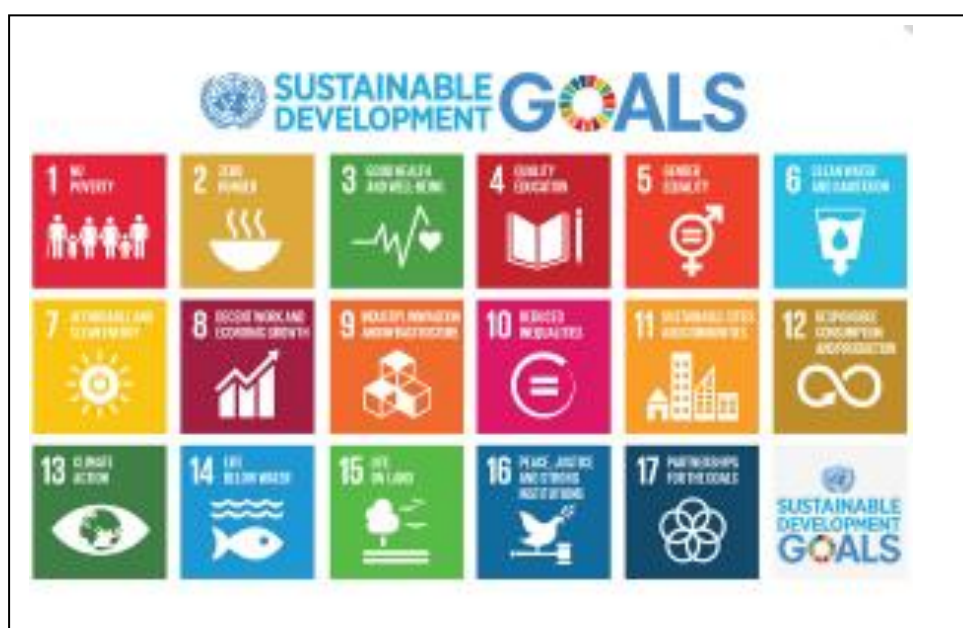


ANALYSIS OF UNIVERSITY OF GALWAY'S RESEARCH OUTPUT ALIGNED TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGS) 2023



Planning & Institutional Research Office
May 2024

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 Inequality: 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

Analysis of University of Galway's SDG Research Output 2018-2023

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 also 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 keyphrase 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
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Industry, Innovation & Infrastructure: SDG 9
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Life on Land: SDG 15
Peace, Justice & Strong Institutions: SDG 16

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SDG 1: No Poverty
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Climate Action: **SDG 13**
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Life on Land: **SDG 15**
Peace, Justice & Strong Institutions: **SDG 16**

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 also 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.

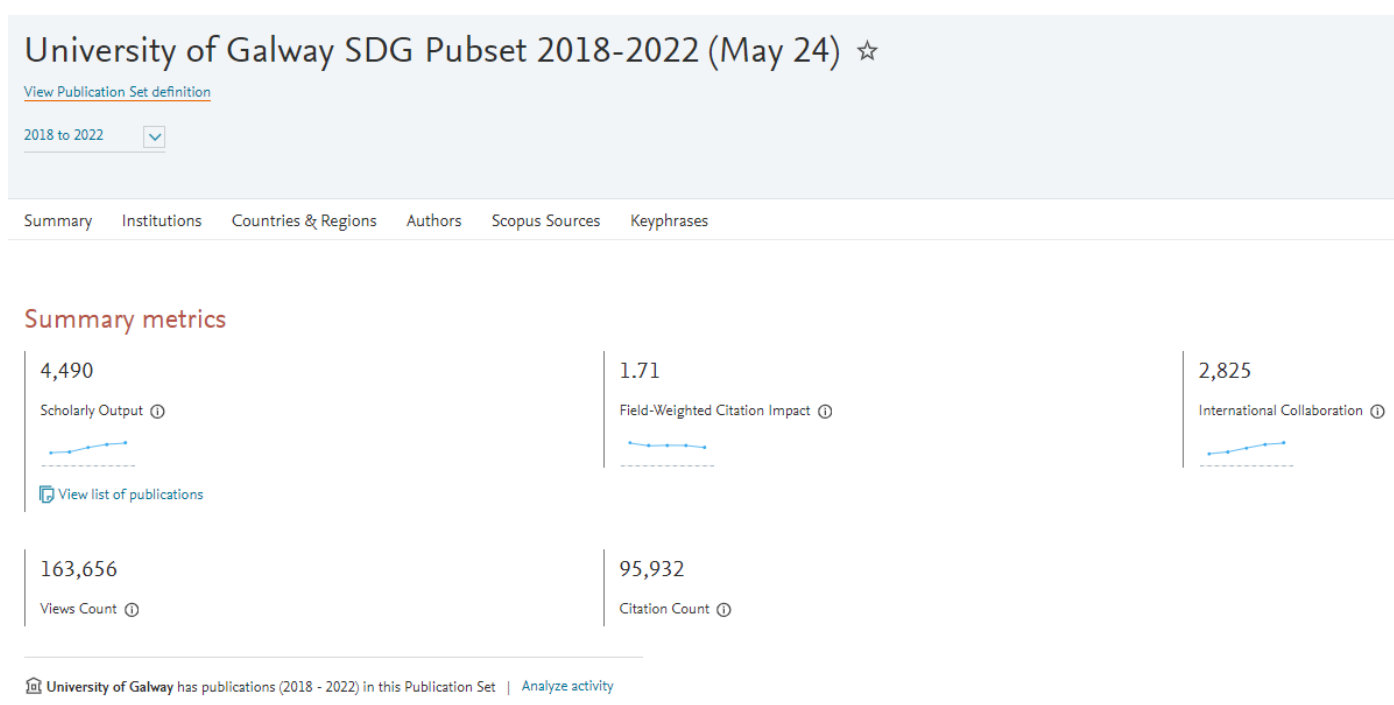
2 University of Galway publications per SDG 2018-2022

Over the 5 year period 2018-2022, per Scival, University of Galway published 4,490 papers related to the UN SDGs, as detailed in Graph 1 and Table 1 below. This is an increase of 75% from 2018 (an average of 15% per annum over the 5 years) and this growth has accelerated in the past three years.

These SDG related publications represented **40%** of all University of Galway’s publications over the same 5 year period, and 45% of the university’s total output in 2022 indicating the higher growth of SDGs in recent years.

Also of note is the higher FWCI of SDG related publications – at **1.71** compared to the University’s FWCI of 1.56 for the same period 2018-2022.

Graph 1: University of Galway – SDG related publications:



- 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 Inequality: 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

Publication share by Subject Area

Pie Chart



Segment size represents relative publication share per Subject Area. Note that a publication can be mapped to multiple Subject Areas. [Learn more](#)

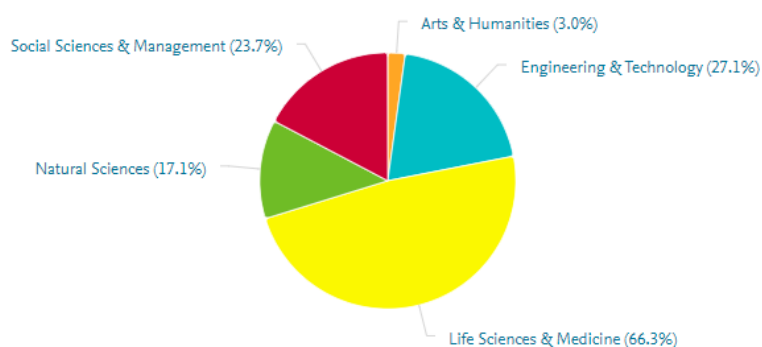


Table 1: University of Galway – Overall v's SDG related publications 2018-2022:

No of Pubs	2018	2019	2020	2021	2022	Total	CAGR* 2018-2022
All University of Galway pubs	1912	1975	2300	2552	2532	11273	7%
SDG Related Pubs	653	693	920	1081	1143	4490	15%
% of University Pubs on SDGs	34.2%	35.1%	40.0%	42.4%	45.1%	39.8%	
Citations	2018	2019	2020	2021	2022	Total	
All University of Galway pubs	52064	41387	50195	34653	21492	199791	
SDG Related Pubs	22178	18872	27624	18289	8969	95932	
% of University Cites on SDGs	42.6%	45.6%	55.0%	52.8%	41.7%	48.0%	
Citations	2018	2019	2020	2021	2022	Total	
All University of Galway pubs	1.59	1.38	1.52	1.52	1.76	1.56	
SDG Related Pubs	1.94	1.7	1.75	1.73	1.55	1.71	

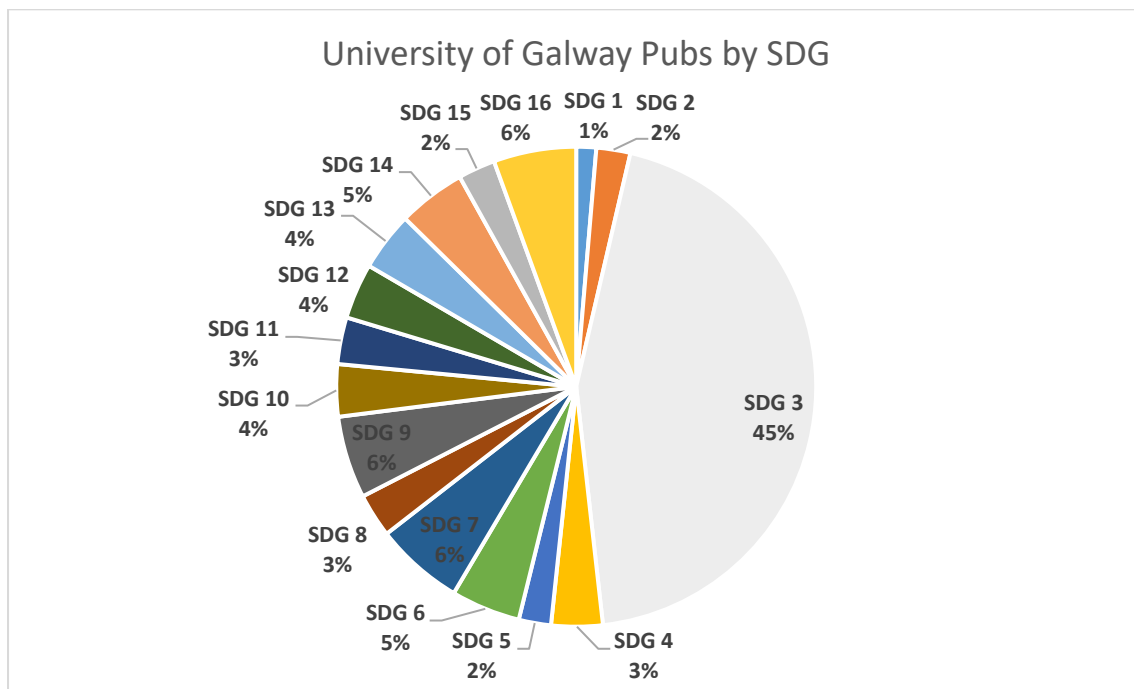
*Compound Annual Growth Rate – average annualised rate of growth.

SDG 1: No Poverty
 SDG 2: Zero Hunger
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Graph 2 below details the distribution of University of Galway’s SDG related publications on Scopus across all SDGs 1-16. It demonstrates that 45% of University of Galway’s SDG related publications are in SDG 3 (41% in 2017-2021) ahead of the global percentage (39% in 2022).

Graph 2: University of Galway distribution of publications per SDG 2018-2022



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

Graph 3: University of Galway distribution of publications per SDG (Exclu SDG 3) 2018-2022

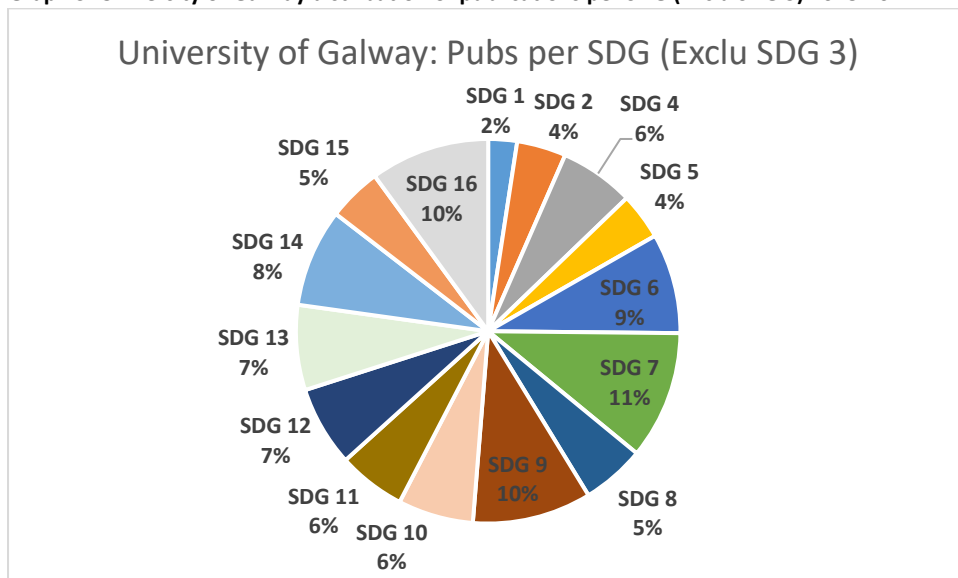


Table 2 below details the data behind the above pie charts – the number of publications per SDG from 2018 to 2022. The final columns also detail the five year growth level of these publications to 2022, compared to the previous five year period to 2021, to highlight which SDGs we are increasing our focus on and which are declining.

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 Inequality: **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 2: Publications per SDG - University of Galway 2018-2022

Publications	2018	2019	2020	2021	2022	% Growth CAGR		
						Overall	2018-22	2017-21
SDG 3	335	382	550	665	655	2587	18%	22%
SDG 7	60	68	59	74	86	347	9%	2%
SDG 16	51	55	64	80	73	323	9%	-3%
SDG 9	46	47	53	79	97	322	21%	23%
SDG 6	47	41	55	67	61	271	7%	18%
SDG 14	45	43	61	54	62	265	8%	9%
SDG 13	36	30	39	57	68	230	17%	25%
SDG 12	25	35	45	47	65	217	27%	18%
SDG 10	21	36	39	47	61	204	31%	10%
SDG 4	37	34	32	55	43	201	4%	25%
SDG 11	28	27	42	34	52	183	17%	-4%
SDG 8	23	31	34	36	47	171	20%	9%
SDG 15	19	18	34	29	45	145	24%	11%
SDG 2	19	21	28	30	35	133	17%	11%
SDG 5	21	23	15	24	43	126	20%	6%
SDG 1	10	14	25	12	17	78	14%	6%

*Compound Annual Growth Rate = the average annualised rate of growth

** 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 4,490.

University of Galway’s top output, by no. of publications, for the past 5 years is **SDG 3**: Good Health & Wellbeing, followed by **SDG 7**: 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 has grown strongly since 2019 bringing overall 5 year CAGR to 18% (22% in last year’s report). The other SDGs where we have demonstrated a high growth rate and a good presence in are **SDG 9** with a CAGR of 21%, **SDG 13** (CAGR 17%), **SDG 12** (CAGR 27%) and **SDG 10 and 11** both at a CAGR of 31% & 17% respectively, 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 7, SDG 16, SDG 12, SDG 10, SDG 11, SDG 8, SDG 15, SDG 2, SDG 5 and SDG 1** have all shown accelerated increases in the number of publications by University of Galway in recent years.

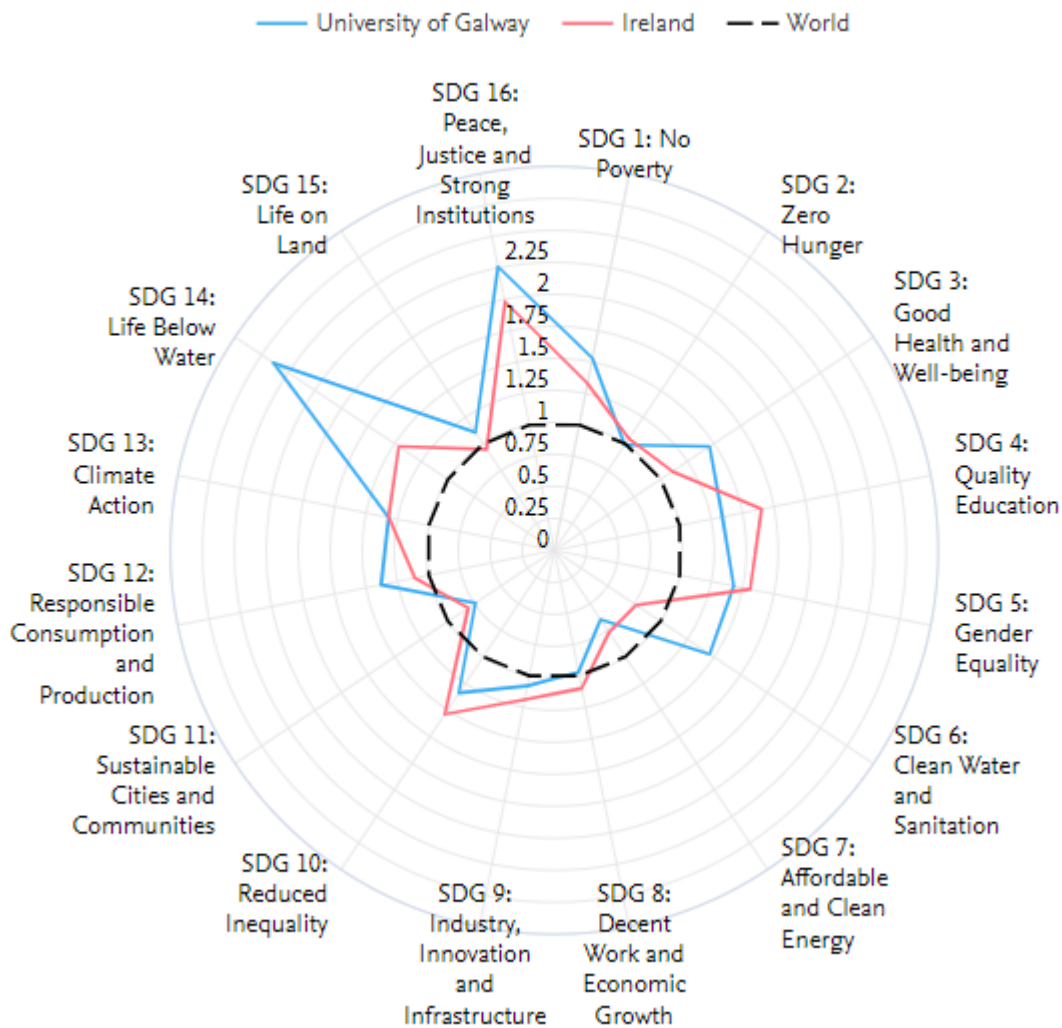
3 Proportion of Output across the SDGs

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:

- 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 Inequality: **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**



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.

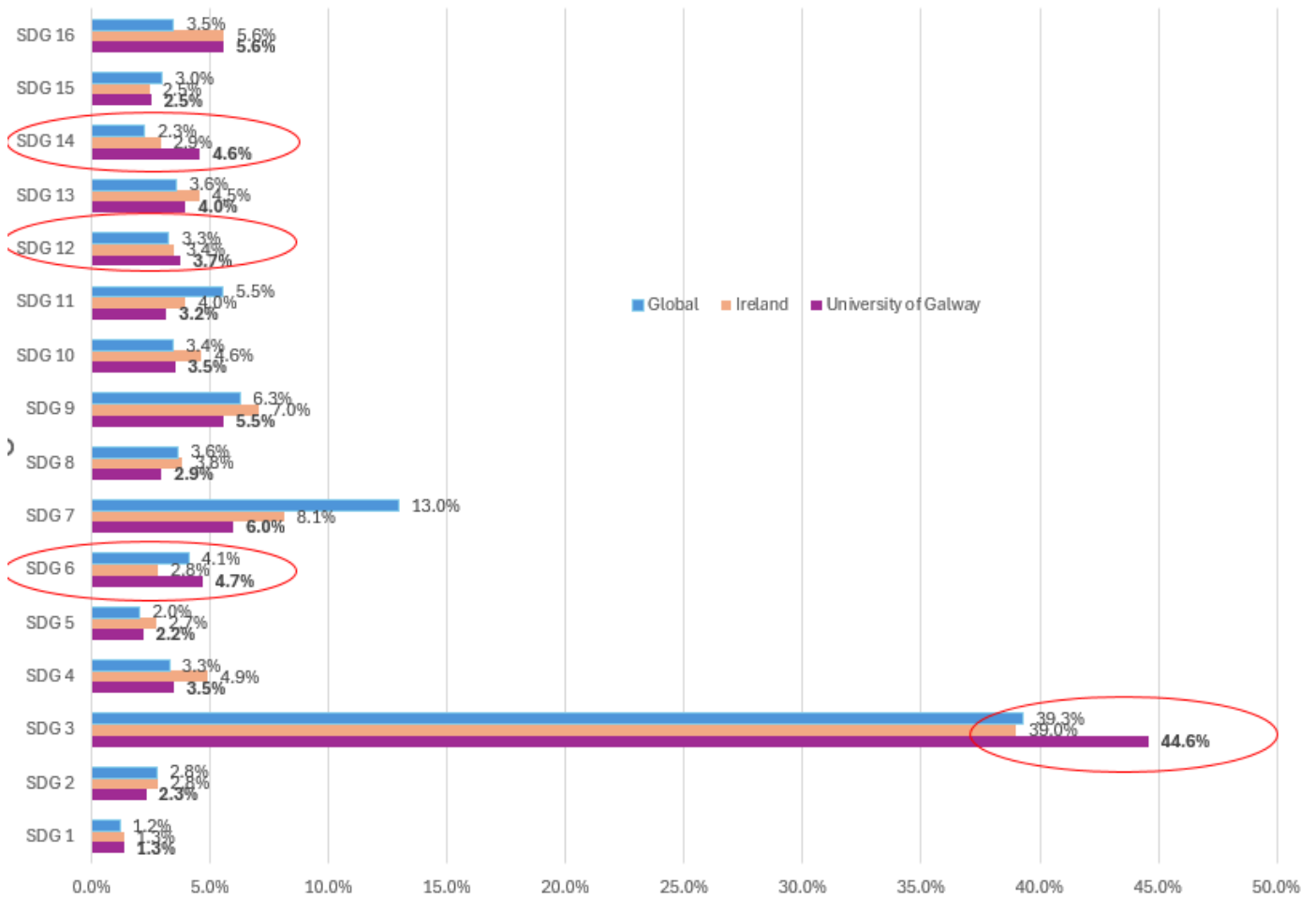
The above graph demonstrates that University of Galway has relatively higher activity than the Worldwide and Irish average in **SDGs 1, SDG 3, SDG 6, SDG 12, SDG 14, SDG 15, SDG 16**.

We are 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**.

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

- | | |
|--------------------------------------|---|
| SDG 1: No Poverty | Industry, Innovation & Infrastructure: SDG 9 |
| SDG 2: Zero Hunger | Reduced Inequality: SDG 10 |
| SDG 3: Good Health & Wellbeing | Sustainable Cities & Communities: SDG 11 |
| SDG 4: Quality Education | Responsible Consumption & Production: SDG 12 |
| SDG 5: Gender Equality | Climate Action: SDG 13 |
| SDG 6: Clean Water & Sanitation | Life Below Water: SDG 14 |
| SDG 7: Affordable & Clean Energy | Life on Land: SDG 15 |
| SDG 8: Decent Work & Economic Growth | Peace, Justice & Strong Institutions: SDG 16 |

% Output per SDG



Graph 4b demonstrates the global dominance of research within SDG 3. Proportionally, University of Galway’s SDG 3 output at 44% is ahead of Ireland (at 39.3%) and the global percentage at 39%.

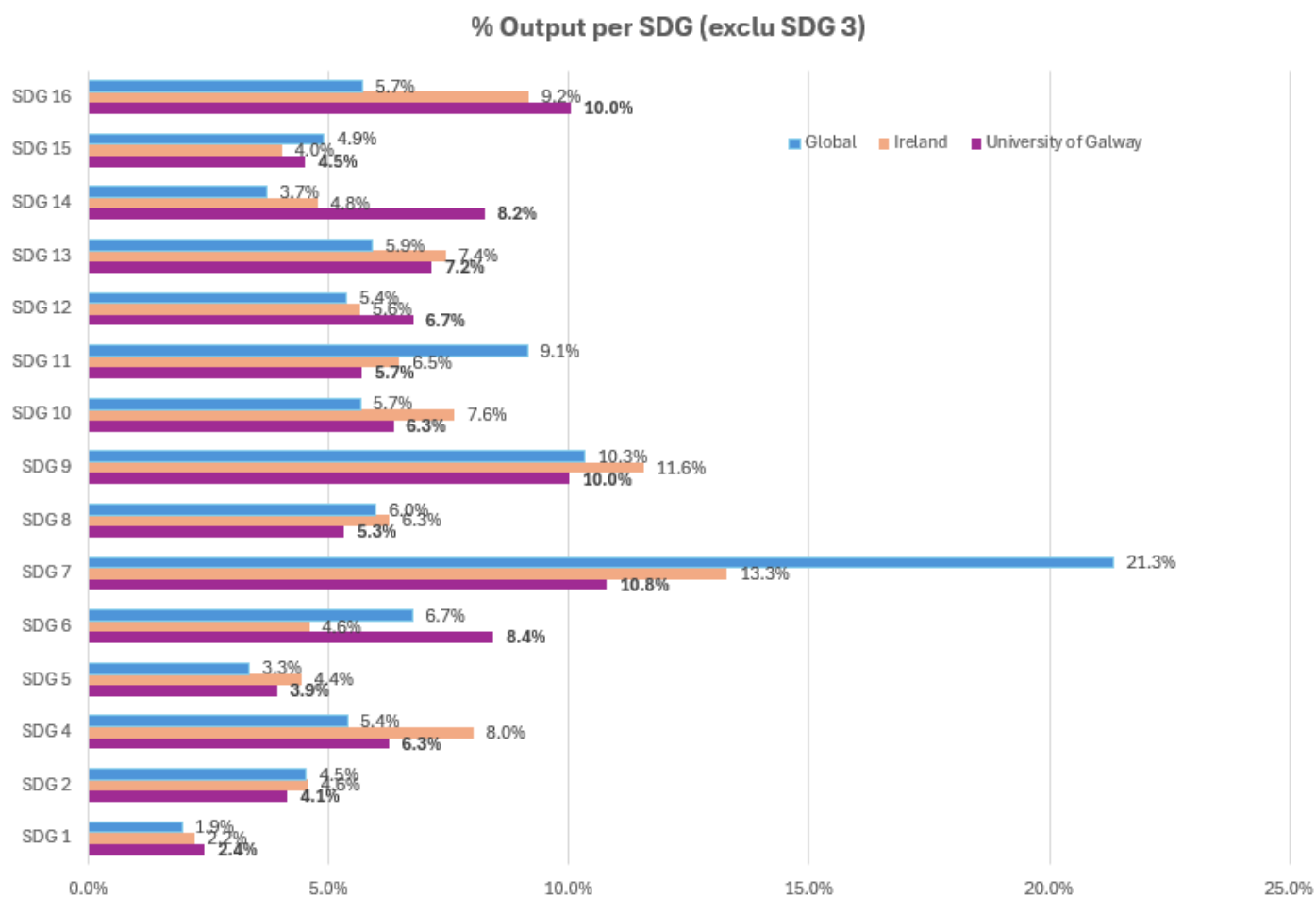
The Other SDGs where proportionally University of Galway is ahead of Ireland/Global are **SDG 14**, **SDG 12** and **SDG 6**

- SDG 1: No Poverty
- SDG 2: Zero Hunger
- SDG 3: Good Health & Wellbeing
- SDG 4: Quality Education
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- SDG 8: Decent Work & Economic Growth

- Industry, Innovation & Infrastructure: **SDG 9**
- Reduced Inequality: **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**

Graph 4c shows the proportion of research output per SDG excluding SDG 3

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 4, SDG 5, SDG 10 and SDG 13, and SDG 9**

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

SDG 1: No Poverty
 SDG 2: Zero Hunger
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Industry, Innovation & Infrastructure: **SDG 9**
 Reduced Inequality: **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**

4 Domestic comparison of Research output per SDG

Table 3 below details the proportion of SDG related publications for some Irish Universities. It demonstrates that though University of Galway are 4th overall in terms of volume of SDG related publications, it has the highest percentage of its publications related to the SDGs at **40%** over the period, followed by UCC and UCD at 35%.

Table 3: Portion of all publications related to the SDGs of Irish Universities 2018-2022:

	University of Galway	Other Traditional Irish Unis
All Pubs	11273	75145
SDG related Pubs	4490	25715
% of SDG Pubs	40%	34%

Table 4 details the research output growth per SDG for all of Ireland (not just the traditional Universities) and for University of Galway, to highlight those SDGs where University of Galway is growing faster than the average for Ireland:

Table 4: Growth in Publications per SDG Ireland versus University of Galway: 2018-2022

Pubs 2018-2022	Ireland	Uni of Galway	% of Ireland	CAGR 2018-2022	
				Ireland	University of Galway
SDG 1	587	78	13%	15.5%	14.2%
SDG 2	1210	133	11%	14.5%	16.5%
SDG 3	16978	2587	15%	12.3%	18.2%
SDG 4	2126	201	9%	13.7%	3.8%
SDG 5	1177	126	11%	17.5%	19.6%
SDG 6	1217	271	22%	12.1%	6.7%
SDG 7	3529	347	10%	8.9%	9.4%
SDG 8	1665	171	10%	16.9%	19.6%
SDG 9	3071	322	10%	19.7%	20.5%
SDG 10	2027	204	10%	14.4%	30.6%
SDG 11	1723	183	11%	7.7%	16.7%
SDG 12	1498	217	14%	16.4%	27.0%
SDG 13	1970	230	12%	21.8%	17.2%
SDG 14	1262	265	21%	13.3%	8.3%
SDG 15	1069	145	14%	14.3%	24.1%
SDG 16	2440	323	13%	13.3%	9.4%

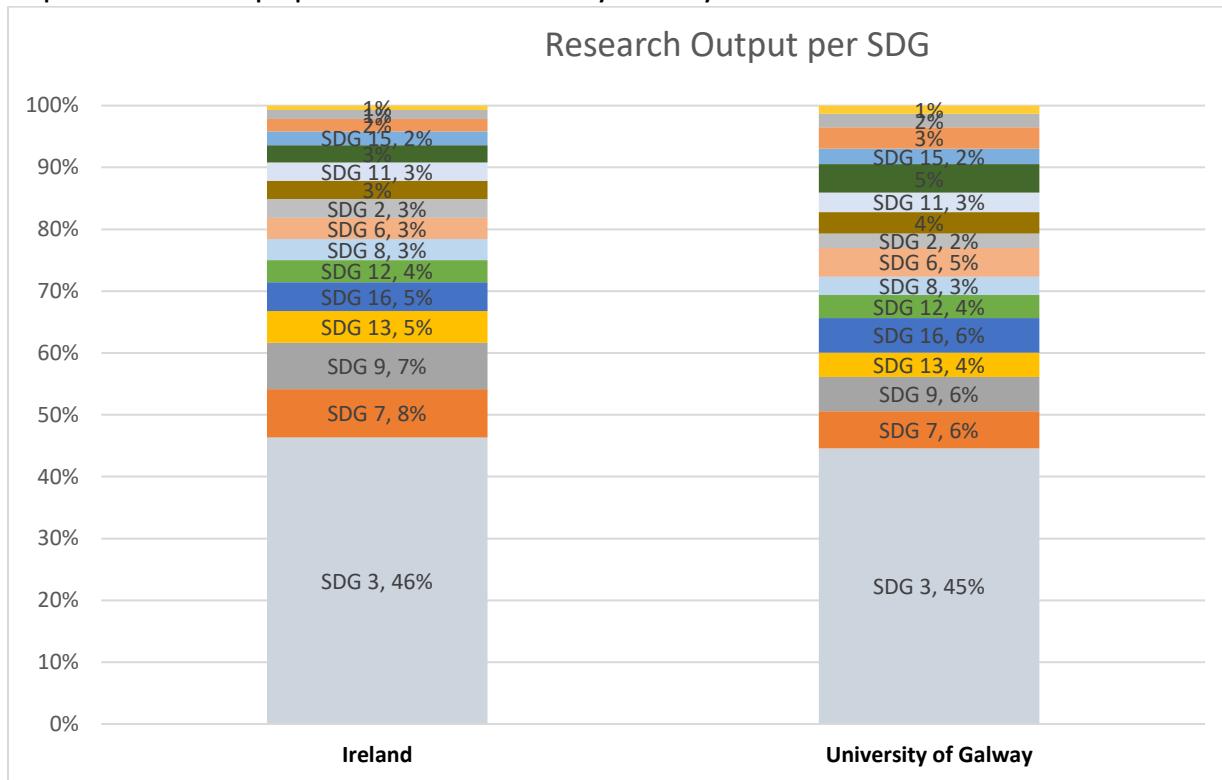
The table above highlights that University of Galway is growing faster in terms of volume of publications than the rest of Ireland in SDGs 2, 3, 5, 7,8,9,10,11 12 & 15, but showing lower growth in other SDGs.

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 Inequality: **SDG 10**
 Sustainable Cities & Communities: **SDG 11**
 Responsible Consumption & Production: **SDG 12**
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 Life Below Water: **SDG 14**
 Life on Land: **SDG 15**
 Peace, Justice & Strong Institutions: **SDG 16**

Graph 5 illustrates the % output per SDG of Ireland v University of Galway

Graph 5: % Research Output per SDG – Ireland v’s University of Galway



Graph 5 helps to highlight the similarity of focus amongst the Irish Universities.

The most common SDG’S amongst the Irish Universities (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

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- Reduced Inequality: **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**

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 2018-2022

Uni of Galway	FWCI	No. of Pubs*	PY FWCI
SDG 14	2.02	265	1.92
SDG 3	1.89	2587	2.38
SDG 9	1.85	322	1.87
SDG 11	1.79	183	2.37
SDG 13	1.79	230	1.72
SDG 12	1.78	217	1.71
SDG 7	1.56	347	1.75
SDG 6	1.54	271	1.51
SDG 8	1.54	171	1.29
SDG 15	1.5	145	1.36
SDG 2	1.38	133	1.5
SDG 5	1.29	126	4.82
SDG 16	1.27	323	2.46
SDG 4	1.23	201	1.23
SDG 10	1.15	204	1.86
SDG 1	1.1	78	1.11

*No. of Pubs < 100 FWCI not statistically reliable.

Overall University of Galway are achieving well above global impact in almost all the SDGs, though some have seen are slightly below last year's 5 year FWCI (in red).

In terms of University of Galway's FWCI – our highest impact publications are in **SDG 14, SDG 3, SDG 9, SDG 11, SDG 13 and SDG 12**.

In terms of the impact of our other large areas of publications **SDG 7** – Affordable & Clean Energy has an FWCI of 1.56 (56% higher than global average), **SDG 6** –FWCI is 1.54 (54% higher than the global average), both in line with the University FWCI of 1.56

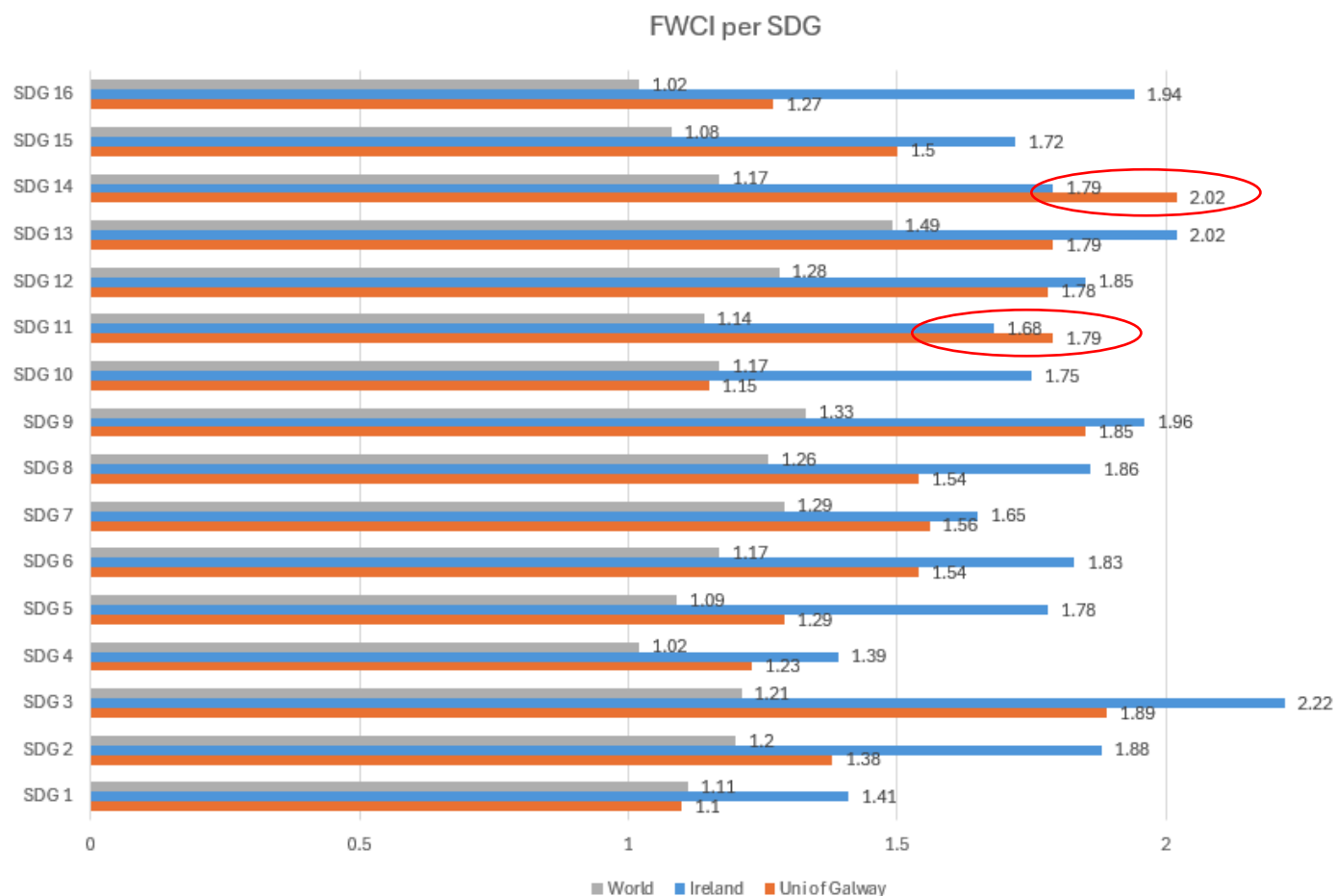
The SDGs where University of Galway is having a higher impact (FWCI) compared to the global and Irish average are detailed in **Graph 7** below:

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

5.2 Assessing Impact per SDG in University of Galway, Ireland and the Globe

Graph 6: FWCI per SDG for the Globe, Ireland and University of Galway



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

University of Galway has higher FWCI than Ireland and Global average in **SDG 11** and **SDG 14** (note: Last year we were ahead for **SDGs 16, SDG 14, SDG 11** and **SDG 10**).

In those other SDGs where University of Galway has a higher proportion of publications, namely: SDG 3, SDG 7, SDG 16, SDG 9 and SDG 6: University of Galway is behind the Irish average although well ahead of the global average

- 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 Inequality: **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**

6 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

2018-2022	Output in Top 10% Citation Percentiles	Scholarly Output
SDG 13	40.9	230
SDG 6	34.3	271
SDG 12	32.7	217
SDG 9	32.6	322
SDG 14	32.1	265
SDG 7	28.8	347
SDG 11	25.1	183
SDG 15	24.1	145
SDG 2	23.3	133
SDG 3	23.3	2587
SDG 8	19.9	171
SDG 4	10.4	201
SDG 5	10.3	126
SDG 16	9.3	323
SDG 10	8.8	204
SDG 1	7.7	78

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 40%, similar to last year. Next is **SDG 6: Clean Water & Sanitation** – which has seen strong growth in the no. of publications in the last 2 years, at 34.3%. Over 30% of University of Galway’s papers published in **SDG 12, SDG 9** and **SDG 14**, were 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 23.3% in top 10% Citation percentiles, **SDG 7** has 28.8% and **SDG 16** has only 9.3%.

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.

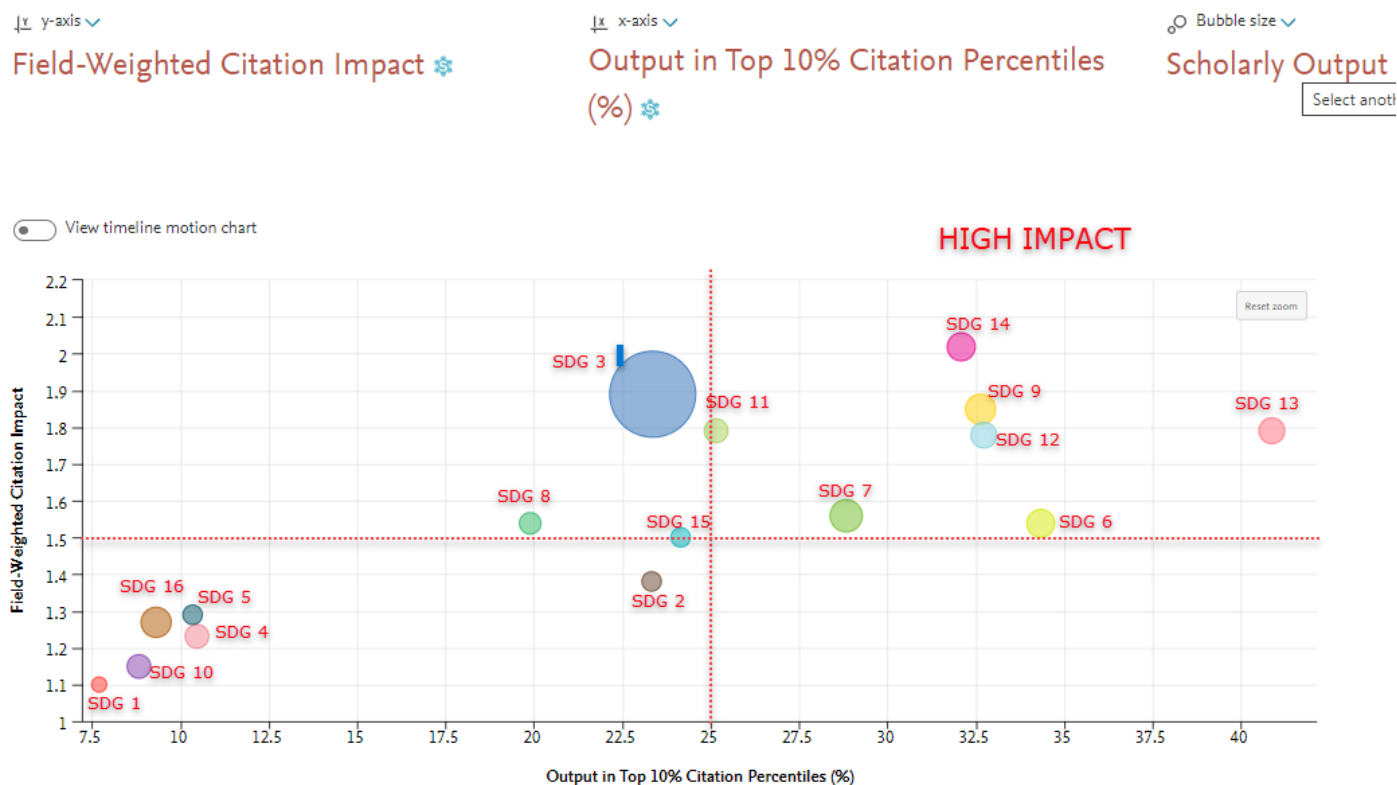
- SDG 1: No Poverty
- SDG 2: Zero Hunger
- SDG 3: Good Health & Wellbeing
- SDG 4: Quality Education
- SDG 5: Gender Equality
- SDG 6: Clean Water & Sanitation
- SDG 7: Affordable & Clean Energy
- SDG 8: Decent Work & Economic Growth

- Industry, Innovation & Infrastructure: **SDG 9**
- Reduced Inequality: **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**

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 7a: University of Galway output in top 10% citation percentiles, FWCI and Scholarly output.



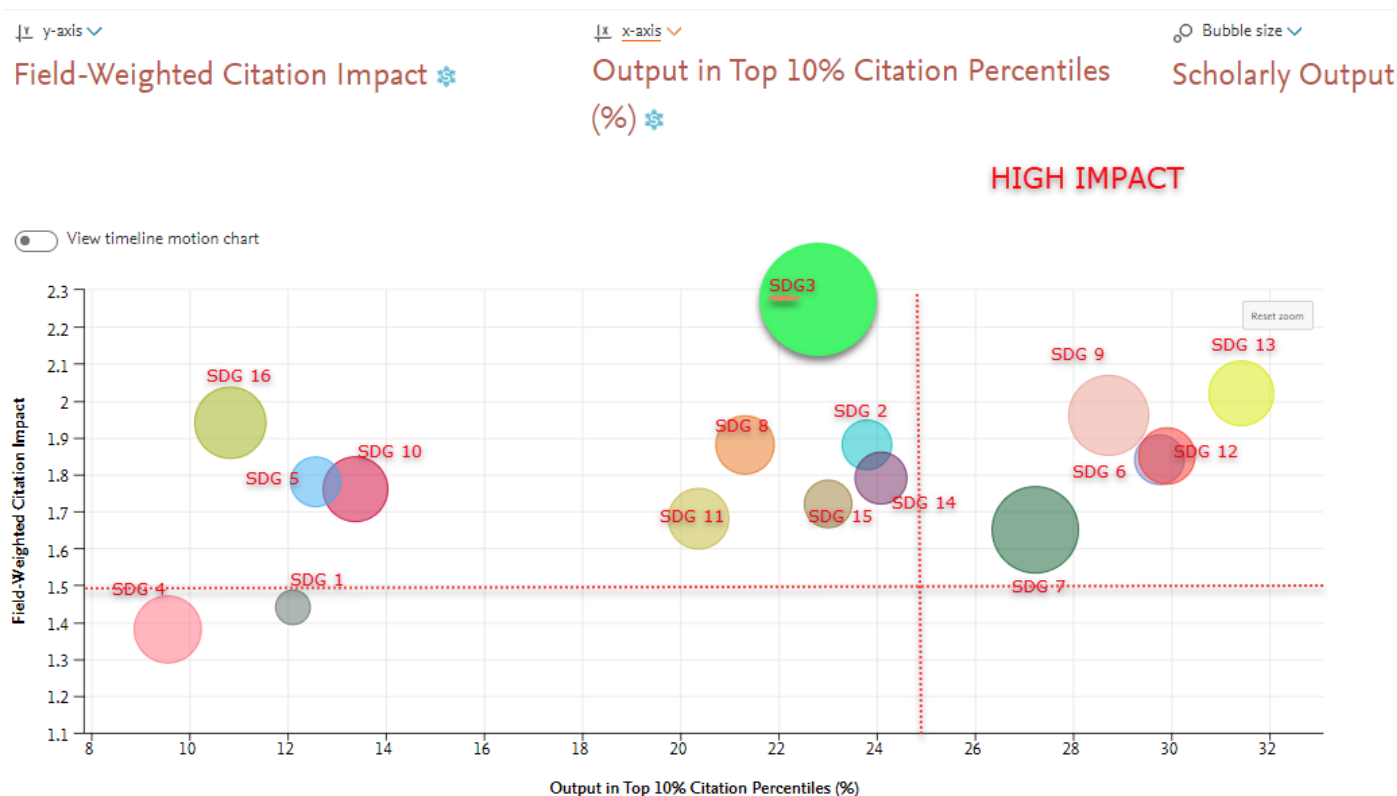
As demonstrated above in Graph 7a, the SDGs that University of Galway has the highest impact in are **SDG 14, SDG 13, SDG 12, SDG 9, SDG 11, SDG 7 and SDG 6.**

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.

- 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 Inequality: **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**

Graph 7b: Ireland output in top 10% citation percentiles, FWCI and Scholarly output.



Ireland’s highest impact SDGs are in **SDG 7, SDG 6, SDG 9, SDG 12 and SDG 13**

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 40% over the 5 year period 2018-2022. This is growing rapidly, particularly over the past 2 years and in the year 2022 they actually represent 45% of all publications.

Those SDGs which have seen the highest growth rate over the period are **SDG 10, SDG 12, SDG 15, SDG 9**.

Those SDGs where we have high output:

SDG 3 – University of Galway’s highest no of publications. Grew by 18% over the period, FWCI of 1.89 above global average but below Ireland FWCI and 23% of papers in top 10% citation percentiles.

SDG 7 – University of Galway’s second highest no. of publications, grew by 9% over the period. Lower presence and FWCI (1.56) than other Irish Universities, with 29% of output in the top 10% citation percentiles.

SDG 16 – University of Galway’s third highest no. of publications, grew by 9% over the period. 3rd highest no of publications in Ireland, above average global representation but below Ireland FWCI at 1.27, and only 9% in the top 10% citation percentiles.

SDG 9 – 4th highest no of publications in University of Galway, showing growth at 21% over the period. 4th in Ireland in terms of no. of publications and 5th in terms of FWCI (1.85). 32% in top 10% citation percentiles.

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 Inequality: **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**

SDG 6 – University of Galway’s 6th highest no of publications, grown at 7% over the period. This is the highest no of publications in Ireland. FWCI at 1.54 above global average, with 34% of our publications in top 10% citation percentiles, but 7th in Ireland.

SDG 14 – While this is only University of Galway’s 6th highest no. of publications, it is growing at 8% and is the second highest no of publications in this SDG in Ireland and above global average representation. University of Galway are third in Ireland for FWCI at 2.02, and have 32% in the top 10% citation percentiles.

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

SDG 13 – 230 Papers over the period, having grown at 17%. Only 4th in Ireland in terms of output but highly cited with over 40% of papers in top citation percentiles and FWCI of 1.79.

SDG 12 – 217 papers over the period, no 2 in Ireland, having grown at 27% over the period. Achieving high impact in this SDG –FWCI at 1.78 and over 32% of our papers are in most highly cited percentiles.

SDG 11 – 183 papers over 5 years, no 3 in Ireland in terms of no. of pubs, with growth of 17% over the period. High impact in terms of FWCI at 1.79, with 25% of papers in the top 10% highly cited.