of Univ pubs on SDGs	35.2%	40.7%	43.1%	45.4%	42.6%	41.7%	
Citations							
All Uni Galway Pubs	51481	66174	50515	39275	21755	229200	
SDG related Pubs	23543	36888	26933	16784	10766	114914	
% of Univ cites on SDGs	45.7%	55.7%	53.3%	42.7%	49.5%	50.1%	
FWCI							
All Uni Galway Pubs	1.36	1.53	1.5	1.79	1.66	1.58	
SDG related Pubs	1.69	1.84	1.71	1.6	1.84	1.73	

<sup>\*</sup>Compound Annual Growth Rate – average annualised rate of growth.

**SDG 1:** No Poverty **SDG 2:** Zero Hunger

SDG 3: Good Health & Wellbeing

**SDG 4:** Quality Education **SDG 5:** Gender Equality

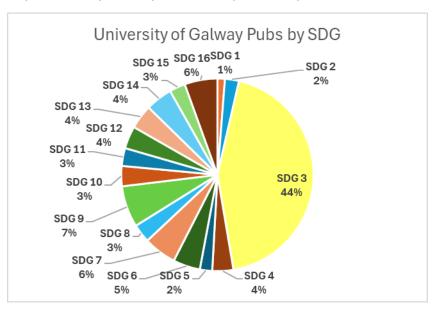
SDG 6: Clean Water & Sanitation SDG 7: Affordable & Clean Energy SDG 8: Decent Work & Economic Growth Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10 Sustainable Cities & Communities: SDG 11 Responsible Consumption & Production: SDG 12

Climate Action: **SDG 13** Life Below Water: **SDG 14** Life on Land: **SDG 15** 

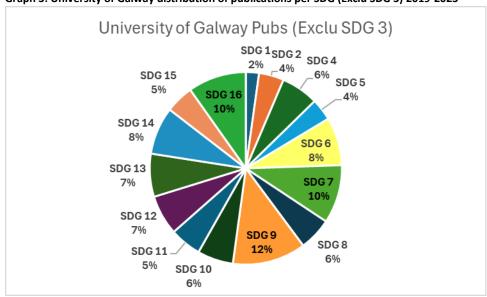
**Graph 2** below details the distribution of University of Galway's SDG related publications on Scopus across all SDGs 1-16. It demonstrates that 44% of University of Galway's SDG related publications are in SDG 3 (45% in 2018-2022) ahead of the global percentage (38.8%).

Graph 2: University of Galway distribution of publications per SDG 2019-2023



Excluding SDG 3, **Graph 3** below demonstrates the other main SDGs University of Galway publish in remain **SDG 7**, **SDG 16**, **SDG 9** and **SDG 14**.

Graph 3: University of Galway distribution of publications per SDG (Exclu SDG 3) 2019-2023



SDG 1: No Poverty

SDG 2: Zero Hunger

SDG 3: Good Health & Wellbeing

SDG 4: Quality Education

**SDG 5:** Gender Equality

**SDG 6:** Clean Water & Sanitation **SDG 7:** Affordable & Clean Energy

SDG 8: Decent Work & Economic Growth

Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10

Sustainable Cities & Communities: SDG 11

Responsible Consumption & Production: **SDG 12** 

Climate Action: **SDG 13** Life Below Water: **SDG 14** 

Life on Land: SDG 15

**Table 2** below details the data behind the above pie charts – the <u>number of publications per SDG from 2019 to 2023</u>. The final columns also detail the five-year growth level of these publications to 2023, compared to the previous five-year period to 2022, to highlight which SDGs we are increasing our focus on, and which are declining.

Table 2: Publications per SDG - University of Galway 2019-2023

Pubs	2019	2020	2021	2022	2023	Overall	2019-2023	2018-2022
SDG 3	397	591	723	687	569	2967	9.4%	18%
SDG 9	54	62	91	115	136	458	26.0%	21%
SDG 7	69	60	74	87	96	386	8.6%	9%
SDG 16	55	68	86	76	80	365	9.8%	9%
SDG 6	41	58	68	62	74	300	15.9%	7%
SDG 14	44	61	55	62	74	296	13.9%	8%
SDG 13	31	41	57	69	70	268	22.6%	17%
SDG 12	36	39	48	58	43	249	4.5%	27%
SDG 4	36	39	48	58	43	233	4.5%	4%
SDG 10	36	39	48	58	43	224	4.5%	31%
SDG 8	31	41	57	69	70	205	22.6%	20%
SDG 11	27	44	35	54	37	197	8.2%	17%
SDG 15	19	35	31	45	46	176	24.7%	24%
SDG 2	22	29	30	37	38	156	14.6%	17%
SDG 5	23	16	27	43	28	137	5.0%	20%
SDG 1	15	25	13	18	11	82	-7.5%	14%

<sup>\*</sup>Compound Annual Growth Rate = the average annualised rate of growth

University of Galway's top output, by no. of publications, for the past 5 years is **SDG 3**: Good Health & Wellbeing, followed by **SDG7**: Affordable & Clean Energy, **SDG 16**: Peace, Justice & Strong Institutions, **SDG 9**: Industry, Innovation & Infrastructure and **SDG 6**: Clean Water & Sanitation.

University of Galway have the highest no. of outputs in **SDG 3**, and this is common amongst most universities. Also, as you would expect, it had grown strongly since 2019 (18% in last year's report) though this growth has slowed in 2023, with an overall 5-year CAGR now at 9.4%.

The other SDGs where we have demonstrated a high growth rate and a good presence in are **SDG 9** with a CAGR of 26%, **SDG 13** (CAGR 22.6%) and **SDG 15** (24.7%), all surpassing global increases in these SDGs.

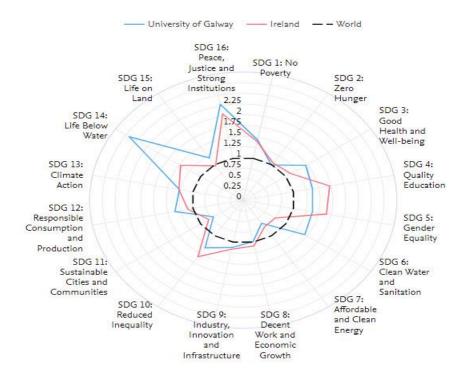
What is also interesting is the differences in growth rates between the 2 periods, demonstrating those SDGs which have grown significantly in recent years. As mentioned, SDG 3 was understandably one of these recent rapid growth SDGs, albeit lower growth in this period, but also **SDG SDG 6, SDG 14, SDG 13, SDG 15,** have all shown accelerated increases in the number of publications by University of Galway in recent years.

<sup>\*\*</sup> Note the data above contains multiple counts of the same paper where it is aligned to multiple SDGs. The distinct count of all papers is 5,058.

# 3 Proportion of Output across the SDGS

**Graphs 4a, 4b & 4c** are comparisons of % of University of Galway output per SDG compared to Ireland and Global averages.

Graph 4a: Relative output per SDG, University of Galway, Ireland and the World:



Graph 4a demonstrates University of Galway's share of publications in each SDG relative to the Irish and Worldwide share of publications in each SDG. A value of 1 indicates our output in that SDG is in line with global activity.

The above graph demonstrates that University of Galway has relatively higher activity than the Worldwide and Irish average in SDG 3, SDG 6, SDG 12, SDG 14, SDG 15, SDG 16.

We are slightly below the Irish average in SDGs 2, 4, 5, 7, 8, 9, 10 and 11 and in line with the Irish average for SDG 13.

SDG 8: Decent Work & Economic Growth

SDG 1: No Poverty

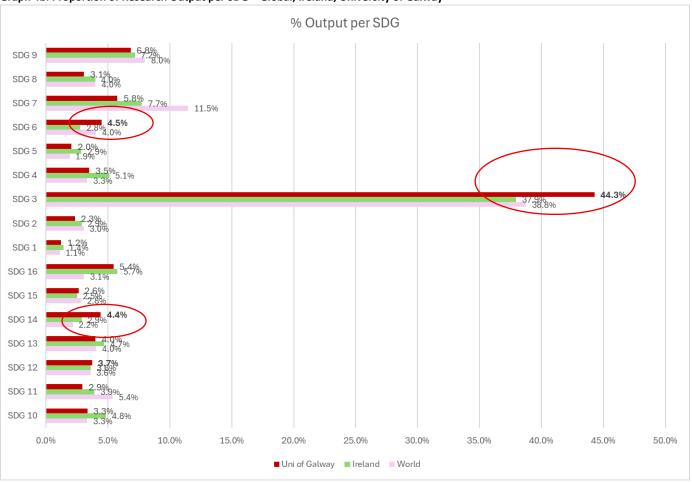
Industry, Innovation & Infrastructure: SDG 9

Sustainable Cities & Communities: **SDG 11**Responsible Consumption & Production: **SDG 12** 

Reduced Inequalities: SDG 10

Climate Action: SDG 13

Graph 4b: Proportion of Research Output per SDG – Global, Ireland, University of Galway



Graph 4b demonstrates the global dominance of research within SDG 3. Proportionally, University of Galway's SDG 3 output at 44.3% is ahead of Ireland (37.9%) and the global percentage (38.8%).

The Other SDGs where proportionally University of Galway is ahead of Ireland/Global are SDG 14, SDG 12 and SDG 6

SDG 3: Good Health & Wellbeing

**SDG 4:** Quality Education **SDG 5:** Gender Equality

SDG 6: Clean Water & Sanitation SDG 7: Affordable & Clean Energy SDG 8: Decent Work & Economic Growth Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10 Sustainable Cities & Communities: SDG 11 Responsible Consumption & Production: SDG 12

> Climate Action: **SDG 13** Life Below Water: **SDG 14** Life on Land: **SDG 15**



Graph 4c: Proportion of Research Output per SDG exclu SDG 3 - Global, Ireland, University of Galway

Graph 4c demonstrates that University of Galway has a proportionally higher than the Irish and global average output (in addition to SDG 3) in:

- SDG 14: Life Below Water (by a considerable proportion)
- SDG 16: Peace, Justice & Strong Institutions (Ireland is also ahead of the global average for this SDG)
- SDG 6: Clean Water & Sanitation (we are quite a bit ahead of the Ireland average)
- SDG 12: Responsible Consumption and Production

Graph 4c also demonstrates that Ireland has proportionally more output than the global average in SDG 1, SDG 4, SDG 5, SDG 10 and SDG 13

Ireland has a lower proportion of its research output aimed at SDG 7, SDG 11, SDG 15 and SDG 6 than the global average.

# Domestic comparison of Research output per SDG

SDG 1: No Poverty SDG 2: Zero Hunger

SDG 3: Good Health & Wellbeing

SDG 4: Quality Education SDG 5: Gender Equality

SDG 6: Clean Water & Sanitation

SDG 7: Affordable & Clean Energy

SDG 8: Decent Work & Economic Growth

Reduced Inequalities: SDG 10 Sustainable Cities & Communities: SDG 11 Responsible Consumption & Production: SDG 12

Climate Action: SDG 13 Life Below Water: SDG 14

Industry, Innovation & Infrastructure: SDG 9

Life on Land: SDG 15 Peace, Justice & Strong Institutions: **SDG 16**  **Table 3** SDG related publications for University of Galway compared to Ireland. It demonstrates that at 42% University of Galway has a higher proportion of its publications related to the SDGs compared to the 36% average for Ireland.

Table 3: Portion of all publications related to the SDGs University of Galway & Ireland 2019-2023:

		Uni of	% of
2019-2023	Ireland	Galway	Ireland
SDG related Pubs	37288	5058	14%
All Pubs	102819	12130	
% SDG Related	36%	<b>42</b> %	

**Table 4** details the research output growth per SDG for all of Ireland and for University of Galway, to highlight those SDGs where University of Galway is growing faster than the average for Ireland:

Table 4: Publications per SDG for University of Galway & Ireland: 2019-2023

	CAGR 20	019-2023			
		Univ of	% of		Uni
Pubs 2019-23	Ireland	Galway	Ireland	Ireland	Galway
SDG 1	672	82	12.2%	21.7%	-5.9%
SDG 2	1380	156	11.3%	16.6%	16.0%
SDG 3	18217	2967	16.3%	12.2%	7.7%
SDG 4	2455	233	9.5%	15.7%	18.0%
SDG 5	1376	137	10.0%	14.5%	6.0%
SDG 6	1330	300	22.6%	12.5%	14.7%
SDG 7	3722	386	10.4%	7.0%	7.6%
SDG 8	1906	205	10.8%	6.8%	13.3%
SDG 9	3447	458	13.3%	16.0%	22.8%
SDG 10	2320	224	9.7%	11.5%	6.9%
SDG 11	1882	197	10.5%	12.4%	5.9%
SDG 12	1729	249	14.4%	15.7%	13.0%
SDG 13	2259	268	11.9%	20.0%	22.7%
SDG 14	1381	296	21.4%	7.1%	13.8%
SDG 15	1202	176	14.6%	12.1%	25.7%
SDG 16	2761	365	13.2%	12.9%	10.5%

The table above highlights that University of Galway is growing faster in terms of volume of publications than Ireland in **SDGs 4, 6, 7, 8,9 13, 14 & 15 but** showing lower growth in other SDGs.

Graph 5: % Research Output per SDG - University of Galway & Ireland

SDG 1: No Poverty

SDG 2: Zero Hunger

SDG 3: Good Health & Wellbeing

SDG 4: Quality Education

**SDG 5:** Gender Equality

**SDG 6:** Clean Water & Sanitation

SDG 7: Affordable & Clean Energy SDG 8: Decent Work & Economic Growth Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: **SDG 10**Sustainable Cities & Communities: **SDG 11**Responsible Consumption & Production: **SDG 12** 

esponsible Consumption & Production: **SDG 12**Climate Action: **SDG 13**Life Below Water: **SDG 14** 

Life on Land: **SDG 15**Peace, Justice & Strong Institutions: **SDG 16** 



The most common SDG'S in Ireland (exclu SDG 3) are **SDG 7**: Affordable & Clean Energy, **SDG 9**: Industry, Innovation & infrastructure, **SDG 13**: Climate Action and **SDG 16**: Peace, Justice & Strong Institutions.

SDG 1: No Poverty

SDG 2: Zero Hunger

SDG 3: Good Health & Wellbeing

SDG 4: Quality Education

**SDG 5:** Gender Equality

**SDG 6:** Clean Water & Sanitation

**SDG 7**: Affordable & Clean Energy **SDG 8**: Decent Work & Economic Growth

Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10

Sustainable Cities & Communities: **SDG 11** 

Responsible Consumption & Production: **SDG 12** 

Climate Action: **SDG 13** Life Below Water: **SDG 14** 

Life on Land: **SDG 15** 

# 5 Assessing Impact per SDGs

#### 5.1 Impact per SDGs in University of Galway

**Table 5** details the **FWCI** of each **SDG** for **University** of **Galway**. Please note any SDGs with less than 100 publications are greyed out as the FWCI is statistically unreliable.

Table 5: FWCI per SDG for University of Galway 2019-2023

SDG	FWCI	Pubs
SDG 14	1.92	296
SDG 3	1.9	2967
SDG 9	1.84	458
SDG 13	1.84	268
SDG 11	1.82	197
SDG 12	1.73	249
SDG 6	1.62	300
SDG 15	1.62	176
SDG 8	1.6	205
SDG 7	1.57	386
SDG 2	1.56	156
SDG 5	1.39	137
SDG 16	1.36	365
SDG 10	1.34	224
SDG 4	1.29	233
SDG 1	1.2	82
Total SDGs	1.73	5058

<sup>\*</sup>No. of Pubs < 100 FWCI not statistically reliable.

Overall University of Galway are achieving well above global impact in almost all the SDGs and our highest impact publications (in terms of FWCI) are in **SDG 14**, **SDG 3**, **SDG 9**, **SDG 13**, **SDG 11** and **SDG 12**.

In terms of the impact of our other large areas of publications **SDG 7:** Affordable & Clean Energy has an FWCI of 1.57 (63% higher than global average), **SDG 6:** FWCI is 1.62 (62% higher than the global average), both above the University FWCI of 1.58 for ALL publications (but below University SDG Publication FWCI).

SDG 3: Good Health & Wellbeing

SDG 4: Quality Education

**SDG 5:** Gender Equality

**SDG 6:** Clean Water & Sanitation **SDG 7:** Affordable & Clean Energy

SDG 8: Decent Work & Economic Growth

Reduced Inequalities: SDG 10

Sustainable Cities & Communities: **SDG 11**Responsible Consumption & Production: **SDG 12** 

Climate Action: **SDG 13** Life Below Water: **SDG 14** Life on Land: **SDG 15** 

#### 5.2 Assessing Impact per SDG in University of Galway, Ireland and the Globe 2019-2023

The SDGs where University of Galway is having a higher impact (FWCI) compared to the global and Irish average are detailed in **Graph 7** below:



Graph 7: FWCI per SDG for the Globe, Ireland and University of Galway

Generally, you will note Irelands FWCI is higher than the Global average across almost all the SDGs.

University of Galway has higher FWCI than Ireland and Global average in SDG 14 and SDG 11.

In those other SDGs where <u>University of Galway has a higher proportion</u> of publications, **namely: SDG 3, SDG 12, SDG 16, and SDG 6:** University of Galway is behind the Irish average although well ahead of the global average.

#### 5.3 FWCI per Irish University

**Table 6** details the **FWCI of each of the Irish Universities per SDG** over the period 2019-2023. Only SDGs where there are more than 100 Publications are considered statistically reliable; hence the others are greyed out:

Table 6: FWCI per SDG University of Galway & Ireland.

2019-2023						
		Uni of				
FWCI	Ireland	Galway				
SDG 14	1.64	1.92				
SDG 3	2.15	1.9				
SDG 9	1.88	1.84				
SDG 13	2.02	1.84				
SDG 11	1.67	1.82				
SDG 12	1.76	1.73				
SDG 6	1.81	1.62				
SDG 15	1.75	1.62				
SDG 8	1.87	1.6				
SDG 7	1.65	1.57				
SDG 2	1.91	1.56				
SDG 5	1.71	1.39				
SDG 16	1.6	1.36				
SDG 10	1.75	1.34				
SDG 4	1.38	1.29				
SDG 1	1.43	1.2				

<sup>\*</sup>If no. of Pubs < 100 FWCI not statistically reliable – hence greyed out.

The SDGs in which University of Galway has the highest impact are **SDG 9, SDG 14 and SDG 3,** though we are below the average for Ireland in SDG **3** and slightly below for **SDG 9.** 

SDG 1: No Poverty

SDG 2: Zero Hunger

SDG 3: Good Health & Wellbeing

SDG 4: Quality Education

**SDG 5:** Gender Equality

**SDG 6:** Clean Water & Sanitation **SDG 7:** Affordable & Clean Energy

SDG 8: Decent Work & Economic Growth

Industry, Innovation & Infrastructure: SDG 9

Reduced Inequalities: SDG 10

Sustainable Cities & Communities: SDG 11

Responsible Consumption & Production: SDG 12

Climate Action: SDG 13

Life Below Water: **SDG 14** 

Life on Land: **SDG 15** Peace, Justice & Strong Institutions: **SDG 16** 

# Percentage Highly Cited Papers per SDG, University of Galway

Table 7 details the SDGs where University of Galway's papers are among the most highly cited in the world for that field – in the top 10% most highly cited papers:

Table 7: University of Galway's % of publications in top 10% citation percentiles

Output in					
	Top <b>10</b> %				
2019-2023	Citation	Pubs			
	Percentiles				
	(%)				
SDG 13	37.3	268			
SDG 9	31.7	458			
SDG 14	31.4	296			
SDG 6	31.3	300			
SDG 12	30.5	249			
SDG 7	28	386			
SDG 11	23.4	197			
SDG 15	22.7	176			
SDG 3	21.6	2967			
SDG 2	21.2	156			
SDG 8	20	205			
SDG 4	12	233			
SDG 10	10.3	224			
SDG 5	10.2	137			
SDG 16	10.1	365			
SDG 1	9.8	82			

Looking at those SDGs where a proportion of University of Galway is highly cited – in the top 10% most highly cited. This metric is useful to identify those SDGs where our publications could be considered influential.

Despite not being in our top SDGs in terms of publications or FWCI - SDG 13 has the highest % of papers in the top 10% citation percentiles at over 37%, like last year. Next is SDG 9, SDG 14 and SDG 6 all above 31% in the top 10% citation percentiles - meaning they are highly cited.

In terms of those SDGs where we have high volume of publications - SDG 3 has 21.6% in top 10% Citation percentiles, SDG 7 has 28% and SDG 16 has 10%.

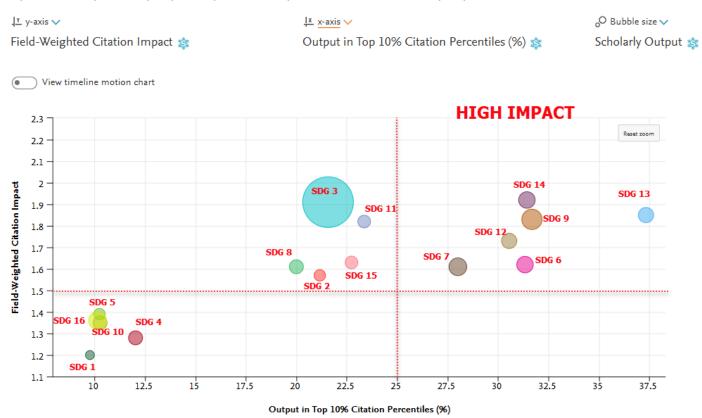
The combination of data in the above charts for University of Galway are visually presented in the bubble graphs (Graphs 8-9) from SciVal on the following page.

SDG 8: Decent Work & Economic Growth

#### 6.1 University of Galway's output and impact per SDG.

The size of the Bubble indicates the no. of papers published, the x-axis details the FWCI, the y-axis details the percentage of our publications that are in the top 10% most cited for their field (this indicates how many of our papers are getting heavily cited and is an indication of impact).

Graph 8: University of Galway output in top 10% citation percentiles, FWCI and Scholarly output 2019-2023.



As demonstrated above in Graph 8, the SDGs that University of Galway has the highest impact in are **SDG 14, SDG 13, SDG 12, SDG 9, SDG 7 and SDG 6.** 

**SDG 3** is our highest in terms of no. of publications and has a high FWCI, but a lower % of outputs in the top 10% most cited.

### 7 Summary

Reviewing the data above, we can surmise the following:

University of Galway has the highest percentage of their publications related to the SDGs in Ireland at 41.6% over the 5-year period 2019-2023. This is growing rapidly, particularly over the past 2 years and in the year 2023 they represent 42% of all publications.

Those SDGs which have seen the highest growth rate over the period are SDG 13, SDG 15, SDG 9.

#### Those SDGs where we have high output:

**SDG 3** – University of Galway's highest no of publications. Grew by 7.7% over the period, FWCI of 1.9 above global average but below Ireland FWCI of 2.15.

**SDG 9** – second highest no of publications in University of Galway, showing growth at 22.8% over the period. 4th in Ireland in terms of no. of publications and FWCI.

**SDG 7** – University of Galway's third highest number of publications grew by 7.6% over the period. Fourth in Ireland in both Publications and FWCI.

**SDG 16** – University of Galway's fourth highest number of publications grew by 10.5% over the period. Third highest no of publications in Ireland, above average global representation but FWCI of 1.36 below Ireland FWCI of 1.6.

**SDG 6** – University of Galway's fifth highest no of publications, grown at 14.7% over the period. This is the highest no of publications in Ireland. FWCI at 1.62 above global average but fourth in Ireland (Ireland FWCI of 1.81).

**SDG 14** – While this is only University of Galway's sixth highest no. of publications, it is growing at 13.8% pa and is the second highest no of publications in this SDG in Ireland. University of Galway are second in Ireland for FWCI at 1.92.

#### Those SDGs where we have high impact and thus possibly the opportunity to grow:

**SDG 13** – 268 Papers over the period, having grown at 22.7%. Only fourth in Ireland in terms of output but highly cited with over 37.3% of papers in top citation percentiles and FWCI of 1.84.

**SDG 12** – 249 papers over the period, second in Ireland, having grown at 13% over the period. Achieving high impact in this SDG –FWCI at 1.73 and over 30.5% of our papers are in most highly cited percentiles.

**SDG 6** – 300 papers over the period, no 1 in Ireland, having grown at 14.7%. Achieving high impact with over 31.3% of its papers in top citation percentiles, while FWCI is at 1.62.

**SDG 11** – 19 papers over 5 years, third in Ireland in terms of no. of pubs, with growth of 5.9% over the period. High impact in terms of FWCI at 1.82, with 23.4% of papers in the top 10% highly cited.

SDG 1: No Poverty